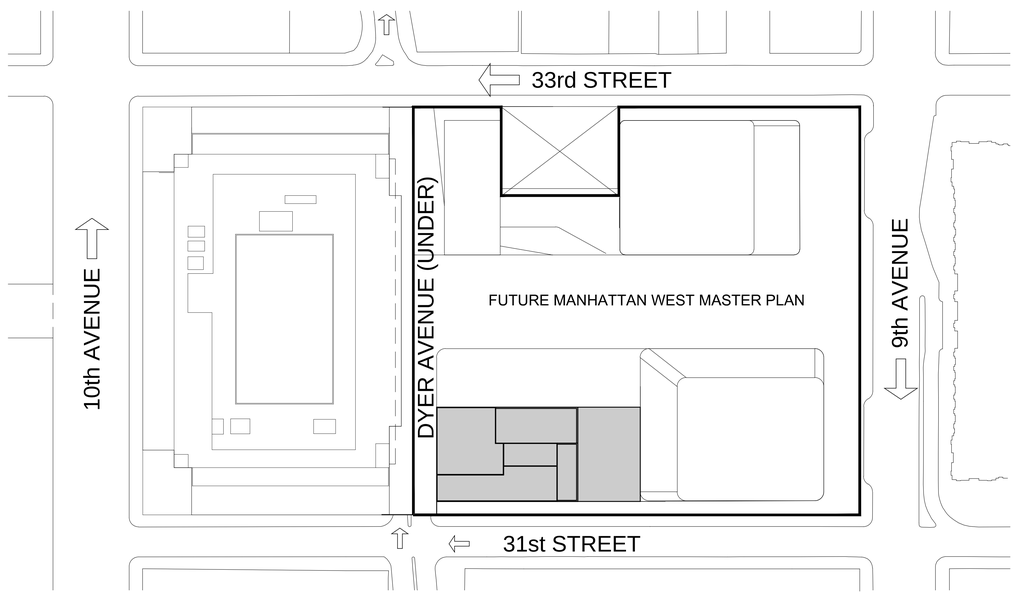
Manhattan West

Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
435 West 31st Street
New York, NY.

VOLUME 1 of 2

ARCHITECTURAL, STRUCTURAL, SUPPORT OF EXCAVATION
PAVING PLANS, LANDSCAPE



2014-11-07

ISSUED FOR DOB FILING

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,*LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

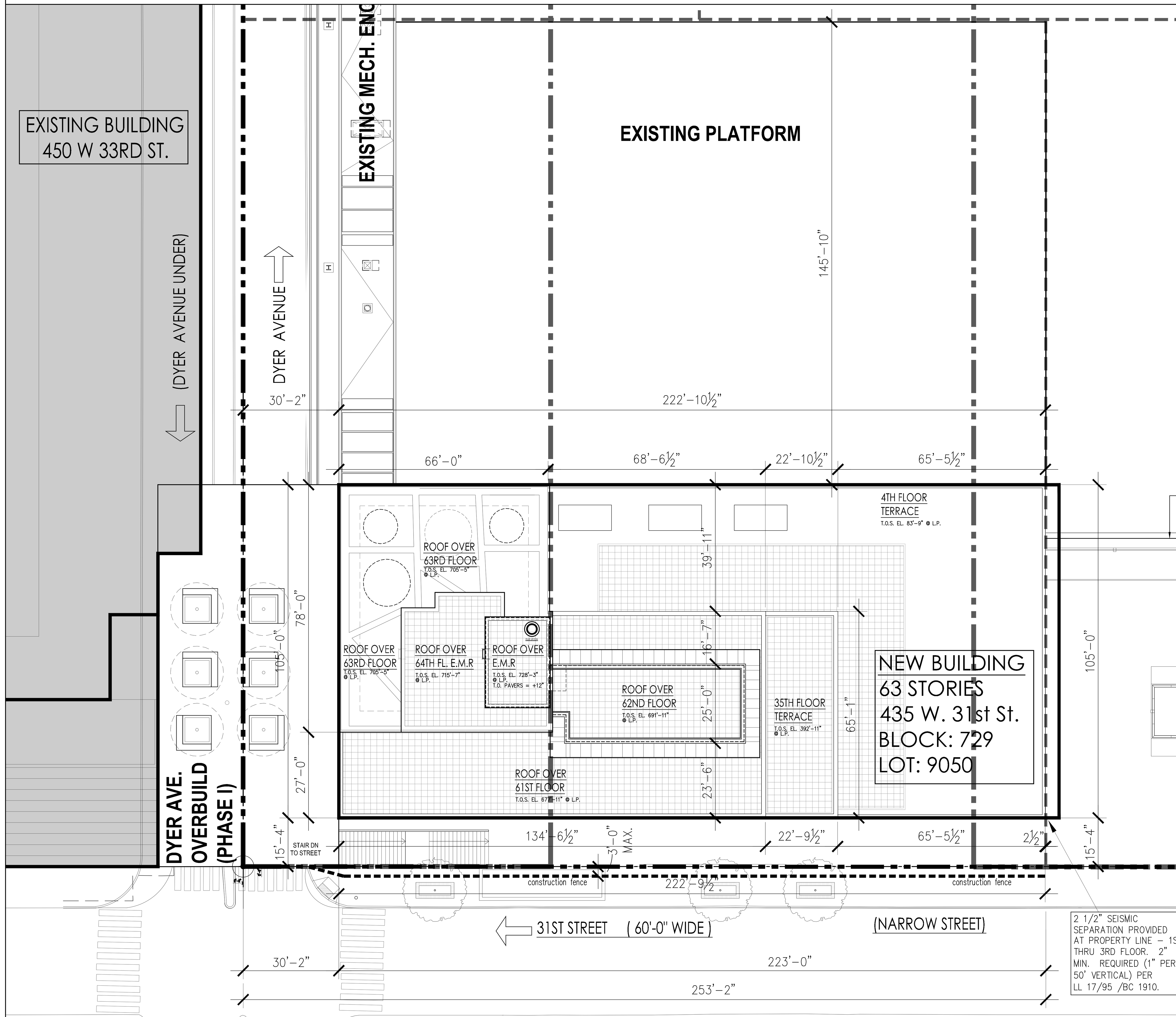
GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

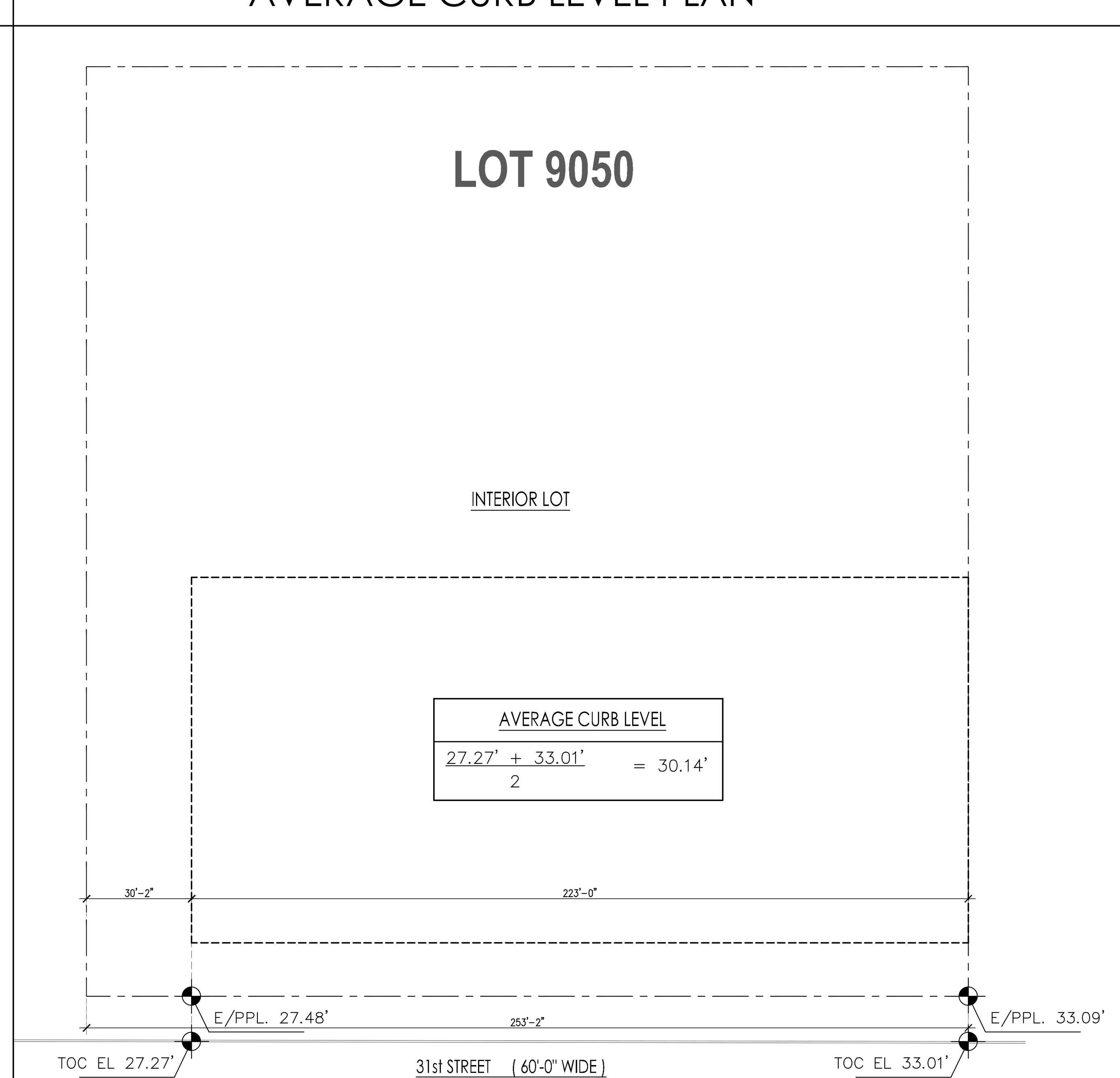
CONSTRUCTION MANAGER:

HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

PLOT PLAN 1/16" = 1'-0"



AVERAGE CURB LEVEL PLAN



D.U. SCHEDULE

FLOOR	# OF D.U.
4	11
5	15
6	15
7	15
8	16
9	16
10	16
11	16
12	16
13	16
14	16
15	16
16	16
17	16
18	16
19	16
20	16
21	16
22	16
23	16
24	16
25	16
26	16
27	16
28	16
29	16
30	16
31	16
32	16
33	16
34	16
35	12
36	12
37	14
38	14
39	14
40	14
41	14
42	12
43	14
44	14
45	14
46	14
47	14
48	14
49	14
50	14
51	14
52	13
53	13
54	13
55	13
56	12
57	12
58	12
59	12
60	12
61	12
TOTAL D.U.	844

FLOOR AREA SCHEDULE

FLOOR	USES	TOTAL		
		GROSS FLOOR AREA	MECHANICAL DEDUCTION	ZONING FLOOR AREA
Cellar	MECH	20,722.00	20,722.00	-
1st	BICYCLE STORAGE	898.00	898.00	-
	RETAIL	1,921.00	-	1,921.00
	RESIDENTIAL BOH	10,918.00	179.00	10,739.00
	TOTAL	13,737.00	1,077.00	12,660.00
(SALLY PORT)	SALLY PORT	6,010.00	-	6,010.00
2nd	MECH	279.00	279.00	-
	BUILDING STORAGE	1,599.00	-	1,599.00
	BICYCLE STORAGE	1,449.00	-	1,449.00
	RES. AMENITY	20,066.00	98.00	19,968.00
	TOTAL	23,393.00	377.00	23,016.00
3rd	MECH.	2,948.00	2,948.00	-
	RES. AMENITY	14,592.00	89.00	14,503.00
	TOTAL	17,540.00	3,037.00	14,503.00
4th	MECH/BOH	2,617.00	2,617.00	-
	RESIDENTIAL	10,250.00	269.00	9,981.00
	TOTAL	12,867.00	2,886.00	9,981.00
5th	RESIDENTIAL	12,867.00	385.00	12,482.00
6th	RESIDENTIAL	12,867.00	385.00	12,482.00
7th	RESIDENTIAL	12,867.00	385.00	12,482.00
8th	RESIDENTIAL	12,867.00	385.00	12,482.00
9th	RESIDENTIAL	12,867.00	385.00	12,482.00
10th	RESIDENTIAL	12,867.00	385.00	12,482.00
11th	RESIDENTIAL	12,867.00	385.00	12,482.00
12th	RESIDENTIAL	12,867.00	385.00	12,482.00
13th	RESIDENTIAL	12,867.00	385.00	12,482.00
14th	RESIDENTIAL	12,867.00	385.00	12,482.00
15th	RESIDENTIAL	12,867.00	385.00	12,482.00
16th	RESIDENTIAL	12,867.00	385.00	12,482.00
17th	RESIDENTIAL	12,867.00	385.00	12,482.00
18th	RESIDENTIAL	12,867.00	385.00	12,482.00
19th	RESIDENTIAL	12,867.00	385.00	12,482.00
20th	RESIDENTIAL	12,867.00	385.00	12,482.00
21st	RESIDENTIAL	12,867.00	385.00	12,482.00
22nd	RESIDENTIAL	12,867.00	385.00	12,482.00
23rd	RESIDENTIAL	12,867.00	385.00	12,482.00
24th	RESIDENTIAL	12,867.00	385.00	12,482.00
25th	RESIDENTIAL	12,867.00	385.00	12,482.00
26th	RESIDENTIAL	12,867.00	385.00	12,482.00
27th	RESIDENTIAL	12,867.00	385.00	12,482.00
28th	RESIDENTIAL	12,867.00	385.00	12,482.00
29th	RESIDENTIAL	12,867.00	385.00	12,482.00
30th	RESIDENTIAL	12,867.00	385.00	12,482.00
31st	RESIDENTIAL	12,867.00	385.00	12,482.00
32nd	RESIDENTIAL	12,867.00	385.00	12,482.00
33rd	RESIDENTIAL	12,867.00	385.00	12,482.00
34th	RESIDENTIAL	12,867.00	385.00	12,482.00
35th	RESIDENTIAL	11,385.00	316.00	11,069.00
36th	MECH.	2,137.00	2,137.00	-
	RESIDENTIAL	9,248.00	247.00	9,001.00
	TOTAL	11,385.00	2,384.00	9,001.00
37th	RESIDENTIAL	11,385.00	335.00	11,050.00
38th	RESIDENTIAL	11,385.00	335.00	11,050.00
39th	RESIDENTIAL	11,385.00	335.00	11,050.00
40th	RESIDENTIAL	11,385.00	335.00	11,050.00
41st	RESIDENTIAL	11,385.00	335.00	11,050.00
42nd	RESIDENTIAL	11,385.00	335.00	11,050.00
43rd	RESIDENTIAL	11,385.00	335.00	11,050.00
44th	RESIDENTIAL	11,385.00	335.00	11,050.00
45th	RESIDENTIAL	11,385.00	335.00	11,050.00
46th	RESIDENTIAL	11,385.00	335.00	11,050.00
47th	RESIDENTIAL	11,385.00	335.00	11,050.00
48th	RESIDENTIAL	11,385.00	335.00	11,050.00
49th	RESIDENTIAL	11,385.00	335.00	11,050.00
50th	RESIDENTIAL	11,385.00	335.00	11,050.00
51st	RESIDENTIAL	11,385.00	335.00	11,050.00
52nd	RESIDENTIAL	11,385.00	340.00	11,045.00
53rd	RESIDENTIAL	11,385.00	340.00	11,045.00
54th	RESIDENTIAL	11,385.00	340.00	11,045.00
55th	RESIDENTIAL	11,385.00	340.00	11,045.00
56th	RESIDENTIAL	11,385.00	341.00	11,044.00
57th	RESIDENTIAL	11,385.00	341.00	11,044.00
58th	RESIDENTIAL	11,385.00	341.00	11,044.00
59th	RESIDENTIAL	11,385.00	341.00	11,044.00
60th	RESIDENTIAL	11,385.00	341.00	11,044.00
61st	RESIDENTIAL	11,385.00	341.00	11,044.00
62nd	RES. TERRACE (zfa)	4,572.00	-	4,572.00
	RES. AMENITY	6,813.00	-	6,813.00
	TOTAL	11,385.00	-	11,385.00
63rd	MECH	4,998.00	4,998.00	-
	TOTAL	4,998.00	4,998.00	-
64th	MECH + EMR	2,497.00	2,497.00	-
Bulkhead	EMR	830.00	830.00	-
BELOW GRADE SUB-TOTAL		20,722.0	20,722.0	0.0
ABOVE GRADE SUB-TOTAL		786,662.0	38,383.0	748,279.0
TOTAL		807,384.0	59,105.0	748,279.0

	GROSS FLOOR AREA	MECHANICAL DEDUCTION	ZONING FLOOR AREA
RETAIL	1,921.0	0.0	1,921.0
RESIDENTIAL	701,518.0	20,813.0	680,705.0
RESIDENTIAL AMENITY	41,471.0	187.0	41,284.0
RESI BOH/STORAGE	13,966.0	179.0	13,787.0
RESIDENTIAL TERRACE	4,572.0	0.0	4,572.0
SALLY PORT	6,010.0	0.0	6,010.0
MECHANICAL	37,926.0	37,926.0	0.0
Total Residential ZFA			740,348.0

ZONING CALCULATION

31ST STREET + DYER AVENUE
ADDRESS: 435 WEST 31st STREET
BLOCK: 729
LOT: 50
MAP: 8D
ZONING DISTRICT: C6-4 & SPECIAL HUDSON YARDS DISTRICT / FARLEY CORRIDOR SUBDRISTRICT B / CENTRAL BLOCKS SUBAREA B2.

SECTION	ITEM	COMPLIANCE
	LOT AREA: 213,630 SF	
	USES PERMITTED: USE GROUP 4 - 14, 16, 17	
	USES PROPOSED: USE GROUP 2 (RESIDENTIAL) USE GROUP 6 (OFFICE & RETAIL)	COMPLIES
93-03	SPECIAL HUDSON YARDS DISTRICT MAP 1. SPECIAL HUDSON YARDS DISTRICT / FARLEY CORRIDOR SUBDRISTRICT B CENTRAL BLOCKS SUBAREA B2	
	MAP 2. MANDATORY GROUND FLOOR RETAIL.	N/A
	MAP 3. MANDATORY STREET WALL REQUIREMENTS	N/A
	MAP 4. MANDATORY SIDEWALK WIDENING	N/A
	MAP 5. TRANSIT FACILITIES	N/A
	MAP 6. SITES WHERE SPECIAL PARKING REGS APPLY	N/A
	MAP 7 THRU 10 SUB DRISTRICT F	N/A
93-17(A)	SIGN REGULATIONS UNDERLYING SIGN REGULATIONS APPLY. ANY SIGNAGE WILL BE FILED UNDER SEPARATELY	
93-20 93-22(A). ROW C	FLOOR AREA REGULATIONS MAX PERMITTED FAR 19.0 FAR TOTAL 19.0 FAR COMMERCIAL 4.0 FAR RESIDENTIAL 2.0 FAR COMMUNITY FACILITY	
	MAX. PERMITTED FLOOR AREA 19.0 x 213,630 SF = 4,058,970 SF TOTAL 19.0 x 213,630 SF = 4,058,970 SF COMMERCIAL 4.0 x 213,630 SF = 854,520 SF RESIDENTIAL 2.0 x 213,630 SF = 427,260 SF COMMUNITY FACILITY	
	FLOOR AREA PROPOSED 748,279 SF TOTAL	COMPLIES
	7,931 SF COMMERCIAL (= RETAIL + SALLY PORT)	COMPLIES
	740,348 SF RESIDENTIAL (= RESIDENTIAL + AMENITY + B.O.H. + TERRACE)	COMPLIES
	0 SF COMMUNITY FACILITY	COMPLIES
23-22	DWELLING UNIT CALCULATIONS DWELLING UNIT FACTOR = 790	
	MAXIMUM RESIDENTIAL FLOOR AREA PERMITTED = 854,520 SF 854,520 / 790 = 1,081 MAXIMUM DWELLING UNITS 844 DWELLING UNITS PROPOSED (SEE CHART THIS SHEET)	COMPLIES
93-221	RESIDENTIAL USE AS PROVIDED FOR PHASED DEVELOPMENT IN 93-122.	
93-40	HEIGHT AND SETBACK REGULATIONS	
93-41(A)	ROOFTOP REGULATIONS. SECTION 33-42 SHALL APPLY	
93-42	HEIGHT AND SETBACK HEIGHT MEASURED FROM CURB LEVEL.	
	D. LENGTH OF BUILDING WALL. MAX LENGTH ABOVE 500'. SHALL NOT EXCEED 250'.	SEE Z-004 & 005 COMPLIES
93-50 93-52(B)	SPECIAL HEIGHT AND SETBACK REGULATIONS TOWER LOT COVERAGE 93-42 DOES NOT APPLY	
93-522.	NINTH AVE RAIL YARDS. ON NARROW ST. BUILDING MAY RISE WITHOUT SETBACK PROVIDED NO PART OF SUCH BUILDING IS WITHIN 15' OF NARROW ST LINE.	SEE Z-004 COMPLIES
93-63.	PEDESTRIAN CIRCULATION SPACE NOT REQUIRED: ZONING LOT IS REQUIRED TO PROVIDE PUBLIC ACCESS PER 93-70.	
93-70 93-73	PUBLIC ACCESS REQUIREMENTS FOR SPECIAL SITES PUBLIC ACCESS AREAS ON 9TH AVE RAIL YARDS	COMPLIES SEE MASTER PLAN
93-80. 93-821	OFF STREET PARKING REGULATIONS NO PARKING REQUIRED NO PARKING PROVIDED	
34-23 93-52	YARD REQUIREMENTS	
93-522	REAR YARD: NO REAR YARD REQUIRED. NONE PROVIDED	SEE Z-004
34-231	FRONT YARD: NO FRONT YARD REQUIRED. NONE PROVIDED	SEE Z-004
34-232	SIDE YARD: NO SIDE YARD REQUIRED. MINIMUM IF PROVIDED = 8'-0" WIDE. NONE PROVIDED	SEE Z-004
25-811 36-711	ENCLOSED BICYCLE PARKING REQUIREMENTS REQUIRED BICYCLE PARKING SPACES RESIDENTIAL USES = 1 PER 2 DWELLING UNITS PROPOSED NO. DWELLING UNITS = 844 D.U. REQUIRED BICYCLE PARKING SPACES: 844 / 2 = 422 BIKES REQUIRED BICYCLE STORAGE PROVIDED AT 15 S.F. / BIKE: BIKE ROOM #1 (CELLAR) 4,196 S.F. / 15 S.F./BIKE = 279 BIKES (SHEET A-101.00) BIKE ROOM #2 (1st FLOOR) 831 S.F. / 15 S.F./BIKE = 55 BIKES (SHEET A-103.00) BIKE ROOM #3 (2nd FLOOR) 1,332 S.F. / 15 S.F./BIKE = 88 BIKES (SHEET A-104.00) TOTAL = 422 BIKES	COMPLIES SEE PLANS NOTED
26-41 33-03	STREET TREE PLANTING REGULATIONS REQUIRED TREES 1 TREE PER 25' OF ZONING LOT STREET FRONTAGE 31st STREET = 498.0' 9th AVENUE = 454.97' 33rd STREET = (498.0-133.43)= 364.57' TOTAL FRONTAGE = 1,317.54' / 25 TRESS PER FT = 53 TREES REQUIRED EXISTING TREES : NONE NEW TREES PROVIDED 3 TREES PLANTED ON SITE (ADJACENT TO 435 W. 31st STREET) 17 TREES PLANTED ON SITE (AS PART OF THE MASTER PLAN- ON 9th AVE & w. 33rd ST) 20 TREES TOTAL PLANTED ON SITE 33 TREES (OFF-SITE) TO BE PLANTED IN ACCORDANCE WITH DEPARTMENT OF PARKS AND RECREATION REGULATIONS.	COMPLIES

NOTE: ELEVATIONS ARE BASED ON SURVEY INFORMATION PROVIDED, AND REFERENCE NAVD 88 DATUM AS REQUIRED BY LOCAL LAW 96/2013.

DEPT OF BLDGS 121185760 Job Number
ES681866101 Scan Code

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects,LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

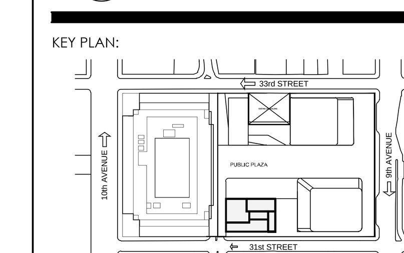
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-28	ISSUED FOR FILING
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING
2014-01-24	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 0'

KEY PLAN:



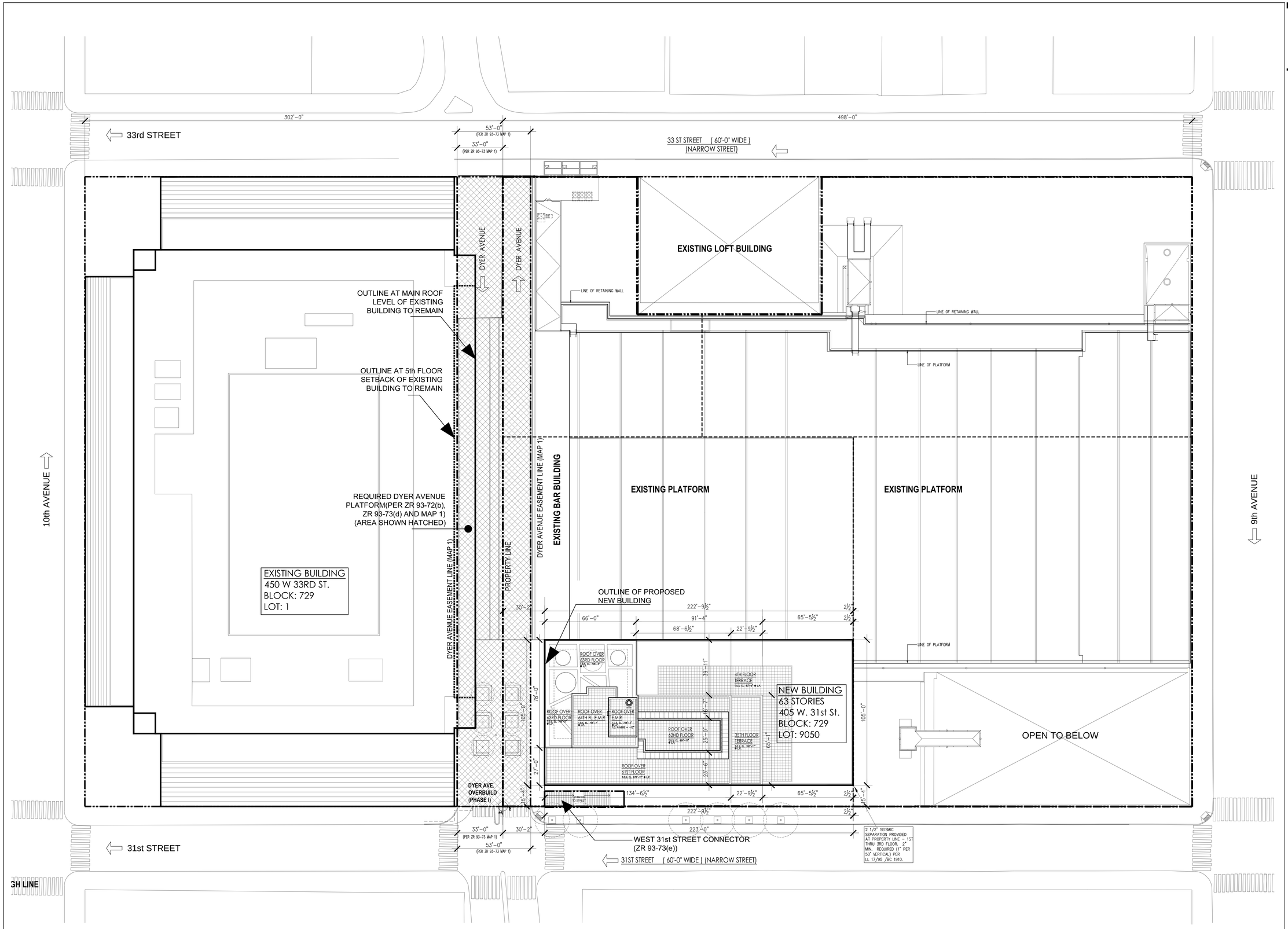
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
ZONING ANALYSIS, CALCULATIONS & PLOT PLAN

SEAL & SIGNATURE:
REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	Z-001.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Zoning\BMW_Z-001.dwg



PROJECT SITE IS NOT IN A FLOOD ZONE

NOTES:
NOTIFICATION TO DOB 24-48 HOURS PRIOR TO COMMENCEMENT OF EARTHWORK AS PER BC 3304.3.1.
BC 104
BC1701 TR-1 FOR SPECIAL/CONTROLLED/PROGRESS INSPECTIONS A) CONCRETE B) CONCRETE TEST PITS & C) CONCRETE TEST CYLINDERS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

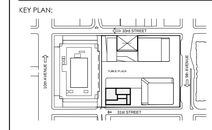
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-08-22	ISSUED TO HPD
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING
2014-01-24	50% DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
OVERALL SITE PLAN
(DYER AVE. EASEMENT DIAGRAM)

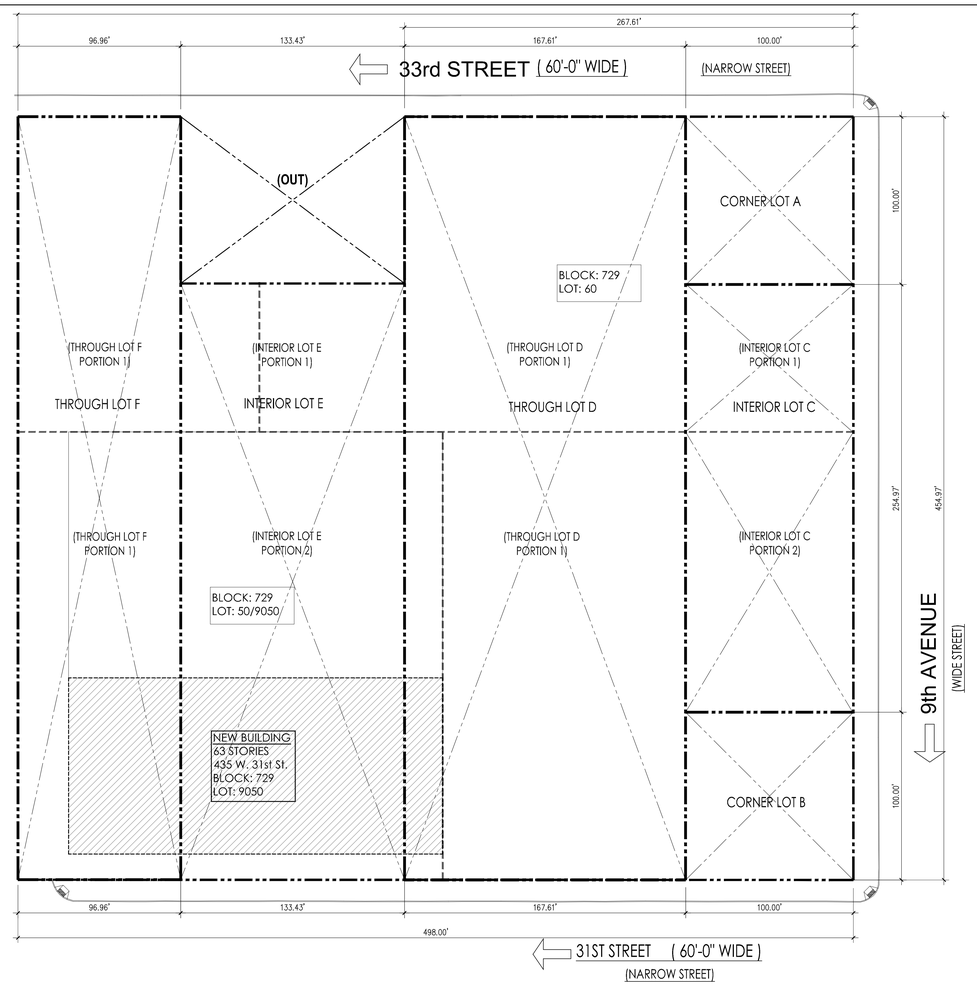
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
SHEET NO.:	Z-003.00
	1 of 000

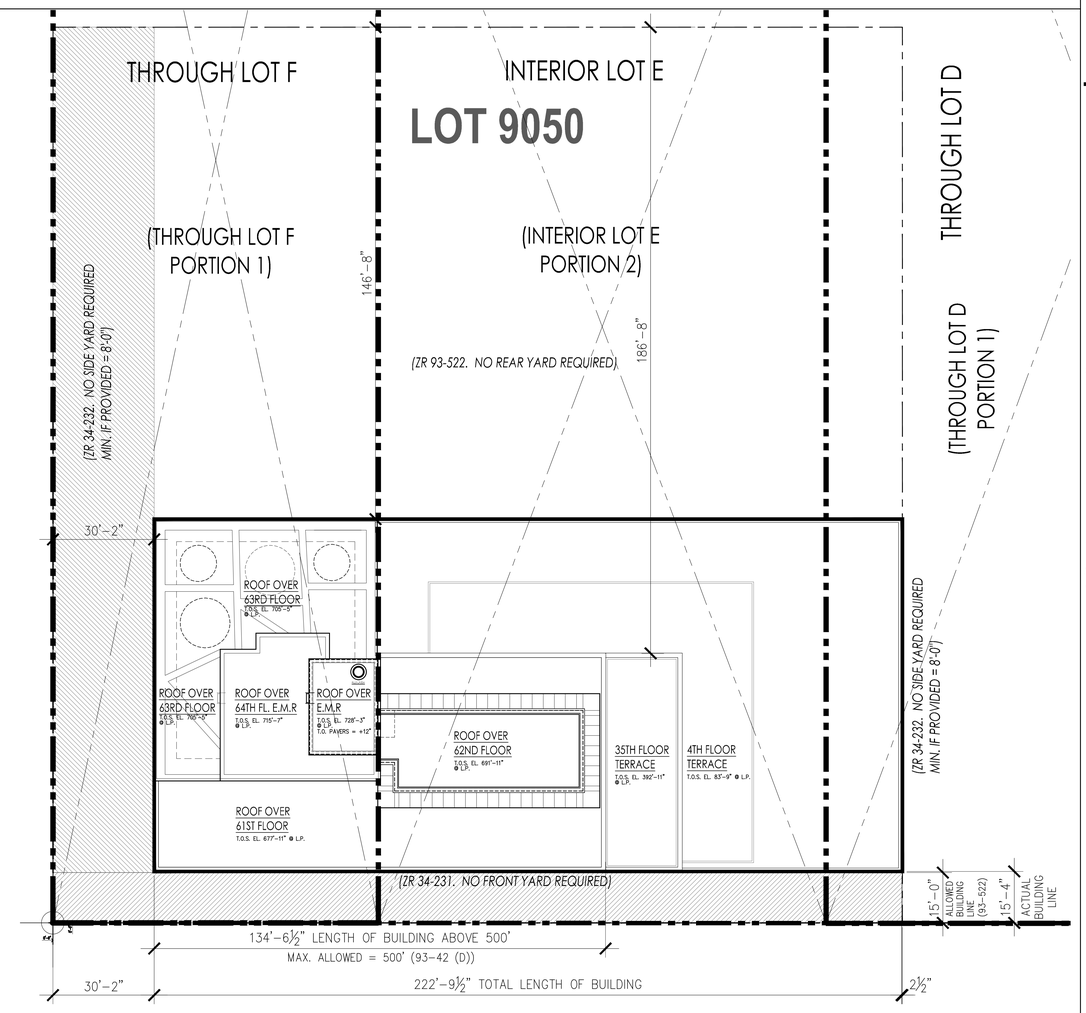
FILE No: T:\brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Zoning\BMW_Z-003_SITE PLAN.dwg

DEPT OF BLDGS 121185760 Job Number E300563239 Scan Code

TAX LOT DIAGRAM



SPECIAL HEIGHT AND SETBACK ANALYSIS - PLAN 1/16" = 1'-0"



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

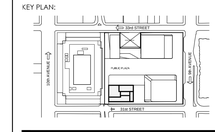
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 0'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

ZONING ANALYSIS - HEIGHT AND SETBACK PLANS

SEAL & SIGNATURE:

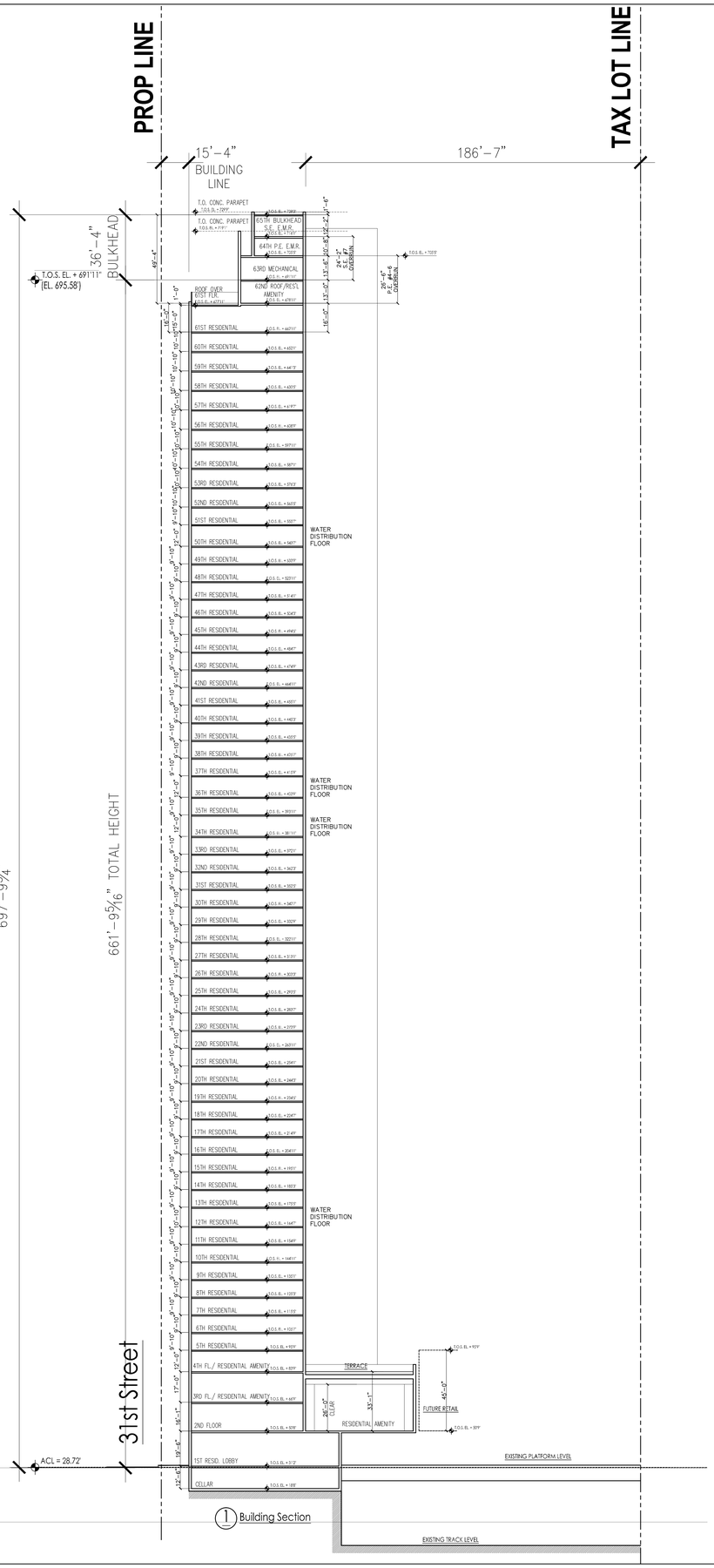
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

Z-004.00
SHEET. No.:

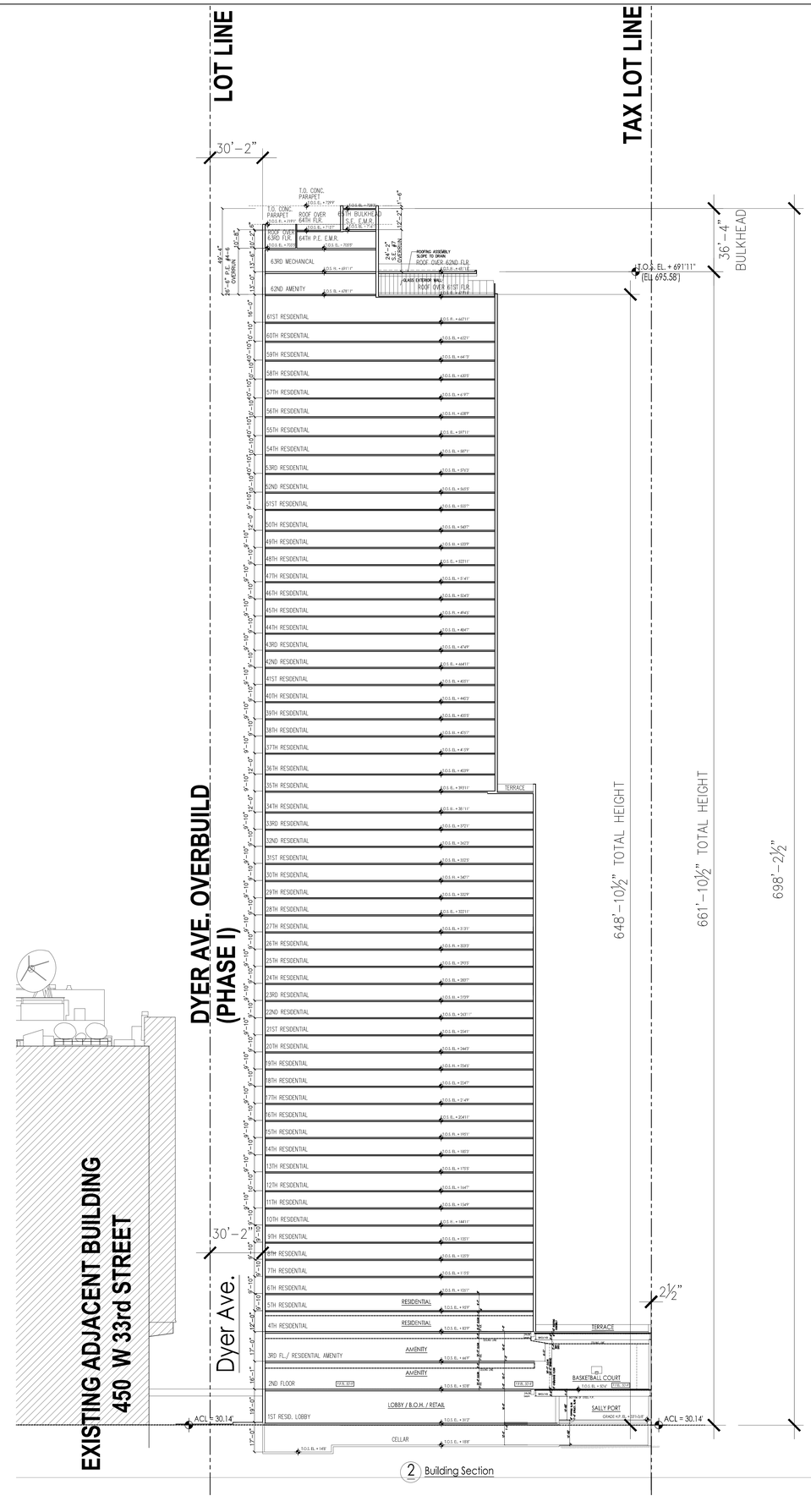
FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\Zoning\BldHt_2-001.dwg

DEPT OF BLDGS 121185760 Job Number E350556250960 Scan Code

SPECIAL HEIGHT AND SETBACK ANALYSIS - SECTIONS



1 Building Section



2 Building Section

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

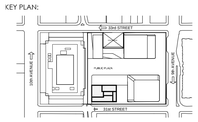
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-09-09	ISSUED FOR CONSTRUCTION
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

ZONING ANALYSIS-
BUILDING SECTIONS

SEAL & SIGNATURE:

REGISTERED ARCHITECT — STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

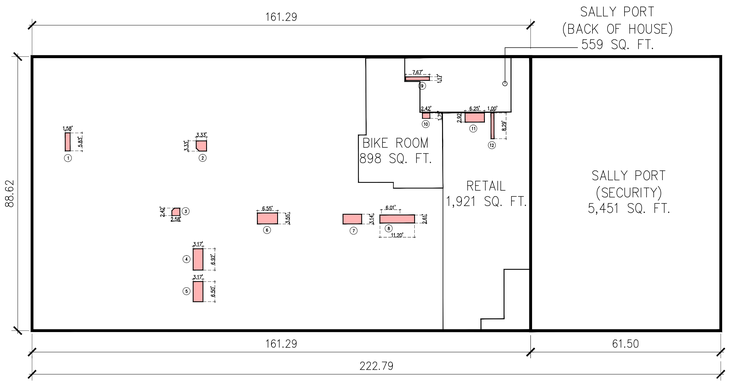
Z-005.00
SHEET. No.:

FILE No: *?:\brookfield\Manhattan-West (2012-32)\SLCE\Drawings\Zoning\Bldlrk_2-005.dwg*

GROSS FLOOR AREA AND DEDUCTION CALCULATIONS

SCALE: 1/16" = 1'-0"

FIRST FLOOR

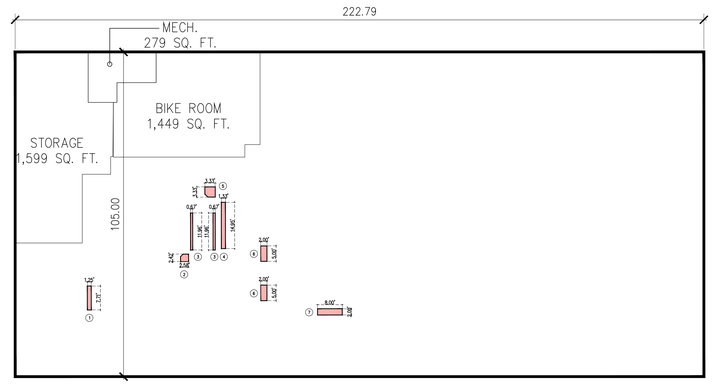


1ST FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
19,747.00	1,077.00	**18,670.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RETAIL	1,921.00
RESIDENTIAL	10,918.00
BIKE STORAGE	898.00
SALLY PORT	6,010.00
TOTAL GROSS FLOOR AREA	**19,747.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	M	1.58	X	5.83	1	9.21
2	P	3.33	X	3.33	1	11.09
3	P	2.58	X	2.42	1	6.24
4	M	3.17	X	6.92	1	21.94
5	M	3.17	X	6.50	1	20.61
6	P	6.55	X	3.55	1	23.25
7	P	6.01	X	3.14	1	18.87
8	P	11.20	X	2.61	1	29.23
9	P	7.67	X	1.17	1	8.97
10	M	2.42	X	1.75	1	4.24
11	M	6.25	X	2.92	1	18.25
12	P	1.00	X	8.29	1	8.29
13						
14						
TOTAL						**179.00**

2ND FLOOR

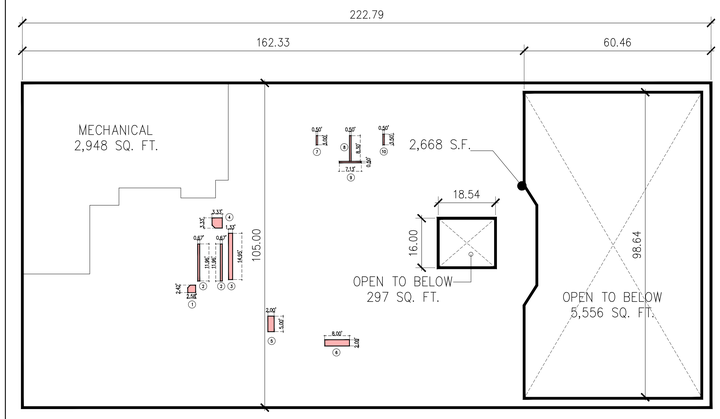


2ND FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
23,393.00	377.00	**23,016.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
MECHANICAL	279.00
RESIDENTIAL AMENITY	20,066.00
BIKE STORAGE	1,449.00
STORAGE	1,599.00
TOTAL GROSS FLOOR AREA	**23,393.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	1.25	X	7.71	1	9.64
2	P	2.58	X	2.42	1	6.24
3	STAIR	0.67	X	11.96	2	16.03
4	P	1.33	X	14.95	1	19.88
5	P	3.33	X	3.33	1	11.09
6	P	2.00	X	5.00	2	20.00
7	P	8.00	X	2.00	1	16.00
8						
9						
10						
11						
12						
13						
TOTAL						**98.00**

3RD FLOOR



3RD FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
17,540.00	3,037.00	**14,503.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL AMENITY	14,592.00
MECHANICAL	2,948.00
TOTAL GROSS FLOOR AREA	**17,540.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	2.58	X	2.42	1	6.24
2	STAIR	0.67	X	11.96	2	16.03
3	P	1.33	X	14.95	1	19.88
4	P	3.33	X	3.33	1	11.09
5	P	2.00	X	5.00	1	10.00
6	P	8.00	X	2.00	1	16.00
7	P	0.50	X	3.00	1	1.50
8	P	0.50	X	8.30	1	4.15
9	P	7.13	X	0.50	1	3.57
10	P	0.50	X	3.50	1	1.75
11						
12						
13						
14						
TOTAL						**89.00**

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

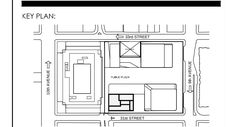
CONSTRUCTION MANAGER:
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-28	ISSUED FOR FILING
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

GROSS AREA
& MECHANICAL DEDUCTIONS

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
SHEET No.:	Z-006.00

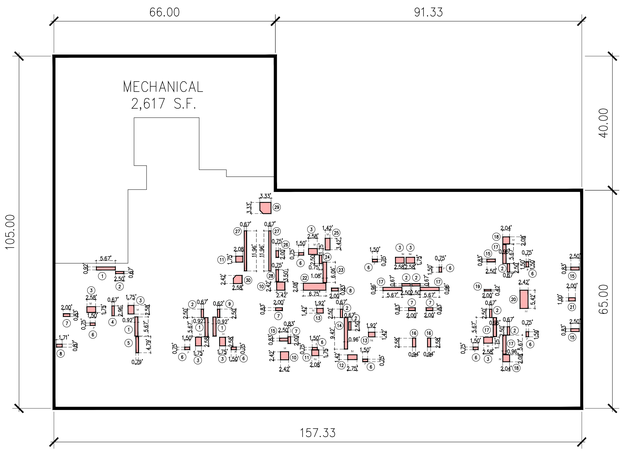
FILE No: \\brookfield-kaymarton-files\2012-32\2.CD-Drawings\Zoning\Bldg_2-006.09_MECH

DEPT OF BLDGS 121185760 Job Number E351947989MS Scan Code

GROSS FLOOR AREA AND DEDUCTION CALCULATIONS

SCALE: 1/16" = 1'-0"

4TH FLOOR

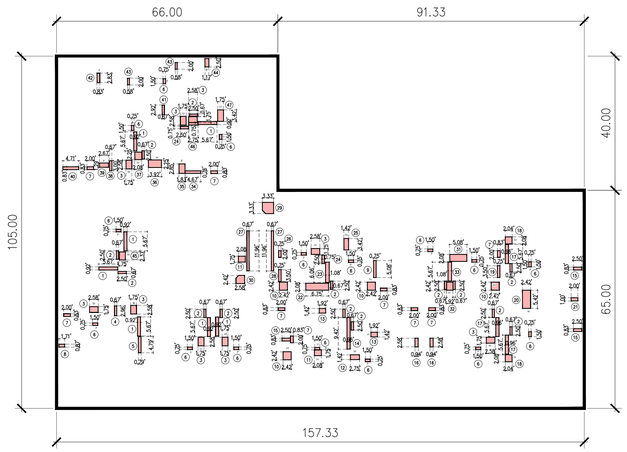


4TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
12,867.00	269.00	**12,598.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	10,250.00
MECHANICAL	2,617.00
TOTAL GROSS FLOOR AREA	**12,867.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	4	20.87
2	P	2.50	X	0.67	9	15.08
3	M	2.58	X	1.75	8	36.12
4	P	0.67	X	2.96	1	1.98
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	11	12.38
7	P	2.00	X	0.83	1	1.66
8	P	1.71	X	0.87	5	7.44
9	P	0.62	X	2.50	2	3.10
10	M	2.42	X	2.42	1	5.86
11	M	2.08	X	1.75	2	7.28
12	M	2.75	X	1.42	2	7.81
13	M	1.92	X	1.42	1	2.73
14	P	0.96	X	9.42	2	18.09
15	P	2.50	X	0.83	1	2.08
16	P	0.94	X	2.58	4	9.70
17	P	5.67	X	0.96	2	10.89
18	M	2.04	X	2.08	5	21.22
19	P	2.00	X	0.42	2	1.68
20	M	2.42	X	5.42	1	13.12
21	P	2.00	X	1.00	1	2.00
22	P	6.75	X	2.08	1	14.04
23	P	1.08	X	6.06	1	6.54
24	P	0.75	X	2.50	1	1.88
25	M	1.42	X	3.42	1	4.86
26	P	0.75	X	2.00	1	1.50
27	STAIR	0.67	X	11.96	2	16.03
28	P	0.75	X	3.50	1	2.63
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
						0.00
TOTAL						**269.00**

5TH THRU 34TH FLOOR

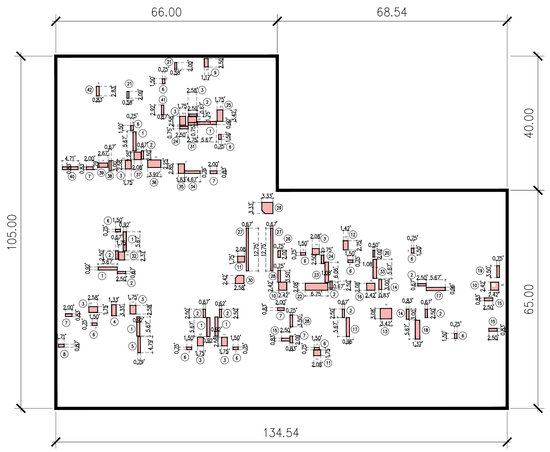


5TH-34TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
12,867.00	385.00	**12,482.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	12,867.00
TOTAL GROSS FLOOR AREA	**12,867.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	7	36.51
2	P	2.50	X	0.67	14	23.45
3	M	2.58	X	1.75	9	40.64
4	P	0.67	X	2.96	1	1.98
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	16	18.00
7	P	2.00	X	0.83	9	14.94
8	P	1.71	X	0.87	1	1.49
9	P	0.62	X	2.50	1	1.55
10	M	2.42	X	2.42	4	23.43
11	M	2.08	X	1.75	2	7.28
12	M	2.75	X	1.42	1	3.91
13	M	1.92	X	1.42	2	5.45
14	P	0.96	X	9.42	1	9.04
15	P	2.50	X	0.83	3	6.23
16	P	0.94	X	2.58	2	4.85
17	P	5.67	X	0.96	3	16.33
18	M	2.04	X	2.08	2	8.49
19	P	3.50	X	0.75	1	2.63
20	M	2.42	X	5.42	1	13.12
21	P	2.00	X	1.00	1	2.00
22	P	6.75	X	2.08	1	14.04
23	P	1.08	X	6.06	1	6.54
24	P	0.75	X	2.50	2	3.75
25	M	1.42	X	3.42	1	4.86
26	P	0.75	X	2.00	1	1.50
27	STAIR	0.67	X	11.96	2	16.03
28	P	0.75	X	3.50	1	2.63
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	5.08	X	2.08	1	10.57
32	M	1.92	X	2.42	1	4.65
33	P	5.67	X	1.08	1	6.12
34	P	4.67	X	0.76	1	3.55
35	P	1.83	X	2.85	1	5.22
36	M	3.92	X	2.25	1	8.82
37	M	2.08	X	2.25	1	4.68
38	P	3.00	X	0.67	1	2.01
39	P	2.67	X	1.29	1	3.44
40	P	4.71	X	0.83	1	3.91
41	P	2.92	X	0.67	1	1.96
42	P	0.83	X	2.83	1	2.35
43	P	0.58	X	2.00	2	2.32
44	P	1.17	X	2.50	1	2.93
45	M	1.75	X	2.37	1	4.15
46	P	2.75	X	0.75	1	2.06
47	M	1.75	X	3.42	1	5.99
48						0.00
TOTAL						**385.00**

35TH FLOOR



35TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	316.00	**11,069.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	11,385.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	7	36.51
2	P	2.50	X	0.67	10	16.75
3	M	2.58	X	1.75	8	36.12
4	P	0.67	X	2.96	1	1.98
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	12	13.50
7	P	2.00	X	0.83	5	8.30
8	P	1.71	X	0.87	1	1.49
9	P	1.17	X	2.50	1	2.93
10	M	2.42	X	2.42	2	11.71
11	M	2.08	X	1.75	2	7.28
12	M	2.75	X	1.42	1	3.91
13	M	3.08	X	3.42	1	10.53
14	P	0.83	X	3.00	2	4.98
15	P	2.50	X	0.83	3	6.23
16	M	2.42	X	2.08	1	5.03
17	P	5.67	X	0.96	2	10.89
18	M	1.37	X	5.67	1	7.77
19	P	3.50	X	0.75	1	2.63
20	M	0.50	X	2.00	1	1.00
21	P	2.00	X	1.00	2	4.00
22	P	6.75	X	2.08	1	14.04
23	P	1.08	X	6.06	1	6.54
24	P	0.75	X	2.50	2	3.75
25	M	1.75	X	3.42	1	5.99
26	P	0.75	X	2.00	1	1.50
27	STAIR	0.67	X	11.96	2	16.03
28	P	0.75	X	3.50	2	5.25
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	2.75	X	0.75	1	2.06
32	M	1.75	X	2.37	1	4.15
33	P	5.67	X	1.08	1	6.12
34	P	4.67	X	0.76	1	3.55
35	P	1.83	X	2.85	1	5.22
36	M	3.92	X	2.25	1	8.82
37	M	2.08	X	2.25	1	4.68
38	P	3.00	X	0.67	1	2.01
39	P	2.67	X	1.29	1	3.44
40	P	4.71	X	0.83	1	3.91
41	P	2.92	X	0.67	1	1.96
42	P	0.83	X	2.83	1	2.35
TOTAL						**316.00**

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

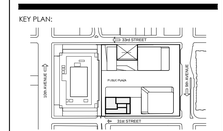
CONSTRUCTION MANAGER:
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-28	ISSUED FOR FILING
2014-08-22	ISSUED TO HPD
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale:

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
GROSS AREA
& MECHANICAL DEDUCTIONS

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

Z-007.00

SHEET. No.:

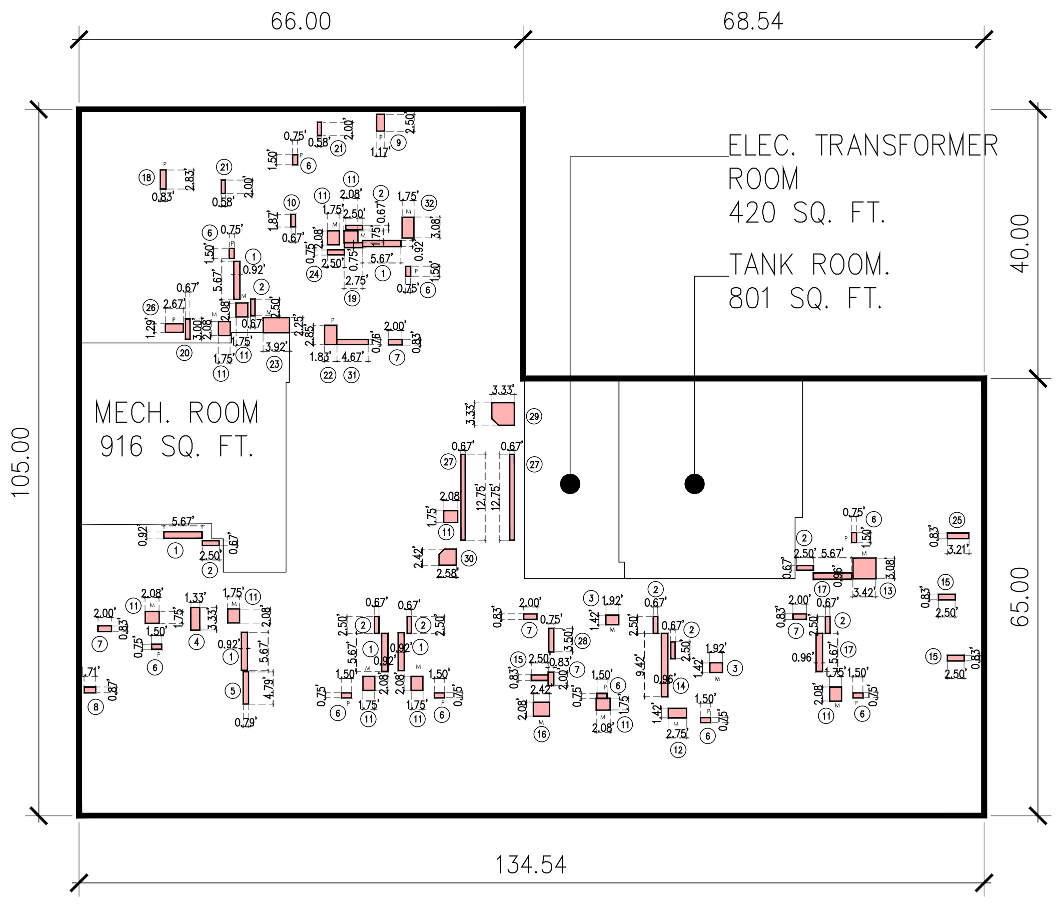
FILE No: T:\brook\bkManhattan-West (2012-32)\SLCE\Drawings\Zoning\ BnW_2-026-009_MECH

DEPT OF BLDGS 121185760 Job Number
ES053385235 Scan Code

GROSS FLOOR AREA AND DEDUCTION CALCULATIONS

SCALE: 1/16" = 1'-0"

36TH FLOOR

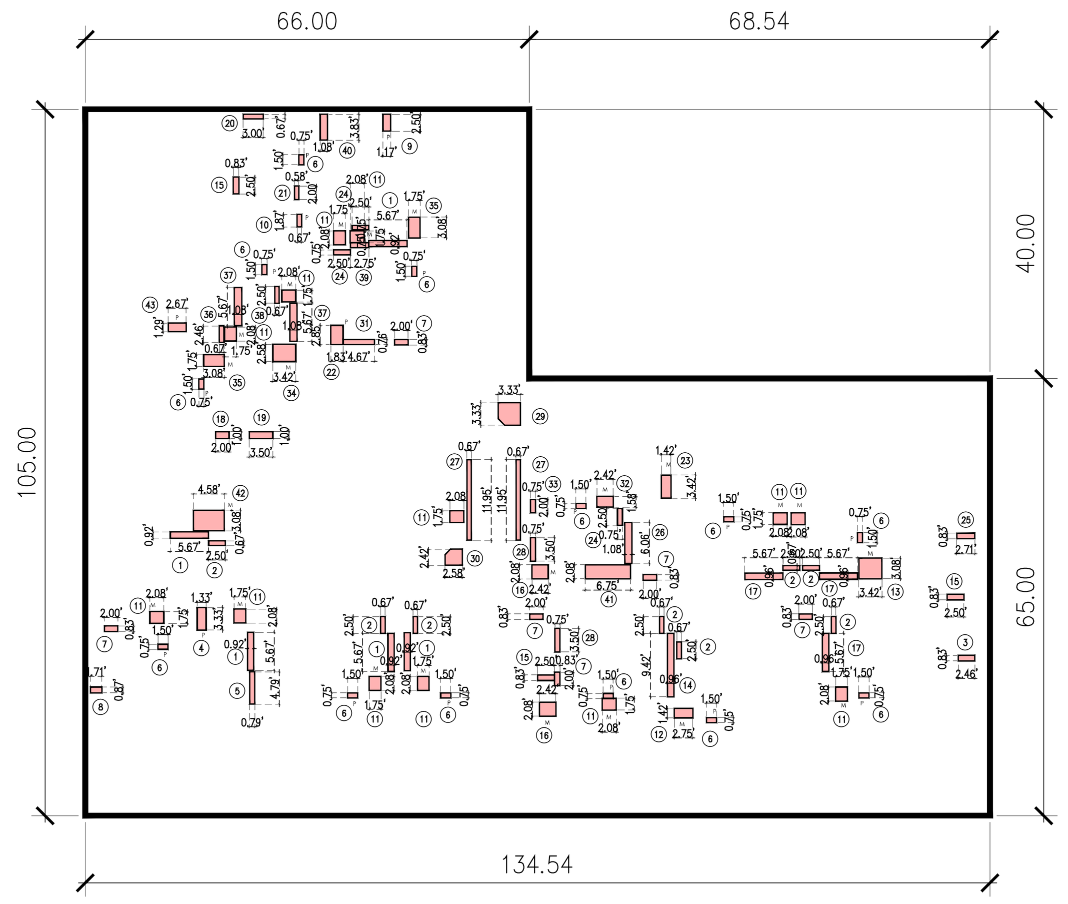


36TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	2,384.00	**9,001.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	9,248.00
MECHANICAL	2,137.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	M	5.67	X	0.92	6	31.30
2	P	2.50	X	0.67	9	15.08
3	M	1.92	X	1.42	2	5.45
4	P	1.33	X	3.33	1	4.43
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	10	11.25
7	P	2.00	X	0.83	5	8.30
8	P	1.71	X	0.87	1	1.49
9	P	1.17	X	2.50	1	2.93
10	P	1.87	X	0.67	1	1.25
11	M	2.08	X	1.75	11	40.04
12	M	2.75	X	1.42	1	3.91
13	M	3.08	X	3.42	1	10.53
14	P	0.96	X	9.42	1	9.04
15	P	2.50	X	0.83	3	6.23
16	M	2.42	X	2.08	1	5.03
17	P	5.67	X	0.96	2	10.89
18	P	0.83	X	2.83	1	2.35
19	P	2.75	X	0.75	1	2.06
20	P	0.67	X	3.00	1	2.01
21	P	0.58	X	2.00	3	3.48
22	P	1.83	X	2.85	1	5.22
23	M	3.92	X	2.25	1	8.82
24	P	0.75	X	2.50	1	1.88
25	P	3.21	X	0.83	1	2.66
26	P	2.67	X	1.29	1	3.44
27	STAIR	0.67	X	12.75	2	17.09
28	P	0.75	X	3.50	1	2.63
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	4.67	X	0.76	1	3.55
32	M	1.75	X	3.08	1	5.39
TOTAL						**247.00**

37TH THRU 51ST FLOOR

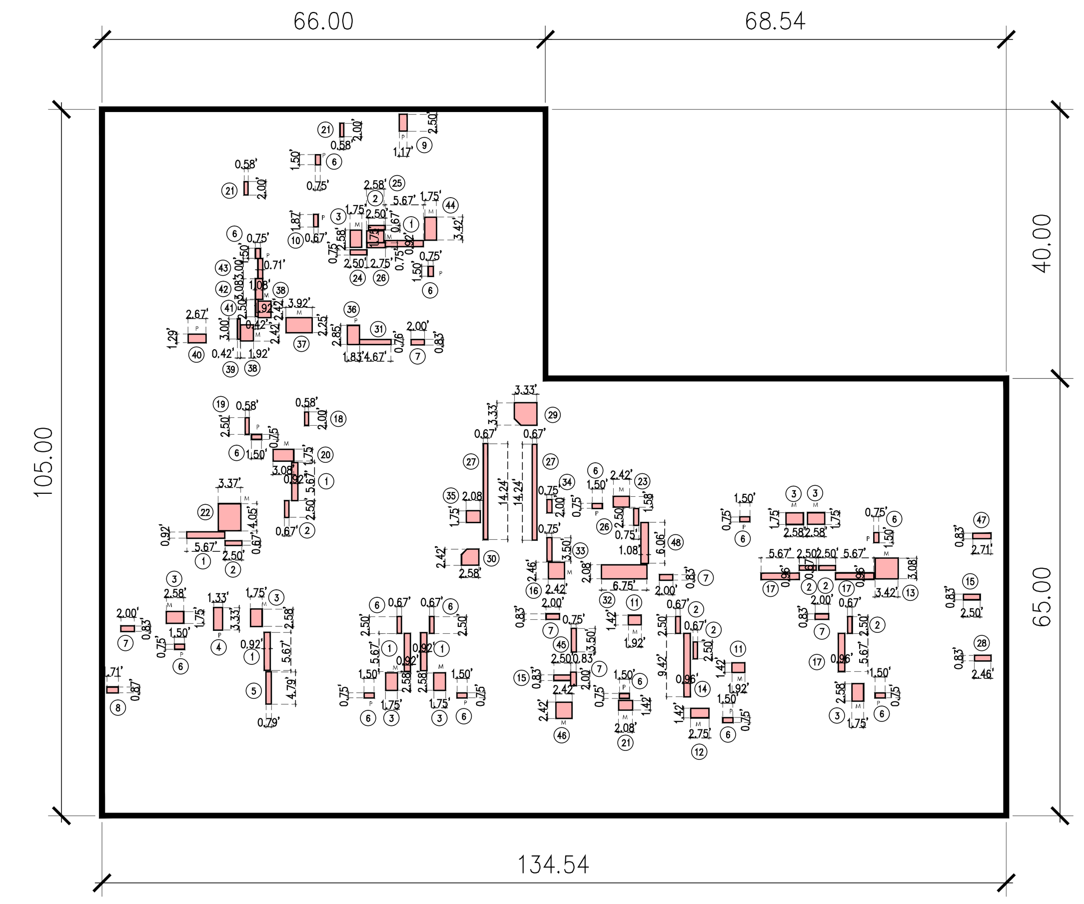


37TH THRU 51ST FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	335.00	**11,050.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	11,385.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	5	26.08
2	P	2.50	X	0.67	8	13.40
3	P	2.46	X	0.83	1	2.04
4	P	1.33	X	3.33	1	4.43
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	13	14.63
7	P	2.00	X	0.83	6	9.96
8	P	1.71	X	0.87	1	1.49
9	P	1.17	X	2.50	1	2.93
10	P	1.87	X	0.67	1	1.25
11	M	2.08	X	1.75	13	47.32
12	M	2.75	X	1.42	1	3.91
13	M	3.08	X	3.42	1	10.53
14	P	0.96	X	9.42	1	9.04
15	P	2.50	X	0.83	3	6.23
16	M	2.42	X	2.08	2	10.07
17	P	5.67	X	0.96	3	16.33
18	P	2.00	X	1.00	1	2.00
19	P	3.50	X	1.00	1	3.50
20	P	0.67	X	3.00	1	2.01
21	P	0.58	X	2.00	1	1.16
22	P	1.83	X	2.85	1	5.22
23	M	1.42	X	3.42	1	4.86
24	P	2.50	X	0.75	3	5.63
25	P	2.71	X	0.83	1	2.25
26	P	1.08	X	6.06	1	6.54
27	STAIR	0.67	X	11.95	2	16.01
28	P	0.75	X	3.50	2	5.25
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	4.67	X	0.76	1	3.55
32	M	2.42	X	1.58	1	3.82
33	P	0.75	X	2.00	1	1.50
34	M	3.42	X	2.58	1	8.82
35	M	3.08	X	1.75	2	10.78
36	P	0.60	X	2.46	1	1.48
37	P	1.08	X	5.67	2	12.25
38	P	0.67	X	2.50	1	1.68
39	P	2.75	X	0.75	1	2.06
40	P	1.08	X	3.83	1	4.14
41	P	6.75	X	2.08	1	14.04
42	M	4.58	X	3.08	1	14.11
43	P	2.67	X	1.29	1	3.44
TOTAL						**335.00**

52ND THRU 55TH FLOOR

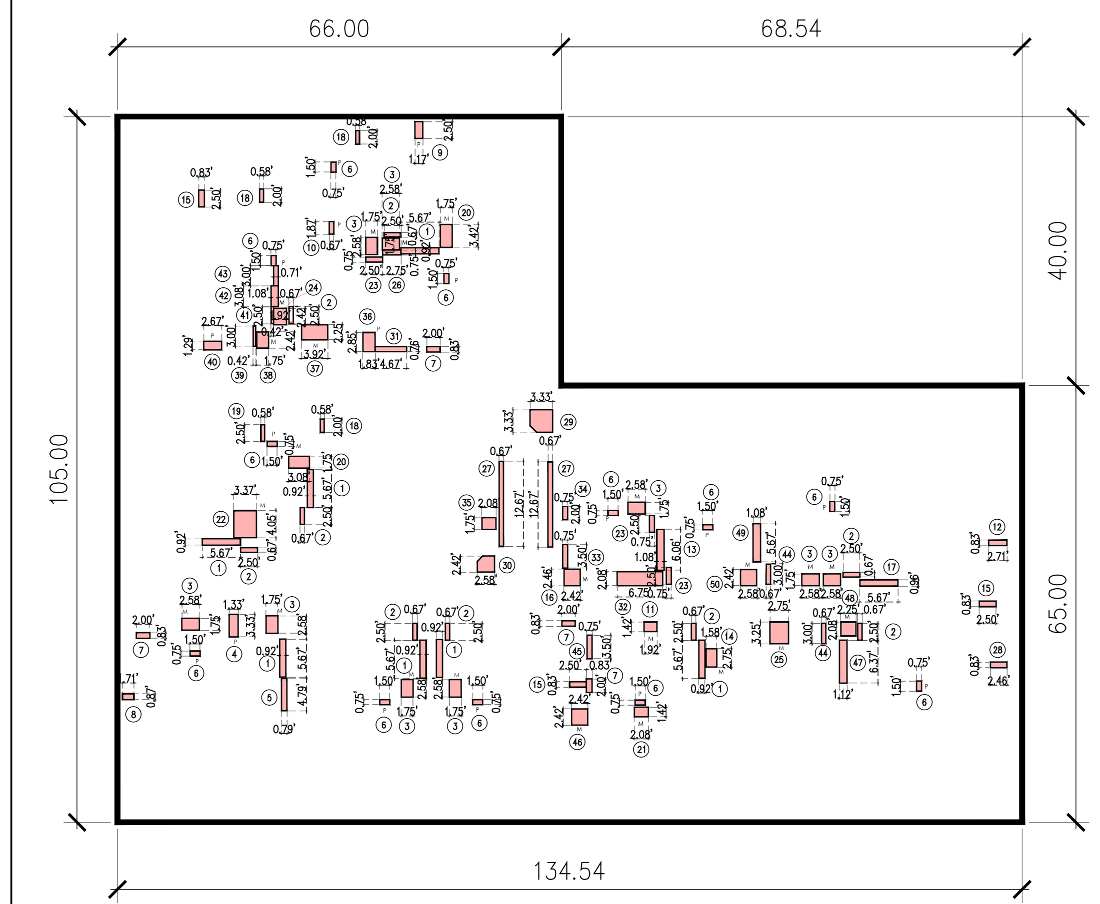


52ND THRU 55TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	340.00	**11,045.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	11,385.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	6	31.30
2	P	2.50	X	0.67	8	13.40
3	M	1.75	X	2.58	8	36.12
4	P	1.33	X	3.33	1	4.43
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	15	16.88
7	P	2.00	X	0.83	6	9.96
8	P	1.71	X	0.87	1	1.49
9	P	1.17	X	2.50	1	2.93
10	P	1.87	X	0.67	1	1.25
11	M	1.92	X	1.42	2	5.45
12	M	2.75	X	1.42	1	3.91
13	M	3.08	X	3.42	1	10.53
14	P	0.96	X	9.42	1	9.04
15	P	2.50	X	0.83	2	4.15
16	M	2.42	X	2.46	1	5.95
17	P	5.67	X	0.96	3	16.33
18	P	0.58	X	2.00	1	1.16
19	P	0.58	X	2.50	1	1.45
20	M	3.08	X	1.75	1	5.39
21	M	2.08	X	1.42	2	5.91
22	M	3.37	X	4.05	1	13.65
23	M	2.42	X	1.58	1	3.82
24	P	2.50	X	0.75	1	1.88
25	M	2.58	X	1.75	1	4.52
26	P	2.75	X	0.75	2	4.13
27	STAIR	14.24	X	0.67	2	19.08
28	P	2.46	X	0.83	1	2.04
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	4.67	X	0.76	1	3.55
32	M	6.75	X	2.08	1	14.04
33	P	0.75	X	3.50	1	2.63
34	M	0.75	X	2.00	1	1.50
35	M	2.08	X	1.75	1	3.64
36	P	1.83	X	2.85	1	5.22
37	M	3.92	X	2.25	1	8.82
38	M	1.92	X	2.42	2	9.29
39	P	0.42	X	3.00	1	1.26
40	P	2.67	X	1.29	1	3.44
41	P	0.42	X	2.50	1	1.05
42	M	3.08	X	1.08	1	3.33
43	P	3.00	X	0.71	1	2.13
44	M	1.75	X	3.42	1	5.99
45	P	0.75	X	3.50	1	2.63
46	M	2.42	X	2.42	1	5.86
47	P	2.71	X	0.83	1	2.25
48	P	1.08	X	6.06	1	6.54
TOTAL						**340.00**

56TH THRU 61ST FLOOR



56th THRU 61st FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	341.00	**11,044.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESIDENTIAL	11,385.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.						
NO.	TYPE	DIMENSIONS (FT)			Quantity	TOTAL
1	P	5.67	X	0.92	7	36.51
2	P	2.50	X	0.67	9	15.08
3	M	1.75	X	2.58	9	40.64
4	P	1.33	X	3.33	1	4.43
5	P	0.79	X	4.79	1	3.78
6	P	1.50	X	0.75	12	13.50
7	P	2.00	X	0.83	4	6.64
8	P	1.71	X	0.87	1	1.49
9	P	1.17	X	2.50	1	2.93
10	P	1.87	X	0.67	1	1.25
11	M	1.92	X	1.42	1	2.73
12	M	2.71	X	0.83	1	2.25
13	M	1.08	X	6.06	1	6.54
14	P	1.58	X	2.75	1	4.35
15	P	2.50	X	0.83	3	6.23
16	M	2.42	X	2.46	1	5.95
17	P	5.67	X	0.96	1	5.44
18	P	0.58	X	2.00	3	3.48
19	P	0.58	X	2.50	1	1.45
20	M	3.42	X	1.75	2	11.97
21	M	2.08	X	1.42	1	2.95
22	M	3.37	X	4.05	1	13.65
23	M	2.50	X	0.75	3	5.63
24	P	1.92	X	2.42	1	4.65
25	M	2.75	X	3.25	1	8.94
26	P	2.75	X	0.75	1	2.06
27	STAIR	12.67	X	0.67	2	16.98
28	P	2.46	X	0.83	1	2.04
29	P	3.33	X	3.33	1	11.09
30	P	2.58	X	2.42	1	6.24
31	P	4.67	X	0.76	1	3.55
32	M	6.75	X	2.08	1	14.04
33	P	0.75	X	3.50	1	2.63
34	M	0.75	X	2.00	1	1.50
35	M	2.08	X	1.75	1	3.64
36	P	1.83	X	2.85	1	5.22
37	M	3.92	X	2.25	1	8.82
38	M	1.75	X	2.42	1	4.24
39	P	0.42	X	3.00	1	1.26
40	P	2.67	X	1.29	1	3.44
41	P	0.42	X	2.50	1	1.05
42	M	3.08	X	1.08	1	3.33
43	P	3.00	X	0.71	1	2.13
44	M	3.00	X	0.67	2	4.02
45	P	0.75	X	3.50	1	2.63
46	M	2.42	X	2.42	1	5.86
47	P	1.12	X	6.37	1	7.13
48	P	2.25	X	2.08	1	4.68
49	P	1.08	X	5.67	1	6.12
50	P	2.58	X	2.42	1	6.24
TOTAL						**341.00**

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

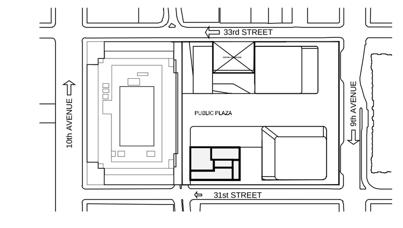
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-28	ISSUED FOR FILING
2014-08-22	ISSUED TO HPD
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
GROSS AREA
& MECHANICAL DEDUCTIONS

SEAL & SIGNATURE: REGISTERED ARCHITECT LUIGI-PIO ROSSO STATE OF NEW YORK No. 020741

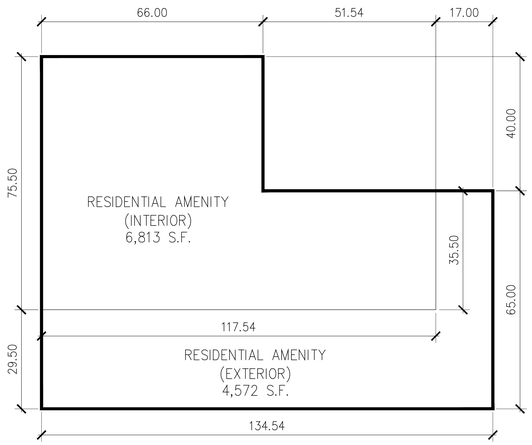
DATE: -
PROJECT No: 2012-32
DRAWN BY: Z.J.R.
CHECKED BY: T.J.F.
DWG. No.: Z-008.00
SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Zoning\BMW_Z-006-009_MECH

GROSS FLOOR AREA AND DEDUCTION CALCULATIONS

SCALE: 1/16" = 1'-0"

62ND FLOOR

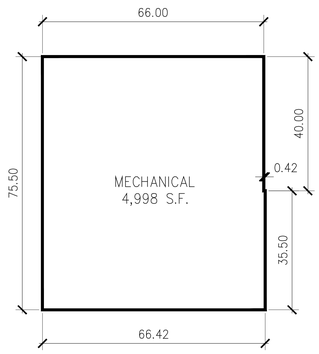


62ND FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
11,385.00	-	**11,385.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
RESI. AMENITY (INTERIOR)	6,813.00
RESI. AMENITY (EXTERIOR)	4,572.00
TOTAL GROSS FLOOR AREA	**11,385.00**

DEDUCTIONS - SQ. FT.				
NO.	TYPE	DIMENSIONS (FT)	Quantity	TOTAL
1				
2				
3				
4				
5				
TOTAL				-

63RD FLOOR

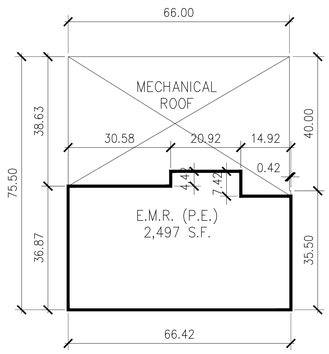


63RD FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
4,998.00	4,998.00	**0.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
MECHANICAL	4,998.00
TOTAL GROSS FLOOR AREA	**4,998.00**

DEDUCTIONS - SQ. FT.				
NO.	TYPE	DIMENSIONS (FT)	Quantity	TOTAL
1				
2				
3				
4				
5				
TOTAL				-

64TH FLOOR

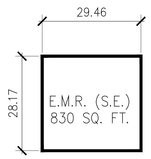


64TH FLOOR		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
2,497.00	2,497.00	**0.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
MECHANICAL	2,497.00
TOTAL GROSS FLOOR AREA	**2,497.00**

DEDUCTIONS - SQ. FT.				
NO.	TYPE	DIMENSIONS (FT)	Quantity	TOTAL
1				
2				
3				
4				
5				
TOTAL				-

E.M.R.



E.M.R.		
ZONING AREA - SQ. FT.		
G.F.A.	DEDUCTION	Z.F.A.
830.00	830.00	**0.00**

GROSS FLOOR AREA - SQ. FT.	
USES	C6-4
MECHANICAL	830.00
TOTAL GROSS FLOOR AREA	**830.00**

DEDUCTIONS - SQ. FT.				
NO.	TYPE	DIMENSIONS (FT)	Quantity	TOTAL
1				
2				
3				
4				
5				
TOTAL				-

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILLIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

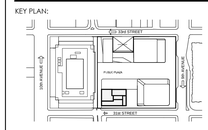
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-28	ISSUED FOR FILING
2014-08-22	ISSUED TO HPD
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale:
0'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

GROSS AREA
& MECHANICAL DEDUCTIONS

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

Z-009.00
SHEET. No.:

FILE No: T:\Brookfield\Manhattan West [2012-32] DLCD\Drawings\Zoning\Bldg_2\Z009_MECH

FEMA MAP (2013 FOR REFERENCE ONLY)

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was New York Long Island State Plane FIPSZONE 3104. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3182
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Department of Information Technology and Telecommunication, City of New York (DoITT). This information was derived from digital orthophotos produced at a scale of 1:1,200 with 2-foot pixel resolution from photography dated April 2008.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

The AE Zone category has been divided by a **Limit of Moderate Wave Action (LiMWA)**. The LiMWA represents the approximate landward limit of the 1.5 - foot breaking wave. The effects of wave hazards between the VE Zone and the LiMWA (or between the shoreline and the LiMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

PROJECT SITE

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A — No Base Flood Elevations determined.
- ZONE AE — Base Flood Elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99 — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Limit of Moderate Wave Action
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- A — A: Cross section line
- 23 — 23: Transect line
- Culvert, Flume, Penstock or Aqueduct
- Road or Railroad Bridge
- Footbridge
- 87°07'45", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 2476000mN — 1000-meter Universal Transverse Mercator grid values, zone 18
- 600000 FT — 5000-foot grid values: New York State Plane coordinate system, Long Island zone (FIPSZONE 3104), Lambert Conformal Conic projection
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- • M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

INITIAL NFIP MAP DATE
June 28, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
June 11, 1976

FLOOD INSURANCE RATE MAP EFFECTIVE
November 16, 1983

FLOOD INSURANCE RATE MAP REVISIONS

For descriptions of revisions see Notice to Users page in the Flood Insurance Study report.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0088G

FIRM
FLOOD INSURANCE RATE MAP

CITY OF,
NEW YORK
NEW YORK
BRONX, RICHMOND, NEW YORK, QUEENS, AND KINGS COUNTIES

PANEL 88 OF 457

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NEW YORK, CITY OF	360497	0088	G

PRELIMINARY
DECEMBER 5, 2013

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
3604970088G

MAP REVISED

Federal Emergency Management Agency

FEMA MAP (2007)

PROJECT SITE

...ood insurance is available in this community, contact your I... ...ional Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0088F

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
NEW YORK,
NEW YORK
BRONX, RICHMOND, NEW YORK, QUEENS, AND KINGS COUNTIES

PANEL 88 OF 457

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NEW YORK, CITY OF	360497	0088	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
3604970088F

MAP REVISED
SEPTEMBER 5, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

PROJECT SITE IS IN FLOOD ZONE X

DEPT OF BLDGS 121185760 Job Number
ES480167030 Scan Code

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

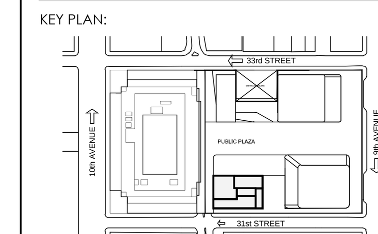
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-28	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
ZONING ANALYSIS
FEMA MAPS

SEAL & SIGNATURE:
REGISTERED ARCHITECT · STATE OF NEW YORK · No. 020741

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	Z-011.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Zoning\BMW_Z-011 FEMA.dwg

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE NEW YORK CITY BUILDING CODE 2008.
2. THE OWNER SHALL BE RESPONSIBLE FOR THE SAFE MAINTENANCE OF THE BUILDING AND ITS FACILITIES (ARTICLE 301 THRU ARTICLE 304).
3. ALL MATERIALS, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION AND SERVICE EQUIPMENT SHALL MEET THE FOLLOWING REQUIREMENTS:
   - A. IT SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE BY THE BOARD OR
   - B. SHALL HAVE BEEN ACCEPTED FOR USE UNDER THE PRESCRIBED CODE TEST METHODS BY THE COMMISSIONER
   - C. PREVIOUSLY APPROVED BY THE BOARD OF STANDARDS AND APPEALS, AND NOT AMENDED OR REPEALED BY THIS COMMISSIONER (BC §28–113.2.6)
4. AT LEAST 24, BUT NO MORE THAN 48 HOURS, WRITTEN NOTICE SHALL BE GIVEN TO THE COMMISSIONER BEFORE COMMENCEMENT OF WORK. (BC 3304.3.1)
5. WITHIN TEN DAYS PRIOR TO THE START OF WORK A WRITTEN NOTICE SHALL BE GIVEN TO ADJOINING LOT OWNER AFFECTED BY FOUNDATION, EARTHWORK OR DEMOLITION WORK. WORK. (BC 3304.3.2)
6. NO WORK TO BE DONE BEYOND THE BUILDING LINES WITHOUT APPROVAL OF THE DEPARTMENT OF HIGHWAYS.
7. SIDEWALKS TO BE LAID IN ACCORDANCE WITH RULES OF THE DEPARTMENT OF HIGHWAYS.
8. BORING DIAGRAM WILL BE FILED BEFORE CONSTRUCTION IS STARTED AS PER BC 1802.
9. AN ACCURATE AND COMPLETE FINAL SURVEY, MADE BY A LICENSED SURVEYOR SHALL BE SUBMITTED AFTER COMPLETION OF WORK SHOWING THE LOCATION OF NEW BUILDING ELEVATION OF FIRST FLOOR, FINISHED GRADES OF OPEN SPACES ESTABLISHED CURB LEVEL, LOCATION AND BOUNDARIES OF LOT. (BC §28–118.4)
10. ALL ELEVATIONS SHALL REFER TO THE DATUM IN USE BY THE DEPARTMENT OF HIGHWAYS, BOROUGH PRESIDENT OF MANHATTAN WHICH IS 2.75 ABOVE THE U.S. COAST AND GEODETIC SURVEY DATUM OF MEAN SEA LEVEL AT SANDY HOOK. (BC §28–104.7.6)
11. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS.
12. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND ARCHITECTS OFFICE MUST BE NOTIFIED OF ANY VARIATION FROM THE DIMENSIONS SHOWN BY THESE DRAWINGS.
13. ALL CONSTRUCTION, DIMENSIONS AND DETAILS SHALL CONCUR WITH AND BE DETERMINED FROM THESE DRAWINGS ONLY.
14. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS APPLICABLE, AND TO CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C.ETC.) WHERE APPLICABLE. ALL MATERIALS INCORPORATED INTO THE WORK SHALL BE NEW.
15. CONTRACTORS SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGED, BREAKAGES, COLLAPSE, DISTORTIONS AND OFF–ALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS AND GOOD PRACTICE.
16. CONSTRUCTION SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES, ORDINANCES, RULES AND REGULATIONS PERTAINING TO LABOR AND MATERIALS.
17. ALL NOTES HEREIN MENTIONED WITH THOSE ON THE VARIOUS DRAWINGS, SHALL APPLY TO ALL DRAWINGS AND FORM PART OF THE CONTRACT.
18. EACH CONTRACTOR WILL BE HELD STRICTLY RESPONSIBLE FOR HIS WORK. ANY DISCREPANCIES IN THE PLANS OR DETAILS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT.
19. POSTED OCCUPANCY AND USE, ALL BUILDING SHALL BE POSTED WITH A SIGN IN A FORM PRESCRIBED BY THE DEPARTMENT, PERMANENTLY AFFIXED, PLACED IN A CONSPICUOUS LOCATION IN PUBLIC HALL OR CORRIDOR, STATING, LIVE LOADS AND OCCUPANT LOADS IN THE BUILDING AND ALL PARTS THEREOF. OCCUPANCY GROUP R–3 IS EXEMPTED FROM THIS REQUIREMENT. (BC §28–118.19)
20. THE FOLLOWING ITEMS OF WORK SHALL BE SUBJECT TO SPECIAL INSPECTIONS, MADE AND WITNESSED BY OR UNDER THE DIRECT SUPERVISION OF AN ARCHITECT OR ENGINEER RETAINED BY THE OWNER AND ACCEPTABLE TO ARCHITECT OF RECORD. TEST REPORTS AND CERTIFICATE OF INSPECTION SHALL BE FILED WITH THE BUILDING.
   - EMERGENCY POWER SYSTEMS (GENERATORS)
   - CONCRETE: CAST–IN–PLACE
   - CONCRETE: PRECAST
   - MASONRY
   - SOILS: SITE PREPARATION
   - SOILS: FILL PLACEMENT & IN–PLACE DENSITY
   - SOILS: INVESTIGATIONS (BORING/TEST PITS)
   - PILE FOUNDATIONS & DRILLED PIER INSTALLATION
   - WALL PANELS, CURTAIN WALLS, AND VENEERS
   - MECHANICAL SYSTEMS
   - FUEL–OIL STORAGE AND FUEL–OIL PIPING SYSTEMS
   - EXCAVATION: SHEETING, SHORING, AND BRACING
   - SITE STORM DRAINAGE DISPOSAL AND DETENTION SYSTEM INSTALLATION
   - HEATING SYSTEMS
   - CHIMNEYS
   - FIRESTOP, DRAFTSTOP, AND FIREBLOCK SYSTEMS
   - CONCRETE TEST CYLINDERS
   - CONCRETE DESIGN MIX
   - FOOTING AND FOUNDATION
   - ENERGY CODE COMPLIANCE INSPECTIONS
   - FIRE–RESISTANCE RATED CONSTRUCTION
21. ALL MATERIALS, ASSEMBLIES AND METHODS OF CONSTRUCTION REGULATED BY THE CODE AND NOT LISTED ABOVE SHALL BE SUBJECT TO SEMI–CONTROLLED INSPECTION BY THE PERSON SUPERINTENDING THE CONSTRUCTION. SIGNED COPIES OF ALL TEST AND INSPECTION REPORTS SHALL BE FILED THROUGH THE ARCHITECT WITH THE DEPARTMENT OF BUILDINGS.
22. ALL MATERIALS AND ASSEMBLIES REQUIRED TO HAVE A FIRE RESISTANCE RATING SHALL COMPLY WITH ONE OF THE FOLLOWING:
   - A. IT SHALL CONFORM WITH NFPA 251 "FIRE RESISTANCE RATINGS" OR,
   - B. IT SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E–119–2000, "STANDARD METHODS OF FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS" AND ACCEPTED BY THE COMMISSIONER, OR
   - C. IT SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE.
23. WHERE PIPES, WIRES, CONDUITS, DUCTS, ETC., PIERCE FIRE PROTECTION OF INDIVIDUALLY ENCASED STRUCTURAL MEMBERS, SUCH PENETRATION SHALL NOT EXCEED 2 PERCENT OF ANY ONE FACE SUCH PROTECTION, AND SHALL BE CLOSED OFF WITH CLOSE FITTING METAL ESCUTCHEONS OR PLATES. (BC 714.3)
24. LINTELS SUPPORTING MASONRY WALLS OVER 4 FEET IN WIDTH SHALL BE FIRE PROTECTED WITH MATERIALS HAVING THE REQUIRED FIRE RESISTANCE–RATING OF THE WALL SUPPORTED. (BC 714.6)
25. CEILINGS THAT CONTRIBUTE TO THE REQUIRED FIRE RESISTANCE RATING OF A FLOOR OR ROOF ASSEMBLY SHALL BE CONTINUOUS BETWEEN FIRE DIVISIONS, FIRE SEPARATIONS OR VERTICAL PARTITIONS HAVING THE SAME FIRE RESISTANCE RATING AS THE CEILING. CONCEALED SPACE ABOVE SUCH CEILING, UNLESS SPRINKLERED, SHALL BE FIRESTOPPED AS PER SECTION BC 717 "CONCEALED SPACES".
26. OPENING PROTECTIVES INCLUDING FRAMES, SELF–CLOSING DEVICES AND HARDWARE, SHALL COMPLY WITH NFPA 252–99 "STANDARD METHODS OF FIRE TEST OF DOOR ASSEMBLIES" AND NFPA 257–00 "STANDARD METHODS OF FIRE TEST OF WINDOW AND GLASS BLOCK ASSEMBLIES" AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 257–00 "INSTALLATION OF FIRE DOORS AND WINDOW". OPENING PROTECTIVES SHALL BE LABELED CERTIFYING PERFORMANCE RATING, AND SHALL HAVE BEEN ACCEPTED BY THE COMMISSIONER.
27. ROOF SHALL BE COVERED WITH CLASS "A" ROOF COVERING MEETING THE REQUIREMENTS OF ASTM–E108 "STANDARD METHODS OF FIRE TESTS OF ROOF COVERINGS" – 2000, OR "FIRE CLASSIFICATIONS". (BC 1505)
28. FIRESTOPPING: CONCEALED SPACES WITHIN PARTITIONS, WALLS, FLOORS, ROOFS, STAIRS, FURRING PIPE SPACES, COLUMN ENCLOSURES, ETC. SHALL BE FIRESTOPPED (EXCEPT WHERE CONCEALED SPACED IS SPRINKLERED OR IS CONSTRUCTED AS A SHAFT) AS PER BC 717 "CONCEALED SPACES".
29. INTERIOR FINISH: MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH THE SURFACE FLAME–SPREAD RATING OBTAINED AS PRESCRIBED IN ASTM E–84–2001 "STANDARD METHOD OF TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS" AS PER BC802.
30. ALL EXITS SHALL BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES.
31. STAIRS SHALL HAVE HANDRAILS ON EACH SIDE (EXCEPT THAT STAIRS LESS THAN 44 INCHES IN WIDTH), HAVING FINGER CLEARANCE OF 1 1/2 INCHES, PROJECTING NOT MORE THAN 3 1/2 INCHES INTO THE REQUIRED STAIR WIDTH.

    HEIGHT OF HANDRAIL SHALL BE BETWEEN 28" AND 34" ABOVE THE TREAD NOSING. HANDRAILS SHALL BE RETURNED TO WALLS AND POSTS AT THEIR TERMINATION. MATERIALS OF HANDRAILS SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 150. HANDRAILS SHALL BE DESIGNED TO RESISTS A SIMULTANEOUS APPLICATION OF A LATERAL FORCE OF 40 PLF AND A VERTICAL LOAD OF 50 PLF. LANDINGS AND PLATFORMS SHALL BE ENCLOSED ON SIDES BY WALL OR RAILINGS,AT LEAST 3'–0"HIGH. RISERS SHALL BE MAXIMUM 7 3/4" HIGH,TREADS MINIMUM 9 1/2" WIDE EXCLUSIVE OF NOSING AND THE SUM OF 2 RISERS PLUS ONE TREAD EXCLUSIVE OF NOSING SHALL BE NOT LESS THAN 24 OR MORE THAN 25 1/2".
32. TREAD STRINGERS AND LANDINGS SHALL BE BUILT OF/OR SURFACED WITH NONSKID MATERIALS.
33. VENTILATION OF EACH REQUIRED STAIR EXTENDING TO THE ROOF WILL COMPLY WITH BC 910.5.
34. ILLUMINATION OF AT LEAST 2 FOOT CANDLES MEASURED AT THE FLOOR LEVEL SHALL BE MAINTAINED CONTINUOUSLY IN EXITS, EXIT DISCHARGES, AND IN PUBLIC CORRIDORS. IT SHALL NOT BE LESS THAN 1 FOOT CANDLE AT THE FLOOR LEVEL EXIT COMPONENTS OTHER THAN PUBLIC CORRIDORS. (BC 1006.2)
35. EXIT LIGHTING SHALL CONFORM TO SECTION BC 1006 "MEANS OF EGRESS ILLUMINATION".
36. LOCATION OF EVERY EXIT ON EVERY FLOOR SHALL BE CLEARLY INDICATED BY EXIT SIGNS READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. INSTALL DIRECTIONAL SIGNS TO SERVE AS GUIDE FROM ALL PORTIONS OF THE CORRIDOR OR FLOOR, SIGNS SHALL BE ON SEPARATE CIRCUITS, TAKEN OFF AHEAD OF THE MAIN SWITCH. (BC 1011) OCCUPANCY CLASS R–2 IS EXEMPTED FROM THE REQUIREMENT.
37. EXIT SIGNS SHALL BE INTERNALLY LIGHTED AT ALL TIMES AND SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SECTION 2702. LETTERS SHALL BE RED NOT LESS THAN 6" HIGH. (BC 1011.4)
38. REQUIRED FOR MULTIPLE DWELLINGS, BUILDING ENTRANCE DOORS AND OTHER EXTERIOR DOORS SHALL BE PROVIDED WITH HEAVY DUTY LOCK SETS WITH AUXILIARY LATCH BOLTS TO PREVENT THE LATCH FROM BEING MANIPULATED BY OTHER THAN A KEY.
39. DOORS TO DWELLING UNITS SHALL BE REQUIRED WITH A HEAVY DUTY DEAD BOLT OR OPERABLE BY KEY FROM OUTSIDE AND THUMB TURN FROM INSIDE AND A CHAIN DOOR GUARD.
40. ALL TOILETS SHALL HAVE TILE FLOOR AND 6" BASE. WAINSCOT SHALL BE PROVIDED WHERE CALLED FOR ON DRAWINGS. (FOR FIN. MAT. SEE FINISH SCHEDULE) AS PER SECTION D26–31.03 H.M.C. AND SECTION 76 M.D.L.
41. ALL INTERIOR TOILETS SHALL BE MECHANICALLY VENTILATED IN ACCORDANCE WITH SECTION BC 1203.4.1.3 OF THE BUILDING CODE.
42. ALL DOORS SHALL BE 6'–8" HIGH UNLESS OTHERWISE NOTED. (BC 1008.1.1.3)
43. ALL ELEVATOR DOORS SHALL HAVE ELECTRIC INTERLOCKS IN ACCORDANCE WITH BC 3002.1.2.
44. SUSPENDED CEILINGS SHALL COMPLY WITH SECTION BC 803.9.1.1, WITH METAL HANGERS, PURLINS AND RUNNERS AS REQUIRED.
45. ALL DOORS TO REQUIRED EXIT STAIRS IN R–2 SHALL COMPLY WITH BC 1008.1.1.
46. DOORS AND ASSEMBLIES SHALL HAVE THE FOLLOWING FIRE RESISTIVE RATINGS, (BC 708) DOORS TO STAIRS 1 1/2 HOUR, EXCEPT WHERE OTHERWISE NOTED. DOORS TO ELEVATOR SHAFT 1 1/2 HOUR.
47. CORRIDORS AND EXIT PASSAGEWAYS SHALL HAVE A MIN. CLEAR HEIGHT OF 7'–6" FOR AT LEAST 75% OF THE FLOOR AREA WITH NO POINT LESS THAN 7 FT. IN HEIGHT, PROJECTION BELOW THE CEILING SHALL NOT OBSTRUCT FULL VIEW OF EXIT SIGNS. (BC 1003)
48. ELEVATOR SHAFTS SHALL BE ENCLOSED WITH IMPACT RESISTANT CONSTRUCTION FOR 2 HOUR FIRE RATING IN ACCORDANCE WITH NEW YORK CITY BUILDING CODE. (BC 403.9.2, BC 707.1, BC 707.14, & CHAPTER 30)
49. INTERIOR REQUIRED STAIR SHALL BE ENCLOSED WITH 2 HOUR FIRE RATING IN ACCORDANCE WITH NEW YORK CITY BUILDING CODE. (BC 1019.1)
50. ALL VENT DUCT SHAFTS SHALL BE ENCASED WITH 1 AND 2 HOUR ENCLOSURE. NO DUCT VENTS TO PASS THROUGH STAIR ENCLOSURES. 1 1/2 HOUR AUTOMATIC SELF–CLOSING FIRE DAMPERS TO BE INSTALLED IN VENT DUCTS WHEN THEY PIERCE PUBLIC CORRIDORS.
51. MASONRY MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF BC 2103 AND TO COMPLY WITH BC 1704.5 FOR CERTIFICATION.
52. ALL MASONRY NON–LOAD BEARING WALLS SHALL BE BONDED IN ACCORDANCE WITH BC 2109.6.
53. EXTERIOR MASONRY WALLS SHALL COMPLY WITH BC 2109.
54. ALL EXTERIOR MASONRY WALL WILL BE LAID UPON ONE PART PORTLAND CEMENT, ONE PART LIME AND SIX PARTS SAND. ALL MORTAR TO COMPY WITH BC 2109.
55. CONCRETE BLOCK SHALL COMPLY WITH BC 2103.
56. ALL CORNERS OF PARAPET WALLS SHALL CONFORM WITH BC 2109.5.5.
57. WHERE GLASS FACING IS USED, THICKNESS AND AREA COMPLIES WITH BC 2401.
58. INTERIOR WALLS, PARTITIONS, FLOOR AND CEILING CONSTUCTION AND MECHANICAL EQUIPMENT SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH BC 1207 TO PROVIDE MIN. PROTECTION FOR EACH DWELLING UNIT FROM EXTRANEOUS NOISES EMANATING FROM OTHER DWELLING UNITS AND FROM MECHANICAL EQUIPMENT IN ADDITION, EXTERIOR MECHANICAL EQUIPMENT SHALL CONFORM TO THE NOISE REDUCTION REQUIREMENTS OF TABLE 1207.2.1.
59. FIRE RATED PARTITIONS SHALL REST DIRECTLY UPON THE CONCRETE FLOOR CONSTRUCTION AND SHALL EXTEND TO THE CONCRETE CONSTRUCTION OF THE FLOOR OR ROOF ABOVE.
60. PIPE SPACE AND WALL FURRINGS SHALL CONSIST OF METAL CHANNELS AND 5/8" GYPSUM WALLBOARD EXCEPT AS OTHERWISE SHOWN.
61. A MINIMUM CEILING HEIGHT OF 8'–0" SHALL BE MAINTAINED IN ALL LIVING ROOMS.
62. WALLS, PARTITIONS AND FLOOR AND CEILING CONSTRUCTION–MIN.STC RATING 50 FOR AIRBORNE NOISE, MIN.35 STC RATING REQUIRED FOR APARTMENT ENTRANCE DOORS.
63. EQUIPMENT USE PERMITS, INSPECTIONS AND TESTS

    PERMITS SHALL BE OBTAINED FOR USE OF THE FOLLOWING EQUIPMENT:
   - A. AIR CONDITIONING AND VENTILATION SYSTEMS (BC 1704.15)
   - B. ELEVATORS
   - C. FUEL BURNING AND FUEL OIL STORAGE EQUIPMENT
   - D. PLUMBING PIPING
   - E. STANDPIPE SYSTEMS (BC 1704.22)
   - F. SPRINKLER SYSTEMS (BC 1704.21)

    EQUIPMENT REQUIRING USE PERMITS SHALL BE INSPECTED AND TESTED TO DETERMINE PROPER FUNCTIONING AND COMPLIANCE WITH THE BUILDING CODE AND OTHER APPLICABLE LAWS AND REGULATIONS. ALL INSPECTIONS AND TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIRED INSPECTION AND TEST PROCEDURES; AND SIGNED COPIES OF REQUIRED INSPECTIONS AND TEST REPORTS SHALL BE FILED WITH THE DEPARTMENT OF BUILDINGS AND FORM PART OF THE PAPERS ACCOMPANYING THE PERMIT APPLICATION. IN THE CASE OF HEATING SYSTEM, A SIGNED STATEMENT BY ARCHITECT OR ENGINEER SHALL BE SUBMITTED WITH THE PERMIT APPLICATION, STATING THAT THE SYSTEM HAS BEEN OPERATED AND FUNCTIONS SATISFACTORY, AND THAT TO THE BEST OF KNOWLEDGE AND BELIEF, THE SYSTEM WILL MEET THE CODE TEMPERATURE REQUIREMENT.
64. SPRINKLER SYSTEM SHALL COMPLY WITH BC 1704.21 SEPARATE SPRINKLER APPLICATION SHALL BE FILED AND APPROVAL OBTAINED.
65. STANDPIPE WILL BE INSTALLED IN ACCORDANCE WITH BC 1704.22. SEPARATE STANDPIPE APPLICATION WILL BE FILED.
66. SEPARATE ELEVATOR APPLICATION WILL BE FILED.
67. VIEWING MIRRORS SHALL BE PROVIDED IN ELEVATORS AS PER SECTION D26–20.03 H.M.C.
68. MECHANICAL VENTILATION, AIR CONDITIONING AND REFRIGERATION
   - A. ALL FINAL INSPECTION AND TESTS OF A REQUIRED VENTILATING SYSTEM SHALL BE MADE (THE ARCHITECT OR ENGINEER NEED NOT TO BE IN THE EMPLOY OF THE OWNER) AS PER BC 1704.15.
   - B. ALL INSPECTION AND TEST OF A REFRIGERATION SYSTEM SHALL BE MADE (THE ARCHITECT OR ENGINEER NEED NOT TO BE IN THE EMPLOY OF THE OWNER) AS PER BC 1704.15.
69. HEATING AND COMBUSTION EQUIPMENT
   - A. ALL FINAL INSPECTIONS AND TESTS FOR BOILERS SHALL BE SUBJECT TO THE PROVISIONS FOR CONTROLLED INSPECTION (SUCH INSPECTIONS AND TESTS, HOWEVER, MAY BE MADE BY DEPARTMENT INSPECTORS OR BY A DULY AUTHORIZED INSURANCE COMPANY INSPECTOR) PER BC 1704.23.
   - B. ALL APPLICATIONS FOR EQUIPMENT USE PERMIT FOR HEATING SYSTEMS SHALL BE ACCOMPANIED BY A SIGNED STATEMENT BY AN ARCHITECT OR ENGINEER STATING THAT THE SYSTEM HAS BEEN OPERATED AND FUNCTIONS SATISFACTORY AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF THE SYSTEM WILL MEET THE CODE TEMPERATURE REQUIREMENTS PER BC 1704.23.
70. FIRE EXTINGUISHING EQUIPMENT
   - A. PER BC 1704.22 INSPECTIONS AND TESTS OF STANDPIPES ARE SUBJECT TO CONTROLLED INSPECTION, IF APPLCANT DOES NOT CHOOSE TO HAVE TESTS WITNESSED BY REPRESENTATIVE OF DEPARTMENTS.
   - B. PER BC 1704.21 INSPECTIONS AND TEST OF SPRINKLER SYSTEMS ARE SUBJECT TO CONTROLLED INSPECTION, IF APPLICANT DOES NOT CHOOSE TO HAVE TESTS WITNESSED BY REPRESENTATIVE.
71. INSPECTION DURING PROGRESS OF WORKS
   - A. THE COMMISSIONER MAY ACCEPT SIGNED STATEMENTS BY ARCHITECTS AND ENGINEERS AND SUPPORTING INSPECTIONS AND TESTS REPORTS WITHOUT VERIFYING INSPECTION OR TEST BY DEPARTMENT INSPECTORS PER ARTICLE 116.
72. ALL PERMITS ISSUED BY THE DEPARTMENT OF BUILDINGS SHALL BE POSTED IN A CONSPICUOUS PLACE OPEN TO THE PUBLIC INSPECTION FOR THE ENTIRE TIME OF THE PROSECUTION OF THE WORK OF THE USE AND OPERATION OF THE EQUIPMENT OR UNTIL THE EXPIRATION OF THE PERMIT.
73. A REFUSE STORAGE ROOM SHALL BE PROVIDED IN COMPLIANCE WITH SECTION 81 OF THE NY STATE MULTIPLE DWELLING LAW ,SECTION 27–2021 OF THE NYC HOUSING MAINTENANCE CODE, AND BC 707.13. IT SHALL BE COMPLETELY ENCLOSED IN A FIRE–RESISTANCE RATING OF 3 HR., WITH SELF–CLOSING PROTECTIVES HAVING A FIRE PROTECTION RATING OF 1 1/2 HR. (BC 1213.1)
74. REFUSE COLLECTING ROOM SHALL BE SPRINKLERED.
75. THE COMPACTING MACHINE SHALL BE LOCATED WITHIN THE REFUSE STORAGE ROOM OR IN A REFUSE CHUTE TERMINATION ROOM. (BC 1213.2)
76. COMPACTING EQUIPMENT SHALL MEET THE CRITERIA ND THE APPROVAL OF THE ENVIRONMENTAL PROTECTION ADMINISTRATION AND ALSO MUST MEET ALL THE REQUIREMENTS OF ANY OTHER AUTHORITY HAVING JURISDICTION.
77. REFUSE CHUTE SHALL BE CONSTRUCTED STRAIGHT AND PLUMB WITHOUT PROJECTIONS OF ANY KIND SUPPORTED ON 2 HR. FLOOR CONSTRUCTION. (BC 707.13.1)
78. REFUSE CHUTE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS AND ANY OTHER AUTHORITY HAVING JURISDICTION.
79. REFUSE CHUTE SHALL EXTEND THROUGH ROOF CONSTRUCTION AT LEAST 6'–0" ABOVE THE ROOF. (BC 707.5)
80. INSPECTION OF REQUIRED SPRINKLERS SHALL COMPLY WITH D26–21.07.
81. JANITORIAL SERVICES TO COMPLY WITH D 26–22.03.
82. OBLIGATIONS OF THE OWNER SHALL COMPLY WITH D 26–22.03.
83. CENTRAL HEAT, ELECTRIC OR GAS HEATING SYSTEM SHALL COMPLY WITH D 26–17.01. THE SUPPLY OF HOT WATER SHALL COMPLY WITH D 26–17.07.
84. BUILDING TO BE PROVIDED WITH RODENT–PROOFING AS PER BC SECTION F101:
   - 84.1. FOUNDATION WALL VENTILATOR OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH PERFORATED SHEET METAL PLATES NO LESS THAN 0.070" THICK, EXPANDED SHEET METAL PLATES NOT LESS THAN 0.047" THICK, CAST IRON GRILLS OR GRATING, EXTRUDED ALUMINUM LOAD–BEARING VENTS OR WITH HARDWARE CLOTH OF 0.035 INCH (0.89 MM) WIRE OR HEAVIER. THE OPENINGS THEREIN SHALL NOT EXCEED 1/4".
   - 84.2. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS, OR OTHER OPENINGS IN THE WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR NONCORROSIVE METAL.
   - 84.3. DOORS ON WHICH METAL PROTECTION HAS BEEN APPLIED SHALL BE HINGED SO AS TO BE FREE SWINGING. WHEN CLOSED, THE MAXIMUM CLEARANCE BETWEEN ANY DOOR, DOOR JAMBS AND SILLS SHALL NOT BE GREATER THAN 3/8".
   - 84.4. WINDOWS AND OTHER OPENINGS FOR THE PURPOSE OF LIGHT OR VENTILATION LOCATED IN EXTERIOR WALLS WITHIN 2 FEET (610 MM) ABOVE THE EXISTING GROUND LEVEL IMMEDIATELY BELOW SUCH OPENING SHALL BE COVERED FOR THEIR ENTIRE HEIGHT AND WIDTH, INCLUDING FRAME, WITH HARDWARE CLOTH OF AT LEAST 1.035" WIRE OR HEAVIER.
85. DEMOLITION TO CLEAR THE SITE WAS DONE UNDER APPLICATION NUMBERS: 103889614 AND 103889605.
85. PUBLIC HALL LIGHTING SHALL COMPLY WITH ARTICLE 14 ARTICLE 19 HMC.
86. MAIL SERVICE WILL BE PROVIDED IN ACCORDANCE WITH D26–21.05–D26–21.01 HMC.
87. STREET NUMBERS WILL BE PROVIDED IN ACCORDANCE WITH D 26–21.05.
88. FLOOR NUMBERS TO BE PROVIDED IN ACCORDANCE WITH D 26–21.05.
89. FLOOR NUMBERS TO BE PROVIDED ON ALL FLOORS IN STAIR HALL AND AT ELEVATOR LANDINGS IN ACCORDANCE WITH SECTION D26–21.03 AND RULES OF THE DEPARTMENT OF BUILDINGS.
90. ALL DUCT SHAFT OFFSETS SHALL BE ENCASED WITH 1 & 2 HOUR FIRE RATING.
91. PROVIDE CARBON MONOXIDE ALARM AND DETECTORS WITHIN APARTMENTS AS REQUIRED PER BC 908.7.1 AND 607.2.3 OF THE NYC MECHANICAL CODE.
92. PROVIDE SMOKE DETECTORS WITHIN APARTMENTS AS REQUIRED PER BC 716, D6–20.08 AND 607.2.3 OF THE NYC MECHANICAL CODE.
93. RADIO AND TV WIRES AND ANTENNA SHALL COMPLY WITH SECTION 62 M.D.L. AND SHALL BE PLACED A MIN. OF 10'–0" ABOVE HIGHEST POINT ON ROOF.
94. BUILDING TO BE RATPROOFED IN ACCORDANCE WITH SECTION 80 M.D.L.
95. ALL CLEANING OF WINDOWS WILL BE IN CONFORMITY WITH THE WINDOW CLEANING CODE.
96. FIREPROOFING
   - A. THE OCCUPANCY CLASSIFICATION OF THE BUILDING IS OCCUPANCY GROUP (O.G.) R–2, BC 310.1.2 AND CLASS "A" MULTIPLE DWELLING AS PER SECTION 4.8 M.D.L.
   - B. THE VARIOUS OCCUPANCIES REQUIRED TO BE SEPARATED FROM EACH OTHER BY FIRE SEPARATING OR DIVISIONS AS PER BC 302.1 SHALL BE SO SEPARATED BY PARTITIONS HAVING THE REQUIRED FIRE RATING IN ACCORDANCE WITH BC 5008.3.3.
   - C. THE CONSTRUCTION CLASSIFICATION OF THE BUILDING IS CONSTRUCTION GROUP R–2 NON–COMBUSTIBLE TYPE 1B AND BC 602 IN ACCORDANCE WITH AREA AND HEIGHT LIMITATIONS AS SPECIFIED IN TABLE 503 AND BC 503. THE CONSTRUCTION ELEMENTS SHALL BE OF THE REQUIRED MINIMUM FIRE RESISTANCE RATINGS AS OUTLINED IN TABLE 601 AND DEFINED IN BC 602.
   - D. PROVIDE SPRINKLERS FOR ENTIRE BUILDING.
97. EXIT DOORS SHALL BE READILY OPENABLE AT ALL TIMES FROM THE SIDE WHICH EGRESS IS TO BE MADE. DOORS OPENING INTO INTERIOR ENCLOSED STAIR SHALL NOT BE LOCKED FROM EITHER SIDE EXCEPT THAT DOORS MAY BE LOCKED TO PREVENT ACCESS TO THE STAIR FROM THE OUTDOORS AT THE STREET LEVEL.
98. ALL WIRE GLASS IN RATED DOORS AND WINDOWS WILL BE OF A TYPE APPROVED BY THE B.S.A.
99. FIRE DIVISION SHALL COMPLY WITH PROVISIONS OF TABLE 508.3.3 AND SHALL BE CONTINUOUS THROUGH ANY CONCEALED SPACE IN FLOOR OR ROOF CONSTRUCTION.
100. DIFFERENT TENANT STORES, APARTMENTS, ETC., NOT SEPARATED BY FIRE DIVISIONS SHALL BE SEPARATED BY FIRE SEPARATIONS, BUT NOT LESS THAN 1 HOUR SEPARATIONS SHALL CONTINUE THROUGH CONCEALED SPACES ABOVE. (TABLE 508.3.3)
101. OPENINGS IN FIRE DIVISIONS AND SEPARATIONS TO COMPLY WITH TABLE 508.3.3.
102. NO CONDUITS, PIPES, MEDICINE CABINETS, ETC. SHALL ENCROACH ON PARTITIONS ENCLOSING STAIRS OR ELEVATOR SHAFTS OR OTHER RATED PARTITIONS.
103. CONDUITS IN FIRE–RATED PARTITIONS WILL NOT EXCEED 3/4 INCH DIAMETER OUTLETS IN SUCH PARTITIONS WILL BE BACKED UP WITH APPROVED MATERIALS.
104. PENETRATION OF OPENINGS IN WALLS, PARTITIONS, OR FLOORS FOR PIPE SLEEVES, MEDICINE CABINETS, HAMPERS ELECTRIC DEVICES, ETC., SHALL BE PACKED & SEALED.
105. ALL VENT DUCT SHAFTS TO BE ENCLOSED WITH 1 OR 2 HOUR ENCLOSURES. NO DUCT VENTS TO PASS THROUGH STAIR ENCLOSURES. 1 1/2 HOUR AUTOMATIC SELF–CLOSING FIRE DAMPERS TO BE INSTALLED IN VENT DUCTS WHEN THEY PIERCE PUBLIC CORRIDORS.
106. FIRE PREVENTION APPLICATIONS WILL BE FILED IF REQUIRED FOR ALL INSTALLATIONS.
107. WOOD REQUIRED TO BE FIRE–RETARDANT–TREATED SHALL BE TESTED IN ACCORDANCE WITH ASTM E84–2001.
108. TOILET ROOM SIDE OF PARTITIONS SHALL BE 5/8" WATER RESISTANT GYPSUM WALLBOARD.
109. VENTILATION SHAFT WALLS 288 SQ.INCH OR OVER SHALL BE AS FOLLOWS: ONE LAYER OF 5/8" SHEETROCK FIRE CODE GYPSUM WALLBOARD EACH SIDE OVER 1" GYPSUM COREBOARD. TOTAL WIDTH= 2 1/4". INSTALLATION AS RECOMMENDED BY MANUFACTURER.
110. INTERIOR FINISH CLASS (803.5) / REQUIRED FIRE RESISTANCE (601, 602, 1005.1)

INTERIOR FINISH CLASS (803.5)	REQUIRED FIRE RESISTANCE (601, 602, 1005.1)
A STAIR ENCLOSURE(INCLUDING SEPARATION)	2 HR. REQUIRED FIRE RESISTANCE RATING
A ELEVATOR SHAFT	2 HR. REQUIRED FIRE RESISTANCE RATING
A DUCT SHAFT	1 & 2 HR. REQUIRED FIRE RESISTANCE RATING
A PUBLIC HALL(CORRIDOR)	1 HR. REQUIRED FIRE RESISTANCE RATING
A EXIT PASSAGEWAY(GRADE LEVEL)	2 HR. REQUIRED FIRE RESISTANCE RATING
B&C INTERIOR PARTITIONS AND FURRING	0 HR. REQUIRED FIRE RESISTANCE RATING
FLOOR CONSTRUCTION	2 HR. REQUIRED FIRE RESISTANCE RATING

111. INTERIOR FINISH TO HAVE FLAME SPREAD INDEX NOT GREATER THAN THAT SPECIFIED IN TABLE 803.5, AND ALL INTERIOR FINISH TO COMPLY WITH BC 803.1 AND 803.5.
112. ALL COMBUSTIBLE FLOORING SHALL CONFORM WITH THE REQUIREMENTS OF BC 804.4.1 THRU 804.4.4.
113. FINISH FLOORING IN ALL EXITS SHALL BE OF NON–COMBUSTIBLE MATERIALS (BC 804.5)
114. BUILDING SPACE CLASSIFICATION

BUILDING SPACE CLASSIFICATION	OCCUPANCY GROUP	FIRE INDEX
BLDG. STORAGE	S–2	2
BOILER ROOM	S–2	2
ELECTRICAL SERVICE	S–2	1
REFUSE COLLECTION ROOM	S–2	2
SUPER'S WORKSHOP	S–2	2
TENANT'S LAUNDRY	R–2 ACCESSORY	1
TENANT'S STORAGE	S–2	1
RESIDENTIAL(APT. HOUSE)	R–2	1

115. ENERGY CONSERVATION CODE NOTES

    ALL PERTINENT DATA AND DESIGN CRITERIA REGARDING THE FOLLOWING CONFORM WITH BOTH THE STATE ENERGY CONSERVATION CONSTRUCTION CODE OF FEBRUARY, 2008 AND THE NEW YORK CITY BUILDING CODE WHICHEVER IS MORE STRINGENT:
   - A. "U" VALUES OF THE ENVELOPE SUB–SYSTEM.
   - B. DESIGN INSIDE AIR TEMPERATURE OF EACH ROOM THAT IS TO BE HEATED AND/OR COOLED. (72 DEG.F. FOR HEATING, 78 DEG.F. FOR COOLING.)
   - C. DESIGN OUTDOOR AIR TEMPERATURE(15 DEG.F. WINTER, 89 DEG.F. SUMMER).
   - D. DESIGN HEAT LOSS AND/OR GAIN THROUGH EACH EXTERIOR FACADE IN BTU/HR.
   - E. "R" VALUES OF INSULATING MATERIALS.
   - F. SIZE AND TYPE OF APPARATUS AND EQUIPMENT AND SYSTEM CONTROLS IS IN CONFORMANCE WITH THE REQUIREMENTS OF THE CODE.
   - G. ELECTRICAL LIGHTING AND POWER DESIGN DATA.
   - H. FIRE PROTECTION CONSTRUCTION REQUIREMENTS, INCLUDING BUILDING CODE LIMITATIONS REGARDING USE OF INSULATION OR EQUIPMENT.
   - I. ALL NECESSARY APPROVALS FOR ELECTRICAL WORK FROM THE BUREAU OF GAS AND ELECTRICITY WILL BE OBTAINED.
116. PHYSICAL DISABILITIES NOTES – BC Chapter 11: Accessibility & Appendix P (see separate sheet for more complete notes and details)
   - A. THE PRIMARY ENTRANCES (RESIDENTIAL LOBBIES) SHALL BE ACCESSIBLE.
   - B. THERE SHALL BE AN UNOBSTRUCTED ACCESSIBLE ROUTE FROM RESIDENTIAL LOBBIES TO ALL APARTMENTS.
   - C. ALL SADDLES AT THE APARTMENT ENTRANCES AND BATHROOMS SHALL HAVE A MAX. HEIGHT OF 1/2" WITH A SLOP OF 2:1 MAX. FOR THE TOP 1/4" OF THE SADDLE.
   - D. ALL APARTMENT KITCHENS AND BATHROOMS SHALL BE DESIGNED AND EQUIPPED TO BE HADICAPPED ADAPTABLE.
   - E. ALL DOORS IN APARTMENTS SHALL BE A MINIMUM OF 2'–11"(2'–8"CLEAR MIN.)
117. LIST OF SPECIAL INSPECTIONS: / ITEMS TO BE FILED SEPARATELY:

LIST OF SPECIAL INSPECTIONS:	ITEMS TO BE FILED SEPARATELY:
a. FIRE ALARM TEST	a. SITE SAFETY PLAN
b. EMERGENCY POWER SYSTEMS (GENERATORS)	b. FIRE PROTECTION PLAN
c. CONCRETE – CAST–IN–PLACE	c. BUILDER PAVEMENT PLAN
d. MASONRY	d. ELEVATOR
e. SOILS – SITE PREPARATION (SUB–GRADE)	e. SPRINKLER
f. SOILS – INVESTIGATIONS (BORINGS/TEST PITS)	f. STANDPIPE
g. WALL PANELS, CURTAIN WALLS, AND VENEERS	g. EMERGENCY POWER SYSTEM
h. SMOKE CONTROL SYSTEMS	h. PLACE OF ASSEMBLY
i. MECHANICAL SYSTEMS	i. FIRE ALARM
j. FUEL–OIL STORAGE AND FUEL–OIL PIPING SYSTEMS	j. CURB CUT
k. FUEL–GAS PIPING (WELDING)	k. SIGNAGE
l. EXCAVATION–SHEETING, SHORING, AND BRACING	
m. SITE STORM DRAINAGE DISPOSAL & DETENTION SYSTEM INSTALL	
n. SPRINKLER SYSTEMS	
o. STANDPIPE SYSTEMS	
p. HEATING SYSTEMS	
q. FIRESTOP, DRAFTSTOP AND FIREBLOCK SYSTEMS	
r. CONCTERE TEST CYLINDERS	
s. CONCTERE DESIGN MIX	
t. REBAR IN CONCTETE	
u. FOOTING AND FOUNDATION	
v. ENERGY CODE COMPLIANCE INSPECTION	
w. FIRE RESISTANCE RATED CONSTRUCTION	

118. THE BUILDING SITE IS NOT IN A FLOOD ZONE.
119. NOTIFICATION TO DOB 24–48 HOURS PRIOR TO COMMENCEMENT OF EARTHWORK AS PER BC 3304.3.1.
120. BC 104

    BC1701 TR–1 FOR SPECIAL/CONTROLLED/PROGRESS INSPECTIONS A) CONCRETE B) CONCRETE TEST PITS & C) CONCRETE TEST CYLINDERS.
121. SOILS & FOUNDATIONS TO COMPLY WITH BC 1801 & BC 1805. COORDINATE WITH STRUCTURE & CIVIL ENGINEERS.

122. TPPN 10/88. NO HISTORIC STRUCTURES ARE LOCATED WITHIN 90' RADIUS OF LOT LINES.

MULTIPLE DWELLING LAW (MULTIPLE DWELLING CLASSIFICATION - CLASS A)

ALL LOT LINE WINDOWS TO COMPLY WITH SEC. 277.1(b)MDL AND TABLE 601 THE BUILDING CODE.

WET PIPE SPRINKLER SYSTEM TO COMPLY WIHT MDL 277.4

THIS IS A FIRE PROOF BUILDING.

FLOOR/ CEILING IS OF 2HR CONSTR. AND COMPLIES WITH MDL 277.6

COMPLY WITH LIGHT AND AIR FOR UNITS AS PER SEC. 277.7 OF THE MDL

HARD WIRED SMOKE DETECTOR OUTSIDE EACH SLEEPING OR BEDROOM AREA IS PROVIDED AS PER SEC. 277.7g OF THE MDL

ALL STAIRWAYS MUST HAVE SKYLIGHTS AND VENTS AS PER MDL 277.10

ALL SHAFTS MUST COMPLY WITH MDL 277.11 (2hr)

KITCHEN MUST COMPLY WITH MDL 277.12 AND MDL 33

BUILDING MUST COMPLY WITH MDL 277.13

EXISTING INTERIOR COLUMNS ARE PROTECTED AS PER MDL 277.14

ELEVATOR SHAFTS, DOORS AND VESTIBULES MUST COMPLY WITH MDL 277.15

BUILDING MUST COMPLY WITH MDL 278

HOUSING MAINTENANCE CODE

THE OWNER SHALL COMPLY WITH THE PROVISIONS OF THE HOUSING MAINTENANCE CODE:

27–2005	OWNER AND TENANT OBLIGATION
27–2010, 2011, 2012	CLEANING
27–2013	PAINTING
27–2018	RODENT AND INSECT ERADICATION
27–2021	RECEPTACLE FOR WASTE
27–2023	COLLECTION OF WASTE
27–2024	WATER SUPPLY
27–2026, 2027	PLUMBING AND DRAINAGE
27–2028, 2029, 2030, 2031, 2033	HEAT AND HOT WATER
27–2034, 2035, 2036	GAS APPLIANCE
27–2037, 2038, 2039, 2040	ARTIFICIAL LIGHTING
27–2041, 2042, 2043, 2045	PEEPHOLES AND LOCKS
27–2049	STREET NUMBER
27–2047	APPROVED TYPE MAIL RECEPTACLE AND DIRECTORY AND REGULATION OF POST OFFICE
27–2053	JANITORIAL SERVICES
27–2057	LIGHTING AND VENTILATION
27–2063	SANITARY FACILITIES
27–2070	KITCHEN AND KITCHENETTES
27–2074	MAXIMUM PERMITTED OCCUPANCY
27–2097	REGISTRATION STATEMENT
27–2104	POSTING OF REGISTRATION IDENTIFICATION SIGN CONTAINING DWELLING SERIAL NUMBER.

COMPLIANCE

FAIR HOUSING ACT

THESE DOCUMENTS COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL.

SEISMIC DESIGN

THE DESIGN, DETAILS AND NOTES INCLUDED HEREBY ARE IN COMPLIANCE WITH LOCAL LAW 17–94 EARTHQUAKE LAW.

M.D.L. AND H.M.C. NOTES

MD1. THE WORK SHALL COMPLY WITH ALL THE RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS OF THE CITY OF NEW YORK AND ALL OTHER APPLCABLE LOCAL, STATE, FEDERAL DEPARTMENTS AND CODES HAVING JURISDICTION.

MD2. BUILDING TO COMPLY WITH ART.7 M.D.L. & HOUSING AND MAINTENANCE CODE.

MD3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES AND DEVIATIONS OF THE APPROVED PLANS.

MD4. BATH VENTS: 12X12 DUCTS, 18 GA. MTL.WITH CORNER CHANNELS SECURED AT ALL FLOORS AND ROOF. FIRE RETARD WITH 2"VERMICULITE PL ON M/L ENTIRE LENGHT OF DUCT; EXTENDED 4' ABOVE ROOF. PROVIDE REGISTER, GRAVITY DAMPER WITH FUSIBLE LINK. FAN ON ROOF TO PROVIDE 4 AIR CHANGES/HR.,25 CFM VELOCITY AND TO RUN FROM 6:00 A.M. TO 12 MIDNIGHT.

MD5. KITCHEN AND KITCHENETTE VENT: 8X8 DUCTS SIMILAR TO BATH VENTS EXCEPT FAN ON ROOF TO PROVIDE 6 CHANGES/HR. 150 CFM TO RUN CONTINUOUSLY.16 GA. METAL. SEE ALSO KITCHENS AND KITCHENETTES:SEC.3 M.D.L. AND ART.32 H.M.C.
- A. EVERY KITCHEN AND KITCHENETTE SHALL BE PROVIDE WITH FACILITIES FOR COOKING AND SHALL BE EQUIPPED FOR ARTIFICIAL LIGHTING.
- B. EVERY KITCHEN AND KITCHENETTES SHALL BE PROVIDED WITH SINK HAVING A MIN.2" WASTE AND TRAP.
- C. LIGHTING AND VENTILATION OF KITCHENETTES SHALL BE PROVIDED UNDER SEC.30 M.D.L. AND ART.30 H.M.C. (SEE NOTE #11)
- D. CEILING AND WALL, EXCLUSIVE OF DOORS,OF ALL KITCHENETTES SHALL BE FIRE RETARDED WITH MATERIALS HAVING A ONE HOUR FIRE RATING WITH ONE LAYER PLASTER B. F.C.60.
- E. ALL COMBUSTIBLE MATERIALS IMMEDIATELY UNDERNEATH AND WITHIN ONE FOOT OF COOKING APPARATUS SHALL BE PROPERLY FIRE RETARDED AND A MIN. OF TWO FEET CLEARANCE MAINTAINED ABOVE EXPOSED COOKING SURFACES COMBUSTIBLE MATERIALS BETWEEN TWO AND THREE FEET ABOVE EXPOSED COOKING SURFACES SHALL BE FIRE RETARDED. SE 5/8"/PL. BD. FC. 60.
- F. GAS RANGES TO BE APPROVED AS PER SEC.64 MDL & AGA(SEE NOTE #155).

MD6. SPRINKLERS SHALL COMPLY WITH SEC.187 MDL.

MD7. BOILER ROOMS: SHALL COMPLY WITH SEC. 65 M.D.L. FIRE RETARDED CEILING ENCLOSED IN FIREPROOF CONSTRUCTION WITH FIREPROOF DOOR TO BE SELF–CLOSING AND SHALL BE 3 HR. RATED WITH BSA APPROVED LABEL.

MD8. NATURAL LIGHTING AND VENTILATION FOR ALL OCCUPIED ROOMS SHALL CONFORM WITH LIGHTING AND VENTILATION: SEC.30 MDL AND ART.30 HMC.
- A. WINDOWS IN ALL ROOMS, EXCEPT BATHROOMS AND KITCHENETTES, SHALL BE AT LEAST ONE–TENTH THE AREA OF THE ROOM AND BE AT LEAST 12 S.F. IN AREA B.S.B. AND 50% OPERABLE.
- B. ROOMS HAVING ONLY ONE WINDOW LESS THAN 18 S.F. IN AREA SHALL HAVE A TRANSOM OR LOUVER, OVER THE DOOR HAVING A MIN. AREA OF 144 SQ. IN.

MD9. PEEPHOLES: SEC.51–A. MDL. AND ART.20 HMC
- A. PEEPHOLES SHALL BE PROVIDED IN ENTRANCE DOORS OF EACH DWELLING UNIT, LOCATED AS PRESCRIBED BY THE DEPARTMENT. B.S.A. APPROVED ASSEMBLY.

MD10. ARTIFICIAL LIGHTING: SEC.26&35 MDL AND ART.19 HMC
- A. PROPER ELECTRIC LIGHTING AND EQUIMENT SHALL BE PROVIDED AND MAINTAINED WITHIN ALL DWELLINGS AND ASSEMBLY.
- B. PROPER ELECTRIC LIGHTINGS SHALL BE INSTALLED AND MAINTAINED AT OR NEAR THE OUTSIDE FRONT ENTRANCE WAY AND IN EVERY REAR YARD, SIDE YARD, FRONT YARD, AND COURTS. MIN. OF 50 WATTS INCANDESCENT ILLUMINATION OR EQUIVALENT AT FRONT ENTRANCE WAY AND A MIN. OF 4 WATTS IN YARDS AND COURTS AND SHALL BE KEPT BURNING FROM SUNSET EACH DAY TO SUNRISE ON THE FOLLOWING DAY.
- C. MAIN ENTRANCE AND VESTIBULE DOORS SHALL HAVE NOT LESS THAN FIVE PROPER ELECTRIC LIGHTINGS SHALL BE INSTALLED AND MAINTAINED AT OR NEAR THE OUTSIDE FRONT ENTRANCE WAY AND IN EVERY REAR YARD, SIDE YARD, FRONT YARD, AND COURTS. MIN. OF 50 WATTS INCANDESCENT ILLUMINATION OR EQUIVALENT AT FRONT ENTRANCE WAY AND MIN. OF 40 WATTS IN YARDS AND COURTS AND SHALL BE KEPT BURNING FROM SUNSET TO SUNRISE ON THE FOLLOWING DAY.
- D. MAIN ENTRANCE AND VESTIBULE DOORS SHALL HAVE NOT LESS THAN FIVE S.F. OF GLAZED SURFACES.

MD11. ENTRANCE DOORS: SEC. 50–A. MDL AND ART.20 HMC
- A. BUILDING ENTRANCES AND ALL OTHER EXTERIOR ENTRANCES SHALL BE EQUIPPED WITH APPROVED TYPE AUTOMATIC SELF–CLOSING AND SELF LOCKING DOORS.
- B. ENRANCE DOORS TO EACH APARTMENT UNIT SHALL HAVE KEY LOCK WITH AT LEAST ONE KEY TO BE PROVIDED BY OWNER, HEAVY DUTY LATCH, SET WITH DEAD BOLT AND DOOR CHAIN GUARD.

MD12. GAS METERS AND GAS APPLIANCES: SEC.64 MDL AND ART. 18 HMC
- A. GAS METERS SHALL COMPLY WITH SEC. 64 MDL.
- B. GAS APPLIANCES SHALL IN ADDITION TO THESE SECTIONS, COMPLY WITH THE BOARD OF STANDARD APPEAL.
- C. YEARLY INSPECTION OF GAS APPLIANCES BY QUALIFIED PERSON SHALL BE MADE IN OLT.

MD13. HEAT AND HOT WATER: SEC.79 MDL AND ART. 17 HMC.
- A. YEARLY INSPECTION SHALL BE MADE BY QUALIFIED PERSON.
- B. MINIMUM TEMPERATURE OF HEATING AND HOT WATER SHALL BE MAITAINED.

MD14. SINGLE STATION SMOKE DETECTORS SHALL BE INSTALLED IMMEDIATELY OUTSIDE OF SLEEPING OR BEDROOM WITH NO INTERVENING WALL SWITCH AS PER SEC.277.7G.

ADDITIONAL APPLICATIONS

Builders Paving Plan	121333501
Curb Cuts	121333510 & 121333976
Sprinkler/Standpipe	121328508
Fence	120699976
UDG Plumbing	121332824
Fire Protection Plan	121333208

ABBREVIATIONS

ARCH.	ARCHITECT(URAL)
A.C.	AIR CONDITIONER
ACOUS.	ACOUSTIC
ABV.	ABOVE
ADJ.	ADJOINING
ADJUST.	ADJUSTABLE
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
APPD.	APPROVED
ASPH.	ASPHALT
A.P.	APARTMENT PANEL
B.C.	BOTTOM OF CURB
BET.	BETWEEN
BLDG.	BUILDING
BL'K.	BLOCK
BOT.	BOTTOM
B.R.	BEDROOM
B.S.A.	BOARD OF STANDARDS AND APPEALS
B.U.	BUILT UP
BV	BATH/TOILET VENT
CONT.	CONTRACT
C.	CARPET
C.G.	CORNER GUARD
C.I.	CAST IRON
CAB.	CABINET
CEM.	CEMENT
CIND.	CINDER
CLG.	CEILING
CL.	CLOSET
C.L.	CENTER LINE
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONV.	CONVECTOR
CONT.	CONTINUOUS
CORR.	CORRIDOR
C.R.	CLOTHES RACK
CS	CORRIDOR SUPPLY
C.T.	CERAMIC TILE
C.C.	COMMUNICATIONS PANEL
C.M.U.	CONCRETE MASONRY UNIT
C.J.	CONTROL JOINT
CV	CORRIDOR VENT
D.	DRYER
D.A.	DINING ALCOVE OR DINING AREA
DET.	DETAIL
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
D.H.	DOUBLE HUNG
DN.	DOWN
DR.	DRAIN
D.R.	DINING ROOM
D.W.	DISH WASHER
DWG.	DRAWING
DF.	DRINKING FOUNTAIN
DV	DRYER VENT
EA.	EACH
ELEC.	ELECTRIC
ENGR.	ENGINEER
EXH.	EXHAUST
EQUIP.	EQUIPMENT
EXIST'G.	EXISTING
E.J.	EXPANSION JOINT
EQ.	EQUAL
F.	FOYER
F.A.I.	FRESH AIR INTAKE
F.B.O.	FURNISHED BY OTHERS
FIN.	FINISH
FIXT.	FIXTURE
FL.	FLOOR
F.D.	FLOOR DRAIN
FLASH.	FLASHING
F.P.S.C.	FIREPROOF SELF–CLOSING
F.S.P.	FIRE STANDPIPE
FURR.	METAL FURRING
F.T.	TERRAZO FRITZ TILE
G.	GAS
GALV.	GALVANIZED
GA.	GAUGE
G.B.	GRAB BAR
G.C.T.	GLAZED CERAMIC TILE
GEN.	GENERAL
GL.	GLASS, GLAZING
GR.	GRADE
GC.	GENERAL CONTRACTOR
GWB	GYPSUM WALLBOARD
H.CLG	HUNG CEILING
H.C.	HOLLOW CORE
HT.	HEIGHT
H.M.	HOLLOW METAL
H.P.	HIGH POINT
HORIZ.	HORIZONTAL
H.R.	HANDRAIL
HR.	HOUR
HVAC	HEATING, VENTILATING, AIR CONDITIONING
HTG.	HEATING
I.N.R.	IMPACT NOISE RATING
INSUL.	INSULATION
INT.	INTERIOR
I.D.	INSIDE DIAMETER
INC.	INCLUDING
JAN.CL.	JANITOR CLOSET
JT.	JOINT
K.	KITCHEN, KITCHENETTE
KPL.	KICK PLATE
LM.	LAMINATED
LAV.	LAVATORY
L.CL. (L.C.)	LINEN CLOSET
LDR.	LEADER
L.P.	LOW POINT
LT. WT.	LIGHT WEIGHT
MACH.	MACHINE
MAINT.	MAINTENANCE
MAS.	MASONRY
MAX.	MAXIMUM
MECH.	MECHANICAL
M.C.	MEDICINE CABINET
MET.	METAL
MIN.	MINUMUM
MIRR.	MIRROR
M.O.	MASONRY OPENING
MH	MANHOLE
MISC.	MISCELLANEOUS
N.I.C.	NOT IN CONTRACT
NO. OR #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFICE
OPNG. (OPG.)	OPENING
OPP.	OPPOSITE
P.	PAINT
PART.	PARTITION
PART.E.	PARTITION END
PAV'T.	PAVEMENT
P.E.	PASSENGER ELEVATOR
PERF.	PERFORATED
PL./P.L.	PLATE, PROPERTY LINE
PLAST.	PLASTER
POL.	POLISH
PRE. FAB.	PREFABRICATED
PLAS. LAM.	PLASTIC LAMINATE
PL.	PROTECTION PLATE
R.	RISERS, RANGE
RAD.	RADIUS
R.D.	ROOF DRAIN
REF.	REFRIGERATOR, REFERENCE
REINF.	REINFORCED
REQ'D.	REQUIRED
RESIST.	RESISTANT
RM.	ROOM
S.	SINK
SCHED.	SCHEDULED
S.E.	SERVICE ELEVATOR
SECT.	SECTION
SH.	SHOWER
SPECS.	SPECIFICATIONS
S.T.C.	SOUND TRANSMISSION CLASS
STL.	STEEL
S.S.	STAINLESS STEEL
STOR.	STORAGE
STRUC.	STRUCTURAL
SIM.	SIMILAR
S.O.	SLAB OPENING
T.	TREAD
T.	TOILET
T.A.	TRANSIT AUTHORITY
T.C.	TOP OF CURB
THK.	THICK
T.O.	TRIMMED OPENING
T.O.P.	TOP OF PARAPET
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
TYP.	TYPICAL
T.B.	TOWEL BAR
T.C.P.	TOP OF CONCRETE PLANK
T.X.	TOILET EXHAUST
V.C.T.	VINYL COMPOSITION TILE
V.C.G.	VINYL CORNER GUARD
VENT.	VENTILATION
VEST.	VESTIBULE
V.W.C.	VINYL WALL COVERING
W.	WASHING MACHINE
W.H.	WEEP HOLES
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
W.GL.	WIRE GLASS
W.P.	WATERPROOFING
W.R.GWB	WATER RESISITANT GYPSUM BOARD

PROGRESS INSPECTIONS

Y	N	INSPECTION/ TEST		PRIMARY CITATION
IIA ENVELOPE INSPECTIONS				
✓		IIA1	PROTECTION OF EXPOSED FOUNDATION INSULATION	ECC 303.2.1; ASHRAE 90.1-5.8.1.7
✓		IIA2	INSULATION PLACEMENT AND R-VALUES	ECC 303.1, 303.1.1, 303.1.2, 502.1, 505.2; ASHRAE 90.1-5.5, 5.6 OR 11; 5.8.1
✓		IIA3	FENESTRATION THERMAL VALUES AND PRODUCT RATINGS FOR U-FACTORS AND SHGC VALUES	ECC 303.1, 303.1.3, 502.3; ASHRAE 90.1-5.5; 5.6 OR 11; 5.8.2
✓		IIA4	FENESTRATION AND DOOR ASSEMBLY PRODUCT RATINGS FOR AIR LEAKAGE	ECC 502.4; ASHRAE 90.1-5.4.3.2
✓		IIA5	DIMENSIONING OF FENESTRATION AREAS	ECC 502.3; ASHRAE 90.1-5.5.4, 5.6 OR 11
✓		IIA6	VISUAL INSPECTION OF AIR SEALING AND INSULATION	ECC 502.4.3, 502.4.7; ASHRAE 90.1-5.4.3.1
	✓	IIA7	PROJECTION FACTORS: DIMENSION OF OVERHANGS	ECC 502.3; ASHRAE 90.1-5.5.4, 5.6 OR 11
✓		IIA8	LOADING DOCK WEATHER SEALS	ECC 502.4.5; ASHRAE 90.1-5.4.3.3
✓		IIA9	BUILDING ENTRANCE VESTIBULES	ECC 502.4.6; ASHRAE 90.1-5.4.3.4
IIB MECHANICAL AND SERVICE WATER HEATING				
✓		IIB1	TIGHT FITTING FIREPLACE DOORS AND COMBUSTION AIR	ECC 303.1.5; BC 2111; MC CHAPTERS 7,9; FGC CHAPTER 6
✓		IIB2	OUTDOOR AIR INTAKES AND EXHAUST AIR OPENINGS AND DAMPERS	ECC 502.4.4; ASHRAE 90.1-6.4.3.4
✓		IIB3	HVAC, SERVICE WATER HEATING, AND POOL EQUIPMENT SIZING AND PERFORMANCE TO BE VERIFIED	ECC 503.2, 504.2, 504.7; ASHRAE 90.1-6.3, 6.4.1, 6.4.2, 6.8; 7.4, 7.8
✓		IIB4	HVAC SYSTEM CONTROLS AND ECONOMIZERS AND SERVICE HOT WATER SYSTEM CONTROLS TO BE VERIFIED	ECC 503.2.4, 503.2.5.1, 503.2.11, 503.3, 503.4, 504.3, 504.6, 504.7; ASHRAE 90.1-6.3, 6.4, 6.5, 6.7.2.4, 7.4.4, 7.4.5
✓		IIB5	DUCT, PLENUM AND PIPING INSULATION AND SEALING TO BE VERIFIED	ECC 503.2.7, 503.2.8, 504.5; ASHRAE 90.1-6.3, 6.4.4.2, 6.8.2, 6.8.3; 7.4.3
✓		IIB6	AIR LEAKAGE TESTING FOR DUCT SYSTEMS DESIGNED TO OPERATE AT STATIC PRESSURES IN EXCESS OF 3 INCHES W.G. (746 Pa)	ECC 503.2.7.1.3; ASHRAE 90.1-6.4.4.2
IIC ELECTRICAL POWER AND LIGHTING SYSTEMS				
✓		IIC1	ELECTRICAL METERING TO BE VERIFIED	ECC 505.7
✓		IIC2	LIGHTING IN DWELLING UNITS VERIFIED FOR HIGH EFFICACY REQUIREMENTS	ECC 505.5.3
✓		IIC3	INTERIOR LIGHTING POWER VERIFIED FOR COMPLIANCE WITH LIGHTING POWER ALLOWANCE	ECC 505.5; ASHRAE 90.1-9.1, 9.2, 9.5, 9.6; IRCNY §101-07(c)(3)(v)(C)4
✓		IIC4	EXTERIOR LIGHTING POWER VERIFIED FOR COMPLIANCE WITH SOURCE EFFICACY AND/OR LIGHTING POWER ALLOWANCE	ECC 505.6; ASHRAE 90.1-9.4.4, 9.4.5; IRCNY §101-07(c)(3)(v)(C)4
✓		IIC5	VERIFY LIGHTING CONTROLS FUNCTIONALITY AND PROPER OPERATION	ECC 505.2, 505.2.2.2; ASHRAE 90.1-9.4.1, 9.4.1.2 (AS MODIFIED BY SECTION ECC A102)
✓		IIC6	EXIT SIGNS DO NOT EXCEEDED PERMITTED WATTAGE	ECC 505.4; ASHRAE 90.1-9.4.3
✓		IIC7	TANDEM WIRING SHALL BE TESTED FOR FUNCTIONALITY	ECC 505.3; ASHRAE 90.1-9.4.2
✓		IIC8	ELECTRICAL MOTORS ARE CODE COMPLIANT AND MEET ENERGY REQUIREMENTS IN CONSTRUCTION DOCUMENTS	ECC 503.2.10; ASHRAE 90.1-10.4
IID OTHER				
✓		IID1	MAINTENANCE INFORMATION VERIFIED BEFORE PROVIDED TO OWNER	ECC 303.3, 503.2.9.3; ASHRAE 90.1-4.2.2.3; 6.7.2.2, 8.7.2

NOTE: THE INSPECTION DESCRIPTION PROVIDED SUMMARIZES THE REQUIREMENTS OUTLINED IN RCNY 5000-01. THE INSPECTOR SHALL FOLLOW THE SPECIFIC REQUIREMENTS AND INSPECTIONS QUANTITIES AS OUTLINED IN RCNY 5000-01.

SYMBOLS

- 1 — PARTITION TYPES
- W1 — WINDOW TYPES
- LV1 — LOUVER TYPES
- A 3BR 2,565 SF — APT. NUMBER, BEDROOMS, SQUARE FOOTAGE
- 1 / A–4 — SECTION NUMBER, SHEET NUMBER
- ELEVATION NUMBER, SHEET NUMBER
- 1 — DETAIL NUMBER
- A.P. — APARTMENT ELECTRICAL PANEL
- CC — COMMUNICATIONS PANEL
- TV 1 — TOILET VENT
- KV 2 — KITCHEN VENT
- DV 3 — DRYER VENT
- PCV 1 — PUBLIC CORRIDOR VENT
- EXIT LIGHT & SIGN
- SC — HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR
- H — HEAT DETECTOR
- 3–4 — DOOR TYPE
- SPRINKLER HEAD
- SP — SPRINKLER RISER
- SR — STEAM RISER
- L — LEADER
- CONCRETE
- CEMENT FILL
- CONCRETE BLOCK
- BRICK
- STEEL
- CERAMIC TILE
- WOOD
- CONTINUOUS TRUSS TYPE MASONRY WALL REINFORCEMENT
- VAPOR BARRIER UNDER UNDER CONCRETE SLAB
- THERMAFIBER INSULATION
- RIGID INSULATION

DEPT OF BLDGS 121185760 Job Number — ES941618847 Scan Code

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
GENERAL NOTES, ABBREVIATIONS, PROGRESS INSPECTIONS, ETC.

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	A-002.00
SHEET. No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A002_Gen Notes, Legends,

HOUSING MAINTENANCE NOTES

158. D27-2010 CLEANING OF ROOFS, YARDS, COURTS AND OTHER OPEN SPACES.

A. THE OWNER OF A DWELLING CONTAINING TWO OR MORE DWELLING UNITS, AND THE OCCUPANT OF A SINGLE FAMILY DWELLING SHALL KEEP THE ROOF, YARD, COURTS AND OTHER OPEN SPACES CLEAN AND FREE FROM DIRT, FILTH, GARBAGE OR OTHER OFFENSIVE MATERIAL.

159. D27-2011 CLEANING OF INTERIOR SHARED SPACE.

A. THE OWNER OF A DWELLING SHALL MAINTAIN THE PUBLIC PARTS IN A CLEAN AND SANITARY CONDITION.

160. D27-2012 CLEANING OF INTERIOR OF DWELLING UNITS.

A. THE OCCUPANT OF A DWELLING SHALL MAINTAIN THE DWELLING UNIT WHICH HE OR SHE OCCUPIES AND CONTROLS IN A CLEAN AND SANITARY CONDITION EXCEPT AS PROVIDED IN SUBDIVISION B OF THIS SECTION.

161. D27-2013 PAINTING OF PUBLIC PARTS AND WITHIN DWELLINGS.

A. IN THE PUBLIC PARTS OF A MULTIPLE DWELLING, THE OWNER SHALL:

(1) PAINT OR COVER THE WALLS AND CEILINGS WITH WALLPAPER OR OTHER ACCEPTABLE WALL COVERING: AND

(2) REPAINT OR RE-COVER THE WALLS AND CEILINGS WITH WALLPAPER OR OTHER ACCEPTABLE WALL COVERING WHENEVER NECESSARY IN THE JUDGEMENT OF THE DEPARTMENT TO KEEP SUCH SURFACES SANITARY.

B. IN OCCUPIED DWELLING UNITS IN A MULTIPLE DWELLING, THE OWNER SHALL:

(1) PAINT OR COVER THE WALLS AND CEILINGS WITH WALLPAPER OR OTHER ACCEPTABLE WALL COVERING: AND

(2) REPAINT OR RE-COVER THE WALLS AND CEILINGS WITH WALLPAPER OR OTHER ACCEPTABLE WALL COVERING EVERY THREE YEARS, AND MORE OFTEN WHEN REQUIRED BY CONTRACT OR OTHER PROVISIONS OF LAW.

C. THE DEPARTMENT MAY REQUIRE A TENANT OF A DWELLING UNIT IN A MULTIPLE DWELLING TO REPAINT OR RECOVER THE INTERIOR WALLS AND CEILINGS OF HIS DWELLING UNIT WITH WALLPAPER OR OTHER ACCEPTABLE WALL COVERING IF SUCH WALLS AND CEILING BECOME UNSANITARY AT ANY TIME WITHIN THREE YEARS FROM THE DATE OF THE LAST REFINISHING BY THE OWNER. HOWEVER, IF THE TENANT CAN SHOW, TO THE SATISFACTION OF THE DEPARTMENT THAT THE WALLS AND CEILINGS HAVE BECOME UNSANITARY THROUGH NO ACT OR NEGLECT OF HIS OWN OR OF HIS FAMILY OR GUESTS, THE DEPARTMENT MAY REQUIRE THE OWNER TO REPAINT OR RE-COVER THE SAME. THIS SUBSECTION DOES NOT RELIEVE THE OWNER FROM HIS DUTIES UNDER SUBSECTION (B)(2) OF THIS SECTION.

D. THE OWNER AND TENANT OF ANY DWELLING UNIT IN A MULTIPLE DWELLING MAY, BY VOLUNTARY AGREEMENT, PROVIDE THAT THE OWNER NEED NOT REPAINT IN SUCH UNIT AS REQUIRED BY SUBSECTION (B)(2) OF THIS SECTION FOR SUCH ADDITIONAL PERIOD, NOT TO EXCEED TWO YEARS, AS MAY BE AGREED UPON. SUCH AN AGREEMENT TO EXTEND THE TIME FOR REPAINTING SHALL NOT BE VALID UNLESS IT HAS BEEN ENTERED INTO NOT EARLIER THAN ONE MONTH PRIOR TO THE EXPIRATION OF THE THREE-YEAR PERIOD, AND SHALL NOT FORM PART OF ANY AGREEMENT OF LEASE. THE DEPARTMENT MAY PRESCRIBE THE FORM OF SUCH AGREEMENTS, REQUIRE THEM TO BE FILED, AND MAY MAKE SUCH OTHER REGULATIONS AS MAY BE NECESSARY TO AVOID ABUSE, AND TO FURTHER THE PURPOSE OF THIS ARTICLE. NOT WITHSTANDING ANY AGREEMENT, THE DEPARTMENT MAY, DURING THE PERIOD FOR WHICH REPAINTING IS DEFERRED BY AGREEMENT, ORDER REPAINTING BY THE OWNER IN ANY DWELLING UNIT WHEN DEEMED NECESSARY TO KEEP THE WALLS AND CEILING OF SUCH UNIT SANITARY. THIS SUB-SECTION SHALL NOT AFFECT THE APPLICABILITY OF SUB-SECTION (C) OF THIS SECTION DURING THE THREE YEARS AFTER ANY

E. REPAINTING OR RE-COVERING.

NEITHER THE OWNER NOR A TENANT OF A DWELLING UNIT SHALL PLACE WALLPAPER OR WALL COVERINGS UPON A WALL OR CEILING IN THE PUBLIC OR TENANT-OCCUPIED PARTS OF A DWELLING UNLESS EXISTING WALLPAPER OR WALL COVERING IS FIRST REMOVED AND SUCH WALL OR CEILING IS CLEANED ARE REPAIRED. HOWEVER, IF WALLPAPER OR WALL COVERING IS IN GOOD CONDITION, FREE FROM VERMIN AND A COAT OF ACCEPTABLE PAINT OR SIZING IS APPLIED, ONE ADDITIONAL LAYER OF WALLPAPER OR WALL COVERING MAY BE APPLIED.

F. NOTHING CONTAINED IN THIS SECTION SHALL BE DEEMED TO REQUIRE THE OWNER OF A DWELLING TO COVER WITH WALLPAPER OR OTHER ACCEPTABLE COVERING ANY WALL OR CEILING NOT PREVIOUSLY SO COVERED BY HIM. WHEN A WALL OR CEILING OF A DWELLING UNIT HAS BEEN DECORATED WITH PAPER, WOOD PANELING, OR OTHER MATERIAL OVER WHICH PAINT NORMALLY IS NOT APPLIED, THE OWNER SHALL BE RELIEVED OF HIS OBLIGATION TO REPAINT OR RE-COVER SUCH WALL OR CEILING SO LONG AS THE SAME REMAINS IN A SANITARY CONDITION, IN THE JUDGEMENT OF THE DEPARTMENT. WHEN THE DEPARTMENT REQUIRES REDECORATION OF SUCH WALL OR CEILING, THE TENANT SHALL REMOVE ANY PAPER, WALL COVERING, WOOD PANELING OR OTHER MATERIAL WHICH HE HIMSELF HAS APPLIED BEFORE THE OWNER IS REQUIRED TO CLEAN AND REPAIR AND REPAINT OR RE-COVER. HOWEVER, IF THE OWNER OR FORMER TENANT HAS APPLIED PAPER, OR WALL COVERING, WOOD PANELING OR OTHER MATERIAL, THE OWNER SHALL BE RESPONSIBLE FOR ITS REMOVAL BEFORE REDECORATION.

THE OWNER OF A MULTIPLE DWELLING SHALL KEEP AND MAINTAIN RECORDS RELATING TO

G. THE REFINISHING OF PUBLIC PARTS AND DWELLING UNITS SHOWING WHEN SUCH PARTS WERE LAST PAINTED, PAPERED OR COVERED WITH ACCEPTABLE MATERIAL AND WHO PERFORMED THE WORK. SUCH RECORDS SHALL BE OPEN TO INSPECTION BY THE DEPARTMENT AND SHALL BE SUBMITTED TO THE DEPARTMENT UPON REQUEST.

H. (1) THE OWNER OF A MULTIPLE DWELLING SHALL REMOVE OR COVER IN A MANNER APPROVED BY THE DEPARTMENT ANY PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL HAVING A READING OF 0.7 MILLIGRAMS OF LEAD PER SQUARE CENTIMETER OR GREATER OR CONTAINING MORE THAN 0.5 PERCENT OF METALLIC LEAD BASED ON THE NON-VOLATILE CONTENT OF THE PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL ON THE INTERIOR WALLS, CEILINGS, DOORS, WINDOW SILLS OR MOLDINGS IN ANY DWELLING UNIT IN WHICH A CHILD OR CHILDREN SIX (6) YEARS OF AGE OR UNDER RESIDE.

(2) IN ANY MULTIPLE DWELLING ERECTED PRIOR TO JANUARY 1, 1960 IN WHICH PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL IS FOUND TO BE PEELING ON THE INTERIOR WALLS, CEILINGS, DOORS, WINDOW SILLS OR MOLDINGS IN ANY DWELLING UNIT IN WHICH A CHILD OR CHILDREN SIX (6) YEARS OF AGE OR UNDER RESIDE, IT SHALL BE PRESUMED THAT THE PEELING SUBSTANCE CONTAINS MORE THAN 0.5 PERCENT OF METALLIC LEAD BASED ON THE NON-VOLATILE CONTENT OF THE PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL OR HAVING A READING OF 0.7 MILLIGRAMS OF LEAD PER SQUARE CENTIMETER OR GREATER.

(3) THE EXISTENCE OF PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL HAVING A READING OF 0.7 MILLIGRAMS OF LEAD PER SQUARE CENTIMETER OR GREATER OR CONTAINING MORE THAN 0.5 PERCENT OF METALLIC LEAD BASED ON THE NON-VOLATILE CONTENT OF THE PAINT OR OTHER SIMILAR SURFACE-COATING MATERIAL ON THE INTERIOR WALLS, CEILINGS, DOORS, WINDOW SILLS OR MOLDINGS IN ANY DWELLING UNIT IN A MULTIPLE DWELLING IN WHICH A CHILD OR CHILDREN THIS CODE. THE PRESUMPTION ESTABLISHED IN PARAGRAPH 2 ABOVE MAY BE SIX (6) YEARS OF AGE AND UNDER RESIDE SHALL CONSTITUTE A CLASS C REBUTTED BY THE OWNER OF THE MULTIPLE DWELLING. SUCH PROOF SHALL BE IN IMMEDIATELY HAZARDOUS VIOLATION AND SUBJECT THE OWNER OF SUCH MULTIPLE FORM AND SUBSTANCE ACCEPTABLE TO THE DEPARTMENT OR A COURT OF DWELLING TO THE PENALTIES OF SUCH VIOLATION PROVIDED IN ARTICLE 51 OF COMPETENT JURISDICTION.

162. D27-2018 RODENT AND INSECT ERADICATION: MANADATORY EXTERMINATION

A. THE OWNER OR OCCUPANT IN CONTROL OF A DWELLING SHALL KEEP THE PREMISES FREE FROM RODENTS, AND FROM INFESTATIONS OF INSECTS AND OTHER PESTS, AND FROM ANY CONDITION CONDUCIVE TO RODENT OR INSECT AND OTHER PEST LIFE.

162.

B. WHEN ANY PREMISES IS SUBJECT TO INFESTATION BY RODENTS OR INSECTS AND OTHER PESTS, THE OWNER OR OCCUPANT IN CONTROL SHALL APPLY CONTINUOUS ERADICATION MEASURES.

C. WHEN THE DEPARTMENT MAKES THE DETERMINATION THAT ANY PREMISES ARE INFESTED BY RODENTS, INSECTS OR OTHER PESTS, IT MAY ORDER SUCH ERADICATION MEASURES AS THE DEPARTMENT DEEMS NECESSARY.

163. D27-2019 ELIMINATION OF HARBORAGES.

ALL BUILDING MATERIAL, LUMBER, BOXES, CARTONS, BARRELS, CONTAINERS, MACHINERY, RAW MATERIAL, FABRICATED GOODS, JUNK, FOOD, ANIMAL FEED AND ANY OTHER SUBSTANCES WHICH MAY AFFORD HARBORAGE OR PROVIDE FOOD FOR SUCH RODENTS OR INSECTS AND OTHER PESTS SHALL BE KEPT STORED OR HANDLED BY THE OWNER AND TENENTS OF EVERY DWELLING IN SUCH MANNER AS THE DEPARTMENT MAY REQUIRE. THE DEPARTMENT MAY MAKE ORDERS TO ELIMINATE RAT HARBORAGE TO THE PERSON WHO IS RESPONSIBLE FOR THE CONDITIONS. THE DEPARTMENT SHALL UNCOVER AND INSPECT PERIODICALLY ALL STRUCTURAL HARBORAGES WHICH CANNOT BE ELIMINATED FROM DWELLINGS.

164. D27-2020 DEFINITIONS.

(A) ORGANIC WASTES SHALL MEAN ALL WASTES PRODUCED BY OR FROM LIVING ORGANISMS.

(B) INORGANIC WASTES SHALL MEAN ALL WASTES OTHER THAN ORGANIC WASTES, INCLUDING DISCARDED LUMBER, WOOD SHAVINGS AND FURNITURE.

(C) HOUSEHOLD WASTSES SHALL MEAN ALL WASTES, ORGANIC AND INORGANIC, WHICH ARE PRODUCED WITHIN A DWELLING UNIT.

165. D27-2021 RECEPTACLES FOR WASTE MATTER.

(A) THE OWNER OR OCCUPANT IN CONTROL OF A DWELLING SHALL PROVIDE AND MAINTAIN METAL CANS, OR OTHER RECEPTACLES JOINTLY APPROVED AS TO SPECIFICATIONS BY THE DEPARTMENT, THE ENVIRONMENTAL PROTECTION ADMINISTRATION AND THE DEPARTMENT OF HEALTH, FOR THE EXCLUSIVE USE OF EACH BUILDING, WHICH SHALL BE OF SUFFICIENT SIZE AND NUMBER TO CONTAIN THE WASTES ACCUMULATED IN IN SUCH BUILDING DURING A PERIOD OF 72 HOURS.

NO RECEPTACLE SHALL BE FILLED TO A HEIGHT SO AS TO PREVENT THE EFFECTIVE CLOSURE THEREOF AND NO RECEPTACLE SHALL WEIGH MORE THAN 100 POUNDS WHEN FILLED. THE RECEPTACLES SHALL BE SO CONSTRUCTED AS TO HOLD THEIR CONTENTS WITHOUT LEAKAGE. METAL CANS SHALL BE EFFECTIVELY PROVIDED WITH TIGHT-FITTING COVERS AND OTHER RECEPTACLES SHALL BE EFFECTIVELY CLOSED. WHEN REQUESTED BY THE ENVIRONMENTAL PROTECTION ADMINISTRATION, THE OWNER OR OCCUPANT IN CONTROL SHALL SEPARATE AND PLACE IN SEPARATE RECEPTACLES. ASHES, ORGANIC AND INORGANIC WASTES. NOTHING CONTAINED IN THIS SUBSECTION SHALL PREVENT THE DEPARTMENT, THE ENVIRONMENTAL PROTECTION ADMINISTRATION AND THE DEPARTMENT OF HEALTH FROM JOINTLY APPROVING AS TO SPECIFICATIONS OTHER SYSTEMS FOR THE DISPOSAL OF WASTE OR UTILIZING CONTAINERS OF LARGER SIZE AND DIFFERENT CONSTRUCTION AS MAY BE APPROPRIATE FOR SUCH SYSTEMS.

(B) MEATL CANS SHALL BE KEPT WITHIN THE DWELLING OR AS REQUIRED BY THE DEPARTMENT UNTIL THE TIME FOR REMOVAL OF THEIR CONTENTS WHEN THEY SHALL BE PLACED IN FRONT OF THE DWELLING. WHEN INSIDE STORAGE IS REQUIRED, RECEPTACLES OF OTHER MATERIALS SHALL BE KEPT IN A METAL CAN OR A RAT-PROOF AND FIRE-PROOF ROOM UNTIL THE TIME OF THEIR REMOVAL WHEN THEY SHALL BE REMOVED FROM THE METAL CAN AND BE NEATLY STACKED IN FRONT OF THE DWELLING. AFTER THE CONTENTS HAVE BEEN REMOVED BY THE ENVIRONMENTAL PROTECTION ADMINISTRATION, ANY RECEPTACLES REMAINING SHALL BE RETURNED PROMPTLY TO THEIR PLACE OF STORAGE. METAL CANS SHALL BE KEPT COVERED AT ALL TIMES AND SHALL BE DISINFECTED REGULARLY AND MAINTAINED IN A SANITARY CONDITION. YARD SWEEPINGS, HEDGE CUTTINGS, GRASS, LEAVES, EARTH, STONE OR BRICKS SHALL NOT BE MIXED WITH HOUSEHOLD WASTES.

(C) NEWSPAPERS, WRAPING PAPER, OR OTHER INORGANIC WASTES WHICH ARE LIKELY TO BE BLOWN OR SCATTERED ABOUT THE STREETS SHALL BE SECURELY BUNDLED, TIED REPACKED BEFORE BEING PLACED FOR COLLECTION, SUCH MATERIALS SHALL BE KEPT AND PLACED FOR COLLECTION IN THE SAME MANNER AS THE RECEPTACLES.

166. D27-2022 FREQUENCY OF COLLECTION WASTE MATTER FROM DWELLING UNITS IN MULTIPLE DWELLINGS.

(A) THE OWNER OF A MULTIPLE DWELLINGT SHALL NOT ALLOW THE ACCUMULATION EXCEPT IN A LAWFUL RECEPTACLE OF ASHES OR ANY TYPE OF WASTE MATTER IN ANY PART OF THE PREMISES.

(B) IN MULTIPLE DWELINGS WHERE THE OWNER PROVIDES DUMBWAITER SERVICE, ALL WASTE MATTER SHALL BE COLLECTED AT LEAST ONCE DAILY AND DEPOSITED IN SEPARATE RECEPTACLES.

(C) IN MULTIPLE DWELLINGS WHERE NO DUMBWAITER SERVICE IS PROVIDED, THE OWNER SHALL PROVIDE BETWEEN THE HOURS OF SEVEN A.M. AND TEN A.M. OR BETWEEN FIVE P.M. AND EIGHT P.M. DAILY:

(1) A SUFFICIENT NUMBER OF RECEPTACLES BUT IN NO EVENT LESS THAN TWO WITHIN THE DWELLING OR OTHER AREA APPROVED BY THE DEPARTMENT WHICH ARE ACCESSIBLE TO THE TENANTS. SUCH RECEPTACLES SHALL BE REMOVED PROMPTLY UPON THE EXPIRATION OF THE SELECTED TIME PERIOD AND TAKEN TO THEIR PLACE OF STORAGE: OR

(2) A PICK-UP SERVICE AT EACH DWELLING UNIT TO COLLECT ASHES AND WASTES FOR DEPOSIT IN THE RECEPTACLES REFERRED TO IN SECTION 27-2021 OF THIS ARTICLE.

THE OWNER SHALL POST AND MAINTAIN A NOTICE IN A CONSPICUOUS PLACE IN THE DWELLING INFORMING THE TENANTS OF THE HOUR AND METHOD OF COLLECTION. A NEW NOTICE SHALL BE POSTED AND MAINTAINED WITHIN 48 HOURS PRECEDING ANY CHANGE IN SUCH HOUR OR METHOD.

(D) THE TENANT OF A MULTIPLE DWELLING SHALL DISPOSE OF WASTE MATTER IN ACCORDANCE WITH THE METHOD PROVIDED BY THE OWNER UNDER SUBSECTION (B) OR (C) OF THIS SECTION. THE TENANT SHALL NOT ACCUMULATE ANY WASTE MATTER IN HIS DWELLING UNIT SO AS TO CREATE A CONDITION WHICH IS UNSANITARY OR A FIRE HAZARD IN THE JUDGEMENT OF THE DEPARTMENT.

(E) SUBSECTIONS (B), (C), AND (D) SHALL NOT APPLY TO ANY MULTIPLE DWELLING WHERE RUBBISH CHUTE TO COMPACTOR SERVICES OR OTHER MEANS OF DISPOSAL APPROVED BY THE DEPARTMENT ARE PROVIDED. THE TENANT SUCH A DWELLING SHALL DISPOSE OF WASTE MATTER IN AN INCINERATOR OR BY SUCH OTHER APPROVED MEANS OF DISPOSAL AND SHALL NOT PERMIT WASTES TO ACCUMULATE SO AS TOCREATE A CONDITION WHICH IS UNSANITARY OR A FIRE HAZARD IN THE JUDGEMENT OF THE DEPARTMENT.

167. D27-2026 MAINTENANCE OF SEWER CONNECTION AND PLUMBING FIXTURES

A. THE OWNER OF A DWELLING SHALL PROPERLY MAINTAIN AND KEEP IN GOOD REPAIR THE PLUMBING AND DRAINAGE SYSTEM, INCLUDING WATER CLOSETS, TOILETS, SINKS AND OTHER FIXTURES.

168. D27-2027 DRAINAGE OF ROOFS AND COURT YARDS

A. THE OWNER OF A DWELLING SHALL GRADE AND MAINTAIN THE GRADING OF ALL ROOFS, TERRACES, SHAFTS, COURTS, YARDS, AND OTHER OPEN SPACES ON THE LOT, AND SHALL PROVIDE AND MAINTAIN UNOBSTRUCTED DRAINAGE FROM THESE AREAS AND SPACES THROUGH A DRAIN CONNECTED TO A STREET STORM-WATER MAIN OR COMBINED SEWER AND STREET STORM -WATER MAIN, THE DEPARTMENT MAY PERMIT THE STORM WATER FROM SUCH AREAS TO DRAIN INTO A STREET GUTTER LEADING TO A NATURAL CHANNEL, WATER COURSE, OR DRY WELL.

B. THE OWNER OF A DWELLING SHALL PROVIDE AND MAINTAIN DRAINAGE FROM ALL ROOFS TO CARRY OFF STORM WATER, TO PREVENT IT FROM DRIPPING TO THE GROUND, OR FROM CAUSING DAMPNESS IN WALLS, CEILINGS, AND OPEN SPACES.

C. THE DEPARTMENT MAY REQUIRE THE OWNER OF A DWELLING TO SURFACE THAT, WITH RESPECT TO PRIVATE DWELLINGS, THE DEPARTMENT MAY PERMIT SHAFTS, COURTS, YARDS AND OTHER OPEN SPACES ON THE LOT WITH THE SURFACING OF SUCH AREAS WITH BITUMINOUS AGGREGATE OR OTHER CONCRETE, AND TO PITCH THE SURFACES OF SUCH AREAS TOWARDS A SIMILAR MATERIAL.

D. THE OWNER OF A DWELLING MAY PLANT GRASS, SOD, SHRUBS, TREES AND OTHER VEGETATION IN YARDS AND COURTS, UNLESS THE DEPARTMENT ORDERS ITS REMOVAL BECAUSE IN ITS OPINION SUCH VEGETATION INTERFERES WITH PROPER DRAINAGE, LIGHT, VENTILATION, OR EGRESS.

169. D27-2037 DUTY TO PROVIDE ELECTRIC LIGHTING EQUIPMENT IN ALL DWELLINGS.

THE OWNER SHALL EQUIP EVERY DWELLING FOR LIGHTING BY ELECTRICITTY. HE SHALL PROVIDE AND MAINTAIN LIGHT FIXTURES TO PROVIDE LIGHTING FOR ALL PUBLIC PARTS IN A DWELLING, INCLUDING THE MEANS OF EGRESS, FOR EVERY ROOM, WATER-CLOSET COMPARTMENT AND BATHROOM IN EVERY DWELLING UNIT, AND FOR EVERY FIXTURE, THE OWNER SHALL INSTALL AND MAINTAIN SUCH RECEPTACLE OUTLETS AS MAY BE REQUIRED BY THE ELECTRICAL CODE. EXCEPT AS OTHERWISE PROVIDED IN THIS CODE OR IN THE ELECTRICAL CODE, THE OWNER MAY SUBSTITUTE AN ADDITIONAL RECEPTACLE OUTLET FOR A REQUIRED LIGHT FIXTURE IN LIVING ROOMS OTHER THAN KITCHENS.

170. D27-2038 ELECTRIC LIGHTING FIXTURES IN CERTAIN PUBLIC PARTS OF DWELLINGS, FIXTURES AND LIGHTS REQUIRED.

A. IN EVERY MULTIPLE DWELLING AND TENANT-OCCUPIED TWO-FAMILY DWELLING THE OWNER SHALL PROVIDE ELECTRIC LIGHTING FIXTURES FOR EVERY PUBLIC HALL, STAIR, FIRE-STAIR AND FIRE-TOWER ON EVERY FLOOR, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

(1) IF AN INCASCENT LIGHTING FIXTURE IS PROVIDED, IT SHALL BE CAPABLE OF PROVIDING ILLUMINATION OF AT LEAST TEN WATTS PER 25 SQUARE FEET OF FLOOR-AREA OR FRACTION THEREOF. EACH LIGHTING FIXTURE SHALL BE PROVIDED WITH ONE OR MORE LIGHTS OF A TOTAL OF NOT LESS THAN 60 WATTS. WHERE, UNDER THIS REQUIREMENT, THE NUMBER OF WATTS PER FIXTURE WOULD EXCEED 100, ONE OR MORE ADDITIONAL FIXTURES SHALL BE PROVIDED AND SHALL BE LOCATED AS MAY BE PRESCRIBED BY THE DEPARTMENT, EXCEPT WHERE THE DISTANCE FROM THE FIXTURE TO THE FARTHEST INTERSECTING WALL DOES NOT EXCEED 20 FEET.

(2) IF A FLOURESCENT LIGHTING FIXTURE IS PROVIDED, IT SHALL BE CAPABLE OF PROVIDING ILLUMINATION OF AT LEAST FOUR WATTS COOL WHITE FLUORESCENT LIGHT PER 25 SQUARE FEET OF FLOOR-AREA OR FRACTION THEREOF. EACH LIGHTING FIXTURE SHALL BE PROVIDED WITH ONE OR MORE LIGHTS OF A TOTAL OF NOT LESS THAN 20 WATTS. WHERE, UNDER THIS REQUIREMENT, THE NUMBER OF WATTS PER FIXTURE WOULD EXCEED 40, ONE OR MORE ADDITIONAL FIXTURES SHALL BE PROVIDED AND SHALL BE LOCATED AS MAY BE PRESCRIBED BY THE DEPARTMENT EXCEPT WHERE THE DISTANCE FROM THE FIXTURE TO THE FARTHEST INTERSECTING WALL DOES NOT EXCEED 20 FEET.

(3) IN EVERY MULTIPLE DWELLING HEREAFTER ERECTED, IN ADDITION TO OTHER LIGHTING REQUIREMENTS, A SUFFICIENT NUMBER OF INCANDESCENT OR FLUORESCENT FIXTURES SHALL BE PROVIDED SO THAT THE DISTANCE BETWEEN FIXTURES IS NOT MORE THAN 30 FEET AND SO THAT NO WALL IS MORE THAN 15 FEET DISTANT FROM A FIXTURE.

B. NOTWITHSTANDING ANY OTHER REQUIREMENT OF THIS SECTION. THE DEPARTMENT MAY REQUIRE FIXTURES TO BE SO LOCATED, AND ADDITIONAL FIXTURES TO BE INSTALLED, IN ORDER TO ASSURE THAT EVERY PART OF EVERY PUBLIC HALL, STAIR, FIRE-STAIR OR FIRE TOWER IS ADEQUATELY LIGHTED.

171. D27-2039 LIGHTING TO BE PROVIDED AT NIGHT: OWNER'S RESPONSIBILITY.

A. THE OWNER OF A MULTIPLE DWELLING SHALL TURN ON ALL REQUIRED LIGHTS IN EVERY PUBLIC HALL AND STAIR AT SUNSET EVERY DAY AND KEEP THEM ON UNTIL SUNRISE THE DAY FOLLOWING.

B. THE OWNER OF A MULTIPLE DWELLING SHALL KEEP ALL REQUIRED LIGHTS BURNING CONTINUOUSLY: (1) IN EVERY FIRE-STAIR AND FIRE TOWER; (2) IN EVERY STAIR AND PUBLIC HALL WHERE THERE IS NO WINDOW OPENING ON A STREET, COURT, YARD, SPACE ABOVE A SETBACK, OR ON A SHAFT; AND (3) IN EVERY STAIR AND PUBLIC HALL WHERE THERE IS A WINDOW WHICH IS IN THE OPINION OF THE DEPARTMENT DOES NOT PROVIDE ADEQUATE NATURAL LIGHT.

C. THE OWNER OF THE MULTIPLE DWELLING SHALL PROVIDE ELECTRIC LIGHT AT ALL HOURS OF THE DAY AND NIGHT IN ROOMS OR SPACES IN MULTIPLE DWELLINGS IN WHICH LAUNDRY EQUIPMENT IS PROVIDED FOR THE COMMON USE OF THE OCCUPANTS WHENEVER NATURAL LIGHT IS INSUFFICIENT IN THE OPINION OF THE DEPARTMENT.

D. THE OWNER OF A MULTIPLE DWELLING SHALL INSTALL AND MAINTAIN IN WORKING CONDITION A LIGHTING FIXTURE THAT CAN BE TURNED ON BY A TENANT OR BY THE MAIL CARRIER DIRECTLY OVER A MAIL BOX OR OTHER RECEPTECLE FOR MAIL IF THE NATURAL LIGHT IN THE PUBLIC HALLS IS NNOT SUFFICIENT TO READ THE NAME ON EACH MAIL BOX OR RECEPTACLE.

E. THE OWNER OF A MULTIPLE DWELLING SHALL NOT BE RESPONSIBLE IF ANY REQUIRED LIGHT BECOMES EXTINGUISHED AND REMAINS SO IF HE CAN SHOW TO THE SATISFACTION OF THE DEPARTMENT OR COURT THAT IT BECAME AND REMAINED EXTINGUISHED WITHOUT HIS KNOWLEDGE OR CONSENT.

172. D27-2040 LIGHTS NEAR ENTRANCE WAYS AND IN YARDS AND COURTS OF MULTIPLE DWELLINGS.

A. THE OWNER OF A MULTIPLE DWELLING SHALL INSTALL AND MAINTAIN ONE OR MORE LIGHTS AT OR NEAR THE OUTSIDE OF THE FRONT ENTRANCE WAY OF THE BUILDING WHICH SHALL IN THE AGGREGATE PROVIDE NOT LESS THAN 50 WATTS INCANDESCENT ILLUMINATION OR ITS EQUIVALENT FOR A BUILDING WITH A FRONTAGE IN EXCESS OF 22 FEET. IN THE CASE OF A MULTIPLE DWELLING WITH A FRONTAGE IN EXCESS OF 22 FEET AND FRONT ENTRANCE DOORS WITH A COMBINED WIDTH IN EXCESS OF FIVE (5) FEET, THE OWNER SHALL INSTALL AT LEAST TWO LIGHTS, ONE ON EACH SIDE OF THE ENTRANCE WAY, WITH AN AGGREGATE ILLUMINATION OF 150 WATTS INCANDESCENT ILLUMINATION OR ITS EQUIVALENT. IF THE MINIMUM LEVEL OF ILLUMINATION IS MAINTAINED, THE OWNER MAY DETERMINE DETAILS OF LOCATION, DESIGN AND INSTALLATION OF LIGHTING FIXTURES, SUBJECT, HOWEVER, TO REGULATIONS OF THE DEPARTMENT WITH RESPECT TO THE MINIMUM HEIGHT ABOVE OR DISTANCE FROM THE ENTRANCE WAY OF SUCH FIXTURES, AND THE ELECTRICAL AND OTHER SAFETY OF THEIR INSTALLATION. THE LIGHTS REQUIRED BY THIS SUBSECTION SHALL BE BURNING FROM SUNSET ON EACH DAY TO SUNRISE ON THE DAY FOLLOWING.

B. THE OWNER OF A MULTIPLE DWELLING SHALL INSTALL AND MAINTAIN IN EVERY YARD AND COURT, ONE OR MORE LIGHTS OF AT LEAST 40 WATTS OF INCANDESCENT ILLUMINATION OR ITS EQUIVALENT, IN SUCH LOCATIONS AS THE DEPARTMENT MAY PRESCRIBE. THE LIGHTS REQUIRED BY THIS SUBSECTION SHALL BE KEPT BURNING FROM SUNSET ON EACH DAY TO SUNRISE ON THE DAY FOLLOWING.

173. D27-2041 PEEPHOLES.

IN EVERY DWELLING, THE OWNER SHALL PROVIDE AND MAINTAIN A PEEPHOLE IN THE ENTRANCE FLOOR OF EACH DWELLING UNIT. SUCH PEEPHOLE SHALL BE LOCATED, AS PRESCRIBED BY THE DEPARTMENT, IN SUCH A PLACE THAT THE PERSON IN EACH DWELLING UNIT MAY VIEW FROM THE INSIDE ANY PERSON IMMEDIATELY OUTSIDE THE ENTRANCE DOOR.

174. D27-2042 MIRRORS IN ELEVATORS.

THE OWNER OF A MULTIPLE DWELLING IN WHICH THERE ARE ONE OR MORE SELF-SERVICE ELEVATORS SHALL AFFIX AND MAINTAIN IN EACH SUCH ELEVATOR A MIRROR WHICH ENABLES PERSONS TO VIEW ITS INTERIOR BEFORE ENTERING THE SAME. THE MIRROR SHALL MEET SUCH REQUIREMENTS AS THE DEPARTMENT SHALL BY REGULATION PRESCRIBE.

175. D27-2043 LOCKS IN DWELLING UNIT DOORS.

A. THE OWNER OF A DWELLING SHALL PROVIDE A KEY LOCK IN THE ENTRANCE DOOR TO EACH DWELLING UNIT AND AT LEAST ONE KEY. IN A CLASS A MULTIPLE DWELLING SUCH DOOR SHALL BE EQUIPPED WITH A HEAVY DUTY LATCH SET AND A HEAVY DUTY DEAD BOLT OPERABLE BY KEY FROM THE OUTSIDE AND A THUMB-TURN FROM THE INSIDE.

B. EACH DWELLING UNIT ENTRANCE DOOR IN A CLASS A MULTIPLE DWELLING SHALL ALSO BE EQUIPPED WITH A CHAIN DOOR GUARD SO AS TO PERMIT PARTIAL OPENING OF THE DOOR.

176. D27-2047 MAIL SERVICE.

THE OWNER OF A MULTIPLE DWELLING SHALL EITHER:

(1) ARRANGE FOR MAIL TO BE DELIVERED TO HIMSELF, HIS AGENTS, OR EMPLOYEES FOR PROMPT DISTRIBUTION TO THE OCCUPANTS; OR AND BY THE REGULATIONS OF THE POST OFFICE DEPARTMENT.

(2) PROVIDE AND MAINTAIN APPROVED MAIL RECEPTACLES AND DIRECTORIES OF PERSONS LIVING IN THE DWELLING AS PROVIDED BY FEDERAL LAW

177. D27-2048 FLOOR SIGNS.

THE OWNER OF A MULTIPLE DWELLING MORE THAN TWO STORIES IN HEIGHT SHALL POST AND MAINTAIN A SIGN, OF SUFFICIENT SIZE TO BE READILY SEEN, WHICH STATES THE NUMBER OF THE FLOOR. SUCH SIGNS SHALL BE LOCATED IN THE PUBLIC HALL NEAR THE STAIRS AND ELEVATOR, AND WITHIN ANY STAIR ENCLOSURE.

178. D27-2049 STREET NUMBERS.

THE OWNER OF A DWELLING SHALL POST AND MAINTAIN STREET NUMBERS ON THE DWELLING, WHICH ARE PLAINLY VISIBLE FROM THE SIDEWALK IN FRONT OF THE DWELLING, IN ACCORDANCE WITH SECTION 3-505 OF THE ADMINISTRATIVE CODE AND THE RULES AND REGULATIONS ISSUED BY THE BOROUGH OF PRESIDENTS THEREUNDER.

179. D27-2053 OBLIGATIONS OF OWNER.

A. THE OWNER OF MULTIPLE DWELLING SHALL PROVIDE ADEQUATE JANITORIAL SERVICES.

B. IN A MULTIPLE DWELLING OF NINE OR MORE DWELLING UNITS, THE OWNER SHALL EITHER;

(1) PERFORM THE JANITORIAL SERVICES HIMSELF, IF HE IS A RESIDENT OWNER; OR

(2) PROVIDE A JANITOR; OR

(3) PROVIDE FOR JANITORIAL SERVICES TO BE PERFORMED ON A 24-HOUR-A-DAY BASIS IN A MANNER APPROVED BY THE DEPARTMENT.

C. THE OWNER OF A MULTIPLE DWELLING OR HIS MANAGING AGENT IN CONTROL SHALL POST AND MAINTAIN IN SUCH DWELLING A LEGIBLE SIGN, CONSPICUOUSLY DISPLAYED, CONTAINING THE JANITOR'S NAME, ADDRESS (INCLUDING APARTMENT NUMBER AND TELEPHONE NUMBER). A NEW IDENTIFICATION SIGN SHALL BE POSTED AND MAINTAINED WITHIN FIVE DAYS FOLLOWING A CHANGE OF JANITOR.

180. D27-2054 RESIDENCE OF PERSON PERFORMING JANITORIAL SERVICES; LIMITATION ON NUMBER OF DWELLING UNITS SERVED.

THE PERSON WHO PERFORMS JANITORIAL SERVICES FOR A MULTIPLE DWELLING OF NINE OR MORE DWELLING UNITS (OTHER THAN WHERE JANITORIAL SERVICES ARE PERFORMED ON A 24-HOUR-A-DAY BASIS UNDER SECTION D26-22.03(B)(3)) SHALL RESIDE IN OR WITHIN A DISTANCE OF ONE BLOCK OR 200 FEET FROM THE DWELLING, WHICHEVER IS GREATER, UNLESS THE OWNER RESIDES IN THE MULTIPLE DWELLING. WHERE TWO OR THREE MULTIPLE DWELLINGS ARE CONNECTED OR ADJOINING, IT SHALL BE SUFFICIENT, HOWEVER, THAT THE PERSON WHO PERFORMS JANITORIAL SERVICES RESIDE IN ONE OF THESE, BUT NO PERSON WHO PERFORMS SERVICES FOR MORE THAN ONE MULTIPLE DWELLING MAY SERVICE MORE THAN 65 DWELLING UNITS. REGARDLESS OF RESIDENCE THE JANITOR MUST HAVE A TELEPHONE WHERE THE JANITOR MAY REASONABLY BE EXPECTED TO BE REACHED.

181. D27-2058 LIGHTING AND VENTILATION OF LIVING ROOMS IN MULTIPLE DWELLINGS ERECTED AFTER NINETEEN HUNDRED TWENTY-NINE.

A. REQUIRED WINDOWS. EVERY LIVING ROOM IN A MULTIPLE DWELLING ERECTED AFTER APRIL EIGHTEENTH, NINETEEN HUNDRED TWENTY-NINE, SHALL HAVE AT LEAST ONE WINDOW OPENING ON:

(1) A STREET

(2) A LAWFUL YARD OR COURT ON THE SAME LOT;

(3) A PARTIALLY ENCLOSED BALCONY OR SPACE ABOVE A SETBACK WHICH OPENS DIRECTLY TO A STREET, YARD OR COURT IF THE AREA OF THE FRONT OF SUCH BALCONY OR SPACE OPEN TO THE OUTER AIR IS AT LEAST EQUAL TO SEVENTY-FIVE PERCENT OF THE FLOOR AREA OF SUCH BALCONY OR SPACE; OR

(4) A COMPLETELY ENCLOSED BALCONY OR SPACE ABOVE A SETBACK IN A FIREPROOF MULTIPLE DWELLING IF: THE ENCLOSURE IS NOT MORE THAN ONE STORY IN HEIGHT; THE OUTER ENCLOSING WALLS AND ROOF ARE INCOMBUSTIBLE MATERIALS; AN AREA, GLAZED WITH CLEAR PLATE GLASS OR PLASTIC EQUIVALENT, ON THE OUTER ENCLOSING WALLS IF AT LEAST FIFTY PERCENT OF THE AREA OF THE INTERIOR ENCLOSING WALLS; AND AND AT LEAST FIFTY PERCENT OF SUCH GLAZED AREA OPENS ON A STREET, LEGAL YARD OR COURT. ONE-HALF OF SUCH GLAZED AREA SHALL BE OPENABLE. A LIVING ROOM DOES NOT INCLUDE A KITCHEN UNDER THIS PARAGRAPH.

B. NO REQUIRED WINDOW OF A LIVING ROOM SHALL OPEN ON AN OFFSET OR A RECESS OF LESS THAN SIX FEET IN WIDTH.

C. SIZE OF WINDOWS.

(1) THE TOTAL AREA OF ALL WINDOWS IN THE ROOM SHALL BE AT LEAST ONE-TENTH THE FLOOR AREA OF SUCH ROOM, EXCEPT THAT WHEN A ROOM OPENS SOLELY ON A BALCONY OR SPACE ABOVE A SETBACK THE TOTAL AREA OF SUCH OPENING SHALL BE ONE-TENTH THE COMBINED FLOOR AREA OF THE ROOM AND THAT PORTION OF THE BALCONY OR SPACE DIRECTLY IN FRONT OF SUCH ROOM. IN DETERMINING THE RATIO OF WINDOWS TO FLOOR AREA, THE COMBINED GLAZED AREA OF WINDOWS AND DOORS OPENING ON A BALCONY OR A SPACE ABOVE A SETBACK MAY BE USED.

(2) EVERY REQUIRED WINDOW SHALL BE AT LEAST TWELVE SQUARE FEET.

(3) AT LEAST ONE-HALF OF EVERY REQUIRED WINDOW SHALL OPEN, EXCEPT THAT FOR A MULLIONED CASEMENT WINDOW A MINIMUM OF FIVE AND ONE-HALF SQUARE FEET IS SUFFICIENT, IN A ROOM WHERE A CENTRALIZED MECHANICAL VENTILATING SYSTEM PROVIDES FORTY CUBIC FEET OF AIR PER MINUTE, TWENTY-FIVE PERCENT OF THE WINDOW AREA OR FIVE AND ONE-HALF SQUARE FEET OF SUCH AREA, WHICHEVER IS GREATER, SHALL BE OPENABLE.

(4) THE TOP OF ONE REQUIRED WINDOW IN EVERY ROOM SHALL BE AT LEAST SEVEN FEET ABOVE THE FLOOR, EXCEPT THAT IN DWELLINGS ERECTED PURSUANT TO PLANS FILED AFTER APRIL TWENTY-THIRD, NINETEEN HUNDRED FIFTY-NINE, AND PRIOR TO JUNE FOURTEENTH, NINETEEN HUNDRED SIXTY-SEVEN, THIS REQUIREMENT SHALL NOT APPLY.

D. THROUGH VENTILATION.

(1) NO PART OF ANY LIVING ROOM WITH WINDOWS, OR DOORS IN LIEU THEREOF, OPENING ON A BALCONY OR SPACE ABOVE A SETBACK SHALL BE MORE THAN THIRTY FEET FROM THE EXTERIOR FACE OF THE OUTER ENCLOSING WALL.

(2) IN ANY DWELLING UNIT IN A NON-FIREPROOF MULTIPLE DWELLING OR IN A DWELLING UNIT OF THREE ROOMS OR LESS IN A FIREPROOF MULTIPLE DWELLING, NO PART OF ANY ROOM SHALL BE MORE THAN THIRTY FEET FROM A WINDOW OPENING ON A STREET OR YARD UNLESS SUCH ROOM ALSO OPENS ON A LEGAL COURT.

E. OPENINGS ON LOT LINE.

EVERY WINDOW AND ITS ASSEMBLY IN A WALL SITUATED ON A LOT LINE, EXCEPT A STREET LINE, SHALL BE FIREPROOF; THE ASSEMBLY SHALL HAVE A FIRE RESISTIVE RATING OF AT LEAST THREE-QUARTERS OF AN HOUR; AND THE WINDOW SHALL BE GLAZED WITH WIRE GLASS AT LEAST ONE-QUARTER OF AN INCH THICK. EVERY SUCH WINDOW SHALL BE OF AUTOMATIC SELF-CLOSING CONSTRUCTION WHENEVER IT IS LESS THAN FIFTY FEET ABOVE THE NON-FIREPROOF ROOF OF ANOTHER STRUCTURE LOCATED THIRTY FEET OR LESS FROM THE LOT LINE.

F. DINING SPACE.

A DINING SPACE SHALL HAVE A WINDOW WHICH:

(1) COMPLIES WITH THE PROVISIONS OF SUBDIVISION A OF THIS SECTION, AND

(2) HAS AN AREA AT LEAST ONE-EIGHT THE FLOOR AREA OF SUCH DINING SPACE.

182. D27-2072 FIRE PROTECTION.

A. IN AMULTIPLE DWELLING, THE OWNER SHALL FIRE-RETARD IN EVERY KITCHEN AND KITCHENETTE ALL COMBUSTIBLE MATERIAL IMMEDIATELY UNDERNEATH OR WITHIN ONE FOOR OF ANY APPARATUS USED FOR COOKING OR WARMING FOOD; OR SHALL COVER SUCH COMBUSTIBLE MATERIAL WITH ASBESTOS OF AT LEAST THREE-SIXTEENTHS OF AN INCH IN THICKNESS AND 26 GAUE METAL, OR WITH FIRE RESISTIVE MATERIAL OF EQUIVALENT RATING, EXCEPT WHERE SUCH COOKING OR WARMING APPARATUS IS SINSTALLED IN ACCORDANCE WITH REQUIREMENTS ESTABLISHED BY THE DEPARTMENT IN CONFORMITY WITH GENERALLY ACCEPTED SAFETY STANDARDS. THERE SHALL GBE AT LEAS TWO FET OF CLEAR SPACE ABOVE THE EXPOSED COOKING SURFACE OF ANY SUCH APPARATUS.

IN A MULTIPLE DWELLING, THE OWNER SHALL; IN EVERY KITCHENETTE, EIHER FIRE-RETARD THE CEILINGS AND WALLS, EXCLUSIVE OF DOORS, OR INSTALL ON OR MORE SPRINKLER HEADS TO FUSE AT A TEMPERATURE NOT HIGHER THAN TWO HUNDRED AND TWELVE DEGREES FAHRENHEIT. SUCH HEADS SHALL BE CONNECTED TO THE WATER SUPPLY THROUGH A PIPE OF AT LEAST ONE-HALF INCH IN DIAMETER. ANY KITCHENETTE WHICH WAS ACCEPTED OR APPROVED BY THE DEPARTMENT ON OR BEFORE JULY FIRST, NINETEEN HUNDRED FIFTY-TWO AND MAINTAINED IN ACCORDANCE WITH SUCH ACCEPTANCE OR APPROVAL SHALL BE DEEMED TO BE IN COMPLIANCE WITH THIS SUBSECTION.

183. D27-2097 REGISTRATION; TIME TO FILE

A. THE OWNER OF A DWELLING REQUIRED TO REGISTER UNDER THIS ARTICLE SHALL REGISTER WITH THE DEPARTMENT IN ACCORDANCE WITH THE PROVISISONS OF THIS ARTICLE.

REGISTRATION STATEMENT SHALL BE FILED:

(1) FOR EVERY EXISTING MULTIPLE DWELLING. A REGISTRATION STATEMENT FILED BY THE ARESENT OWNER OF A DWELLING PURSUANT TO THE REQUIREMENTS OF THE PRIOR LAW SHALL CONSTITUTE COMPLIANCE WITH THIS SECTION.

(2) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

(3) ON OR BEFORE JOLY 1, 1970, FOR ALL ONE AND TWO-FAMILY DWELLINGS WHOSE OWNER DOES NOT RESIDE WITHIN THE CITY AND THEREFORE NOT LATER THAN TEN DAYS AFTER THE OWNER OF A ONE OR TWO-FAMILY DWELLING REMOVES HIS RESIDENCE FROM THE CITY.

(4) ON OR BEFORE JULY 1, 1984, OR ANY GARDEN-TYPE MAISONETTE DWELLING PROJECT CONSISTING OF A SERIES OF DWELLING UNITS WHICH TOGETHER AND IN THEIR AGGREGATE ARE ARRANGED OR DESIFNED TO PROVIDE THREE OR MORE APARTMENTS, AND ARE PROVIDED AS A GROUP COLLECTIVELY WITH ALL ESSENTIAL HEAT, AND WHICH ARE OPERATED AS A UNIT UNDER SINGLE OWNERSHIP, NOTWITHSTANDING THAT CERTIFICATES OF OCCUPANCY WHERE ISSUED FOR PORTIONS THEREOF AS PRIVAT DWELLINGS.

(5) WITHIN SUCH TIME AS PROVIDED IN SECTION D26-41.05, IN THE CASE OF A CHANE OF OWNERSHIP WHERE REGISTRATION IS REQUIRED UNDER THIS ARTICLE.

C. AN OWNER WHO IS REQUIRD TO REGISTER SHALL FILE A NEW REGISTRATION STATEMENT EVERY THREE YEARS

D. AN OWNER WHO IS REQUIRED TO REGISTER SHALL FILE A NEW REGISTRATION STATEMENT ON THE REGISTRATION DATE ASSIGNED TO THAT DWELLIN GY THE DEPARTMENT WHETHER OR NOT THAT OWNER FILED A REGISTRATION STATEMENT FOR THAT DWELLING WITHIN THE PREIOUS THREE YEARS.

E. THE REGISTRATON DATE OF A DWELLING SHALL BE A CALENDAR DATE AND YEAR ASSIGNED BY THE BY THE DEPARTMENT TO THAT DWELLING FOR THE PURPOSE OF REGISTRATION ON SUCH DATE AT INTERVALS O THREE YEARS.

184. D27-2098 REGISTRATION STATEMENT; CONTENTS

A. THE REGISTRATION STATEMENT SHALL INCLUDE THE FOLLOWING INFORMATION:

(1.) AN IDENTIFICATION OF THE PREMISES BY BLOCK AND LOT NUMBR, AND BY THE STREET NUMBERS AND NAMES OF ALL STREETS CONIGUOUS TO THE DWELLING, OR BY SUCH OTHER DESCRIPTION AS WILL ENABLE THE DEPARTMENT TO LOCATE THE DWELLING. IF THE DWELLING IS GARDEN-TYPE MAISONETTE DWELLING PROJECT REQUIRED TO REGISTER PURSUANT TO PARAGRAPH (4) OF SUBDIVISION (B) OF SECTION D26-41.01 OF THIS CODE, THE OWNER WHO FILES THE FIRST REGISTRATION STATEMENT WITH THE DEPARTMENT FOR SUCH PROJECT SHALL LIST ON THE REGISTRATION STATEMENT THE STREET NUMBERS FOR EACH DWELLING IN THE PROJECT AND SHALL DESIGNATE AND ADDRESS BY WHICH THE PROJECT DWELLINGS ARE TO BE IDENTIFIED BY THE DEPARTMENT.

(2.) AN IDENTIFICATION OF THE OWNER BY NAME, RESIDENCE AND BUSINESS ADDRESS. IF THE OWNER IS A CORPORATION, THE IDENTIFICATION SHALL ALSO INCLUDE THE NAMES AND ADDRESSES OF ANY PERSON WHOSE SHARE OF OWNERSHIP OF THE CORPORATION EXCEEDS TWENTY-FIVE PERCENT. FOR THE PURPOSES OF THIS SUBDIVISION, ANY PERSON OWNING A SHARE OF A PARENT CORPORATION SHALL BE DEEMED TO BE AN OWNER OF A SHARE OF A SUBSIDIARY CORPORATION EQUAL TO THE PRODUCT OF THE PERCENTAGE OF HIS OWNERSHIP OF THE PARENT CORPORATION MULTIPLIED BY THE PERCENTAGE OF THE PARENT CORPORATION'S OWNERSHIP OF THE SUBSIDIARY CORPORATION. IF THE OWNER IS UNDER THE AGE OF EIGHTEEN YEARS OF HAS BEEN JUDICALLY DECLARED INCOPETENT, HIS LEGAL REPRESENTATION SHALL FILE THE REGISTRATION STATEMENT.

(3.) IF THE DWELLING IS A MULTIPLE DWELLING, THE NAME AND ADDRESS OF A MANAGING AGENT DESIGNATED BY THE OWNER TO BE IN CONTROL OF AND RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF SUCH DWELLING AND TO AUTHORIZE, ON BEHALF OF THE OWNER, THE CORRECTION OF ANY EMERGENCY CONDITIONS OR THE MAKING OF ANY EMERGENCY REPAIRS FOR WHICH THE OWNER IS RESPONSIBLE UNDER THE PROVISIONS OF THE MULTIPLE DWELLING LAW OR THIS CODE. TO QUALIFY FOR SUCH DESIGNATION, AN AGENT SHALL BE A NATURAL PERSON OVER THE AGE OF TWENTY-ONE YEARS AND SHALL RESIDE WITHIN THE CITY OR CUSTOMARILY AND REGULARLY ATTEND A BUSINESS OFFICE MAINTAINED WITHIN THE CITY. AN OWNER OR CORPORATE OFFICER WHO MEETS SUCH QUALIFICATIONS MAY BE DESIGNATED TO SERVE AND REGISTER AS THE MANAGING AGENT.

(4.) IF THE DWELLING IS A MULTIPLE DWELLING THE NUMBER OF A TELEPHONE WITHIN A RADIUS OF 50 MILES OF THE CITY LIMITS WHERE AN OWNER OR OFFICER, IF THE OWNER IS A CORPORATION, OR THE MANAGING AGENT MAY REASONABLY BE EXPECTED TO BE REACHED AT ALL TIMES. THE TELEPHONE NUBER CONTAINED IN THE REGISTRATION STATEMENT SHALL NOT BE CONSTITUTE A PUBLIC RECORD AND SHALL BE ACCESSIBLE ONLY TO DULY AUTHORIZED EMPLOYEES OF OFFICERS IF THE DEPARTMENT AND USE EXCLUSIVELY BY SICH PERSONNEL IN CONNECTION WITH AN EMERGENCY ARISING ON THE PREMISES FOR WHICH THE OWNER IS RESPONSIBLE UNDER THE PROVISIONS OF THE MULTIPLE DWELLING LAW OR THIS CODE. THE DEPARTMENT MAY PROMULGATE REGULATIONS TO IMPLEMENT PROVISIONS OF THIS PARAGRAPH.

(5.) THE REGISTRATION STATEMENT SHALL BE FILED ON FORMS TO BE PRESCRIBED BY THE DEPARTMENT AND SHALL BE ACCOMPLANIED BY A FILING FEE OF SIX DOLLARS. IN THE CASE OF AN OWNER PREVIOUSLY REGISTERED WITH THE DEPARTMENT, THE FILING OF A SUPPLIMENTARY REGISTRATION CONTAINING A TELEPHONE NUMBER REQUIRED YNDER SUBSECTION (A) (4) SHALL BE ACCOMPANIED BY A FILING FEE

185. D27-2104 POSTING OF SERIAL NUMBER.

AN IDENTIFICATION SIGN CONTAINING THE DWELLING SERIAL NUMBER ASSIGNED BY THE DEPARTMENT FOR THE PURPOSE OF IDENTIFYING THE REGISTERED MULTIPLE DWELLING AND THE OWNER AND MANAGING AGENT SHALL BE POSTED IN EVERY MULTIPLE DWELLING IN THE MANNER AND LOCATION PRESCRIBED BYTHE DEPARTMENT.

186. GENERAL NOTE: ALL DRYERS WITHIN DWELLING UNITS ARE ELECTRIC, VENTLESS.

M.D.L. AND H.M.C. NOTES

MD1. THE WORK SHALL COMPLY WITH ALL THE RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS OF THE CITY OF NEW YORK AND ALL OTHER APPLCABLE LOCAL, STATE, FEDERAL DEPARTMENTS AND CODES HAVING JURISDICTION.

MD2. BUILDING TO COMPLY WITH 3 (11) M.D.L. & HOUSING AND MAINTENANCE CODE.

MD3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES AND DEVIATIONS OF THE APPROVED PLANS.

MD4. BATH VENTS: DUCTS, 18 GA. MTL.WITH CORNER CHANNELS SECURED AT ALL FLOORS AND ROOF. FIRE RETARD WITH FIRE-RATED GYP. BOARD ON M/L ENTIRE LENGTH OF DUCT (EXT. QUALITY AS REQUIRED) ; EXTENDED 4' ABOVE ROOF. PROVIDE REGISTER, GRAVITY DAMPER WITH FUSIBLE LINK. FAN ON ROOF TO PROVIDE 4 AIR CHANGES/HR.,25 CFM VELOCITY AND TO RUN FROM 6:00 A.M. TO 12 MIDNIGHT.

MD5. KITCHEN AND KITCHENETTE VENT: DUCTS SIMILAR TO BATH VENTS EXCEPT FAN ON ROOF TO PROVIDE 6 CHANGES/HR. 150 CFM TO RUN CONTINUOUSLY.16 GA. METAL. SEE ALSO KITCHENS AND KITCHENETTES: SEC.3 M.D.L. AND ART.32 H.M.C.

A. EVERY KITCHEN AND KITCHENETTE SHALL BE PROVIDE WITH FACILITIES FOR COOKING AND SHALL BE EQUIPPED FOR ARTIFICIAL LIGHTING.

B. EVERY KITCHEN AND KITCHENETTES SHALL BE PROVIDED WITH SINK HAVING A MIN.2" WASTE AND TRAP.

C. LIGHTING AND VENTILATION OF KITCHENETTES SHALL BE PROVIDED UNDER SEC.30 M.D.L. AND ART.30 H.M.C. (SEE NOTE #11)

D. CEILING AND WALL, EXCLUSIVE OF DOORS,OF ALL KITCHENETTES SHALL BE FIRE RETARDED WITH MATERIALS HAVING A ONE HOUR FIRE RATING WITH ONE LAYER PLASTER B. F.C.60.

E. ALL COMBUSTIBLE MATERIALS IMMEDIATELY UNDERNEATH AND WITHIN ONE FOOT OF COOKING APPARATUS SHALL BE PROPERLY FIRE RETARDED AND A MIN. OF TWO FEET CLEARANCE MAINTAINED ABOVE EXPOSED COOKING SURFACES COMBUSTIBLE MATERIALS BETWEEN TWO AND THREE FEET ABOVE EXPOSED COOKING SURFACES SHALL BE FIRE RETARDED. SE 5/8"/PL. BD. FC. 60.

F. GAS RANGES TO BE APPROVED AS PER SEC.64 MDL & AGA(SEE NOTE #155).

MD6. SPRINKLERS SHALL COMPLY WITH SEC.187 MDL.

MD7. BOILER ROOMS: NOT APPLICABLE

MD8. NATURAL LIGHTING AND VENTILATION FOR ALL OCCUPIED ROOMS SHALL CONFORM WITH LIGHTING AND VENTILATION: SEC.30 MDL AND ART.30 HMC.

A. WINDOWS IN ALL ROOMS, EXCEPT BATHROOMS AND KITCHENETTES, SHALL BE AT LEAST ONE-TENTH THE AREA OF THE ROOM AND BE AT LEAST 12 S.F. IN AREA B.S.B. AND 50% OPERABLE.

B. ROOMS HAVING ONLY ONE WINDOW LESS THAN 18 S.F. IN AREA SHALL HAVE A TRANSOM OR LOUVER, OVER THE DOOR HAVING A MIN. AREA OF 144 SQ. IN.

MD9. PEEPHOLES: SEC.51-A. MDL. AND ART.20 HMC

A. PEEPHOLES SHALL BE PROVIDED IN ENTRANCE DOORS OF EACH DWELLING UNIT, LOCATED AS PRESCRIBED BY THE DEPARTMENT. B.S.A. APPROVED ASSEMBLY.

MD10. ARTIFICIAL LIGHTING: SEC.26&35 MDL AND ART.19 HMC

A. PROPER ELECTRIC LIGHTING AND EQUIMENT SHALL BE PROVIDED AND MAINTAINED WITHIN ALL DWELLINGS AND ASSEMBLY.

B. PROPER ELECTRIC LIGHTINGS SHALL BE INSTALLED AND MAINTAINED AT OR NEAR THE OUTSIDE FRONT ENTRANCE WAY AND IN EVERY REAR YARD, SIDE YARD, FRONT YARD, AND COURTS. MIN. OF 50 WATTS INCANDESCENT ILLUMINATION OR EQUIVALENT AT FRONT ENTRANCE WAY AND A MIN. OF 4 WATTS IN YARDS AND COURTS AND SHALL BE KEPT BURNING FROM SUNSET EACH DAY TO SUNRISE ON THE FOLLOWING DAY.

C. MAIN ENTRANCE AND VESTIBULE DOORS SHALL HAVE NOT LESS THAN FIVE PROPER ELECTRIC LIGHTINGS SHALL BE INSTALLED AND MAINTAINED AT OR NEAR THE OUTSIDE FRONT ENTRANCE WAY AND IN EVERY REAR YARD, SIDE YARD, FRONT YARD, AND COURTS. MIN. OF 50 WATTS INCANDESCENT ILLUMINATION OR EQUIVALENT AT FRONT ENTRANCE WAY AND MIN. OF 40 WATTS IN YARDS AND COURTS AND SHALL BE KEPT BURNING FROM SUNSET TO SUNRISE ON THE FOLLOWING DAY.

D. MAIN ENTRANCE AND VESTIBULE DOORS SHALL HAVE NOT LESS THAN FIVE S.F. OF GLAZED SURFACES.

MD11. ENTRANCE DOORS: SEC. 50-A. MDL AND ART.20 HMC

A. BUILDING ENTRANCES AND ALL OTHER EXTERIOR ENTRANCES SHALL BE EQUIPPED WITH APPROVED TYPE AUTOMATIC SELF-CLOSING AND SELF LOCKING DOORS.

B. ENRANCE DOORS TO EACH APARTMENT UNIT SHALL HAVE KEY LOCK WITH AT LEAST ONE KEY TO BE PROVIDED BY OWNER, HEAVY DUTY LATCH, SET WITH DEAD BOLT AND DOOR CHAIN GUARD.

MD12. GAS METERS AND GAS APPLIANCES: SEC.64 MDL AND ART. 18 HMC

A. GAS METERS SHALL COMPLY WITH SEC. 64 MDL.

B. GAS APPLIANCES SHALL IN ADDITION TO THESE SECTIONS, COMPLY WITH THE BOARD OF STANDARD APPEAL.

C. YEARLY INSPECTION OF GAS APPLIANCES BY QUALIFIED PERSON SHALL BE MADE IN OLT.

MD13. HEAT AND HOT WATER: SEC.79 MDL AND ART. 17 HMC.

A. YEARLY INSPECTION SHALL BE MADE BY QUALIFIED PERSON.

B. MINIMUM TEMPERATURE OF HEATING AND HOT WATER SHALL BE MAITAINED.

MD14. SINGLE STATION SMOKE DETECTORS SHALL BE INSTALLED IMMEDIATELY OUTSIDE OF SLEEPING OR BEDROOM WITH NO INTERVENING WALL SWITCH AS PER SEC.277.7G.

MD15. PROVIDE VIEWING MIRRORS AT ELEVATORS.

HOUSING MAINTENANCE CODE SUMMARY

THE OWNER SHALL COMPLY WITH AND PROVIDE PROVISIONS OF THE HOUSING MAINTENANCE CODE:

1.	27-2005, 2006,2007	OWNER AND TENANT OBLIGATION
2.	27-2010, 2011, 2012	CLEANING
3.	27-2013, 2014, 2015, 2016	PAINTING
4.	27-2018	RODENT AND INSECT ERADICATION
5.	27-2021	RECEPTACLE FOR WASTE
6.	27-2023	COLLECTION OF WASTE
7.	27-2024	WATER SUPPLY
8.	27-2026, 2027	SEWERS AND DRAINAGE
9.	27-2028, 2029, 2030, 2031, 2033	HEAT AND HOT WATER
10.	27-2034, 2035, 2036	GAS APPLIANCES
11.	27-2037, 2038, 2039, 2040	ARTIFICIAL LIGHTING
12.	27-2041, 2042, 2043, 2045	PEEPHOLES AND LOCKS
13.	27-2049	STREET NUMBER
14.	27-2047	APPROVED TYPE MAIL RECEPTACLE AND DIRECTORY AND REGULATION OF POST OFFICE DEPARTMENT.
15.	27-2048	FLOOR SIGNS IN PUBLIC HALL STAIR
16.	27-2053	JANITORIAL SERVICES
17.	27-2057	LIGHTING AND VENTILATION
18.	27-2063	SANITARY FACILITIES
19.	27-2070	KITCHEN AND KITCHENETTES
20.	27-2074	MAXIMUM PERMITTED OCCUPANCY
21.	27-2081	OCCUPANCY OF CELLARS AND BASEMENTS
22.	27-2097	REGISTRATION STATEMENT
23.	27-2104	POSTING OF REGISTRATION IDENTIFICATION SIGN CONTAINING DWELLING SERIAL NUMBER.

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,*LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT
	2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
HOUSING MAINTANACE CODE & MULTIPLE DWELLING LAW NOTES

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	A-003.00
SHEET. No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A003_Housing Maintenance

DOORWAY REQUIREMENTS

ICC/ANSI A117.1-2003

ANSI 404 Doors and Doorways.

ANSI 404.1 General.
Doors to accessible spaces and elements and along accessible routes shall comply with the requirements of ANSI 404.

ANSI 404.2.1 Double-Leaf Doors and Gates.
If doorways have two independently operated door leaves, then at least one leaf shall meet the specifications in ANSI 404.2.2 & 404.2.3. That leaf shall be an active leaf.

ANSI 404.2.2 Clear Width.
Doorways intended for user passage shall have a minimum clear opening of 32 in (815 mm) with the door open 90 degrees, measured between the face of the door and the stop (see Fig. 404.2.2 (a), (b), and (c)). Opening more than 24 in (610mm) in depth shall comply with 404.2.2 (see Fig. 404.2.2 (d)).

ANSI 404.2.3 Maneuvering Clearances at Doors.
Minimum maneuvering clearances at doors that are not automatic shall comply as shown in Fig. 404.2.3.1, 404.2.3.2, and 404.2.3.4. The floor or ground area within the required clearances shall be level and clear.

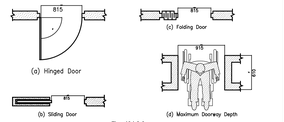


Fig. 404.2.2
Clear Doorway Width and Depth

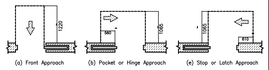


Fig. 404.2.3.2
Maneuvering Clearances at Sliding and Folding Door

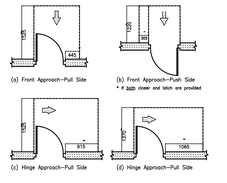


Fig. 404.2.3.4
Maneuvering Clearances at Recessed Doors

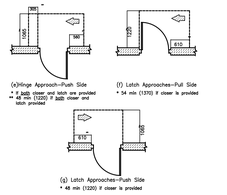


Fig. 404.2.3.1
Maneuvering Clearances at Manual Swinging Doors

ANSI 404.2.4 Thresholds at Doorways.
Thresholds at doorways shall be 1/2 in (13mm) maximum in height. Raised thresholds and changes in level at doorways shall comply with ANSI 302 & 303.

ANSI 404.2.5 Two Doors in Series.
The minimum space between two hinged or pivoted doors in series shall be 48 in (1220 mm) plus the width of any door swinging into the space. The space between the doors shall provide a turning space complying with ANSI 304. (see Fig. 404.2.5)

ANSI 404.2.6 Door Hardware.
Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of such hardware shall be 34 inches (865mm) minimum and 48" inches (1220mm) maximum above the floor. If a door requires both pull and push operation, operating hardware shall be exposed and usable from both sides.

EXCEPTION: Locks used only for security purposes and not used for normal operation are permitted in any location

ANSI 404.2.7 Closing Speed.

AKSHAK.7.1 Door Closers.
Closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.

ANSI 404.2.7.2 Spring Hinges.
Door spring hinges shall be adjusted so that from the open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum.

ANSI 404.2.8 Door—Opening Force.
The maximum force, expressed in pounds-force (lbf) and newtons (N), for pushing or pulling open a door shall be as follows:

(1) Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

(2) Other doors:
(a) Interior hinged doors: 5.0 lbf (22.2 N)
(b) Sliding and Folding doors: 5.0 lbf (22.2 N)

These forces do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in closed position.

ANSI 404.3 Automatic Doors.
If an automatic door is used, it shall comply with ANSI / BHMA A156.10 listed in ANSI 105.2.4.
Power-assist and low-energy doors shall comply with ANSI / BHMA A156.19 listed in ANSI 105.2.3.

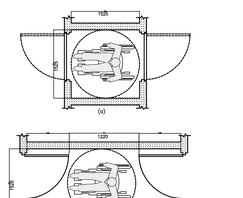


Fig. 404.2.5
Two Doors in a Series

PARKING REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

BC1106 Parking and Passenger Loading Facilities

BC1106.1 Required.
Where parking is provided 5% of the total number of parking spaces, but not less than one parking space, shall be accessible parking spaces except as otherwise required by BC1106.2 through 1106.4. Accessible parking spaces shall be designed and constructed in accordance with ANSI 502.

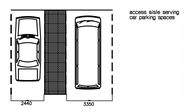


Fig. 502.2
Vehicle Parking Space Size

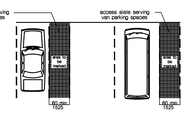


Fig. 502.4
Parking Space Access Aisle

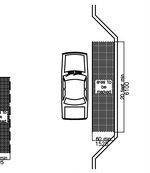


Fig. 503.3
Passenger Loading Zone Access Aisle

ELEVATOR REQUIREMENTS

ICC/ANSI A117.1-2003

ANSI 407 Elevators.

ANSI 407.1 General.
Elevators shall comply with ANSI 407 and ASME A17.1 listed in ANSI 105.2.5. Elevators shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

ANSI 407.2.1 Call Controls.
Elevator call buttons or keypads shall comply with ANSI 407.2.1 & 309.4.

ANSI 407.2.1.1 Height.
Call buttons and keypads shall be located within one of the reach ranges specified in ANSI 308, measured to the centerline of the highest operable part.

ANSI 407.2.1.2 Size.
Call buttons shall be 3/4 inch (19mm) minimum in the smallest dimension.

ANSI 407.2.2 Hall Signals.

ANSI 407.2.2.1 Visible and Audible Signals.
A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel.

ANSI 407.2.2.2 Visible Signals.
Visible signals shall have the following features:

(1) Visible signal fixtures shall be centered at 72 inches (1830mm) minimum above the floor.
(2) Visible signal elements shall be 2 1/2 inches (64mm) minimum measured along the vertical centerline of the element.
(3) Signals shall be visible from the floor area adjacent to the hall call button.

ANSI 407.2.2.3 Audible Signals.
Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of travel.

ANSI 407.2.3 Hoistway Signs.

ANSI 407.2.3.1 Floor Designations.
Floor designations shall be provided in tactile characters complying with ANSI 703.5 located on both jambs of elevator hoistway entrances. Tactile characters shall be 2 inches (51mm) minimum in height. A tactile star shall be provided on both jambs at the main entry level.

ANSI 407.3.3 Reopening Device.
Elevator doors shall be provided with a reopening device complying with ANSI 407.3.3 that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

ANSI 407.3.3.1 Height.
The reopening device shall be actived by sensing an obstruction passing through the opening at 5 inches (125mm) nominal and 29 inches (735mm) nominal above the floor.

ANSI 407.3.3.2 Contact.
The reopening device shall not require physical contact to be activated, although contact shall be permitted before the door reverses.

ANSI 407.3.3.2 Duration.
The reopening device shall remain effective for 20 seconds minimum.

ANSI 407.3.4 Door and Signal Timing.
The minimum acceptable time from notification that a car is answering a call until the doors of that car start to close shall be calculated from the following equation:

$$T = \frac{D}{1.5\ ft/s} \quad \text{or} \quad T = \frac{D}{445\ mm/s} + 5 \text{ seconds minimum}$$

where T = total time in seconds and D = distance (in feet or millimeters) from the point in the door zone where the door begins to open to the point in the center of the farthest call button controlling the car to the centerline of its hoistway door.

EXCEPTION: For cars with in-car lanterns, T shall be permitted to begin when the signal is visible from the point 60 in. (1525mm) directly in front of the farthest call button and the audible signal is sounded.

ANSI 407.3.5 Door Delay.
The minimum time for elevator doors to remain fully open in response to a car call shall be 3 seconds.

ANSI 407.4 Elevator Car Requirements.

ANSI 407.4.1 Car Dimensions.
Inside dimensions of elevator cars shall comply with Table 407.4.1.

ANSI 407.4.2 Floor Surfaces.
Floor surfaces in elevator cars shall comply with ANSI 302.

ANSI 407.4.3 Platform to Hoistway Clearances. The clearance between the car platform sill and the edge of any hoistway landing shall be in compliance with ASME/ANSI A17.1 listed in ANSI 105.2.5.

ANSI 407.4.4 Leveling.
Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings with a tolerance of 1/2 in (13mm) under rated loading to zero loading conditions.

ANSI 407.4.5 Illumination.
The level of illumination at the car controls, platform, car threshold and car landing sill shall be 5 foot-candles (54 lux) minimum.

ANSI 407.4.6 Elevator Car Controls.

ANSI 407.4.6.1 Location.
Controls shall be located within one of the reach ranges specified in ANSI 308.

ANSI 407.4.6.2 Buttons.
Car control buttons with floor designations shall be raised or flush. Buttons shall be 3/4 in (19mm) minimum in their smallest dimension.

ANSI 407.4.6.4 Emergency Controls.
Emergency controls shall have their centerlines 35 in (890mm) minimum above the floor. Emergency controls, including the emergency alarm, shall be grouped at the bottom of the panel.

ANSI 407.4.7 Designations and Indicators of Car Controls.
Car control buttons shall comply with the following features:

ANSI 407.4.7.1.1 Type.
Control buttons shall be identified by tactile characters complying with ANSI 703.3.

ANSI 407.4.7.1.2 Location.
Tactile characters with tactile designations shall be placed immediately to the left of the control button to which the designations apply.

ANSI 407.4.7.1.3 Symbols.
The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with tactile symbols as shown in Table 407.4.7.1.3.

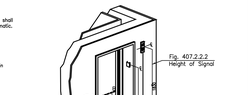
ANSI 407.4.7.1.4 Visible Indicators.
Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indications shall extinguish when the car arrives at the designated floor.

ANSI 407.4.8 Car Position Indicators.
Audible and visible car position indicators shall be provided in elevator cars.

ANSI 407.4.8.1 Visible Indicators.
Characters shall be 1/2 in (13mm) minimum in height. Indicators shall be located above the car control panel or above the door. As the car passes a floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate.

ANSI 407.4.8.2 Audible Indicators.
The signal shall be an automatic verbal annunciator that announces the floor at which the car stops. The signal shall sounds when the car approaching the floor shall be completed prior to the initiation of the door opening. The verbal annunciator shall be 10 dBA minimum above ambient, but shall not exceed 80 dBA, measured at the annunciator. It shall have a frequency of 300 Hz min. to 3,000 Hz max.

ANSI 407.4.10 Emergency Communications.
Emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ANSI 407.4.10 and ASME/ANSI A17.1 listed in ANSI 105.2.5. The highest operable part of a two-way communication system shall comply with ANSI 308. Tactile characters complying with ANSI 703.3 and symbols complying with ANSI 407.4.7.1.3 shall be provided adjacent to the device.



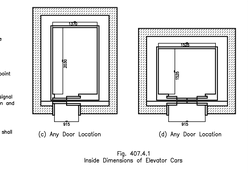


Fig. 407.4.1
Inside Dimensions of Elevator Cars

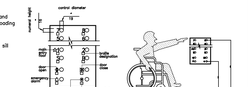


Fig. C407.4.6
Elevator Control Panel

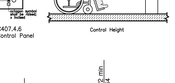


Fig. 407.2.2.3
Elevator Visible Signals

Key Function	Description of Tactile Symbol	Tactile Symbol
Enter or Proceed:	CIRCLE	○
Clear or Correct:	LEFT ARROW	←—
Cancel:	"X"	X
Add Value:	PLUS SIGN	+
Decrease Value:	MINUS SIGN	–

Table 707.6.1
Tactile Symbols

ANSI 410 Platform Lifts.

ANSI 410.1 General.
Platform lifts shall comply with Section 410 and ASME/ANSI A18.1 listed in ANSI 105.2.6. Platform lifts shall not be attendant operated and shall provide unassisted entry and exit from the lift.

ANSI 410.2 Lift Entry.
Doors and gates shall be low energy power operated doors or gates complying with ANSI 404.3. Doors shall remain open for 20 seconds min. End door clear opening width shall be 32 in. (815 mm) min. Side door clear opening width shall be 42 in. (1065 mm) min. End ramps shall be 32 in. (815 mm) min. in width. Side ramps shall be 42 in. (1065 mm) min. in width.

ANSI 410.4 Platform to Runway Clearance.
The clearance between the platform sill and the edge of any runway landing shall be 1–1/4 in. (32 mm) max.

ANSI 410.5 Clear Floor Space.
Clear floor space of platform lifts shall comply with ANSI 305.

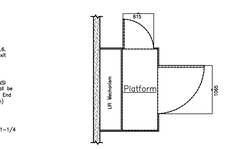
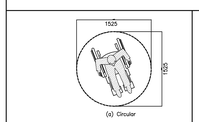


Fig. 410.2.1
Platform Lift Doors and Gates

GENERAL REQUIREMENTS

ICC/ANSI A117.1-2003



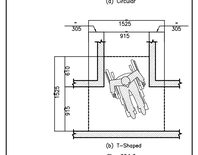


Fig. 304.3
Size of Turning Space

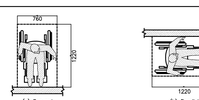


Fig. 305.5
Position of Clear Floor Space

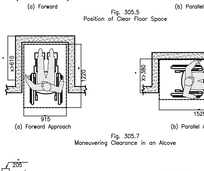
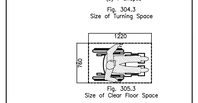
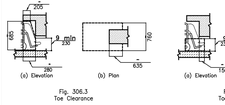
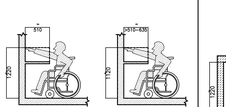
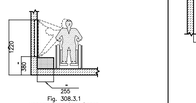


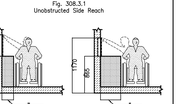
Fig. 305.7
Maneuvering Clearance in an Alcove

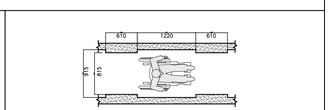


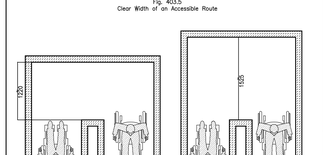












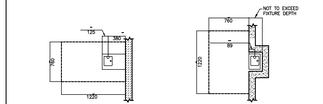


Fig. 104.2
Graphic Conventions for Figures

Convention	Description
916	Typical dimension line showing U.S. customary units (in inches) above the line and SI units (in millimeters) below
150	Dimension for small measurements
710–915	Dimension line showing range of with minimum – maximum
	Direction of approach
	Boundary of clear floor area
℄	Centerline

THE DRAWINGS PREPARED FOR THIS PROJECT HAVE BEEN COORDINATED TO COMPLY WITH THE 2008 N.Y.C. BUILDING CODE, FAIR HOUSING ACT, AND ICC ANSI A117.1

DWELLING UNIT REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

BC1107 & ANSI Chapter 10 Dwelling Units and Sleeping Units.

ACCESSIBLE UNITS

ANSI 1000.1 General – Accessible units shall comply with ANSI 1002.

ANSI 1002.2 Primary Entrance.
The accessible primary entrance shall be on an accessible route from public and common areas. The primary entrance shall not be to a bedroom.

ANSI 1002.3 Accessible Route.
Exterior accessible routes less than 30 inches (760 mm) in depth or width shall comply with ANSI 1002.3.1, 1002.3.3, 302, and 303.

ANSI 1002.3.1 Size.
At least one accessible route shall connect all spaces and elements that are a part of the unit. Where only one accessible route is provided, it shall not pass through bathrooms and toilet rooms, closets, or similar spaces.

ANSI 1002.3.2 Surfaces.
All rooms served by an accessible route shall provide a turning space complying with ANSI 304.

ANSI 1002.3 Components.
Accessible routes shall consist of one or more of the following elements: walking surfaces with a slope not steeper than 1:20, ramps, elevators, and platform lifts.

ANSI 1002.5 Doors and Doorways.
The primary entrance door to the unit, and all other doorways intended for user passage, shall comply with ANSI 404.

ANSI 1002.6 Ramps.
Ramps shall comply with ANSI 405.

ANSI 1002.9 Operable Ports.
Lighting controls, electrical switches and receptacle outlets, environmental controls, appliance controls, operating hardware for operable windows, plumbing fixture controls, and user controls for security or intercom systems shall comply with ANSI 309. Refer to ANSI 1002.9 for listed exceptions.

ANSI 1002.10 Laundry Equipment.
Washing machines and clothes dryers shall comply with ANSI 611.

ANSI 1002.11 Toilet and Bathing Facilities.
Toilet and bathing facilities shall comply with ANSI 603 through 610 (refer to "BATHROOM REQUIREMENTS" on this sheet).

ANSI 1002.12 Kitchens.
Kitchens shall comply with ANSI 804 (refer to "KITCHEN REQUIREMENTS" on this sheet). At least one work surface, 30 in. (760 mm) min, for length, shall comply with ANSI 902.

ADAPTABLE UNITS (TYPE B) R–2 OCCUPANCIES.

BC1107.2 Design.
Dwelling units and sleeping units which are required to be Accessible Units or Type B units shall comply with this code including Appendix E where applicable, and the applicable provisions of Chapter 10 of ICC A117.1. Type B units in R–2 occupancies shall comply with BC1107.2.1 thru BC1107.2.8.

BC1107.2.2.1.1 Type B Units.
Every dwelling unit and sleeping unit shall be a Type B unit.

ANSI 1004.2 Primary Entrance.
Refer to ANSI 1002.2 on this sheet.

ANSI 1004.3 Accessible Route.
Refer to ANSI 1002.3.1 & 1002.3.3 on this sheet for locations and components. Accessible routes do not require a turning space anywhere within the unit. Refer to ANSI 1004.3 for listed exceptions to locations.

ANSI 1004.4 Walking Surface.
Walking surfaces that are part of an on accessible route shall have a clear width complying with Fig. 403.5.

BC1107.2.1 & BC1105.1.6.1 Type B unit doors and doorways in R–2 occupancy.
Doors and doorways shall comply with ANSI 1003.5. Refer to BC1107.2.1 for listed exceptions.

ANSI 1003.5 Doors and Doorways.
The primary entrance door to the unit, and all other doorways intended for user passage, shall comply with ANSI 404.

ANSI 1004.6 Ramps.
Ramps shall comply with ANSI 405.

BC P102.2 & ANSI 1004.9 Operable Ports.
Refer to ANSI 1002.9 on this sheet. Additional exceptions include controls or switches mounted on appliances and plumbing fixture controls.

BC1107.2.4 Type B unit operable windows in R–2 occupancy.
All operable windows in rooms or spaces in the dwelling unit or sleeping unit shall have operable parts complying with ANSI 309.

EXCEPTION: Compliance with BC1107.2.4 is not required in kitchenettes less than 80 SF (7.2m²) in area and equipped with an accessible mechanical means of ventilation, and in bathrooms equipped with an accessible means of ventilation complying with NYC Mechanical Code.

BC1107.2.8 Laundry Equipment.
Washing machines and clothes dryers shall comply with ANSI 611 and shall be front loading (refer to "LAUNDRY REQUIREMENTS" on this sheet).

BC1107.2.2 & ANSI 1004.11 Toilet and Bathing Facilities.
Toilet and bathing facilities shall comply with Appendix F of the NYC Building Code, ANSI 1004.11, and FHA (refer to "BATHROOM REQUIREMENTS" on this sheet).

BC1107.2.3 Kitchens.
Kitchens shall comply with the requirements of BC1107.2.3.1 thru BC1107.2.3.4 and ANSI 1003.12 (refer to "KITCHEN REQUIREMENTS" on this sheet). Secondary kitchens shall comply with ANSI 1004.12.

KITCHEN REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

ACCESSIBLE KITCHENS

ANSI 804.1 General.
Accessible kitchens and kitchenettes shall comply with ANSI 804.

ANSI 804.2 Clear Floor Space.

ANSI 804.2.1 Pass–through Kitchens.
Clearances between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 in. (1015 mm) min. Pass–through kitchens shall have two entries.

ANSI 804.2.2 U–Shaped Areas.
Clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 in (1525 mm) min.

ANSI 804.3 Work Surface.
Work surfaces shall comply with ANSI 902.

ANSI 804.4 Sinks.
Sinks shall comply with ANSI 606.

ANSI 804.5 Storage.
At least 18 percent of shelf space in cabinets shall comply with ANSI 905.
905.10 – The provisions in this section are the minimum standards necessary to ensure that a storage facility is accessible when required by the administrative authority.

ANSI 804.6 Appliances.

ANSI 804.6.1 Clear Floor Space.
Clear floor space complying with ANSI 305 shall be provided at each kitchen appliance and are permitted to overlap.

ANSI 804.6.2 Operable Ports.
All appliance controls shall comply with ANSI 309.

EXCEPTIONS:
(1) Appliance doors and door latching devices shall not be required to comply with ANSI 309.4
(2) Bottom–hinged appliance doors, when in the open position, shall not be required to comply with ANSI 309.3.

ANSI 804.6.3 Dishwasher.
Provide a clear floor space adjacent to the dishwasher door. The dishwasher door in open position shall not obstruct the clear floor space for dishwasher or adjacent sink.

ANSI 804.6.4 Range or Cooktop.
Provide a clear floor space positioned for a parallel or forward approach. For a forward approach, provide knee and toe clearance complying with ANSI 306. The location of controls shall not require reaching across burners.

ANSI 804.6.5 Oven.

(1) Side–hinged door ovens shall have a work surface complying with ANSI 804.3 positioned adjacent to the latch side of the oven door.
(2) Bottom–hinged door ovens shall have a work surface complying with ANSI 804.3 positioned adjacent to one side of the door.
(3) Ovens shall have controls on the front panels.

ANSI 804.6.6 Refrigerator/Freezer.
Combination refrigerators/freezers shall have at least 50 percent of the freezer compartment shelves, including the bottom of the freezer, 54 in (1370 mm) max above the floor. Provide a clear floor space for a parallel approach to the space dedicated to a refrigerator/freezer. The centerline of the clear floor space shall be offset 24 in. (610 mm) max from the centerline of the dedicated space.

ADAPTABLE KITCHENS

ANSI 1003.12 Kitchens.
Kitchens shall comply with the requirements of BC1107.2.3.1 thru BC1107.2.3.4 and ANSI 1003.12. Secondary kitchens shall comply with ANSI 1004.12.

ANSI 1003.12.1 Clearance.

ANSI 1003.12.1.1 Minimum Clearance.
Clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 in. (1015 mm) min.

ANSI 1003.12.1.2 U–Shaped Areas.
Refer to ANSI 804.2.2 on this sheet.

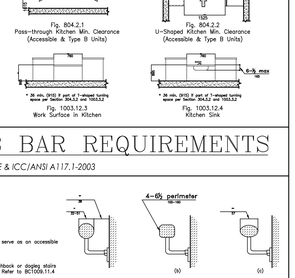
ANSI 1003.12.3 Work Surface.
At least one section of counter shall provide a work surface 30 in. in length and 34 in. max above the floor. Cabinetry shall be permitted under the work surface if it can be removed. A counter that is adjustable to provide a work surface at variable heights, 29 in. min and 36 in. max, without cutting the counter shall be permitted.

ANSI 1003.12.4 Sinks.
Sinks shall be permitted to be under sink provided it can be removed. The front of the sink shall be 34 in. max above the floor, unless a counter that is adjustable at variable heights, 29 in. min and 36 in. max, without cutting the counter is provided.

BC1107.2.3.4 Kitchen and kitchenette storage.
Kitchen storage, except overhead cabinets, shall comply with ANSI 1003.12 and 905 (refer to Storage Requirements on this sheet). At least one storage shelf or cabinet shall be mounted 48 in max. above the work counters.

ANSI 1003.12.5 Storage.
A clear floor space for a parallel or forward approach shall be provided.

ANSI 1003.12.6 Appliances.
Shall comply with ANSI 804.6 on this sheet.



HANDRAIL AND GRAB BAR REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

BC1009.11 & ANSI 505 Handrails.

ANSI 505.1 General.
Handrails required by ANSI 405.8 for ramps, or ANSI 504.6 for stairs, shall comply with ANSI 505.

BC1109.11 & ANSI 505.2 Location.
Handrails shall be provided on both sides of stairs and ramps.

EXCEPTION: One handrail shall be allowed in enclosed exit stairs less than 44 in. (1118mm) that do not serve as an accessible means of egress. Refer to BC1009.11 for additional exceptions.

BC1009.11.4 & ANSI 505.3 Continuity.
Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs or ramps shall be continuous between flights or runs. Other handrails shall comply with ANSI 505.10 & 307. Refer to BC1009.11.4 for listed exceptions.

BC1009.11.1 & ANSI 505.4 Height.
Top of gripping surfaces of handrails shall be 34 in. (865 mm) min and 38 in. (965 mm) max vertically above stair nosings, ramp surfaces, and walking surfaces; handrails shall remain at a consistent height.

BC1109.11.6 & ANSI 505.5 Clearance.
Clearance between handrail gripping surface and adjacent surfaces shall be 1–1/2 in. (38 mm) min.

BC1009.11.3 & ANSI 505.7 Cross Section.
Handrails shall have a cross section complying with ANSI 505.7.1 or 505.7.2. Edges shall have a min. radius of 0.01 in (0.25mm).

ANSI 505.7.1 Round Cross Section.
Handrails with a circular cross section shall have an outside diameter of 1–1/4 in. (32 mm) min and 2 in. (51 mm) max.

ANSI 505.7.2 Noncircular Cross Sections.
Handrails with a noncircular cross section shall have a perimeter dimension of 4 in. (100 mm) min and 6–1/4 in. (160 mm) max, and a cross–section dimension of 2–1/4 in (57 mm) max.

ANSI 505.8 Surfaces.
Handrails, and any wall or other surfaces adjacent to them, shall be free of any sharp or abrasive elements. Edges shall be rounded.

BC1009.11.5 & ANSI 505.10 Handrail Extensions.
Handrails shall extend beyond and in the same direction of stair flights and ramp runs in accordance with ANSI 505.10.

EXCEPTIONS:
(1) Continuous handrails at the inside turn of stairs and ramps.
(2) Extensions not required for handrails in aisles serving seating where handrails are discontinuous.
(3) In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

ANSI 505.10.1 Top and Bottom Extension at Ramps.
Ramp handrails shall extend horizontally above the landing 12 in. (305 mm) min beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or floor, or shall be continuous to the handrail of an adjacent ramp run.

ANSI 505.10.2 Top Extension at Stairs.
At the top of a stair flight, handrails shall extend horizontally above the landing for 12 in. (305 mm) min beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

ANSI 505.10.3 Bottom Extension at Stairs.
At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

ANSI 609 Grab Bars.

ANSI 609.1 General.
Grab bars in accessible toilet or bathing facilities shall comply with ANSI 609.

ANSI 609.2 Cross Section.
Grab bars shall have a cross section complying with ANSI 609.2.1 or 609.2.2.

ANSI 609.2.1 Circular Cross Section.
Grab bars with a circular cross section shall have an outside diameter of 1–1/4 in. (32 mm) min and 2 in. (51 mm) max.

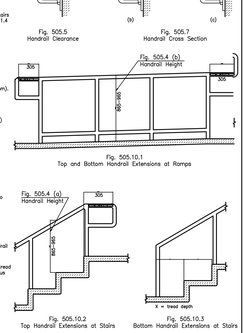
ANSI 609.2.2 Noncircular Cross Sections.
Grab bars with a noncircular cross section shall have a cross section dimension of 2 in. (51 mm) max, and a perimeter dimension of 4 in. (102 mm) min and 4.8 in. (122 mm) max.

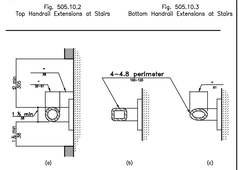
ANSI 609.3 Spacing.
The space between the wall and the grab bar shall be 1 1/2 in. (38 mm). The space between the grab bar and projecting objects below and at the ends of the grab bar shall be 1 1/2 in. (38 mm) min. The space between the grab bar and projecting objects above the grab bar shall be 12 in. (305 mm) min.

EXCEPTIONS:
(1) Space between grab bars and shower controls, shower fittings, and other grab bars shall be permitted to be 1 1/2 in. (38 mm) min.
(2) Swing–up grab bars shall not be required to comply with ANSI 609.3.

ANSI 609.4 Position of Grab Bars.
Grab bars shall be installed in a horizontal position, 33 in. (840 mm) min and 36 in. (915 mm) max above the floor measured to the top of the gripping surface.

EXCEPTIONS:
(1) The lower grab bar on the back wall of a bathtub required by ANSI 607.4.1.1 or 607.4.2.1.
(2) Vertical grab bars required by ANSI 604.5.1, 607.4.1.2.2, 607.4.2.2.2, & 608.3.1.2.





LAUNDRY AND STORAGE REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

ANSI 611 Washing Machines and Clothes Dryers.

BC1107.2.8 Type B unit laundry equipment in R–2 Occupancy.
Where washing machines or clothes dryers are provided within the dwelling unit, it shall comply with ANSI 611 and be front loading (refer to BC1107.2.8 for exception).

ANSI 611.2 Clear Floor Space.
A clear floor space complying with Section 305, positioned for parallel approach, shall be provided centered on the appliance.

ANSI 611.3 Operable Ports.
Operable ports, including doors, lint screens, detergent and bleach compartments, shall comply with ANSI 309.

ANSI 611.4 Height.
Top loading machines shall have the door to the laundry compartment 36 in. (915 mm) max above the floor. Front loading machines shall have the bottom of the opening to the laundry compartment 15 in. (380 mm) min and 34 in. (865 mm) max.

ANSI 905 Storage Facilities

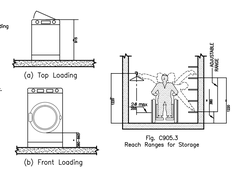
ANSI 905C Storage Facilities.
Storage facilities may include shelves, cabinets, clothes rods, mail boxes, storage lockers, etc.

ANSI 905.1 General.
Accessible storage facilities shall comply with ANSI 905.

ANSI 905.2 Clear Floor Space.
A clear floor space complying with ANSI 305.

ANSI 905.3 Height.
Accessible storage elements shall comply with at least one of the reach ranges specified in ANSI 308.

ANSI 905.4 Operable Parts.
Operable parts of storage facilities shall comply with ANSI 309.



BATHROOMS REQUIREMENTS

2008 NYC BUILDING CODE & ICC/ANSI A117.1-2003

Toilet and Bathing Rooms.

ACCESSIBLE BATHROOMS

ANSI 603.1 General.
Accessible toilet and bathing rooms shall comply with ANSI 603.

ANSI 603.2 Clearances.

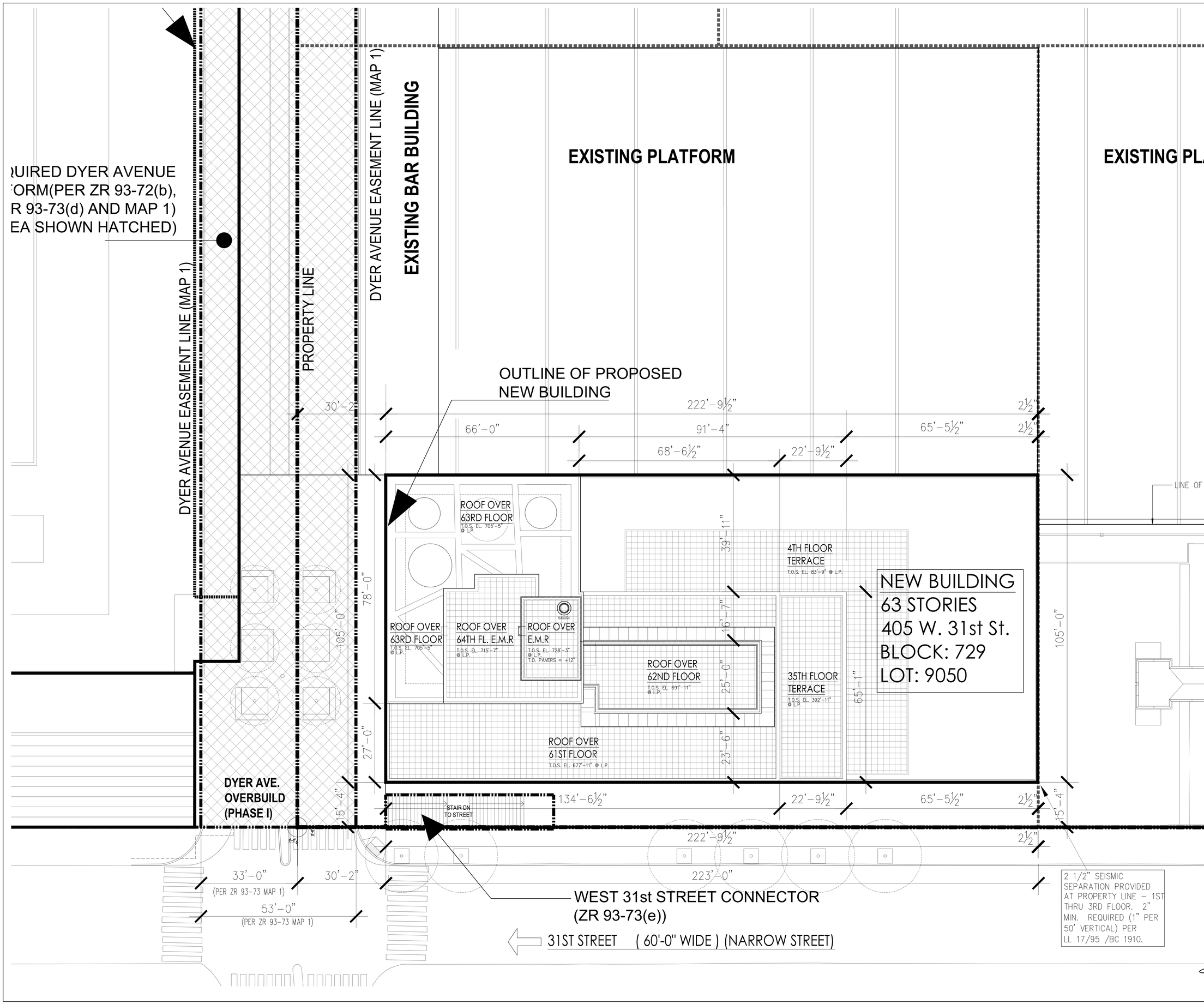
ANSI 603.2.1 Turning Space.
A turning space complying with ANSI 304 shall be provided within the room.

BC P102.5 & ANSI 603.2.2 Overlap.
Clear floor spaces shall be permitted to overlap.

BC P102.3 & ANSI 603.2.3 Door Swing.
Doors shall not swing into the clear floor space or clearance for any fixture.

EXCEPTION: Where the room is for

DEPT OF BLDGS 121185760 Job Number
E381558943 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

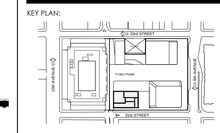
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING
2014-01-24	50% DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

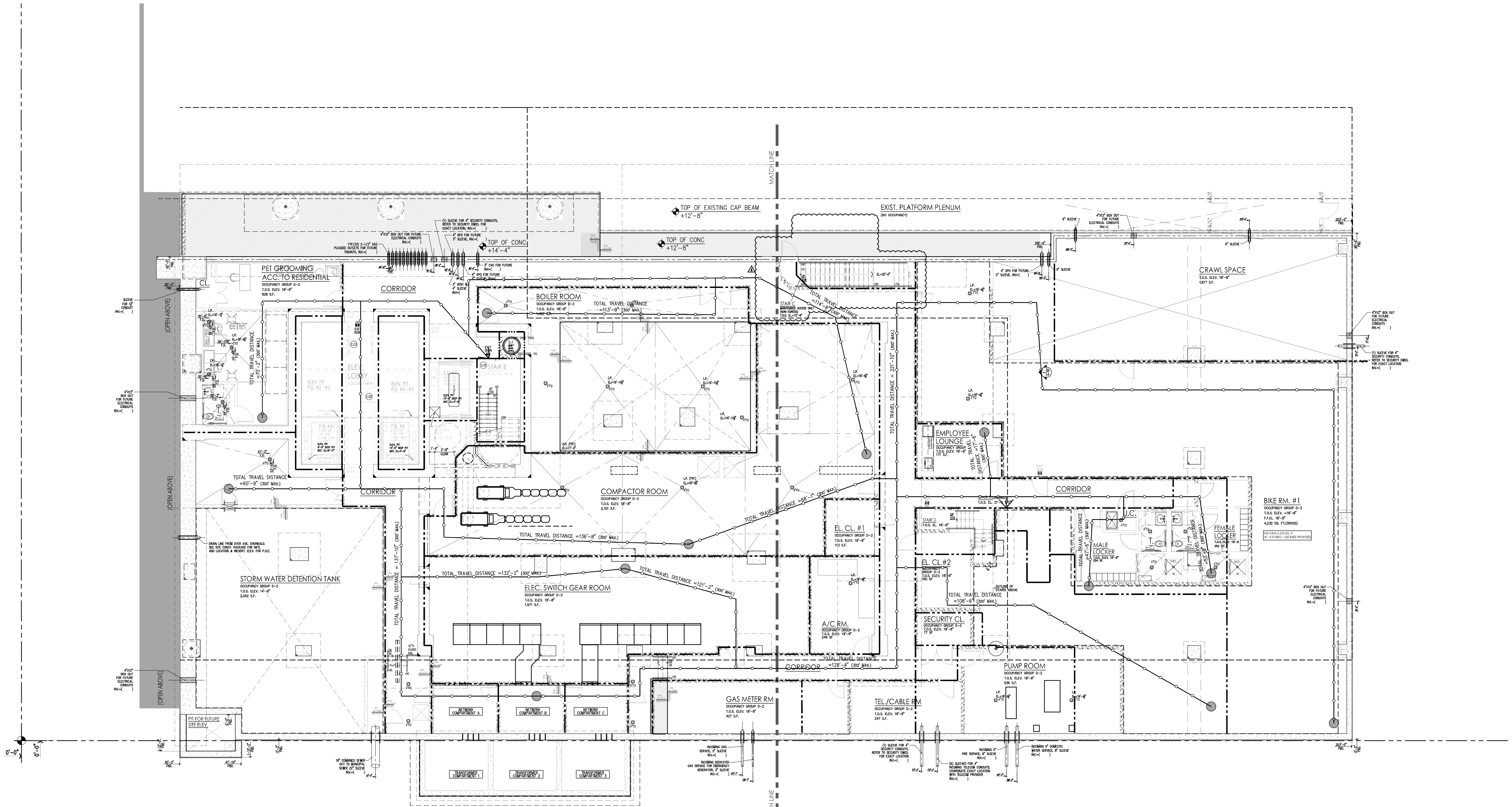
SITE PLAN

SEAL & SIGNATURE:

REGISTERED ARCHITECT T. J. F. STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
SHEET No.:	A-005.00
SHEET. No.:	1 of 000

FILE No: T:\bos06\bldg\manhattan-West (2012-32)\SLCE\Drawings\BAR_A005_SITE-PLAN-A.dwg



GROSS AREA: 20,762 SF

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY: EGRESS WIDTH FOR OCCUPANTS – DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD	
STORM WATER DETENTION TANK	–	1,811	300	6	persons
DOG GROOMIMG		624	300	2	persons
BOILER ROOM		1,475	300	5	persons
ELEC. SWITCH GEAR ROOM		2,189	300	7	persons
GAS METER ROOM		331	300	1	persons
TEL./CABLE ROOM		242	300	1	persons
PUMP ROOM		495	300	1	persons
BUILDING STORAGE		308	300	1	persons
EMPLOYEE LOUNGE		632	100	6	persons
SUPER'S OFFICE		163	100	2	persons
MALE & FEMALE LOCKER ROOM		497	50	10	persons
BUILDING STORAGE ROOM		1,324	300	4	persons
CRAWL SPACE		3,739		–	persons
TOTAL				46	persons

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 46 OCC.

DOOR WIDTH REQUIRED: 46 OCC. X .2"/P = 9.2"
DOOR WIDTH PROVIDED: (4) 36" = 144", COMPLIES

STAIR WIDTH REQUIRED: 46 OCC. X .3"/P = 13.8"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS
STAIR D = 44" WIDE STAIRS

DEPT OF BLDGS 121185760 Job Number — ES483328728 Scan Code

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

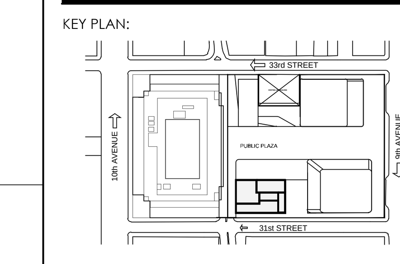
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT
	2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/8" = 1'- 0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

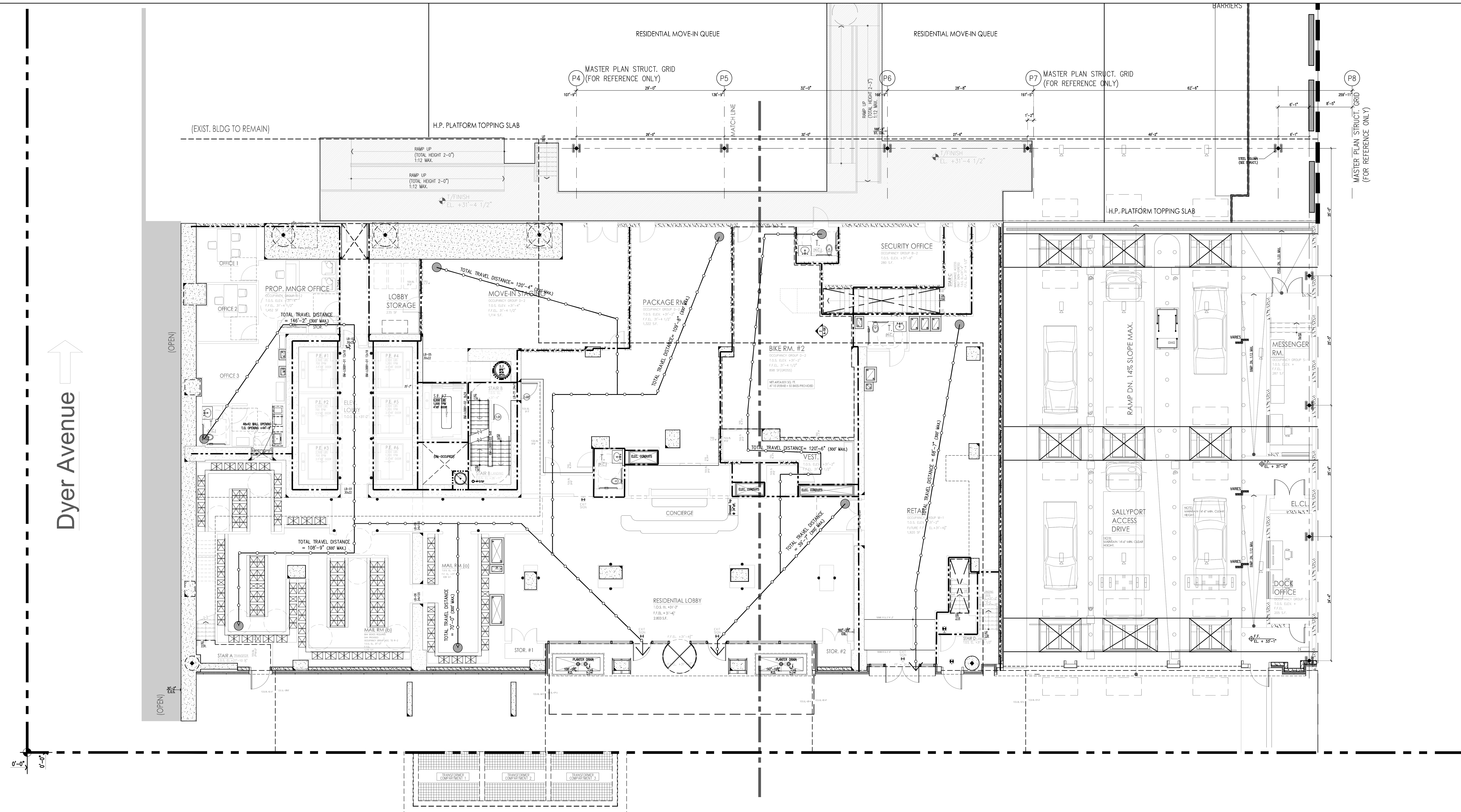
DRAWING TITLE:
CELLAR FLOOR
LIFE SAFETY PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-050.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A050_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES307317008 Scan Code



LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT; HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS; A-2 ASSEMBLY; A-3 EXERCISE; M RETAIL; S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL LOBBY	–	–	–	– persons
STAFF LOUNGE				persons
MAIL ROOM				persons
CARTS STORAGE				persons
PACKAGE ROOM				persons
MOVE-IN STAGING				persons
BICYCLE STORAGE				persons
RETAIL				persons

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: --- OCC.

DOOR WIDTH REQUIRED: --- OCC. X .2"/P = ---"
DOOR WIDTH PROVIDED: (4) 36" = 144", COMPLIES

STAIR WIDTH REQUIRED: ---OCC. X .3"/P = ---"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS
STAIR D = 44" WIDE STAIRS

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

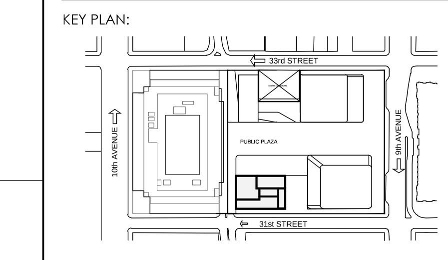
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'- 0" 0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

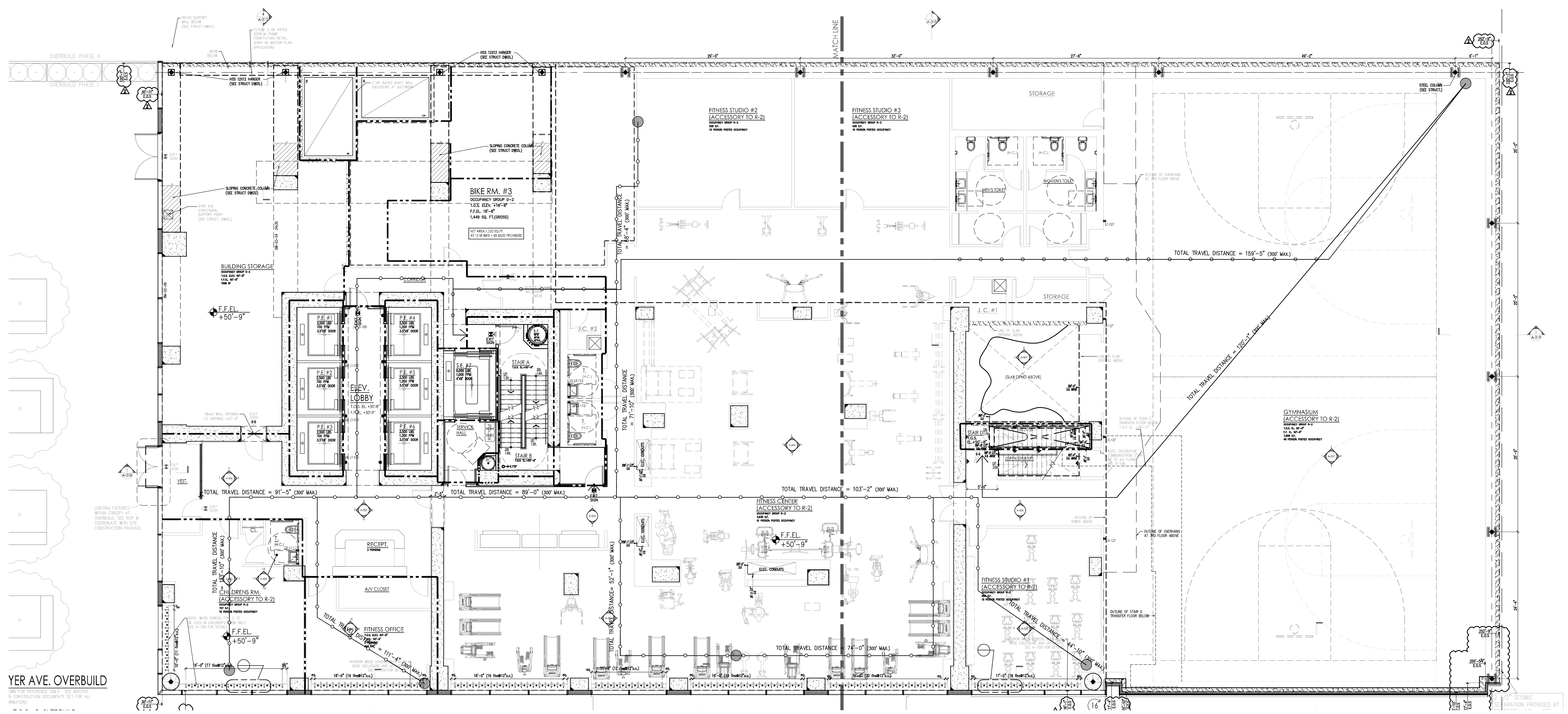
1ST FLOOR LIFE SAFETY PLAN

SEAL & SIGNATURE:

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-051.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A051_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES806213091 Scan Code



LEGEND

	HABITABLE SPACE
	GENERAL TRAVEL DISTANCE
	COMMON PATH OF TRAVEL
	DEAD END CORRIDOR
	ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
	TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
	THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
	FIRE EXTINGUISHER
	EXIT SIGNS (ARROW INDICATES DIRECTION)
SS	SMOKE DETECTOR
CO	CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT - PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA - IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS - EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS - EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS - INTERIOR	0 HRS.
FLOOR CONSTRUCTION - SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION - SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY — EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	-	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
CAFE NORTH	-	-	-	- persons
CAFE SOUTH				persons
RESIDENTIAL AMENITY				persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: _____ SF/ 200 SF = ___ OCC.

DOOR WIDTH REQUIRED: ___ OCC. X .2"/P = ___"
DOOR WIDTH PROVIDED: (4) 36" = 144", COMPLIES

STAIR WIDTH REQUIRED: ___ OCC. X .3"/P = ___"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS
STAIR D = 44" WIDE STAIRS

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

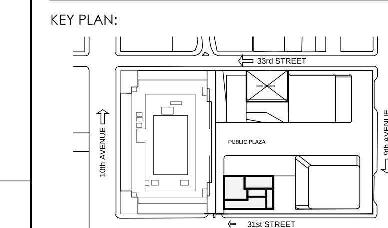
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT
	2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

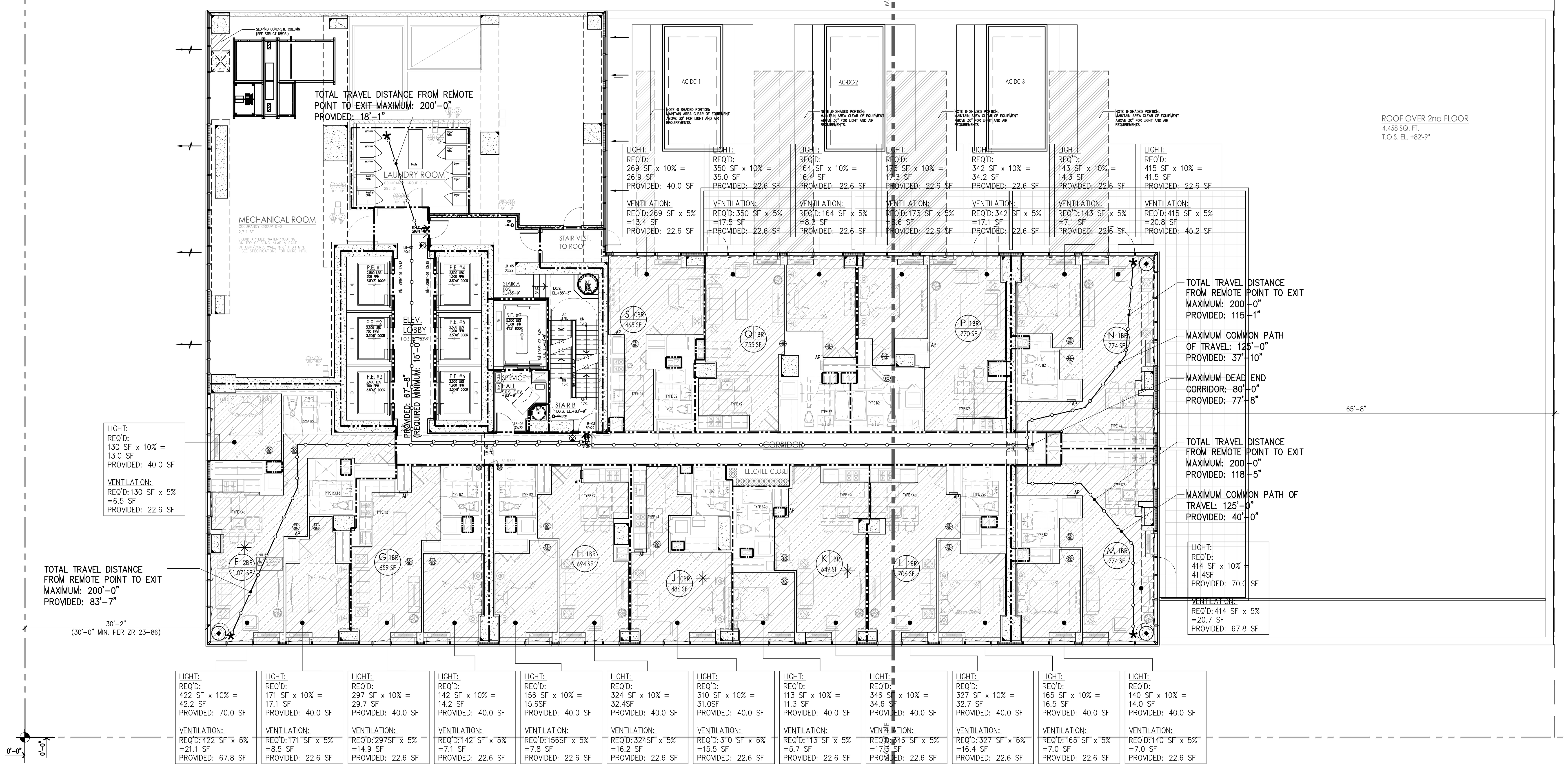
DRAWING TITLE:
2ND FLOOR
LIFE SAFETY PLAN

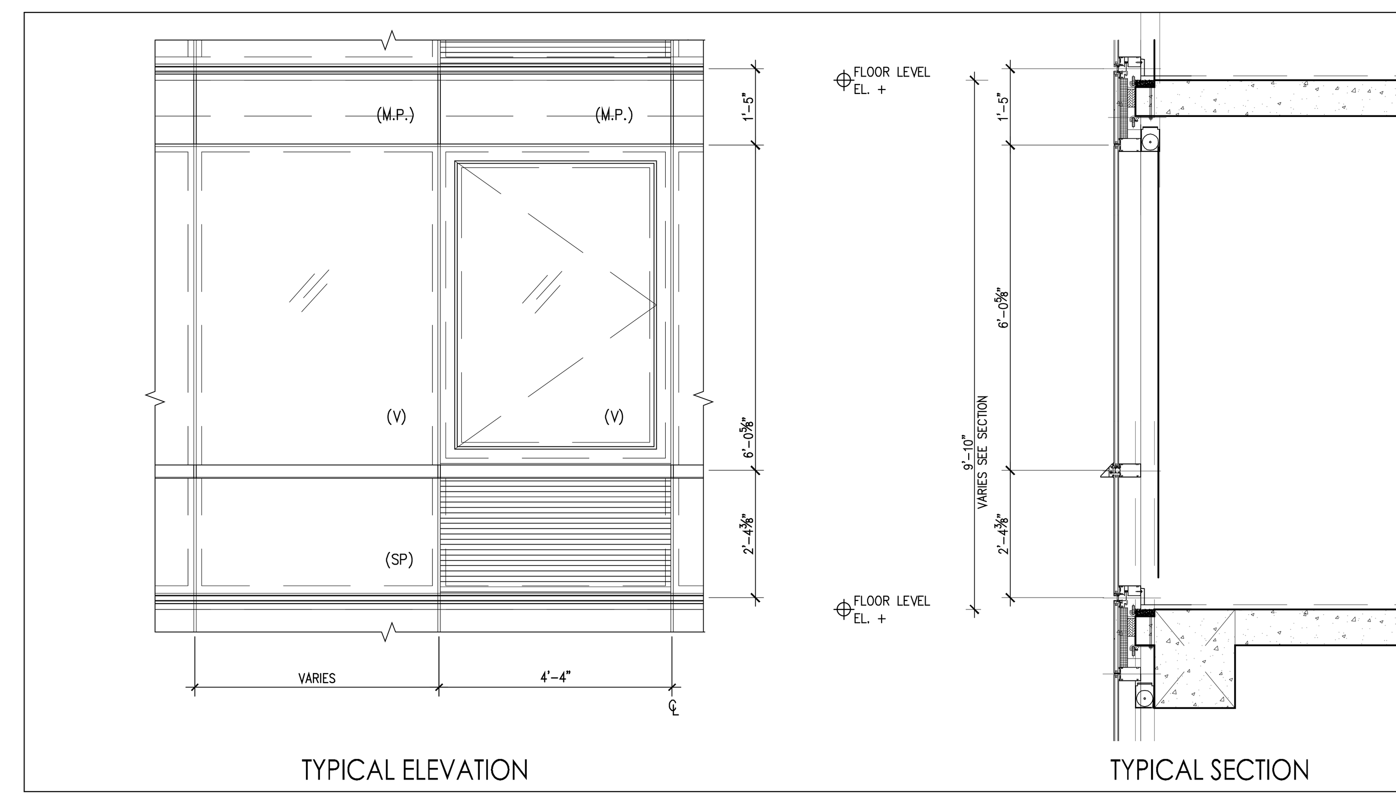
SEAL & SIGNATURE:
REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-052.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A052_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES858404643 Scan Code





TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL GENERAL NOTES:

1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS: 405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK: 729
ZONING DISTRICT: C64
ZONING MAP: 8d
LOT AREA: SF
STORIES: 63
CONSTRUCTION: 62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT - PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA - IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B	FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)
COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS - EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS - EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS - INTERIOR	0 HRS.
FLOOR CONSTRUCTION - SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION - SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	-	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
-	-	-	-	- persons
-	-	-	-	- persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: _____ SF/ 200 SF = ___ OCC.

DOOR WIDTH REQUIRED: ___ OCC. X .2"/P = ___"
DOOR WIDTH PROVIDED: (4) 36" = 144", COMPLIES

STAIR WIDTH REQUIRED: ___ OCC. X .3"/P = ___"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS
STAIR D = 44" WIDE STAIRS

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

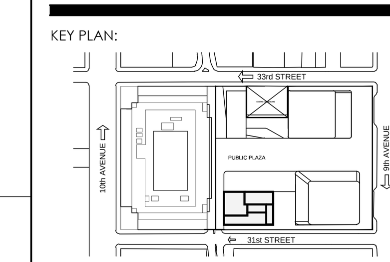
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'- 0" 0' 3 6 12 18

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

4TH FLOOR
LIFE SAFETY PLAN

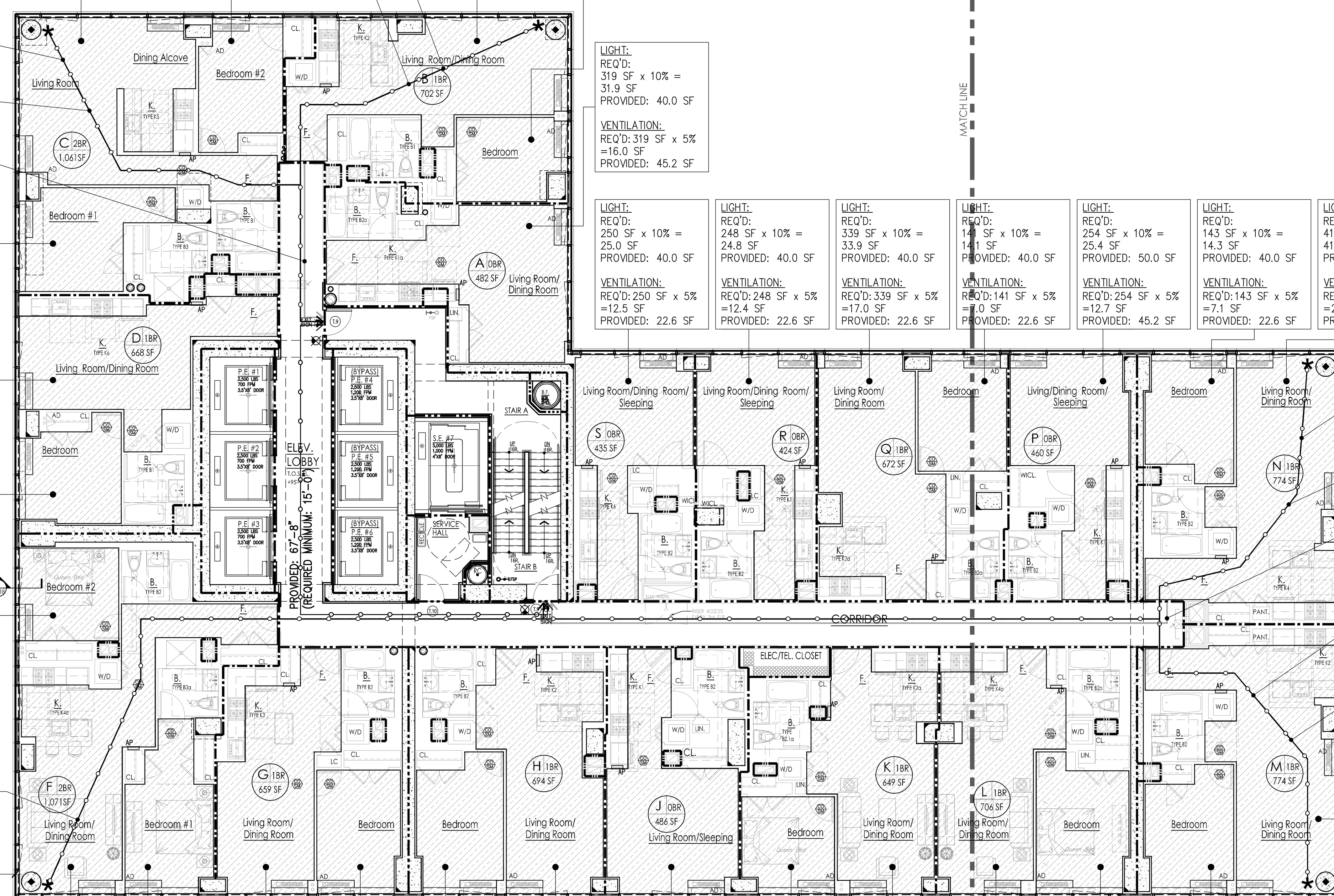
SEAL & SIGNATURE:

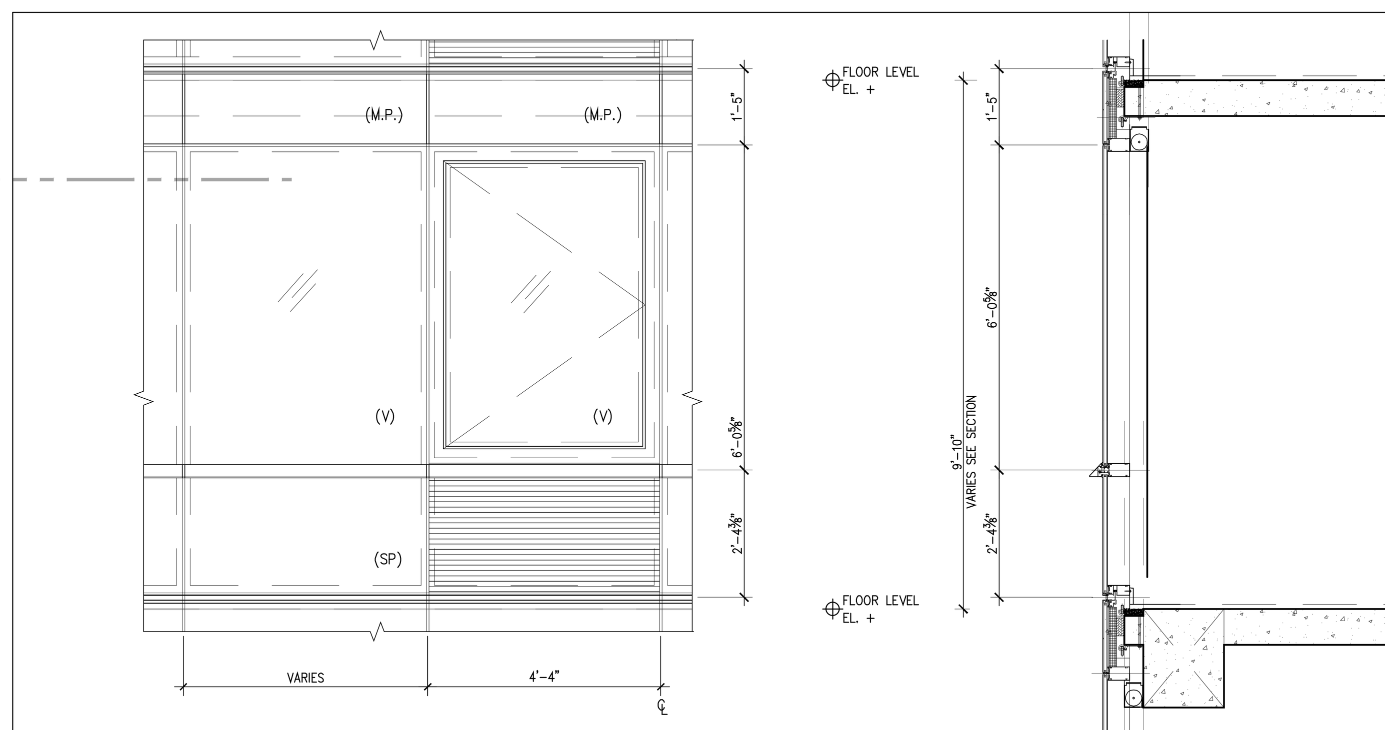
DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-054.00
SHEET. No.:	

REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A054_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES106296664 Scan Code





TYPICAL ELEVATION

TYPICAL SECTION

TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS: 405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK: 729
ZONING DISTRICT: C64
ZONING MAP: 8d
LOT AREA: SF
STORIES: 63
CONSTRUCTION: 62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
		FEDERAL FAIR HOUSING ACT
HANDICAP LAWS AND GUIDELINES:		HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003.
		AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH   TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R-2	12,867	200	64 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 12,867 SF/ 200 SF = 64 OCC.

DOOR WIDTH REQUIRED: 64 OCC. X .2"/P = 12.8"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 64 OCC. X .3"/P = 19.2"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/8" = 1'- 0"
0' 3 6 12 18

KEY PLAN:
33rd STREET / 10th AVENUE / 9th AVENUE / PUBLIC PLAZA / 31st STREET

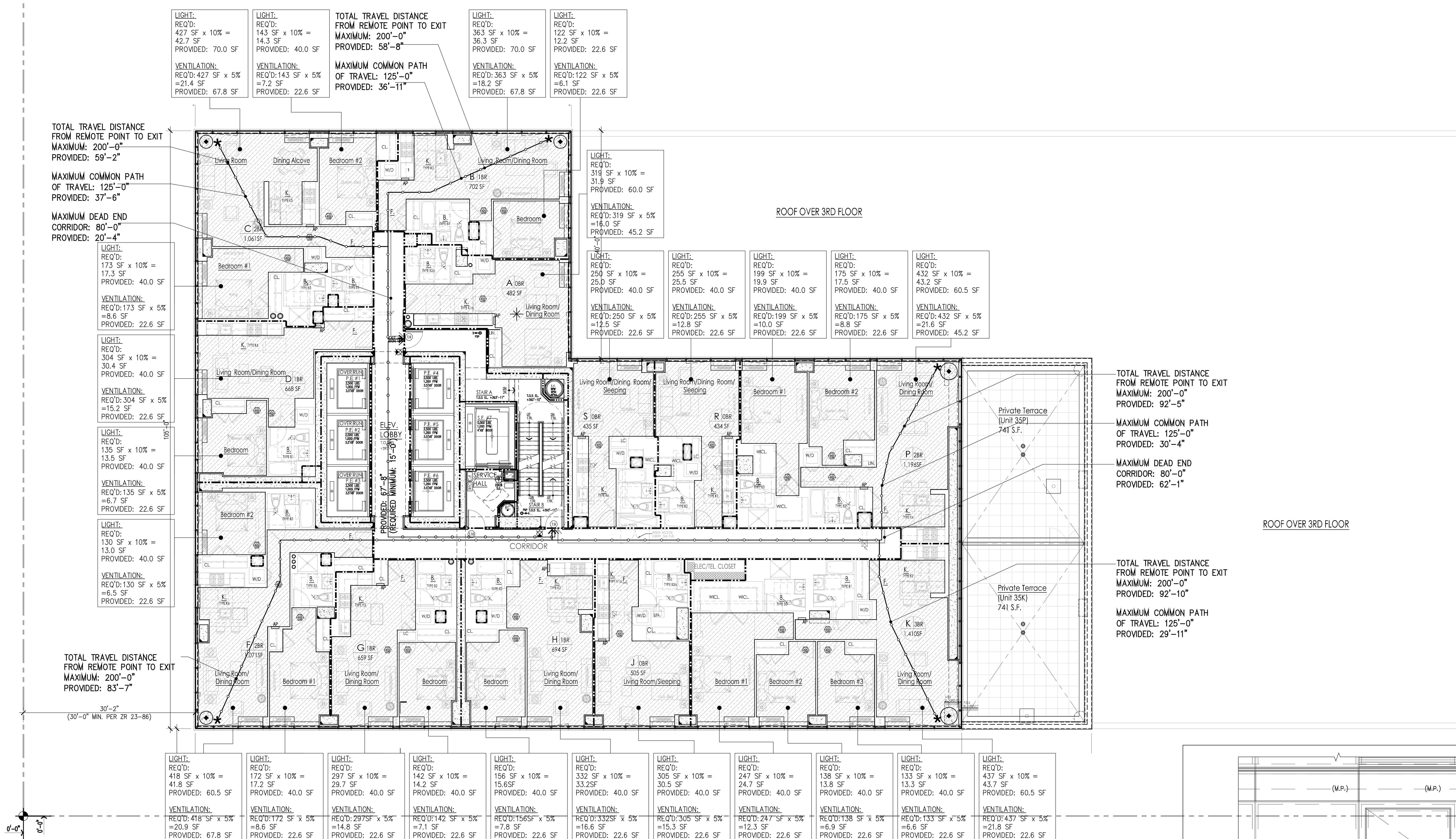
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

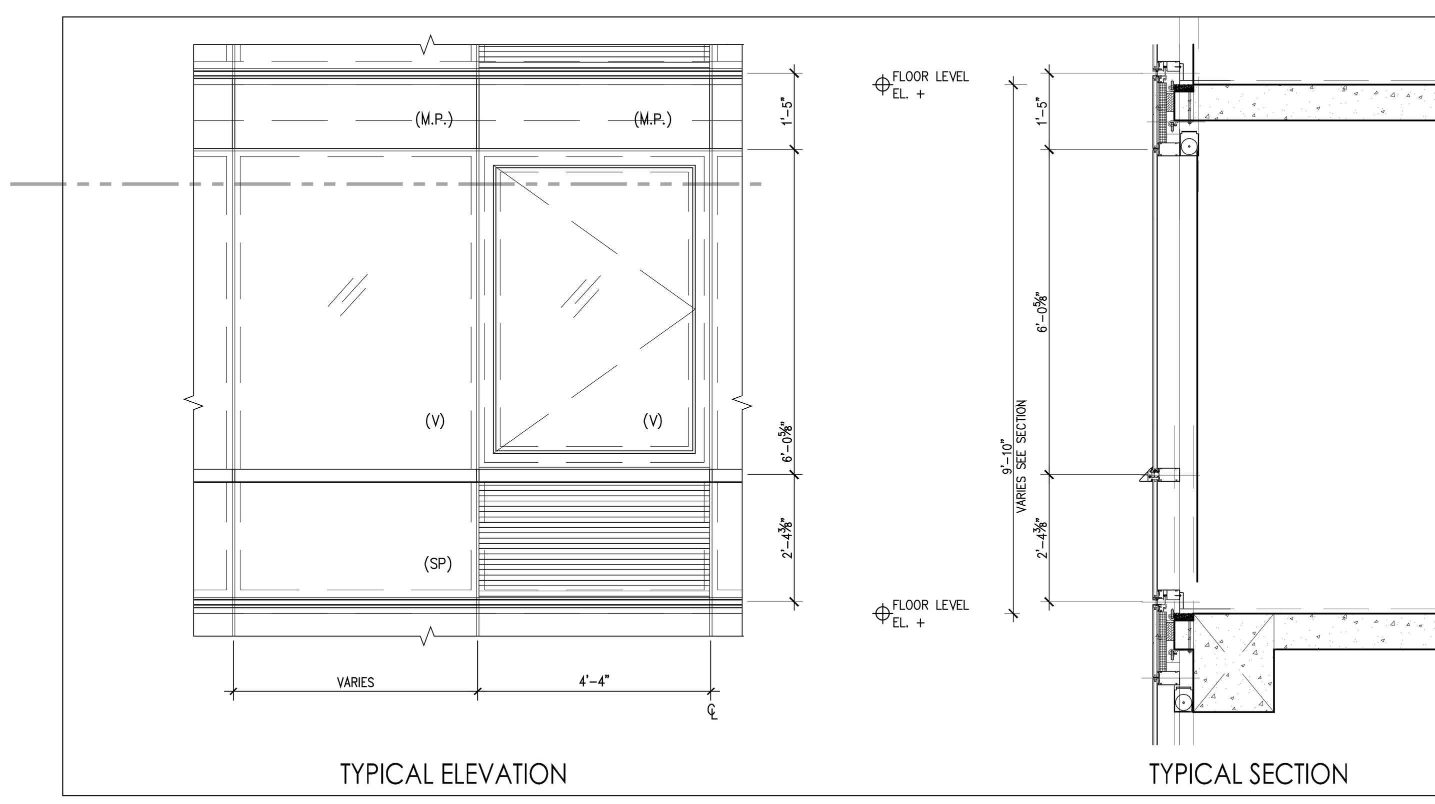
DRAWING TITLE:
5TH THRU 34TH FLOOR
LIFE SAFETY PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT, STATE OF NEW YORK, LUIGI PIO ROSSI, No. 020741
DATE: 11/25/13
PROJECT No: 2012-32
DRAWN BY: JCB
CHECKED BY: T.J.F.
DWG. No.: A-055.00
SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A055_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES357629031 Scan Code





TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT - PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA - IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)	
COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS - EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS - EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS - INTERIOR	0 HRS.
FLOOR CONSTRUCTION - SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION - SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	-	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R-2	11,385	200	57 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 11,385 SF/ 200 SF = 57 OCC.

DOOR WIDTH REQUIRED: 57 OCC. X .2"/P = 11.4"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 57 OCC. X .3"/P = 17.1"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

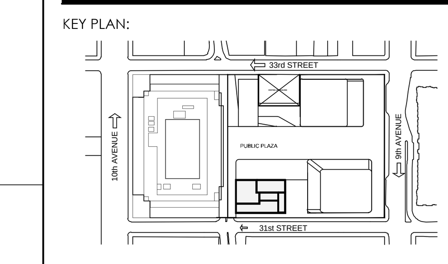
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

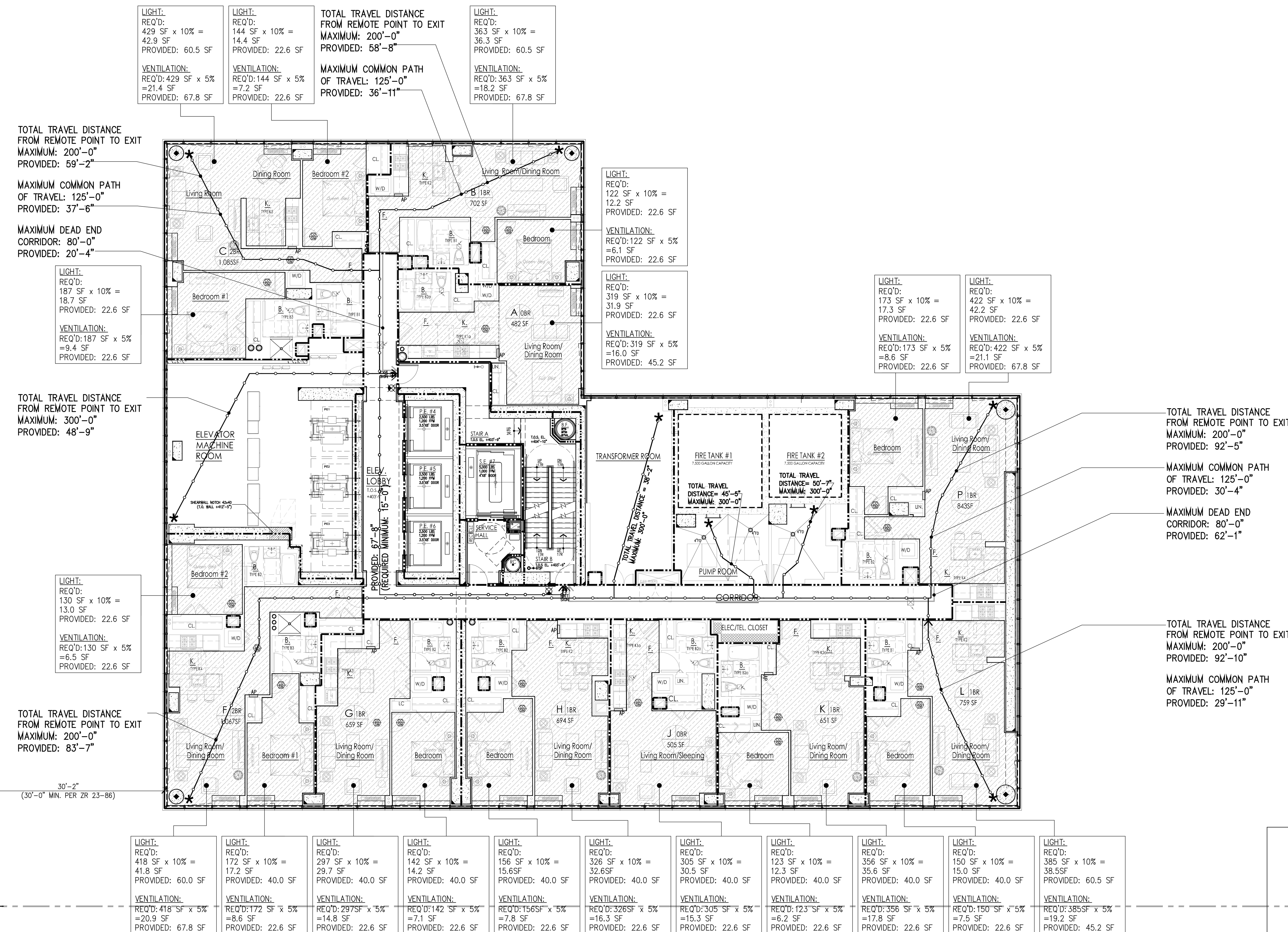
DRAWING TITLE:
35TH FLOOR
LIFE SAFETY PLAN

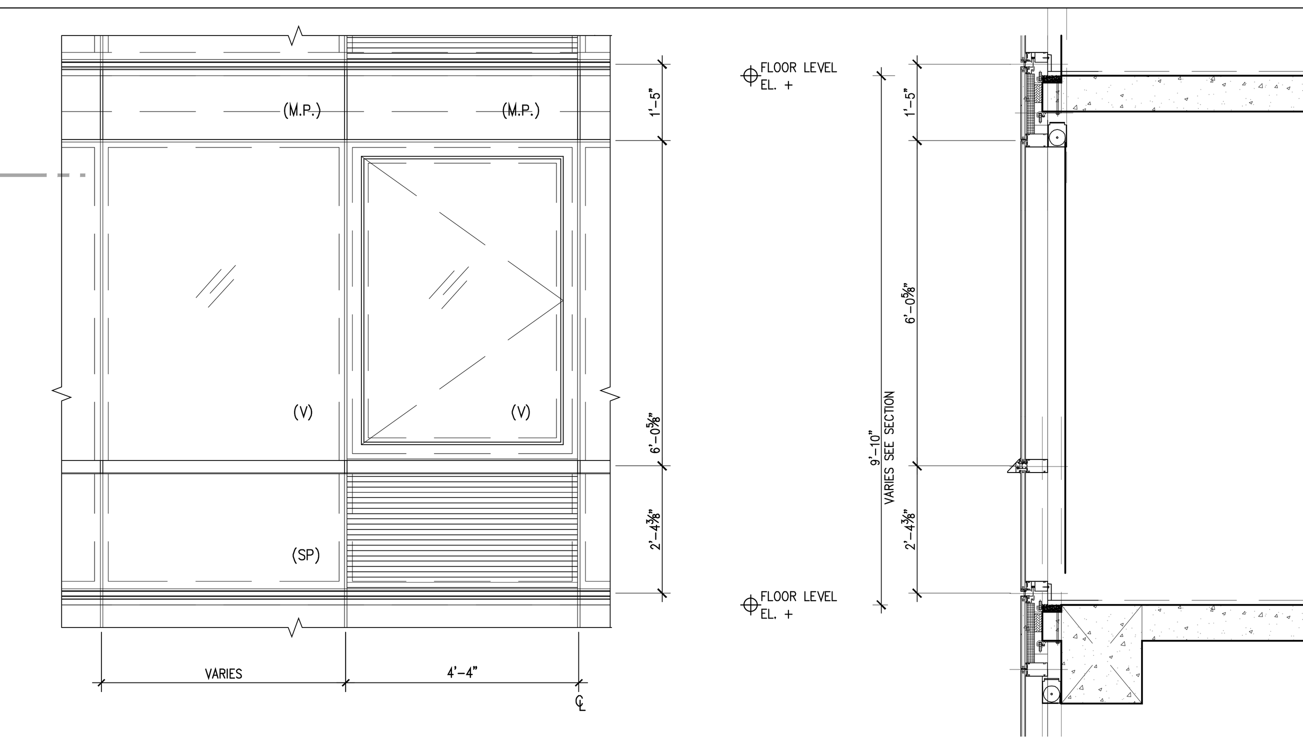
SEAL & SIGNATURE:

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-056.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A056_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES787239324 Scan Code





TYPICAL ELEVATION

TYPICAL SECTION

TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45–MINUTE SELF–CLOSING DOORS)
- TWO HOUR WALLS (90–MINUTE SELF–CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF–CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R–2
PARKING	S–2
STORAGE	S–2
MECHANICAL	F–2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT–AS PER 2008 NYCBC–1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI–117.1–2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R–2 APARTMENTS A–2 ASSEMBLY A–3 EXERCISE M RETAIL S–2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I–B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I–B — FIRE–RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON–BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON–BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE–RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S–2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A–2	B	B	C	A	A	B
R–2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R–1, R–2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A–2	150–P/250–S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S–2	250	0.2	0.3	0.2	44	20'	100'
A	150–P / 250–S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'–0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R–2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R–2	11,385	200	57 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 11,385 SF/ 200 SF = 57 OCC.

DOOR WIDTH REQUIRED: 57 OCC. X .2"/P = 11.4"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 57 OCC. X .3"/P = 17.1"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

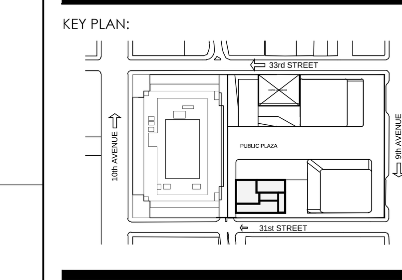
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 3 6 12 18

KEY PLAN:



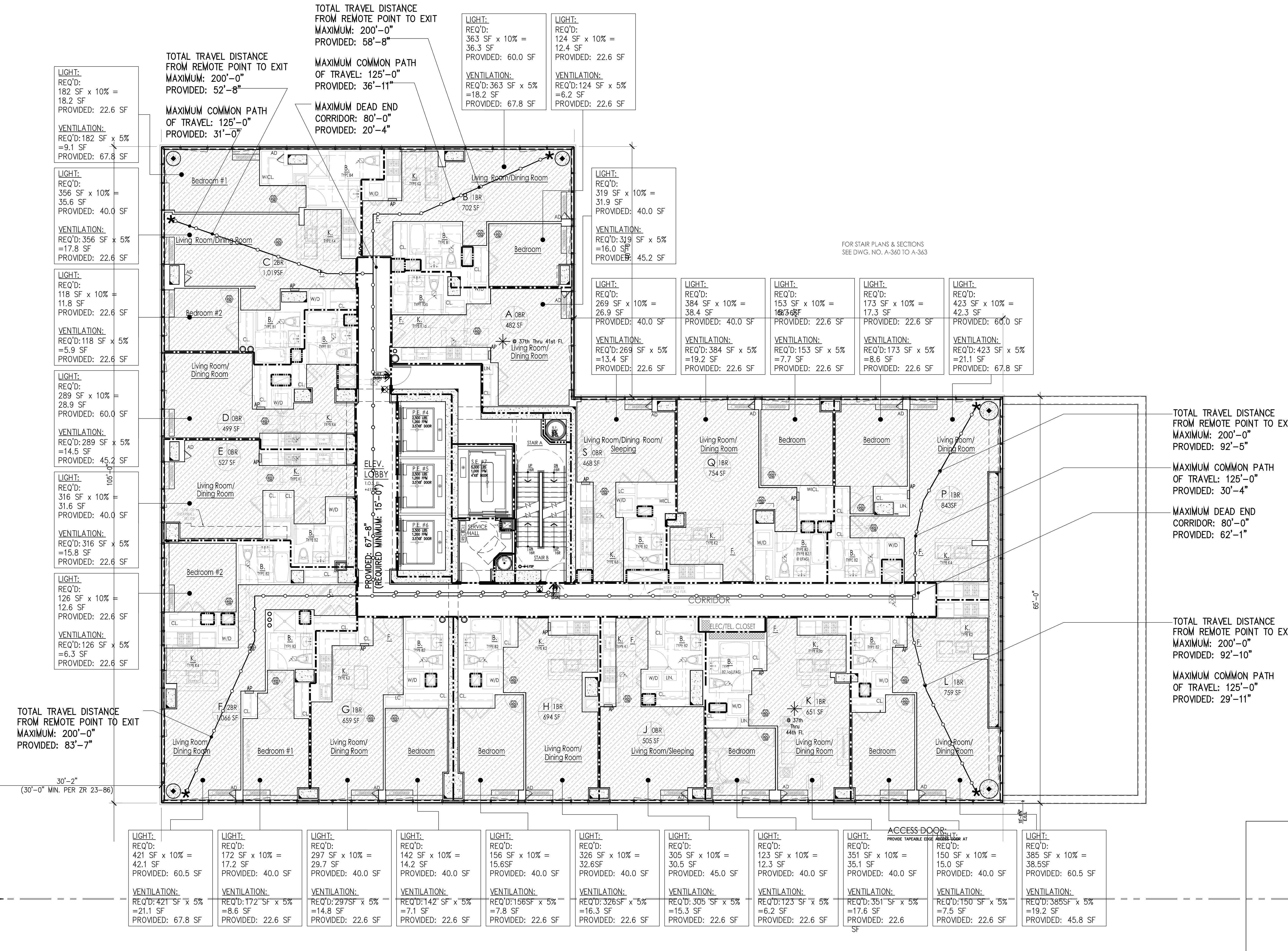
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

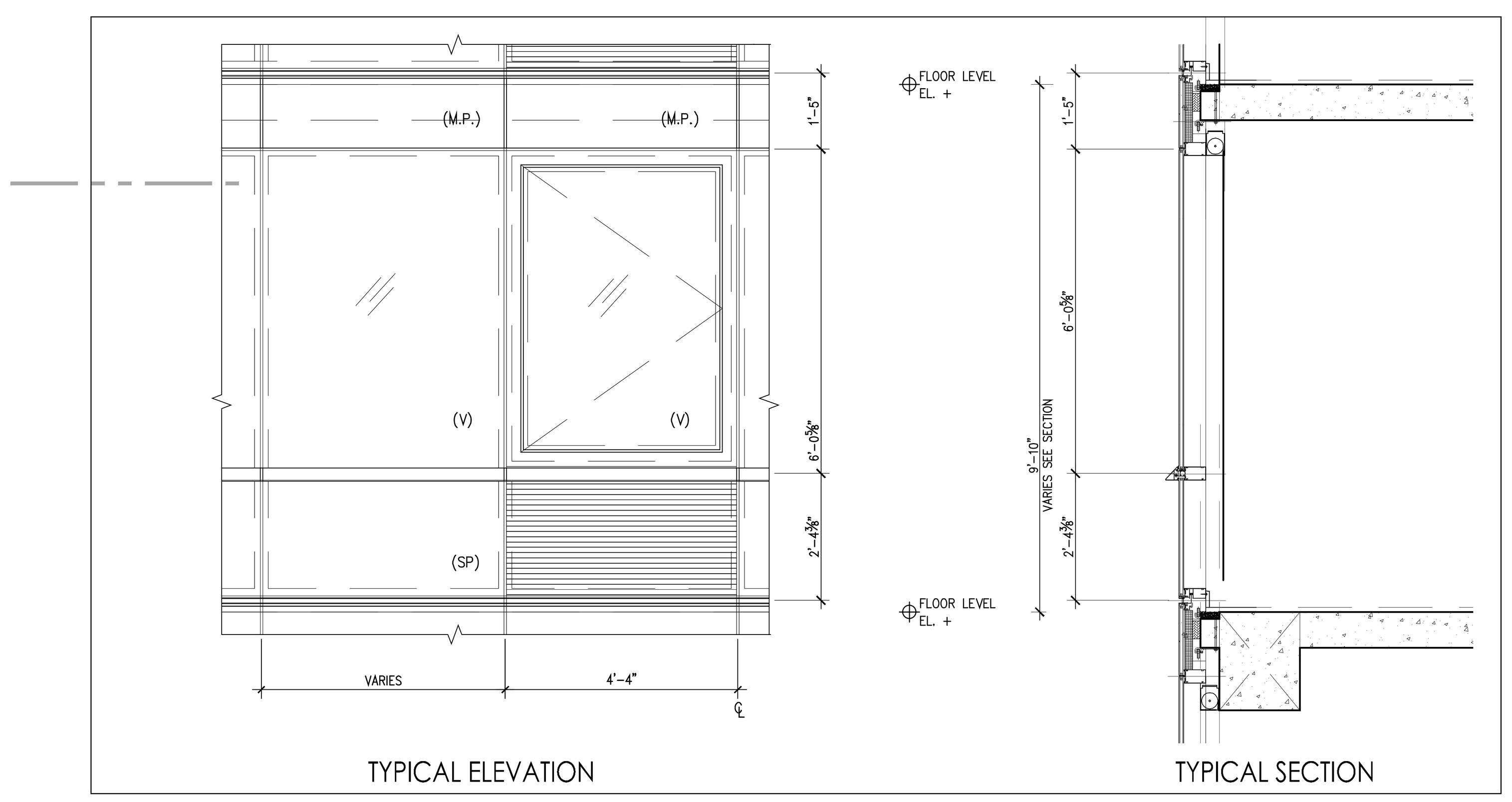
DRAWING TITLE:
36TH FLOOR
LIFE SAFETY PLAN

SEAL & SIGNATURE:
REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-057.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A057_Life Safety





TYPICAL ELEVATION

TYPICAL SECTION

TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT; HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT - PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS; A-2 ASSEMBLY; A-3 EXERCISE; M RETAIL; S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA - IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS - EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS - EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS - INTERIOR	0 HRS.
FLOOR CONSTRUCTION - SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION - SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY: EGRESS WIDTH FOR OCCUPANTS — DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	-	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R-2	11,385	200	57 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 11,385 SF/ 200 SF = 57 OCC.

DOOR WIDTH REQUIRED: 57 OCC. X .2"/P = 11.4"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 57 OCC. X .3"/P = 17.1"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

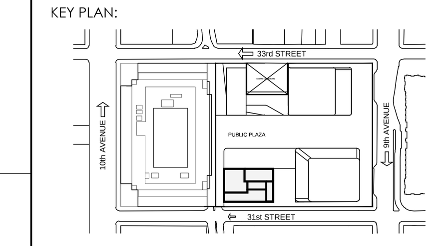
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'- 0" 0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
37TH THRU 51ST FLOOR
LIFE SAFETY PLAN

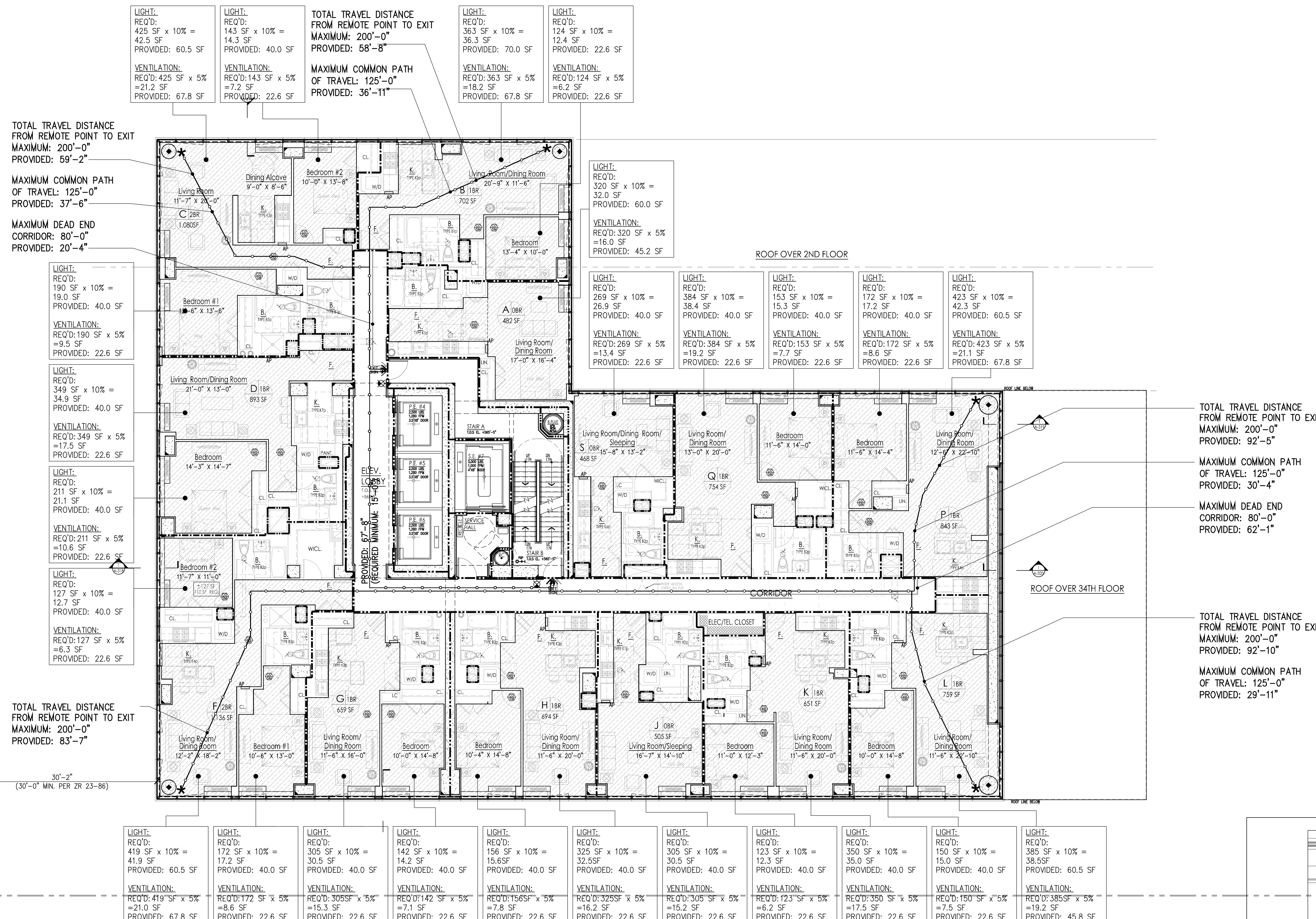
SEAL & SIGNATURE:

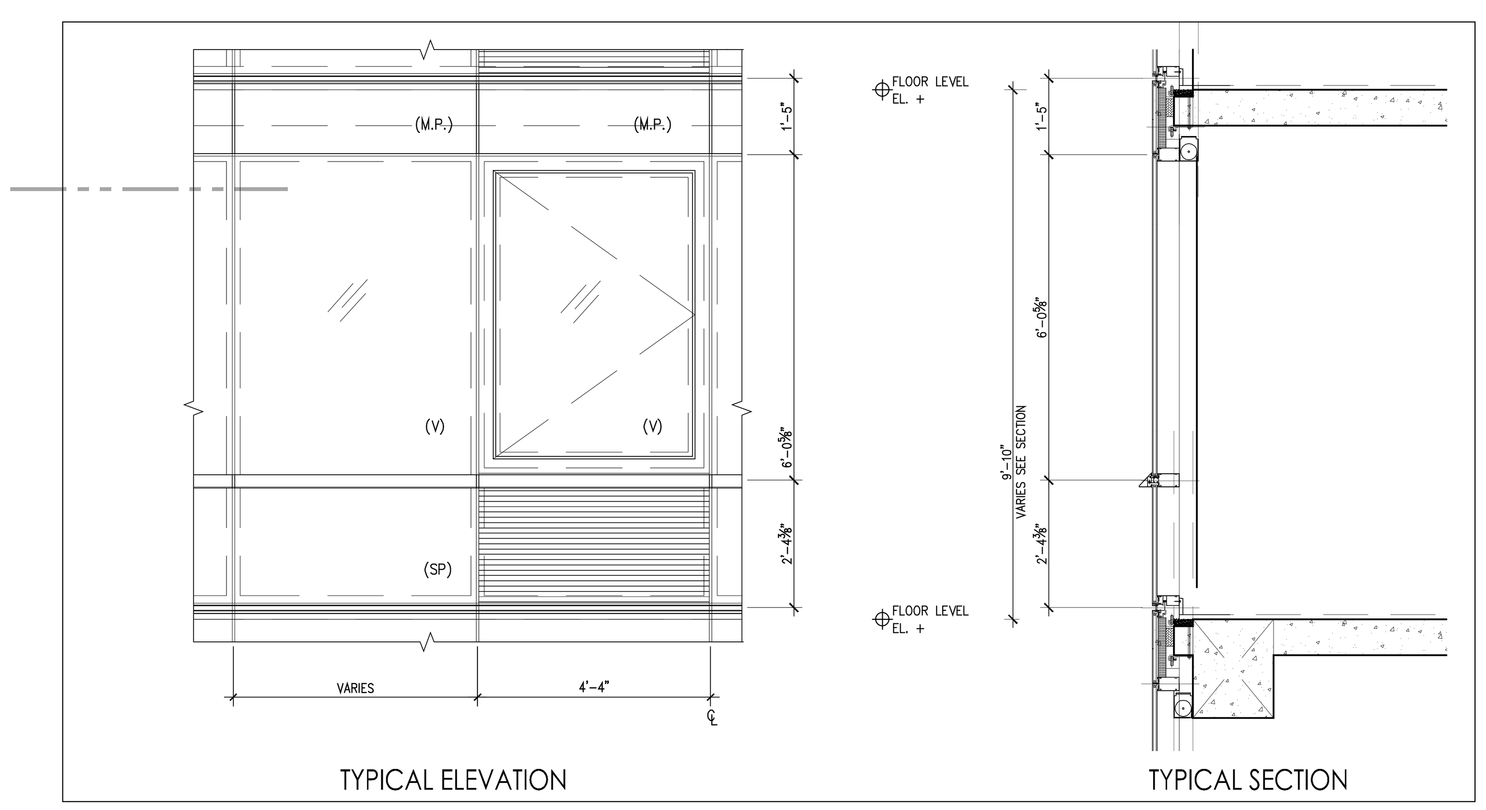
DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-058.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A058_Life Safety

DEPT OF BLDGS 121185760 Job Number ES890608567 Scan Code

DEPT OF BLDGS 121185760 Job Number
ES440888362 Scan Code





TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45-MINUTE SELF-CLOSING DOORS)
- TWO HOUR WALLS (90-MINUTE SELF-CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF-CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R-2
PARKING	S-2
STORAGE	S-2
MECHANICAL	F-2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT-AS PER 2008 NYCBC-1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI-117.1-2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R-2 APARTMENTS A-2 ASSEMBLY A-3 EXERCISE M RETAIL S-2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I-B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I-B — FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON-BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON-BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S-2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A-2	B	B	C	A	A	B
R-2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R-1, R-2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A-2	150-P/250-S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S-2	250	0.2	0.3	0.2	44	20'	100'
A	150-P 250-S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'-0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R-2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R-2	11,385	200	57 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 11,385 SF/ 200 SF = 57 OCC.

DOOR WIDTH REQUIRED: 57 OCC. X .2"/P = 11.4"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 57 OCC. X .3"/P = 17.1"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

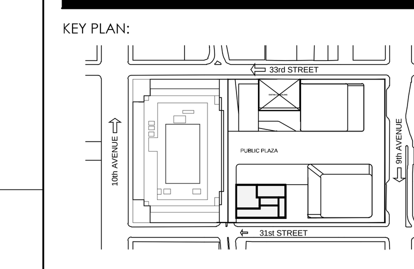
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

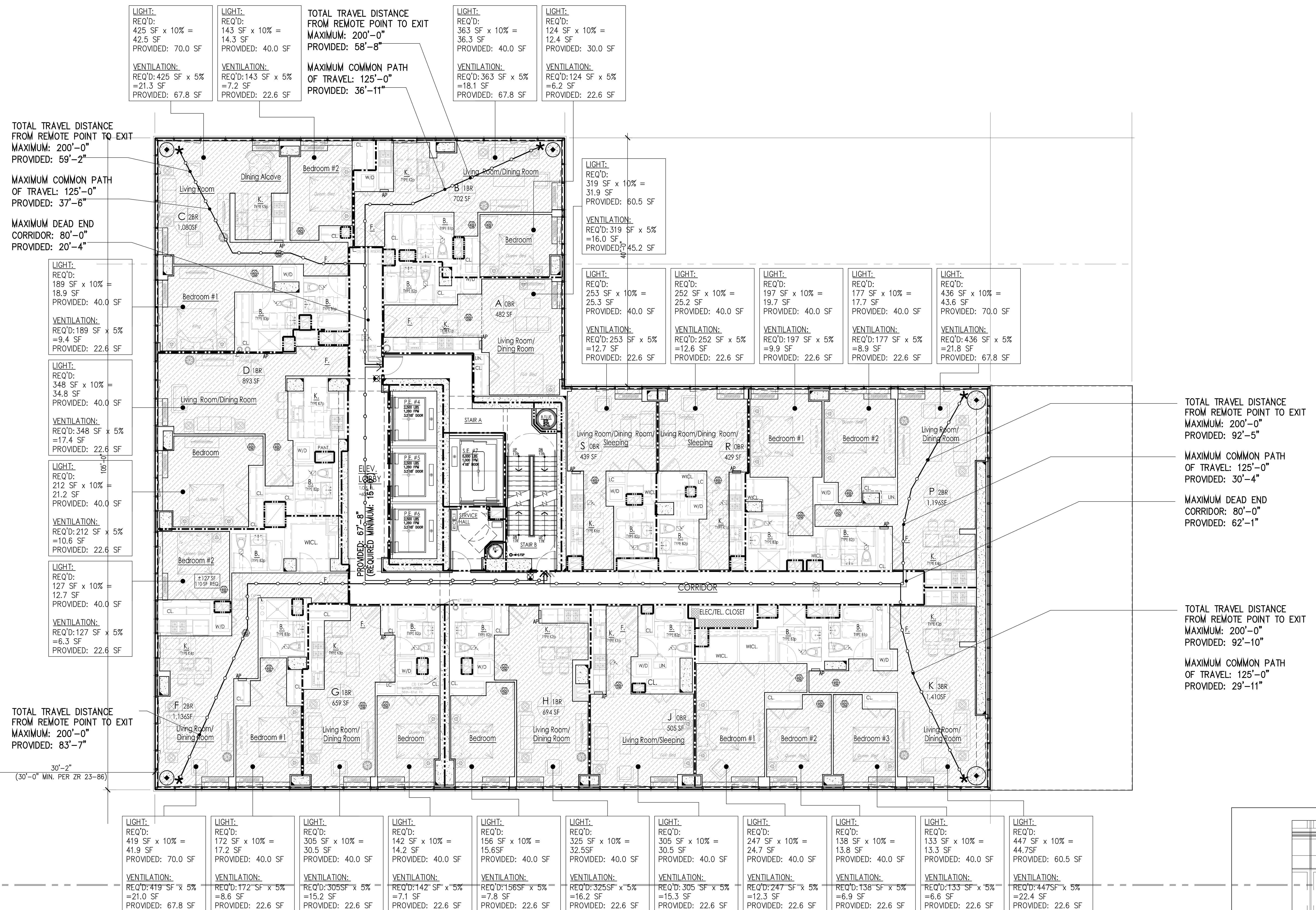
DRAWING TITLE:
52ND THRU 55TH FLOOR
LIFE SAFETY PLAN

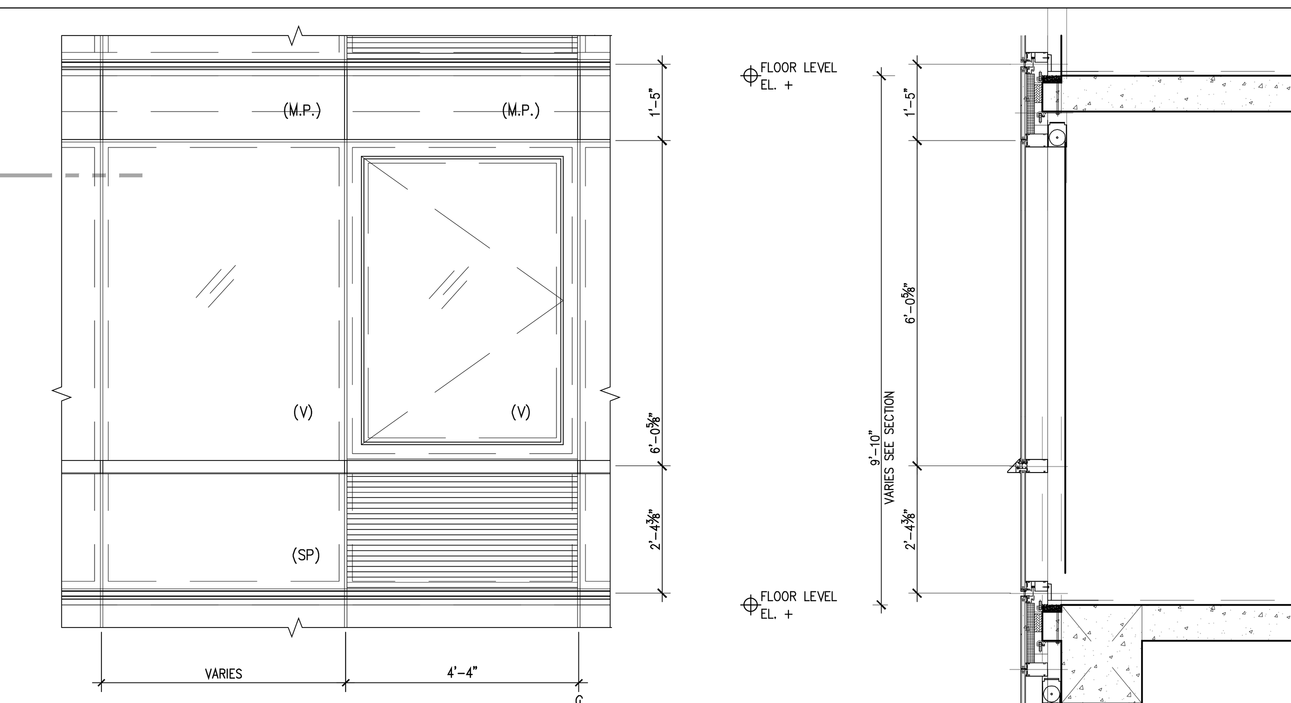
SEAL & SIGNATURE:

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-059.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A059_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES734282207 Scan Code





TYPICAL ELEVATION

TYPICAL SECTION

TYPICAL OPERABLE WINDOWS IN D.U.

LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45–MINUTE SELF–CLOSING DOORS)
- TWO HOUR WALLS (90–MINUTE SELF–CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF–CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R–2
PARKING	S–2
STORAGE	S–2
MECHANICAL	F–2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT–AS PER 2008 NYCBC–1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT; HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI–117.1–2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R–2 APARTMENTS; A–2 ASSEMBLY; A–3 EXERCISE; M RETAIL; S–2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I–B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 TYPE I–B — FIRE–RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON–BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON–BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE–RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S–2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A–2	B	B	C	A	A	B
R–2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH — TABLE 1015.1 EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R–1, R–2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A–2	150–P/250–S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S–2	250	0.2	0.3	0.2	44	20'	100'
A	150–P 250–S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'–0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R–2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL APARTMENTS	R–2	11,385	200	57 persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: 11,385 SF/ 200 SF = 57 OCC.

DOOR WIDTH REQUIRED: 57 OCC. X .2"/P = 11.4"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: 57 OCC. X .3"/P = 17.1"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

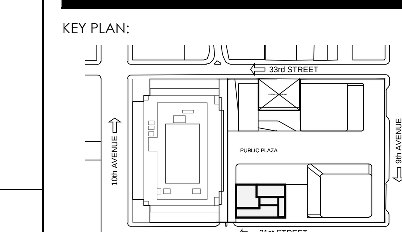
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'- 0" 0' 3 6 12 18

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

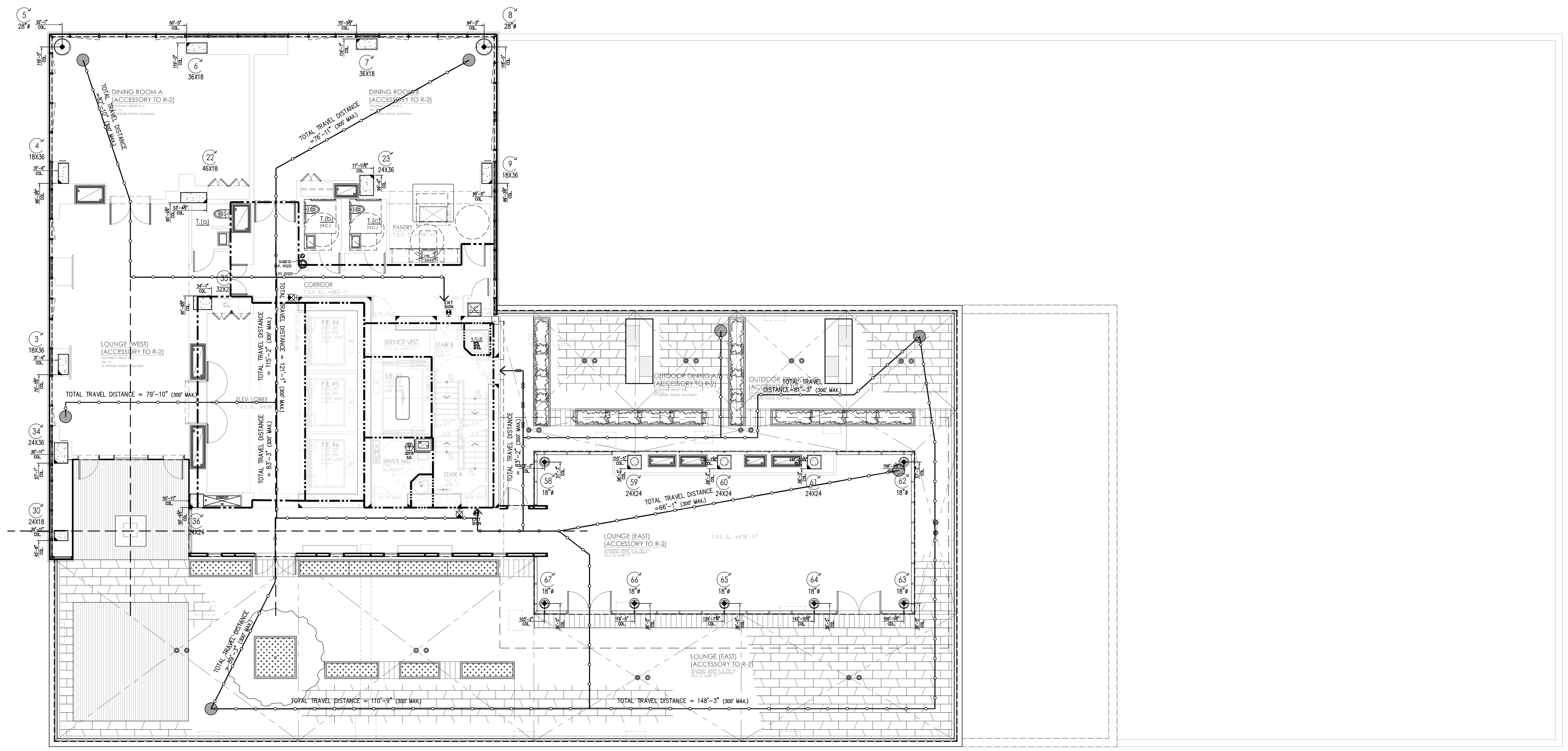
DRAWING TITLE:
56TH THRU 61ST FLOOR
LIFE SAFETY PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-060.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A060_Life Safety

DEPT OF BLDGS 121185760 Job Number
ES004697043 Scan Code



LEGEND

- HABITABLE SPACE
- GENERAL TRAVEL DISTANCE
- COMMON PATH OF TRAVEL
- DEAD END CORRIDOR
- ONE HOUR BEARING WALLS (45–MINUTE SELF–CLOSING DOORS)
- TWO HOUR WALLS (90–MINUTE SELF–CLOSING DOORS)
- THREE HOUR WALLS (3HR SELF–CLOSING DOORS)
- FIRE EXTINGUISHER
- EXIT SIGNS (ARROW INDICATES DIRECTION)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR

RESIDENTIAL
GENERAL NOTES:
1. BUILDING IS FULLY SPRINKLED PER NFPA 13
2. CORRIDOR PARTITIONS ARE REQUIRED TO BE RATED AS SHOWN, BUT ARE CONSTRUCTED AS 2 HOUR ONLY TO MEET THE STC RATING. CONTRACTOR SHALL FOLLOW FLOOR PLAN AND PARTITION TYPES WHEN CONSTRUCTING WALLS.

GENERAL BUILDING DATA

ADDRESS:	405 WEST 31ST STREET NEW YORK, NEW YORK
BLOCK:	729
ZONING DISTRICT:	C64
ZONING MAP:	8d
LOT AREA:	SF
STORIES:	63
CONSTRUCTION:	62 STORIES OF REINFORCED CONCRETE. FOUNDATION SUPPORTED BY PILES

OCCUPANCY CLASS

USE	OCC. CLASS
MERCANTILE	M
RESIDENTIAL	R–2
PARKING	S–2
STORAGE	S–2
MECHANICAL	F–2
BUSINESS	B

OCCUPANT COUNTS

MAX. FLOOR AREA ALLOWANCE PER OCCUPANT–AS PER 2008 NYCBC–1004.1.2

OCCUPANCY	NET FLOOR AREA PER OCCUPANT
HABITABLE ROOM	200 SF
EXERCISE	50 SF
STORAGE ROOMS	30 SF
OFFICES	100 SF
MECHANICAL SPACE	300 SF
RETAIL	30 SF

CODE DATA

BUILDING LIMITATIONS

CATEGORY	CODE SECTION	CRITERIA
1. APPLICABLE BUILDING CODES:		2008 BUILDING CODE OF THE CITY OF NEW YORK
HANDICAP LAWS AND GUIDELINES:		FEDERAL FAIR HOUSING ACT HANDICAP ACCESSIBILITY: AMERICAN NATIONAL STANDARDS INSTITUTE / ANSI–117.1–2003. AMERICANS WITH DISABILITIES ACT – PUBLIC SPACES (LATEST AMENDMENTS)
2. BUILDING OCCUPANCY:	308.2	R–2 APARTMENTS A–2 ASSEMBLY A–3 EXERCISE M RETAIL S–2 STORAGE, MECHANICAL
3. CONSTRUCTION CLASSIFICATION:	TABLE 601	NONCOMBUSTIBLE I–B
4. HEIGHT LIMITATIONS:	TABLE 503	NO LIMIT HEIGHT OR AREA – IB

5. FIRE PROTECTION

TABLE 601 FIRE–RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) TYPE I–B

COLUMNS, GIRDERS, TRUSSES	2 HRS.
BEARING WALLS – EXTERIOR & INTERIOR	2 HRS.
NON–BEARING WALLS & PARTITIONS – EXTERIOR	TABLE 602
NON–BEARING WALLS & PARTITIONS – INTERIOR	0 HRS.
FLOOR CONSTRUCTION – SUPPORTING BEAMS & JOINTS	2 HRS.
ROOF CONSTRUCTION – SUPPORTING BEAMS & JOINTS	1 HR.

BUILDING LIMITATIONS

TABLE 602 FIRE–RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE	TYPE OF CONSTRUCTION	OCCUPANCY GROUP M	OCCUPANCY GROUP B, R, S–2
< 5	ALL	2	1
>= 5 TO < 10	IA	2	1
>= 5 TO < 10	OTHERS	1	1
>= 10 TO < 30	IA, IB	1	1
>= 10 TO < 30	IIB, VB	0	0
>= 10 TO < 30	OTHERS	1	1
>= 30	ALL	0	0

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS

CLASSIFICATION OF OPENING	0 ≤ TO < 3	3≤ TO <5	5≤ TO <10	10≤ TO <15	15≤ TO <20	20≤ TO <25	25 ≤ TO <30	30 ≤
UNPROTECTED	NOT PERMITTED	NOT PERMITTED	10%	15%	25%	45%	70%	NO LIMIT
PROTECTED	NOT PERMITTED	15%	25%	45%	75%	NO LIMIT	NO LIMIT	NO LIMIT

6. SPRINKLERS — FULLY SPRINKLERED FOR ALL FLOORS.

7. INTERIOR FINISH CLASS:

TABLE 803.5 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
A–2	B	B	C	A	A	B
R–2	B	C	C	A	B	B

8. EGRESS REQUIREMENTS (FULLY SPRINKLERED):

TABLE 1005.1 EGRESS WIDTH **TABLE 1015.1** EXIT ACCESS TRAVEL DISTANCE

OCCUPANCY CLASS	TRAVEL DISTANCE (WITH SPRINKLER)	CAPACITY – EGRESS WIDTH FOR OCCUPANTS: DOORS	STAIRS	RAMPS	CORRIDORS: MIN. WIDTH	MAX. DEAD END (1016.3)	COMMON PATH OF TRAVEL (1013.3)
R–1, R–2	200	0.2	0.3	0.2	–	40' (80' WITH 2HR CORR)	125'
A–2	150–P/250–S	0.2	0.3	0.2	44	20'	30' (50') SC
M	200	0.2	0.3	0.2	44	20'	125'
S–2	250	0.2	0.3	0.2	44	20'	100'
A	150–P 250–S	0.2	0.3	0.2	44	20'	30'
B	300	0.2	0.3	0.2	44	20'	75'

CODE

9. LOCATION OF EXITS	1014.2.1	DOOR OPENINGS TO VERTICAL EXITS SHALL BE SPACED NOT MORE THAN ONE THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED. IN R2 WITH SCISSOR STAIRS, DOORS CAN BE SPACED A MINIMUM OF 15'–0" APART.
10. EXIT DOORS	1008.1.1.1	MAX. WIDTH: 48" (PER LEAF) MIN. WIDTH: 32" (SINGLE DOOR)
11. EXIT ACCESS	1013.6	EXIT ACCESS IN R–2 OCCUPANCIES. IN BUILDINGS EXCEEDING THREE STORIES OR MORE IN HEIGHT OR OCCUPIED BY MORE THAN TWO DWELLING UNITS ON ANY STORY, A DOOR FROM A DWELLING UNIT SHALL OPEN INTO AN INTERVENING PUBLIC HALL. SUCH PUBLIC HALL SHALL BE CONSTRUCTED AS A PUBLIC CORRIDOR IN ACCORDANCE WITH SECTION 1016. WHERE TWO OR MORE EXITS ARE REQUIRED.
12. STAIRWAY DOOR	403.12 1008.1.8.7	A DOOR LOCKED FROM THE STAIR SIDE MAY BE PERMITTED PROVIDED THAT SUCH DOOR IS EQUIPPED WITH AN AUTOMATIC FAIL SAFE SYSTEM FOR OPENING IN THE EVENT OF THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION SYSTEM, OR WHEN ANY ELEVATOR RECALL IS ACTIVATED, OR WHEN ANY SIGNAL IS RECEIVED FROM THE FIRE COMMAND CENTER. SUCH DOOR SHALL BE DEEMED AS OPENABLE FROM THE STAIR SIDE.
13. STAIRWAY WIDTH	1205.2.1	NOT LESS THAN 44" WIDE.
14. STAIR PRESSURE/ POST FIRE SMOKE PURGE	912.1 EXCEPTION #1	POST FIRE SMOKE PURGE NOT REQUIRED IN R2 DUE TO: OPERABLE WINDOWS IN COMPLIANCE WITH 912.1(4)(1).
15. ACCESSIBLE MEANS OF EGRESS	1007.2.1 1109.6	(2) ACCESSIBLE MEANS OF EGRESS ARE REQUIRED. BOTH ARE VIA AN ELEVATOR AS PER BC 1007.2.1
16. NATURAL LIGHT	1203.4.1.2	10% OF FLOOR AREA OF THE ROOM. EVERY OPENING PROVIDING NATURAL LIGHT MUST BE A MINIMUM OF 12 SF. OF GLAZED AREA
17. NATURAL VENTILATION HABITABLE SPACES.	1009.1	5% OF FLOOR AREA OF THE HABITABLE SPACE

OCCUPANCY CALCULATIONS

PER TABLE 1004.1.2

USE	CLASS	AREA S.F.	FLR AREA/ OCCUPANT	OCCUPANT LOAD
RESIDENTIAL AMENITY	–	–	–	– persons

* : INCIDENTAL USE AREAS FOR PER TABLE 508.2
** : ACCESSORY PER TABLE 508.3.1

EGRESS CALCULATIONS

PER 1005.1 (DOORS CALCULATED @ 0.2"/OCCUPANT. STAIRS CALCULATED AT 0.3"/OCCUPANT)

TOTAL NO. OF OCCUPANTS: ---- SF/ ---SF = -- OCC.

DOOR WIDTH REQUIRED: -- OCC. X .2"/P = ---"
DOOR WIDTH PROVIDED: (2) 36" = 72", COMPLIES

STAIR WIDTH REQUIRED: -- OCC. X .3"/P = ---"
STAIR WIDTH PROVIDED:
STAIR A = 44" WIDE STAIRS
STAIR B = 44" WIDE STAIRS

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects, LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

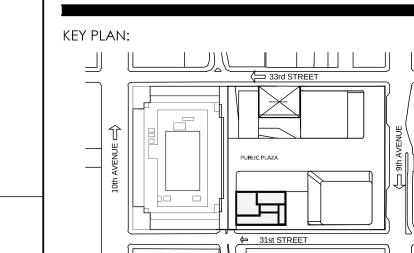
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'- 0" (0' 3 6 12 18)

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

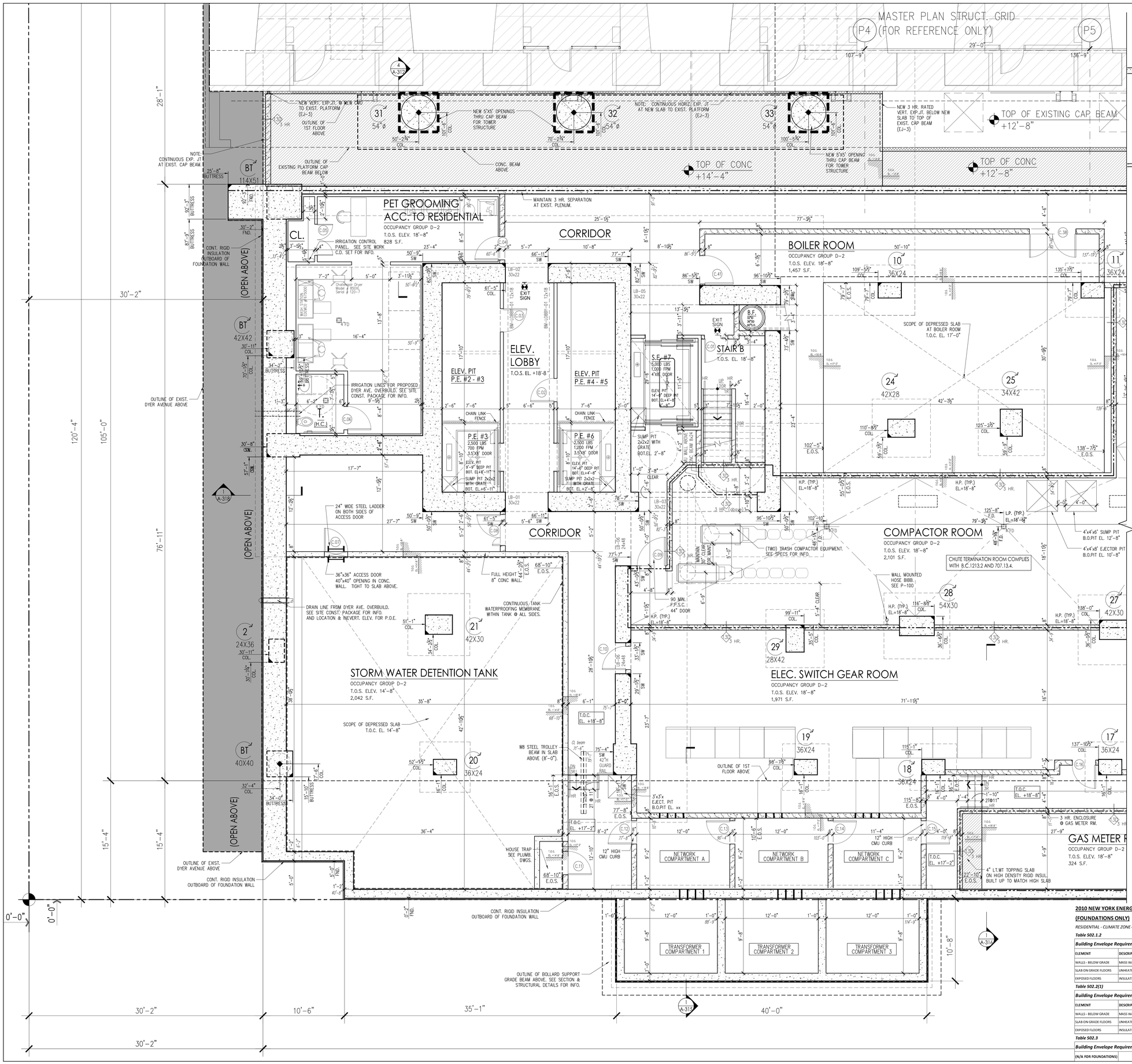
DRAWING TITLE:
62ND FLOOR / MAIN ROOF
LIFE SAFETY PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT LUIGI PIO ROSSO No. 020741 STATE OF NEW YORK

DATE:	11/25/13
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-061.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Life Safety\BMW_A061_Life Safety

DEPT OF BLDGS 121185760 Job Number
E395487054S Scan Code



2010 NEW YORK ENERGY CONSERVATION CONSTRUCTION CODE (NYECCC)

(FOUNDATIONS ONLY)

RESIDENTIAL - CLIMATE ZONE 4A

Table 502.1.2

Building Envelope Requirements - Opaque Elements, Maximum U-Factors (C and F Values)

ELEMENT	DESCRIPTION	Maximum U-Value	Proposed U-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	C-1.14	C-1.14
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	Equivalent F-0.73	Equivalent F-0.73
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	U-0.074	U-0.042

Table 502.2(1)

Building Envelope Requirements - Opaque Elements, R-Values

ELEMENT	DESCRIPTION	R-Value	Proposed R-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	R-10.4	R-10.95
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	R-10.4	R-10.95
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	R-10.4ci	R-20

Table 502.3

Building Envelope Requirements - Fenestration

(N/A FOR FOUNDATIONS)	

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5654
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

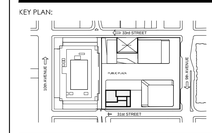
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
3	2014-10-22	BULLETIN #2
2	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

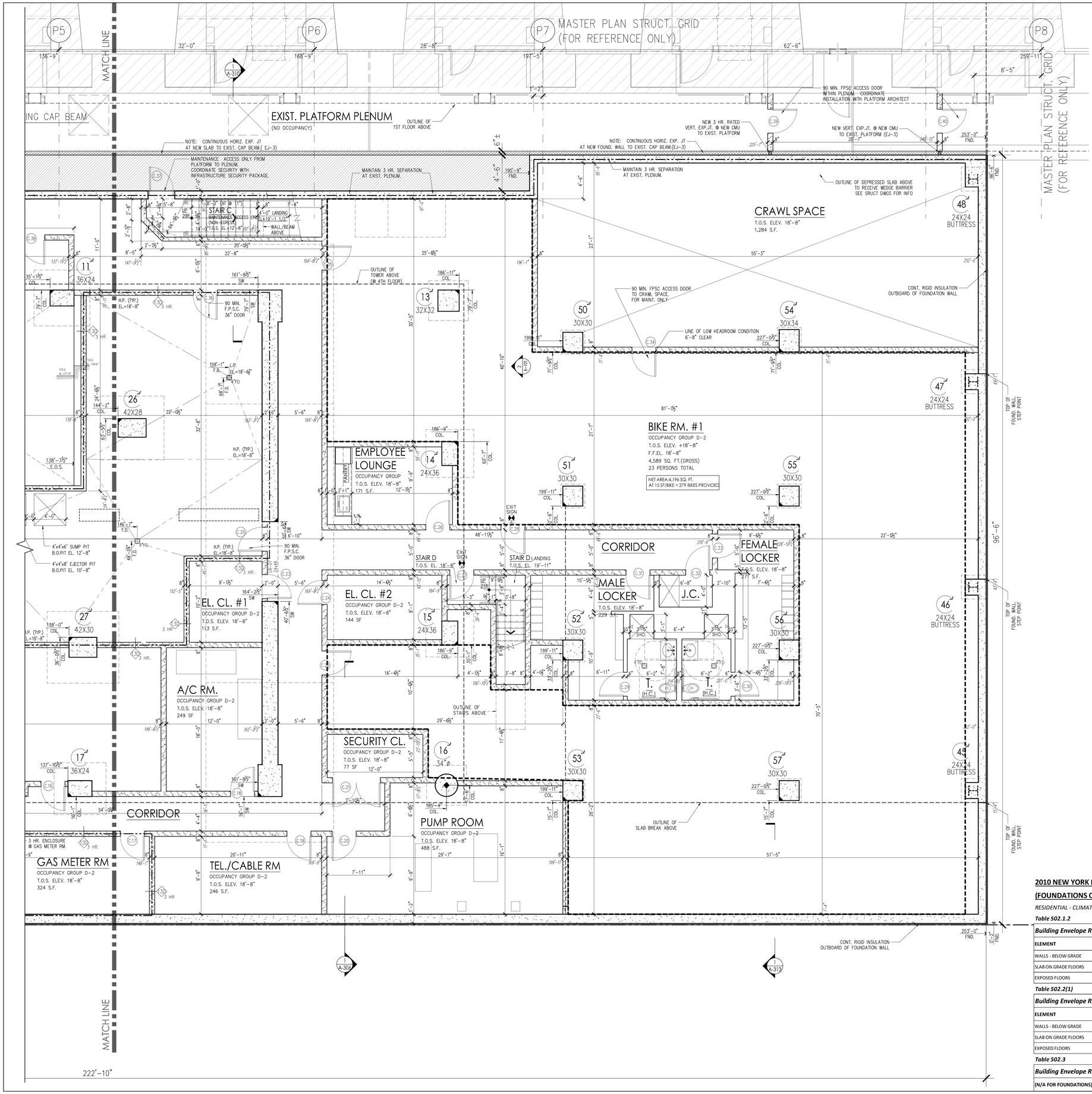
PARTIAL CELLAR FLOOR PLAN (WEST)

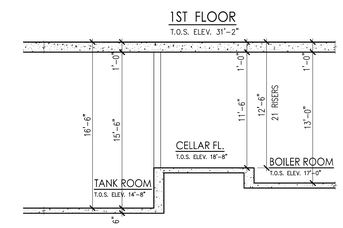
SEAL & SIGNATURE:

REGISTERED ARCHITECT JOHN C. HOHN STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
DRAWING No:	A-100.00
SHEET. No.:	1 of 000

FILE No: *Y:\brookfield-Manhattan-West (2012-32)\LCE Drawings\BMW_A-100_Cellar DOB NO 3.DWG*





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

EXPANSION JOINT SCHEDULE:
(AT EXISTING ADJACENT CONSTRUCTION)

- EJ-1: 3" total movement, 3 hour fire rating required.
- EJ-2: 6" total movement, 3 hour fire rating required with metal cover plate.
- EJ-3: 2" total movement, 3 hour fire rating required with metal cover plate.

2010 NEW YORK ENERGY CONSERVATION CONSTRUCTION CODE (NYECCC)

(FOUNDATIONS ONLY)

RESIDENTIAL - CLIMATE ZONE 4A

Table 502.1.2

Building Envelope Requirements - Opaque Elements, Maximum U-Factors (C and F Values)

ELEMENT	DESCRIPTION	Maximum U-Value	Proposed U-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	C-1.14	C-1.14
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	Equivalent F-0.73	Equivalent F-0.73
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	U-0.074	U-0.042

Table 502.2(1)

Building Envelope Requirements - Opaque Elements, R-Values

ELEMENT	DESCRIPTION	R-Value	Proposed R-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	R-10.4	R-10.95
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	R-10.4	R-10.95
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	R-10.4ci	R-20

Table 502.3

Building Envelope Requirements - Fenestration

(N/A FOR FOUNDATIONS)			

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

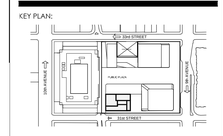
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-22	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL CELLAR FLOOR PLAN (EAST)

SEAL & SIGNATURE:

DATE: -
PROJECT No: 2012-32
DRAWN BY: Z.J.K.
CHECKED BY: T.J.F.

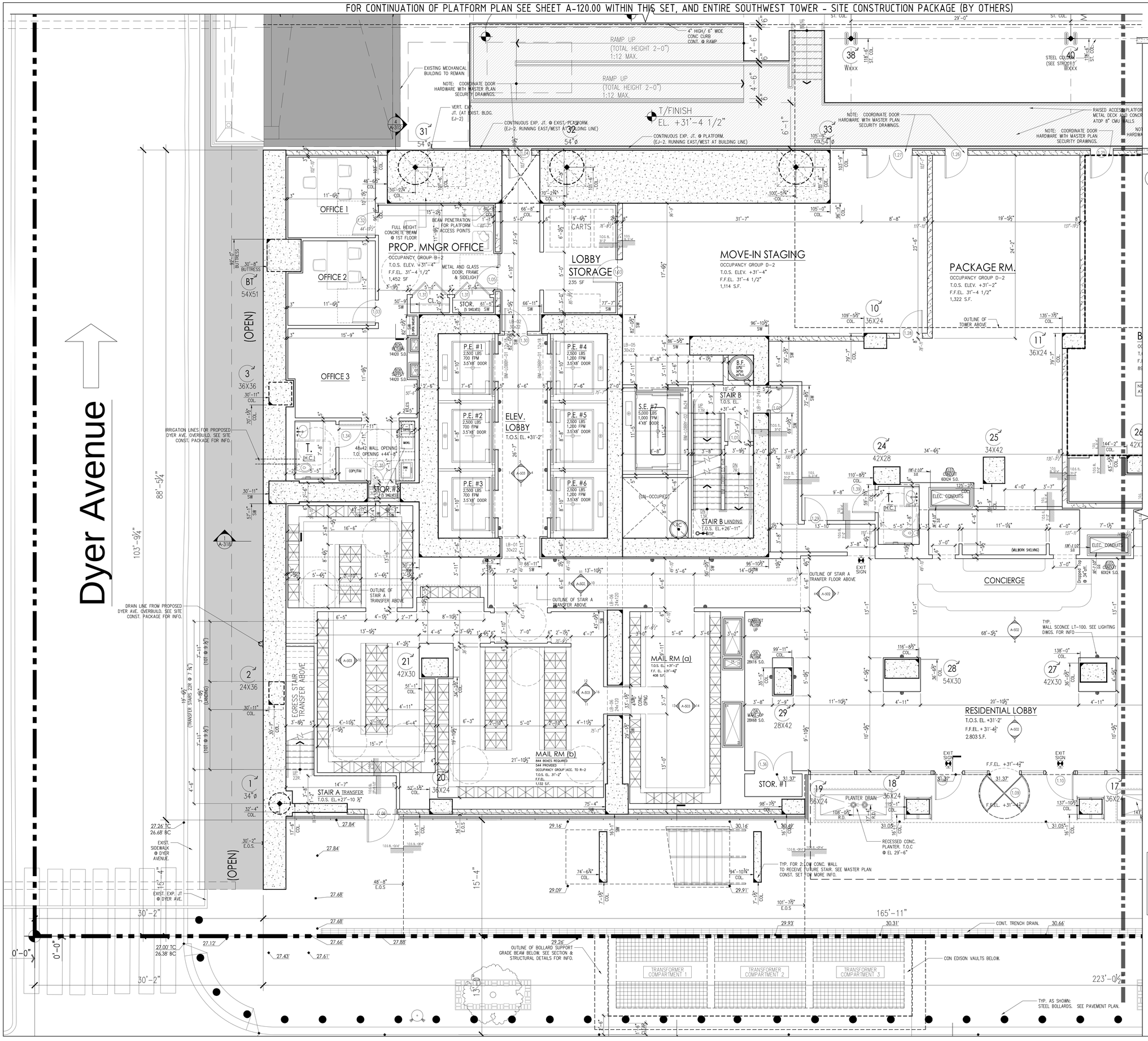
A-101.00

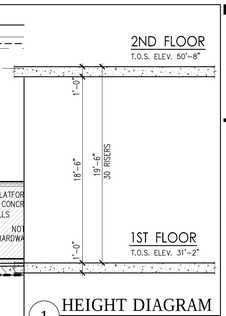
SHEET, No.: 1 of 000

FILE No: Y:\Brookfield\Manhattan-West\2012-32\LCE-Drawings\BMW_A-100_Cellar DOB NO BFS

DEPT OF BLDGS 121185760 Job Number
E351550929 Scan Code

FOR CONTINUATION OF PLATFORM PLAN SEE SHEET A-120.00 WITHIN THIS SET, AND ENTIRE SOUTHWEST TOWER - SITE CONSTRUCTION PACKAGE (BY OTHERS)





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

EXPANSION JOINT SCHEDULE:
(AT EXISTING ADJACENT CONSTRUCTION)
EJ-1: 3" total movement, 3 hour fire rating required.
EJ-2: 6" total movement, 3 hour fire rating required with metal cover plate.
EJ-3: 2" total movement, 3 hour fire rating required with metal cover plate.

SECURITY REQUIREMENTS FOR DOORS & WINDOWS:
1008.4.1 ALL MAIN ENTRANCE & EXTERIOR DOORS TO COMPLY (HARDWARE SECURITY AND ILLUMINATION LEVELS).
1008.4.2 ALL RESIDENTIAL UNIT ENTRY DOORS TO COMPLY (HARDWARE SECURITY AND VIEWING DEVICE).
1008.4.3 ALL OPERABLE WINDOWS SHALL COMPLY (SASH LOCKS).
1008.4.4 BUILDING SHALL BE PROVIDED WITH INTERCOM SYSTEM BETWEEN EACH DWELLING UNIT AND FULL TIME ATTENDANTS STATION.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-22	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-14	ISSUED FOR BID

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0"

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

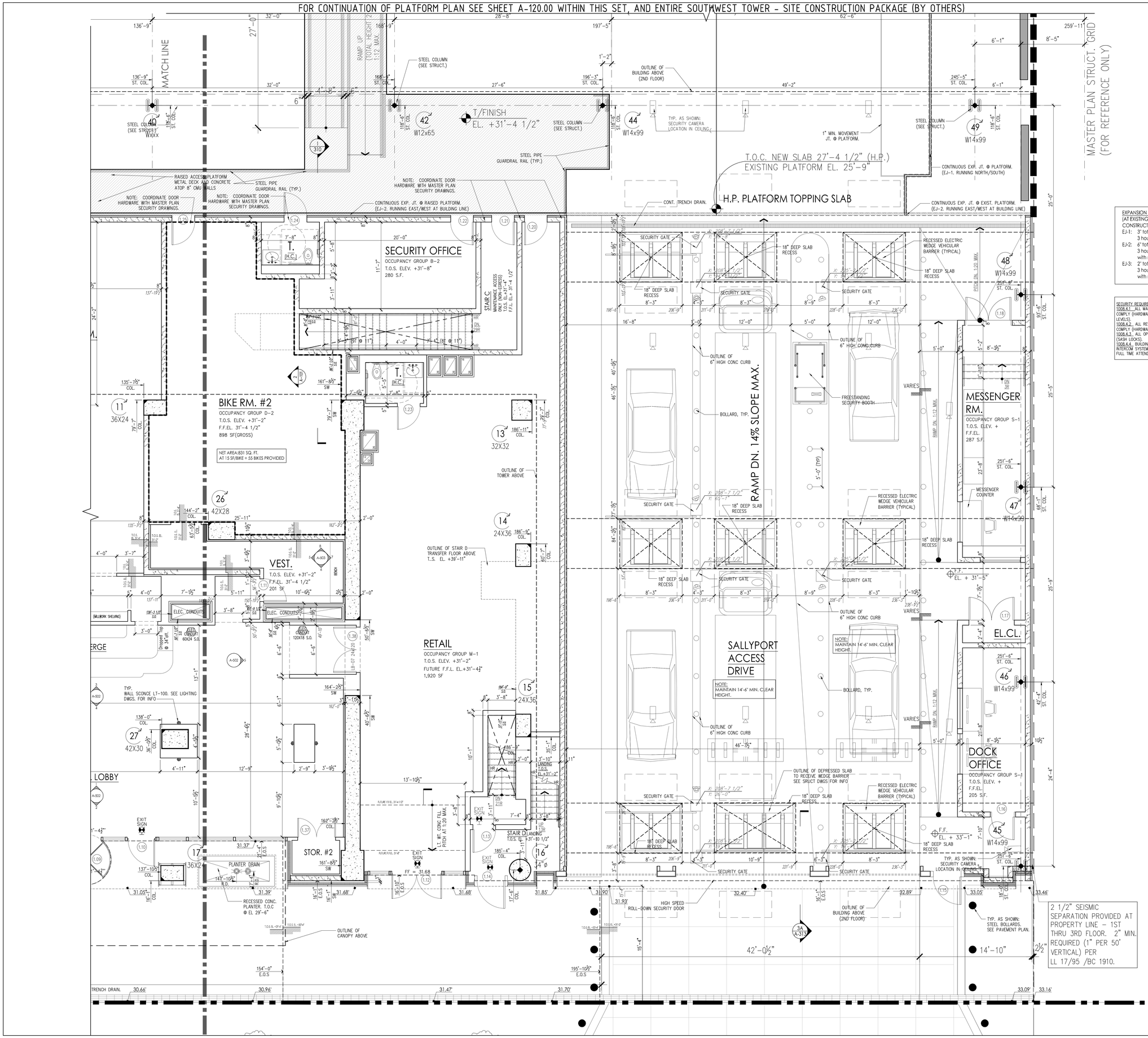
DRAWING TITLE:
PARTIAL 1ST FLOOR PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
DRAWING No:	A-102.00
SHEET: No.:	1 of 000

FILE No: T:\Boos\Bdsk\Manhattan-West (2012-32)\CD\Drawings\BAR\A_102_01R.DOB NO PARKING

DEPT OF BLDGS 121185760 Job Number
E3254665295 Scan Code



EXPANSION JOINT SCHEDULE:
(AT EXISTING ADJACENT CONSTRUCTION)
EJ-1: 3" total movement, 3 hour fire rating required.
EJ-2: 6" total movement, 3 hour fire rating required with metal cover plate.
EJ-3: 2" total movement, 3 hour fire rating required with metal cover plate.

SECURITY REQUIREMENTS FOR DOORS & WINDOWS:
1008.4.1 ALL MAIN ENTRANCE & EXTERIOR DOORS TO COMPLY (HARDWARE SECURITY AND ILLUMINATION LEVELS).
1008.4.2 ALL RESIDENTIAL UNIT ENTRY DOORS TO COMPLY (HARDWARE SECURITY AND VIEWING DEVICE).
1008.4.3 ALL OPERABLE WINDOWS SHALL COMPLY (SASH LOCKS).
1008.4.4 BUILDING SHALL BE PROVIDED WITH INTERCOM SYSTEM BETWEEN EACH DWELLING UNIT AND FULL TIME ATTENDANTS STATION.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-22	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL 1ST FLOOR PLAN (EAST)

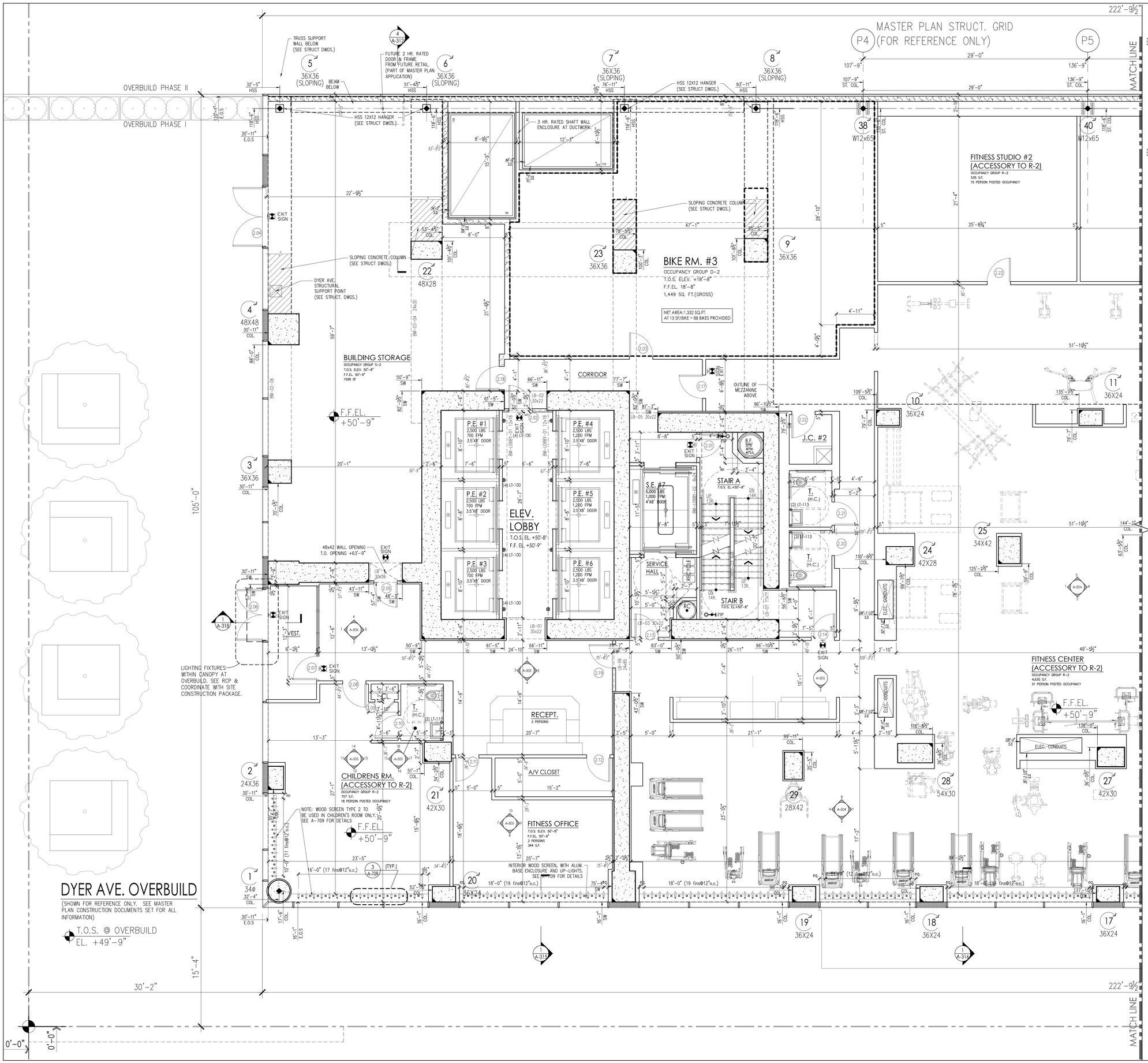
SEAL & SIGNATURE:
REGISTERED ARCHITECT TIMOTHY J. JOHNSON STATE OF NEW YORK

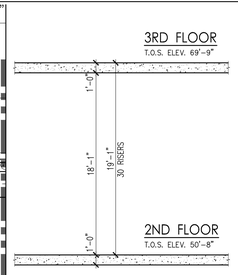
DATE: -
PROJECT No: 2012-32
DRAWN BY: Z.J.R.
CHECKED BY: T.J.F.

A-103.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BMW_A-103_EVFL DOB NO PARKING

DEPT OF BLDGS 121185760 Job Number
E3545650518 Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

2	2014-10-23	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR PLANG
	DATE:	REVISION:

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL 2ND FLOOR PLAN (WEST)

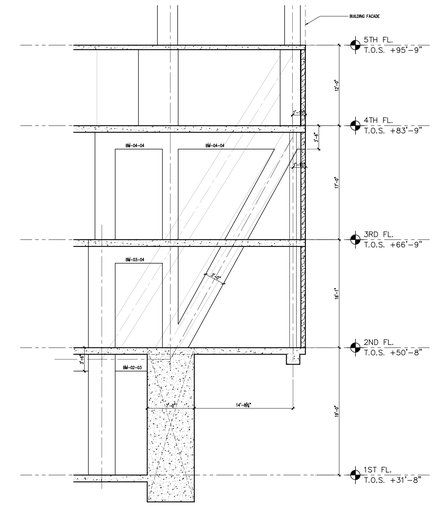
SEAL & SIGNATURE:
REED ARCHITECTS P.C. STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

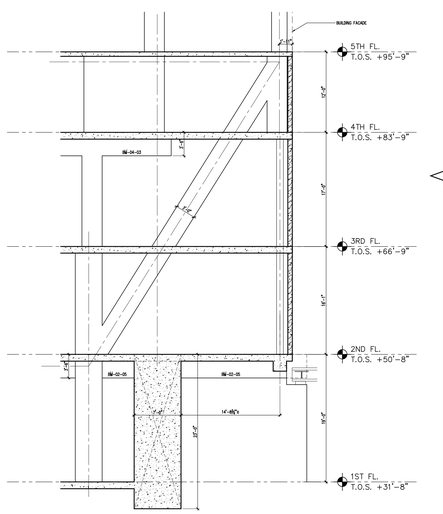
DRAWING No:
A-104.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BAR\A-104.DWG DOB with Stamp

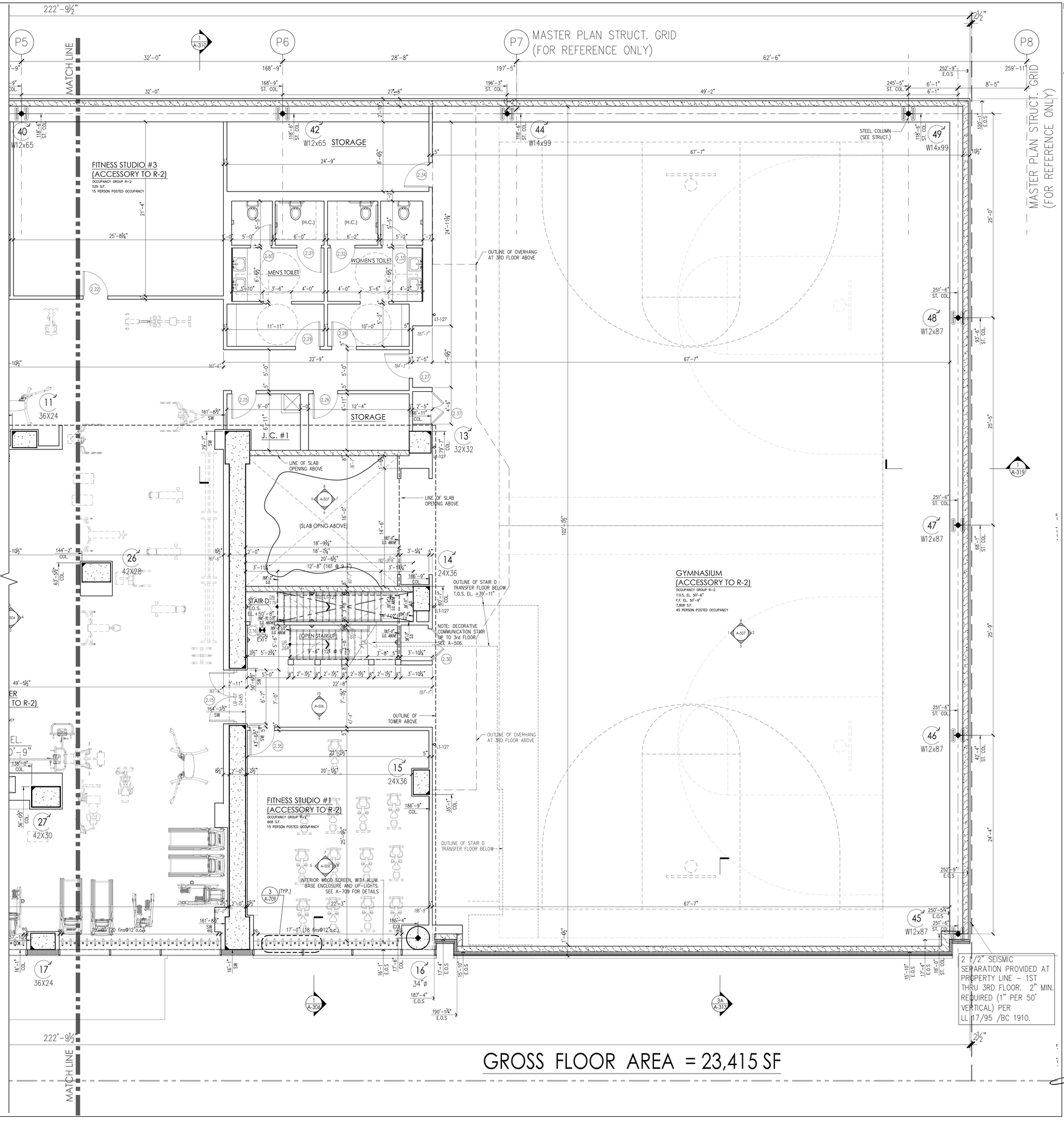
DEPT OF BLDGS 121185760 Job Number
E302025708F2 Scan Code



A PARTIAL SECTION
SCALE: 1/8" = 1'-0"



B PARTIAL SECTION
SCALE: 1/8" = 1'-0"



GROSS FLOOR AREA = 23,415 SF

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

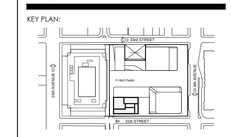
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
3	2014-10-23	BULLETIN #2
2	2014-10-09	BULLETIN #1
1	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0 2 4 6 10'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL 2ND FLOOR PLAN (EAST)

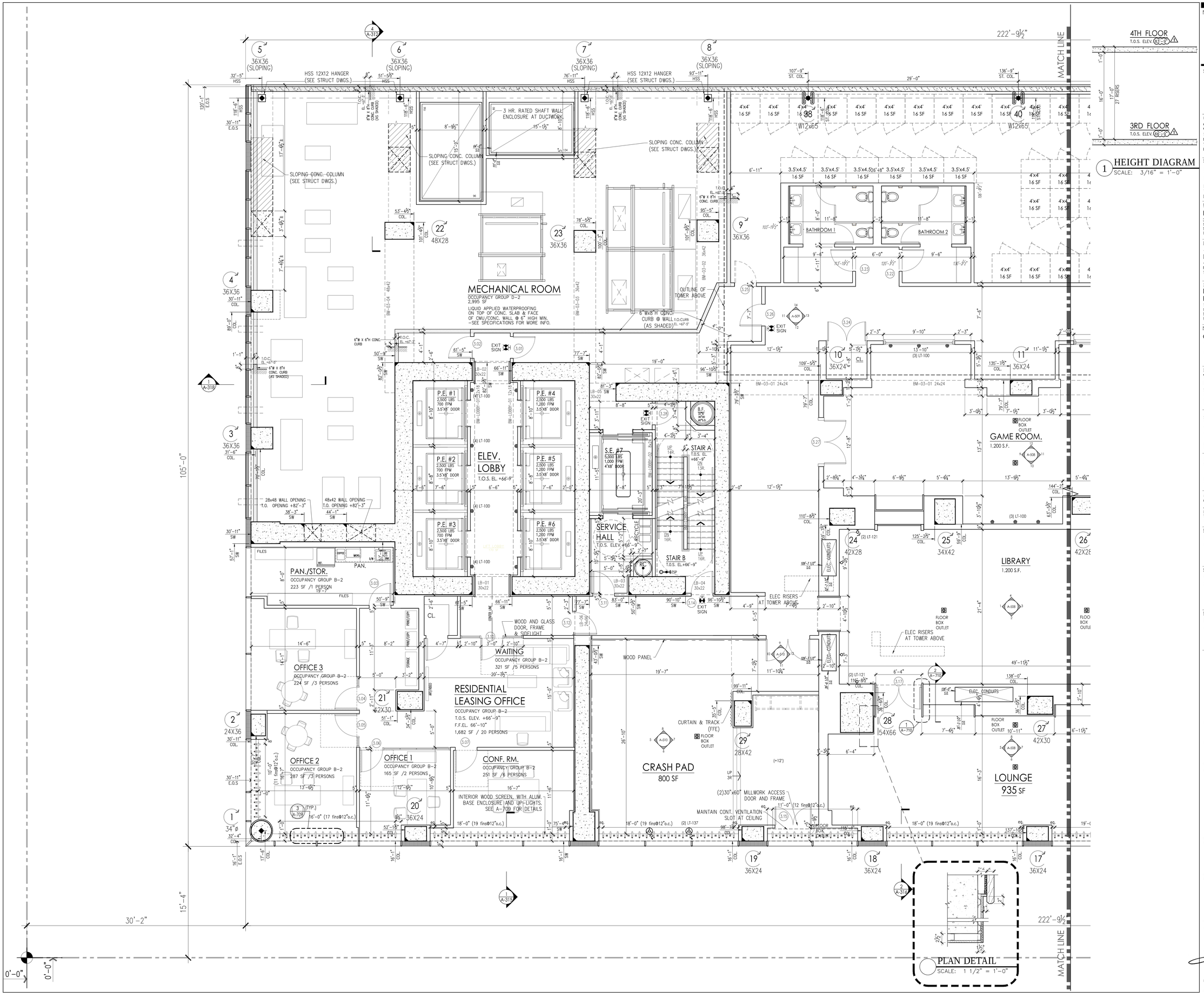
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
SCALE:	1/8" = 1'-0"

A-105.00
SHEET, No.: 1 of 000

FILE No: Y:\Projects\Manhattan West 2012-32\SLCE\Drawings\BMR_A-1A_DR1.DGN with Sheet

DEPT OF BLDGS 121185760 Job Number
E300961460560 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

O.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0"

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

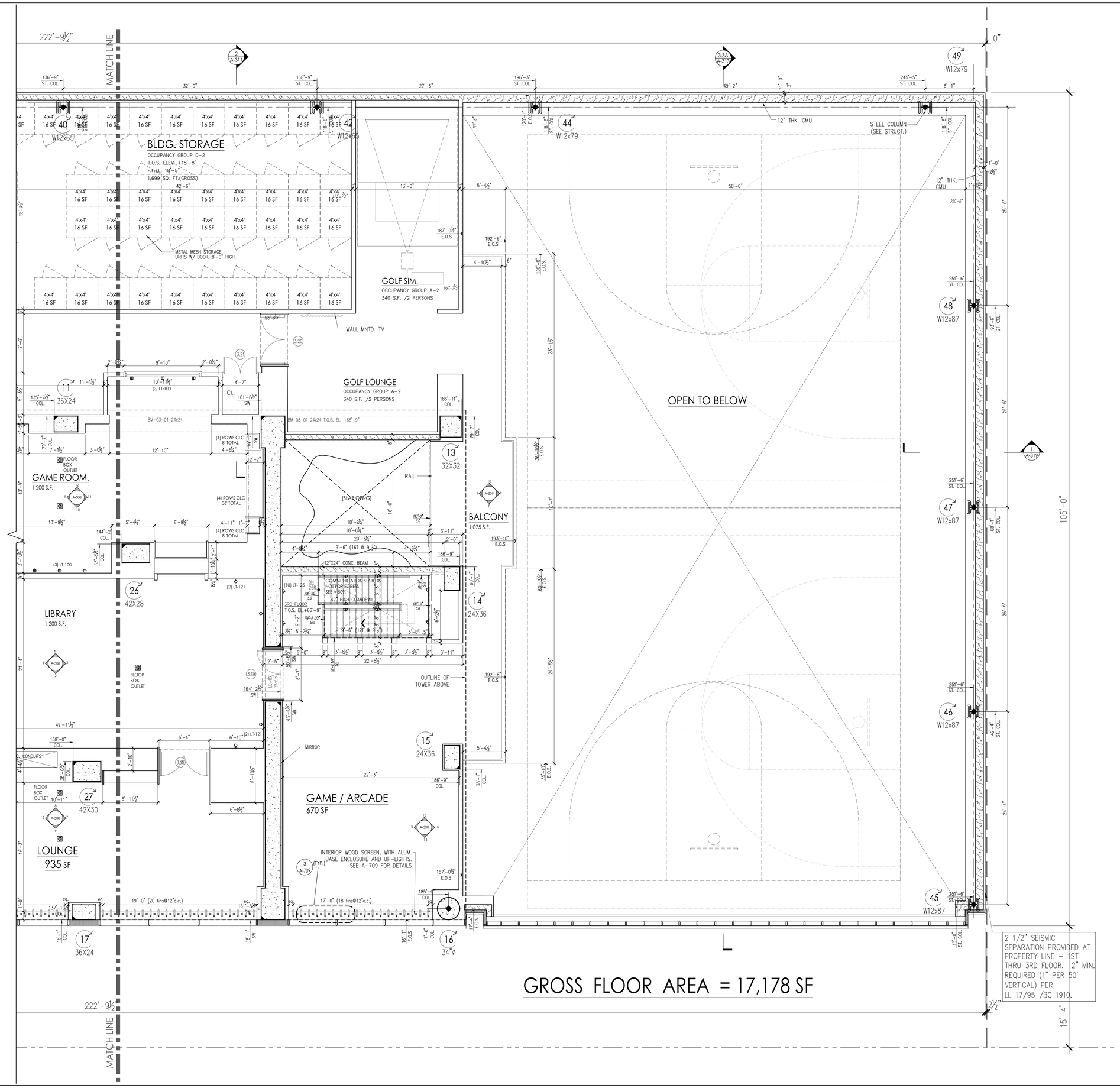
PARTIAL 3RD FLOOR PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
SHEET No.:	A-106.00
SHEET: No.:	1 of 000

FILE No: T:\Brook\Bdk\Manhattan-West (2012-32)\SCE\Drawings\B4W_A-106_03RL.dwg

DEPT OF BLDGS 121185760 Job Number
E385054276E Scan Code



GROSS FLOOR AREA = 17,178 SF

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

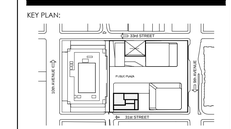
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PARTIAL 3RD FLOOR PLAN (EAST)

SEAL & SIGNATURE:

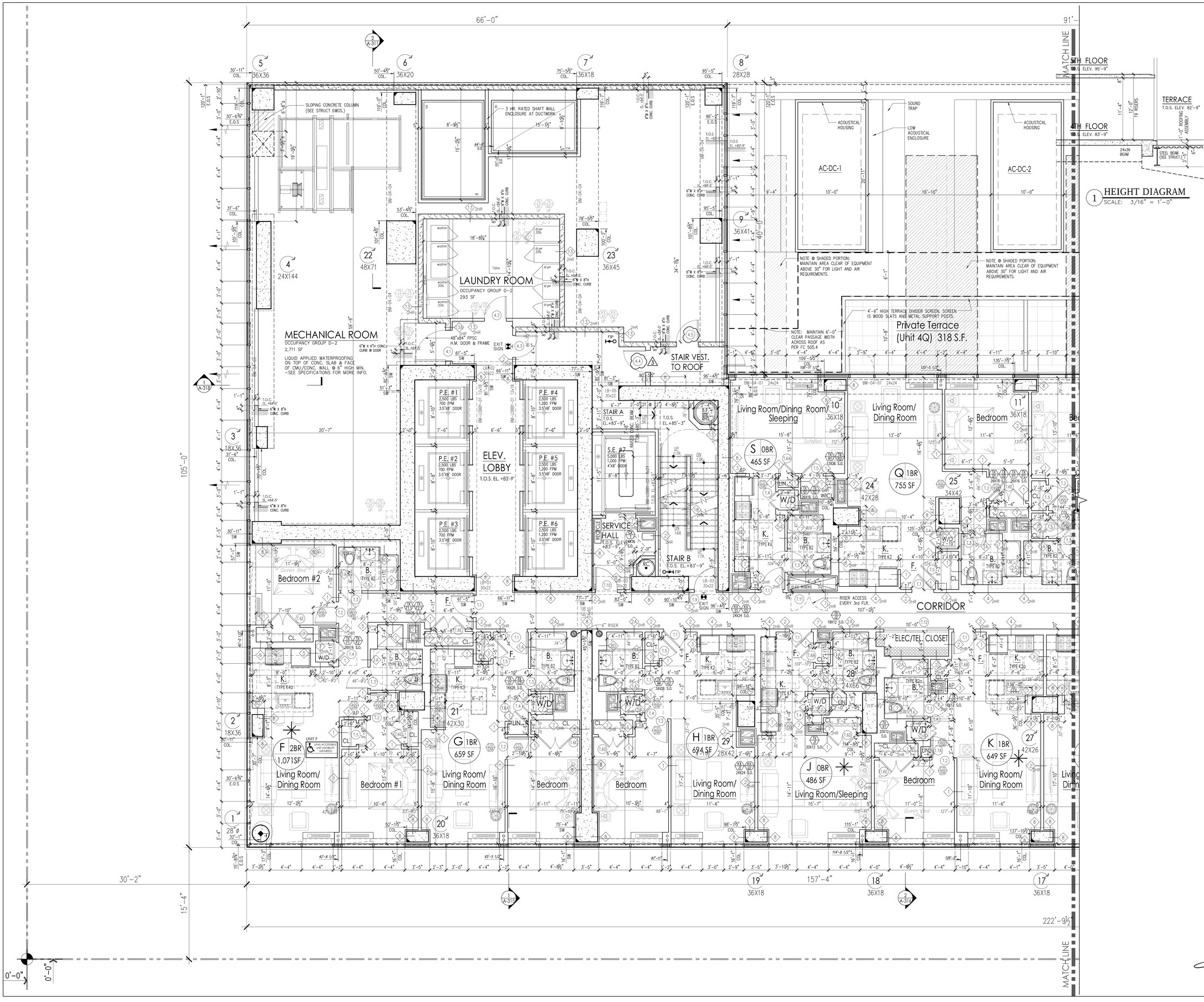
REGISTERED ARCHITECT T. J. FERRI STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

DRAWING No.: A-107.00
SHEET No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BMW_A-106_03RL.dwg

DEPT OF BLDGS 121185760 Job Number
E2014050203M0 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0 2 4 6 10'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

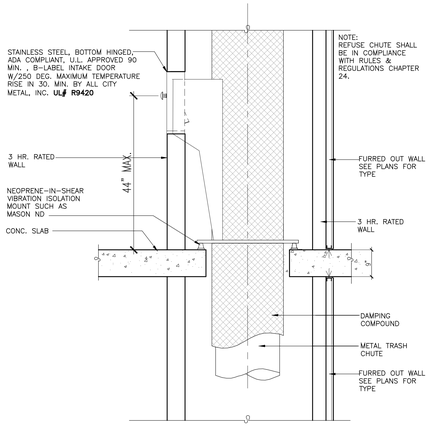
DRAWING TITLE:
PARTIAL 4TH FLOOR PLAN (WEST)

SEAL & SIGNATURE:

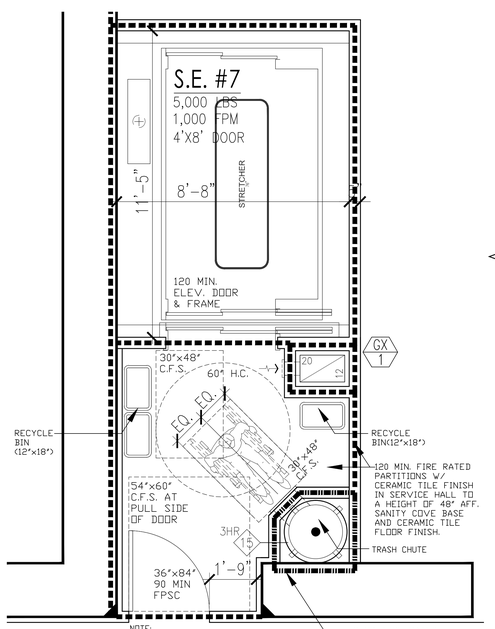
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DRAWING NO:	A-108.00
SHEET, No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawing\1BMW_A108_04R.dwg

DEPT OF BLDGS 121185760 Job Number
E362505726 Scan Code



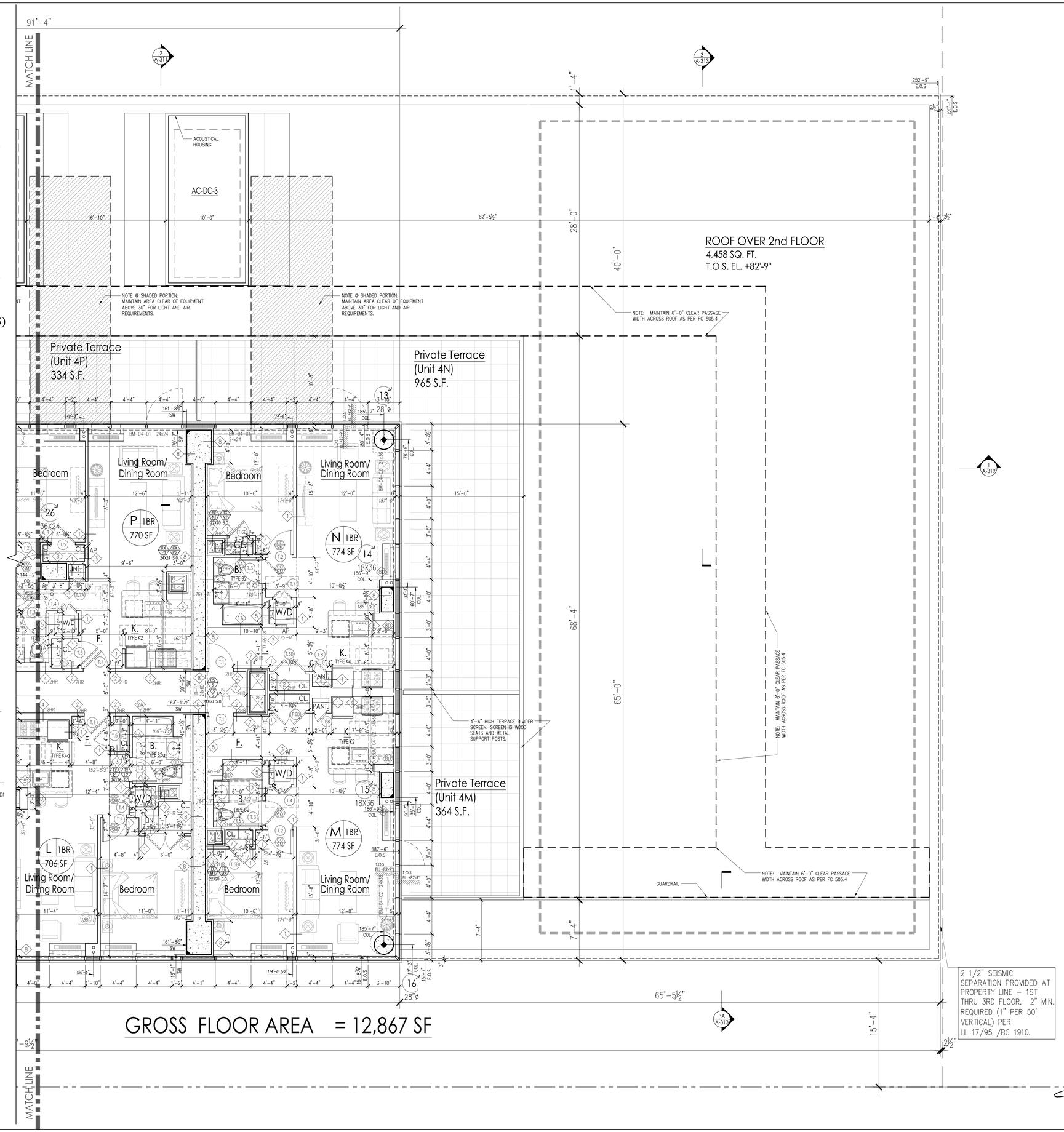
2 REFUSE CHUTE ACCESS DETAIL (ALL FLOORS)
SCALE: 3/4" = 1'-0"



NOTE:
HEIGHT OF TRASH CHUTE ACCESS HOPPER DOOR TO COMPLY WITH ANSI A117.1-2003 (308) FOR FORWARD REACH. AND (309) FOR OPERABLE PARTS.

GENERAL NOTES:
- REFUSE CHUTE PROVIDED PER 1213.3. WITH 2HR ENCLOSURE AND OPENINGS PROTECTED PER 707.12 AND 715.
- SERVICE HALL COMPLIES WITH BC 1213.1. AND 707.13.3. (2 HR PARTITIONS WITH SELF CLOSING OPENING PROTECTIVE OF 90 MINS.)
- CHUTE TERMINATION ROOM COMPLIES WITH 707.13. SEE CELLAR PLAN.
- ADA HOPPER DOOR PROVIDED: UL#R9420

1 SERVICE HALL DETAILED PLAN (ALL FLOORS)
SCALE: 1/2" = 1'-0"



GROSS FLOOR AREA = 12,867 SF

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
3	2014-10-23	BULLETIN #2
1 2	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	30% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'- 0"
0' 2' 4' 6' 10'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

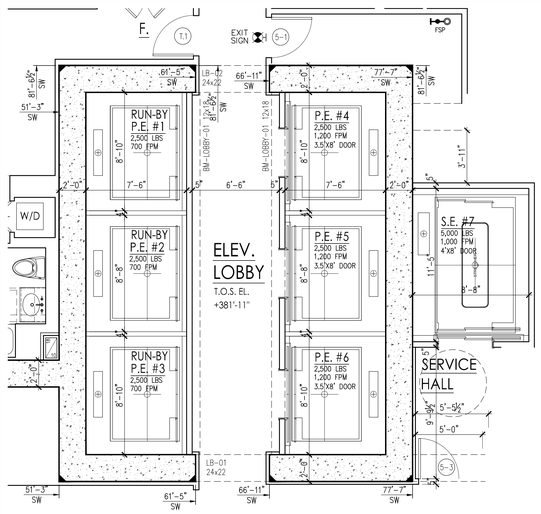
DRAWING TITLE:
PARTIAL 4TH FLOOR PLAN (EAST)

SEAL & SIGNATURE:

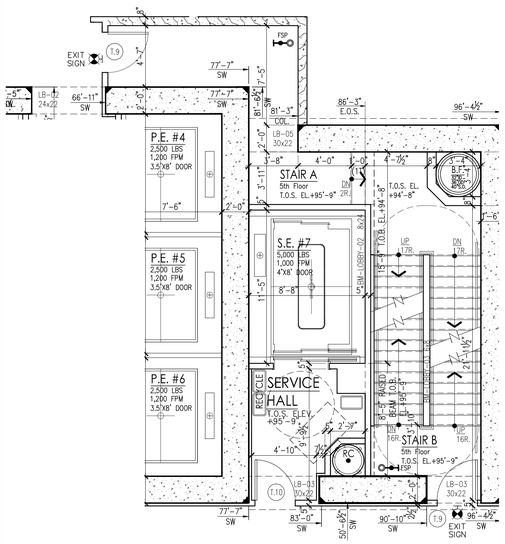
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

A-109.00
SHEET. NO.: 1 of 000

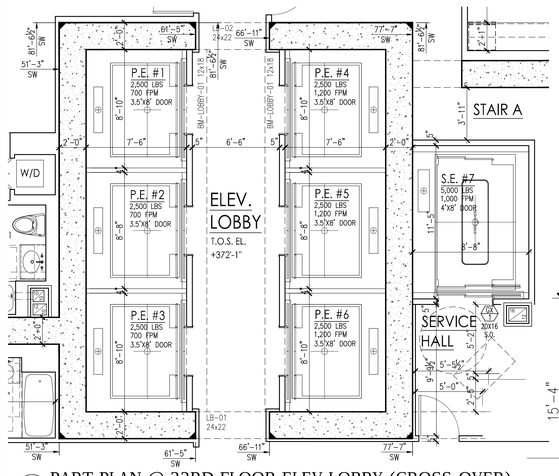
FILE No: T:\bookfiles\Manhattan-West\2012-32\SLCE\Drawing\BldA\A109_5-8\L.dwg



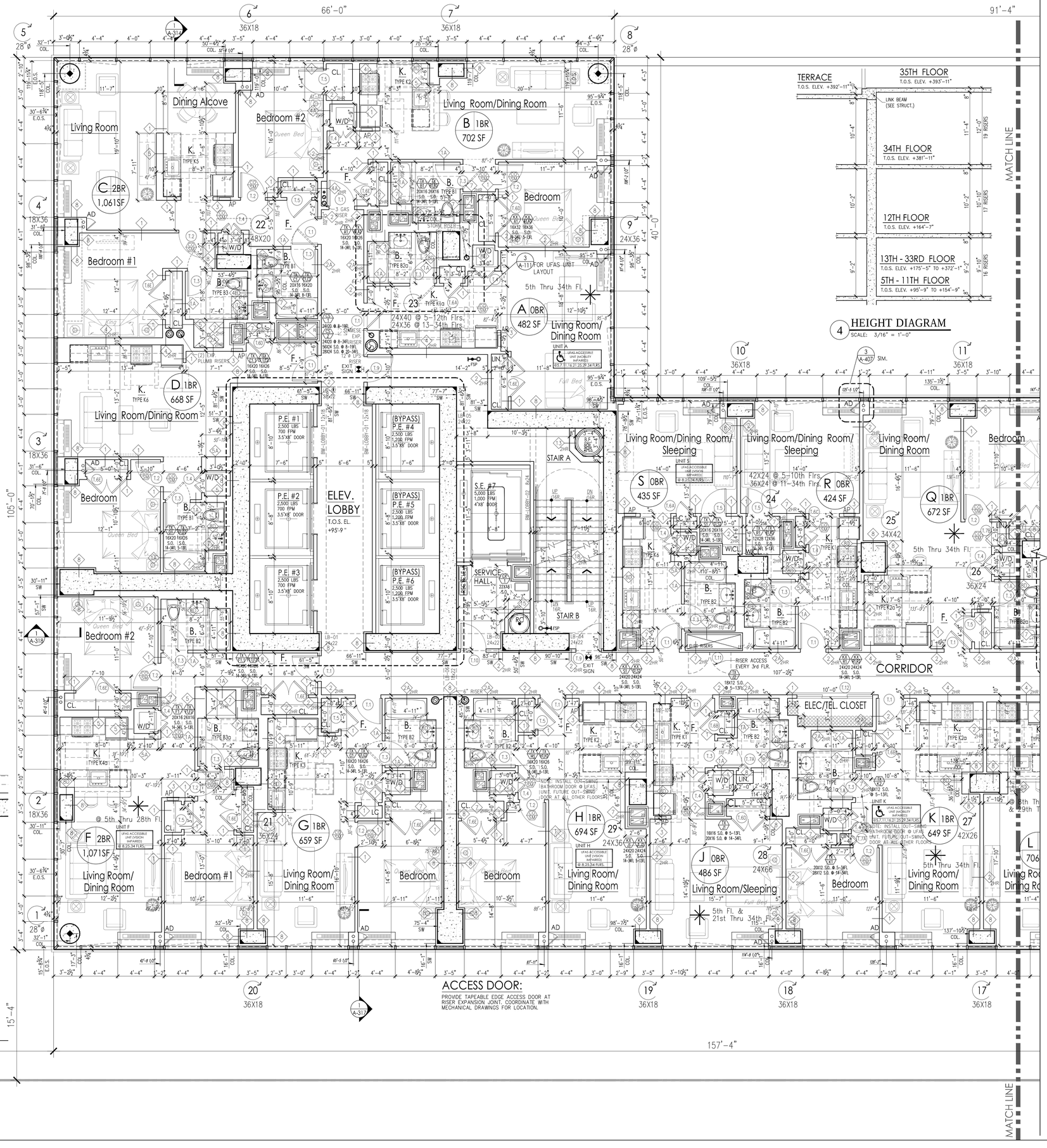
1 PART PLAN @ 34TH FLOOR ELEV. LOBBY
SCALE: 1/4" = 1'-0"



2 PART PLAN @ 5th Floor (STAIR A & B)
SCALE: 1/4" = 1'-0"



3 PART PLAN @ 33RD FLOOR ELEV LOBBY (CROSS-OVER)
SCALE: 1/4" = 1'-0"



ACCESS DOOR:
PROVIDE TAPEABLE EDGE ACCESS DOOR AT RISER EXPANSION JOINT. COORDINATE WITH MECHANICAL DRAWINGS FOR LOCATION.

4 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY, 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

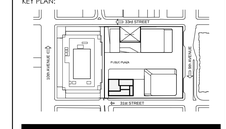
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-03-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0' 2' 4' 6' 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL 5TH THRU 34TH FLOOR PLAN (WEST)

SEAL & SIGNATURE:

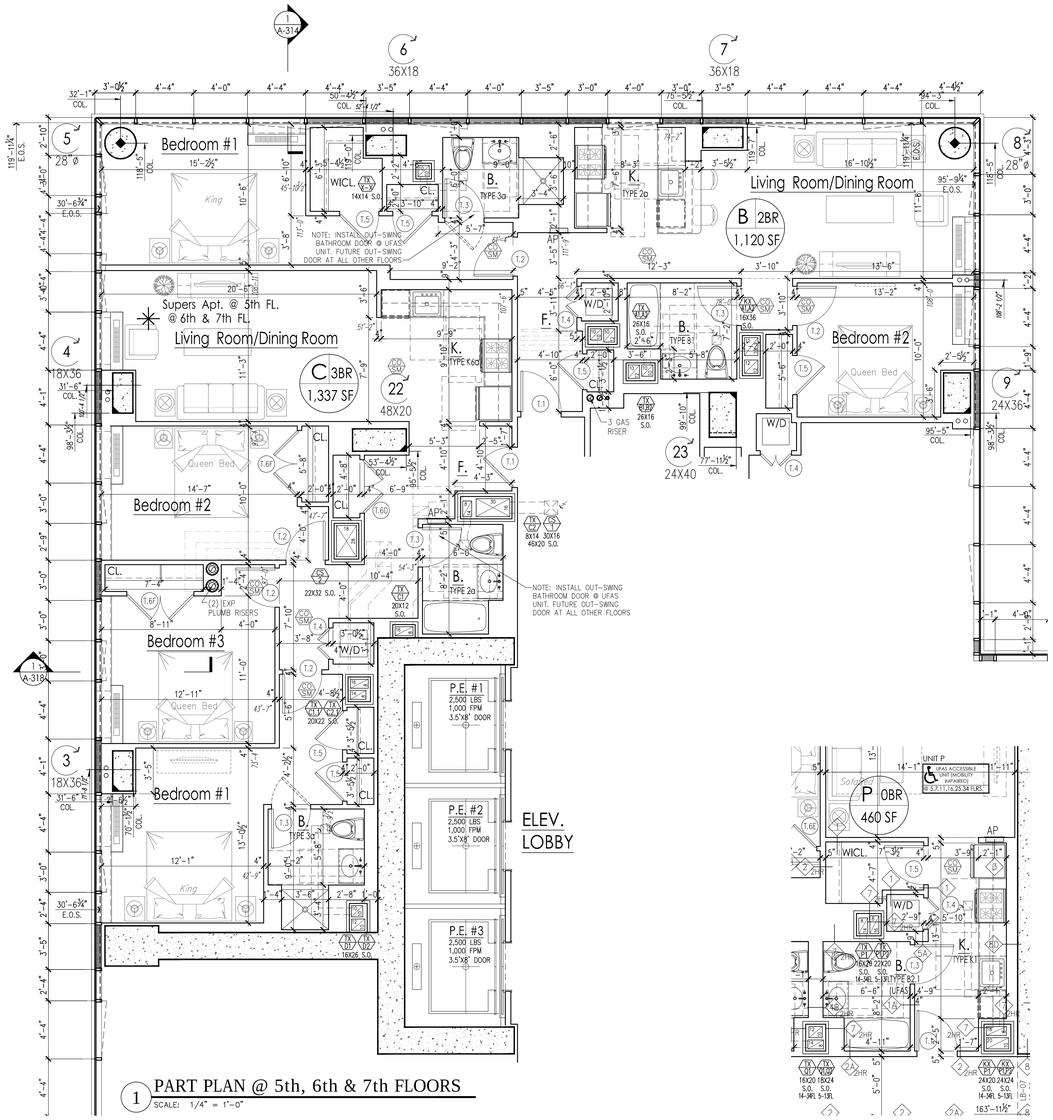
DATE:	-
PROJECT No.:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
SHEET No.:	1 of 000

A-110.00

FILE No: T:\Brookfield\Manhattan-West 2012-32\SLCE\Drawings\BMW_A110_05-34FL.dwg

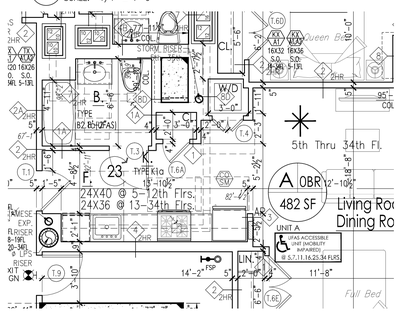
DEPT OF BLDGS 121185760 Job Number

E3435983034 Scan Code

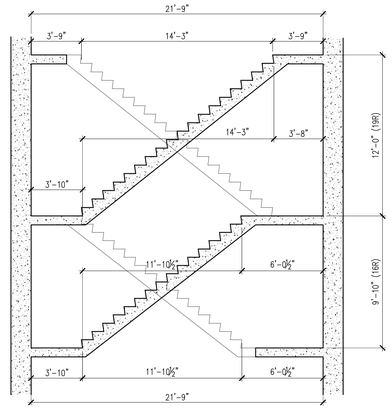


1 PART PLAN @ 5th, 6th & 7th FLOORS
SCALE: 1/4" = 1'-0"

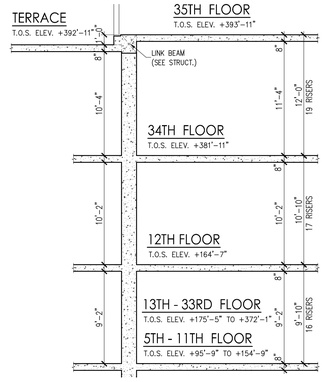
2 PART PLAN @ UFAS M.I. UNIT P
SCALE: 1/4" = 1'-0"



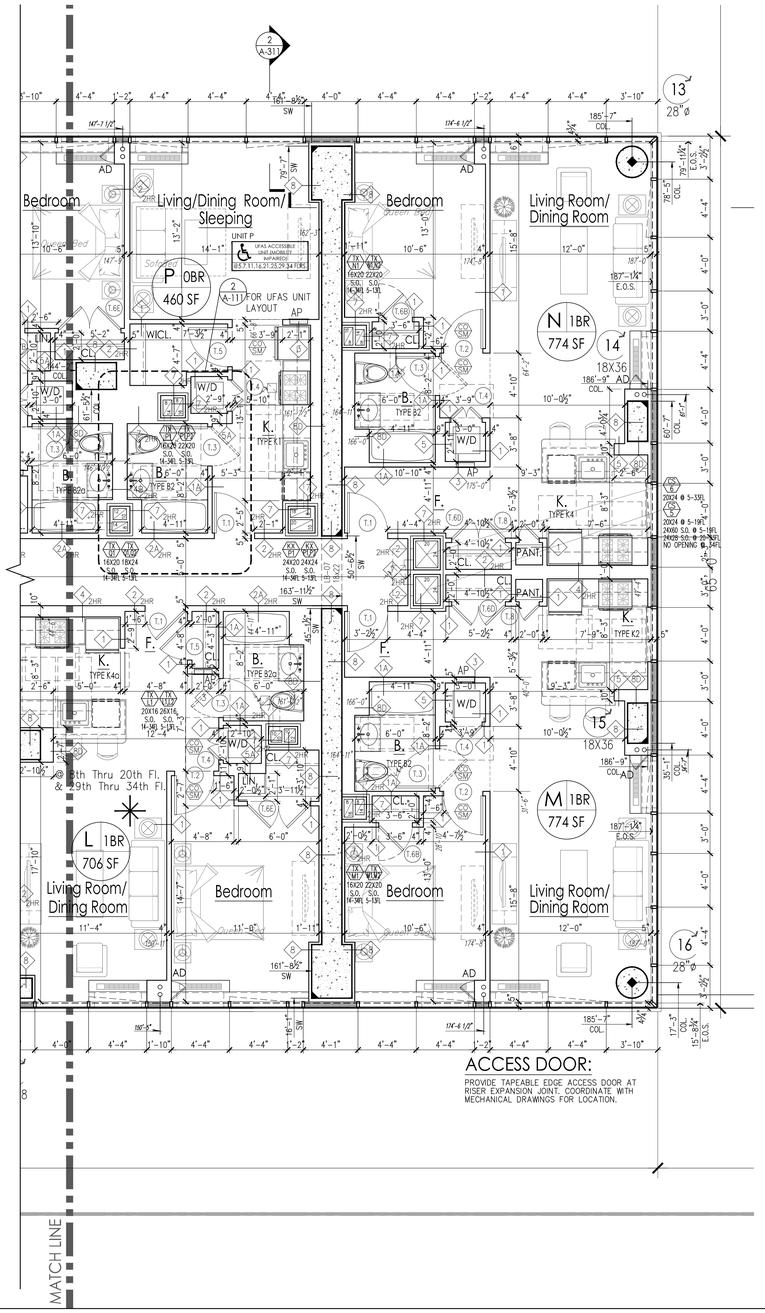
3 PART PLAN @ UFAS M.I. UNIT A
SCALE: 1/4" = 1'-0"



3 TYPICAL VERTICAL SECTION
SCALE: 1/4" = 1'-0"



4 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"



ACCESS DOOR:
PROVIDE TAPEABLE EDGE ACCESS DOOR AT RISER EXPANSION JOINT. COORDINATE WITH MECHANICAL DRAWINGS FOR LOCATION.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

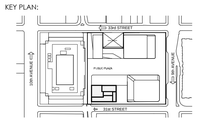
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0' 2' 4' 6' 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PARTIAL 5TH THRU 34TH FLOOR PLAN (EAST)

SEAL & SIGNATURE:

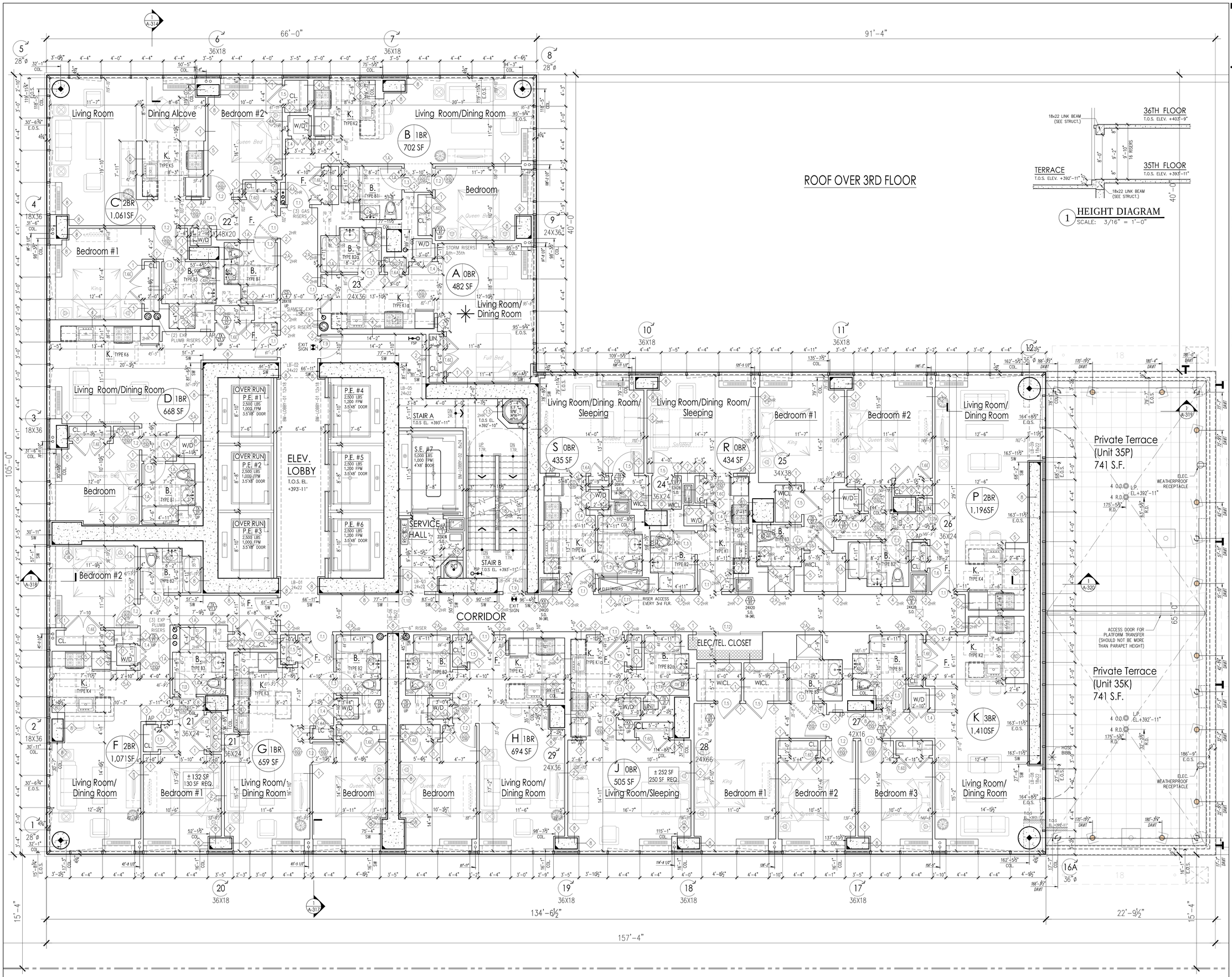
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.

A-111.00

SHEET, No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BMW_A110_05-34FL.dwg

DEPT OF BLDGS 121185760 Job Number
E352497237 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

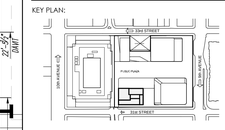
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0, 2, 4, 6, 10)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

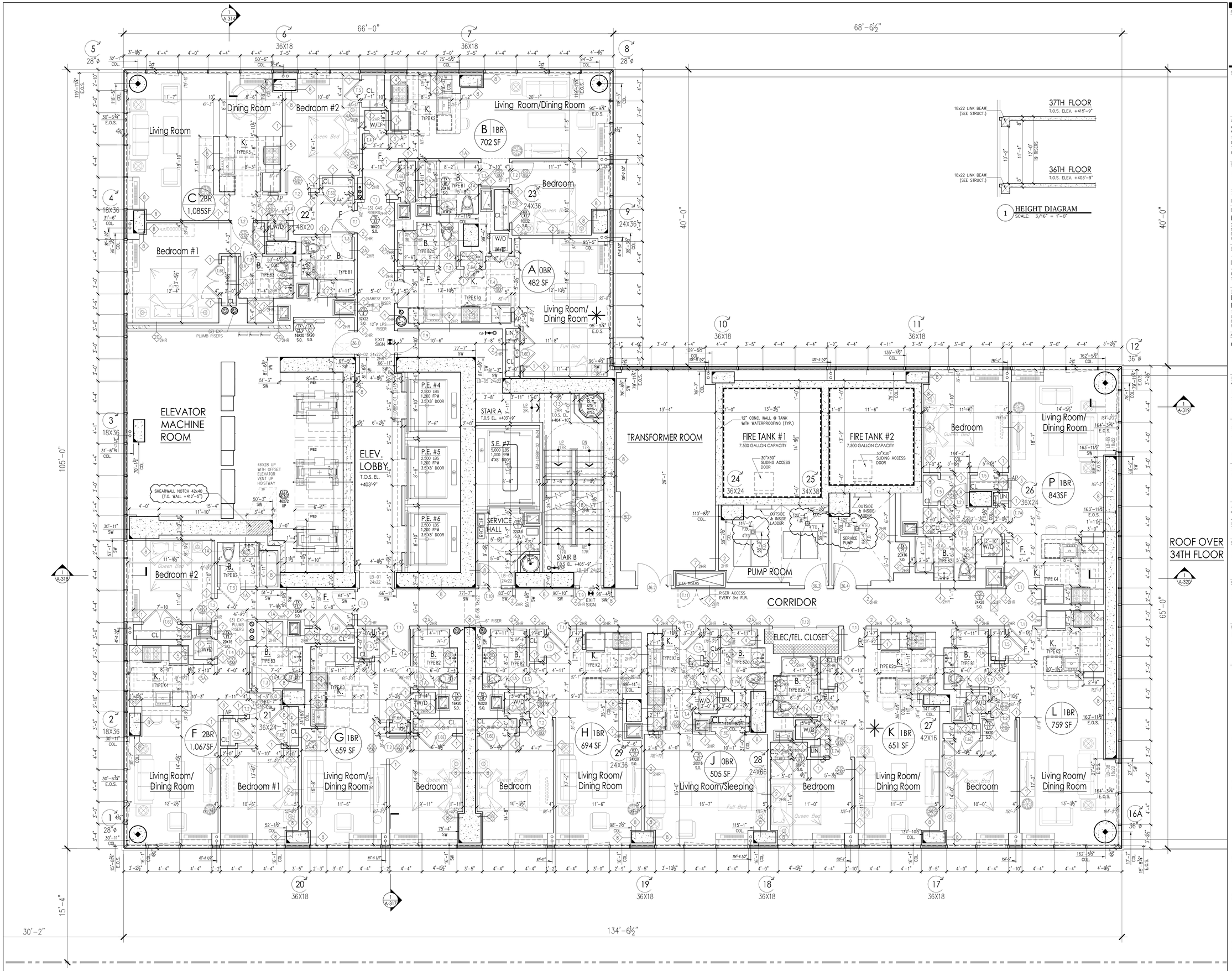
35TH FLOOR PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
DRAWING No:	A-112.00
SHEET: No.:	1 of 000

FILE No: T:\Book\Bldg\Manhattan West (2012-32)\SCE\Drawings\BAR\A112_35FL.dwg

DEPT OF BLDGS 121185760 Job Number
E3637337594S Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

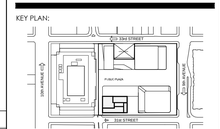
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0' 2' 4' 6' 10')

KEY PLAN:



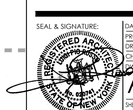
PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

36TH FLOOR PLAN

SEAL & SIGNATURE:



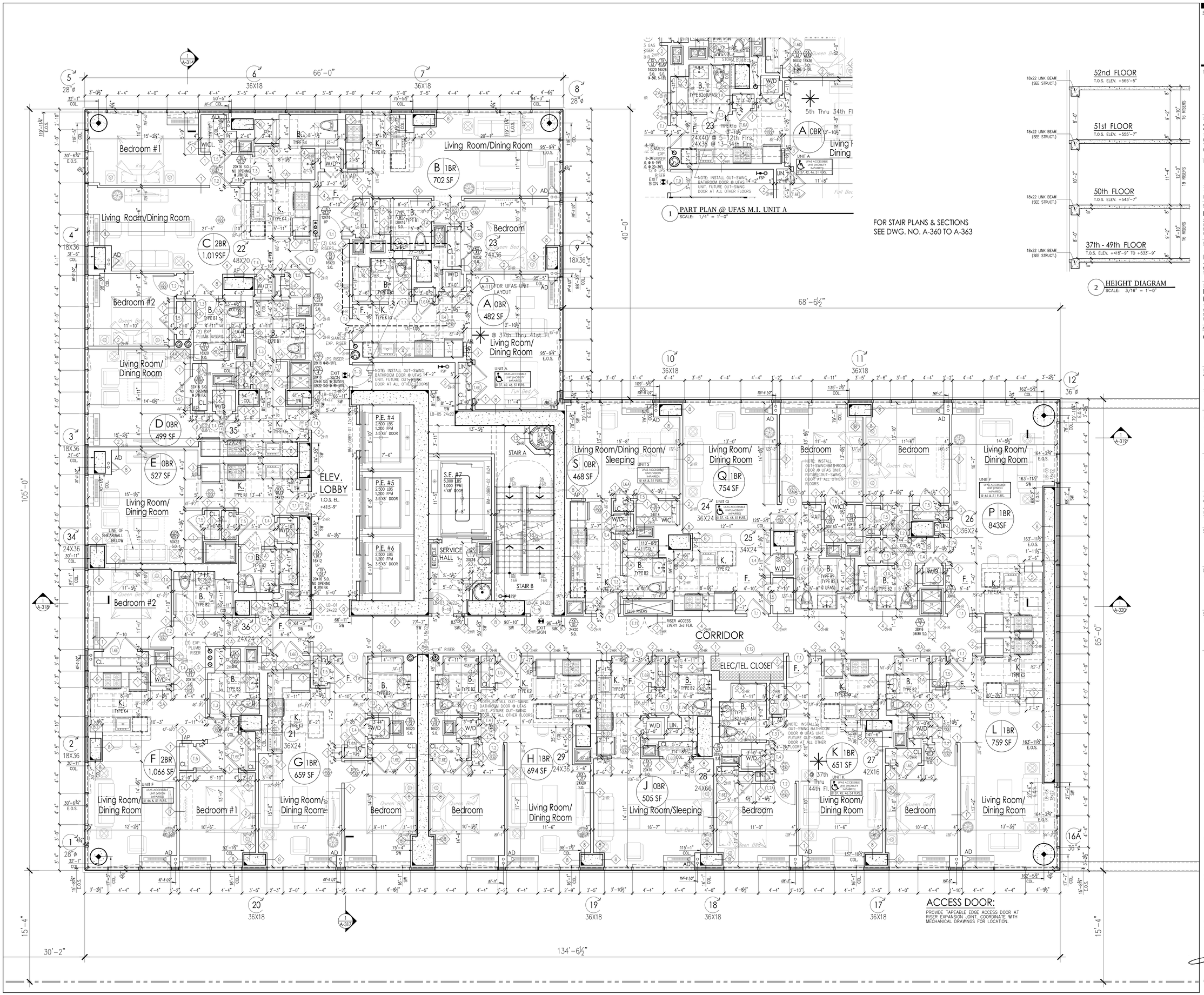
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

A-113.00

SHEET No.: 1 of 000

FILE No: T:\Brook\Bdl\Manhattan-West (2012-32)\SLCE\Drawings\BMW_A113_36FL.Dwg

DEPT OF BLDGS 121185760 Job Number
E261232339 Scan Code



1 PART PLAN @ UFAS M.I. UNIT A
SCALE: 1/4" = 1'-0"

FOR STAIR PLANS & SECTIONS SEE DWG. NO. A-360 TO A-363

2 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

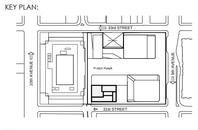
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
7	2014-11-07	ISSUED FOR DOB FILING
6	2014-10-23	BULLETIN #2
5	2014-10-09	BULLETIN #1
4	2014-09-09	ISSUED FOR CONSTRUCTION
3	2014-08-01	90% CONSTRUCTION DOCUMENTS
2	2014-06-03	50% CONSTRUCTION DOCUMENTS
1	2014-05-16	ISSUED FOR BID
0	2014-05-12	ISSUED FOR DOB FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

37TH THRU 51ST FLOOR PLAN

SEAL & SIGNATURE:

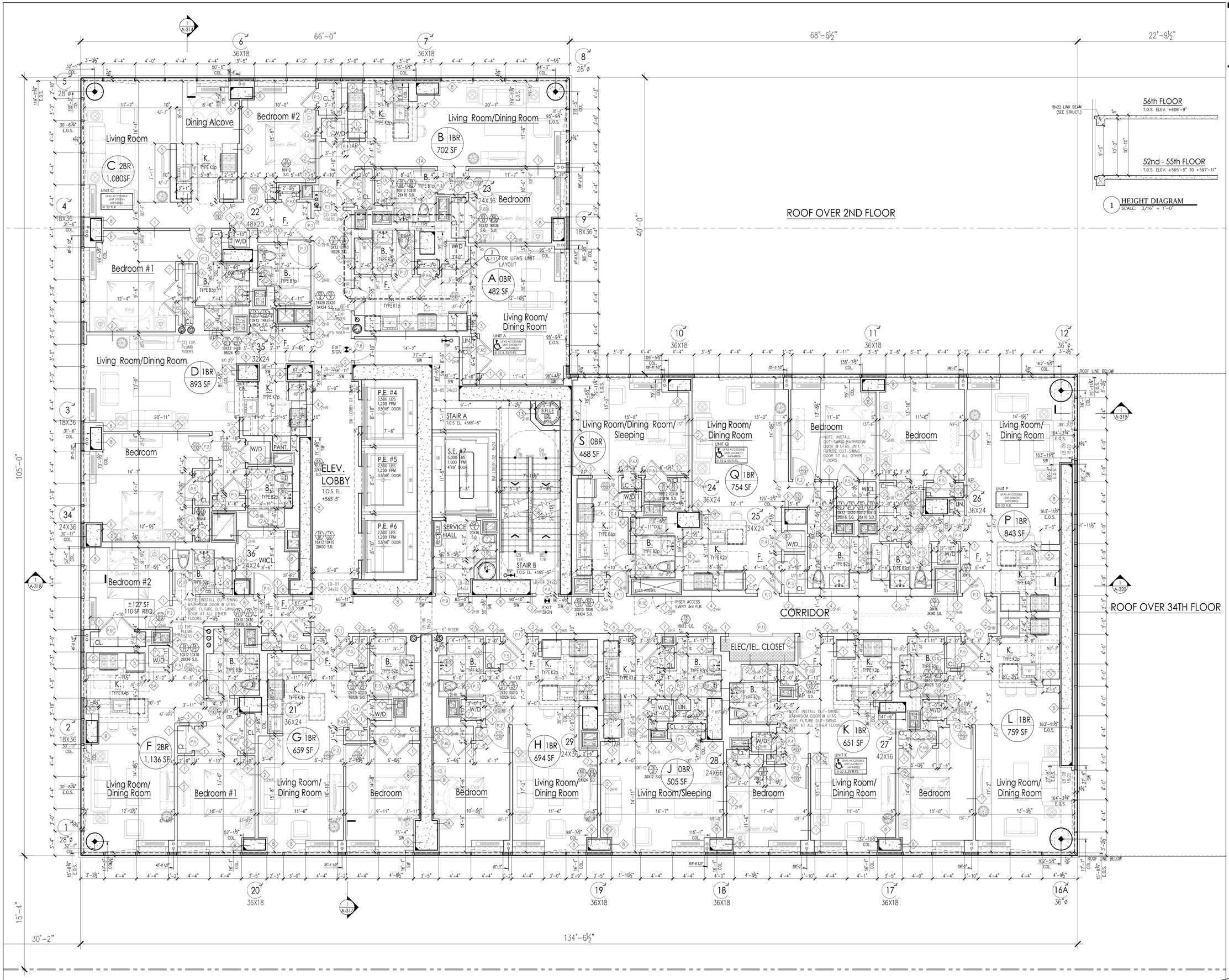
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

DRAWING No.: A-114.00

SHEET No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BMW_A114_37-51FL.dwg

DEPT OF BLDGS 121185760 Job Number
E302135582US Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

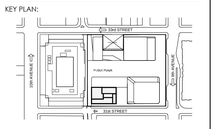
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

52ND THRU 55TH FLOOR PLAN

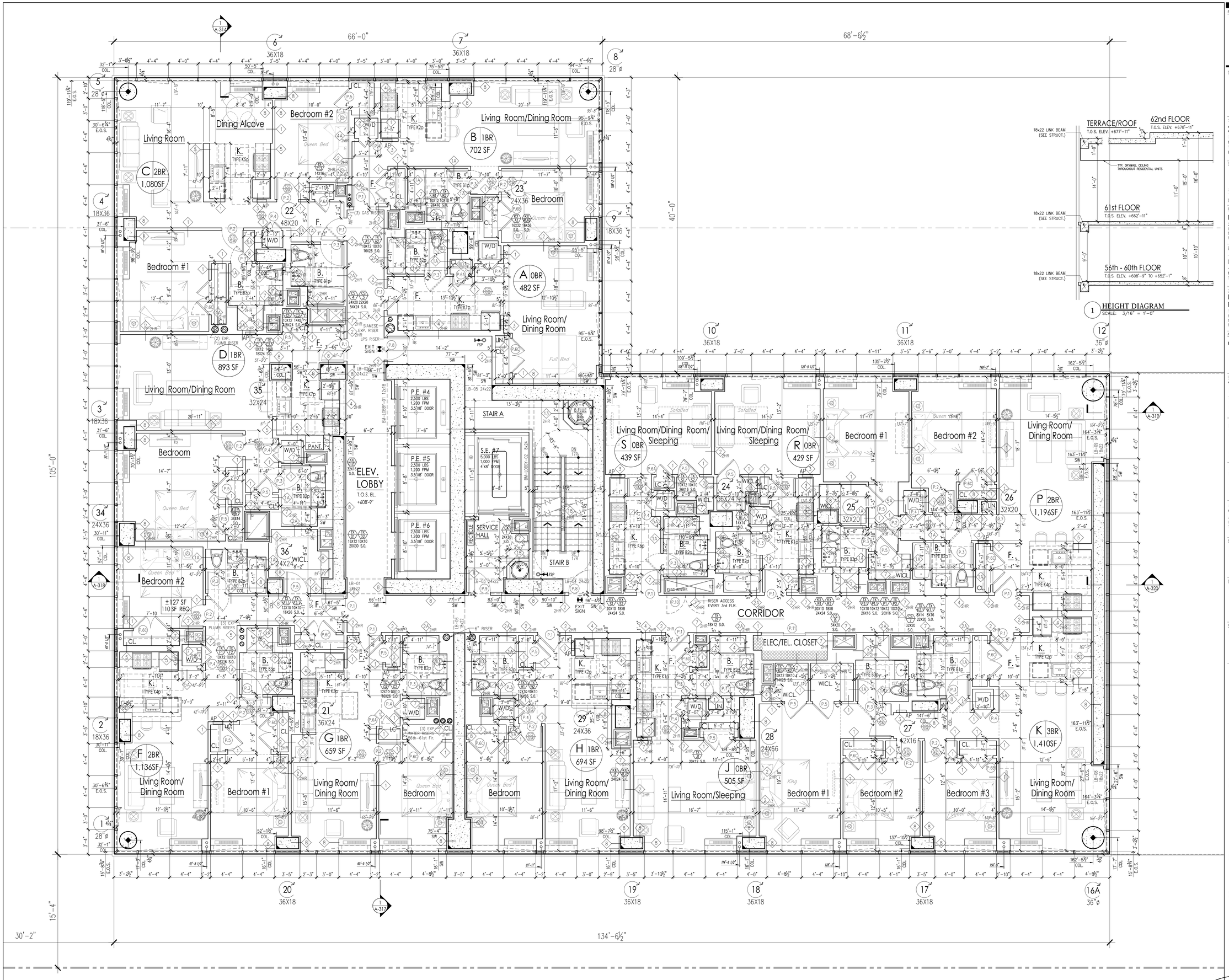
SEAL & SIGNATURE:

DATE:	-
PROJECT No.:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DRAWING No.:	A-115.00
SHEET, No.:	1 of 000

FILE No: T:\BookSlide\Manhattan-West\2012-32\CD\Drawing\BldA\A115_52-55FL.dwg

DEPT OF BLDGS 121185760 Job Number

E2S.320000175 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

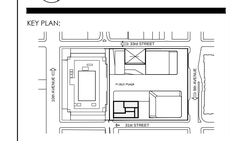
D.O.B. NUMBER:

NB# 121185760

NORTH:

Scale: 1/4" = 1'-0"
0 2 4 6 10'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

56TH THRU 61ST FLOOR PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No.:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

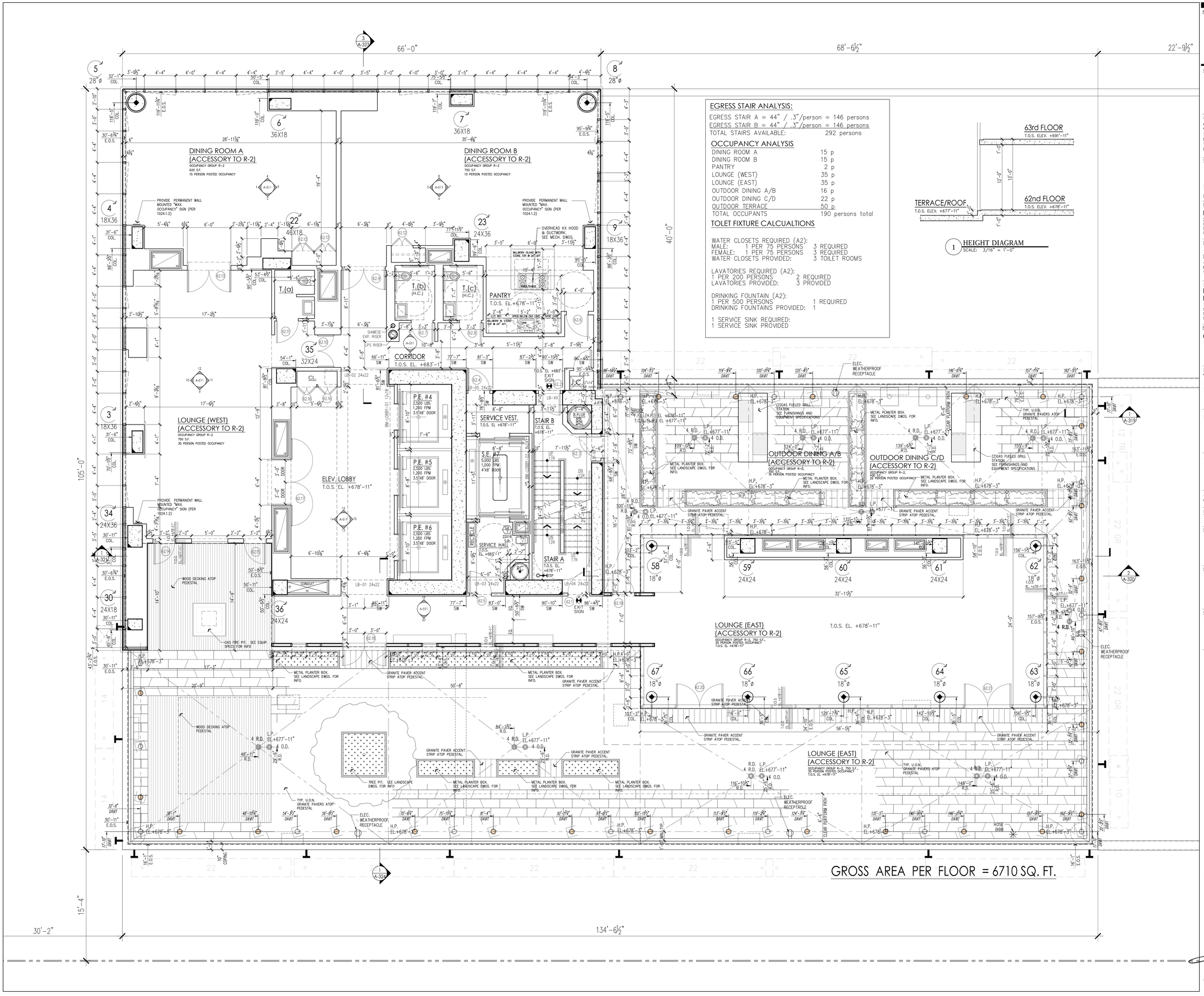
A-116.00

SHEET. No.: 1 of 000

FILE No: Y:\Boos\Bdsb\Manhattan-West 2012-32\SLCE\Drawings\BMW_A116_56-61FL.dwg

DEPT OF BLDGS 121185760 Job Number

E362221640 Scan Code



EGRESS STAIR ANALYSIS:

EGRESS STAIR A = 44" / .3"/person = 146 persons
EGRESS STAIR B = 44" / .3"/person = 146 persons
TOTAL STAIRS AVAILABLE: 292 persons

OCCUPANCY ANALYSIS

DINING ROOM A	15 p
DINING ROOM B	15 p
PANTRY	2 p
LOUNGE (WEST)	35 p
LOUNGE (EAST)	35 p
OUTDOOR DINING A/B	16 p
OUTDOOR DINING C/D	22 p
OUTDOOR TERRACE	50 p
TOTAL OCCUPANTS	190 persons total

TOLET FIXTURE CALCUALTIONS

WATER CLOSETS REQUIRED (A2):
MALE: 1 PER 75 PERSONS 3 REQUIRED
FEMALE: 1 PER 75 PERSONS 3 REQUIRED
WATER CLOSETS PROVIDED: 3 TOILET ROOMS

LAVATORIES REQUIRED (A2):
1 PER 200 PERSONS 2 REQUIRED
LAVATORIES PROVIDED: 3 PROVIDED

DRINKING FOUNTAIN (A2):
1 PER 500 PERSONS 1 REQUIRED
DRINKING FOUNTAINS PROVIDED: 1

1 SERVICE SINK REQUIRED:
1 SERVICE SINK PROVIDED

1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

GROSS AREA PER FLOOR = 6710 SQ. FT.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

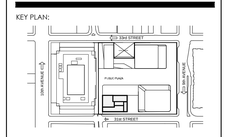
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0' 2' 4' 6' 10')

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

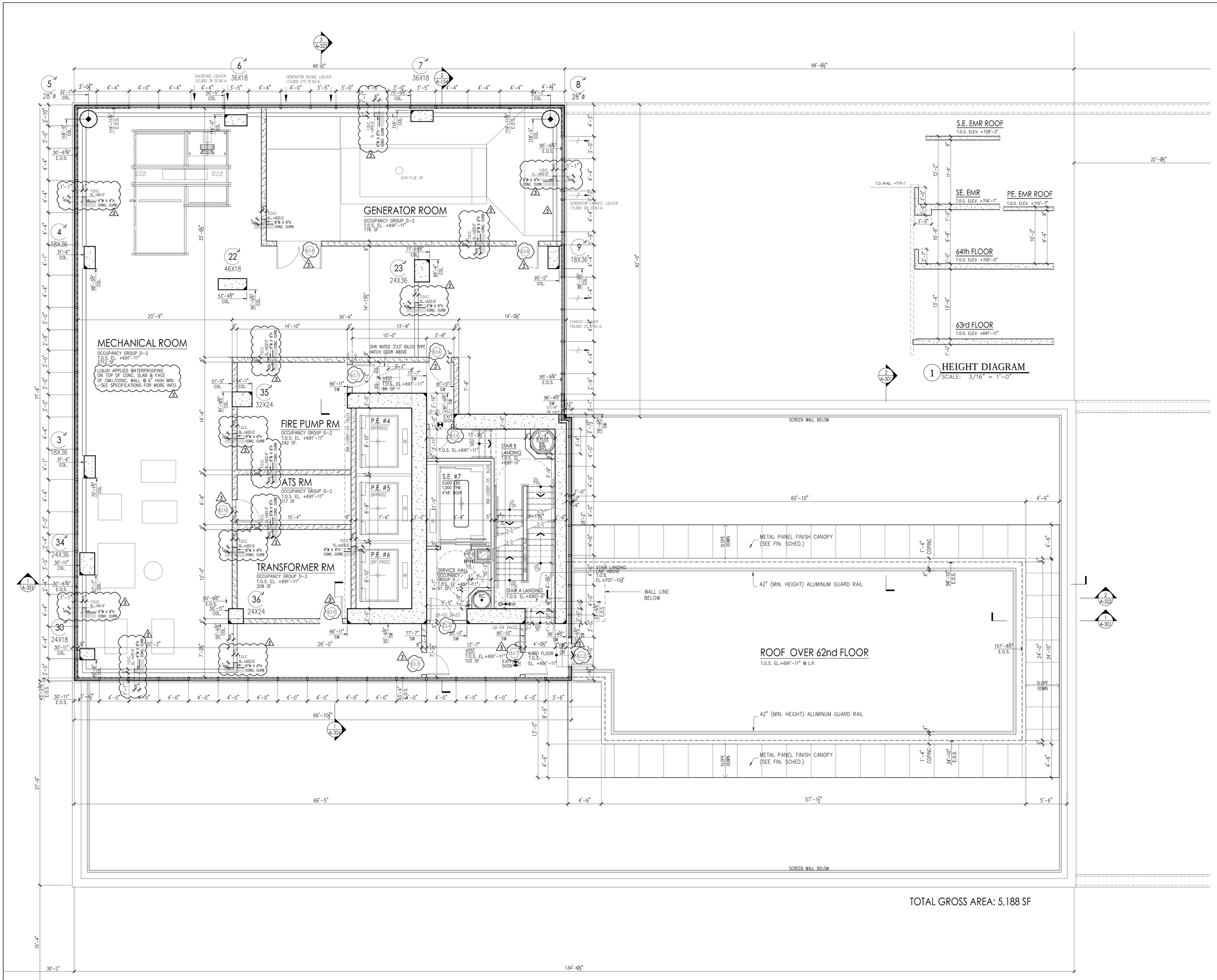
62ND FLOOR (MAIN ROOF) PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No.:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DRAWING NO.:	A-117.00
SHEET, No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Bldg A\117_62fl_Main-Roof.dwg

DEPT OF BLDGS 121185760 Job Number | E5220520735 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

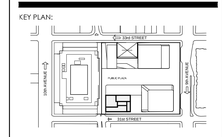
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH | Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

63RD FLOOR PLAN

SEAL & SIGNATURE:

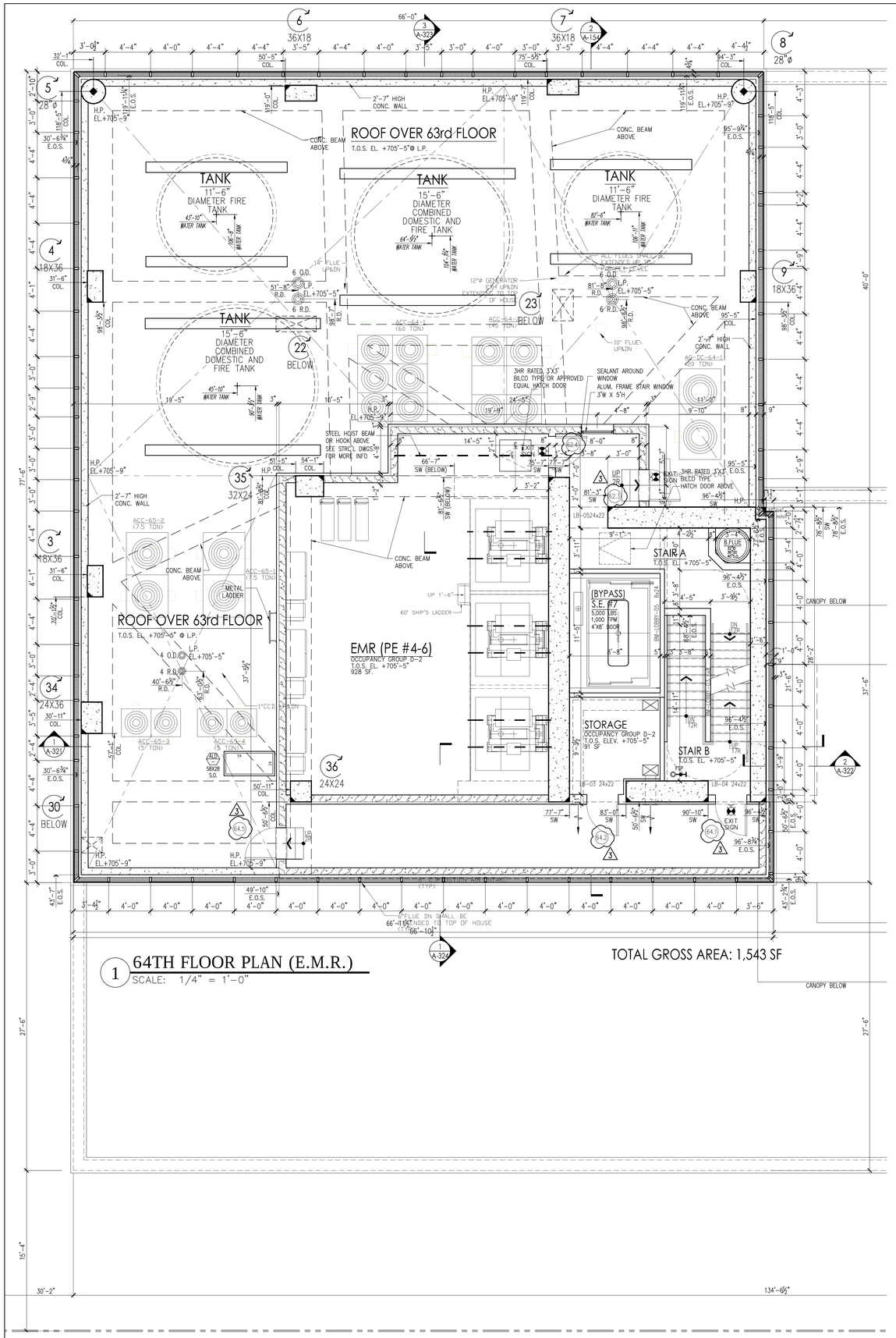
REGISTERED ARCHITECT JOSEPH P. SCHEER No. 022842 STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
DRAWING NO.:	A-118.00
SHEET, No.:	1 of 000

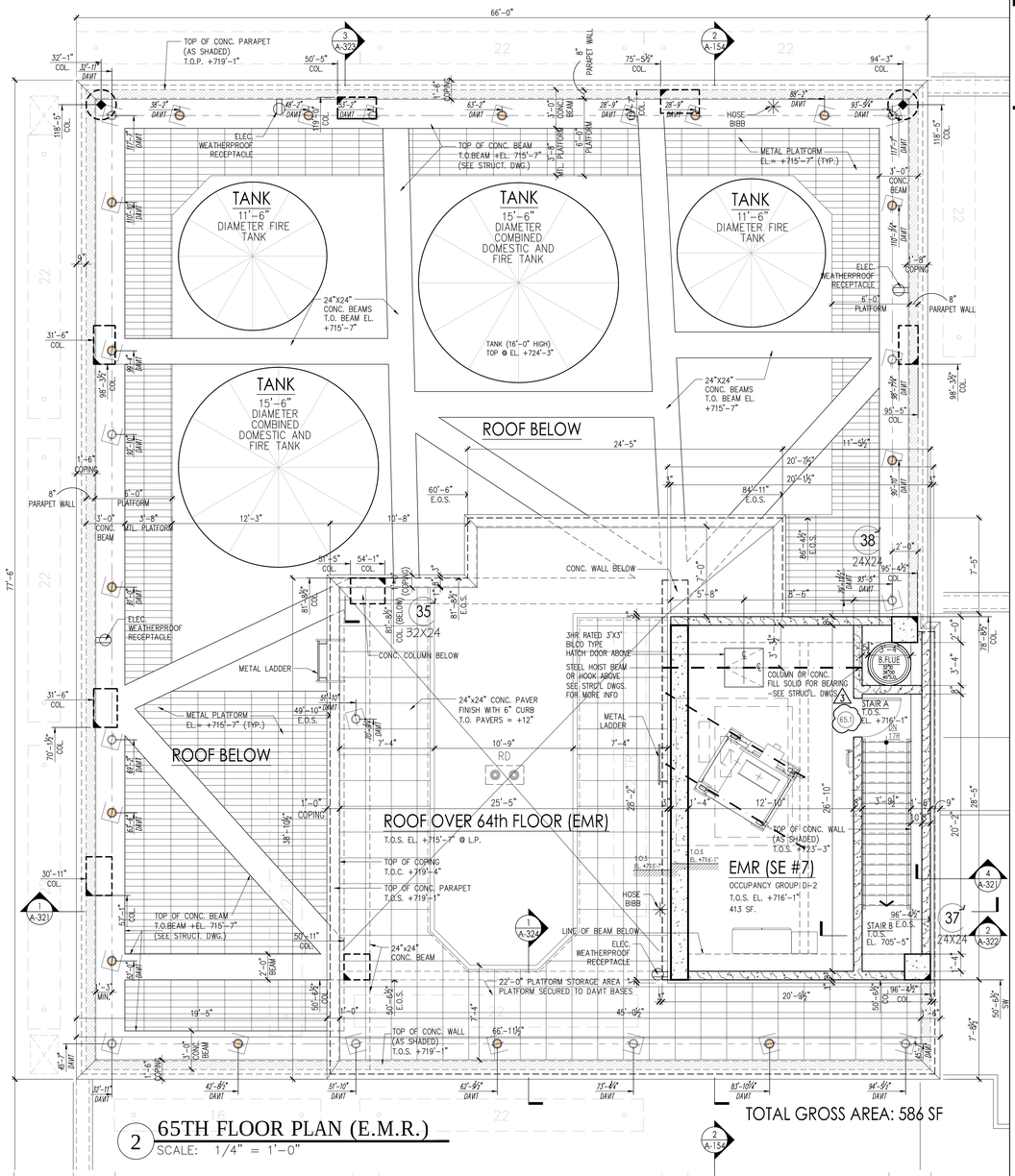
FILE No: "I:\Brookfield-Manhattan-West (2012-32)\LD\CD Drawings\BMW_A118_63RD BLdMesh5.dwg"

DEPT OF BLDGS 121185760 Job Number

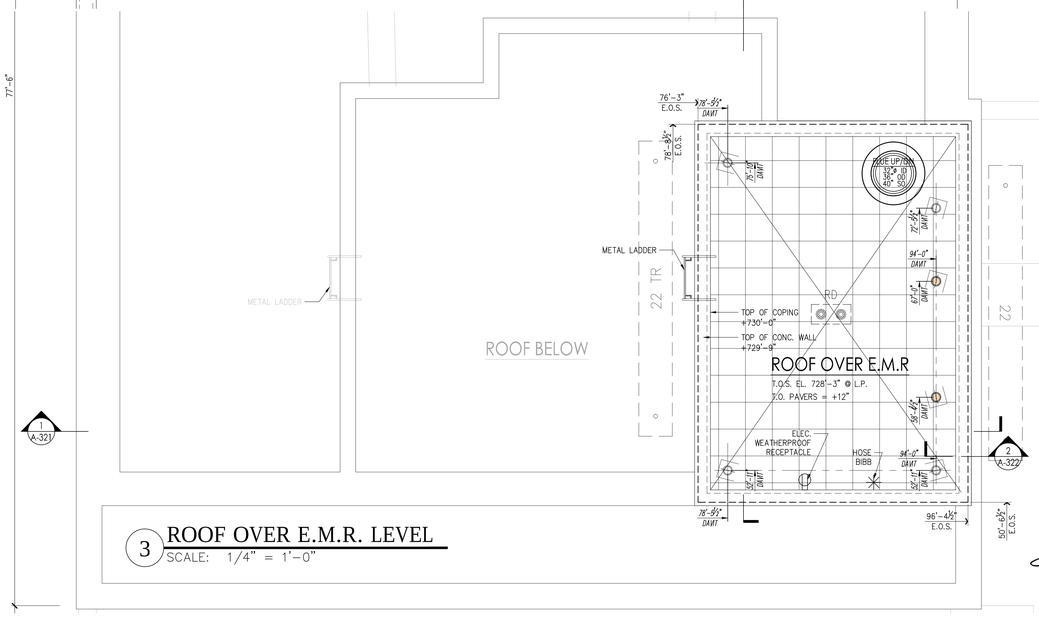
E3205793279 Scan Code



1 64TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"



2 65TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"



3 ROOF OVER E.M.R. LEVEL
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

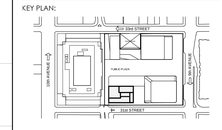
DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-17	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH

Scale: 1/4" = 1'-0"
0 2 4 6 10'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BULKHEAD LEVEL PLANS
(64th AND 65th FLOORS)

SEAL & SIGNATURE:

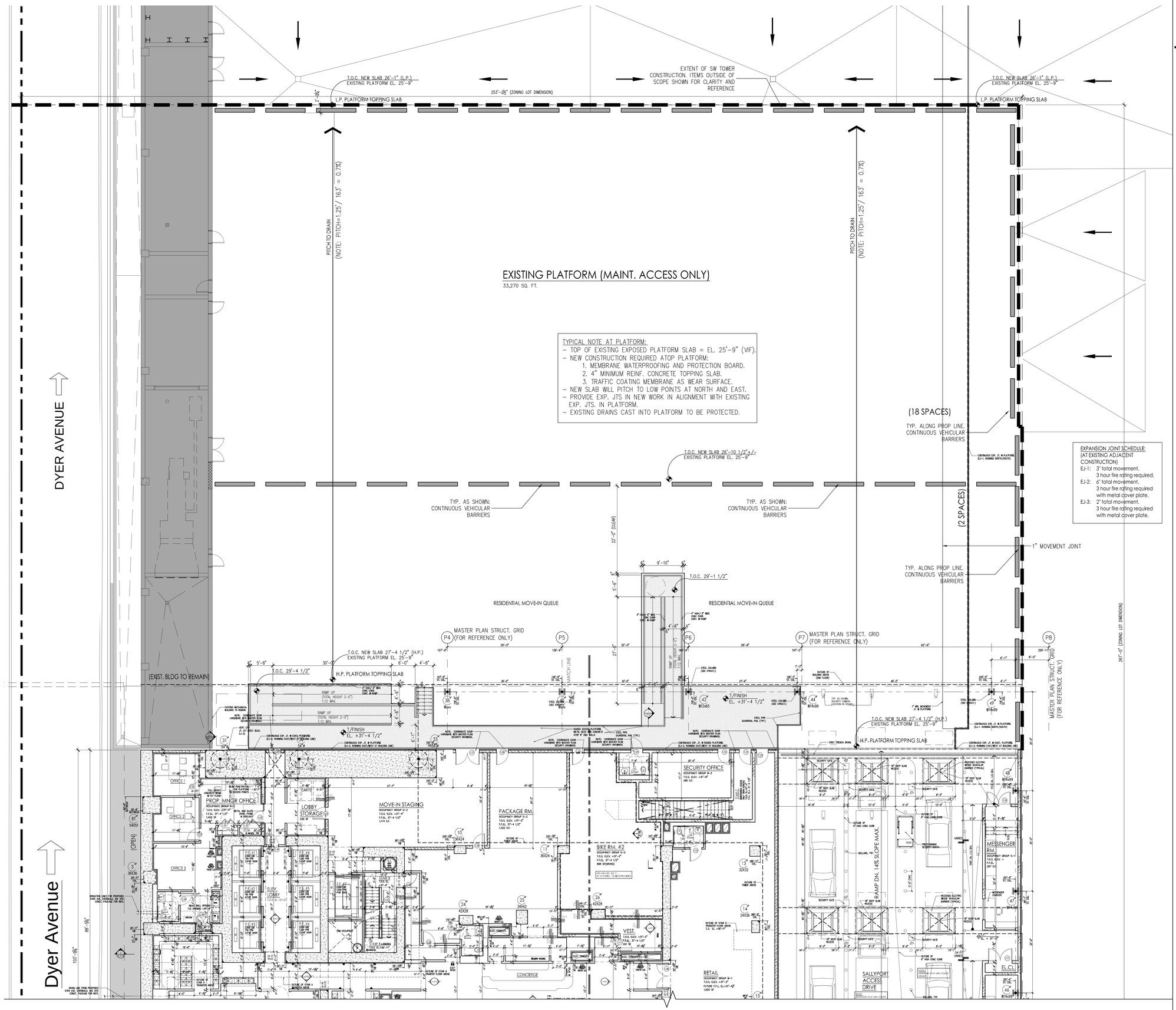
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

DRAWING NO.: A-119.00

SHEET, No.: 1 of 000

FILE No: "Y:\Brookfield-Manhattan-West (2012-32)\S.C.E\Drawings\BAMX_A-119_65th Bulkhead-5.dwg"

DEPT OF BLDGS 121185760 Job Number
E305667806US Scan Code



FOR CONTINUATION OF 1ST FLOOR PLAN SEE SHEET A-102.00 & A-103.00 WITHIN THIS SET.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

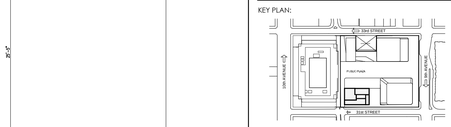
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLATFORM / 1ST FLOOR PLAN

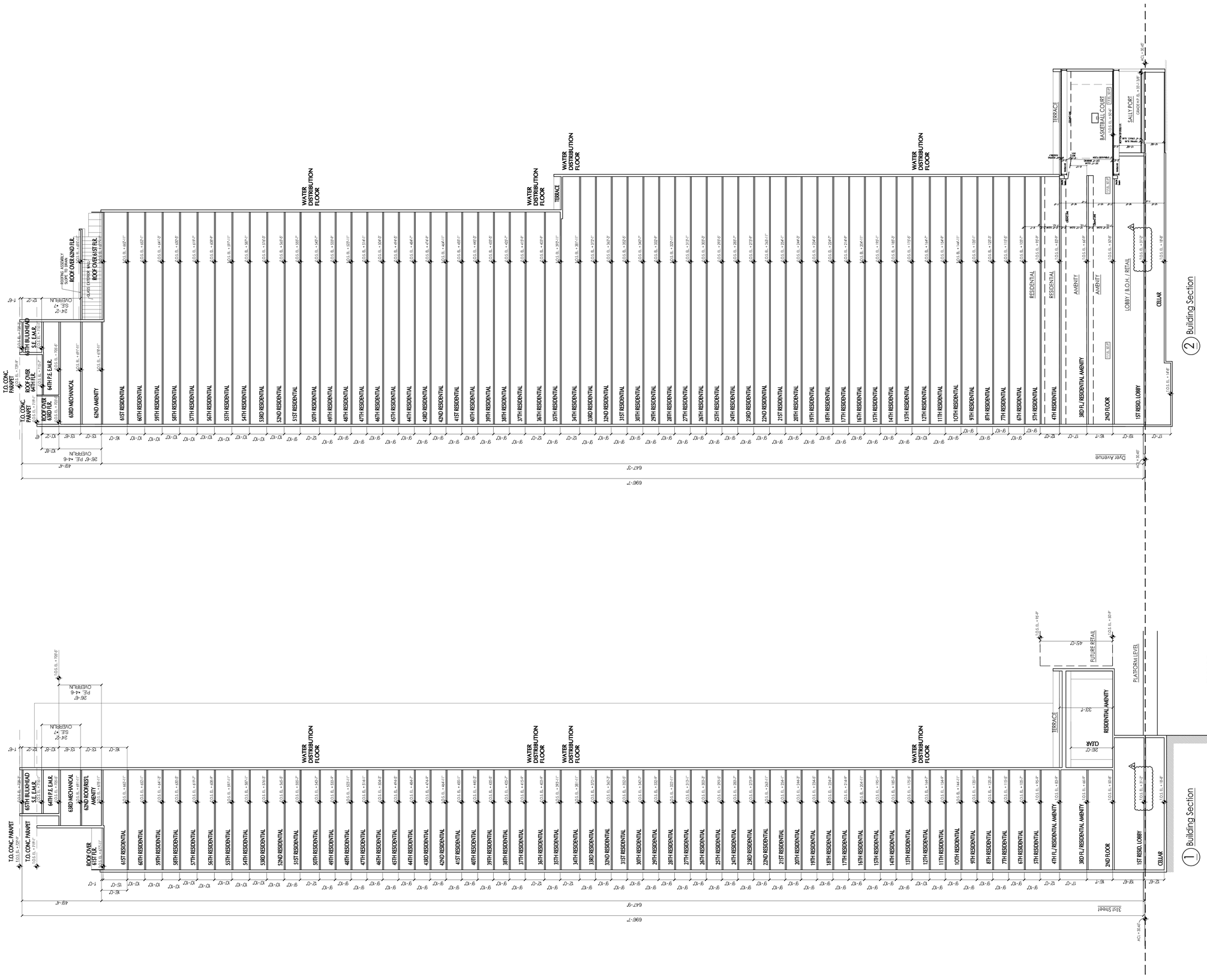
SEAL & SIGNATURE:
REGISTERED ARCHITECT TIMOTHY J. JAMES STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

A-120.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE\Drawings\BMR_A-120_DYL DOB NO PARKING

DEPT OF BLDGS 121185760 Job Number
E380079759 Scan Code



2 Building Section

1 Building Section

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

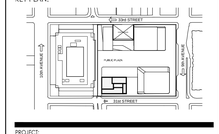
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/16" = 1'- 0"
0 8 16 24 40'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

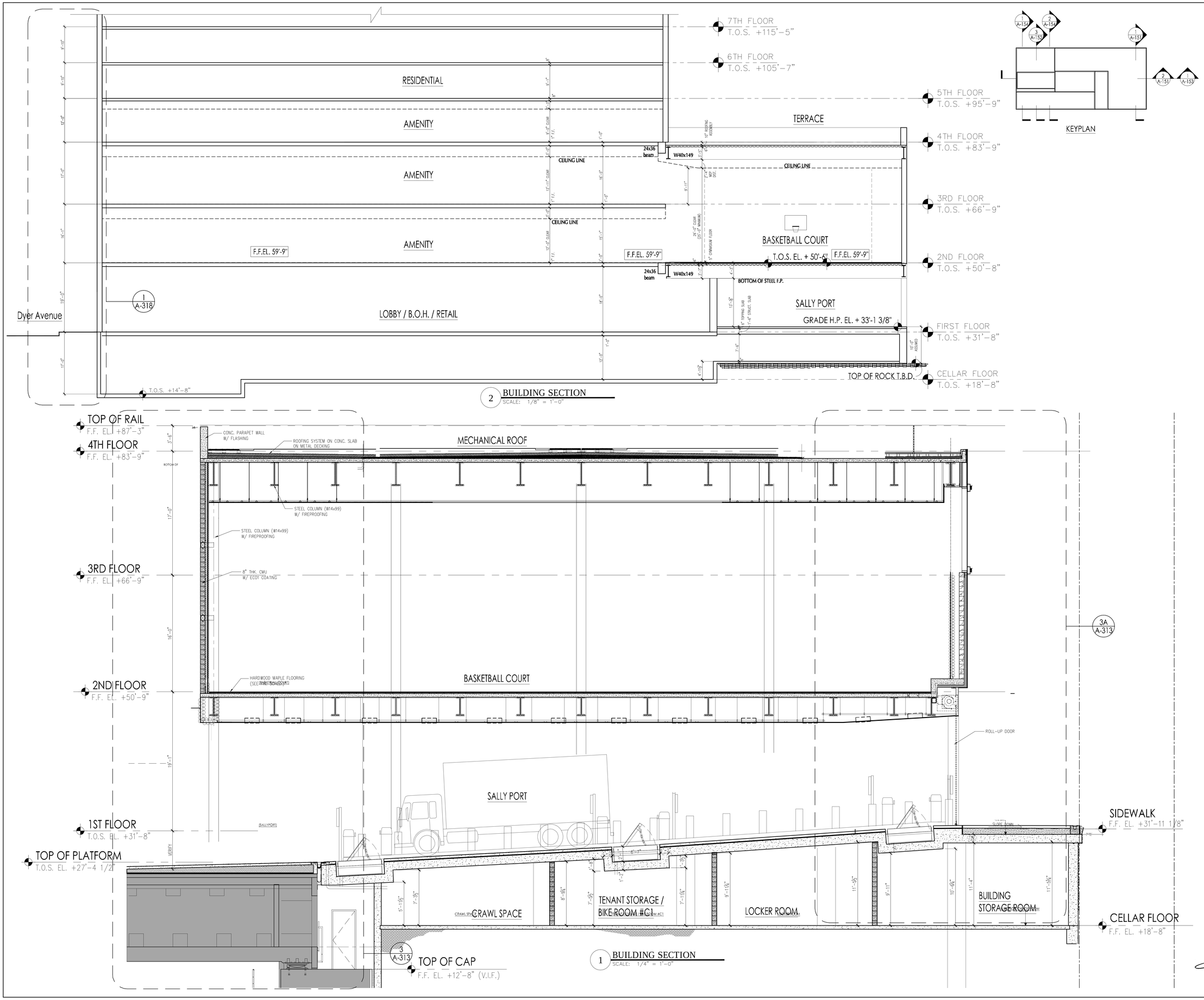
DRAWING TITLE:
OVERALL BUILDING SECTIONS

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
SHEET No.:	A-150.00
SHEET, No.:	1 of 000

FILE No: Y:\Boards\Manhattan-West\2012-32\LD_CD\Drawings\BMW_A-150_Building Sections.dwg

DEPT OF BLDGS 121185760 Job Number
E5715552575 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH

Scale: 1/8" = 1'-0"
0 4 8 12 20'

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

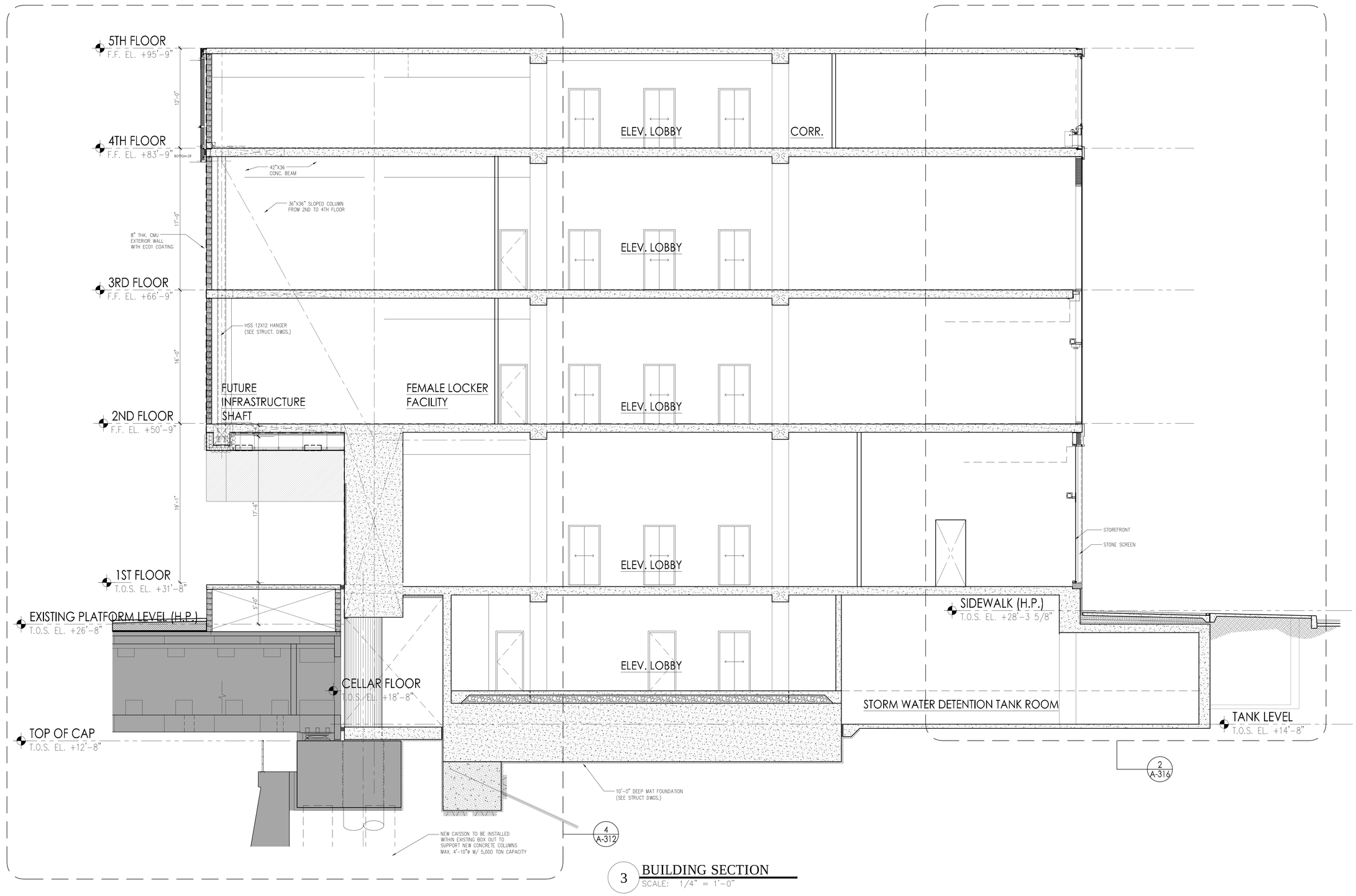
ENLARGE PARTIAL BUILDING SECTION 1

SEAL & SIGNATURE:

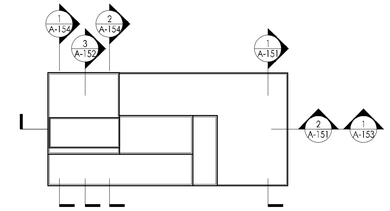
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO.:	A-151.00
SHEET, No.:	1 of 000

FILE No: \\Slcea1dc04\shared\projfiles\2012-32\3_CD\Drawings\BldgA_A-SH-154_Enlarge

DEPT OF BLDGS 121185760 Job Number
E2025CA035 Scan Code



3 BUILDING SECTION
SCALE: 1/4" = 1'-0"



KEYPLAN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

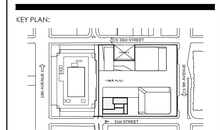
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
3	2014-10-23	BULLETIN #2
2	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

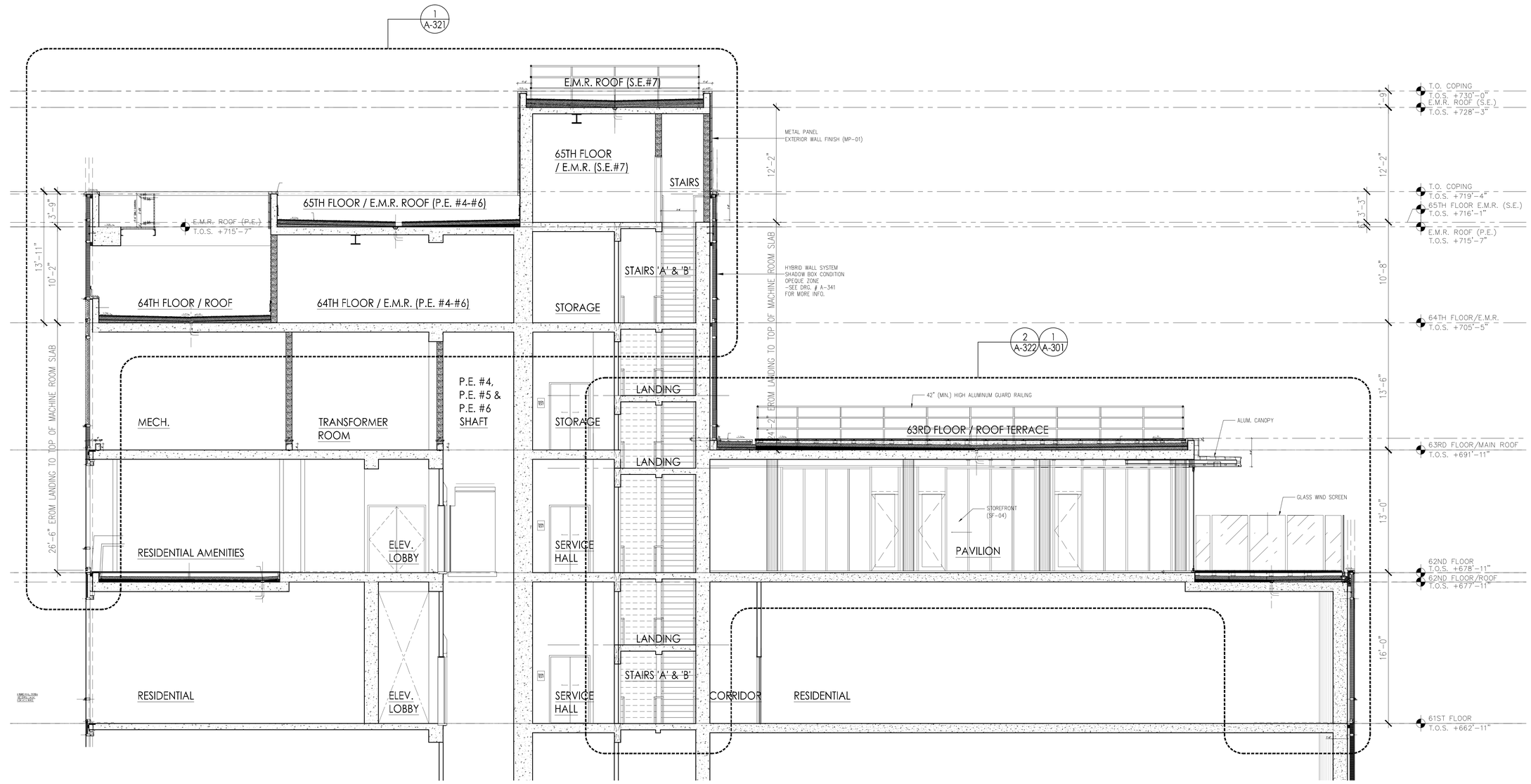
ENLARGE
BUILDING SECTION 2

SEAL & SIGNATURE:

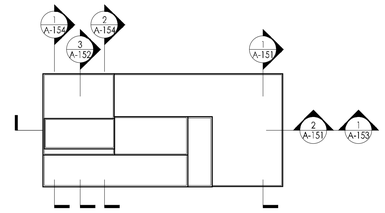
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No:	A-152.00
SHEET. No.:	1 of 000

FILE No: \\Slcea\Jobs\Manhattan West (2012-32)\S_CD\Drawings\BMW_A_S1-A154_Enlarge

DEPT OF BLDGS 121185760 Job Number
E290339973 Scan Code



1 BULKHEAD SECTION 1
SCALE: 1/4" = 1'-0"



KEYPLAN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

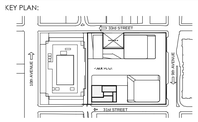
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
ENLARGE
BULKHEAD SECTION 1

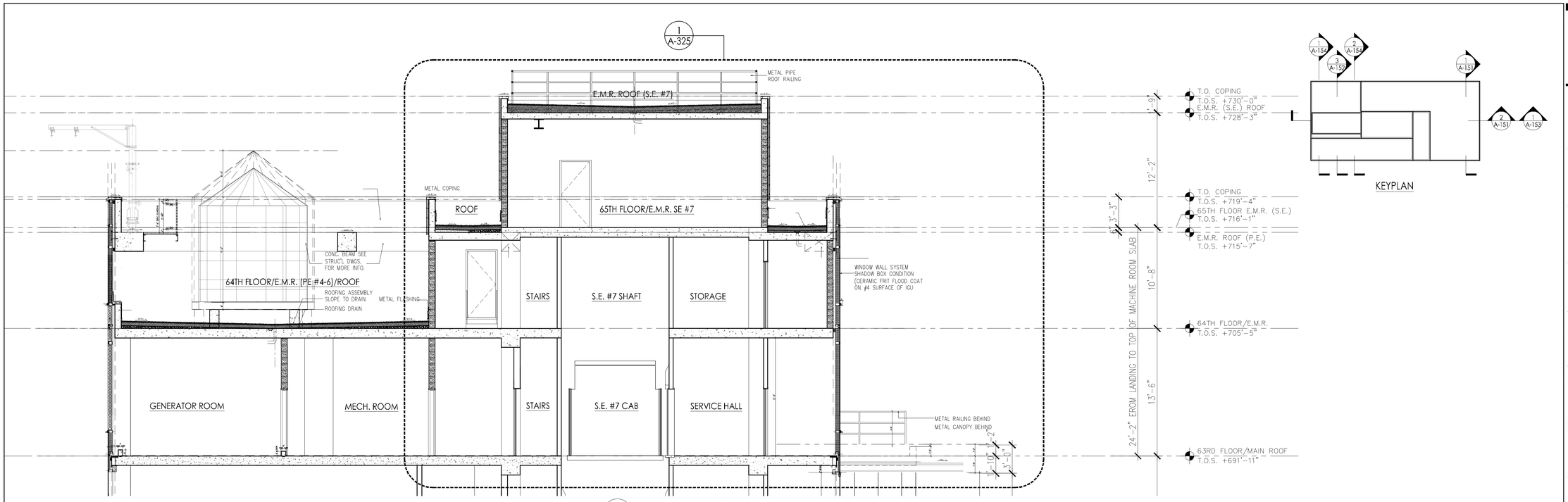
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/abo
CHECKED BY:	T.J.F.

A-153.00
SHEET No.: 1 of 000

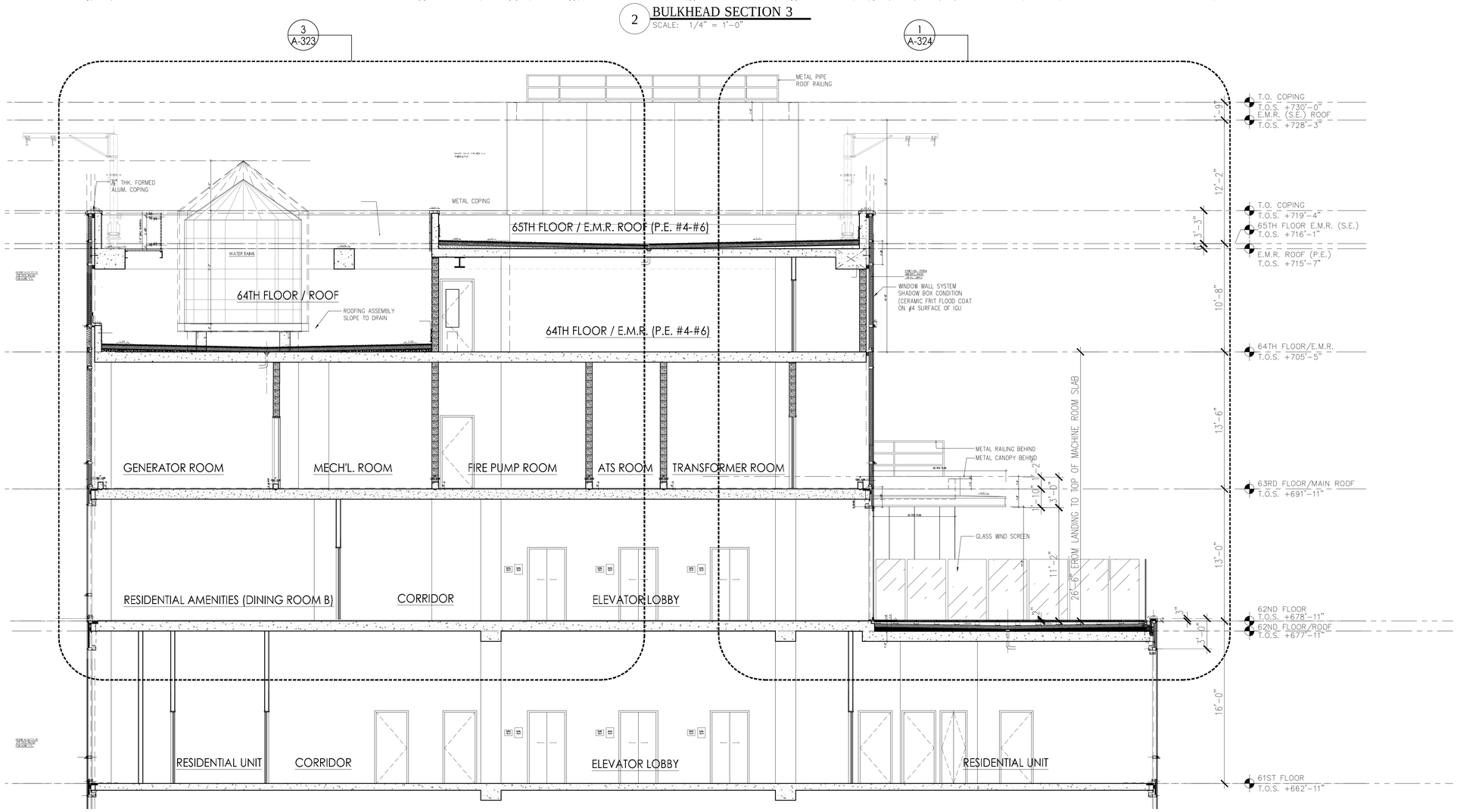
FILE No: \\Boxer\Bldg\Manhattan West (2012-32)\LS CD\Drawings\BMW_A_S1-A154_Bulkhead

DEPT OF BLDGS 121185760 Job Number
E1212350599 Scan Code



2 BULKHEAD SECTION 3
SCALE: 1/4" = 1'-0"

KEYPLAN



1 BULKHEAD SECTION 2
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

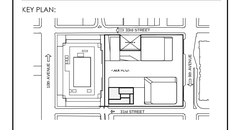
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'-0" (0, 4, 8, 12, 20)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

ENLARGE
BULKHEAD SECTION 2 & 3

SEAL & SIGNATURE:

REGISTERED ARCHITECT CHRISTOPHER J. KNOX STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/dbo
CHECKED BY:	TJT

DRAWING No.: A-154.00

SHEET, No.: 1 of 000

FILE No: \\box\slcdata\Manhattan West (2012-32)_CD\Drawings\BAW_A_SH-A154_Bulkhead

DEPT OF BLDGS 121185760 Job Number
E369700423US Scan Code

UNIT KEY

VISION GLASS

OPAQUE ZONE

PTAC GRILL

OPERABLE CASEMENT WINDOW

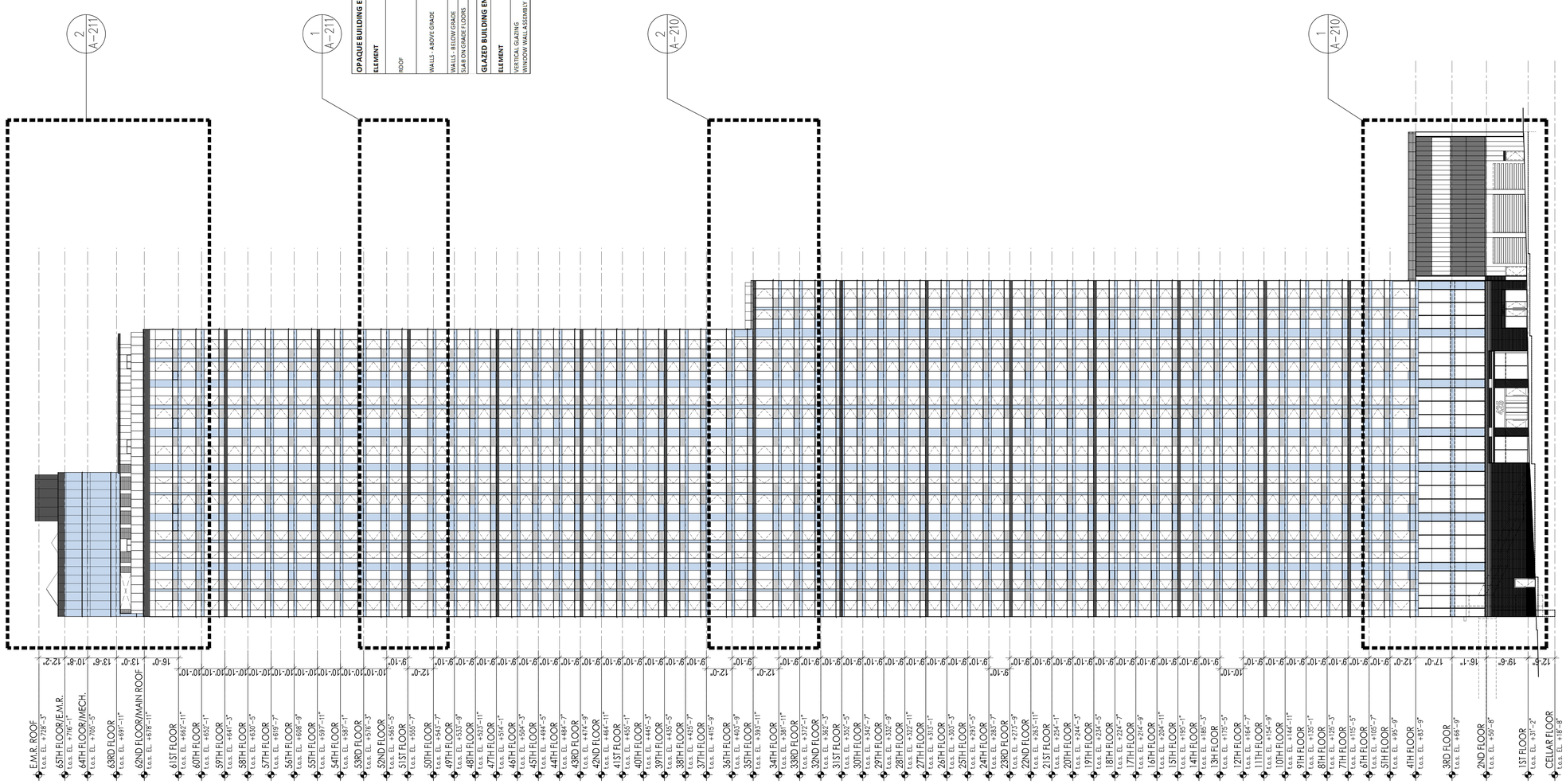
NOTE:

OPAQUE BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	INSULATION (R-VALUE)	ASSEMBLY (U-FACTOR, F-FACTOR, C-FACTOR)
ROOF	INSULATED CONCRETE ROOF DECK	R-21	U-0.045
	SOLAR ABSORPTIANCE	0.75	
	EMITTANCE	0.9	
WALLS - ABOVE GRADE	SPANDREL WALL (ALUMINUM SHADOW BOX)	R-9	U-0.25
	INDOOR SPANDREL	R-20	U-0.056
	SHEAR WALL SPANDREL	R-9	U-0.20
WALLS - BELOW GRADE	CONCRETE WALL	NR	C-1.140
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	NR	F-0.73

GLAZED BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	CENTER OF GLASS U-FACTOR	ASSEMBLY U-FACTOR	SHGC	VLT
VERTICAL GLAZING	VRE-38	U-0.49	U-0.49	0.23	0.31
WINDOW WALL ASSEMBLY					



SOUTH ELEVATION

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

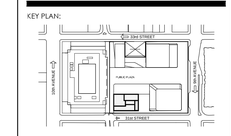
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: NTS

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SOUTH ELEVATION

SEAL & SIGNATURE:

DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.

DRAWING NO.: A-200.00

SHEET, No.: 1 of 000

FILE No: Y:\Brookfield-Manhattan-West\2012-32\LD_CD\Drawings\BMW_A200-A203_Building

DEPT OF BLDGS 121185760 Job Number E1S14P0CM95 Scan Code

UNIT KEY

- VISION GLASS
- OPAQUE ZONE
- PTAC GRILL
- OPERABLE CASEMENT WINDOW

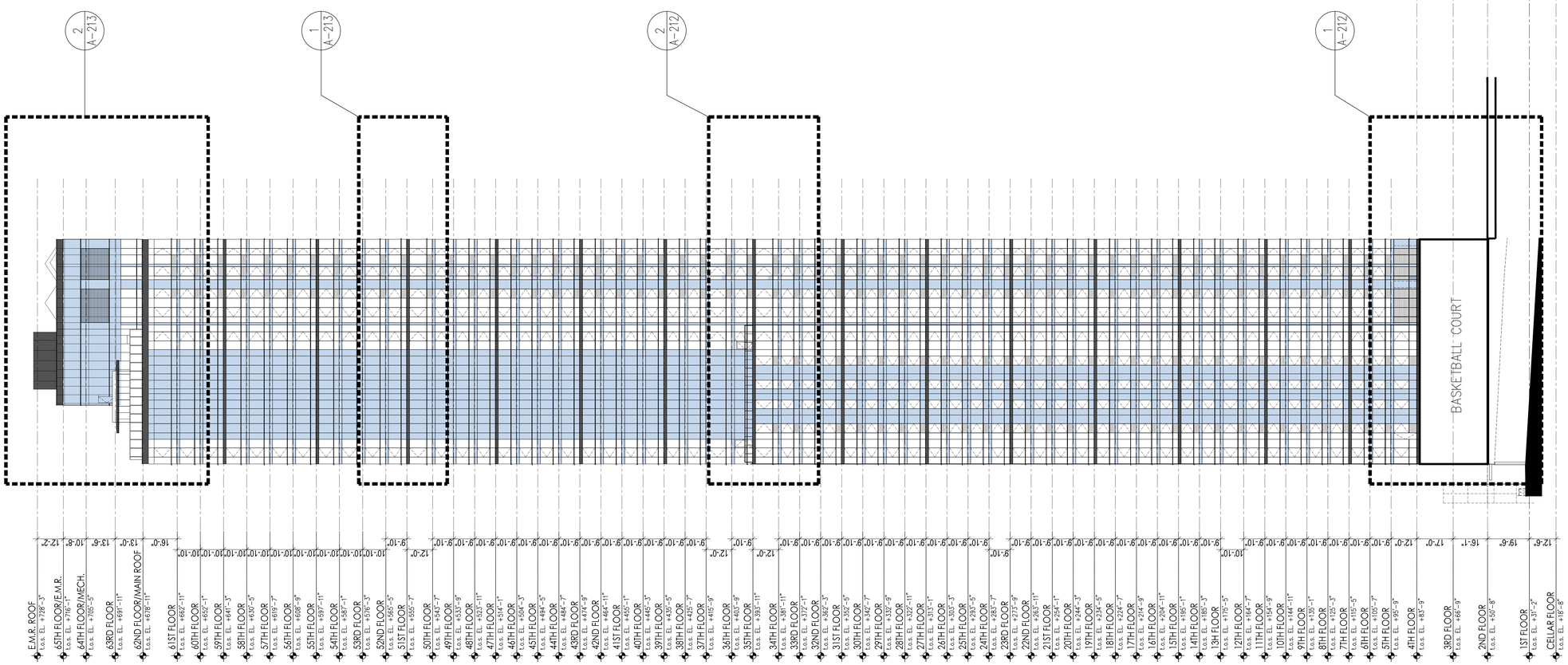
NOTE:

OPAQUE BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	INSULATION (R-VALUE)	ASSEMBLY (U-FACTOR, F-FACTOR, C-FACTOR)
ROOF	INSULATED CONCRETE ROOF DECK	R-21	U-0.045
	SOLAR ABSORPTANCE	0.75	
	EMITTANCE	0.9	
WALLS - ABOVE GRADE	SPANDREL WALL (ALUMINUM SHADOW BOX)	R-9	U-0.25
	FIXED SPANDREL	R-20	U-0.046
	SHEAR WALLS SPANDREL	R-9	U-0.20
WALLS - BELOW GRADE	CONCRETE WALL	NR	C-1.140
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	NR	F-0.73

GLAZED BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	CENTER OF GLASS U-FACTOR	ASSEMBLY U-FACTOR	SHGC	VLT
VERTICAL GLAZING WINDOW WALL ASSEMBLY	VRE-38	U-0.49	U-0.49	0.23	0.31



EAST ELEVATION

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

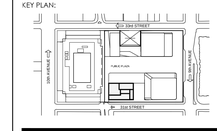
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: NTS

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

EAST ELEVATION

SEAL & SIGNATURE:

REGISTERED ARCHITECT TIMOTHY J. FOLEY STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

DRAWING No.: A-201.00

SHEET, No.: 1 of 000

FILE No: \\Brookfield\Manhattan-West (2012-32)\LCD\Drawings\BMW_A200-A203_Building

UNIT KEY

- VISION GLASS
- OPAQUE ZONE
- PTAC GRILL
- OPERABLE CASEMENT WINDOW

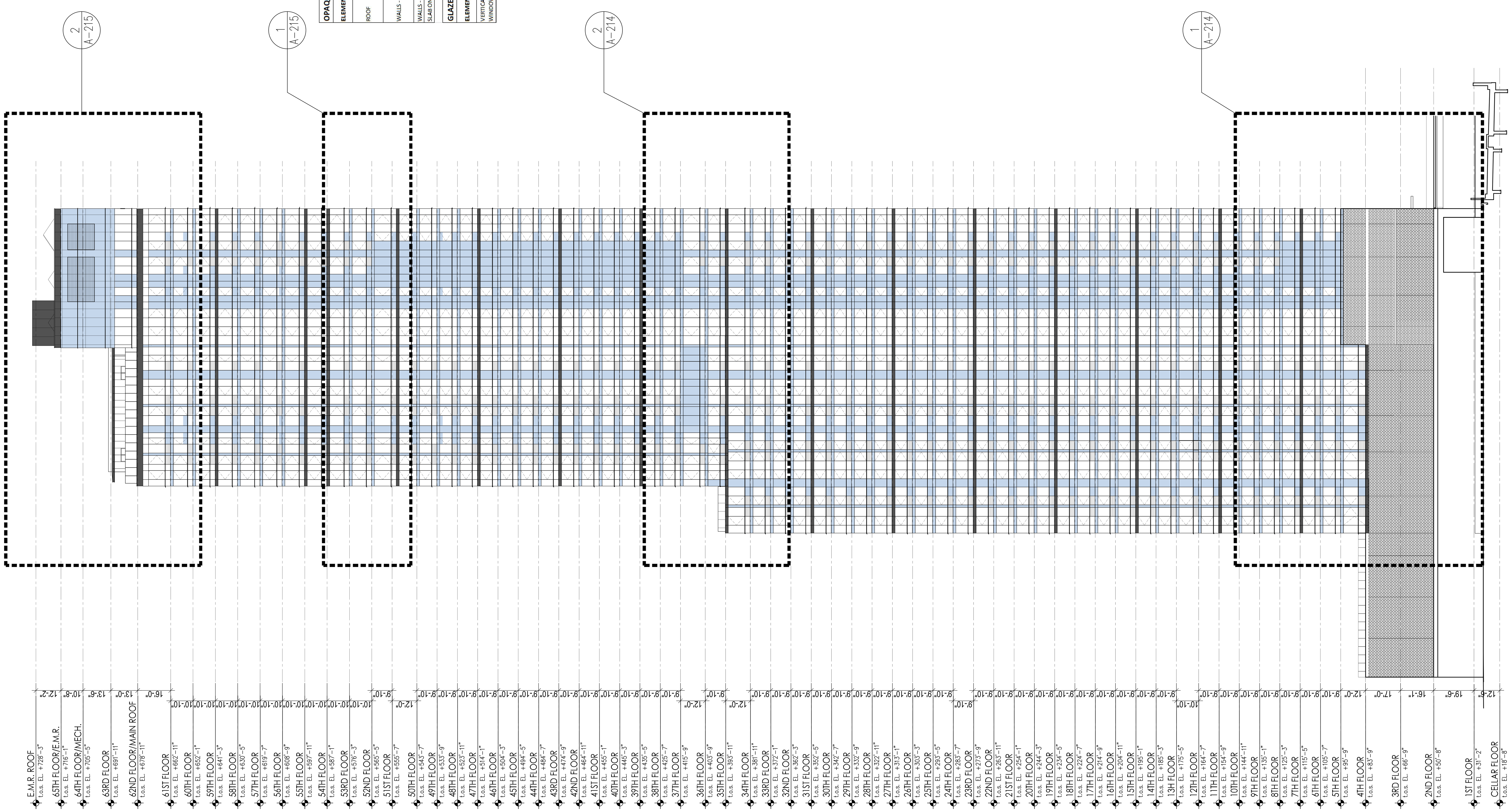
NOTE:

OPAQUE BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	INSULATION (R-VALUE)	ASSEMBLY (U-FACTOR, F-FACTOR, C-FACTOR)
ROOF	INSULATED CONCRETE ROOF DECK	R-21	U-0.045
	SOLAR ABSORPTANCE	0.75	
	EMITTANCE	0.9	
WALLS - ABOVE GRADE	SPANDREL WALL (ALUMINUM SHADOW BOX)	R-9	U-0.25
	FIXED SPANDREL	R-20	U-0.046
	SHEAR WALL SPANDREL	R-9	U-0.20
WALLS - BELOW GRADE	CONCRETE WALL	NR	C-1.140
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	NR	F-0.73

GLAZED BUILDING ENVELOPE PARAMETERS

ELEMENT	DESCRIPTION	CENTER OF GLASS U-FACTOR	ASSEMBLY U-FACTOR	SHGC	VLT
VERTICAL GLAZING WINDOW WALL ASSEMBLY	VRE-38	U-0.49	U-0.49	0.23	0.31



NORTH ELEVATION

DEPT OF BLDGS 121185760 Job Number
ES980121616 Scan Code

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects,LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

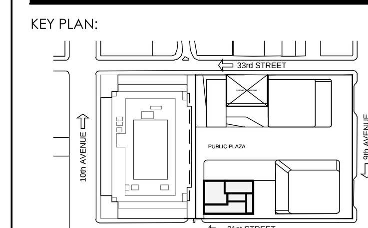
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: NTS
0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
NORTH ELEVATION

SEAL & SIGNATURE:
REGISTERED ARCHITECT STATE OF NEW YORK No. 020741

DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.
DWG. No.: A-202.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A200-A203_Building

DEPT OF BLDGS 121185760 Job Number E300562323ZS Scan Code

UNIT KEY

VISION GLASS

OPAQUE ZONE

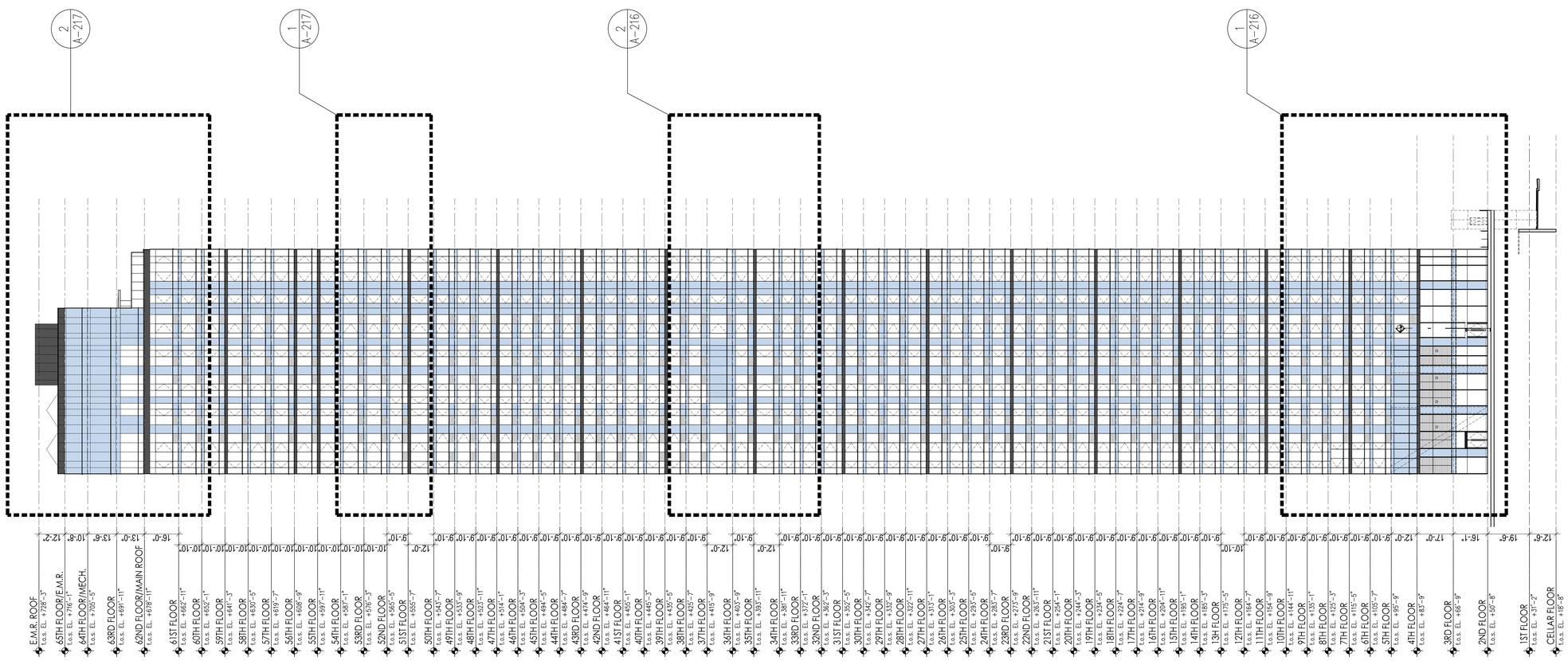
PTAC GRILL

OPERABLE CASEMENT WINDOW

NOTE:

OPAQUE BUILDING ENVELOPE PARAMETERS			
ELEMENT	DESCRIPTION	INSULATION (R-VALUE)	ASSEMBLY (U-FACTOR, F-FACTOR, C-FACTOR)
ROOF	INSULATED CONCRETE ROOF DECK	R-21	U-0.045
	SOLAR ABSORPTIANCE	0.75	
	EMITTANCE	0.9	
WALLS - ABOVE GRADE	SPANDREL WALL (ALUMINUM SHADOW BOX)	R-9	U-0.25
	FIXED SPANDREL	R-20	U-0.046
	SHEAR WALL SPANDREL	R-9	U-0.30
WALLS - BELOW GRADE	CONCRETE WALL	INR	C-1.140
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	INR	F-0.73

GLAZED BUILDING ENVELOPE PARAMETERS				
ELEMENT	DESCRIPTION	CENTER OF GLASS U-FACTOR	ASSEMBLY U-FACTOR	SHGC	VLT
VERTICAL GLAZING WINDOW WALL ASSEMBLY	VRE-38	U-0.49	U-0.49	0.23	0.31



WEST ELEVATION

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2013-12-18	SCHEMATIC DESIGN

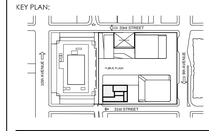
O.O.B. NUMBER:

NB# 121185760

NORTH

Scale: NTS

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

WEST ELEVATION

SEAL & SIGNATURE:

REGISTERED ARCHITECT TERRY A. FRANK STATE OF NEW YORK

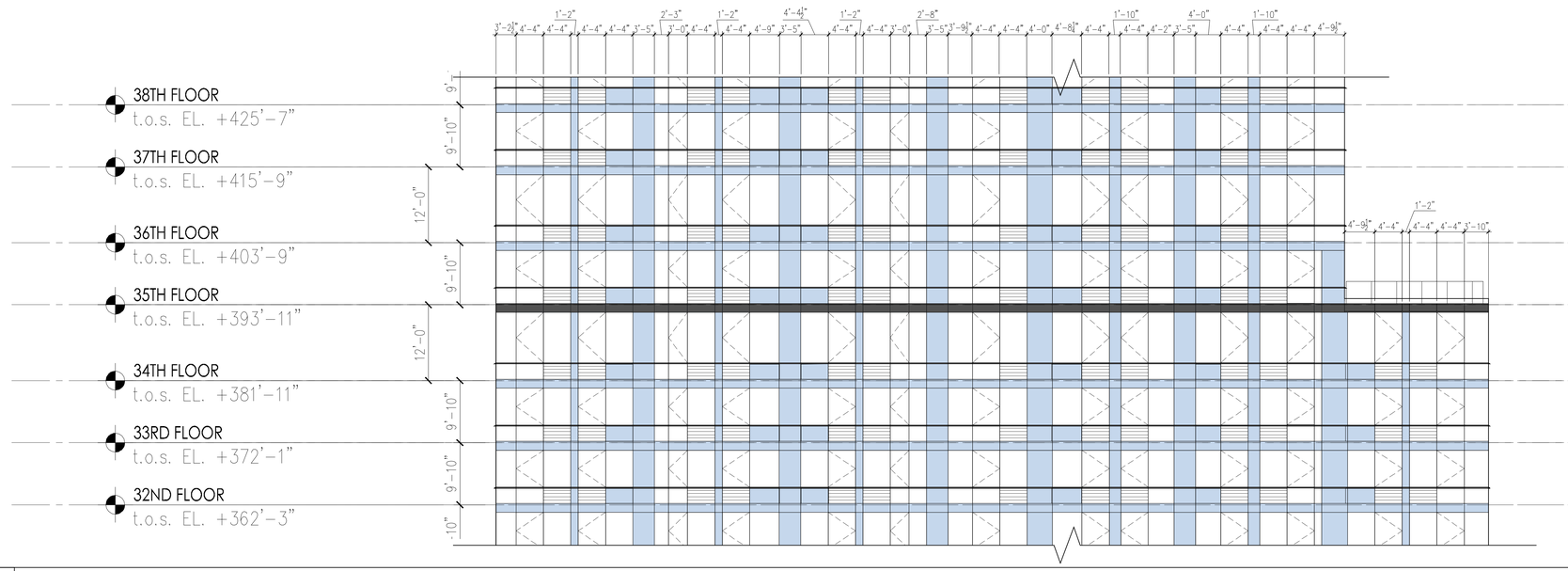
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

A-203.00

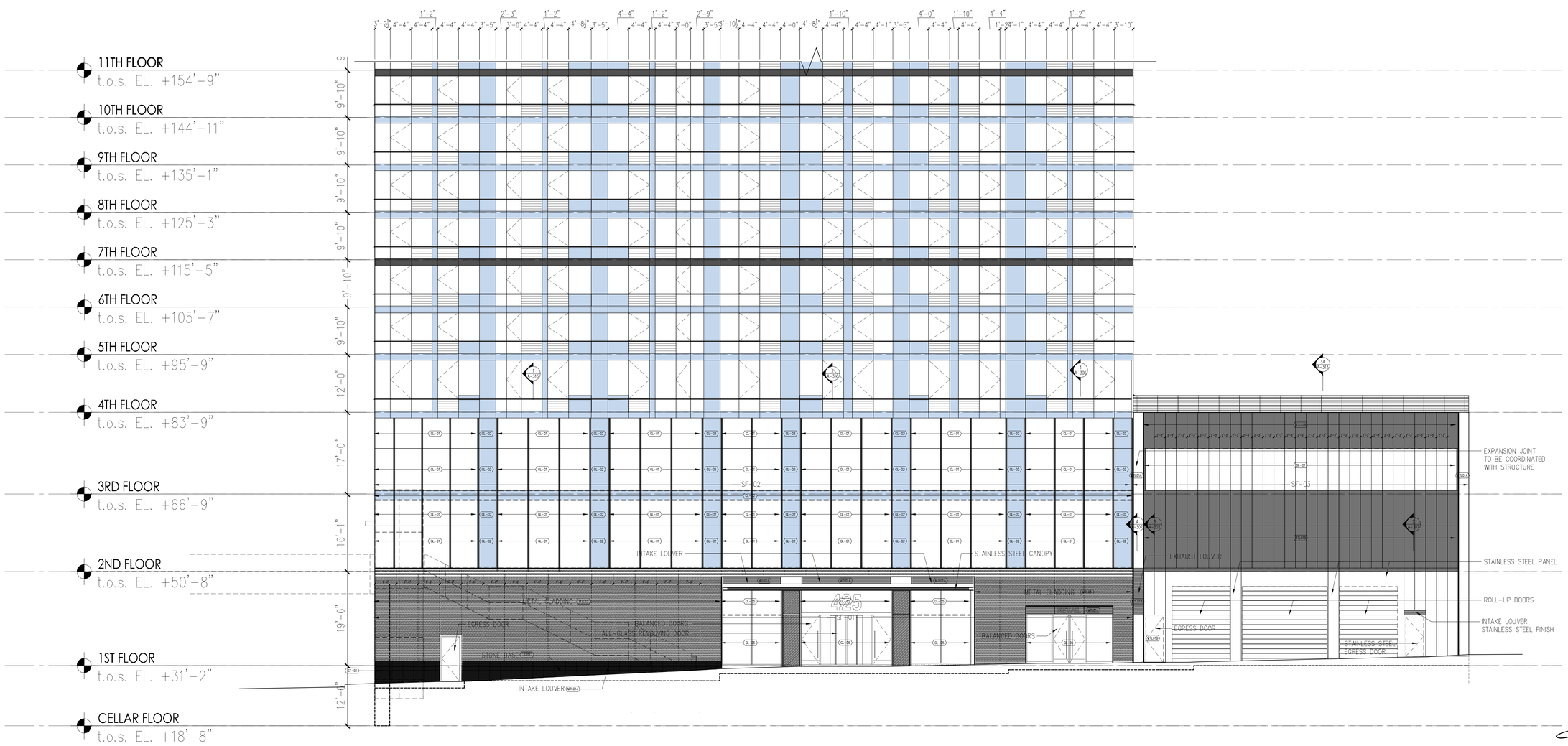
SHEET. No.: 1 of 000

FILE No: \\bbcor\ledi-Manhattan-West\2012-032\J_CD\Drawings\Bldg A203-A205_Building

DEPT OF BLDGS 121185760 Job Number
E5324525348 Scan Code



2 SOUTH ELEVATIONS - MID LEVEL
1/8" = 1'-0"



1 SOUTH ELEVATIONS - PODIUM
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

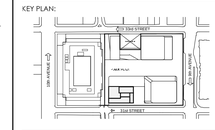
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-03	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/8" = 1'-0" (0, 4, 8, 12, 20')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

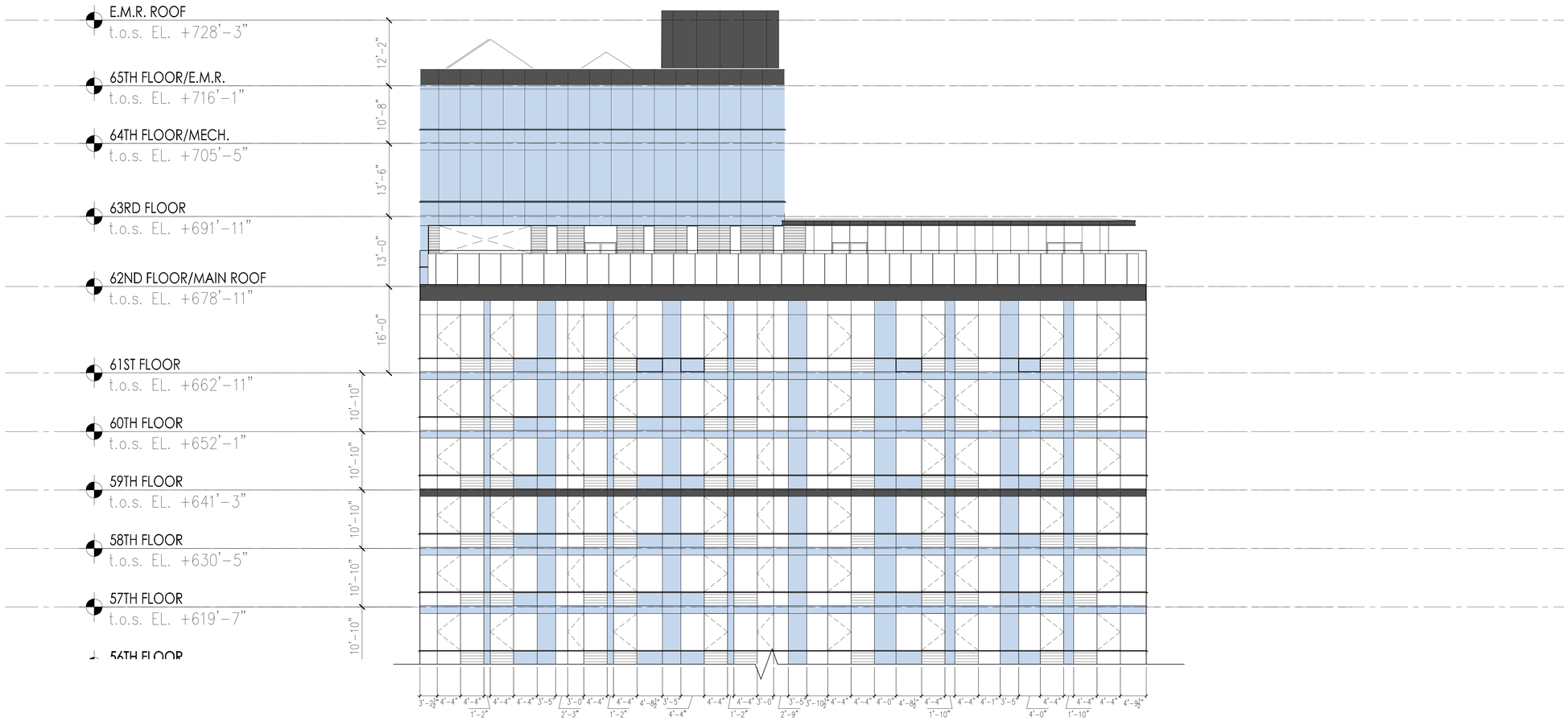
DRAWING TITLE:
SOUTH ELEVATION
LOWER

SEAL & SIGNATURE:

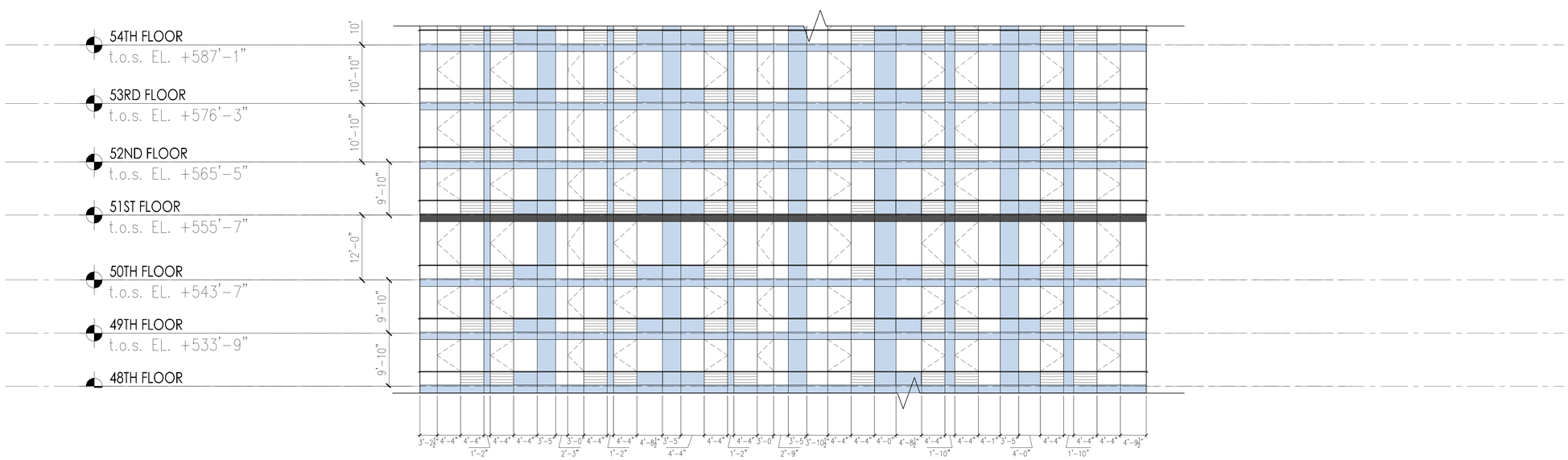
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
DRAWING No:	A-210.00
SHEET, No.:	1 of 000

FILE No: \\Jaxw\dgs\Martyr\to-Hilal\2012-32\L-2012\Drawings\BldgA\A210-A211.dwg

DEPT OF BLDGS 121185760 Job Number
E3569760304 Scan Code



2 SOUTH ELEVATIONS - BULKHEAD
1/8" = 1'-0"



1 SOUTH ELEVATIONS - UPPER LEVELS
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

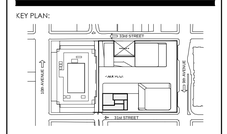
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT #1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'-0"
0 4 8 12 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SOUTH ELEVATION
UPPER

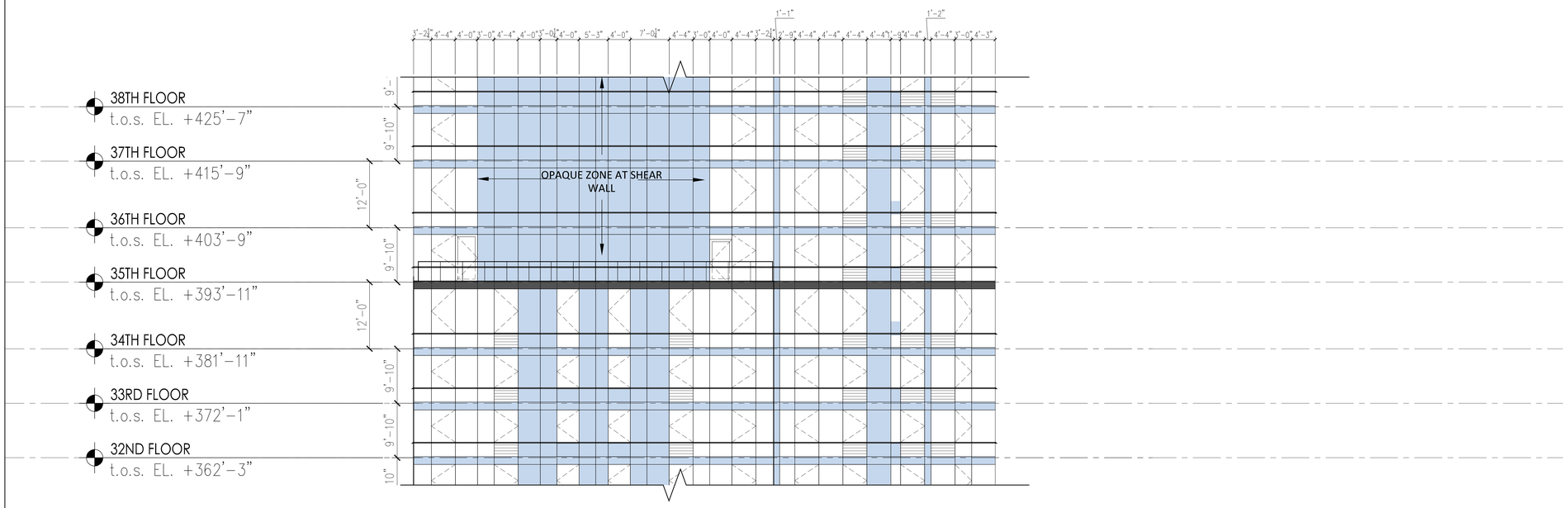
SEAL & SIGNATURE:

REGISTERED ARCHITECT
STATE OF NEW YORK

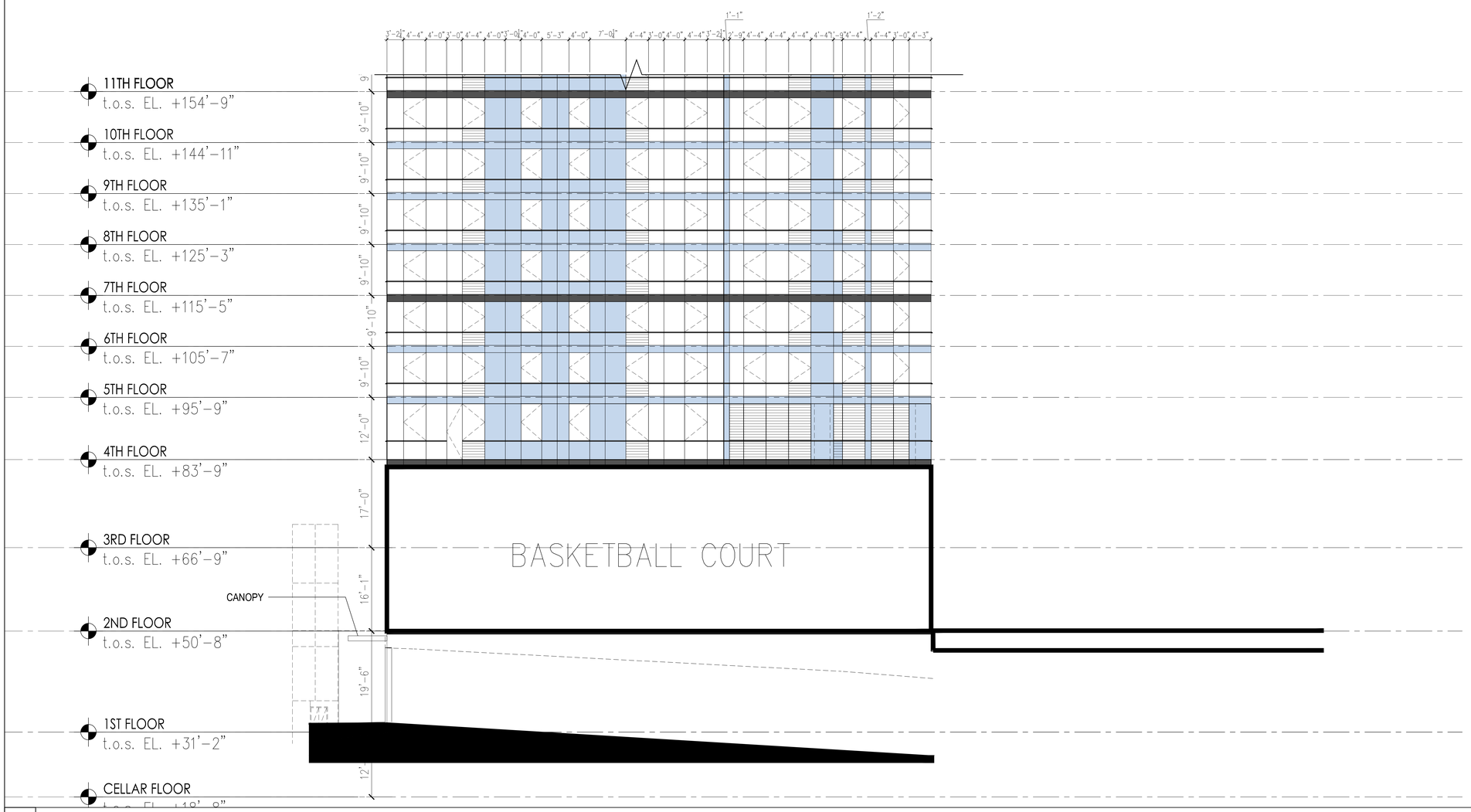
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET No.:	A-211.00
SHEET. No.:	1 of 000

FILE No: \\bcc-fs\Manhattan West (2012-32)_CD\Drawings\BMW_A210-A211.dwg

DEPT OF BLDGS 121185760 Job Number | 830430007605 Scan Code



2 EAST ELEVATIONS - MID LEVEL
1/8" = 1'-0"



1 EAST ELEVATIONS - PODIUM
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

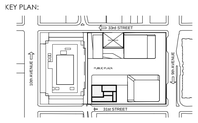
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-03	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'-0"
0 4 8 12 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

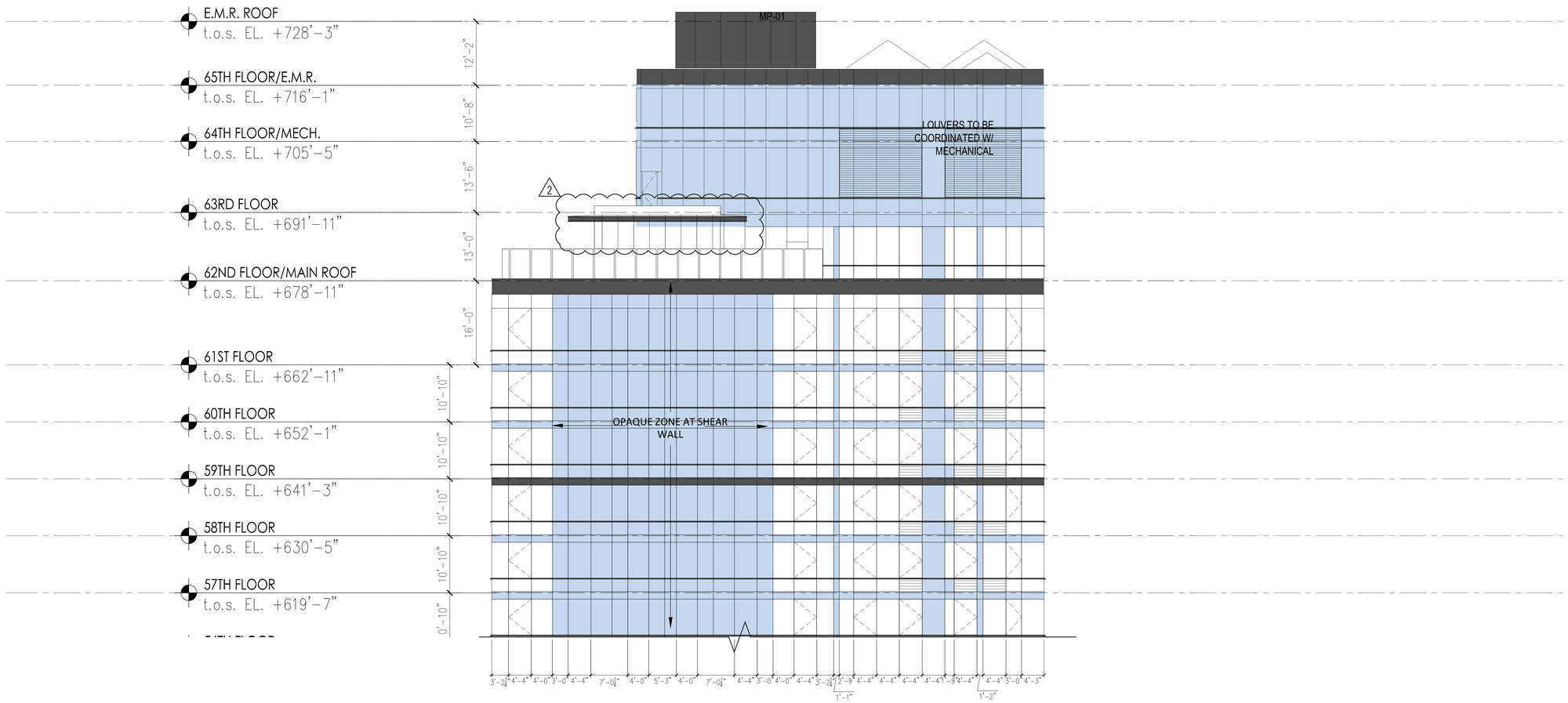
DRAWING TITLE:
EAST ELEVATION
LOWER

SEAL & SIGNATURE:

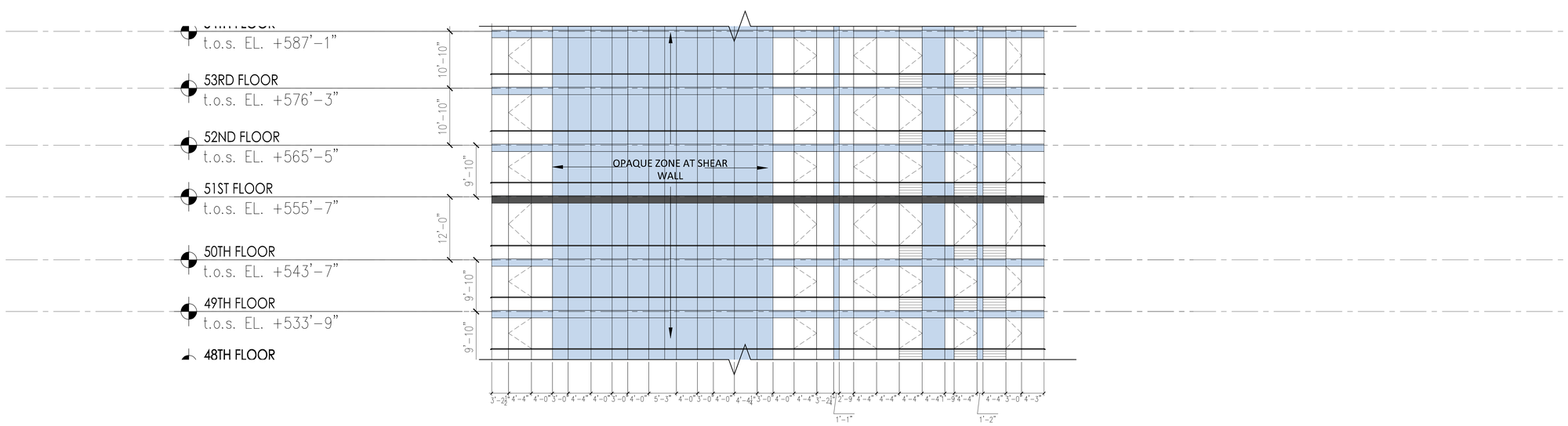
DATE:	-
PROJECT No.:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
DWG. No.:	A-212.00
SHEET. No.:	1 of 000

FILE No: Y:\Brookfield-Manhattan-West\2012-32\LCE-Drawings\BMW_A212-A215.dwg

DEPT OF BLDGS 421185760 Job Number
E300610221151 Scan Code



2 EAST ELEVATIONS - BULKHEAD
1/8" = 1'-0"



1 EAST ELEVATIONS - UPPER LEVELS
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

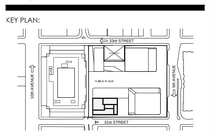
CONSTRUCTION MANAGER:
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

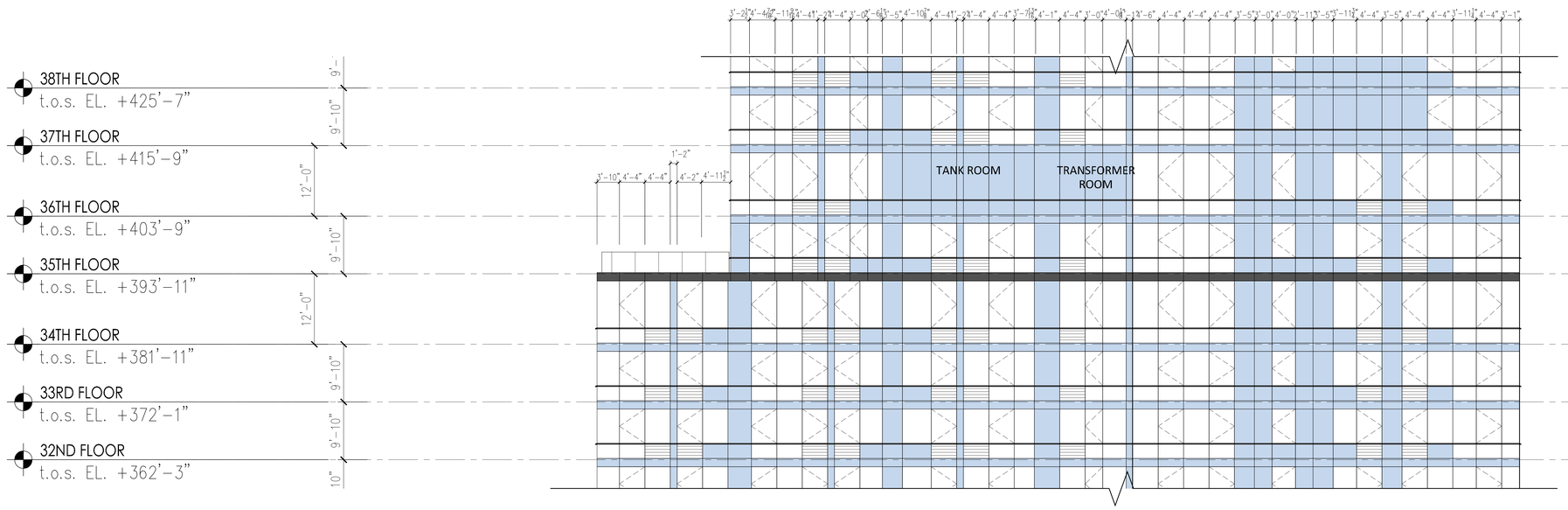
DRAWING TITLE:
EAST ELEVATION
UPPER

SEAL & SIGNATURE:

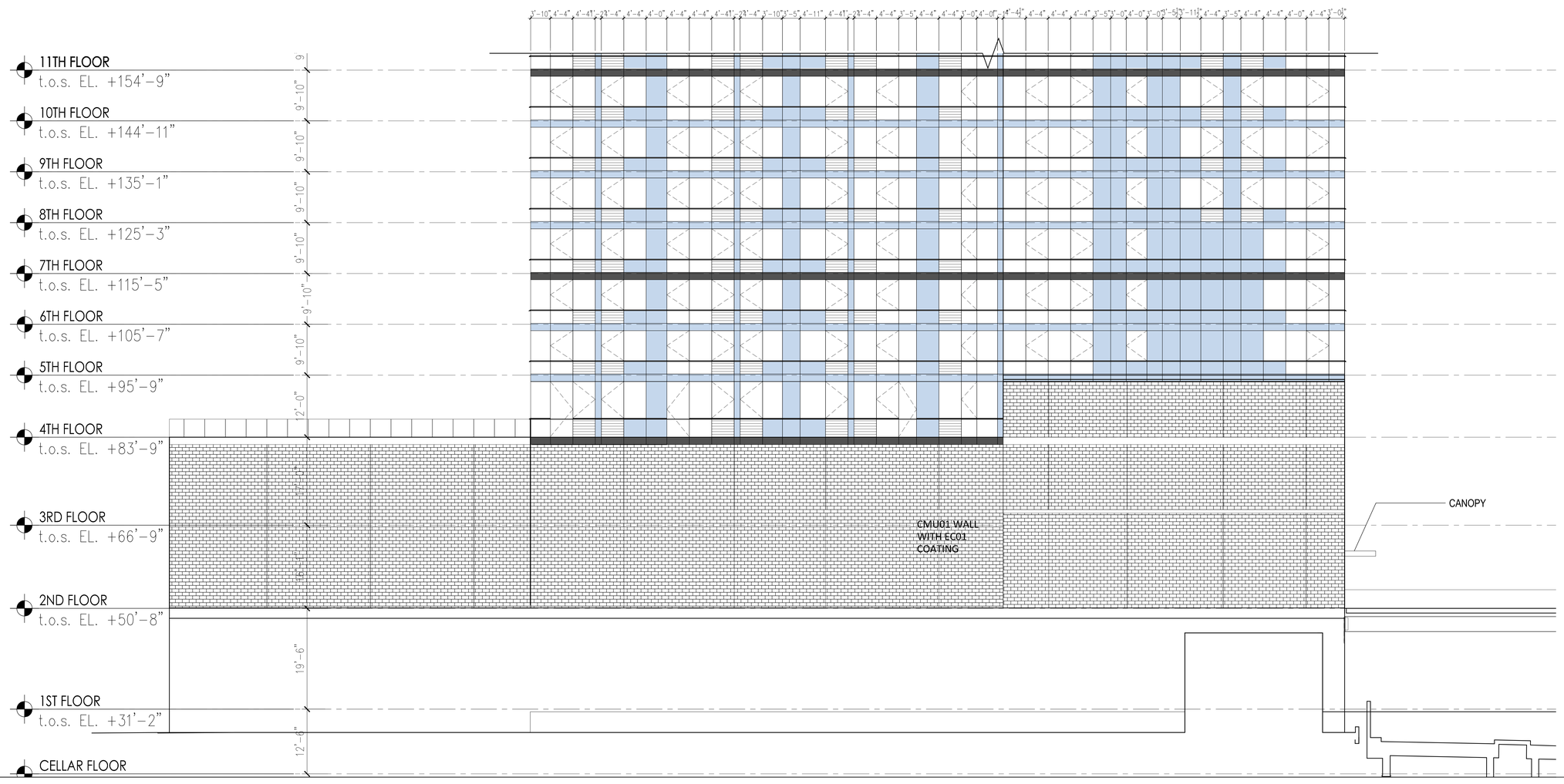
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET No.:	A-213.00
	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A213-A215.dwg

DEPT OF BLDGS 121185760 Job Number
E5206000065 Scan Code



2 NORTH ELEVATIONS - MID LEVELS
1/8" = 1'-0"



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

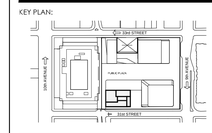
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

NORTH ELEVATION
LOWER

SEAL & SIGNATURE:

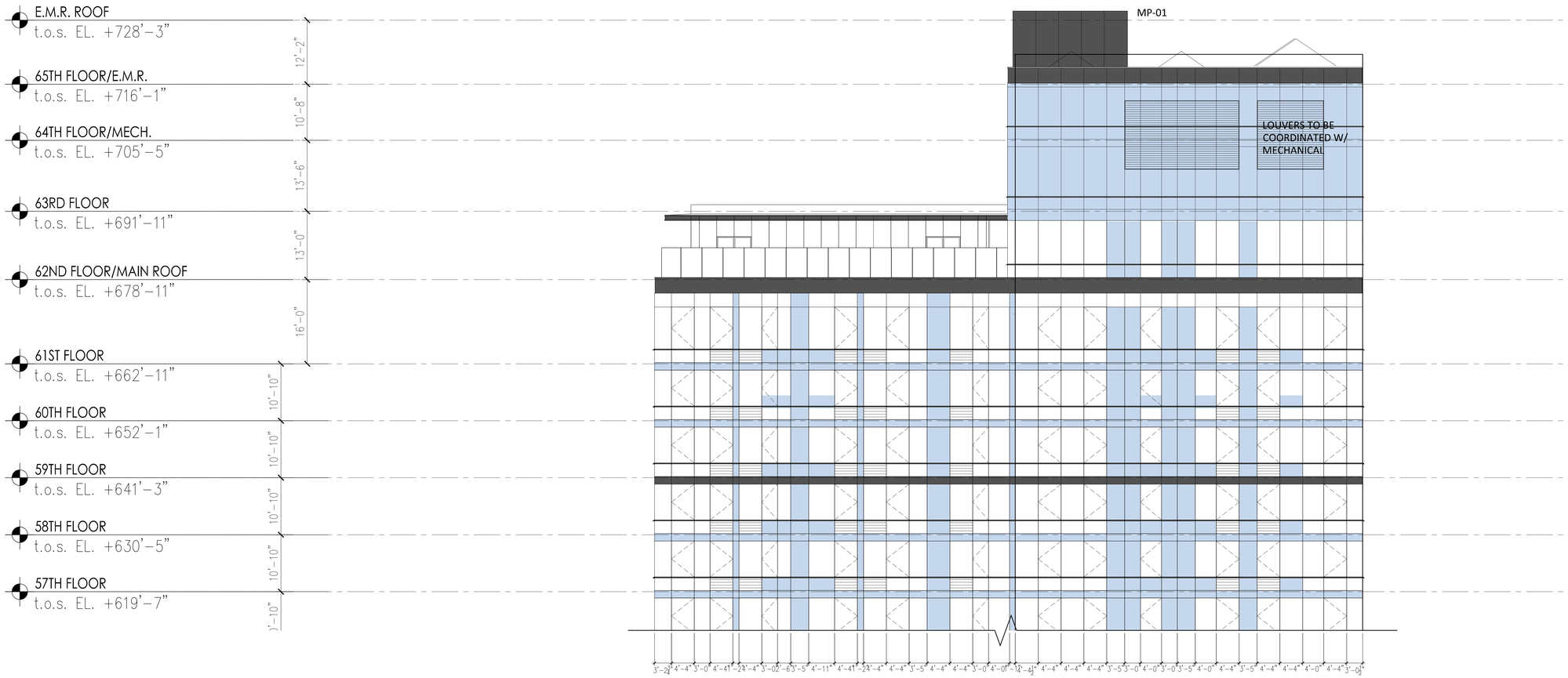
LICENSED ARCHITECT
TIMOTHY J. FIFE
No. 021 FIFE
STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

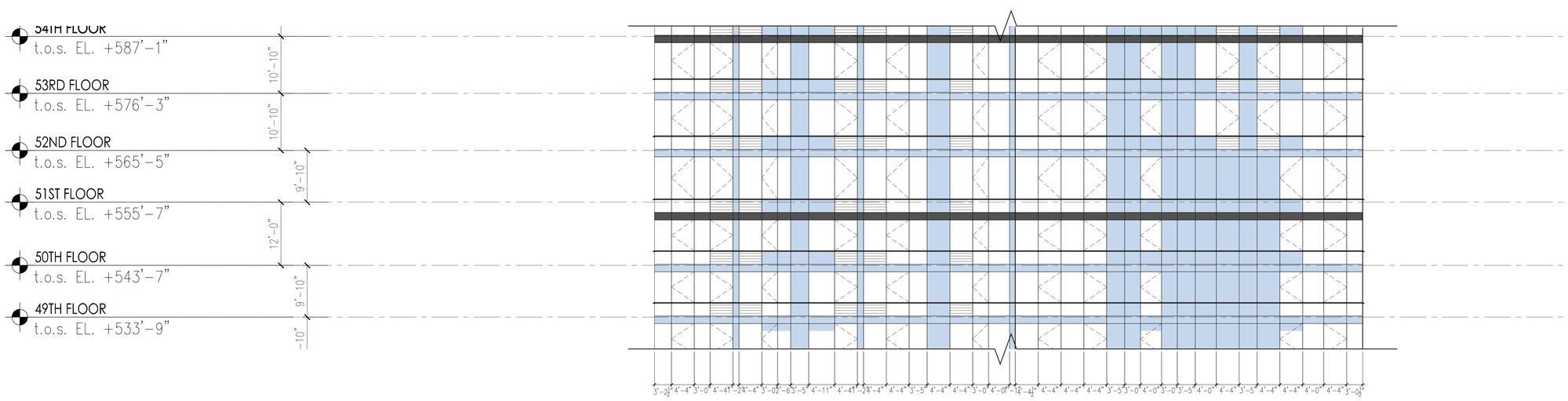
A-214.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\LCE Drawings\BldN_A214A215.dwg

DEPT OF BLDGS 121185760 Job Number | E3122094812 Scan Code



2 NORTH ELEVATIONS - BULKHEAD
1/8" = 1'-0"



1 NORTH ELEVATIONS - UPPER LEVELS
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

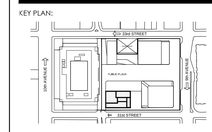
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

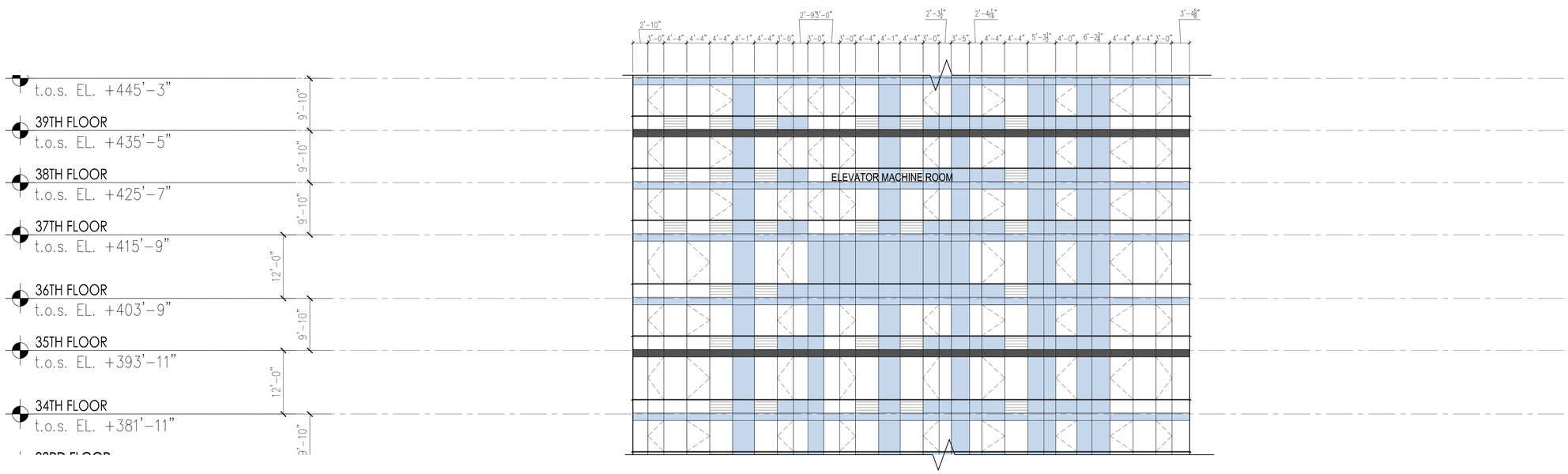
DRAWING TITLE:
NORTH ELEVATION
UPPER

SEAL & SIGNATURE:

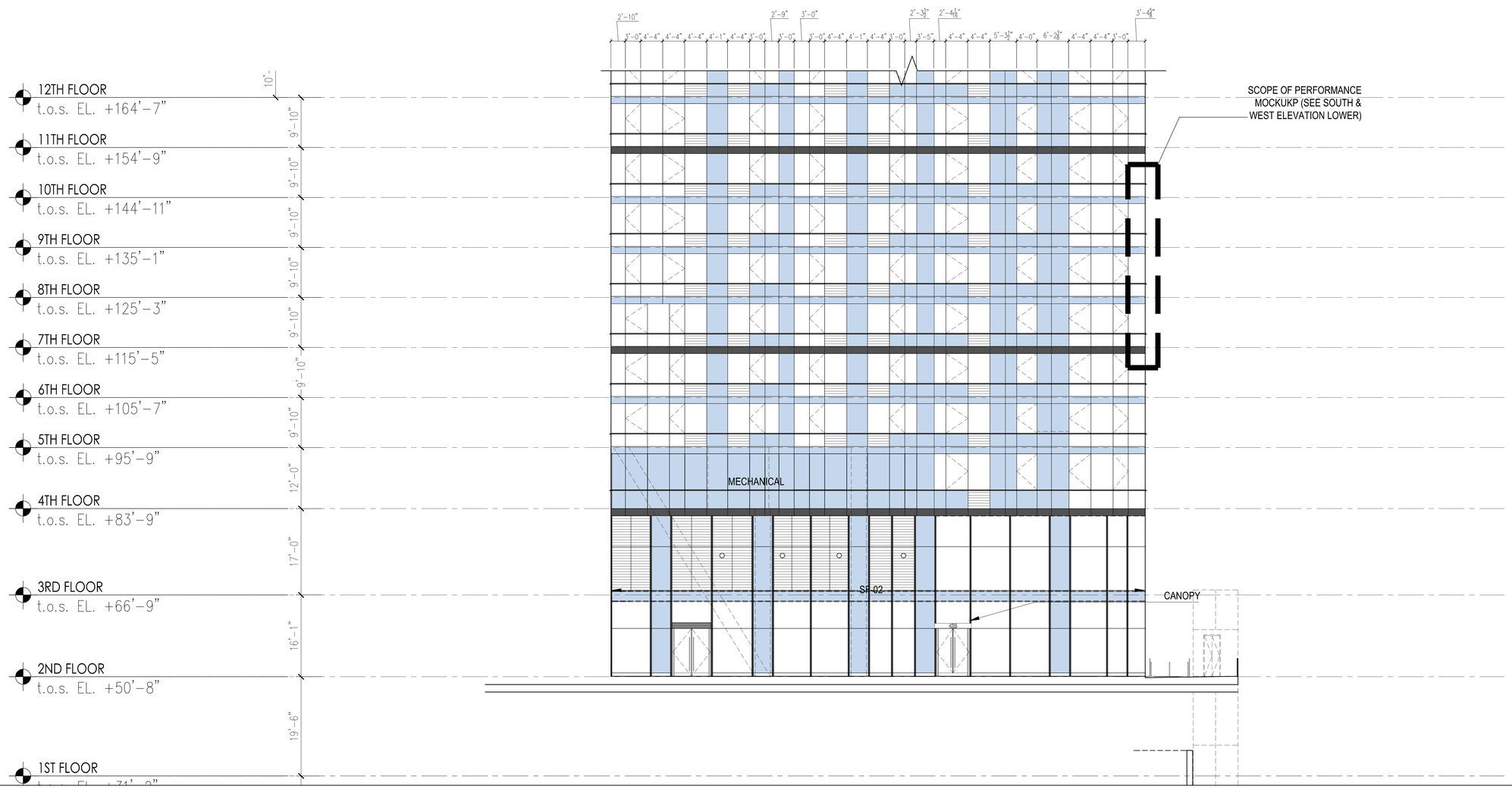
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET. No.:	A-215.00
	1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A214-A215.dwg

DEPT OF BLDGS 421185760 Job Number
E5527295065 Scan Code



2 WEST ELEVATIONS - MID LEVELS
1/8" = 1'-0"



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

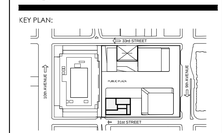
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-05	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

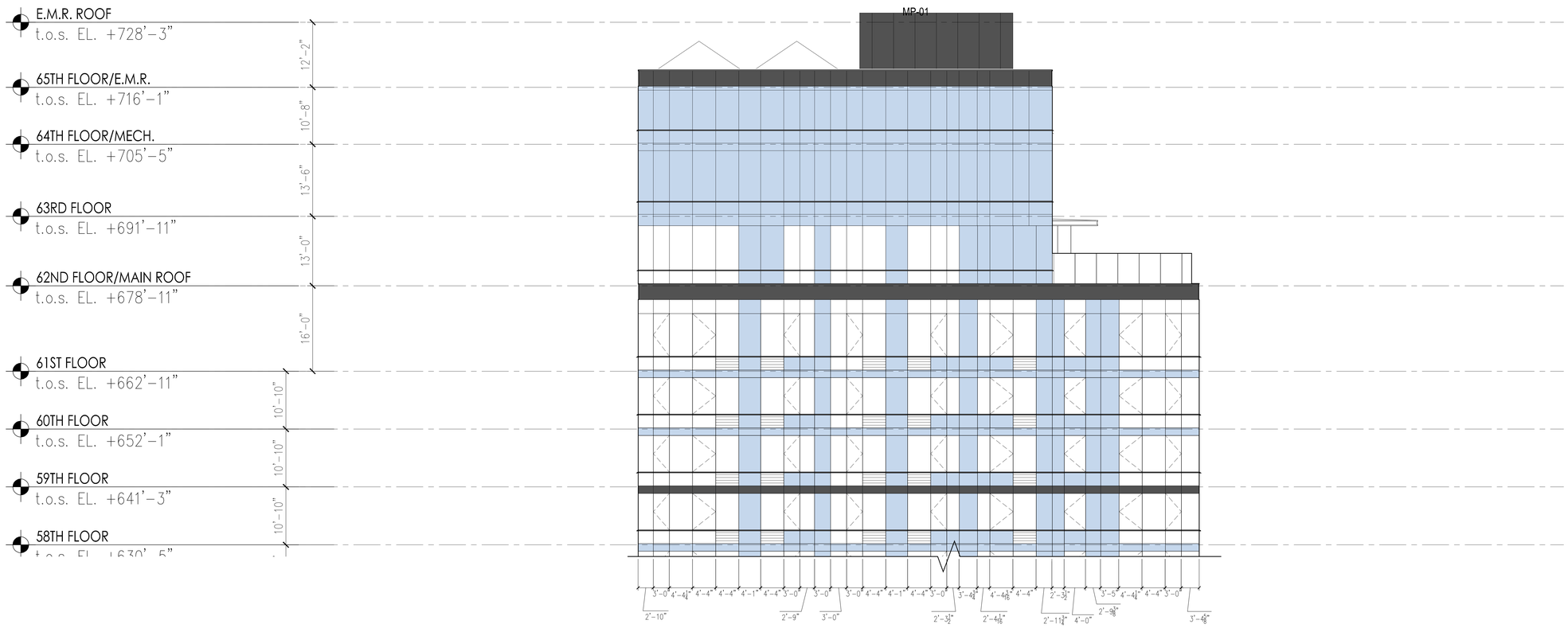
DRAWING TITLE:
WEST ELEVATION
LOWER

SEAL & SIGNATURE:

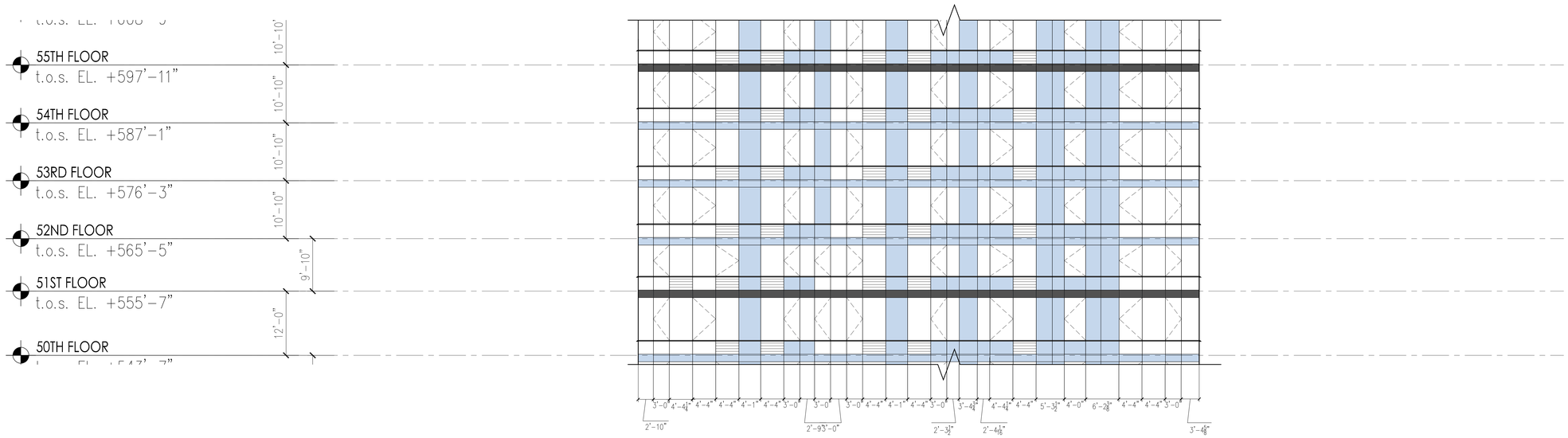
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	-
CHECKED BY:	T.J.F.
DRAWING No:	A-216.00
SHEET. No.:	1 of 000

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SLCE Drawings\BMW_A216-A217.dwg

DEPT OF BLDGS 121185760 Job Number
E267265742 Scan Code



2 WEST ELEVATIONS - BULKHEAD
1/8" = 1'-0"



1 WEST ELEVATIONS - UPPER LEVELS
1/8" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (917) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

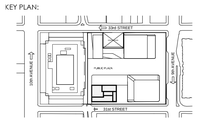
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/8" = 1' 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

WEST ELEVATION
UPPER

SEAL & SIGNATURE:

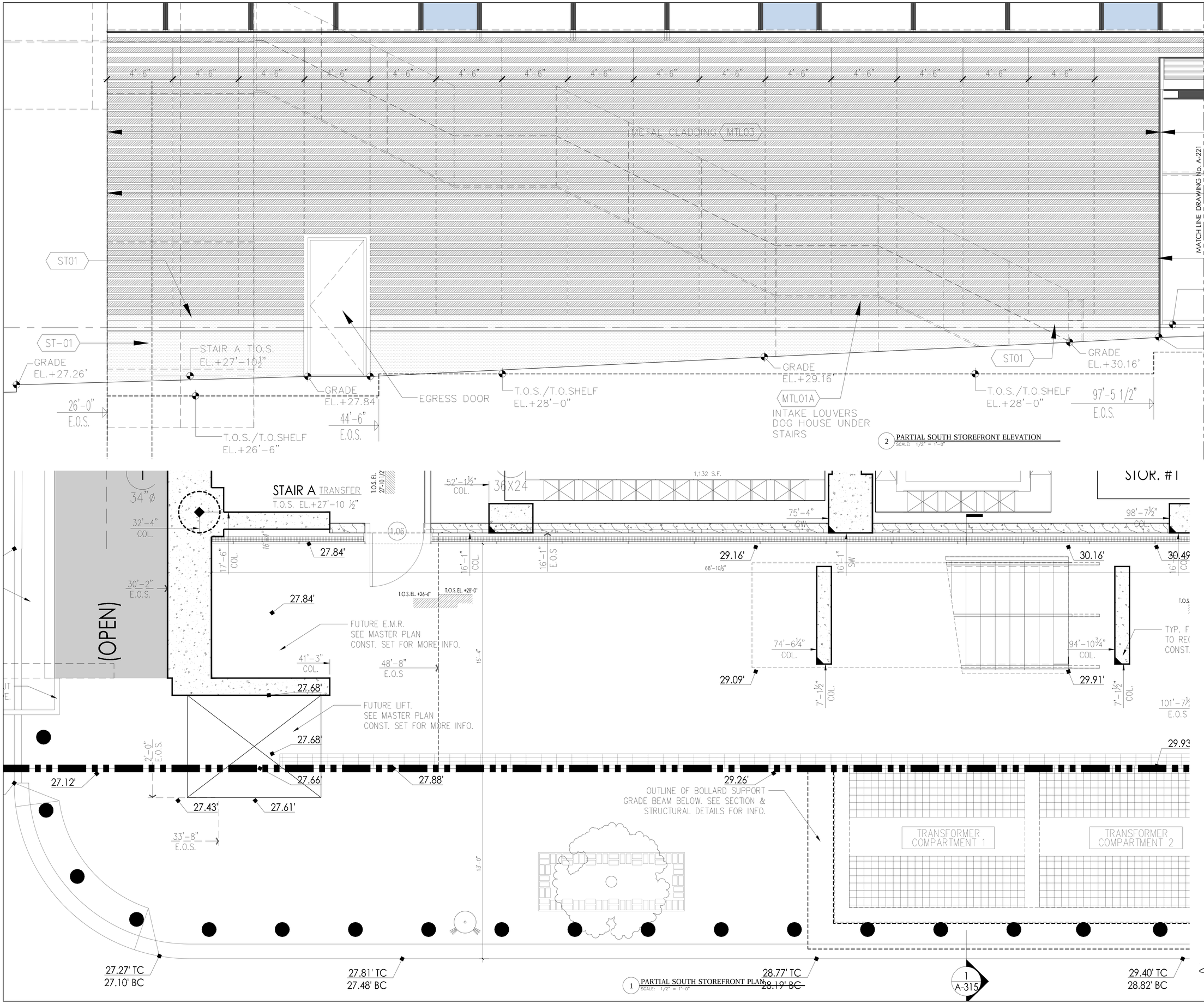
DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.

A-217.00

SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A216-A217.dwg

DEPT OF BLDGS 121185760 Job Number E326941202SI Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, RK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOBFILING
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-03-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/2" = 1'-0"
0 1 2 3 5

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

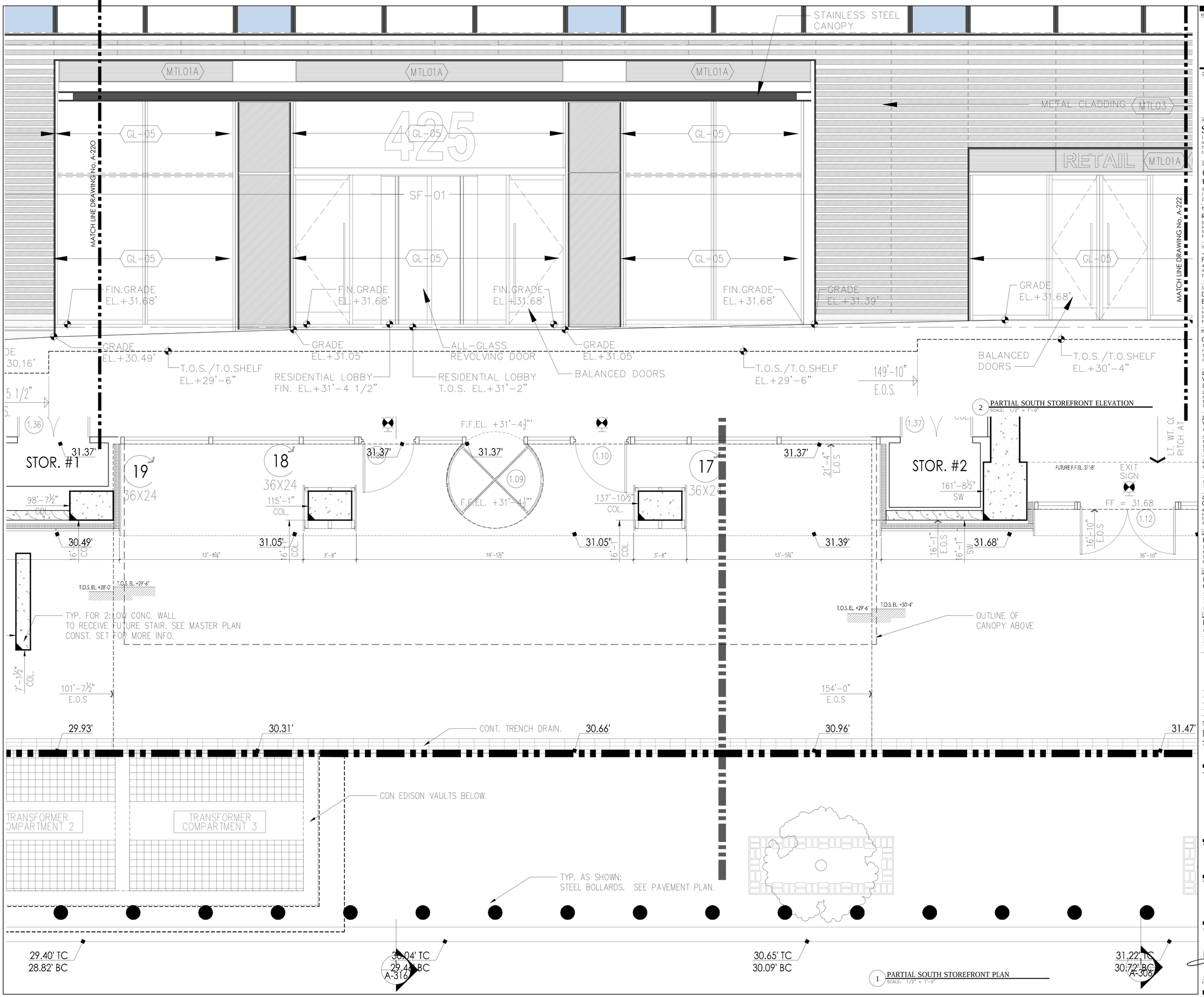
DRAWING TITLE:
SOUTH STOREFRONT DETAIL 1

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

A-220.00
SHEET. NO.: 1 of 000

FILE No: \\Slcw-fs\Manhattan West (2012-32)\2.CD\Drwings\BldW_A220-A222.dwg



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

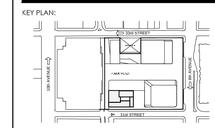
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-02-14	ISSUED FOR FOUNDATION FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/2" = 1'-0" (0 1 2 3 5)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SOUTH STOREFRONT DETAIL 2

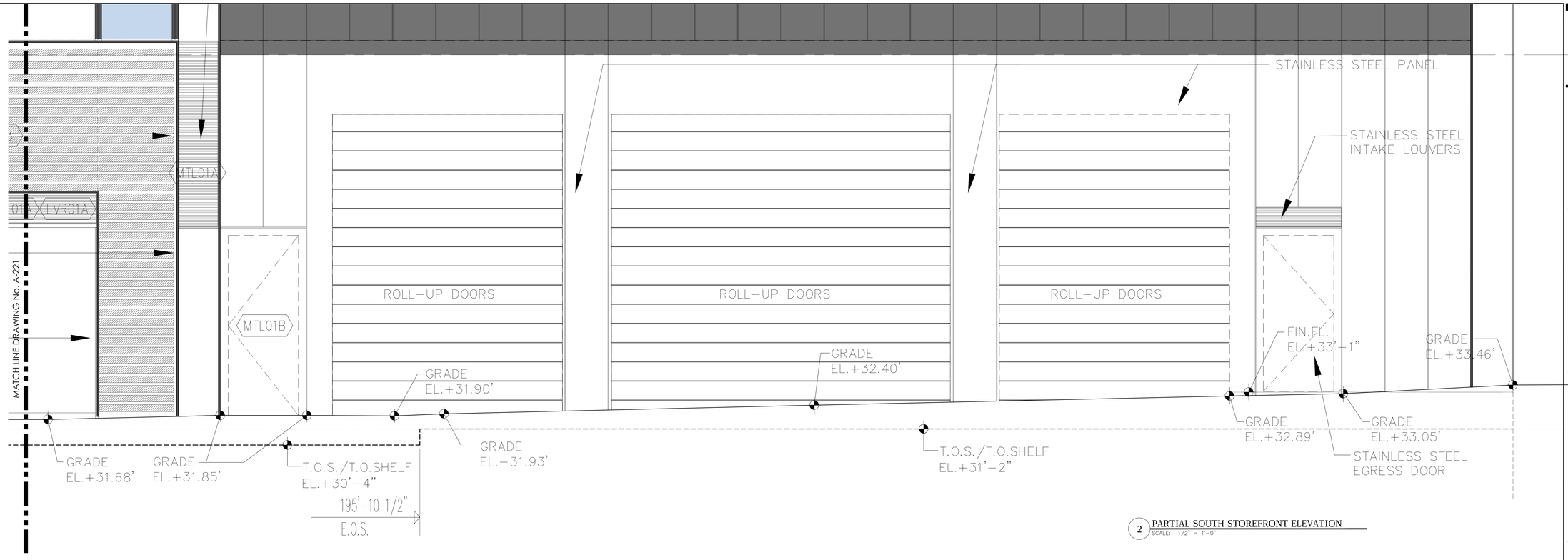
SEAL & SIGNATURE:

REGISTERED ARCHITECT JOHN C. CHUNG STATE OF NEW YORK

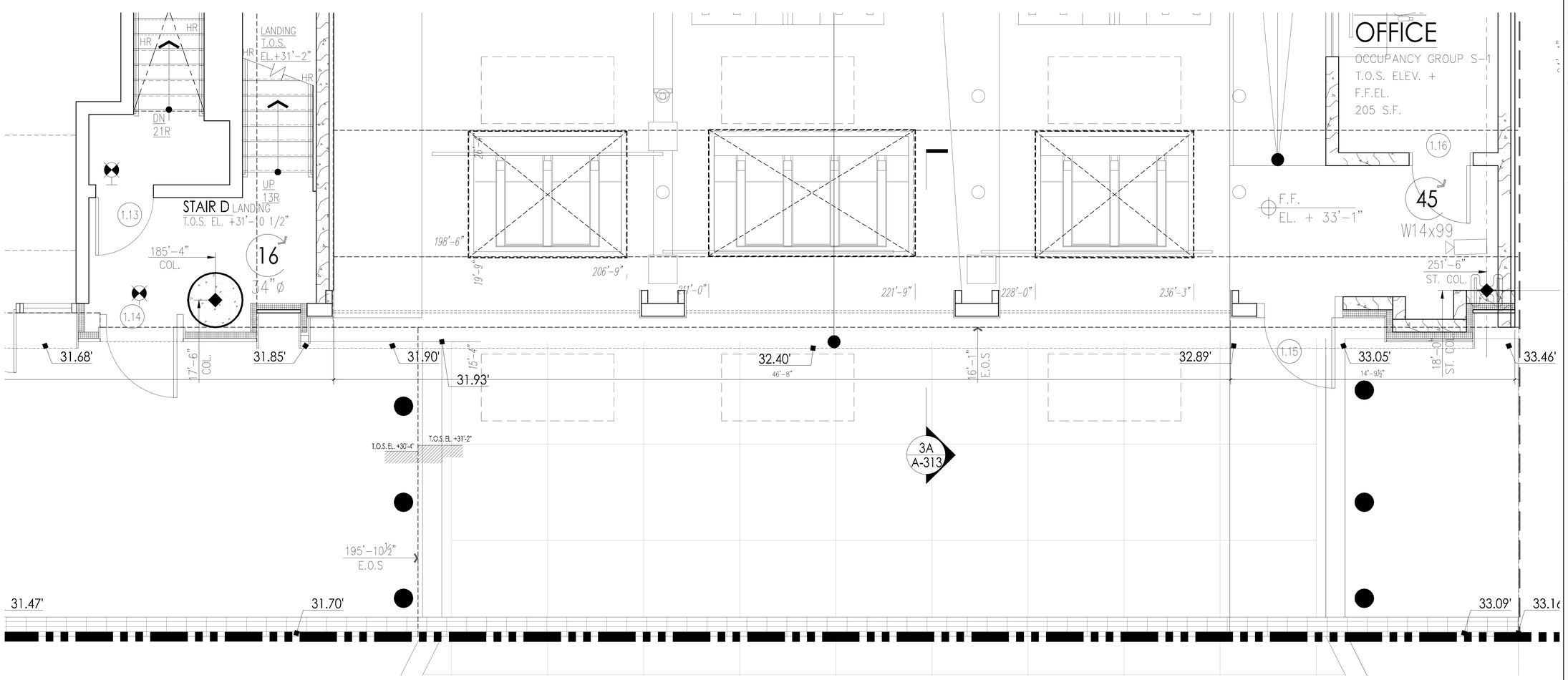
DATE: -
PROJECT No: 2012-32
DRAWN BY: JCB
CHECKED BY: T.J.F.

SHEET No.: A-221.00
1 of 000

FILE No: \\boxer\Brookfield\ManhattanWest\2012-032.2012\Drawings\BMW_A220-A222.dwg



2 PARTIAL SOUTH STOREFRONT ELEVATION
SCALE: 1/2" = 1'-0"



1 PARTIAL SOUTH STOREFRONT PLAN
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

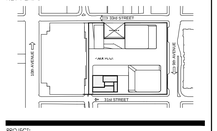
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOBFILING
2014-10-23	BULLETIN #2
2014-09-09	ISSUED FOR CONSTRUCTION
2014-05-14	ISSUED FOR FOUNDATION FILING

O.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0 1 2 3 5

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

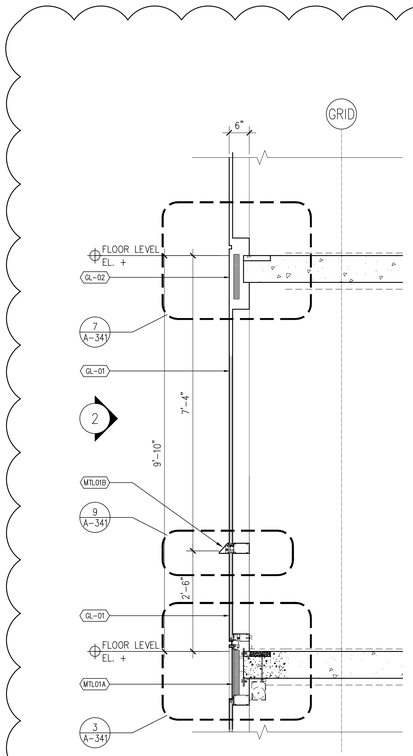
DRAWING TITLE:
SOUTH STOREFRONT DETAIL 3

SEAL & SIGNATURE:

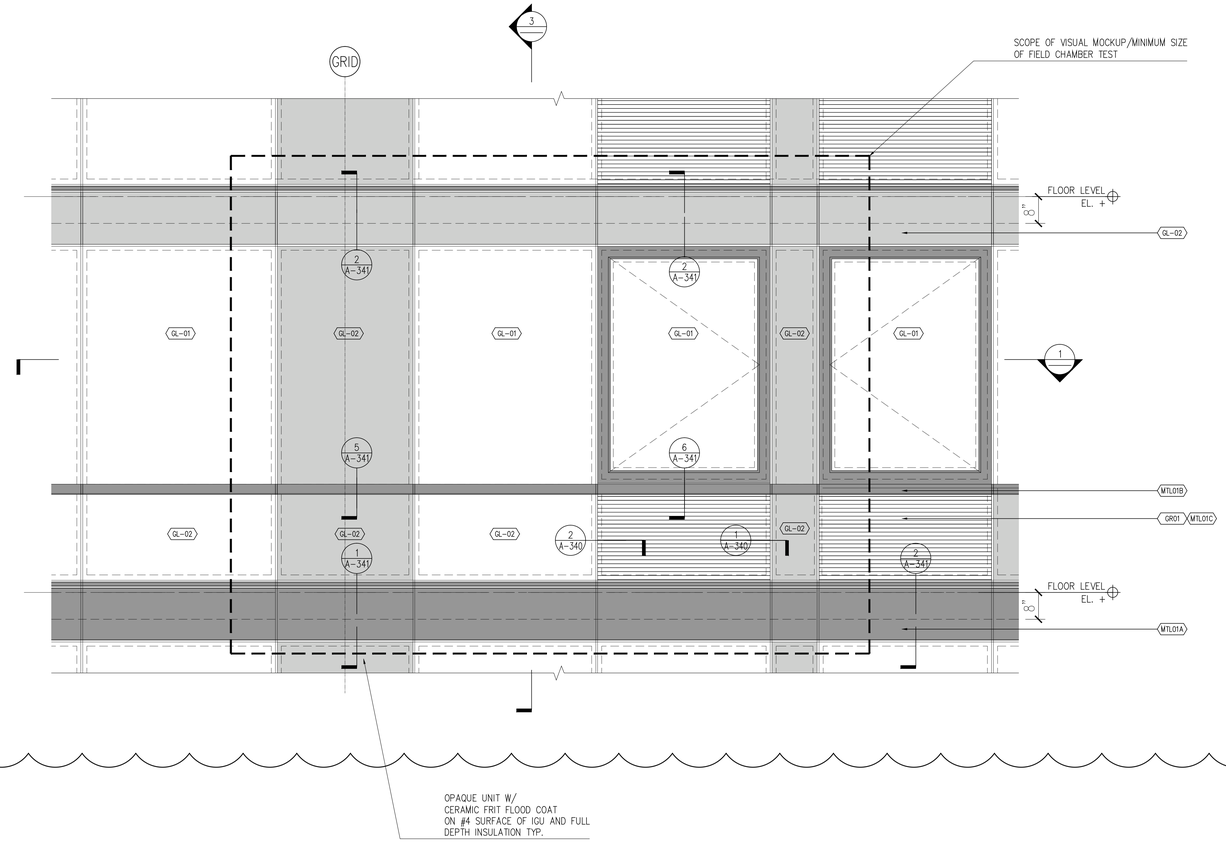
DATE:	-
PROJECT No:	2012-32
DRAWN BY :	JCB
CHECKED BY :	T.J.F.
DRAWING No.:	A-222.00
SHEET. No.:	1 of 000

FILE No: \\boxer\ebs\Manhattanwest\2012-0232\2.CD\Drawings\BAW_A222-A225.dwg

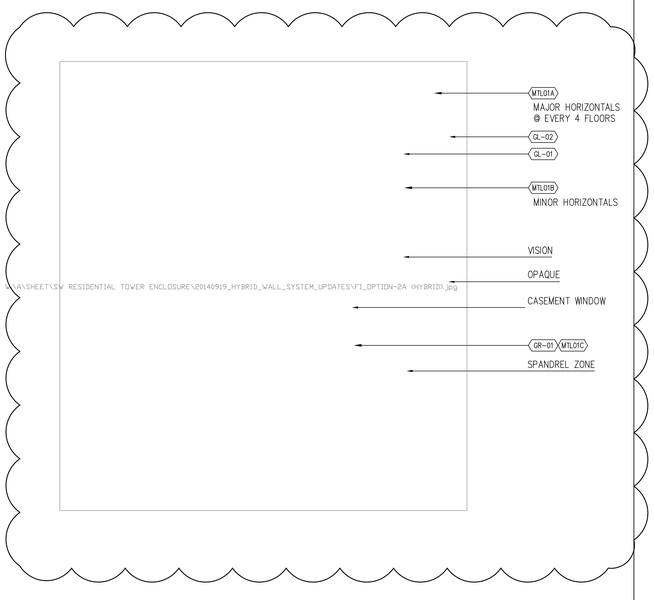
DEPT OF BLDGS 121185760 Job Number | E3235634R000 Scan Code



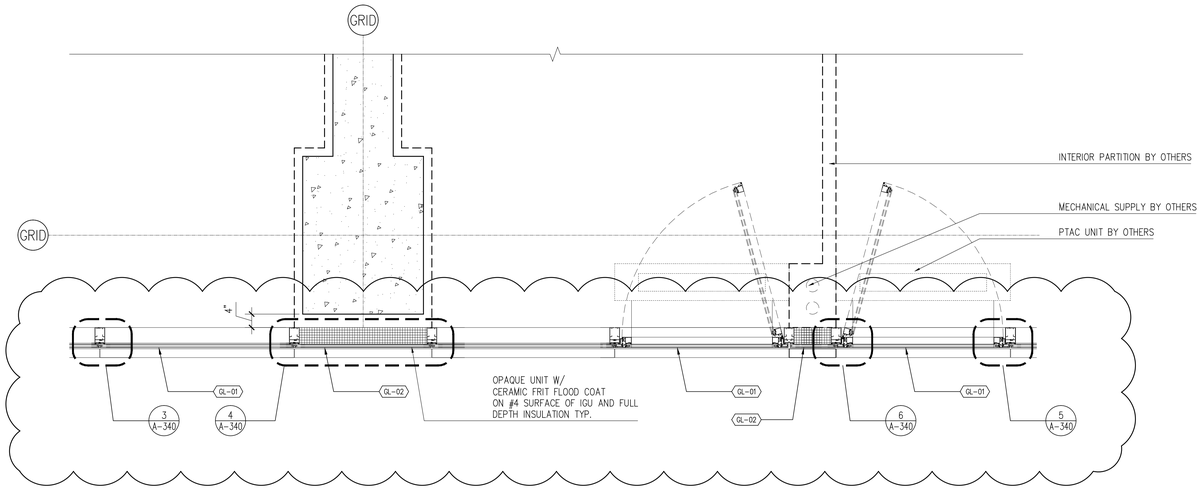
3 STANDARD SYSTEM - SECTION
SCALE: (F) 3/4"=1'-0"



2 STANDARD SYSTEM - ELEVATION
SCALE: (F) 3/4"=1'-0"



4 STANDARD SYSTEM - ISOMETRIC VIEW
SCALE: (F) 3/4"=1'-0"



1 STANDARD SYSTEM - PLAN
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

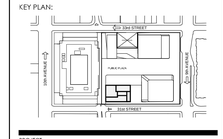
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 3/4" = 1'- 0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

HW01 HYBRID
WALL SYSTEM

SEAL & SIGNATURE:

REGISTERED ARCHITECT
JOHN FRANCIS SLCE
STATE OF NEW YORK

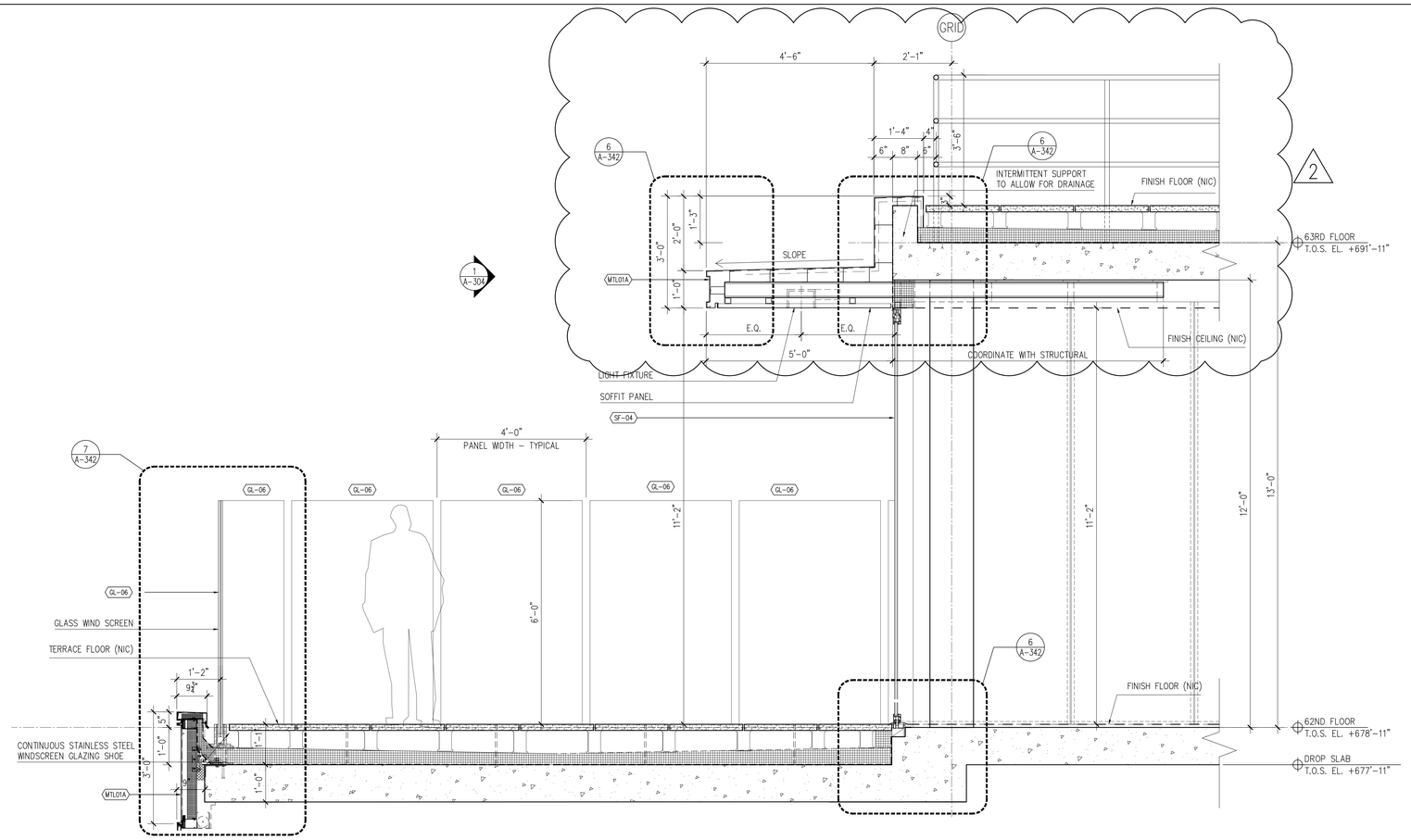
DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.

A-300.00

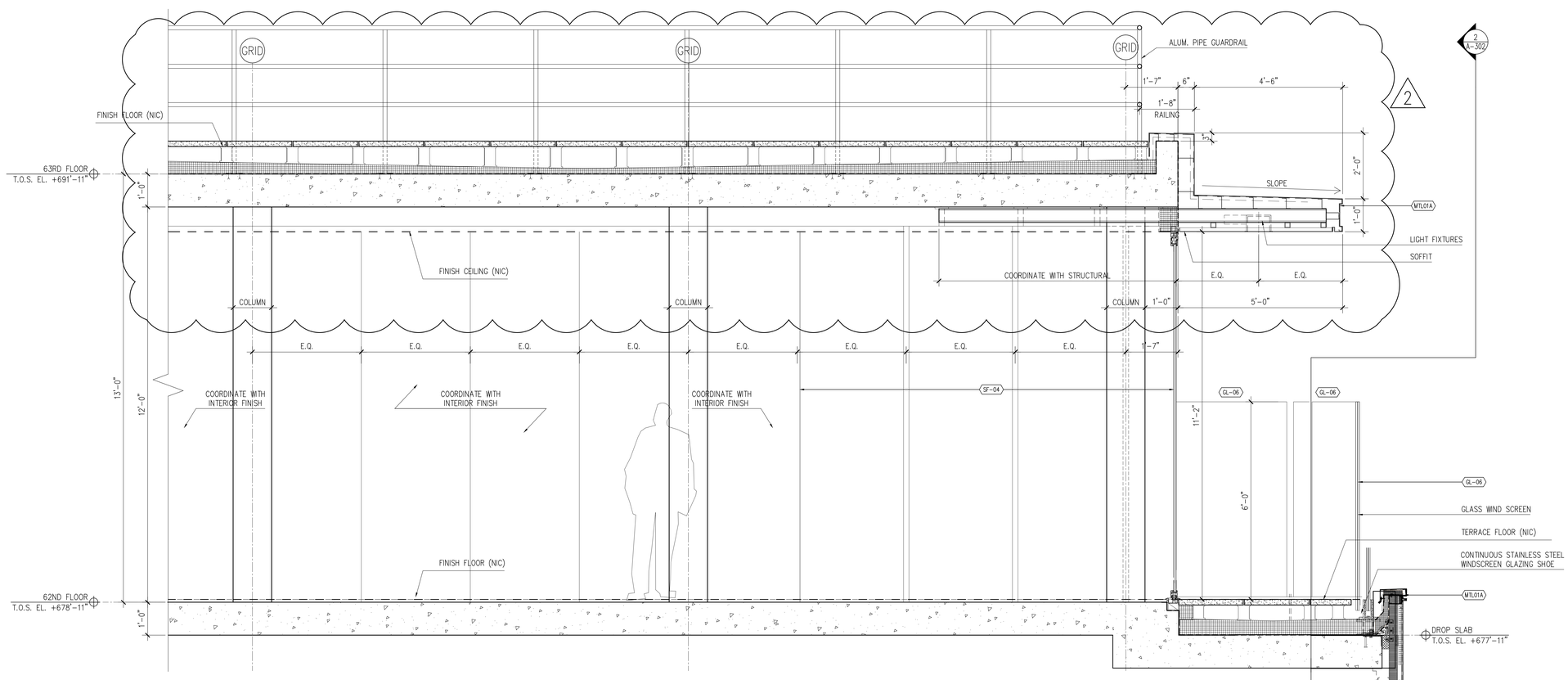
SHEET, No.: 1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)_CD Drawings\ BldW_A300.dwg

DEPT OF BLDGS 121185760 Job Number | E300169405 Scan Code



2 62ND FLOOR - SECTION (SOUTH-NORTH)
SCALE: (F) 3/4"=1'-0"



1 62ND FLOOR - SECTION (WEST-EAST)
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

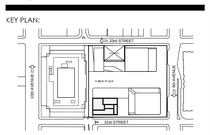
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
7	2014-10-23	BULLETIN #2
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-28	DESIGN DEVELOPMENT-R1
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'- 0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

62ND FLOOR
PARTIAL SECTION

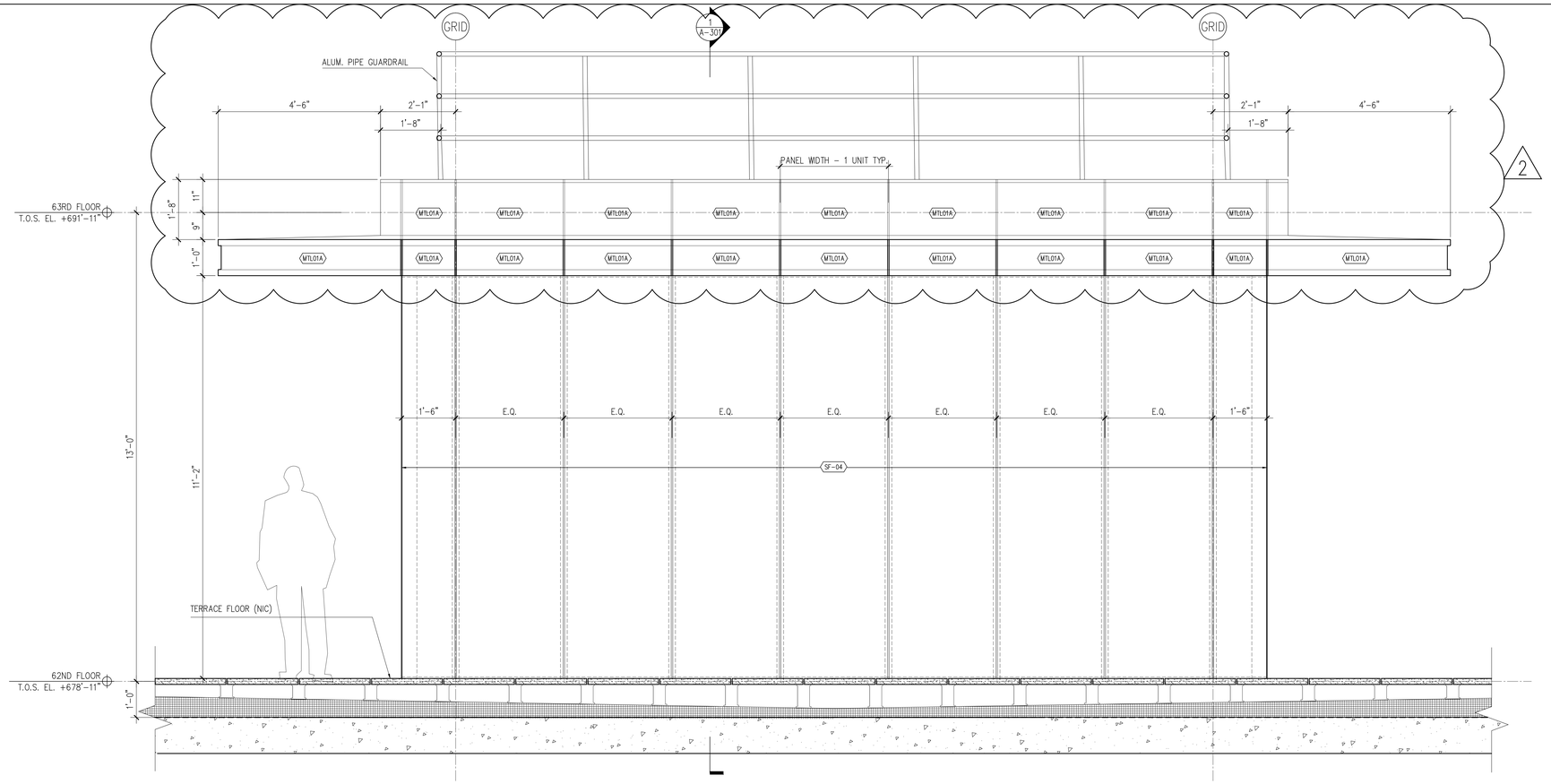
SEAL & SIGNATURE:

REGISTERED ARCHITECT
JOHN FRANCIS SLCE
STATE OF NEW YORK

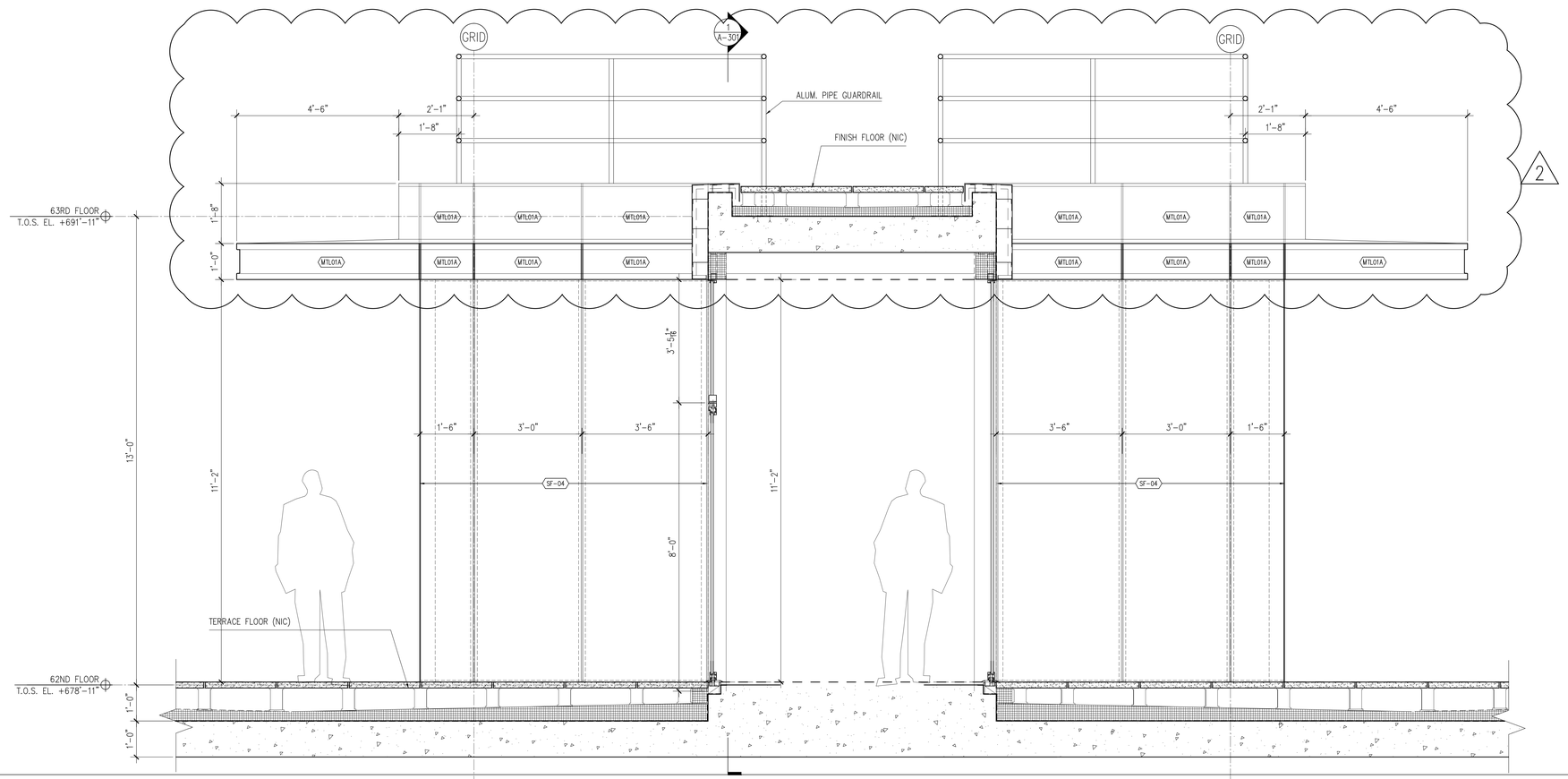
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET No.:	A-301.00
SHEET. No.:	1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)\LC\Drawings\BldA_A301-A305.dwg

DEPT OF BLDGS 121185760 Job Number
E-DOB-200105 Scan Code



2 PAVILION - EAST ELEVATION
SCALE: (F) 3/4"=1'-0"



1 PAVILION - SOUTH ELEVATION
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

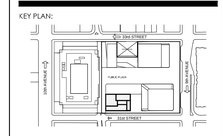
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-28	DESIGN DEVELOPMENT-R1
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'- 0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

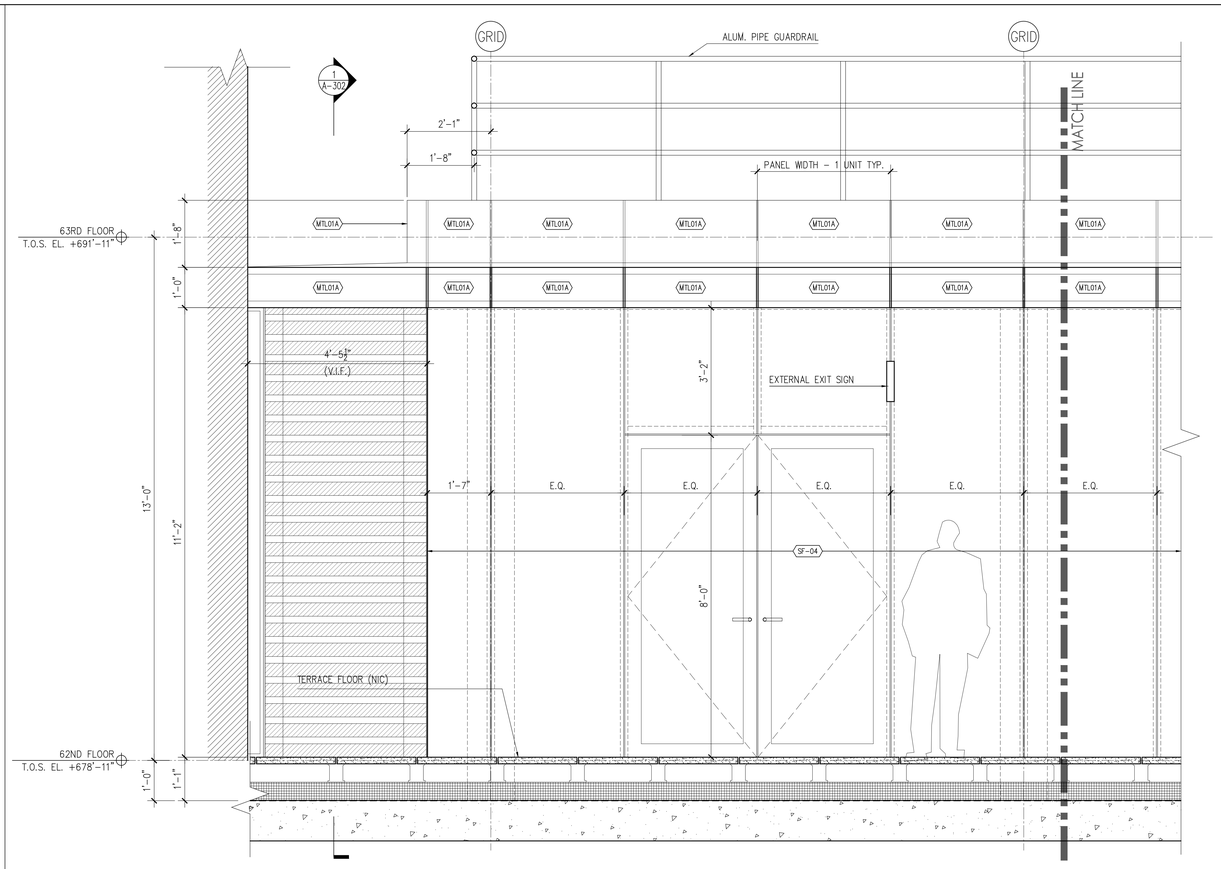
DRAWING TITLE:
62ND FLOOR
PARTIAL ELEVATION 1 (EAST & WEST)

SEAL & SIGNATURE:
REGISTERED ARCHITECT
STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET NO.:	A-302.00
SHEET NO.:	1 of 000

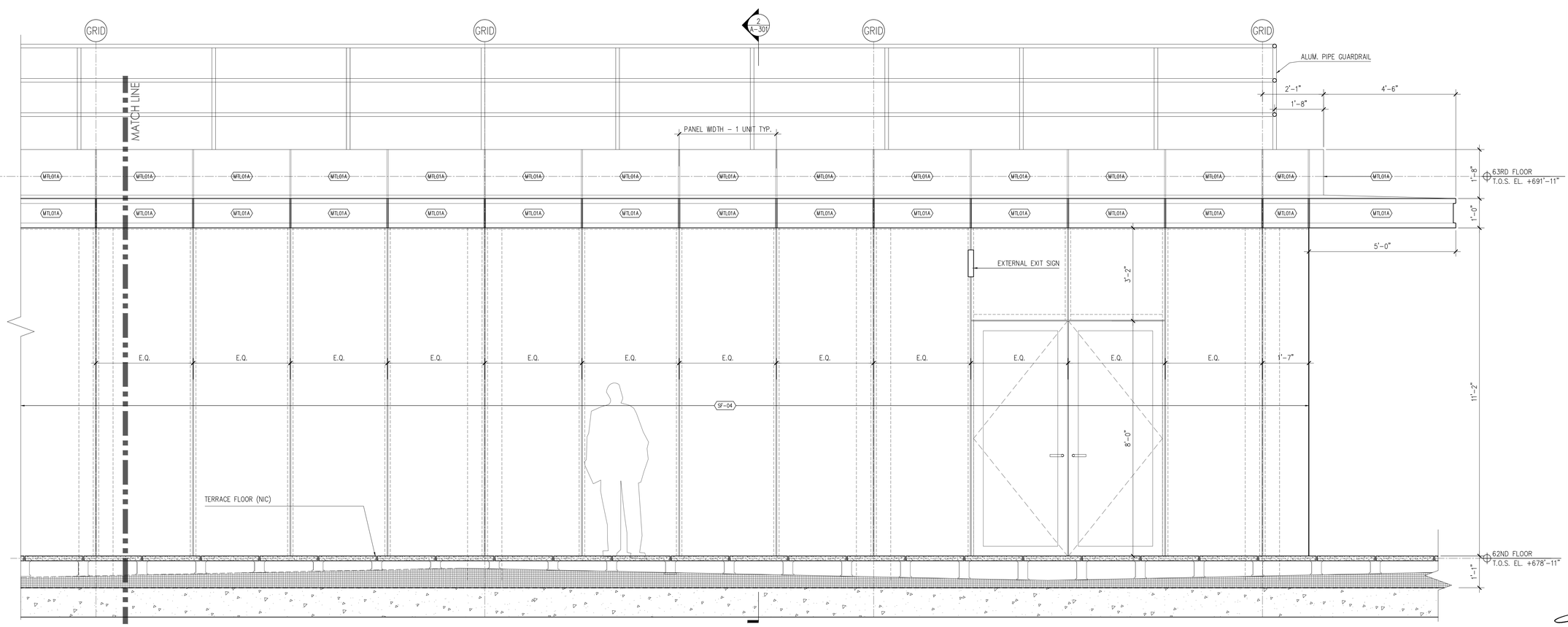
FILE NO: T:\brookfield-Manhattan-West (2012-32)\SLCE-Drawings\BMW_A301-A305.dwg

DEPT OF BLDGS 121185760 Job Number
E3848865350 Scan Code



2 PAVILION - SOUTH ELEVATION - 2

SCALE: (F) 3/4"=1'-0"



1 PAVILION - SOUTH ELEVATION - 1

SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

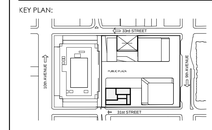
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-28	DESIGN DEVELOPMENT-R1
2014-03-14	DESIGN DEVELOPMENT

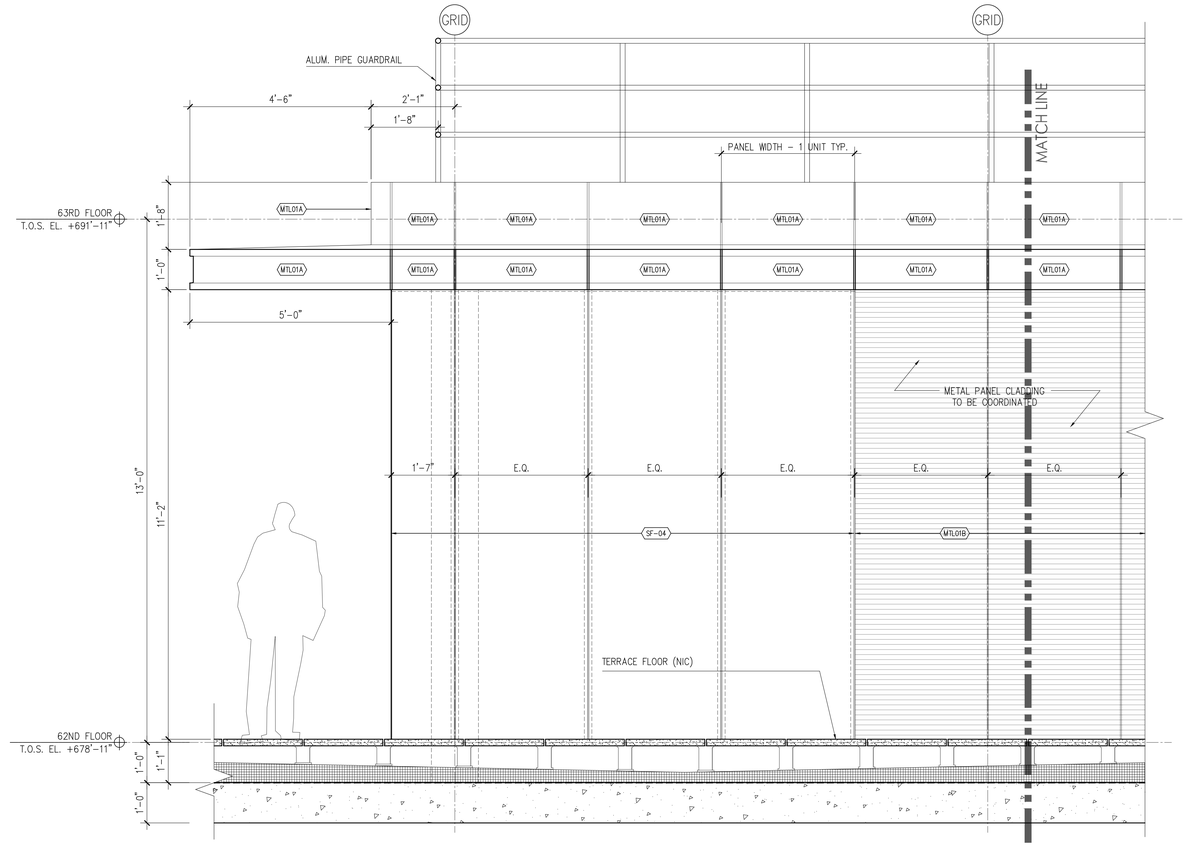
D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0' 6" 1' 3'

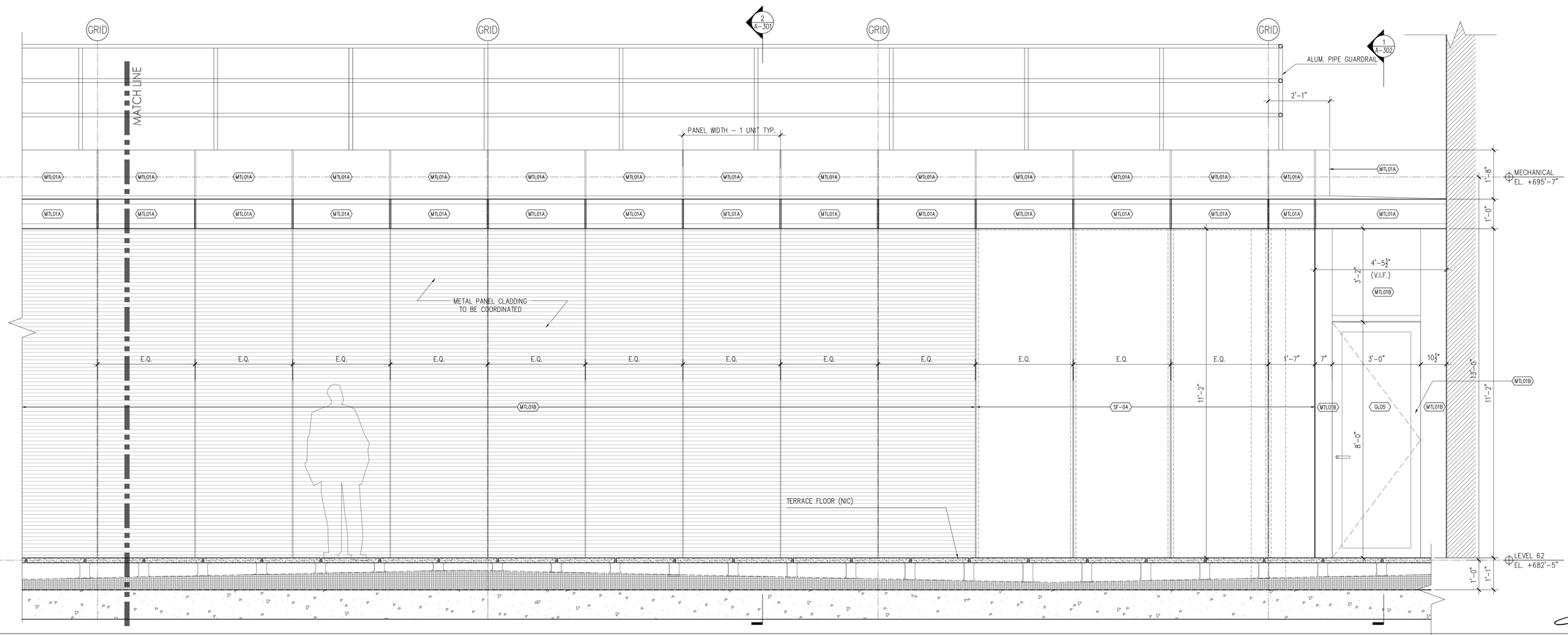
KEY PLAN:


31st STREET
10th AVENUE
9th AVENUE
DYER AVENUE
PARCEL A
PARCEL B
PARCEL C
PARCEL D
PARCEL E
PARCEL F
PARCEL G
PARCEL H
PARCEL I
PARCEL J
PARCEL K
PARCEL L
PARCEL M
PARCEL N
PARCEL O
PARCEL P
PARCEL Q
PARCEL R
PARCEL S
PARCEL T
PARCEL U
PARCEL V
PARCEL W
PARCEL X
PARCEL Y
PARCEL Z
PARCEL AA
PARCEL BB
PARCEL CC
PARCEL DD
PARCEL EE
PARCEL FF
PARCEL GG
PARCEL HH
PARCEL II
PARCEL JJ
PARCEL KK
PARCEL LL
PARCEL MM
PARCEL NN
PARCEL OO
PARCEL PP
PARCEL QQ
PARCEL RR
PARCEL SS
PARCEL TT
PARCEL UU
PARCEL VV
PARCEL WW
PARCEL XX
PARCEL YY
PARCEL ZZ
PARCEL AAA
PARCEL BBB
PARCEL CCC
PARCEL DDD
PARCEL EEE
PARCEL FFF
PARCEL GGG
PARCEL HHH
PARCEL III
PARCEL JJJ
PARCEL KKK
PARCEL LLL
PARCEL MMM
PARCEL NNN
PARCEL OOO
PARCEL PPP
PARCEL QQQ
PARCEL RRR
PARCEL SSS
PARCEL TTT
PARCEL UUU
PARCEL VVV
PARCEL WWW
PARCEL XXX
PARCEL YYY
PARCEL ZZZ
PARCEL AAAA
PARCEL BBBB
PARCEL CCCC
PARCEL DDDD
PARCEL EEEE
PARCEL FFFF
PARCEL GGGG
PARCEL HHHH
PARCEL IIII
PARCEL JJJJ
PARCEL KKKK
PARCEL LLLL
PARCEL MMMM
PARCEL NNNN
PARCEL OOOO
PARCEL PPPP
PARCEL QQQQ
PARCEL RRRR
PARCEL SSSS
PARCEL TTTT
PARCEL UUUU
PARCEL VVVV
PARCEL WWWW
PARCEL XXXX
PARCEL YYYY
PARCEL ZZZZ
PARCEL AAAAA
PARCEL BBBBB
PARCEL CCCCC
PARCEL DDDDD
PARCEL EEEEE
PARCEL FFFFF
PARCEL GGGGG
PARCEL HHHHH
PARCEL IIIII
PARCEL JJJJJ
PARCEL KKKKK
PARCEL LLLLL
PARCEL MMMMM
PARCEL NNNNN
PARCEL OOOOO
PARCEL PPPPP
PARCEL QQQQQ
PARCEL RRRRR
PARCEL SSSSS
PARCEL TTTTT
PARCEL UUUUU
PARCEL VVVVV
PARCEL WWWWW
PARCEL XXXXX
PARCEL YYYYY
PARCEL ZZZZZ
PARCEL AAAAAA
PARCEL BBBBBB
PARCEL CCCCCC
PARCEL DDDDDD
PARCEL EEEEEE
PARCEL FFFFFF
PARCEL GGGGGG
PARCEL HHHHHH
PARCEL IIIIII
PARCEL JJJJJJ
PARCEL KKKKKK
PARCEL LLLLLL
PARCEL MMMMMM
PARCEL NNNNNN
PARCEL OOOOOO
PARCEL PPPPPP
PARCEL QQQQQQ
PARCEL RRRRRR
PARCEL SSSSSS
PARCEL TTTTTT
PARCEL UUUUUU
PARCEL VVVVVV
PARCEL WWWWWW
PARCEL XXXXXX
PARCEL YYYYYY
PARCEL ZZZZZZ
PARCEL AAAAAAA
PARCEL BBBBBBB
PARCEL CCCCCCC
PARCEL DDDDDDD
PARCEL EEEEEEE
PARCEL FFFFFFF
PARCEL GGGGGGG
PARCEL HHHHHHH
PARCEL IIIIIII
PARCEL JJJJJJJ
PARCEL KKKKKKK
PARCEL LLLLLLL
PARCEL MMMMMMM
PARCEL NNNNNNN
PARCEL OOOOOOO
PARCEL PPPPPPP
PARCEL QQQQQQQ
PARCEL RRRRRRR
PARCEL SSSSSSS
PARCEL TTTTTTT
PARCEL UUUUUUU
PARCEL VVVVVVV
PARCEL WWWWWWW
PARCEL XXXXXXX
PARCEL YYYYYYY
PARCEL ZZZZZZZ
PARCEL AAAAAAAA
PARCEL BBBBBBBB
PARCEL CCCCCCCC
PARCEL DDDDDDDD
PARCEL EEEEEEEE
PARCEL FFFFFFFF
PARCEL GGGGGGGG
PARCEL HHHHHHHH
PARCEL IIIIIIII
PARCEL JJJJJJJJ
PARCEL KKKKKKKK
PARCEL LLLLLLLL
PARCEL MMMMMMMM
PARCEL NNNNNNNN
PARCEL OOOOOOOO
PARCEL PPPPPPPP
PARCEL QQQQQQQQ
PARCEL RRRRRRRR
PARCEL SSSSSSSS
PARCEL TTTTTTTT
PARCEL UUUUUUUU
PARCEL VVVVVVVV
PARCEL WWWWWWWW
PARCEL XXXXXXXX
PARCEL YYYYYYYY
PARCEL ZZZZZZZZ
PARCEL AAAAAAAAA
PARCEL BBBBBBBBB
PARCEL CCCCCCCCC
PARCEL DDDDDDDDD
PARCEL EEEEEEEEE
PARCEL FFFFFFFFF
PARCEL GGGGGGGGG
PARCEL HHHHHHHHH
PARCEL IIIIIIIII
PARCEL JJJJJJJJJ
PARCEL KKKKKKKKK
PARCEL LLLLLLLLL
PARCEL MMMMMMMMM
PARCEL NNNNNNNNN
PARCEL OOOOOOOOO
PARCEL PPPPPPPPP
PARCEL QQQQQQQQQ
PARCEL RRRRRRRRR
PARCEL SSSSSSSSS
PARCEL TTTTTTTTT
PARCEL UUUUUUUUU
PARCEL VVVVVVVVV
PARCEL WWWWWWWWW
PARCEL XXXXXXXXX
PARCEL YYYYYYYYY
PARCEL ZZZZZZZZZ
PARCEL AAAAAAAAAA
PARCEL BBBBBBBBBB
PARCEL CCCCCCCCCC
PARCEL DDDDDDDDDD
PARCEL EEEEEEEEEE
PARCEL FFFFFFFFFF
PARCEL GGGGGGGGGG
PARCEL HHHHHHHHHH
PARCEL IIIIIIIIII
PARCEL JJJJJJJJJJ
PARCEL KKKKKKKKKK
PARCEL LLLLLLLLLL
PARCEL MMMMMMMMMM
PARCEL NNNNNNNNNN
PARCEL OOOOOOOOOO
PARCEL PPPPPPPPPP
PARCEL QQQQQQQQQQ
PARCEL RRRRRRRRRR
PARCEL SSSSSSSSSS
PARCEL TTTTTTTTTT
PARCEL UUUUUUUUUU
PARCEL VVVVVVVVVV
PARCEL WWWWWWWWWW
PARCEL XXXXXXXXXX
PARCEL YYYYYYYYYY
PARCEL ZZZZZZZZZZ
PARCEL AAAAAAAAAAA
PARCEL BBBBBBBBBBB
PARCEL CCCCCCCCCCC
PARCEL DDDDDDDDDDD
PARCEL EEEEEEEEEEE
PARCEL FFFFFFFFFFF
PARCEL GGGGGGGGGGG
PARCEL HHHHHHHHHHH
PARCEL IIIIIIIIIII
PARCEL JJJJJJJJJJJ
PARCEL KKKKKKKKKKK
PARCEL LLLLLLLLLLL
PARCEL MMMMMMMMMMM
PARCEL NNNNNNNNNNN
PARCEL OOOOOOOOOOO
PARCEL PPPPPPPPPPP
PARCEL QQQQQQQQQQQ
PARCEL RRRRRRRRRRR
PARCEL SSSSSSSSSSS
PARCEL TTTTTTTTTTT
PARCEL UUUUUUUUUUU
PARCEL VVVVVVVVVVV
PARCEL WWWWWWWWWWW
PARCEL XXXXXXXXXXX
PARCEL YYYYYYYYYYY
PARCEL ZZZZZZZZZZZ
PARCEL AAAAAAAAAAAA
PARCEL BBBBBBBBBBBB
PARCEL CCCCCCCCCCCC
PARCEL DDDDDDDDDDDD
PARCEL EEEEEEEEEEEE
PARCEL FFFFFFFFFFFF
PARCEL GGGGGGGGGGGG
PARCEL HHHHHHHHHHHH
PARCEL IIIIIIIIIIII
PARCEL JJJJJJJJJJJJ
PARCEL KKKKKKKKKKKK
PARCEL LLLLLLLLLLLL
PARCEL MMMMMMMMMMMM
PARCEL NNNNNNNNNNNN
PARCEL OOOOOOOOOOOO
PARCEL PPPPPPPPPPPP
PARCEL QQQQQQQQQQQQ
PARCEL RRRRRRRRRRRR
PARCEL SSSSSSSSSSSS
PARCEL TTTTTTTTTTTT
PARCEL UUUUUUUUUUUU
PARCEL VVVVVVVVVVVV
PARCEL WWWWWWWWWWWW
PARCEL XXXXXXXXXXXX
PARCEL YYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHH
PARCEL IIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJJJJ
PAR

DEPT OF BLDGS 121185760 Job Number
E343123245 Scan Code



2 PAVILION - NORTH ELEVATION - 2
SCALE: (F) 3/4"=1'-0"



1 PAVILION - NORTH ELEVATION - 1
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

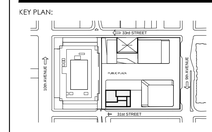
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-28	DESIGN DEVELOPMENT-R1
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

62ND FLOOR
PARTIAL ELEVATION - 3 (NORTH)

SEAL & SIGNATURE:

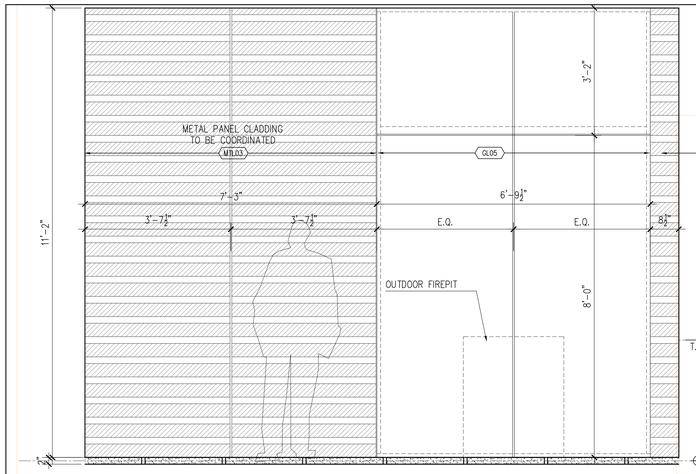
REGISTERED ARCHITECT
No. 026190
STATE OF NEW YORK

DATE: -
PROJECT NO: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.

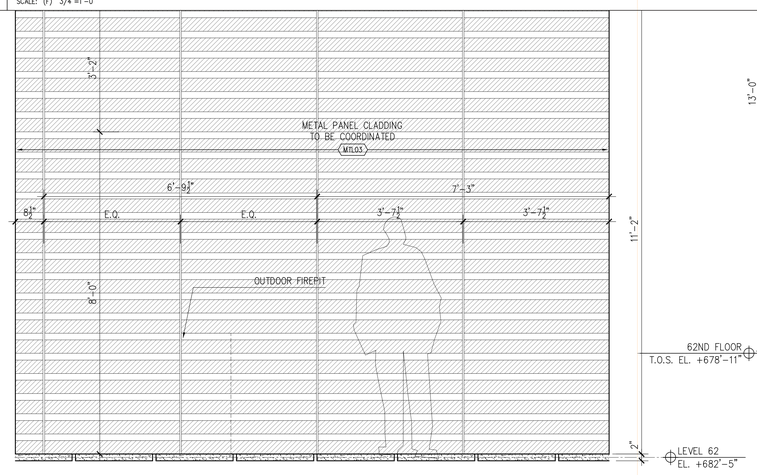
DRAWING NO.: A-304.00
SHEET NO.: 1 of 000

FILE NO: T:\brookfield-Manhattan-West (2012-32)\LCE\Drawings\BMW_A301-A305.dwg

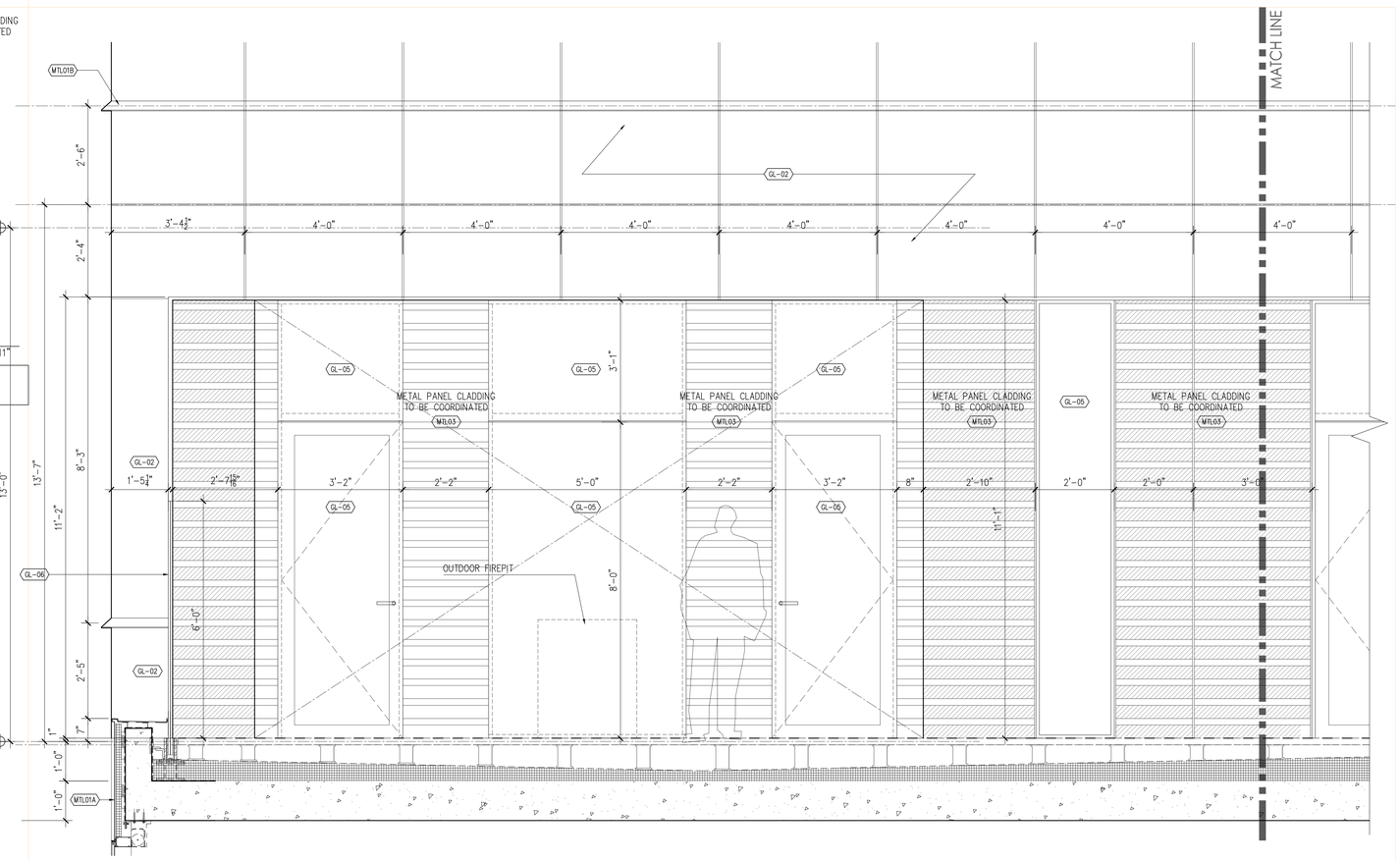
DEPT OF BLDGS 121185760 Job Number
E562485420599 Scan Code



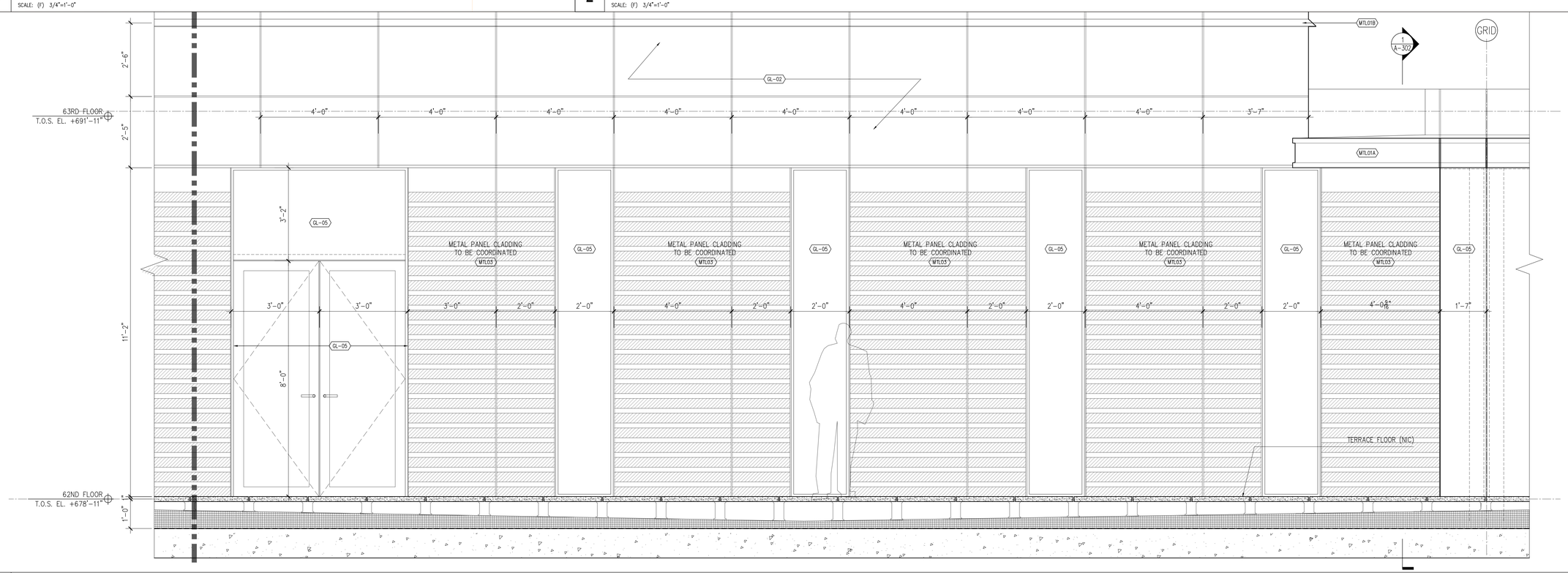
4 FEATURE WALL PARTIAL ELEVATION - 4
SCALE: (F) 3/4"=1'-0"



3 FEATURE WALL PARTIAL ELEVATION - 3
SCALE: (F) 3/4"=1'-0"



2 PAVILION - FEATURE WALL PARTIAL ELEVATION - 2
SCALE: (F) 3/4"=1'-0"



1 PAVILION - FEATURE WALL PARTIAL ELEVATION - 1
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

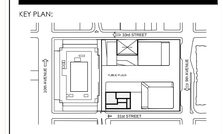
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-28	DESIGN DEVELOPMENT-#1
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0' 6" 1' 3'

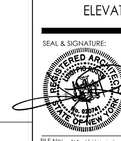
KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
62ND FLOOR
FEATURE WALL
ELEVATION 1,2,3 & 4

SEAL & SIGNATURE:

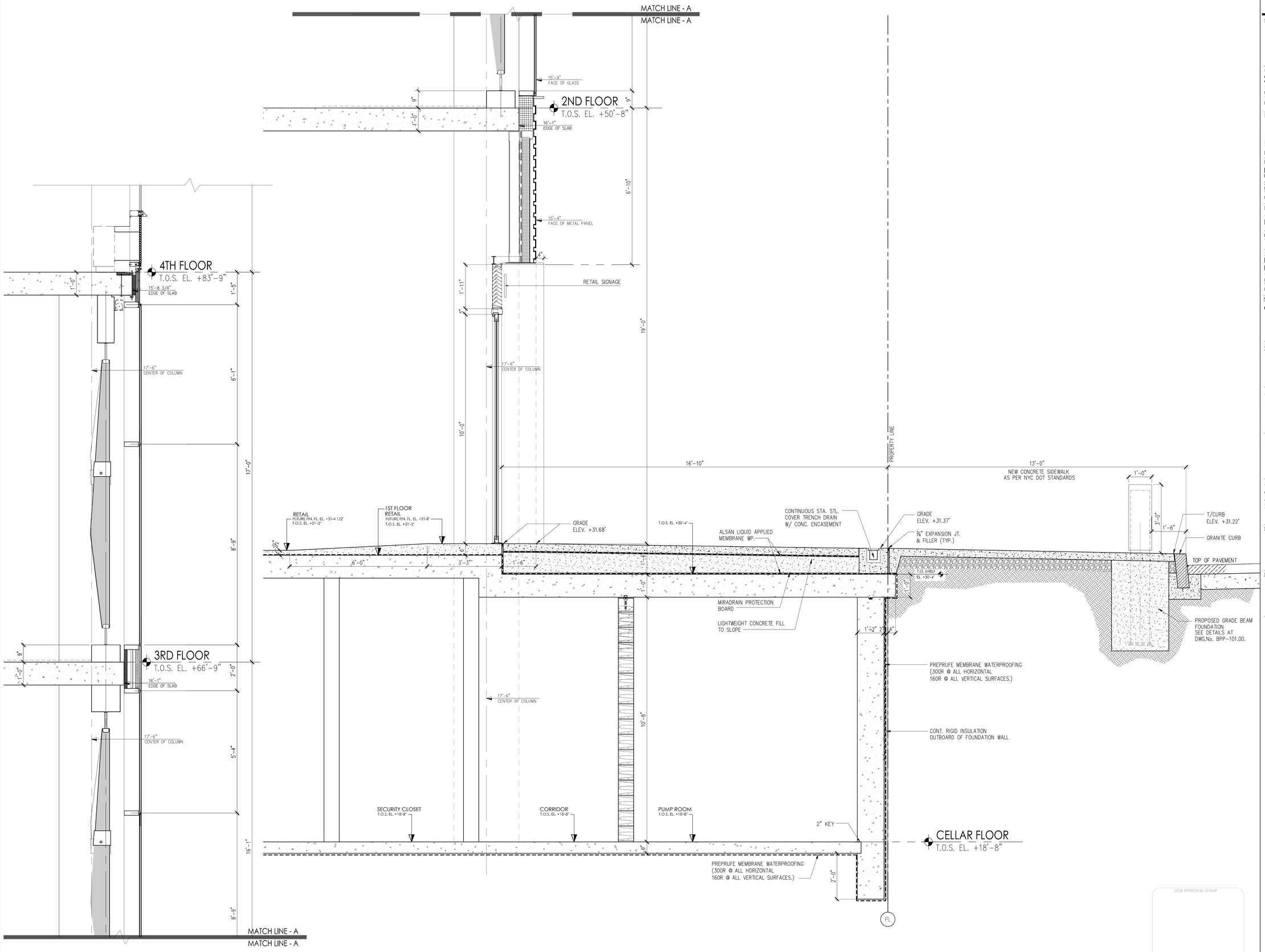


DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

A-305.00
SHEET. No.: 1 of 000

FILE No: \\brookfield-manhattan-West (2012-32)\LCD\Drawings\BAW_A301-A305.dwg

DEPT OF BLDGS 421189760 Job Number
E369110908005 Scan Code



1 BASE SOUTH WALL SECTION
SCALE: 3/4" = 1'-0"

BINDING CLEARANCE

DOB APPROVAL STAMP

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
250 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

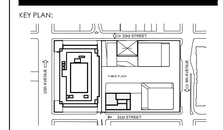
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

O.O.B. NUMBER:
NB#

NORTH
Scale: 3/4" = 1'- 0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STOREFRONT SOUTH SECTIONS

SEAL & SIGNATURE:

REGISTERED ARCHITECT JOHN C. BOSCO STATE OF NEW YORK

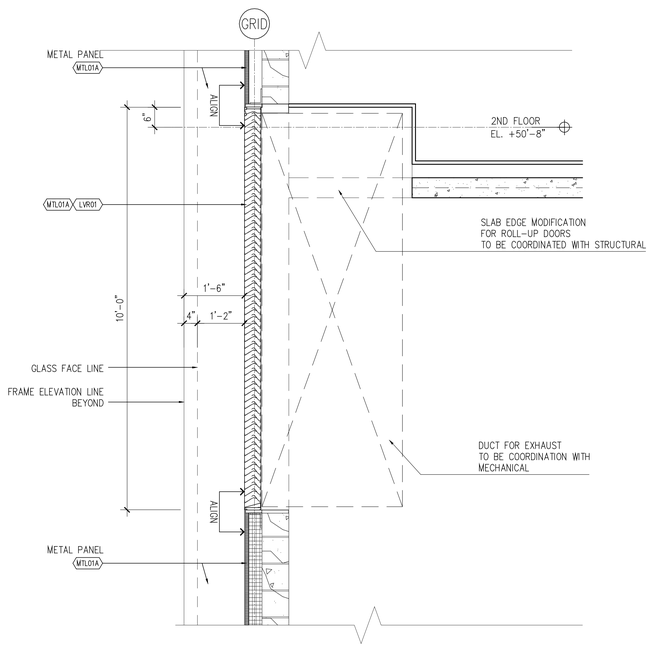
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

A-306.00

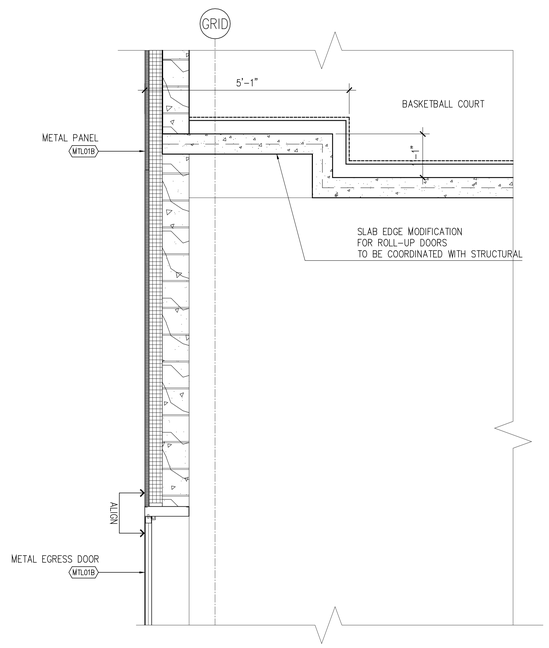
SHEET, No.: 1 of 000

FILE No: \\brookfield-manhattan-West (2012-32)\LCE Drawings\ BAR\ A306.dwg

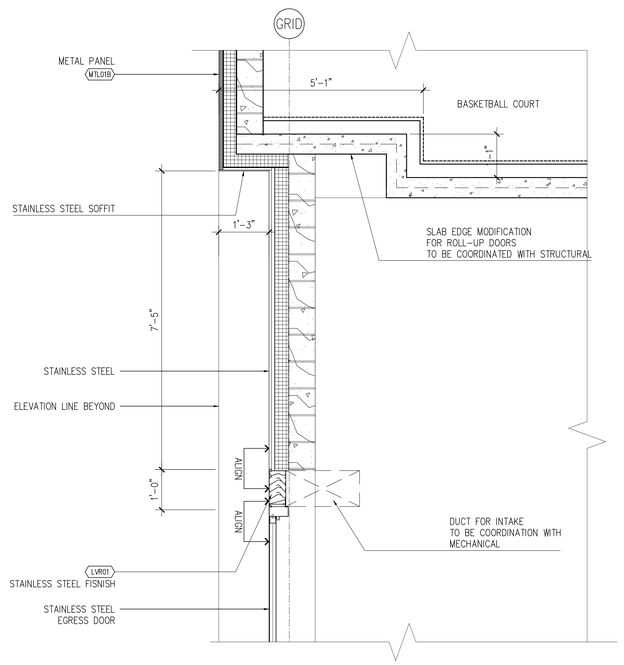
DEPT OF BLDGS 421185700 Job Number
E3641272005 Scan Code



4 SOUTH STOREFRONT (SF-03_REVEAL)
SCALE: (F) 3/4"=1'-0"



3 SOUTH STOREFRONT (SF-03_EGRESS DOOR - 2)
SCALE: (F) 3/4"=1'-0"



2 SOUTH STOREFRONT (SF-03_EGRESS DOOR - 1)
SCALE: (F) 3/4"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

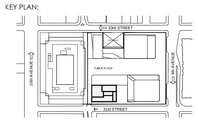
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

DATE:	REVISION:
2014-10-23	BULLETIN #2
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-03-28	DESIGN DEVELOPMENT-R1

D.O.B. NUMBER:
NB#

NORTH:
Scale: 3/4" = 1'-0"
0" 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STOREFRONT SOUTH & WEST SECTIONS

SEAL & SIGNATURE:

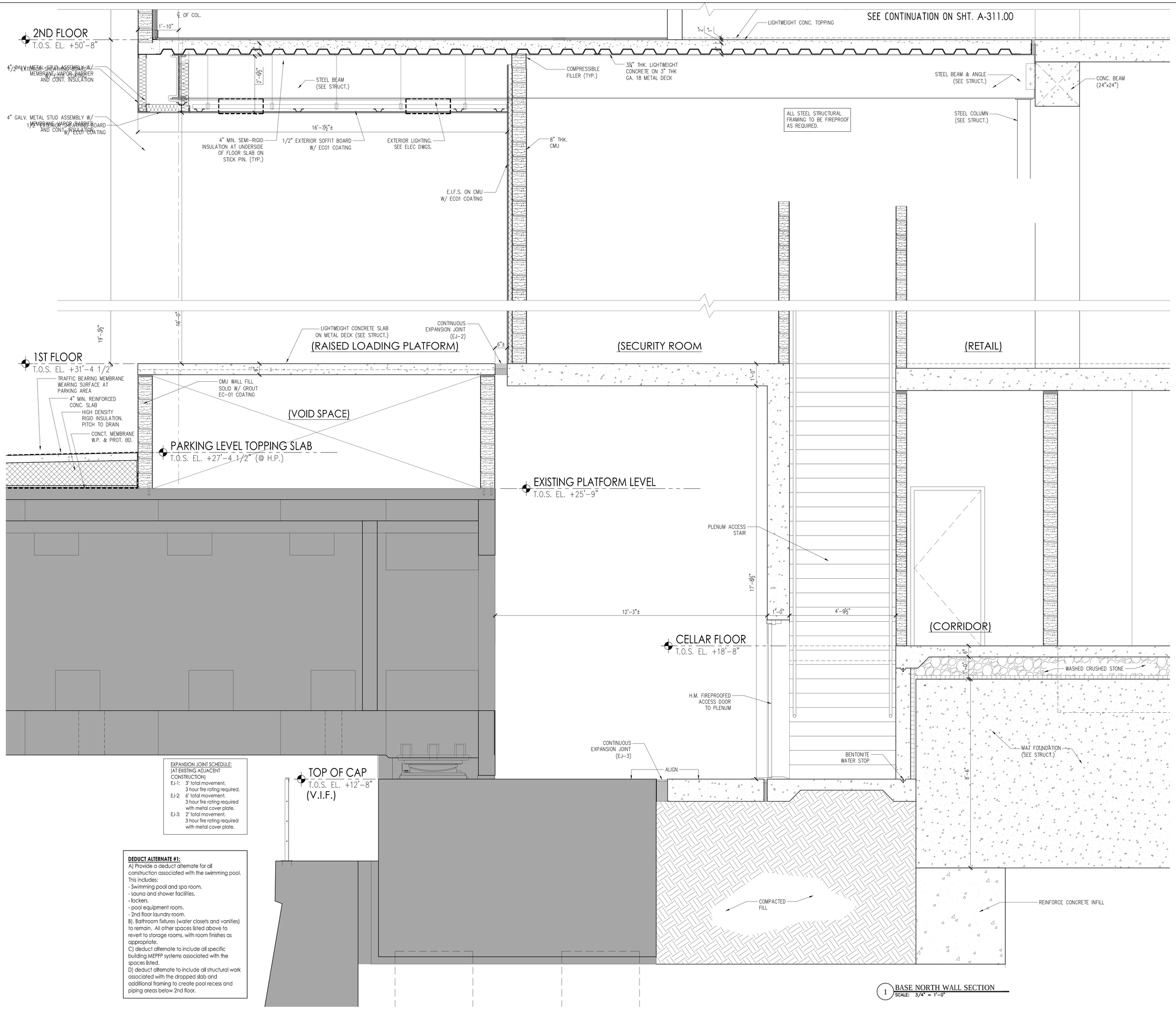
REGISTERED ARCHITECT
TIMOTHY J. FOLEY
STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

A-307.00
SHEET. No.: 1 of 000

FILE No: T:\brookfield\Manhattan-West (2012-32)\SLCE Drawings\BMW_A307.dwg

DEPT OF BLDGS 121185760 Job Number
E350680904209 Scan Code



EXPANSION JOINT SCHEDULE:
(AT EXISTING ADJACENT CONSTRUCTION)

EJ-1: 3" total movement. 3 hour fire rating required.
EJ-2: 6" total movement. 3 hour fire rating required with metal cover plate.
EJ-3: 2" total movement. 3 hour fire rating required with metal cover plate.

DEDUCT ALTERNATE #1:
A) Provide a deduct alternate for all construction associated with the swimming pool. This includes:
- Swimming pool and spa room.
- sauna and shower facilities.
- lockers.
- pool equipment room.
- 2nd floor laundry room.

B). Bathroom fixtures (water closets and vanities) to remain. All other spaces listed above to revert to storage rooms. with room finishes as appropriate.
C) deduct alternate to include all specific building MEPFP systems associated with the spaces listed.
D) deduct alternate to include all structural work associated with the dropped slab and additional framing to create pool recess and piping areas below 2nd floor.

1 BASE NORTH WALL SECTION
SCALE: 3/4" = 1'-0"

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0" 6" 1' 3'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BASE NORTH WALL SECTION 1 SHOWING LOADING PLATFORM & SWIMMING POOL

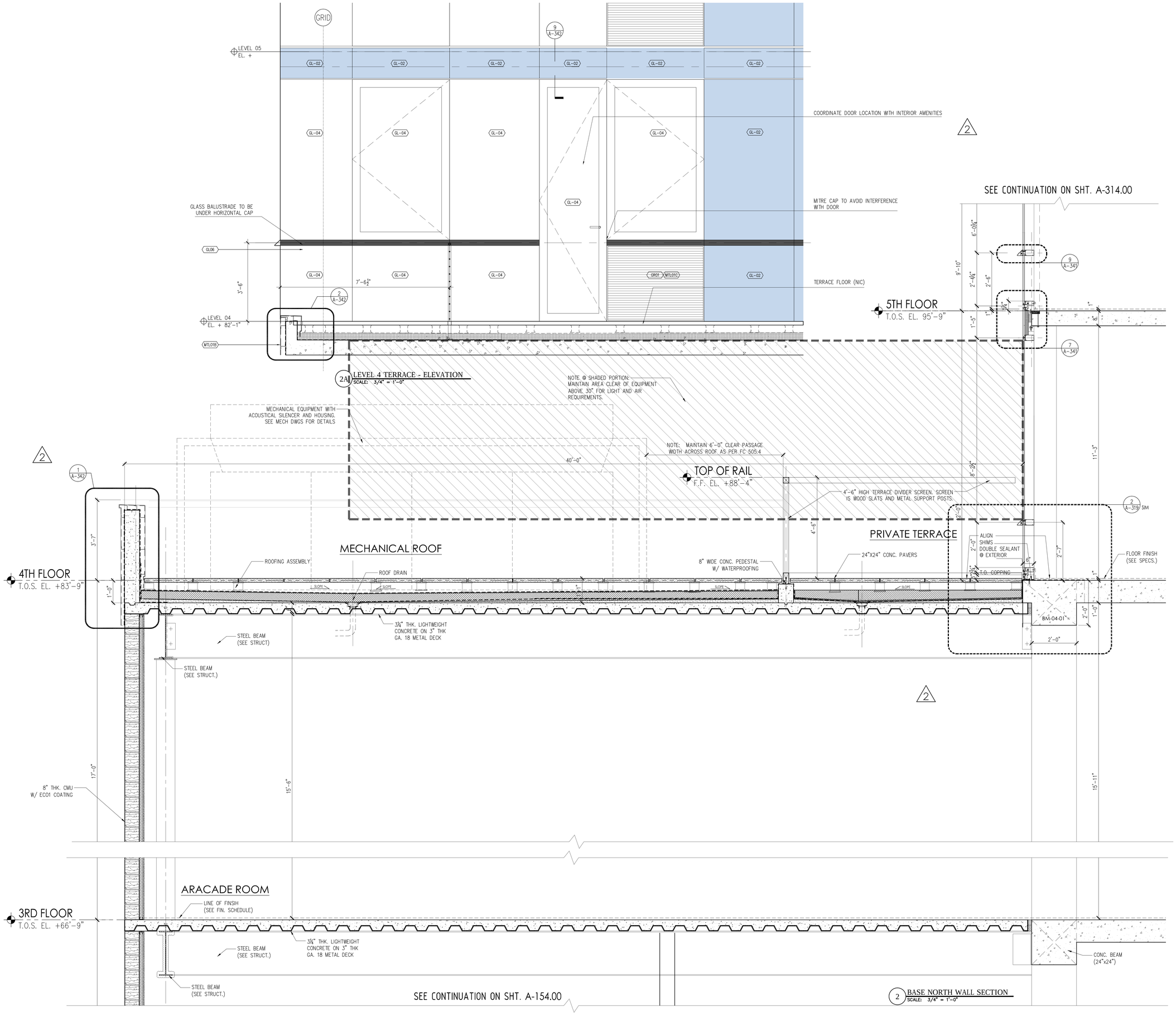
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

A-310.00
SHEET. NO.: 1 of 000

FILE No: T:\brookfield\manhattan-West (2012-32)\LC\Drawings\BaWA_A310-A313_BnBridge

DEPT OF BLDGS 121185760 Job Number
E357183326 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

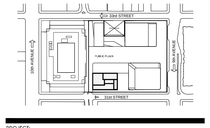
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 3/4" = 1'- 0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

NORTH WALL SECTION @ MECHANICAL ROOF & PRIVATE TERRACE

SEAL & SIGNATURE:

REGISTERED ARCHITECT JOHN C. BERGER STATE OF NEW YORK

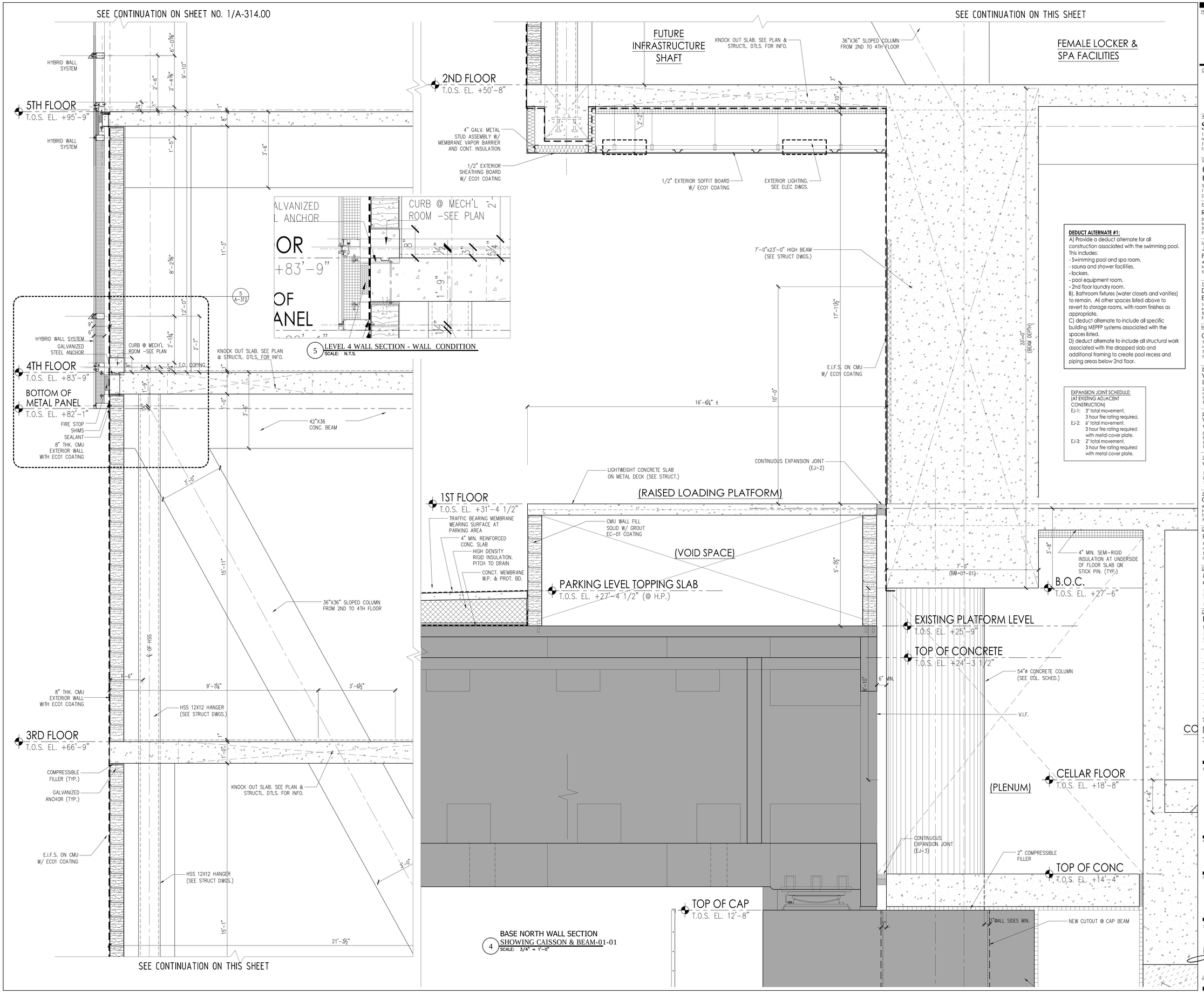
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/obo
CHECKED BY:	T.J.F.

A-311.00

SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCE Drawings\BldN_A310-A318_B.dwg

DEPT OF BLDGS 121185760 Job Number
E381443324X Scan Code



DEDUCT ALTERNATE #1:
A) Provide a deduct alternate for all construction associated with the swimming pool. This includes:
- Swimming pool and spa room.
- sauna and shower facilities.
- lockers.
- pool equipment room.
- 2nd floor laundry room.

B). Bathroom fixtures (water closets and vanities) to remain. All other spaces listed above to revert to storage rooms, with room finishes as appropriate.
C) deduct alternate to include all specific building MEPFP systems associated with the spaces listed.
D) deduct alternate to include all structural work associated with the dropped slab and additional framing to create pool recess and piping areas below 2nd floor.

EXPANSION JOINT SCHEDULE:
(AT EXISTING ADJACENT CONSTRUCTION)
EJ-1: 3" total movement, 3 hour fire rating required.
EJ-2: 6" total movement, 3 hour fire rating required with metal cover plate.
EJ-3: 2" total movement, 3 hour fire rating required with metal cover plate.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
3	2014-10-23	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 3/4" = 1'-0"

KEY PLAN:

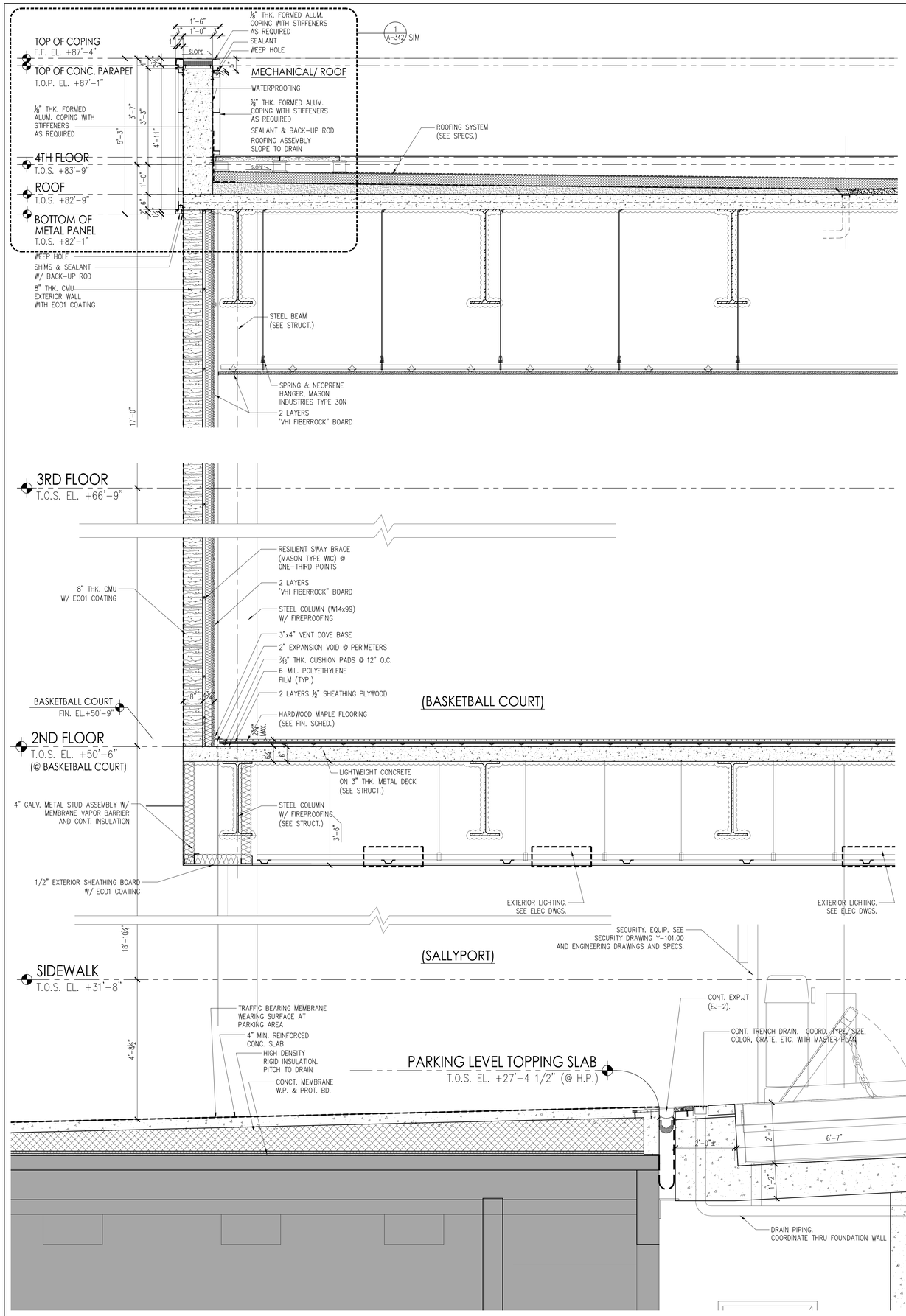
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BASE NORTH WALL SECTION 2

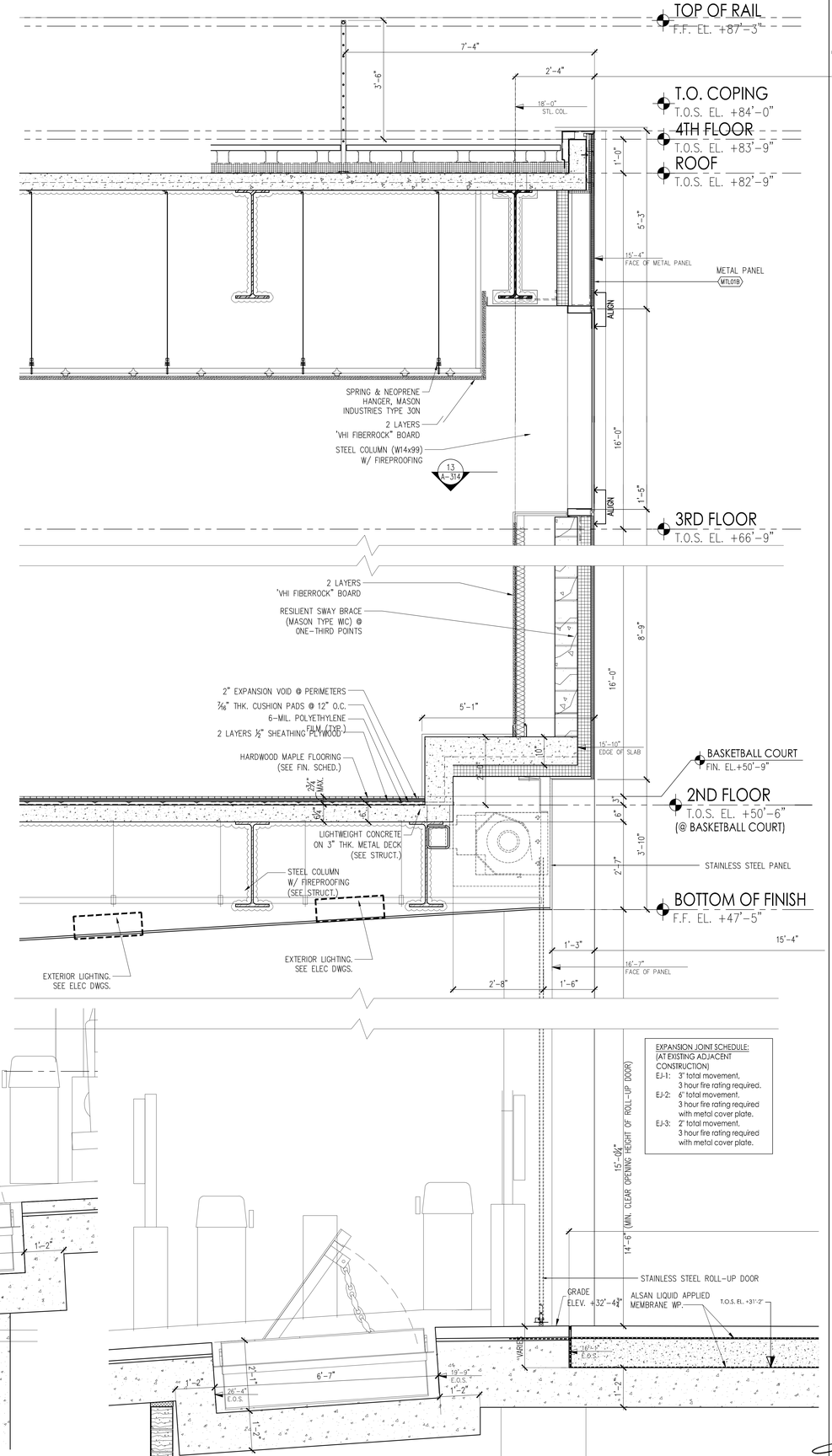
SEAL & SIGNATURE:

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JC/rbbo
CHECKED BY:	T.J.F.
SHEET NO.:	A-312.00
	1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\LCD-Drawings\BWN_A-300-A313_B-Range



3 BASE NORTH WALL SECTION @ SALLYPORT & BASKETBALL COURT
SCALE: 3/4" = 1'-0"



3A BASE SOUTH WALL SECTION @ SALLYPORT & BASKETBALL COURT
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

O.O.B. NUMBER: NB# 121185760

NORTH

Scale: 3/4" = 1'-0"

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BASE NORTH & SOUTH WALL SECTION @ SALLYPORT & BASKETBALL COURT

SEAL & SIGNATURE:

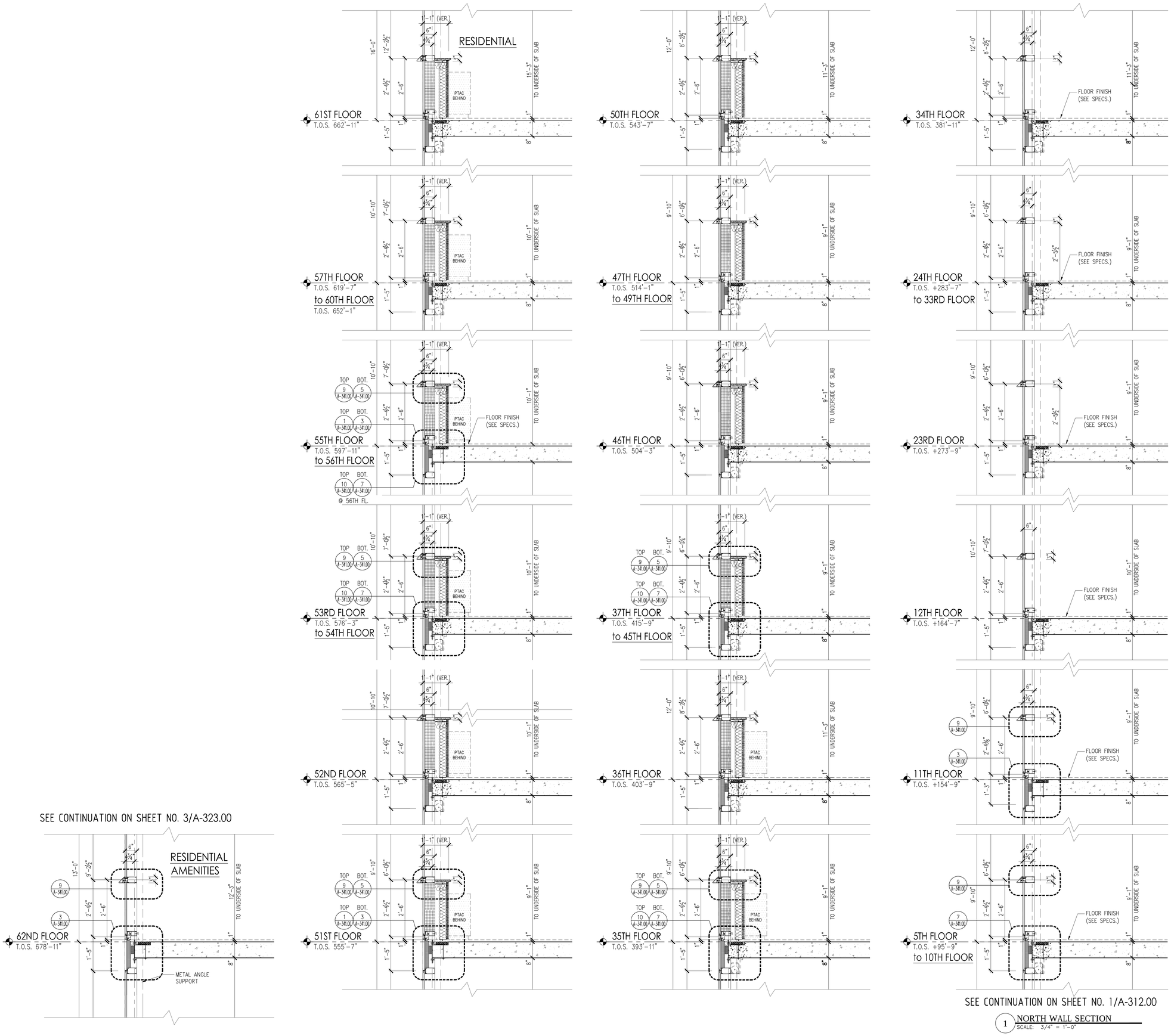
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

DRAWING No.: A-313.00

SHEET, No.: 1 of 000

FILE No: \\Brookfield\Manhattan-West\2012-32\C.CD Drawings\BAW_A313-A315_B.dwg

DEPT OF BLDGS 121185760 Job Number
E367243258 Scan Code



1 NORTH WALL SECTION
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

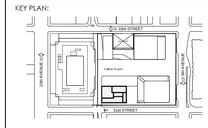
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-22	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0 6" 1' 2' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

NORTH WALL SECTION
@ 5TH TO 62ND FLOOR

SEAL & SIGNATURE:

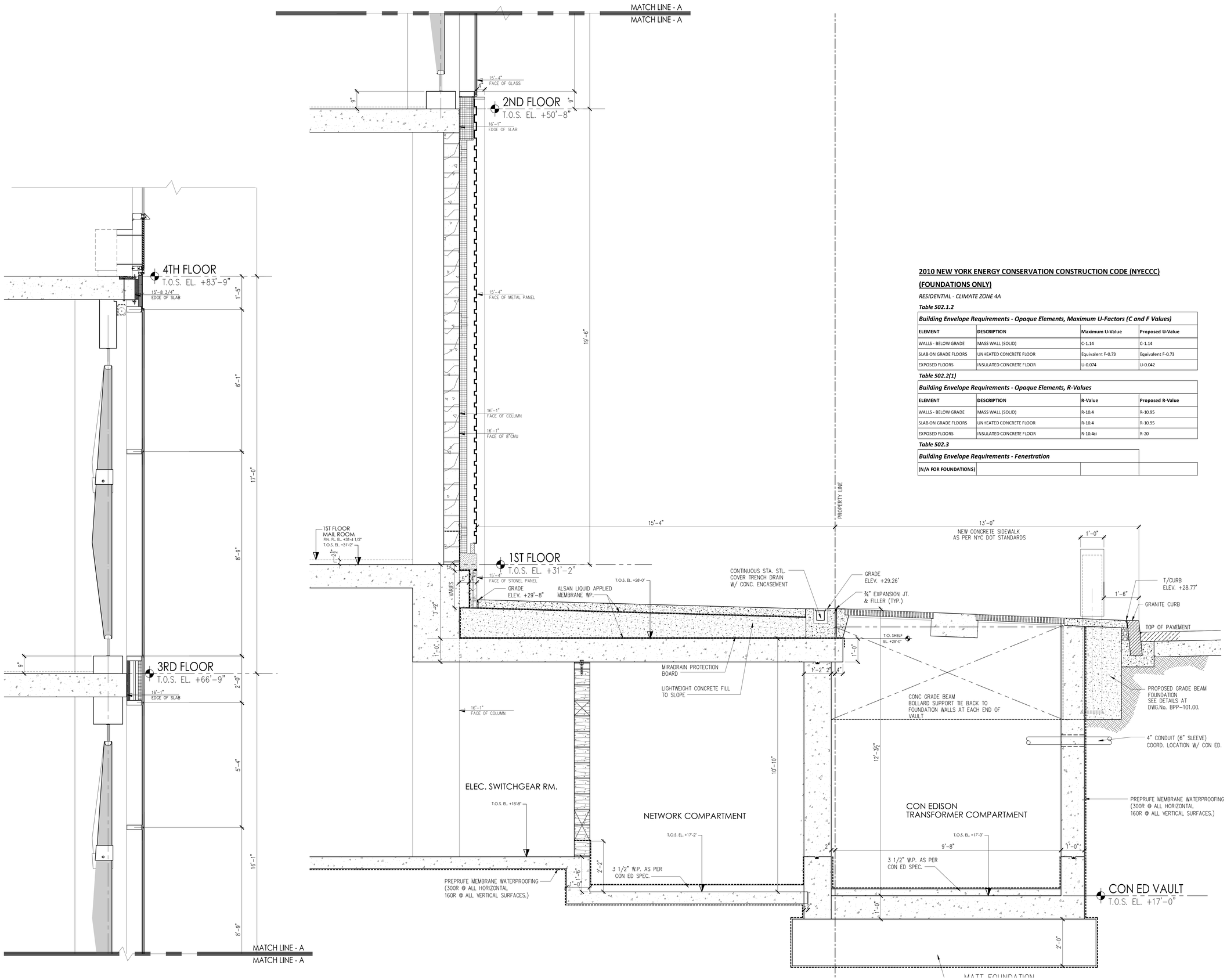
REGISTERED ARCHITECT
No. 026110
STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JC&rbo
CHECKED BY:	T.J.F.

DRAWING NO.: A-314.00
SHEET NO.: 1 of 000

FILE NO: T:\brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A314_A317 Wall Section.dwg

DEPT OF BLDGS 121185760 Job Number
E350125290 Scan Code



1 BASE SOUTH WALL SECTION
SCALE: 3/4" = 1'-0"

2010 NEW YORK ENERGY CONSERVATION CONSTRUCTION CODE (NYECCC)

(FOUNDATIONS ONLY)

RESIDENTIAL - CLIMATE ZONE 4A

Table 502.1.2

Building Envelope Requirements - Opaque Elements, Maximum U-Factors (C and F Values)

ELEMENT	DESCRIPTION	Maximum U-Value	Proposed U-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	C-1.14	C-1.14
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	Equivalent F-0.73	Equivalent F-0.73
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	U-0.074	U-0.042

Table 502.2(1)

Building Envelope Requirements - Opaque Elements, R-Values

ELEMENT	DESCRIPTION	R-Value	Proposed R-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	R-10.4	R-10.95
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	R-10.4	R-10.95
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	R-10.4ci	R-20

Table 502.3

Building Envelope Requirements - Fenestration

(N/A FOR FOUNDATIONS)			

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY. 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

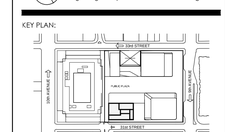
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-04	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BASE SOUTH WALL
SECTION 1

SEAL & SIGNATURE:

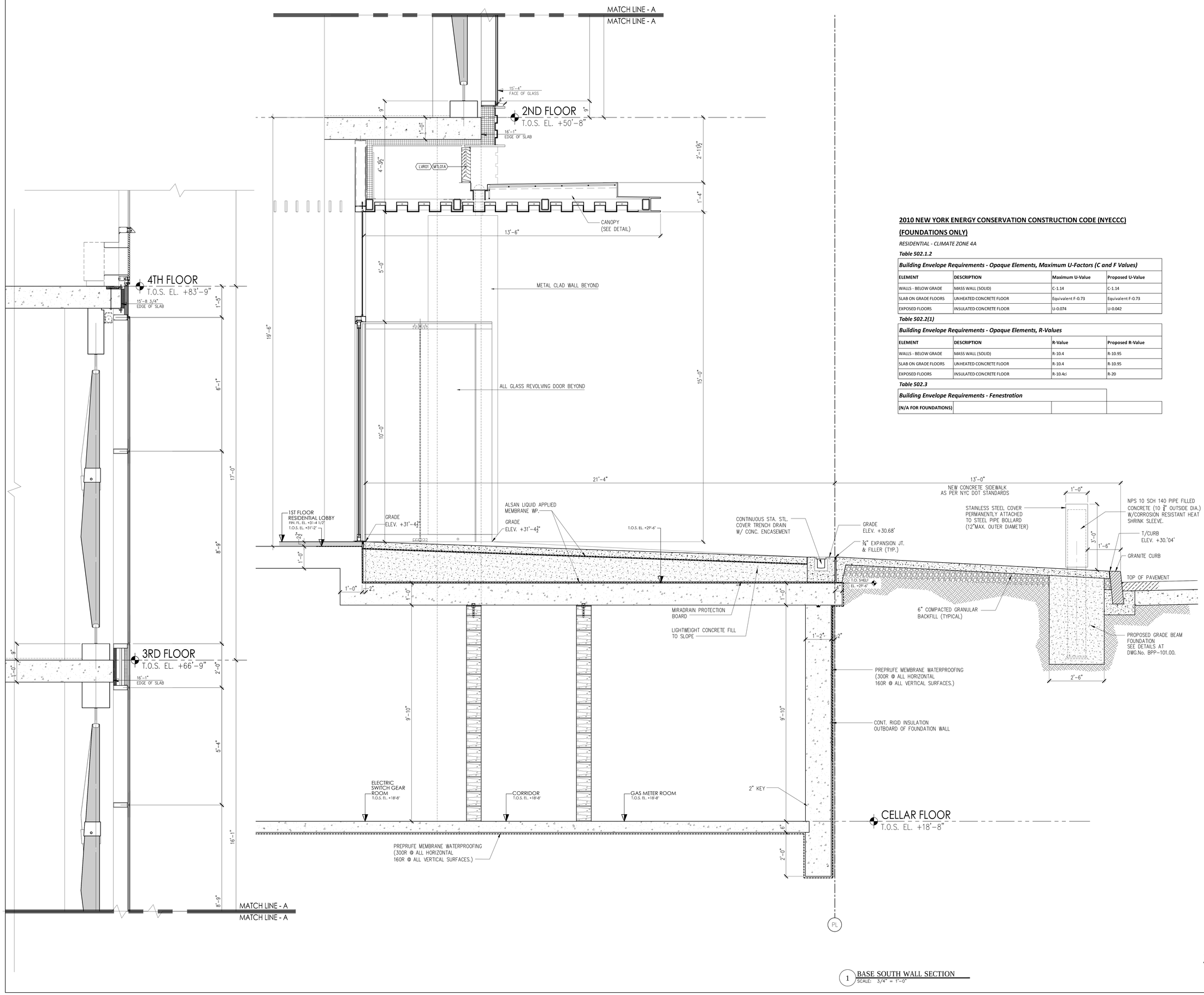
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

A-315.00

SHEET NO.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BaWA_A315_McB Section.dwg

DEPT OF BLDGS 121185760 Job Number
E351645372 Scan Code



1 BASE SOUTH WALL SECTION
SCALE: 3/4" = 1'-0"

2010 NEW YORK ENERGY CONSERVATION CONSTRUCTION CODE (NYECCC)

(FOUNDATIONS ONLY)

RESIDENTIAL - CLIMATE ZONE 4A

Table 502.1.2

Building Envelope Requirements - Opaque Elements, Maximum U-Factors (C and F Values)

ELEMENT	DESCRIPTION	Maximum U-Value	Proposed U-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	C-1.14	C-1.14
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	Equivalent F-0.73	Equivalent F-0.73
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	U-0.074	U-0.042

Table 502.2(1)

Building Envelope Requirements - Opaque Elements, R-Values

ELEMENT	DESCRIPTION	R-Value	Proposed R-Value
WALLS - BELOW GRADE	MASS WALL (SOLID)	R-10.4	R-10.95
SLAB ON GRADE FLOORS	UNHEATED CONCRETE FLOOR	R-10.4	R-10.95
EXPOSED FLOORS	INSULATED CONCRETE FLOOR	R-10.4ci	R-20

Table 502.3

Building Envelope Requirements - Fenestration

(N/A FOR FOUNDATIONS)			

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,*LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

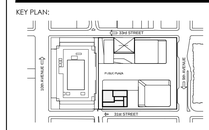
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
2	2014-10-23	BULLETIN #2
	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0" 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BASE SOUTH WALL SECTION 2
@ MAIN ENTRANCE

SEAL & SIGNATURE:

REGISTERED ARCHITECT
JOSEPH CORSARO
No. 026110
STATE OF NEW YORK

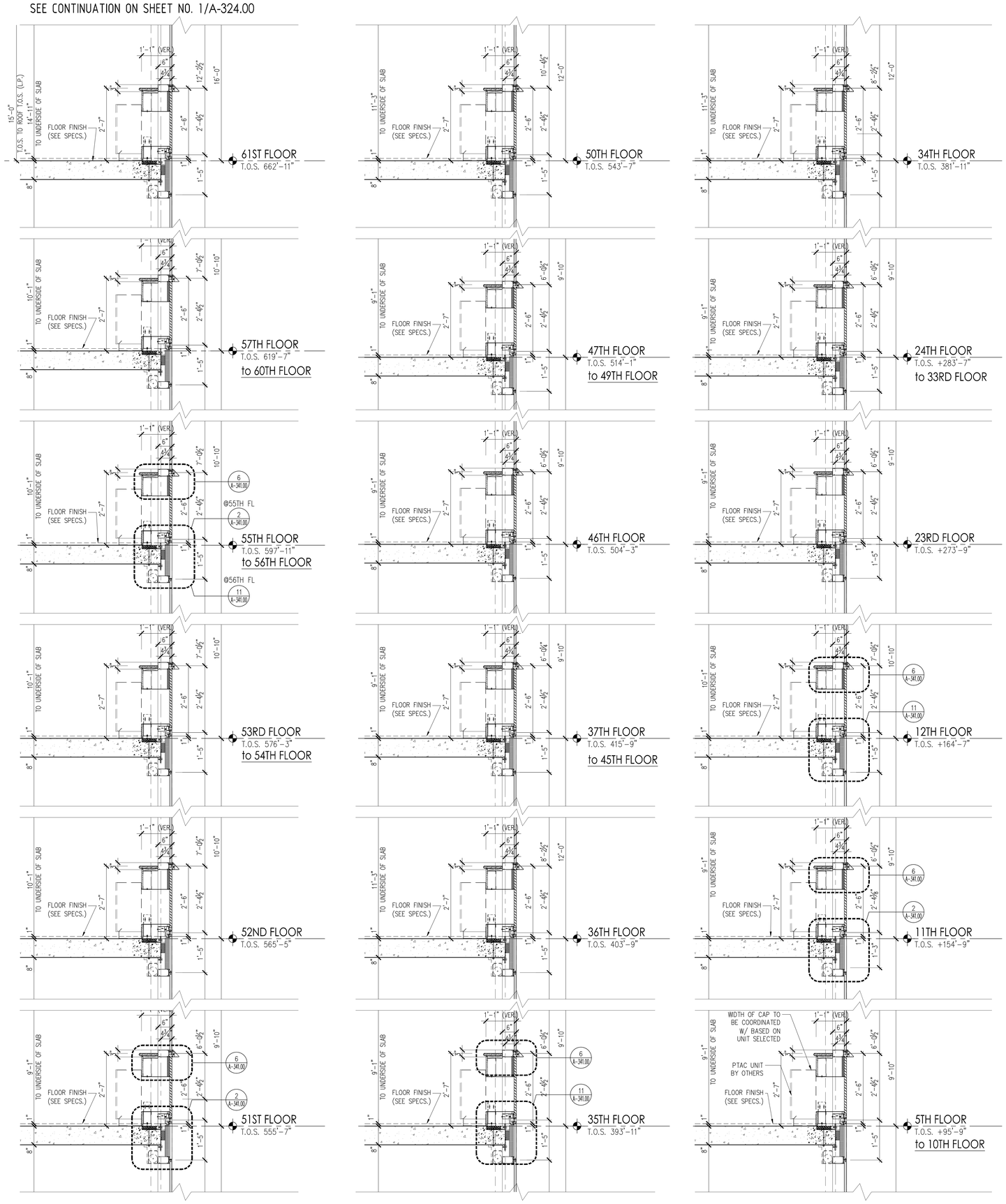
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SHEET No.:	1 of 000

A-316.00

FILE No: T:\Brookfield\Manhattan-West (2012-32)\SCED\Drawings\BMW_A316_Wall Section.dwg

DEPT OF BLDGS 121185760 Job Number
E5406003002T3 Scan Code

SEE CONTINUATION ON SHEET NO. 1/A-324.00



SEE CONTINUATION ON SHEET NO. 1/A-315.00

1 SOUTH WALL SECTION
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

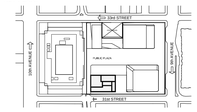
DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-22	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION

D.O.B. NUMBER: NB# 121185760

NORTH:

Scale: 3/4" = 1'-0"
0' 6" 1' 3'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SOUTH WALL SECTION
@ 5TH TO 61ST FLOOR

SEAL & SIGNATURE:

REGISTERED ARCHITECT
STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/rabo
CHECKED BY:	T.J.F.

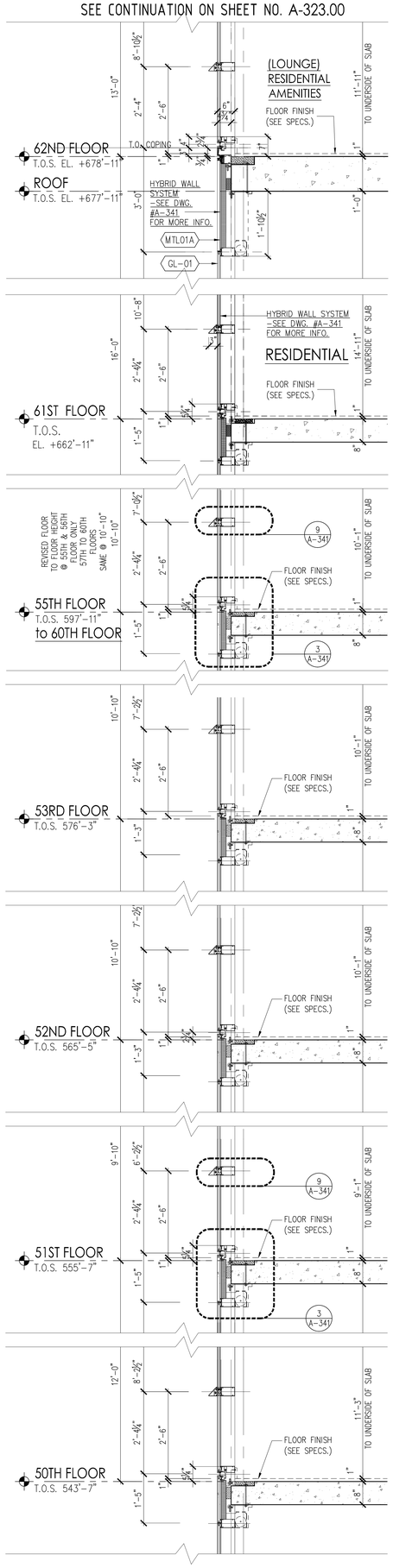
A-317.00

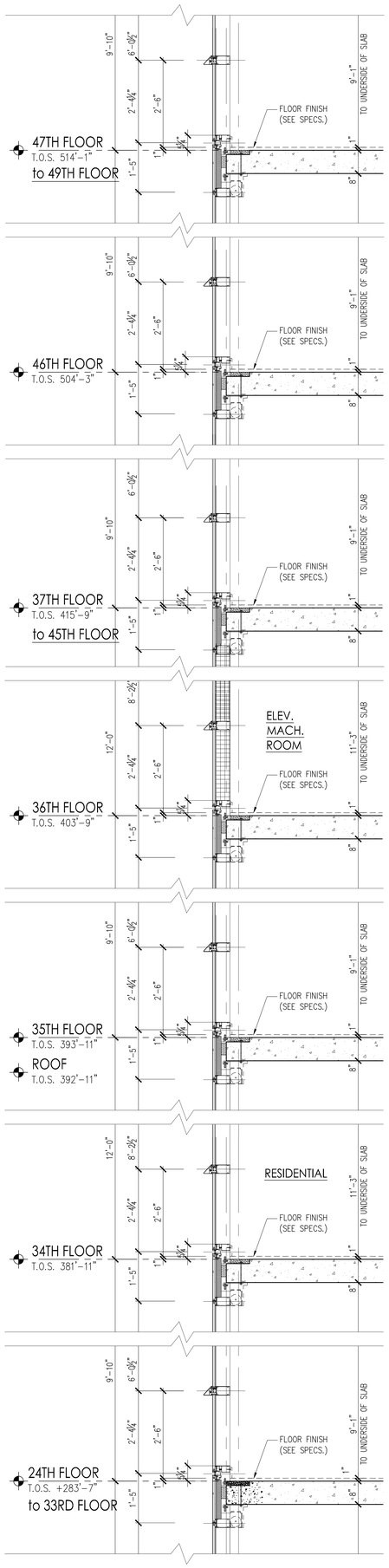
SHEET. No.: 1 of 000

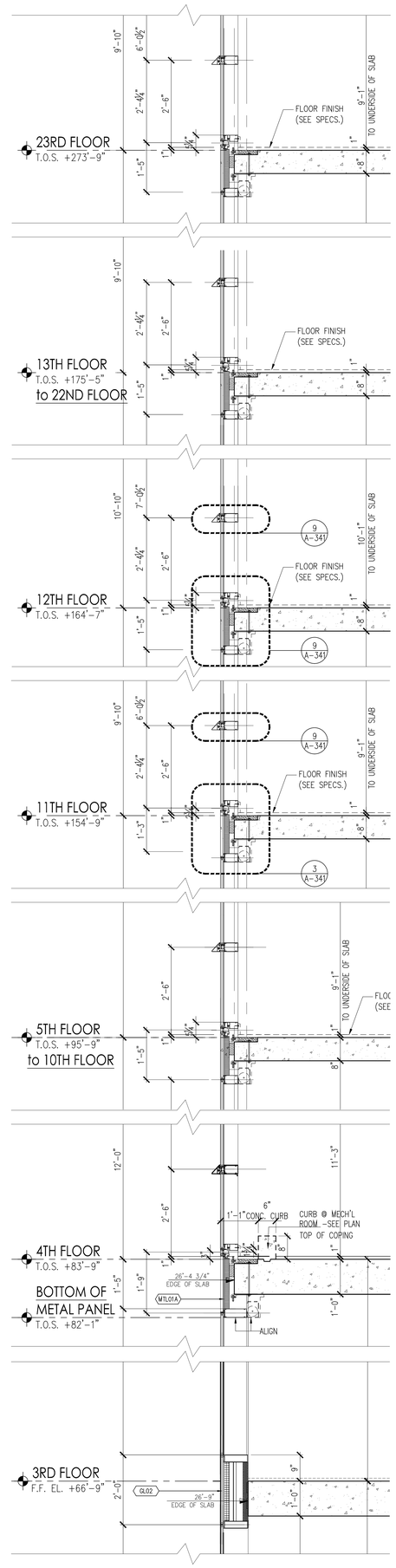
FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A314_A317 Wall Sections.dwg

DEPT OF BLDGS 121185760 Job Number
E3560750480 Scan Code

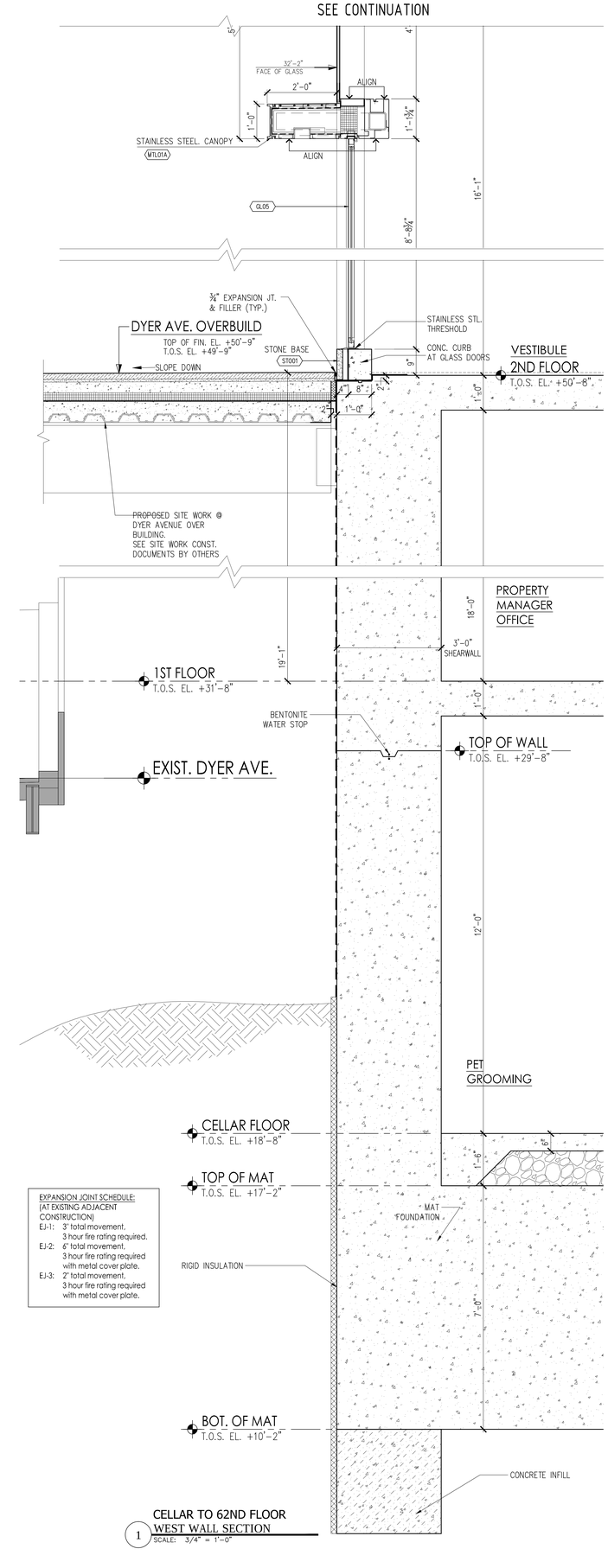
SEE CONTINUATION ON SHEET NO. A-323.00







SEE CONTINUATION



EXPANSION JOINT SCHEDULE: (AT EXISTING ADJACENT CONSTRUCTION)	
EJ-1:	3" total movement, 3 hour fire rating required.
EJ-2:	6" total movement, 3 hour fire rating required with metal cover plate.
EJ-3:	2" total movement, 3 hour fire rating required with metal cover plate.

1 CELLAR TO 62ND FLOOR WEST WALL SECTION
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

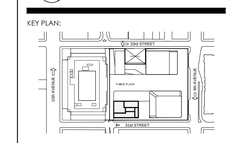
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER: NB# 121185760

NORTH
Scale: 3/4" = 1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

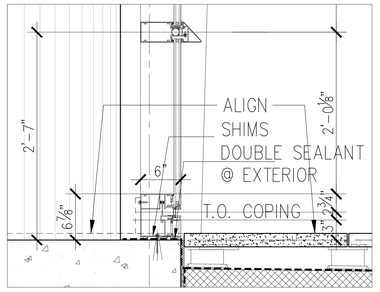
DRAWING TITLE:
WEST WALL SECTION
@ CELLAR TO 62ND FLOOR

SEAL & SIGNATURE:

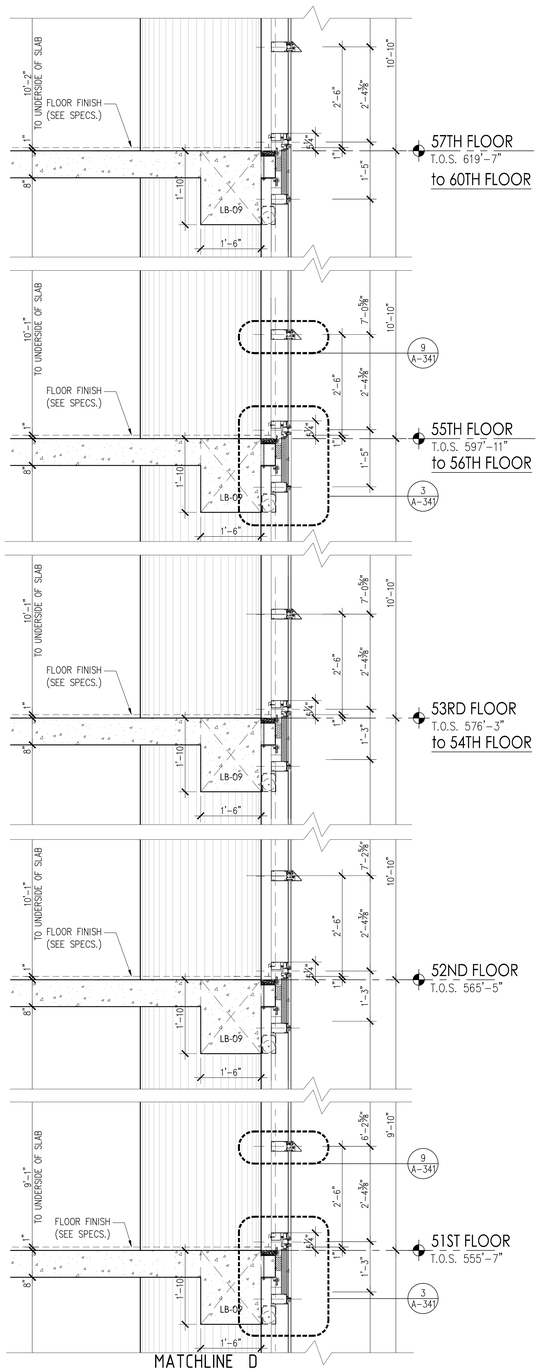
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/abo
CHECKED BY:	T.J.F.
DRAWING No:	A-318.00
SHEET, No.:	1 of 000

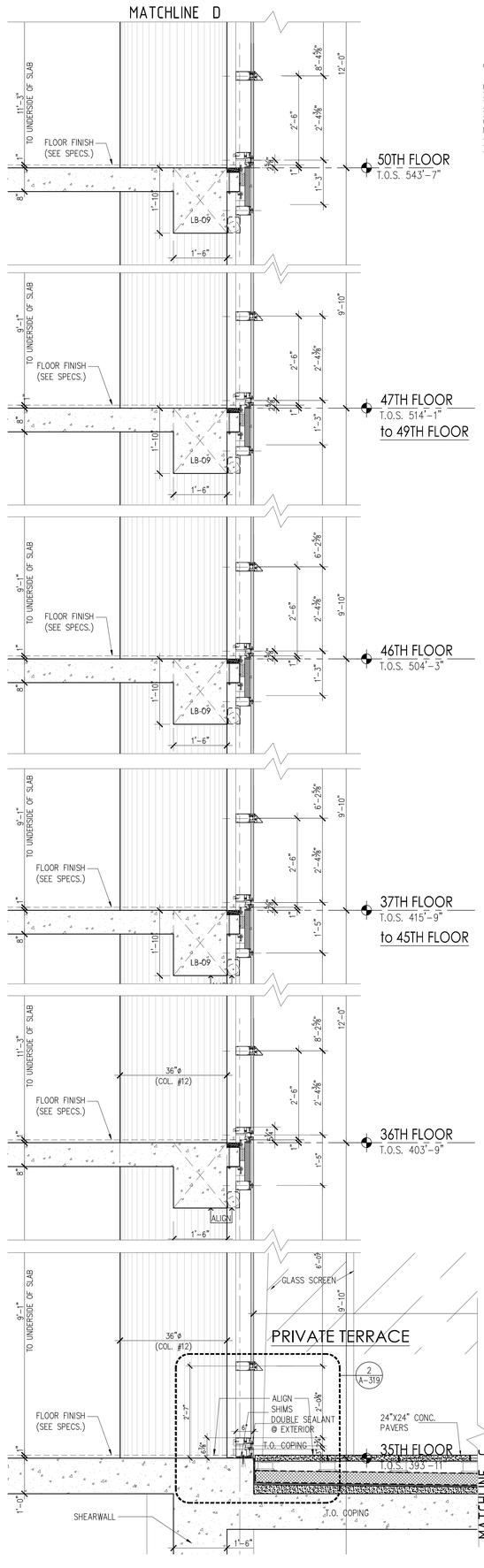
FILE No: "I:\brookfield-Manhattan-West (2012-32)\LCD Drawings\BldA_A318_West Wall Section.dwg"

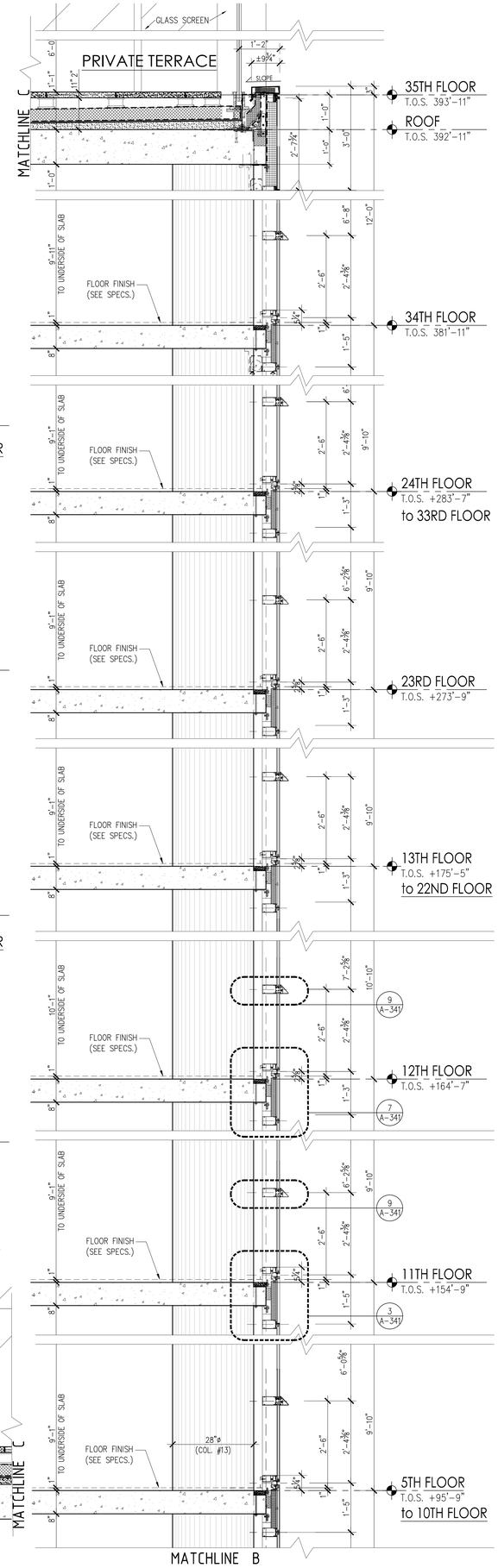
DEPT OF BLDGS 121185760 Job Number
E3/X0030905 Scan Code

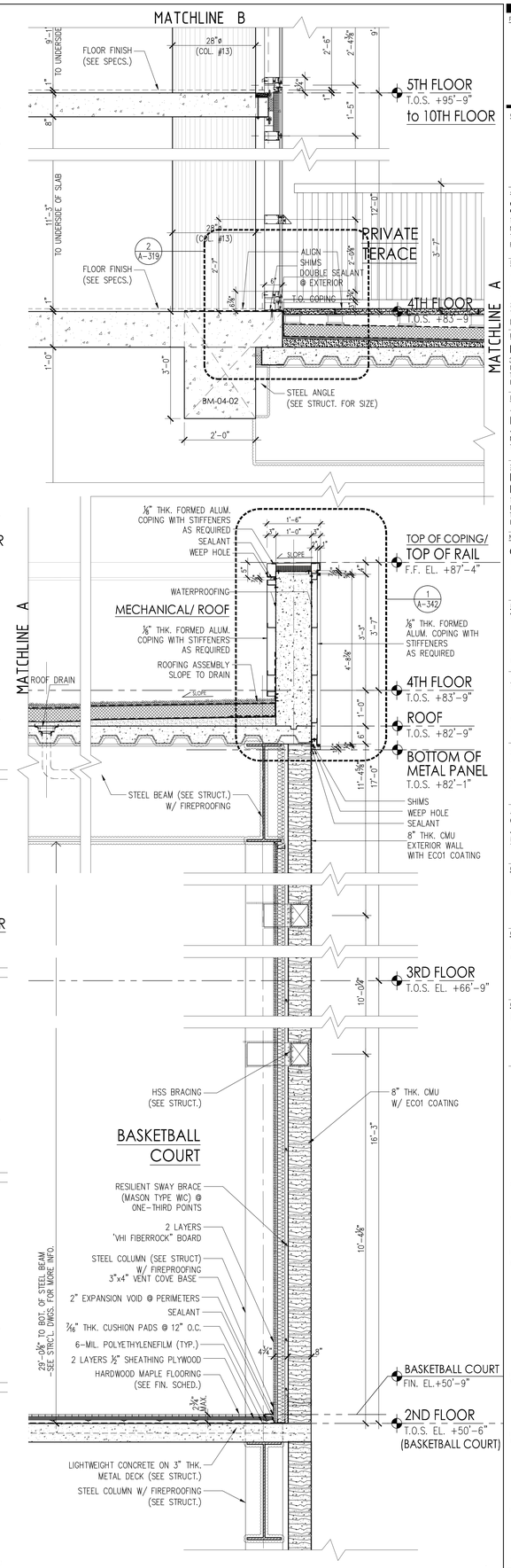


2 LEVEL 4 & 35 WALL SECTION - BASE CONDITION
SCALE: N.T.S.
SEE DETAIL-3 SHEET NO. A-342 FOR MORE INFO.









1 EAST WALL SECTION @ 2ND TO 61ST FLOOR
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

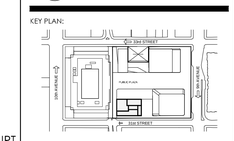
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 3/4" = 1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
EAST WALL SECTION @ 2ND TO 62ND FLOOR SHOWING LINTEL BEAM

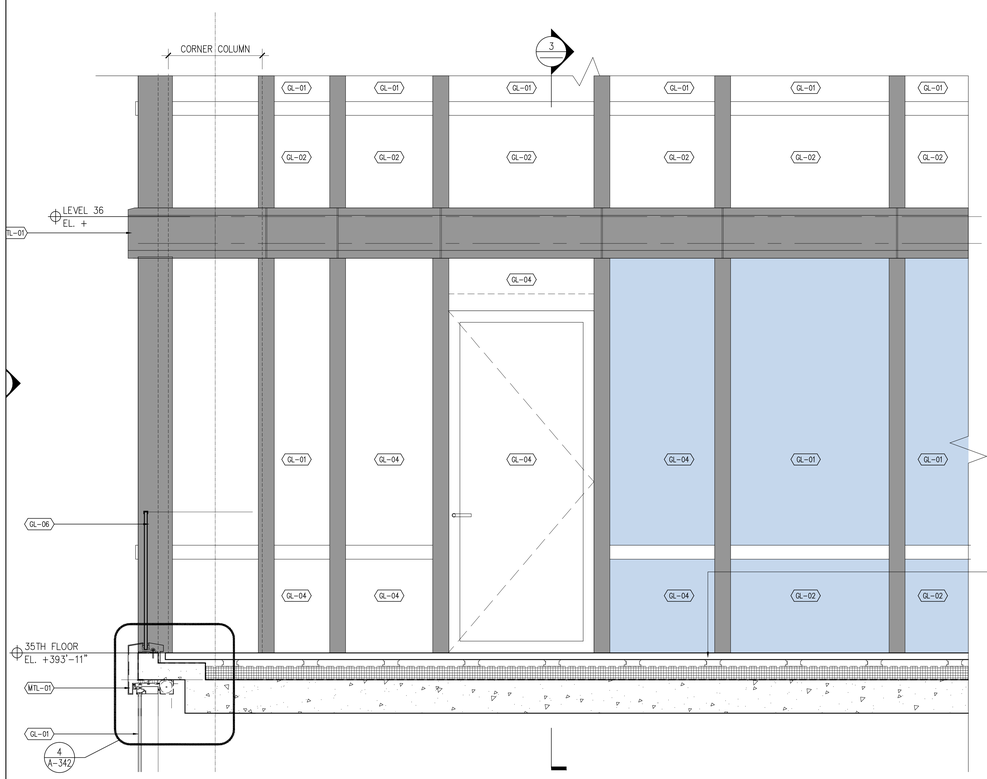
SEAL & SIGNATURE:

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JC/rdo
CHECKED BY:	T.J.F.

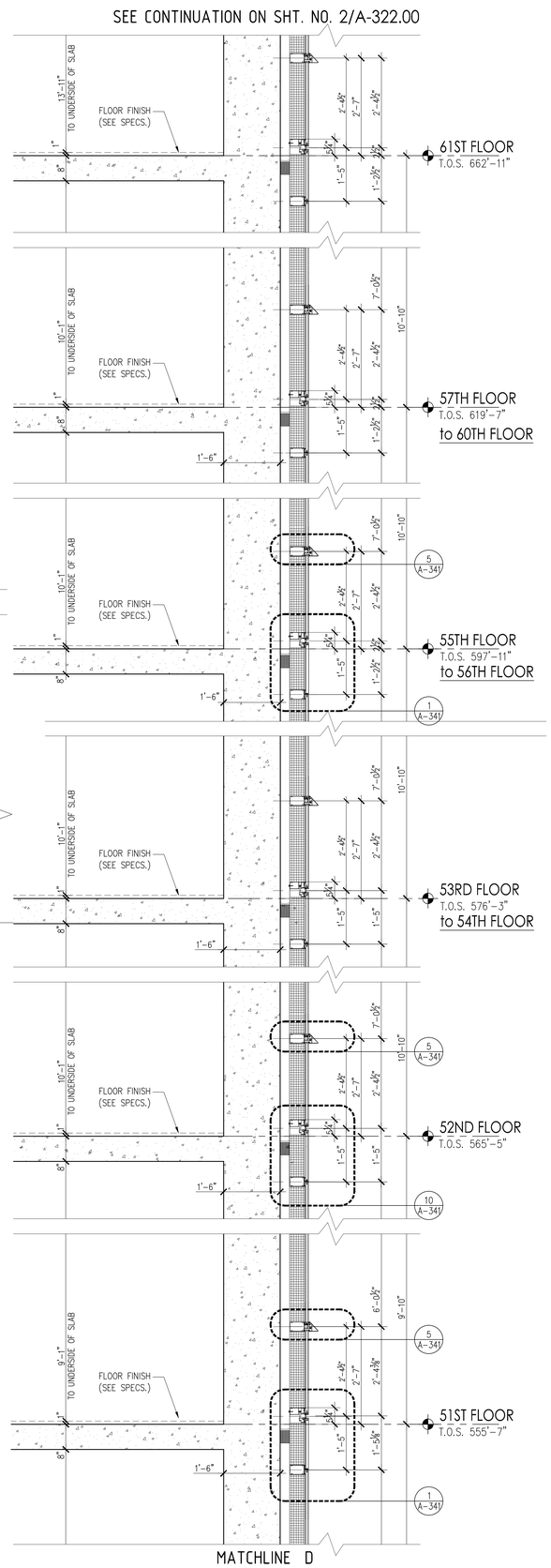
FLOOR NO.: A-319.00
SHEET NO.: 1 of 000

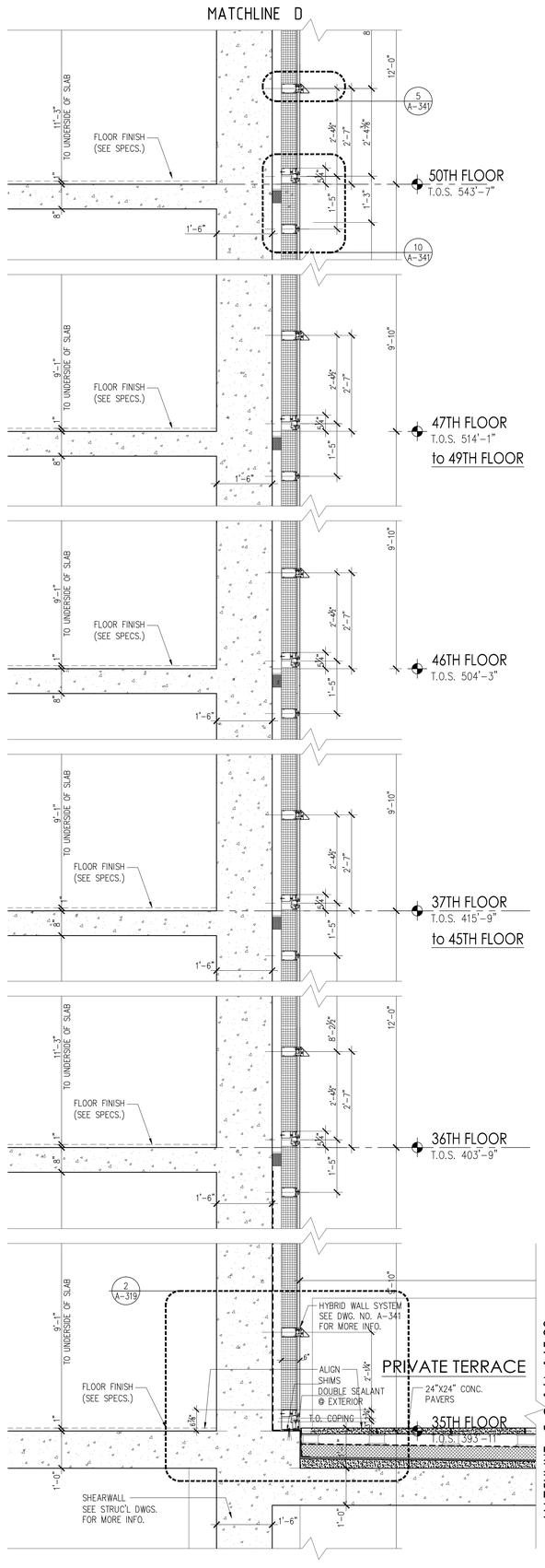
FILE NO: T:\Brookfield-Manhattan-West (2012-32)\LCE-Drawings\BAR_A319 East Wall Section.dwg

DEPT OF BLDGS 121185760 Job Number | E3970063436 Scan Code



2 EAST WALL ELEVATION @ 35TH FLOOR PRIVATE TERRACE
SCALE: 3/4" = 1'-0"





1 EAST WALL SECTION @ 35TH TO 61ST FLOOR SHOWING SHEARWALL
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

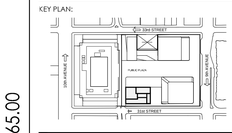
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
3	2014-10-23	BULLETIN #2
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3/4" = 1'-0"
0" 6" 1' 3'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
EAST WALL SECTION @ 2ND TO 62ND FLOOR SHOWING SHEARWALL

SEAL & SIGNATURE:

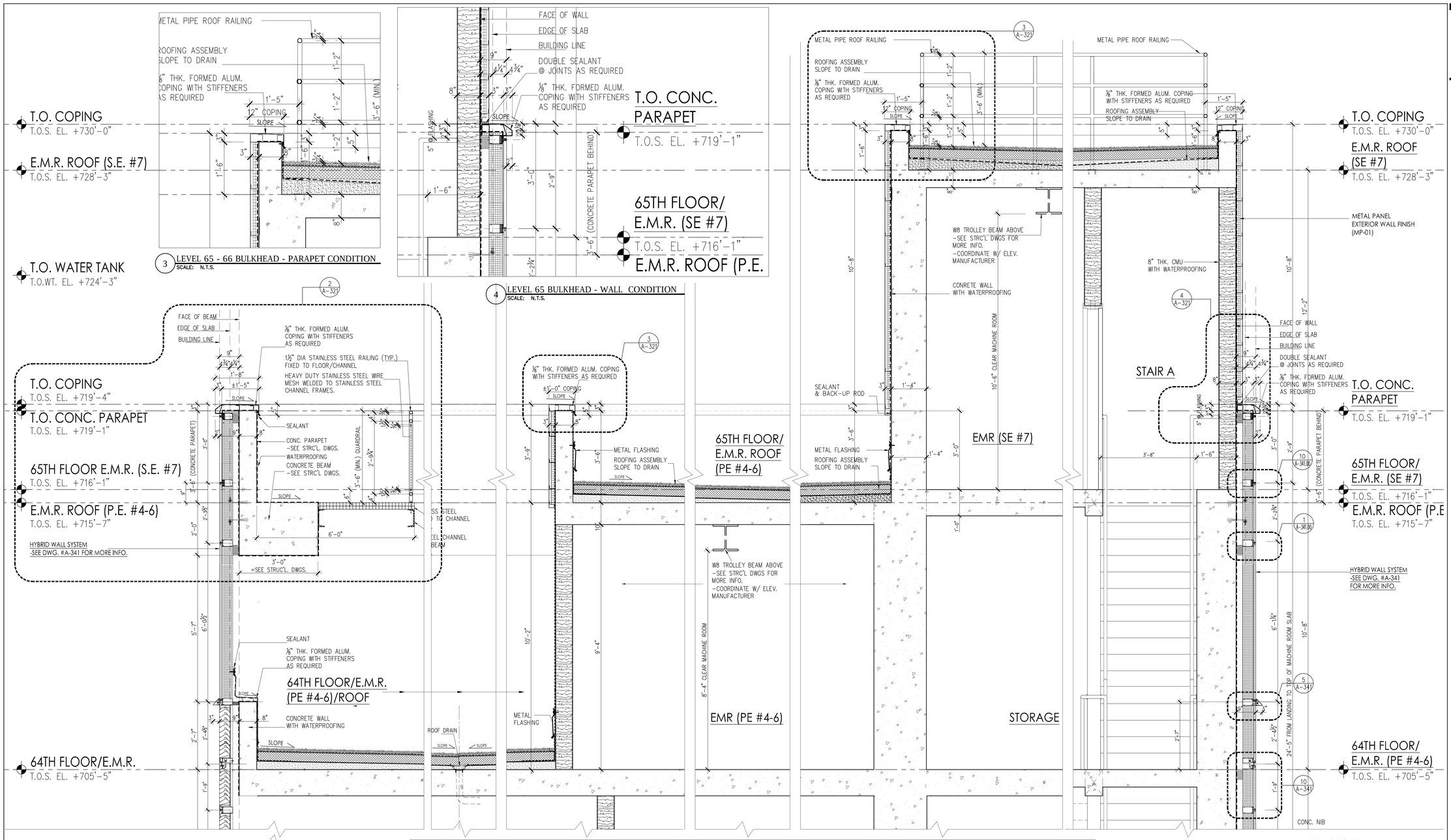
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/abo
CHECKED BY:	T.J.F.

A-320.00

SHEET. NO.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCD Drawings\BMW_A320_East Wall Section.dwg

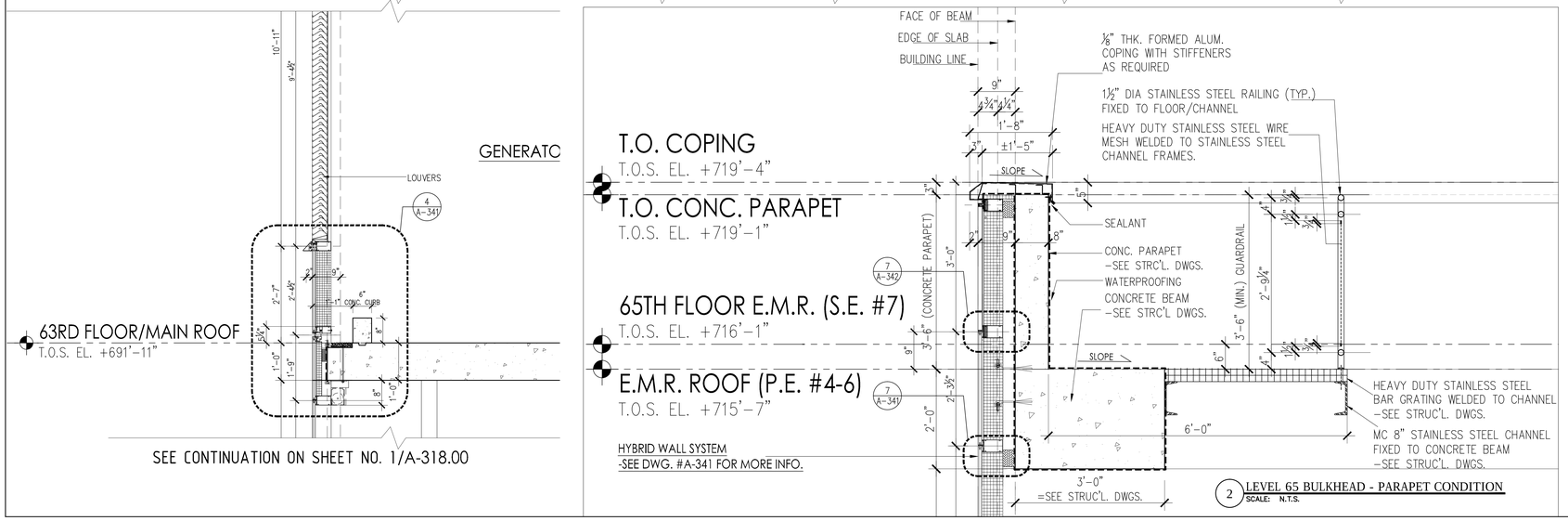
DEPT OF BLDGS 121185760 Job Number
E360504124 Scan Code



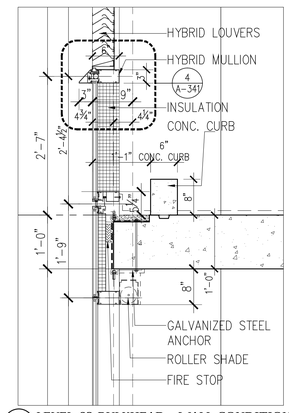
3 LEVEL 65 - 66 BULKHEAD - PARAPET CONDITION
SCALE: N.T.S.

4 LEVEL 65 BULKHEAD - WALL CONDITION
SCALE: N.T.S.

1 BULKHEAD SECTION DETAIL
SCALE: 3/4" = 1'-0"



2 LEVEL 65 BULKHEAD - PARAPET CONDITION
SCALE: N.T.S.



5 LEVEL 63 BULKHEAD - WALL CONDITION
SCALE: N.T.S.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 3/4" = 1'-0"

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BULKHEAD SECTION DETAIL 1
@ 64TH FLOOR E.M.R./ROOF (WEST)

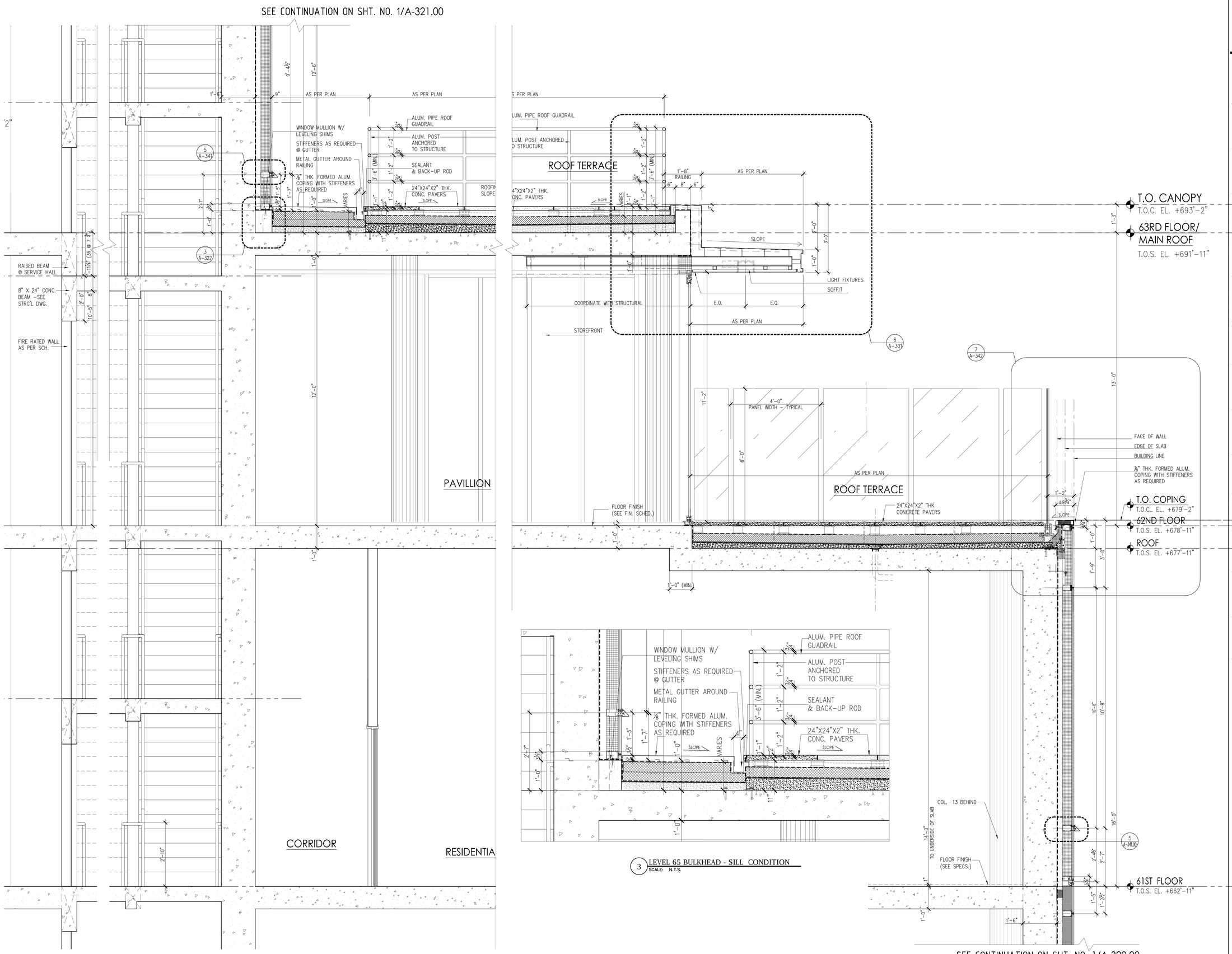
SEAL & SIGNATURE:

DATE: -
PROJECT NO: 2012-32
DRAWN BY: JCB/abo
CHECKED BY: T.J.F.

A-321.00
SHEET NO.: 1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A321-A323_Bulkhead

DEPT OF BLDGS 121185760 Job Number
E369562218 Scan Code



3 LEVEL 65 BULKHEAD - SILL CONDITION
SCALE: N.T.S.

2 PARTIAL SECTION @ 62ND FLR. PAVILION & ROOF TERRACE @ 63RD FLOOR (EAST)
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE	REVISION
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 3/4" = 1'- 0"

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BULKHEAD SECTION DETAIL 2 @ ROOF TERRACE (WEST)

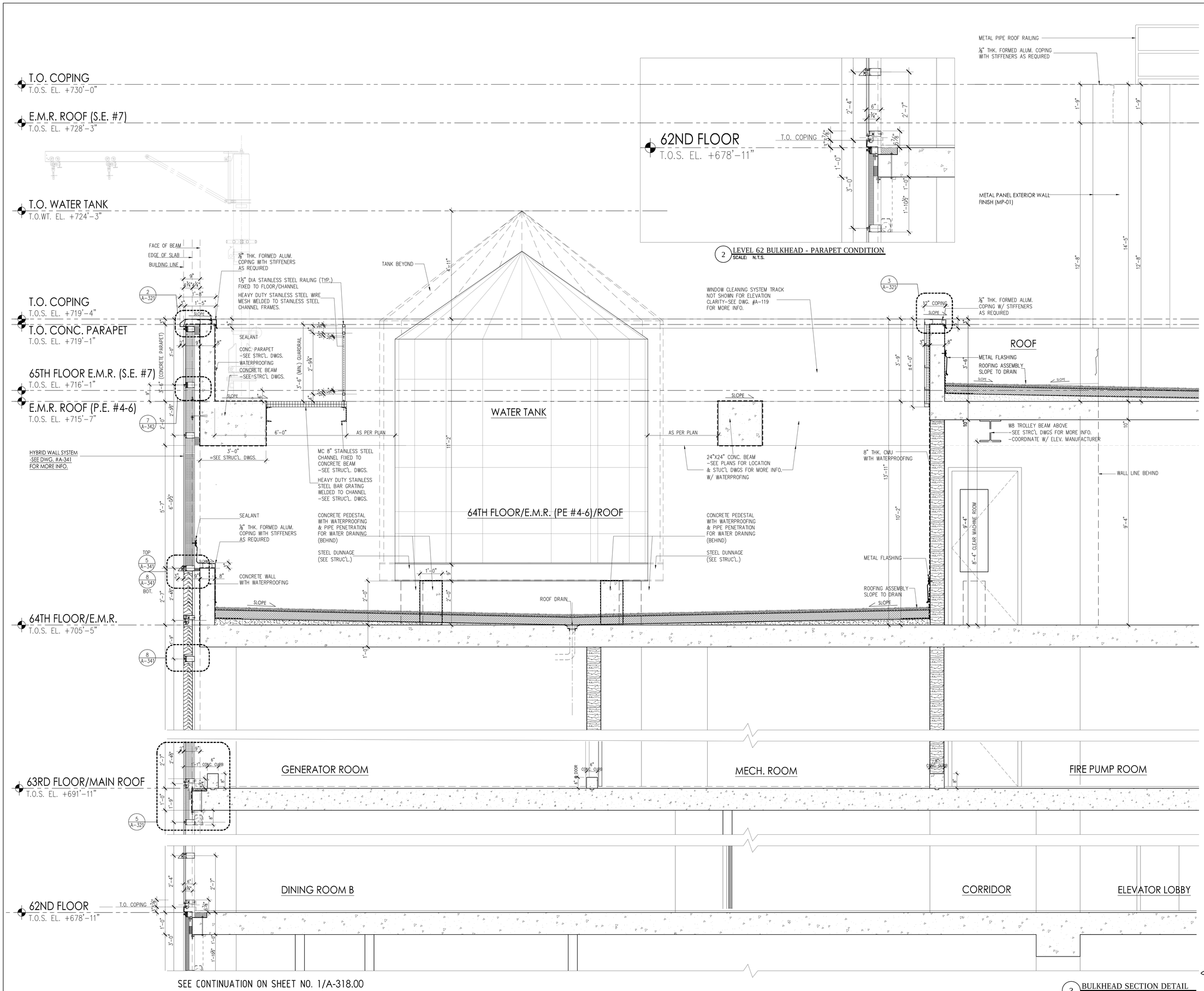
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/abo
CHECKED BY:	T.J.F.

A-322.00
SHEET. No.: 1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)\LCE Drawings\BldNt_A321-A325_Bulletin2

DEPT OF BLDGS 121185760 Job Number
E360620995X Scan Code



2 LEVEL 62 BULKHEAD - PARAPET CONDITION
SCALE: N.T.S.

3 BULKHEAD SECTION DETAIL
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 3/4" = 1'-0"

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BULKHEAD SECTION DETAIL 3 @ WATER TANK (NORTH)

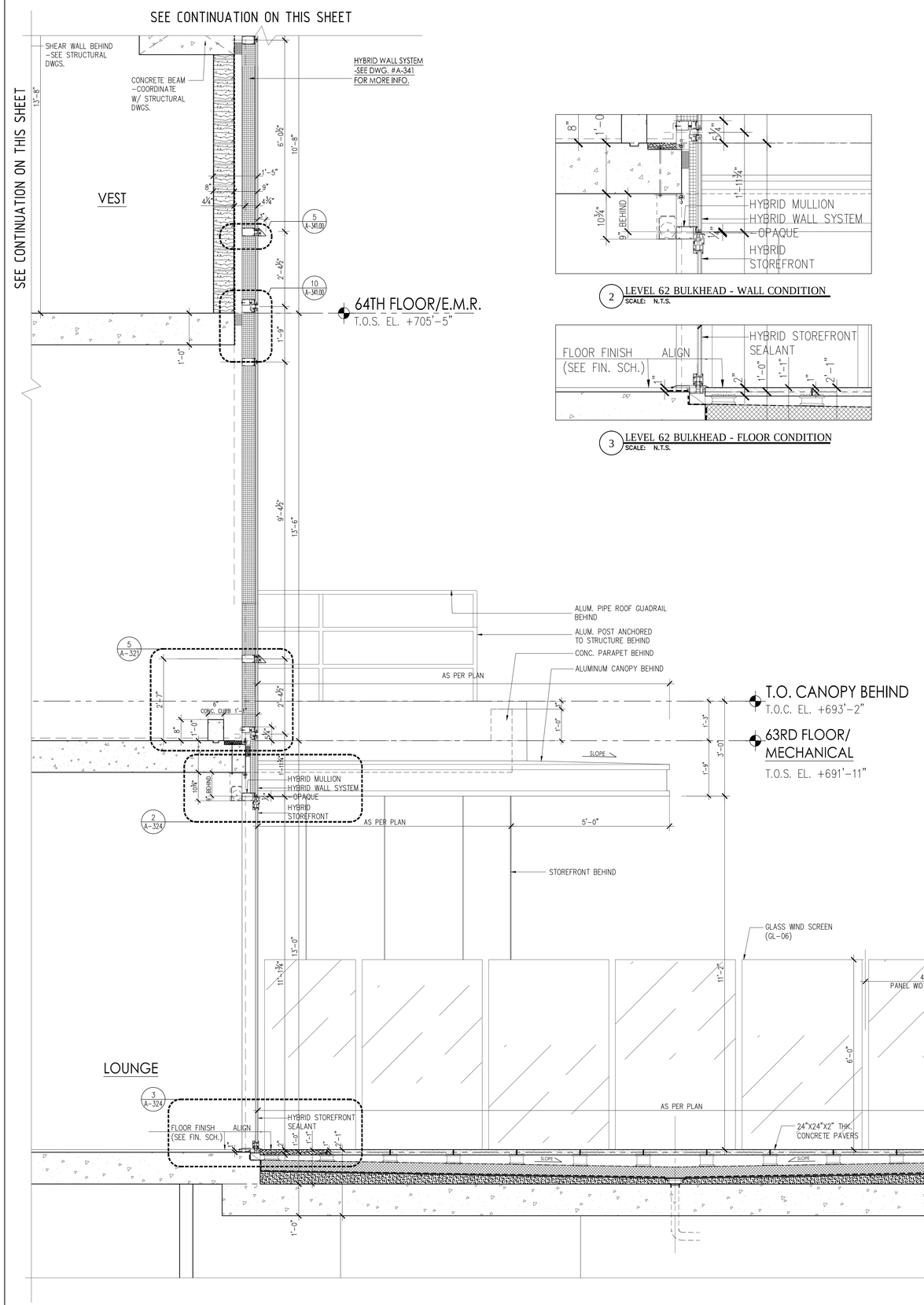
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/dbo
CHECKED BY:	T.J.F.

DRAWING No.: A-323.00
SHEET. No.: 1 of 000

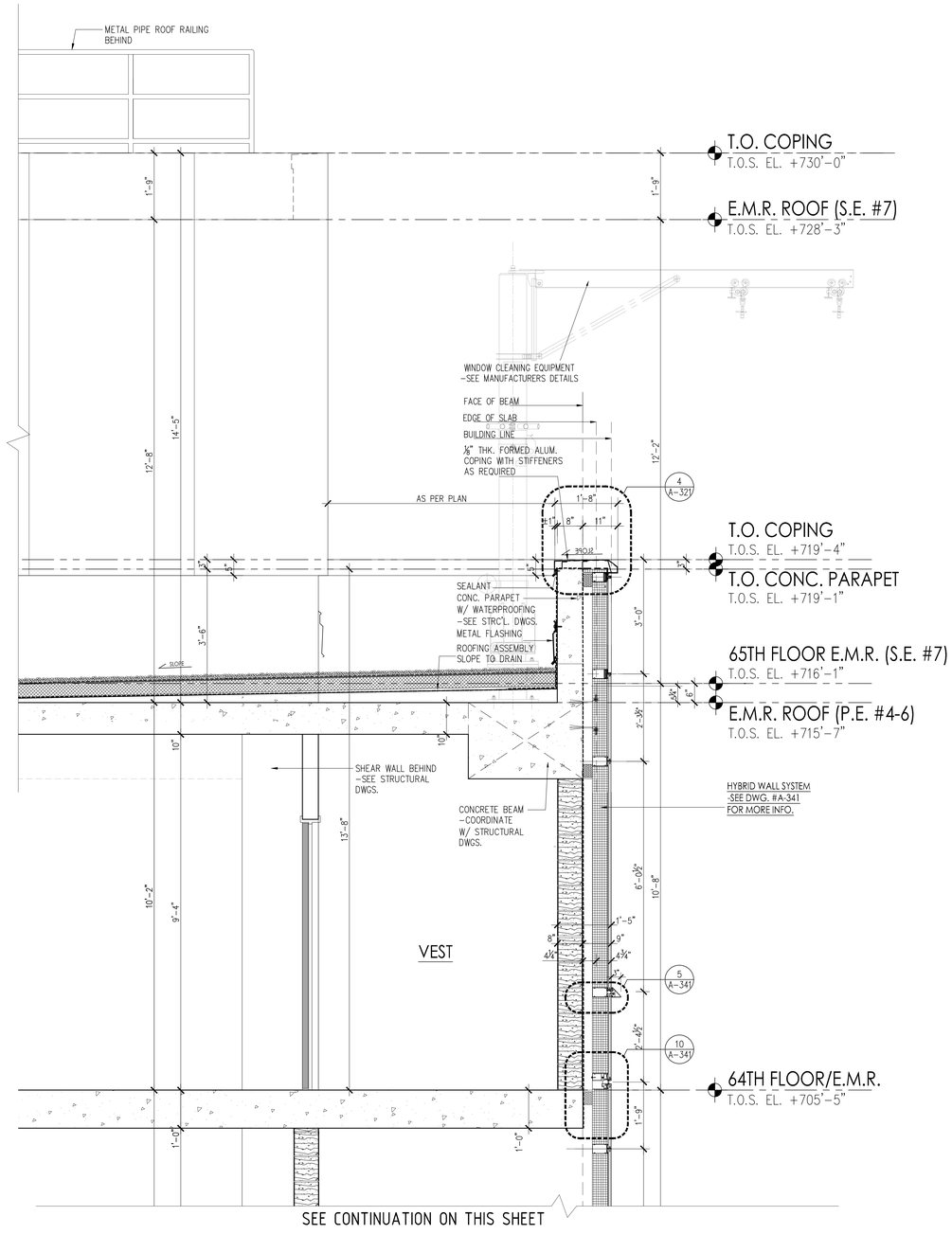
FILE No: \\Brookfield\Manhattan-West (2012-32)\3.CD\Drawings\BAW_A321-A325_Bulkhead

DEPT OF BLDGS 121185760 Job Number
B30/SAF/90656 Scan Code



2 LEVEL 62 BULKHEAD - WALL CONDITION
SCALE: N.T.S.

3 LEVEL 62 BULKHEAD - FLOOR CONDITION
SCALE: N.T.S.



1 BULKHEAD SECTION DETAIL
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

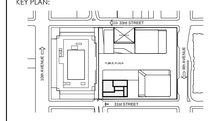
DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-23	BULLETIN #2
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

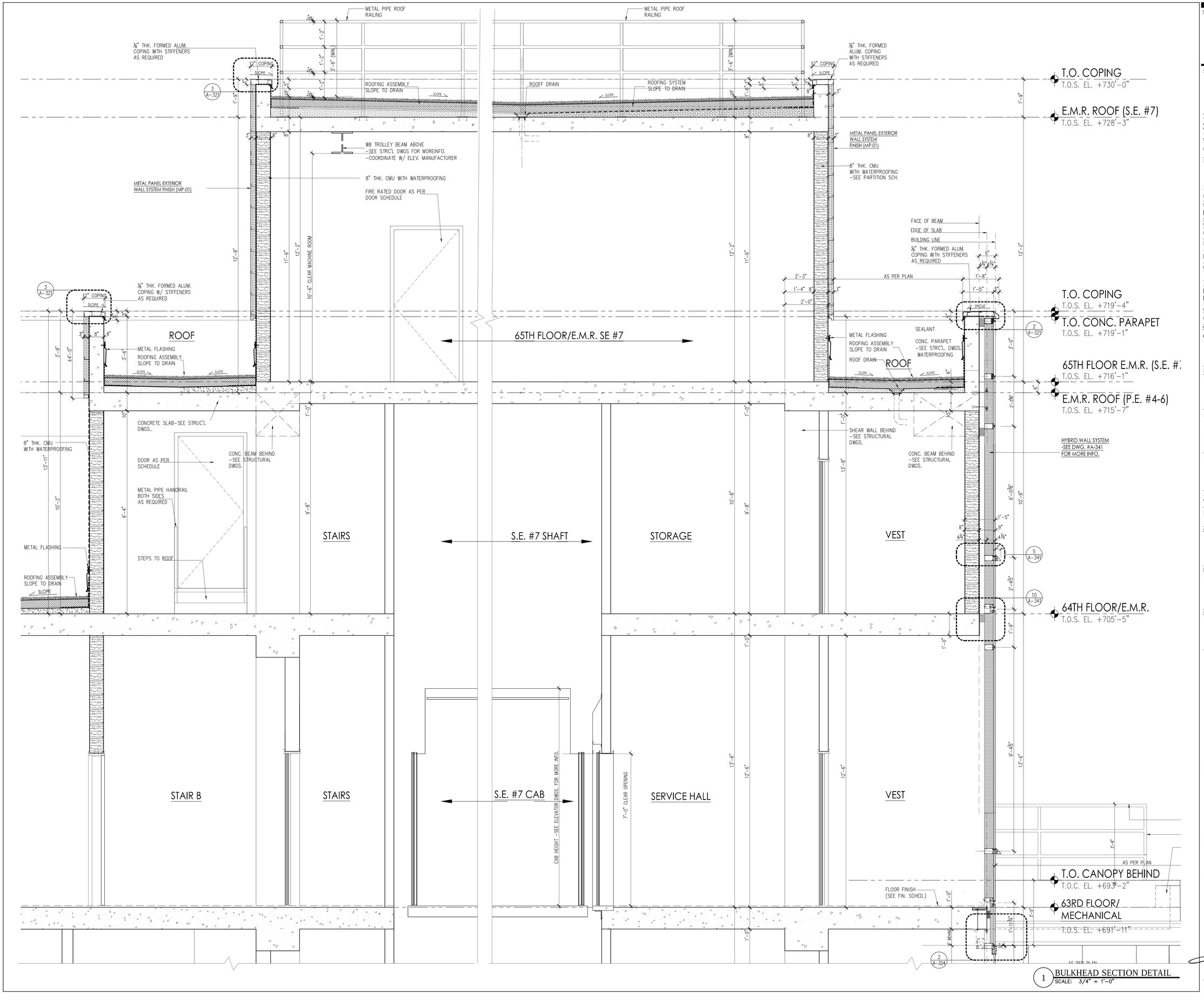
NORTH:

Scale: 3/4" = 1'-0"
0' 6" 1' 3'

KEY PLAN:


10th AVENUE
9th AVENUE
West 33rd STREET
West 31st STREET
PARCEL A
PARCEL B
PARCEL C
PARCEL D
PARCEL E
PARCEL F
PARCEL G
PARCEL H
PARCEL I
PARCEL J
PARCEL K
PARCEL L
PARCEL M
PARCEL N
PARCEL O
PARCEL P
PARCEL Q
PARCEL R
PARCEL S
PARCEL T
PARCEL U
PARCEL V
PARCEL W
PARCEL X
PARCEL Y
PARCEL Z
PARCEL AA
PARCEL BB
PARCEL CC
PARCEL DD
PARCEL EE
PARCEL FF
PARCEL GG
PARCEL HH
PARCEL II
PARCEL JJ
PARCEL KK
PARCEL LL
PARCEL MM
PARCEL NN
PARCEL OO
PARCEL PP
PARCEL QQ
PARCEL RR
PARCEL SS
PARCEL TT
PARCEL UU
PARCEL VV
PARCEL WW
PARCEL XX
PARCEL YY
PARCEL ZZ
PARCEL AAA
PARCEL BBB
PARCEL CCC
PARCEL DDD
PARCEL EEE
PARCEL FFF
PARCEL GGG
PARCEL HHH
PARCEL III
PARCEL JJJ
PARCEL KKK
PARCEL LLL
PARCEL MMM
PARCEL NNN
PARCEL OOO
PARCEL PPP
PARCEL QQQ
PARCEL RRR
PARCEL SSS
PARCEL TTT
PARCEL UUU
PARCEL VVV
PARCEL WWW
PARCEL XXX
PARCEL YYY
PARCEL ZZZ
PARCEL AAAA
PARCEL BBBB
PARCEL CCCC
PARCEL DDDD
PARCEL EEEE
PARCEL FFFF
PARCEL GGGG
PARCEL HHHH
PARCEL IIII
PARCEL JJJJ
PARCEL KKKK
PARCEL LLLL
PARCEL MMMM
PARCEL NNNN
PARCEL OOOO
PARCEL PPPP
PARCEL QQQQ
PARCEL RRRR
PARCEL SSSS
PARCEL TTTT
PARCEL UUUU
PARCEL VVVV
PARCEL WWWW
PARCEL XXXX
PARCEL YYYY
PARCEL ZZZZ
PARCEL AAAAA
PARCEL BBBBB
PARCEL CCCCC
PARCEL DDDDD
PARCEL EEEEE
PARCEL FFFFF
PARCEL GGGGG
PARCEL HHHHH
PARCEL IIIIII
PARCEL JJJJJ
PARCEL KKKKK
PARCEL LLLLL
PARCEL MMMMM
PARCEL NNNNN
PARCEL OOOOO
PARCEL PPPPP
PARCEL QQQQQ
PARCEL RRRRR
PARCEL SSSSS
PARCEL TTTTT
PARCEL UUUUU
PARCEL VVVVV
PARCEL WWWWW
PARCEL XXXXX
PARCEL YYYYY
PARCEL ZZZZZ
PARCEL AAAAAA
PARCEL BBBBBB
PARCEL CCCCCC
PARCEL DDDDDD
PARCEL EEEEEE
PARCEL FFFFFF
PARCEL GGGGGG
PARCEL HHHHHH
PARCEL IIIIIII
PARCEL JJJJJJ
PARCEL KKKKKK
PARCEL LLLLLL
PARCEL MMMMMM
PARCEL NNNNNN
PARCEL OOOOOO
PARCEL PPPPPP
PARCEL QQQQQQ
PARCEL RRRRRR
PARCEL SSSSSS
PARCEL TTTTTT
PARCEL UUUUUU
PARCEL VVVVVV
PARCEL WWWWWW
PARCEL XXXXXX
PARCEL YYYYYY
PARCEL ZZZZZZ
PARCEL AAAAAAA
PARCEL BBBBBBB
PARCEL CCCCCCC
PARCEL DDDDDDD
PARCEL EEEEEEE
PARCEL FFFFFFF
PARCEL GGGGGGG
PARCEL HHHHHHH
PARCEL IIIIIIII
PARCEL JJJJJJJ
PARCEL KKKKKKK
PARCEL LLLLLLL
PARCEL MMMMMMM
PARCEL NNNNNNN
PARCEL OOOOOOO
PARCEL PPPPPPP
PARCEL QQQQQQQ
PARCEL RRRRRRR
PARCEL SSSSSSS
PARCEL TTTTTTT
PARCEL UUUUUUU
PARCEL VVVVVVV
PARCEL WWWWWWW
PARCEL XXXXXXX
PARCEL YYYYYYY
PARCEL ZZZZZZZ
PARCEL AAAAAAAA
PARCEL BBBBBBBB
PARCEL CCCCCCCC
PARCEL DDDDDDDD
PARCEL EEEEEEEE
PARCEL FFFFFFFF
PARCEL GGGGGGGG
PARCEL HHHHHHHH
PARCEL IIIIIIIII
PARCEL JJJJJJJJ
PARCEL KKKKKKKK
PARCEL LLLLLLLL
PARCEL MMMMMMMM
PARCEL NNNNNNNN
PARCEL OOOOOOOO
PARCEL PPPPPPPP
PARCEL QQQQQQQQ
PARCEL RRRRRRRR
PARCEL SSSSSSSS
PARCEL TTTTTTTT
PARCEL UUUUUUUU
PARCEL VVVVVVVV
PARCEL WWWWWWWW
PARCEL XXXXXXXX
PARCEL YYYYYYYY
PARCEL ZZZZZZZZ
PARCEL AAAAAAAAA
PARCEL BBBBBBBBB
PARCEL CCCCCCCCC
PARCEL DDDDDDDDD
PARCEL EEEEEEEEE
PARCEL FFFFFFFFF
PARCEL GGGGGGGGG
PARCEL HHHHHHHHH
PARCEL IIIIIIIIII
PARCEL JJJJJJJJJ
PARCEL KKKKKKKKK
PARCEL LLLLLLLLL
PARCEL MMMMMMMMM
PARCEL NNNNNNNNN
PARCEL OOOOOOOOO
PARCEL PPPPPPPPP
PARCEL QQQQQQQQQ
PARCEL RRRRRRRRR
PARCEL SSSSSSSSS
PARCEL TTTTTTTTT
PARCEL UUUUUUUUU
PARCEL VVVVVVVVV
PARCEL WWWWWWWWW
PARCEL XXXXXXXXX
PARCEL YYYYYYYYY
PARCEL ZZZZZZZZZ
PARCEL AAAAAAAAAA
PARCEL BBBBBBBBBB
PARCEL CCCCCCCCCC
PARCEL DDDDDDDDDD
PARCEL EEEEEEEEEE
PARCEL FFFFFFFFFF
PARCEL GGGGGGGGGG
PARCEL HHHHHHHHHH
PARCEL IIIIIIIIIII
PARCEL JJJJJJJJJJ
PARCEL KKKKKKKKKK
PARCEL LLLLLLLLLL
PARCEL MMMMMMMMMM
PARCEL NNNNNNNNNN
PARCEL OOOOOOOOOO
PARCEL PPPPPPPPPP
PARCEL QQQQQQQQQQ
PARCEL RRRRRRRRRR
PARCEL SSSSSSSSSS
PARCEL TTTTTTTTTT
PARCEL UUUUUUUUUU
PARCEL VVVVVVVVVV
PARCEL WWWWWWWWWW
PARCEL XXXXXXXXXX
PARCEL YYYYYYYYYY
PARCEL ZZZZZZZZZZ
PARCEL AAAAAAAAAAA
PARCEL BBBBBBBBBBB
PARCEL CCCCCCCCCCC
PARCEL DDDDDDDDDDD
PARCEL EEEEEEEEEEE
PARCEL FFFFFFFFFFF
PARCEL GGGGGGGGGGG
PARCEL HHHHHHHHHHH
PARCEL IIIIIIIIIIII
PARCEL JJJJJJJJJJJ
PARCEL KKKKKKKKKKK
PARCEL LLLLLLLLLLL
PARCEL MMMMMMMMMMM
PARCEL NNNNNNNNNNN
PARCEL OOOOOOOOOOO
PARCEL PPPPPPPPPPP
PARCEL QQQQQQQQQQQ
PARCEL RRRRRRRRRRR
PARCEL SSSSSSSSSSS
PARCEL TTTTTTTTTTT
PARCEL UUUUUUUUUUU
PARCEL VVVVVVVVVVV
PARCEL WWWWWWWWWWW
PARCEL XXXXXXXXXXX
PARCEL YYYYYYYYYYY
PARCEL ZZZZZZZZZZZ
PARCEL AAAAAAAAAAAA
PARCEL BBBBBBBBBBBB
PARCEL CCCCCCCCCCCC
PARCEL DDDDDDDDDDDD
PARCEL EEEEEEEEEEEE
PARCEL FFFFFFFFFFFF
PARCEL GGGGGGGGGGGG
PARCEL HHHHHHHHHHHH
PARCEL IIIIIIIIIIIII
PARCEL JJJJJJJJJJJJ
PARCEL KKKKKKKKKKKK
PARCEL LLLLLLLLLLLL
PARCEL MMMMMMMMMMMM
PARCEL NNNNNNNNNNNN
PARCEL OOOOOOOOOOOO
PARCEL PPPPPPPPPPPP
PARCEL QQQQQQQQQQQQ
PARCEL RRRRRRRRRRRR
PARCEL SSSSSSSSSSSS
PARCEL TTTTTTTTTTTT
PARCEL UUUUUUUUUUUU
PARCEL VVVVVVVVVVVV
PARCEL WWWWWWWWWWWW
PARCEL XXXXXXXXXXXX
PARCEL YYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKK

DEPT OF BLDGS 121185760 Job Number
E350670956 Scan Code



1 BULKHEAD SECTION DETAIL
SCALE: 3/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY. 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-11-07	ISSUED FOR DOB FILING
2014-10-09	BULLETIN #1

D.O.B. NUMBER: NB# 121185760

NORTH

Scale: 3/4" = 1'-0"

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BULKHEAD SECTION DETAIL 5 @ 65TH FLOOR E.M.R. (S.E.) (NORTH)

SEAL & SIGNATURE:

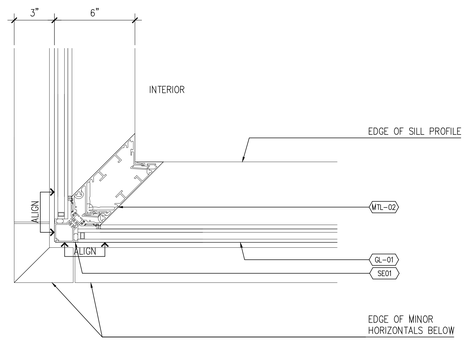
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	dbo
CHECKED BY:	T.J.F.

A-325.00

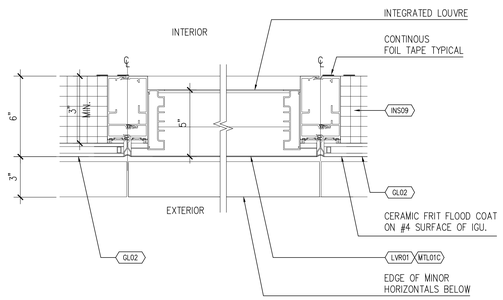
SHEET: No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCE Drawings\BldN_A321-A325_Bulkhead

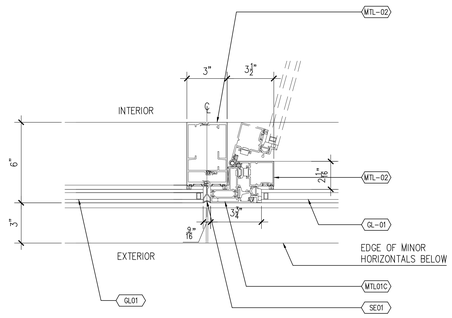
DEPT OF BLDGS 121185760 Job Number B540270005 Scan Code



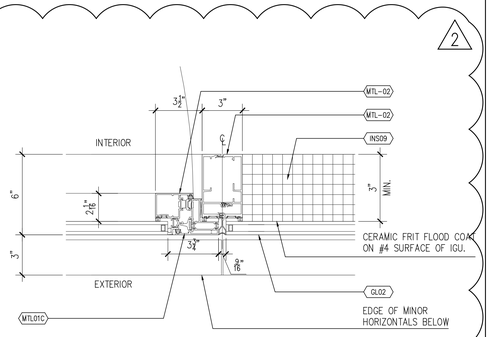
8 HW01 (HYBRID WALL SYTEM) - CORNER CONDITION
SCALE: (C) 3"=1'-0"



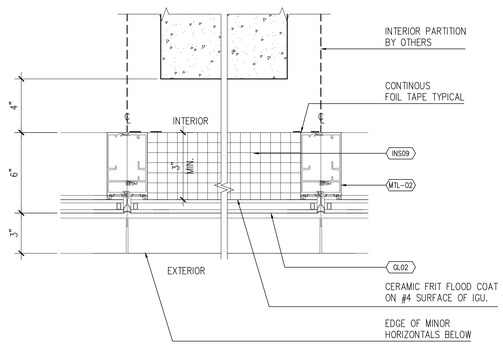
7 WW01 (WINDOW WALL SYTEM) - MECHANICAL LOUVER
SCALE: (C) 3"=1'-0"



6 HW01 (HYBRID WALL SYTEM) - CASEMENT WINDOW (HINGE SIDE)
SCALE: (C) 3"=1'-0"

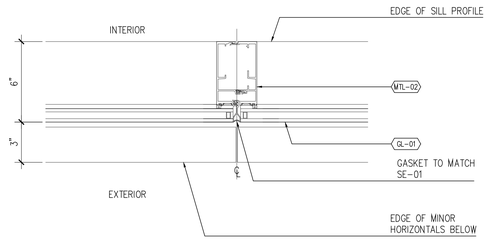


5 HW01 (HYBRID WALL SYTEM) - CASEMENT WINDOW
SCALE: (C) 3"=1'-0"

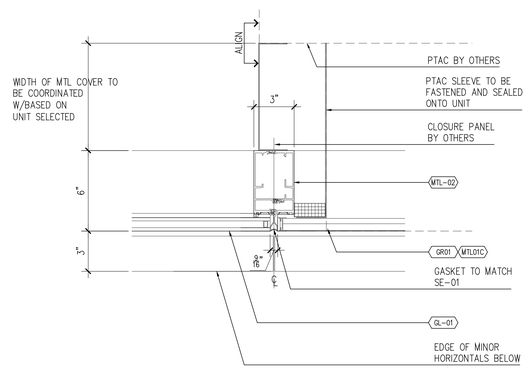


NOTE:
AT DEMISING WALL PROVIDE SOUND ISOLATOR
BETWEEN BACK OF MULLION AND INTERIOR PARTITION.

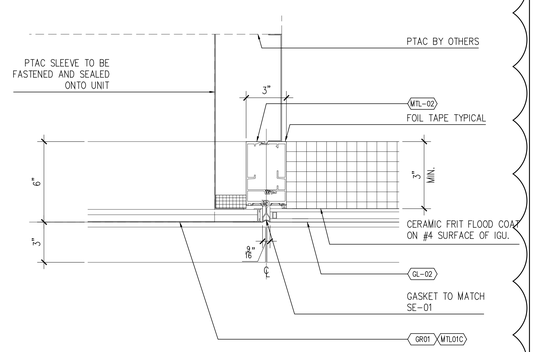
4 WW01 (WINDOW WALL SYTEM) - OPAQUE ZONE CONDITION
SCALE: (C) 3"=1'-0"



3 HW01 (HYBRID WALL SYTEM) - TYPICAL MULLION
SCALE: (C) 3"=1'-0"



2 HW01 (HYBRID WALL SYTEM) - PTAC GRILLE
SCALE: (C) 3"=1'-0"



1 HW01 (HYBRID WALL SYTEM) - PTAC GRILLE
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

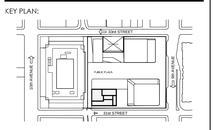
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3" = 1'- 0"
0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
EXTERIOR WALL PLAN
DETAILS- STANDARD SYSTEM

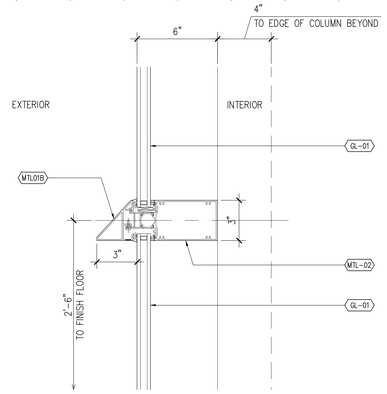
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.

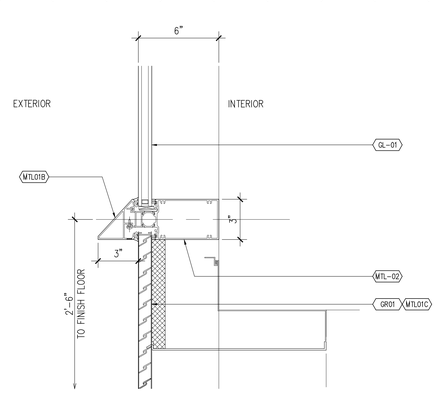
A-340.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A340.dwg

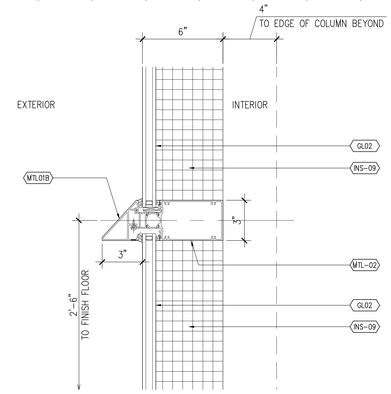
DEPT OF BLDGS 121185760 Job Number | E-5885505945 Scan Code



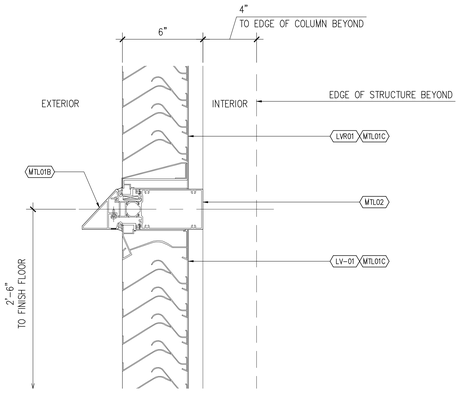
9 HW01 (HYBRID WALL SYTEM) -TYPICAL INTERMEDIATE
SCALE: (C) 3"=1'-0"



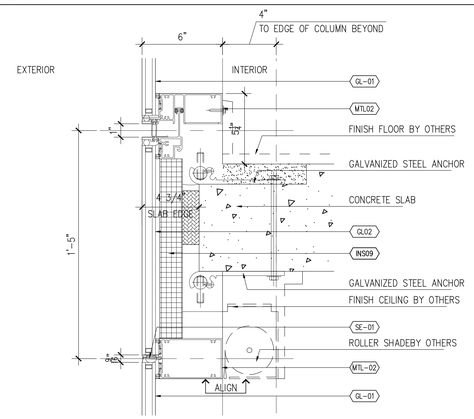
6 HW01 (HYBRID WALL SYTEM) - STANDARD PTAC SCREEN HEAD (INTERMED.)
SCALE: (C) 3"=1'-0"



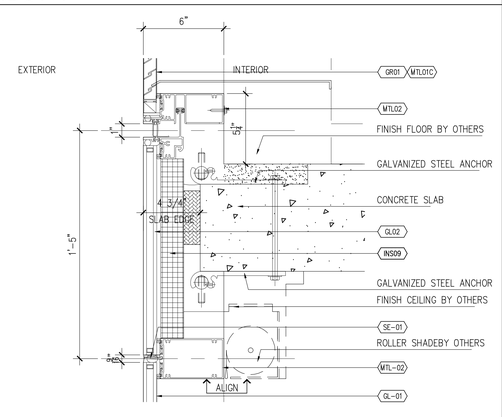
5 HW01 (HYBRID WALL SYTEM) - OPAQUE ZONE (INTERMED.)
SCALE: (C) 3"=1'-0"



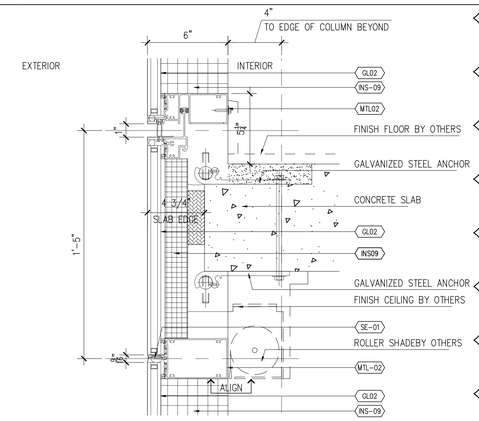
8 HW01 (HYBRID WALL SYTEM) -LOUVER INTERMEDIATE
SCALE: (C) 3"=1'-0"



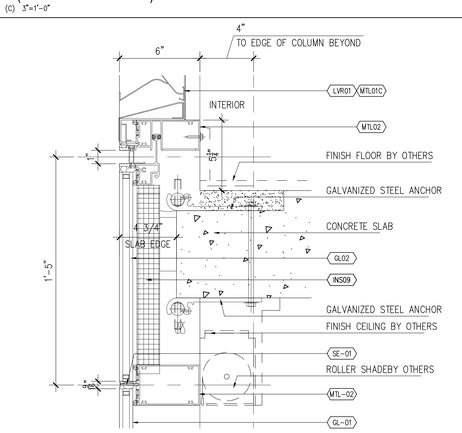
7 HW01 (HYBRID WALL SYTEM) - TYPICAL SILL (MINOR)
SCALE: (C) 3"=1'-0"



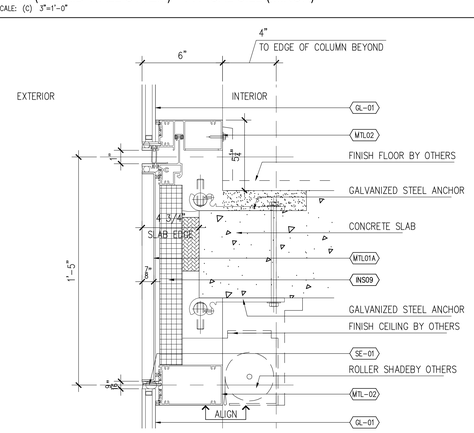
11 HW01 (HYBRID WALL SYTEM) - STANDARD PTAC SCREEN SILL (MINOR)
SCALE: (C) 3"=1'-0"



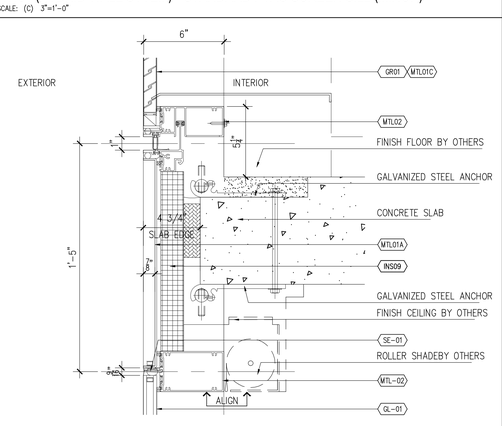
10 HW01 (HYBRID WALL SYTEM) - OPAQUE ZONE SILL (MINOR)
SCALE: (C) 3"=1'-0"



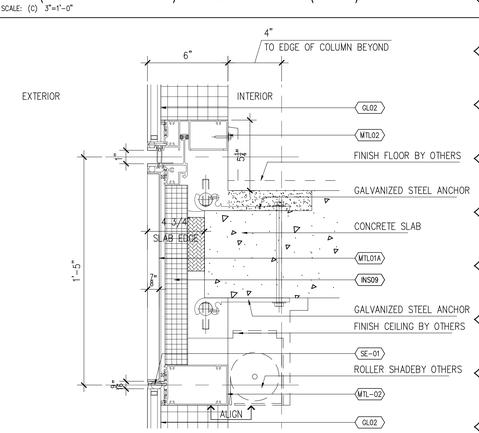
4 HW01 (HYBRID WALL SYTEM) - LOUVER SILL
SCALE: (C) 3"=1'-0"



3 HW01 (HYBRID WALL SYTEM) - TYPICAL SILL (MAJOR)
SCALE: (C) 3"=1'-0"



2 HW01 (HYBRID WALL SYTEM) - STANDARD PTAC SCREEN SILL (MAJOR)
SCALE: (C) 3"=1'-0"



1 HW01 (HYBRID WALL SYTEM) - OPAQUE ZONE SILL (MAJOR)
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

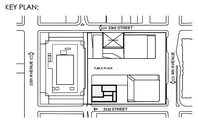
CONSTRUCTION MANAGER:
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3" = 1'- 0"
0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

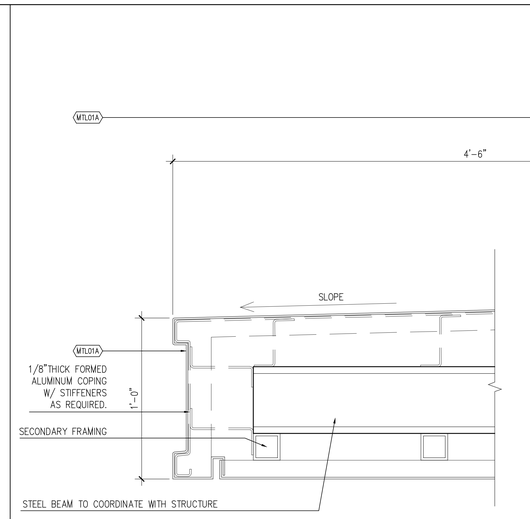
DRAWING TITLE:
EXTERIOR WALL SECTION
DETAILS- STANDARD SYSTEM

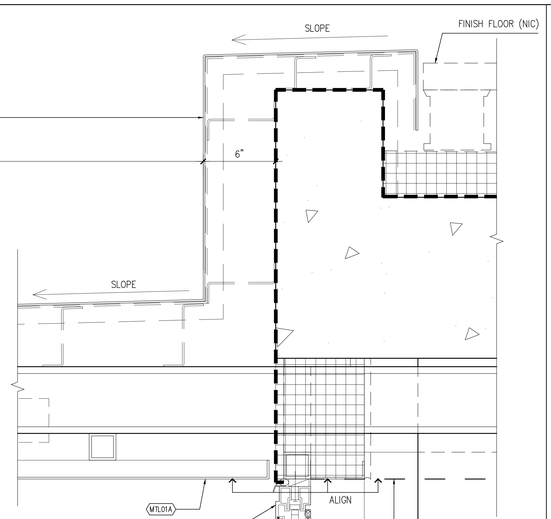
SEAL & SIGNATURE:
LICENSED ARCHITECT
T. J. FINN
STATE OF NEW YORK

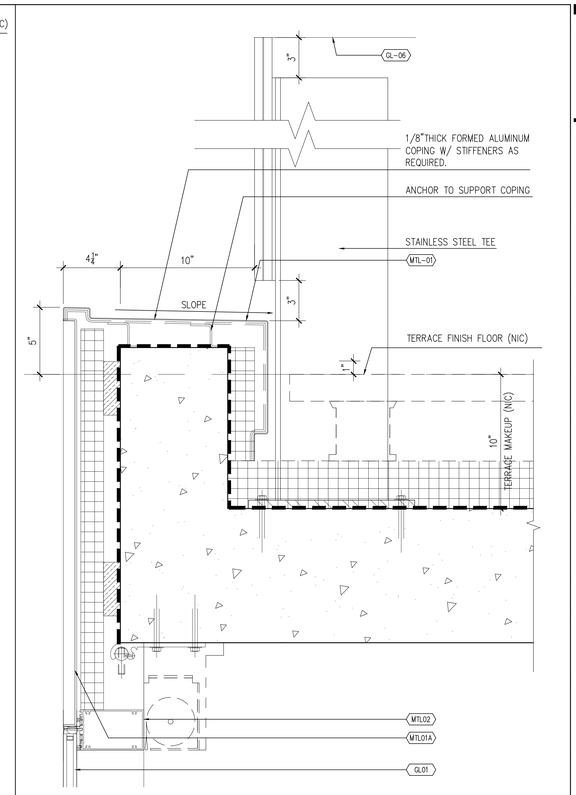
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET No.:	A-341.00
SHEET:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BldA_A341.dwg

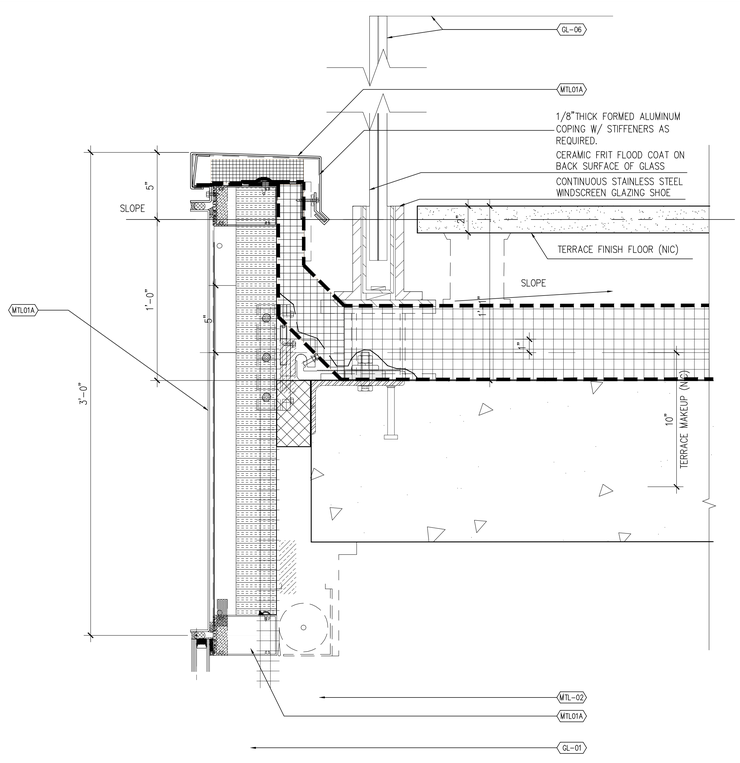
DEPT OF BLDGS 121185760 Job Number
E2620520210 Scan Code





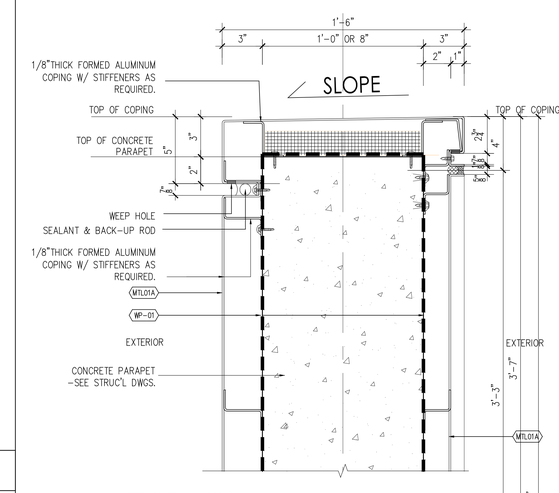


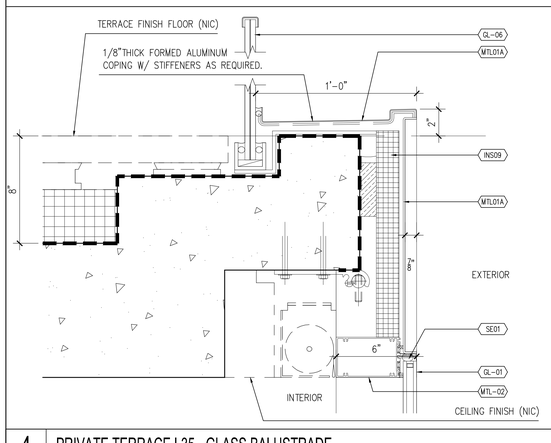
5 ROOF TERRACE - GLASS BALUSTRADE (ALTERNATE)
SCALE: (C) 3"=1'-0"



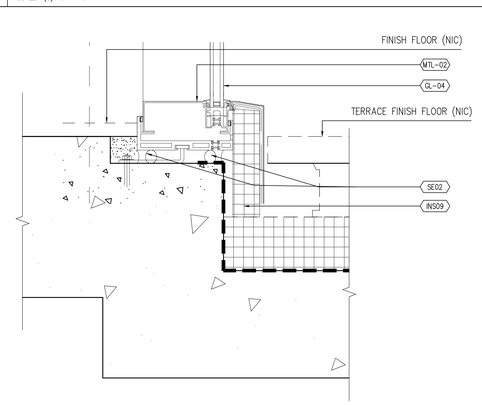
7 ROOF TERRACE - GLASS BALUSTRADE
SCALE: (C) 3"=1'-0"

6 62ND FLOOR - SILL / HEAD / TERRRACE DETAILS (SF-04)
SCALE: (C) 3"=1'-0"

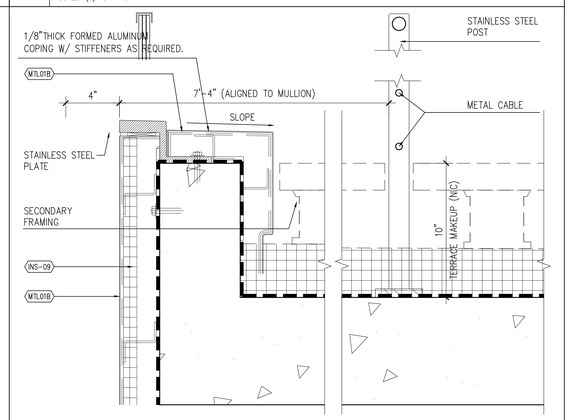




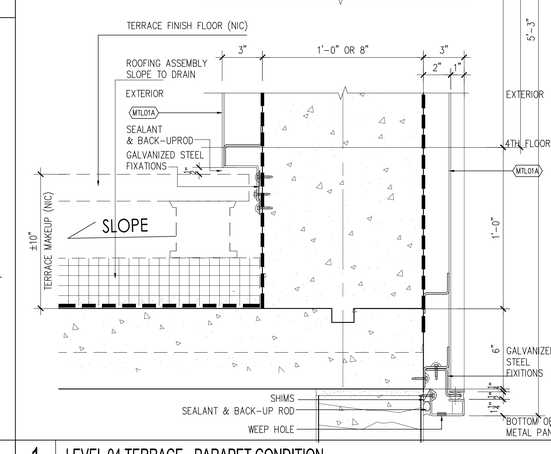
4 PRIVATE TERRACE L35 - GLASS BALUSTRADE
SCALE: (C) 3"=1'-0"



3 LEVEL04 TERRACE - SILL CONDITION
SCALE: (C) 3"=1'-0"



2 LEVEL04 TERRACE - GLASS BALUSTRADE
SCALE: (C) 3"=1'-0"



1 LEVEL 04 TERRACE - PARAPET CONDITION
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

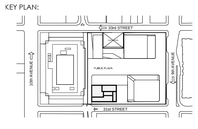
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-11-07	ISSUED FOR DOB FILING
1	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3" = 1'- 0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
EXTERIOR WALL SECTION DETAILS- TERRACE

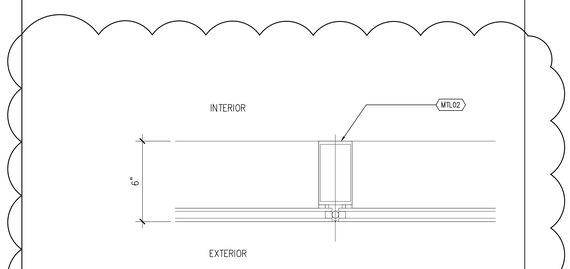
SEAL & SIGNATURE:

DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY: T.J.F.

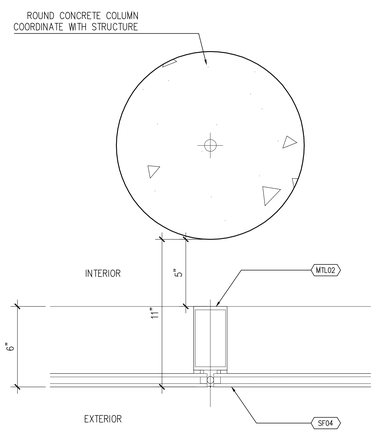
A-342.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A342.Dwg

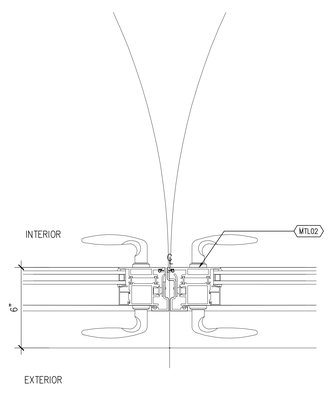
DEPT OF BLDGS 121185760 Job Number B2400602700 Scan Code



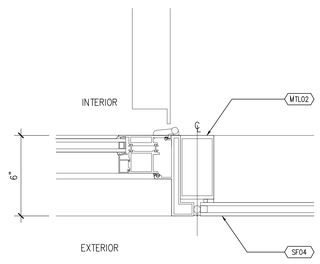
4 SF-04 TYPICAL CONDITION
SCALE: (C) 3"=1'-0"



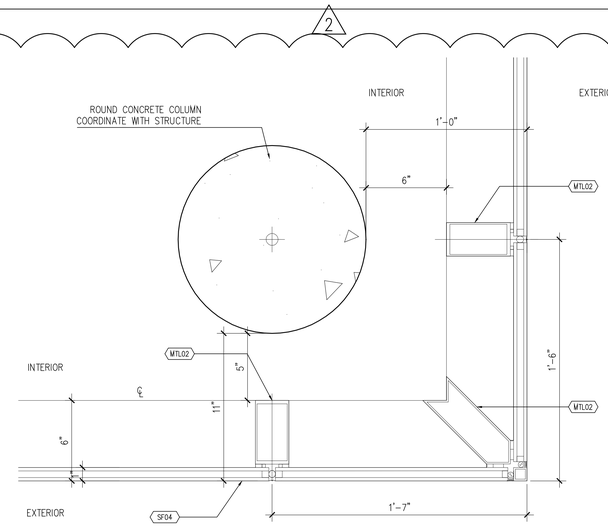
4 SF-04 COLUMN & TYPICAL CONDITION
SCALE: (C) 3"=1'-0"



3 SF-04 DOOR HANDLE CONDITION
SCALE: (C) 3"=1'-0"



2 SF-04 DOOR HINGE CONDITION
SCALE: (C) 3"=1'-0"



1 SF-04 CORNER CONDITION
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

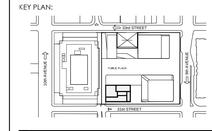
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	DATE:	REVISION:

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 3" = 1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

EXTERIOR WALL PLAN
DETAILS- STOREFRONT 04

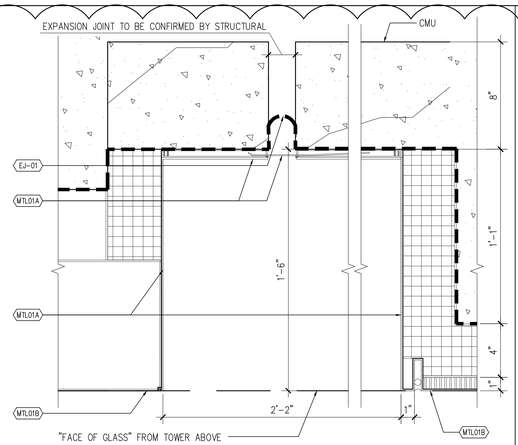
SEAL & SIGNATURE:

REGISTERED ARCHITECT
STATE OF NEW YORK

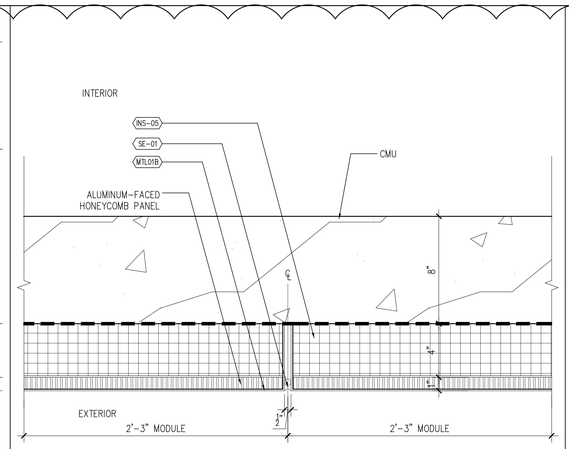
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SHEET No.:	A-343.00
SHEET. No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCD Drawings\BMW_A343.dwg

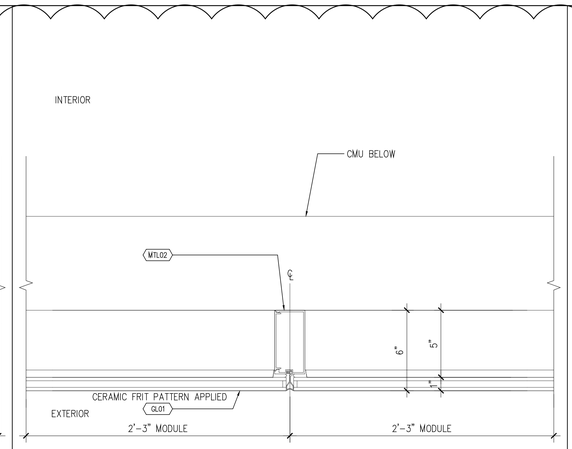
DEPT OF BLDGS 121185760 Job Number
E303120080 Scan Code



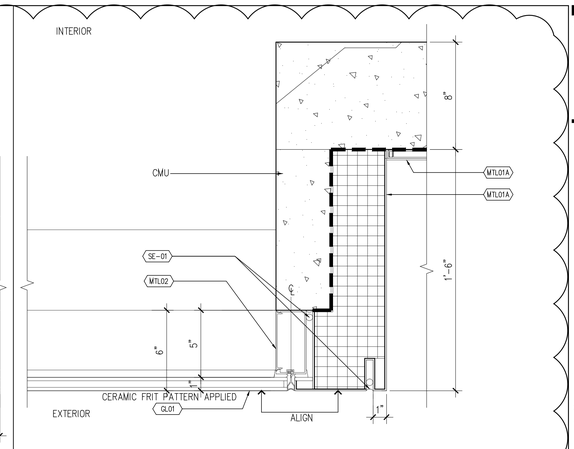
15 SF-03 - EXPANSION JOINT CONDITION
SCALE: (C) 3"=1'-0"



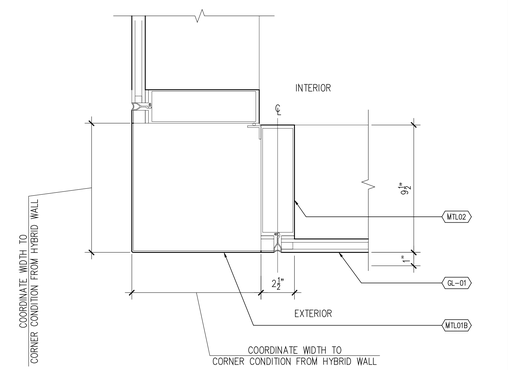
14 SF-03 METAL PANEL CONDITION AT (LOCALIZED CONNECTION)
SCALE: (C) 3"=1'-0"



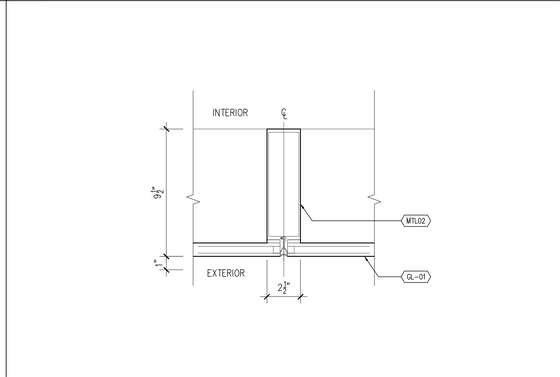
13 SF-03 TYPICAL CONDITION AT VISION ZONE
SCALE: (C) 3"=1'-0"



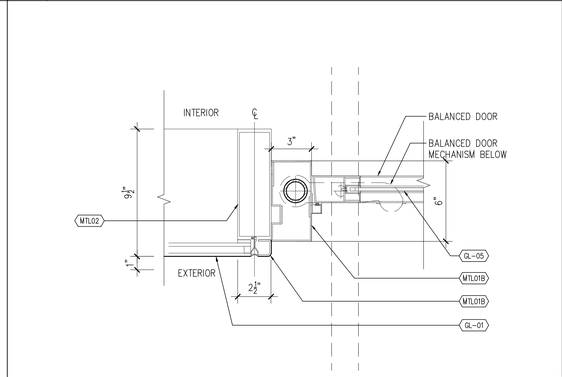
12 SF-03 CONDITION AT END OF VISION ZONE
SCALE: (C) 3"=1'-0"



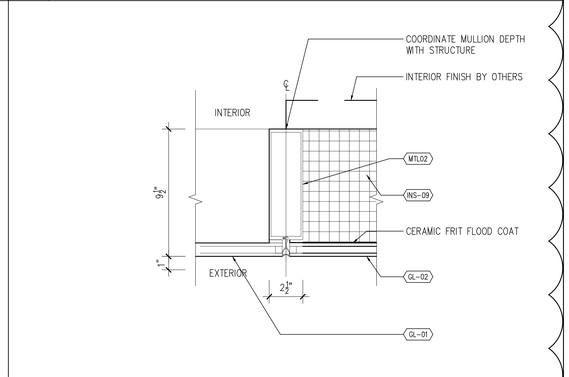
11 SF-02 TYPICAL AT CORNER CONDITION
SCALE: (C) 3"=1'-0"



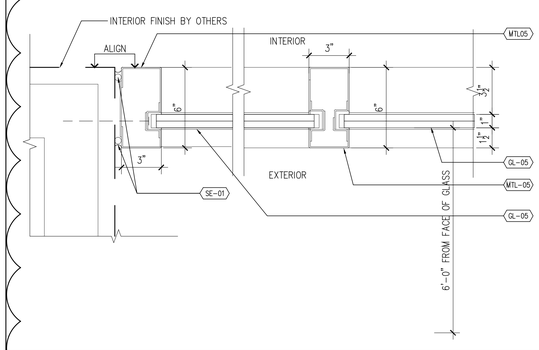
10 SF-02 TYPICAL AT VISION ZONE
SCALE: (C) 3"=1'-0"



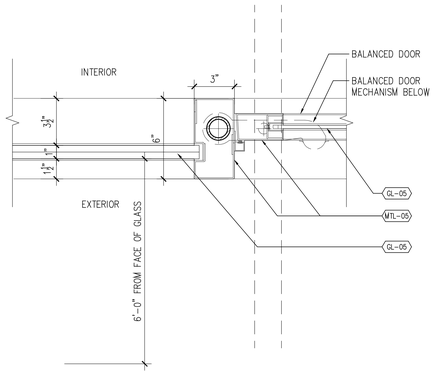
9 SF-02 - DOOR CONDITION (WEST FACADE)
SCALE: (C) 3"=1'-0"



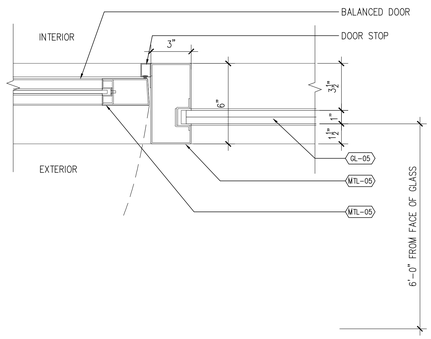
8 SF-02 - CAPTURED VERTICAL JOINT AT OPAQUE
SCALE: (C) 3"=1'-0"



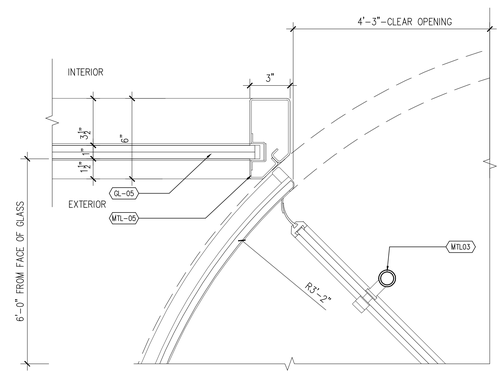
7 SF-01 - END & TYPICAL CONDITION
SCALE: (C) 3"=1'-0"



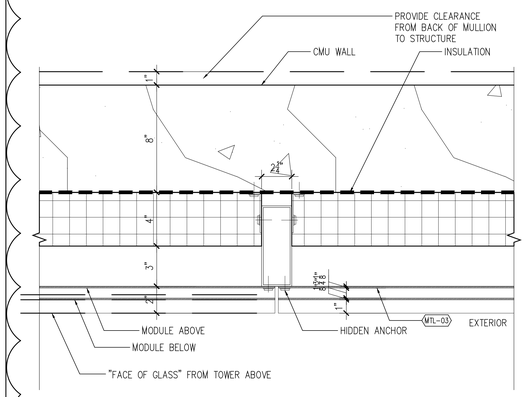
6 SF-01 - BALANCED DOOR (HINGE SIDE)
SCALE: (C) 3"=1'-0"



5 SF-01 - BALANCED DOOR
SCALE: (C) 3"=1'-0"

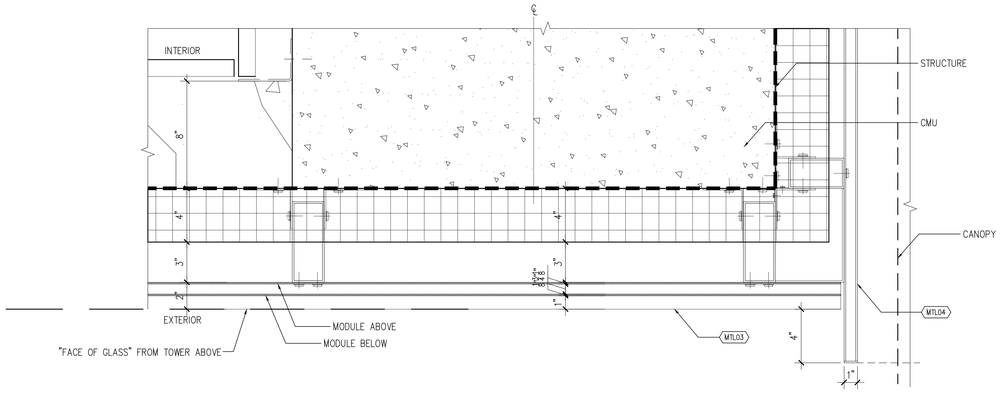


4 SF-01 - REVOLVING DOOR CONDITION
SCALE: (C) 3"=1'-0"



3 SF-01 - TYPICAL MULLION/STONE ELEMENTS
SCALE: (C) 3"=1'-0"

2 SF-01 - CONDITION AT LOUVER
SCALE: (C) 3"=1'-0"



1 SF-01 CORNER CONDITION AT COLUMN
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (203) 299-1411
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

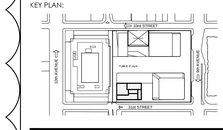
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	DATE:	REVISION:

D.O.B. NUMBER: NB# 121185760

NORTH:
Scale: 3" = 1'- 0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

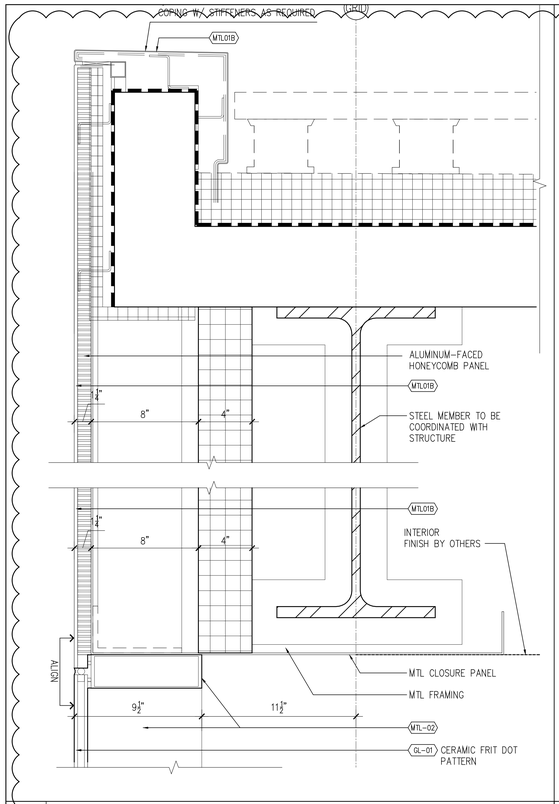
DRAWING TITLE:
PODIUM EXTERIOR WALL PLAN DETAILS

SEAL & SIGNATURE:

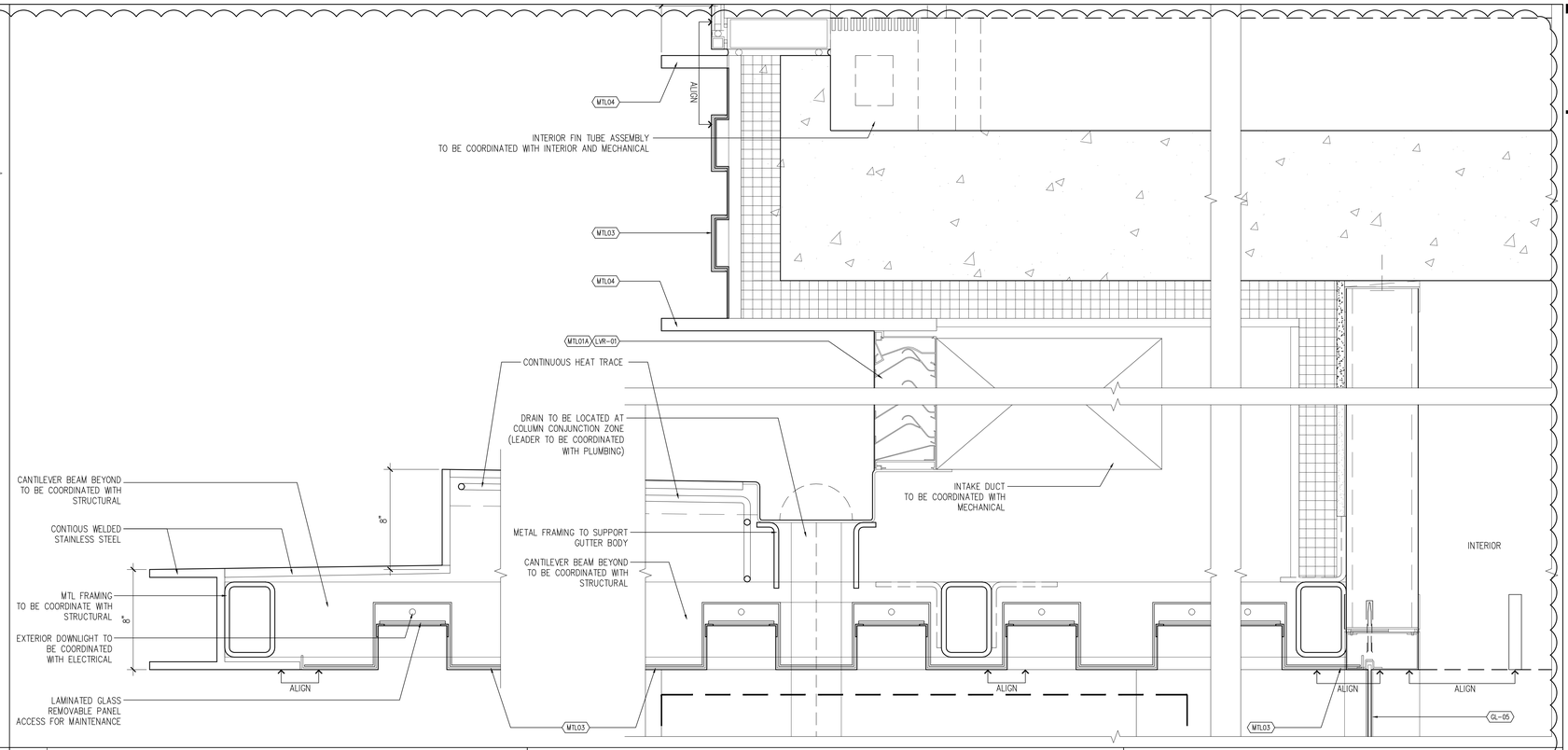
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	
CHECKED BY:	T.J.F.
SHEET NO.:	A-344.00
SHEET. NO.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCD\Drawings\BMW_A344.dwg

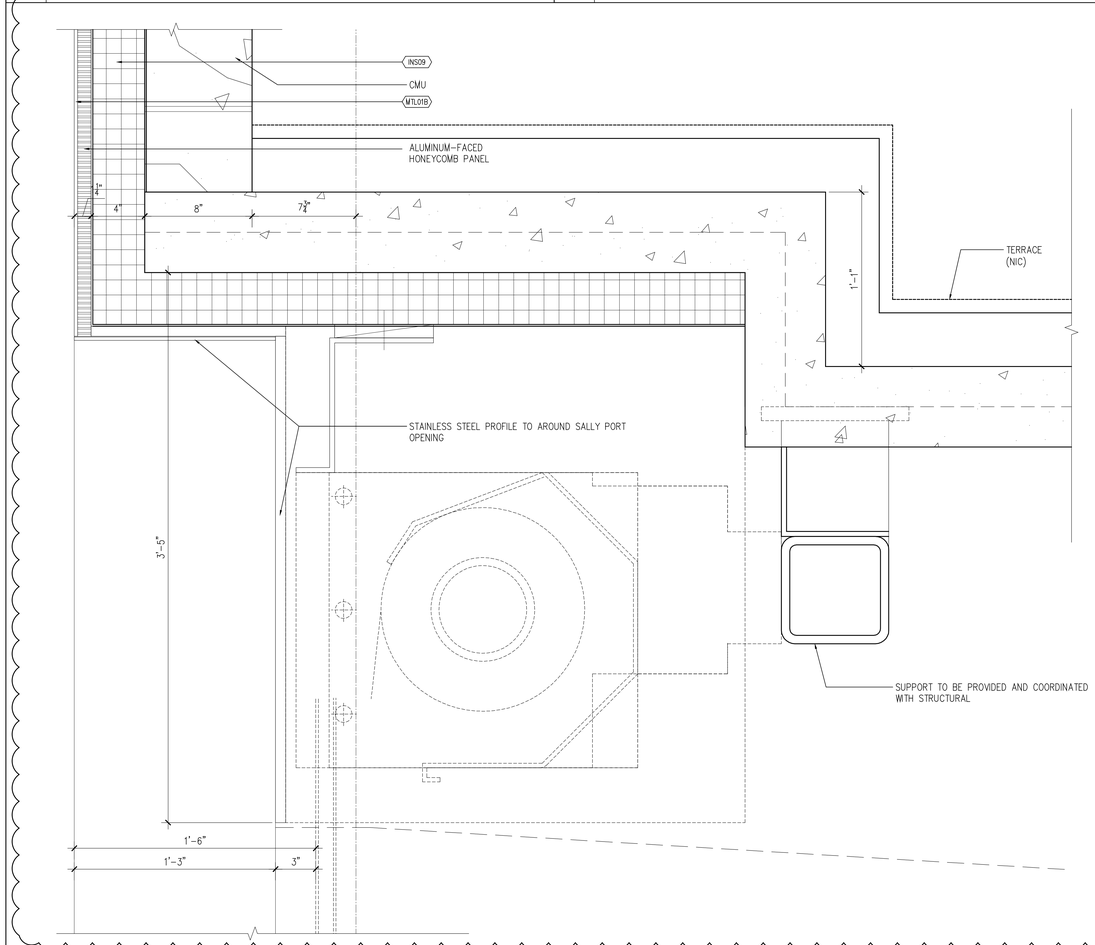
DEPT OF BLDGS 121185760 Job Number
E2579880022 Scan Code



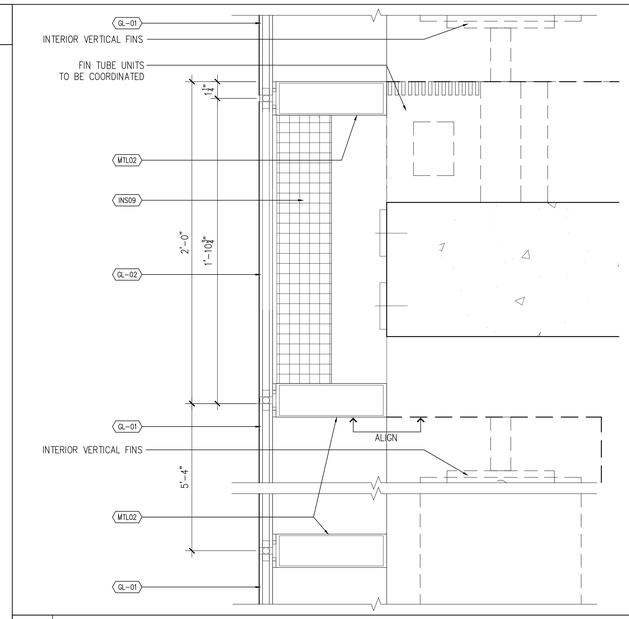
9 SF-03 SECTION DETAIL AT WINDOW HEAD
SCALE: (C) 3"=1'-0"



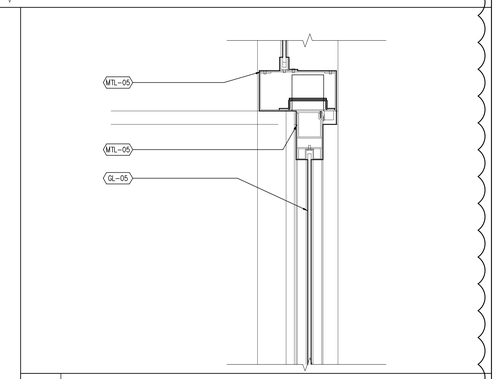
10 SF-01 SECTION DETAILS AT CANOPY
SCALE: (C) 3"=1'-0"



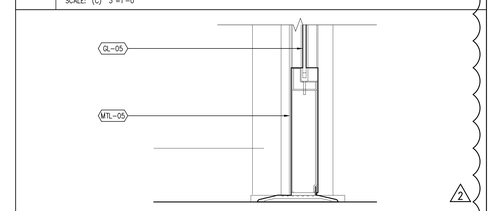
3 SF-03 SECTION DETAIL AT SALLY PORT
SCALE: (C) 3"=1'-0"



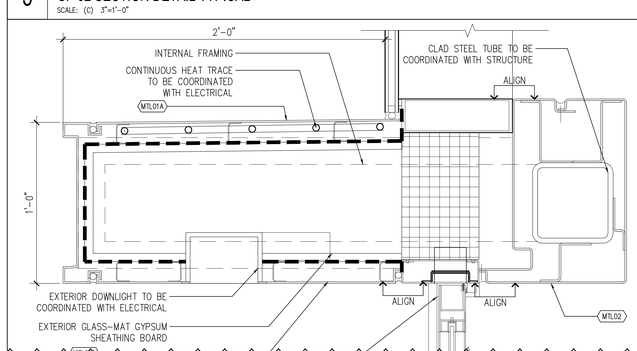
5 SF-02 SECTION DETAIL TYPICAL
SCALE: (C) 3"=1'-0"



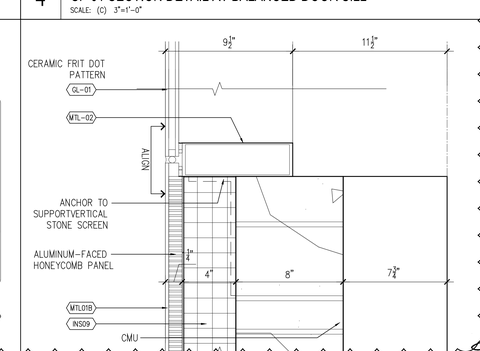
6 SF-01 - SECTION DETAIL AT BALANCED DOOR HEAD
SCALE: (C) 3"=1'-0"



4 SF-01 SECTION DETAIL AT BALANCED DOOR SILL
SCALE: (C) 3"=1'-0"



2 SF-02 SECTION DETAIL AT CANOPY
SCALE: (C) 3"=1'-0"



1 SF-03 - SECTION DETAIL AT WINDOW SILL
SCALE: (C) 3"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

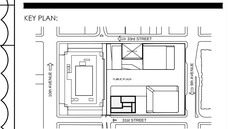
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
2	2014-10-23	BULLETIN #2
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2014-03-28	DESIGN DEVELOPMENT-R1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 3" = 1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

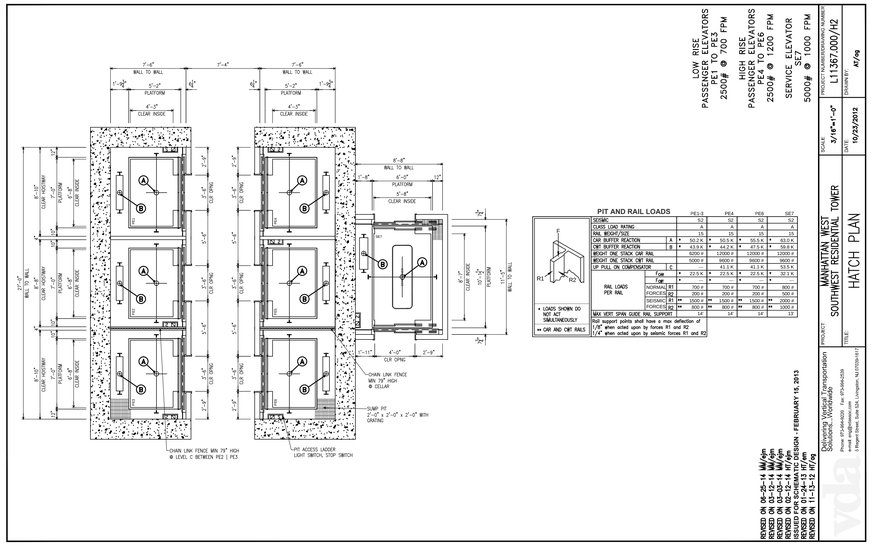
DRAWING TITLE:
PODIUM EXTERIOR WALL SECTION DETAILS

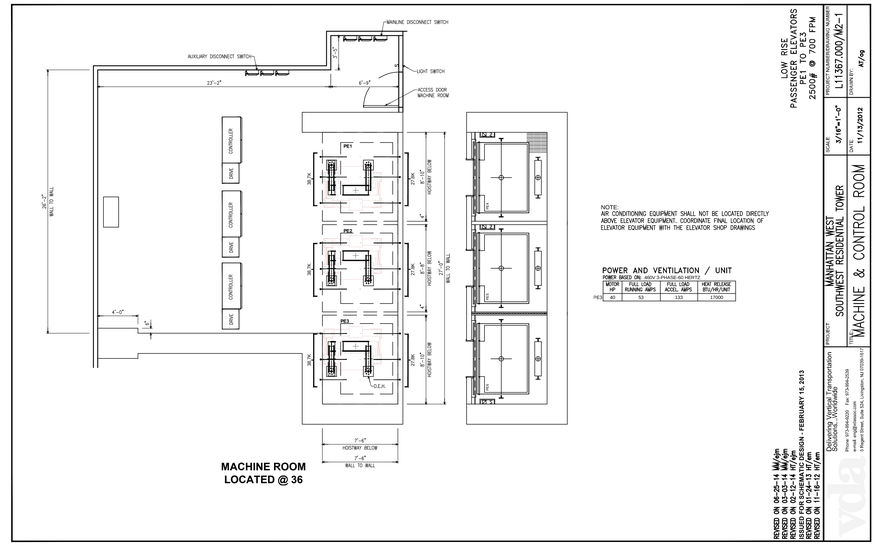
SEAL & SIGNATURE:

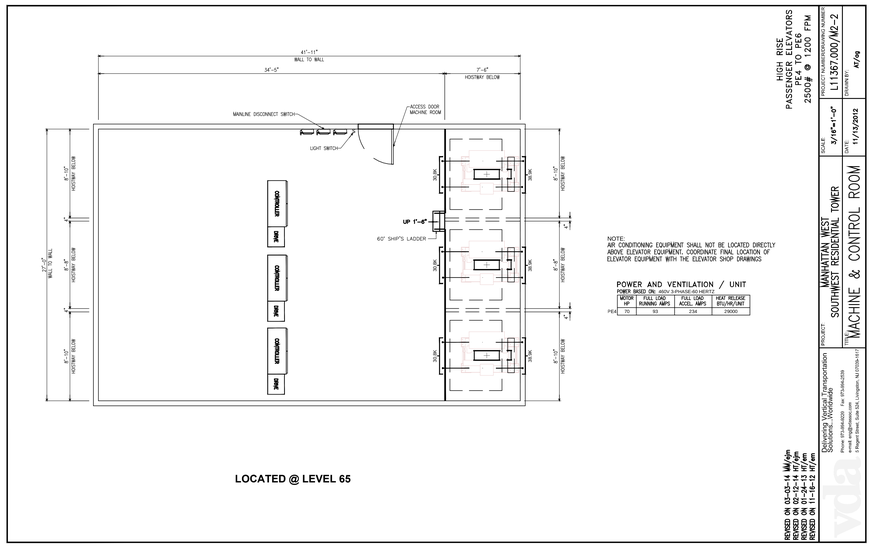
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	T.J.F.
CHECKED BY:	T.J.F.
SHEET No.:	A-345.00
SHEET, No.:	1 of 000

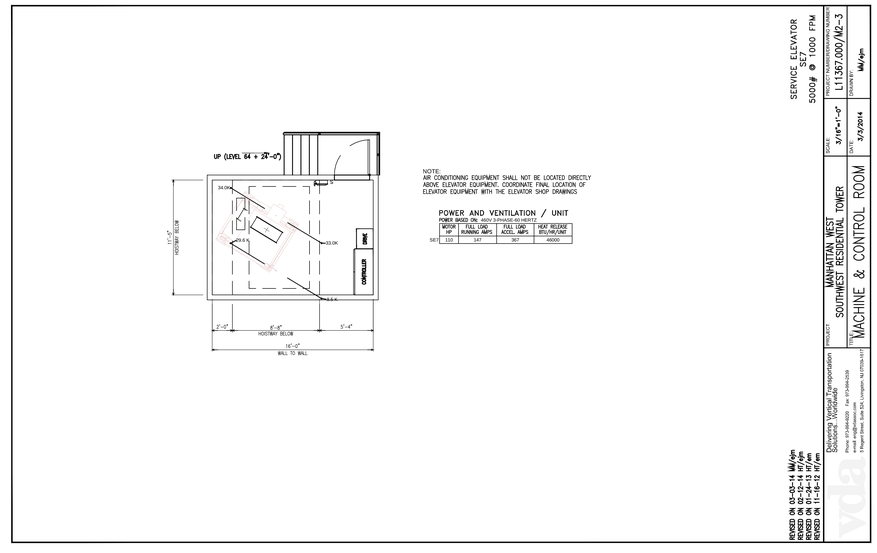
FILE No: Y:\Brookfield\Manhattan-West\2012-32\LCE-Drawings\BMW_A345.dwg

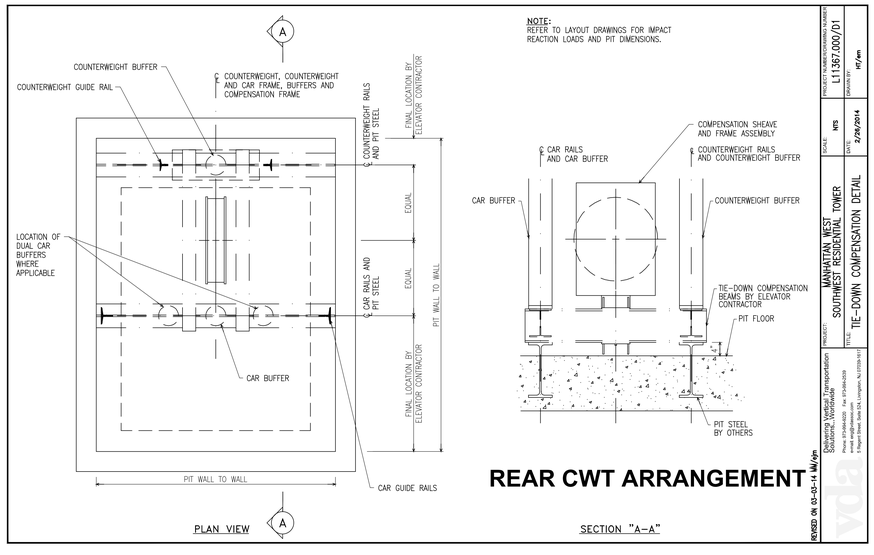
DEPT OF BLDGS 121185760 Job Number
E3525050090 Scan Code

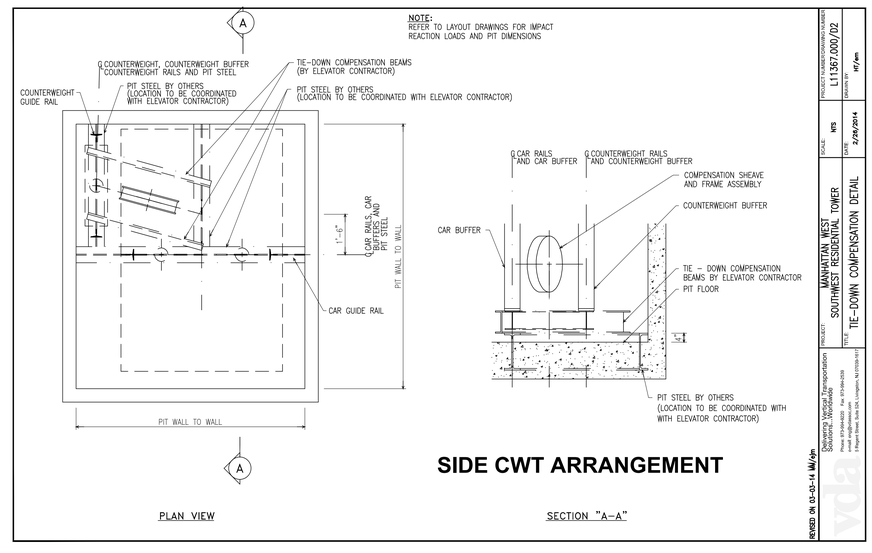












PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

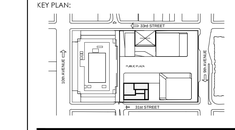
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE	REVISION
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1" 0" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12" 13" 14" 15" 16" 17" 18" 19" 20" 21" 22" 23" 24" 25" 26" 27" 28" 29" 30" 31" 32" 33" 34" 35" 36" 37" 38" 39" 40" 41" 42" 43" 44" 45" 46" 47" 48" 49" 50" 51" 52" 53" 54" 55" 56" 57" 58" 59" 60" 61" 62" 63" 64" 65" 66" 67" 68" 69" 70" 71" 72" 73" 74" 75" 76" 77" 78" 79" 80" 81" 82" 83" 84" 85" 86" 87" 88" 89" 90" 91" 92" 93" 94" 95" 96" 97" 98" 99" 100"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

VERTICAL TRANSPORTATION PLANS & DETAILS

SEAL & SIGNATURE:

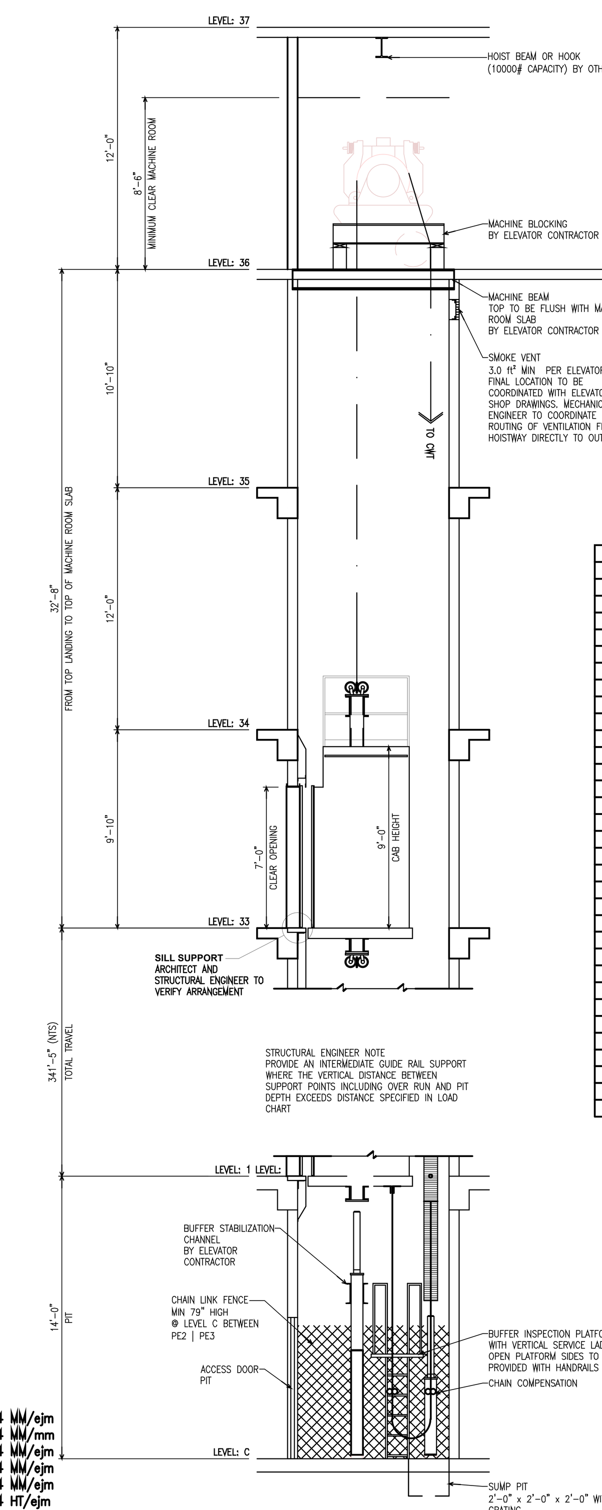
REGISTERED ARCHITECT STEVEN M. SCHWARTZ STATE OF NEW YORK

DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY:

A-350.00

SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCE Drawings\BldNr_A350-A351_Elevator



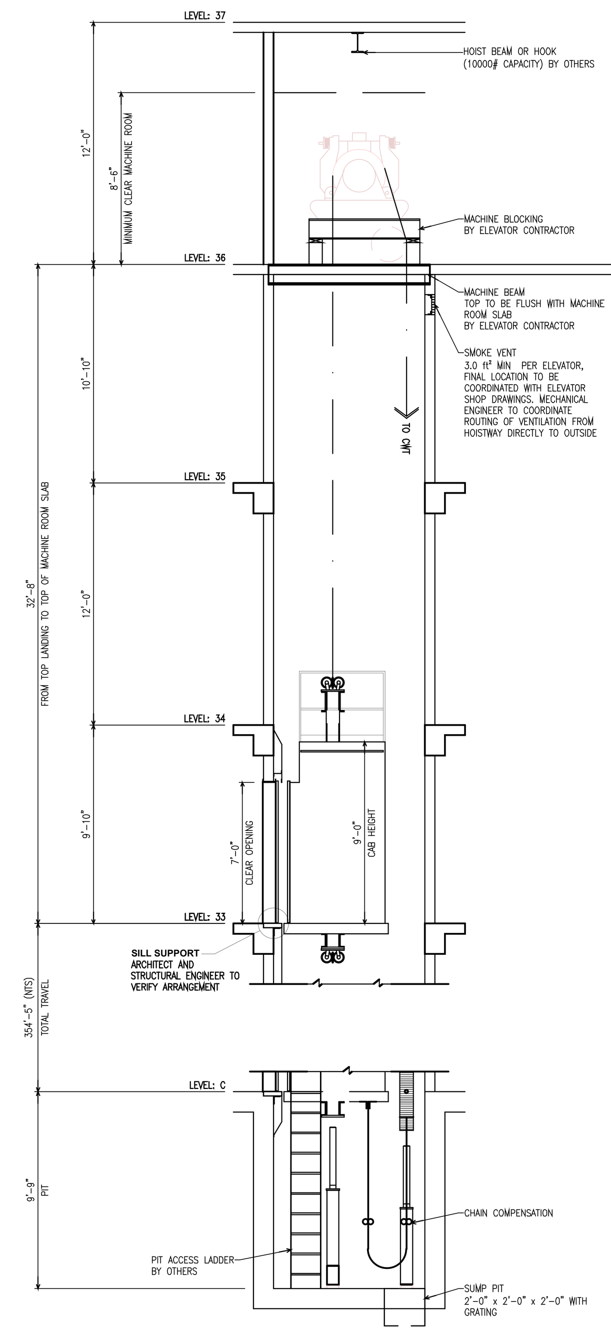
FLOOR	FTF	F
33	9'-10"	X
32	9'-10"	X
31	9'-10"	X
30	9'-10"	X
29	9'-10"	X
28	9'-10"	X
27	9'-10"	X
26	9'-10"	X
25	9'-10"	X
24	9'-10"	X
23	10'-10"	X
22	9'-10"	X
21	9'-10"	X
20	9'-10"	X
19	9'-10"	X
18	9'-10"	X
17	9'-10"	X
16	9'-10"	X
15	9'-10"	X
14	9'-10"	X
13	9'-10"	X
12	9'-10"	X
11	10'-10"	X
10	9'-10"	X
9	9'-10"	X
8	9'-10"	X
7	9'-10"	X
6	9'-10"	X
5	9'-10"	X
4	12'-0"	X
3	14'-0"	X
2	19'-0"	X
1	19'-1"	X

REVISED ON 06-25-14 MM/ejm
REVISED ON 05-19-14 MM/mm
REVISED ON 03-12-14 MM/ejm
REVISED ON 03-03-14 MM/ejm
REVISED ON 02-25-14 MM/ejm
REVISED ON 02-12-14 HT/ejm
ISSUED FOR SCHEMATIC DESIGN - FEBRUARY 15, 2013
REVISED ON 01-24-13 HT/em
REVISED ON 11-16-12 HT/em

LOW RISE
PASSENGER ELEVATORS
PE1 AND PE2
2500# @ 700 FPM

vda — Delivering Vertical Transportation Solutions...Worldwide
Phone: 973-994-9220 Fax: 973-994-2539
e-mail: eng@vdassoc.com
5 Regent Street, Suite 524, Livingston, NJ 07039-1617

PROJECT: MANHATTAN WEST SOUTHWEST RESIDENTIAL TOWER
SCALE: 3/16"=1'-0"
PROJECT NUMBER/DRAWING NUMBER: L11367.000/S2-1
TITLE: SECTION
DATE: 11/13/2012
DRAWN BY: HT/em



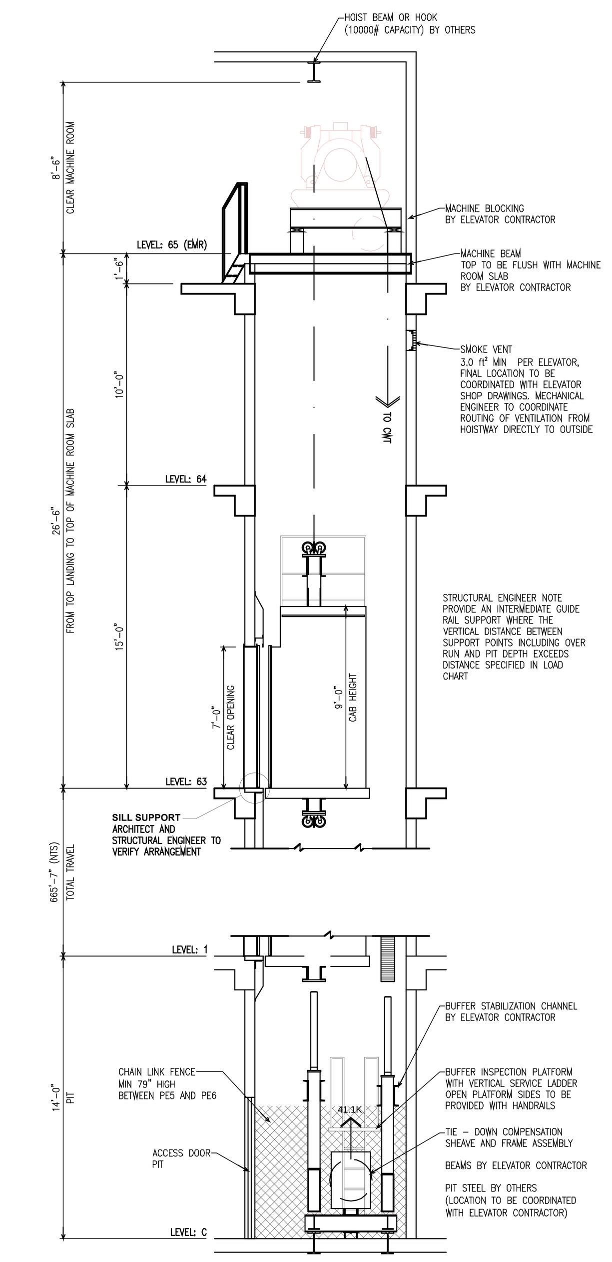
FLOOR	FTF	F
33	9'-10"	X
32	9'-10"	X
31	9'-10"	X
30	9'-10"	X
29	9'-10"	X
28	9'-10"	X
27	9'-10"	X
26	9'-10"	X
25	9'-10"	X
24	9'-10"	X
23	10'-10"	X
22	9'-10"	X
21	9'-10"	X
20	9'-10"	X
19	9'-10"	X
18	9'-10"	X
17	9'-10"	X
16	9'-10"	X
15	9'-10"	X
14	9'-10"	X
13	9'-10"	X
12	9'-10"	X
11	10'-10"	X
10	9'-10"	X
9	9'-10"	X
8	9'-10"	X
7	9'-10"	X
6	9'-10"	X
5	9'-10"	X
4	12'-0"	X
3	14'-0"	X
2	19'-0"	X
1	19'-1"	X
C	13'-0"	X

REVISED ON 06-25-14 MM/ejm
REVISED ON 05-19-14 MM/mm

LOW RISE
PASSENGER ELEVATOR
PE3
2500# @ 700 FPM

vda — Delivering Vertical Transportation Solutions...Worldwide
Phone: 973-994-9220 Fax: 973-994-2539
e-mail: eng@vdassoc.com
5 Regent Street, Suite 524, Livingston, NJ 07039-1617

PROJECT: MANHATTAN WEST SOUTHWEST RESIDENTIAL TOWER
SCALE: 3/16"=1'-0"
PROJECT NUMBER/DRAWING NUMBER: L11367.000/S2-1.1
TITLE: SECTION
DATE: 3/12/2014
DRAWN BY: HT/em



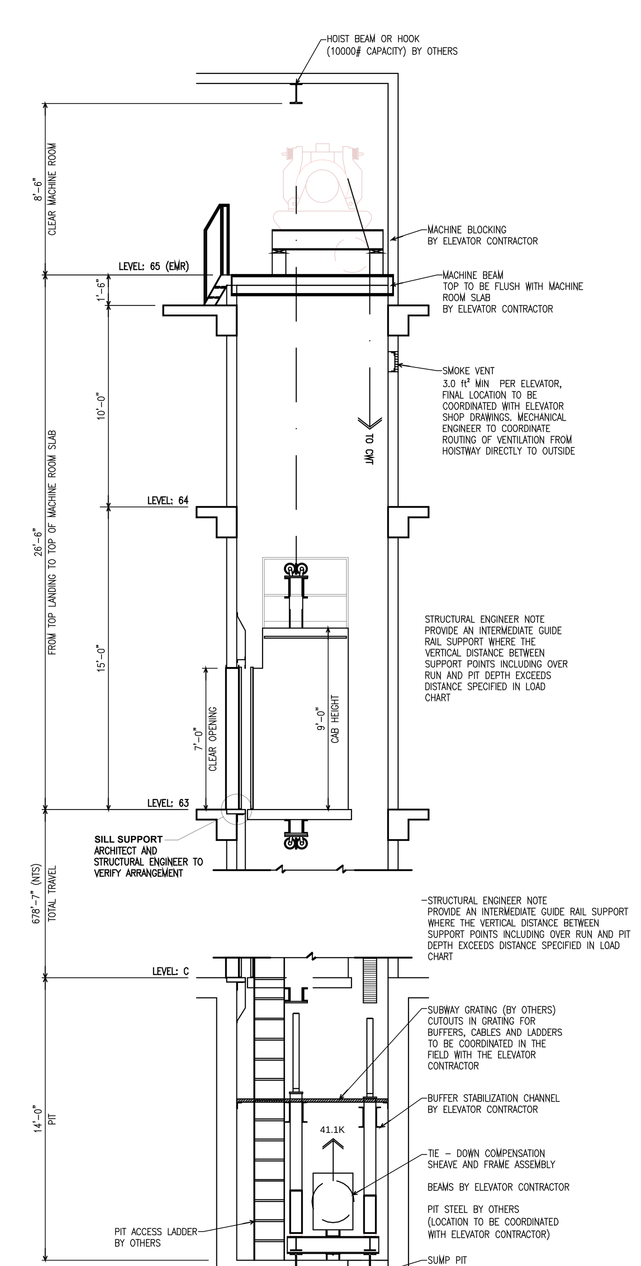
FLOOR	FTF	F
63	15'-0"	X
62	13'-2"	X
61	16-0"	X
60	10'-10"	X
59	10'-10"	X
58	10'-10"	X
57	10'-10"	X
56	11'-10"	X
55	12'-0"	X
54	10'-10"	X
53	10'-10"	X
52	10'-10"	X
51	12'-0"	X
50	9'-10"	X
49	9'-10"	X
48	9'-10"	X
47	9'-10"	X
46	10'-10"	X
45	9'-10"	X
44	9'-10"	X
43	9'-10"	X
42	9'-10"	X
41	9'-10"	X
40	9'-10"	X
39	9'-10"	X
38	9'-10"	X
37	9'-10"	X
36	12'-0"	X
35	10'-10"	X
34	12'-0"	X
33	9'-10"	X
32	9'-10"	
31	9'-10"	
30	9'-10"	
29	9'-10"	
28	9'-10"	
27	9'-10"	
26	9'-10"	
25	9'-10"	
24	9'-10"	
23	10'-10"	
22	9'-10"	
21	9'-10"	
20	9'-10"	
19	9'-10"	
18	9'-10"	
17	9'-10"	
16	9'-10"	
15	9'-10"	
14	9'-10"	
13	9'-10"	
12	9'-10"	
11	10'-10"	
10	9'-10"	
9	9'-10"	
8	9'-10"	
7	9'-10"	
6	9'-10"	
5	9'-10"	
4	12'-0"	X
3	14'-0"	X
2	19'-0"	X
1	19'-1"	X

REVISED ON 05-19-14 MM/mm
REVISED ON 03-12-14 MM/ejm
REVISED ON 03-03-14 MM/ejm
REVISED ON 02-25-14 MM/ejm
REVISED ON 02-12-14 HT/ejm
ISSUED FOR SCHEMATIC DESIGN - FEBRUARY 15, 2013
REVISED ON 01-24-13 HT/em
REVISED ON 11-16-12 HT/em

HIGH RISE
PASSENGER ELEVATORS
PE4 AND PE5
2500# @ 1200 FPM

vda — Delivering Vertical Transportation Solutions...Worldwide
Phone: 973-994-9220 Fax: 973-994-2539
e-mail: eng@vdassoc.com
5 Regent Street, Suite 524, Livingston, NJ 07039-1617

PROJECT: MANHATTAN WEST SOUTHWEST RESIDENTIAL TOWER
SCALE: 3/16"=1'-0"
PROJECT NUMBER/DRAWING NUMBER: L11367.000/S2-2
TITLE: SECTION
DATE: 11/13/2012
DRAWN BY: HT/em



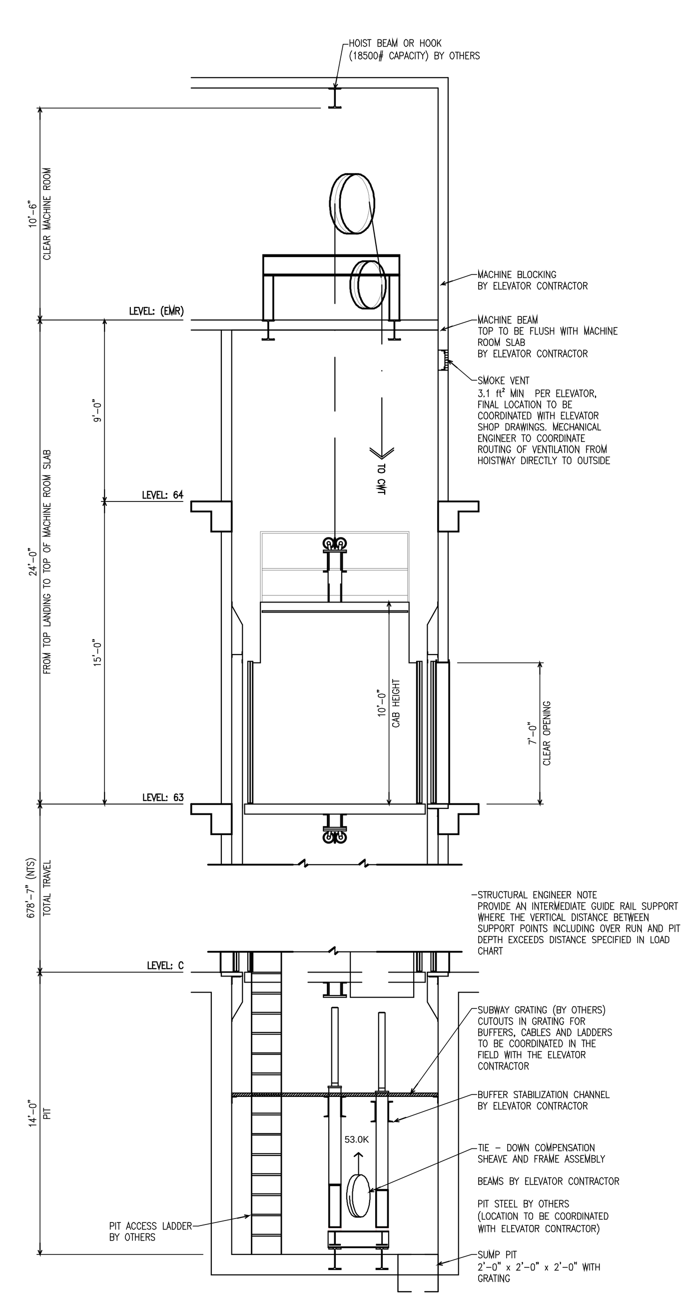
FLOOR	FTF	F
63	15'-0"	X
62	13'-2"	X
61	16'-0"	X
60	10'-10"	X
59	10'-10"	X
58	10'-10"	X
57	10'-10"	X
56	11'-10"	X
55	12'-0"	X
54	10'-10"	X
53	10'-10"	X
52	10'-10"	X
51	12'-0"	X
50	9'-10"	X
49	9'-10"	X
48	9'-10"	X
47	9'-10"	X
46	10'-10"	X
45	9'-10"	X
44	9'-10"	X
43	9'-10"	X
42	9'-10"	X
41	9'-10"	X
40	9'-10"	X
39	9'-10"	X
38	9'-10"	X
37	9'-10"	X
36	12'-0"	X
35	10'-10"	X
34	12'-0"	X
33	9'-10"	X
32	9'-10"	
31	9'-10"	
30	9'-10"	
29	9'-10"	
28	9'-10"	
27	9'-10"	
26	9'-10"	
25	9'-10"	
24	9'-10"	
23	10'-10"	
22	9'-10"	
21	9'-10"	
20	9'-10"	
19	9'-10"	
18	9'-10"	
17	9'-10"	
16	9'-10"	
15	9'-10"	
14	9'-10"	
13	9'-10"	
12	9'-10"	
11	10'-10"	
10	9'-10"	
9	9'-10"	
8	9'-10"	
7	9'-10"	
6	9'-10"	
5	9'-10"	
4	12'-0"	X
3	14'-0"	X
2	19'-0"	X
1	19'-1"	X
C	13'-0"	X

REVISED ON 05-19-14 MM/mm
REVISED ON 03-12-14 MM/ejm
REVISED ON 03-03-14 MM/ejm
REVISED ON 02-25-14 MM/ejm
REVISED ON 02-12-14 HT/ejm
ISSUED FOR SCHEMATIC DESIGN - FEBRUARY 15, 2013
REVISED ON 01-24-13 HT/em
REVISED ON 11-16-12 HT/em

HIGH RISE
PASSENGER ELEVATOR
PE6
2500# @ 1200 FPM

vda — Delivering Vertical Transportation Solutions...Worldwide
Phone: 973-994-9220 Fax: 973-994-2539
e-mail: eng@vdassoc.com
5 Regent Street, Suite 524, Livingston, NJ 07039-1617

PROJECT: MANHATTAN WEST SOUTHWEST RESIDENTIAL TOWER
SCALE: 3/16"=1'-0"
PROJECT NUMBER/DRAWING NUMBER: L11367.000/S2-3
TITLE: SECTION
DATE: 11/13/2012
DRAWN BY: HT/em



FLOOR	FTF	F	R
63	15'-0"		X
62	13'-2"	X	X
61	16'-0"	X	
60	10'-10"	X	
59	10'-10"	X	
58	10'-10"	X	
57	10'-10"	X	
56	11'-10"	X	
55	12'-0"	X	
54	10'-10"	X	
53	10'-10"	X	
52	10'-10"	X	
51	12'-0"	X	
50	9'-10"	X	
49	9'-10"	X	
48	9'-10"	X	
47	9'-10"	X	
46	10'-10"	X	
45	9'-10"	X	
44	9'-10"	X	
43	9'-10"	X	
42	9'-10"	X	
41	9'-10"	X	
40	9'-10"	X	
39	9'-10"	X	
38	9'-10"	X	
37	9'-10"	X	
36	12'-0"	X	
35	10'-10"	X	
34	12'-0"	X	
33	9'-10"	X	
32	9'-10"	X	
31	9'-10"	X	
30	9'-10"	X	
29	9'-10"	X	
28	9'-10"	X	
27	9'-10"	X	
26	9'-10"	X	
25	9'-10"	X	
24	9'-10"	X	
23	10'-10"	X	
22	9'-10"	X	
21	9'-10"	X	
20	9'-10"	X	
19	9'-10"	X	
18	9'-10"	X	
17	9'-10"	X	
16	9'-10"	X	
15	9'-10"	X	
14	9'-10"	X	
13	9'-10"	X	
12	9'-10"	X	
11	10'-10"	X	
10	9'-10"	X	
9	9'-10"	X	
8	9'-10"	X	
7	9'-10"	X	
6	9'-10"	X	
5	9'-10"	X	
4	12'-0"	X	
3	14'-0"	X	
2	19'-0"	X	
1	19'-1"		X
C	14'-0"	X	X

REVISED ON 05-19-14 MM/mm
REVISED ON 03-03-14 MM/ejm
REVISED ON 02-25-14 MM/ejm
REVISED ON 02-12-14 HT/ejm
ISSUED FOR SCHEMATIC DESIGN - FEBRUARY 15, 2013
REVISED ON 01-24-13 HT/em
REVISED ON 11-16-12 HT/em

SERVICE ELEVATOR
SE7
5000# @ 1000 FPM

vda — Delivering Vertical Transportation Solutions...Worldwide
Phone: 973-994-9220 Fax: 973-994-2539
e-mail: eng@vdassoc.com
5 Regent Street, Suite 524, Livingston, NJ 07039-1617

PROJECT: MANHATTAN WEST SOUTHWEST RESIDENTIAL TOWER
SCALE: 3/16"=1'-0"
PROJECT NUMBER/DRAWING NUMBER: L11367.000/S2-4
TITLE: SECTION
DATE: 11/13/2012
DRAWN BY: HT/em

DEPT OF BLDGS 121185760 Job Number
ES777125046 Scan Code

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

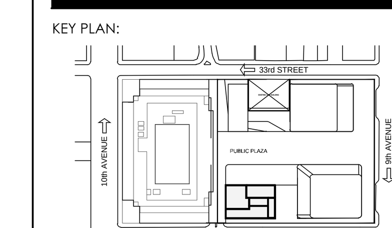
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

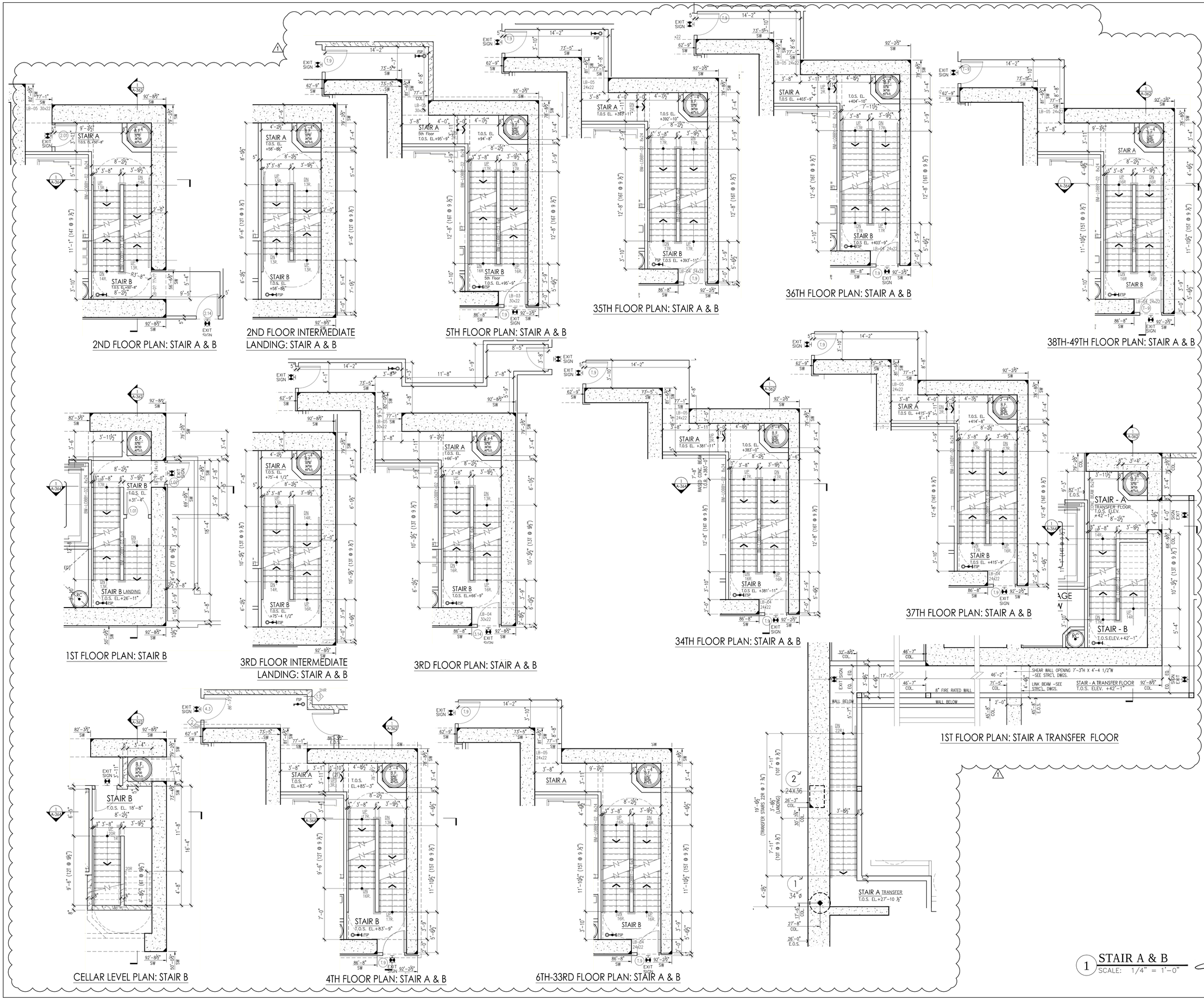
DRAWING TITLE:
VERTICAL TRANSPORTATION SECTIONS

SEAL & SIGNATURE:
REGISTERED ARCHITECT — LUIGI PIO ROSSO — No. 020741 — STATE OF NEW YORK

DATE: -
PROJECT No: 2012-32
DRAWN BY:
CHECKED BY:
DWG. No.: A-351.00
SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A350-A351_Elevator

DEPT OF BLDGS 121185760 Job Number
E365458269SI Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

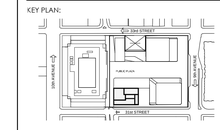
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT
	DATE:	REVISION:

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/4" - 1'-0"
0 2 4 6 10

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'A' & 'B' PLANS
CELLAR THRU 49TH FLOOR

SEAL & SIGNATURE:

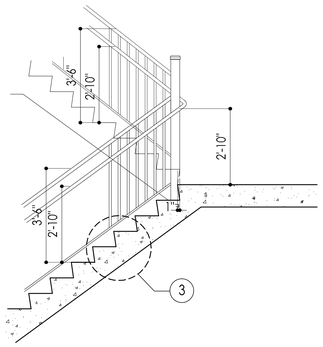
REGISTERED ARCHITECT JOSEPH CERAMI No. 026110 STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JC&rbo
CHECKED BY:	T.J.F.
SCALE:	1/4" = 1'-0"
SHEET NO.:	1 of 000

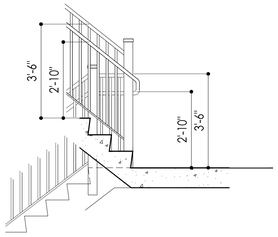
A-360.00

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A360-A361_Stair Plans &

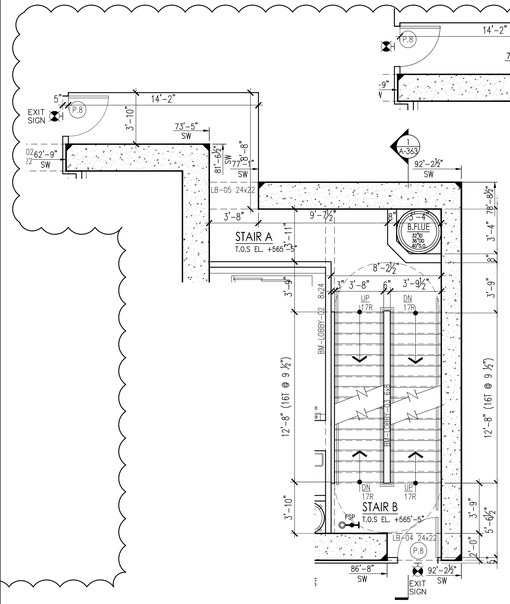
DEPT OF BLDGS 121185760 Job Number
E3630059655 Scan Code



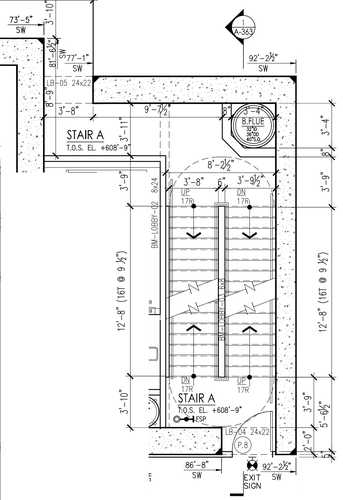
8 SECTION CONDITION AT EVEN TREAD
SCALE: 1/2" = 1'-0"



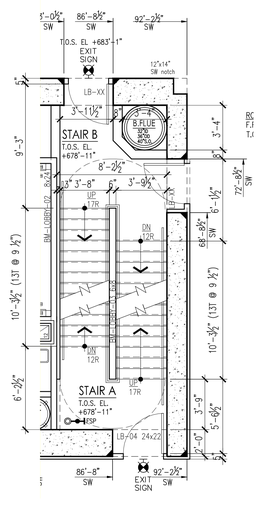
7 SECTION CONDITION AT UNEVEN TREAD
SCALE: 1/2" = 1'-0"



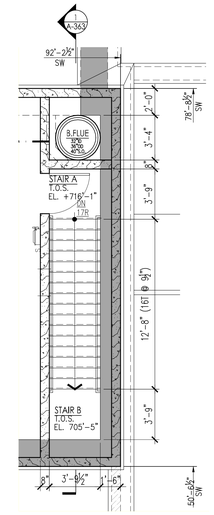
52ND-55TH FLOOR PLAN: STAIR A & B



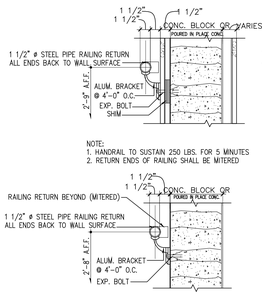
56TH FLOOR PLAN: STAIR A & B



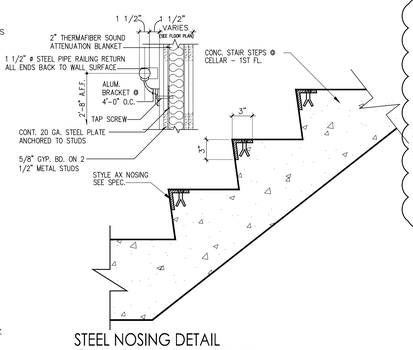
62ND FLOOR PLAN: STAIR A & B



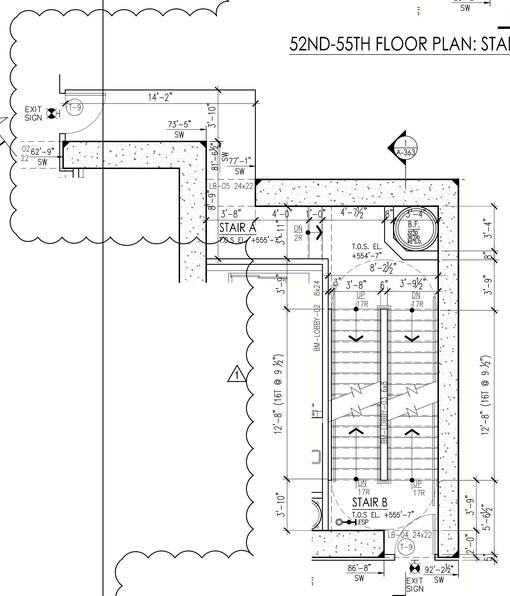
65TH FLOOR PLAN: STAIR A & B



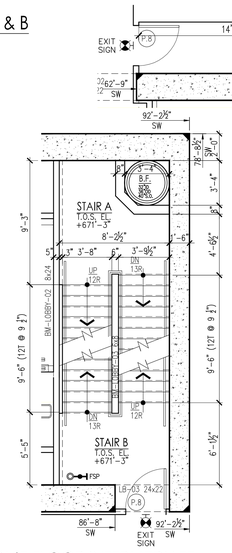
6 HANDRAIL DETAIL@ WALL
SCALE: 1-1/2" = 1'-0"



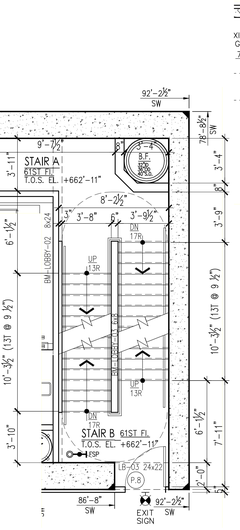
STEEL NOSING DETAIL
5 @ CELLAR TO FIRST FLOOR ONLY
SCALE: 1-1/2" = 1'-0"



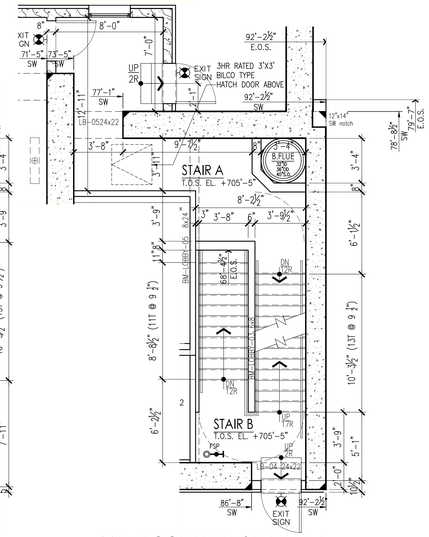
51ST FLOOR PLAN: STAIR A & B



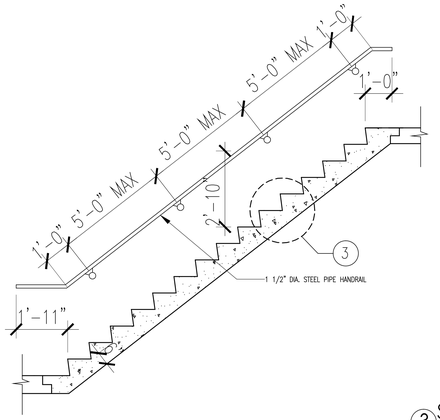
61ST FLOOR INTERMEDIATE LANDING: STAIR A & B



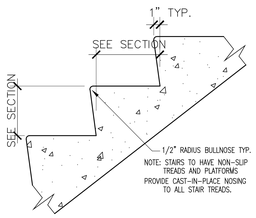
61ST FLOOR PLAN: STAIR A & B



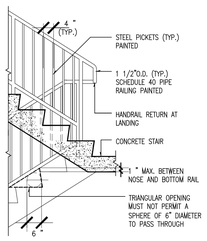
64TH FLOOR PLAN: STAIR A & B



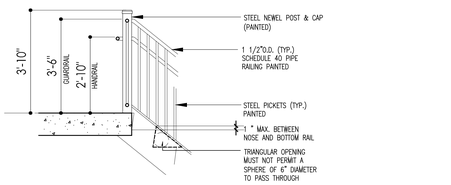
4 TYPICAL CONCRETE STAIR DETAIL
SCALE: 1/2" = 1'-0"



3 STAIR NOSING DETAIL, TYP.
SCALE: 1-1/2" = 1'-0"

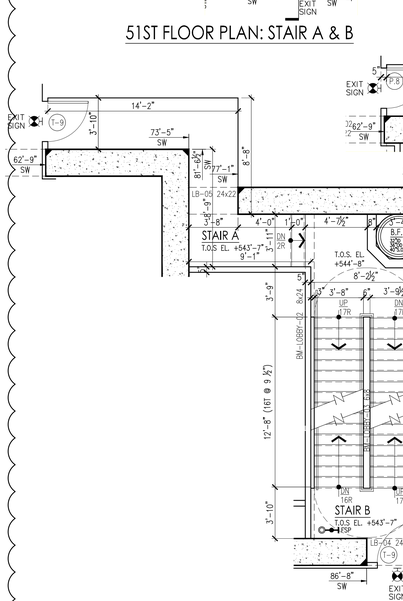


2 TYPICAL RAIL DETAIL
SCALE: 1/2" = 1'-0"

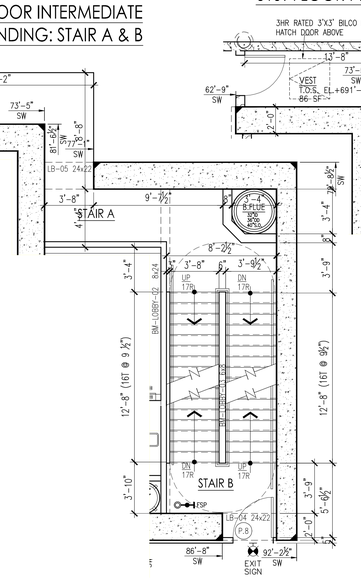


1 TYPICAL RAIL DETAIL @ NEWEL POST
SCALE: 1/2" = 1'-0"

3 STAIR DETAILS
SCALE: AS SHOWN

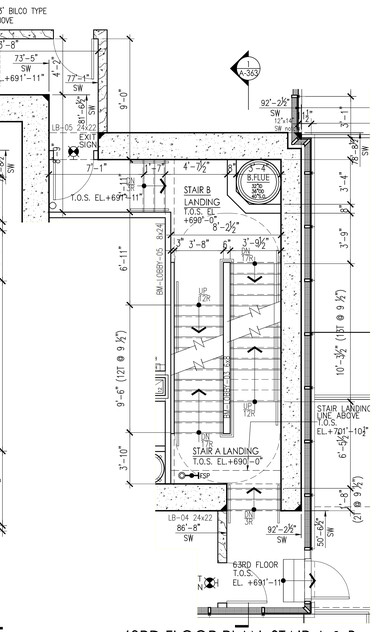


50TH FLOOR PLAN: STAIR A & B

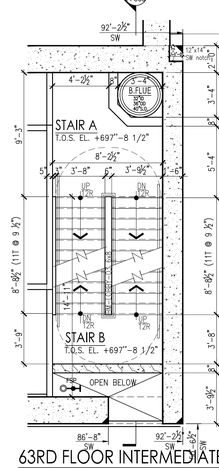


57TH-60TH FLOOR PLAN: STAIR A & B

2 STAIR A & B (CONT.)
SCALE: 1/4" = 1'-0"



63RD FLOOR PLAN: STAIR A & B



63RD FLOOR INTERMEDIATE LANDING: STAIR A & B

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (203) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

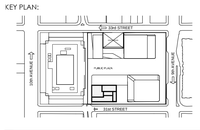
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" - 1'-0" (0' 2 4 6 10)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

1 STAIR 'A' & 'B' PLANS (50TH) FLOOR THRU E.M.R. & STAIR DETAILS

SEAL & SIGNATURE:

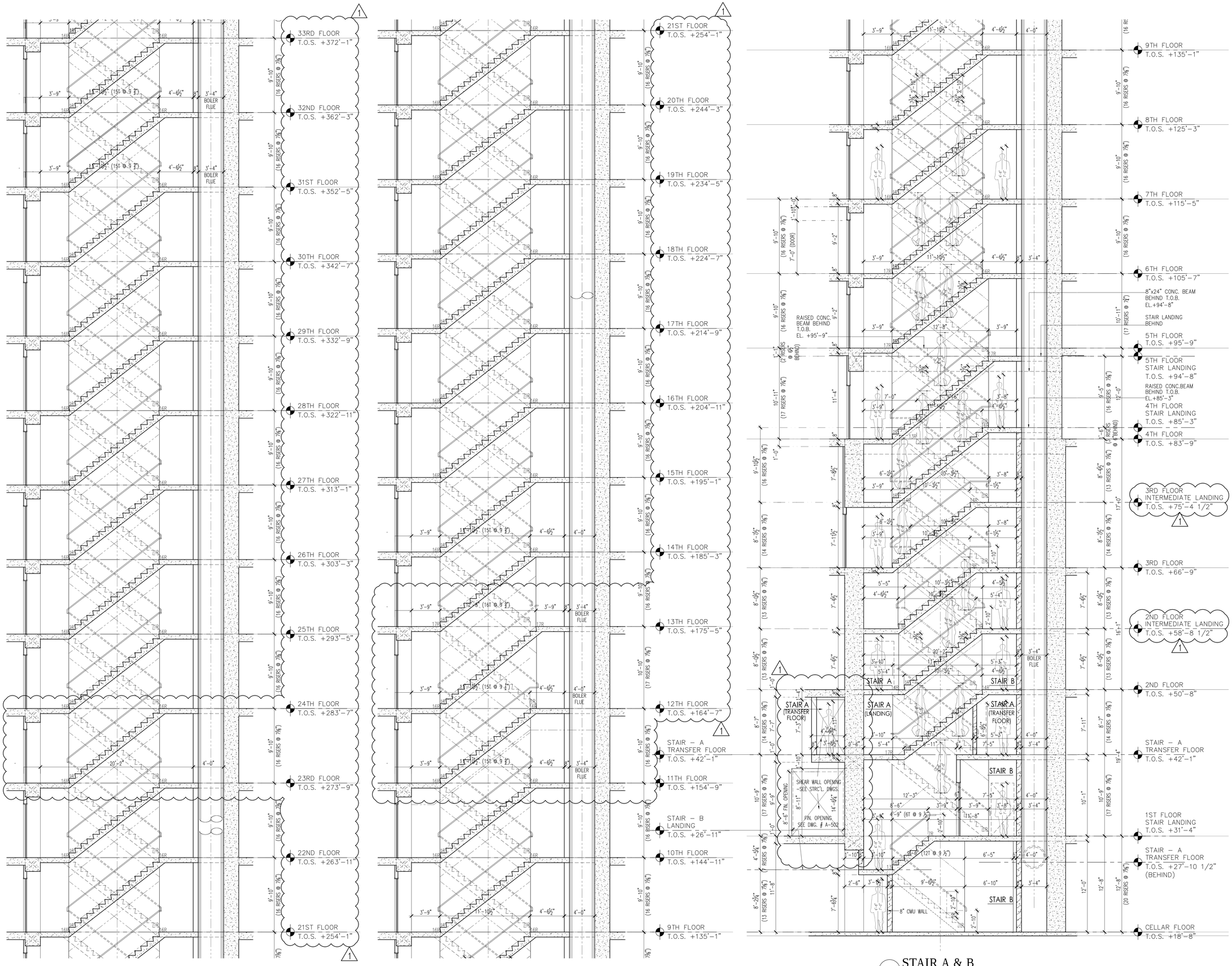
REGISTERED ARCHITECT CHRISTOPHER LEE CORBETT STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/rdbo
CHECKED BY:	T.J.F.

A-361.00
SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCE Drawings\BMW_A360-A361_3rd Plans & Details.dwg

DEPT OF BLDGS 121185760 Job Number
E162005418B Scan Code



1 STAIR A & B
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

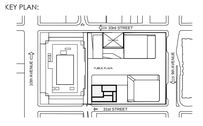
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'A' & 'B' SECTIONS

SEAL & SIGNATURE:

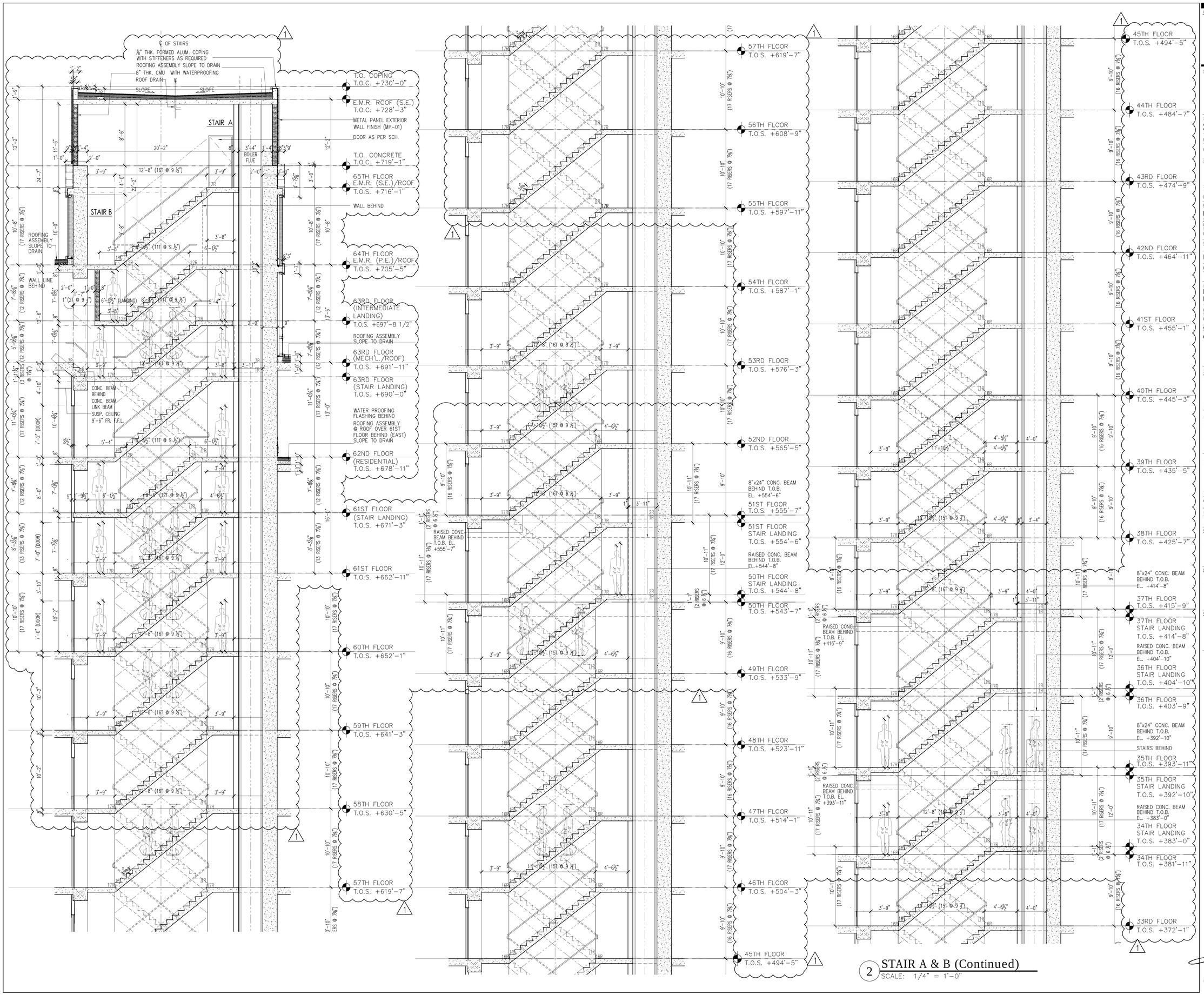
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JC8/obo
CHECKED BY:	T.J.F.

DRAWING No.: A-362.00

SHEET, No.: 1 of 000

FILE No: "I:\Brookfield-Manhattan-West (2012-32)\S_CD Drawings\BMW_A360-364-A366_Stair

DEPT OF BLDGS 121185760 Job Number
E2013193038 Scan Code



2 STAIR A & B (Continued)
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

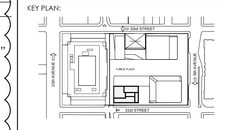
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-16	ISSUED FOR BID
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/4" = 1'-0"
0 2 4 6 10

KEY PLAN:



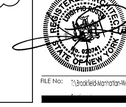
PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'A' & 'B' SECTIONS (CONTINUED)

SEAL & SIGNATURE:



DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB/abo
CHECKED BY:	T.J.F.

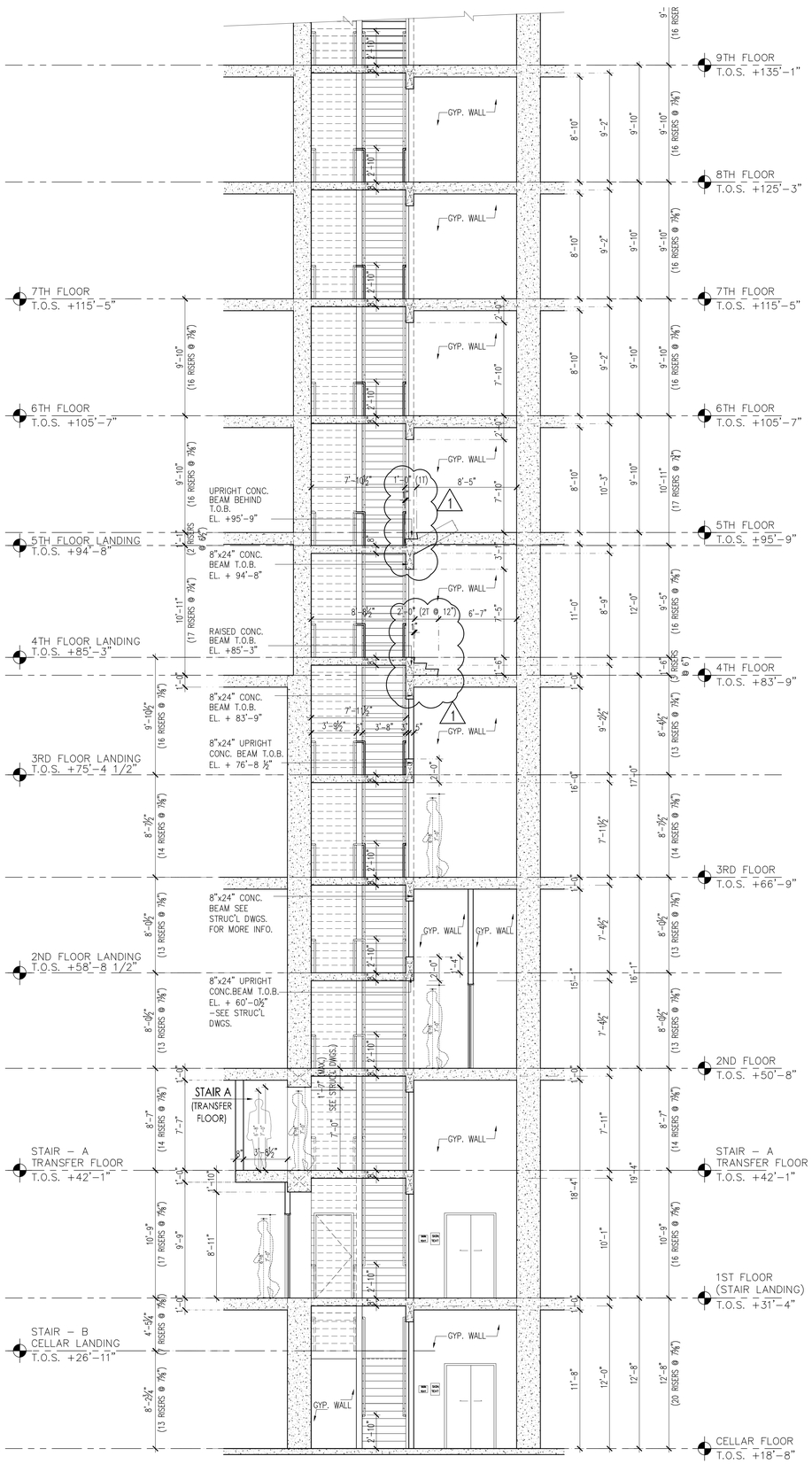
DRAWING No.: A-363.00

SHEET, No.: 1 of 000

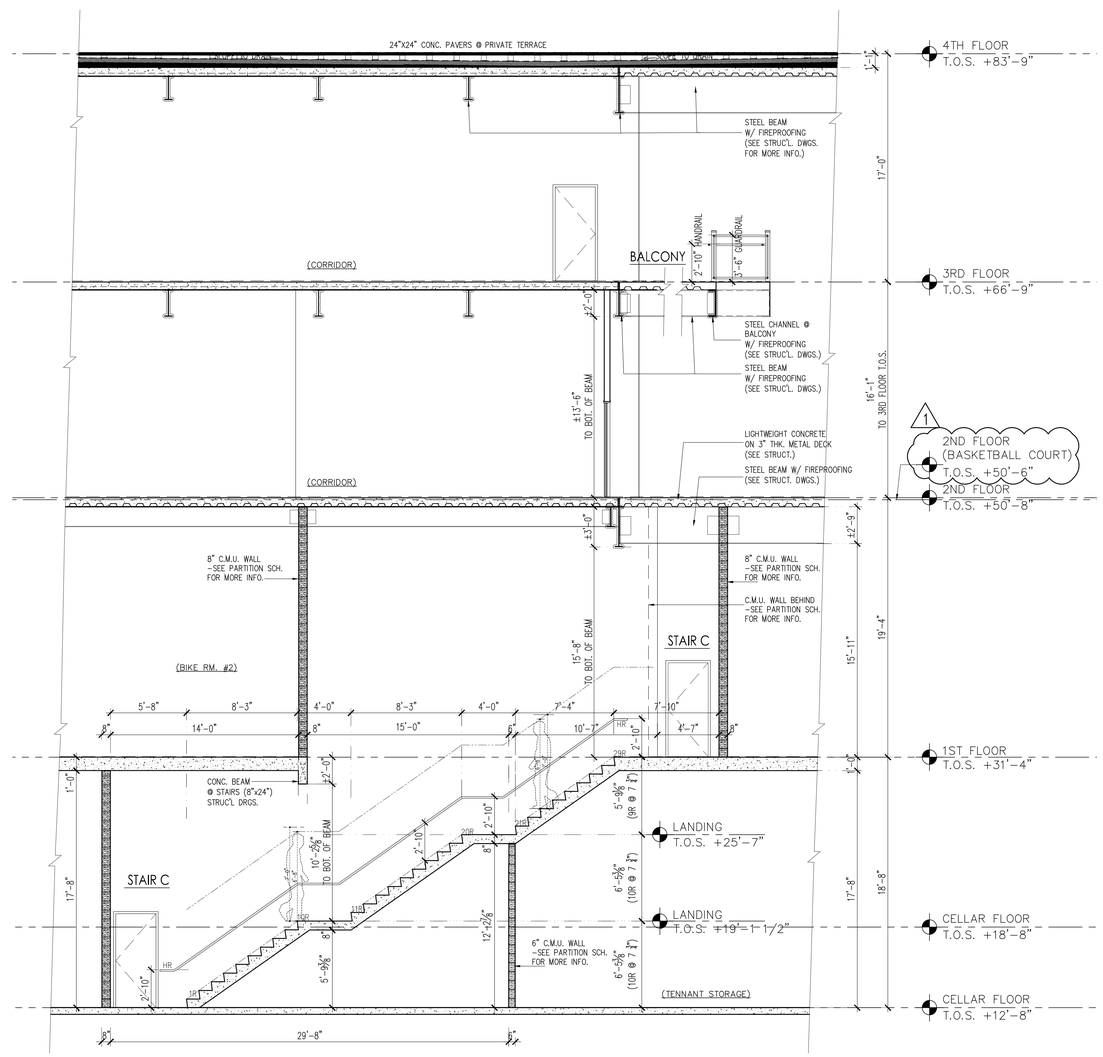
FILE No: "I:\Brookfield-Manhattan-West (2012-32)\5.CD Drawings\BMW_A363-364-365.Dwg"

Xref T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\Xref\GMP BULLETIN #1.dwg

DEPT OF BLDGS 121185760 Job Number
E360063939 Scan Code



1 STAIR A & B (PART SECTION)
SCALE: 1/4" = 1'-0"



2 STAIR C (PART SECTION)
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

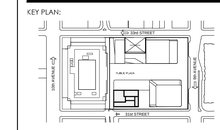
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS (NEW DRAWING)

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 1/4" = 1'-0"
0 2 4 6 10

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'A' & 'B', STAIR 'C' SECTIONS

SEAL & SIGNATURE:

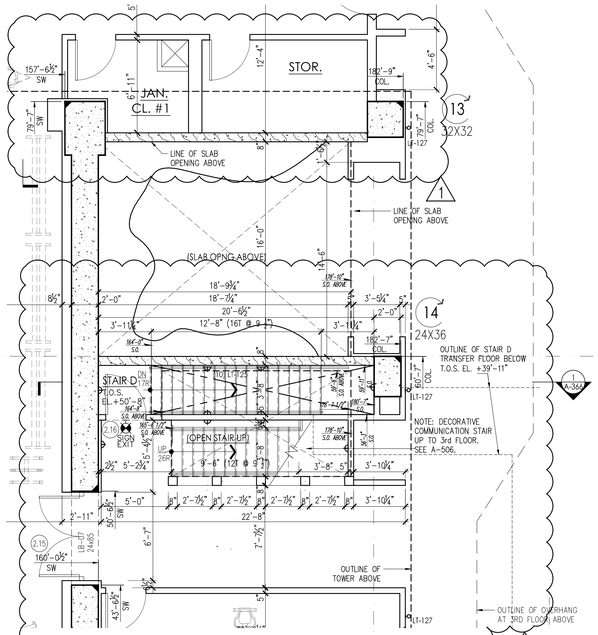
REGISTERED ARCHITECT
No. 026110
STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	obo
CHECKED BY:	T.J.F.
SHEET NO.:	1 of 000

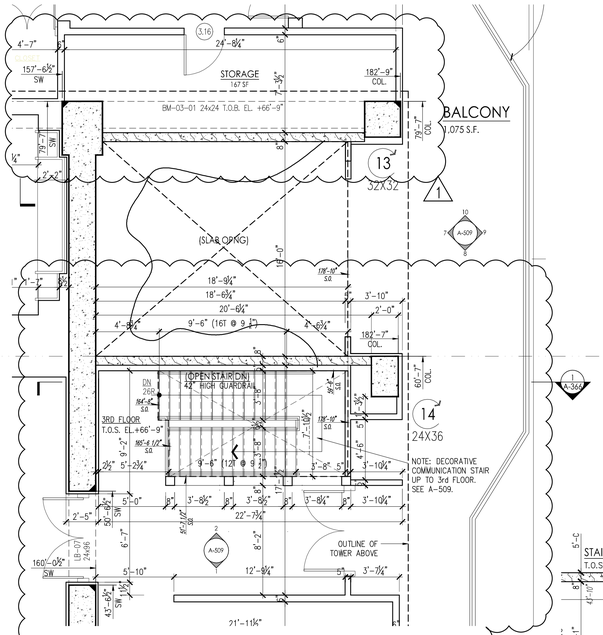
A-364.00

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A-363-364-A3d_Stair

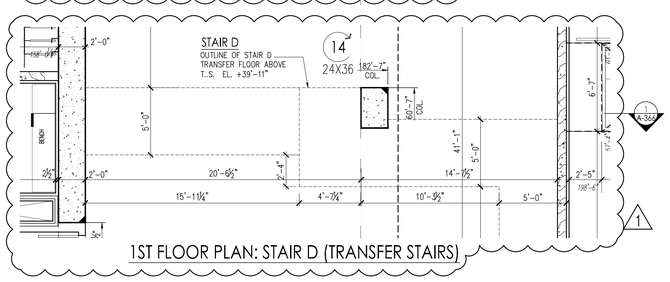
DEPT OF BLDGS 121185760 Job Number
E362769327 Scan Code



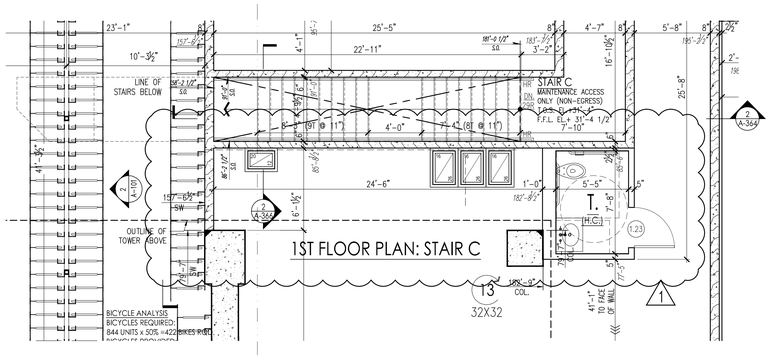
2ND FLOOR PLAN: STAIR D (TRANSFER STAIRS) & (COMMUNICATION STAIRS)



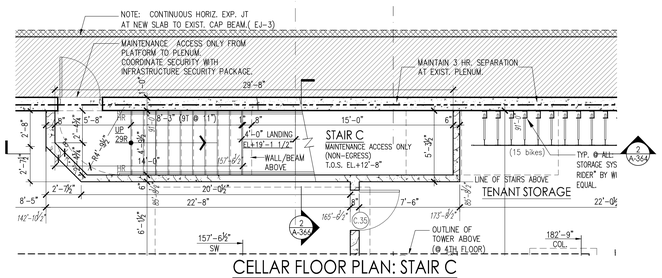
3RD FLOOR PLAN: (COMMUNICATION STAIRS)



1ST FLOOR PLAN: STAIR D (TRANSFER STAIRS)

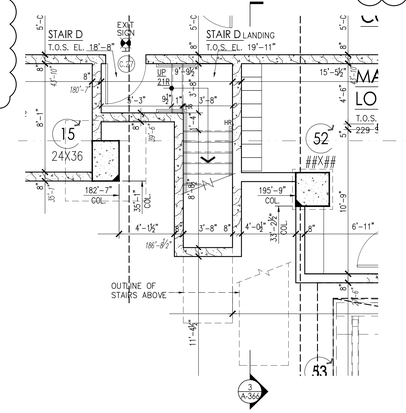


1ST FLOOR PLAN: STAIR C

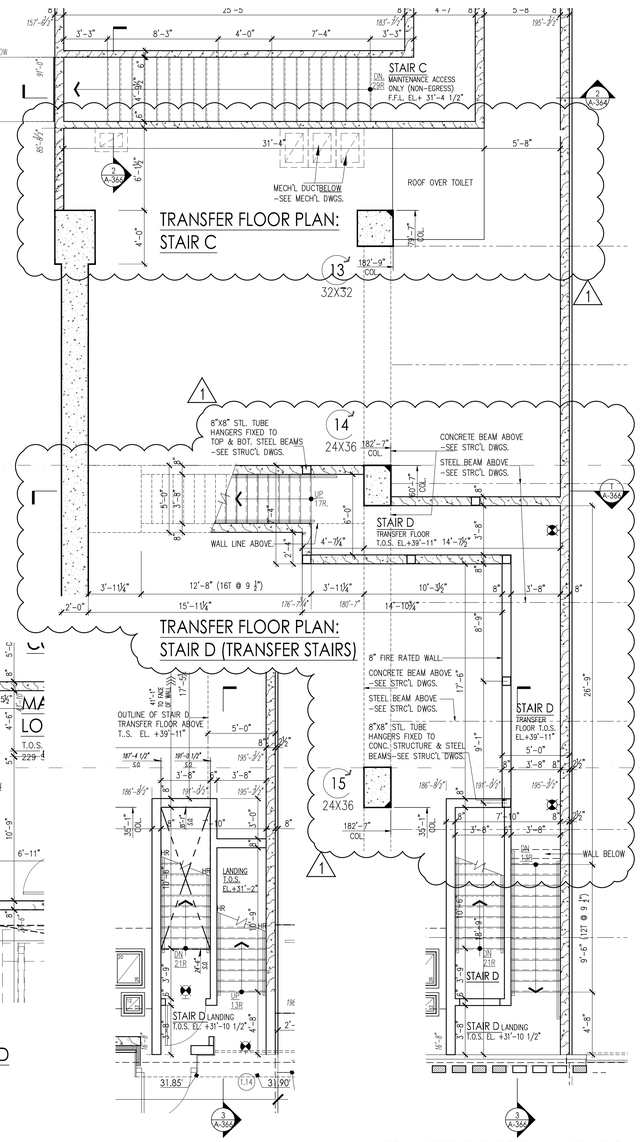


CELLAR FLOOR PLAN: STAIR C

1 STAIR C, STAIR D (TRANSFER STAIRS) & COMMUNICATION STAIRS
SCALE: 1/4" = 1'-0"



CELLAR FLOOR PLAN: STAIR D



1ST FLOOR PLAN: STAIR D

TRANSFER FLOOR PLAN: STAIR D

2 STAIR D
SCALE: 1/4" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

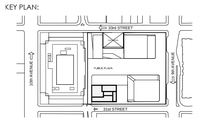
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	ISSUED FOR BID
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0, 2, 4, 6, 10)

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'C' & STAIR 'D' PLANS
CELLAR THRU 3RD FLOOR

SEAL & SIGNATURE:

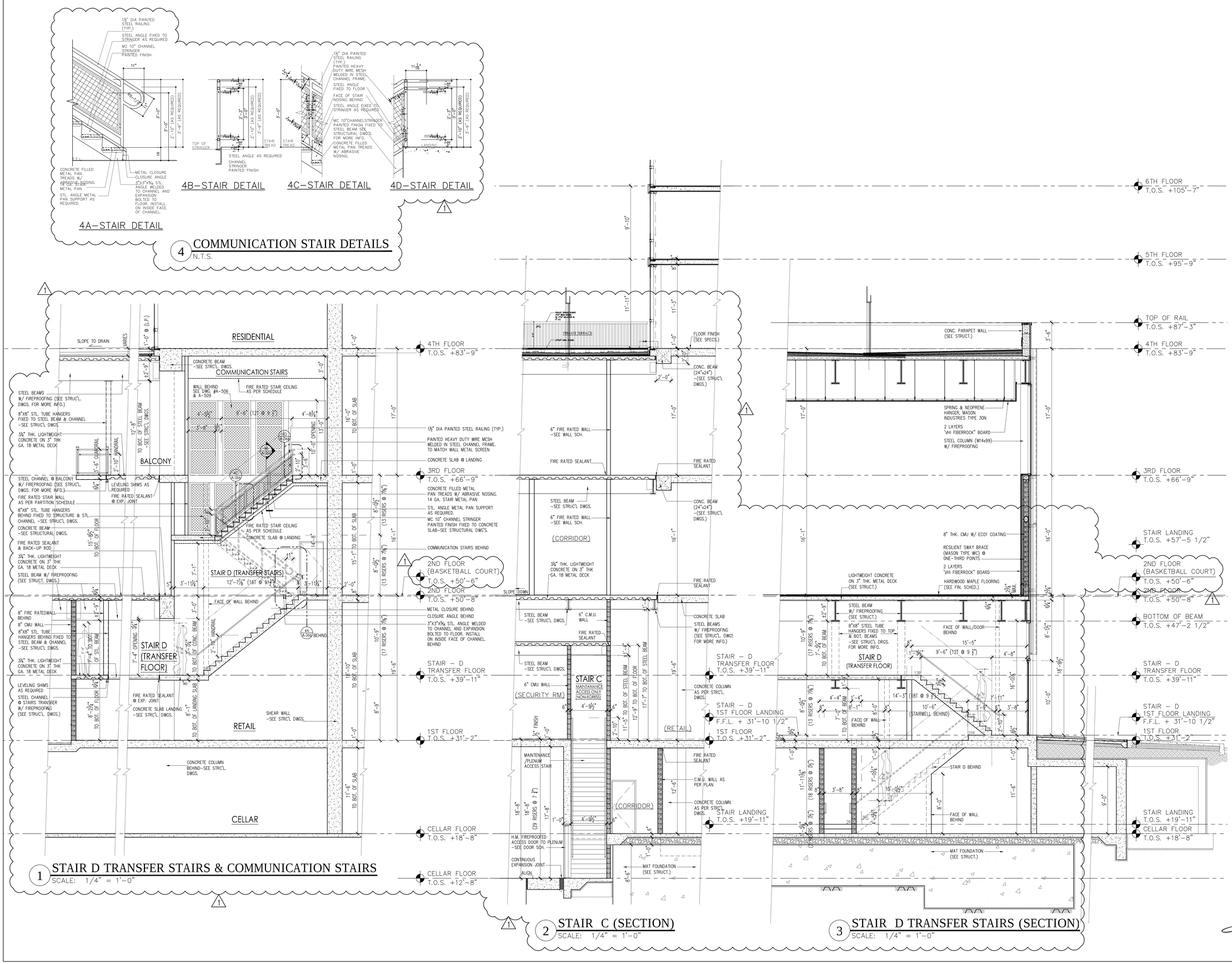
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	abo
CHECKED BY:	T.J.F.

A-365.00

SHEET. No.: 1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A365_Stair Plans & Details.dwg

DEPT OF BLDGS 121185760 Job Number
E5190003950 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-10-09	BULLETIN #1
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS (NEW DRAWING)

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0"

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

STAIR 'C', & STAIR 'D' SECTIONS

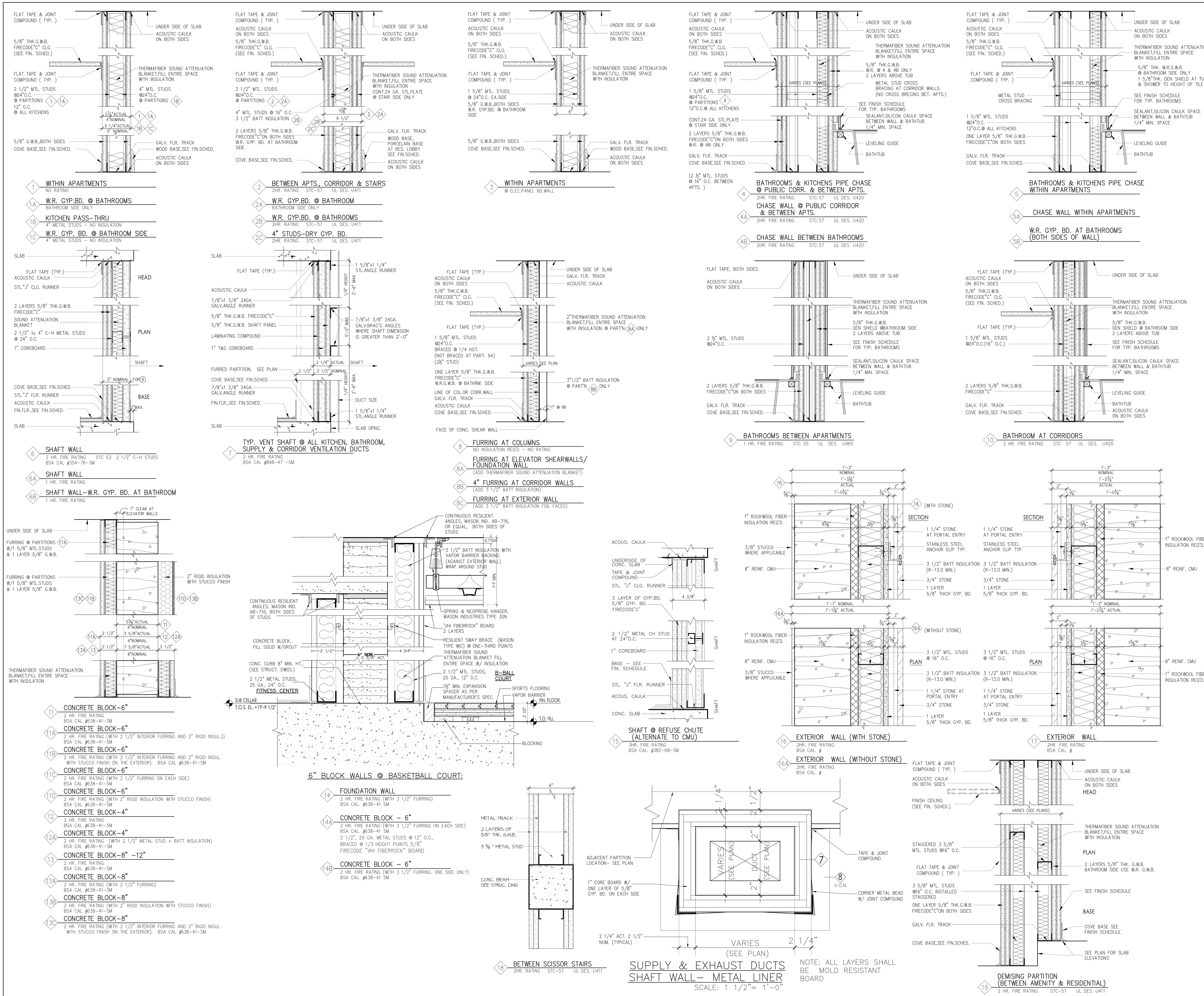
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	dbo
CHECKED BY:	T.J.F.

A-366.00

SHEET. No.: 1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A366-366+A368_3.rvt



1 WITHIN APARTMENTS
NO RATING

1A W.R. GYP.BD. @ BATHROOMS
BATHROOM SIDE ONLY

1B KITCHEN PASS-THRU
4" METAL STUDS - NO INSULATION

1C W.R. GYP. BD. @ BATHROOM SIDE
4" METAL STUDS - NO INSULATION

2 BETWEEN APTS., CORRIDOR & STAIRS
2HR. RATING STC-57 UL DES. U411

2A W.R. GYP.BD. @ BATHROOM
BATHROOM SIDE ONLY

2B W.R. GYP.BD. @ BATHROOMS
2HR. RATING STC-57 UL DES. U411

2C 4" STUDS-DRY GYP. BD.
2HR. RATING STC-57 UL DES. U411

3 WITHIN APARTMENTS
@ ELEC.PANEL BD.WALL

4 BATHROOMS & KITCHENS PIPE CHASE @ PUBLIC CORR. & BETWEEN APTS.
2HR. FIRE RATING STC:57 UL DES. U420

4A CHASE WALL @ PUBLIC CORRIDOR & BETWEEN APTS.
2HR. FIRE RATING STC:57 UL DES. U420

4B CHASE WALL BETWEEN BATHROOMS
2HR. FIRE RATING STC:57 UL DES. U420

5 BATHROOMS & KITCHENS PIPE CHASE WITHIN APARTMENTS

5A CHASE WALL WITHIN APARTMENTS

5B W.R. GYP. BD. AT BATHROOMS (BOTH SIDES OF WALL)

6 SHAFT WALL
2 HR. FIRE RATING STC 53 2 1/2" C-H STUDS
BSA CAL #354-76-SM

6A SHAFT WALL
1 HR. FIRE RATING

6B SHAFT WALL-W.R. GYP. BD. AT BATHROOM
1 HR. FIRE RATING

7 TYP. VENT SHAFT @ ALL KITCHEN, BATHROOM, SUPPLY & CORRIDOR VENTILATION DUCTS
2 HR. FIRE RATING
BSA CAL #898-47 -SM

8 FURRING AT COLUMNS
NO INSULATION REQ'D - NO RATING

8A FURRING AT ELEVATOR SHEARWALLS/ FOUNDATION WALL
(ADD THERMAFIBER SOUND ATTENUATION BLANKET)

8B 4" FURRING AT CORRIDOR WALLS
(ADD 3 1/2" BATT INSULATION)

8C FURRING AT EXTERIOR WALL
(ADD 3 1/2" BATT INSULATION FOIL FACED)

9 BATHROOMS BETWEEN APARTMENTS
1 HR. FIRE RATING STC 55 UL DES. U465

10 BATHROOM AT CORRIDORS
2 HR. FIRE RATING STC 57 UL DES. U420

11 CONCRETE BLOCK-6"
2 HR. FIRE RATING
BSA CAL #638-41-SM

11A CONCRETE BLOCK-6"
2 HR. FIRE RATING (WITH 2 1/2" INTERIOR FURRING AND 2" RIGID INSUL.))
BSA CAL #638-41-SM

11B CONCRETE BLOCK-6"
2 HR. FIRE RATING (WITH 2 1/2" INTERIOR FURRING AND 2" RIGID INSUL. WITH STUCCO FINISH ON THE EXTERIOR). BSA CAL #638-41-SM

11C CONCRETE BLOCK-6"
2 HR. FIRE RATING (WITH 2 1/2" FURRING ON EACH SIDE)
BSA CAL #638-41-SM

11D CONCRETE BLOCK-6"
2 HR. FIRE RATING (WITH 2" RIGID INSULATION WITH STUCCO FINISH)
BSA CAL #638-41-SM

12 CONCRETE BLOCK-4"
2 HR. FIRE RATING
BSA CAL #638-41-SM

12A CONCRETE BLOCK-4"
2 HR. FIRE RATING (WITH 2 1/2" METAL STUD + BATT INSULATION)
BSA CAL #638-41-SM

13 CONCRETE BLOCK-8" -12"
2 HR. FIRE RATING
BSA CAL #638-41-SM

13A CONCRETE BLOCK-8"
2 HR. FIRE RATING (WITH 2 1/2" FURRING)
BSA CAL #638-41-SM

13B CONCRETE BLOCK-8"
2 HR. FIRE RATING (WITH 2" RIGID INSULATION WITH STUCCO FINISH)
BSA CAL #638-41-SM

13C CONCRETE BLOCK-8"
2 HR. FIRE RATING (WITH 2 1/2" INTERIOR FURRING AND 2" RIGID INSUL. WITH STUCCO FINISH ON THE EXTERIOR). BSA CAL #638-41-SM

14 FOUNDATION WALL
2 HR. FIRE RATING (WITH 3 1/2" FURRING)
BSA CAL. #638-41 SM

14A CONCRETE BLOCK - 6"
2 HR. FIRE RATING (WITH 3 1/2" FURRING ON EACH SIDE)
BSA CAL. #638-41 SM
2 1/2", 20 GA. METAL STUDS @ 12" O.C., BRACED @ 1/3 HEIGHT POINTS 5/8" FIRECODE "VHI FIBERROCK" BOARD

14B CONCRETE BLOCK - 6"
2 HR. FIRE RATING (WITH 3 1/2" FURRING. ONE SIDE ONLY)
BSA CAL. #638-41 SM

15 SHAFT @ REFUSE CHUTE (ALTERNATE TO CMU)
3HR. FIRE RATING
BSA CAL. #382-68-SM

16 EXTERIOR WALL (WITH STONE)
2HR. FIRE RATING
BSA CAL. #

16A EXTERIOR WALL (WITHOUT STONE)
2HR. FIRE RATING
BSA CAL. #

17 EXTERIOR WALL
2HR. FIRE RATING
BSA CAL. #

18 BETWEEN SCISSOR STAIRS
2HR. RATING STC-57 UL DES. U411

19 DEMISING PARTITION (BETWEEN AMENITY & RESIDENTIAL)
2 HR. FIRE RATING STC-57 UL DES. U411

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER: Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT: SLCEArchitects,LLP
1359 BROADWAY, NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT: SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN: RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR, NEW YORK, NY 10012

LANDSCAPE ARCHITECT: JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE, NEW YORK, NY 10018

STRUCTURAL ENGINEER: DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET, NEW YORK, NY 10011

MECHANICAL ENGINEER: COSENTINI ASSOCIATES
TWO PENN PLAZA, NEW YORK, N.Y. 10121

BUILDING ENVELOPE CONSULTANT: VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE, NEW YORK, NY

ENERGY / ENVIRONMENTAL CONSULTANT: VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET, NORWALK, CT 06854

VERTICAL TRANSPORTATION CONSULTANT: VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524, LIVINGSTON, NJ 07039

ACOUSTICAL CONSULTANT: CERAMI ASSOCIATES
404 FIFTH AVENUE, NEW YORK, NY 10018

CIVIL ENGINEER: PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL., NEW YORK, NY 10016

GEOTECHNICAL ENGINEER: MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET, NEW YORK, NY 10122

CONSTRUCTION MANAGER: HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR, NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-02-14	ISSUED FOR FOUNDATION FILING

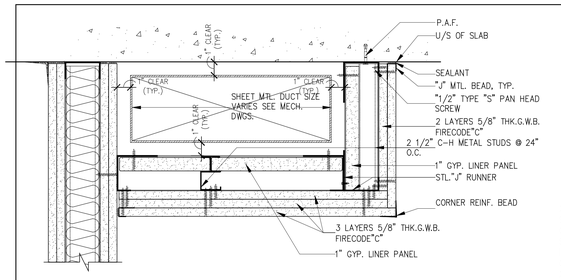
D.O.B. NUMBER: NB# 121185760

PROJECT: MANHATTAN WEST, NEW YORK , NEW YORK

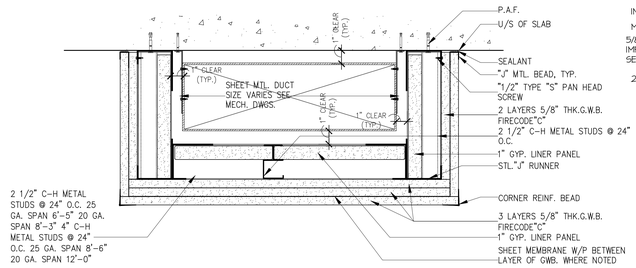
DRAWING TITLE: PARTITION SCHEDULE I

DATE: -
PROJECT No: 2012-32
DRAWN BY: JCB
CHECKED BY: T.J.F.
DWG. No.: A-401.00
SHEET. No.: 1 of 000

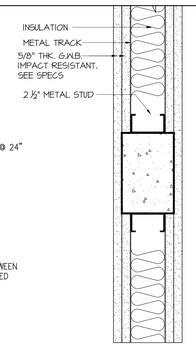
FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A401-A402-A407_Partition



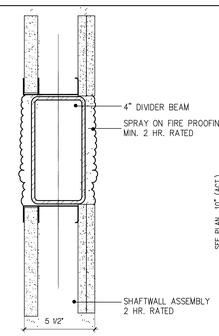
SECTION AT HORIZONTAL DUCT FIRE PROTECTION
2 HR. FIRE RATING SCALE: 3" = 1'-0"
BSA CAL. #277-83-SM



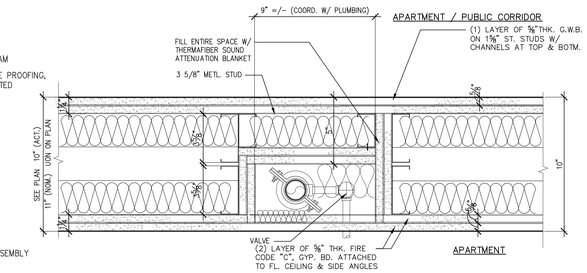
SECTION AT HORIZONTAL DUCT FIRE PROTECTION
2 HR. FIRE RATING SCALE: 3"=1'-0"
BSA CAL. #277-83-SM



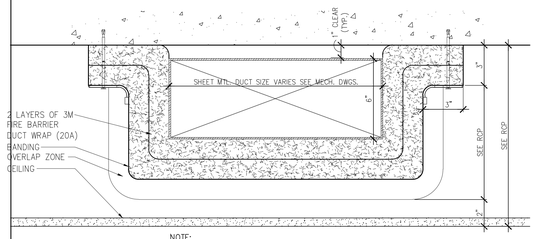
FURRING/PARTITION @ STAIR DIVIDER BEAM
2 HR. FIRE RATING SCALE: 3"=1'-0"



SECTION @ ELEVATOR SHAFT @ TALL FLOORS
2 HR. FIRE RATING SCALE: 3"=1'-0"

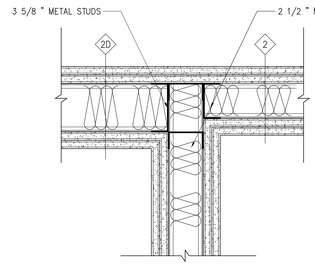


SINGLE RISER AT CHASE WALL

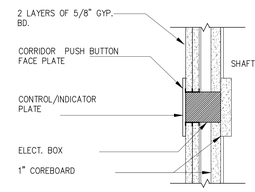


NOTE:
ASSEMBLY TO COMPLY TO MANUFACTURER'S INSTRUCTIONS

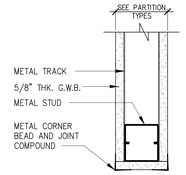
SECTION AT HORIZONTAL DUCT FIRE PROTECTION
2 HR. FIRE RATING SCALE: 3"=1'-0"
MEA # 20-02-M



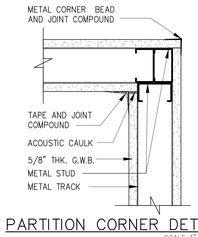
TYP. DETAIL @ 2 1/2"-3 5/8" STUD WALL TRANSITIONS



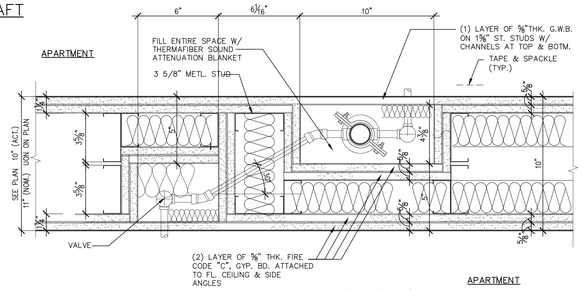
TYP. ELEVATOR CONTROL/ INDICATOR BOX DETAIL
SCALE: NTS



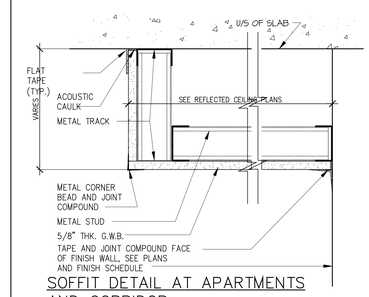
PARTITION END DETAIL
CORNER REINFORCING SCALE: 3"=1'-0"



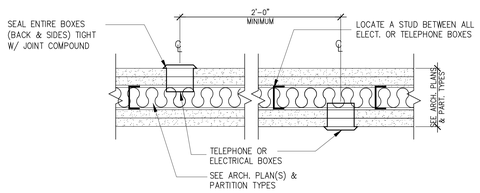
PARTITION CORNER DETAIL
SCALE: 3"=1'-0"



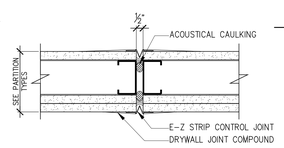
SINGLE RISER AT SHARED CHASE WALL



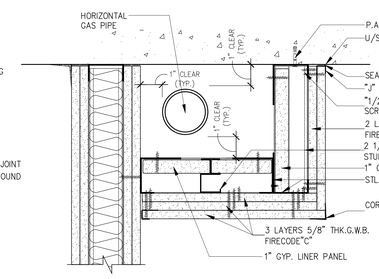
SOFFIT DETAIL AT APARTMENTS AND CORRIDOR
SCALE: 3"=1'-0"



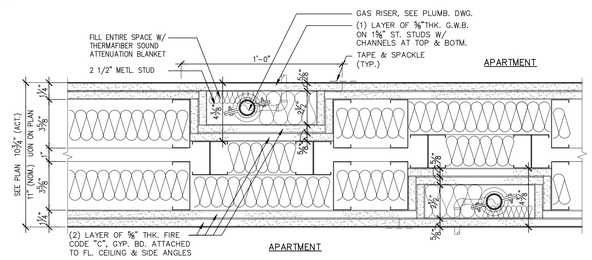
PLAN DETAIL OF ADJACENT ELECTRICAL BOXES
SCALE: 3"=1'-0"



CONTROL JOINT DETAIL
FOR LOCATIONS SEE DOOR TYPES
SCALE: 3"=1'-0"

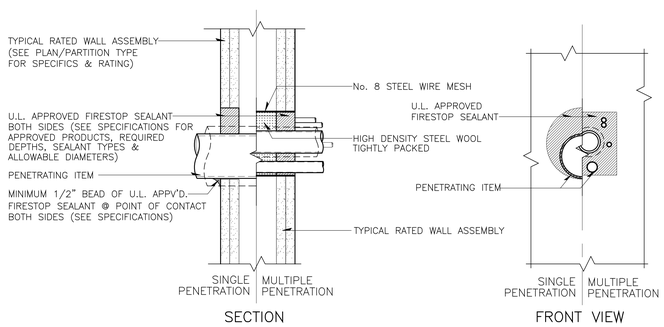


SECTION AT HORIZONTAL PIPE FIRE PROTECTION
2 HR. FIRE RATING SCALE: 3" = 1'-0"
BSA CAL. #277-83-SM



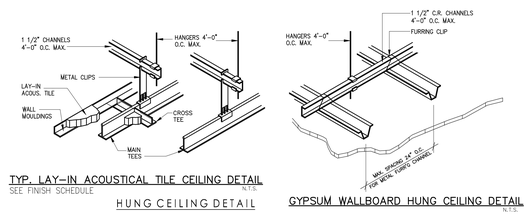
SEPARATE RISERS AT SHARED CHASE WALL

PLAN DETAILS AT GAS RISER AT DEMISING PARTITIONS
2 HR. FIRE RATING SCALE: 3"=1'-0"



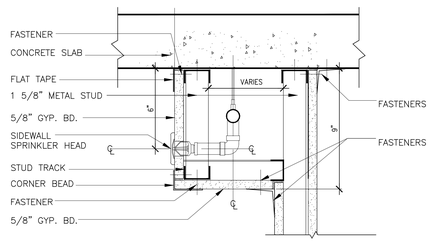
SECTION FRONT VIEW

TYPICAL FIRESTOPING @ THROUGH WALL PENETRATIONS
NOTE: TYPICAL @ ALL THROUGH WALL PENETRATIONS IN ALL RATED PARTITIONS
N.T.S.



TYP. LAY-IN ACOUSTICAL TILE CEILING DETAIL
SEE FINISH SCHEDULE N.T.S.
HUNG CEILING DETAIL

GYPSUM WALLBOARD HUNG CEILING DETAIL
N.T.S.



SOFFIT DETAIL @ APARTMENTS, @ CORRIDOR WITH SIDE WALL SPRINKLER HEAD
SCALE: 3"=1'-0"

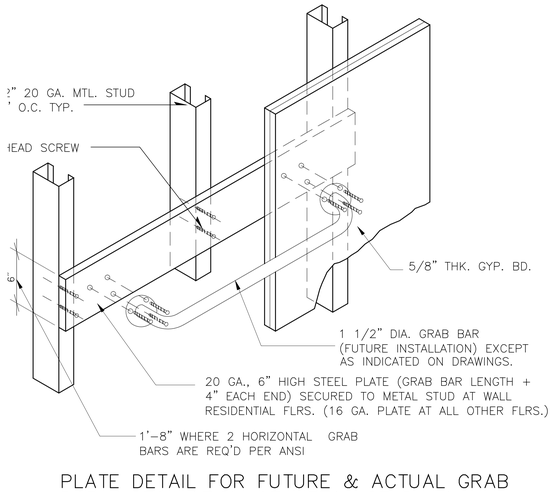
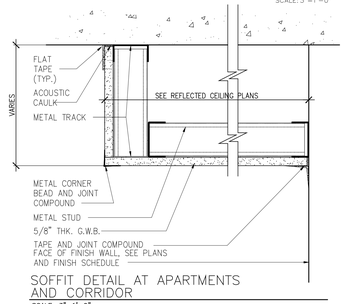
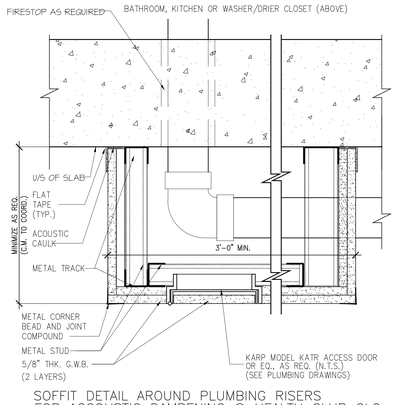


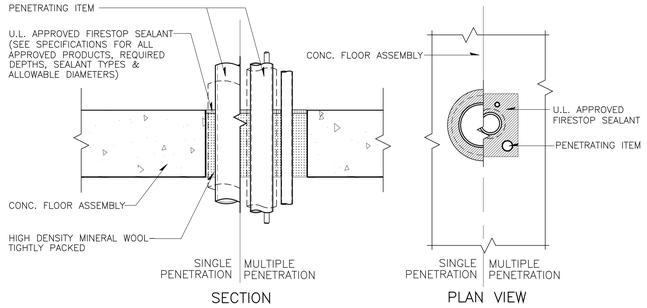
PLATE DETAIL FOR FUTURE & ACTUAL GRAB BAR INSTALLATION AT METAL STUD WALL
SEE BATHROOM ELEVATION FOR LOCATION
N.T.S.



SOFFIT DETAIL AT APARTMENTS AND CORRIDOR
SCALE: 3"=1'-0"



SOFFIT DETAIL AROUND PLUMBING RISERS FOR ACOUSTIC DAMPENING @ HEALTH CLUB CLG.
SCALE: 3"=1'-0"



SECTION PLAN VIEW

TYPICAL FIRESTOPING @ THROUGH FLOOR PENETRATIONS
NOTE: TYPICAL @ ALL THROUGH FLOOR PENETRATIONS
N.T.S.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

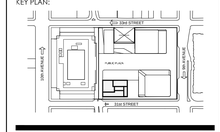
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH
Scale: 0' 1' 2' 3' 4' 5' 6' 7' 8' 9' 10'

KEY PLAN:


West 33rd STREET
West 31st STREET
Dyer Avenue
PARCEL A
PARCEL B
PARCEL C
PARCEL D
PARCEL E
PARCEL F
PARCEL G
PARCEL H
PARCEL I
PARCEL J
PARCEL K
PARCEL L
PARCEL M
PARCEL N
PARCEL O
PARCEL P
PARCEL Q
PARCEL R
PARCEL S
PARCEL T
PARCEL U
PARCEL V
PARCEL W
PARCEL X
PARCEL Y
PARCEL Z
PARCEL AA
PARCEL BB
PARCEL CC
PARCEL DD
PARCEL EE
PARCEL FF
PARCEL GG
PARCEL HH
PARCEL II
PARCEL JJ
PARCEL KK
PARCEL LL
PARCEL MM
PARCEL NN
PARCEL OO
PARCEL PP
PARCEL QQ
PARCEL RR
PARCEL SS
PARCEL TT
PARCEL UU
PARCEL VV
PARCEL WW
PARCEL XX
PARCEL YY
PARCEL ZZ
PARCEL AAA
PARCEL BBB
PARCEL CCC
PARCEL DDD
PARCEL EEE
PARCEL FFF
PARCEL GGG
PARCEL HHH
PARCEL III
PARCEL JJJ
PARCEL KKK
PARCEL LLL
PARCEL MMM
PARCEL NNN
PARCEL OOO
PARCEL PPP
PARCEL QQQ
PARCEL RRR
PARCEL SSS
PARCEL TTT
PARCEL UUU
PARCEL VVV
PARCEL WWW
PARCEL XXX
PARCEL YYY
PARCEL ZZZ
PARCEL AAAA
PARCEL BBBB
PARCEL CCCC
PARCEL DDDD
PARCEL EEEE
PARCEL FFFF
PARCEL GGGG
PARCEL HHHH
PARCEL IIII
PARCEL JJJJ
PARCEL KKKK
PARCEL LLLL
PARCEL MMMM
PARCEL NNNN
PARCEL OOOO
PARCEL PPPP
PARCEL QQQQ
PARCEL RRRR
PARCEL SSSS
PARCEL TTTT
PARCEL UUUU
PARCEL VVVV
PARCEL WWWW
PARCEL XXXX
PARCEL YYYY
PARCEL ZZZZ
PARCEL AAAAA
PARCEL BBBBB
PARCEL CCCCC
PARCEL DDDDD
PARCEL EEEEE
PARCEL FFFFF
PARCEL GGGGG
PARCEL HHHHH
PARCEL IIIII
PARCEL JJJJJ
PARCEL KKKKK
PARCEL LLLLL
PARCEL MMMMM
PARCEL NNNNN
PARCEL OOOOO
PARCEL PPPPP
PARCEL QQQQQ
PARCEL RRRRR
PARCEL SSSSS
PARCEL TTTTT
PARCEL UUUUU
PARCEL VVVVV
PARCEL WWWWW
PARCEL XXXXX
PARCEL YYYYY
PARCEL ZZZZZ
PARCEL AAAAAA
PARCEL BBBBBB
PARCEL CCCCCC
PARCEL DDDDDD
PARCEL EEEEEE
PARCEL FFFFFF
PARCEL GGGGGG
PARCEL HHHHHH
PARCEL IIIIII
PARCEL JJJJJJ
PARCEL KKKKKK
PARCEL LLLLLL
PARCEL MMMMMM
PARCEL NNNNNN
PARCEL OOOOOO
PARCEL PPPPPP
PARCEL QQQQQQ
PARCEL RRRRRR
PARCEL SSSSSS
PARCEL TTTTTT
PARCEL UUUUUU
PARCEL VVVVVV
PARCEL WWWWWW
PARCEL XXXXXX
PARCEL YYYYYY
PARCEL ZZZZZZ
PARCEL AAAAAAA
PARCEL BBBBBBB
PARCEL CCCCCCC
PARCEL DDDDDDD
PARCEL EEEEEEE
PARCEL FFFFFFF
PARCEL GGGGGGG
PARCEL HHHHHHH
PARCEL IIIIIII
PARCEL JJJJJJJ
PARCEL KKKKKKK
PARCEL LLLLLLL
PARCEL MMMMMMM
PARCEL NNNNNNN
PARCEL OOOOOOO
PARCEL PPPPPPP
PARCEL QQQQQQQ
PARCEL RRRRRRR
PARCEL SSSSSSS
PARCEL TTTTTTT
PARCEL UUUUUUU
PARCEL VVVVVVV
PARCEL WWWWWWW
PARCEL XXXXXXX
PARCEL YYYYYYY
PARCEL ZZZZZZZ
PARCEL AAAAAAAA
PARCEL BBBBBBBB
PARCEL CCCCCCCC
PARCEL DDDDDDDD
PARCEL EEEEEEEE
PARCEL FFFFFFFF
PARCEL GGGGGGGG
PARCEL HHHHHHHH
PARCEL IIIIIIII
PARCEL JJJJJJJJ
PARCEL KKKKKKKK
PARCEL LLLLLLLL
PARCEL MMMMMMMM
PARCEL NNNNNNNN
PARCEL OOOOOOOO
PARCEL PPPPPPPP
PARCEL QQQQQQQQ
PARCEL RRRRRRRR
PARCEL SSSSSSSS
PARCEL TTTTTTTT
PARCEL UUUUUUUU
PARCEL VVVVVVVV
PARCEL WWWWWWWW
PARCEL XXXXXXXX
PARCEL YYYYYYYY
PARCEL ZZZZZZZZ
PARCEL AAAAAAAAA
PARCEL BBBBBBBBB
PARCEL CCCCCCCCC
PARCEL DDDDDDDDD
PARCEL EEEEEEEEE
PARCEL FFFFFFFFF
PARCEL GGGGGGGGG
PARCEL HHHHHHHHH
PARCEL IIIIIIIII
PARCEL JJJJJJJJJ
PARCEL KKKKKKKKK
PARCEL LLLLLLLLL
PARCEL MMMMMMMMM
PARCEL NNNNNNNNN
PARCEL OOOOOOOOO
PARCEL PPPPPPPPP
PARCEL QQQQQQQQQ
PARCEL RRRRRRRRR
PARCEL SSSSSSSSS
PARCEL TTTTTTTTT
PARCEL UUUUUUUUU
PARCEL VVVVVVVVV
PARCEL WWWWWWWWW
PARCEL XXXXXXXXX
PARCEL YYYYYYYYY
PARCEL ZZZZZZZZZ
PARCEL AAAAAAAAAA
PARCEL BBBBBBBBBB
PARCEL CCCCCCCCCC
PARCEL DDDDDDDDDD
PARCEL EEEEEEEEEE
PARCEL FFFFFFFFFF
PARCEL GGGGGGGGGG
PARCEL HHHHHHHHHH
PARCEL IIIIIIIIII
PARCEL JJJJJJJJJJ
PARCEL KKKKKKKKKK
PARCEL LLLLLLLLLL
PARCEL MMMMMMMMMM
PARCEL NNNNNNNNNN
PARCEL OOOOOOOOOO
PARCEL PPPPPPPPPP
PARCEL QQQQQQQQQQ
PARCEL RRRRRRRRRR
PARCEL SSSSSSSSSS
PARCEL TTTTTTTTTT
PARCEL UUUUUUUUUU
PARCEL VVVVVVVVVV
PARCEL WWWWWWWWWW
PARCEL XXXXXXXXXX
PARCEL YYYYYYYYYY
PARCEL ZZZZZZZZZZ
PARCEL AAAAAAAAAAA
PARCEL BBBBBBBBBBB
PARCEL CCCCCCCCCCC
PARCEL DDDDDDDDDDD
PARCEL EEEEEEEEEEE
PARCEL FFFFFFFFFFF
PARCEL GGGGGGGGGGG
PARCEL HHHHHHHHHHH
PARCEL IIIIIIIIIII
PARCEL JJJJJJJJJJJ
PARCEL KKKKKKKKKKK
PARCEL LLLLLLLLLLL
PARCEL MMMMMMMMMMM
PARCEL NNNNNNNNNNN
PARCEL OOOOOOOOOOO
PARCEL PPPPPPPPPPP
PARCEL QQQQQQQQQQQ
PARCEL RRRRRRRRRRR
PARCEL SSSSSSSSSSS
PARCEL TTTTTTTTTTT
PARCEL UUUUUUUUUUU
PARCEL VVVVVVVVVVV
PARCEL WWWWWWWWWWW
PARCEL XXXXXXXXXXX
PARCEL YYYYYYYYYYY
PARCEL ZZZZZZZZZZZ
PARCEL AAAAAAAAAAAA
PARCEL BBBBBBBBBBBB
PARCEL CCCCCCCCCCCC
PARCEL DDDDDDDDDDDD
PARCEL EEEEEEEEEEEE
PARCEL FFFFFFFFFFFF
PARCEL GGGGGGGGGGGG
PARCEL HHHHHHHHHHHH
PARCEL IIIIIIIIIIII
PARCEL JJJJJJJJJJJJ
PARCEL KKKKKKKKKKKK
PARCEL LLLLLLLLLLLL
PARCEL MMMMMMMMMMMM
PARCEL NNNNNNNNNNNN
PARCEL OOOOOOOOOOOO
PARCEL PPPPPPPPPPPP
PARCEL QQQQQQQQQQQQ
PARCEL RRRRRRRRRRRR
PARCEL SSSSSSSSSSSS
PARCEL TTTTTTTTTTTT
PARCEL UUUUUUUUUUUU
PARCEL VVVVVVVVVVVV
PARCEL WWWWWWWWWWWW
PARCEL XXXXXXXXXXXX
PARCEL YYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVVVVVVV
PARCEL WWWWWWWWWWWWWWWWW
PARCEL XXXXXXXXXXXXXXXXX
PARCEL YYYYYYYYYYYYYYYYY
PARCEL ZZZZZZZZZZZZZZZZZ
PARCEL AAAAAAAAAAAAAAAAAA
PARCEL BBBBBBBBBBBBBBBBBB
PARCEL CCCCCCCCCCCCCCCCCC
PARCEL DDDDDDDDDDDDDDDDDD
PARCEL EEEEEEEEEEEEEEEEEE
PARCEL FFFFFFFFFFFFFFFFFF
PARCEL GGGGGGGGGGGGGGGGGG
PARCEL HHHHHHHHHHHHHHHHHH
PARCEL IIIIIIIIIIIIIIIIII
PARCEL JJJJJJJJJJJJJJJJJJ
PARCEL KKKKKKKKKKKKKKKKKK
PARCEL LLLLLLLLLLLLLLLLLL
PARCEL MMMMMMMMMMMMMMMMMM
PARCEL NNNNNNNNNNNNNNNNNN
PARCEL OOOOOOOOOOOOOOOOOO
PARCEL PPPPPPPPPPPPPPPPPP
PARCEL QQQQQQQQQQQQQQQQQQ
PARCEL RRRRRRRRRRRRRRRRRR
PARCEL SSSSSSSSSSSSSSSSSS
PARCEL TTTTTTTTTTTTTTTTTT
PARCEL UUUUUUUUUUUUUUUUUU
PARCEL VVVVVVVVVVVV

DEPT OF BLDGS 121185760 Job Number
ES875692997 Scan Code

LEGEND

ACC:	ACCENT	P;PT:	PAINT
ACT:	ACOUSTICAL CEILING TILE	PE:	PAINT EPOXY
AST:	ANTI-STATIC TILE OR ROLL	PL:	PLASTIC LAMINATE
BOH:	BACK OF HOUSE		
	WINDOW BLIND	P/CT:	PORCELEAN CERAMIC TILE
CAT:	CATEGORIES	QT:	QUARRY TILE
	CONCRETE BLOCK	RB:	RUBBER BASE
	CORNER GUARD		
CK:	CORK FLOORING	RI:	RIGID INSULATION
CLR:	COLOR	RT:	RUBBER TILE
	WOOD CROWN MOLDING	S:	SEALER
CONC:	CONCRETE	SACS:	SUSPENDED ACOUSTICAL CEILING SYSTEM
CPT:	CARPET	SP:	KADEX WITH PAINT ON CONC.
	CRASH RAIL	SSWP:	STAINLESS STEEL WALL PANEL
	CERAMIC TILE	ST:	STONE
	DECK PAINT	SV:	HOT WELDED SHEET VINYL
	DIAMOND TREAD	T.O.:	TRIM OPENING
	FABRIC	TP.:	TOILET PARTITION
FRP:	FIBERGLASS REINFORCED PLASTIC	V:	VINYL
	GLASS	VB:	VINYL BASE
	GROUT	VCT:	VINYL COMPOSITE TILE
	GRANITE TILE	VWC:	WALLCOVERING
GWB:	GYPSUM WALLBOARD	W.I.C.:	WALK IN CLOSET
H.C.:	HOLLOW CORE	WD:	WOOD
HIWC:	HIGH IMPACT WALL COVERING	W/D:	WASHER/DRYER
	HOLLOW METAL	W.P.:	WATERPROOFING
	KNOCK DOWN FRAME	WRGB:	WATER RESISTANT GYPSUM BOARD
	PAINTED KADEX ON CONC.	VSF:	VINYL SHEET FLOORING
MAT:	MATERIAL		
ME/MCT:	METAL CEILING TILE		
	MIRROR		
M.O.:	MASONRY OPENING		
	MARBLE TILE		
MYT:	MYLAR CEILING TILE		
	OFFICE PARTITION		

DEDUCT ALTERNATE #1:

A) Provide a deduct alternate for all construction associated with the swimming pool. This includes:
- Swimming pool and spa room.
- sauna and shower facilities.
- lockers.
- pool equipment room.
- 2nd floor laundry room.

B). Bathroom fixtures (water closets and vanities) to remain. All other spaces listed above to revert to storage rooms, with room finishes as appropriate.

C) deduct alternate to include all specific building MEPFP systems associated with the spaces listed.

D) deduct alternate to include all structural work associated with the dropped slab and additional framing to create pool recess and piping areas below 2nd floor.

FINISH SCHEDULE

FLOOR	BOH AREA CAT.	ROOM NAME	FLOOR MAT.	FLOOR FIN. FIELD	FLOOR FIN. ACC.	WALL BASE TYPE	WALL BASE FIN.	WALL MAT.	WALL FIN. FIELD	WALL FIN. ACC.	CEILING MAT.	CEILING FIN.	MILLWORK	BUMPER/ CORNER GUARD	REMARKS
3RD FLOOR		ELEVATOR LOBBY	CONC.	CK	-	-	-				GYP.	P	N	N	
		MECHANICAL ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		PAN. / STOR.	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		OFFICE 3	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		OFFICE 2	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		OFFICE 1	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		CONF. RM.	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		RESIDENTIAL LEASING OFFICE	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		CLOSET (LEASING)	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		WAITING	CONC.	CK	-	WD	P	GYP.	P	-	GYP.	P		N	
		CRASH PAD	CONC.	RB	-	MT/WD		GYP.	P	-	GYP.	P		N	
		LOUNGE	CONC.	CK	-	WD		GYP.	P	-	WD/GYP.	P		N	
		FITNESS STUDIO 1	CONC.	WD	-	WD	P	GYP.	P	-	GYP.	P		N	
		OPEN STAIR DN.	CONC.	RB	-	-	-	-	-	-	-	-		N	
		BALCONY	CONC.	MT	-			GYP.	T.B.D.	-	GYP.	P		N	
		LIBRARY	CONC.	CK	-	WD		GYP.	P	-	WD/GYP.	P		N	
		GAME ROOM	CONC.	CK	-					-				N	
		FITNESS STUDIO 2	CONC.	WD	-	WD	P	GYP.	P	-	GYP.	P		N	
		STORAGE	CONC.	PE.1	-	WD	P	GYP.	P	-	GYP.	P		N	
		BATHROOM 4	CONC.	CT	-	CT	-	CT/P	-	-	GYP.	P		N	
		BATHROOM 3	CONC.	CT	-	CT	-	CT/P	-	-	GYP.	P		N	
		BATHROOM 2	CONC.	CT	-	CT	-	CT/P	-	-	GYP.	P		N	
		BATHROOM 1	CONC.	CT	-	CT	-	CT/P	-	-	GYP.	P		N	
		LOUNGE AND GOLF SIMULATOR	CONC.	RB	-	T.B.D.		T.B.D.	P	-	GYP.	P		N	
		CLOSET (AMENITY)	CONC.	CK	-	-	-	GYP.	P	-	GYP.	P		N	
		ARCADE CORNER	CONC.	CK	-	WD	P	T.B.D.	P	-	GYP.	P		N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		SERVICE HALL	CONC.	P	-	-	-	CONC./CB	P	-	CONC.	P		N	
		CORRIDOR	CONC.	P	-	-	-	CONC./GYP.	P	-	GYP.	P	N	N	
TYPICAL APT. UNIT 4TH-55TH FLOORS		ELEVATOR LOBBY	CONC.	CPT	-	WD	P	GYP.	P	WD	GYP.	P	N	N	
		PUBLIC CORRIDOR	CONC.	CPT	-	WD	P	-	-	-	-	-		N	
		EL./TEL. CLOSET	CONC.	P	-	-	-	GYP.	P	-	GYP.	P		N	
		STAIR 'A' & 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		ENTRY FOYER	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		KITCHEN	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		BEDROOM	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		BATHROOM	CONC.	CT	-	CT	-	GYP.	CT/P	-	GYP/CONC	P		N	
		LR/DA	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		CLOSET/W.I.C./PAN.	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		WASHER/DRYER	CONC.	CT	-	CT	-	GYP.	P	-	GYP/CONC	P		N	
		SERVICE HALL	CONC.	P	-	-	-	CONC./CB	P	-	CONC.	P		N	
		LAUNDRY RM. (4TH FL.)	CONC.	CT	-	CT	-	GYP.	P	-	GYP/CONC	P		N	
		MECHANICAL RM. (4TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		E.M.R. (PE •1-•3) (36TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		FIRE TANK •1 (36TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		FIRE TANK •2 (36TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		PUMP ROOM (36TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		TRANSFORMER ROOM (36TH FL.)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
TYPICAL APT. UNIT 56TH-61ST FLOORS		ELEVATOR LOBBY	CONC.	CPT	-	WD	P	GYP.	P	WD	GYP.	P	N	N	
		PUBLIC CORRIDOR	CONC.	CPT	-	WD	P	-	-	-	-	-		N	
		EL./TEL. CLOSET	CONC.	P	-	-	-	GYP.	P	-	GYP.	P		N	
		STAIR 'A' & 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		ENTRY FOYER	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		KITCHEN	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		BEDROOM	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		BATHROOM	CONC.	CT	-	CT	-	GYP.	CT/P	-	GYP/CONC	P		N	
		LR/DA	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		CLOSET/W.I.C./PAN.	CONC.	WD	-	WD	P	GYP.	P	-	GYP/CONC	P		N	
		WASHER/DRYER	CONC.	CT	-	CT	-	GYP.	P	-	GYP/CONC	P		N	
		SERVICE HALL	CONC.	P	-	-	-	CONC./CB	P	-	CONC.	P		N	
62ND FLOOR (MAIN ROOF)		ELEVATOR LOBBY	CONC.	WD	-	MT	-	GYP.	WD	-	GYP.	P	N	N	
		PANTRY	CONC.	WD	-	-	-	GYP.	P	-	GYP.	P		N	
		TOILET	CONC.	ST	-	MT	-	GYP.	P	-	GYP.	P		N	
		TOILET	CONC.	ST	-	MT	-	GYP.	P	-	GYP.	P		N	
		DINING ROOM B	CONC.	WD	-	WD	P	GYP.	P	-	GYP.	P		N	
		DINING ROOM A	CONC.	WD	-	WD	P	GYP.	P	-	GYP.	P		N	
		TOILET (LOUNGE)	CONC.	ST	-	MT	-	GYP.	P	-	GYP.	P		N	
		LOUNGE	CONC.	WD	-	WD	P	GYP.	P	-	GYP.	P		N	
		FIRE PIT	CONC.	WD	-	-	-	-	-	-	GYP.	P		N	SEE EXTERIOR ELEVATION
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		SERVICE HALL	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P	N	N	
		SERVICE VEST.	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P	N	N	
63RD FLOOR		SERVICE HALL	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		VEST.	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		GENERATOR ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		MECHANICAL ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		FIRE PUMP ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		ATS ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		TRANSFORMER ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		CORRIDOR	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
64TH FLOOR		E.M.R. (PE •4-•6)	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		ROOF OVER 63RD FLOOR	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STORAGE	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
65TH FLOOR		E.M.R. (SE •7)	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		ROOF OVER 63RD FLOOR	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	

FINISH SCHEDULE

FLOOR	BOH AREA CAT.	ROOM NAME	FLOOR MAT.	FLOOR FIN. FIELD	FLOOR FIN. ACC.	WALL BASE TYPE	WALL BASE FIN.	WALL MAT.	WALL FIN. FIELD	WALL FIN. ACC.	CEILING MAT.	CEILING FIN.	MILLWORK	BUMPER/ CORNER GUARD	REMARKS
CELLAR FLOOR		ELEVATOR LOBBY (BOH)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		ELEV. PIT (PE •1-•3)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		ELEV. PIT (PE •4 & •5)	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		CORRIDOR	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		TOILET (PET GROOMING)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		CLOSET (PET GROOMING)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		PET GROOMING	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		STORM WATER DETENTION TANK	CONC.												
		NETWORK COMPARTMENT A	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		NETWORK COMPARTMENT B	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		NETWORK COMPARTMENT C	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		TRANSFORMER COMPARTMENT 1	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		TRANSFORMER COMPARTMENT 2	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		TRANSFORMER COMPARTMENT 3	CONC.	P	-	CONC.	-	CONC.	P	-	CONC.	P	N	N	COORD W/ CON EDISON DESIGN STANDARDS
		GAS METER ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		TEL./CABLE ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		PUMP ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		SECURITY CLOSET	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		BUILDING STORAGE ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		FEMALE LOCKER	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		TOILET (FEMALE)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		JAN. CL.	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		MALE LOCKER	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		TOILET (MALE)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		TENANT STORAGE / BIKE RM. •C1	CONC.												
		CRAWL SPACE	CONC.												
		EMPLOYEE LOUNGE	CONC.												
		STAIR 'D'	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		STAIR 'C'	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		ELECTRICAL CLOSET •2	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		ELECTRICAL CLOSET •1	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		A/C ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		ELEC. SWITCH GEAR ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		COMPACTOR ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		BOILER ROOM	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE.1	-	CONC.	P	N	N	
1ST FLOOR		ELEVATOR LOBBY	CONC.	ST	ST	ST	-	GYP.	WD	WD	GYP.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		PROP. MNGR OFFICE	CONC.	ST.109	-	WD	P	GYP.	P	-	GYP.	P	Y	N	
		OFFICE 1	CONC.	CPT	-	WD	P	GYP.	P	-	ALT	-	Y	N	
		OFFICE 2	CONC.	CPT	-	WD	P	GYP.	P	-	ALT	-	Y	N	
		OFFICE 3	CONC.	CPT	-	WD	P	GYP.	P	-	ALT	-	Y	N	
		TOILET (OFFICE)	CONC.	CT	-	CT	-	GYP.	P	-	ALT	-	N	N	
		STORAGE •3	CONC.	CT	-	CT	-	GYP.	P	-	ALT	-	N	N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		MAIL ROOM (a)	CONC.	TR	TR	TR	-	GYP.	P	-	GYP.	P	Y	N	
		RESIDENTIAL LOBBY	CONC.	ST	ST	ST	-	GYP.	P	-	WD	P	Y	N	
		CONCIERGE	CONC.	ST	ST	ST	-	GYP.	P	-	WD	P	Y	N	
		STORAGE •1	CONC.	ST	ST	ST	-	GYP.	P	-	GYP.	P	N	N	
		STORAGE •2	CONC.	ST	ST	ST	-	GYP.	P	-	GYP.	P	N	N	
		STAIR 'D'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		RETAIL	CONC.	PE.1	-	-	-	CONC./CB	-	-	CONC.	-	N	N	
		SALLYPORT ACCESS DRIVE	CONC.										N	N	
		DOCK OFFICE	CONC.										N	N	
		EL. CLOSET	CONC.										N	N	
		MESSENGER RM.	CONC.										N	N	
		SECURITY OFFICE	CONC.										N	N	
		TOILET (SECURITY)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		STAIR 'C'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		BIKE RM. •2	CONC.	TR	-	TR	-	GYP.	P	-	CONC.	P	Y	N	
		PACKAGE RM.	CONC.	PE.1	-	-	-	CONC./CB	P	-	CONC.	P	Y	N	
		TOILET (PACKAGE)	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		MOVE-IN STAGING	CONC.	PE.1	-	-	-	CONC./CB	P	-	CONC.	P	N	N	
		CARTS	CONC.	ST	ST	ST	-	GYP.	P	-	GYP.	P	N	N	
		LOBBY STORAGE	CONC.	ST	-	ST	-	GYP.	P	-	GYP.	P	N	N	
		CORRIDOR	CONC.	ST	ST	ST	-	GYP.	P	-	GYP.	P	N	N	
2ND FLOOR		ELEVATOR LOBBY	CONC.	CK	-	CK	-	GYP.	P	-	GYP.	P	N	N	
		BUILDING STORAGE	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P		N	
		VEST.	CONC.	RB	-	RB	-	GYP.	P	-	GYP.	P		N	
		RECEPTION	CONC.	CK	-	CK	-	GYP.	P/WD	-	GYP.	P		N	
		CHILDREN'S ROOM	CONC.	CK	-	CK	-	GYP.	P	-	GYP.	P		N	SEE A-404 FOR INFO
		CLOSET	CONC.	CK	-	CK	-	GYP.	P	-	GYP.	P		N	
		TOILET (CHILDREN)	CONC.	CT	-	CT	-	GYP.	CT	-	GYP.	P		N	
		A/V CLOSET	CONC.	RB	-	RB	-	GYP.	P	-	CONC.	P		N	
		FITNESS OFFICE	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P		N	
		FITNESS CENTER	CONC.	RB	-	RB	-	GYP.	P	-	CONC.	P		N	
		FITNESS STUDIO •1	CONC.	WD	-	RB	-	GYP.	P	-	GYP.	P		N	
		STAIR 'D'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STOR.	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P	N	N	
		BASKETBALL COURT	CONC.	WD	-	RB	-	GYP.	P	-	-	P	N		
		JAN. CL. •1	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	4'-0" WALL TILE WAINSCOT
		MALE LOCKER RM.	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		LOCKERS (MALE)	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		WC •1	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		WC •2	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		WC •3	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		SHOWER •1	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		SHOWER •2	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		STEAM RM. (MALE)	CONC.	CT	-	CT	-	GYP.	CT	-	-	GYP.	CT	N	
		POOL	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		SPA	CONC.	PT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		POOL DECK	CONC.	PT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		POOL EQIP. RM.	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	Y	N	
		JAN. CL. •2	CONC.	CT	-	CT	-	GYP.	P	-	GYP.	P	N	N	
		TOILET (FITNESS)	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		TOILET (FITNESS)	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		FEMALE LOCKER RM.	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		LOCKERS (FEMALE)	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		WC •4	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		WC •5	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		SHOWER •3	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		SHOWER •4	CONC.	CT	-	CT	-	CT	-	-	GYP.	P	N	N	
		STEAM RM. (FEMALE)	CONC.	CT	-	CT	-	GYP.	CT	-	-	GYP.	CT	N	
		POOL LAUNDRY RM.	CONC.	CT	-	CT	-	GYP.	CT	-	-	GYP.	P	N	
		STAIR 'A'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		STAIR 'B'	CONC.	PE.1	-	-	-	CONC./CB	PE	-	CONC.	P	N	N	
		SERVICE HALL	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P	N	N	
		CORRIDOR	CONC.	PE.1	-	-	-	GYP.	P	-	CONC.	P	N	N	

PROJECT:

Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

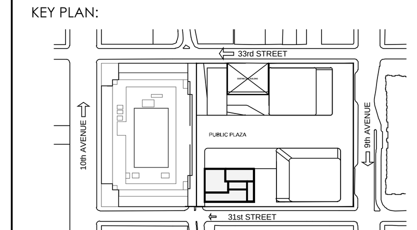
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
INTERIOR
FINISH SCHEDULE

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-403.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A403-404_Finish Schedule.dwg

DEPT OF BLDGS 121185760 Job Number
ES571870306 Scan Code

8/10/2014

CODE		APPLICATION	DESCRIPTION	MANUFACTURER / VENDOR	PRODUCT NAME / NUMBER	SIZE	FINISH/COLOR	REMARKS	CONTACT
STONE-APARTMENT FLOORS									
ST	100	Affordable Kitchen - Countertop	Granite	Design and Direct Source	Eastern Stone- Mongolian Black	Refer to dwg.	Honed	Or approved equal.	Suzanne Sanning 503.525.0600
ST	102	Market Kitchen - Countertop	Granite	Design and Direct Source	Eastern Stone - Mongolian Black	Refer to dwg.	Honed	Or approved equal.	Suzanne Sanning 503.525.0600
ST	104	Premium Kitchen - Countertop	Marble	Design and Direct Source	Eastern Stone - Pure Black	Refer to dwg.	Honed	Or approved equal.	Suzanne Sanning 503.525.0600
ST	107	Premium Bathroom - Tile Flooring	Marble	Design and Direct Source	Eastern Stone- Oriental White	9" X 16"	Honed	Or approved equal.	Suzanne Sanning 503.525.0600
STONE-AMENITY FLOORS									
ST	108	Lobby Floor	Marble	Design and Direct Source	Eastern Stone-Natural Brown	18" x 30"	Honed	Or approved equal.	Suzanne Sanning 503.525.0600
ST	109	Lobby Floor	Marble	Design and Direct Source	Eastern Stone-Carbon Caliente	18" x 30"	Honed	Or approved equal.	Suzanne Sanning 503.525.0601
ST	112	61st Restroom Floor	Marble	Design and Direct Source	Eastern Stone- Oriental White	9" X 16"	Honed	Or approved equal.	Suzanne Sanning 503.525.0599
ST	113	bathroom/Locker room countertops	Quartz	Design and Direct Source	Caeserstone	--	5131 Calacatta Nuvo	Or approved equal.	info@caesarstoneus.com
TERRAZO-AMENITY FLOORS									
TR	100	Maiilroom Floor	Poured Epoxy Terrazo	D.Magnon	3407-R and 3478-R	Refer to dwg.	Custom Pattern	Or approved equal.	Dominque magnon 914. 664.0700
TR	101	Maiilroom/Bike Shop Floor	Poured Epoxy Terrazo	D.Magnon	3407-R and 3478-R	Refer to dwg.	Custom Pattern	Or approved equal.	Dominque magnon 914. 664.0701
RUBBER-AMENITY FLOORS									
RB	100	2nd floor columns/wall	Rubber Bovine Matting	Treadall, inc.	Model GF-B1024-75	10' x 24'	Black	Or approved equal.	Dean Chandler 1-800-720-6287
RB	102	Elevator Floor	Rubber Studded Matting	Mat King	Studded Matt	1/8" x 12" x 12"	Black/Brass studs	Or approved equal.	(516) 501-0744
RB	103	Flooring	Perelli	Roppe	Round Raised	Rolls	TBD	Or approved equal.	John Geagan 631.219.2868
RB	104	Gym Flooring	Rubber Tiles	Motion Fitness	Pavi	square tiles	TBD	Or approved equal.	Parker Johnson 847-963-8969 x 1107
RB	105	Connecting Stair Tred	Perelli	Roppe	Raised Round	To size	Black Brown	Or approved equal.	John Geagan 631.219.2868
RB	106	Gym Flooring	Rubber Matting	Mats Inc.	Activation Matting Interlocking Tile	2' x 2'	TBD/Slate 903	Or approved equal.	Mats Inc. <info@matsinc.com>
RB	107	Stage Flooring	Rubber Flooring	Roppe	Smooth Rubber Tile	19-11/16" x 19-11/16"	Black Brown	Or approved equal.	John Geagan 631.219.2867
RB	108	Gym Base Trim	Rubber	Roppe	Flat Rubber	19-11/16" x 19-11/16"	Black Brown	Or approved equal.	John Geagan 631.219.2868
WOOD-APARTMENT FLOORS									
WD	100	Affordable Unit - Flooring Throughout	Engineered Wood	DOMA Source	Par KY Sound Series	5" wide	Imbuia	Or approved equal.	Robert Kowalski 973.900.9969
WD	101	Affordable Unit - Bathroom Storage	Stained Oak	By GC	--	Refer to dwg.	Satin Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	102	Affordable Unit - Open Cabinet Surround	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	103	Affordable Unit - Open Cabinet Shelving	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	104	Affordable Unit - Cabinetry	Paint Grade Hardwood	G.C.	--	Refer to dwg.	--	Or approved equal.	--
WD	105	Market Unit - Flooring Throughout	Engineered Wood	DOMA Source	Par KY Sound Series	5" wide	Imbuia	Or approved equal.	Robert Kowalski 973.900.9969
WD	106	Market Unit - Bathroom Storage	Stained Oak	By GC	--	Refer to dwg.	Satin Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	107	Market Unit - Open Cabinet Surround	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	108	Market Unit - Open Cabinet Shelving	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	109	Market Unit - Cabinetry	Paint Grade Hardwood	By GC	--	Refer to dwg.	--	Or approved equal.	--
WD	110	Premium Unit - Flooring Throughout	Engineered Wood	DOMA Source	Par KY Sound Series	5" wide	Imbuia	Or approved equal.	Robert Kowalski 973.900.9969
WD	111	Premium Unit - Bathroom Storage	Stained Oak	By GC	--	Refer to dwg.	Satin Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	112	Premium Unit - Open Cabinet Surround	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	113	Premium Unit - Open Cabinet Shelving	Stained Imbuia	By GC	--	Refer to dwg.	Matte Varnish	Refer to RW2 approved control sample. Or approved equal	--
WD	114	Premium Unit - Cabinetry	Paint Grade Hardwood	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal	--
WD	115	Corridor Millwork	Stained Wood Tambour	By GC	--	Refer to dwg.	Stained to Match W-116	Refer to RW2 approved control sample. Or approved equal	Juanita 800.964.8961
WD	116	Corridor Millwork	Stained Walnut	By GC	--	Refer to dwg.	Satin Varnish	Refer to RW2 approved control sample. Or approved equal.	--
WD	118	Corridor Millwork	Paint Grade Hardwood	By GC	--	Refer to dwg.	--	Or approved equal.	--
WOOD-AMENITY FLOORS									
WD	119	1st Floor-Lobby Walls	Stained 'Walnut Veneer	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	120	1st Floor-Lobby Ceiling	Walnut Wood Ceiling system	Rulon	Panel Grille-TBD	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	904-584-1400
WD	121	1st Floor Door/Column trim	Stained Walnut Hardwood	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	122	Mailroom Counter/3rd floor Ceiling/63 Flooring	Stained Oak Hardwood	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	124	Floor/Door Trim	Paint Grade Hardwood	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	125	3rd Floor	Stained Oak Veneer	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	126	Trim	Stained Oak Hardwood	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	129	Walls	Stained Oak Hardwood Planks	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WD	130	Basketball Court	Hardwood Flooring	Tarkett Sports	Omnisports 8.3 mm	Refer to dwg.	Classic Oak	Refer to RW2 approved control sample. Or approved equal.	Terri Ranels 888-364-6541 ext. 133
WD	131	Fitness and Yoga Studios	Hardwood Sprung Flooring	Harlequin	Harelquin Activity with Hardwood Surface	Refer to dwg.	Oak	Refer to RW2 approved control sample. Or approved equal.	Harlequin New Jersey 1 (856) 234 5505
WD	132	Rooftop Wood Flooring	Reclaimed Wood Flooring	TerraMai	White Oak-AMF finish	5/8" x 3"-6" wide x 2'-7' long	White Oak	Or approved equal.	Andy Kjellgren 917 855-9445
WD	134	Sundeck	ipe	Handy Deck	Ipe Pavers	24"x24"	Ipe	Or approved equal.	Handy Deck 1 866 206 8316.
WD	135	Pool Doors	Teak	By GC	--	Refer to dwg.	Oiled	Refer to RW2 approved control sample. Or approved equal.	--
METAL-AMENITY FLOORS									
MT	100	1st Floor Lobby Base Trim	Brass	By GC	--	Refer to dwg.	Brushed Unlaquered	Refer to RW2 approved control sample. Or approved equal.	--
MT	101	1st Floor-Celing Roulon Supports	Black Painted Steel	By GC	--	Refer to dwg.	Black	Refer to RW2 approved control sample. Or approved equal.	--
MT	102	Metal Door Frames	Metal	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
MT	103	Climbing Wall Walkway	Metal Grating	By GC	P.isa	Refer to dwg.	Stainless Steel	Refer to RW2 approved control sample. Or approved equal.	--
MT	104	Stairwell Fencing	Metal	Howard Wire	Welded Mesh	2" x .250" Wire Welded	Stainless Steel	Powdercoated by third party Tiger Drylac- Railing Black	Shana Lane 510) 887-8787
MT	105	Stairwell Walls	Metal	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
MT	107	3rd/Rooftop Metal Trims	Metal	By GC	--	Refer to dwg.	Burnished Aluminum	Refer to RW2 approved control sample. Or approved equal.	--
NETTING-AMENITY FLOORS									
NT	100	Seating Wall- Climbing Zone	Netting	Barrry Divisions	Knotless Netting	Refer to dwg.	TBD	Refer to RW2 approved control sample. Or approved equal.	--
PLASTER-AMENITY FLOORS									
PL	100	Pool Walls	Plaster	By GC	--	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal.	--
WALLCOVERING-AMENITY FLOORS									
WC	100	Gym Wall Pads	Vinyl	Majalite	JXAWM3V-Q22	--	Claret Attache	Upholstered panels by others	978.441.6800
WC	101	Crash Room Walls	Fabric	Mood Frabics	FC25769		Denim	Refer to RW2 approved control sample. Or approved equal.	(212) 730-5003
WC	102	Lobby Reception	Printed Wallpaper	Aztec Wallcovering	Custsom	--	TBD	Refer to RW2 approved control sample. Or approved equal.	

110 manhattan west - sw residential tower
equipment INDEX
(see rw studio plans and elevations for additional information)

9/30/2014

CODE		APPLICATION	DESCRIPTION	MANUFACTURER / VENDOR	PRODUCT NAME / NUMBER	SIZE	FINISH/COLOR	REMARKS	CONTACT
EQUIPMENT-AMENITY									
EQ	100	Gym Walls	Gym Wall Racks	Artimex Sporting Equipment	TBD	Standard	Oak	Or approved equal.	Bruce Bickford (888) 983-4095
EQ	102	Locker Rooms	Lockers	Hollman Athletic Lockers	TBD	Custom	Red Oak Veneer	Or approved equal.	972.815.4000
EQ	103	Climbing Wall	Plywood	Entre Prises	Mozaik	Custom	Gray-#3716	To be coordinated with La Palestra for configuration of climing routes. Vinyl padding required @ floor. Or approved equal.	Allison Osantowske 541.388.5465
EQ	104	Mailroom Units	Metal	XPB Locker	[XPB-2016]	16 units	Custom Color	Powdercoated to match Sherwin Williams Sample provided by RW2. Or approved equal	Patty Holland 877 483 9270
EQ	105	Mailroom Units	Metal	XPB Locker	[XPB-2016]	16 units	Custom Color	Powdercoated to match Sherwin Williams Sample provided by RW2. Or approved	Patty Holland 877 483 9270
EQ	106	Mailroom Units	Metal	XPB Locker	[XPB-2016]	15 units	Custom Color	Powdercoated to match Sherwin Williams Sample provided by RW2. Or approved equal	Patty Holland 877 483 9269
EQ	107	Baby Change Table	Plastic	tbd	tbd	tbd	tbd	tbd	tbd
EQ	108	Kids Playroom Equipment/Blocks	Plastic/Wood	tbd	tbd	tbd	tbd	tbd	tbd
EQ	109	Arcade Video Games	Aracde Games	tbd	tbd	tbd	tbd	tbd	tbd
EQ	110	Indoor Fireplace	Fireplace	Focus	Gyro Focus	one size	Black matte-Standard finish	--	CF+D Custom Fireplace Burlington, Canada 905 681 30 70
EQ	111	Exterior Fire Pit	Fireplace	Thos Baker	SKU: #BT.1030SQ	30w 30d 19.5h	Cor-ten Steel	--	877.855.1900

110 manhattan west - sw residential tower
Amenity MATERIALS INDEX
(see rw studio plans and elevations for additional information)

8/10/2014

CODE		APPLICATION	DESCRIPTION	MANUFACTURER / VENDOR	PRODUCT NAME / NUMBER	SIZE	FINISH/COLOR	REMARKS	CONTACT
CARPET-APARTMENT FLOORS									
CPT	100	Corridor Floors	Wall to Wall Carpeting	TBD	--	Refer to dwg.	Custom pattern	Refer to FF&E specifications. Or approved equal.	--
CERAMIC TILE-APARTMENT FLOORS									
CT	100	Affordable Unit Kitchen - Wall @ Cooktop	Ceramic Tile on Mesh with 1/8" Grout Stacked Bond	Design and Direct Source	Modena	2" X 4"	Charcoal Glossy	Or approved equal.	Suzanne Sanning 503.525.0600
CT	101	Affordable Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	NT320(1)	3/4" Penny rounds	Cream	Or approved equal.	Ilene 646.638.0444
CT	102	Affordable Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	SD-240(2)	3/4" Penny rounds	Light Blue	Or approved equal.	Ilene 646.638.0444
CT	103	Affordable Unit Bathroom - Floor	Ceramic Tile	Design and Direct Source	Modern Spectrum Anti-Slip	4"x8"	Ivory	Or approved equal.	Suzanne Sanning 503.525.0600
CT	104	Market Unit Kitchen - Wall @ Cooktop	Ceramic Tile on Mesh with 1/8" Grout Stacked Bond	Design and Direct Source	Modena	2" X 4"	Charcoal Glossy	Or approved equal.	Suzanne Sanning 503.525.0600
CT	105	Market Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	NT320	3/4" Penny rounds	Cream	Or approved equal.	Ilene 646.638.0444
CT	106	Market Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	SD-240	3/4" Penny rounds	Light Blue	Or approved equal.	Ilene 646.638.0444
CT	108	Premium Unit Kitchen - Wall @ Cooktop	Ceramic Tile on Mesh with 1/8" Grout Stacked Bond	Design and Direct Source	Heritage Tile- Santos	2" X 4"	Grey / Glossy	Or approved equal.	Suzanne Sanning 503.525.0600
CT	109	Premium Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	NT320	3/4" Penny rounds	Cream	Or approved equal.	Ilene 646.638.0444
CT	110	Premium Unit Bathroom - Walls	Ceramic Tile	Chelsea Arts Tile & Stone	SD-240	3/4" Penny rounds	Light Blue	Or approved equal.	Ilene 646.638.0444
CT	111	All Units- Closet Floor	Quarry Tile	Daletile	0Q42	6" x 6"	Arid Flash	Or approved equal.	Rachel Hannur 212.471.0256
CT	112	Market Bathroom -Floor	Ceramic Tile	Design and Direct Source	Modern Spectrum Anti-Slip	4" x 8"	Ivory	Or approved equal.	Suzanne Sanning 503.525.0600
CERAMIC TILE-AMENITY FLOORS									
CT	113	Gym Walls	Ceramic Tile	Subway Ceramics	Subway tile	3x6	Garnet Glaze	Or approved equal.	subwayceramics.com 708-919-1600
CT	114	Gym Walls	Ceramic Tile	Subway Ceramics	Subway tile	3x6	Avalon white	Or approved equal.	subwayceramics.com 708-919-1601
CT	115	Gym Walls	Ceramic Tile	Subway Ceramics	Subway tile	TBD	white	Or approved equal.	subwayceramics.com 708-919-1602
CT	116	Gym Walls	Ceramic Base Tile	Subway Ceramics	Subway tile	TBD	white	Or approved equal.	subwayceramics.com 708-919-1603
CT	117	Swimming Pool and Jacuzzi	Ceramic Tile	Daltile	Glazed Wall Tile	2"x2"	Ocean Blue Q049	Or approved equal.	Rachel Hannur 212.471.0256
CT	118	Locker Room Tile	Ceramic Tile	American Olean	Unglazed Ceramic Mosaic	1"x1"	Charcoal A33	Or approved equal.	(718) 353-5554
CT	119	Shower Design Tile	Ceramic Tile	American Olean	Unglazed Ceramic Mosaic	1"x1"	Red R26	Or approved equal.	(718) 353-5555
CT	120	Kids Playroom Bathroom	Ceramic Tile	American Olean	Unglazed Ceramic Mosaic	1"x1"	Storm Gray A40	Or approved equal.	(718) 353-5556
CT	121	Locker Room Wall Tile	Ceramic Tile	American Olean	Unglazed Ceramic Mosaic	1"x1"	Charcoal A33	Or approved equal.	(718) 353-5557
CT	122	Pool Deck	Porcelain Tile	Porcelanosa	URBATEK-NEO	23 5/8" x 11 6/8"	Beige-Texture Finish	Or approved equal.	Nadia Kovynyova 917 756 4186
CT	123	Janitor Closet Floor	Quarry Tile	Daletile	0Q41	6" x 6"	Arid Flash	Or approved equal.	Rachel Hannur 212.471.0255
CORK-AMENITY FLOORS									
CK	100	Kids Playroom Floor	Cork Flooring	Duro Design	Marmol Collection	Plank 12"x36"	Paprika	Or approved equal.	Duro Designs (888) 528-8518
CK	101	Kids Playroom Floor	Cork Flooring	Duro Design	Marmol Collection	Plank 12"x36"	Mustard Yellow	Or approved equal.	Duro Designs (888) 528-8519
CK	102	Kids Playroom Floor	Cork Flooring	Duro Design	Marmol Collection	Plank 12"x36"	Infinity Blue	Or approved equal.	Duro Designs (888) 528-8520
CK	103	Kids Playroom Floor	Cork Flooring	Duro Design	Marmol Collection	Plank 12"x36"	Moka	Or approved equal.	Duro Designs (888) 528-8521
CK	104	General Flooring	Cork Flooring	Duro Design	Marmol Collection	Plank 12"x36"	Natural	Or approved equal.	Duro Designs (888) 528-8522
GLASS-APARTMENT FLOORS									
GL	100	Premium Unit Bathroom - Shower Doors	Clear Tempered Glass	By GC	--	3/8" TH.	--	Or approved equal.	--
GLASS-AMENITY FLOORS									
GL	101	2nd Floor Gym	Interior Horizontal	Bendheim	I-60 LINIT tempered	Refer to dwg.	--	Refer to RW2 approved control sample. Or approved equal	Sandra McDonald
GL	102	1st Floor Gym	Clear Mirror	By GC	--	3/16"	--	Or approved equal.	--
GL	103	Locker Rooms	Clear Mirror	By GC	--	3/16"	--	Or approved equal.	--
PAINT-APARTMENT FLOORS									
PT	100	All Units - Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Flat	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	101	All Units - Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	102	All Units - Base Trim	Oil Base Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-123 Bravarian Cream / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	103	All Units - Interior Doors	Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-56 Moonshine / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	104	Bathroom (All Units) - Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	105	Bathroom (All Units) - Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Semi-Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	106	Elevator Lobby and Corridor - Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-31 Fog Mist / Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	107	Elevator Lobby and Corridor - Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-31 Fog Mist / Flat	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	108	Corridor - Door Exterior	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-56 Moonshine / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	109	Corridor - Base Trim	Oil Base Contract Grade Paint	Benjamin Moore	Color Preview	--	Black / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	110	Metal Doors and Trims	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	111	All Units - Millwork	Oil Base Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-123 Bravarian Cream / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	112	Corridor Trims	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	OC-17 White Dove / Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	113	Elevator Lobby - Wall Paneling	Oil Base Contract Grade Paint	Benjamin Moore	Color Preview	--	2126-20 Racoon Fur / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PAINT-AMENITY FLOORS									
PT	110	1st floor-Lobby Columns	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD-Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	115	1st Floor-Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD-Satin	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	116	1st Floor-Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD-Flat	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	118	1st Floor-Bike Shop Wall	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	119	Base/Door trims	Oil Base Contract Grade Paint	Benjamin Moore	Color Preview	--	Black / Gloss	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	120	2nd floor-Gym Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	121	Security Reception	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	122	Kids Playroom Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	123	Kids Playroom Restroom Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	124	Fitness Studio Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	125	Stairwell Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	126	Gym	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	127	Library Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	128	Crash Pad Walls	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	129	Wall Reveal	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	131	Column Fitness Studio	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD-With Glaze	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	132	Lobby Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	Black Bean Soup	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	133	Mailroom Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	134	Basketball Court Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	135	Third Floor Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	136	62nd Floor Ceiling	Latex Contract Grade Paint	Benjamin Moore	Color Preview	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--
PT	137	Seating Wall- Netting Graphic	Fabric/Material Paint	--	--	--	TBD	GC to submit draw down of color selection to RW2 for review. Or approved equal.	--

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

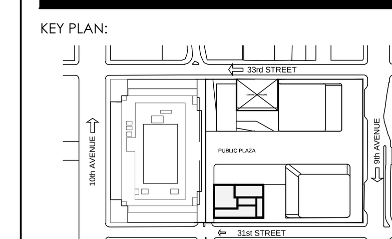
CONSTRUCTION MANAGER:
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
INTERIOR FINISH
& EQUIPMENT LIST

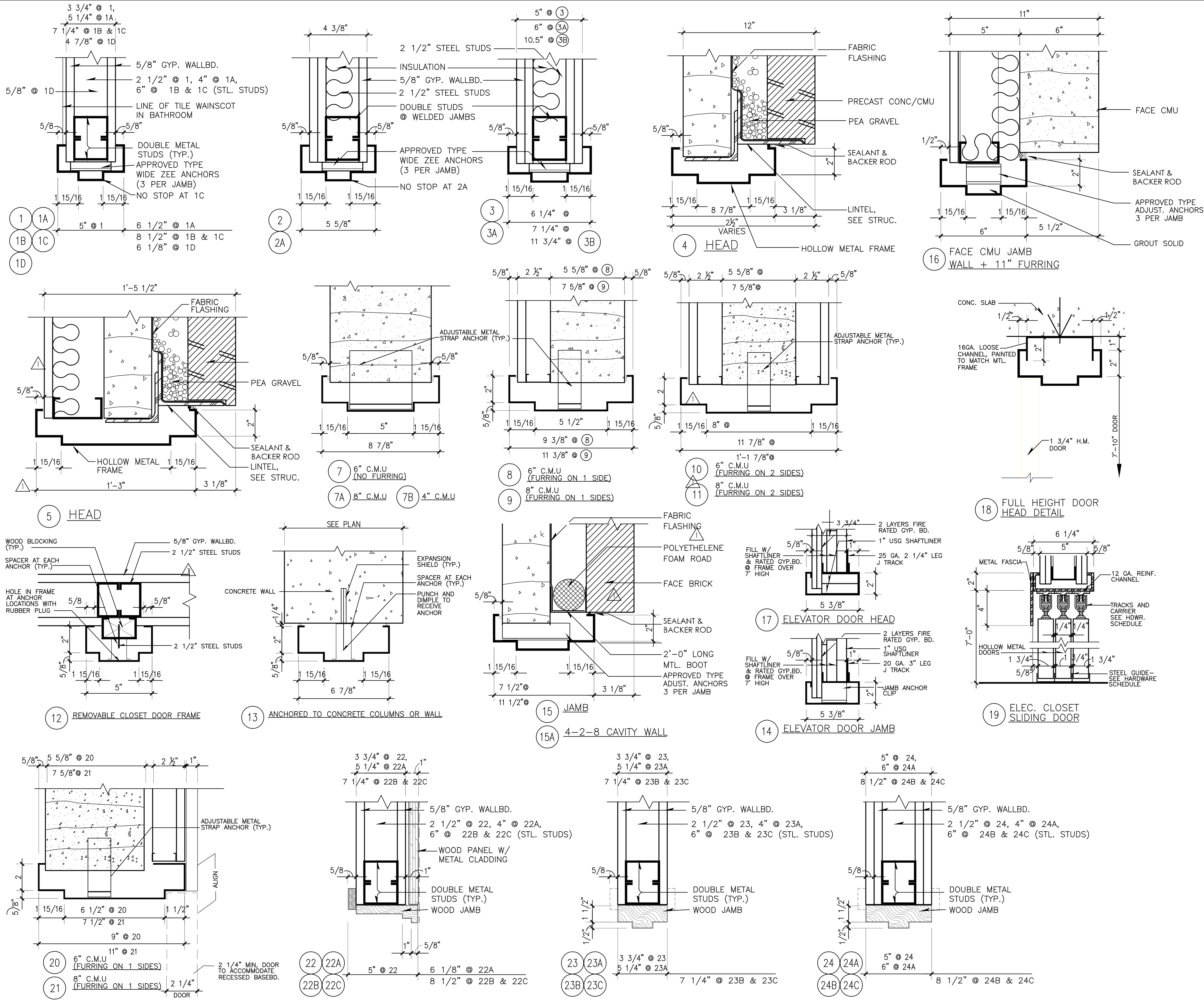
SEAL & SIGNATURE:
REGISTERED ARCHITECT · STATE OF NEW YORK · No. 020741

DATE: -
PROJECT No: 2012-32
DRAWN BY: JCB
CHECKED BY: T.J.F.
DWG. No.:
A-404.00
SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A403-404_Finish Schedule.dwg

DEPT OF BLDGS 121185760 Job Number

ES599436115 Scan Code

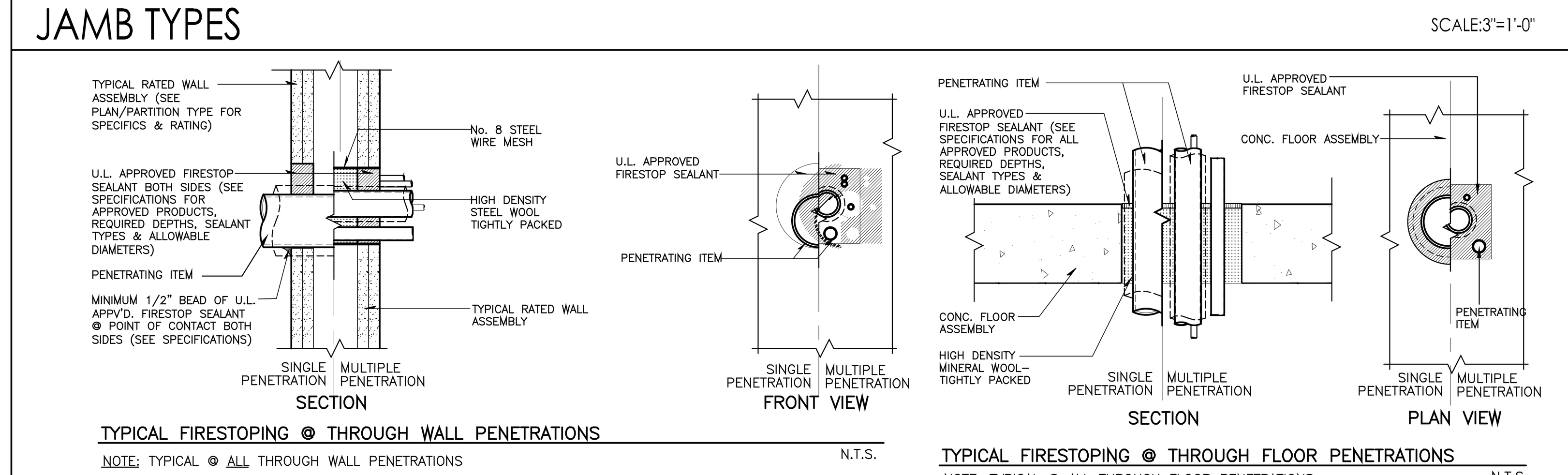


GENERAL NOTE:
1" MIN. UNDERCUT IS REQUIRED FOR 6'-0" W. DOORS OF ALL ELETRICAL CLOSETS AT FLOORS:
9, 12, 15, 18, 21,24, 27, 30, 33, 36, 39 & 41 ONLY.

SECURITY REQUIREMENTS FOR DOORS & WINDOWS:
1008.4.1 ALL MAIN ENTRANCE & EXTERIOR DOORS TO COMPLY (HARDWARE SECUTIRY AND ILLUMINATION LEVELS).
1008.4.2 ALL RESIDENTIAL UNIT ENTRY DOORS TO COMPLY (HARDWARE SECURITY AND VIEWING DEVICE).
1008.4.3 ALL OPERABLE WINDOWS SHALL COMPLY (SASH LOCKS).
1008.4.4 BUILDING SHALL BE PROVIDED WITH INTERCOM SYSTEM BETWEEN EACH DWELLING UNIT AND FULL TIME ATTENDANTS STATION.

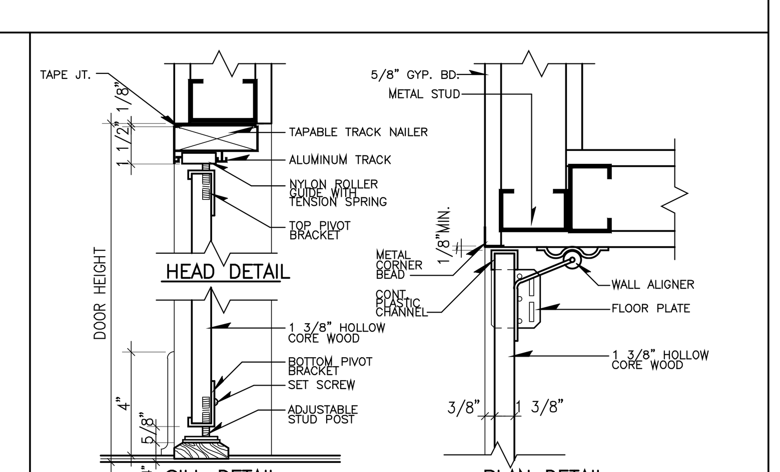
JAMB TYPES

SCALE:3"=1'-0"



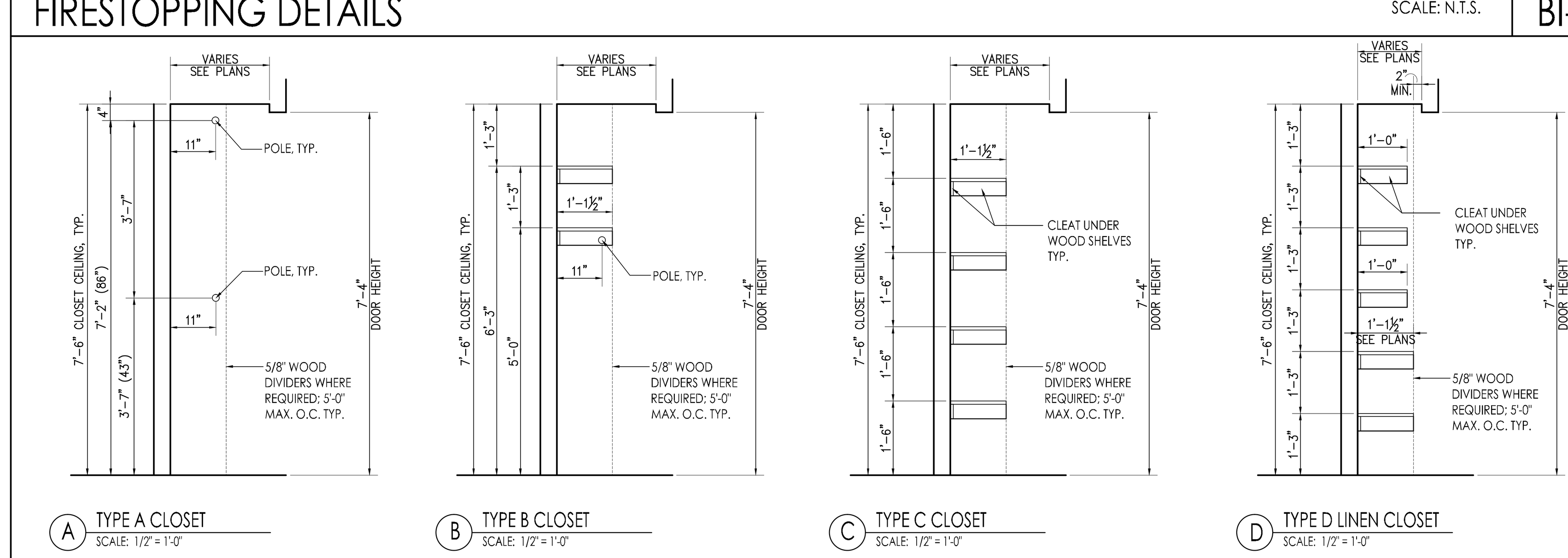
FIRESTOPPING DETAILS

SCALE: N.T.S.

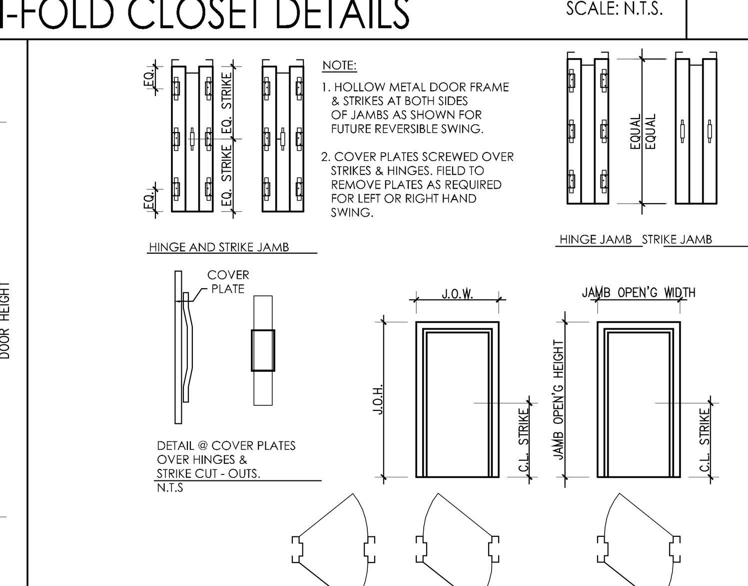


BI-FOLD CLOSET DETAILS

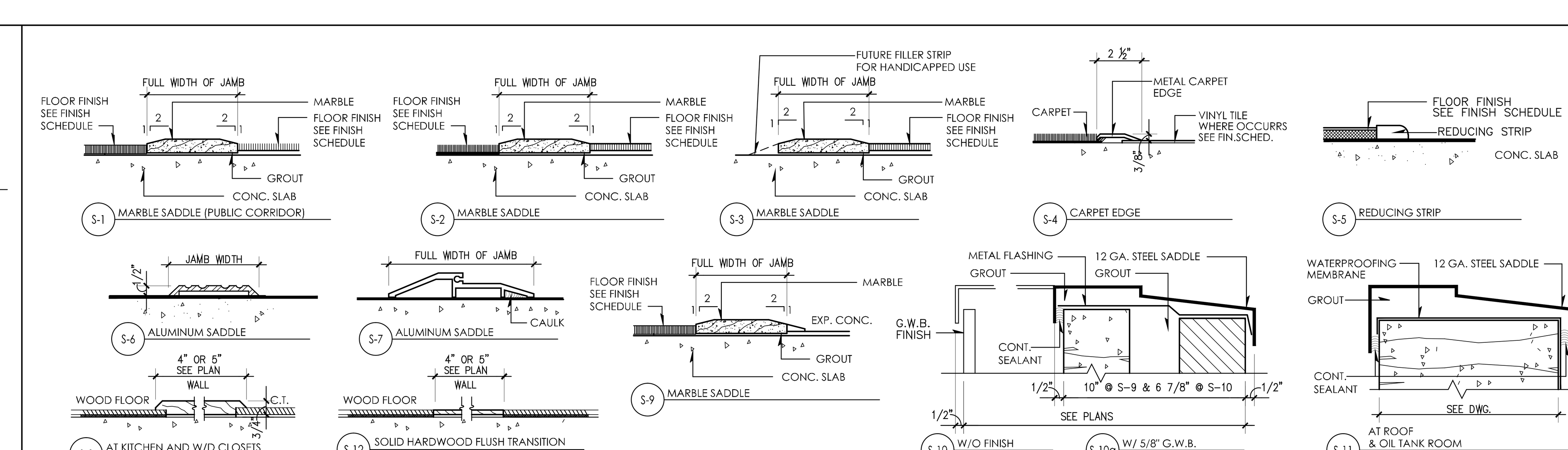
SCALE: N.T.S.



TYP. CLOSET TYPES



FRAME DETAILS



SADDLE TYPES

SCALE: N.T.S.

DOOR SCHEDULE

FLOOR	DOOR NO.	LOCATION	WIDTH	HT.	THICK	MAT.	TYPE	JAMB	SADDLE	FIRE RATING	HDWR	SECURITY	REMARKS
3RD FLOOR	3.01	ELEV. LOBBY TO STAIR A	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.02	ELEV. LOBBY TO MECH. RM.	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.03	PAN./STO.	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	3.04	OFFICE 3	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	3.05	OFFICE 2	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	3.06	OFFICE 1	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	3.07	CONFERENCE RM.	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	3.08	CLOSET	(2)2'-6"	7'-0"	1 3/4"	WD	E1	1D	–	–			
	3.09	CLOSET	(2)2'-6"	7'-0"	1 3/4"	WD	E1	1D	–	–			
	3.10	ELEV. LOBBY TO RES. LEASING OFF.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	3.11	ELEV. LOBBY TO SERVICE HALL	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.12	ELEV. LOBBY TO LIBRARY	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.13	CRASH PAD TO LIBRARY	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.14	LIBRARY TO STAIR B	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.15	ACCESS DOOR	(2)2'-6"	4'-6"	1 3/4"	WD	E1	1D	–	–			
	3.16	ACCESS DOOR	2'-6"	7'-0"	1 3/4"	WD	A1	1D	–	–			
	3.17	LIBRARY TO LOUNGE	(2)3'-0"	10'-0"	*	WD	*	*	–	–			* SEE 2/A-508 & A-706
	3.18	LIBRARY TO LOUNGE	(2)3'-0"	10'-0"	*	WD	*	*	–	–			* SEE 2/A-508 & A-706
	3.19	LIBRARY TO OPEN STAIR	(2)3'-0"	8'-6"	*	WD	*	*	–	–			* SEE 3/A-508 & A-706
	3.20	BALCONY TO ARCADE CORNER	(2)3'-0"	8'-0"	1 3/4"	WD	E1	3	S-9	90 MIN.			
	3.21	CLOSET TO ARCADE CORNER	(2)2'-1"	8'-0"	1 3/4"	WD	E1	3	S-9	90 MIN.			
	3.22	BATHROOM 2 TO ARCADE CORNER	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	3.23	BATHROOM 1 TO ARCADE CORNER	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	3.24	CLOSET TO ARCADE CORNER	(2)2'-1"	8'-0"	1 3/4"	WD	E1	3	S-9	90 MIN.			
	3.25	BUILDING STORAGE	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	3.26	CORRIDOR TO ARCADE CORNER	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	3.27	ARCADE CORNER TO GAME RM.	(2)3'-0"	8'-0"	1 3/4"	WD	E1	3A	S-9	90 MIN.			SEE 9/A-508
	3.28	ELEV. LOBBY TO STAIR A	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
4TH THRU 51ST FLOORS (TYPICAL)	T.1	APARTMENT ENTRY	3'-0"	7'-0"	1 3/4"	H.M.	B	3	S-1	90 MIN.			
	T.2	BEDROOM	2'-11"	7'-0"	1 3/4"	WD	L1	23	S-12	–			
	T.3	BATHROOM	2'-11"	7'-0"	1 3/4"	WD	L1	23	S.2	–			
	T.4	WASHER DRYER CLOSET	2(1'-2")	7'-0"	1 3/4"	WD	L2	23	S.8	–			
	T.5	WALK-IN CLOSET/CLOSET	2'-11"	7'-0"	1 3/4"	WD	L1	23	S-12	–			
	T.6A	CLOSET	2'-0"	7'-0"	1 3/4"	WD	L1	23	S-12	–			
	T.6B	CLOSET	2'-6"	7'-0"	1 3/4"	WD	L1	23	S-12	–			
	T.6C	CLOSET (PAIR)	2(1'-6")	7'-0"	1 3/4"	WD	L2	23	S-12	–			
	T.6D	CLOSET (PAIR)	2(2'-0")	7'-0"	1 3/4"	WD	L2	23	S-12	–			
	T.6E	CLOSET (PAIR)	2(2'-4")	7'-0"	1 3/4"	WD	L2	23	S-12	–			
	T.6F	CLOSET (PAIR)	2(2'-6")	7'-0"	1 3/4"	WD	L2	23	S-12	–			
	T.7A	CLOSET BI-FOLD	1'-6"	7'-0"	1 3/4"	WD	N1	*	S-12	–			*SEE DETAIL THIS SHEET
	T.7B	CLOSET BI-FOLD	2'-4"	7'-0"	1 3/4"	WD	N1	*	S-12	–			*SEE DETAIL THIS SHEET
	T.8	PANTRY	1'-6"	7'-0"	1 3/4"	H.M.	L1	23	S-12	–			
	T.9	EGRESS STAIR	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	T.10	SERVICE HALL	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-1	90 MIN.			
	T.11	ELEC. RISERS	2(2'-6")	7'-0"	1 3/4"	H.M.	E	3	S-9	90 MIN.			
	T.12	ELEC./TEL. CLOSET	9'-0"	7'-0"	1 3/4"	H.M.	A	19	S-9	–			
	4.1	MECHANICAL ROOM	4'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	4.2	LAUNDRY ROOM	3'-0"	7'-0"	1 3/4"	H.M.	C1	3	S-1	–			
	4.3	STAIR FROM STAIR VEST.	3'-0"	7'-0"	1 3/4"	H.M.	F	3	–	90 MIN.			
	4.4	ELEV. LOBBY TO STAIR VEST.	3'-0"	7'-0"	1 3/4"	H.M.	F	3	–	90 MIN.			
	4.5	STAIR VEST. TO MECH. RM.	3'-0"	7'-0"	1 3/4"	H.M.	A	3	–	90 MIN.			
	36.1	E.M.R.	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	36.2	TRANSFORMER ROOM	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	36.3	PUMP ROOM	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	36.4	TANK ROOM (ACCESS DOOR)	3'-0"	3'-0"	1 3/4"	H.M.	A	13	–	90 MIN.			WATERPROOF A.D. WITH 4-SIDED FRAME
52ND THRU 61ST FLOORS (PREMIUM TYPICAL)	P.1	APARTMENT ENTRY	3'-0"	7'-6"	1 3/4"	H.M.	B	3	S-1	90 MIN.			
	P.2	BEDROOM	2'-11"	7'-6"	1 3/4"	WD	L1	23	S-12	–			
	P.3	BATHROOM	2'-11"	7'-6"	1 3/4"	WD	L1	23	S.2	–			
	P.4	WASHER DRYER CLOSET	2(2'-6")	7'-6"	1 3/4"	WD	L2	23	S.8	–			
	P.5	WALK-IN CLOSET/CLOSET	2'-11"	7'-6"	1 3/4"	WD	L1	23	S-12	–			
	P.6A	CLOSET	2'-0"	7'-6"	1 3/4"	WD	L1	23	S-12	–			
	P.6B	CLOSET (PAIR)	2(2'-0")	7'-6"	1 3/4"	WD	L2	23	S-12	–			
	P.6C	CLOSET (PAIR)	2(2'-4")	7'-6"	1 3/4"	WD	L2	23	S-12	–			
	P.6D	CLOSET	2'-6"	7'-6"	1 3/4"	WD	L1	23	S-12	–			
	P.7	CLOSET BI-FOLD	1'-6"	7'-6"	1 3/4"	WD	N1	*	S-12	–			*SEE DETAIL THIS SHEET
	P.8	EGRESS STAIR	3'-0"	7'-6"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	P.9	SERVICE HALL	3'-0"	7'-6"	1 3/4"	H.M.	A	3	S-1	90 MIN.			
	P.10	ELEC. RISERS	2(2'-6")	7'-6"	1 3/4"	H.M.	E	3	S-9	90 MIN.			
	P.11	ELEC./TEL. CLOSET	9'-0"	7'-6"	1 3/4"	H.M.	A	19	S-9	90 MIN.			
62ND FLOOR	62.1	STAIR A TO LOUNGE	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	62.2	STAIR B TO CORRIDOR	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	62.3	STAIR B TO TERRACE	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-11	90 MIN.			
	62.4	SERVICE VEST. TO CORRIDOR	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	62.5	SERVICE HALL TO LOUNGE	3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	62.6	DINING RM. B TO CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	62.7	TOILET (H.C.) TO CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	62.8	TOILET (H.C.) TO CORRIDOR	3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	62.9	DINING RM. B TO ELEV. LOBBY	(2)3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	62.10	LOUNGE TO ELEV. LOBBY	(2)2'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	62.11	TOILET (H.C.) TO LOUNGE	3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	–			
	62.12	CLOSET @ DINING RM. A & B	(2)1'-6"	7'-0"	1 3/4"	WD	A1	1	–	–			
	62.13	DINING RM. A TO LOUNGE	(2)3'-0"	7'-0"	1 3/4"	WD	A1	3	S-9	–			
	62.14	LOUNGE TO TERRACE	3'-0"	7'-0"	1 3/4"	WD	A1	3A	S-7	–			*SEE 9/A-511 & 4/A-707
	62.15	LOUNGE TO TERRACE	3'-0"	7'-0"	1 3/4"	WD	A1	3A	S-7	–			*SEE 9/A-511 & 4/A-707
	62.16	CLOSET @ ELEV. LOBBY	(2)1'-4"	7'-0"	1 3/4"	WD	A1	1	–	–			
	62.17	LOUNGE TO ELEV. LOBBY	(2)3'-0"	7'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			180° DOUBLE SWING DOOR
	62.18	LOUNGE TO TERRACE	–	–	–	–	–	–	–	–			STOREFRONT
	62.19	LOUNGE TO TERRACE	–	–	–	–	–	–	–	–			STOREFRONT
	62.20	LOUNGE TO TERRACE	–	–	–	–	–	–	–	–			STOREFRONT
	62.21	LOUNGE TO TERRACE	–	–	–	–	–	–	–	–			STOREFRONT
63RD FLOOR	63.1	STAIR A TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			
	63.2	STAIR A TO VEST.	*	*	*	*	*	*	*	*			* SEE CURTAIN WALL DETAIL
	63.3	MECH RM. TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-6	90 MIN.			
	63.4	SERVICE HALL TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-6	90 MIN.			
	63.5	STAIR B TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			
	63.6	MECH RM. TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-6	90 MIN.			
	63.7	FIRE PUMP RM. TO VEST.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-6	90 MIN.			
	63.8	GENERATOR RM. TO MECH RM.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			
	63.9	GENERATOR RM. TO MECH RM.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			
	63.10	ATS RM. TO MECH RM.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-11	90 MIN.			
	63.11	TRANSFORMER RM. TO MECH RM.	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-6	90 MIN.			
64TH FLOOR	64.1	STAIR B TO COORIDOR	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			
	64.2	STORAGE TO COORIDOR	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	64.3	STAIR A TO ROOF	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-11	–			
	64.4	EMR TO STAIR A	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	64.5	CORRIDOR TO ROOF	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-11	–			
65TH FLOOR	65.1	EMR TO STAIR A	3'-0"	7'-0"	1 3/4"	H.M.	A	7A	S-7	90 MIN.			

FLOOR	DOOR NO.	LOCATION	WIDTH	HT.	THICK	MAT.	TYPE	JAMB	SADDLE	FIRE RATING	HDWR	SECURITY	REMARKS
CELLAR FLOOR	C.01	CORRIDOR TO STAIR B	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.02	P.E. #4-#5 PIT TO ELEV. LOB.	3'-0"	7'-6"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	C.03	P.E. #2-#3 PIT TO ELEV. LOB.	3'-0"	7'-6"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	C.04	CORRIDOR TO PET GROOMING	3'-0"	7'-6"	1 3/4"	H.M.	C.1	9	S-9	–			
	C.05	CLOSET TO PET GROOMING	2(2'-0")	7'-6"	1 3/4"	H.M.	E	1	–	–			
	C.06	TOILET TO PET GROOMING	3'-0"	7'-6"	1 3/4"	H.M.	A	1	S-9	–			
	C.07	STORM WATER TANK	3'-0"	3'-0"	1 3/4"	H.M.	A	13	–	–			ACCESS DOOR
	C.08	CORRIDOR TO STRM WTR TANK	3'-0"+1'-0"	7'-6"	1 3/4"	H.M.	P	7A	–	90 MIN.			
	C.09	COMPACTOR RM. TO CORRIDOR	3'-8"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.10	ELEC. SWITCH RM. TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.11	HOUSE TRAP	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-11	90 MIN.			
	C.12	N.W.P. COMP. A TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			COMPLY WITH CON. ED. STANDARD DTLS & SPECS (C.12–C.16)
	C.13	N.W.P. COMP. B TO COMP. A	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.14	N.W.P. COMP. B TO COMP. C	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.15	N.W.P. COMP. C TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.16	ELEC. SWITCH RM. TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.17	CORRIDOR TO GAS METER RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.18	CORRIDOR TO A/C RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.19	CORRIDOR TO TEL./CABLE RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.20	CORRIDOR TO PUMP RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.21	SECURITY CL. TO CORRIDOR	2(3'-0")	7'-6"	1 3/4"	H.M.	E	7A	–	90 MIN.			
	C.22	CORRIDOR TO BLDG. STO. RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.23	ELEC. CLOSET TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.24	ELEC. CLOSET TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.25	CORRIDOR TO COMPACTOR RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.26	CORRIDOR TO EMPLOYEE LNG.	3'-0"	7'-6"	1 3/4"	H.M.	F	7A	S-9	90 MIN.			
	C.27	CORRIDOR TO STAIR D	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.28	TENANT STO. RM. TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.29	TOILET TO MALE LOCKER	3'-0"	7'-6"	1 3/4"	H.M.	A	1	S-9	–			
	C.30	TOILET TO FEMALE LOCKER	3'-0"	7'-6"	1 3/4"	H.M.	A	1	S-9	–			
	C.31	CORRIDOR TO MALE LOCKER	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.32	J.C. TO CORRIDOR	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.33	CORRIDOR TO FEMALE LOCKER	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.34	CRWL SPACE TO TEN. STO. RM.	3'-0"	6'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.35	CORRIDOR TO TENANT STO. RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.36	CORRIDOR TO COMPACTOR RM.	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	S-9	90 MIN.			
	C.37	STAIR C TO PLENUM	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.38	CORRIDOR TO BOILER RM.	(2)3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.39	EXIST. PLATFORM PLENUM	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.40	EXIST. PLATFORM PLENUM	3'-0"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
	C.41	CORRIDOR TO BOILER ROOM	3'-8"	7'-6"	1 3/4"	H.M.	A	7A	–	90 MIN.			
1ST FLOOR	1.01	STAIR B TO RES. LOBBY	3'-0"	8'-0"	1 3/4"	H.M.	A	3	–	90 MIN.			
	1.02	STAIR B TO RES. LOBBY	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	1.03	MOVE-IN STAGING TO STO.	3'-0"	8'-0"	1 3/4"	H.M.	A	9	S-9	90 MIN.			
	1.04	PLATFORM TO ELEV. LOBBY STO.	3'-0"	8'-0"	1 3/4"	H.M.	C1	9	S-7	–			EXTERIOR DOOR
	1.05	ELEV. LOBBY TO PROP. OFFICE	3'-0"	8'-0"	1 3/4"	H.M.	C1	9	S-9	–			
	1.06	STAIR A TO STREET	–	–	–	–	–	–	–	–			SEE STOREFRONT
	1.07	PACKAGE RM. TO TOILET (H.C.)	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	–			
	1.08	RES. LOBBY TO STREET	–	–	–	–	–	–	–	–			SEE STOREFRONT
	1.09	RES. LOBBY TO STREET	–	–	–	–	–	–	–	–			REVOLVING DOOR
	1.10	RES. LOBBY TO STREET	–	–	–	–	–	–	–	–			SEE STOREFRONT
	1.11	RES. LOBBY TO BIKE ROOM	3'-0"	8'-0"	1 3/4"	H.M.	A	3	–	90 MIN.			
	1.12	RETAIL TO STREET	–	–	–	–	–	–	–	–			SEE STOREFRONT
	1.13	STAIR D TO CELLAR	3'-0"	8'-0"	1 3/4"	H.M.	A	3	–	90 MIN.			
	1.14	STAIR D TO STREET	–	–	–	–	–	–	–	–			SEE STOREFRONT
	1.15	SALLYPORT DRV TO STREET	3'-0"	8'-0"	1 3/4"	H.M.	A	–	–	–			EXTERIOR DOOR
	1.16	SALLYPORT DRV TO DOCK OFF.	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			EXTERIOR DOOR
	1.17	SALLYPORT DRV TO (EL. CL.)	2(3'-0")	8'-0"	1 3/4"	H.M.	E	7A	S-7	–			EXTERIOR DOOR
	1.18	SALLYPORT DRV TO MESSENGER RM.	2(3'-0")	8'-0"	1 3/4"	H.M.	E	7A	S-7	–			EXTERIOR DOOR
	1.19	RES. LOBBY TO RETAIL	2(3'-0")	8'-6"	1 3/4"	H.M.	E	3A	S-7	–			
	1.20	PLATFORM TO RETAIL	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			
	1.21	PLATFORM TO STAIR C	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			
	1.22	PLATFORM TO SECURITY OFFICE	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			
	1.23	TOILET TO RETAIL	3'-0"	8'-0"	1 3/4"	H.M.	A	1D	S-9	–			
	1.24	TOILET TO PLATFORM	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			EXTERIOR DOOR
	1.25	PLATFORM TO BIKE RM.	3'-8"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			EXTERIOR DOOR
	1.26	PLATFORM TO PACKAGE RM.	3'-8"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			EXTERIOR DOOR
	1.27	PLATFORM TO MOVE-IN STAGING	2(3'-0")	8'-0"	1 3/4"	H.M.	E	7A	S-7	–			EXTERIOR DOOR
	1.28	PACKAGE RM. TO MOVE-IN STAGING	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	–	–			
	1.29	RES. LOBBY TO PACK. RM.	3'-0"	8'-0"	1 3/4"	H.M.	A	7A	–	–			
	1.30	ELEV. LOBBY TO LOBBY STO.	2(2'-4"	8'-6"	1 3/4"	H.M.	A	3A	–	–			
	1.31	CLOSET & STORAGE	2(2'-4")	8'-0"	1 3/4"	WD	E1	1D	–	–			
	1.32	OFFICE 1	3'-0"	8'-0"	1 3/4"	H.M.	A	3	–	–			
	1.33	OFFICE 2	3'-0"	8'-0"	1 3/4"	H.M.	A	3	–	–			
	1.34	TOILET (H.C.)	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S3	–			
	1.35	STORAGE #3	2(1'-8")	8'-0"	1 3/4"	H.M.	E	3	–	–			
	1.36	STORAGE #1	2(2'-6")	8'-0"	1 3/4"	H.M.	E	3	–	–			
	1.37	STORAGE #2	2(2'-6")	8'-0"	1 3/4"	H.M.	E	3	–	–			
2ND FLOOR	2.01	CORRIDOR TO STAIR A	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.02	ELEV. LOBBY TO CORRIDOR	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-7	90 MIN.			
	2.03	CORRIDOR TO BIKE RM. #3	3'-8"	8'-0"	1 3/4"	H.M.	A	7A	S-7	–			
	2.04	BLDG. STO. TO OVERBUILD	–	–	–	–	–	–	–	–			STOREFRONT
	2.05	STO. TO FITNESS CENTER	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.06	VEST. TO OVERBUILD	–	–	–	–	–	–	–	–			STOREFRONT (SEE A-318)
	2.07	RECEPTION TO VEST.	3'-0"	8'-0"	1 3/4"	GL/AL.	K1	–	S-7	–			
	2.08	RECEPTION TO CHILDREN'S RM.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	2.09	CLOSET TO CHILDREN'S RM.	3'-0"	8'-0"	1 3/4"	WD	A1	1D	–	–			
	2.10	TOILET TO CHILDREN'S RM.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-2	–			
	2.11	RECEPTION TO FITNESS OFF.	3'-0"	8'-6"	1 3/4"	WD	A1	3	–	–			
	2.12	RECEPTION TO A/V CLOSET	3'-0"	8'-6"	1 3/4"	WD	A1	3	–	–			
	2.13	FITNESS CTR. TO SERVICE HALL	3'-0"	8'-6"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.14	FITNESS CENTER TO STAIR B	3'-0"	8'-6"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.15	BASKETBALL COURT TO FITNESS CTR.	2(3'-0")	8'-6"	1 3/4"	WD	E1	7A	S-7	–			
	2.16	FITNESS CENTER TO STAIR D	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.17	FITNESS CENTER TO CORRIDOR	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.18	CORRIDOR TO BLDG. STORAGE	3'-0"	8'-0"	1 3/4"	H.M.	A	3	S-9	90 MIN.			
	2.19	NOT USED											
	2.20	TOILET (H.C.) TO FITNESS CTR.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.21	TOILET (H.C.) TO FITNESS CTR.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.22	J.C. #2 TO FITNESS CENTER	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.23	FITNESS STUDIO #2	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	2.24	FITNESS STUDIO #3	3'-0"	8'-0"	1 3/4"	WD	A1	3	–	–			
	2.25	J.C. #1 TO FITNESS CENTER	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.26	STORAGE TO FITNESS CENTER	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.27	BASKETBALL COURT TO FITNESS CTR.	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.28	FITNESS CENTER TO BATHROOM 2	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.29	FITNESS CENTER TO BATHROOM 1	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	–			
	2.30	BASKETBALL COURT TO STORAGE	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	2.31	BASKETBALL TO FITNESS STUDIO #1	3'-0"	8'-0"	1 3/4"	WD	A1	3	S-9	90 MIN.			
	2.32	CLOSET (SECURITY)	(2)2'-0"	*	*	WD	A1	–	–	–			* SEE A-507
	2.33	CLOSET (SECURITY)	(2)2'-0"	*	*	WD	A1	–	–	–			* SEE A-507

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

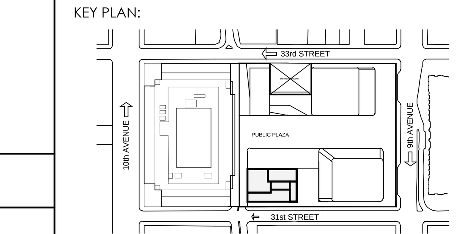
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-09-09	ISSUED FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-03-14	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 0'

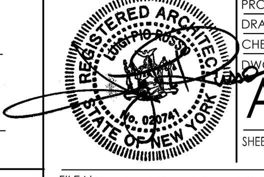
KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
DOOR SCHEDULE

SEAL & SIGNATURE:

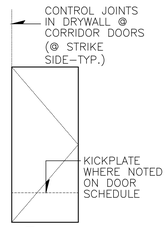


DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DWG. No.:	A-405.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A405_Door Schedule.dwg

DEPT OF BLDGS 121185760 Job Number | 83475457455 Scan Code

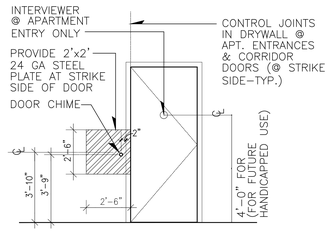
DOOR TYPES:



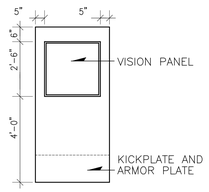
A FLUSH H.M.

A1 FLUSH WD.

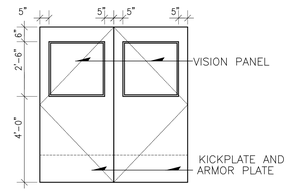
A2 HW W/WD VENEER



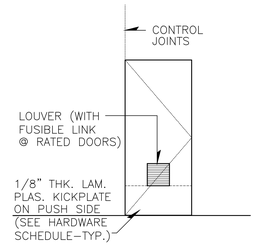
B FLUSH H.M. @ APT. ENTRY



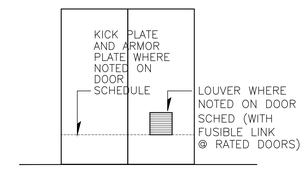
C1 FLUSH H.M. WITH FULL WINDOW



C2 FLUSH H.M. WITH FULL WINDOW

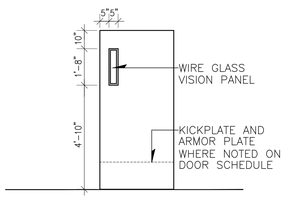


D FLUSH H.M. WITH LOUVER

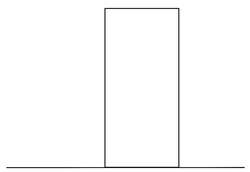


E FLUSH H.M.

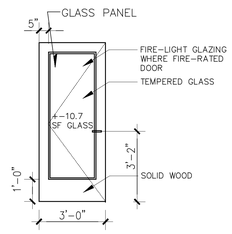
E1 FLUSH WD.



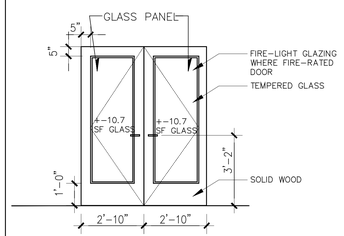
F HOLLOW METAL DOOR WITH RATED GLASS WINDOW



G FLUSH WD DOOR

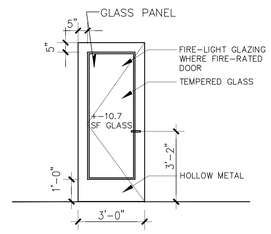


H FLUSH WD SINGLE DOOR W/FULL GLAZING

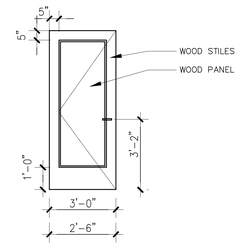


J1 FLUSH WD DOUBLE DR W/FULL GLAZING

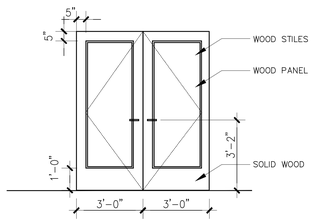
J2 FLUSH WD DOUBLE DR W/FULL GLAZING NON–RATED



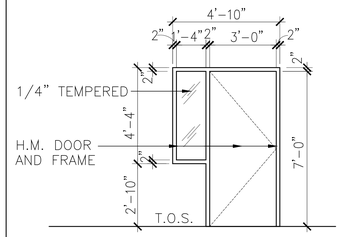
K FLUSH HM SINGLE DOOR W/FULL GLAZING



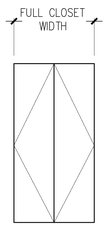
L1 FLUSH WD SINGLE DOOR W/WOOD PANEL



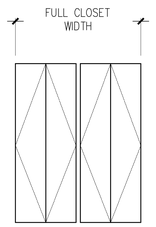
L2 FLUSH WD DOUBLE DR W/WOOD PANEL



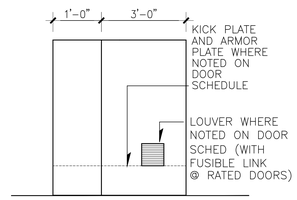
M RES. LAUNDRY ROOM – SUB–CELLAR
H.C. LAUNDRY ROOM – CELLAR



N1 2 PANEL FLUSH WOOD BI–FOLD CLOSET DOOR



N2 4 PANEL FLUSH WOOD BI–FOLD CLOSET DOOR



P FLUSH H.M. (UN–EQUAL LEAVES)

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

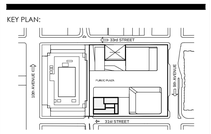
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale:

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

DOOR SCHEDULE

SEAL & SIGNATURE:

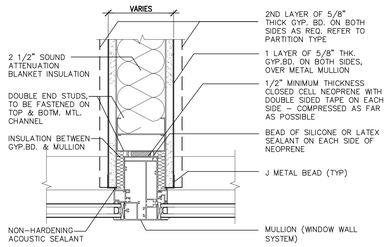
DATE: -
PROJECT No: 2012-32
DRAWN BY: JCB
CHECKED BY: T.J.F.
REV. No.:

A-406.00

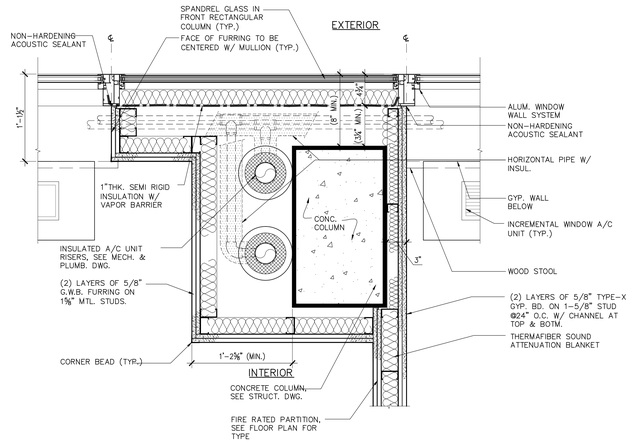
SHEET No.:

FILE No: T:\boofield\brmatter-West (2013-32)\LCFD Drawing\BMW_A406_Door Schedule.dwg

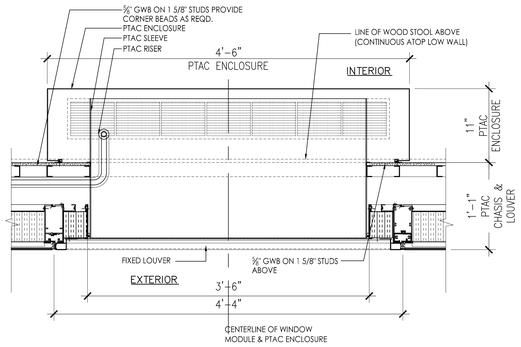
DEPT OF BLDGS 121185760 Job Number
E3620050290115 Scan Code



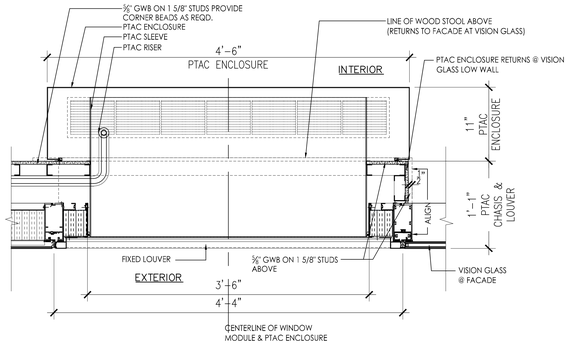
4 PLAN DETAIL @ DEMISING WALL AT WINDOW MULLION
SCALE: 3"=1'-0"



3 PLAN DETAIL @ DEMISING WALL WITH COLUMN AT MECH RISER
SCALE: 1 1/2"=1'-0"



1 PLAN DETAIL @ PTAC UNIT WITH ADJACENT SPANDREL PANEL @ FACADE
SCALE: 1 1/2"=1'-0"



2 PLAN DETAIL @ PTAC UNIT WITH ADJACENT VISION PANEL @ FACADE
SCALE: 1 1/2"=1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

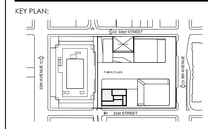
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

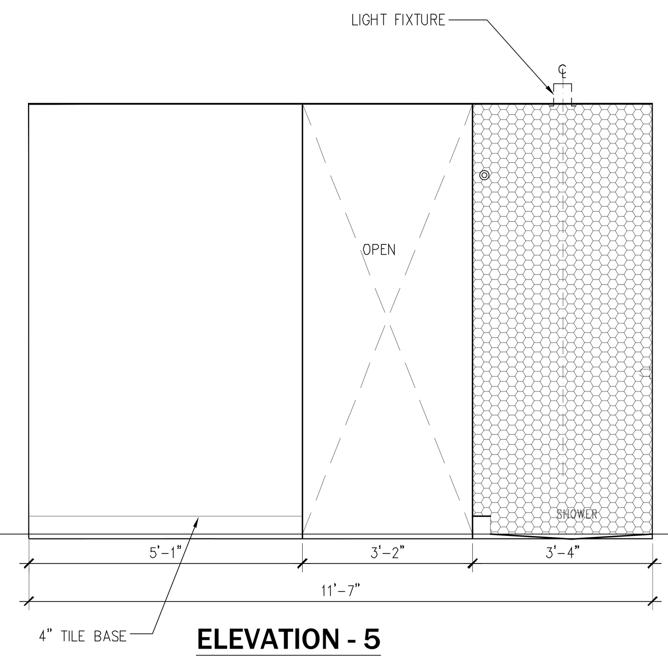
INTERIOR DETAILS

SEAL & SIGNATURE:

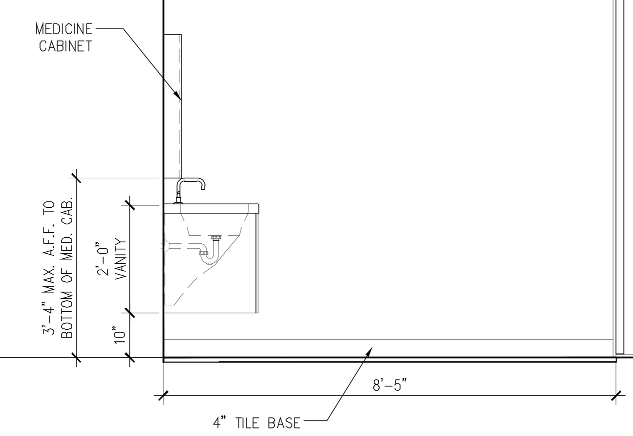
REGISTERED ARCHITECT STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-407.00
SHEET. No.:	1 of 000

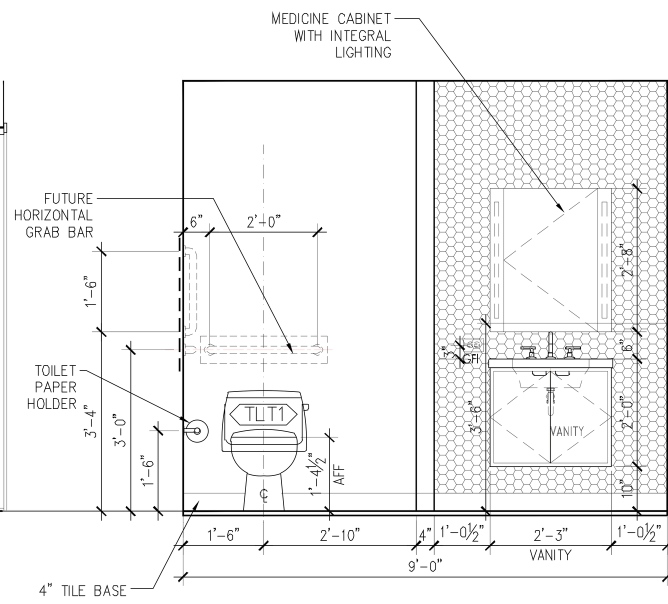
FILE No: T:\brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A401-A403-A407_Partitions



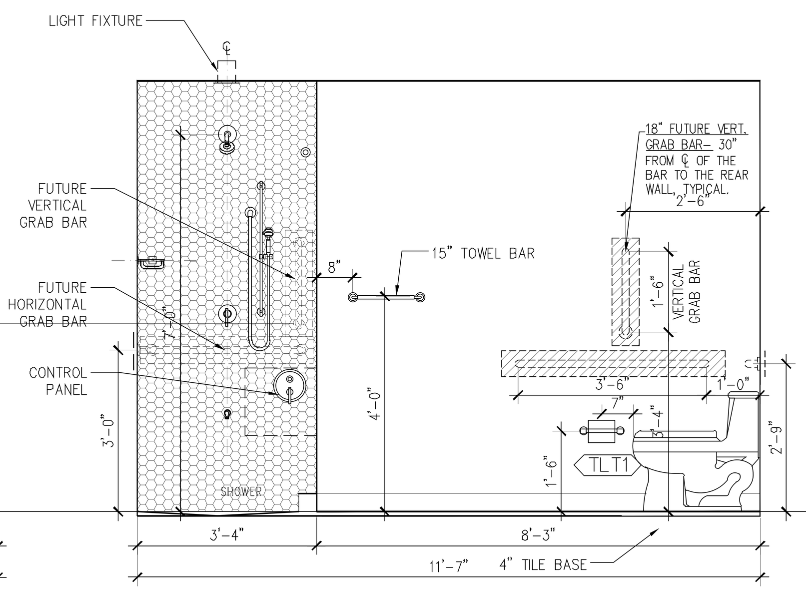
ELEVATION - 5
SCALE: 1/2" = 1'-0"



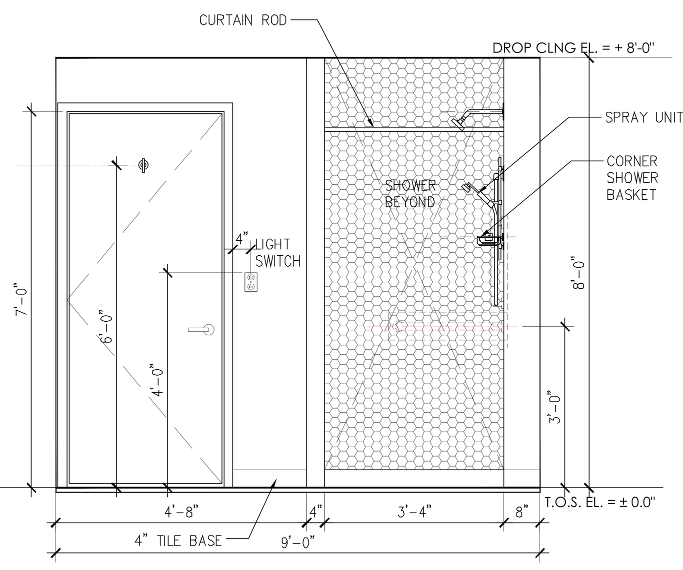
ELEVATION - 4
SCALE: 1/2" = 1'-0"



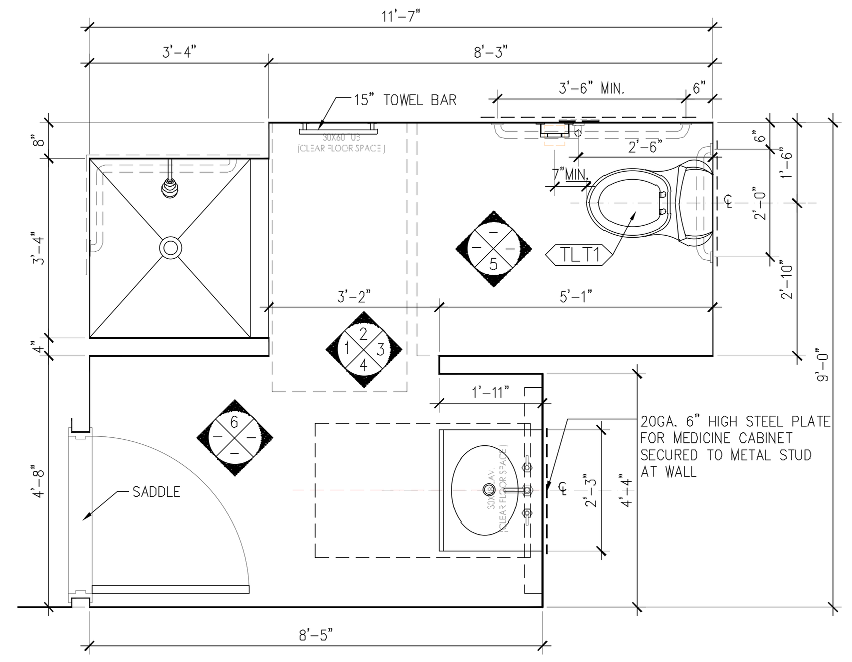
ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"

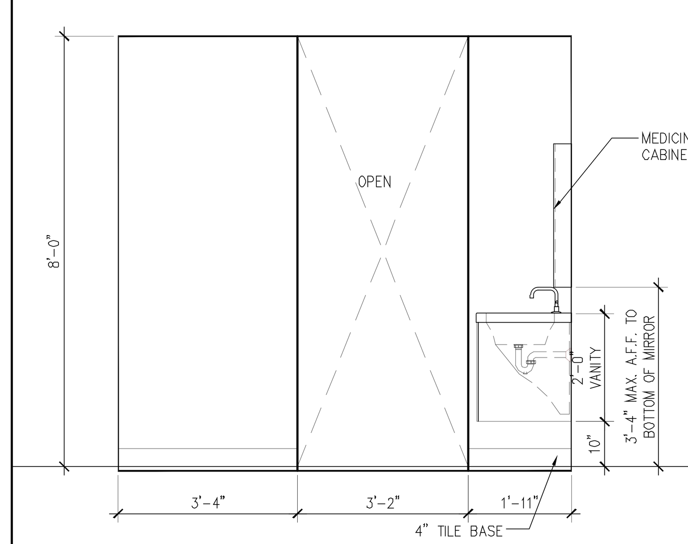


ELEVATION - 1
SCALE: 1/2" = 1'-0"

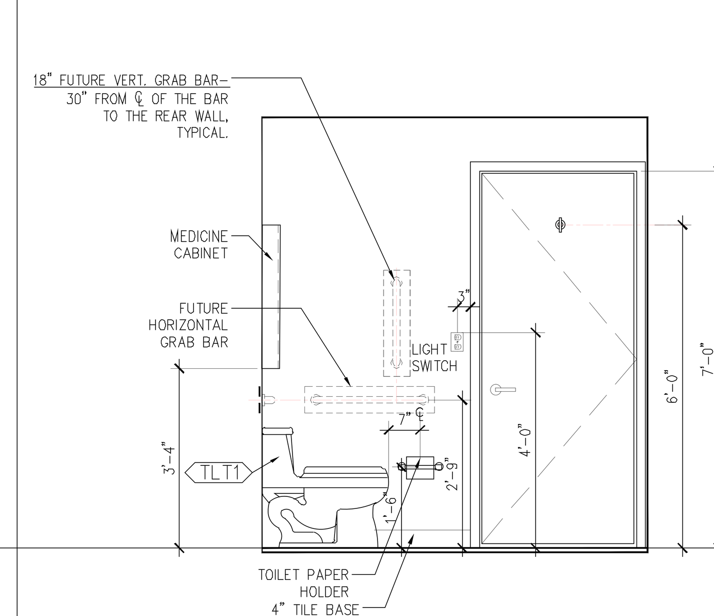


TYPE	FLOORS	APARTMENTS	
B4	37-51	C	

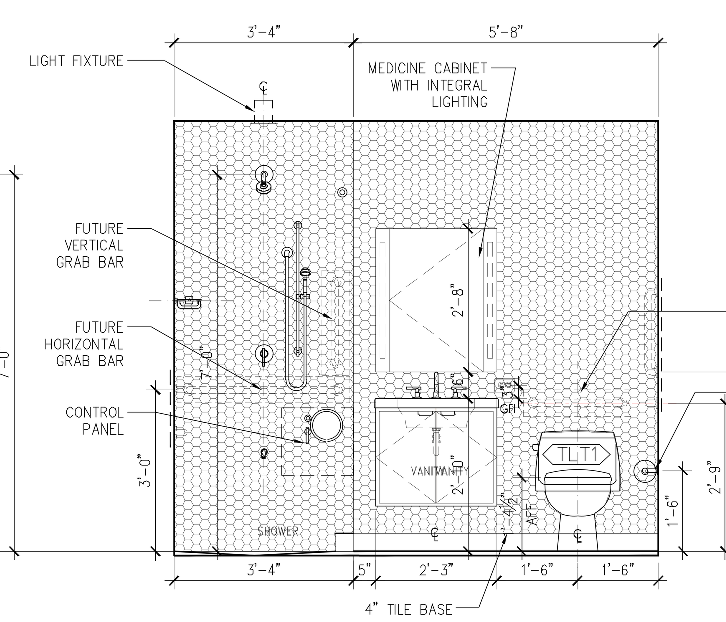
BATHROOM TYPE B4 PLAN
SCALE: 1/2" = 1'-0"



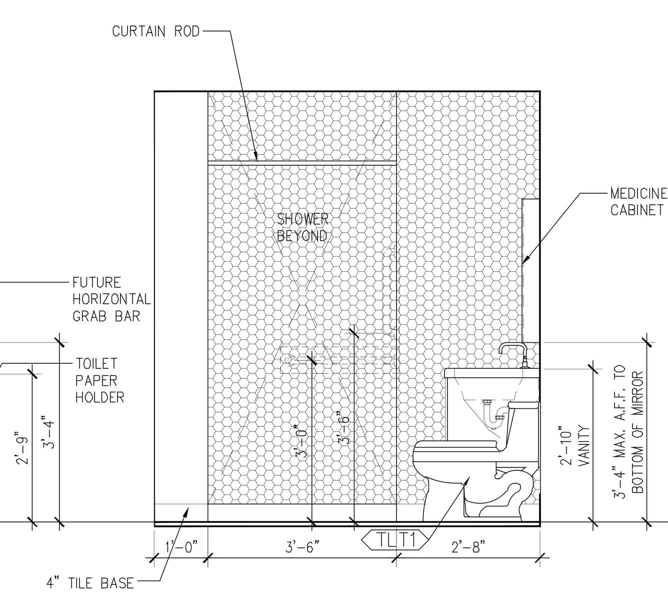
ELEVATION - 6
SCALE: 1/2" = 1'-0"



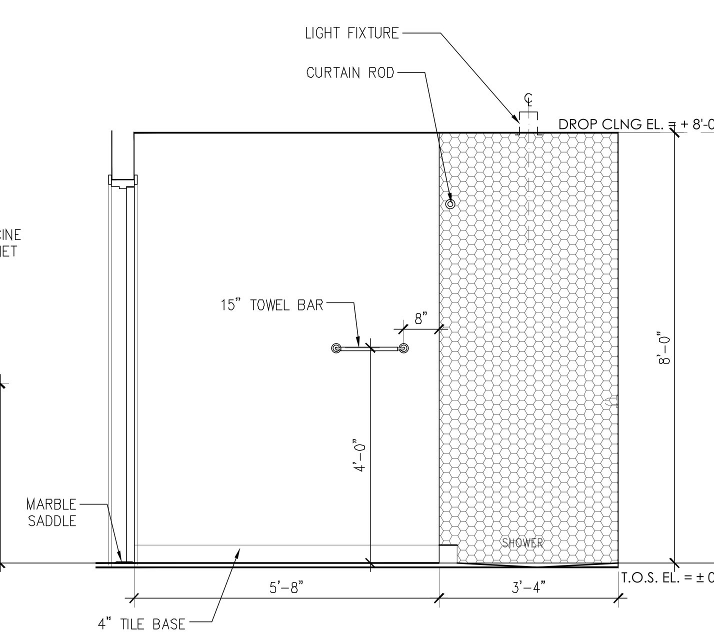
ELEVATION - 10
SCALE: 1/2" = 1'-0"



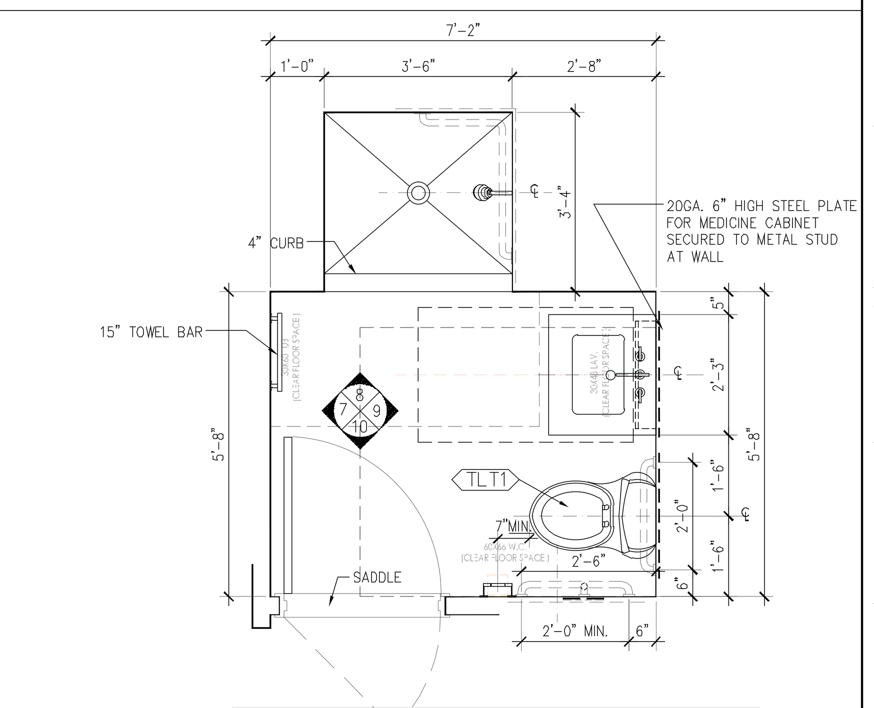
ELEVATION - 9
SCALE: 1/2" = 1'-0"



ELEVATION - 8
SCALE: 1/2" = 1'-0"

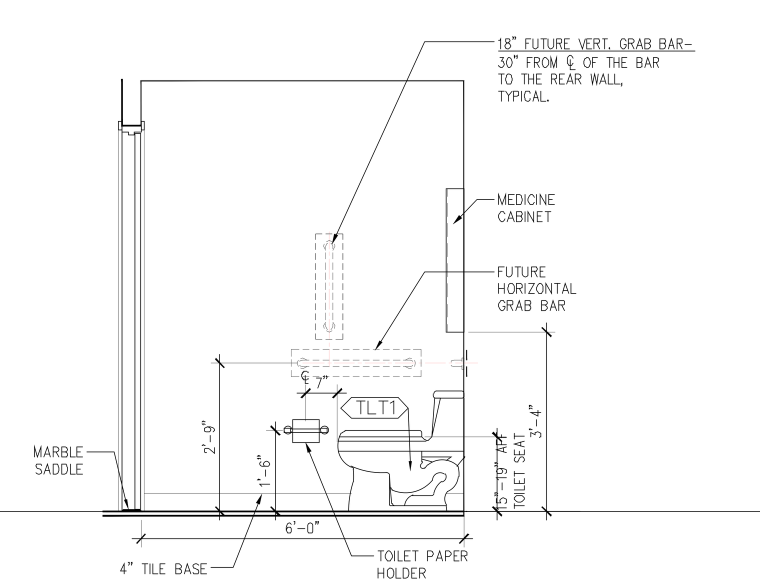


ELEVATION - 7
SCALE: 1/2" = 1'-0"

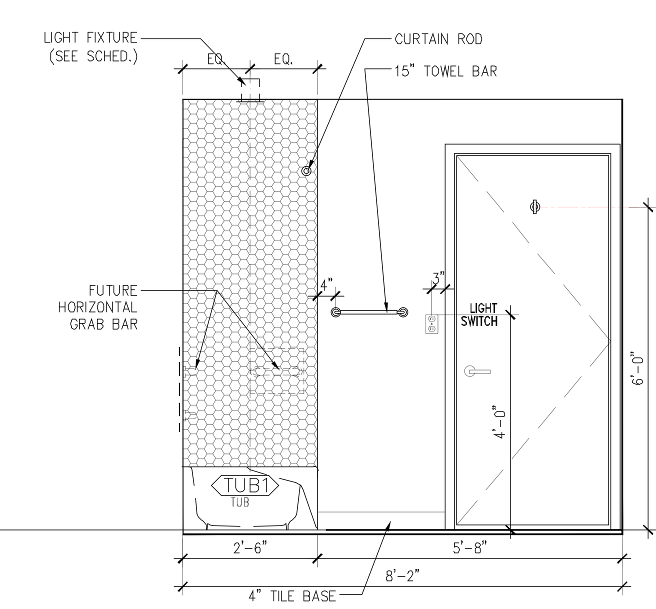


TYPE	FLOORS	APARTMENTS	REMARKS
B3	5-34	C	
	35	C,F,K	
	36	C,F	
	37-51	F	

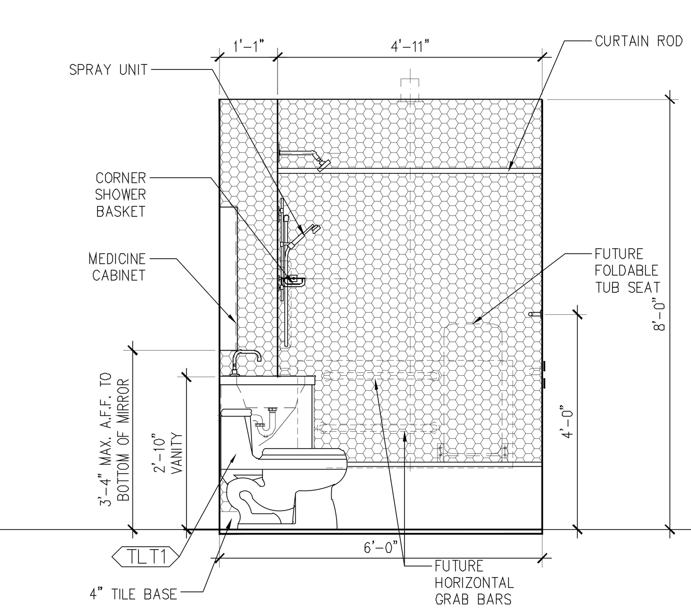
BATHROOM TYPE B3 PLAN
SCALE: 1/2" = 1'-0"



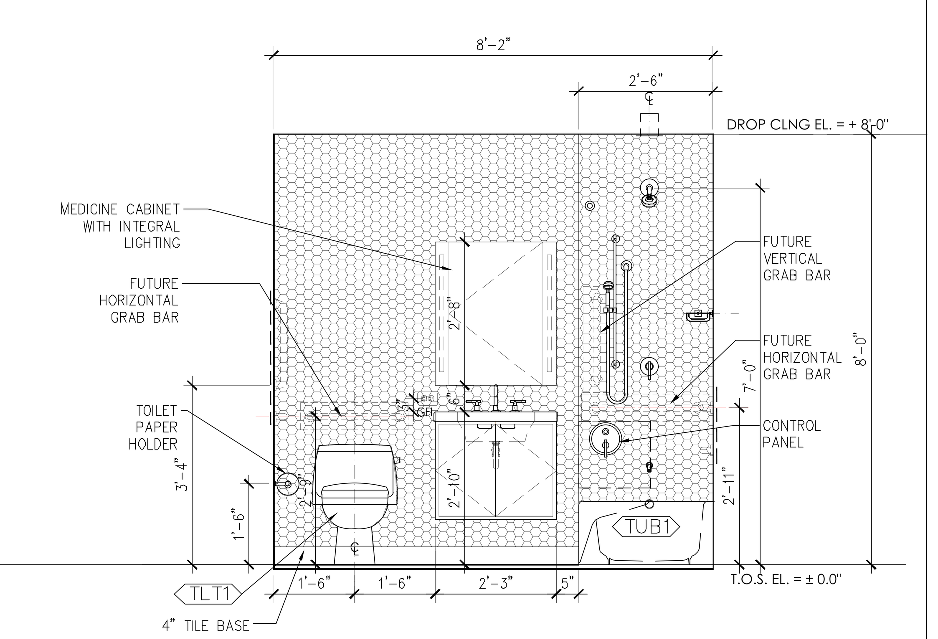
ELEVATION - 14
SCALE: 1/2" = 1'-0"



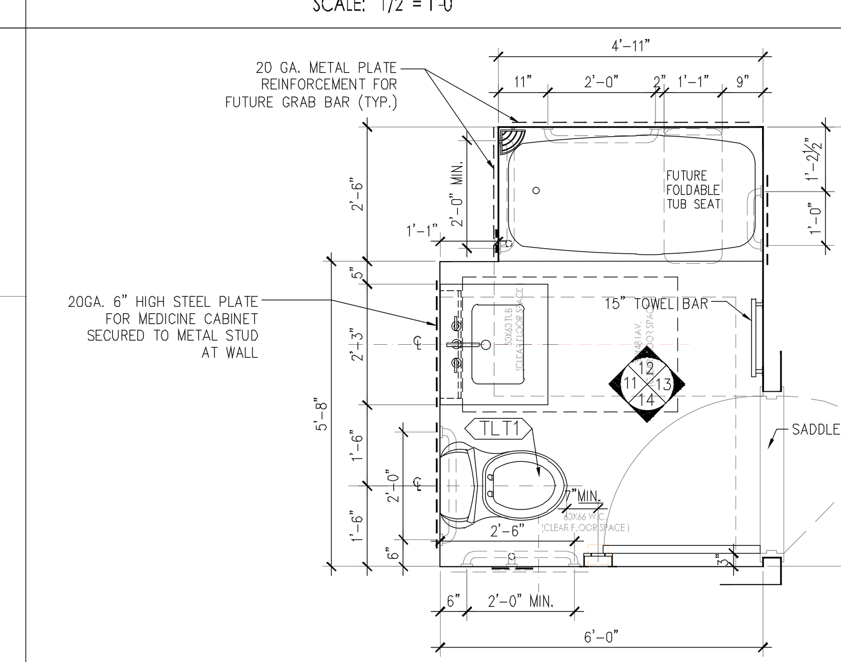
ELEVATION - 13
SCALE: 1/2" = 1'-0"



ELEVATION - 12
SCALE: 1/2" = 1'-0"

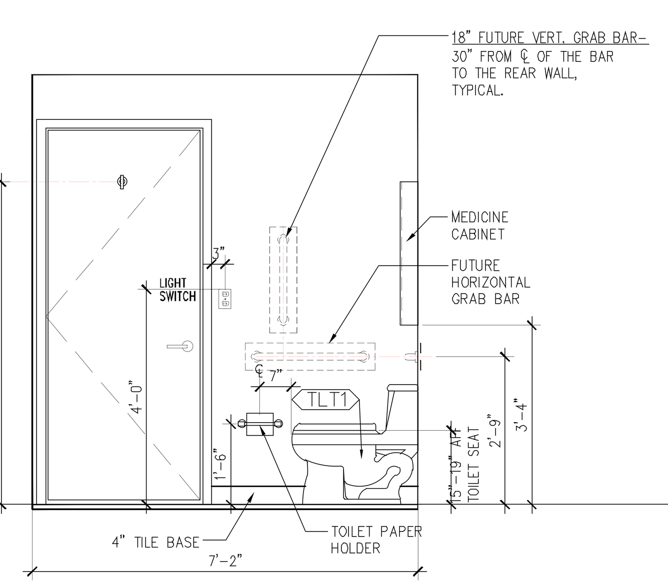


ELEVATION - 11
SCALE: 1/2" = 1'-0"

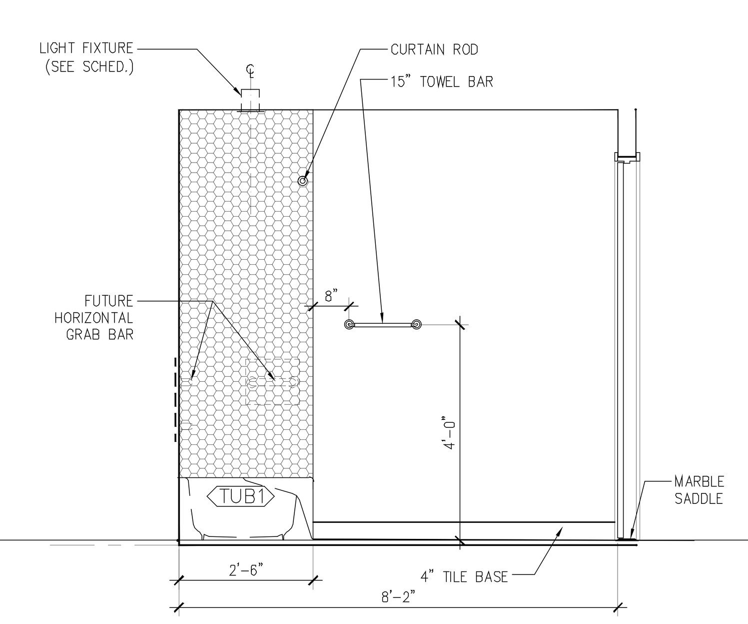


TYPE	FLOORS	APARTMENTS	REMARKS
B2	4	G,H,S,Q,M,N,P	
	5-34	G,H,S,R,M,N,P	
	35	F,G,H,S,R,P	
	36	F,G,H,P	
	37-51	E,F,G,H,J,L,P,Q,S	

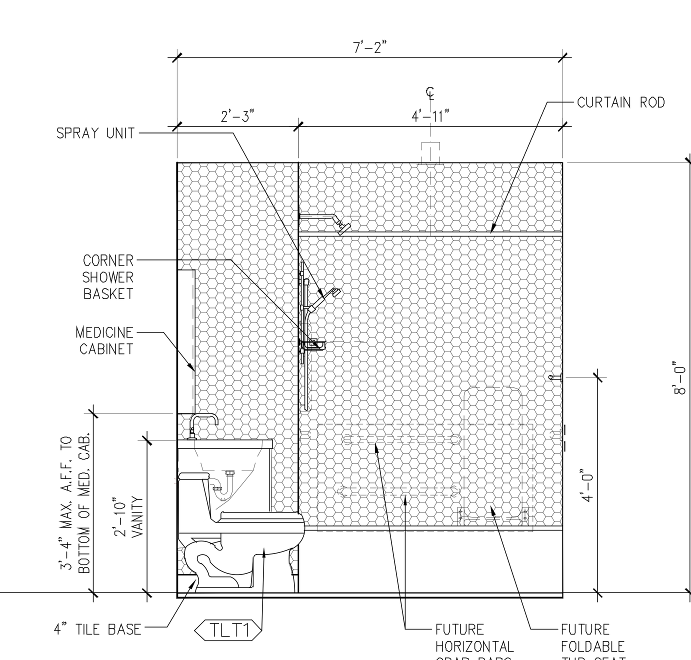
BATHROOM TYPE B2 PLAN
SCALE: 1/2" = 1'-0"



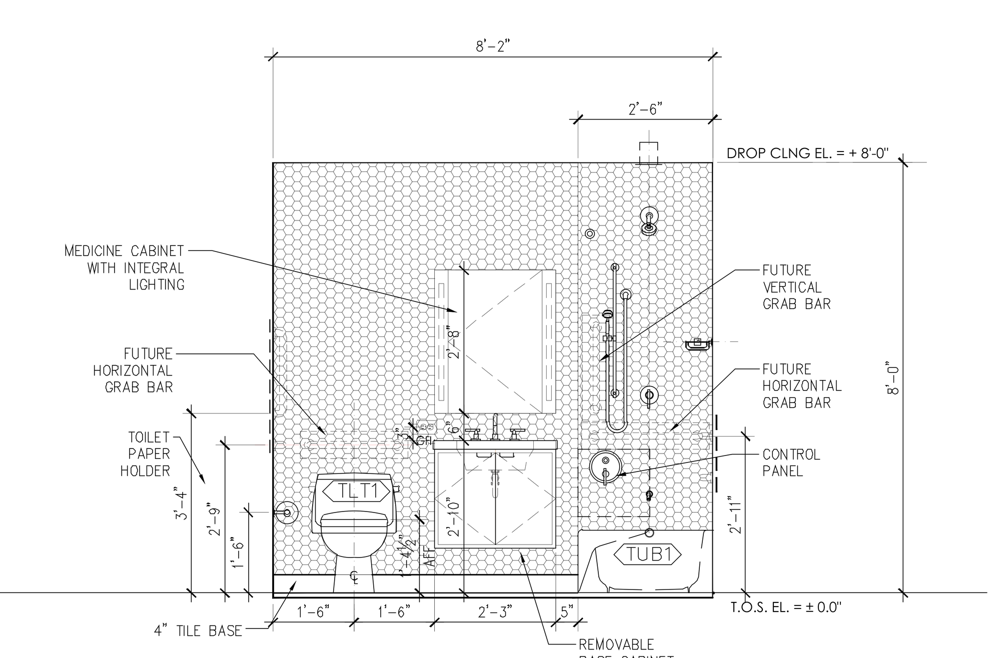
ELEVATION - 18
SCALE: 1/2" = 1'-0"



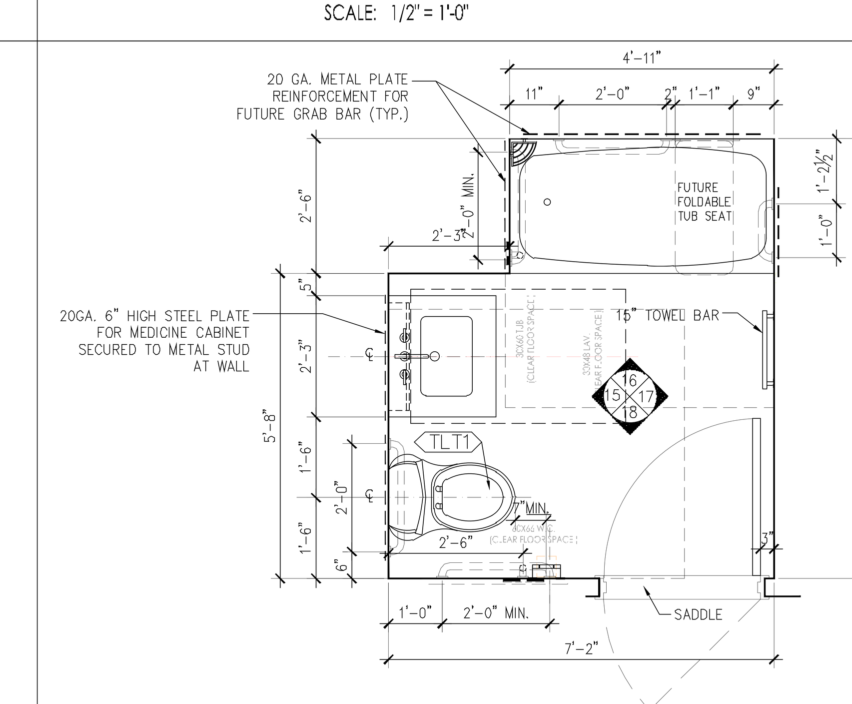
ELEVATION - 17
SCALE: 1/2" = 1'-0"



ELEVATION - 16
SCALE: 1/2" = 1'-0"



ELEVATION - 15
SCALE: 1/2" = 1'-0"



TYPE	FLOORS	APARTMENTS	REMARKS
B1	5-34	B,C,D	
	35	B,C,D,K	
	36	B,C,L	
	37-51	B,C,D	

BATHROOM TYPE B1 PLAN
SCALE: 1/2" = 1'-0"

DEPT OF BLDGS 121185760 Job Number
ES061214949 Scan Code

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

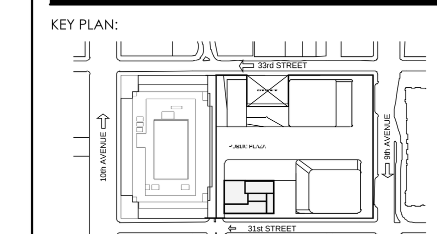
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-09-09	ISSUE FOR CONSTRUCTION
	2014-08-01	90% CONSTRUCTION DOCUMENTS
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	ISSUED FOR FILING
	2014-03-14	DESIGN DEVELOPMENT
	2014-01-24	50% DESIGN DEVELOPMENT
	2014-01-17	ISSUED TO HPD
	2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0' 1' 2' 3' 5'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

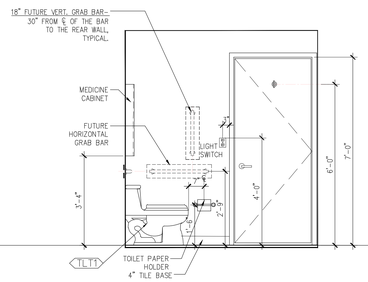
DRAWING TITLE:
BATHROOM DETAIL PLANS AND ELEVATIONS-(MARKET)

SEAL & SIGNATURE:
REGISTERED ARCHITECT STATE OF NEW YORK

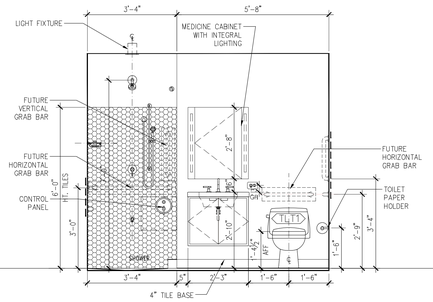
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	A-410.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\S.CE\Drawings\BMW_A410_Bathrooms.dwg

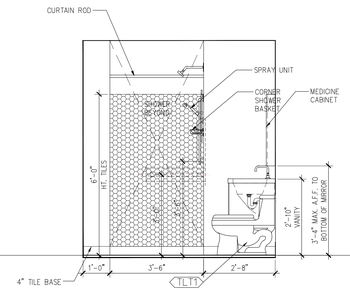
DEPT OF BLDGS 121185760 Job Number
E2500R0107P01 Scan Code



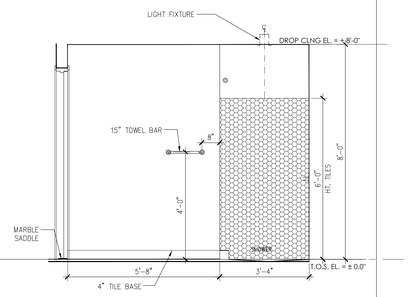
ELEVATION - 4
SCALE: 1/2" = 1'-0"



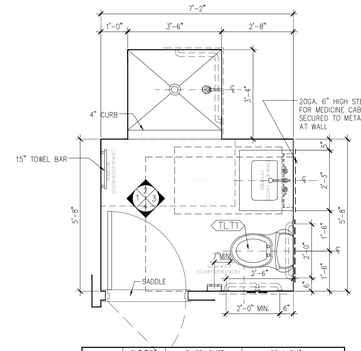
ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"

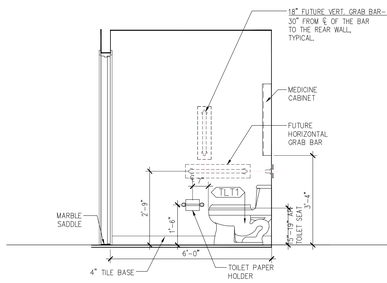


ELEVATION - 1
SCALE: 1/2" = 1'-0"

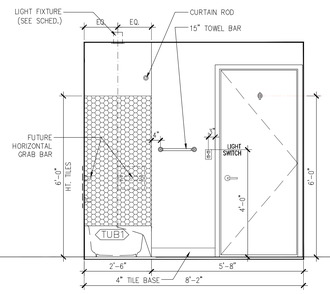


	FLOORS	APARTMENTS	REMARKS
B3a	4	F	
	5-34	F	
	5-6-7	C	

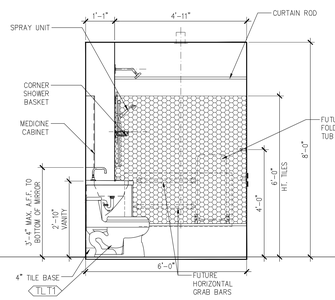
BATHROOM TYPE B3a PLAN
SCALE: 1/2" = 1'-0"



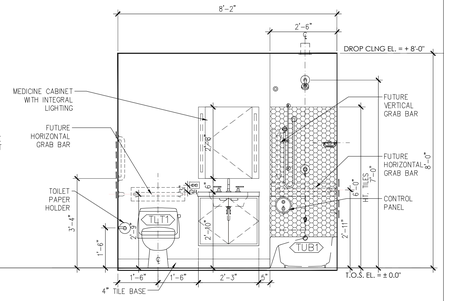
ELEVATION - 8
SCALE: 1/2" = 1'-0"



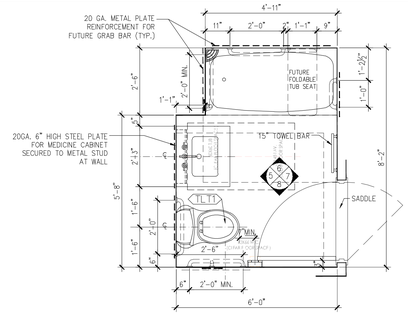
ELEVATION - 7
SCALE: 1/2" = 1'-0"



ELEVATION - 6
SCALE: 1/2" = 1'-0"



ELEVATION - 5
SCALE: 1/2" = 1'-0"



TYPE	FLOORS	APARTMENTS	REMARKS
B2a	4	F,J,L,K	
	5-34	F,J,A,K,L	
	5-6-7	C	
	35	A,J	
	36	A,J,K	
	37-51	A,K	

BATHROOM TYPE B2a PLAN
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

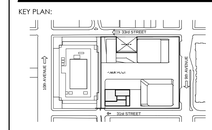
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0" 1' 2' 3' 5'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BATHROOM DETAIL PLANS AND ELEVATIONS-(LOW INCOME)

SEAL & SIGNATURE:

REGISTERED ARCHITECT STATE OF NEW YORK

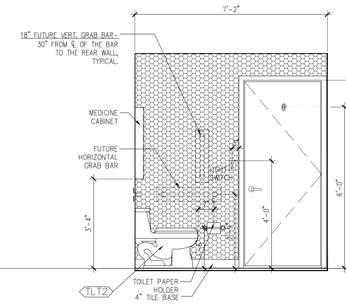
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.

DRAWING No.: A-411.00

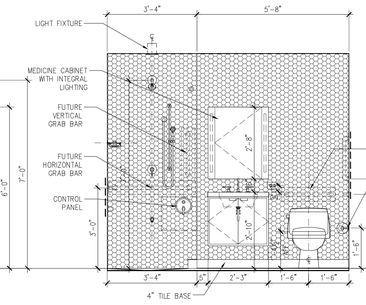
SHEET. No.:

FILE No: \\boxer\b4-Manhattan-West (2012-32)\S_CD\Drawings_BMW_A410_Bathrooms.dwg

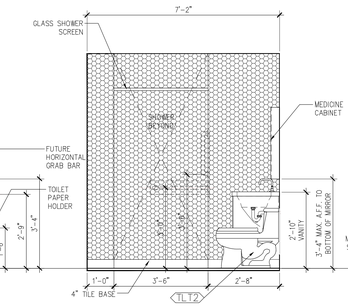
DEPT OF BLDGS 121185760 Job Number
E383863723 Scan Code



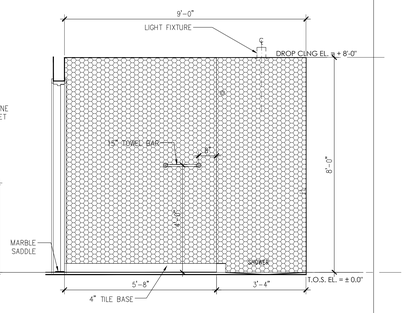
ELEVATION - 4
SCALE: 1/2" = 1'-0"



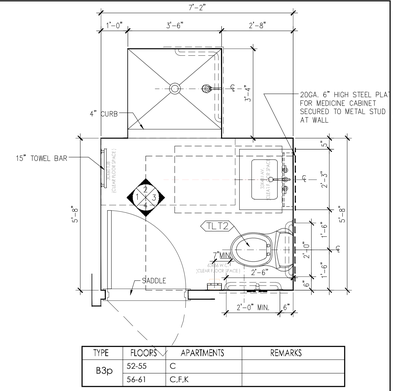
ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"

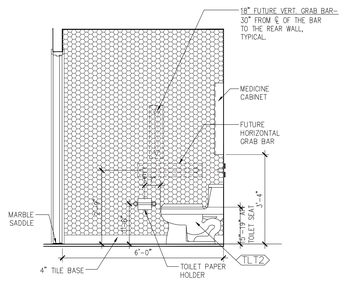


ELEVATION - 1
SCALE: 1/2" = 1'-0"

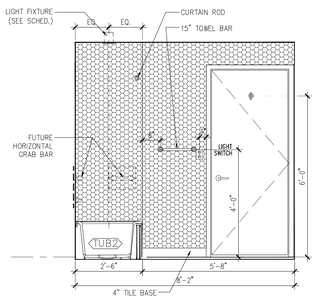


TYPE	FLOORS	APARTMENTS	REMARKS
B3p	52-55	C	
	56-61	C,F,K	

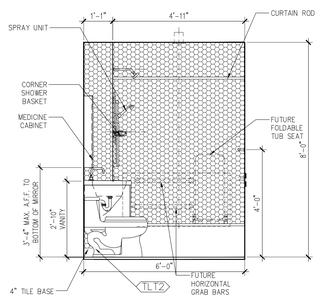
BATHROOM TYPE B3p PLAN
SCALE: 1/2" = 1'-0"



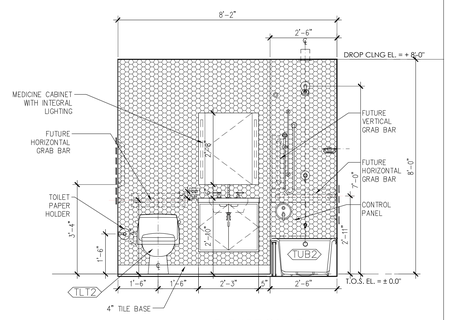
ELEVATION - 8
SCALE: 1/2" = 1'-0"



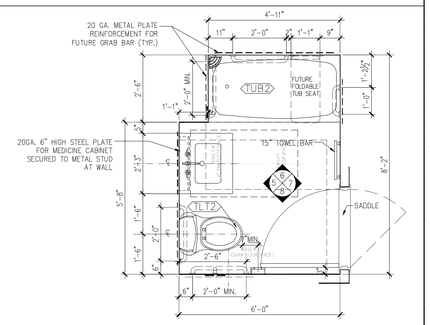
ELEVATION - 7
SCALE: 1/2" = 1'-0"



ELEVATION - 6
SCALE: 1/2" = 1'-0"

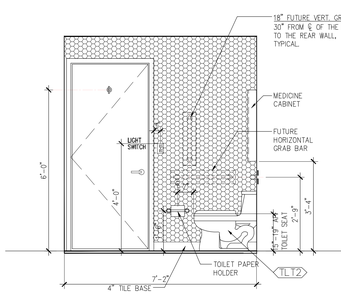


ELEVATION - 5
SCALE: 1/2" = 1'-0"

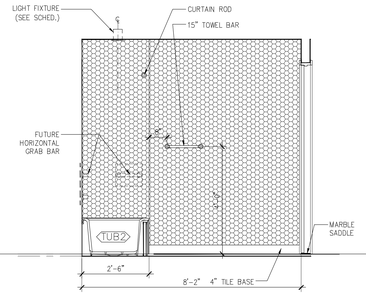


TYPE	FLOORS	APARTMENTS	REMARKS
B2p	52-55	B,D,F,G,H,J,K,L,P,Q,S	
	56-61	A,D,F,G,H,J,P,R,S	

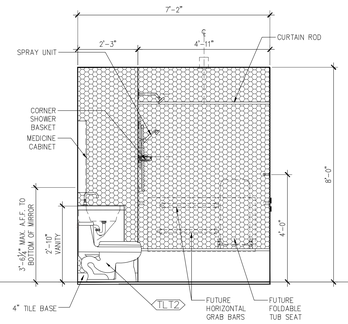
BATHROOM TYPE B2p PLAN
SCALE: 1/2" = 1'-0"



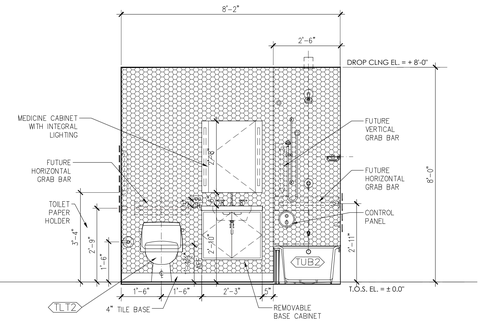
ELEVATION - 12
SCALE: 1/2" = 1'-0"



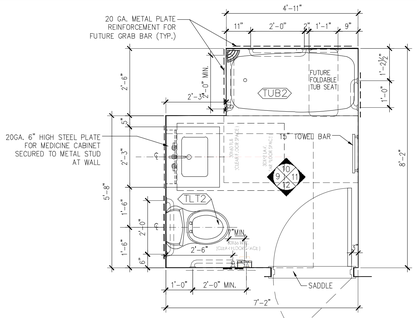
ELEVATION - 11
SCALE: 1/2" = 1'-0"



ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"



TYPE	FLOORS	APARTMENTS	REMARKS
B1p	52-55	B,C	
	56-61	B,C,K	

BATHROOM TYPE B1p PLAN
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

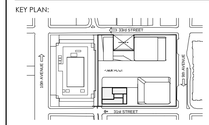
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0" 1' 2' 3' 5'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BATHROOM DETAIL PLANS
AND ELEVATIONS-(PREMIUM)

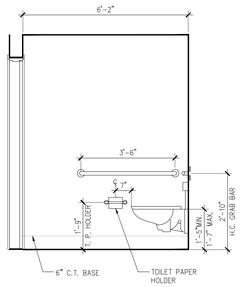
SEAL & SIGNATURE:

DATE: -
PROJECT No: 2012-32
DRAWN BY: Z.J.R.
CHECKED BY: T.J.F.

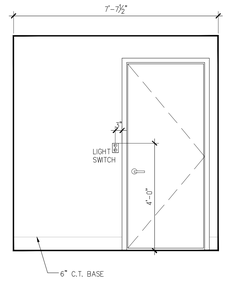
SHEET No.:
A-412.00

FILE No: \\boxer\bb4\Manhattan West (2012-32)\S_CD\Drawings\BWW_A412_Bathrooms.dwg

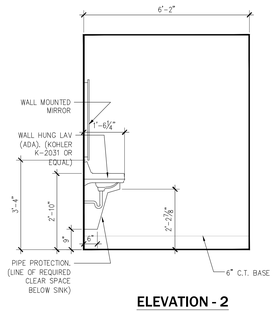
DEPT OF BLDGS 121185760 Job Number
E5202028897 Scan Code



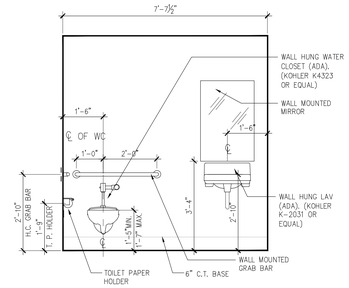
ELEVATION - 4
SCALE: 1/2" = 1'-0"



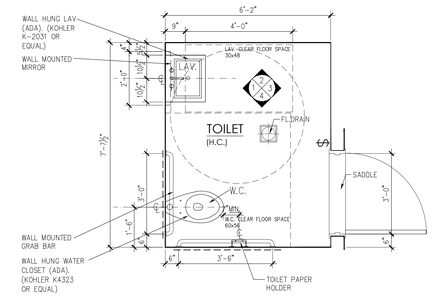
ELEVATION - 3
SCALE: 1/2" = 1'-0"



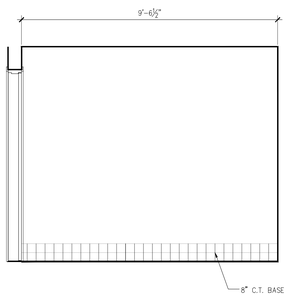
ELEVATION - 2
SCALE: 1/2" = 1'-0"



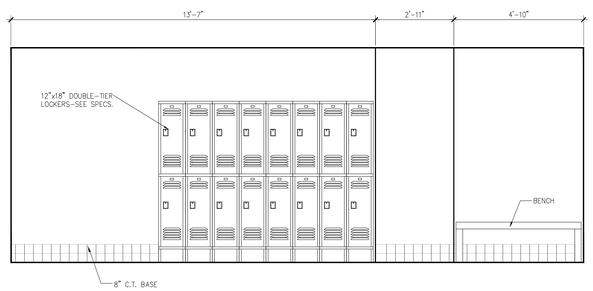
ELEVATION - 1
SCALE: 1/2" = 1'-0"



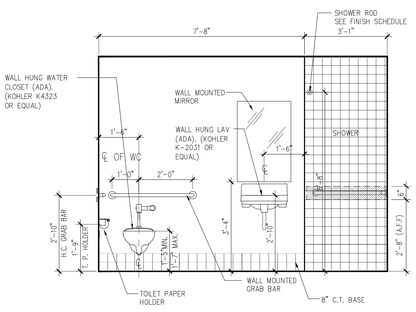
TOILET AT PET GROOMING-CELLAR
SCALE: 1/2" = 1'-0"



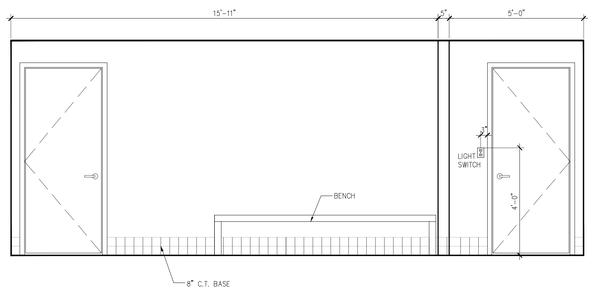
ELEVATION - 6
SCALE: 1/2" = 1'-0"



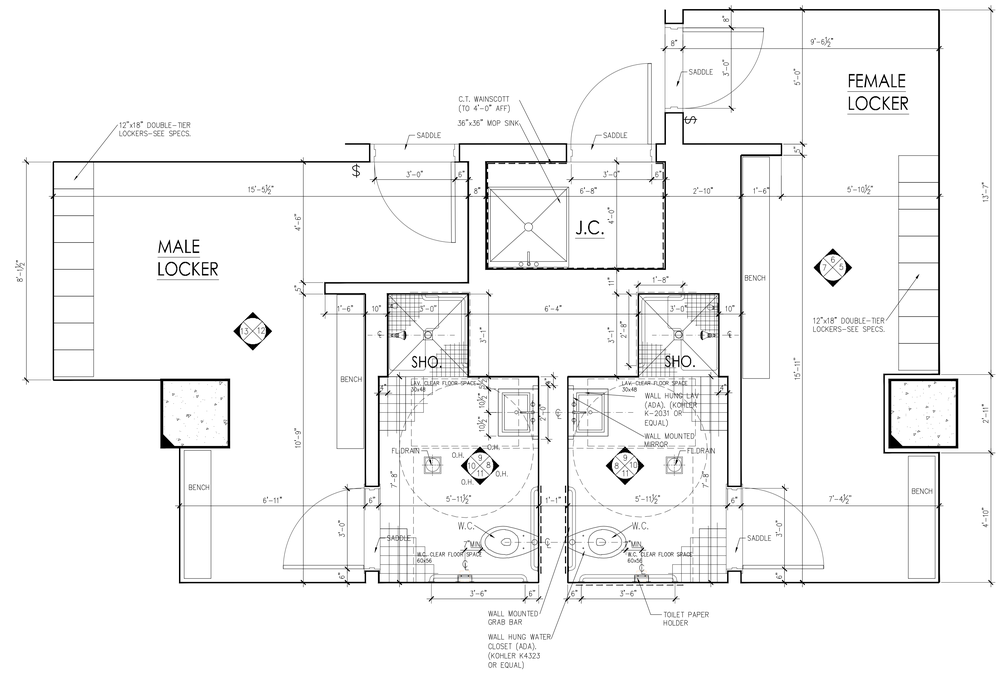
ELEVATION - 5
SCALE: 1/2" = 1'-0"



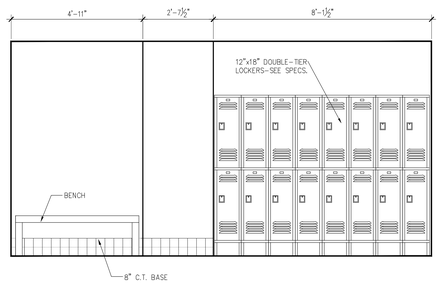
ELEVATION - 8
SCALE: 1/2" = 1'-0"



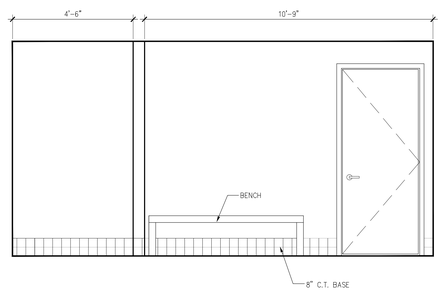
ELEVATION - 7
SCALE: 1/2" = 1'-0"



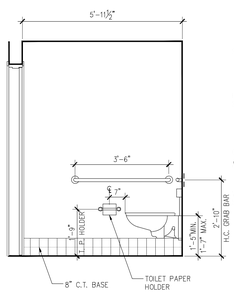
MALE & FEMALE LOCKER ROOMS-CELLAR
SCALE: 1/2" = 1'-0"



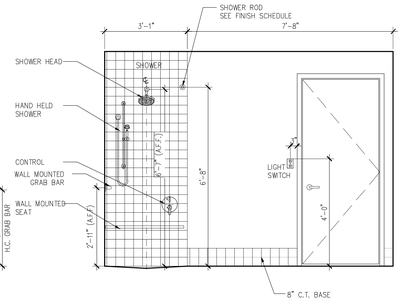
ELEVATION - 13
SCALE: 1/2" = 1'-0"



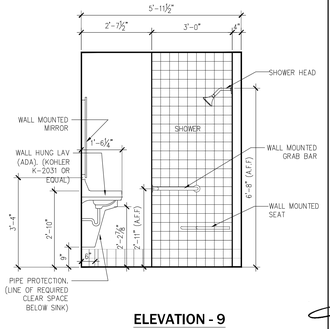
ELEVATION - 12
SCALE: 1/2" = 1'-0"



ELEVATION - 11
SCALE: 1/2" = 1'-0"



ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

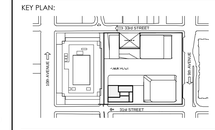
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE	REVISION
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0' 1' 2' 3' 5'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BATHROOM & LOCKER ROOMS AT CELLAR

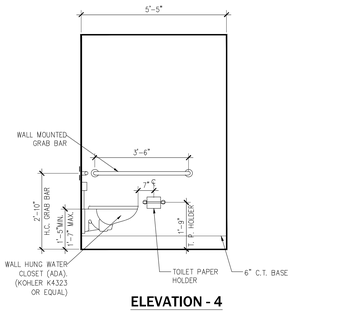
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.

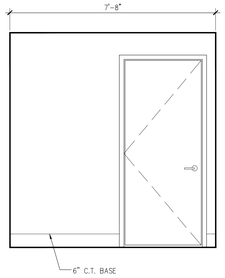
A-413.00
SHEET. No.:

FILE No: \\boxer\ab4\Manhattan West (2012-32)\2.CD\Drawings\BldG_A413_Bathrooms.dwg

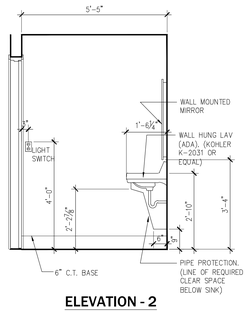
DEPT OF BUILDINGS 121185760 Job Number
E300206479 Scan Code



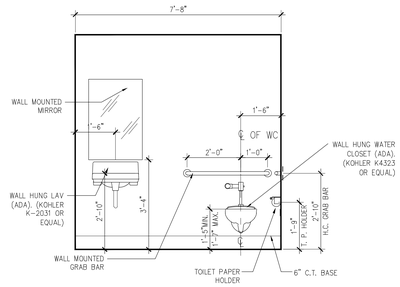
ELEVATION - 4
SCALE: 1/2" = 1'-0"



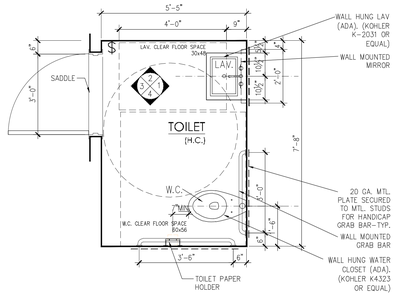
ELEVATION - 3
SCALE: 1/2" = 1'-0"



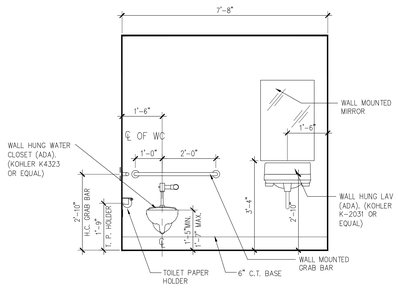
ELEVATION - 2
SCALE: 1/2" = 1'-0"



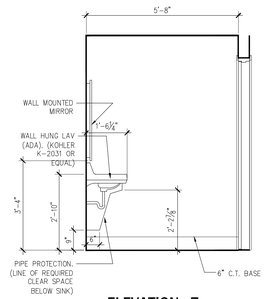
ELEVATION - 1
SCALE: 1/2" = 1'-0"



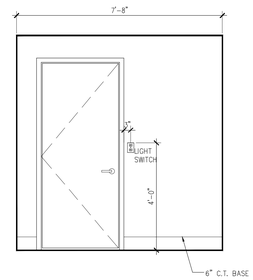
TOILET AT CONCIERGE-1st FLOOR
SCALE: 1/2" = 1'-0"



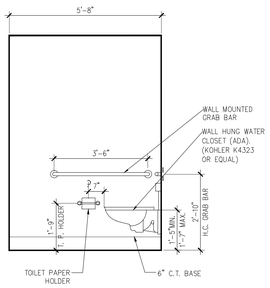
ELEVATION - 8
SCALE: 1/2" = 1'-0"



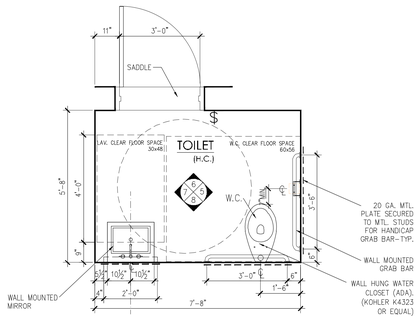
ELEVATION - 7
SCALE: 1/2" = 1'-0"



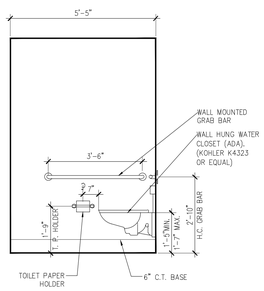
ELEVATION - 6
SCALE: 1/2" = 1'-0"



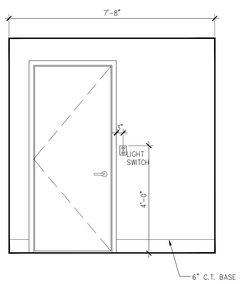
ELEVATION - 5
SCALE: 1/2" = 1'-0"



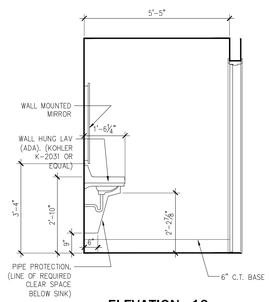
TOILET AT SECURITY-1st FLOOR
SCALE: 1/2" = 1'-0"



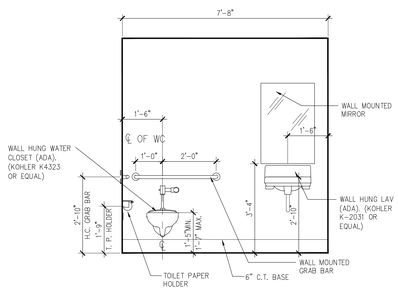
ELEVATION - 12
SCALE: 1/2" = 1'-0"



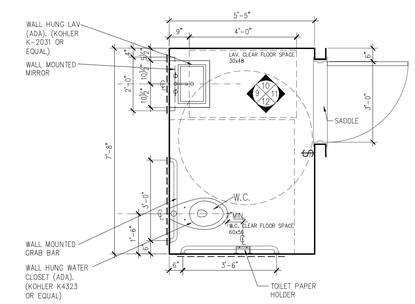
ELEVATION - 11
SCALE: 1/2" = 1'-0"



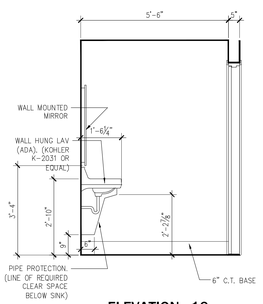
ELEVATION - 10
SCALE: 1/2" = 1'-0"



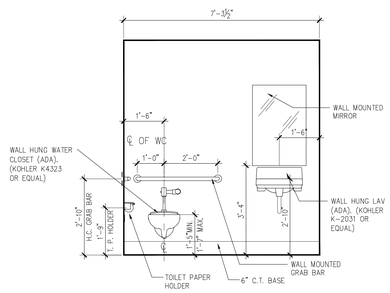
ELEVATION - 9
SCALE: 1/2" = 1'-0"



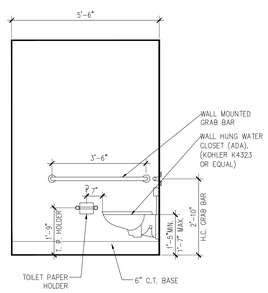
TOILET AT PROP. MNGR. OFFICE-1st FLOOR
SCALE: 1/2" = 1'-0"



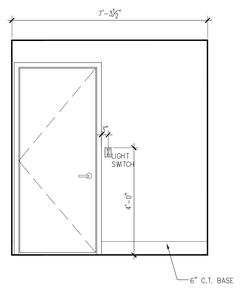
ELEVATION - 16
SCALE: 1/2" = 1'-0"



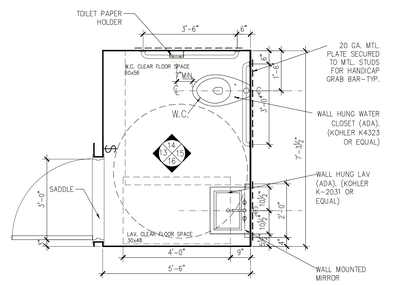
ELEVATION - 15
SCALE: 1/2" = 1'-0"



ELEVATION - 14
SCALE: 1/2" = 1'-0"



ELEVATION - 13
SCALE: 1/2" = 1'-0"



TOILET AT CHILDREN'S ROOM-2nd FLOOR
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY. 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

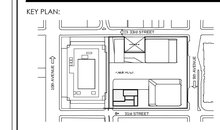
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0" 1' 2' 3' 5'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
BATHROOMS PLANS & ELEVATIONS AT 1ST & 2ND FLR.

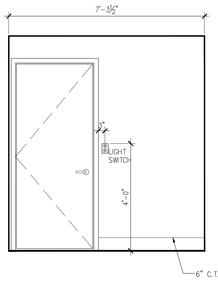
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.

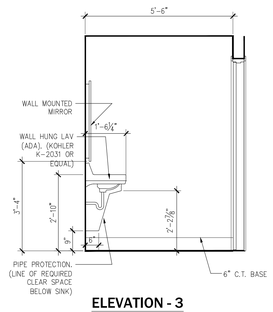
DRAWING No.: A-414.00
SHEET. No.:

FILE No: \\boxer\bb4\Manhattan-West\2012-0012_CD\Drawings\BWW_A410_Bathrooms.dwg

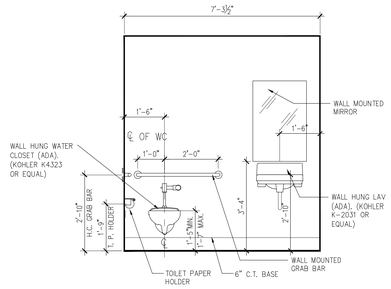
DEPT OF BLDGS 121185760 Job Number
E290528293 Scan Code



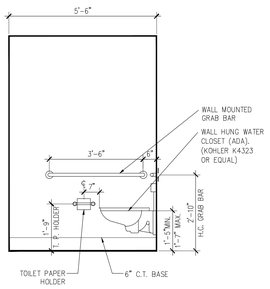
ELEVATION - 4
SCALE: 1/2" = 1'-0"



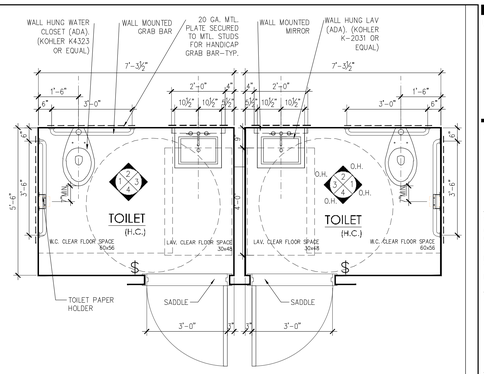
ELEVATION - 3
SCALE: 1/2" = 1'-0"



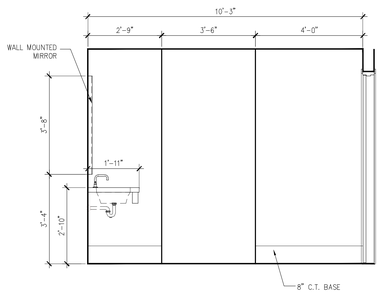
ELEVATION - 2
SCALE: 1/2" = 1'-0"



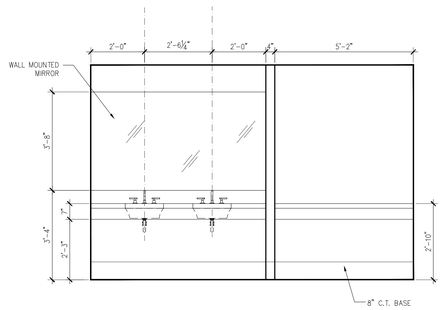
ELEVATION - 1
SCALE: 1/2" = 1'-0"



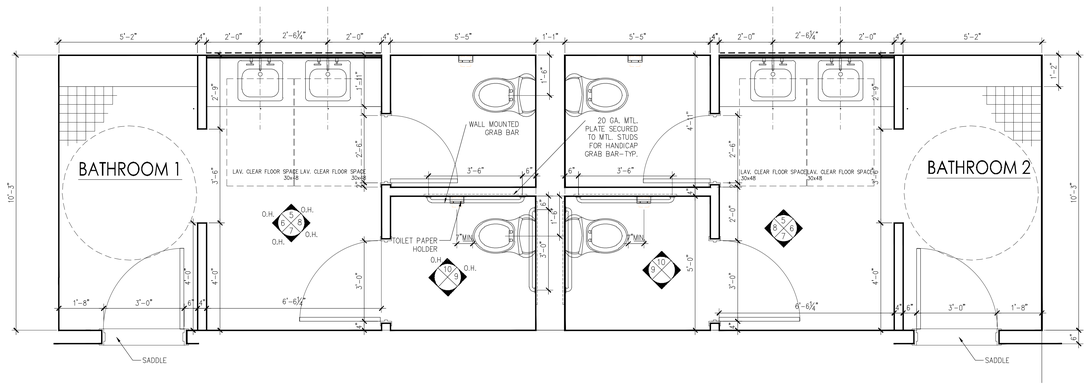
TOILETS AT FITNESS CENTER-2nd FLOOR
SCALE: 1/2" = 1'-0"



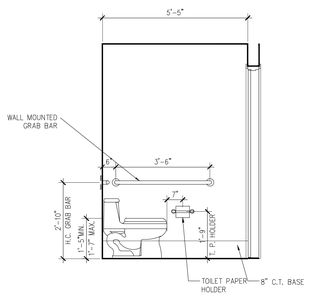
ELEVATION - 6
SCALE: 1/2" = 1'-0"



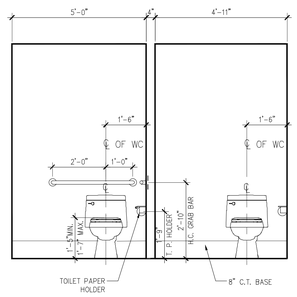
ELEVATION - 5
SCALE: 1/2" = 1'-0"



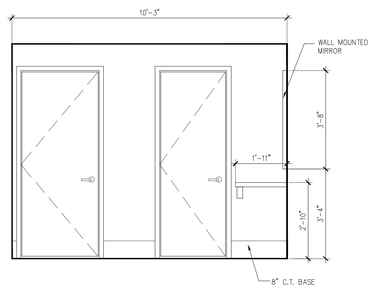
TOILET-3rd FLOOR
SCALE: 1/2" = 1'-0"



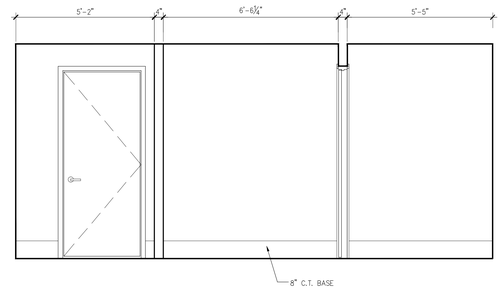
ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"



ELEVATION - 8
SCALE: 1/2" = 1'-0"



ELEVATION - 7
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

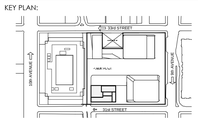
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0' 1' 2' 3' 5'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

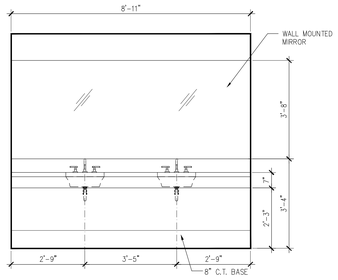
BATHROOM PLANS & ELEVATIONS
AT 1ST & 2ND FLOORS

SEAL & SIGNATURE:

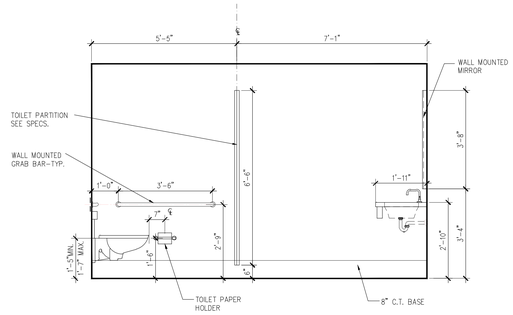
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.
SHEET No.:	A-415.00

FILE No: \\boxer\ebManhattanWest\2012-32\LCD\Drawings\BWW_A410_Bathrooms.dwg

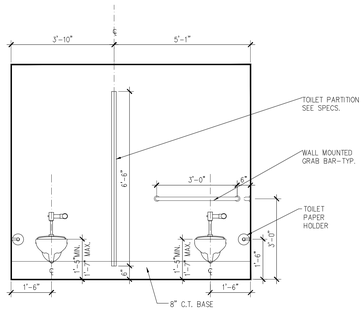
DEPT OF BLDGS 121185760 Job Number
E-Submission 700604 Scan Code



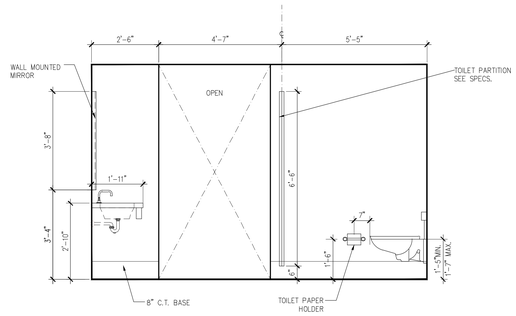
ELEVATION - 2
SCALE: 1/2" = 1'-0"



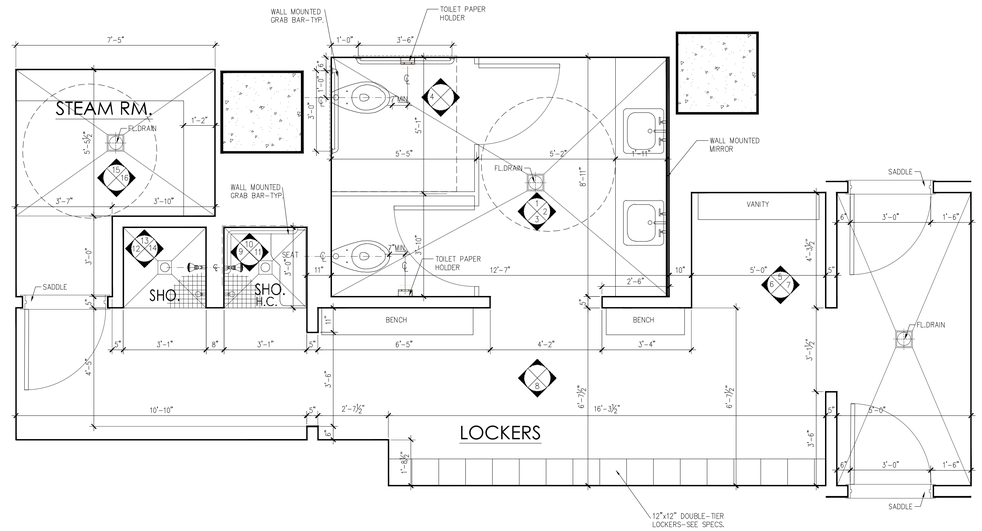
ELEVATION - 1
SCALE: 1/2" = 1'-0"



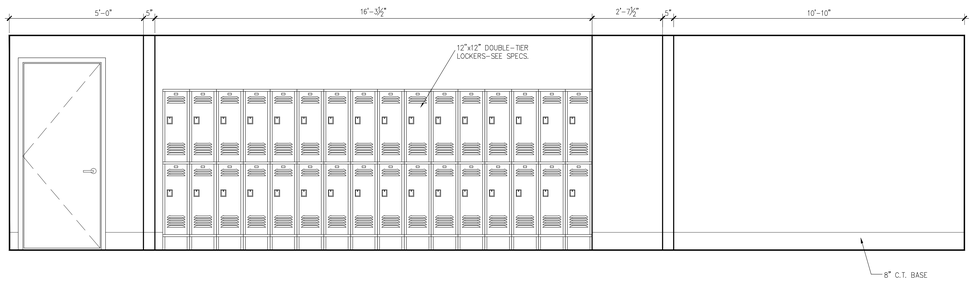
ELEVATION - 4
SCALE: 1/2" = 1'-0"



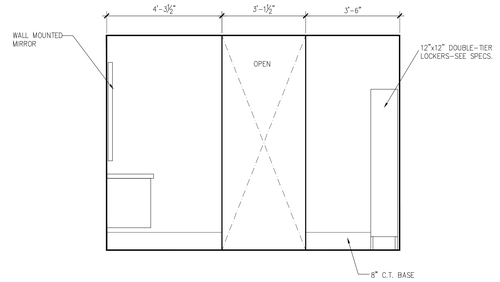
ELEVATION - 3
SCALE: 1/2" = 1'-0"



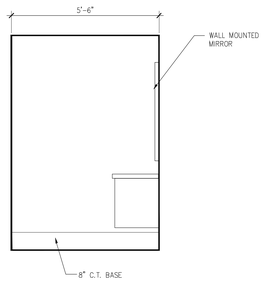
FEMALE LOCKER ROOMS-2ND FLOOR
SCALE: 1/2" = 1'-0"



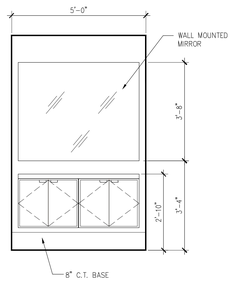
ELEVATION - 8
SCALE: 1/2" = 1'-0"



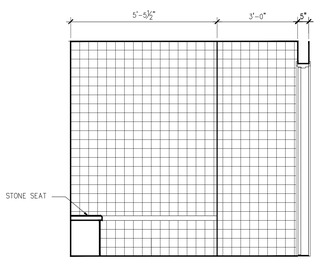
ELEVATION - 7
SCALE: 1/2" = 1'-0"



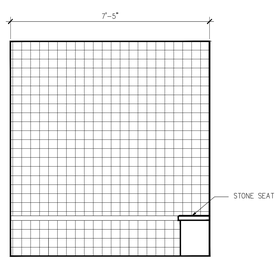
ELEVATION - 6
SCALE: 1/2" = 1'-0"



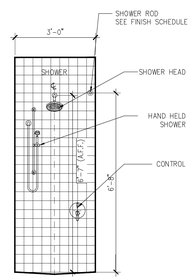
ELEVATION - 5
SCALE: 1/2" = 1'-0"



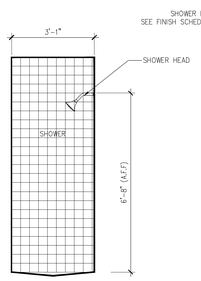
ELEVATION - 16
SCALE: 1/2" = 1'-0"



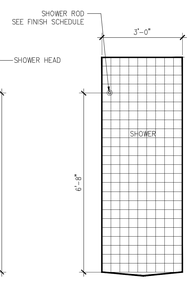
ELEVATION - 15
SCALE: 1/2" = 1'-0"



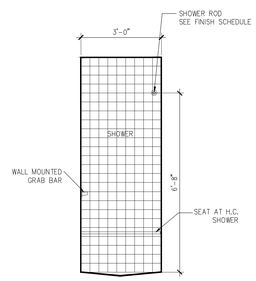
ELEVATION - 14
SCALE: 1/2" = 1'-0"



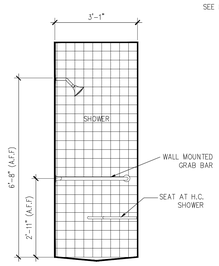
ELEVATION - 13
SCALE: 1/2" = 1'-0"



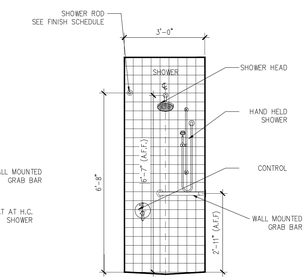
ELEVATION - 12
SCALE: 1/2" = 1'-0"



ELEVATION - 11
SCALE: 1/2" = 1'-0"



ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

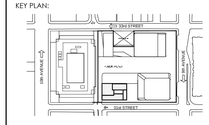
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/2" = 1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

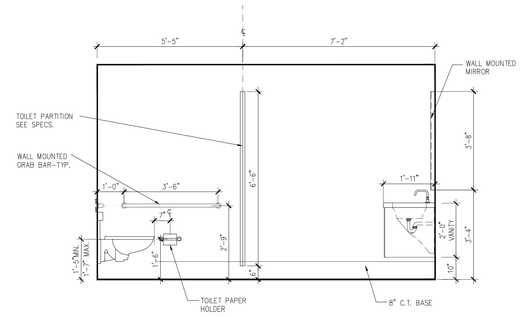
DRAWING TITLE:
FEMALE LOCKERS PLANS & ELEVATIONS AT 2ND FLOOR

SEAL & SIGNATURE:

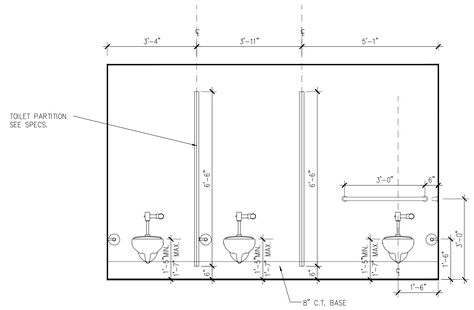
DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSI
CHECKED BY:	T.J.F.
DRAWING No.:	A-416.00
SHEET, No.:	

FILE No: \\boxer\ldd\ManhattanWest (2012-32)\S_CD\Drawings\BldW_A410_Bathrooms.dwg

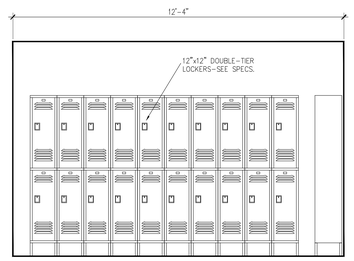
DEPT OF BLDGS 121185760 Job Number
E3806062618 Scan Code



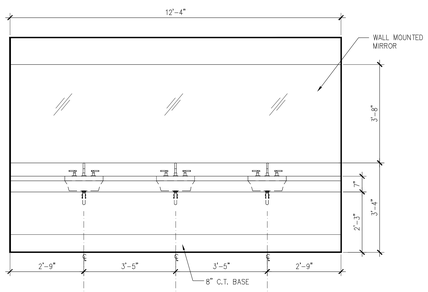
ELEVATION - 2
SCALE: 1/2" = 1'-0"



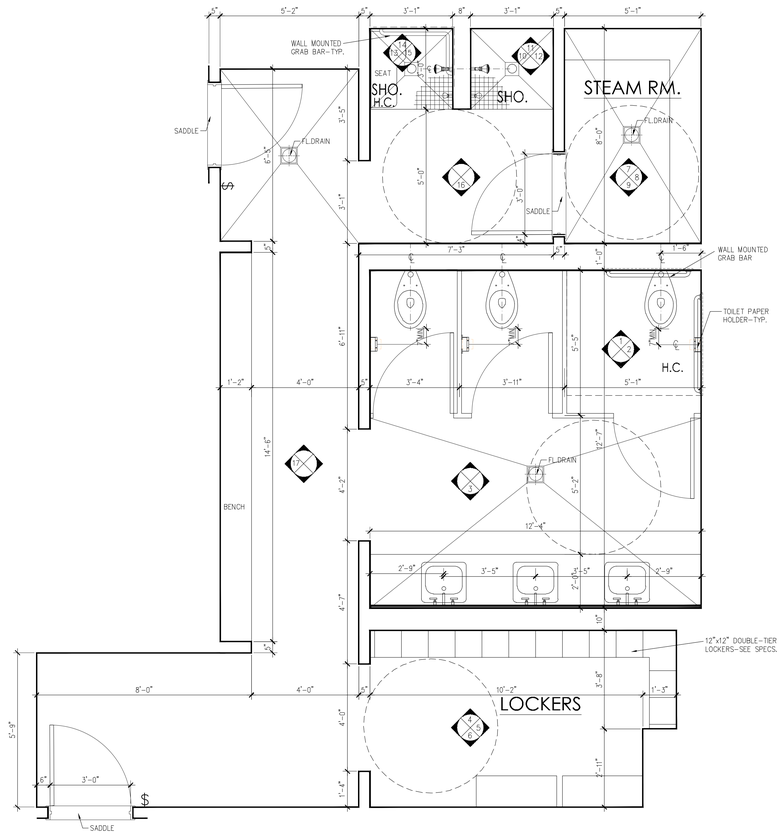
ELEVATION - 1
SCALE: 1/2" = 1'-0"



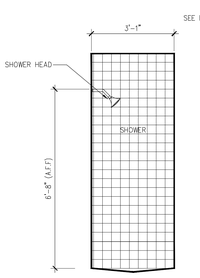
ELEVATION - 4
SCALE: 1/2" = 1'-0"



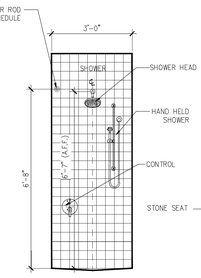
ELEVATION - 3
SCALE: 1/2" = 1'-0"



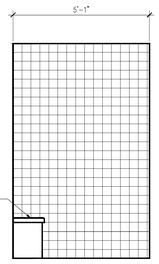
MALE LOCKER ROOMS-2ND FLOOR
SCALE: 1/2" = 1'-0"



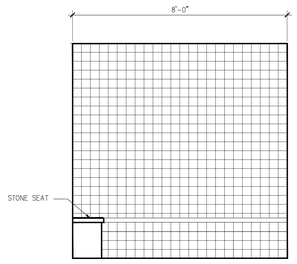
ELEVATION - 11
SCALE: 1/2" = 1'-0"



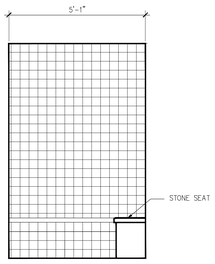
ELEVATION - 10
SCALE: 1/2" = 1'-0"



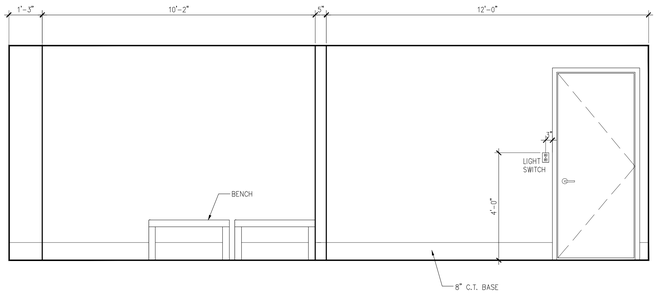
ELEVATION - 9
SCALE: 1/2" = 1'-0"



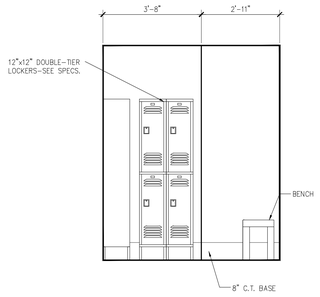
ELEVATION - 8
SCALE: 1/2" = 1'-0"



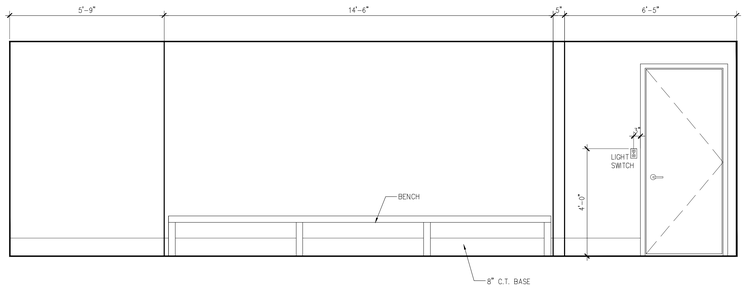
ELEVATION - 7
SCALE: 1/2" = 1'-0"



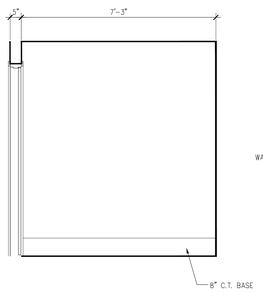
ELEVATION - 6
SCALE: 1/2" = 1'-0"



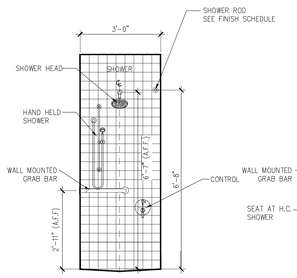
ELEVATION - 5
SCALE: 1/2" = 1'-0"



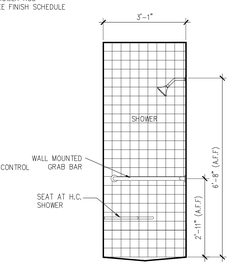
ELEVATION - 17
SCALE: 1/2" = 1'-0"



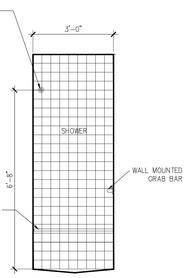
ELEVATION - 16
SCALE: 1/2" = 1'-0"



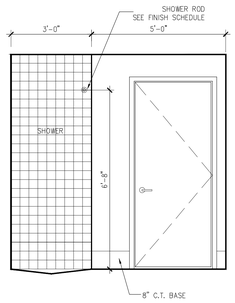
ELEVATION - 15
SCALE: 1/2" = 1'-0"



ELEVATION - 14
SCALE: 1/2" = 1'-0"



ELEVATION - 13
SCALE: 1/2" = 1'-0"



ELEVATION - 12
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY. 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

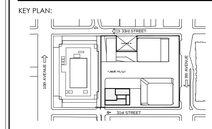
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'-0"
0" 1' 2' 3' 5'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MALE LOCKERS PLANS & ELEVATIONS 2ND FLOORS

SEAL & SIGNATURE:

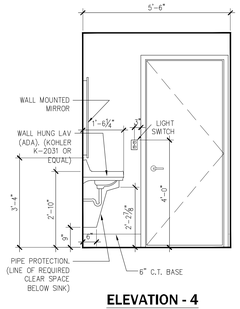
REGISTERED ARCHITECT CHRISTOPHER J. LEE STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.

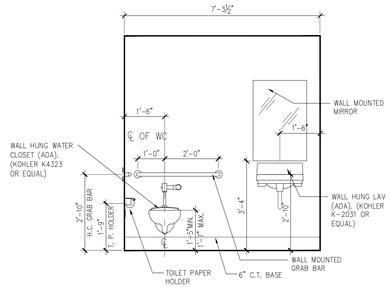
DRAWING No.: A-417.00
SHEET. No.:

FILE No: \\boxer\bs4\Manhattan-West\2012-0212.CED\Drawings\BMW_A410_Bathrooms.dwg

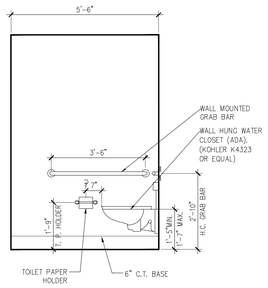
DEPT OF BLDGS 121185760 Job Number
B32B26040210 Scan Code



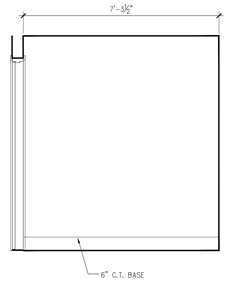
ELEVATION - 4
SCALE: 1/2" = 1'-0"



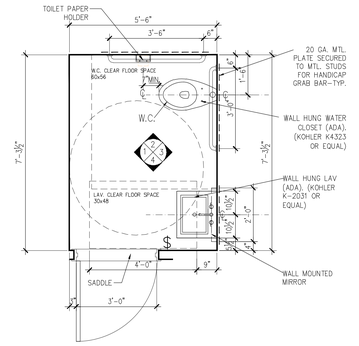
ELEVATION - 3
SCALE: 1/2" = 1'-0"



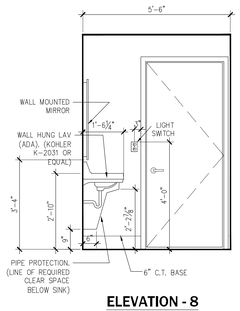
ELEVATION - 2
SCALE: 1/2" = 1'-0"



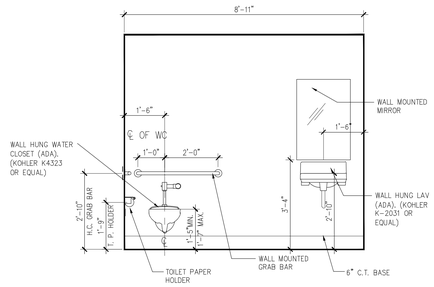
ELEVATION - 1
SCALE: 1/2" = 1'-0"



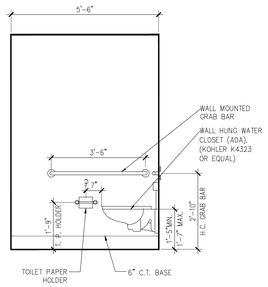
TOILET AT 62nd FLOOR
SCALE: 1/2" = 1'-0"



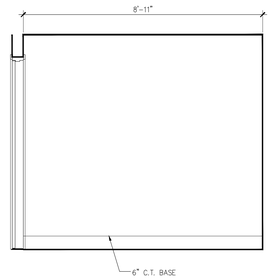
ELEVATION - 8
SCALE: 1/2" = 1'-0"



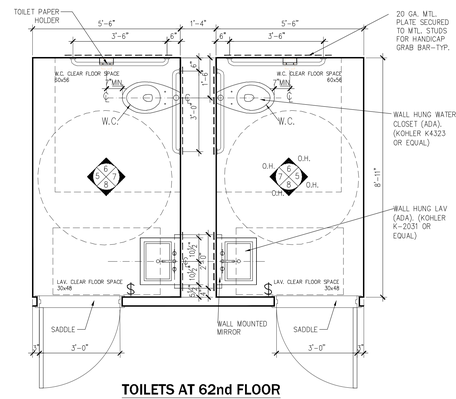
ELEVATION - 7
SCALE: 1/2" = 1'-0"



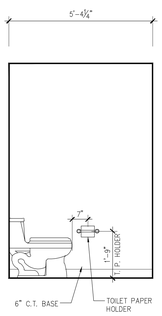
ELEVATION - 6
SCALE: 1/2" = 1'-0"



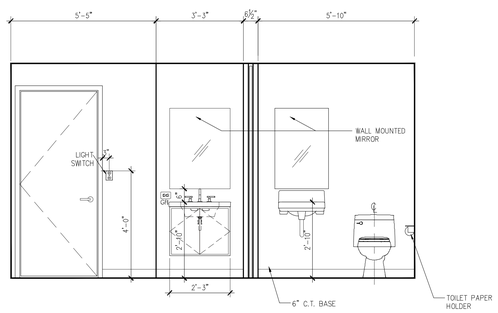
ELEVATION - 5
SCALE: 1/2" = 1'-0"



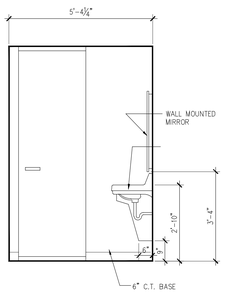
TOILETS AT 62nd FLOOR
SCALE: 1/2" = 1'-0"



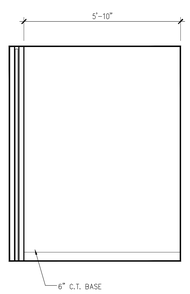
ELEVATION - 10
SCALE: 1/2" = 1'-0"



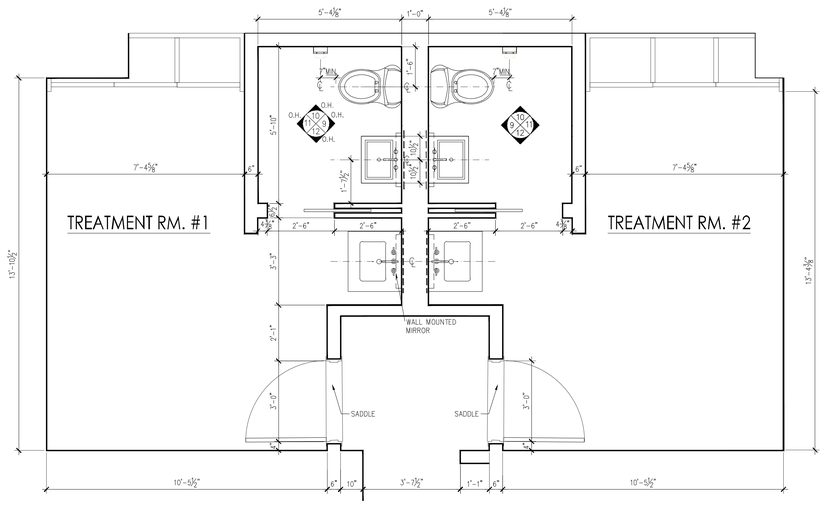
ELEVATION - 9
SCALE: 1/2" = 1'-0"



ELEVATION - 12
SCALE: 1/2" = 1'-0"



ELEVATION - 11
SCALE: 1/2" = 1'-0"



TOILET-3rd FLOOR
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

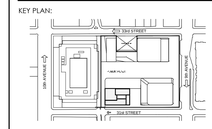
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0" 1' 2' 3' 5'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

BATHROOMS PLANS & ELEVATIONS 3RD & 62ND FLOOR

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.
DRAWING No.:	A-418.00
SHEET. No.:	

FILE No: \\boxer\ebf-Manhattan-West (2012-32)\S_CD\Drawings_BMW_A410_Bathrooms.dwg

110 manhattan west - swresidential tower
PLUMBING FIXTURE AND FITTING SCHEDULE

(see rwstudio plans and elevations for location)
7/8/2014

CODE		LOCATION	DESCRIPTION	SOURCE	PRODUCT NAME	PRODUCT NUMBER	FINISH/COLOR	SIZE	REMARKS
		Affordable Unit Bathroom	Floor Mount Toilet	Kohler	Cimarron	K-3828	White	18-15/16"W X 29-5/16"D X 28-13/16"H	Or approved equal
		Affordable Unit Bathroom	Toilet Cover and Seat	Kohler	Cimarron	K-3829	White	1-3/8"H	Included with Toilet. Or approved equal
		Affordable Unit Bathroom	Wall Hung Washbasin - Three Hole	Nameeks	Tecla	MAR01011	White Porcelain	27.56" x 21.26" x 6.5"H	Or approved equal
		Affordable Unit Bathroom	Lav Set	Symmons	Dia	SLW-3512-1.5	Polished Chrome	8"W X 6-3/8"D X 2-1/2"H	Or approved equal
		Affordable Unit Bathroom	P-Trap	Kohler	P-Trap	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or approved equal
		Affordable Unit Bathroom	Bath & Shower Trim Set	Symmons	Dia	S-3502-CYL-B-X	Polished Chrome	Control Valve: 5"DIA X 2"D Bath Faucet: 2-7/16"DIA X 5-1/2"D Shower Head & Arm: 2-1/2"DIA X 6-1/8"D	Set includes: Control Valve, Diverter, Bath Faucet, Shower Head, Shower Arm. Or approved equal
		Affordable Unit Bathroom	Alcover Bathtub with Directional Drain	Kohler	Villager Alcove Bath	K-716-0	White Cast Iron, Polished Chrome Drain	60"L X 30.25"W X 14"H	Direcitonal drain. Note accordingly when ordering. Or approved equal.
		Market Unit Bathroom	Floor Mount Toilet	Kohler	Cimarron	K-3828	White	18-15/16"W X 29-5/16"D X 28-13/16"H	Or approved equal
		Market Unit Bathroom	Toilet Cover and Seat	Kohler	Cimarron	K-3829	White	1-3/8"H	Included with Toilet. Or approved equal
		Market Unit Bathroom	Wall Hung Washbasin - Three Hole	Nameeks	Tecla	MAR01011	White Porcelain	27.56" x 21.26" x 6.5"H	Or approved equal
		Market Unit Bathroom	Lav Set	Kohler	Purist	K-14406-4-CP	Polished Chrome	8"W X 5-1/2"D X 8-1/2"H	Or approved equal
		Market Unit Bathroom	P-Trap	Kohler	--	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or approved equal
		Market Unit Bathroom	Bath & Shower Trim Set	Kohler	Purist	K-T14421-4	Polished Chrome	Control Valve: 6-1/2"DIA Bath Faucet: 4"DIA X 7-3/4"D Shower Head & Arm: 4"DIA X 10-5/8"D X 5-5	Set includes: Control Valve, Diverter, Bath Faucet, Shower Head, Shower Arm. Or approved equal.
		Market Unit Bathroom	Drop-In Bathtub & Reversible Drain	Kohler	Soissons Drop-In Bath with Reversible Drain	K-941-0	White Cast Iron, Polished Chrome Drain	59"L X 27-1/2"W X 16"H	Or approved equal
		Market Unit Bathroom	Handshower Kit (Slidebar, Trim, 60" Shower Hose, Supply Elbow)	Kohler	Stillness/Purist	K-9059-CP	Polished Chrome	3-5/8"OAW X 8-3/4"OAD X 30"OAH	Or approved equal
		Premium Unit Bathroom	Floor Mount Toilet	Kohler	Cimarron	K-3828	White	18-15/16"W X 29-5/16"D X 28-13/16"H	Or approved equal
		Premium Unit Bathroom	Toilet Cover and Seat	Kohler	Cimarron	K-3829	White	1-3/8"H	Included with Toilet. Or approved equal
		Premium Unit Bathroom	Wall Hung Washbasin - Three Hole	Nameeks	Tecla	MAR01011	White Porcelain	27.56" x 21.26" x 6.5"H	Or approved equal
		Premium Unit Bathroom	Lav Set	Kohler	Purist	K-14406-4-CP	Polished Chrome	8"W X 5-1/2"D X 8-1/2"H	Or approved equal
		Premium Unit Bathroom	P-Trap	Kohler	--	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or approved equal
		Premium Unit Bathroom	Bath & Shower Trim Set	Kohler	Purist	K-T14421-4	Polished Chrome	Control Valve: 6-1/2"DIA Bath Faucet: 4"DIA X 7-3/4"D Shower Head & Arm: 4"DIA X 10-5/8"D X 5-5	Set includes: Control Valve, Diverter, Bath Faucet, Shower Head, Shower Arm. Or approved equal
		Premium Unit Bathroom	Drop-In Bathtub & Reversible Drain	Kohler	Soissons Drop-In Bath with Reversible Drain	K-941-0	White Cast Iron, Polished Chrome Drain	59"L X 27-1/2"W X 16"H	Or approved equal
		Premium Unit Bathroom	Handshower Kit (Slidebar, Trim, 60" Shower Hose, Supply Elbow)	Kohler	Stillness/Purist	K-9059-CP	Polished Chrome	3-5/8"OAW X 8-3/4"OAD X 30"OAH	Or approved equal
		Amenity Space Bathrooms	Sink	Western Pottery	--	L188	White	20" W 15-11/16" D7-1/8" H	Or approved equal
		Amenity Space Bathrooms	Faucet	Kohler	Purist	K-7507-CP	Polished Chrome	2"W X 8"D X 11-3/8"H	Or approved equal
		Amenity Space Bathrooms	P-Trap	Kohler	--	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or approved equal
		Amenity Space Bathrooms	Lav Supply	Kohler	--	K-7638-CP	Polished Chrome	--	Or approved equal
		Amenity Space Bathrooms	Floor Mount Toilet	Kohler	Cimarron	K-3828	White	18-15/16"W X 29-5/16"D X 28-13/16"H	Or approved equal
		Amenity Space Bathrooms	Toilet Cover and Seat	Kohler	Cimarron	K-3829	White	1-3/8"H	Included with Toilet. Or approved equal
		Amenity Space Bathrooms	Toilet Supply	Kohler	Purist	K-7654-CP	Polished Chrome	--	Or approved equal.
		Amenity Space Bathrooms	Shower Head and Arm	Kohler	Purist	K-14418-CP	Polished Chrome	Shower Head & Arm: 4"DIA X 10-5/8"D X 5-5/16"H	Or approved equal.
		Amenity Space Bathrooms	Pressure Balance	Kohler	Purist	K-T14501-4-CP	Polished Chrome	'Control Valve: 6-1/2"DIA	Or approved equal.
		Amenity Space Bathrooms	Urinal and Flushometer	Kohler	Bardon	K-72524-NA	White / Polished Chrome	38 5/8"H x 14 1/8"L x W18"	Or approved equal

110 MANHATTAN WEST - SWRESIDENTIAL TOWER
APARTMENT BATHROOM ACCESSORY SCHEDULE
(see RW studio plans and elevations for additional information)
7/8/2014

CODE		LOCATION	DESCRIPTION	MANUFACTURER / VENDOR	PRODUCT NAME / NUMBER	FINISH	REMARKS
APARTMENT BATHROOM							
		Affordable Unit Bathroom	Paper Holder	Symmons	353TP	Polished Chrome	Or approved equal
		Affordable Unit Bathroom	Hook	Symmons	353RH	Polished Chrome	Or approved equal
		Affordable Unit Bathroom	18" Towel Bar	Symmons	353TB-18	Polished Chrome	Or approved equal
		Affordable Unit Bathroom	Shower Rod & Flange	Moen	DN2145CH	Polished Chrome	Or approved equal
		Market Unit Bathroom	Paper Holder	Kohler	K-14393-CP	Polished Chrome	Or approved equal
		Market Unit Bathroom	Hook	Kohler	K-14443-CP	Polished Chrome	Or approved equal
		Market Unit Bathroom	18" Towel Bar	Kohler	K-14436-CP	Polished Chrome	Or approved equal
		Market Unit Bathroom	Shower Rod & Flange	Kohler	TBD	Polished Chrome	Only in Studio & 1 Bedroom Units. Or approved equal.
		Premium Unit Bathroom	Paper Holder	Kohler	K-14393-CP	Polished Chrome	Or approved equal
		Premium Unit Bathroom	Hook	Kohler	K-14443-CP	Polished Chrome	Or approved equal
		Premium Unit Bathroom	18" Towel Bar	Kohler	K-14436-CP	Polished Chrome	Or approved equal
AMENITY BATHROOMS							
		Amenity Space Bathroom	Paper Holder	Kohler	K-14393-CP	Polished Chrome	Or approved equal
		Amenity Space Bathroom	Hook	Kohler	K-14443-CP	Polished Chrome	Or approved equal
		Amenity Space Bathroom	Soap Dispenser	Nameeks	Gedy 2081-13	Stainless Steel	Or approved equal
		Amenity Space Bathroom	Hand Dryer	Royal Industries	ROY DRY JA01	White	Or approved equal

DEPT OF BLDGS 121185760 Job Number
ES758712118 Scan Code

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

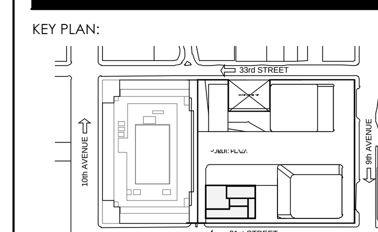
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/2" = 1'- 0"
0' 1' 2' 3' 5'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

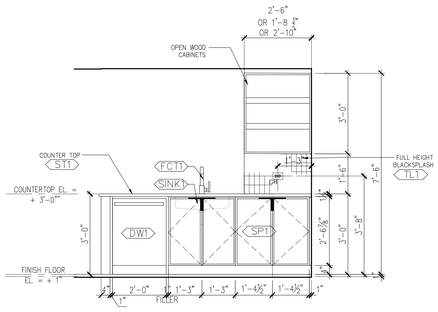
DRAWING TITLE:
BATHROOMS FINISH SCHEDULE

SEAL & SIGNATURE:
REGISTERED ARCHITECT
LUIGI PIO ROSSO
No. 020741
STATE OF NEW YORK

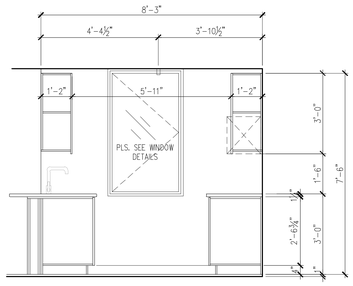
DATE: -
PROJECT No: 2012-32
DRAWN BY: GSF
CHECKED BY: T.J.F.
DWG. No.:
A-419.00
SHEET. No.:

FILE No: T:\Brookfield-Manhattan-West (2012-32)\5.CE\Drawings\BMW_A410_Bathrooms.dwg

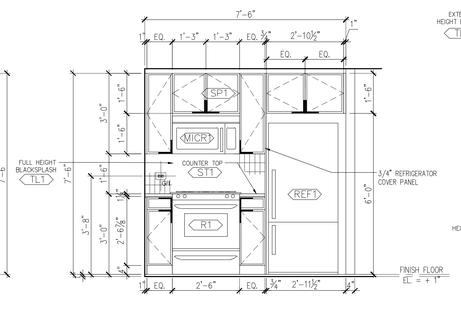
DEPT OF BLDGS 121185760 Job Number
E2605/P499625 Scan Code



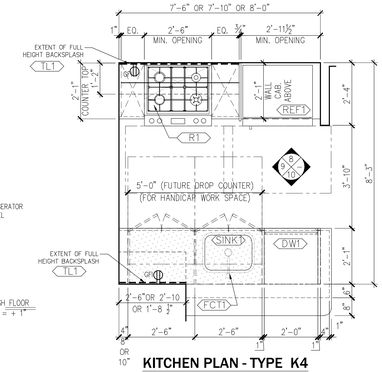
ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"



ELEVATION - 8
SCALE: 1/2" = 1'-0"

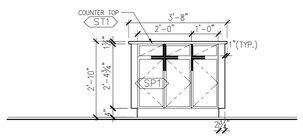


KITCHEN PLAN - TYPE K4
SCALE: 1/2" = 1'-0"

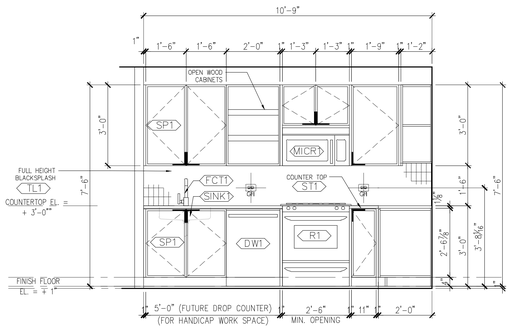
KITCHEN PLAN - TYPE K4

TYPE	FLOORS	APT.	REMARKS
K4	37-51	C	7'-6" WIDE
	29-34,35,36,37-51	F	8'-0" WIDE
	5-19,21-28	L	7'-6" WIDE
	4, 5-34	N	7'-6" WIDE
	35	P	7'-6" WIDE
	36, 37-51	P	8'-0" WIDE
	5-34	C	7'-10" WIDE

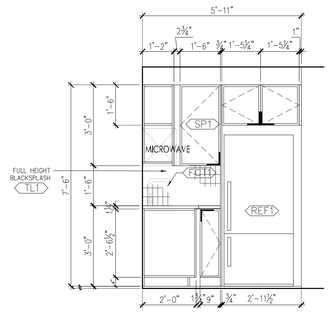
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



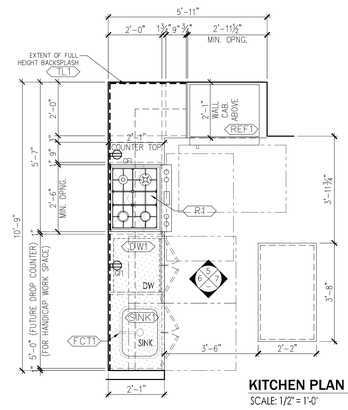
ELEVATION - 7
SCALE: 1/2" = 1'-0"



ELEVATION - 6
SCALE: 1/2" = 1'-0"



ELEVATION - 5
SCALE: 1/2" = 1'-0"

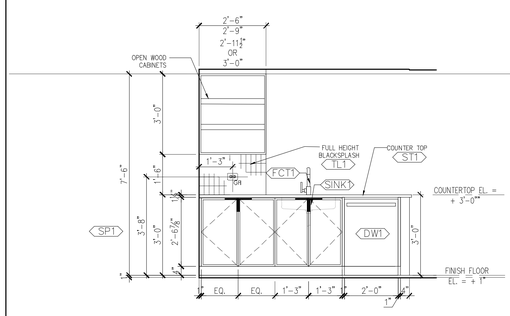


KITCHEN PLAN - TYPE K3
SCALE: 1/2" = 1'-0"

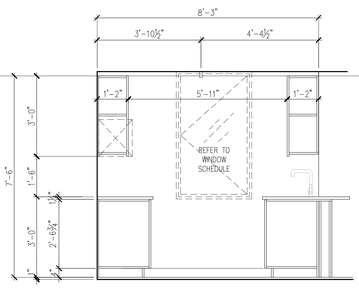
KITCHEN PLAN - TYPE K3

TYPE	FLOORS	APT.	REMARKS
K3	4 - 51	G	-

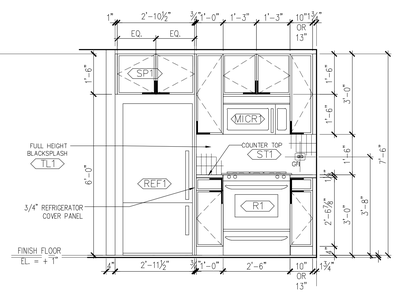
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



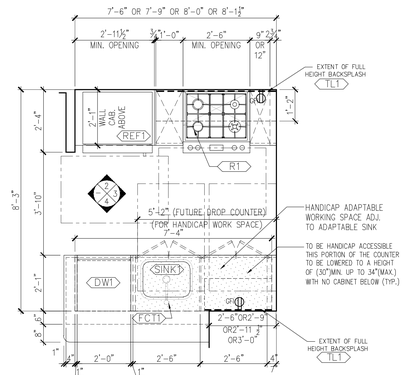
ELEVATION - 4
SCALE: 1/2" = 1'-0"



ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"

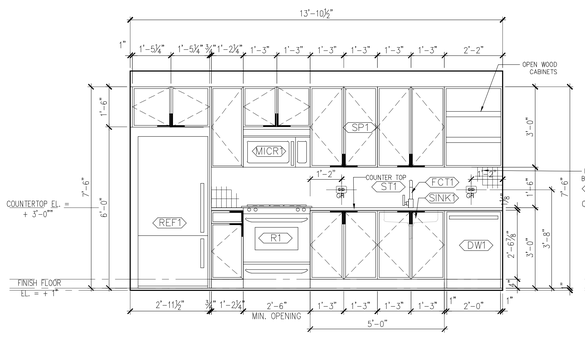


KITCHEN PLAN - TYPE K2
SCALE: 1/2" = 1'-0"

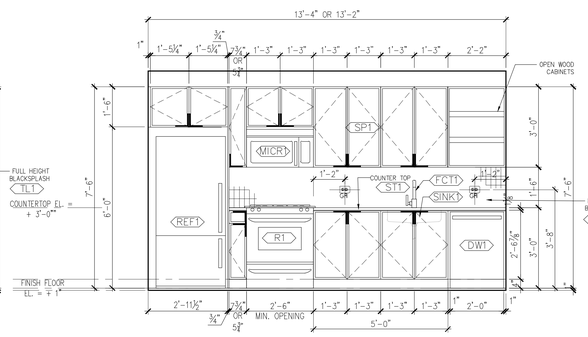
KITCHEN PLAN - TYPE K2

TYPE	FLOORS	APT.	REMARKS
K2	35,36,37-51	B	7'-6" WIDE
	5-34	B	7'-9" WIDE
	4,5-34,35,36,37-51	H	7'-6" WIDE
	35,43-41	K	7'-6" WIDE
	36	L	7'-9" WIDE
	37-51	L	8'-0" WIDE
	4, 5-34	M	7'-6" WIDE
	4	P	8'-0" WIDE
	4,37-51	Q	8'-1 1/2" WIDE

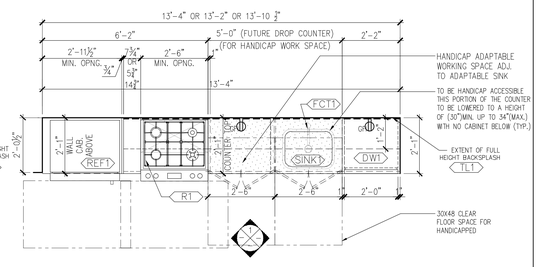
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



ELEVATION - 1 (@ 13'-10 1/2")
SCALE: 1/2" = 1'-0"



ELEVATION - 1 (@13'-1" & 13'-4")
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K1
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K1 (MARKET)

TYPE	FLOORS	APT.	REMARKS
K1	42-51	A	13'-10 1/2" WIDE
	37 - 51	E	13'-4" WIDE
	4, 6-20,37-51	J	13'-2" WIDE
	5-34	P	13'-1" WIDE
	5 - 35	R	13'-1" WIDE

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

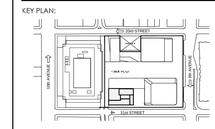
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

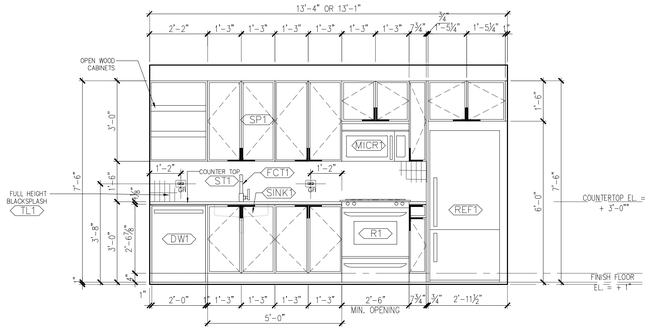
DRAWING TITLE:
KITCHEN PLANS & ELEVATIONS MARKET

SEAL & SIGNATURE:

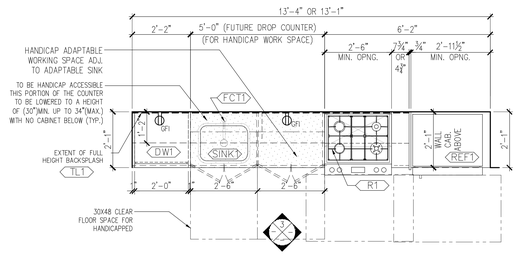
DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.I.K.
CHECKED BY:	T.J.F.
SHEET No.:	A-420.00

FILE No: \\boo\bb\Manhattan West (2012-32)\CD\Drawings\BMW_A400-A425_Kitchen.dwg

DEPT OF BLDGS 121185760 Job Number E3176205655 Scan Code



ELEVATION - 3
SCALE: 1/2" = 1'-0"

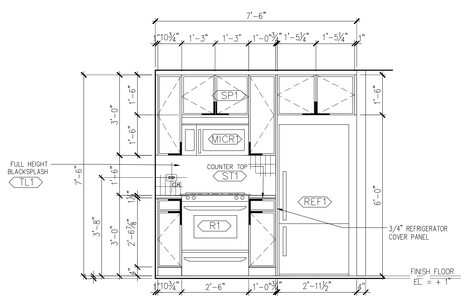


KITCHEN PLAN - TYPE K6
SCALE: 1/2" = 1'-0"

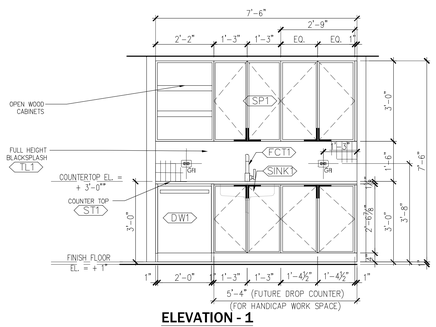
KITCHEN PLAN - TYPE K6

TYPE	FLOORS	APT.	REMARKS
K6	5-34, 37-51	D	13'-4" WIDE
	35	D	13'-4" WIDE
	4, 5-34, 35	S	13'-1" WIDE
	37-51	S	13'-4" WIDE

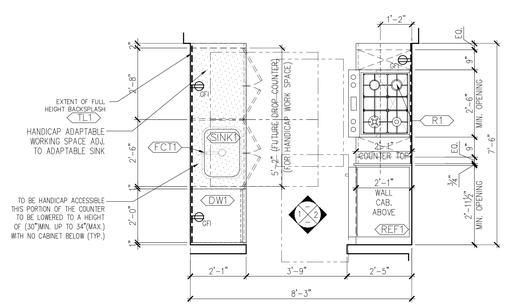
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



ELEVATION - 2
SCALE: 1/2" = 1'-0"



ELEVATION - 1
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K5
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K5

TYPE	FLOORS	APT.	REMARKS
K5	35, 36	C	7'-6" WIDE

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

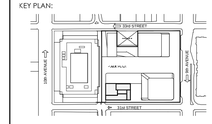
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

KITCHEN PLANS & ELEVATIONS
MARKET

SEAL & SIGNATURE:

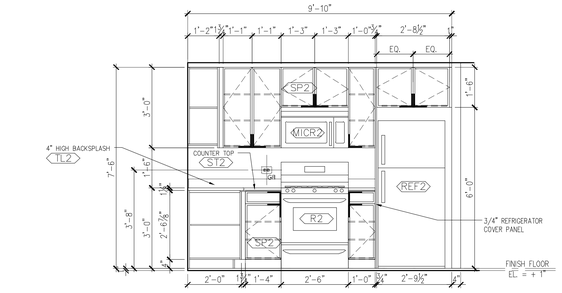
REGISTERED ARCHITECT
STATE OF NEW YORK

DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.

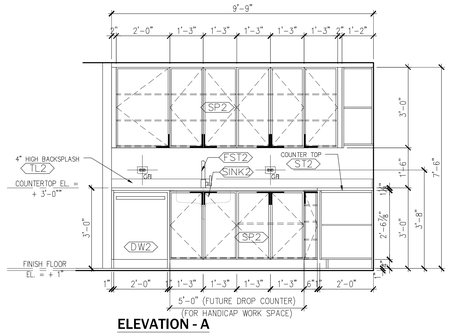
SHEET No.: A-421.00

FILE No: \\boc\bldg\Manhattan West (2012-32)\2012\Drawings\BMW_A400-A425_Kitchen.dwg

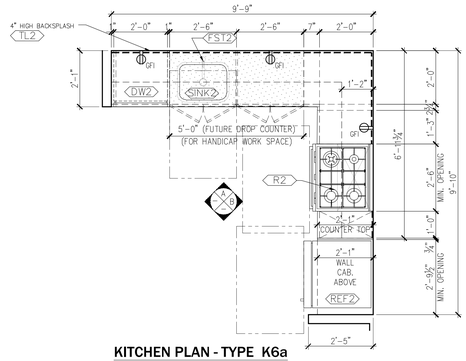
DEPT OF BLDGS 121185760 Job Number E361390946DS Scan Code



ELEVATION - B
SCALE: 1/2" = 1'-0"



ELEVATION - A
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K6a
SCALE: 1/2" = 1'-0"

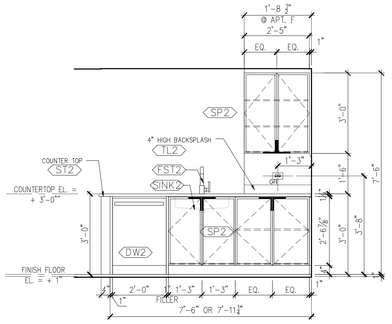
KITCHEN PLAN - TYPE K6a (HPD UNIT)

TYPE	FLOORS	APT.	REMARKS
K6a	5	C	SUPER'S APARTMENT
	6 & 7	C	

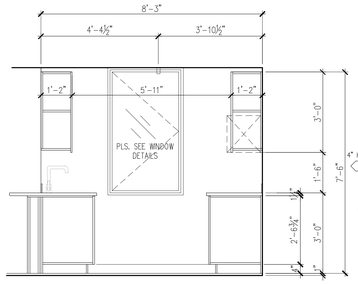
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

INCLUSIONARY UNIT REQUIREMENT

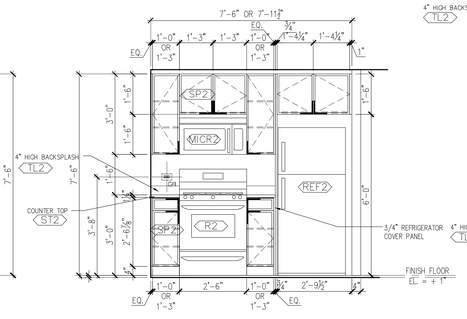
	REQUIRED	PROVIDED
	3 BR.	
REF.	14 CU. FT.	18 CU. FT.
COUNTER TOP WORK SURFACE	8 L.F.	16'-8 3/4" L.F.
SHELVING	55 L.F.	32'-3" L.F.



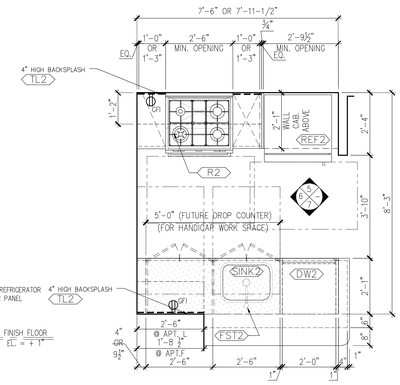
ELEVATION - 7
SCALE: 1/2" = 1'-0"



ELEVATION - 6
SCALE: 1/2" = 1'-0"



ELEVATION - 5
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K4a
SCALE: 1/2" = 1'-0"

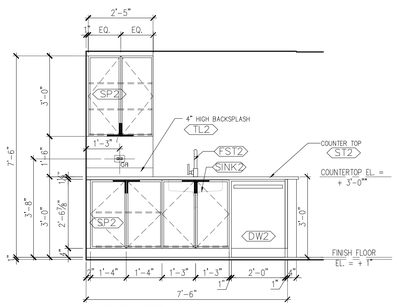
KITCHEN PLAN - TYPE K4a (HPD UNIT)

TYPE	FLOORS	APT.	REMARKS
K4a	4,5-28	F	7'-11 1/2" WIDE (2 BR.)
	4,8-20,29-34	L	7'-6" WIDE (1 BR.)
			11, 16 UFAS

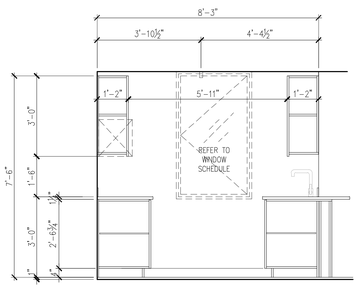
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

INCLUSIONARY UNIT REQUIREMENT

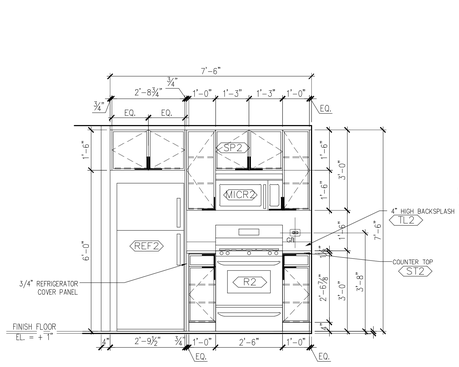
	REQUIRED		PROVIDED	
	1 BR.	2 BR.	1 BR.	2 BR.
REF.	14 C.F.	14 CU. FT.		18 CU. FT.
COUNTER TOP WORK SURFACE	6 L.F.	7 L.F.	12'-8 3/4" L.F.	13'-0 3/4" L.F.
SHELVING	40 L.F.	50 L.F.	34'-0" L.F.	35'-0" L.F.



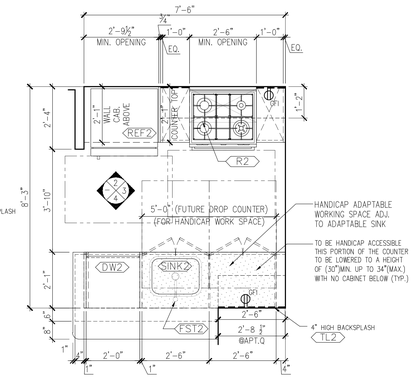
ELEVATION - 4
SCALE: 1/2" = 1'-0"



ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K2a
SCALE: 1/2" = 1'-0"

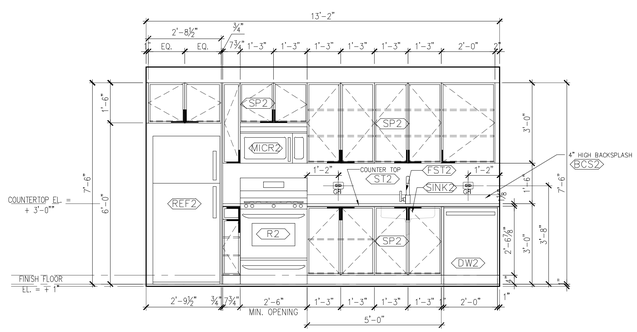
KITCHEN PLAN - TYPE K2a (HPD UNIT)

TYPE	FLOORS	APT.	REMARKS
K2a	5 - 7	B	5 & 6 (UFAS) (2 BR.)
	4	K	UFAS (1 BR.)
	5-34	K	8, 25, 34 (UFAS) (1 BR.)
	36	K	(1 BR.)
	37-42	K	37, 42. (UFAS) (1 BR.)
	5-34	Q	

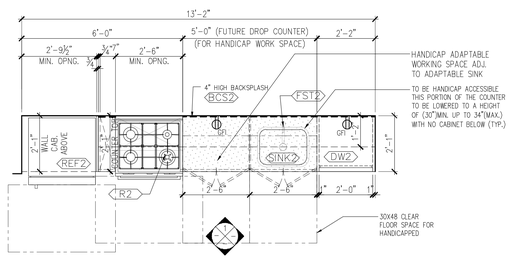
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

INCLUSIONARY UNIT REQUIREMENT

	REQUIRED		PROVIDED
	1 BR.	2 BR.	
REF.	14 CU. FT.		18 CU. FT.
COUNTER TOP WORK SURFACE	6 L.F.	7 L.F.	9'-10" L.F.
SHELVING	40 L.F.	50 L.F.	34'-0" L.F.



ELEVATION - 1
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K1a
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K1a (HPD UNIT)

TYPE	FLOORS	APT.	REMARKS
K1a	4,5, 2-34	J	13'-2" WIDE (0 BR.)
	35	J	13'-2" WIDE (0 BR.)
	36	J	13'-2" WIDE (0 BR.)

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

INCLUSIONARY UNIT REQUIREMENT

	REQUIRED	PROVIDED
	0 BR.	
REF.	14 CU. FT.	18 CU. FT.
COUNTER TOP WORK SURFACE	5 L.F.	7'-9 3/4" L.F.
SHELVING	30 L.F.	33'-6" L.F.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

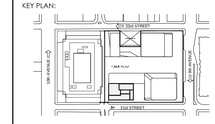
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
KITCHEN PLANS & ELEVATIONS
LOW INCOME

SEAL & SIGNATURE:

DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.J.K.
CHECKED BY:	T.J.F.
SHEET. No.:	A-422.00

FILE No: \\boo16b\Manhattan West\2012-032.00\Drawings\BMW_A400-A425_Kitchen.dwg

110 manhattan west - sw residential tower
appliance schedule

(see rw studio plans and elevations for location)
7/8/2014

CODE	LOCATION	DESCRIPTION	SOURCE	PRODUCT #	FINISH/COLOR	DIMENSIONS	REMARKS
	Affordable Unit Kitchen	Refridgerator/Freezer	General Electric	Model #GTZ18ICESS	Stainless Steel	29-1/2"W X 32-1/8"D X 66-5/8"H	–
	Affordable Unit Kitchen	Dishwasher	General Electric	Model #GLD T696DSS	Stainless Steel	24"W X 24"D X 32-11/32"H	–
	Affordable Unit Kitchen	Microwave	General Electric	Model #PVM9179SFSS	Stainless Steel	31-1/4"W X 29-3/8"D X 39-1/4"H	Over range microwave. Includes clcrulating vent.
	Affordable Unit Kitchen	Gas Range	General Electric	Model #JGS650SEFSS	Stainless Steel	29-7/8"W X 15-1/2"D X 16-1/4"H	–
	Market Unit Kitchen	Refridgerator/Freezer	Fisher & Paykel	Model #RF170ADX4	Stainless Steel	31-3/32"W X 27-3/8"D (excl. handles) X 67-17/32"H	–
	Market Unit Kitchen	Dishwasher	Bosch	#SHX8PT55UC	Stainless Steel	23-7/8"W X 24-6/8"D X 36"Max H	–
	Market Unit Kitchen	Microwave	Samsung	#ME21F707MJT	Stainless Steel	29-13/16"W X 18-1/2"D X 16-29/32"H	Over range microwave. Includes clcrulating vent.
	Market Unit Kitchen	Gas Range	Bertazzoni	PRO30-4-DFS-X	Stainless Steel	29-13/16"W X 26-1/8"D X 35-1/2"H	–
	Premium Unit Kitchen	Refridgerator/Freezer	Sub-Zero	BI-30U/O	Built-In Flush Inset Panel	30"W X 26"D X 83-3/4"H	–
	Premium Unit Kitchen	Dishwasher	Bosch	SHV7PT53UC	Built-In Flush Inset Panel	23"W X 23"D X 33-7/8"H	–
	Premium Unit Kitchen	Microwave	Bertazzoni	KO-30-PRO-X	Stainless Steel	29"W X 16"D X 16-1/4"H	Over range microwave. Includes clcrulating vent.
	Premium Unit Kitchen	Gas Range	Bertazzoni	PRO30-4-DFS-X	Black Enamel / Stainless Steel	29-13/16"W X 26-1/8"D X 35-1/2"H	–
	Premium Unit Kitchen	Wine Cooler	Summit	SWC1535B	Glass Front Panel / Stainless Steel	14.75"W x 22.75"D x 33.88"H	–
	~~Premium Unit Kitchen~~	~~Garbage Disposal~~	~~In Sink Erator~~	~~Evolution Compact~~	~~Black Powdercoat~~	~~8"DIA X 5-3/4"W X 12-1/8"H~~	–
	~~Premium Unit~~	~~Washer/Dryer~~	~~Asko~~	~~W6884FI~~	~~Stainless Steel or Custom Overlay Panel~~	~~23-5/8"W X 23-1/8"D X 34-1/2"Max H~~	–
	Affordable Unit	Washer/Dryer	Maytag	MET3800XW	White	27 1/4"W x 36"D x 71 3/4"H	–
	Premium	Washer	Bosch	WAP24202UC	White	23-1/2"W X 25"D X 33-1/4"H	–
	Premium	Dryer	Bosch	WTB86202UC	White	23-1/2"W X 25"D X 33-1/4"H	–
	All Units	In Wall Safe	Elsafe	TBD	Stainless/Black	TBD	–

110 manhattan west - sw residential tower
PLUMBING FIXTURE AND FITTING SCHEDULE

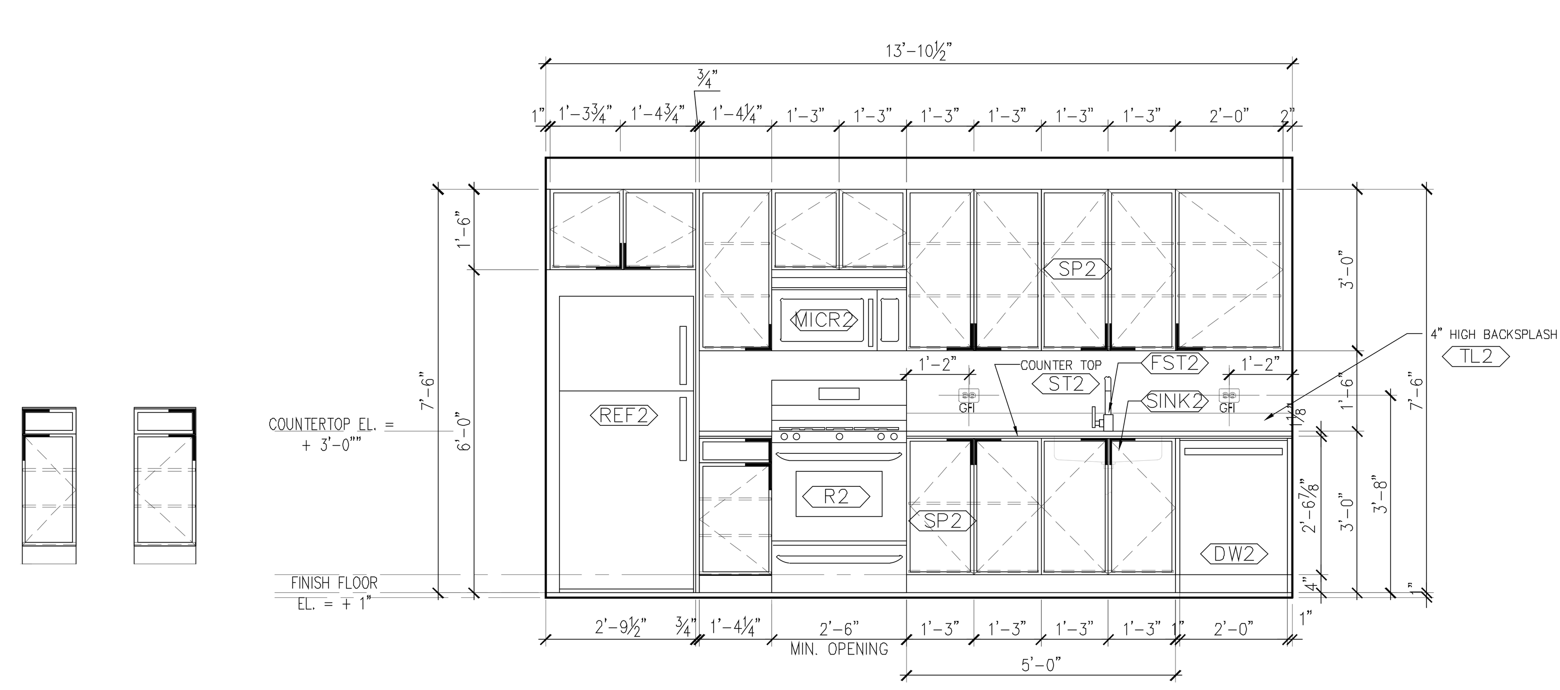
(see rw studio plans and elevations for location)
7/8/2014

CODE	LOCATION	DESCRIPTION	SOURCE	PRODUCT NAME	PRODUCT NUMBER	FINISH/COLOR	SIZE	REMARKS
	Affordable Unit Kitchen	Sink	Kraus	Exclusive Kraus Collection	KHU100-30	Stainless Steel	Interior Dimensions: 28"W X 16"D X 10"H Exterior Dimensions: 30"W X 18"D X 10"H	Or approved equal
	Affordable Unit Kitchen	Faucet	Kohler	Purist	K-7507-CP	Polished Chrome	2"W X 8"D X 11-3/8"H	Or Approved Equal
	Affordable Unit Kitchen	P-Trap	Kohler	P-Trap	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or Approved Equal
	Market Unit Kitchen	Sink	Kraus	Exclusive Kraus Collection	KHU100-30	Stainless Steel	Interior Dimensions: 28"W X 16"D X 10"H Exterior Dimensions: 30"W X 18"D X 10"H	Or Approved Equal
	Market Unit Kitchen	Faucet	Kohler	Purist	K-7507-CP	Polished Chrome	2"W X 8"D X 11-3/8"H	Or Approved Equal
	Market Unit Kitchen	P-Trap	Kohler	P-Trap	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or Approved Equal
	Premium Unit Kitchen	Sink	Kraus	Exclusive Kraus Collection	KHU100-30	Stainless Steel	Interior Dimensions: 28"W X 16"D X 10"H Exterior Dimensions: 30"W X 18"D X 10"H	Or Approved Equal
	Premium Unit Kitchen	Faucet with integrated hand spray	Kohler	Purist	K-7505-CP	Polished Chrome	2"W X 8"D X 11-3/8"H	Or Approved Equal
	Premium Unit Kitchen	P-Trap	Kohler	P-Trap	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or Approved Equal
	Amenity Space Bathrooms	Sink	Western Pottery	–	L188	White	20" W 15-11/16" D7-1/8" H	Or approved equal
	Amenity Space Bathrooms	Faucet	Kohler	Purist	K-7507-CP	Polished Chrome	2"W X 8"D X 11-3/8"H	Or approved equal
	Amenity Space Bathrooms	P-Trap	Kohler	–	K-9018	Polished Chrome	3"DIA Flange X 4-3/8"H X 14-1/2" Max Width	Or approved equal
	Amenity Space Bathrooms	Lav Supply	Kohler	–	K-7638-CP	Polished Chrome	–	Or approved equal
	Amenity Space Bathrooms	Floor Mount Toilet	Kohler	Cimarron	K-3828	White	18-15/16"W X 29-5/16"D X 28-13/16"H	Or approved equal
	Amenity Space Bathrooms	Toilet Cover and Seat	Kohler	Cimarron	K-3829	White	1-3/8"H	Included with Toilet. Or approved equal
	Amenity Space Bathrooms	Toilet Supply	Kohler	Purist	K-7654-CP	Polished Chrome	–	Or approved equal
	Amenity Space Bathrooms	Shower Head and Arm	Kohler	Purist	K-14418-CP	Polished Chrome	Shower Head & Arm: 4"DIA X 10-5/8"D X 5-5/16"H	Or approved equal
	Amenity Space Bathrooms	Pressure Balance	Kohler	Purist	K-T14501-4-CP	Polished Chrome	Control Valve: 6-1/2"DIA	Or approved equal.
	Amenity Space Bathrooms	Urinal and Flushometer	Kohler	Bardon	K-72524-NA	White / Polished Chrome	38 5/8"H x 14 1/8"L x W18"	Or approved equal

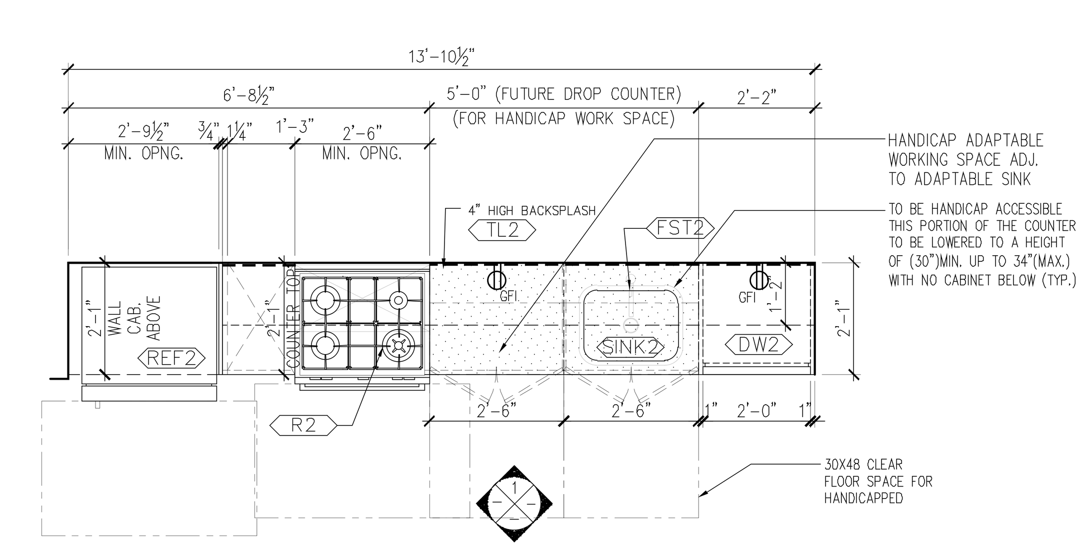
110 manhattan west - sw residential tower
apartment cabinet hardware sets

(see rw studio plans and elevations for location)
7/8/2014

CODE	LOCATION	HANDLE SOURCE	PRODUCT #	FINISH/COLOR	SIZE	Remarks
	Affordable Unit Kitchen - Upper Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	Affordable Unit Kitchen -Lower Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	~~Affordable Unit Bathroom - Vanity Door~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~
	~~Affordable Unit Bathroom - Vanity Drawers~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~
	Market Unit Kitchen - Upper Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	Market Unit Kitchen -Lower Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	~~Market Unit Bathroom - Vanity Door~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~
	~~Market Unit Bathroom - Vanity Drawers~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~
	Premium Unit Kitchen - Upper Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	Premium Unit Kitchen -Lower Cabinets	Lacava	Martini #K-150	Matte Black	5 3/8" x 5 3/8"	Or approved equal. Refer to drawings.
	~~Premium Unit Bathroom - Vanity Door~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~
	~~Premium Unit Bathroom - Vanity Drawers~~				~~TBD~~	~~Or approved equal. Refer to drawings.~~



ELEVATION - 1
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K7a
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K7a (HPD UNIT)

TYPE	FLOORS	APT.	REMARKS
K7a	5 - 34,35,36,37-41	A	5,7,11,16,25,34 UFAS 13'-10 1/2" WIDE

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

INCLUSIONARY UNIT REQUIREMENT

	REQUIRED	PROVIDED
	0 BR.	
REF.	14 CU. FT.	18 CU. FT.
COUNTER TOP WORK SURFACE	8 L.F.	8'-5" L.F.
SHELVING	55 L.F.	43'-6" L.F.

DEPT OF BLDGS 121185760 Job Number
ES040890474 Scan Code

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

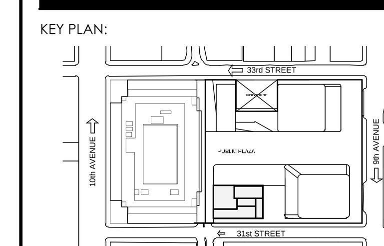
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'- 0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

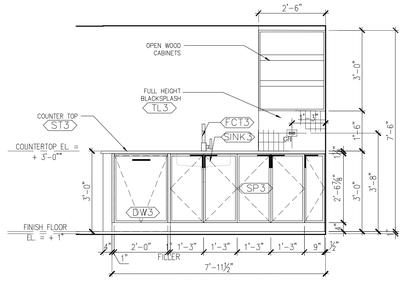
DRAWING TITLE:
KITCHEN PLANS & ELEVATIONS
LOW INCOME
& KITCHEN SCHEDULES

SEAL & SIGNATURE:

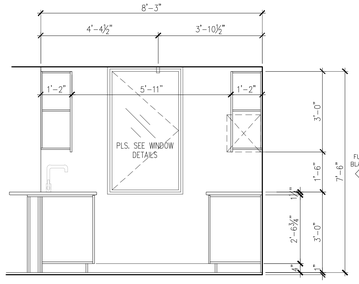
DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DWG. No.:	A-423.00
SHEET. No.:	

FILE No: T:\Brookfield-Manhattan-West (2012-32)\S.CE\Drawings\BMW_A420-A425_Kitchen.dwg

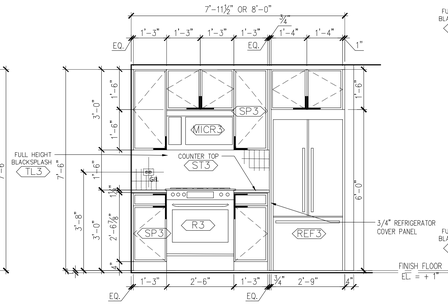
DEPT OF BLDGS 121185760 Job Number | E399505075 Scan Code



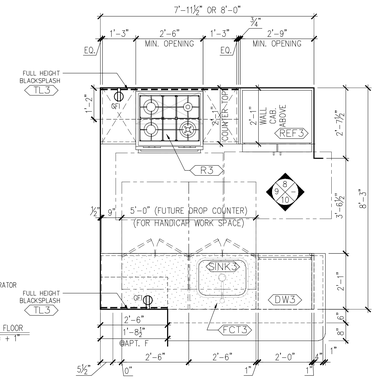
ELEVATION - 10
SCALE: 1/2" = 1'-0"



ELEVATION - 9
SCALE: 1/2" = 1'-0"



ELEVATION - 8
SCALE: 1/2" = 1'-0"

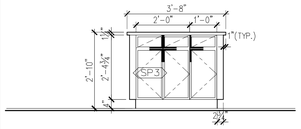


KITCHEN PLAN - TYPE K4p
SCALE: 1/2" = 1'-0"

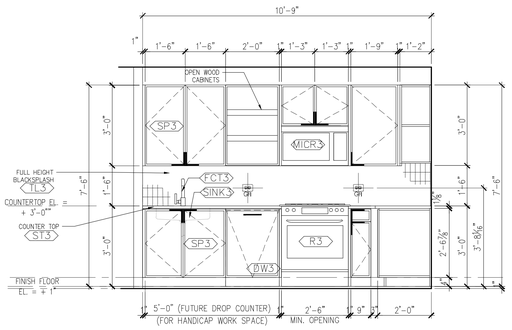
KITCHEN PLAN - TYPE K4p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K4p	52-61	F	7'-11 1/2" WIDE
	52-61	P	8'-0" WIDE

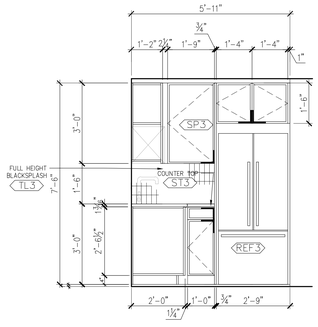
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



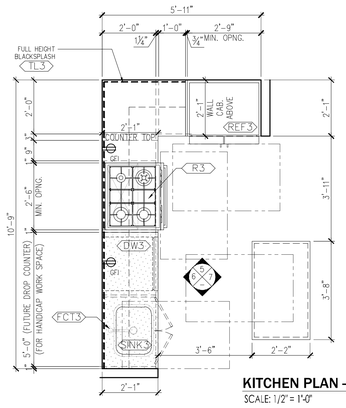
ELEVATION - 7
SCALE: 1/2" = 1'-0"



ELEVATION - 6
SCALE: 1/2" = 1'-0"



ELEVATION - 5
SCALE: 1/2" = 1'-0"

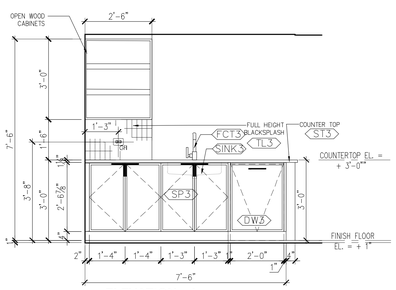


KITCHEN PLAN - TYPE K3p
SCALE: 1/2" = 1'-0"

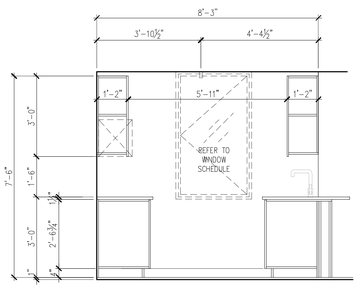
KITCHEN PLAN - TYPE K3p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K3p	52-61	G	-

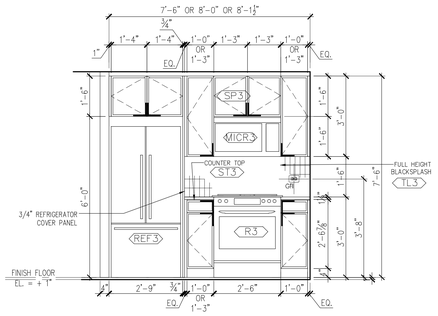
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



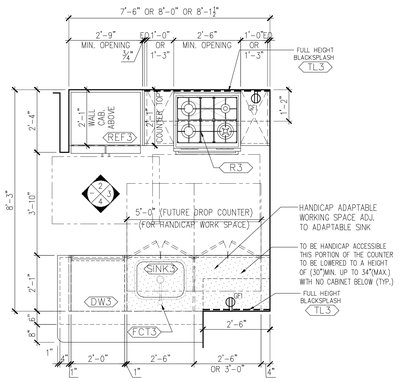
ELEVATION - 4
SCALE: 1/2" = 1'-0"



ELEVATION - 3
SCALE: 1/2" = 1'-0"



ELEVATION - 2
SCALE: 1/2" = 1'-0"

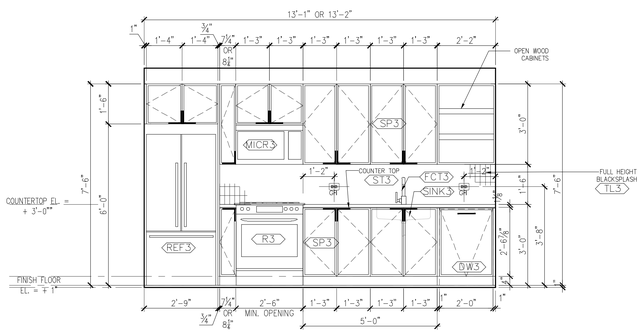


KITCHEN PLAN - TYPE K2p
SCALE: 1/2" = 1'-0"

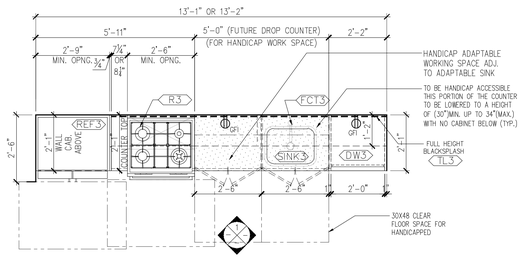
KITCHEN PLAN - TYPE K2p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K2p	52 - 61	B	7'-6" WIDE
	52 - 61	H	7'-6" WIDE
	52 - 55	K	7'-6" WIDE
	52 - 55	L	8'-0" WIDE
	52 - 55	Q	8'-1 1/2" WIDE
	56-61	K	8'-0" WIDE

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



ELEVATION - 1
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K1p
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K1p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K1p	52 - 61	J	13'-2" WIDE
	56 - 61	R	13'-1" WIDE

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

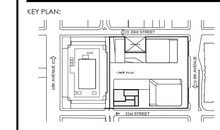
GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:


PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

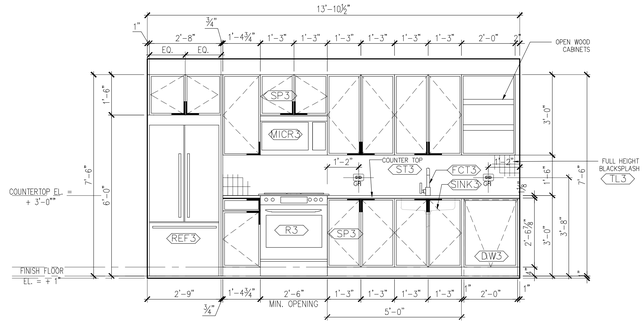
DRAWING TITLE:
KITCHEN PLANS & ELEVATIONS
PREMIUM

SEAL & SIGNATURE:
REGISTERED ARCHITECT TIMOTHY J. FOLEY STATE OF NEW YORK

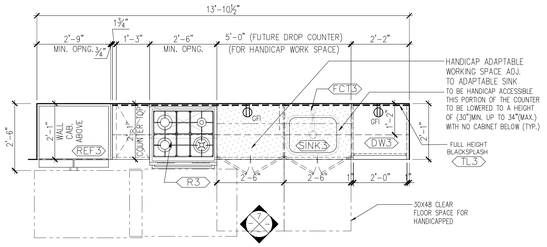
DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DRAWING No.:	A-424.00
SHEET: No.:	

FILE No: \\boxfiles\Manhattan West (2012-32)_CD\Drawings\BMW_A400-A425_Kitchen.dwg

DEPT OF BLDGS 121185760 Job Number | E320050569976 Scan Code



ELEVATION - 7
SCALE: 1/2" = 1'-0"

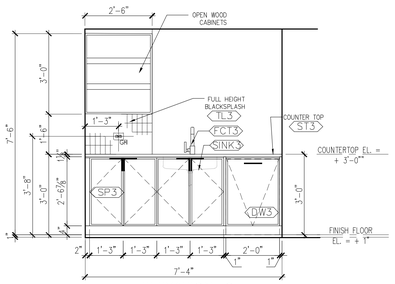


KITCHEN PLAN - TYPE K8p
SCALE: 1/2" = 1'-0"

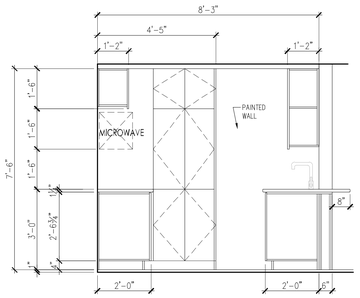
KITCHEN PLAN - TYPE K8p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K8p	52 - 61	A	13'-10 1/2" WIDE

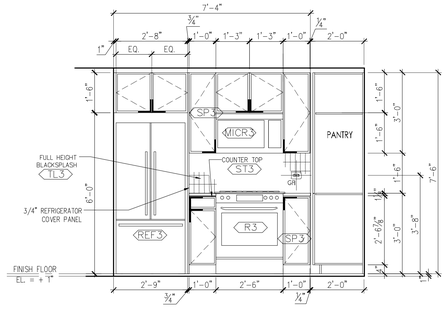
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



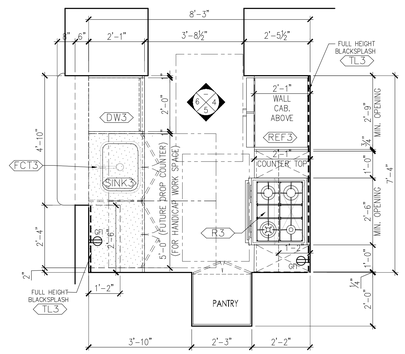
ELEVATION - 6
SCALE: 1/2" = 1'-0"



ELEVATION - 5
SCALE: 1/2" = 1'-0"



ELEVATION - 4
SCALE: 1/2" = 1'-0"

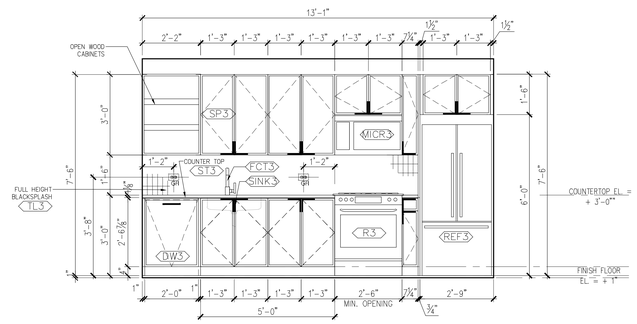


KITCHEN PLAN - TYPE K7p
SCALE: 1/2" = 1'-0"

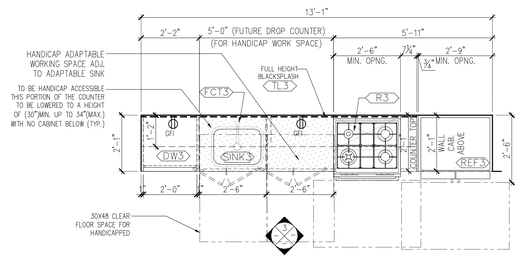
KITCHEN PLAN - TYPE K7p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K7	52 - 61	D	-

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



ELEVATION - 3
SCALE: 1/2" = 1'-0"

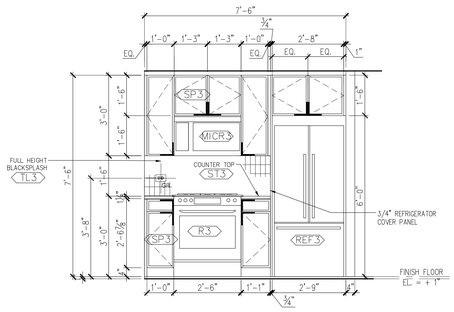


KITCHEN PLAN - TYPE K6p
SCALE: 1/2" = 1'-0"

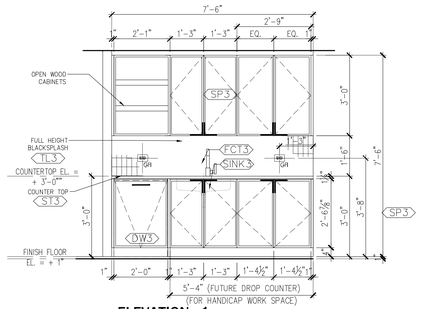
KITCHEN PLAN - TYPE K6p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K6p	52-61	S	13'-1" WIDE

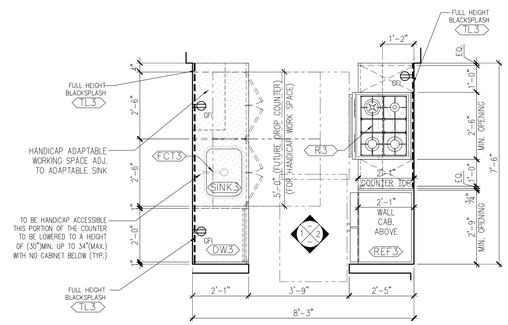
NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD



ELEVATION - 2
SCALE: 1/2" = 1'-0"



ELEVATION - 1
SCALE: 1/2" = 1'-0"



KITCHEN PLAN - TYPE K5p
SCALE: 1/2" = 1'-0"

KITCHEN PLAN - TYPE K5p (PREMIUM UNIT)

TYPE	FLOORS	APT.	REMARKS
K5p	52-61	C	

NOTE:
1. PLEASE VERIFY ACTUAL MEASUREMENT IN FIELD

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

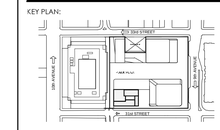
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-4800

DATE:	REVISION:
2014-09-09	ISSUE FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	ISSUED FOR FILING
2014-03-14	DESIGN DEVELOPMENT
2014-01-24	50% DESIGN DEVELOPMENT
2014-01-17	ISSUED TO HPD
2013-12-18	SCHEMATIC DESIGN

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

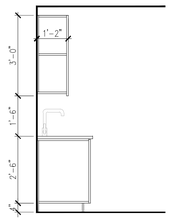
DRAWING TITLE:
KITCHEN PLANS & ELEVATIONS PREMIUM

SEAL & SIGNATURE:

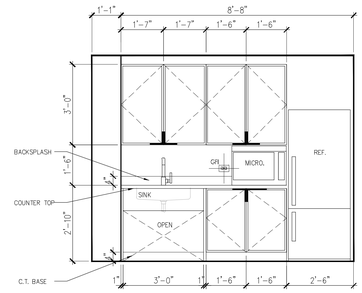
DATE:	12/06/13
PROJECT No:	2012-32
DRAWN BY:	Z.J.R.
CHECKED BY:	T.J.F.
DRAWING No.:	A-425.00
SHEET. No.:	

FILE No: \\boxfiles\Manhattan West (2012-32)_CD\Drawings\BMW_A425-A426_Kitchen.dwg

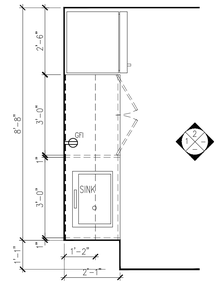
DEPT OF BLDGS 121185760 Job Number E309125968S Scan Code



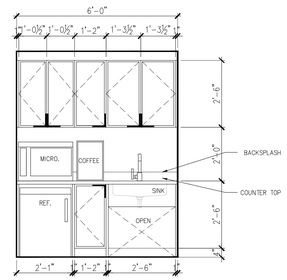
ELEVATION - 2
SCALE: 1/2" = 1'-0"



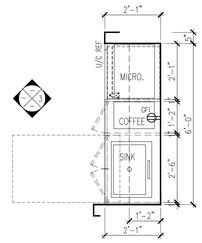
ELEVATION - 1
SCALE: 1/2" = 1'-0"



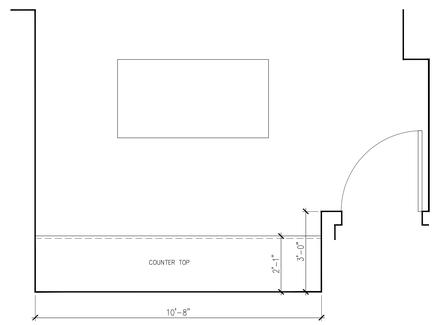
PANTRY PLAN AT EMLOYEE LOUNGE-CELLAR
SCALE: 1/2" = 1'-0"



ELEVATION - 3
SCALE: 1/2" = 1'-0"



PANTRY PLAN AT PROP. MNGR.-1ST FLOOR
SCALE: 1/2" = 1'-0"



PANTRY PLAN AT 62ND FLOOR
SCALE: 1/2" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

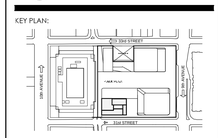
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 8' 12'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PANTRY PLANS & ELEVATIONS
CELLAR, 1ST & 62ND FLOOR

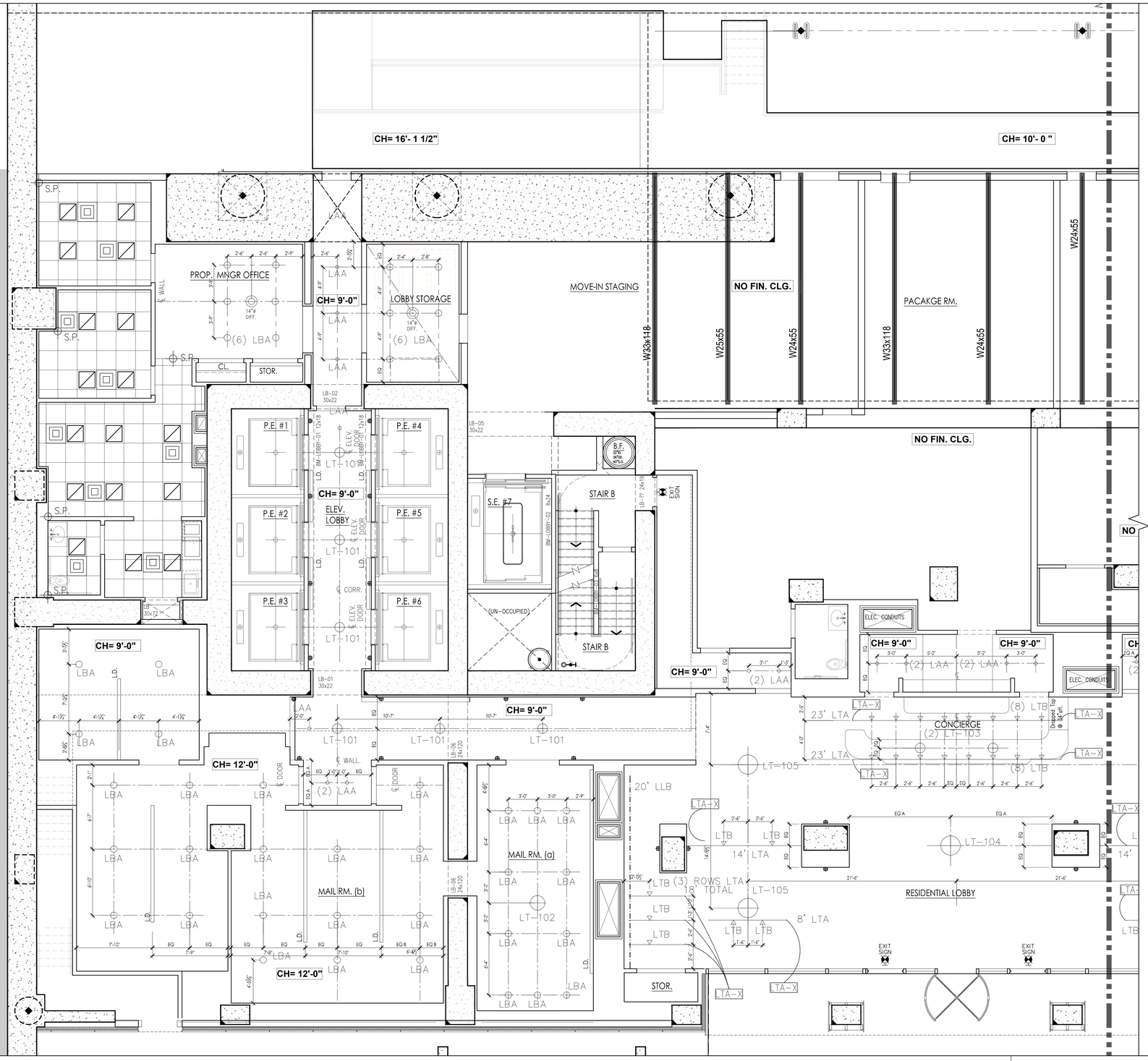
SEAL & SIGNATURE:

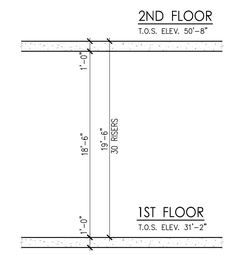
REGISTERED ARCHITECT
STATE OF NEW YORK

DATE:	10/08/2014
PROJECT No:	2012-32
DRAWN BY:	GSF
CHECKED BY:	T.J.F.
SHEET No.:	A-426.00

FILE No: \\boo\ebs\Manhattan West\2012-032.00\Drawings\BMW_A400-A425_Kitchen.dwg

DEPT OF BLDGS 121185760 Job Number
E3524807229 Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

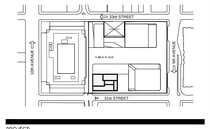
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-15-09	BULLETIN # 1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'- 0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

1ST FLOOR
REFLECTED CEILING PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY :	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-602.00
SHEET. No.:	1 of 000

FILE No: \\brookfield-sla\manhattan-West (2012-32)\LCD\Drawings\BAW_A602-A603_01_R07.dwg

CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.

FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.

FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.

COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED

SPRINKLER HEADS (SEE MECHL. FOR LEGEND)

KADEX FINISH ON CONC. SLAB ABOVE

DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

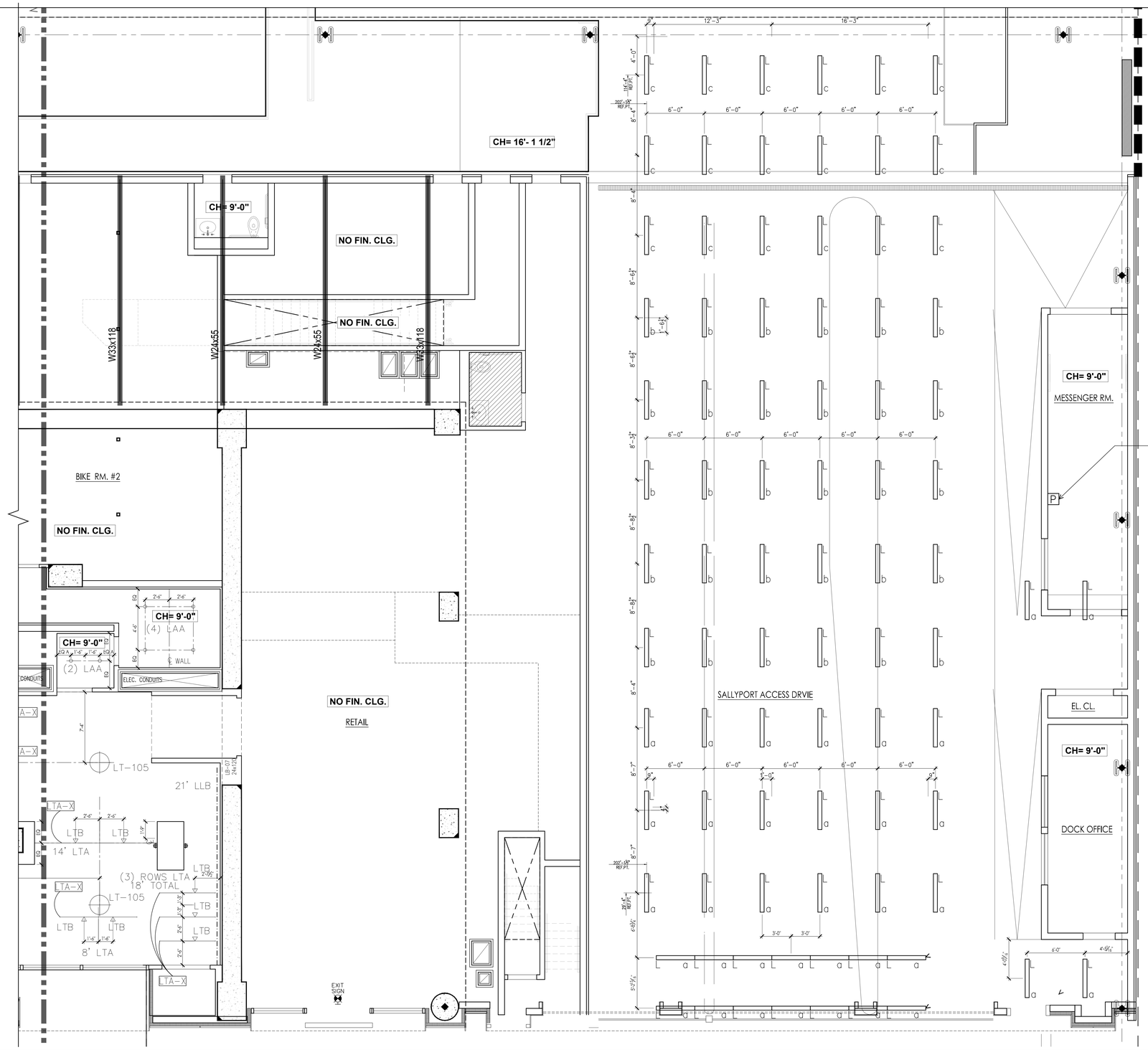
THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

DEPT OF BLDGS 121185760 Job Number
E309969171TS Scan Code



LEGEND (SALLY PORT LIGHTING ONLY)

SYMBOL	DESCRIPTION
L	LED "DIMMABLE" LENS FIXTURE
P	MASTER PRESET CONTROL 'a' – ZONING FOR DAYTIME ADAPTIVE LIGHTING 'b' – ZONING FOR SECURITY LIGHTING 'c' – ZONING FOR GENERAL LIGHTING

DESIGN CRITERIA:

–LIGHTING LEVELS REPRESENT MAINTAINED LIGHT LEVELS, MINIMUMS EXPECTED.

–LIGHT LEVEL AVERAGE: MIN TO BE NO GREATER THAN 4:1 WITHIN THE SALLY PORT DRIVE AND ADJACENT WALKWAY.

–EACH 'L' FIXTURE TO BE MOUNTED BETWEEN STRUCTURAL BEAM BAYS. BOTTOM OF FIXTURE TO BE ALIGNED WITH BOTTOM OF NEAREST STRUCTURAL BEAM.

CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.

FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
LIGHT FIXTURE TYPE DESIGNATION. REFER TO LIGHTING SPEC.

FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.

COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED

SPRINKLER HEADS (SEE MECHL. FOR LEGEND)

KADEX FINISH ON CONC. SLAB ABOVE

DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____& A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

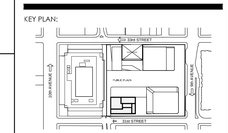
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER
NB# 121185760

NORTH
Scale: 1/4" = 1'- 0"
0' 2' 4' 6' 10'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

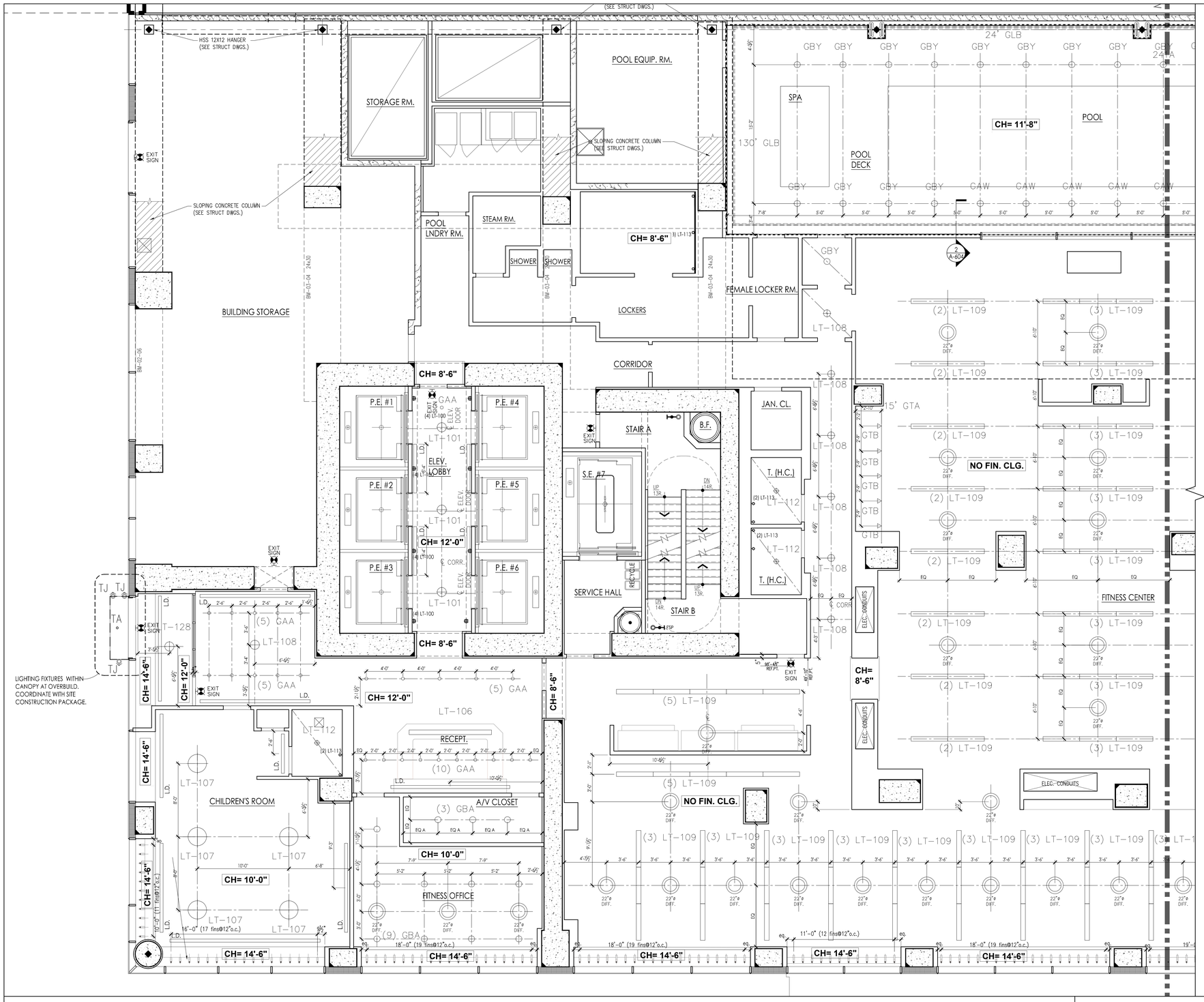
DRAWING TITLE:
1ST FLOOR
REFLECTED CEILING PLAN (EAST)

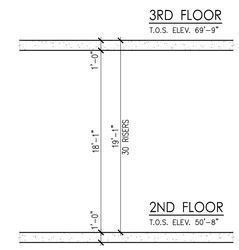
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SHEET No:	A-603.00
SHEET. NO.:	1 of 000

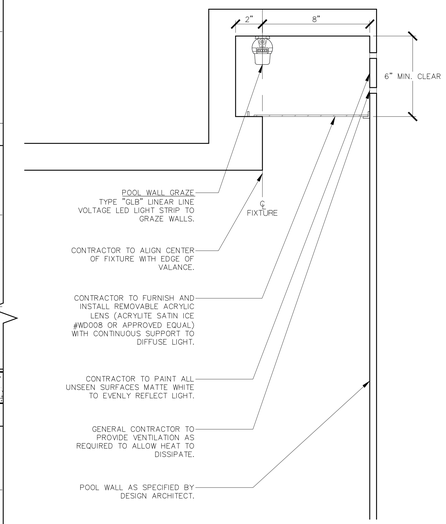
FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCD Drawings\BMW_A603-A605_01-R_RCP.Dwg

DEPT OF BLDGS 121185760 Job Number
E344257745 Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"



2 SWIMMING POOL - CEILING
SCALE: 3" = 1'-0"

DEDUCT ALTERNATE #1:
A) Provide a deduct alternate for all construction associated with the swimming pool. This includes:
- Swimming pool and spa room.
- sauna and shower facilities.
- lockers.
- pool equipment room.
- 2nd floor laundry room.

B). Bathroom fixtures (water closets and vanities) to remain. All other spaces listed above to revert to storage rooms, with room finishes as appropriate.
C) deduct alternate to include all specific building MEPFP systems associated with the spaces listed.
D) deduct alternate to include all structural work associated with the dropped slab and additional framing to create pool recess and piping areas below 2nd floor.

1

CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.

FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.

FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.

COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED

SPRINKLER HEADS (SEE MECHL. FOR LEGEND)

KADEX FINISH ON CONC. SLAB ABOVE

DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

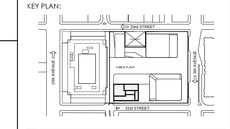
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0 2 4 6 10'

KEY PLAN:



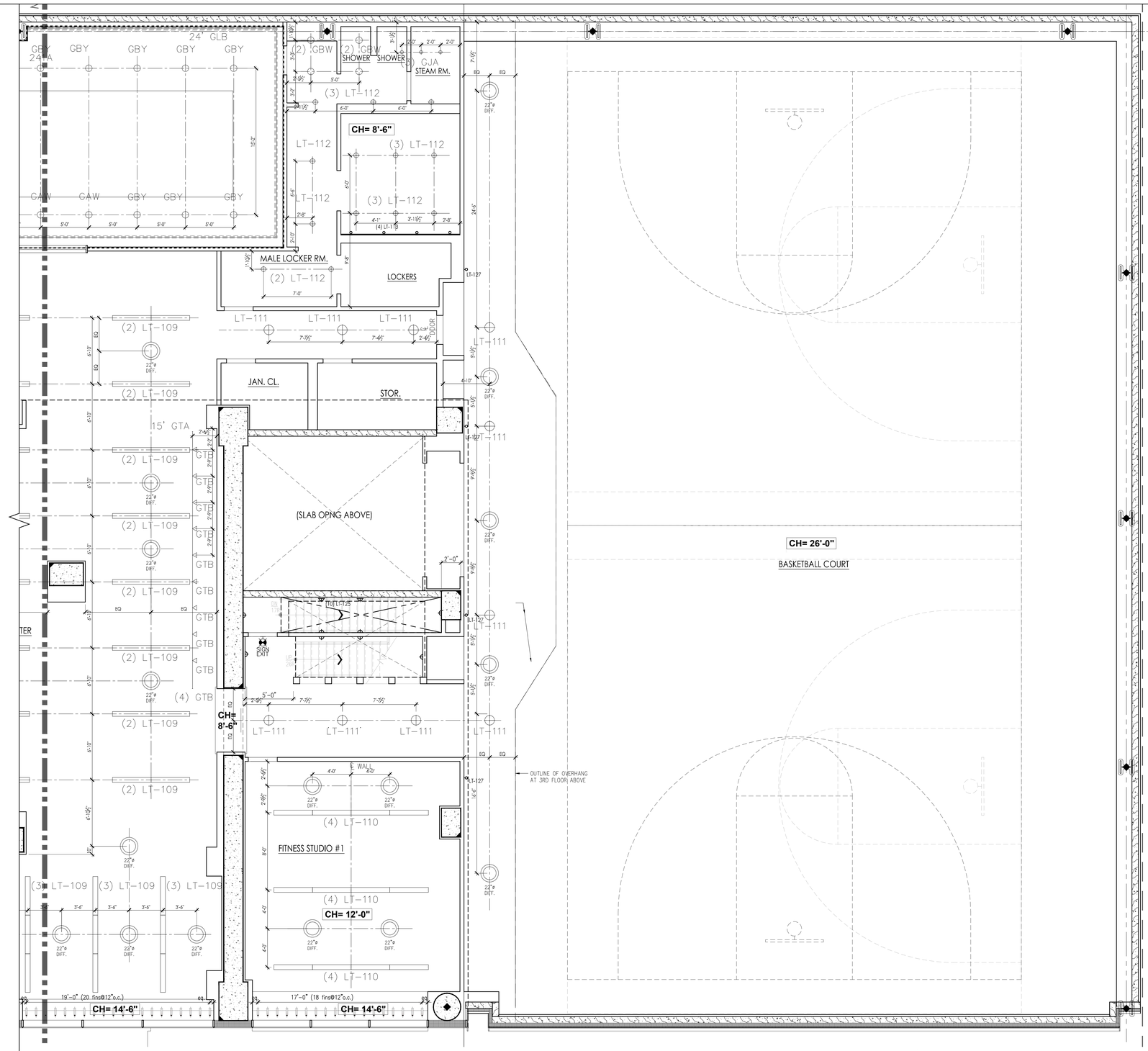
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
2ND FLOOR
REFLECTED CEILING PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SCALE:	1/4" = 1'-0"
DRAWING NO:	A-604.00
SHEET. No.:	1 of 000

FILE No: Y:\Brookfield\Manhattan-West\2012-32\LD\CD\Drawings\BMW_A604-A605_2ND_RCP.dwg



DEDUCT ALTERNATE #1:
A) Provide a deduct alternate for all construction associated with the swimming pool. This includes:
- Swimming pool and spa room.
- sauna and shower facilities.
- lockers.
- pool equipment room.
- 2nd floor laundry room.

B). Bathroom fixtures (water closets and vanities) to remain. All other spaces listed above to revert to storage rooms, with room finishes as appropriate.
C) deduct alternate to include all specific building MEPFP systems associated with the spaces listed.
D) deduct alternate to include all structural work associated with the dropped slab and additional framing to create pool recess and piping areas below 2nd floor.

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.

FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.

FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.

COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED

SPRINKLER HEADS (SEE MECHL. FOR LEGEND)

KADEX FINISH ON CONC. SLAB ABOVE

DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

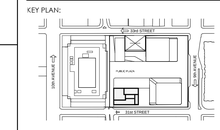
DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH

Scale: 1/4" = 1'- 0"
0 2 4 6 10'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

2ND FLOOR
REFLECTED CEILING PLAN (EAST)

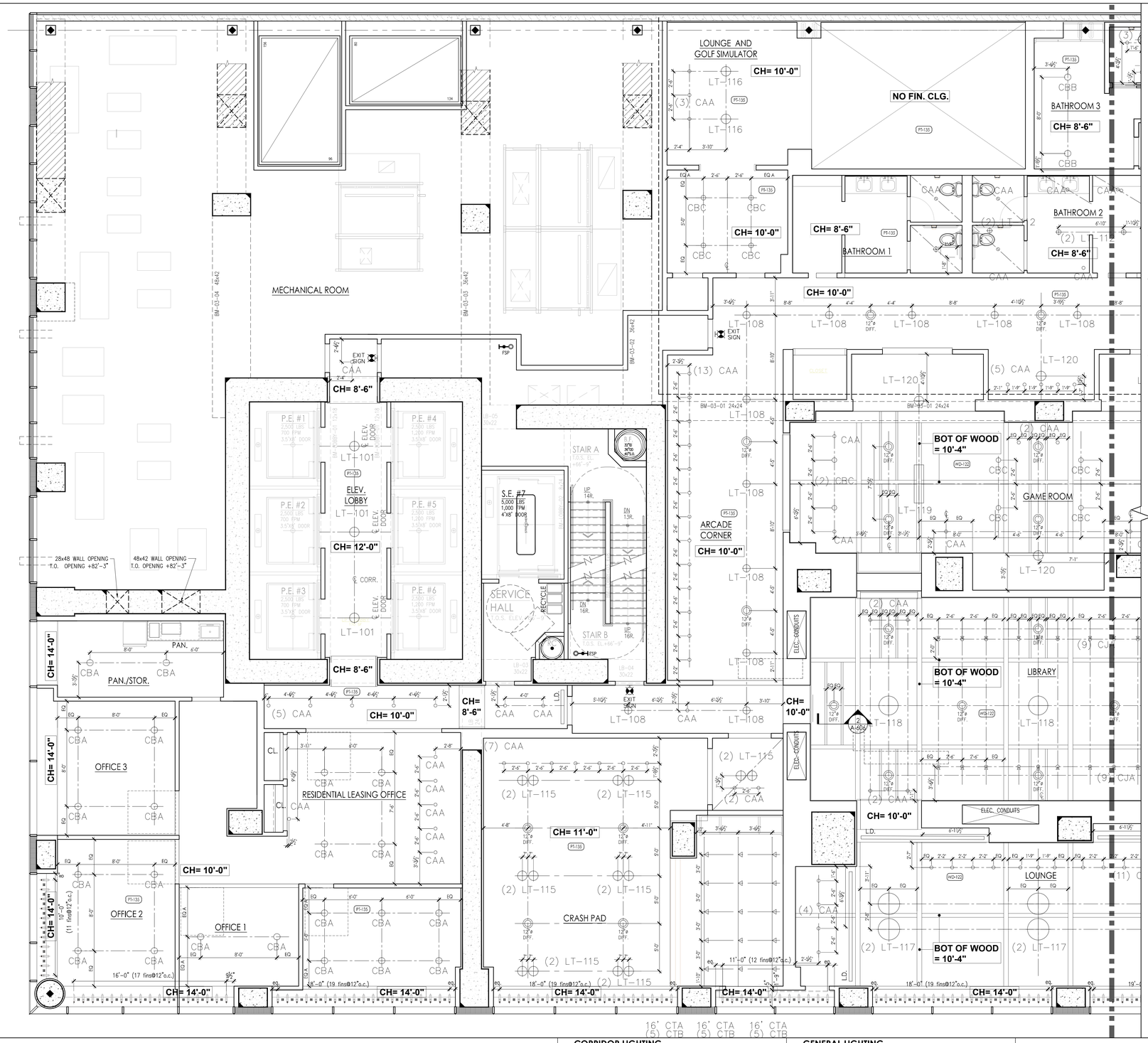
SEAL & SIGNATURE:

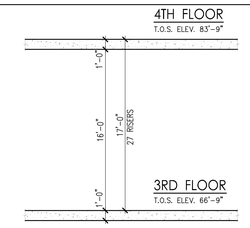
REGISTERED ARCHITECT No. 026110 STATE OF NEW YORK

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-605.00
SHEET No.:	1 of 000

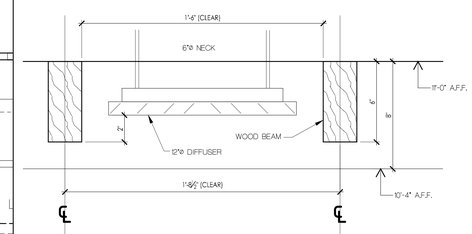
FILE No: T:\brookfield-Manhattan-West (2012-32)\LCD\Drawings\BMW_A604-A605_D01_RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E260970000200 Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"



2 CEILING @ LOUNGE/LIBRARY/GAMEROOM
SCALE: 3" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- A FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- B EM
- C EM
- C1 FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- CO CSU COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

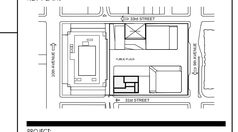
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

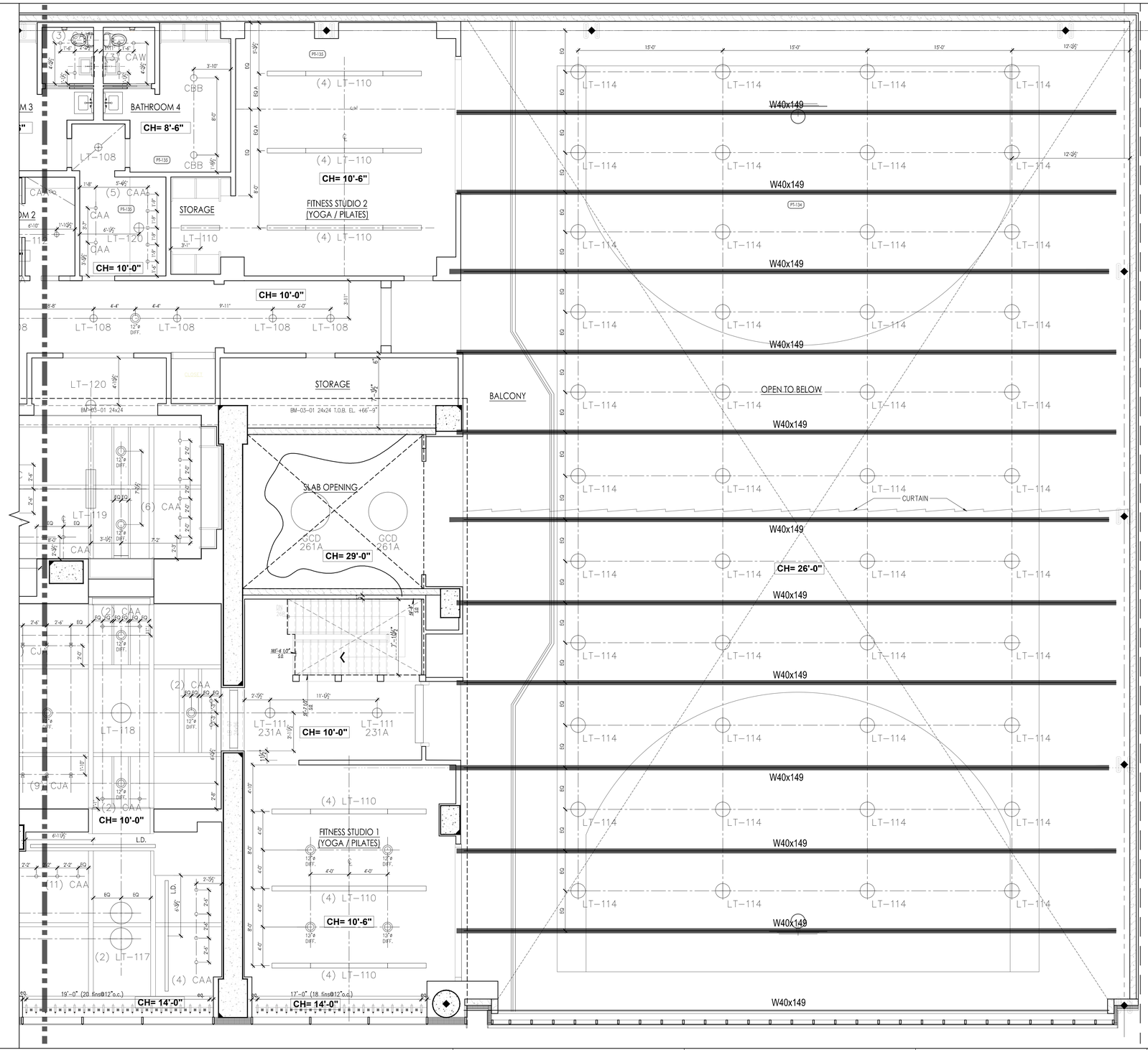
DRAWING TITLE:
3RD FLOOR
REFLECTED CEILING PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO:	A-606.00
SHEET. No.:	1 of 000

FILE No: "I:\Brookfield\Manhattan-West (2012-32)\LCD Drawings\BMW_A606-A607_2ZR_RCP.dwg"

DEPT OF BLDGS 121185760 Job Number
E300185705 Scan Code



CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- A — FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- B — EM
- C — EM — C1 — FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

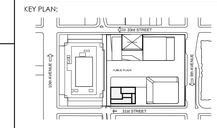
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 1/4" = 1'- 0" (0, 2, 4, 6, 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

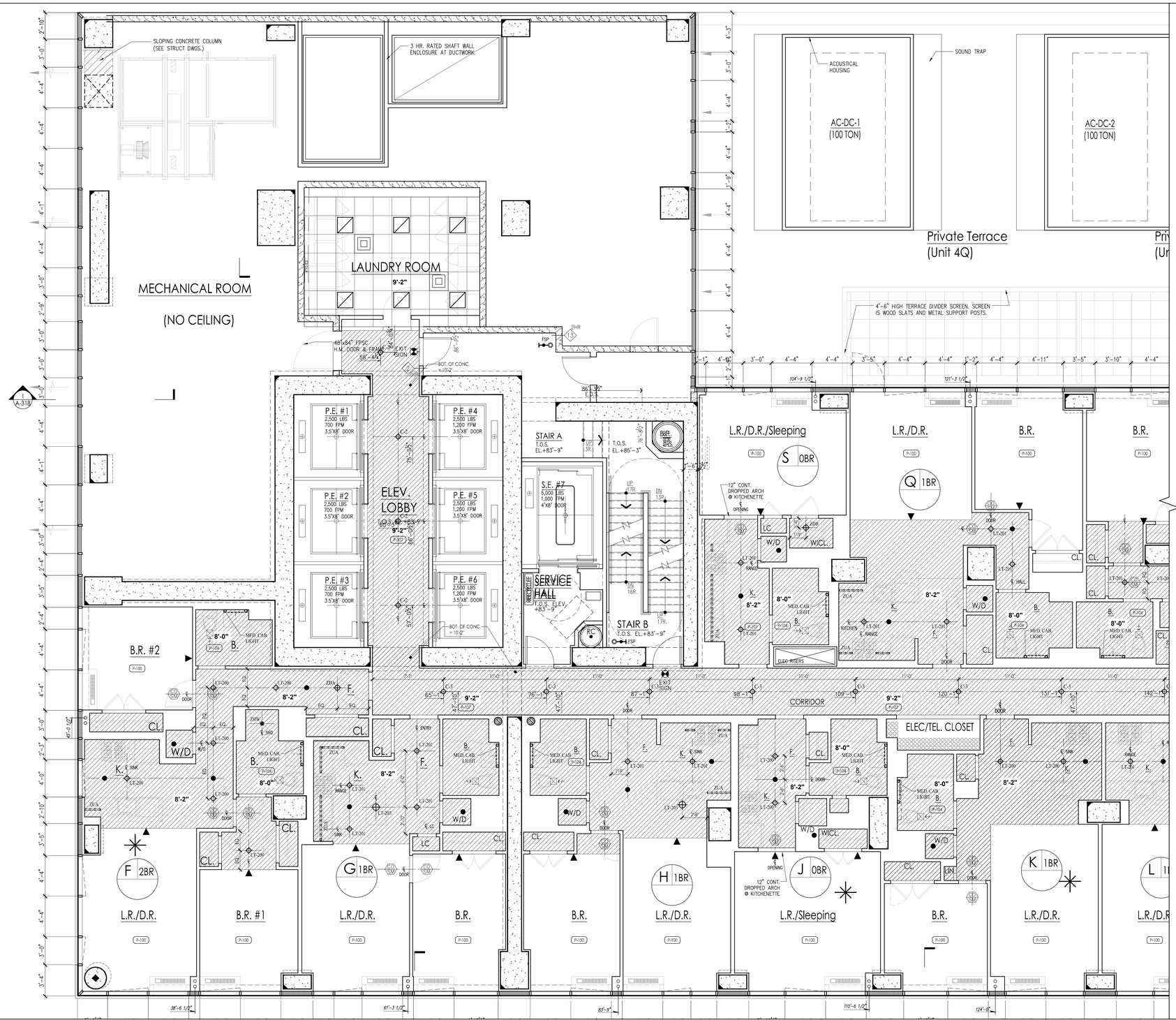
DRAWING TITLE:
3RD FLOOR
REFLECTED CEILING PLAN (EAST)

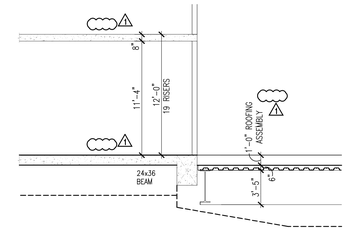
SEAL & SIGNATURE: REGISTERED ARCHITECT JOSEPH A. CORSO STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO.:	A-607.00
SHEET. NO.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCD Drawings\BMW_A606-A607_DR_RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E357126590X06 Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____& A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

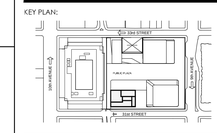
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

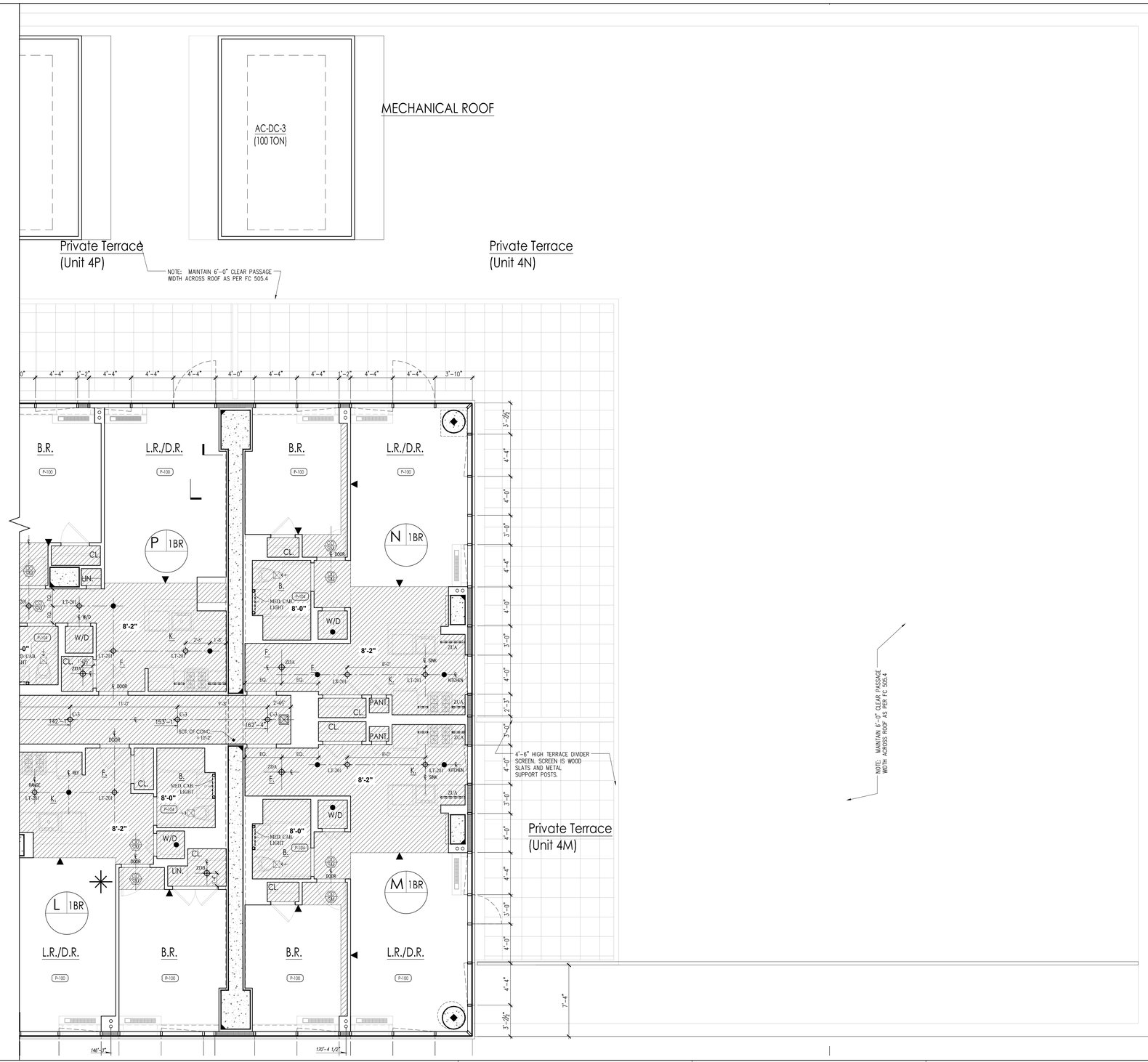
DRAWING TITLE:
4TH FLOOR
REFLECTED CEILING PLAN (WEST)

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No:	A-608.00
SHEET, No.:	1 of 000

FILE No: Y:\Brookfield\Manhattan-West\2012-32\LD\CD\Drawings\BMW_A608_04R1-RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E300981235 Scan Code



CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. (A) LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- (B) EM / (C) EM / (C1) FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS. AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

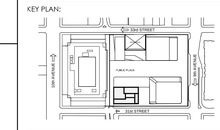
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 1/4" = 1'- 0" (0 2 4 6 10')

KEY PLAN:



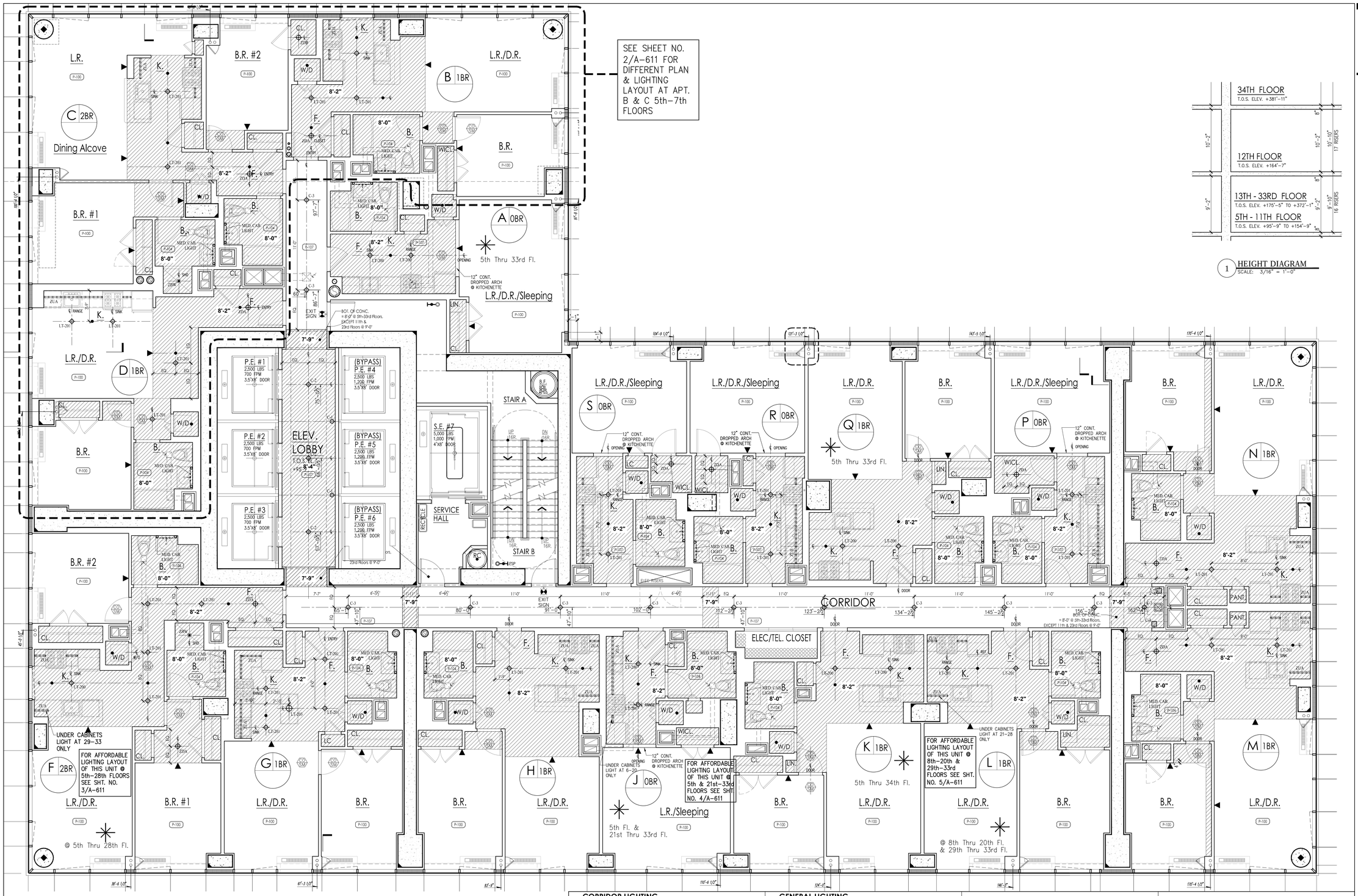
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
4TH FLOOR
REFLECTED CEILING PLAN (EAST)

SEAL & SIGNATURE: REGISTERED ARCHITECT JOSEPH A. CORSO STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO.:	A-609.00
SHEET. NO.:	1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\LCD Drawings\BMW_A608_DR1_RCP.dwg



CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. (A) LIGHT FIXTURE TYPE DESIGNATION. REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS. (B, EM, C, EM, C1)
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____& A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS.
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

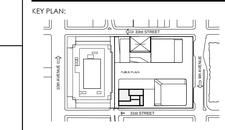
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0' 2' 4' 6' 10')

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

5TH Thru 33RD FLOOR REFLECTED CEILING PLAN

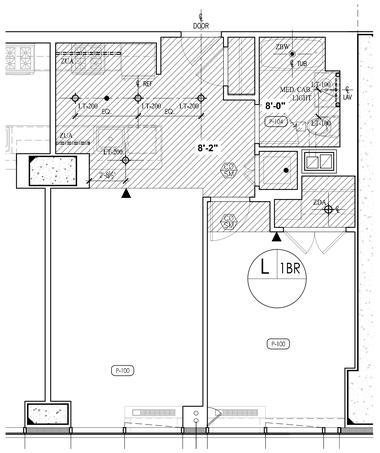
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.

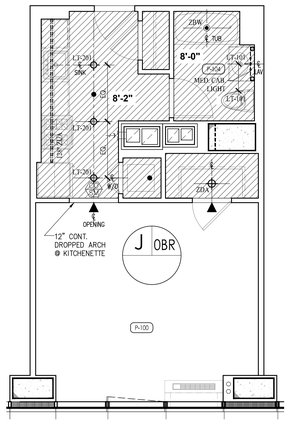
SHEET No.: A-610.00
1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\SLCE Drawings\BMW_A610-A611_5-33RL RCP.dwg

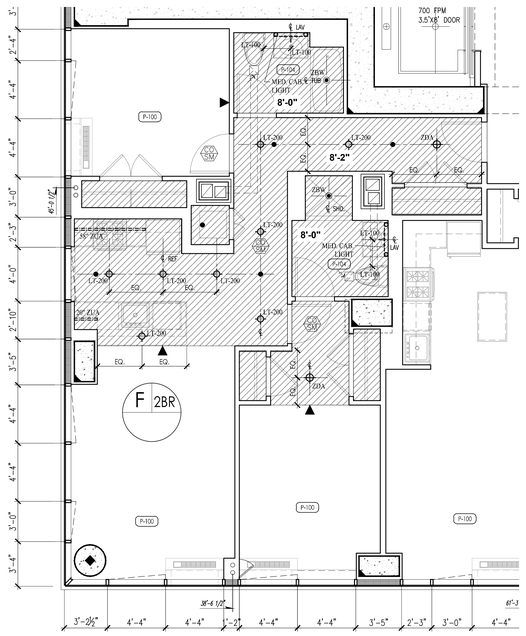
DEPT OF BLDGS 121185760 Job Number
E360269950 Scan Code



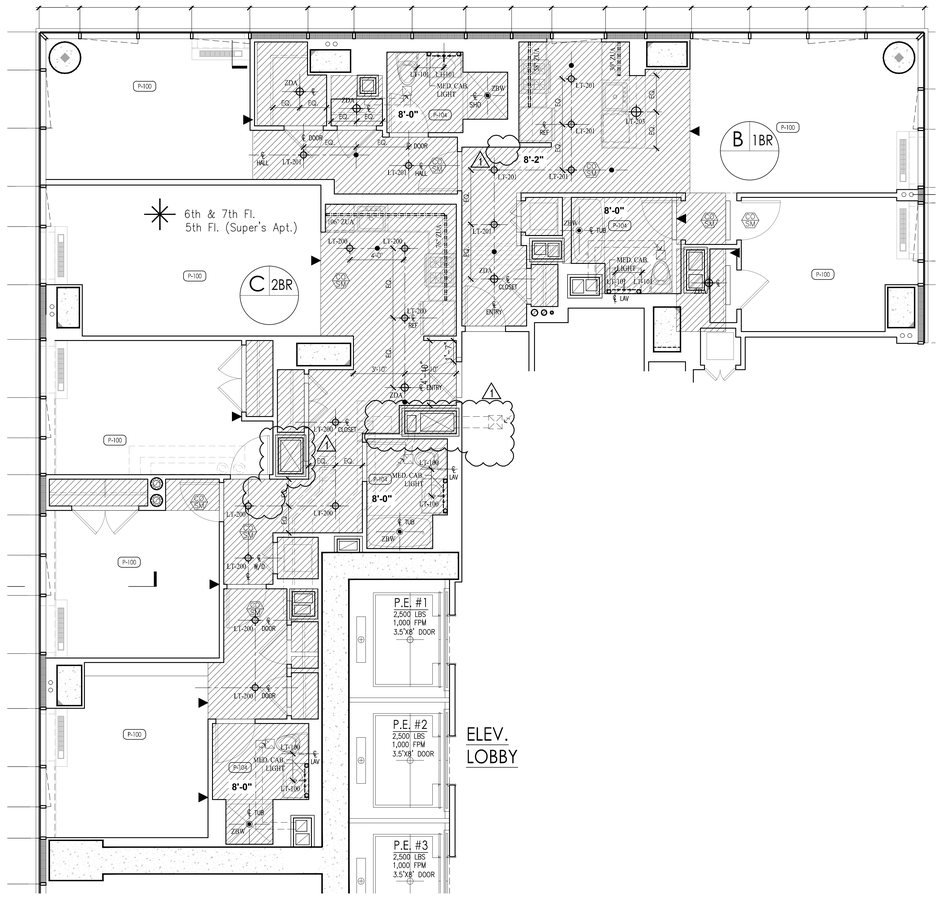
5 APT. L REFLECTED CEILING PLAN
AT 8th-20th & 29th-33rd FLOORS (Affordable)
SCALE: 1/4" = 1'-0"



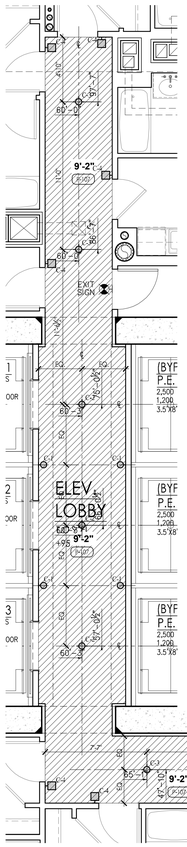
4 APT. J REFLECTED CEILING PLAN
AT 5th & 21st-34th FLOORS (Affordable)
SCALE: 1/4" = 1'-0"

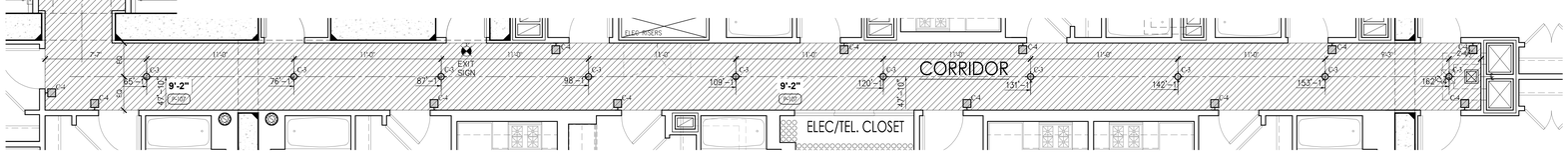


3 APT. F REFLECTED CEILING PLAN
AT 5th 28th FLOORS (Affordable)
SCALE: 1/4" = 1'-0"

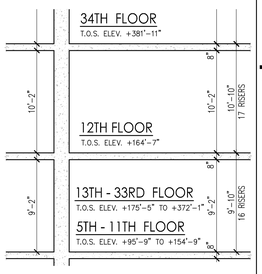


REFLECTED CEILING PLAN AT
APT B 5th, 6th & 7th FLOORS (Market Rate)
APT C 5th (Super's Apt.), 6th & 7th FLOORS (Affordable)
2 SCALE: 1/4" = 1'-0"





6 PUBLIC CORRIDOR CEILING @ FLOORS 11th & 23rd
SCALE: 1/4" = 1'-0"



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

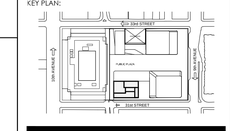
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'- 0" (0' 2' 4' 6' 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

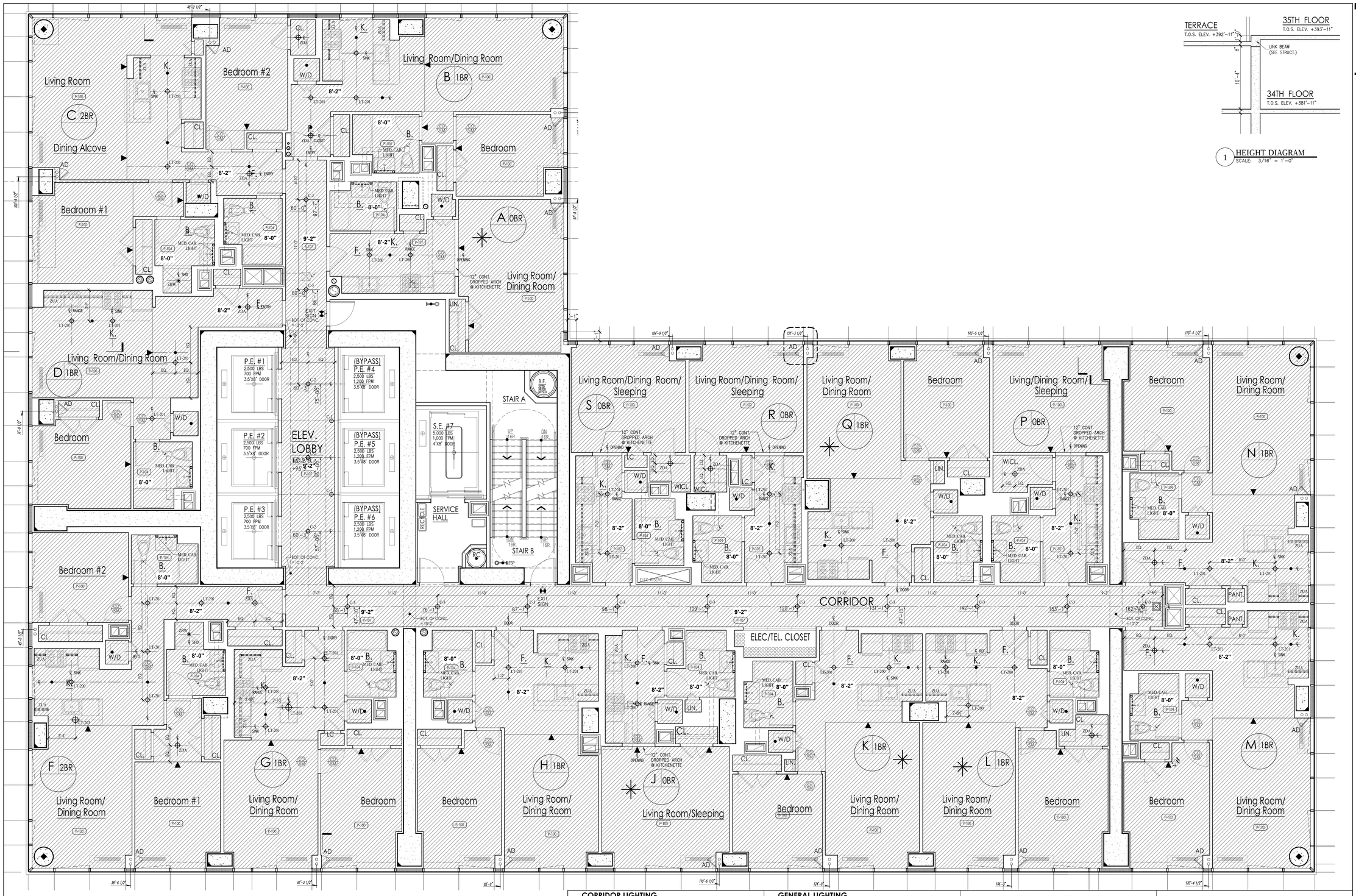
DRAWING TITLE:
5TH Thru 33RD PARTIAL FLOOR REFLECTED CEILING PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-611.00
SHEET. No.:	1 of 000

FILE No: T:\Brookfield-Manhattan-West (2012-32)\LCE Drawings\BMW_A610-A611_5-33RD FCP.dwg

DEPT OF BLDGS 121185760 Job Number
E305-1999905205 Scan Code



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. (A) — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS. (B, C, C1; EM)
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A_____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS. AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

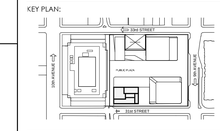
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 1/4" = 1'- 0" (0, 2, 4, 6, 10')

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

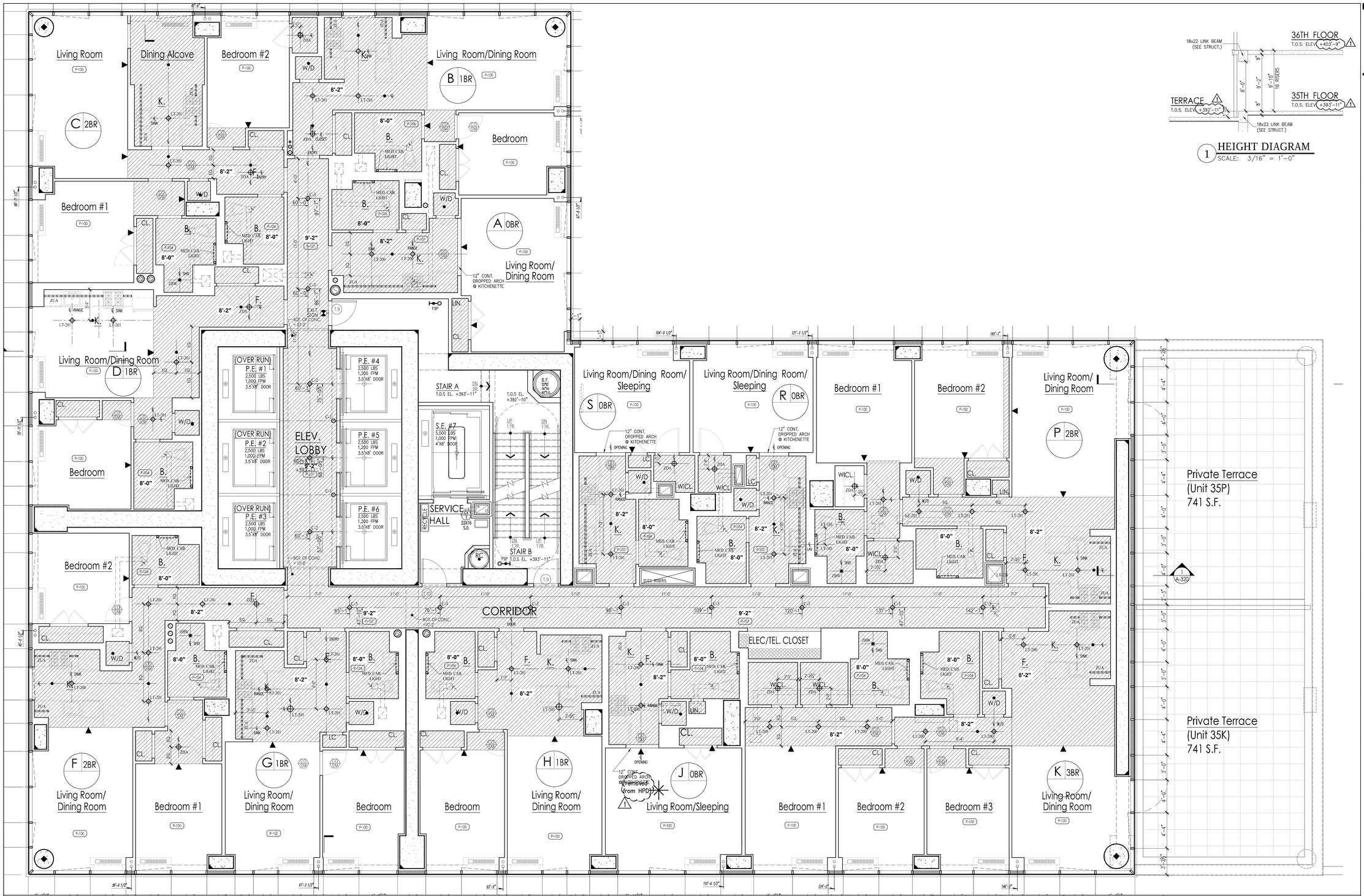
DRAWING TITLE:
34TH FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT No. 026110 STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCS
CHECKED BY:	T.J.F.
SHEET NO.:	A-612.00
	1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A612.SW1.RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E500120056A0 Scan Code



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- W/D LIN. FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
- LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

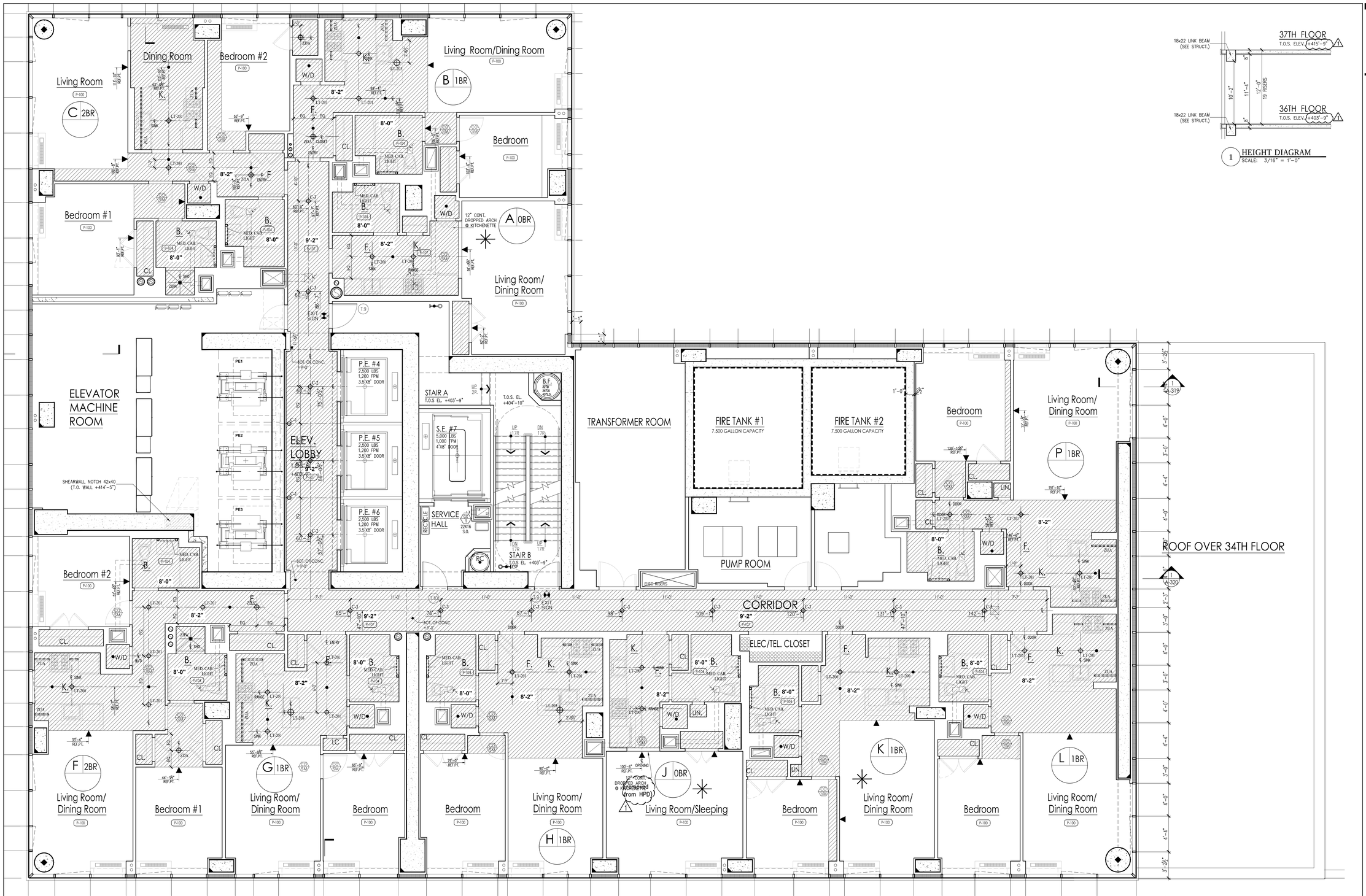
DRAWING TITLE:
35TH FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No:	A-613.00
SHEET, No.:	1 of 000

FILE No: "I:\Brookfield\Manhattan-West\2012-32\LD\CD\Drawings\BMW_A613_35R_RCP.dwg"

DEPT OF BLDGS 121185760 Job Number
E2500000085 Scan Code



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A_____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS. AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

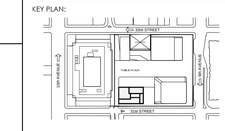
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'- 0" (0, 2, 4, 6, 10)

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

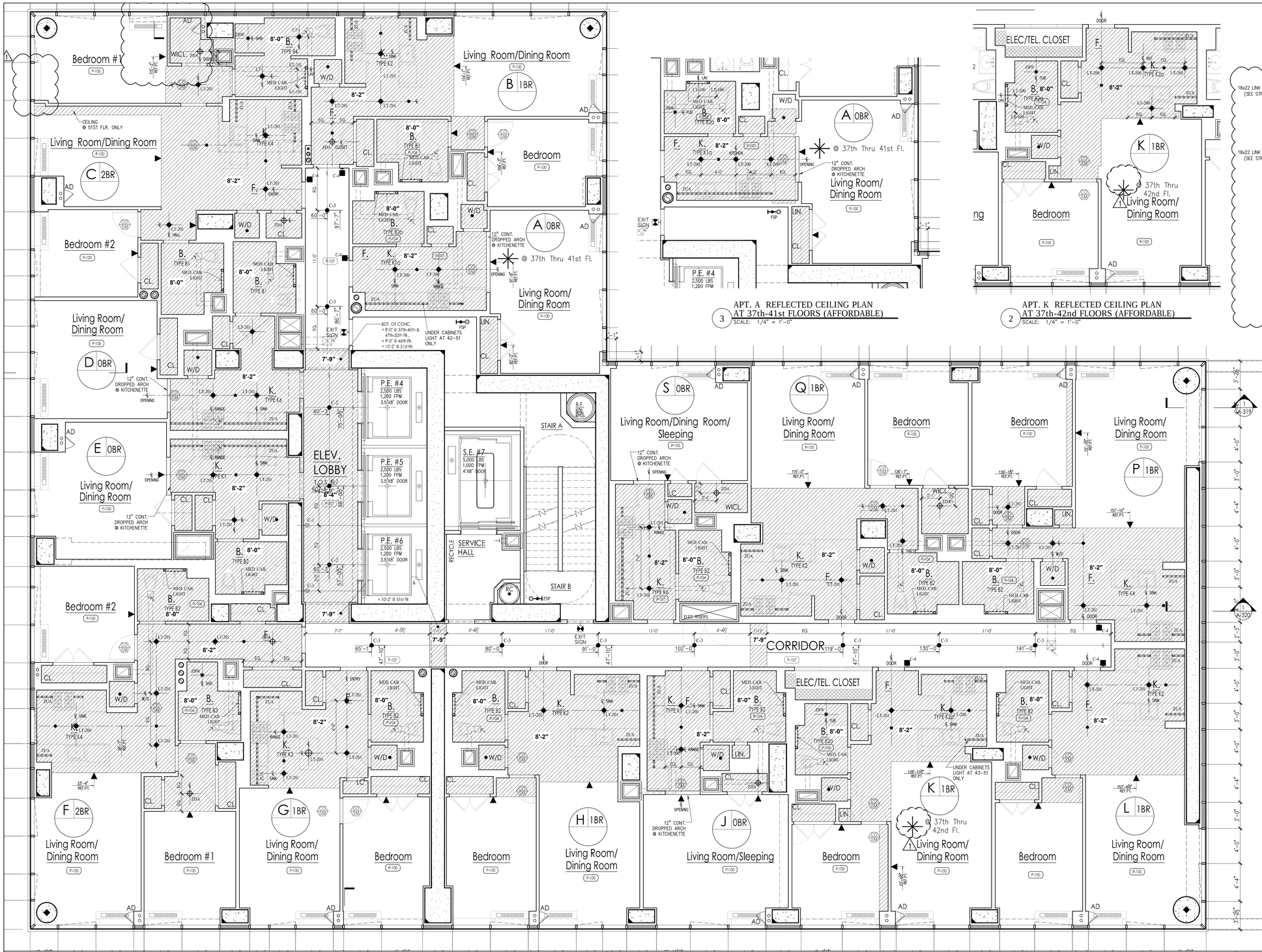
DRAWING TITLE:
36TH FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT No. 026110 STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCS
CHECKED BY:	T.J.F.
DRAWING NO.:	A-614.00
SHEET. NO.:	1 of 000

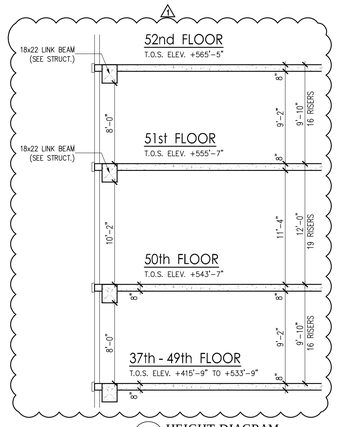
FILE NO: T:\brookfield-Manhattan-West (2012-32)\LCD\Drawings\BMW_A614_SqW_RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E2400299915 Scan Code



3 APT. A REFLECTED CEILING PLAN AT 37th-41st FLOORS (AFFORDABLE)
SCALE: 1/4" = 1'-0"

2 APT. K REFLECTED CEILING PLAN AT 37th-42nd FLOORS (AFFORDABLE)
SCALE: 1/4" = 1'-0"



2 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- A — FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. LIGHT FIXTURE TYPE DESIGNATION. REFER TO LIGHTING SPEC.
- B, EM, C, EM, C1 — FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- CO CSU — COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____& A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, RK. 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

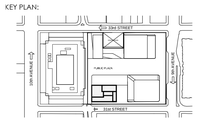
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:



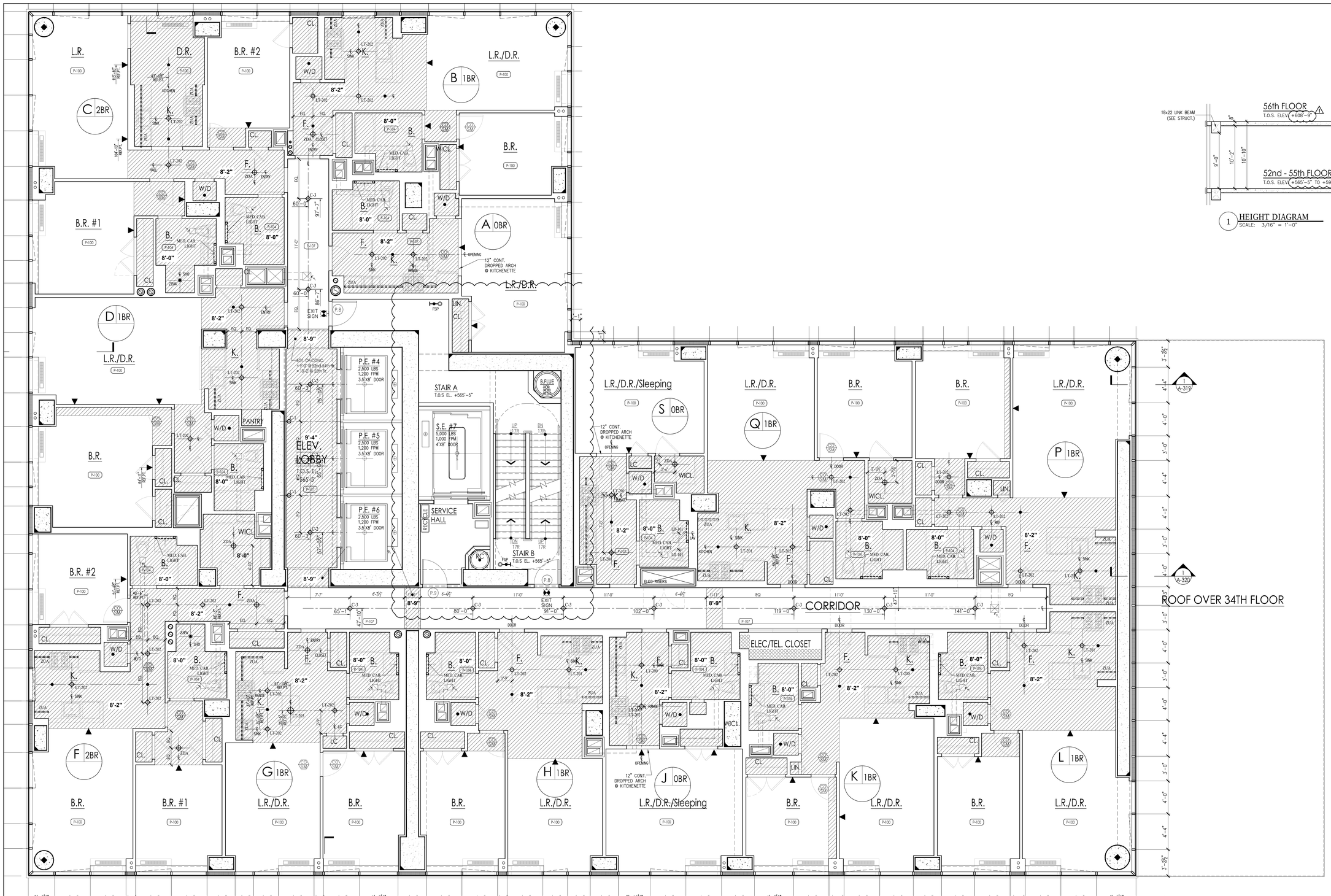
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

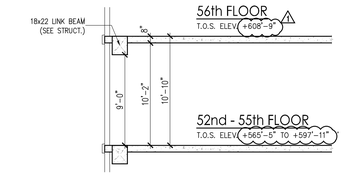
DRAWING TITLE:
37TH Thru 51ST FLOOR REFLECTED CEILING PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO:	A-615.00
SHEET, No.:	1 of 000

FILE No: "\\Brookfield\Manhattan-West\2012-32\LD-CD-Drawings\BMW_A615_37-51FL RCP.dwg"





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A_____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

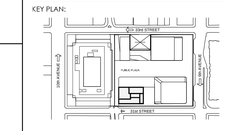
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 1/4" = 1'- 0" (0 2 4 6 10)

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

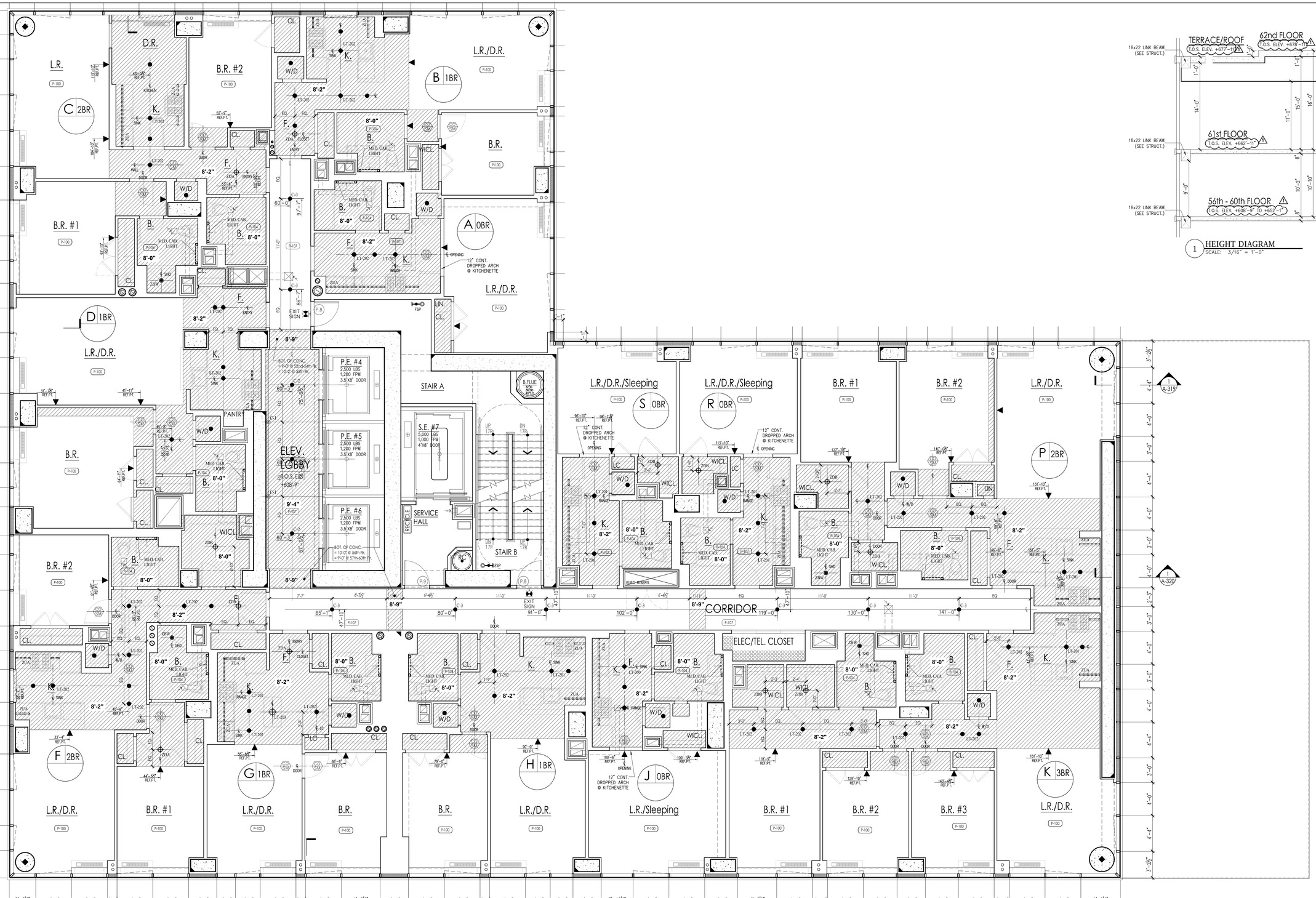
DRAWING TITLE:
52ND Thru 55TH FLOOR REFLECTED CEILING PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT No. 026110 STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING NO.:	A-616.00
SHEET. NO.:	1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\LC-CD\Drawings\BMW_A616_52-55FL RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E324497480 Scan Code



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

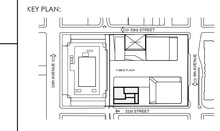
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH — Scale: 1/4" = 1'- 0" (0, 2, 4, 6, 10)

KEY PLAN:



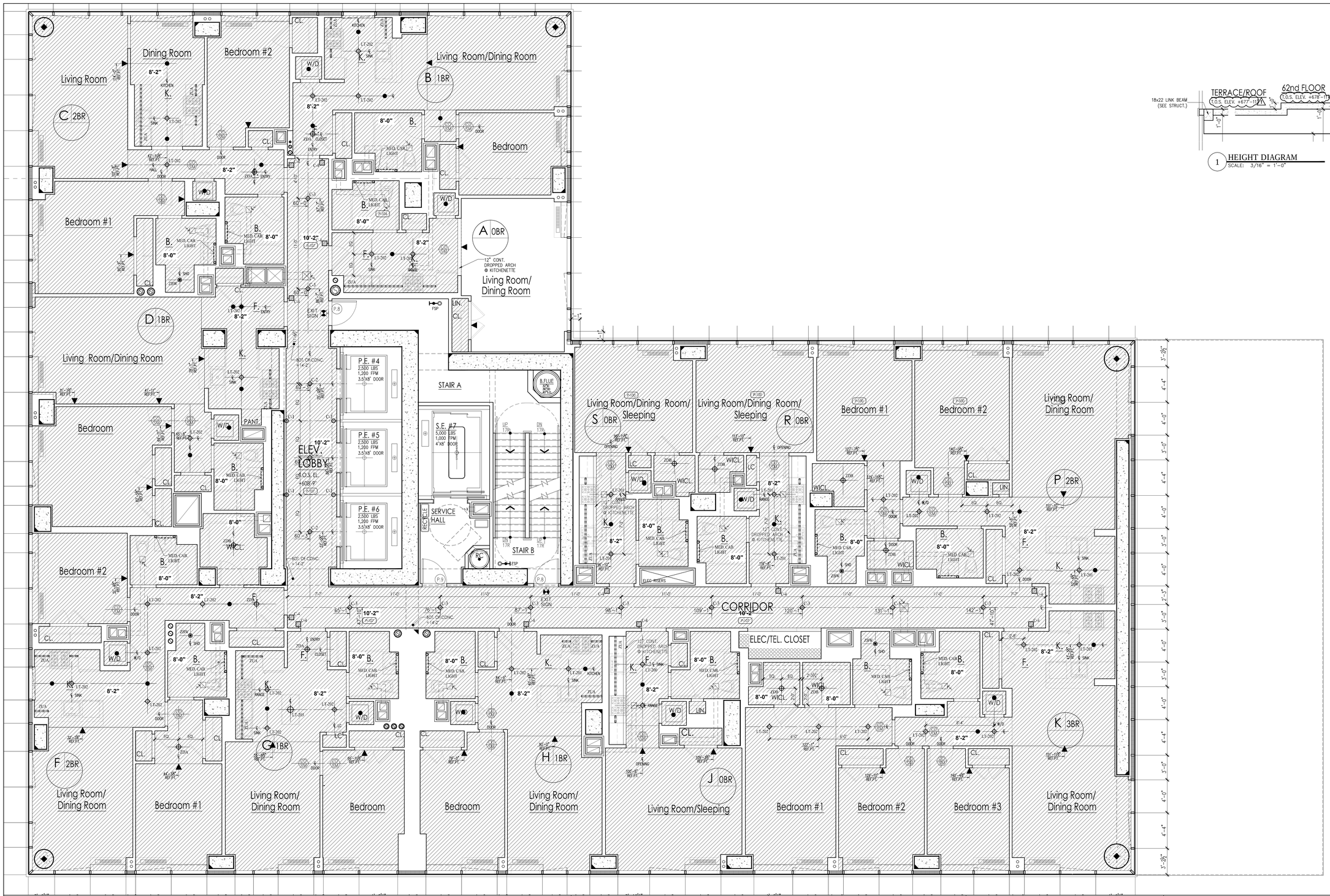
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

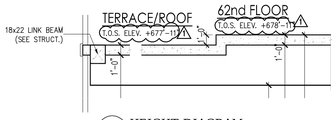
DRAWING TITLE:
56TH Thru 60TH FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE: REGISTERED ARCHITECT — STATE OF NEW YORK

DATE:	-
PROJECT NO:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SCALE:	1/4" = 1'-0"
SHEET NO.:	A-617.00
	1 of 000

FILE NO: T:\Brookfield-Manhattan-West (2012-32)\LCD\Drawings\BMW_A617_56-60FL RCP.dwg





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CORRIDOR LIGHTING

- C-1 WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- A FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. — LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- B, EM, C, EM, C1 FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- CO CO COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____& A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB# 121185760

NORTH: Scale: 1/4" = 1'-0" (0 2 4 6 10')

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

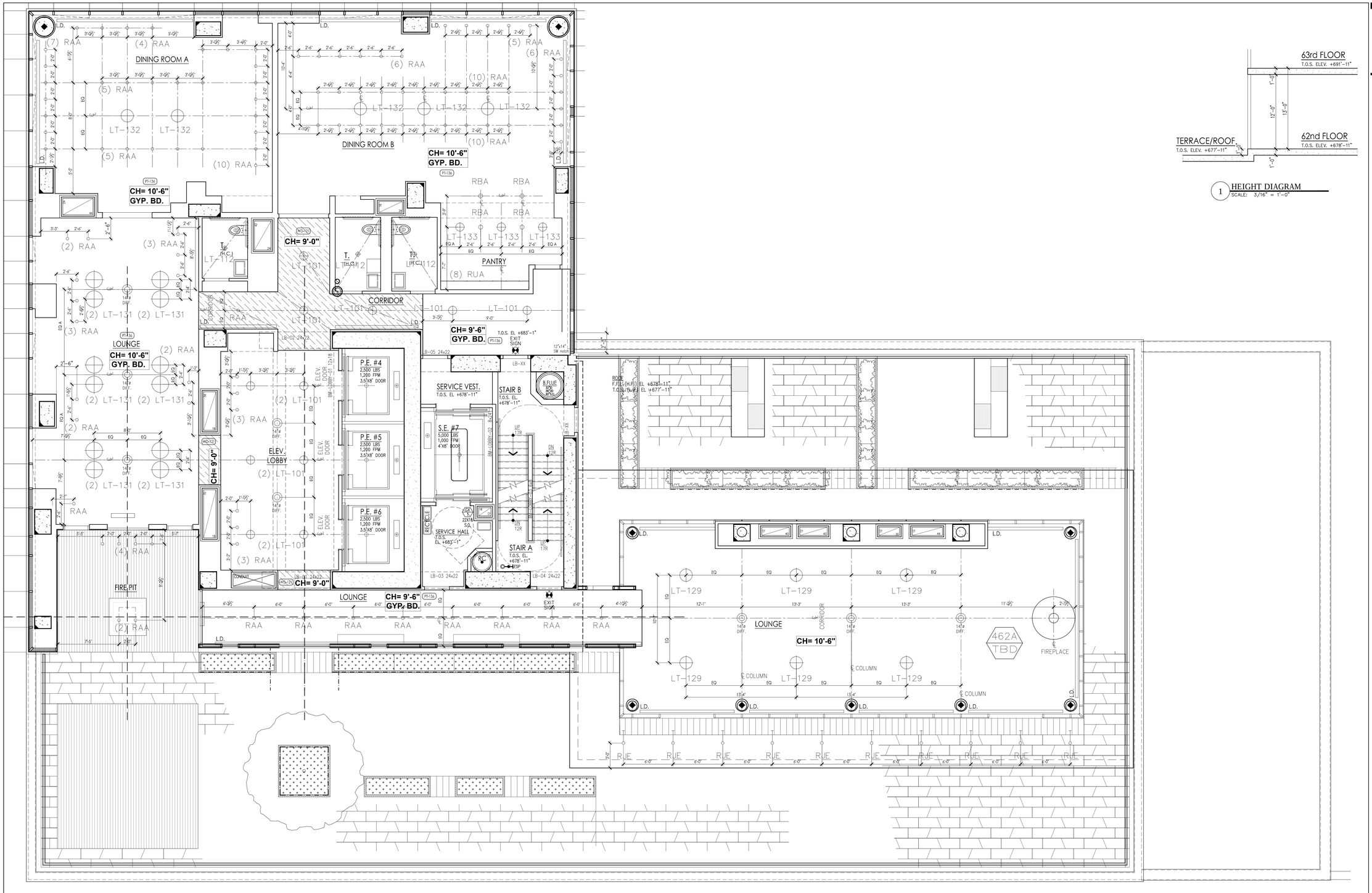
61ST FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
SCALE:	1/4" = 1'-0"
SHEET No.:	A-618.00
	1 of 000

FILE No: "I:\Brookfield\Manhattan-West\2012-32\LS-CD-Drawings\BMW_A618_61FR_RCP.dwg"

DEPT OF BLDGS 121185760 Job Number
E3345035345 Scan Code



1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.

FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS.
LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.

FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.

COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED

SPRINKLER HEADS (SEE MECHL. FOR LEGEND)

KADEX FINISH ON CONC. SLAB ABOVE

DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A_____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

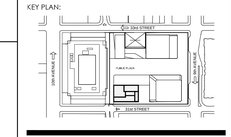
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH: Scale: 1/4" = 1'- 0"
0 2 4 6 10'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

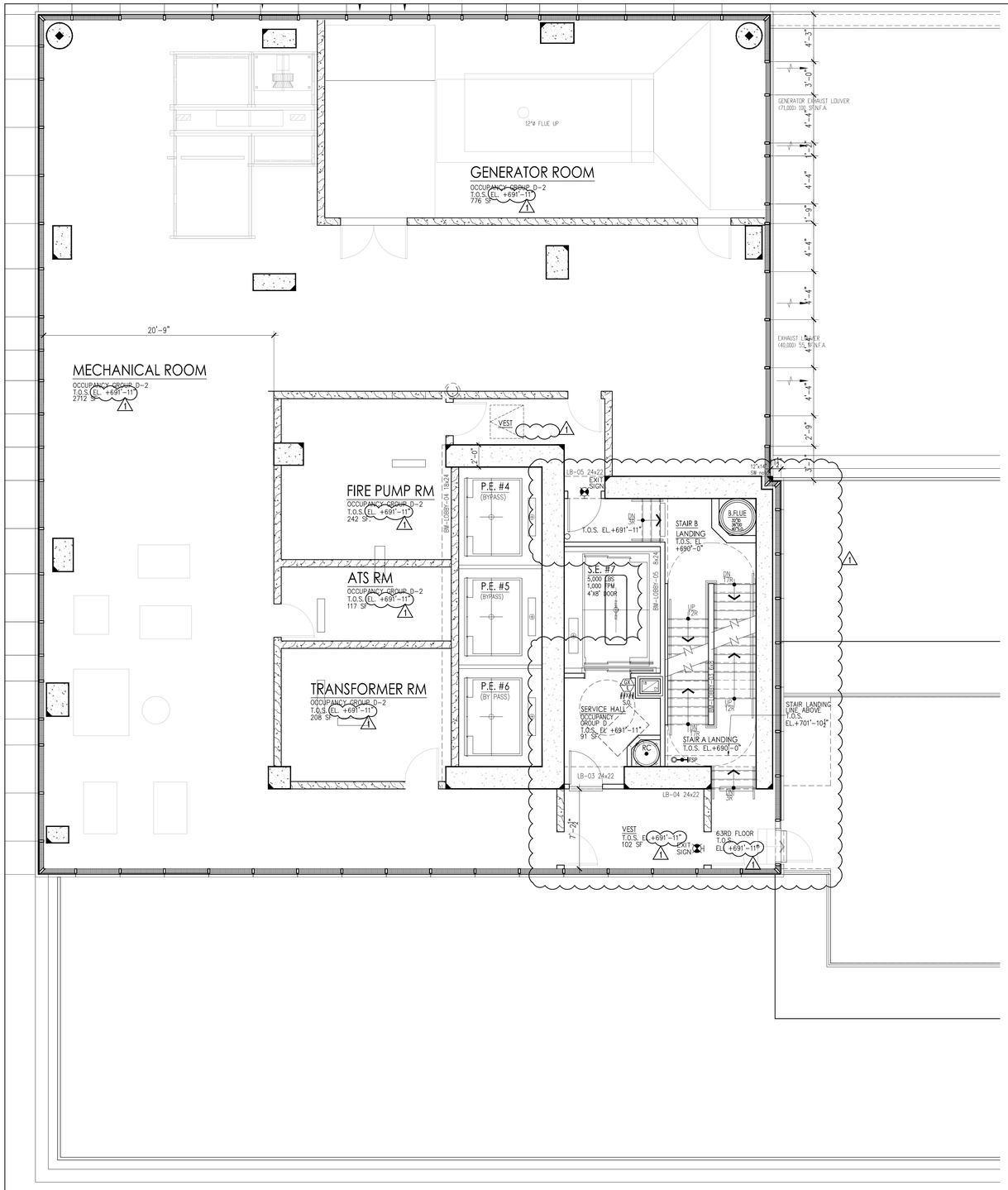
DRAWING TITLE:
62ND FLOOR
REFLECTED CEILING PLAN

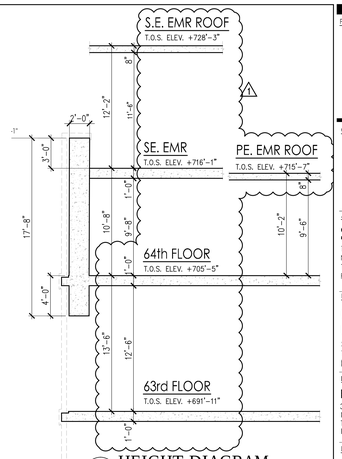
SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY:	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-619.00
SHEET. No.:	1 of 000

FILE No: T:\brookfield-Manhattan-West (2012-32)\SLCE\Drawings\BMW_A619_62ND_RCP.dwg

DEPT OF BLDGS 121185760 Job Number
E364782276X Scan Code





1 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

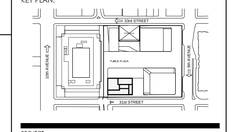
HUNTER ROBERTS
CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-10-09	BULLETIN #1
2014-09-09	ISSUED FOR CONSTRUCTION
2014-08-01	90% CONSTRUCTION DOCUMENTS
2014-06-05	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB# 121185760

NORTH:
Scale: 1/4" = 1'-0"
0' 2' 4' 6' 10'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
63RD FLOOR
REFLECTED CEILING PLAN

SEAL & SIGNATURE:

DATE:	-
PROJECT No:	2012-32
DRAWN BY :	JCB
CHECKED BY:	T.J.F.
DRAWING No.:	A-620.00
SHEET. No.:	1 of 000

FILE No: \\brookfield-manhattan-West (2012-32)\LCD Drawings\BAW_A620_63RD_RCP.dwg

CORRIDOR LIGHTING

- C-1 — WALL MOUNT LIGHTING **- AT LOBBY ELEVATOR LOBBY ALTERNATE AT FLOOS 4-51**
- C-2 — SURFACE MOUNT CEILING LIGHTING **- AT LOBBY**
- C-3 — SURFACE MOUNT CEILING LIGHTING **- AT CORRIDOR**
- C-4 — WALL MOUNT LIGHTING **- AT APARTMENT ENTRY DOOR**

AFFORDABLE APARTMENT LIGHTING

- LT-100 — WALL MOUNT LIGHTING **- BATHROOM**
- LT-200 — SURFACE MOUNT CEILING LIGHTING **- KITCHEN**

PREMIUM APARTMENT LIGHTING

- LT-103 — WALL MOUNT LIGHTING **- BATHROOM**

GENERAL LIGHTING

- ZDA — SURFACE MOUNT CEILING LIGHTING **- ENTRY FOYER / W.I.C.** (AFFORDABLE, MARKET RATE & PREMIUM APT.)
- ZUA — WALL MOUNT LINEAR FLUORESCENT **- KITCHEN** (MARKET RATE & PREMIUM APT.)
- ZBW — WALL MOUNT LINEAR FLUORESCENT **- TUB & SHOWER**(AFFORDABLE, MARKET RATE & PREMIUM APT.)

MARKET RATE APARTMENT LIGHTING

- LT-101 — WALL MOUNT LIGHTING **- BATHROOM**
- LT-201 — SURFACE MOUNT CEILING LIGHTING **- KITCHEN**
- LT-203 — DECORATIVE PENDANT LIGHTING **- KITCHEN**

GENERAL SECURITY EQUIPMENT

- CEILING MOUNTED SECURITY CAMERA

- CEILING MOUNTED ELECTRIC UNIT HEATER (EUH) SEE MECHL. FOR SPECS.
- A — FLUORESCENT LIGHT STRIP LIGHT FIXTURE TYPE, REFER LIGHTING SPECS. LIGHT FIXTURE TYPE DESIGNATION, REFER TO LIGHTING SPEC.
- B, EM, C, EM, C1 — FLUORESCENT LIGHT FIXTURE. LIGHT FIXTURE TYPE, REFER TO LIGHTING SPECS.
- CO/SM — COMBINATION HARDWIRED SMOKE/ CARBON MONOXIDE DETECTOR - CEILING MOUNTED
- SPRINKLER HEADS (SEE MECHL. FOR LEGEND)
- KADEX FINISH ON CONC. SLAB ABOVE
- DROP SOFFIT A.F.F. SEE PLAN FOR CEILING HEIGHTS

SEE DWG. A____ & A____ FOR LIGHTS FIXTURE SCHEDULE

LEGEND

NOTES:

THIS LEGEND IS USED AS THE MASTER LIST FOR ALL REFLECTED CEILING PLANS, AND NOT ALL SYMBOL DESIGNATIONS & NOTES ARE APPLICABLE FOR THIS PLAN.

1. PROVIDE 2 HOUR FIRE RATED ENCLOSURE OVER ALL MECHANICAL OFFSETS. COORDINATE WITH MECHANICAL DRAWINGS.
2. PROVIDE ACCESS PANELS AT ALL MECHANICAL, ELECTRICAL AND PLUMBING POINTS FOR SERVICE. SEE M.E.P. DRAWINGS
3. REFER TO ELECTRICAL DRAWING FOR POWER SUPPLIES & SPECIFICATIONS
4. SEE ELECTRICAL DRAWINGS FOR "BACK OF HOUSE", STAIRS, & RETAIL FOR LIGHTING SCHEDULE.
5. REFER TO LIGHTING SPECIFICATION FOR TYPE

(C) - CORRIDOR LIGHTING FIXTURE
(G) - GENERAL LIGHTING FIXTURE
(V) - AVA APT. LIGHTING FIXTURE
(M) - MARKET RATE APT. LIGHTING FIXTURE
(X) - AFFORDABLE APT. LIGHTING FIXTURE

CH: - CEILING HEIGHT

DEPT OF BLDGS 121185760 Job Number   ES885427543 Scan Code

FILE NAME I:\120187-02\Mech\M-001_(Cover Sheet).dwg SAVED ON 12/8/2014 8:30 AM PLOTTED ON 12/8/2014 9:36 AM PLOTTED BY LEO, DAVID

KEY OF SYMBOLS AND ABBREVIATIONS

NOTE: THE KEY OF SYMBOLS INDICATED IS FOR CONVENIENCE ONLY AND ITEMS INDICATED ARE NOT NECESSARILY WITHIN THE SCOPE OF THE WORK.

COMBINATION FLOW METER/SHUT-OFF/ BALANCING VALVE (CIRCUIT SETTER)
BALL VALVE
CHECK VALVE
RELIEF OR SAFETY VALVE
3-WAY AUTOMATIC CONTROL VALVE
2-WAY AUTOMATIC CONTROL VALVE
PRESSURE REDUCING VALVE
STRAINER WITH BLOW-OFF VALVE
STRAINER WITH BLOW-OFF VALVE
BUTTERFLY VALVE HAND OPERATED
BUTTERFLY VALVE MOTOR OPERATED
TWO BUTTERFLY VALVES W/COMMON MOTOR OPERATOR
MOTORIZED PLUG VALVE
SOLENOID VALVE
AIR VENT AUTOMATIC
AIR VENT MANUAL
AIR SEPARATOR (S)
BALL JOINT
FLOW METER (F)
BTU METER (BTU)
STEAM METER (STM)
FLOW SWITCH (FS)
ORIFICE PLATE
PRESSURE GAGE W/ GAGE COCK
PUMP SUCTION DIFFUSER (PSD)
PUMP

FLEXIBLE CONNECTOR
REMOVABLE INSULATION FOR PORTABLE METER (R)
UNION FITTING
PIPE GUIDE
PIPE ANCHOR
VALVED CAPPED OUTLET
REDUCER
PIPE UP
PIPE DN
PIPE BOTTOM CONNECTION
PIPE TOP CONNECTION
PIPE STUB UP
FLOW DIRECTION
PIPE PITCH UP OR DOWN
EXPANSION LOOP (E.L.)
THERMOMETER
TEMPERATURE TRANSMITTER (T)

Line	Description
PCWS	PRIMARY CONDENSER WATER SUPPLY
PCWR	PRIMARY CONDENSER WATER RETURN
SCWS	SECONDARY CONDENSER WATER SUPPLY
SCWR	SECONDARY CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CW	CITY WATER
D	DRAIN LINE
DW	DOMESTIC WATER
FOF	FUEL OIL FILL
FOG	FUEL OIL GAUGE LINE
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
GWS	GLYCOL WATER SUPPLY
GWR	GLYCOL WATER RETURN
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
LPS	LOW PRESSURE STEAM
COND	CONDENSATE RETURN
PD	PUMP DISCHARGE
PCHWS	PRIMARY CHILLED WATER SUPPLY
PCHWR	PRIMARY CHILLED WATER RETURN
SCHWS	SECONDARY CHILLED WATER SUPPLY
SCHWR	SECONDARY CHILLED WATER RETURN
V	VENT OR RELIEF LINE

NEW WORK
AIR RISER (A 1)
WATER SUPPLY RISER (S 1)
WATER RETURN RISER (R 1)
CONDENSATE DRAIN RISER (D 1)
SQUARE INCHES
SQUARE FEET
SEE DETAIL NO. 1 ON DRAWING M-101 (1 / M-101)
SEE SECTION NO. 1 ON DRAWING M-101 (1 / M-101)

E EMERGENCY SWITCH
H HUMIDISTAT
T THERMOSTAT
T THERMOSTAT W/TEMPERATURE SENSOR
S SWITCH
SD DUCT MOUNTED SMOKE DETECTOR
PS PRESSURE SENSOR
TS TEMPERATURE SENSOR
FS FIRE STAT
LD FUEL OIL LEAK DETECTION SENSOR
OS OCCUPANCY SENSOR (AIRCUITY ROOM SENSOR)
B G BREAK GLASS

UNIT HEATER (UH)
AXIAL FLOW FAN
PROPELLER FAN
CENTRIFUGAL FAN
ROOF VENTILATOR INTAKE
ROOF VENTILATOR EXHAUST
FAN POWERED TERMINAL UNIT
EXAMPLE OF FAN POWERED TERMINAL UNIT DESIGNATION (FLOOR DESIGNATION; TERMINAL NUMBER; 13-1 / A / 1500; FAN CFM; UNIT SIZE DESIGNATION (REFER TO SCHEDULE))
(200) AIR QUANTITY (200 CFM)
CEILING DIFFUSER
SUPPLY AIR
RETURN/EXHAUST AIR (OR)
RETURN GRILLE
TOP REGISTER

DUCT SIZE IN INCHES (FIRST FIGURE IS SIDE SHOWN) (36x12)
DUCT WITH ACOUSTICAL LINING (SIZE INDICATES CLEAR AREA INSIDE) (36x12)
DUCT IN FIRE RATED ENCLOSURE
FLEXIBLE CONNECTION
FLEXIBLE DUCT
SQUARE VANED ELBOW
RADIUS ELBOW
SUPPLY AIR DUCT
RETURN/EXHAUST AIR DUCT
VOLUME DAMPER (VD)
FUSIBLE LINK FIRE DAMPER W/ACCESS DOOR (FLD)
FIRE SMOKE DAMPER W/FUSIBLE LINK & ACCESS DOOR (F/SM)
AUTOMATIC LOUVERED DAMPER (ALD)
TRANSFER OPENING ABOVE HUNG CEILING
TRANSFER DUCT ABOVE HUNG CEILING WITH ACOUSTICAL LINING (SEE DETAILS 115 & 115A)

Abbr.	Description
AC	AIR CONDITIONING
ACS	AIR CURTAIN
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ACOUSTICAL LINING
ALD	AUTOMATIC LOUVERED DAMPER
ALWS	ALUMINUM LOUVER AND ALUMINUM WIRE MESH SCREEN
AP	ACCESS PANEL
AS	AIR SEPARATOR
BF	BLIND FLANGE
BG	BOTTOM GRILLE
BHP	BREAK HORSEPOWER
BI	BLACK IRON
BO	BLANK OFF
BR	BOTTOM REGISTER
BTU	BRITISH THERMAL UNIT
CAR	CONSTANT AIRFLOW REGULATOR
CC	COOLING COIL
CCD	COOLING COIL CONDENSATE DRAIN
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
CNK	CONDENSATE NEUTRALIZATION KIT
CUH	CABINET UNIT HEATER
CO	CAPPED OUTLET
COD	CLEAN OUT DOOR
CR	CEILING REGISTER
CV	CONSTANT VOLUME BOX
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DN	DOWN
EAT	ENTERING AIR TEMPERATURE
ET	EXPANSION TANK
EE	ELEVATOR EXHAUST
EF	EXHAUST FAN
EUH	ELECTRIC UNIT HEATER
EWT	ENTERING WATER TEMPERATURE
F	FILTER
FA	FACE AREA
FC	FLEXIBLE CONNECTION
FD	FLOOR DRAIN
FLD	FUSIBLE LINK FIRE DAMPER W/ACCESS DOOR
FPB	FAN POWERED BOX
FLT	FLUSH TANK
F/SM-HS	FIRE/SMOKE DAMPER W/FUSIBLE (RESETTABLE TYPE) W/HEAT SENSOR & ACCESS DOOR
F/SM	FIRE/SMOKE DAMPER W/ LINK AND ACCESS DOOR
FTR	FIN-TUBE RADIATION
GC	GENERAL CONTRACTOR
GE	GENERAL EXHAUST
GI	GALVANIZED IRON
GP	GLYCOL PUMP
GPM	GALLONS PER MINUTE
HC	HEATING COIL
HP	HORSEPOWER
HRC	HEAT RECOVERY COIL
HWRX	HOT WATER EXPRESS RETURN
HRP	HEAT RECOVERY PUMP
H&V	HEATING & VENTILATION UNIT
IB	INTERNAL DUCT BOOT
INS	INSULATION
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
L	LIQUID DETECTOR
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MBH	1000 BTU PER HOUR
MCC	MOTOR CONTROL CENTER
MER	MECHANICAL EQUIPMENT ROOM
N.C.	NORMALY CLOSED
NFA	NET FREE AREA
NIC	NOT IN CONTRACT
N.O.	NORMALY OPEN
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OB.VD	OPPOSED BLADE VOLUME DAMPER
OV	OUTLET VELOCITY
PH	PRE-HEAT COIL
PIM	PRESSURE INDEPENDENT MODULE
PO	PLUGGED OUTLET
PRV	PRESSURE REDUCING VALVE
RA	RETURN AIR
RF	RETURN FAN
RF	RETURN FAN
RG	RETURN GRILLE
RHC	RE-HEAT COIL
SB	SECURITY BARS
SD	SUPPLY DIFFUSER
SE	SMOKE EXHAUST
SG	SUPPLY GRILLE
SM	SMOKE DAMPER W/ACCESS DOOR
SPD	SPLITTER DAMPER
S.PR	STAIR PRESSURIZATION
SQ	SQUARE
SQ. FT	SQUARE FEET
SSO	SAFETY SHUT-OFF VALVE
ST	SOUND TRAP
TF	TRANSFER FAN
TC	TOP CONNECTION
TG	TOP GRILLE
TR	TOP REGISTER
TR GR	TRANSFER GRILLE
UL	UNDERWRITER'S LABORATORY
UH	UNIT HEATER
U.O.N	UNLESS OTHERWISE NOTED
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WCU	WATER CHILLING UNIT
WMS	WIRE MESH SCREEN
WU	WINDOW UNIT
SHWP	SECONDARY HOT WATER PUMP
PHWP	PRIMARY HOT WATER PUMP

DRAWING LIST

Drawing No	Description	Scale
M-001.00	MECHANICAL SYMBOLS, ABBREVIATIONS AND DRAWING LIST	N.T.S.
M-100.00	MECHANICAL CELLAR LEVEL PLAN	1/8"=1'-0"
M-101.00	MECHANICAL CELLAR LEVEL PIPING PLAN	1/8"=1'-0"
M-102.00	MECHANICAL 1ST FLOOR PLAN	1/8"-1'-0"
M-103.00	MECHANICAL 1ST FLOOR PIPING PLAN	1/8"=1'-0"
M-104.00	MECHANICAL 2ND FLOOR PLAN	1/8"-1'-0"
M-105.00	MECHANICAL 2ND FLOOR PIPING PLAN	1/8"=1'-0"
M-106.00	MECHANICAL 3RD FLOOR PLAN	1/8"-1'-0"
M-107.00	MECHANICAL 3RD FLOOR PIPING PLAN	1/8"=1'-0"
M-108.00	MECHANICAL 4TH FLOOR PLAN	1/8"-1'-0"
M-109.00	MECHANICAL 5TH THRU 13TH FLOOR PART PLAN	VARIES
M-110.00	MECHANICAL 5TH THRU 13TH FLOOR PLAN	1/4"-1'-0"
M-111.00	MECHANICAL 14TH THRU 34TH FLOOR PLAN	1/4"-1'-0"
M-112.00	MECHANICAL 35TH FLOOR PLAN	1/4"-1'-0"
M-113.00	MECHANICAL 36TH FLOOR PLAN	1/4"-1'-0"
M-114.00	MECHANICAL 37TH THRU 51ST FLOOR PLAN	1/4"-1'-0"
M-115.00	MECHANICAL 52ND THRU 55TH FLOOR PLAN	1/4"-1'-0"
M-116.00	MECHANICAL 56TH THRU 61ST FLOOR PLAN	1/4"-1'-0"
M-117.00	MECHANICAL 52DN THRU 61ST FLOOR PIPING PLAN	1/4"-1'-0"
M-118.00	MECHANICAL 62ND FLOOR AND 63RD FLOOR ROOF PART PLANS	1/4"-1'-0"
M-119.00	MECHANICAL 62ND FLOOR PIPING PLAN	1/4"-1'-0"
M-120.00	MECHANICAL 63RD FLOOR PLAN	1/4"-1'-0"
M-121.00	MECHANICAL 64TH AND 65TH FLOORS PLAN	1/4"-1'-0"
M-201.00	MECHANICAL 3RD FLOOR PART PLANS (1)	1/4"-1'-0"
M-202.00	MECHANICAL 4TH FLOOR PART PLANS	1/4"-1'-0"
M-203.00	MECHANICAL BOILER ROOM PART PLAN	1/4"-1'-0"
M-204.00	MECHANICAL 3RD AND 4TH FLOOR SECTIONS	1/4"-1'-0"
M-301.00	MECHANICAL AIR RISER DIAGRAM SHEET NO.1	N.T.S.
M-302.00	MECHANICAL AIR RISER DIAGRAM SHEET NO.2	N.T.S.
M-303.00	MECHANICAL AIR RISER DIAGRAM SHEET NO.3	N.T.S.
M-304.00	MECHANICAL WATER RISER DIAGRAM SHEET NO.1	N.T.S.
M-305.00	MECHANICAL WATER RISER DIAGRAM SHEET NO.2	N.T.S.
M-401.00	MECHANICAL SCHEDULES NO.1	N.T.S.
M-402.00	MECHANICAL SCHEDULES NO.2	N.T.S.
M-501.00	MECHANICAL DETAILS SHEET NO.1	N.T.S.
M-502.00	MECHANICAL DETAILS SHEET NO.2	N.T.S.
M-503.00	MECHANICAL DETAILS SHEET NO.3	N.T.S.
M-504.00	MECHANICAL DETAILS SHEET NO.4	N.T.S.
M-505.00	MECHANICAL DETAILS SHEET NO.5	N.T.S.

NYC BUILDING DEPARTMENT NOTES

1. ALL WORK AND COMPONENTS SHOWN ON THESE PLANS COMPLY WITH THE NEW YOR BUILDING LAWS AS OF JULY 1, 2008 AS AMENDED TO THIS DATE.
2. NEW YORK STATE ENERGY CONSERVATION CODE 2011 HAVE BEEN FOLLOWED.
3. THE MECHANICAL SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE NEW YORK CITY MECHANICAL CODE 2008.
4. THE HEATING AND AIR CONDITIONING SYSTEMS HAVE BEEN DESIGNED TO MAINTAIN A MINIMUM TEMPERATURE 75 DEG. F (SUMMER), AND A MAXIMUM TEMPERATURE OF 72 DEG. F (WINTER).
5. TEMPERATURES VARING FROM THESE POINTS WILL BE ACCOMPLISHED WITHOUT THE USE OF ADDITIONAL FUEL. (2)
6. –
7. INSPECTIONS AND TESTING AS PER SECTION MC 107 OF NYC BUILDING CODE 2008 SHALL BE PERFORMED BY SPECIAL INSPECTORS AS RETAINED BY THE CONTRACTOR.
8. ALL INSPECTIONS TO BE 3RD PARTY RETAINED BY CLIENT.
9. SPECIAL INSPECTIONS ARE REQUIRED FOR :
   a. CHIMNEYS – BC 1704.24
   b. MECHANICAL SYSTEMS – BC 1704.15
   c. HEATING SYSTEMS – BC 1704.23
   d. WELDING PIPING – BC 1704.3.1
   e. FIRESTOP SYSTEMS – PENETRATIONS THROUGH RATED CONSTRUCTION– BC 1704.25
   f. AIR CONDITIONING SYSTEMS, VENTILATION SYSTEMS, FUEL BURNING, FUEL STORAGE EQUIPMENT, REF

(1)

GENERAL NOTES

1. ALL LOUVERS GIVEN IN SQUARE FOOT NET FREE AREA; FOR OUTSIDE DIMENSIONS OF LOUVERS, AND LOCATIONS SEE ARCHITECTURAL DRAWINGS .
2. ALL DUCTWORK IS TO BE KEPT AS HIGH AS POSSIBLE SO AS TO MAINTAIN CEILING HEIGHTS SHOWN ON ARCHITECTURAL DRAWINGS.
3. WHERE PIPING, LIGHTS AND DUCTWORK CONFLICT, DUCTWORK SHALL SET UP AND DOWN.
4. MARGIN TYPES, COLOR, FINISHES, AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES, REGISTERS AND LINEAR DIFFUSERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
5. FOR EXACT LOCATIONS OF THERMOSTATS, HUMIDISTATS AND SWITCHES REFER TO ARCHITECTURAL DRAWINGS .
6. FOR EXACT LOCATIONS AND FACE SIZES OF REGISTERS, DIFFUSERS AND GRILLES IN HUNG CEILINGS, SEE ARCHITECTURAL REFLECTED CEILING PLANS.
7. PROVIDE COMBINATION FIRE/SMOKE DAMPERS (WITH ACCESS DOORS) AT THE FOLLOWING POINTS.
   A. POINT OF PASSING THROUGH SHAFT WALLS TO CONNECT TO VERTICAL RISERS.
   B. WHERE PASSING THROUGH FLOOR OR CEILING CONSTRUCTION (NOT IN AIR SHAFTS).
   C. WHERE PASSING THROUGH FIRE RATED PARTITIONS (REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED PARTITION.
   D. WHERE INDICATED OR REQUIRED BY CODE.
   E. PROVIDE FSM/HS IN ALL DUCTS ASSOCIATED WITH SMOKE PURGE SYSTEM.
   F. FIRE/SMOKE DAMPERS SHALL NOT BE INSTALLED IN FUME HOODS EXHAUST DUCTWORK.
8. ACCESS IS REQUIRED BELOW FOR ALL DAMPERS, VALVES, EXPANSION JOINTS, AIR TERMINAL BOXES, ACCESS DOORS IN DUCTWORK AND OTHER MECHANICAL EQUIPMENT.
9. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF ALL WATER SYSTEMS.
10. PROVIDE AUTOMATIC VENTS AT ALL HIGH POINTS OF ALL WATER SYSTEMS.
11. PROVIDE ON ALL MAIN BRANCH PIPING ONE (1) SHUT-OFF VALVE ON THE SUPPLY PIPE AND ONE (1) COMBINATION SHUT-OFF/BALANCING VALVE WITH PRESSURE TAPS AND MEMORY STOP ON THE RETURN PIPE.
12. PROVIDE VOLUME DAMPERS IN LOW PRESSURE DUCTWORK FOR ALL SUPPLY, RETURN, AND EXHAUST OUTLETS.(EXCEPT FUME HOODS). PROVIDE VOLUME DAMPERS (VD) AT EVERY DUCTWORK BRANCH, TAP AND SPLIT. DO NOT INSTALL VOLUME DAMPERS ON MEDIUM PRESSURE DUCTWORK.
13. PROVIDE ACCESS DOORS IN DUCTWORK OR PLENUMS WHERE INDICATED OR REQUIRED FOR ACCESS TO SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
    A. AUTOMATIC DAMPERS
    B. FILTER BANKS
    C. FIRE DAMPERS
    D. COMBINATION FIRE SMOKE DAMPERS
14. FOR AREAS WITH INACCESSIBLE CEILINGS, VOLUME DAMPERS SHALL BE PROVIDED WITH METAL FLEXIBLE CABLE OPERATORS FOR REMOTE OPERATION OF DAMPERS.
15. HOT WATER / STEAM PIPING:
    A. PROVIDE MINIMUM PITCH TO INSURE ADEQUATE VENTING AND DRAINAGE.
    B. PROVIDE AS REQUIRED, AUTOMATIC AIR VENTS, MANUAL AIR VENTS AND RELIEF VALVES.
16. FOR PIPE CONNECTIONS DETAILS FOR EQUIPMENT, SEE DETAIL SHEET DRAWINGS AND SPECIFICATIONS.
17. ALL MOTOR STARTERS LOCATED OUTDOORS OR EXPOSED TO WET OR DAMP CONDITIONS SHALL BE NEMA TYPE 4.
18. NO PIPING SHALL BE SMALLER THAN 3/4 INCH UNLESS OTHERWISE NOTED.
19. FOR PIPE SIZES NOT INDICATED ON PLANS, SEE EQUIPMENT CONNECTION DETAILS.
20. PROVIDE FITTINGS FOR CHANGE IN PIPE SIZES FOR FINAL CONNECTIONS AS REQUIRED.
21. PROVIDE UNION OR FLANGED CONNECTIONS AT EACH PIECE OF EQUIPMENT AND ON BOTH SIDES OF CONTROL VALVES.
21. DRAINAGE PIPING PITCH NOT LESS THAN 1/8 PER FOOT.
22. ALL DUCT DIMENSIONS ARE CLEAR INSIDE DUCT DIMENSIONS.
23. ALL FUSIBLE LINK DAMPERS SHALL UTILIZE TYPE "B" OR "C" MOUNTINGS. TYPE "A" MOUNTINGS ARE NOT ACCEPTABLE.
24. PROVIDE 4 X INLET DIAMETER STRAIGHT DUCT LENGTH UPSTREAM OF ALL AIR TERMINAL BOXES AS PER DETAILS AND SPECIFICATIONS.
25. THE MINIMUM EXTERNAL STATIC PRESSURE NOTED ON THE AHU AND AC UNIT SCHEDULES IS EXCLUSIVE OF COMPONENTS FURNISHED BY THE UNIT MANUFACTURER AS PART OF THE UNIT INCLUDING, BUT NOT LIMITED TO, ALL COILS, ALL FILTERS (DIRTY), UNIT CASING, DISCHARGE PLENUM, DIFFUSION SECTION, HUMIDIFIER, SOUND ATTENUATOR, DAMPERS (INLET AND DISCHARGE),SYSTEM EFFECT ETC.
26. ALL DUCTS ELBOW SHALL BE ROUND ELBOW EXCEPT WHERE THERE IS A SPACE CONSTRAIN, USE OF SHORT ELBOWS WILL BE ACCEPTED
27. PLUMBING CONTRACTOR TO PROVIDE A BACK FLOW PREVENTER IN ALL HVAC EQUIPMENT WHERE DOMESTIC WATER MAKE-UP IS REQUIRED.
28. ALL WATER PIPE EXPOSED AND LOCATED OUTDOOR SHALL BE ELECTRICALLY HEAT TRACED.
29. PROVIDE DRAIN VALVED NIPPLES WITH CAP AT THE BOTTOM OF EACH RISER.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EQUIPMENT USE PERMIT OF ALL MECHANICAL EQUIPMENT FROM NEW YORK CITY BUILDING DEPARTMENT.
31. ALL HEATING PIPES ASSOCIATED WITH THE PERIMETER FIN TUBE RADIATION AND DUCTWORK MOUNTED HOT WATER REHEAT COILS SHALL BE BLACK STEEL, SEE SPECIFICATION. CONTRACTOR TO RESPONSIBLE TO PROTECTION OF FIN TUBE RADIATION DURING CONSTRUCTION AND INSTALLATION.
32. ALL PIPE THAT BELOW 3"DIAMETER SHALL BE ALL SEAMLESS PIPE.
33. BALANCING CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION OF ALL VENTILATION AND FIRE SMOKE DAMPERS. BALANCING CONTRACTOR SHALL COORDINATE WITH COMMISSIONING AGENT PRIOR TO INSPECTION.
34. ALL PIPE NIPPLE SHOULD BE SEAMLESS AND EXTRA HEAVY AND CLOSE NIPPLE SHALL NOT BE USED.
35. ALL TOILETS LOCATED AT PERIMETER AND ON TOP FLOOR IMMEDIATELLY UNDER EXPOSED ROOF TO BE PROVIDED WITH SIDE WALL ELECTRIC HEATER (1000 WATTS) HEATERS TO BE PROVIDED BY ELECTRICAL TRADE.
36. ALL KITCHENS LOCATED AT PERIMETER WALL NOT SERVED BY AC. UNIT TO BE PROVIDED WITH TOE SPACE HEATER (1500WATTS) HEATERS TO BE PROVIDED BY ELECTRICAL TRADE
37. ALL CORRIDOR SUPPLY WALL REGISTERS TO BE PROVIDE WITH FD AND VD ASSEMBLY
38. ALL KX & TX RISER OFFSETS TO BE COVERED WITH FIRE RATED ENCLOSURE(FIRE WRAPPED) (BY MECHANICAL CONTRACTOR)
39. ALL TOILETS LOCATED AT PERIMETER AND ON TOP FLOOR IMMEDIATELY UNDER EXPOSED ROOF TO BE PROVIDED WITH SIDE WALL ELECTRIC HEATER (1000 WATTS) HEATERS TO BE PROVIDED BY MECHANICAL TRADE.
40. ALL KITCHENS LOCATED AT PERIMETER WALL NOT SERVED BY AC. UNIT TO BE PROVIDED WITH TOE SPACE HEATER (1500WATTS) HEATERS TO BE PROVIDED BY MECHANICAL TRADE
41. COORDINATE EXACT LOCATION OF SUPPLY/EXHAUST DIFFUSER WITH ARCHITECT'S DRAWINGS.
42. SIZES INDICATED ARE FOR DUCTWORK ONLY SHAFT SIZES SHALL ALLOW FOR DUCTWORK CLEARANCES.

ENERGY COMPLIANCE STATEMENT

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CODE.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

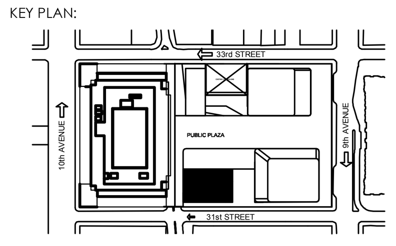
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1 (1)
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER: NB#

NORTH: Scale: N.T.S. 0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL SYMBOLS, ABBREVIATIONS AND DRAWING LIST

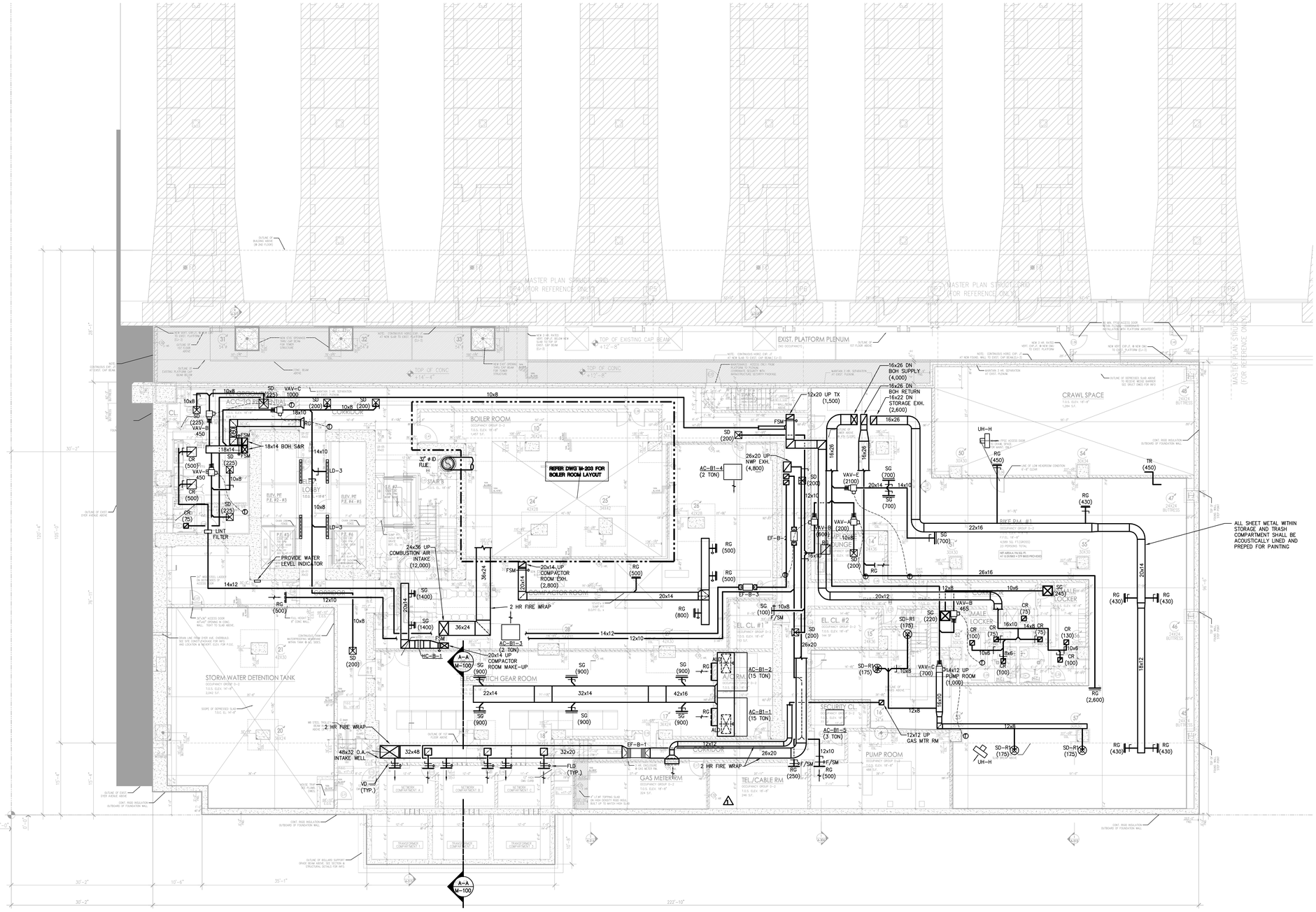
SEAL & SIGNATURE:

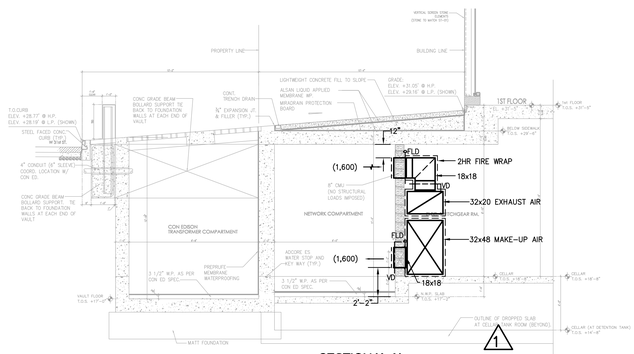
DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-001.00
SHEET. No.:	1 of 39

FILE No: I:\120187-02\Mech\M-001_(Cover Sheet).dwg

DEPT OF BLDGS 421859760 Job Number

E3456597M00 Scan Code





SECTION 'A-A'
SCALE: 1/4"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

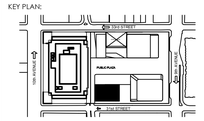
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-29	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/8" = 1'- 0"
0 4 8 12 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
CELLAR LEVEL PLAN

SEAL & SIGNATURE:

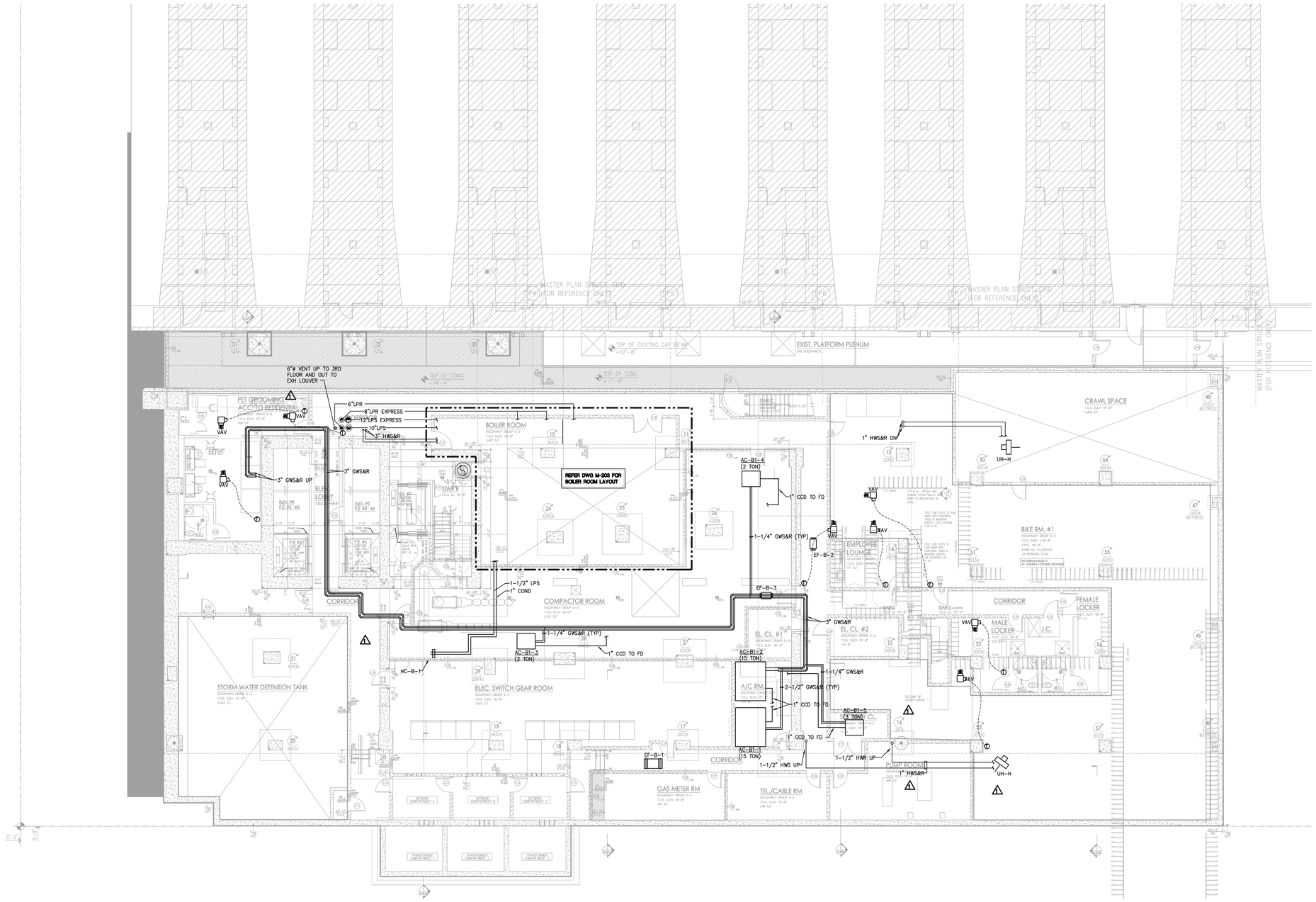
STATE OF NEW YORK · DAVID LEE · 038 · 077 · 1 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-100.00
SHEET No.:	2 of 39

FILE No: I:\120187-02\Mech\M-100_(B1 level).dwg

FILE NAME: I:\120187-02\Mech\M-100_(B1 level).dwg SAVED ON 12/8/2014 8:31 AM PLOTTED ON 12/8/2014 9:36 AM PLOTTED BY LEE, DAVID

DEPT OF BLDGS 121189190 Job Number
E300560425 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:

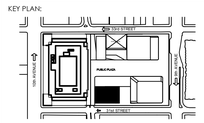
NB#

NORTH:

Scale: 1/8" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

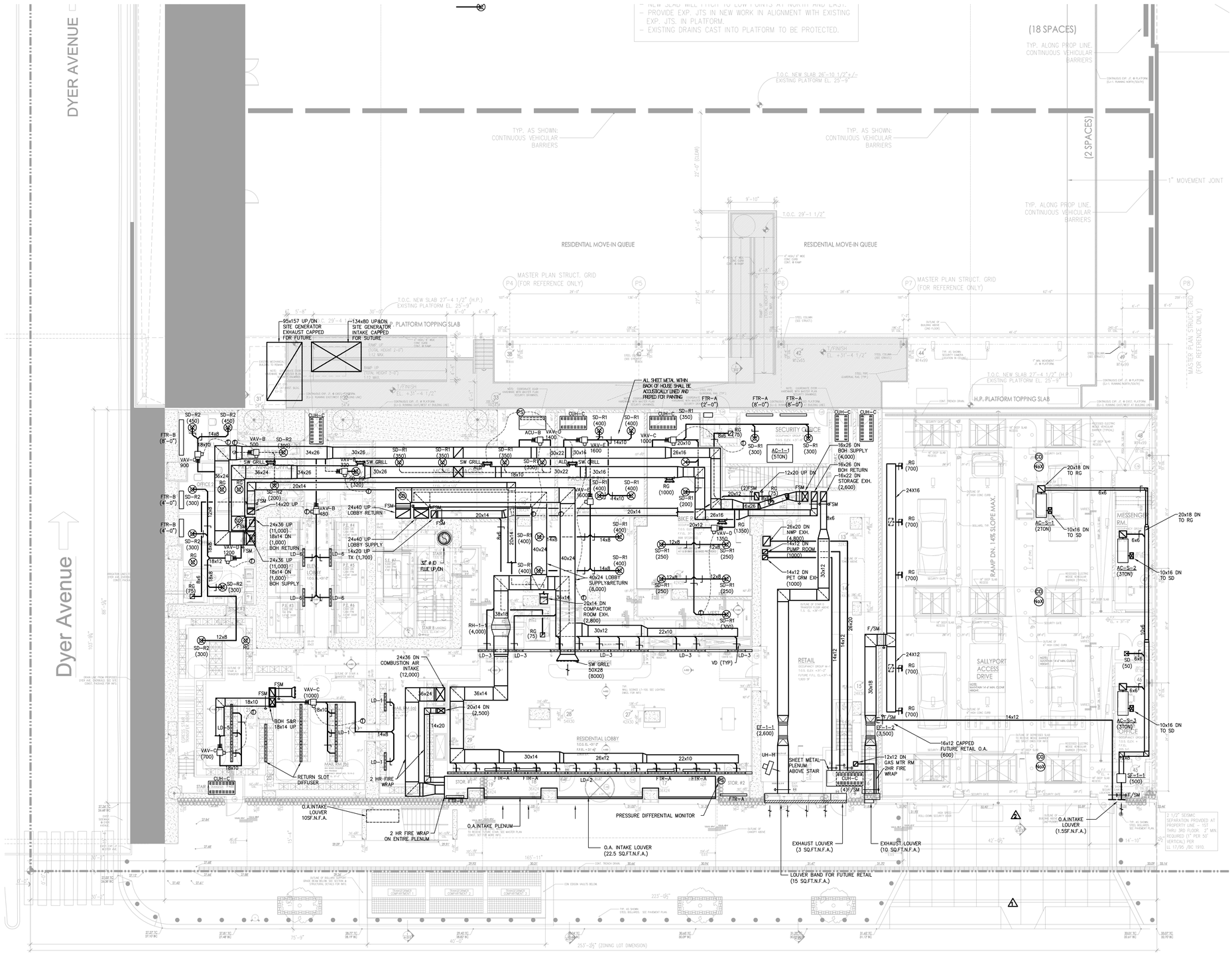
MECHANICAL
CELLAR LEVEL PIPING PLAN

SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-101.00
SHEET. No.:	3 of 39

FILE No: I:\120187-02\Mech\M-101_(B1 level piping).dwg

FILE NAME I:\120187-02\Mech\M-101_(B1 level piping).dwg SAVED ON 12/8/2014 8:45 AM PLOTTED ON 12/8/2014 9:36 AM PLOTTED BY LED, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

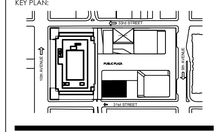
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/8" = 1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
1ST FLOOR PLAN

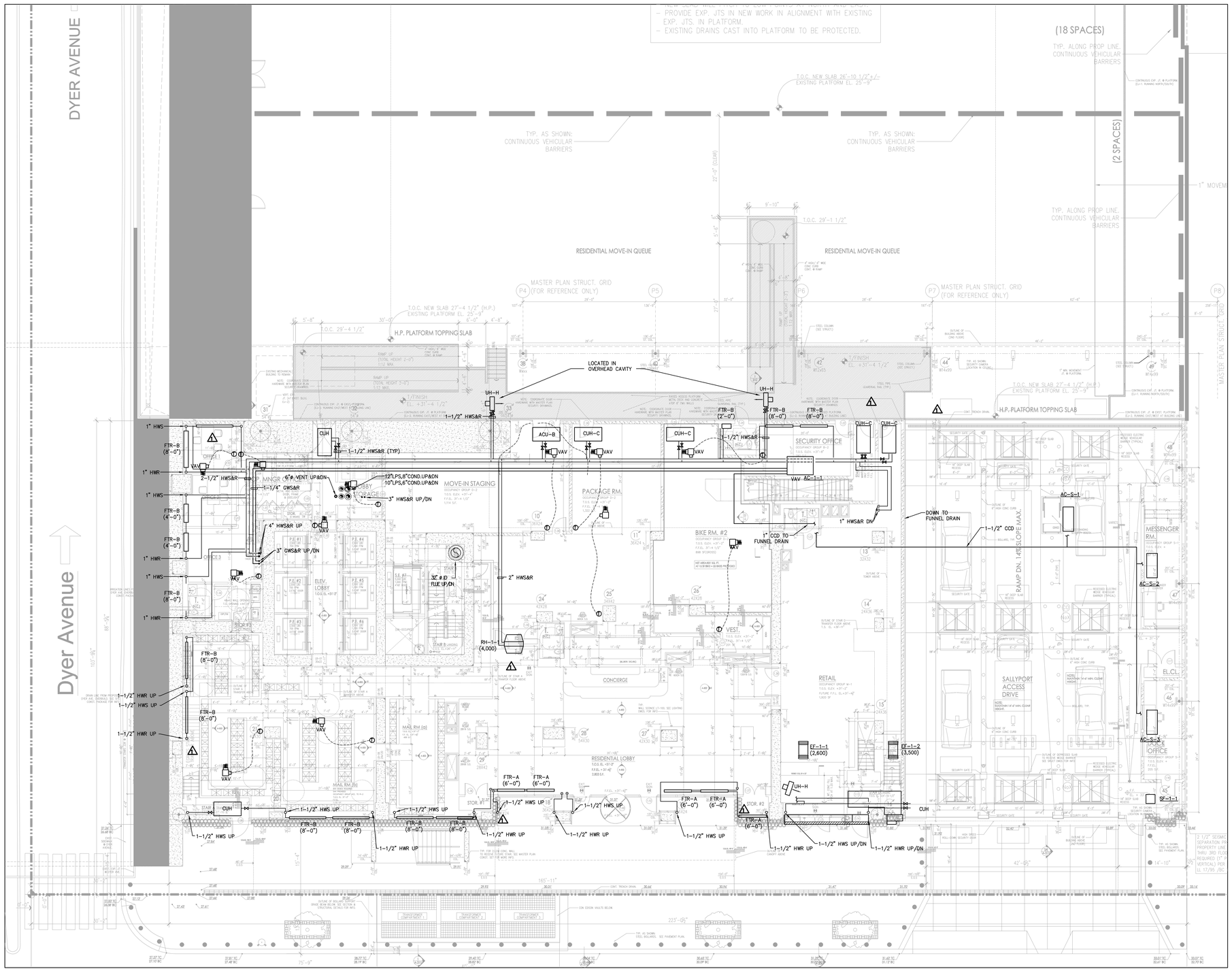
SEAL & SIGNATURE:

DATE:	12/07/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-102.00
SHEET. No.:	4 of 39

FILE No: I:\120187-02\Mech\M-102_(ground level).dwg

FILE NAME I:\120187-02\Mech\M-102_(ground level).dwg SAVED ON 12/8/2014 8:44 AM PLOTTED ON 12/8/2014 9:36 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 421859760 Job Number
E5944809651 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-12-08	ISSUED FOR DOB FILING
1	2014-10-09	Bulletin #1
	2014-09-09	Issued for Construction
	2014-08-01	90% Construction Documents

D.O.B. NUMBER:

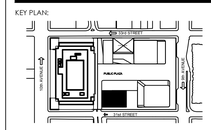
NB#

NORTH:

Scale: 1/8" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
1ST FLOOR PIPING PLAN

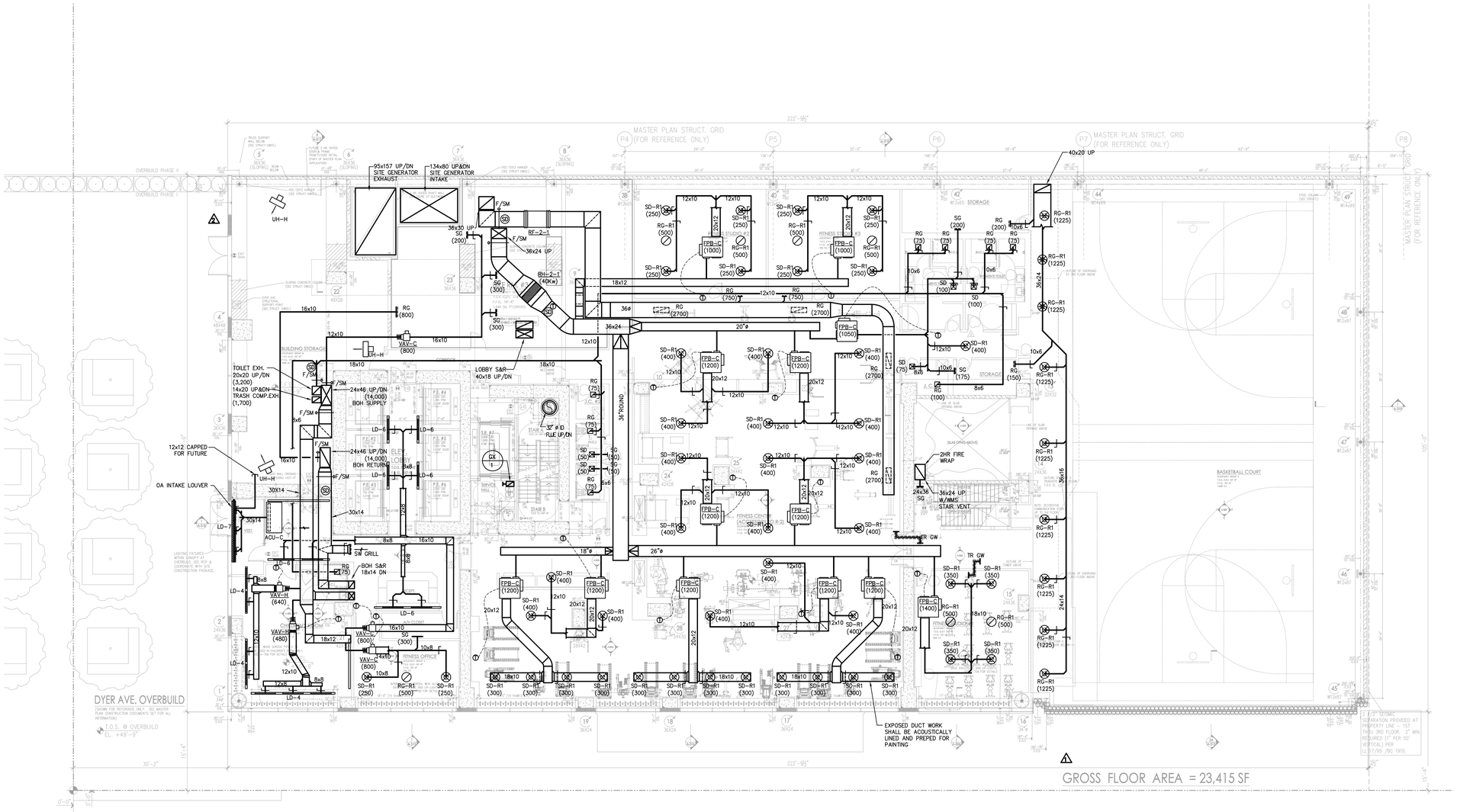
SEAL & SIGNATURE:

DATE:	12/07/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-103.00
SHEET, No.:	5 of 39

FILE No: I:\120187-02\Mech\M-103_(ground level piping).dwg

FILE NAME I:\120187-02\Mech\M-103_(ground level piping).dwg SAVED ON 12/8/2014 8:43 AM PLOTTED ON 12/8/2014 9:35 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121187150 Job Number
E2007213386 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:

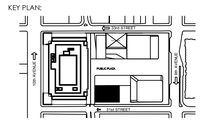
NB#

NORTH:

Scale: 1/8" = 1'- 0"

0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
2ND FLOOR PLAN

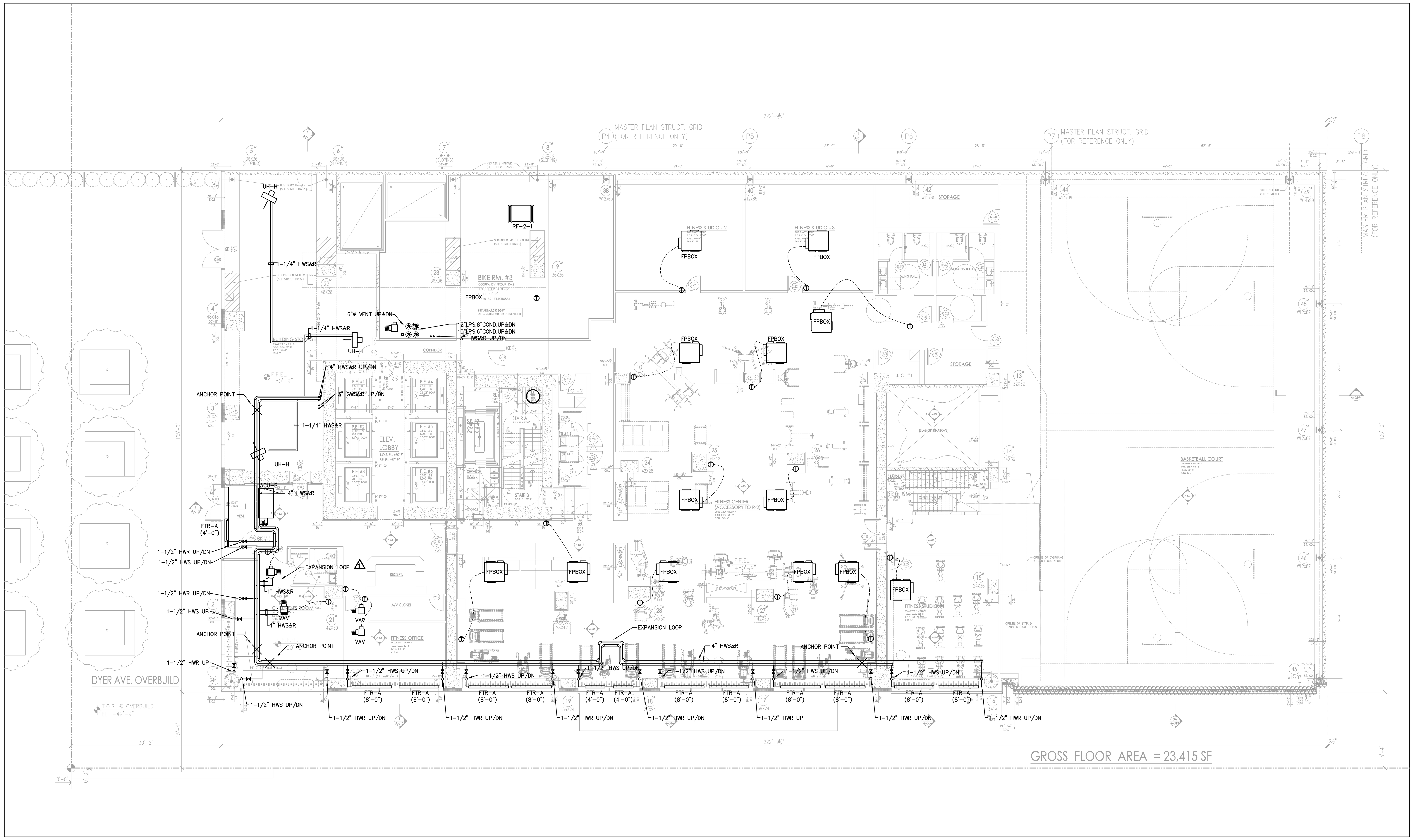
SEAL & SIGNATURE:

DATE:	12/04/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-104.00
SHEET. No.:	6 of 39

FILE No: I:\120187-02\Mech\M-104_(2nd level).dwg

FILE NAME: I:\120187-02\Mech\M-104_(2nd level).dwg SAVED ON 12/8/2014 8:43 AM PLOTTED ON 12/8/2014 9:35 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 121185760 Job Number
ES236631482 Scan Code



PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects, LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

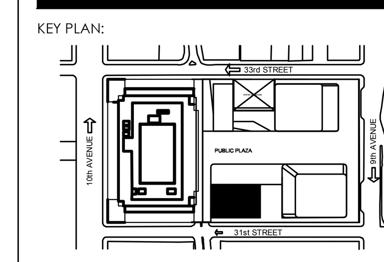
D.O.B. NUMBER:

NB#

NORTH:

Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
2ND FLOOR PIPING PLAN

SEAL & SIGNATURE:

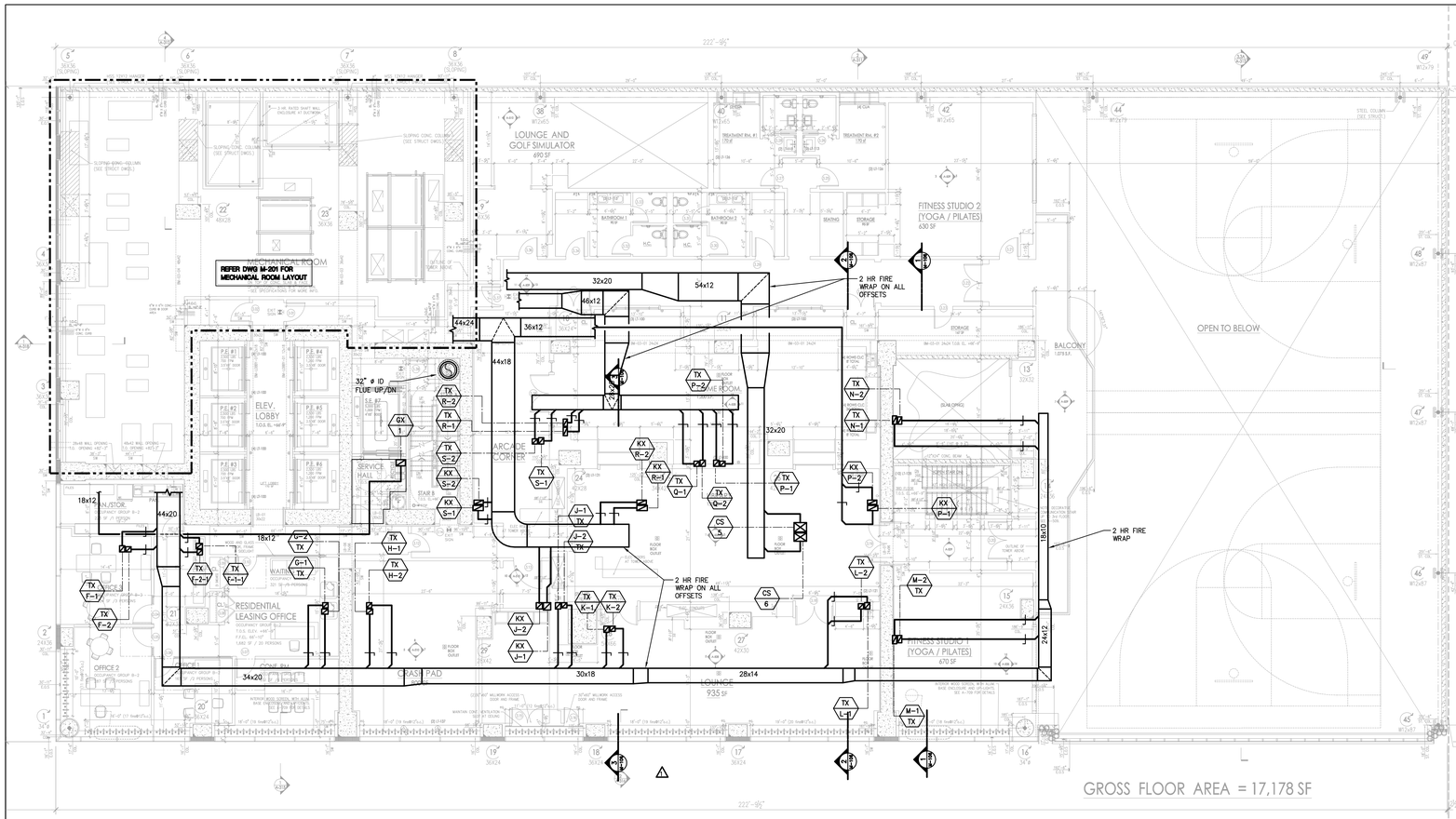
DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-105.00
SHEET. No.:	7 of 39

FILE No: I:\120187-02\Mech\M-105_(2nd level piping plan).dwg

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

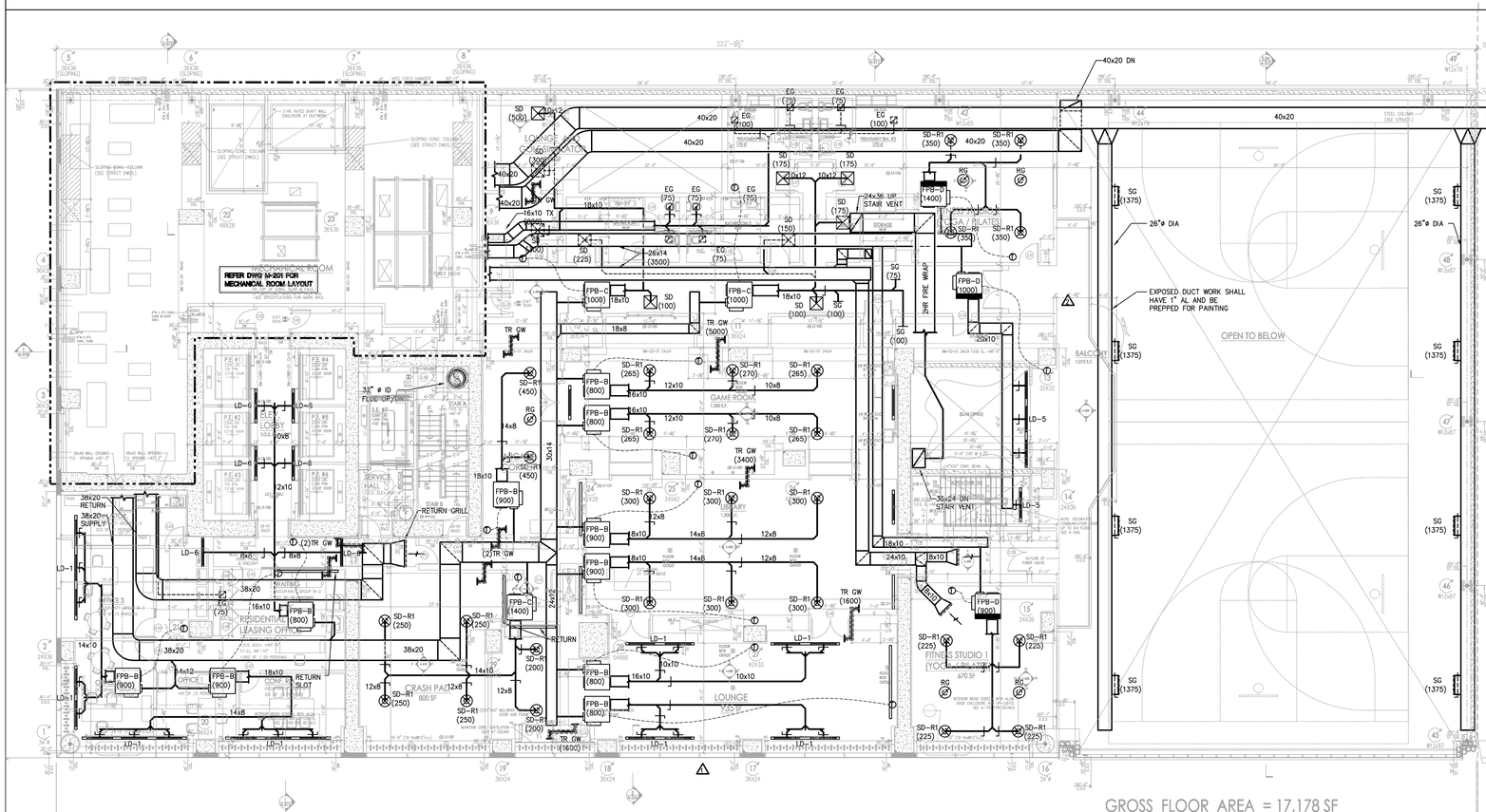
FILE NAME I:\120187-02\Mech\M-105_(2nd level piping plan).dwg SAVED ON 12/8/2014 8:42 AM PLOTTED ON 12/8/2014 9:35 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121851900 Job Number
E5860503495 Scan Code



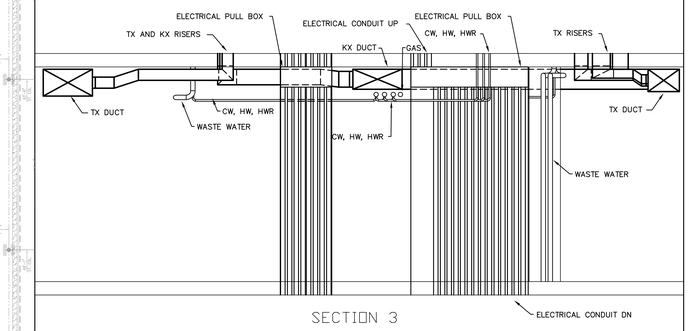
GROSS FLOOR AREA = 17,178 SF

THIRD FLOOR TOWER OFFSET LEVEL DUCTWORK PLAN

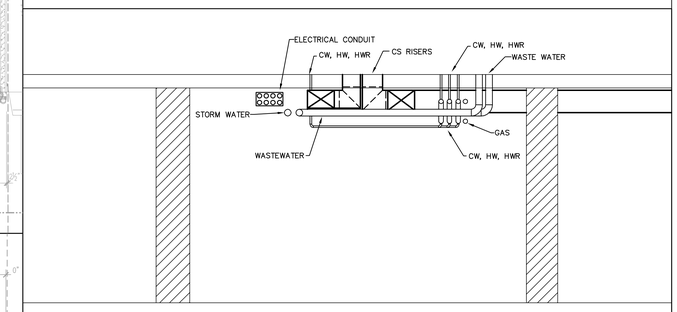


GROSS FLOOR AREA = 17,178 SF

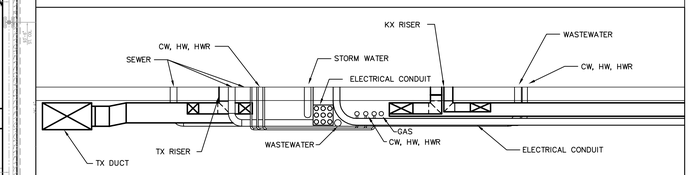
THIRD FLOOR DISTRIBUTION LEVEL DUCTWORK PLAN



SECTION 3



SECTION 2



SECTION 1

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

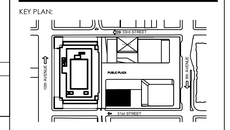
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/8" = 1'-0"
0 4 8 12 20

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
3RD FLOOR PLAN

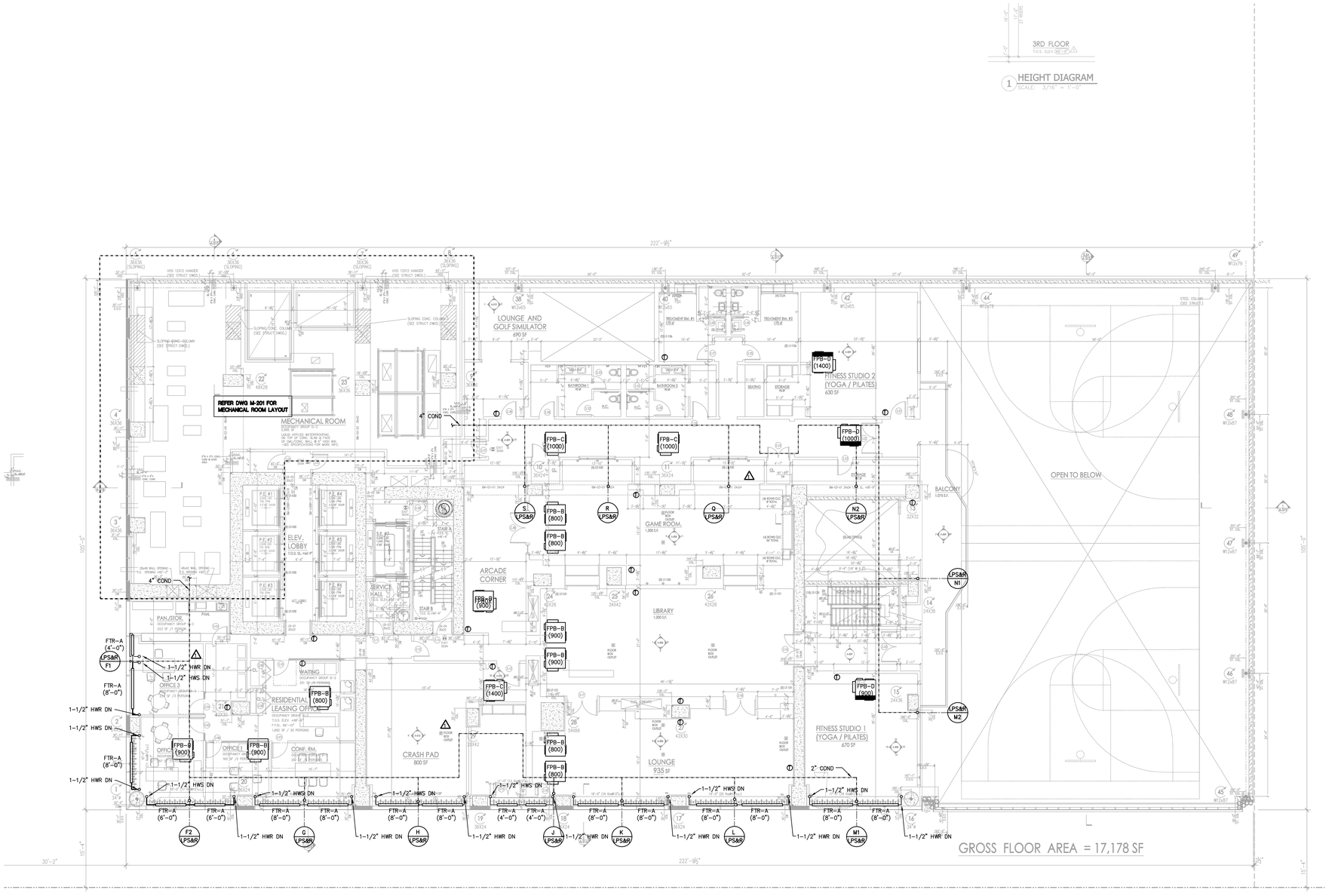
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-106.00
SHEET. No.:	8 of 39

FILE NO: I:\120187-02\Mech\M-106_(3rd floor).dwg

FILE NAME I:\120187-02\Mech\M-106_(3rd floor).dwg SAVED ON 12/8/2014 8:32 AM PLOTTED ON 12/8/2014 9:35 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859750 Job Number
E350543183590 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

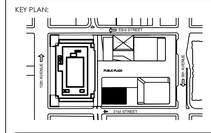
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-29	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH:

Scale: 1/8" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
3RD FLOOR PIPING PLAN

SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID DIGUILIO · No. 035725 · PROFESSIONAL ENGINEER

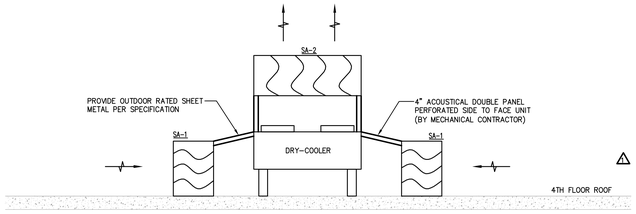
DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-107.00
SHEET. No.:	9 of 39

FILE No: I:\120187-02\Mech\M-107_(3rd floor piping).dwg

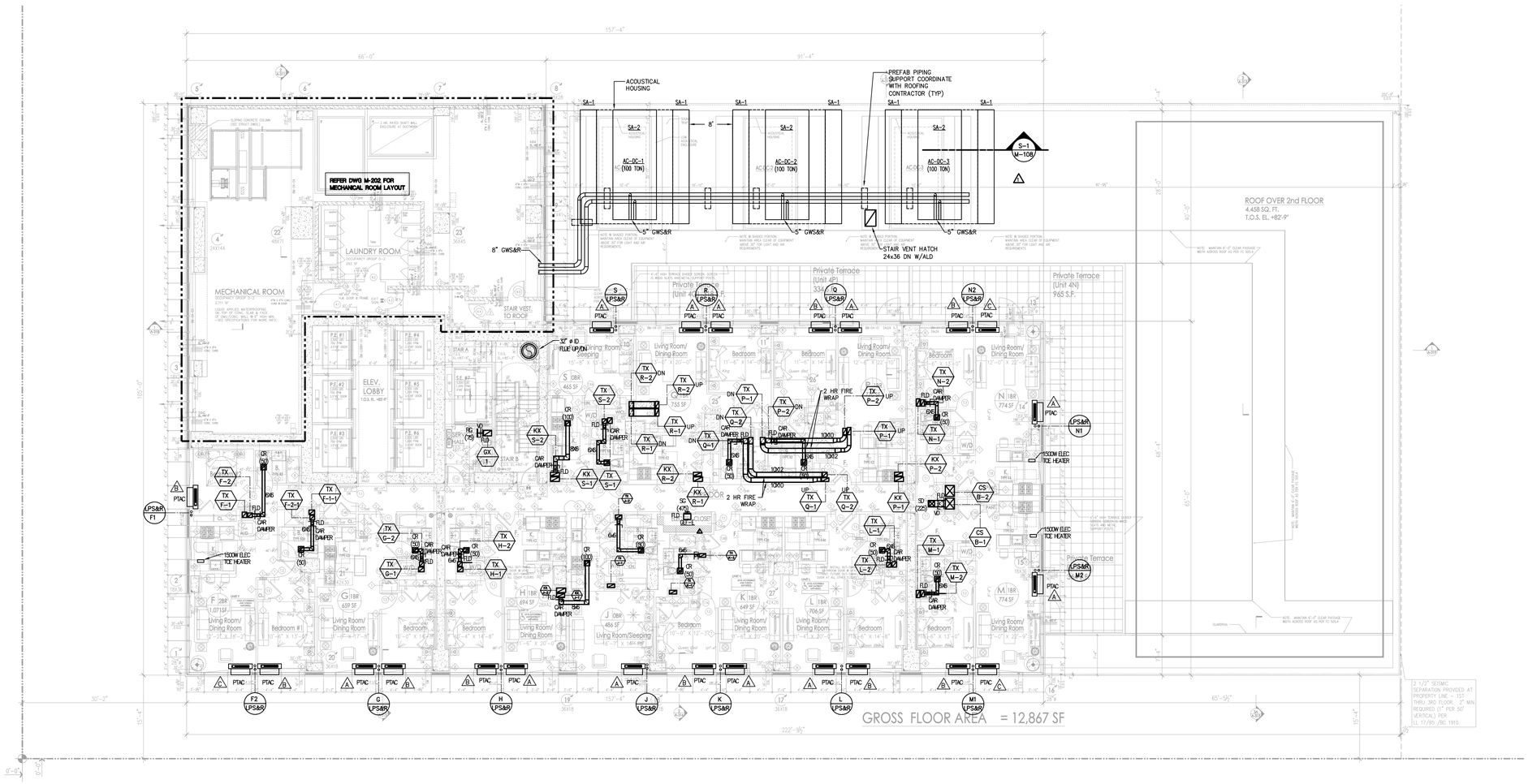
FILE NAME I:\120187-02\Mech\M-107_(3rd floor piping).dwg SAVED ON 12/8/2014 8:31 AM PLOTTED ON 12/8/2014 9:34 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859700 Job Number

E549149716 Scan Code



SECTION – 1
$\frac{1}{4}$"=1'-0"



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
1	2014-12-08	ISSUED FOR DOB FILING
	2014-10-09	Bulletin #1
	2014-09-09	Issued for Construction
	2014-08-01	90% Construction Documents
	2014-06-03	50% CONSTRUCTION DOCUMENTS
	2014-05-12	Issued for DOB filing
	2014-03-14	Design Development
	2014-01-24	50% Design Development
	2013-12-18	Schematic Design

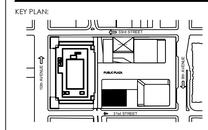
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
4TH FLOOR PLAN

SEAL & SIGNATURE:

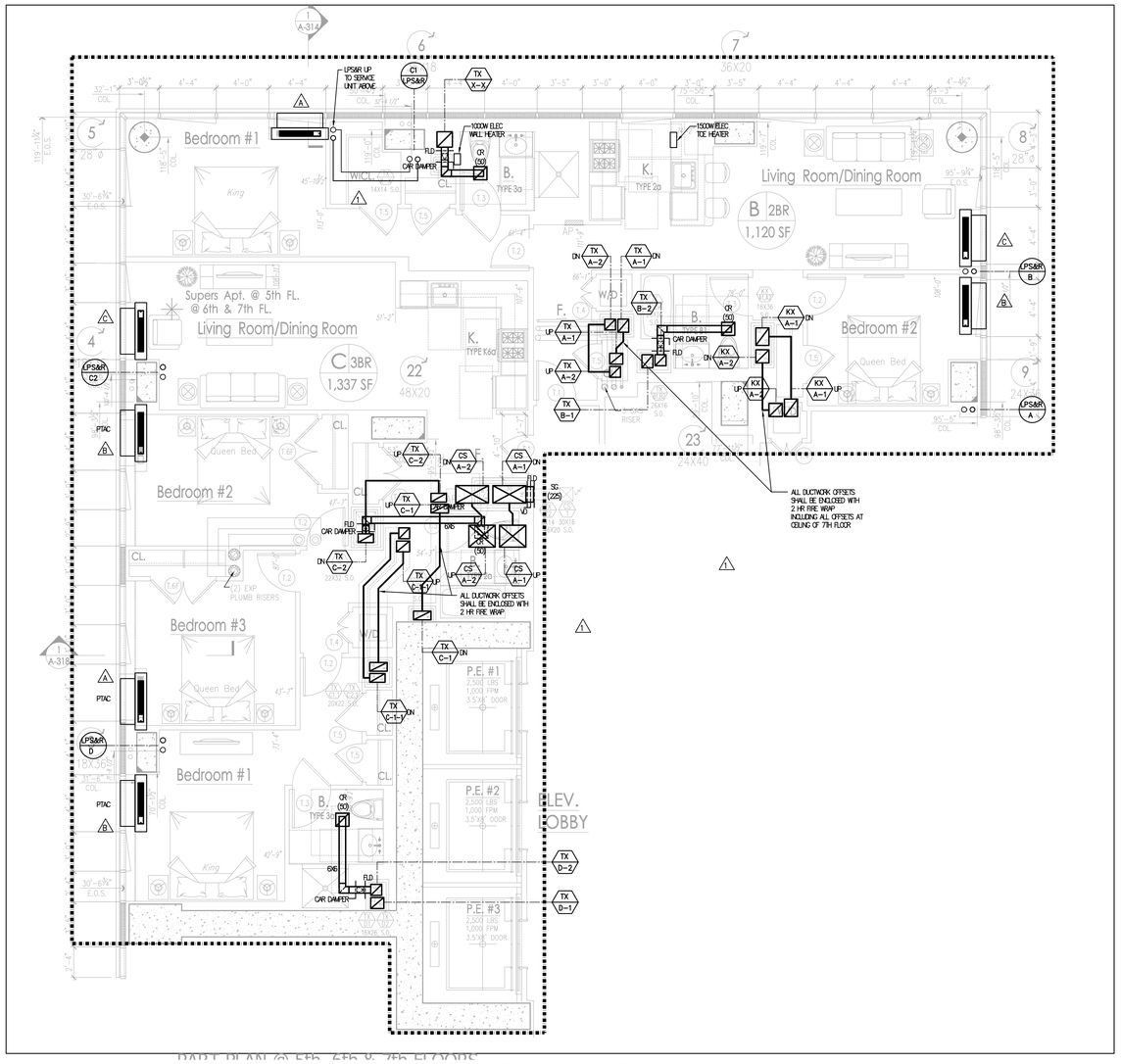
STATE OF NEW YORK · DAVID LEE · 037 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-108.00
SHEET. No.:	10 of 39

FILE No.: I:\120187-02\Mech\M-108_(4th floor).dwg

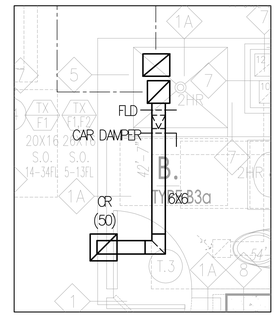
FILE NAME I:\120187-02\Mech\M-108_(4th floor).dwg SAVED ON 12/8/2014 8:31 AM PLOTTED ON 12/8/2014 9:34 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121189760 Job Number
E554120251S Scan Code



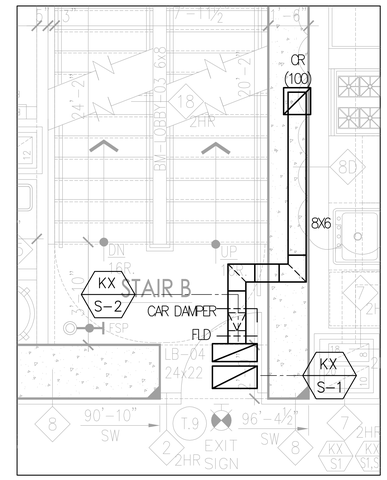
TYPICAL FOR 5TH FLOOR THROUGH 7TH FLOOR

SCALE: 1/4"=1'-0"



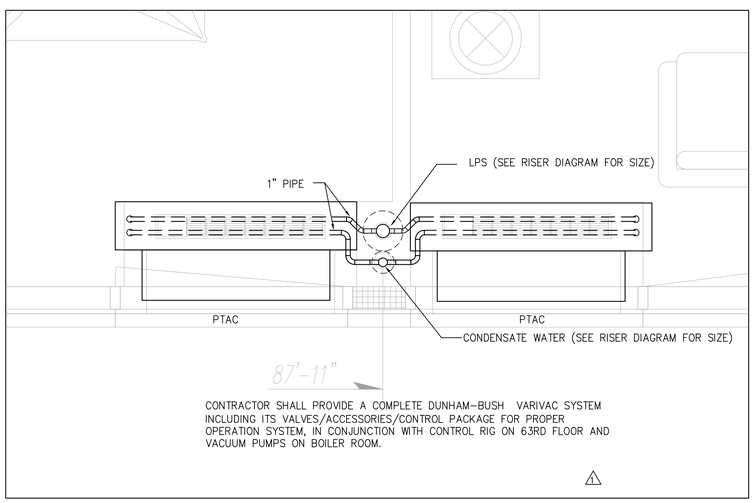
TYPICAL TOILET EXHAUST DUCTWORK PART PLAN

SCALE: 1/2"=1'-0"



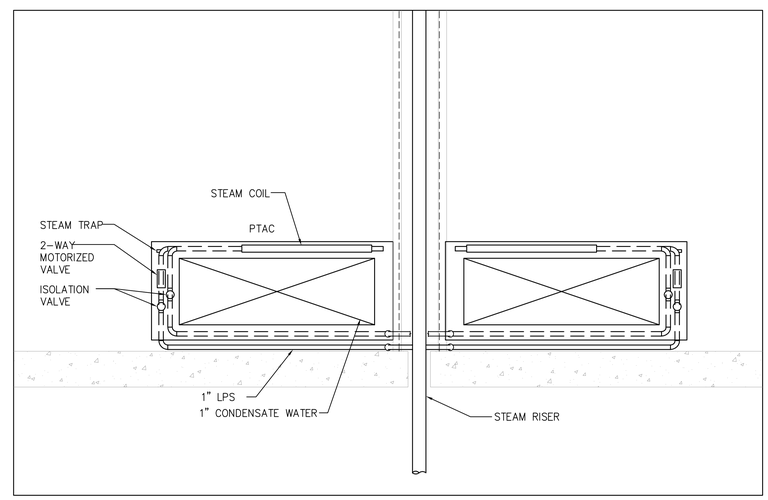
TYPICAL KITCHEN EXHAUST DUCTWORK PART PLAN

SCALE: 1/2"=1'-0"



TYPICAL PTAC UNIT PIPE CONNECTION DETAIL PLAN

SCALE: 1"=1'-0"



TYPICAL PTAC UNIT PIPE CONNECTION DETAIL SECTION

SCALE: 1"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects,LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08:	ISSUED FOR DOB FILING.
2014-10-09	Bulletin #1
2014-09-09:	Issued for Construction
2014-08-01:	90% Construction Documents

D.O.B. NUMBER:

NB#

NORTH

Scale: VARIES

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
5TH THRU 13TH FLOOR PART PLAN

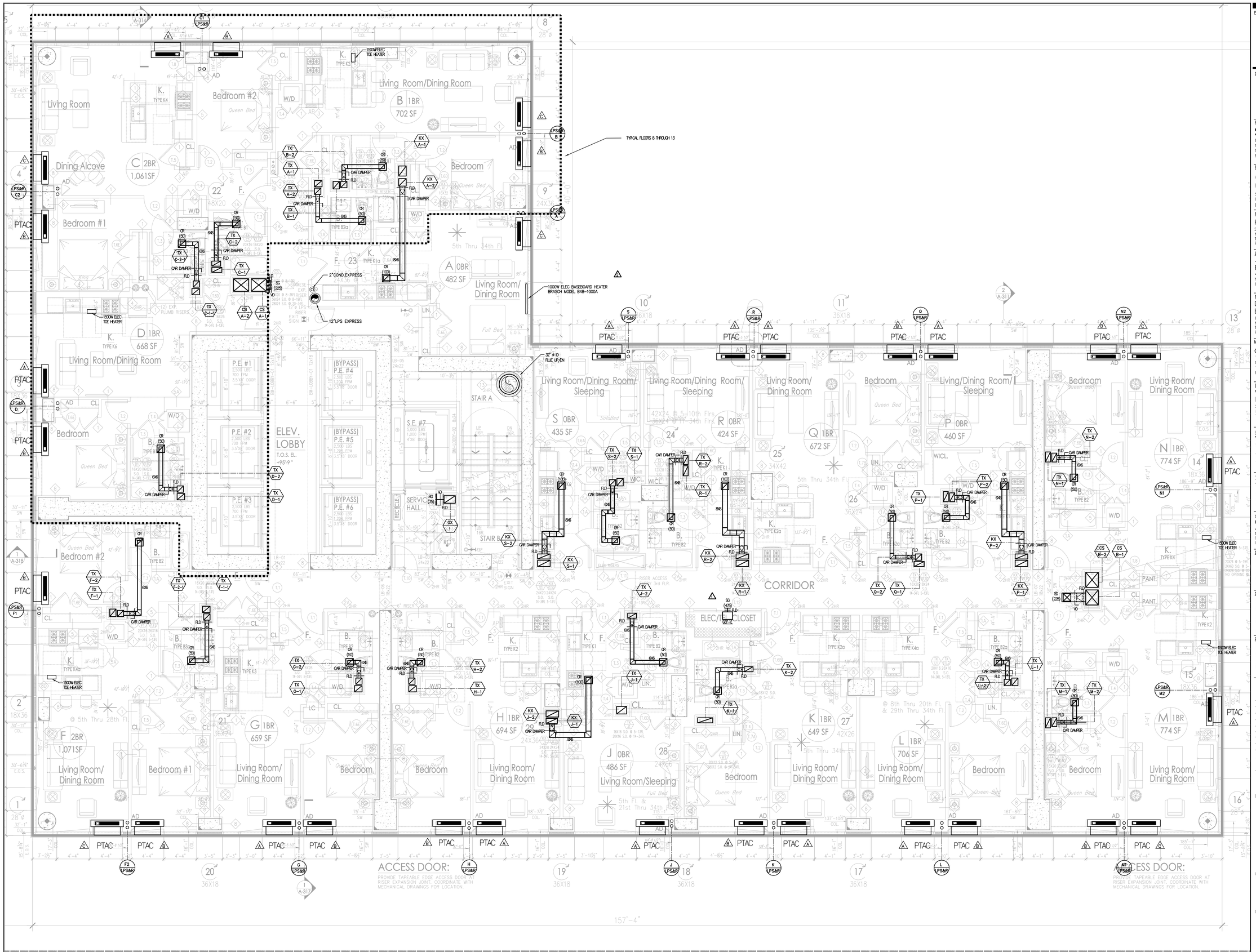
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-109.00
SHEET No.:	11 of 39

FILE No: I:\120187-02\Mech\M-109_(5th thru 13th floor part plan).dwg

FILE NAME I:\120187-02\Mech\M-109_(5th thru 13th floor part plan).dwg SAVED ON 12/8/2014 9:04 AM PLOTTED ON 12/8/2014 9:33 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121187192 Job Number E-SDR5605005 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISIONS
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB filing
2014-03-14	Design Development

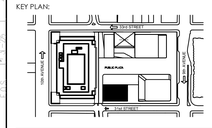
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/4" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
5TH THRU 13TH FLOOR PLAN

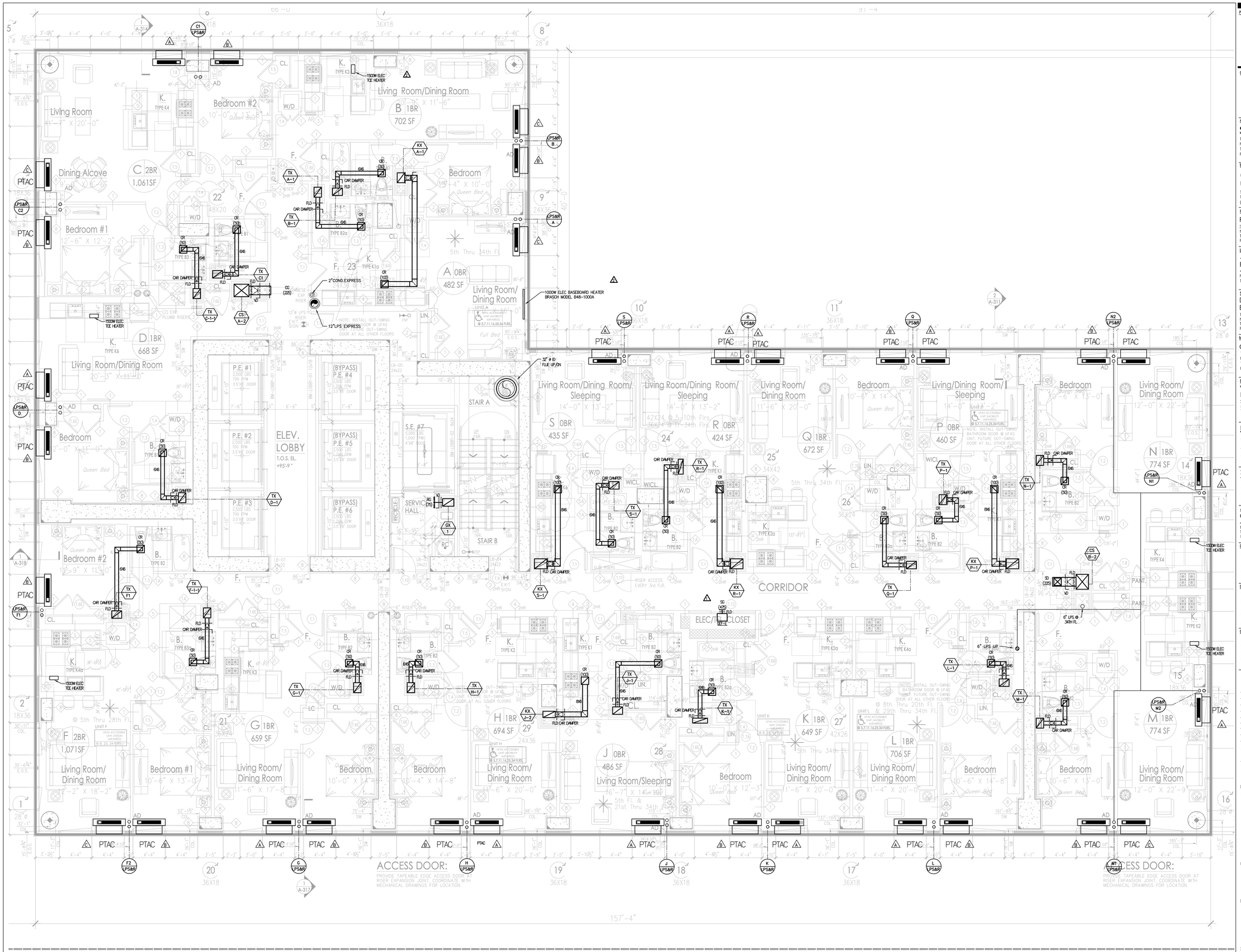
SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID LEE · 075-00-1 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-110.00
SHEET No.:	12 of 39

FILE No: I:\120187-02\Mech\M-110_(5th thru 13th floor).dwg

FILE NAME I:\120187-02\Mech\M-110_(5th thru 13th floor).dwg SAVED ON 12/8/2014 9:03 AM PLOTTED ON 12/8/2014 9:33 AM PLOTTED BY LED, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISIONS
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B.NUMBER:

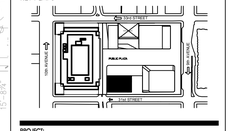
NB#

NORTH

Scale: 1/4" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

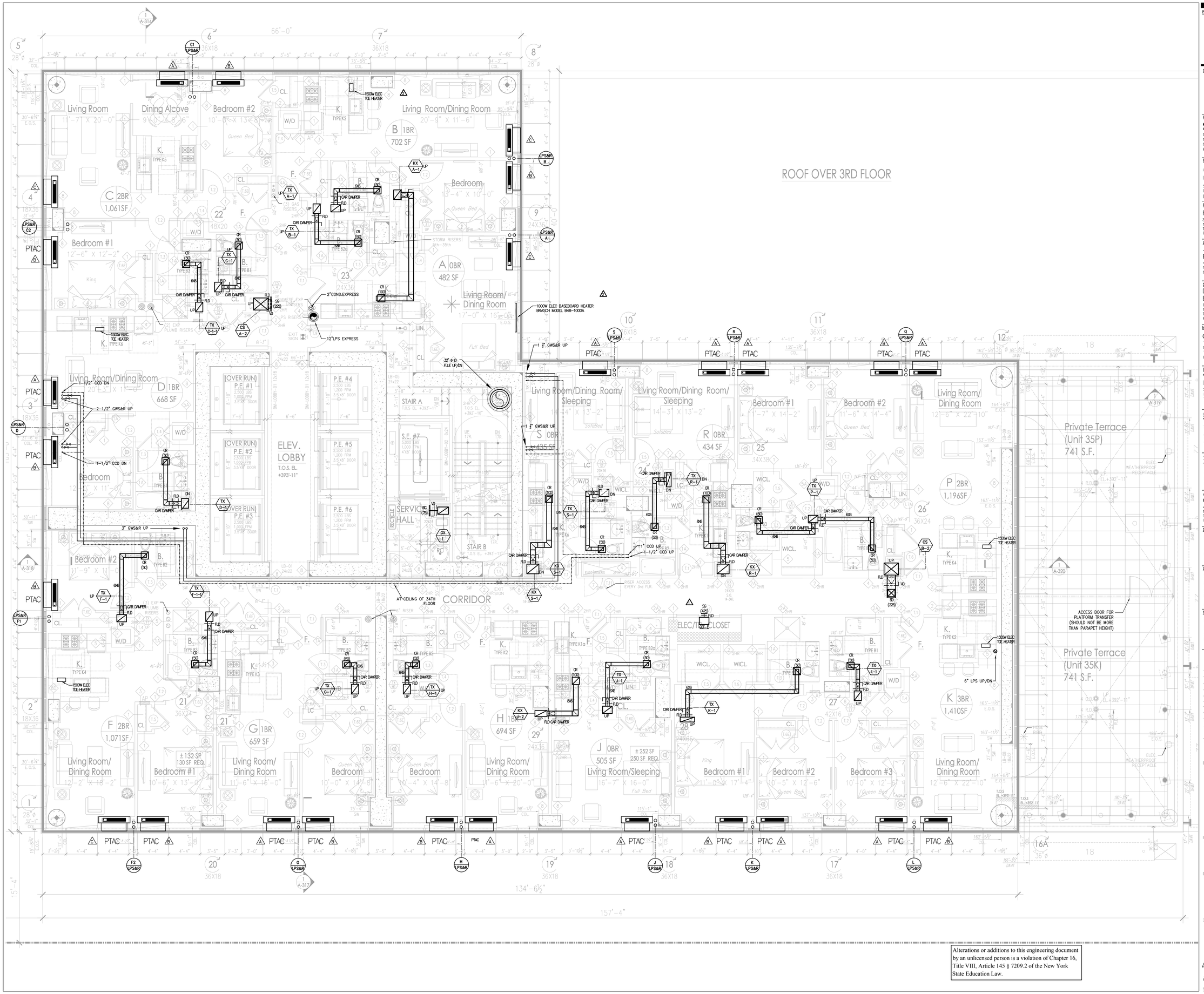
MECHANICAL
14TH THRU 34TH FLOOR PLAN

SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-111.00
SHEET. No.:	13 of 39

FILE NO: I:\120187-02\Mech\M-111_(14th thru 34th floor).dwg

FILE NAME I:\120187-02\Mech\M-111_(14th thru 34th floor).dwg SAVED ON 12/8/2014 9:03 AM PLOTTED ON 12/8/2014 9:33 AM PLOTTED BY LED, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

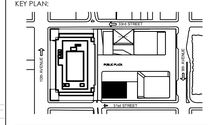
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER: NB#

NORTH

Scale: 1/4" = 1'-0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
35TH FLOOR PLAN

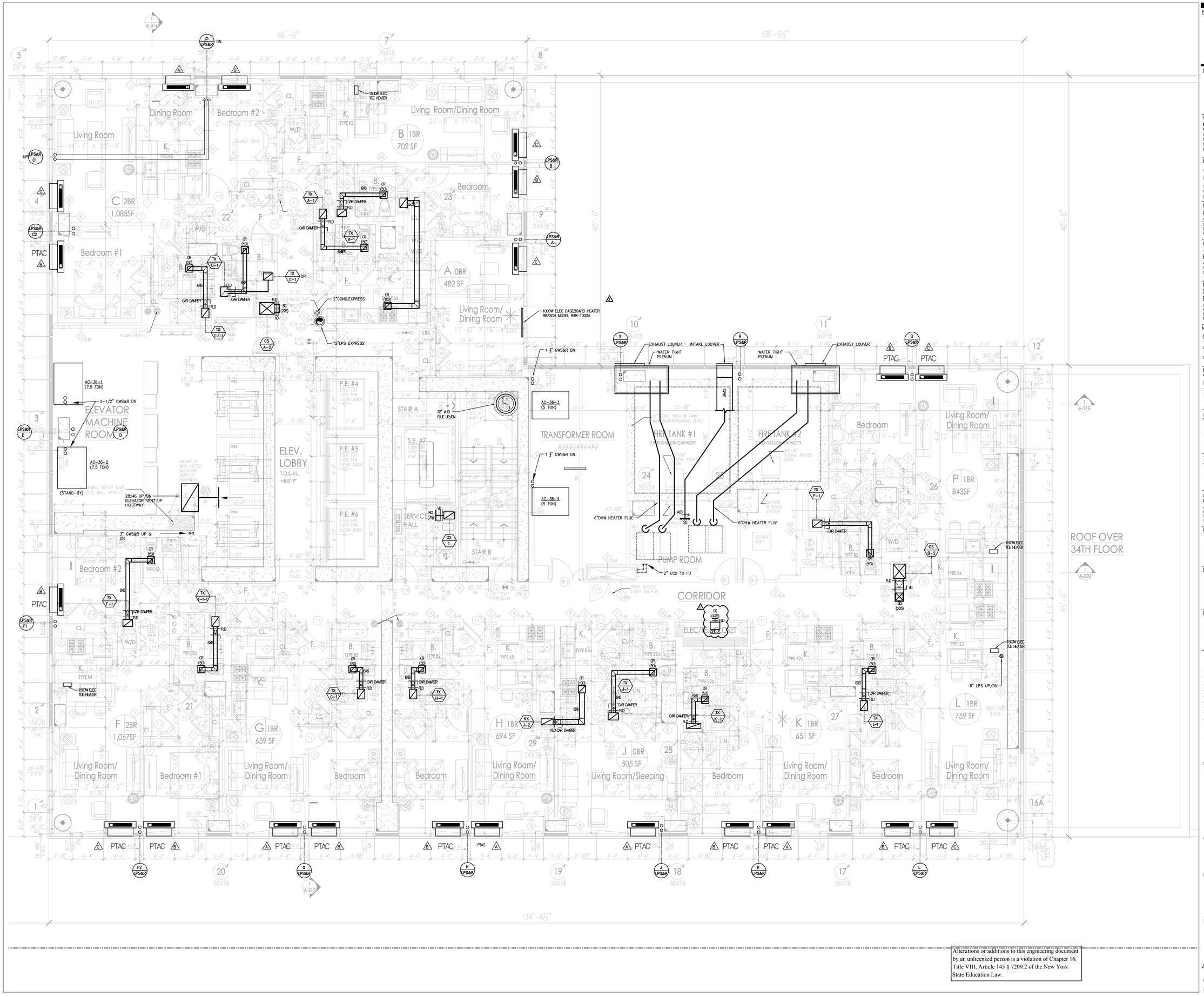
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No.:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-112.00
SHEET. No.:	14 of 39

FILE No: I:\120187-02\Mech\M-112_(35th floor).dwg

FILE NAME I:\120187-02\Mech\M-112_(35th floor).dwg SAVED ON 12/8/2014 9:02 AM PLOTTED ON 12/8/2014 9:33 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121187102 Job Number
E302052892282 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-29	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

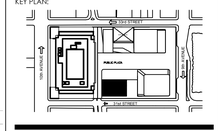
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/4" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
36TH FLOOR PLAN

SEAL & SIGNATURE:

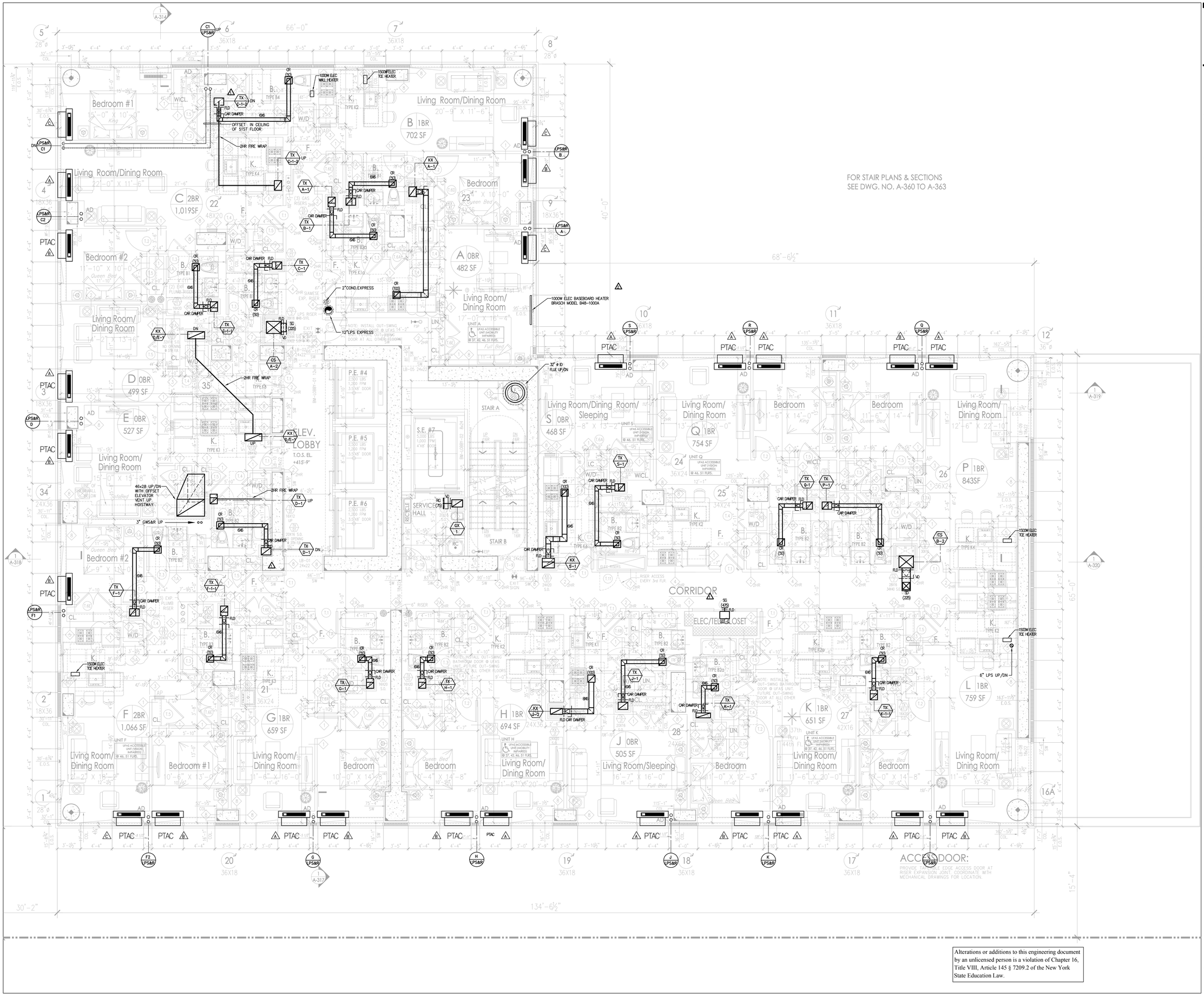
STATE OF NEW YORK · DAVID LED · 075 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-113.00
SHEET. No.:	15 of 39

FILE No: I:\120187.02\Mech\M-113_(36th floor).dwg

FILE NAME I:\120187-02\Mech\M-113_(36th floor).dwg SAVED ON 12/8/2014 9:01 AM PLOTTED ON 12/8/2014 9:32 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421,689,900 Job Number
E500,000,00314 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-05	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

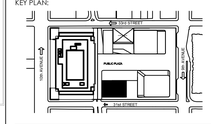
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/8" = 1'- 0"
0 4 8 12 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
37TH THRU 51ST FLOOR PLAN

SEAL & SIGNATURE:

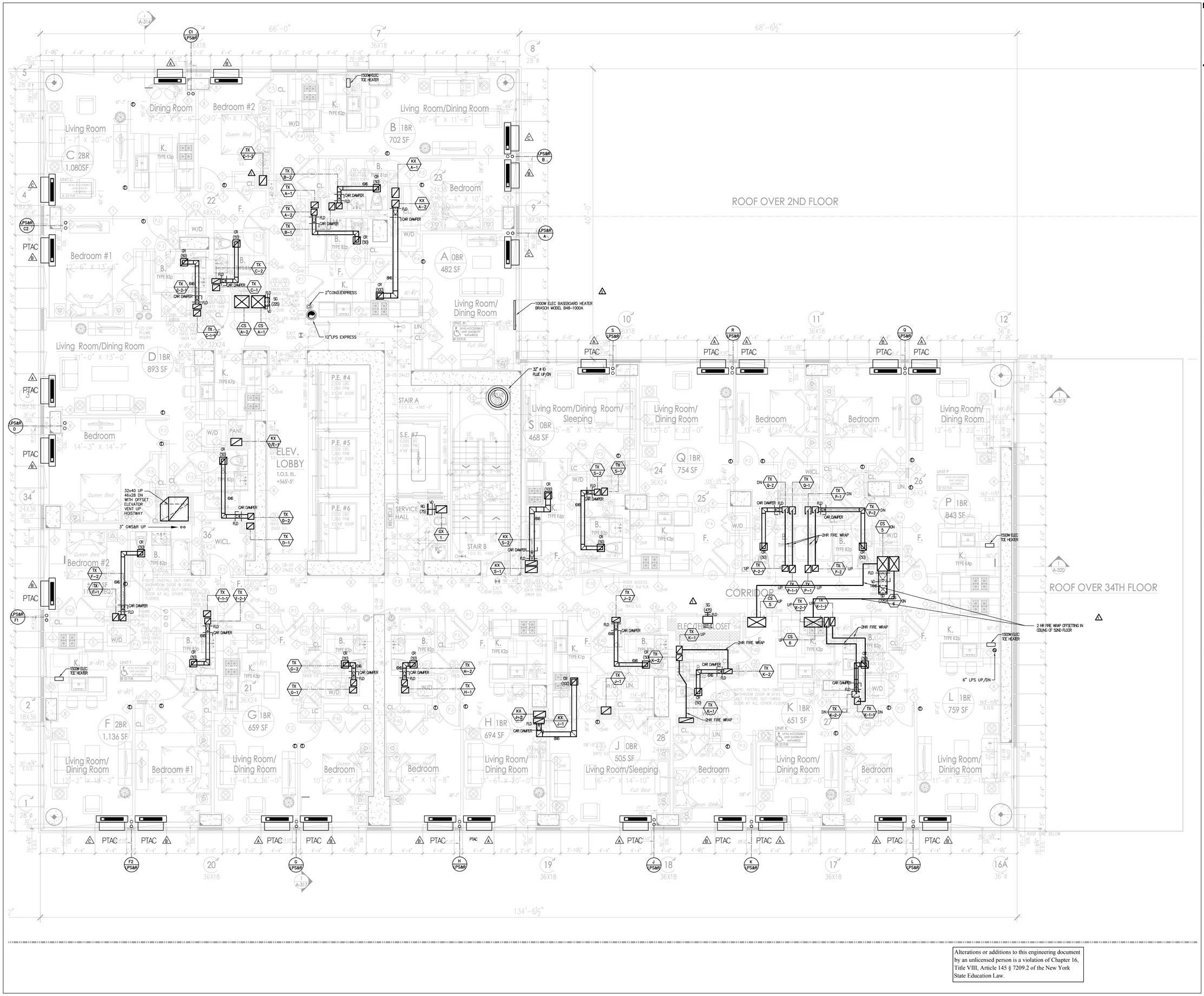
DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-114.00
SHEET. No.:	16 of 39

FILE No: I:\120187-02\Mech\M-114_(37th - 51st floor).dwg

FILE NAME I:\120187-02\Mech\M-114_(37th - 51st floor).dwg SAVED ON 12/6/2014 9:01 AM PLOTTED ON 12/6/2014 9:32 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859760 Job Number

E3554899412 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-30	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B.-NUMBER:

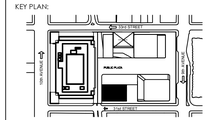
NB#

NORTH

Scale: 1/4" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
52ND THRU 55TH FLOOR PLAN

SEAL & SIGNATURE:

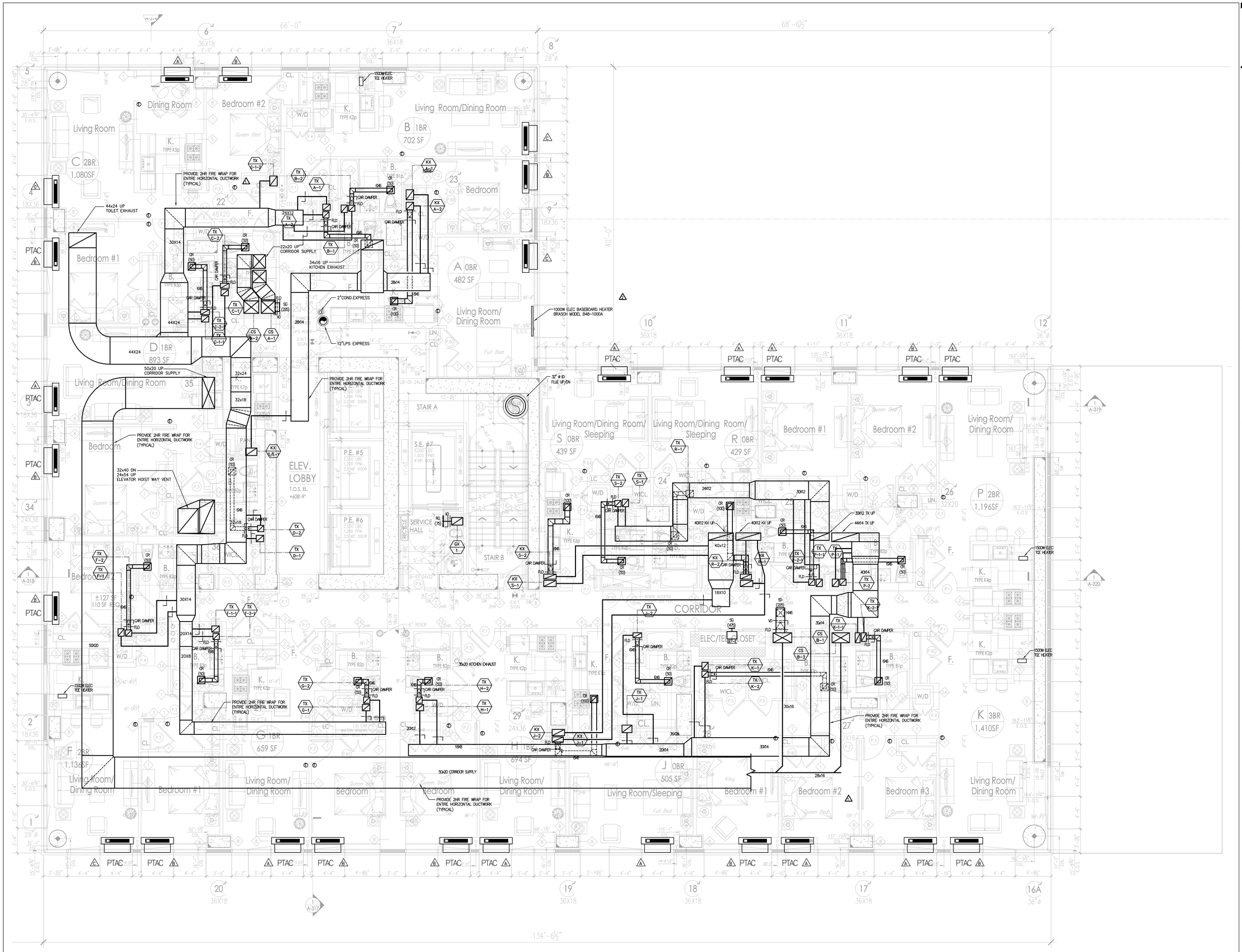
STATE OF NEW YORK · DAVID LEE · 075 · 12/8/2014 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-115.00
SHEET. No.:	17 of 39

FILE No: I:\120187-02\Mech\M-115_(52th thru 55th floor).dwg

FILE NAME: I:\120187-02\Mech\M-115_(52th thru 55th floor).dwg SAVED ON 12/8/2014 9:00 AM PLOTTED ON 12/8/2014 9:32 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121187100 Job Number
E377895545J Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-29	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

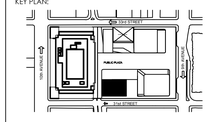
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/4" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
56TH THRU 61ST FLOOR PLAN

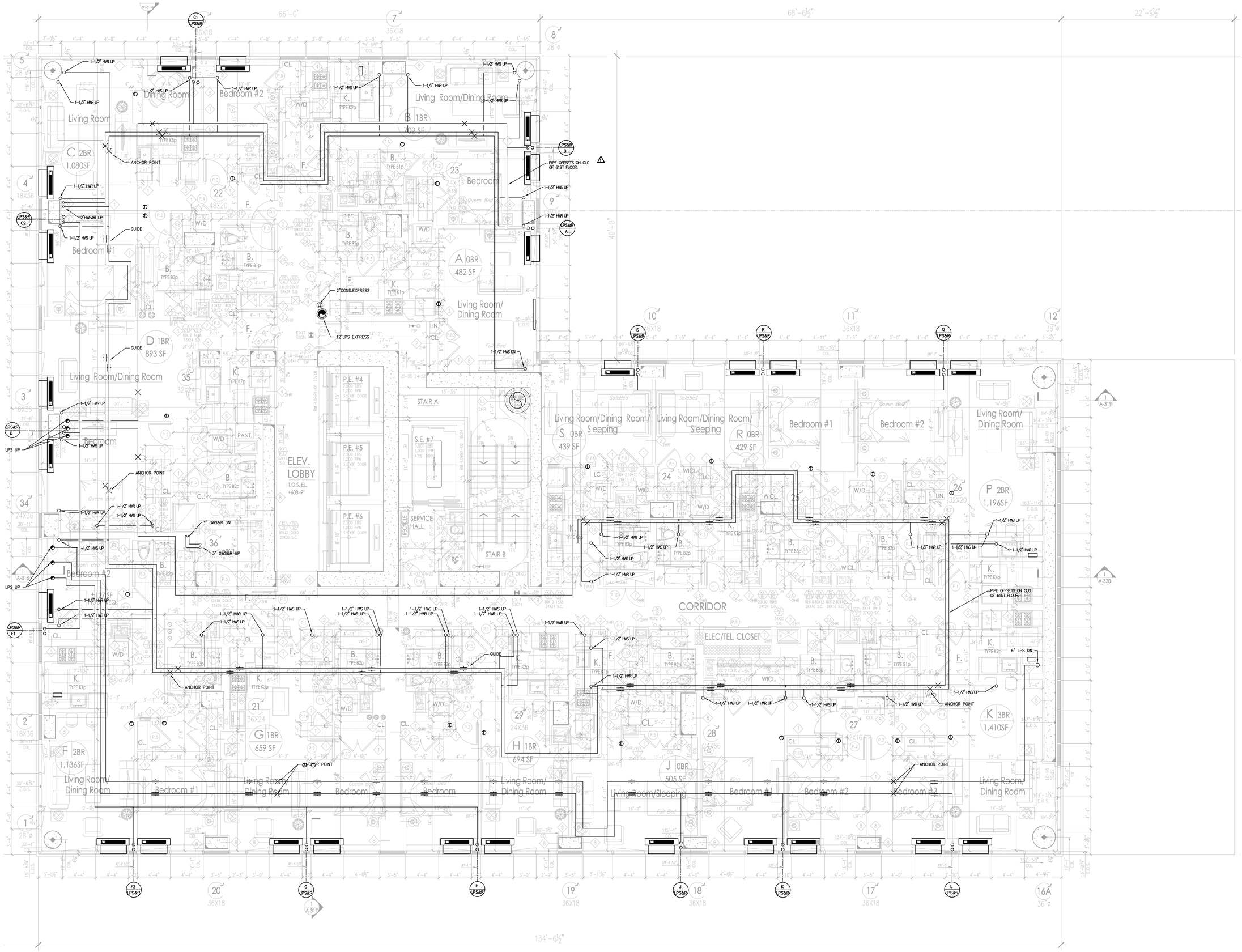
SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID LEE · 038 · 1 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-116.00
SHEET. No.:	18 of 39

FILE No: I:\120187-02\Mech\M-116_(56th thru 61st floor).dwg

FILE NAME I:\120187-02\Mech\M-116_(56th thru 61st floor).dwg SAVED ON 12/8/2014 8:59 AM PLOTTED ON 12/8/2014 9:32 AM PLOTTED BY LED, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

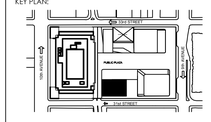
D.O.B. NUMBER:

NB#

NORTH:

Scale: 1/4" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL 52ND THRU 61ST FLOOR PIPING PLAN

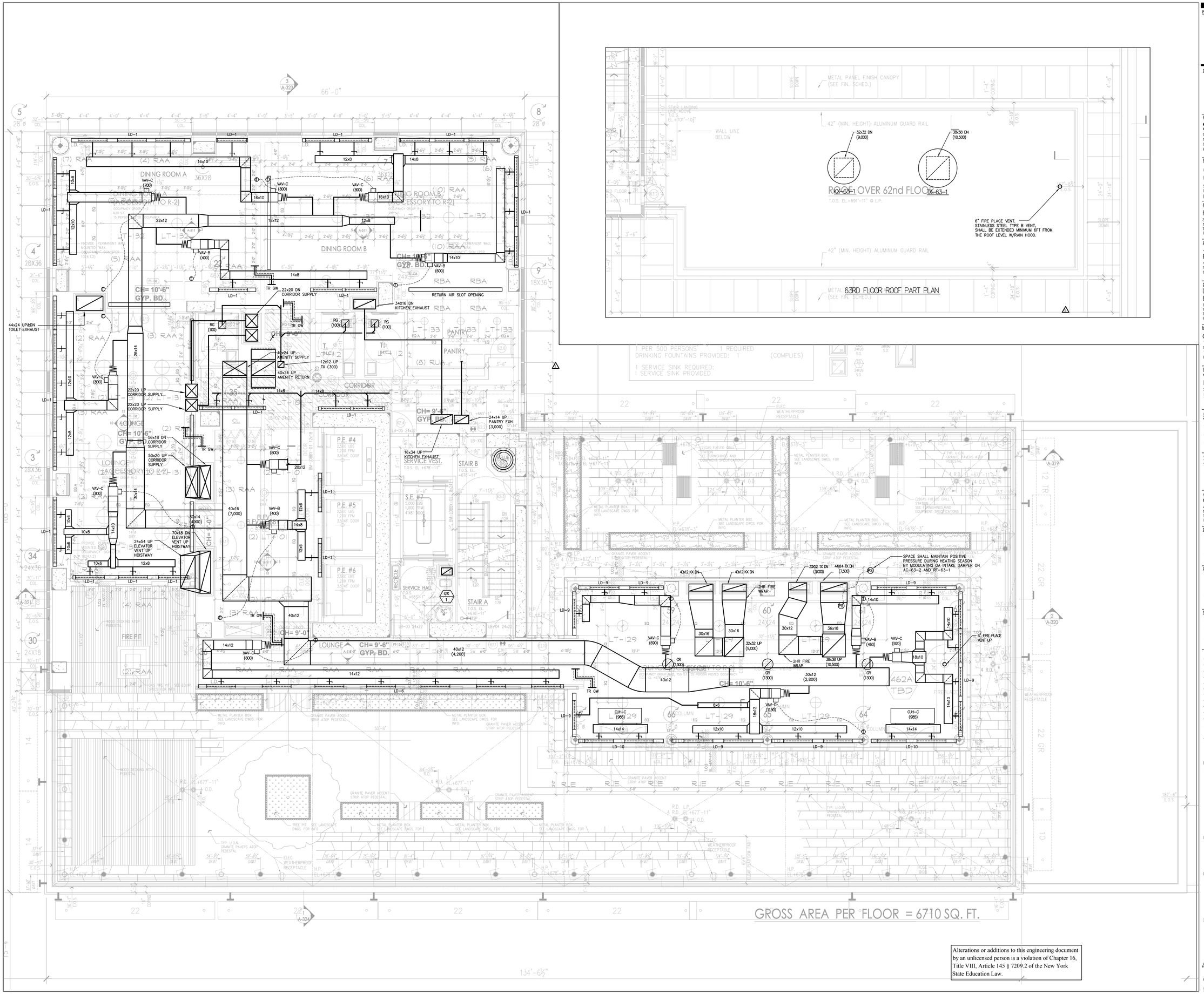
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-117.00
SHEET. No.:	19 of 39

FILE No: I:\120187-02\Mech\M-117_61st floor piping plan).dwg

FILE NAME I:\120187-02\Mech\M-117_(61st floor piping plan).dwg SAVED ON 12/8/2014 8:58 AM PLOTTED ON 12/8/2014 9:32 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421189760 Job Number
E5545570435 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:

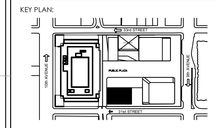
NB#

NORTH

Scale: 1/4" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL 62ND FLOOR AND 63RD ROOF PART PLANS

SEAL & SIGNATURE:

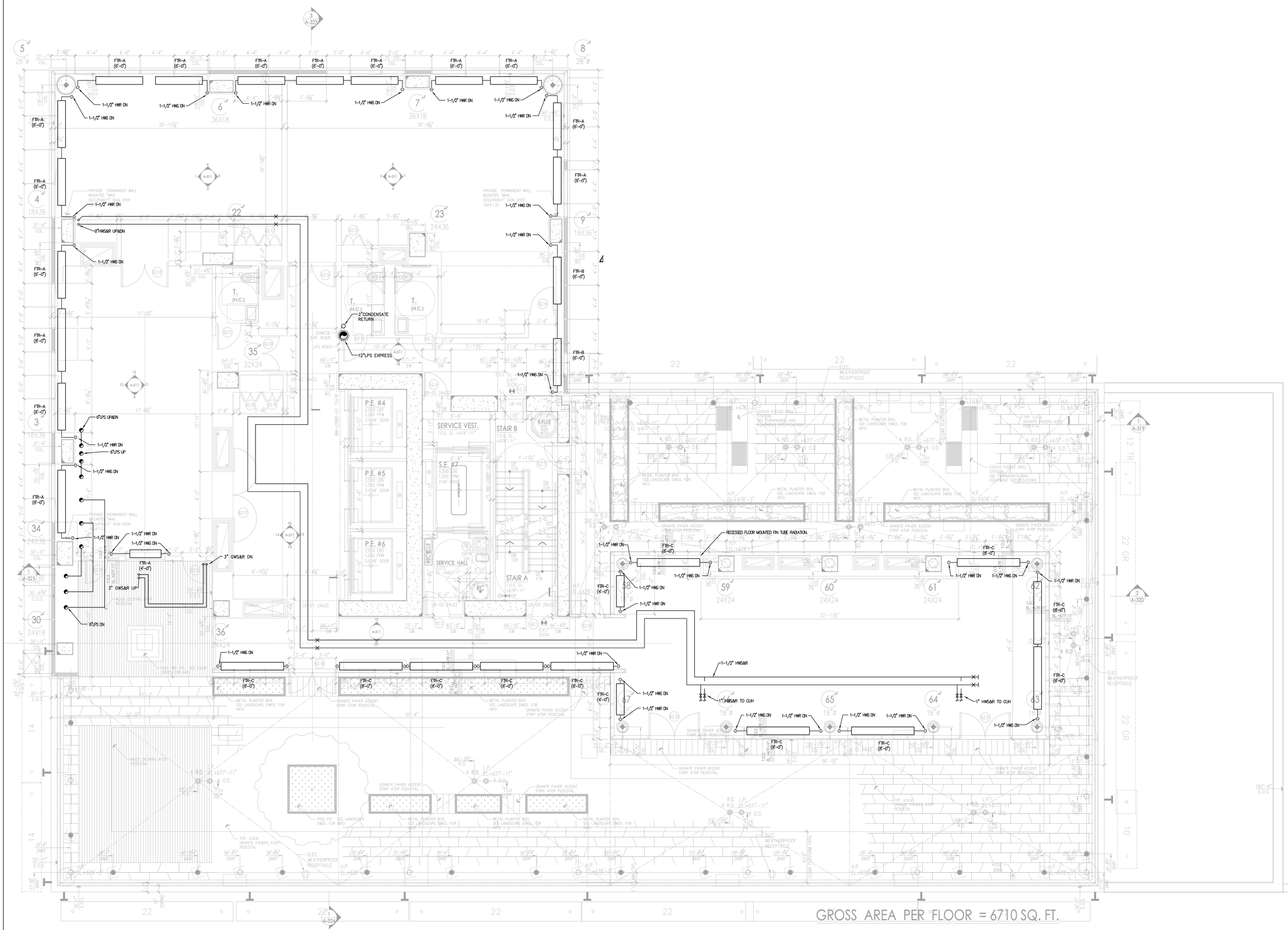
STATE OF NEW YORK · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-118.00
SHEET No.:	20 of 39

FILE No: I:\120187-02\Mech\M-118_(62nd floor main roof).dwg

FILE NAME: I:\120187-02\Mech\M-118_(62nd floor main roof).dwg SAVED ON 12/8/2014 8:58 AM PLOTTED ON 12/8/2014 9:31 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859760 Job Number
E3497002948 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

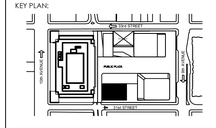
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER: NB#

NORTH: Scale: 1/4" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

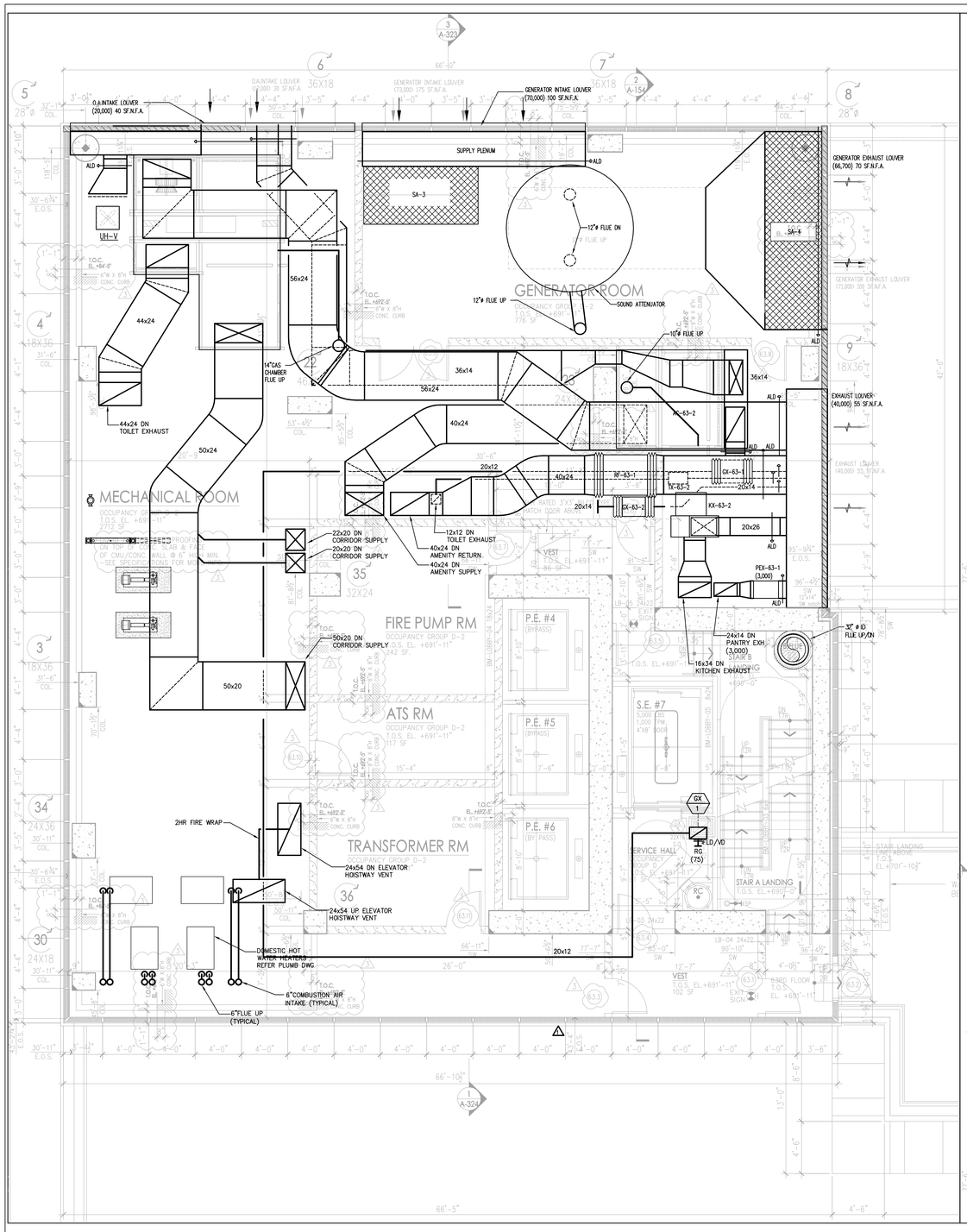
MECHANICAL 62ND FLOOR PIPING PLAN

SEAL & SIGNATURE:

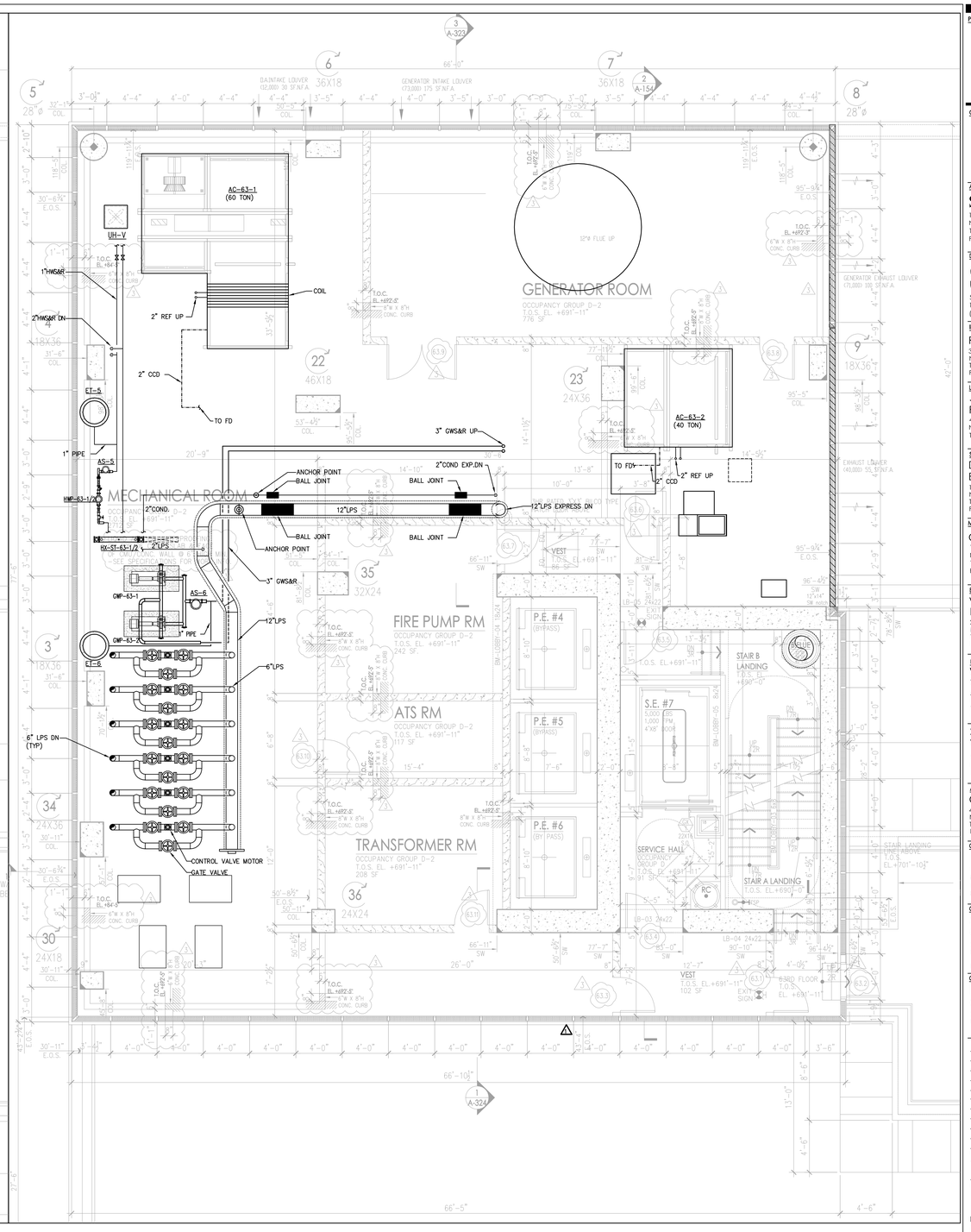
DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	VG
CHECKED BY:	DL
DWG. No.:	M-119.00
SHEET. No.:	21 of 39

FILE No: I:\120187-02\Mech\M-119_62nd floor piping plan).dwg

FILE NAME: I:\120187-02\Mech\M-119_62nd floor piping plan).dwg SAVED ON 12/8/2014 8:57 AM PLOTTED ON 12/8/2014 9:31 AM PLOTTED BY LEO, DAVID



63RD FLOOR DUCT WORK PLAN



63RD FLOOR PIPING PLAN

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA,
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

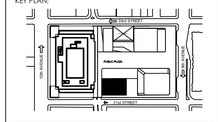
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/4" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
63RD FLOOR PLAN

SEAL & SIGNATURE:

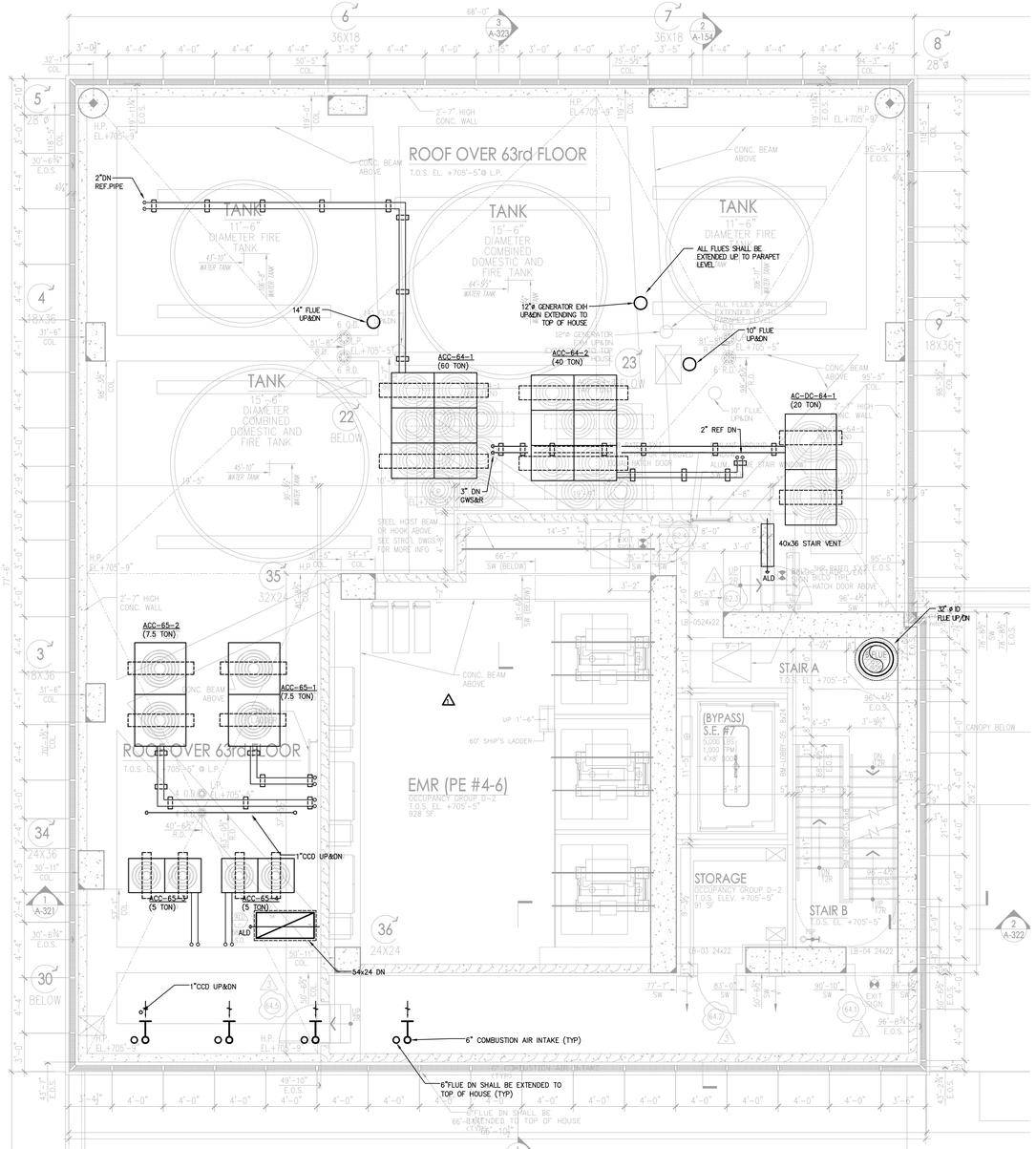
STATE OF NEW YORK · DAVID DIAMOND · 037 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-120.00
SHEET. No.:	22 of 39

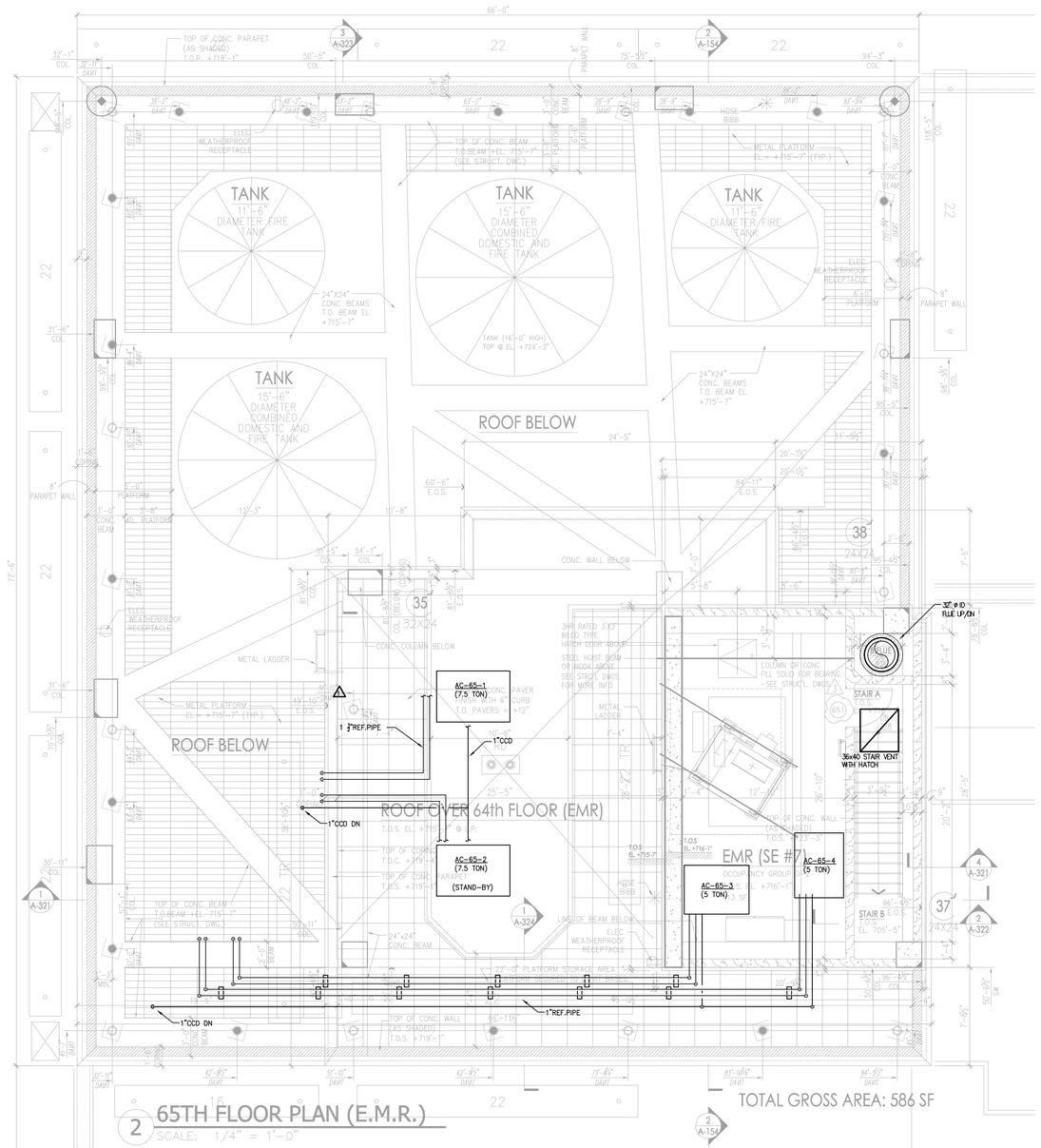
FILE No: I:\120187-02\Mech\M-120_63rd floor).dwg

FILE NAME: I:\120187-02\Mech\M-120_(63rd floor).dwg SAVED ON 12/8/2014 8:56 AM PLOTTED ON 12/8/2014 9:31 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 121189190 Job Number
E3752514430 Scan Code



1 64TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"



2 65TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"

64TH FLOOR PLAN

65TH FLOOR PLAN

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

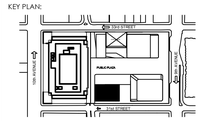
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/4" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL 64TH AND 65TH FLOORS PLAN

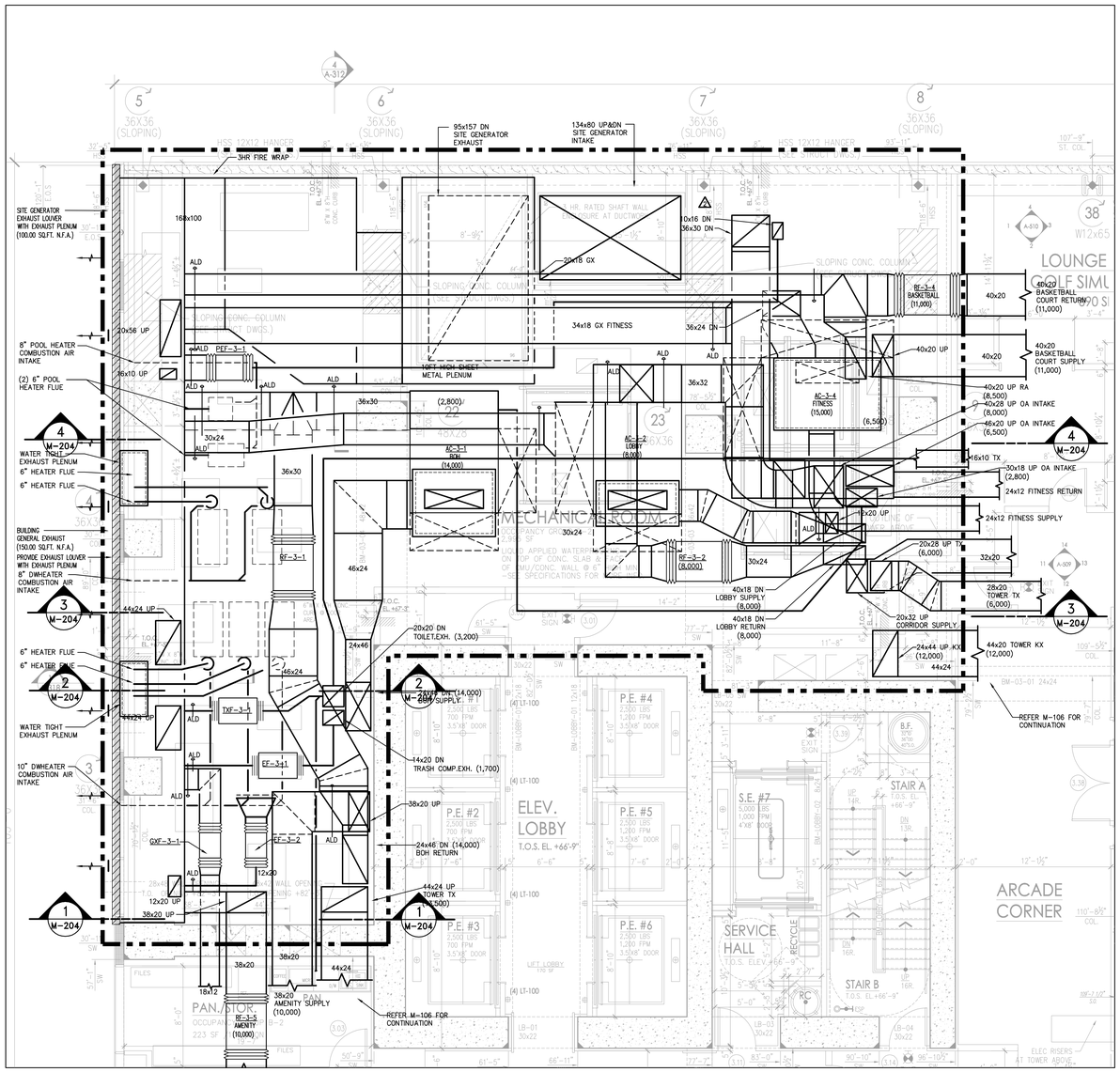
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-121.00
SHEET, No.:	23 of 39

FILE No: I:\120187-02\Mech\M-121_(Roof level).dwg

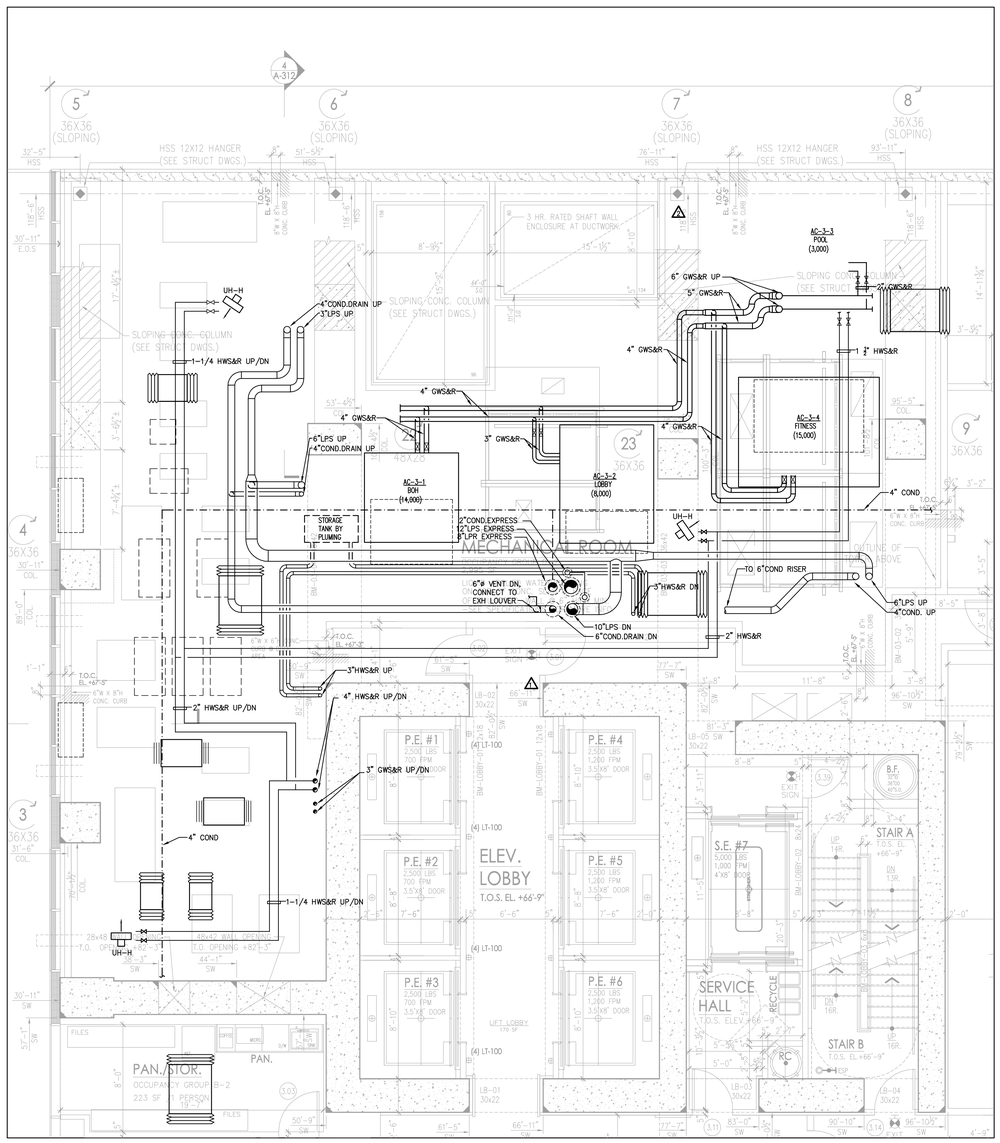
FILE NAME I:\120187-02\Mech\M-121_(Roof level).dwg SAVED DN 12/8/2014 8:56 AM PLOTTED DN 12/8/2014 9:31 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421185190 Job Number
E344005605S Scan Code



THIRD FLOOR DUCTWORK PART PLAN

SCALE: 1/4"=1'-0"



THIRD FLOOR PIPING PART PLAN

SCALE: 1/4"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

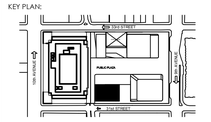
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-29	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/4" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
3RD FLOOR PART PLANS

SEAL & SIGNATURE:

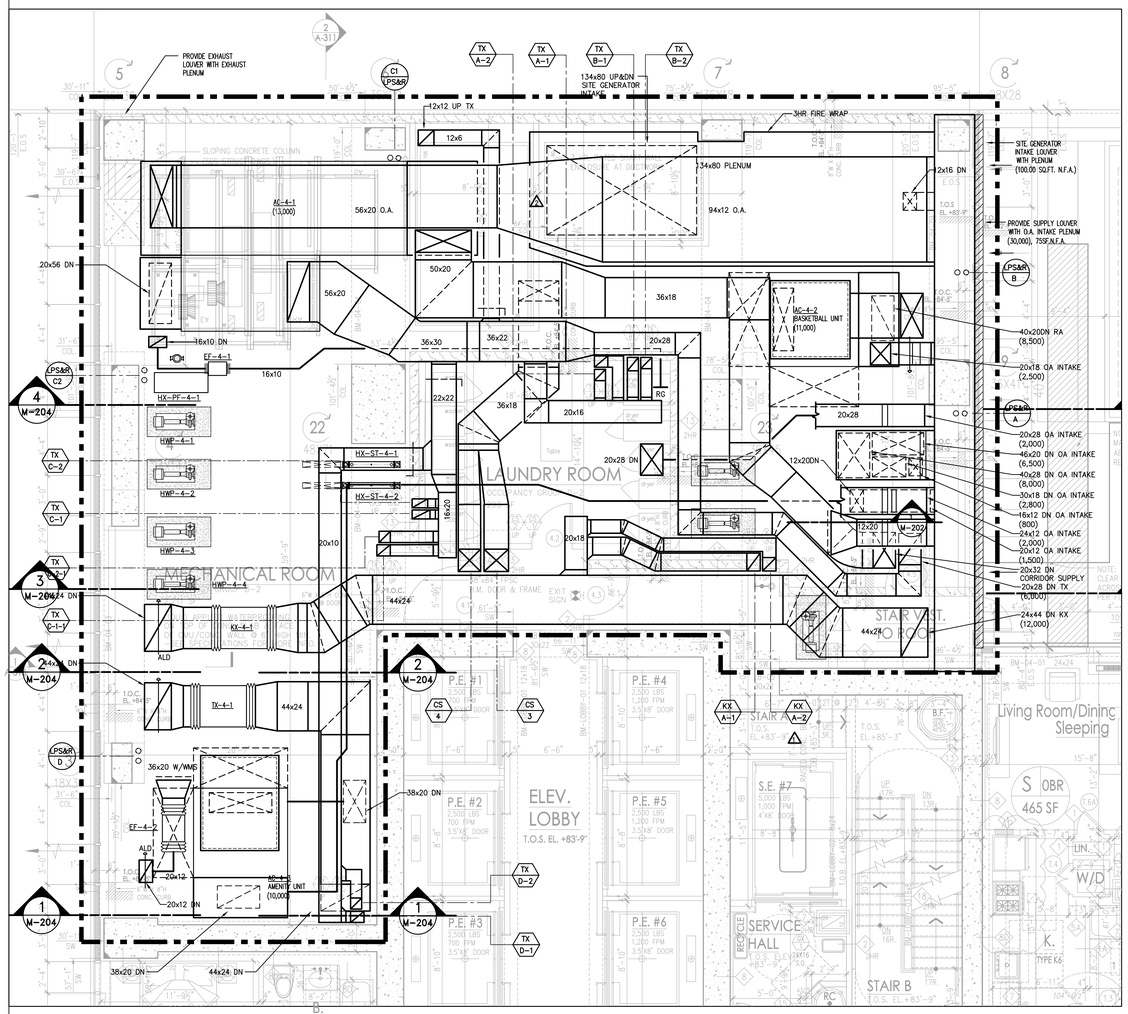
STATE OF NEW YORK · DAVID DEGUZMAN · 085377 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-201.00
SHEET. No.:	24 of 39

FILE No: I:\120187-02\Mech\M-201.00 (Part Plans).dwg

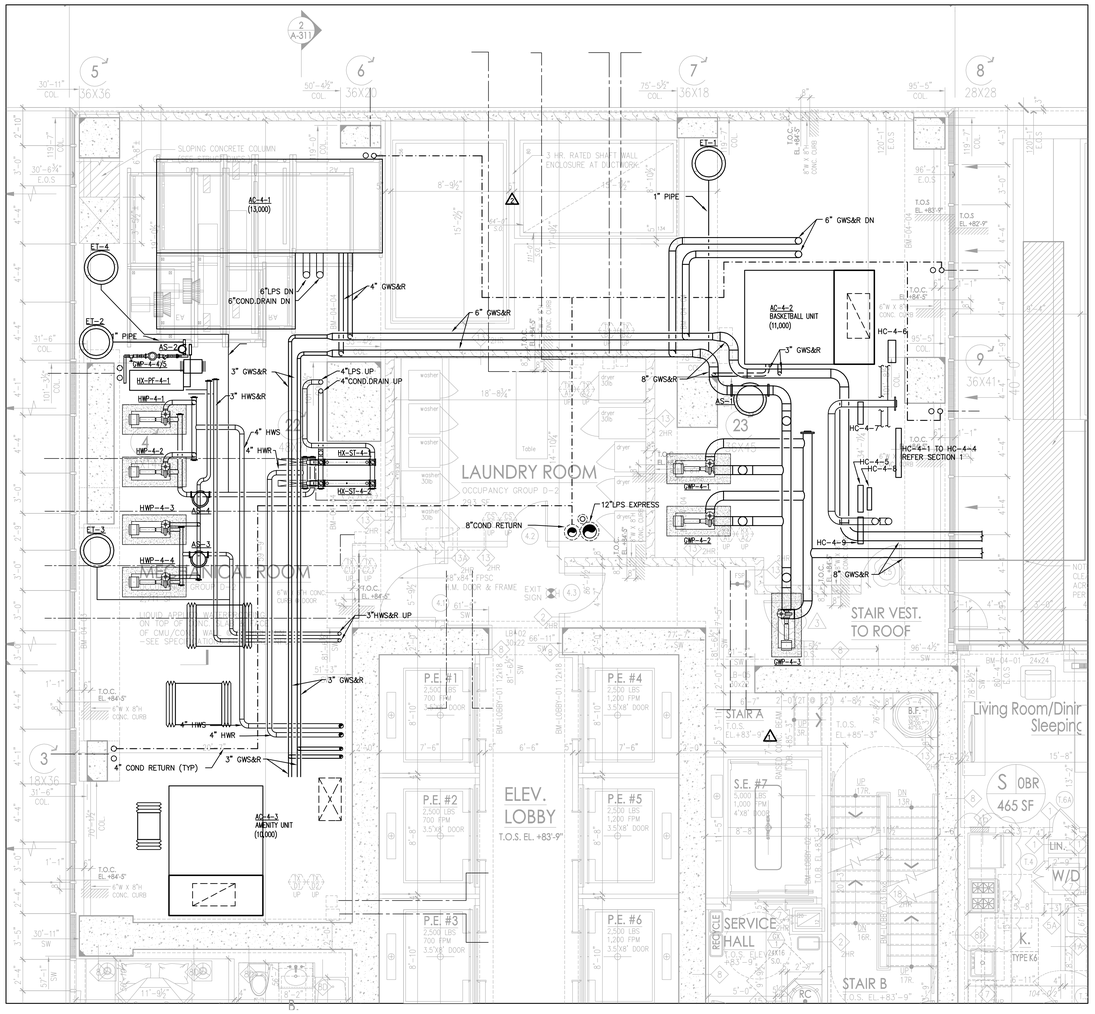
FILE NAME I:\120187-02\Mech\M-201.00 (Part Plans).dwg SAVED ON 12/8/2014 8:55 AM PLOTTED ON 12/8/2014 9:30 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121185190 Job Number
E300505798R Scan Code



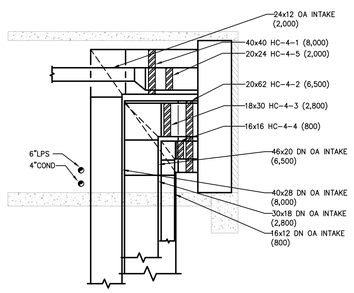
FOURTH FLOOR DUCTWORK PART PLAN

SCALE: 1/4"=1'-0"



FOURTH FLOOR PIPING PART PLAN

SCALE: 1/4"=1'-0"



SECTION 1

3"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:

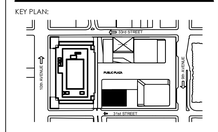
NB#

NORTH:

Scale: 1/4" = 1'- 0"

0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
4TH FLOOR PART PLANS

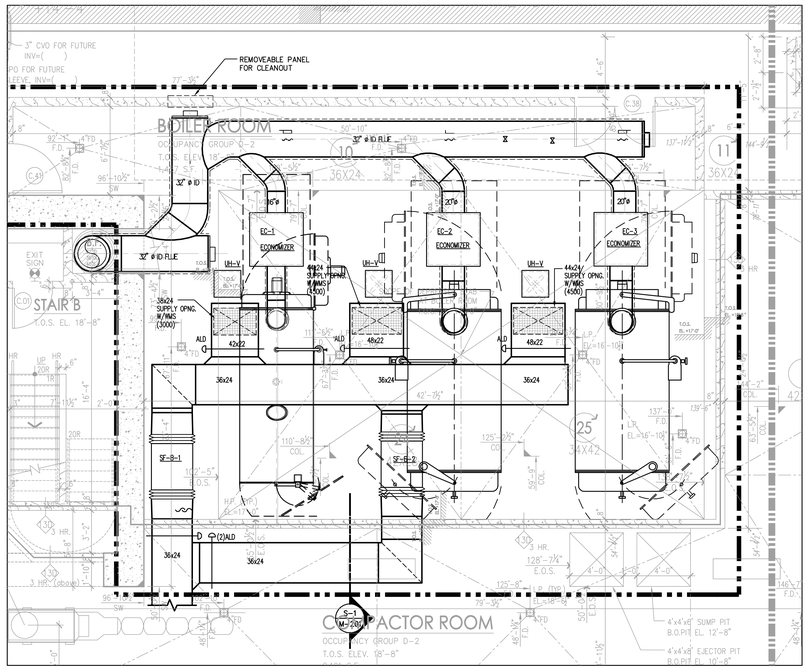
SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID DIAMOND · 025 · 025 · 025 · 025

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-202.00
SHEET. No.:	25 of 39

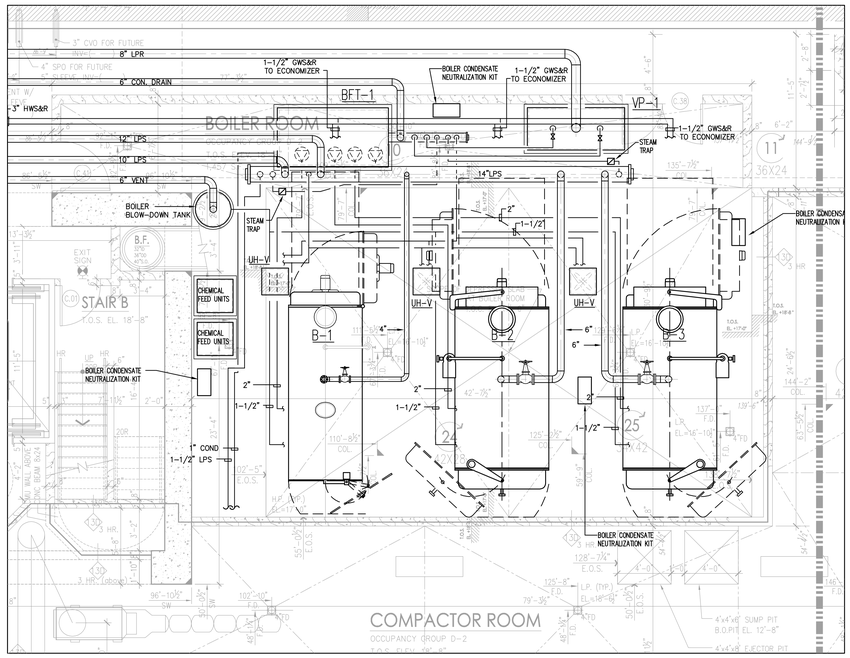
FILE NO: I:\120187-02\Mech\M-202.00 (4th FloorPart Plans).dwg

FILE NAME I:\120187-02\Mech\M-202.00 (4th FloorPart Plans).dwg SAVED ON 12/8/2014 8:52 AM PLOTTED ON 12/8/2014 9:30 AM PLOTTED BY LEO, DAVID

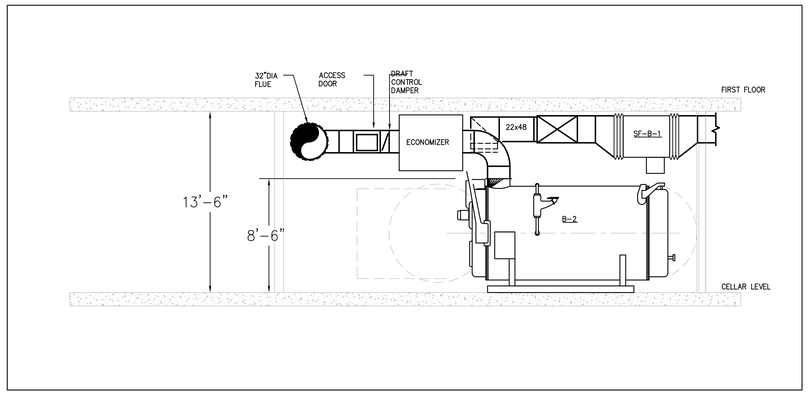


CELLAR LEVEL PART PLAN - DUCTWORKLAYOUT BOILER ROOM

SCALE: 1/4"=1'-0"



CELLAR LEVEL PART PLAN - PIPING LAYOUT BOILER ROOM



CELLAR LEVEL SECTION 1 - BOILER ROOM

SCALE: 1/4"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-29	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:

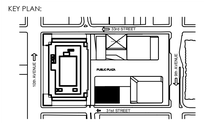
NB#

NORTH:

Scale: 1/4" = 1'- 0"

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL BOILER ROOM PART PLAN

SEAL & SIGNATURE:

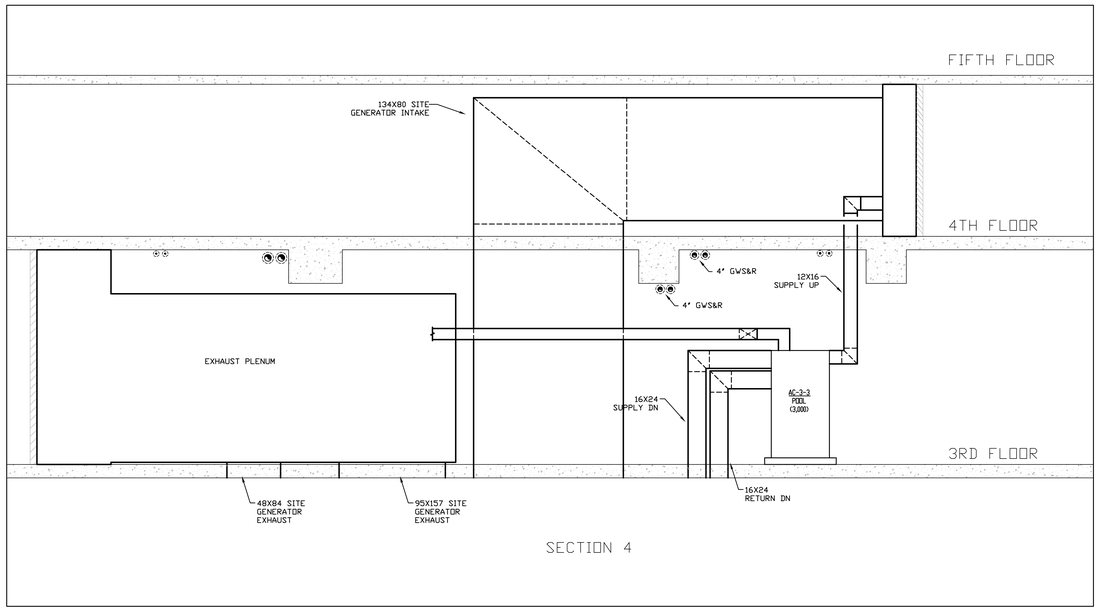
DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-203.00
SHEET. No.:	26 of 39

FILE No: I:\120187-02\Mech\M-203.00 (Part Plan-Boiler room).dwg

DEPT OF BLDGS 421185190 Job Number
E500076784 Scan Code

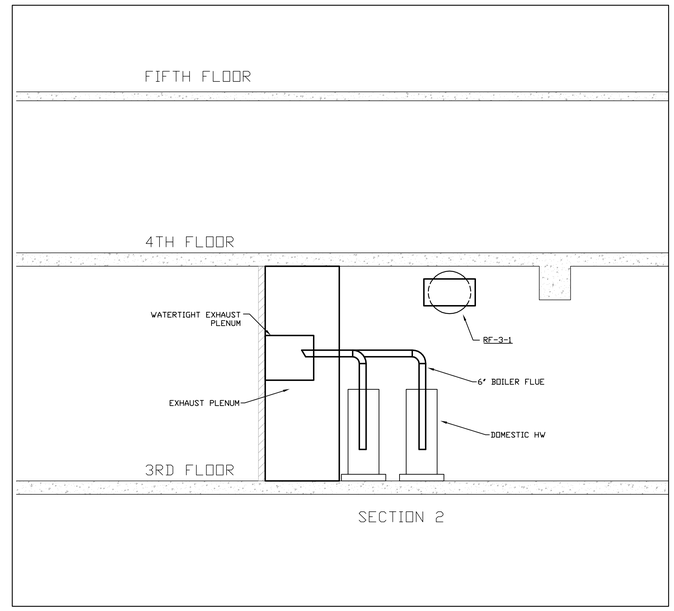
FILE NAME I:\120187-02\Mech\M-203.00 (Part Plan-Boiler room).dwg SAVED ON 12/8/2014 8:50 AM PLOTTED ON 12/8/2014 9:30 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121187100 Job Number
E369166869593 Scan Code



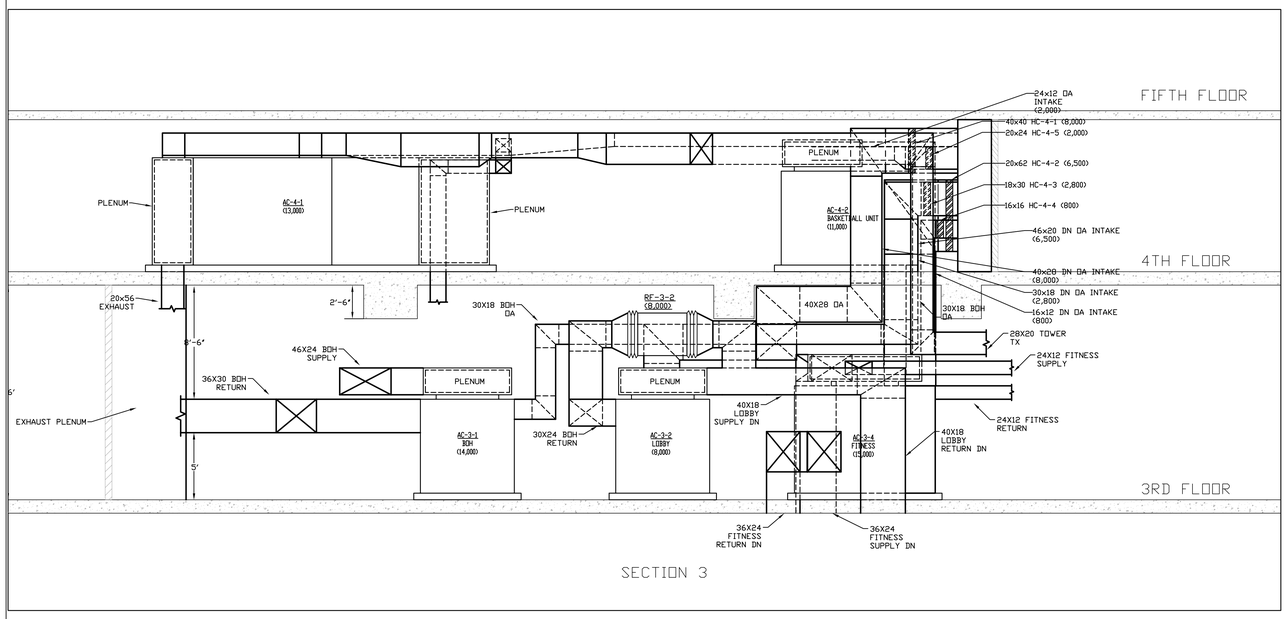
3RD AND 4TH FLOOR MECHANICAL ROOM SECTION 4

SCALE: 1/4"=1'-0"



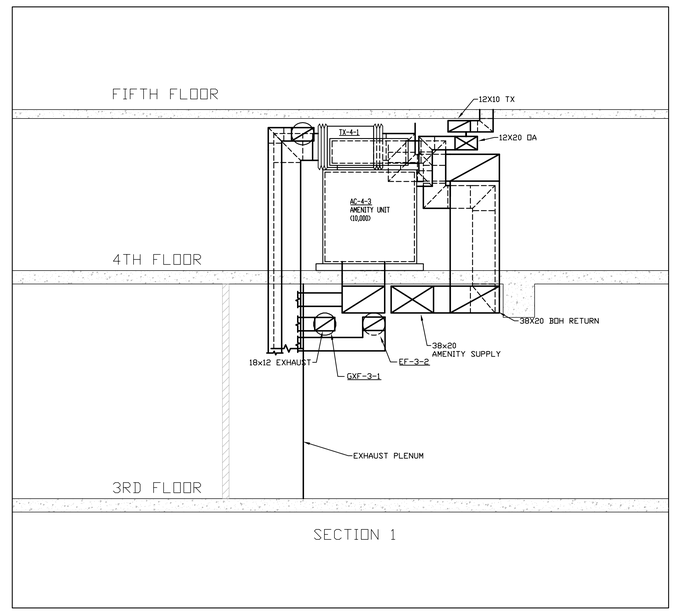
3RD AND 4TH FLOOR MECHANICAL ROOM SECTION 2

SCALE: 1/4"=1'-0"



3RD AND 4TH FLOOR MECHANICAL ROOM SECTION 3

SCALE: 1/4"=1'-0"



3RD AND 4TH FLOOR MECHANICAL ROOM SECTION 1

SCALE: 1/4"=1'-0"

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5655

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

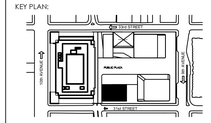
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/4" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL 3RD AND 4TH FLOOR SECTIONS

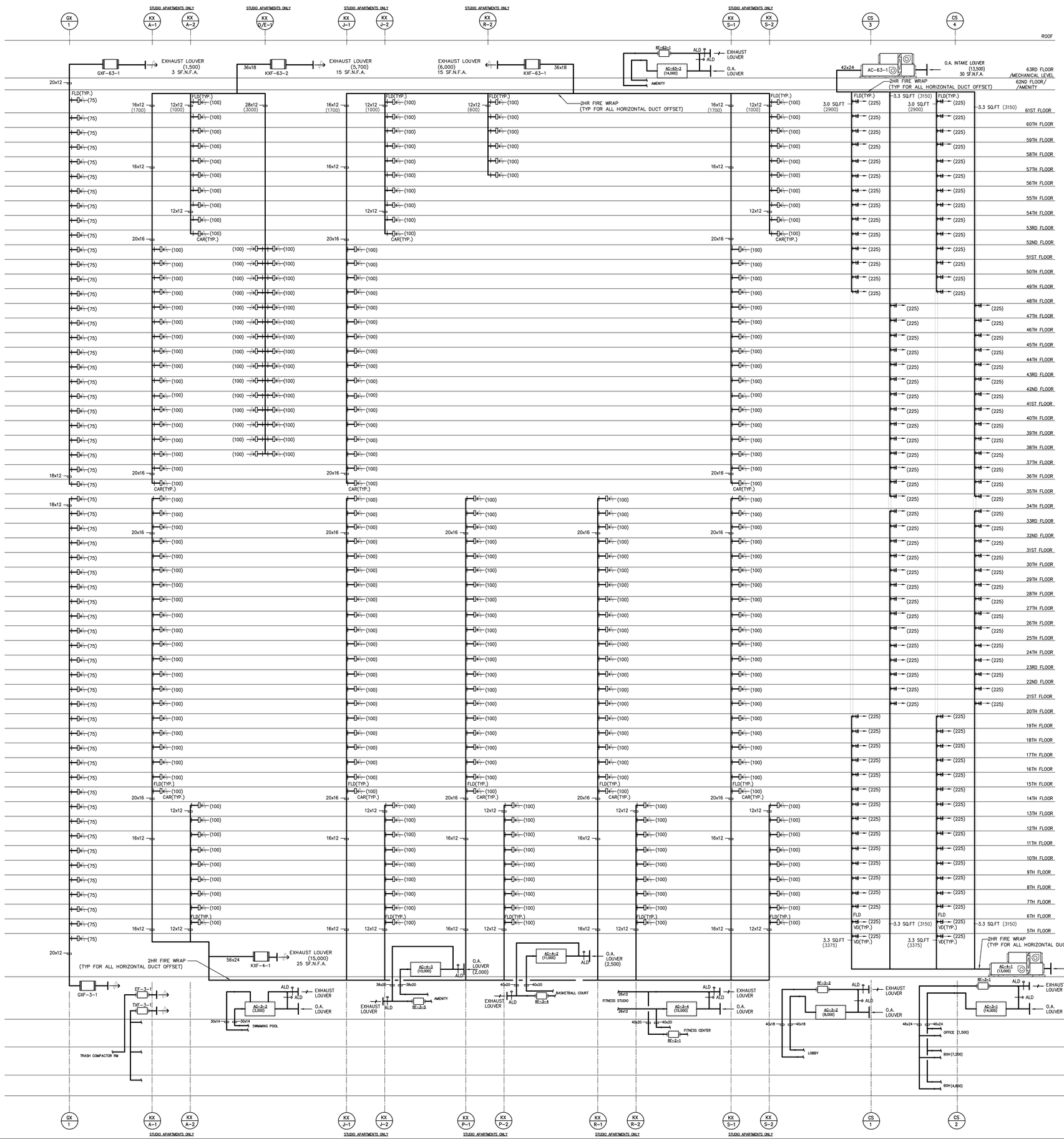
SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID DIGIOIA · 027-000-1 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-204.00
SHEET. No.:	27 of 39

FILE No: I:\120187-02\Mech\M-204.00 (Part Plan-MER).dwg

FILE NAME I:\120187-02\Mech\M-204.00 (Part Plan-MER).dwg SAVED ON 12/8/2014 9:05 AM PLOTTED ON 12/8/2014 9:29 AM PLOTTED BY LEO, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: N.T.S.
0 4 8 12 20

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
AIR RISER DIAGRAM SHEET NO.1

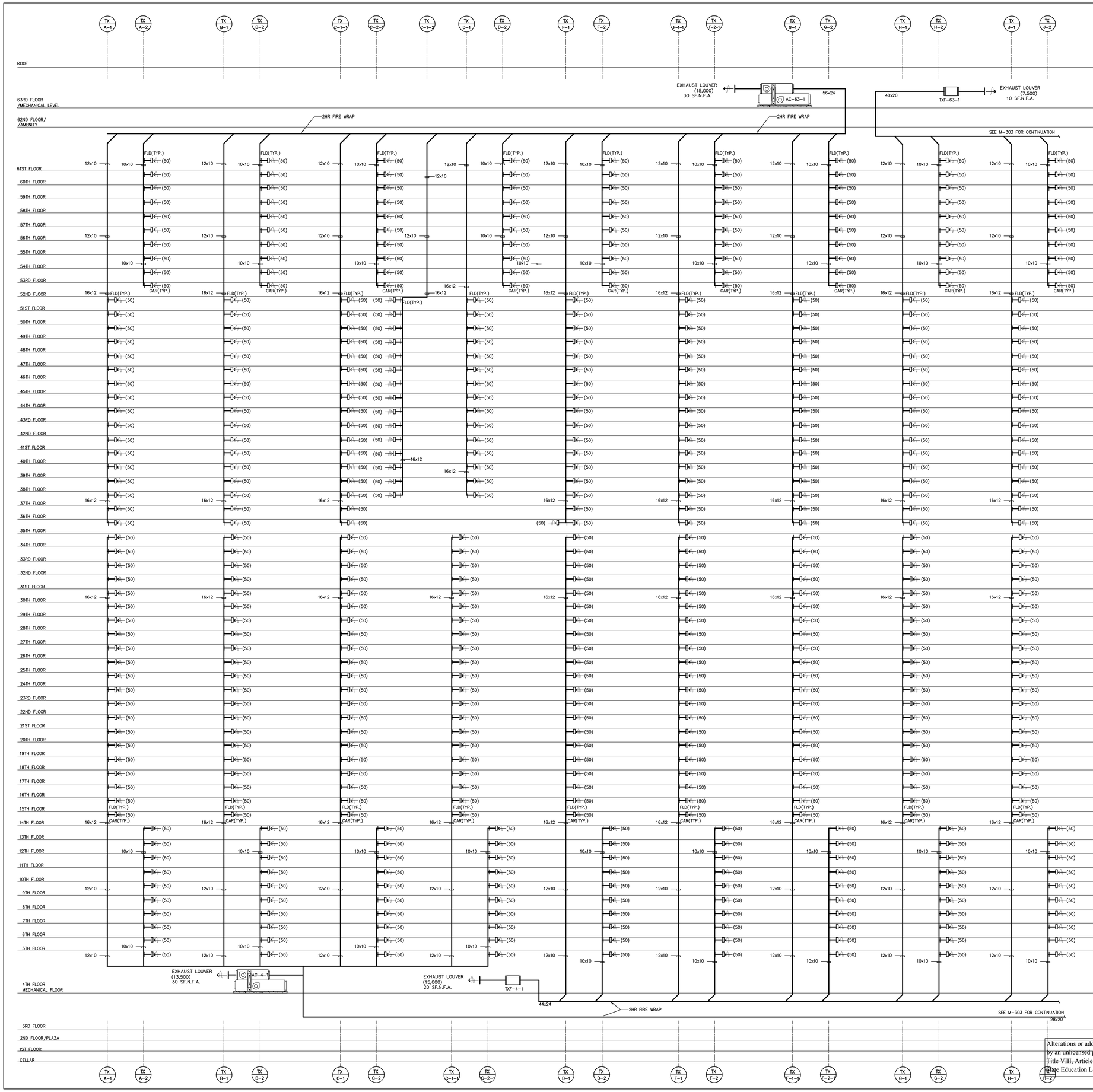
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-301.00
SHEET No.:	28 of 39

FILE NO: I:\120187-02\Mech\M-301.00\Revised Kitchen exhaust and Corridor supply).dwg

FILE NAME: I:\120187-02\Mech\M-301.00\Revised Kitchen exhaust and Corridor supply).dwg SAVED DN 12/8/2014 9:13 AM PLOTTED BY LEO, DAVID PLOTTED DN 12/8/2014 9:29 AM

DEPT OF BLDGS 421859760 Job Number
ES1 481959855 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

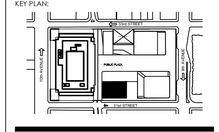
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: NONE
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
AIR RISER DIAGRAM SHEET NO.2

SEAL & SIGNATURE:

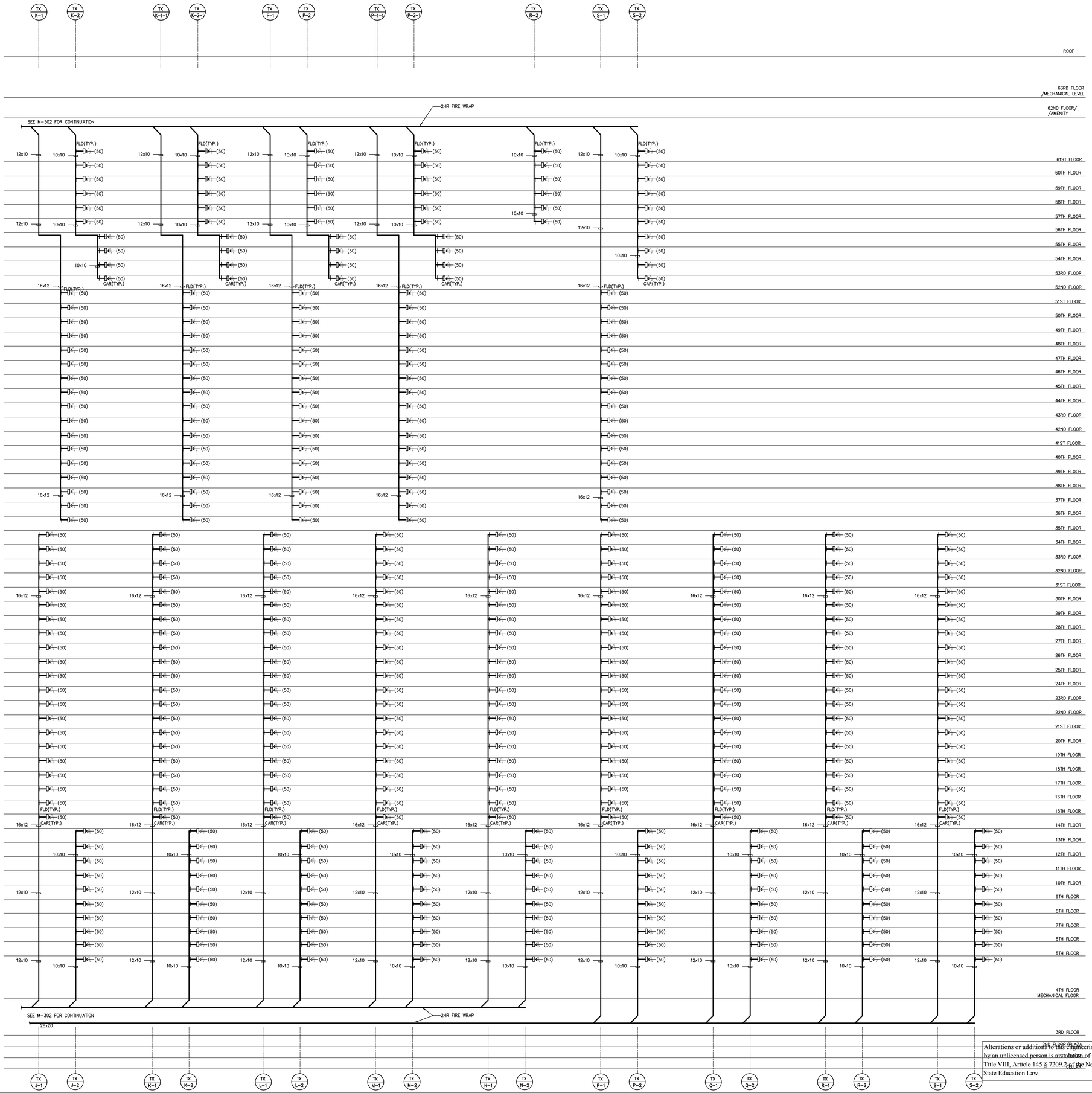
STATE OF NEW YORK · DAVID LEE · 048 · 12/06/2013

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-302.00
SHEET. No.:	29 of 39

FILE NO: I:\120187-02\Mech\M-302.00(Revised Toilet Exhaust).dwg

FILE NAME I:\120187-02\Mech\M-302.00(Revised Toilet Exhaust).dwg SAVED ON 12/8/2014 9:13 AM PLOTTED ON 12/8/2014 9:29 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859760 Job Number
E320040091L4 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209-2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

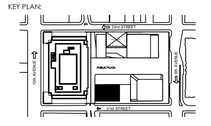
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL
AIR RISER DIAGRAM SHEET NO.3

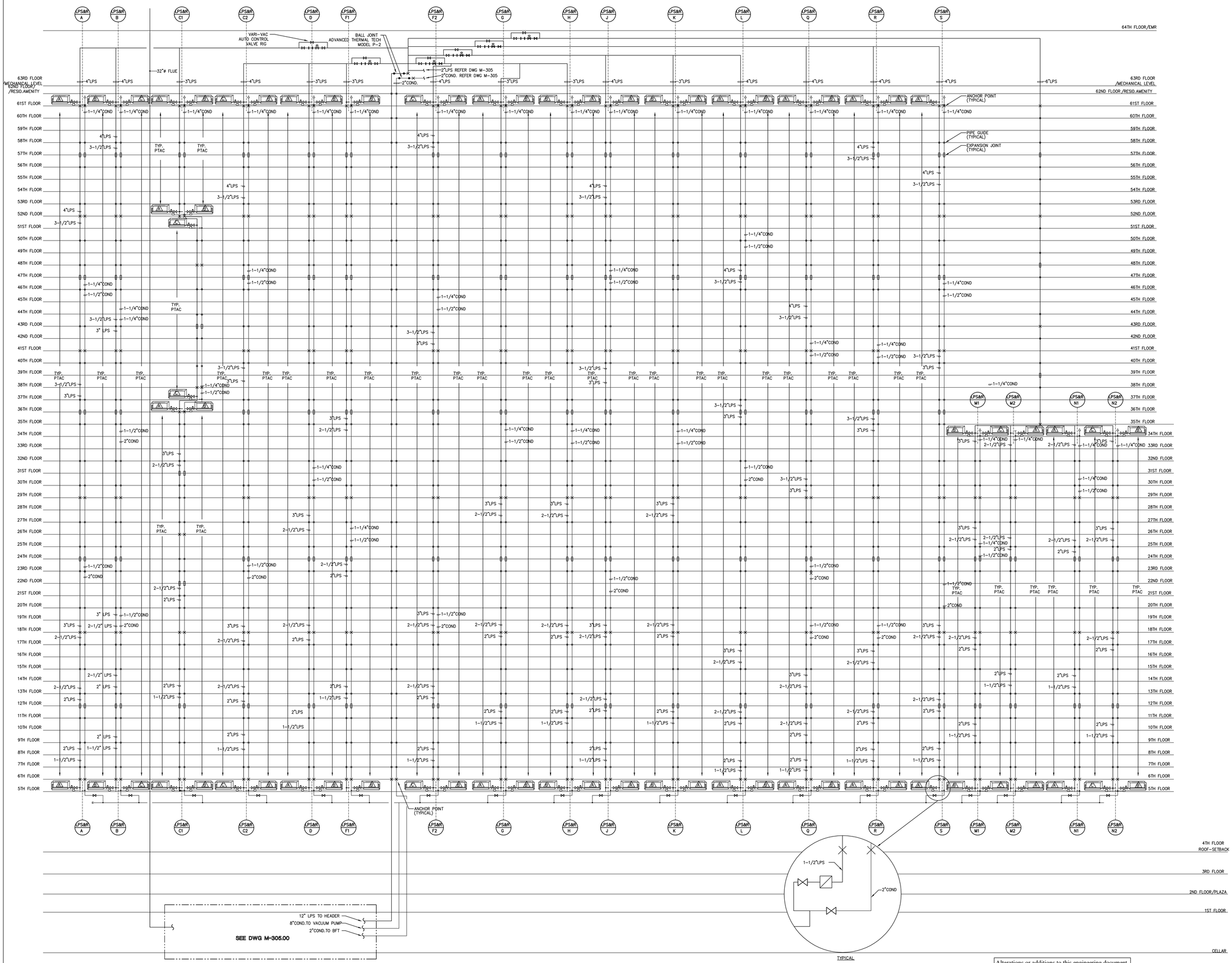
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-303.00
SHEET. No.:	30 of 39

FILE NO: I:\120187-02\Mech\M-303.00(Revised Toilet Exhaust).dwg

FILE NAME: I:\120187-02\Mech\M-303.00(Revised Toilet Exhaust).dwg SAVED ON 12/8/2014 9:13 AM PLOTTED ON 12/8/2014 9:29 AM PLOTTED BY LED, DAVID

DEPT OF BLDGS 421859760 Job Number
E500417983 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILLIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

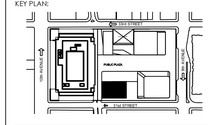
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

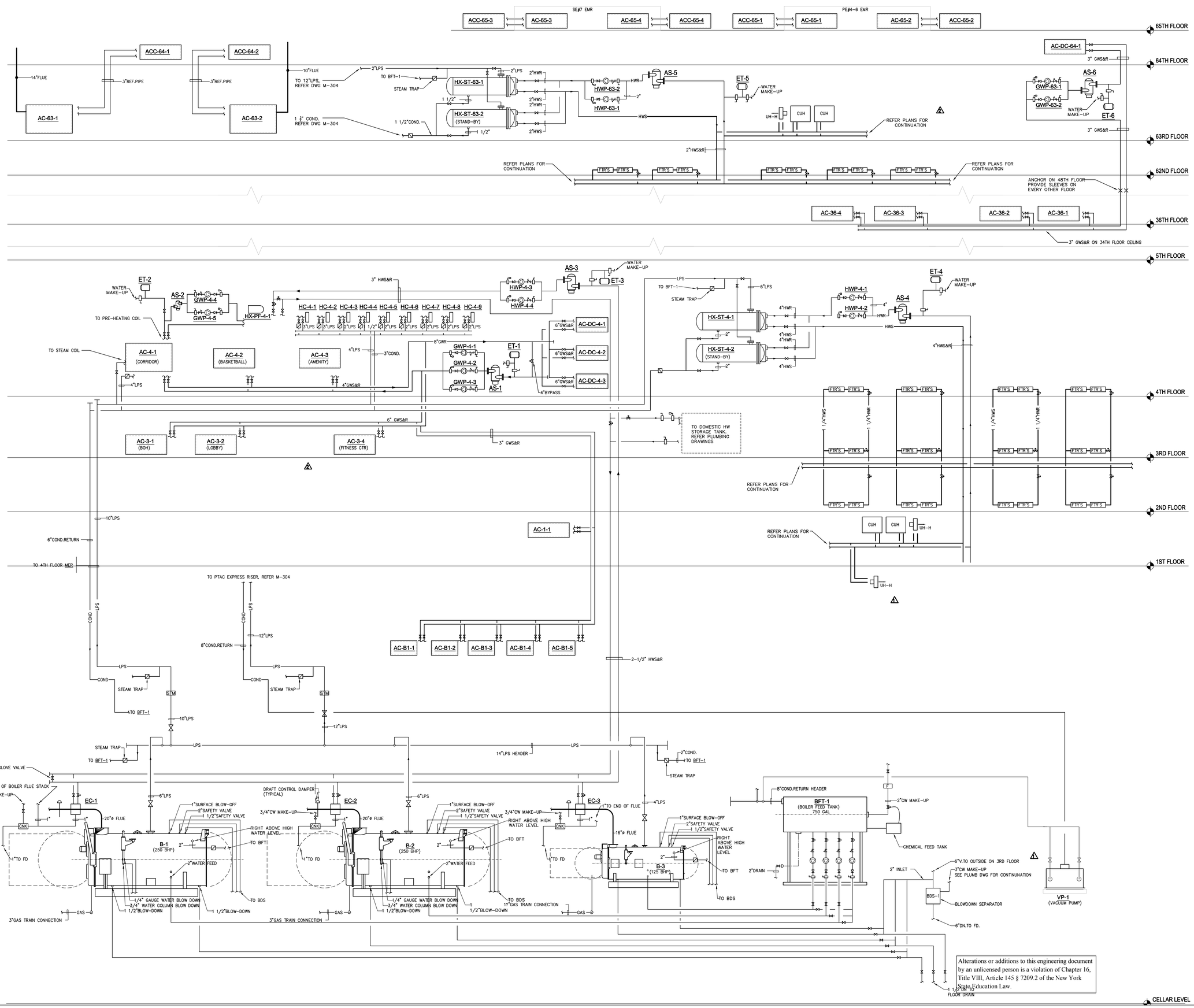
MECHANICAL WATER RISER DIAGRAM SHEET NO.1

SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No.:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-304.00
SHEET. No.:	31 of 39

FILE No: I:\120187-02\Mech\M-304.00\Water Riser Diagram3.dwg

FILE NAME I:\120187-02\Mech\M-304.00\Water Riser Diagram3.dwg SAVED ON 12/8/2014 9:13 AM PLOTTED ON 12/8/2014 9:29 AM PLOTTED BY LED, DAVID



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-05	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:

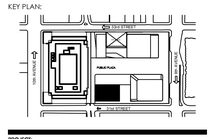
NB#

NORTH:

Scale: NONE

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL WATER RISER DIAGRAM SHEET NO.2

SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-305.00
SHEET. No.:	32 of 39

FILE No: I:\120187-02\Mech\M-305.00(Water Riser Diagram).dwg

FILE NAME: I:\120187-02\Mech\M-305.00(Water Riser Diagram).dwg SAVED ON 12/8/2014 9:12 AM PLOTTED ON 12/8/2014 9:28 AM PLOTTED BY LED, DAVID

BOILER SCHEDULE

UNIT NO.	LOCATION	SERVICE	BOILER HP	OUTPUT (MBH)	STEAM DATA: BOILER OPERATING PRESSURE	STEAM DATA: BOILER STEAM OUTPUT (PPH)	BURNER DATA: FUEL	BURNER DATA: GAS INPUT (CFH)	BURNER DATA: MIN/MAX GAS INLET PRESSURE (IN W.C.)	BOILER TYPE	MODEL	ELECTRICAL DATA: VOLTS/Hz/PHASE	ELECTRICAL DATA: BURNER MOTOR HP	REMARKS
B-1	CELLAR	HEATING SYSTEM	250	8,368	10	8,625	GAS	10,205	25/36	STEAM	CBI	460/3/60	15	3" VENTLESS GAS TRAIN 30 PPM NOx PERFORMANCE EM
B-2	CELLAR	HEATING SYSTEM	250	8,368	10	8,625	GAS	10,205	25/36	STEAM	CBI	460/3/60	15	3" VENTLESS GAS TRAIN 30 PPM NOx PERFORMANCE EM
B-3	CELLAR	HEATING SYSTEM	125	4,184	10	4,313	GAS	5,102	22.2/33	STEAM	CBI	460/3/60	10	1.5" VENTLESS GAS TRAIN 30 PPM NOx PERFORMANCE EM

NOTES:
1. PACKAGED BOILER AND BURNER SHALL BE TESTED TO MEET THE PERFORMANCE AND COMPLIES WITH EPA AND DAR REQUIREMENTS.
2. CONTRACTOR TO COORDINATE WITH OTHER TRADES FOR GAS PRESSURE AND ELECTRICAL REQUIREMENTS TO CONFORM TO FURNISHED BOILER REQUIREMENTS.
3. PACKAGED BOILER AND BURNER SHALL BE PROVIDED WITH PACKAGED UL LABEL.
4. BOILER SHALL BE PROVIDED WITH HAWK ICS PARALLEL POSITIONING COMBUSTION CONTROLS WITH OXYGEN TRIM VARIABLE SPEED DRIVE AND INTEGRAL DRAFT CONTROLS.

PACKAGED TERMINAL A.C. UNIT SCHEDULE

UNIT NO.	TOTAL COOLING (BTUH)	TOTAL HEATING COIL REQUIRED (EDR)	UNIT EER	ELECTRICAL DATA: TOTAL POWER INPUT (WATT)	ELECTRICAL DATA: VOLTS	ELECTRICAL DATA: PHASE	MANUF. MODEL NO.	REMARKS
A	12,800	45	11.4	1,123	208	1	SEE SPECIFICATION	LIVING ROOM
B	9,700	30	12.0	808	115	1	SEE SPECIFICATION	BED ROOM
C	14,000	65	10.5	1.333	208	1	SEE SPECIFICATION	CORNER ROOM

NOTES:
1. ALL PTAC UNITS IN BEDROOMS (TYPE B) TO BE PROVIDED WITH UNIT MOUNTED MANUAL CONTROLS (SIX POSITION MODE SWITCH) OPTION PROVIDED BY ICE AIR ACCUZONE CONTROLS.
2. ALL PTACS UNITS IN (TYPE A & C) LIVING ROOM & STUDIO SHALL HAVE ONE PROGRAMMABLE THERMOSTAT (ICE AIR LCD PROGRAMMABLE (ELA-8842)) WITH CAPABILITY OF NIGHT SETBACK OR SHUTDOWN BASED ON TIME OF DAY. THE THERMOSTAT TO BE MOUNTED ON WALL 48"A.F.F. NEAR ELECTRICAL PANEL IN LIVING ROOM. FOR THE APARTMENTS WHICH HAVE TWO PTACS IN ONE LIVING ROOM, THE THERMOSTAT MUST BE PROGRAMMED FROM THE FACTORY TO HAVE ONE MASTER AND ONE "SLAVE" UNIT. (PREMIUM APARTMENT ONLY)
3. UNIT ENCLOSURES TO BE PROVIDED WITH KNOCK-OUTS FOR ELECTRICAL OUTLETS.
4. STEAM COILS AT THE PTAC SHOULD BE LOCATED SUCH THAT ALL STEAM PIPING CONNECTIONS ARE AT SIDE AWAY FROM THE STEAM AND COND. RISER.
5. PROVIDE MOTORIZED CONTROL VALVE AND STEAM TRAP WITH PTAC.
6. PROVIDE UNIT MOUNTED T-STAT FOR ALL UNITS BETWEEN 4TH FLOOR AND 50TH FLOOR AND REMOTE T-STAT FOR ALL UNITS ABOVE THE 50TH FLOOR.
7. PROVIDE ALL REQUIRED VALVE AND ACCESSORIES INCLUDING, VACUUM BREAKER, STEAM TRAP, ISOLATION VALVES, ETC.

BOILER FEED PUMP / TANK SCHEDULE

PUMP TAG & NO.	LOCATION	SERVICE	RECEIVER: GALS	RECEIVER: L"xD"	GPM	TOTAL HEAD PSI	MOTOR (EA.): H.P.	MOTOR (EA.): RPM	V/PH/HZ	MODEL NO.	REMARKS
BFT-1	BOILER ROOM	STEAM CONDENSATE AND MAKE UP WATER	750	96"x48"	68		(4)15		460/3/60		EM

BLOWDOWN SEPARATOR SCHEDULE

UNIT NO.	LOCATION	SERVICE	MODEL	INLET	DRAIN	VENT	COOLING WATER INLET	TANK DIMENSIONS	REMARKS
BDS-1	CELLAR 2 LEVEL BOILER ROOM	BOTTOM BLOWDOWN (B1-B3)	CLEAVER BROOKS MODEL"H"	2"	6"	5"	3"	14"x56"	EM

1. PROVIDE AFTERCOOLER WITH SELF CONTAINED TEMPERATURE REGULATING VALVE.
2. PROVIDE DRAIN THERMOMETER.
3. PROVIDE ANGLE LEGS WITH PADS.

BOILER FLUE ECONOMIZER SCHEDULE

CLEAVER BROOKS AS STANDARD

UNIT NO.	LOCATION	MODEL	CAPACITY EACH MBH	FIRE SIDE PRESSURE DROP IN W.C.	INLET WATER TEMP DEG F	OUTLET WATER TEMP DEG F	DESIGN FLOW RATE GPM	WATER SIDE PRESSURE DROP PSI	FLUE INLET/OUTLET DIAMETER	REMARKS
EC-1	BOILER ROOM	C1X-M2B6AL-H	298	.15	50	111	10	.02	16	
EC-2 EC-3	BOILER ROOM	C1X-M2D6AL-H	449	.22	50	102	17	.03	20	

NOTES:
1. PROVIDE BY-PASS DAMPER FOR EACH HEAT RECOVERY MODULE.
2. MANUFACTURER SHALL PROVIDE INLET AND OUTLET / AIR AND WATER SIDE TEMPERATURE ELEMENT AND TRANSMITTERS. ALL TEMPERATURE SHALL BE DISPLACED ON RESPECTIVE BOILER CONTROL PANEL TOUCH SCREEN. PROVIDE LOCAL TEMPERATURE INDICATORS.
3. PROVIDE STAINLESS STEEL(316L) TUBES AND STAINLESS STEEL(316L) FINS.

HEATING VENTILATING & AIR CONDITIONING UNIT SCHEDULE

UNIT NO.	AREA SERVED	LOCATION	NOM. CAP. TONS REFRIG.	FAN DATA: TOTAL CFM STD. AIR	FAN DATA: TOTAL O.A. AIR	FAN DATA: EXT. STATIC PRESS. IN.W.G.	FAN DATA: RPM	FAN DATA: MODEL NO.	FAN MOTOR DATA: NO OF FANS	FAN MOTOR DATA: BHP	FAN MOTOR DATA: HP	FAN MOTOR DATA: RPM	FAN MOTOR DATA: V/Ph/Hz	DX COIL: CFM STD. AIR	DX COIL: MIN. O.A. CFM	DX COIL: AIR TEMP(°F) ENT. DB	ENT. WB	LVG. DB	LVG. WB	DX COIL: TOTAL MBH	DX COIL: SENS. MBH	DX COIL: TOTAL FACE AREA SQ.FT	DX COIL: MAX. FACE VELOC. (FPM)	CONDENSER WATER (GLYCOL): ENT WATER TEMP (°F)	LVG WATER TEMP (°F)	GPM	WPD (FT)	HEATING: STEAM LB/HR	STEAM PRESS. (PSIG)	ENT AIR TEMP (°F)	LVG AIR TEMP (°F)	ENTHALPY WHEEL: SUMMER ENT. DB (°F)	SUMMER ENT. WB (°F)	SUMMER LVG. DB (°F)	SUMMER LVG. WB (°F)	WINTER ENT. DB (°F)	WINTER ENT. WB (°F)	WINTER LVG. DB (°F)	WINTER LVG. WB (°F)	WHEEL DIA/HP	WHEEL EFF.	ELECTRICAL V/PH/Hz	ELECTRICAL DATA: VOLTS/PH/HZ	MCA	MOP	FILTER: TOTAL FACE AREA SQ.FT	FACE VELOC. (FPM)	FILTER TYPE	MANUFACTUR.	REMARKS
AC-3-1	BOH	3RD FL MER	50	14,000	2,800	2.5	–	SWSI	1	13.7	20	–	460/3/60	14,000	2,800	79	66	53	53	535	391	30	450	110	120	152	20.9	–	–														460/3/60	97.6	110	–	450	MERV.13	MCQUAY	VFD
AC-3-2	LOBBY	3RD FL MER	40	8,000	8,000	2.5	–	SWSI	1	6.55	15	–	460/3/60	8,000	4,000	85	71	54	54	432	269	25	450	110	120	122	18.3	–	–														460/3/60	78.4	100	–	450	MERV.13	MCQUAY	VFD
AC-3-4	FITNESS	3RD FL MER	75	15,000	6,500	2.5	–	SWSI	1	13.6	20	–	460/3/60	15,000	6,500	84	70	52	52	825	515	53	450	110	120	231	20.8	–	–														460/3/60	137.6	150	–	450	MERV.13	MCQUAY	VFD
AC-4-1	CORRIDORS	4TH FL MER	70	13,000	13,000	2.5	2,322	SWSI	2	11.2	20	1,750	460/3/60	13,000	13,000	95	78	62	61	848	465	25	450	110	120	139	20.5	872	5	0	75	95	78	83	70	10	10	48	45	72"/1HP	0.854	120/1/60	460/3/60	162	175	–	450	MERV.13	MCQUAY	VFD
AC-4-2	BASKETBALL COURT	4TH FL MER	45	11,000	2,100	2.5	–	SWSI	1	8.94	15	–	460/3/60	11,000	2,100	79	66	52	52	461	324	25	450	110	120	131	18.3	–	–														460/3/60	85.4	100	–	450	MERV.13	MCQUAY	VFD
AC-4-3	AMENITY	4TH FL MER	40	10,000	1,700	2.5	–	SWSI	1	7.72	15	–	460/3/60	10,000	1,700	78	66	50	50	450	309	25	450	110	120	129	17.7	–	–														460/3/60	85.4	100	–	450	MERV.13	MCQUAY	VFD

NOTES:
1. ALL UNIT SHALL BE BASED UPON 40% PROPYLENE GLYCOL WATER
2. AC-3-4 SHALL BE EQUIPPED WITH HEAT-PIPE AROUND THE DX COIL.

AIR SEPARATOR SCHEDULE

B&G

UNIT NO.	SERVICE	LOCATION	MANUFACTURER & MODEL NO.	GPM	REMARKS
AS-1	GLYCOL WATER SYSTEM	4TH FLOOR	RL-6F	1,050	
AS-2	GLYCOL WATER SYSTEM	4TH FLOOR	RL-3F	75	
AS-3	HOT WATER SYSTEM	4TH FLOOR	RL-3F	75	
AS-4	HOT WATER SYSTEM	4TH FLOOR	RL-4F	200	
AS-5	HOT WATER SYSTEM	63RD FLOOR	RL-3F	20	
AS-6	GLYCOL WATER SYSTEM	63RD FLOOR	RL-3F	70	

NOTES:
1. ALL AIR SEPARATER SHALL BE RATED FOR 250 PSIG WORKING PRESSURE.
2. ALL AIR SEPARATER PIPE CONNECTION SHALL MATCH SYSTEM PIPE SIZE.

SPLIT AIR COOLED AIR CONDITIONING & VENTILATING UNITS SCHEDULE

CONDENSING SECTION: UNIT NO.	NOM CAP TONS REFRIG	LOCATION	MANFCTR.	MODEL No.	FAN CFM	TOTAL HR (MBH)	ELECTRICAL DATA: FAN MOTOR HP	FLA	MCA	VOLTS/PH/HZ	EVAPORATOR SECTION: UNIT NO.	NOM CAP TONS REFRIG	LOCATION	MODEL No.	AIR QUANTITY CFM	EXT. S.P. IN INCH	COOLING CAPACITY AT 75°F DB, 62.5° F WB, 95° F AMBIENT TEMP.: SENSIBLE MBH	TOTAL MBH	ELECTRICAL DATA: FAN HP	FAN QT	FLA	VOLTS/PH/HZ	COMPR. Qty./KW	HEATING: TOTAL MBH	GAS: GAS INPUT (CFH)	ENT AIR TEMP (°F)	LVG AIR TEMP (°F)	GAS PRESS REQUIRED (IN W.C)	ENTHALPY WHEEL: SUMMER ENT. DB (°F)	SUMMER ENT. WB (°F)	SUMMER LVG. DB (°F)	SUMMER LVG. WB (°F)	WINTER ENT. DB (°F)	WINTER ENT. WB (°F)	WINTER LVG. DB (°F)	WINTER LVG. WB (°F)	WHEEL DIA	WHEEL EFF.	ELECTRICAL V/PH/Hz	REMARKS
ACC-64-1	60	ROOF	MCQUAY	RCS062D	–	625	(6)1.5	–	108.4	460/3/60	AC-63-1	60	63RD FL MER	CAH035GDGM	13,000	2.0	401	693	20	2	–	460/3/60	– / –	780	912	0	65	7"	95	78	83	70	10	10	48	45	72"	57	110/1/60	VFD
ACC-64-2	40	ROOF	MCQUAY	RCS045D	–	494	(6)1.5	–	88.9	460/3/60	AC-63-2	40	63RD FL MER	CAH030GDGC	14,000	2.0	356	520	20	1	–	460/3/60	– / –	480	600	40	70	7"												VFD
ACC-65-1	7.5	ROOF	STULTZ	SCS-192-DEC	19,325	154	(2)3.8	8.2		460/3/60	AC-65-1	7.5	65TH FL EMR	OHS-084-DAR	3,350	0.5	70.8	83.9	2	1	22.2	460/3/60	2 / 3.8																	EM
ACC-65-2	7.5	ROOF	STULTZ	SCS-192-DEC	19,325	154	(2)3.8	8.2		460/3/60	AC-65-2	7.5	65TH FL EMR	OHS-084-DAR	3,350	0.5	70.8	83.9	2	1	22.2	460/3/60	2 / 3.8																	EM
ACC-65-3	5	ROOF	STULTZ	SCS-120-DEC	9,107	94.2	(2)1.8	3.6		460/3/60	AC-65-3	5	65TH FL EMR	OHS-060-AR	2,500	0.5	51.6	60.4	1.5	1	23.2	460/3/60	1 / 4.9																	EM
ACC-65-4	5	ROOF	STULTZ	SCS-120-DEC	9,107	94.2	(2)1.8	3.6		460/3/60	AC-65-4	5	65TH FL EMR	OHS-060-AR	2,500	0.5	51.6	60.4	1.5	1	23.2	460/3/60	1 / 4.9																	EM

NOTE;
1) ACC-64-1 / ACC-64-2 SHALL BE EQUIPPED WITH LOW SOUND CONDENSER FANS AND COMPRESSOR SOUND BLANKET.
2) PROVIDE 2-STAGE ELEC. HEATING COIL FOR AC-65-1,2,3,4.
3) AC-63-1 SHALL BE EQUIPPED WITH ENTHALPY HEAT RECOVERY WHEEL.

PACKAGED WATER COOLED AIR CONDITIONING UNIT SCHEDULE

STULTZ AS STANDARD

UNIT NO.	AREA SERVED	LOCATION	NOM. CAPAC. TONS REFRIG.	FANS: CFM	EXT. S.P. (IN.)	RPM	HP	DIRECT EXPANSION COOLING COIL: AIR TEMP.(F) ENT. DB	ENT. WB	LVG. DB	LVG. WB	SENS. MBH	TOTAL MBH	FACE AREA SQ.FT.	NO. OF ROWS	COMPRESSOR: TYPE/NO.	REFRIGERANT	RPM	kW	ELECTRICAL: V/Ph/Hz	FLA	MCA	MFS	CONDENSER(WATER-COOLED): DESIGN PRESS. (PSIG)	GPM	E.W.T. (°F)	P.D. (FEET)	HUMIDIFIER: kW	CAPACITY (LBS/HR)	TYPE	RE-HEAT COIL: kW	TYPE	FILTER: TYPE	NO.	SIZE EA.FILTER	MODEL NO.	REMARKS
AC-B1-1	CELLAR SWITCH GEAR	CELLAR AC RM	15	9,800	0.5	–	8.2	80	65	75	62	161.6	161.6	23.5	3	SCROLL 2	R-407C	–	8.3	460/3/60	40.9	50.9	60	600	57.2	110	36,232						DOWN FLOW 4" DEEP	4	20"X20"	VFS-180-DG-FC-U-EC	
AC-B1-2	CELLAR SWITCH GEAR	CELLAR AC RM	15	9,800	0.5	–	8.2	80	65	75	62	161.6	161.6	23.5	3	SCROLL 2	R-407C	–	8.3	460/3/60	40.9	50.9	60	600	57.2	110	36,232						DOWN FLOW 4" DEEP	4	20"X20"	VFS-180-DG-FC-U-EC	
AC-B1-3	CELLAR COMPACTOR RM	CELLAR COMPACTOR RM	2	900	0.5	–	0.5	80	65	75	62	18.7	22.9	2.1	3	SCROLL 1	R-407C	–	2.2	460/3/60	4.8	6.7	15	300	6.9	110	38.4						1" DEEP THROW AWAY	1	20"X20"	OHS-024-HG-FC	
AC-B1-4	CELLAR COMPACTOR RM	CELLAR COMPACTOR RM	2	900	0.5	–	0.5	80	65	75	62	18.7	22.9	2.1	3	SCROLL 1	R-407C	–	2.2	460/3/60	4.8	6.7	15	300	6.9	110	38.4						1" DEEP THROW AWAY	1	20"X20"	OHS-024-HG-FC	
AC-B1-5	CELLAR SECURITY CL	CELLAR SECURITY CL	3	1,415	0.5	–	0.75	80	65	75	62	27	31.9	2.8	3	SCROLL 1	R-407C	–	3	460/3/60	6.6	9.1	15	300	9.7	110	34.3						1" DEEP THROW AWAY	1	20"X20"	OHS-040-HG-FC	
AC-1-1	SECURITY OFFICE	SECURITY OFFICE	5	2,500	0.5	–	2.0	80	65	75	62	50.4	57.3	5.0	4	SCROLL 1	R-407C	–	5.3	460/3/60	11.4	16.2	25	300	16.7	110	24.9						1" DEEP THROW AWAY	2	20"X16"	OHS-060-HG-FC	
AC-36-1	36TH FL EMR	36TH FL EMR	7.5	3,350	0.5	–	2.0	80	65	75	62	69.4	79.5	6.7	4	SCROLL 2	R-407C	–	4.1	460/3/60	15.5	20.6	25	400	23.8	110	41.0						1" DEEP THROW AWAY	2	20"X20"	OHS-084-DG-FC	
AC-36-2	36TH FL EMR	36TH FL EMR	7.5	3,350	0.5	–	2.0	80	65	75	62	69.4	79.5	6.7	4	SCROLL 2	R-407C	–	4.1	460/3/60	15.5	20.6	25	400	23.8	110	41.0						1" DEEP THROW AWAY	2	20"X20"	OHS-084-DG-FC	
AC-36-3	36TH FL TRANSFORMER RM	36TH FL TRANSFORMER RM	5	2,500	0.5	–	2.0	80	65	75	62	50.4	57.3	5.0	4	SCROLL 1	R-407C	–	5.3	460/3/60	11.4	16.2	25	300	16.7	110	24.9						1" DEEP THROW AWAY	2	20"X16"	OHS-060-HG-FC	
AC-36-4	36TH FL TRANSFORMER RM	36TH FL TRANSFORMER RM	5	2,500	0.5	–	2.0	80	65	75	62	50.4	57.3	5.0	4	SCROLL 1	R-407C	–	5.3	460/3/60	11.4	16.2	25	300	16.7	110	24.9						1" DEEP THROW AWAY	2	20"X16"	OHS-060-HG-FC	

NOTES:
1. PROVIDE UNIT MOUNTED SMOKE DETECTOR.
2. UNIT SHALL EQUIPPED WITH ECONOMIZER COIIL WITH SWITCHOVER CONTROL WHEN CONDENSER WATER TEMPERATURE BELOW 44 DEG.
3. PROVIDE 12" FACTORY MOUNTED FLOOR STAND.
4. PROVIDE FACTORY INSTALLED ELECTRIC HUMIDIFICATION.
5. PROVIDE CONDENSATE RETURN PUMPS FOR EACH UNIT.

1
2

FINNED-TUBE RADIATION SCHEDULE

SYMBOL	BTUH/LF	E.W.T. (°F)	L.W.T. (°F)	FINS: SIZE	FINS: PER FT.	FINS: MATERIAL	FINS: ROWS	PIPE: SIZE	PIPE: MATERIAL	ENCLOSURE: HEIGHT	ENCLOSURE: DEPTH	ENCLOSURE: TYPE	MFR. & MODEL	REMARKS
FTR-A	950	180	160	4-1/4"	48	STEEL	1	1-1/4"ø	STEEL	ARCHITECTURAL CUSTOM ENCLOSURE			RITTLING	PEDESTAL FREE STANDING
FTR-B	1200	180	160	4-1/4"	48	STEEL	1	1-1/4"ø	STEEL	6"	6"	STEEL	RITTLING	PEDESTAL FREE STANDING
FTR-C	805	180	160	5-1/4"	48	STEEL	1	1-1/4"ø	STEEL	FTR MANUFACTURER CUSTOM			RUNTAL XFF MODEL	PEDESTAL FREE STANDING

NOTE:
1. FIN TUBE ENCLOSURE LENGTH SHALL ACCOMMODATE CONTROL VALVES & FITTINGS.
2. MECHANICAL CONTRACTOR SHALL PROVIDE CONTINUOUS LINEAR GRILLE ON TOP OF ENCLOSURE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE CONTINUOUS ENCLOSURE BETWEEN VERTICAL HW PIPE RISERS FOR FTR-B
4. MECHANICAL CONTRACTOR SHALL PROVIDE RUNTAL PIPE ACCESSORIES, DESIGNED FOR XFF MODEL.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

DEPT OF BLDGS 121185760 Job Number
ES865576164 Scan Code

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

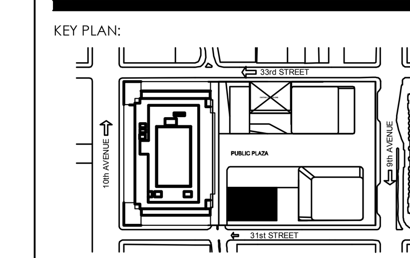
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS
2014-05-16	Issued for Bid
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
SCHEDULES NO.1

SEAL & SIGNATURE:
STATE OF NEW YORK · DOUGLAS C. MASS · No. 58375 · LICENSED PROFESSIONAL ENGINEER

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-401.00
SHEET. No.:	33 of 39

FILE No: I:\120187-02\Mech\M-401(schedules).dwg

FILE NAME I:\120187-02\Mech\M-401(schedules).dwg SAVED ON 12/8/2014 9:12 AM PLOTTED ON 12/8/2014 9:28 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121185760 Job Number
ES217791045 Scan Code

FAN SCHEDULE

"COOK" AS STD.

FAN NO.	LOCATION	SERVICE	CFM	EXT. STATIC PRESS. IN.W.G.	RPM	OUTLET VELOC. FPM	TYPE	MFR.	MODEL No.	BHP	MOTOR HP	Volt/Ph/Hz	VIBRATION ISOLATION SPEC. TYPE	VIBRATION ISOLATION DEFLECTION (INCHES)	REMARKS
SF-B-1	BOILER ROOM	COMBUSTION AIR	12,000	1.5	1215	1842	MIXED FLOW	COOK	245 QMX	4.83	7.5	460/3/60	SEE SPEC		VFD EM
SF-B-2	BOILER ROOM	COMBUSTION AIR	12,000	1.5	1215	1842	MIXED FLOW	COOK	245 QMX	4.83	7.5	460/3/60	SEE SPEC		VFD EM STAND-BY
EF-B-1	CELLAR LEVEL	NWP ROOM EXHAUST	4,800	3.0	2409	1966	MIXED FLOW	COOK	150 QMX	3.56	7.5	460/3/60	SEE SPEC		VFD
EF-B-2	CELLAR LEVEL	PUMP ROOM EXH	1,000	1.0	2702	1137	MIXED FLOW	COOK	90 QMX	.478	3	460/3/60	SEE SPEC		VFD
EF-B-3	CELLAR LEVEL	PET GRM EXH.	1,000	1.0	2702	1137	MIXED FLOW	COOK	90 QMX	.478	3	460/3/60	SEE SPEC		VFD
															1
EF-1-1	1ST FLOOR	STORAGE EXHAUST	2,600	1.5	1850	1638	MIXED FLOW	COOK	135 QMX	1.19	3	460/3/60	SEE SPEC		VFD
EF-1-2	1ST FLOOR	SALLYPORT EXH	3,500	1.5	1713	1692	MIXED FLOW	COOK	150 QMX	1.33	5	460/3/60	SEE SPEC		VFD
SF-1-1	1ST FLOOR	SALLYPORT SUPPLY	500	0.75	1849	500	CENTRIFUGAL	COOK	80SQN-B	.203	1	460/3/60	SEE SPEC		VFD
RF-2-1	2ND FLOOR	FITNESS CENTER RETURN	15,000	1.5	910	1536	MIXED FLOW	COOK	300 QMX	5.39	10	460/3/60	SEE SPEC		VFD
RF-3-1	3RD FL.MER	BOH RETURN	14,000	2.0	947	1433	MIXED FLOW	COOK	300 QMX	6.52	10	460/3/60	SEE SPEC		VFD
RF-3-2	3RD FL.MER	LOBBY RETURN	8,000	2.0	1258	1456	MIXED FLOW	COOK	225 QMX	3.9	7.5	460/3/60	SEE SPEC		VFD
RF-3-4	3RD FL.MER	BASKETBALL COURT RETURN	11,000	1.5	1152	1689	MIXED FLOW	COOK	245 QMX	4.26	7.5	460/3/60	SEE SPEC		VFD
RF-3-5	3RD FL.MER	AMENITY RETURN	10,000	1.5	1313	1820	MIXED FLOW	COOK	225 QMX	4.01	7.5	460/3/60	SEE SPEC		VFD
EF-3-1	3RD FL.MER	TRASH COMP.EXH	1,700	1.5	1542	960	MIXED FLOW	COOK	120 QMX	.79	1	460/3/60	SEE SPEC		VFD
EF-3-2	3RD FL.MER	MER EXH.	1,500	.75	1542	960	MIXED FLOW	COOK	120 QMX	.362	1	460/3/60	SEE SPEC		
GXF-3-1	3RD FL.MER	TRASH RM EXH	2,250	1.5	1800	1137	MIXED FLOW	COOK	135 QMX	1.04	3	460/3/60	SEE SPEC		VFD
TXF-3-1	3RD FL.MER	PODIUM TOILET EXH.	3,200	1.5	1666	1310	MIXED FLOW	COOK	150 QMX	1.20	3	460/3/60	SEE SPEC		VFD 1
PEF-3-1	3RD FL.MER	POOL EQUIP RM / SPA EXH.	800	1.0	1435	246	CENTRIFUGAL	COOK	150SQI-HP	0.422	3	460/3/60	SEE SPEC		VFD
TX-4-1	4TH FL MER	TOILET EXH	15,000	2.5	1040	1536	MIXED FLOW	COOK	300 QMX	8.73	15	460/3/60	SEE SPEC		VFD
EF-4-1	4TH FL MER	LAUNDRY RM	2,000	1.5	2123	1280	MIXED FLOW	COOK	120 QMX	.924	3	460/3/60	SEE SPEC		VFD
KX-4-1	4TH FL MER	KITCHEN EXH	15,000	2.5	1040	1536	MIXED FLOW	COOK	300 QMX	8.73	15	460/3/60	SEE SPEC		VFD
EF-4-2	4TH FL.MER	MER EXH.	1,500	.75	1542	960	MIXED FLOW	COOK	120 QMX	.362	1	460/3/60	SEE SPEC		
TX-63-1	63RD FL ROOF	TOILET EXH	10,500	2.0	775	1205	CENTRIFUGAL	COOK	365 ACRU-HP	5.82	10	460/3/60	SEE SPEC		VFD
KX-63-1	63RD FL ROOF	KITCHEN EXH	9,000	1.75	1006	1886	CENTRIFUGAL	COOK	300 ACRU-HP	4.95	10	460/3/60	SEE SPEC		VFD
GX-63-1	63RD FL MER	TRASH RM EXH	2,250	1.5	1800	1137	MIXED FLOW	COOK	135 QMX	1.04	3	460/3/60	SEE SPEC		VFD
RF-63-1	63RD FL MER	AMENITY RETURN	12,000	1.5	1004	1517	MIXED FLOW	COOK	270 QMX	4.30	7.5	460/3/60	SEE SPEC		VFD
GX-63-2	63RD FL MER	MER VENTILATION	1,200	0.5	1247	768	MIXED FLOW	COOK	270 QMX	4.30	7.5	460/3/60	SEE SPEC		VFD
KX-63-2	63RD FL MER	KITCHEN EXH	6,000	1.75	1007	1718	CENTRIFUGAL	COOK	245CA-SWSI	2.45	5	460/3/60	SEE SPEC		VFD
PEX-63-2	63RD FL MER	PANTRY EXH	3,000	1.5	2052	1517	MIXED FLOW	COOK	135 QMX	1.39	3	460/3/60	SEE SPEC		VFD
TX-63-2	63RD FL ROOF	TOILET EXH	300	1.0	2466	300	CENTRIFUGAL	COOK	70SQN-B	.295	1	460/3/60	SEE SPEC		VFD 1
GEF-E	SEE PLANS	ELE/TEL CLOSET EXH	470	0.125	960	975	CEILING	COOK	GC620	0.4	1.0	120/1/60	SEE SPEC		

CENTRIFUGAL PUMP SCHEDULE

PUMP NO.	SERVICE	LOCATION	TYPE	GPM	TOTAL DYNAM. HEAD FEET	MIN. DESIGN WORKING PRESS. P.S.I.G.	MFR.	MODEL	IMP. DIAM. INCH	MIN. N.P.S.H. REQ. FEET	ELECTRICAL DATA BHP	HP	RPM	V/Ph/Hz	VIBR. ISOL. SPEC. TYPE	MIN. STATIC DEFL. INCHES	REMARKS
HWP-4-1/2	HOT WATER SYSTEM	4TH FLOOR	END SUCTION	200	100	150	B&G	E1510-2EB	10.25	7.2	7.0	10	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' (ONE STAND BY)
HWP-4-3/4	ECONOMIZER SYSTEM	4TH FLOOR	END SUCTION	75	60	150	B&G	E1510-1.25BC	8.25	7.6	2.1	5	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' (ONE STAND BY)
GWP-4-1/2/3	DRYCOOLER SYSTEM	4TH FLOOR	END SUCTION	350	100	150	B&G	E1510-3EB	10.375	6.1	12.7	20	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' 40% PROPYLENE GLYCOL
GWP-4-4/5	OA HEATING SYSTEM	4TH FLOOR	INLINE	45	35	150	B&G	E1510-1.5AD	6	4.1	1.2	3	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' 40% PROPYLENE GLYCOL (ONE STAND BY)
GWP-63-1/2	DRYCOOLER SYSTEM	63RD FLOOR	END SUCTION	70	100	150	B&G	E1510-2EB	10	6.4	5.9	10	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' 40% PROPYLENE GLYCOL (ONE STAND BY)
HWP-63-1/2	HOT WATER SYSTEM	63RD FLOOR	INLINE	20	75	150	B&G		-	-	1.2	3	1750	460/3/60	SEE SPEC	SEE SPEC	VFDs' (ONE STAND BY)

VACUUM PUMP (DUPLEX) SCHEDULE

UNIT NO.	SERVICE	LOCATION	MANUF. MODEL NO.	TOTAL CAPACITY EDR	COMPRESSOR CFM	HG OF MERCURY	TEMP. °F	PUMP DATA GPM	GPM each	DISCH. PRESS. (PSIG)	MOTOR HP	V/Ph/Hz	APPROX. WEIGHT (LBS)	VIB. ISOLATION SPEC TYPE	MIN DEF(IN)	REMARKS
VP-1	STEAM VACUUM-PTAC	CELLAR BOILER ROOM	MEPCO 65	65,000	35	5.5	160	97	97	40	5	460/3/60	-	SEE SPEC		UNIT SHALL BE DUPLEX TYPE AND SHALL BE PROVIDED WITH COMPLETE CONTROL

CABINET & UNIT HEATER SCHEDULE

UNIT NO.	AREA SERVED	LOCATION	TYPE	AIR QTY (CFM)	E.S. PRESS. IN.W.G.	AIR TEMP (°F) ENT.	AIR TEMP (°F) LVG.	TOTAL CAPACITY (MBH)	HOT WATER TEMP (°F) ENT.	LVG.	GPM	WATER PD(FT)	ELECT. KW	FAN MOTOR HP	Volts/Ph/Hz	MANUFACTURER & MODEL NO.	REMARKS
CUH-C	SEE PLAN	SEE PLAN	CLG MTD RECESSED	630	-	30	-	40.75	180	160	2.36	0.44		1/10	120/1/60	RWI-1120	
CUH-W	SEE PLAN	SEE PLAN	WALL MTD RECESSED	630	-	30	-	40.75	180	160	2.36	0.44		1/10	120/1/60	W-1120	
UH-H	SEE PLAN	SEE PLAN	HORIZONTAL	1200	0.1	30	-	59.9	180	160	6.0	-		1/10	120/1/60	HS	
UH-V	SEE PLAN	SEE PLAN	VERTICAL	630	-	30	-	59.9	180	160	6.0	-		1/10	120/1/60	VS	

NOTES:
(1) PROVIDE UNIT MOUNTED THERMOSTAT.
(2) PROVIDE THREE POSITION MANUAL SELECTOR SWITCH.
(3) PROVIDE CONSTANT HOT WATER FLOW WITH MODULATING SUPPLY AIR FANS UTILIZING ECM MOTOR.

AIR CURTAIN SCHEDULE

"MARLEY" AS STANDARD

UNIT NO.	LOCATION	NOZZLE WIDTH (IN)	MAX. VEL. (FPM)	AVG. OUTLET VEL. (FPM)	AIR VOLUME (SCFM)	NO. OF MOTOR & HP	Volt/ PH/HZ	AMPS/ MOTOR	ELEC HEATING COIL CAPACITY (MBH)	TEMP. (°F) RISE	KW	HOT WATER HEATING COIL CAPACITY (MBH)	TEMP. (°F) RISE	GPM	MODEL NO.	WEIGHT (LBS)	REMARKS
ACU-A	SEE PLANS	108	1748	1748	3606	3 @ 1/2	208 / 1 / 60	1.4	—	—	—	127	20	12	CHD 3-108	318	
ACU-B	SEE PLANS	96	1748	1748	3204	2 @ 1/2	208 / 1 / 60	1.4	—	—	—	97	30	10	CED 2-96	222	
ACU-C	SEE PLANS	96	1748	1748	3204	2 @ 1/2	208 / 1 / 60	1.4	—	—	—	97	30	10	CED 2-96	222	DUCTED DISCHARGE

NOTE:
1. AIR CURTAIN OPERATION SHALL BE INTERLOCK WITH DOOR CONTACT, SHALL BE ON AUTOMATICALLY WHEN OUTSIDE DB TEMP IS BELOW 40 DEGREE (ADJUSTABLE).
2. UNIT SHALL BE TIE TO BMS SYSTEM, WITH LOCAL CONTROL.

FAN POWERED TERMINAL UNIT SCHEDULE

BASED ON 'TITUS'

TAG	MODEL	SIZE UNIT	INLET (INCH)	OUTLET (INCH)	CFM MAX.	CFM MIN.	STATIC PRESSURE (INCH) INLET	DOWN	MIN.	FAN CFM @ 55°	ESP	HP	ELEC HEATING COIL CFM	MBH	EAT	LAT	APd	KW	ELECTRICAL DATA FOR UNIT VOLTS/PH/HZ	FLA	REMARKS
FPB-A	DTFS-F	3	10	16.5x14.6	720	230	1.5	0.30	0.07	900	0.33	1/2	—	—	—	—	—	—	277/1/60	2.8	
FPB-B	DTFS-F	4	12	16.5x14.6	960	230	1.5	0.30	0.12	1200	0.35	1/2	—	—	—	—	—	—	277/1/60	2.8	
FPB-C	DTFS-F	4	12	16.5x14.6	1600	350	1.5	0.30	0.06	1600	0.38	1/2	—	—	—	—	—	—	277/1/60	2.8	
FPB-D	DTFS-F	4	12	16.5x14.6	1600	350	1.5	0.30	0.06	1600	0.38	1/2	1600	17.2	55	65	0.08	5	277/1/60	2.8	

NOTE: 1. ROOM NC LEVEL SHOWN INCLUDES ATTENUATION TRANSFER FUNCTIONS OBTAINED FROM TABLES IN ARI STANDARD 885.
2. SOUND DATA SHALL BE OBTAINED FROM TESTS CONDUCTED IN ACCORDANCE WITH ARI STANDARD 880-98.
3. PROVIDE 1"ACOUSTICAL LINING WITH FACTORY FABRICATED RETURN PLENUM BOX.
4. PROVIDE MULTI-STAGE ELEC HEATING COIL CONTROL. POWER FOR ELEC HEATING COIL SHALL BE 460/3/60.

SHELL AND TUBE HEAT EXCHANGER SCHEDULE

B&G

UNIT NO.	SERVICE	LOCATION	SHELL SIDE STEAM LB/HR	STEAM PRESS (PSI)	WORKING PRESS. (PSIG)	TUBE SIDE SECONDARY WATER GPM	TEMP(°F) ENT.	TEMP(°F) LVG.	PD (PSIG)	WORKING PRESS. (PSIG)	FOULING FACTOR	MIN. HEAT TRANSFER (MBH)	MIN. SURFACE AREA (SQ.FT.)	MODEL NO.	REMARKS
HX-ST-4-1 HX-ST-4-2	HW SYSTEM	4TH FLOOR	2066	5.0	15	200	160	180	7.5	0.42	0.0001872	1,954	56	SU104-2	ONE STAND-BY
HX-ST-63-1 HX-ST-63-2	HW SYSTEM	63RD FLOOR	180	5.0	15	20	160	180	7.5	150	0.0001872	-	-	-	ONE STAND-BY

PLATE FRAME HEAT EXCHANGER SCHEDULE

UNIT NO.	SERVICE	LOCATION	PRIMARY WATER GPM	TEMP(°F) ENT.	TEMP(°F) LVG.	PD (FT)	WORKING PRESS. (PSIG)	SECONDARY WATER GPM	TEMP(°F) ENT.	TEMP(°F) LVG.	PD (FT)	WORKING PRESS. (PSIG)	FOULING FACTOR	MIN. HEAT TRANSFER (MBH)	MIN. SURFACE AREA (SQ.FT.)	REMARKS
HX-PF-4-1	O.A. HEAT RECOVERY	4TH FLOOR	75	85	50	3.4	150	75	40	75	4.3	150	0.0005	-	267	

NOTES:
1. CONNECTION LINER MATERIAL SHALL BE STAINLESS STEEL.
2. ARI CERTIFIED.

OUTDOOR GLYCOL DRY COOLER UNIT SCHEDULE

UNIT NUMBER	AREA SERVED	LOCATION	NOMIN. CAP. (tons)	TOTAL CAP. (MBH)	NUMBER FANS	HP	ELECTRICAL VOLT/PH/HZ	FLA	OPERAT. WEIGHT	MANUF.	MODEL#	GPM	FLUID PD FT/WAT.	AIR PD IN/WAT.	REMARK
AC-DC-1	CW SYSTEM	4TH FLOOR	100	1,572	10	1.5	460/3/60	33	5500	STULTZ	FDS-1003B	350	8.9	0.6	40% GLYCOL
AC-DC-2	CW SYSTEM	4TH FLOOR	100	1,572	10	1.5	460/3/60	33	5500	STULTZ	FDS-1003B	350	8.9	0.6	40% GLYCOL
AC-DC-3	CW SYSTEM	4TH FLOOR	100	1,572	10	1.5	460/3/60	33	5500	STULTZ	FDS-1003B	350	8.9	0.6	40% GLYCOL
AC-DC-64-1	LOW RISER EMR	65TH FLOOR	20	304	2	1.5	460/3/60	7.1	701	STULTZ	FSS-211A	66	5.3	70	40% GLYCOL

STEAM HEATING COIL SCHEDULE

SYMBOL	LOCATION	CFM	NET AREA S.F.	STEAM COIL E.A.T. (F)	L.A.T. (F)	TTL MBH	LB/HR. STEM	REMARKS
HC-4-1	4TH FLOOR	8,000	11.2	0	55	475	500	DUCT MOUNTED
HC-4-2	4TH FLOOR	6,500	8.6	0	55	386	406	DUCT MOUNTED
HC-4-3	4TH FLOOR	2,800	3.75	0	55	166	174	DUCT MOUNTED
HC-4-4	4TH FLOOR	800	1.7	0	55	47.5	50	DUCT MOUNTED
HC-4-5	4TH FLOOR	2,000	3.3	0	55	118	124	DUCT MOUNTED
HC-4-6	4TH FLOOR	2,100	3.5	0	55	124	131	DUCT MOUNTED
HC-4-7	4TH FLOOR	2,000	4.0	0	55	118	124	DUCT MOUNTED
HC-4-8	4TH FLOOR	1,500	3.0	0	55	89	93	DUCT MOUNTED
HC-4-9	4TH FLOOR	1,500	3.0	0	55	89	93	DUCT MOUNTED
HC-B-1	CELLAR LEVEL	2,800	3.6	0	55	166	175	DUCT MOUNTED

HOT WATER HEATING COIL SCHEDULE

SYMBOL	LOCATION	CFM	NET AREA S.F.	HOT WATER COIL E.A.T. (F)	L.A.T. (F)	TTL MBH	E.W.T. (F)	L.W.T. (F)	GPM	REMARKS
RH-1-1	1ST FLOOR	4,000	5	55	105	216	180	160	22	DUCT MOUNTED

PACKAGED AIR COOLED AIR CONDITIONING UNITS SCHEDULE

UNIT NO.	CONDENSING NOM CAP TONS REFRIG	LOCATION	MANFCTR.	MODEL No.	FAN CFM	TOTAL HR (MBH)	FAN MOTOR HP	EVAPORATOR NOM CAP TONS REFRIG	LOCATION	MODEL No.	AIR QUANTITY CFM	EXT. S.P. IN INCH	COOLING CAPACITY AT 75°F DB, 62.5° F WB, 95° F AMBIENT TEMP. SENSIBLE MBH	TOTAL MBH	ELEC HEATING COIL BTU	KW	V/PH/HZ	ELECTRICAL DATA MCA	FLA	V/PH/HZ	REMARKS
AC-S-1	2	SALLY PORT	STULTZ	OHS-012-AS	1,400	31.4	1/3	2	SALLY PORT	024-AS/AR	900	0.3	20.9	24.6	17.3	5.3	460/3-60	17.3	13.6	460/3/60	
AC-S-2	3	SALLY PORT	STULTZ	OHS-040-AS	2,000	43.8	1/2	3	SALLY PORT	040-AS/AR	1,415	0.3	27.4	32.6	18.8	5.5	460/3-60	20.5	16.1	460/3/60	
AC-S-3	3	SALLY PORT	STULTZ	OHS-040-AS	2,000	43.8	1/2	3	SALLY PORT	040-AS/AR	1,415	0.3	27.4	32.6	18.8	5.5	460/3-60	20.5	16.1	460/3/60	

EXPANSION TANK SCHEDULE

B&G

UNIT NO.	SERVICE	LOCATION	LENGTH (IN)	DIAM. (IN)	CAPAC. (GAL)	WORK. PRESS. (PSIG)	OPERATING WEIGHT	MANUFACTURER & MODEL NO.	REMARKS
ET-1	GLYCOL WATER SYSTEM	4TH FLOOR	81	30	53	250	629	B-200	
ET-2	GLYCOL WATER SYSTEM	4TH FLOOR	36	24	53	250	629	D-15	
ET-3	HOT WATER SYSTEM	4TH FLOOR	36	24	53	250	629	D-15	
ET-4	HOT WATER SYSTEM	4TH FLOOR	36	24	53	250	629	B-200	
ET-5	HOT WATER SYSTEM	63RD FLOOR	36	24	53	250	629	B-200	
ET-6	GLYCOL WATER SYSTEM	63RD FLOOR	36	24	53	250	629	B-200	

VAV BOX SCHEDULE

TITUS AS STANDARD

SYMBOL	INLET INCH	CFM MAX.	CFM MIN.	NC LEVELS DISCHARGE	NC LEVELS RADIATED	STATIC PRESSURE INLET	DOWN	MIN	DIMENSION WxLxH	REMARKS
VAV-A	6	300	50	20	20	1.00	0.25	0.07	10x26x14	
VAV-B	8	600	301	20	20	1.00	0.25	0.02	12x26x14	
VAV-C	10	1050	601	20	20	1.00	0.25	0.01	14x26x14	
VAV-D	12	1400	1051	20	20	1.00	0.25	0.01	18x26x14	
VAV-E	14	2100	1401	20	20	1.00	0.25	0.04	24x26x14	
VAV-H	8	600	301	20	20	1.00	0.25	0.02	12x26x14	

NOTE:
1. MINIMUM SETTING FOR VAV SHALL BE 1/3 OF ITS INDICATED AIR QUANTITY.
2. PROVIDE MIN OF 15 FEET OF 1" A.L. DOWNSTREAM OF BOX UNLESS OTHERWISE NOTED.
3. PROVIDE HOT WATER REHEAT COIL FOR VAV-H ,25 MBH, 150PSI PRESSURE RATING, 3 GPM.
4. PROVIDE FACTORY INSTALLED VALVE / ACCESSORY PACKAGE FOR REHEAT COIL.

AIR OUTLET SCHEDULE

TITUS AS STANDARD

TYPE SYMBOL	SERVICE	NECK SIZE (INCHES)	FACE SIZE	RANGE CFM	MAX NC	CEILING TYPE	MODEL	REMARKS
SD	AS PER DWG'S	6"Ø	24x24	50-150	15	LAY-IN	SEE NOTE 1	SUPPLY
		8"Ø	24x24	155 - 250	15	LAY-IN	SEE NOTE 1	SUPPLY
		10"Ø	24x24	255 - 400	18	LAY-IN	SEE NOTE 1	SUPPLY
		12"Ø	24x24	405 - 600	20	LAY-IN	SEE NOTE 1	SUPPLY
CR	AS PER DWG'S	6"Ø	12x12	UP TO 180	-	GYP.	SEE NOTE 1	EXHAUST/RETURN-DUCTED
		8"Ø	12x12	UP TO 300	-	GYP.	SEE NOTE 1	RETURN-UNDUCTED
		15"Ø	24x24	UP TO 700	-	GYP.	SEE NOTE 1	RETURN-UNDUCTED
TR	AS PER DWG'S	-	AS PER DWG.'S	AS PER DWG.'S	24	LAY-IN-GYP	300 R	SINGLE DEFL. TOP REGISTER
SG	SIDE WALL GRILLE	-	AS PER DWG.'S	AS PER DWG.'S	28	LAY-IN	300 RL	DOUBLE DEFL. TOP REGISTER
LD-1	AS PER DWG'S	-	-	50 CFM/LF	<20	AS PER DWG'S	FL-15 HT, 1 SLOT	SUPPLY
LD-2	AS PER DWG'S	-	-	80 CFM/LF	<20	AS PER DWG'S	FL-15 JT, 1 SLOT	SUPPLY
LD-3	AS PER DWG'S	-	-	80 CFM/LF	<20	AS PER DWG'S	FL-25 HT, 1 SLOT	SUPPLY
LD-4	AS PER DWG'S	-	-	40 CFM/LF	<20	AS PER DWG'S	ML-39, 2 SLOT	SUPPLY
LD-5	AS PER DWG'S	-	-	60 CFM/LF	<20	AS PER DWG'S	FL-10 JT, 1 SLOT	SUPPLY
LD-6	AS PER DWG'S	-	-	25 CFM/LF	<20	AS PER DWG'S	FL-10 HT, 1 SLOT	SUPPLY
LD-7	AS PER DWG'S	-	-	266 CFM/LF	<20	AS PER DWG'S	FL-25 JT, 2 SLOT	SUPPLY
LD-8	AS PER DWG'S	-	-	62 CFM/LF	<20	AS PER DWG'S	ML-39, 3 SLOT	SUPPLY
LD-9	AS PER DWG'S	-	-	57 CFM/LF	<20	AS PER DWG'S	FL-10 HT, 2 SLOT	SUPPLY
LD-10	AS PER DWG'S	-	-	124 CFM/LF	<20	AS PER DWG'S	FL-10 JT, 2 SLOT	SUPPLY

NOTES:
1. SD MODEL SHALL BE OMNI, SD-R1 MODEL SHALL BE TMRA, SD-R2 MODEL SHALL BE R-OMNI.
2. PROVIDE REMOTE OPERATED DAMPER FOR LOBBY AREA DIFFUSERS.

ELECTRIC HEATING COIL SCHEDULE

SYMBOL	LOCATION	CFM	NET AREA S.F.	ELECTRIC COIL E.A.T. (F)	L.A.T. (F)	TTL MBH	KW	V/PH/Hz	REMARKS
RH-2-1	2ND FLOOR	12,500	12.5	55	65	135	40	460/3/60	DUCT MOUNTED

NOTE:
1. REHEAT COIL SHALL BE EQUIPPED WITH MULTI STAGE TEMPERATURE CONTROL

SOUND ATTENUATOR SCHEDULE

UNIT	SERVICE	LOCATION	CFM	FACE AREA S.F.	FACE VEL.	MODEL NUMBER	pd (in.w.c.)
SA-1	DRYCOOLER	4TH FLOOR	22,000	54	400	IAC 3LFS	0.09
SA-2	DRYCOOLER	4TH FLOOR	44,000	110	400	IAC 3LFS	0.09
SA-3	GENERATOR	63RD FLOOR	60,000	60	1000	-	-
SA-4	GENERATOR	63RD FLOOR	60,000	60	1000	-	-

NOTES:
1. REFER PLANS FOR ITS QUANTITY AND LOCATION.
2. SA-1, SA-2 SHALL BE RATED FOR OUTDOOR APPLICATION.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE *Architects, LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	50% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0' 4' 8' 12' 20'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
SCHEDULES NO.2

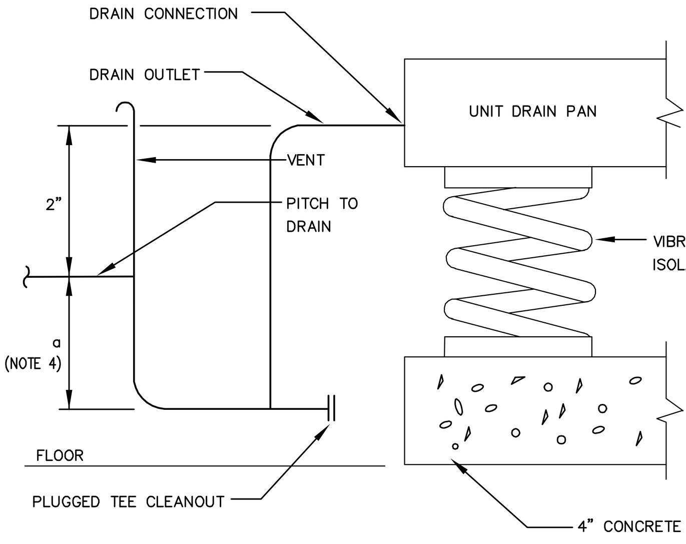
SEAL & SIGNATURE:
STATE OF NEW YORK · DOUGLAS C. BASS · No. 58375 · LICENSED PROFESSIONAL ENGINEER

DATE: 12/06/2013
PROJECT No: 120187.02
DRAWN BY: DL
CHECKED BY: DD
DWG. No.: M-402.00
SHEET. No.: 34 of 39

FILE No: I:\120187-02\Mech\M-402(schedules).dwg

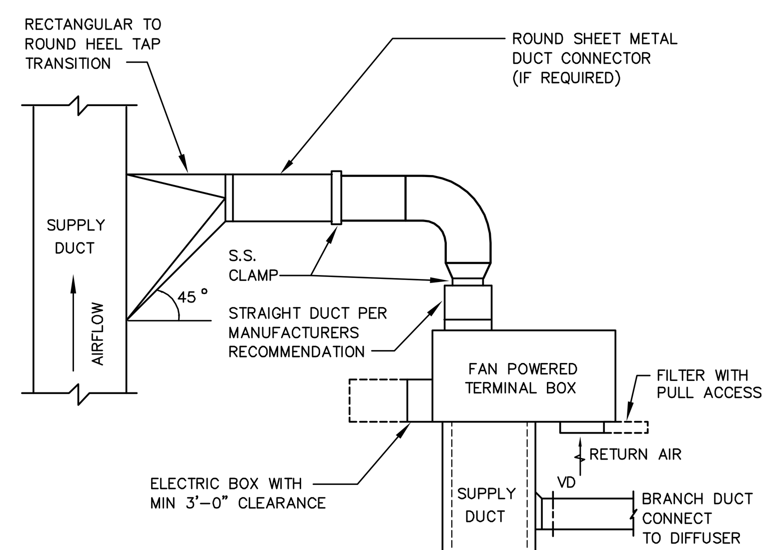
FILE NAME I:\120187-02\Mech\M-402(schedules).dwg SAVED ON 12/8/2014 9:12 AM PLOTTED ON 12/8/2014 9:28 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 121185760 Job Number
ES638616405 Scan Code



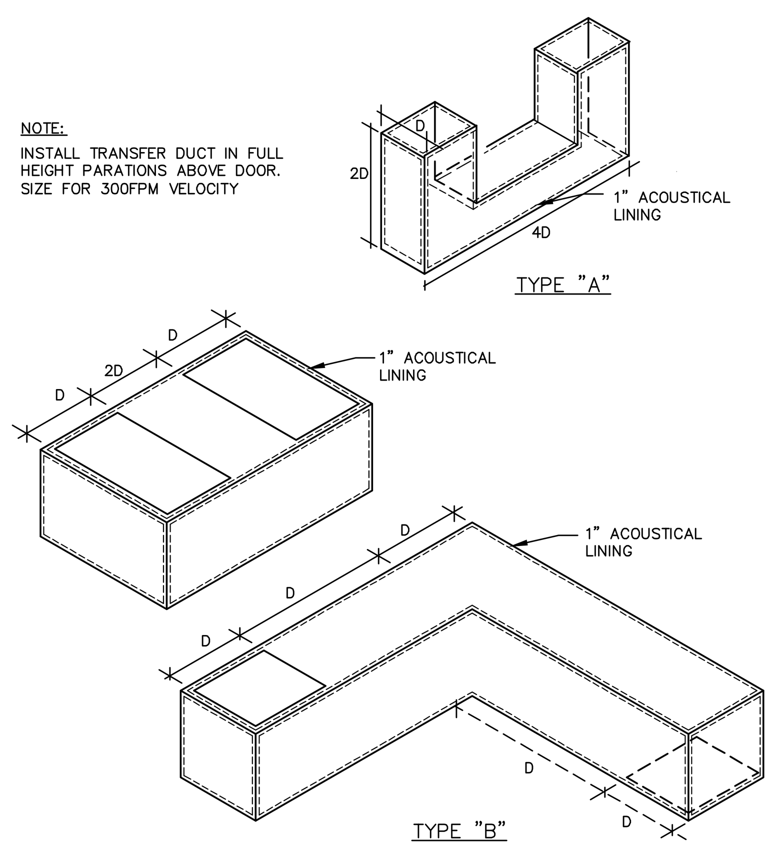
NOTES:
1. ALL DRAIN PIPING TO BE DRAIN PAN OUTLET SIZE 1-1/2" MINIMUM.
2. SUPPORT DRAIN LINES TO PREVENT SAG.
3. INSULATE DRAIN LINES AS PER SPECIFICATIONS.
4. MIN. DIMENSION
FOR DRAW THRU UNITS a = 1.0 x S.P."
FOR BLOW THRU UNITS a = 1.5 x S.P."

AIR HANDLING UNIT COOLING COIL DRAIN DETAIL

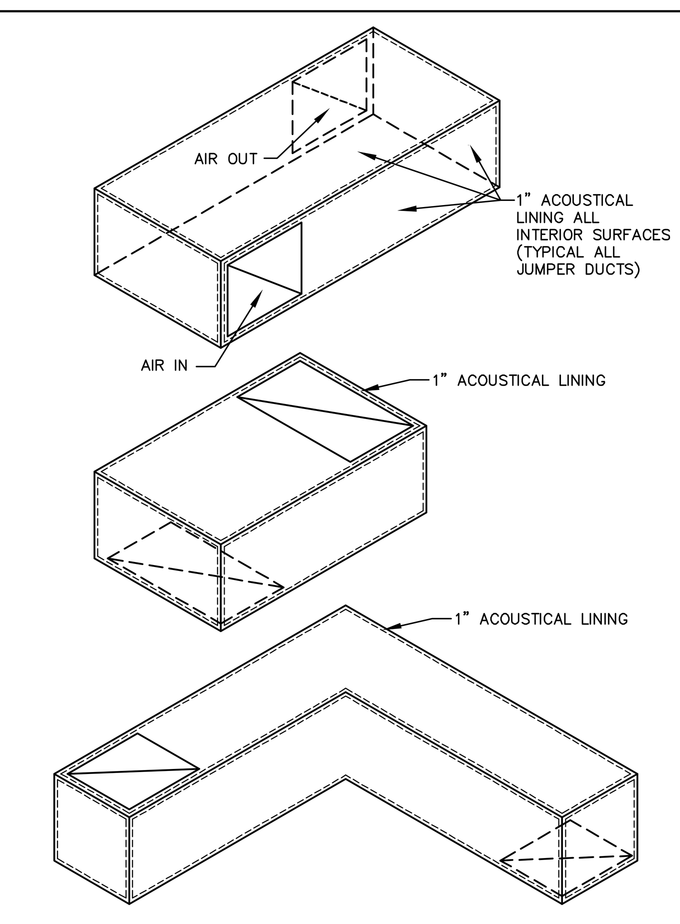


TYPICAL FAN-POWERED TERMINAL UNIT CONNECTION DETAIL

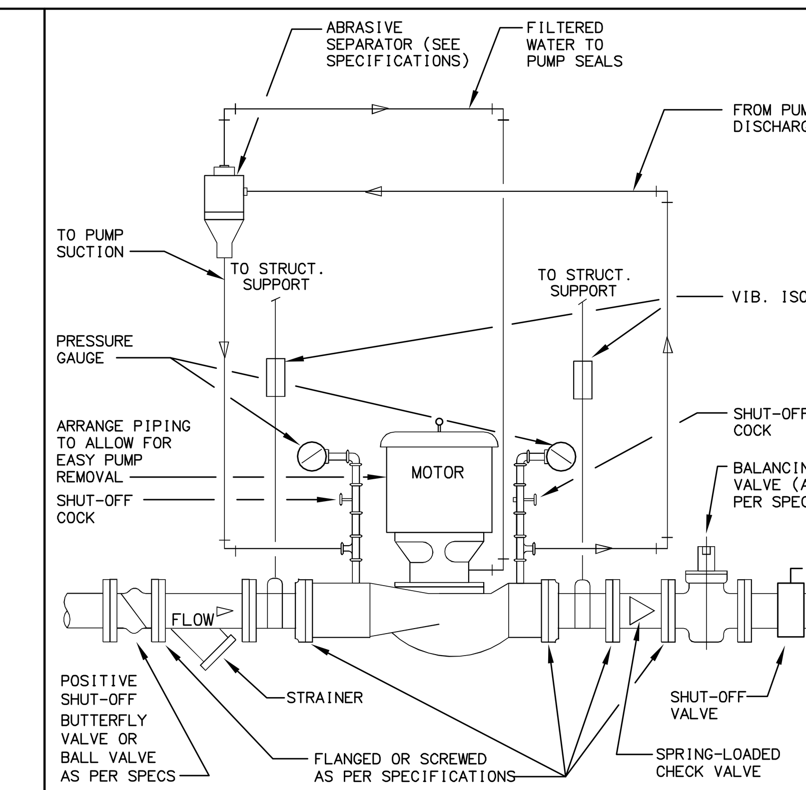
NOTE:
INSTALL TRANSFER DUCT IN FULL HEIGHT PARATIONS ABOVE DOOR. SIZE FOR 300FPM VELOCITY



TRANSFER (JUMPER) DUCT TYPES

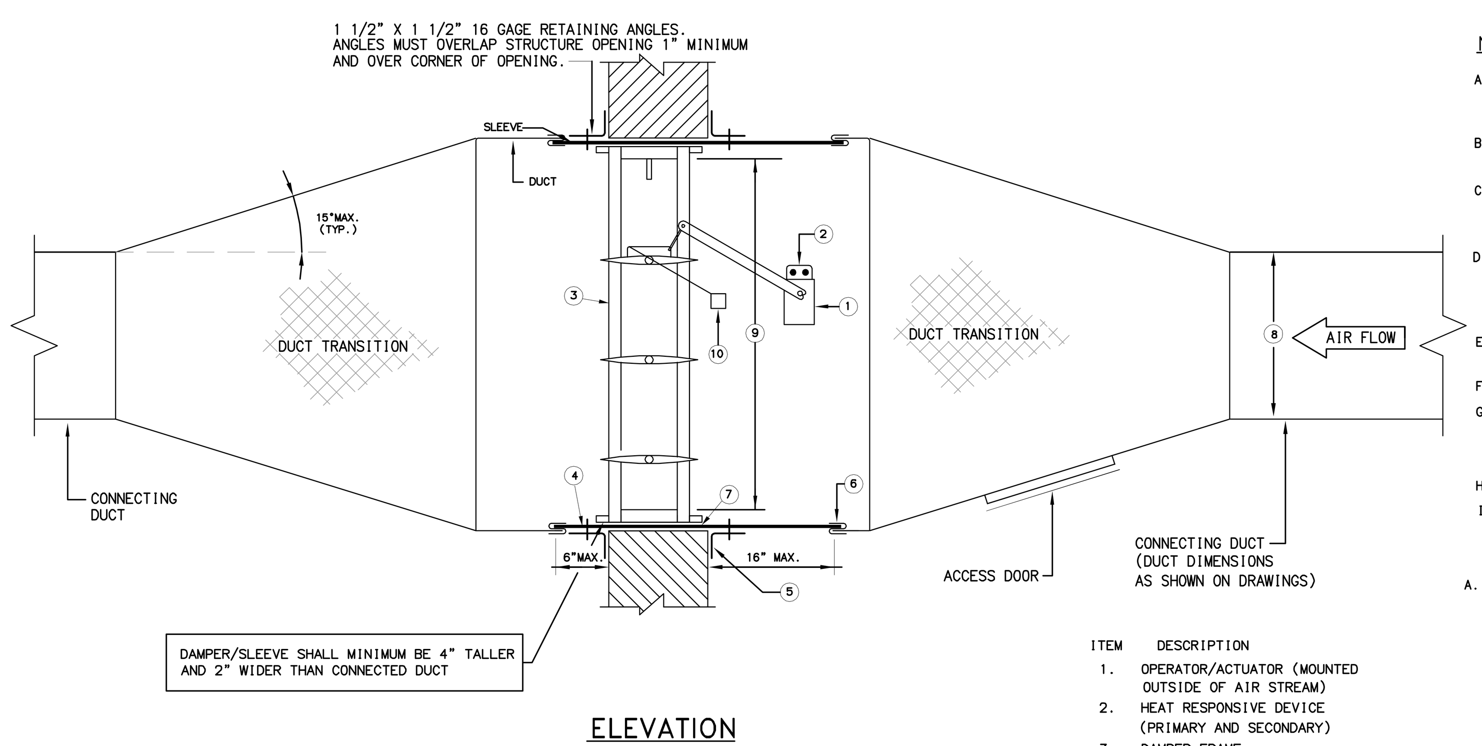


TRANSFER (JUMPER) DUCT TYPES



NOTES:
1. IF MOTOR IS IN HORIZONTAL POSITION PROVIDE SEPARATEHANGER FOR MOTOR.
2. PRESSURE GUAGE SHALL BE RATED FOR 150% OF WORKING PRESSURE.
3. ALL ACCESSORIES ASSOCIATED WITH PUMP SHALL HAVE THE SAME WORKING PRESSURE RATING AS THAT SCHEDULED FOR THE PUMP.

IN LINE PUMP DETAIL
(W/ABRASIVE SEPARATOR PIPING)



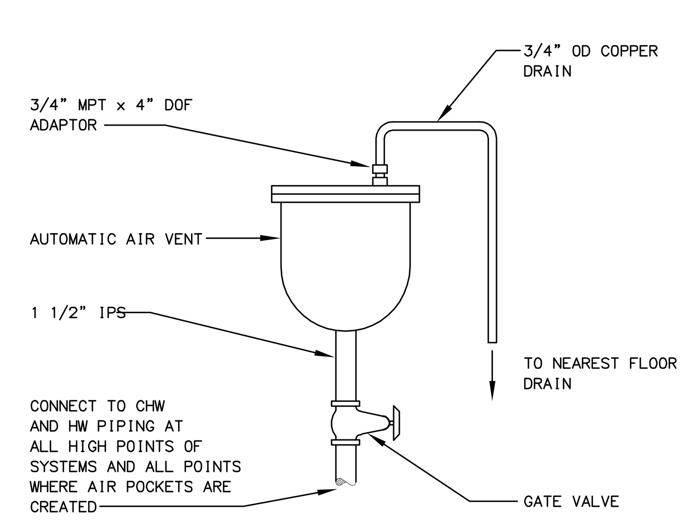
ELEVATION

ITEM	DESCRIPTION
1.	OPERATOR/ACTUATOR (MOUNTED OUTSIDE OF AIR STREAM)
2.	HEAT RESPONSIVE DEVICE (PRIMARY AND SECONDARY)
3.	DAMPER FRAME
4.	SLEEVE
5.	MOUNTING ANGLES
6.	UL LISTED BREAKAWAY CONNECTION
7.	CAULKING MATERIAL
8.	CONNECTING DUCT OPEN AREA
9.	DAMPER CLEAR OPEN AREA
10.	DAMPER END SWITCH

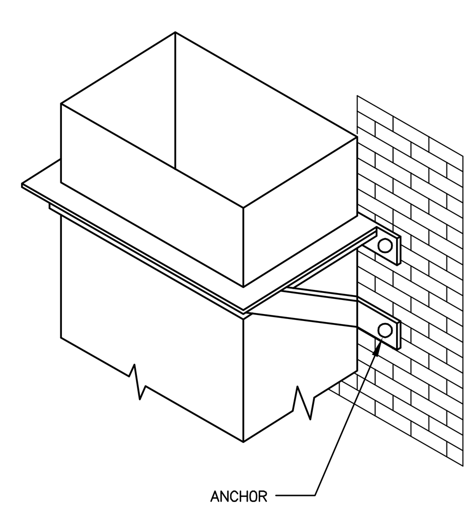
NOTES:
A. COMBINATION FIRE AND SMOKE RATED DAMPERS ARE DESIGNED TO OPERATE WITH BLADES RUNNING HORIZONTALLY AND MUST BE INSTALLED WITHIN THE FIRE WALL DUCT OPENING.
B. DAMPERS SHALL BE INSTALLED PER THE CONDITION OF THEIR UL LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTION.
C. DAMPER SHALL BE IN ACCORDANCE , UL 555S (LATEST EDITION) AND ALL REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION AND SHALL HAVE UL LABEL.
D. DAMPER ACTUATOR SHALL BE UL RATED FOR 350°F DAMPER SLEEVE SHALL NOT EXTEND MORE THAN 6" BEYOND THE FIRE WALL OR PARTITION AND NOT MORE THAN 16" ON THE OPERATOR/ACTUATOR SIDE.
E. CONTRACTOR SHALL SUBMIT STATIC PRESSURE LOSS THRU DAMPER AT OPERATING DUCT VELOCITIES.
F. PROVIDE ACCESS DOORS AS PER CODE AND SPECIFICATIONS.
G. THE MAXIMUM SINGLE DAMPER ASSEMBLY WHETHER SINGLE OR MULTI-SECTION MAY NOT EXCEED THE LIMIT AS CERTIFIED BY UL. WHERE MULTIPLE ASSEMBLIES ARE REQUIRED PROVIDE AN APPROVED MULLIONS (FOR MASONRY WALL APPLICATION ONLY)
H. SEE SPECS FOR ADDITIONAL REQUIREMENTS.
I. PROVIDE PRIMARY HEAT RESPONSIVE DEVICE. FOR SMOKE MANAGEMENT SYSTEM, PROVIDE PRIMARY AND SECONDARY HEAT RESPONSIVE DEVICES.

CONTROLS
A. NON SMOKE MANAGEMENT SYSTEM
WHERE F/SM DAMPERS ARE PART OF A FLOOR-BY-FLOOR AIR HANDLING OR FAN SYSTEM, DAMPERS SHALL BE INTERLOCKED WITH AIR HANDLING UNIT OPERATION. EACH DAMPER SHALL BE PROVIDED WITH END SWITCHES WHICH SHALL BE HARD WIRED AND STATUS CONFIRMED PRIOR TO MOTOR START OF AIR HANDLING UNIT.
WHERE F/SM DAMPERS ARE PART OF A CENTRAL AIR HANDLING OR FAN SYSTEM, DAMPER SHALL BE INTERLOCKED WITH AIR HANDLING UNIT OPERATION. EACH DAMPER SHALL BE PROVIDED WITH END SWITCHES WHICH SHALL BE HARD WIRED AND STATUS CONFIRMED PRIOR TO MOTOR START OF AIR HANDLING UNIT.
REFER TO SPECIFICATIONS FOR ADDITIONAL SYSTEM SEQUENCES.
B. SMOKE MANAGEMENT
SAME AS ABOVE EXCEPT PROVIDE OVERRIDE CONTROL OF DAMPER THRU CENTRAL SMOKE MANAGEMENT OR FIRE ALARM SYSTEM, INCLUDE OVERRIDE OF LOW TEMPERATURE HEAT SENSOR FOR REOPENING DAMPER.
REFER TO SPECIFICATIONS FOR ADDITIONAL SYSTEM SEQUENCES.

FIRE/SMOKE DAMPER INSTALLATION DETAIL

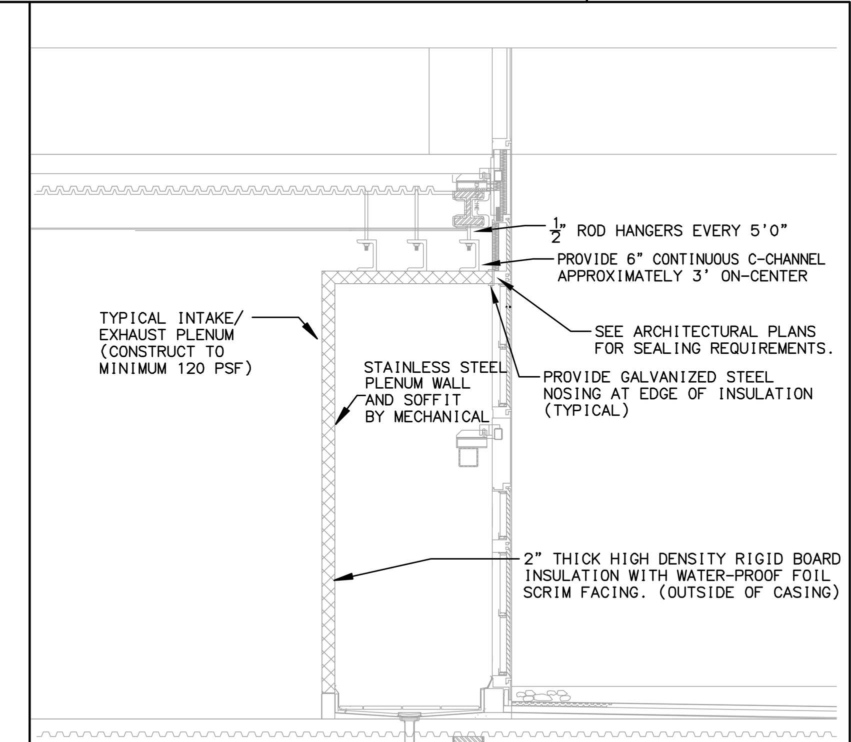


AUTOMATIC AIR VENT DETAIL

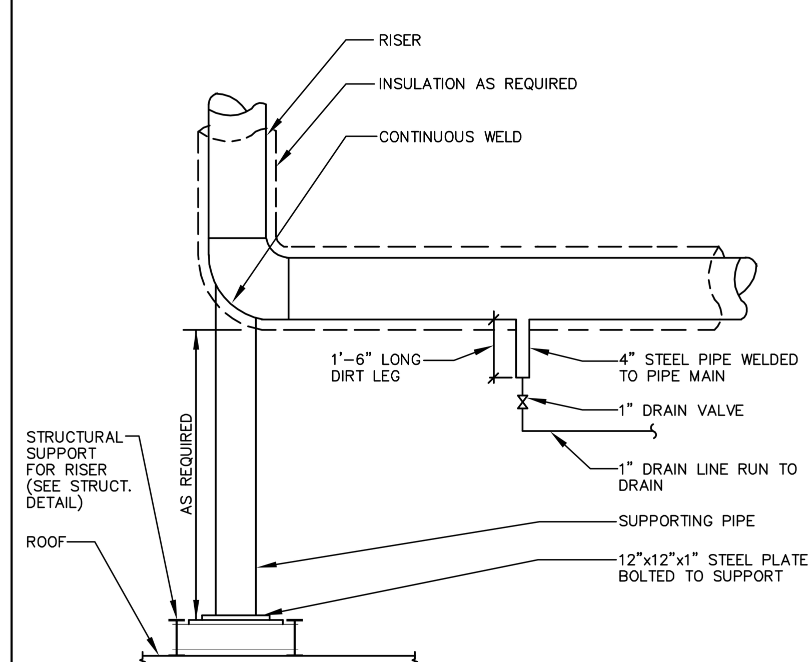


NOTE:
1. BRACKETS ARE SIZED FOR 12 FEET OF DUCT MAXIMUM.
2. LOCATE DUCTS AGAINST WALL OR MAXIMUM OF 2" AWAY FROM WALL.
3. EACH WALL ANCHOR SHALL SATISFY THE FOLLOWING CRITERIA UNLESS OTHER ANALYSIS IS MADE:
A. TENSILE LOAD= 3/8 x DUCT WEIGHT; SAFETY FACTOR OF 4.
B. SHEAR LOAD= 1/2 x DUCT WEIGHT; SAFETY FACTOR OF 4.

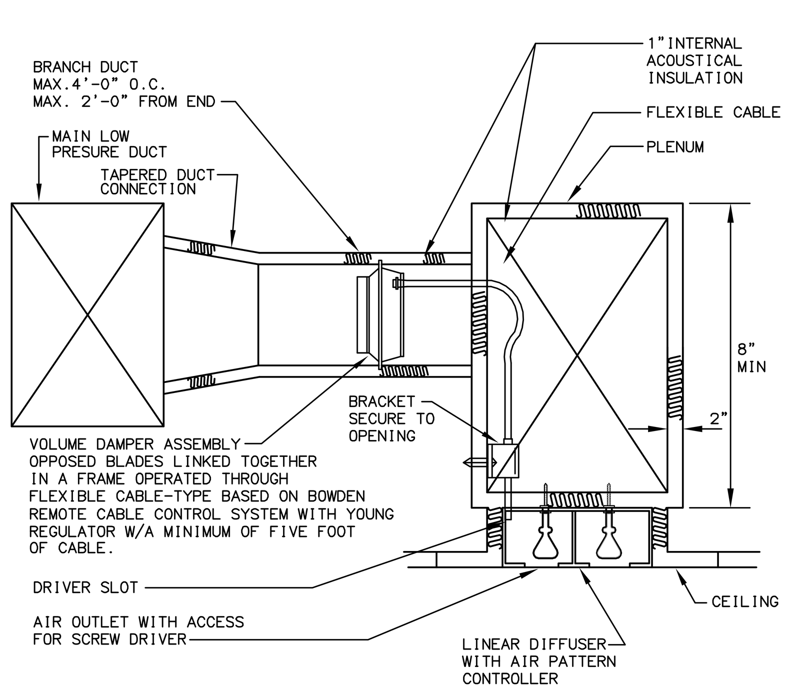
DUCT RISER SUPPORT DETAIL



TYPICAL INTAKE & EXHAUST PLENUM

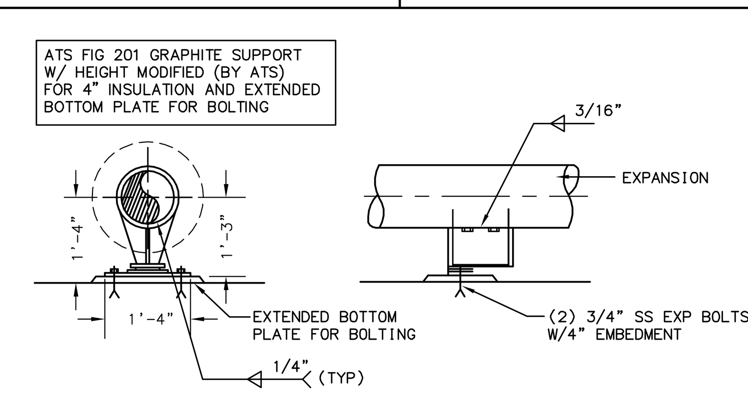


PIPE RISER BASE ELBOW SUPPORT DETAIL

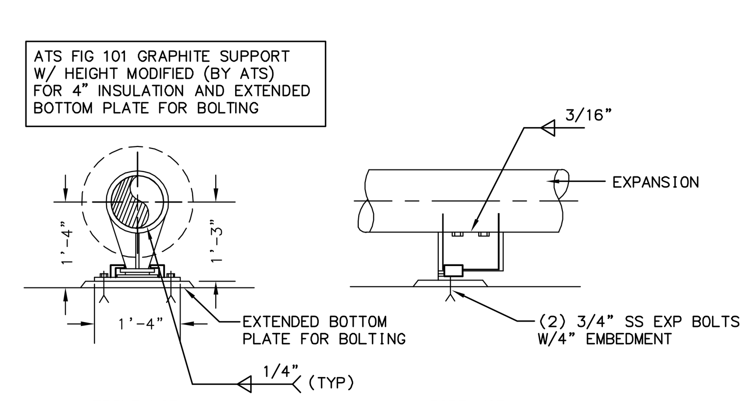


NOTES:
1. TYPICAL BRANCH DUCT TO BE MIN. 6"x6" (CLEAR DIMENSION) UNLESS NOTED.
2. COORDINATE DIFFUSER BORDER TYPES AND COLORS AND CEILING SUPPORTS WITH ARCHITECTURAL DRAWINGS.

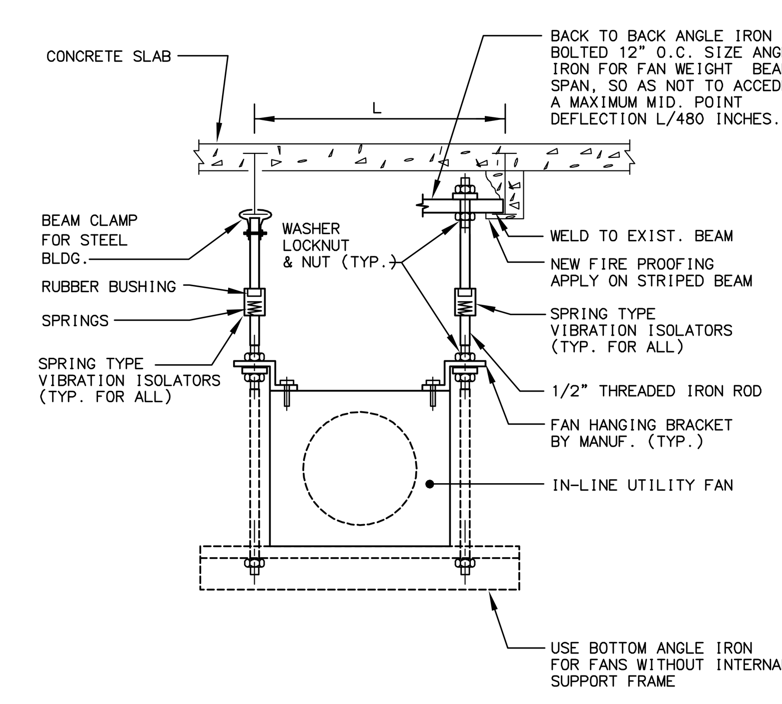
LINEAR DIFFUSER DETAIL



TYPICAL PIPE SUPPORT

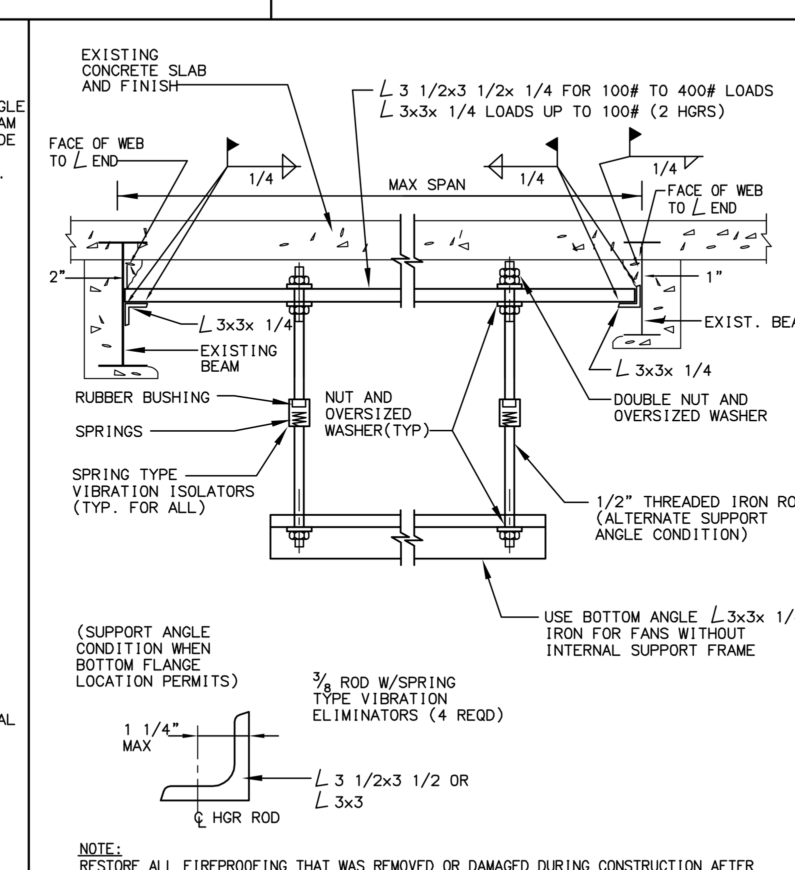


TYPICAL PIPE GUIDE



NOTES:
METHOD OF HANGING, TYPE OR INSERT, BEAM CLAMP, ROD, ETC., MUST BE APPROVED BY STRUCTURAL ENGINEER.

IN-LINE FAN SUPPORT DETAIL



NOTE:
RESTORE ALL FIREPROOFING THAT WAS REMOVED OR DAMAGED DURING CONSTRUCTION AFTER ALL STEEL IS PLACED AND WELDING IS COMPLETED.

DETAIL FOR SUPPORT OF A/C UNIT

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

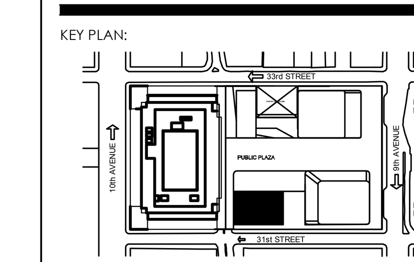
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0' 4' 8' 12' 20'

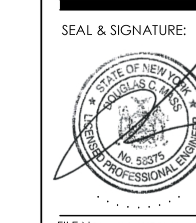
KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
DETAILS SHEET No.1

SEAL & SIGNATURE:

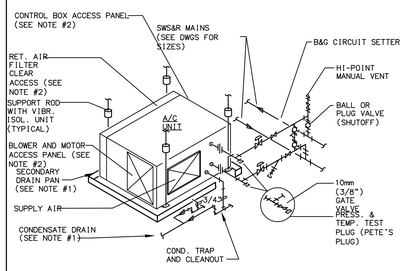


DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-501.00
SHEET. No.:	35 of 39

FILE No: I:\120187-02\Mech\M-501(Details).dwg

FILE NAME I:\120187-02\Mech\M-501(Details).dwg SAVED ON 12/8/2014 9:12 AM PLOTTED ON 12/8/2014 9:28 AM PLOTTED BY LEO, DAVID

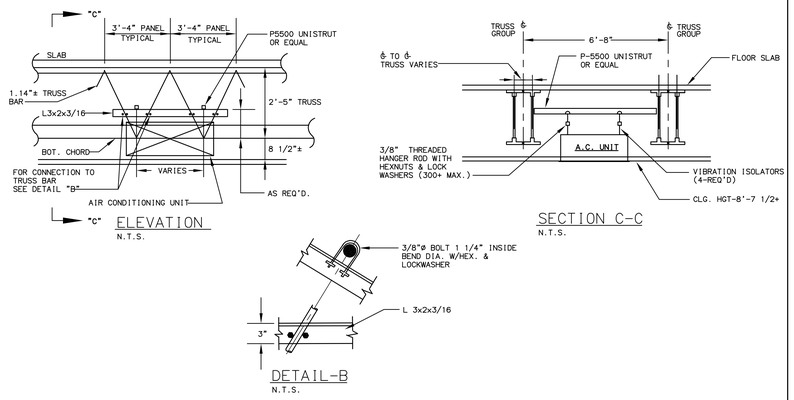
DEPT OF BLDGS 421189760 Job Number
E364845025 Scan Code



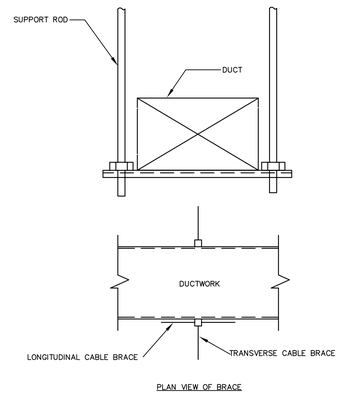
NOTES:

1. UNIT TO BE INSTALLED AT ELEVATION SO AS TO PERMIT GRAVITY DRAIN FROM CONDENSATE PAN AND SECONDARY DRAIN PAN TRAPS (ABOVE HUNG CEILING) TO BUILDING DRAIN. LEAK DETECTOR SHALL BE INSTALLED IN SECONDARY DRAIN PAN-IT SHALL WIRED TO SHUT-OFF THE UNIT.
2. UNIT SHALL BE LOCATED SO THAT ACCESS IS CLEAR TO FILTERS AND ACCESS PANELS.
3. SELECT VALVE PRESSURE RATING AS FOLLOWS:
   WHERE "X"= DISTANCE FROM UNIT INLET TO TOP OF SYSTEM
4. PROVIDE ROOM STAT WITH SUB-BASE.
5. REGULATING VALVE SHALL STOP WATER FLOW WHEN POWER FAILS OR UNIT IS STOPPED.

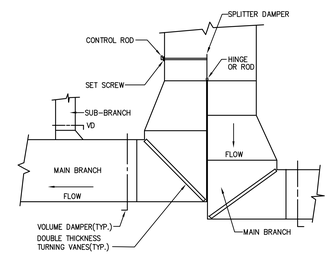
SUPPLEMENTARY A/C UNIT PIPING DETAIL



HANGING SUPPORT FOR AIR CONDITIONING UNIT

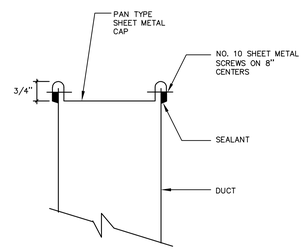


TRANSVERSE AND LONGITUDINAL CABLE BRACE FOR DUCT



DUCT CONNECTION DETAIL

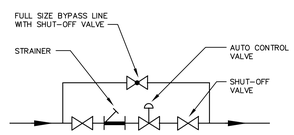
SCALE : N.T.S.



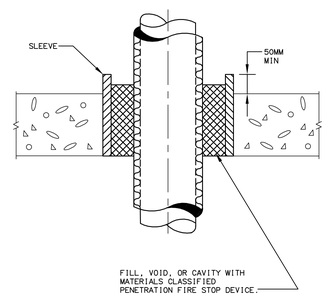
NOTES.

1. EXTEND AND PATCH INSULATION TO COVER CAP ON EXISTING INSULATED DUCTS
2. PROVIDE DUCT LINING ON CAP ON EXISTING LINED DUCTS.

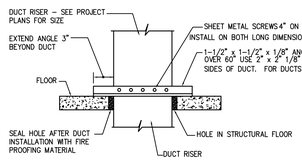
DUCT CAPPING DETAIL



AUTOMATIC CONTROL VALVE STATION DETAIL WITH BYPASS



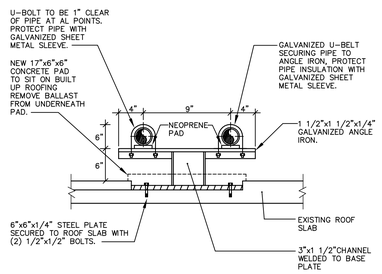
TYPICAL PIPE AND/OR CONDUIT FLOOR PENETRATION



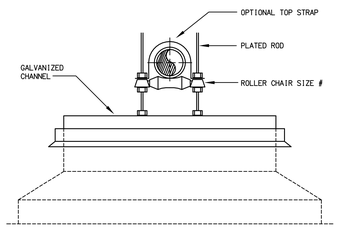
NOTES:

1. ALL DUCTWORK RISERS WHICH ARE RUN EXPOSED, SUCH AS THROUGH MEZZANINE FLOORS AND FAN ROOM FLOORS, SHALL BE PROVIDED WITH A 3" HIGH CONCRETE CURB AROUND OPENING FOR DUCT.
2. LOW PRESSURE DUCTWORK SHALL INCLUDE DUCTWORK OPERATING AT 2 INCHES W.G. OR LESS.

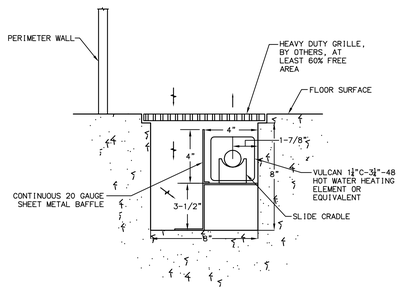
LOW PRESSURE DUCT RISER SUPPORT



PIPES SUPPORT ON ROOF DETAIL

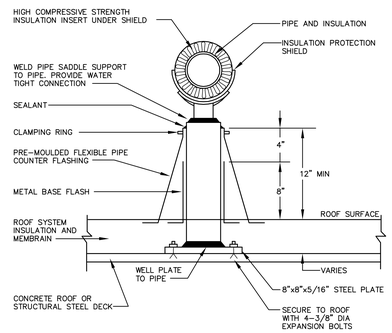


PIPE ROLLER SUPPORT



PERIMETER HOT WATER FIN TUBE RADIATION FLOOR TRENCH INSTALLATION DETAIL

N.T.S.



PIPE SUPPORT ON ROOF DETAIL

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

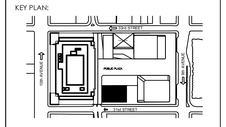
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

O.O.B. NUMBER: NB#

NORTH: Scale: NONE

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

MECHANICAL DETAILS SHEET NO.2

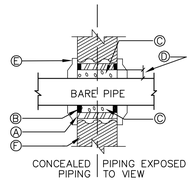
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-502.00
SHEET, No.:	36 of 39

FILE No: I:\120187-02\Mech\M-502(Details).dwg

FILE NAME I:\120187-02\Mech\M-502(Details).dwg SAVED ON 12/8/2014 9:11 AM PLOTTED ON 12/8/2014 9:28 AM PLOTTED BY LEO, DAVID

DEPT OF BLDGS 421189160 Job Number
E534129956M Scan Code



- Ⓐ STANDARD WEIGHT STEEL PIPE SLEEVE TO PASS PIPE
- Ⓑ TERMINATE SLEEVE FLUSH WITH FINISHED WALL SURFACES.
- Ⓒ SEAL OR CAULK SLEEVES THRU FIRE WALLS IN A SMOKE TIGHT MANNER. REFER TO SPECIFICATIONS.
- Ⓓ 1/2" CLEAR MAXIMUM.
- Ⓔ FINISHED ESCUTCHEON PLATE FLUSH AGAINST WALL AND OF SIZE TO COMPLETELY COVER OPENING (TYP FOR EACH SIDE)
- Ⓕ FINISHED WALL SURFACE.

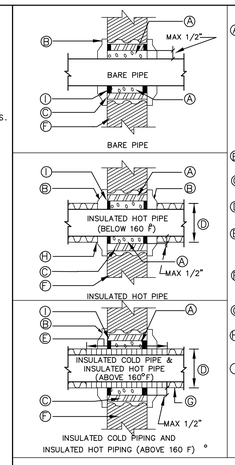
TYPICAL DETAIL OF PIPE INSTALLATION THRU RATED WALL

SLEEVES AND ESCUTCHEONS

A. SLEEVES FOR PIPING THROUGH MASONRY WALL SHALL BE SCHEDULE 40, STANDARD GALVANIZED STEEL PIPE; IN FRAMED PARTITIONS SHALL BE 20 GAUGE SHEET METAL. THE SPACE BETWEEN THE PIPE AND ITS SLEEVE SHALL NOT EXCEED ONEHALF INCH. THE SLEEVE SHALL HAVE A SUFFICIENT LENGTH TO BE FLUSH WITH THE FINISHED WALL SURFACES.
B. EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, OR CEILINGS SHALL BE FITTED WITH CHROMIUM-PLATED CAST BRASS ESCUTCHEONS WITH FASTENING SET SCREWS

CUTTING AND PATCHING

A. PIPING PASSING THROUGH WALLS SHALL HAVE A TRIM OPENING CUT NO GREATER THAN NECESSARY FOR THE INSTALLATION OF A SLEEVE SECURED THEREIN.
B. PIPING PASSING THROUGH CONCRETE FLOORS SHALL HAVE AN OPENING CORE DRILLED SO THAT THE SPACE BETWEEN THE OPENING AND THE PIPE SHALL NOT EXCEED ONE-HALF INCH.
C. ANNULAR SPACES BETWEEN PIPING AND SLEEVES OR CORE DRILLED FLOOR OPENINGS SHALL BE PACKED WITH MINERAL WOOL AND SEALED, TO RETAIN THE FIRE INTEGRITY OF THE WALLS AND FLOOR, WITH A NON-HARDENING COMPOUND SIMILAR OR EQUAL TO DUXSEAL AS MANUFACTURED BY THE JM CLIPPER CORP.
D. FOR DETAILS OF FLOOR CORING RESTRICTIONS IN TOWER BUILDING, SEE DRAWING S-C1



- Ⓐ ALL SPACES PACKED FULL DEPTH WITH MINERAL WOOL OR OTHER EQUALLY APPROVED FIRE RESISTIVE MATERIAL (ASBESTOS OR FIBERGLASS SHALL NOT BE USED)

  FIRE RESISTANT FOAM SEAL ANT CHASE FOAM CTC P2-855 (NYC MEA#58-79 M#1&11 MAY BE USED. INSTALL-ATION AS PER MANUFAC-TURER.
- Ⓑ ESCUTCHEON BOTH SIDES
- Ⓒ SLEEVE
- Ⓓ DIAMETER OF INSULATED PIPE
- Ⓔ ANHYDROUS CALCIUM SILICATE INSULATION THRU SLEEVE
- Ⓕ FIRE RATED PARTITION WALL OR FLOOR
- Ⓖ FIBERGLASS INSULATION
- Ⓗ TERMINATE INSULATION AT ESCUTCHEON
- Ⓘ 1/2" DEPTH FIRE STOP FINISH SEALANT (SEE HVAC SPEC)

DETAIL OF PIPING PIERCING FIRE RATED PARTITIONS, WALLS AND FLOORS

PIPE HANGER & SUPPORT SCHEDULE

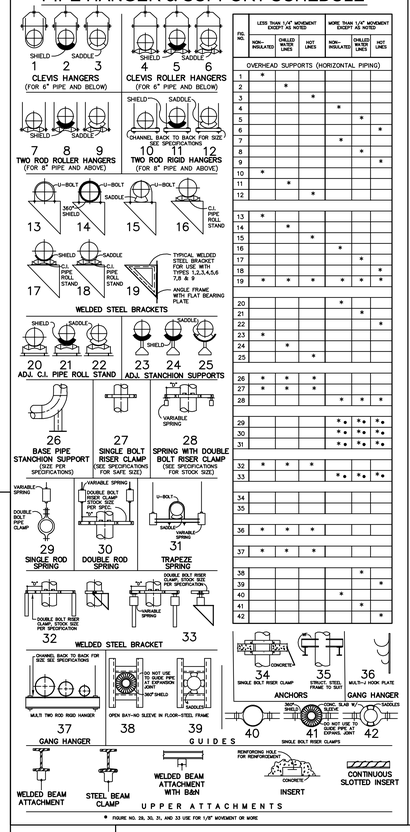
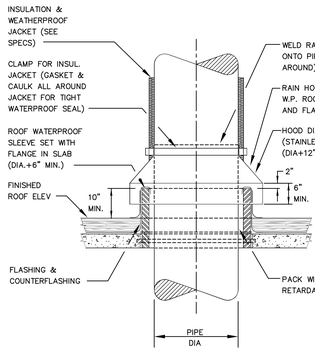
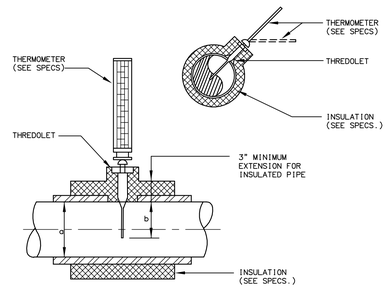


FIG NO.	LESS THAN 1/4" MOVEMENT EXCEPT AS NOTED: NON-INSULATED	CHILLED WATER LINES	HOT LINES	MORE THAN 1/4" MOVEMENT EXCEPT AS NOTED: NON-INSULATED	CHILLED WATER LINES	HOT LINES
OVERHEAD SUPPORTS (HORIZONTAL PIPING)						
1	*					
2		*				
3			*			
4				*		
5					*	
6						*
7				*		
8					*	
9						*
10	*					
11		*				
12			*			
13	*					
14		*				
15			*			
16				*		
17					*	
18						*
19	*	*	*	*	*	*
20				*		
21					*	
22						*
23	*					
24		*				
25			*			
26	*	*	*			
27	*	*	*			
28				*	*	*
29				*▲	*▲	*▲
30				*▲	*▲	*▲
31				*▲	*▲	*▲
32	*	*	*			
33				*▲	*▲	*▲
34						
35						
36	*	*	*			
37	*	*	*			
38					*	
39						*
40				*		
41					*	
42						*

▲ FIGURE NO. 26, 30, 31, AND 33 USE FOR 1/4" MOVEMENT OR MORE

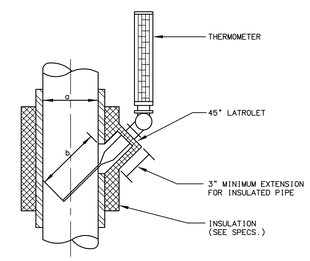


PIPE PENETRATION THRU ROOF SLAB



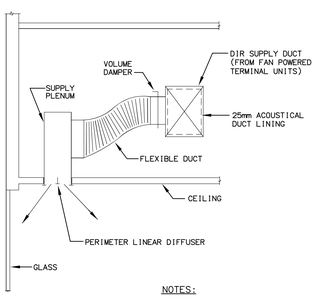
INSERTION LENGTH SCHEDULE	
a = PIPE DIAMETER	b = INSERTION LENGTH
UP TO 4"	3"
6" TO 8"	6"
10" AND LARGER	8"

THERMOMETER WELL LOCATED IN HORIZONTAL PIPE



INSERTION LENGTH SCHEDULE	
a = PIPE DIAMETER	b = INSERTION LENGTH
UP TO 6"	6"
8" AND 10"	8"
12" AND LARGER	14"

THERMOMETER WELL LOCATED IN VERTICAL PIPE

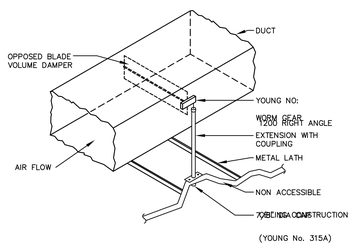


NOTES:

1. CONTINUOUS PERIMETER SLOT NOT USED FOR SUPPLY TO BE USED FOR RETURN.
2. ALL EXPOSED SURFACES SHALL BE FLAT BLACK.

TYPICAL PERIMETER SLOT DIFFUSER

NO SCALE



NOTES:

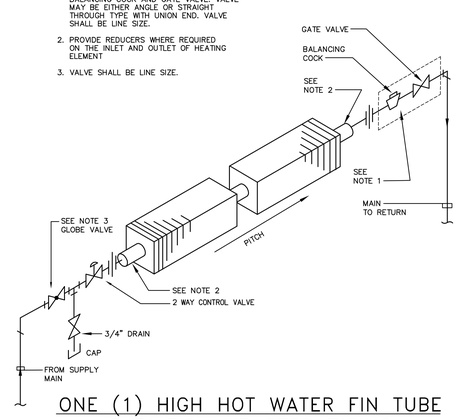
1. WHEN DAMPER IS LOCATED WITHIN 10' OF A DIFFUSER, OR WITHIN A LOBBY OR SPECIALTY SPACE (COORDINATE WITH ARCHITECT), VOLUME DAMPER ASSEMBLY SHALL BE OPERABLE THROUGH FACE OF NEAREST DIFFUSER, BY MEANS OF FLEXIBLE-CABLE BASED ON BOWDEN REMOTE CABLE CONTROL SYSTEM WITH YOUNG REGULATOR.
2. ALL OTHER NON-ACCESIBLE CEILING AREAS SHALL BE AS INDICATED.

VOLUME CONTROL DAMPER

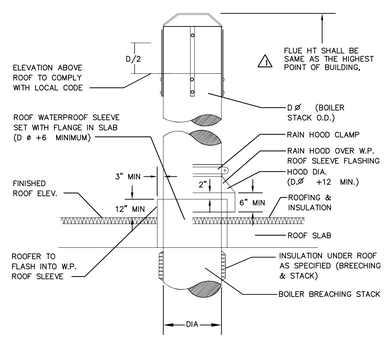
FOR NON ACCESSIBLE CEILINGS ONLY

NOTES

1. COMBINATION BALANCING VALVE WITH "MEMORY STOP" MAY BE SUBSTITUTED FOR SEPARATE BALANCING COCK AND GATE VALVE. VALVE MAY BE EITHER ANGLE OR STRAIGHT THROUGH TYPE WITH UNION END. VALVE SHALL BE LINE SIZE.
2. PROVIDE REDUCERS WHERE REQUIRED ON THE INLET AND OUTLET OF HEATING ELEMENT
3. VALVE SHALL BE LINE SIZE.

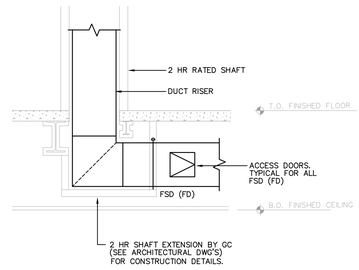


ONE (1) HIGH HOT WATER FIN TUBE RADIATION UP FEED PIPING



ELEVATION OF BOILER STACK

NO SCALE



TYPICAL DUCT SHAFT TERMINATION DETAIL

TABLE OF GUIDE SPACINGS

NOMINAL PIPE SIZE	MAXIMUM DISTANCE		MAXIMUM DISTANCE BETWEEN INTERMEDIATE GUIDES (FT) FOR PRESSURES (PSIG) SHOWN BELOW							
(IN)	EXPANSION JOINT TO FIRST GUIDE	FIRST TO SECOND GUIDE	50	100	150	200	250	300	350	400
3	1'-0"	3'-6"	21	19	17	16	15	14	13	13
4	1'-4"	4'-8"	35	29	25	22	20	19	18	17
6	2'-0"	7'-0"	57	44	37	32	29	27	25	23
8	2'-8"	9'-4"	66	52	45	40	36	33	31	29
10	3'-4"	11'-8"	91	69	58	51	46	42	39	36
12	4'-0"	14'-0"	107	79	66	58	52	48	44	41
14	4'-8"	16'-4"	115	85	71	62	56	51	47	
16	5'-4"	18'-8"	127	94	78	68	61	56	52	
18	6'-0"	21'-0"	139	102	85	74	67	61	56	
20	6'-8"	23'-4"	151	110	91	80	71			
24	8'-0"	28'-0"	172	125	103	89	80			
30	10'-0"	35'-0"	200	144	118	103	92			

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

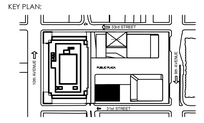
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH
Scale: NONE
0 4 8 12 20

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL DETAILS SHEET NO.3

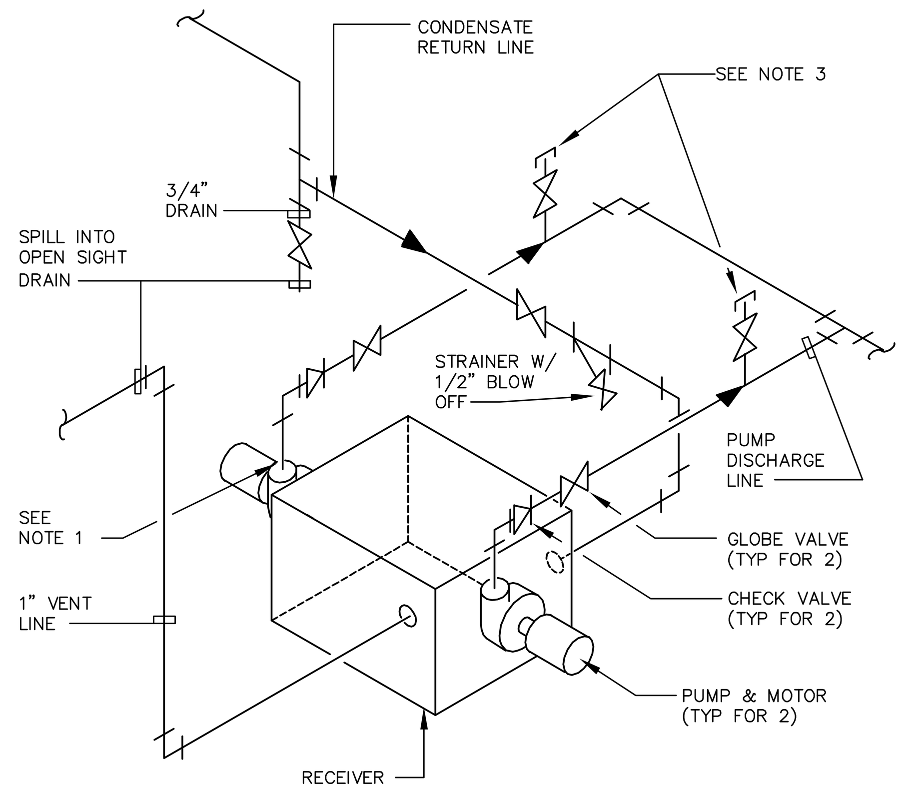
SEAL & SIGNATURE:

DATE:	12/04/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-503.00
SHEET. No.:	37 of 39

FILE No: I:\120187-02\Mech\M-503(Details).dwg

FILE NAME: I:\120187-02\Mech\M-503(Details).dwg SAVED ON 12/8/2014 9:11 AM PLOTTED ON 12/8/2014 9:27 AM PLOTTED BY LED, DAVID

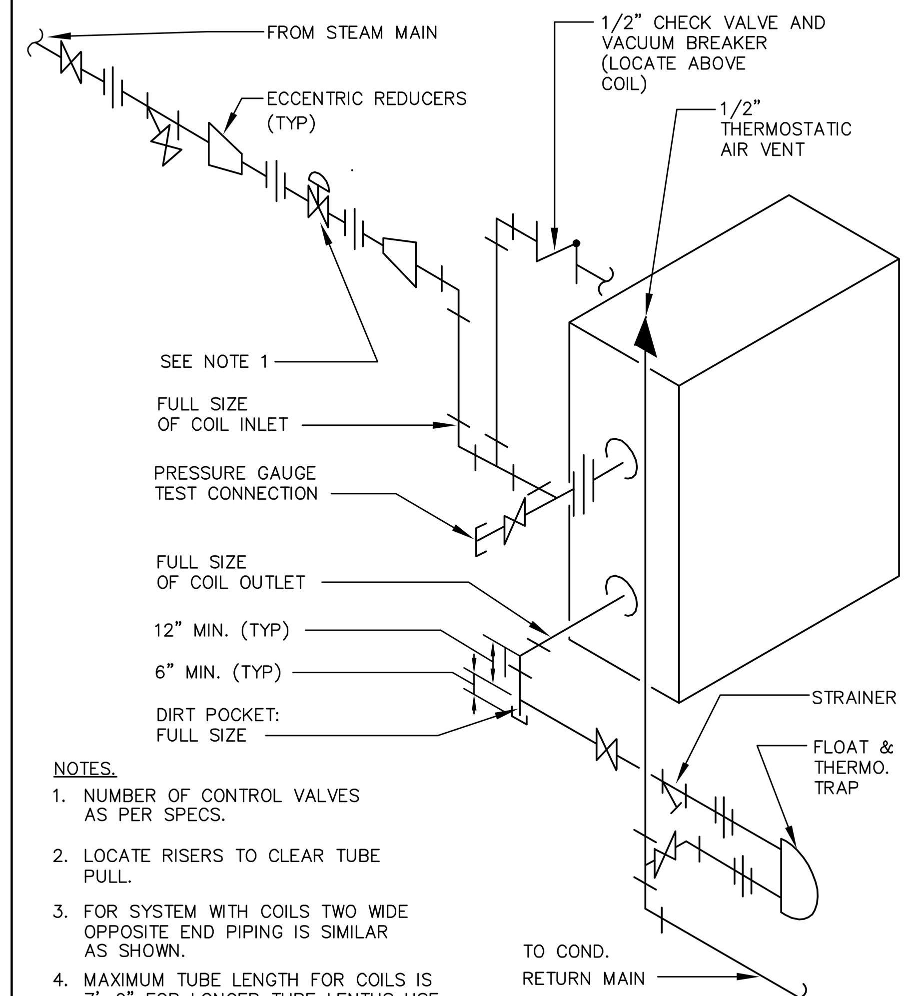
DEPT OF BLDGS 121185760 Job Number
ES127033344 Scan Code



NOTES:

1. PROVIDE REDUCER AT EACH PUMP DISCHARGE WHERE REQUIRED. ALL VALVES SHALL BE LINE SIZE.
2. INSTALL ON 4" HIGH HOUSEKEEPING PAD.
3. PRESS AND TEMP TEST CONNECTION. (PETE'S PLUG)

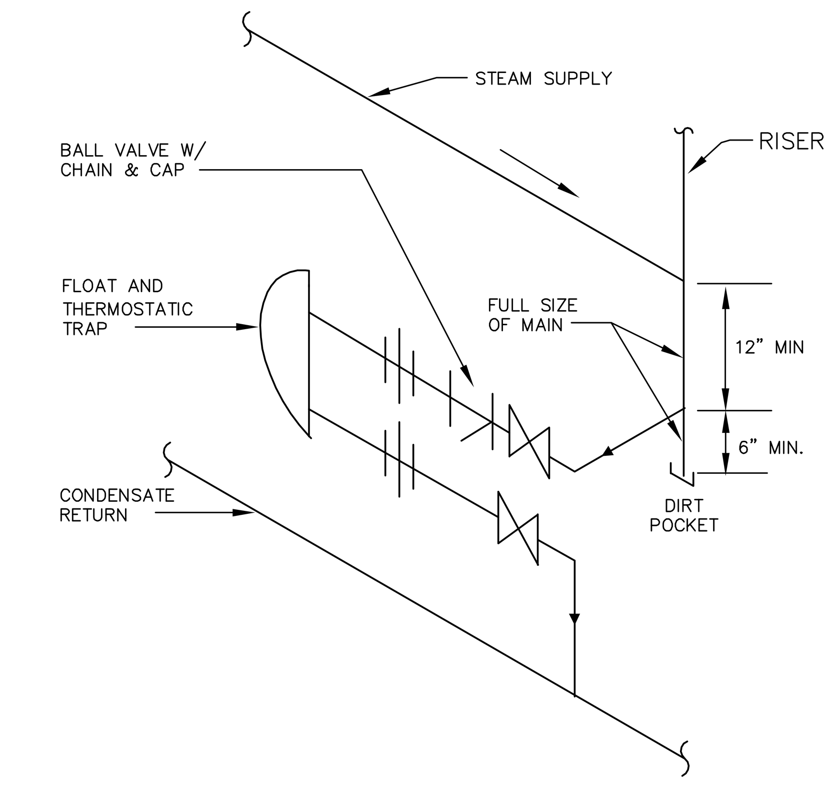
DUPLEX CONDENSATE PUMP AND RECEIVER DETAIL



NOTES.

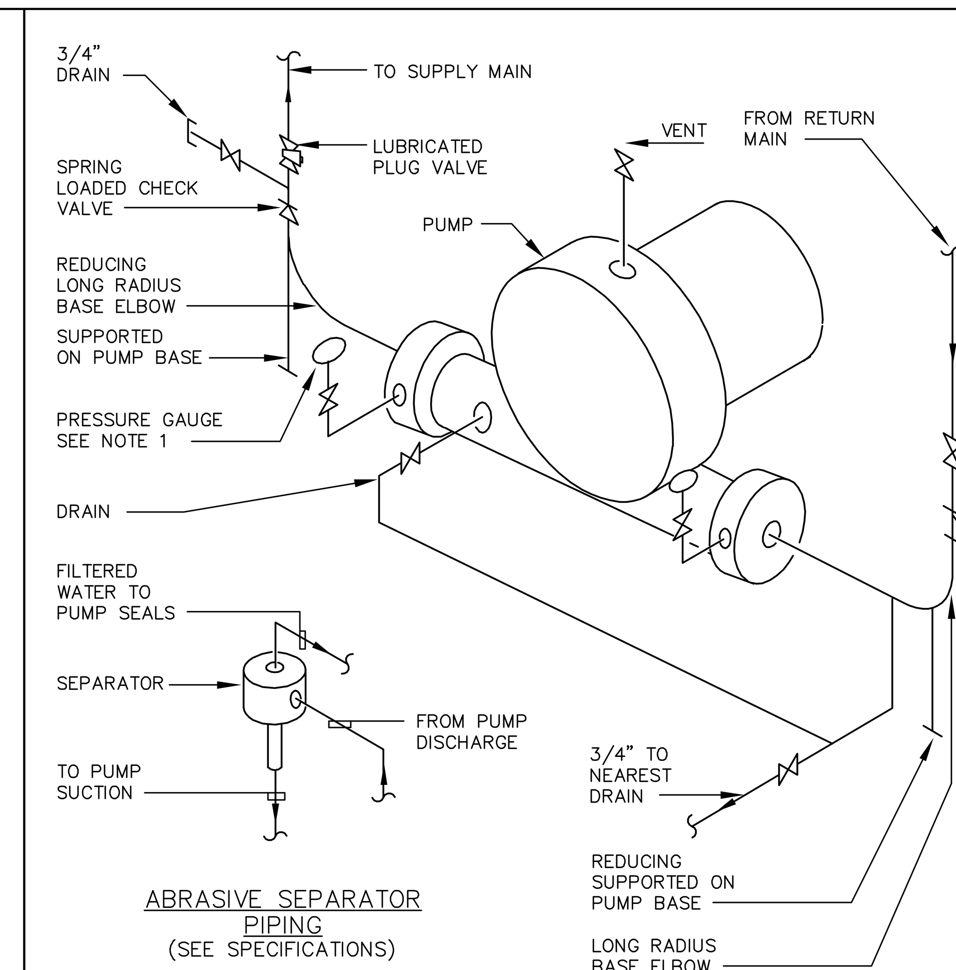
1. NUMBER OF CONTROL VALVES AS PER SPECS.
2. LOCATE RISERS TO CLEAR TUBE PULL.
3. FOR SYSTEM WITH COILS TWO WIDE OPPOSITE END PIPING IS SIMILAR AS SHOWN.
4. MAXIMUM TUBE LENGTH FOR COILS IS 7'-0" FOR LONGER TUBE LENTHS USE 2 COILS AND FEED EACH SIDE OF UNIT.

ONE HIGH VERT. STEAM COIL PIPING FOR PREHEAT AND REHEAT COILS



NOTE:
ALL DRIP ASSEMBLIES SHALL BE 3/4" UNLESS OTHERWISE NOTED ON THE DRAWINGS.

HEEL DRIP-STEAM RISER (LOW PRESSURE)

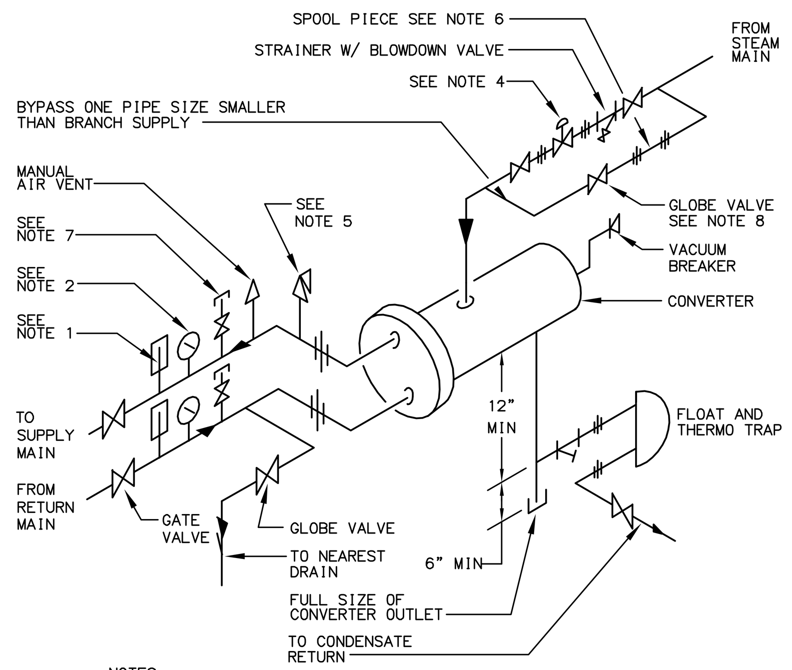


ABRASIVE SEPARATOR PIPING
(SEE SPECIFICATIONS)

NOTE:

1. INSTALL PRESSURE GAUGES FOR 150% OF WORKING PRESSURE IN 1/4" TAPPING PROVIDED BY PUMP VENDOR.

WATER PUMP PIPING HORIZONTAL SPLIT-CASE



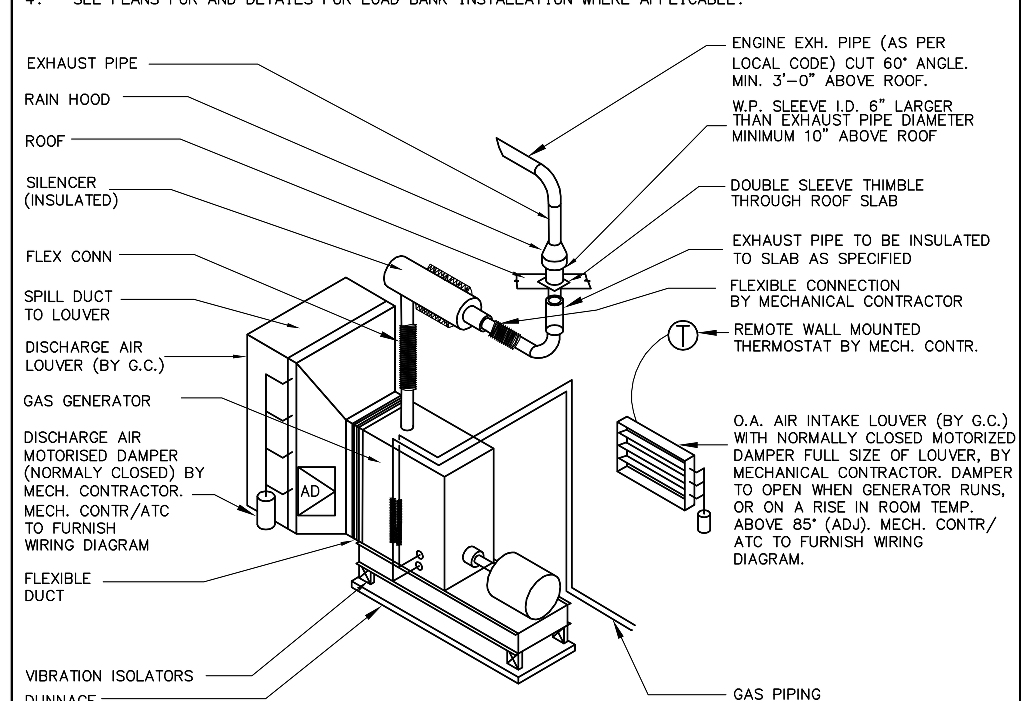
NOTES:

1. SEPARABLE SOCKETS FOR THERMOMETERS. PROVIDE THERMOMETERS.
2. PRESSURE GAUGE TEST CONNECTIONS. PROVIDE GAUGES
3. LOCATE PIPING TO CLEAR COIL PULL.
4. NUMBERS OF CONTROL VALVES AS PER SPECIFICATIONS.
5. RELIEF VALVE SETTING TO BE 10 PSI BELOW RATING OF PIPING SYSTEM.
6. SPOOL PIECE IS PROVIDED FOR INSTALLATION OF A SELF ACTING CONTROL VALVE AND GATE VALVE IF REQUIRED FOR TEMPORARY HEATING.
7. PROVIDE 3/4" VALVED CONNECTION WITH CAPS FOR TESTING AND BALANCING.
8. ONE (1) PIPE SIZE SMALLER THAN LINE SIZE.

HOT WATER CONVERTER PIPING

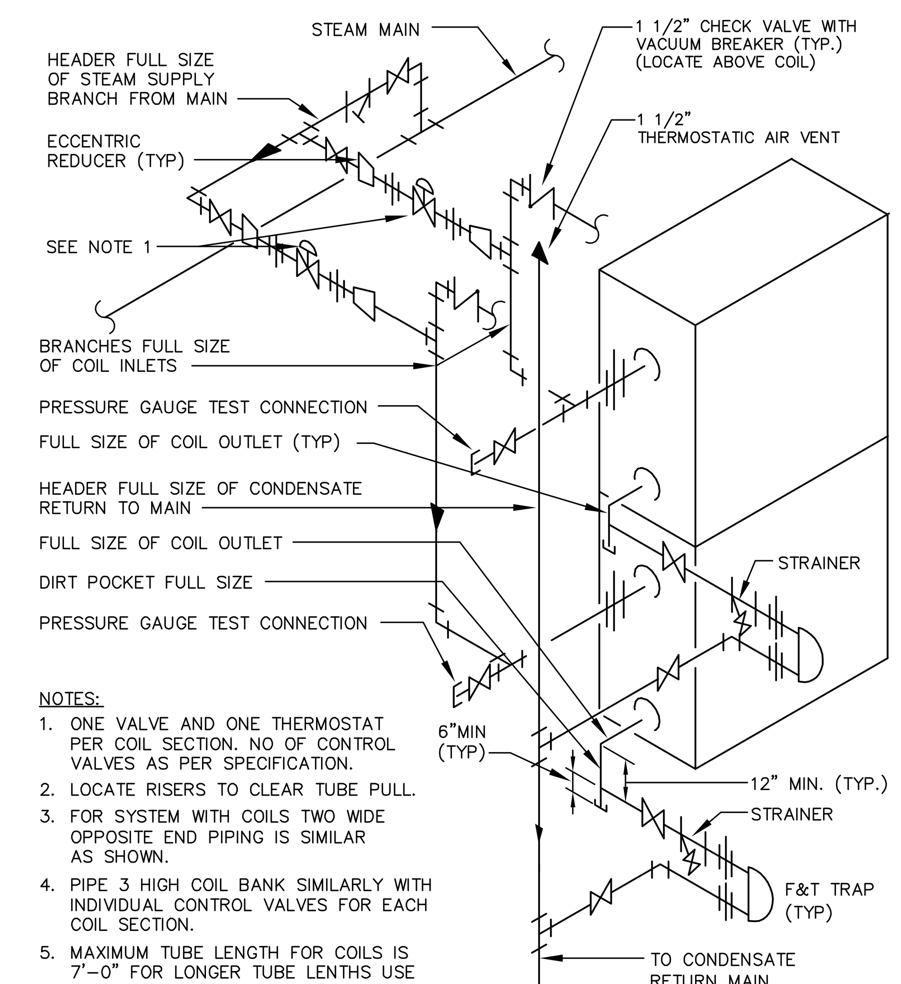
NOTES:

1. GAS GENERATOR UNIT AND CONTROLS AND WIRING LOCAL TO THE GENERATOR SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNDER ANOTHER DIVISION OF THIS WORK (SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS). SILENCER AND FLEXIBLE EXHAUST PIPE CONNECTIONS TO BE FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. ALL APPURTENANCES NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR, INCLUDING ENGINE EXHAUST THROUGH ROOF, DUCT CONNECTIONS TO RADIATOR, MAKEUP AIR AND EXHAUST LOUVERS, GAS PIPING, VENT PIPING, ETC. SILENCER TO BE INSTALLED ON STEEL SADDLES.
2. EQUIPMENT AND PANEL LOCATIONS IN GENERATOR ROOM/VICINITY SHALL BE COORDINATED BY THE ELECTRICAL AND MECHANICAL CONTRACTORS TO RETAIN ACCESS FOR OPERATION, MAINTENANCE, AND CODE REQUIREMENTS.
3. GAS GENERATOR MANUFACTURER & ELECTRICAL CONTRACTOR TO CHECK AND VERIFY THAT ALL EQUIPMENT, INCLUDING ITEMS DUCTED, WIRED, PIPED, ETC BY OTHERS, WILL SUIT THE SAFE OPERATION OF THE GENERATOR EQUIPMENT AT FULL LOAD, AND CONFIRM THIS IN WRITING WITH THE SHOP DRAWING SUBMITTALS.
4. SEE PLANS FOR AND DETAILS FOR LOAD BANK INSTALLATION WHERE APPLICABLE.



EMERGENCY GENERATOR SCHEMATIC DIAGRAM GAS FIRED, INDOOR INSTALLATION

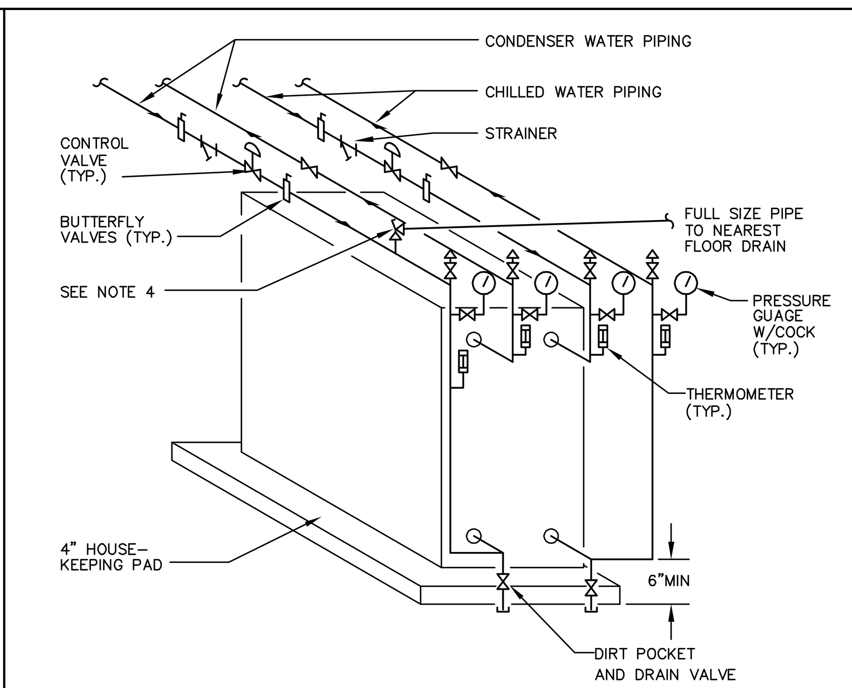
(NOT TO SCALE)



NOTES:

1. ONE VALVE AND ONE THERMOSTAT PER COIL SECTION. NO OF CONTROL VALVES AS PER SPECIFICATION.
2. LOCATE RISERS TO CLEAR TUBE PULL.
3. FOR SYSTEM WITH COILS TWO WIDE OPPOSITE END PIPING IS SIMILAR AS SHOWN.
4. PIPE 3 HIGH COIL BANK SIMILARLY WITH INDIVIDUAL CONTROL VALVES FOR EACH COIL SECTION.
5. MAXIMUM TUBE LENGTH FOR COILS IS 7'-0" FOR LONGER TUBE LENTHS USE 2 COILS AND FEED EACH SIDE OF UNIT.

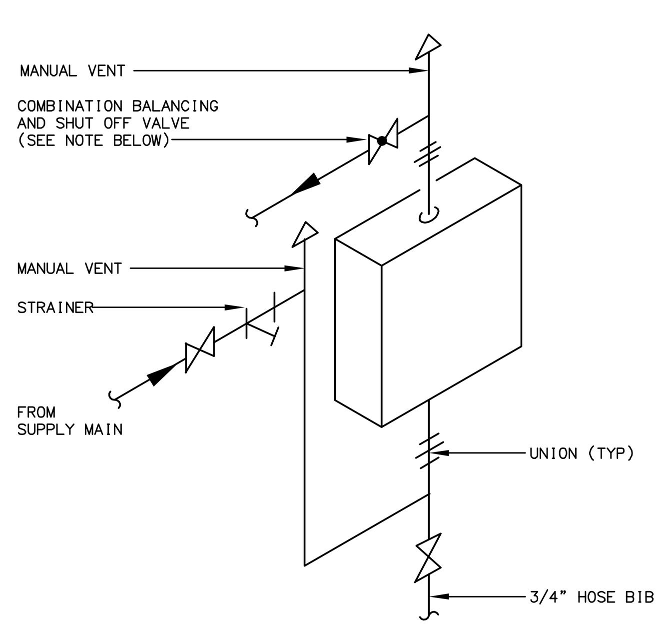
MULTIPLE VERTICAL COIL PIPING FOR STEAM PREHEAT COILS



NOTES:

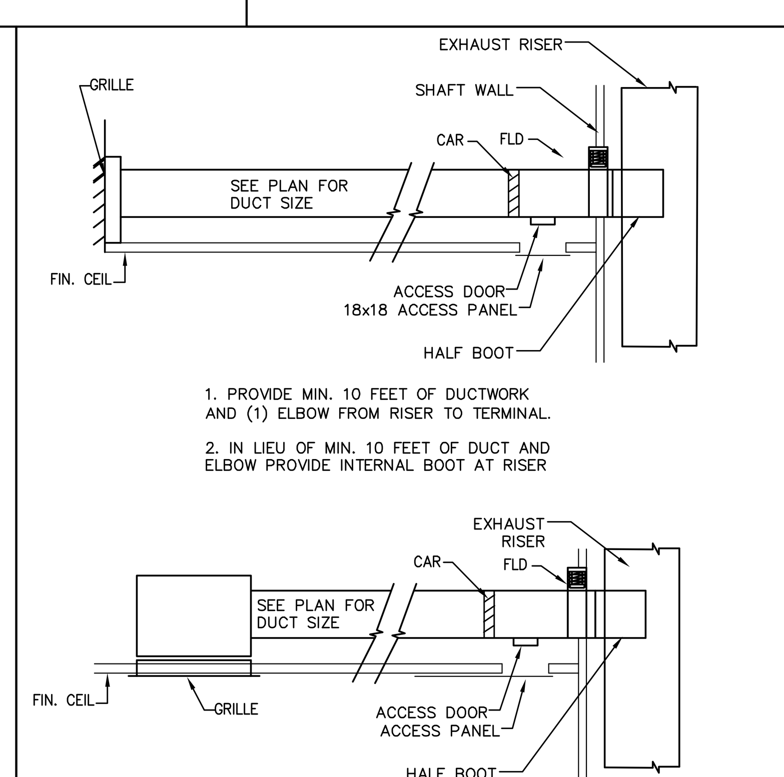
1. PROVIDE THERMOMETERS AND SEPARABLE SOCKETS FOR THERMOMETERS.
2. PROVIDE PRESSURE GAUGES AND GAUGE TEST CONNECTIONS.
3. ALL PIPING SHALL BE ARRANGED TO ALLOW REMOVAL OF PLATE FIN SECTIONS FOR CLEANING W/MIN. DISTURBANCE TO PIPING.
4. RELIEF VALVE SETTING SHALL BE 10 PSI BELOW RATING OF PIPING SYSTEM OF HEAT EXCHANGER.

PLATE & FRAME HEAT EXCHANGER



NOTE:
COMBINATION BALANCING VALVE WITH "MEMORY STOP" MAY BE SUBSTITUTED FOR SEPARATE BALANCING VALVE AND GATE VALVE.

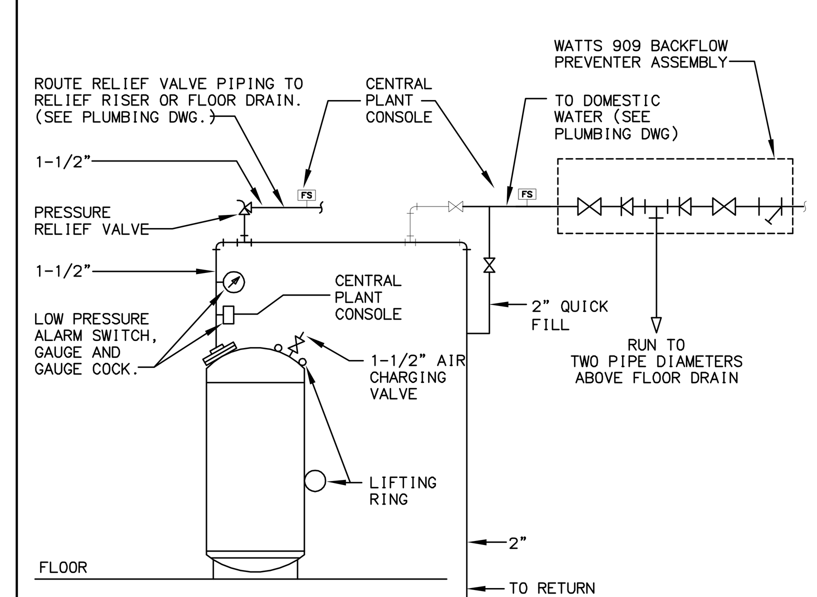
UNIT HEATER HOT WATER PIPING



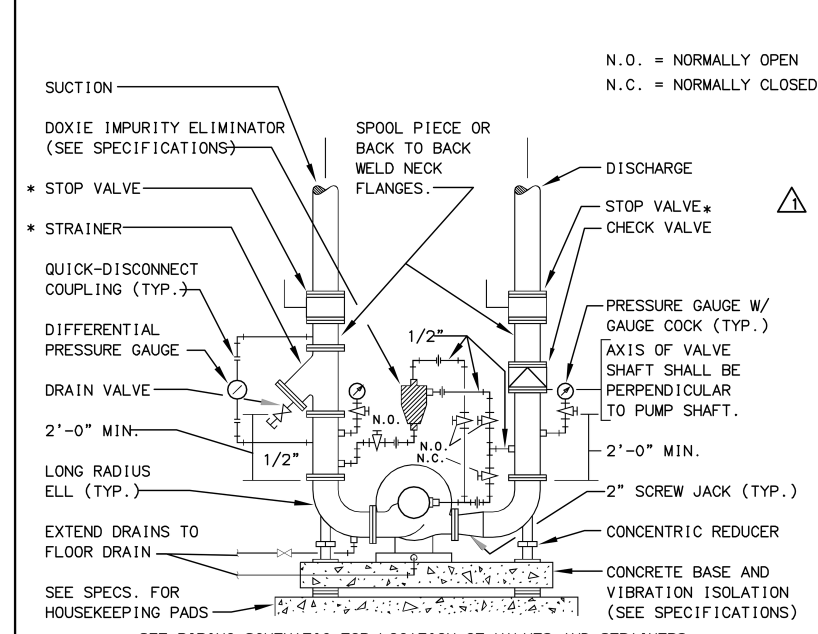
1. PROVIDE MIN. 10 FEET OF DUCTWORK AND (1) ELBOW FROM RISER TO TERMINAL.
2. IN LIEU OF MIN. 10 FEET OF DUCT AND ELBOW PROVIDE INTERNAL BOOT AT RISER

FLD @ SHAFT EXHAUST TERMINAL DETAIL

NOT TO SCALE



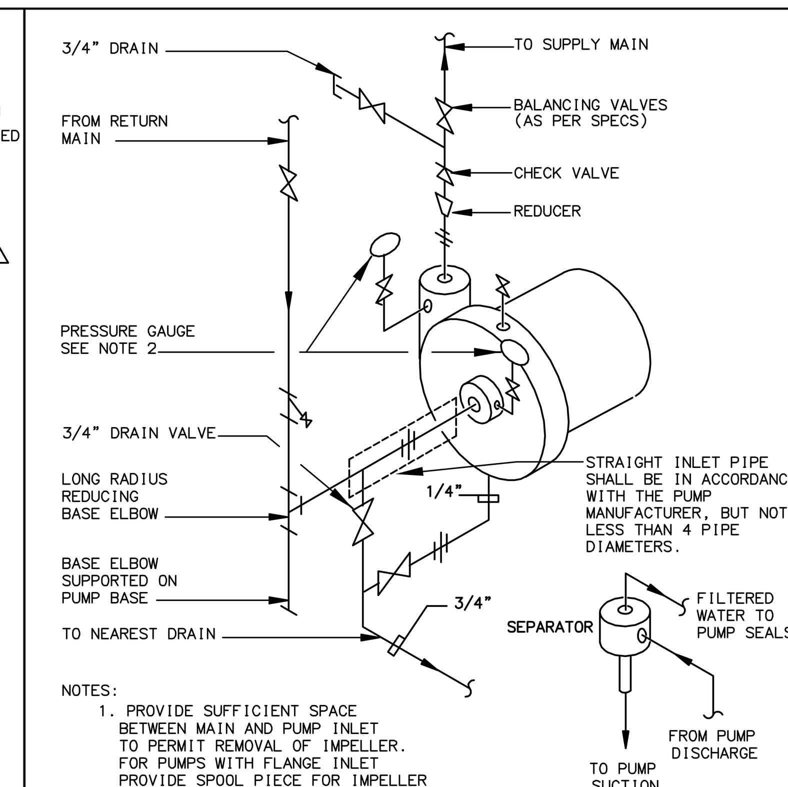
DIAPHRAGM TYPE EXPANSION TANK DETAIL



* SEE PIPING SCHEMATIC FOR LOCATION OF VALVES AND STRAINERS

TYPICAL PIPING ARRANGEMENT FOR DOUBLE SUCTION PUMP

NO SCALE



NOTES:

1. PROVIDE SUFFICIENT SPACE BETWEEN MAIN AND PUMP INLET TO PERMIT REMOVAL OF IMPELLER. FOR PUMPS WITH FLANGE INLET PROVIDE SPOOL PIECE FOR IMPELLER REMOVAL.
2. INSTALL PRESSURE GAUGES FOR 150% OF WORKING PRESSURE IN 1/4" TAPPING PROVIDED BY VENDOR. IF TAPS ARE NOT PROVIDED, PROVIDE IN PIPING.

ABRASIVE SEPARATOR PIPING
(SEE SPECIFICATIONS)

WATER PUMP PIPING END SUCTION PUMP

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

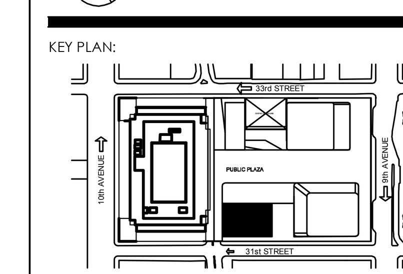
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0' 4' 8' 12' 20'

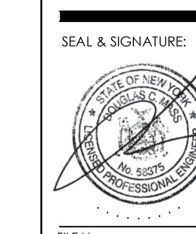
KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
DETAILS SHEET NO.4

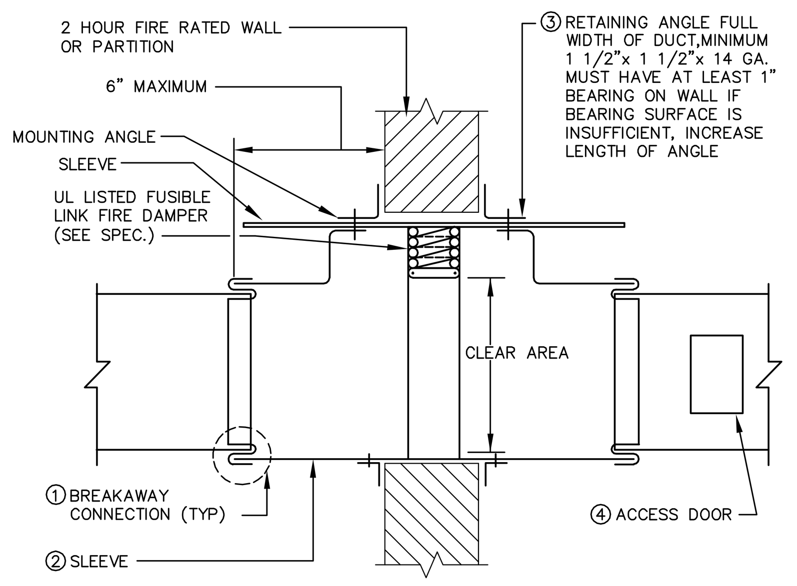
SEAL & SIGNATURE:



DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-504.00
SHEET. No.:	38 OF 39

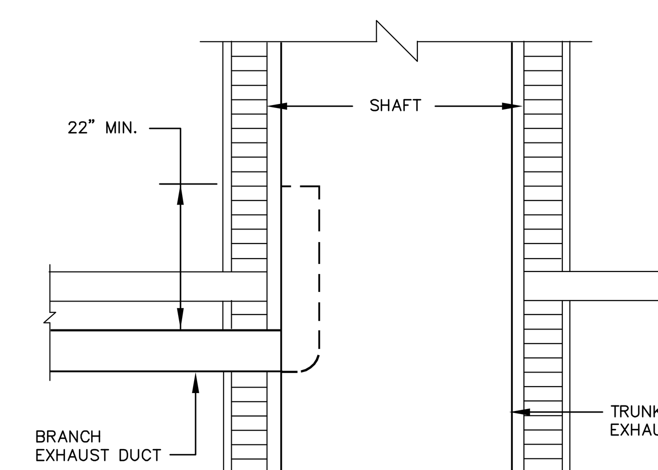
FILE No: I:\120187-02\Mech\M-504(Details).dwg

FILE NAME I:\120187-02\Mech\M-504(Details).dwg SAVED ON 12/8/2014 9:27 AM PLOTTED ON 12/8/2014 9:27 AM PLOTTED BY LEO, DAVID



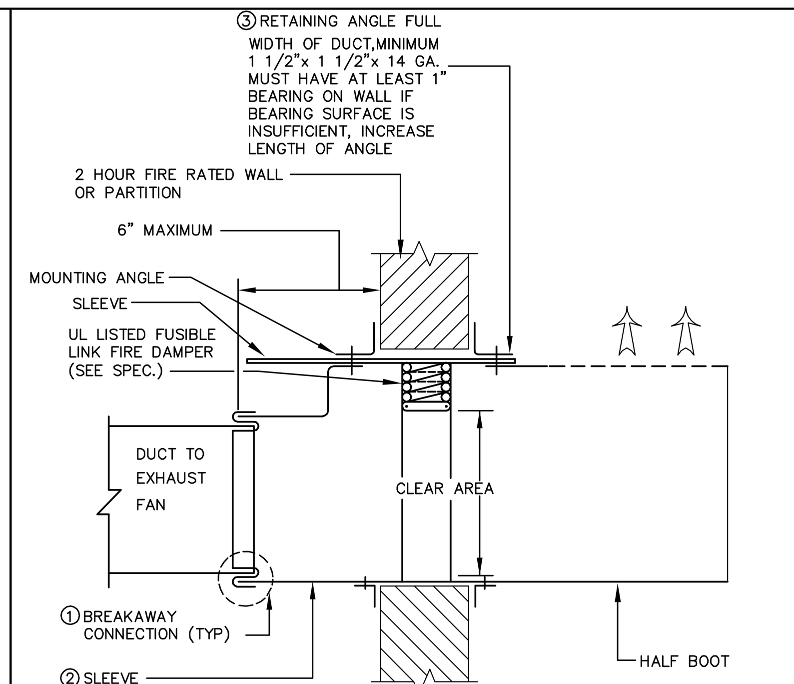
1 BREAKAWAY CONNECTION SHALL BE SIMILAR TO UL555 SEC. 14.4 APPROVED TYPES, AND NFPA 90A.
2 SLEEVE MAY BE DUCT GAUGE IF UL555 CONNECTIONS ARE USED. SLEEVE SHALL BE 16 GA. UP TO 36"Wx24"H OR 14 GA. FOR LARGER SIZES.
3 SHEET METAL CONTRACTOR SHALL FURNISH CONSTRUCTION CONTRACTOR WITH OPENING SIZES. ALL OPENINGS SHALL BE PACKED WITH SUITABLE FIRE RETARDANT MATERIAL.
4 ACCESS DOOR MUST BE LOCATED AS REQUIRED TO ENABLE RESETTING OF DAMPER. MORE THAN ONE DOOR MAY BE REQUIRED ON LARGE DUCTS.
5 DAMPER CLEAR OPEN AREA SHALL BE EQUAL TO INSIDE CLEAR DUCT DIMENSION OF CONNECTING DUCTS OR TRANSFER OPENING.

AUTOMATIC FIRE DAMPERS (F.L.D.)



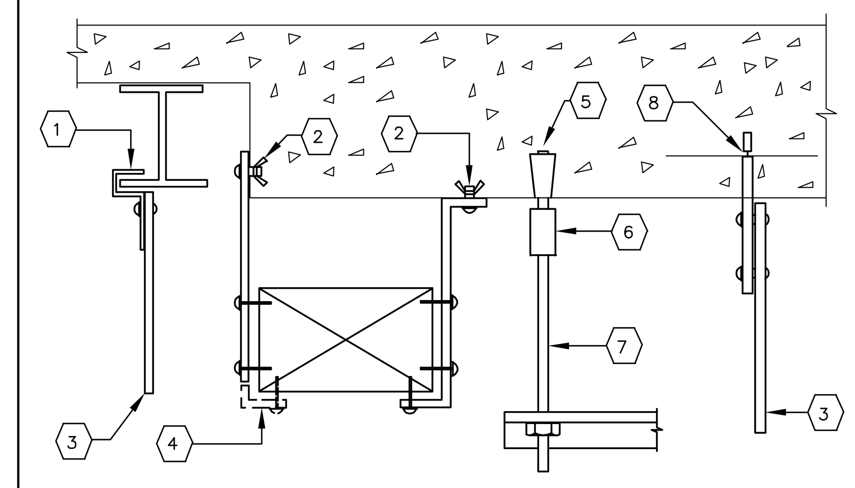
NOTE:
BOOT CONNECTIONS SHALL MEET ALL APPLICABLE CODE REQUIREMENTS.

TOILET EXHAUST BOOT CONNECTION DETAIL

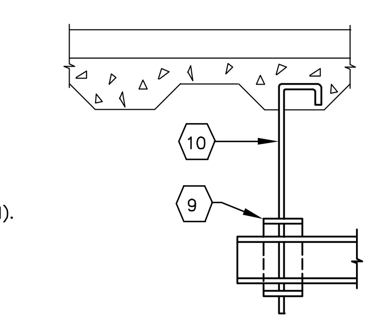


1 BREAKAWAY CONNECTION SHALL BE SIMILAR TO UL555 SEC. 14.4 APPROVED TYPES, AND NFPA 90A.
2 SLEEVE MAY BE DUCT GAUGE IF UL555 CONNECTIONS ARE USED. SLEEVE SHALL BE 16 GA. UP TO 36"Wx24"H OR 14 GA. FOR LARGER SIZES.
3 SHEET METAL CONTRACTOR SHALL FURNISH CONSTRUCTION CONTRACTOR WITH OPENING SIZES. ALL OPENINGS SHALL BE PACKED WITH SUITABLE FIRE RETARDANT MATERIAL.
4 ACCESS DOOR MUST BE LOCATED AS REQUIRED TO ENABLE RESETTING OF DAMPER. MORE THAN ONE DOOR MAY BE REQUIRED ON LARGE DUCTS.
5 DAMPER CLEAR OPEN AREA SHALL BE EQUAL TO INSIDE CLEAR DUCT DIMENSION OF CONNECTING DUCTS OR TRANSFER OPENING.
6 TYPE "B" OR "C" MOUNTING SHALL BE USED FOR ALL DAMPERS. TYPE "A" MOUNTING IS NOT PERMITTED.

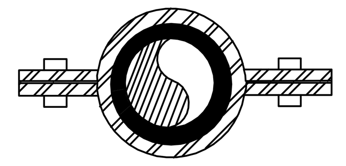
AUTOMATIC FIRE DAMPERS (F.L.D.) WITH HALF BOOT APPLICATION



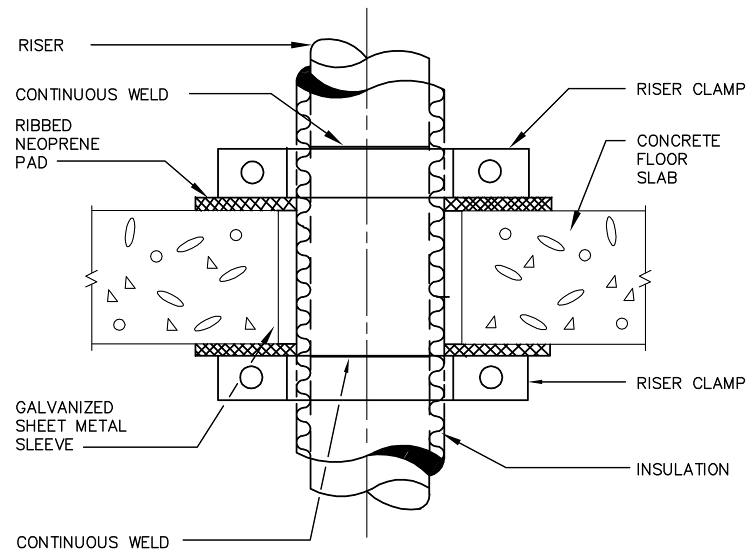
1. H.I.T. OR CADDY BEAM CLIP FOR APPROPRIATE BEAM THICKNESS.
2. PHILLIPS JS14C (BSA APPROVAL NO. 39058 SM) OR EQUAL, OR FORCED ENTRY FASTENERS.
3. BAND IRON HANGER PER CODE OR SMACNA.
4. TURN UNDER WHEN DUCT IS OVER 47" WIDE.
5. PHILLIPS J38C OR EQUAL
6. THREADED ROD COUPLING.
7. THREADED ROD (SIZE AS REQUIRED 3/8" MIN).
8. SCISSOR CLAMP ON REINFORCED ROD.
9. G.A.T. CHANNEL CLAMP SLAB FASTENER.
10. STEEL ROD (3/8"MIN.)



METHOD OF HANGING DUCTWORK

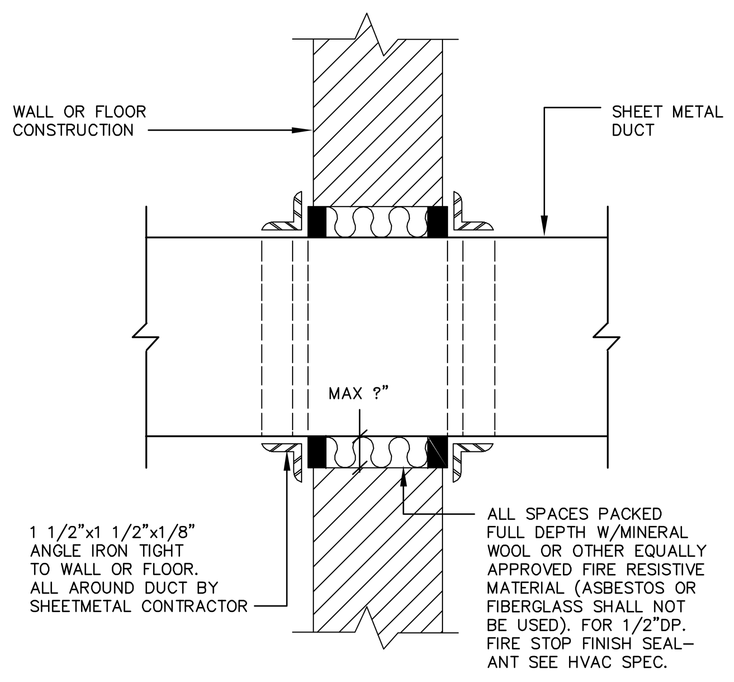


PLAN VIEW



ELEVATION

TYPICAL RISER ANCHOR DETAIL



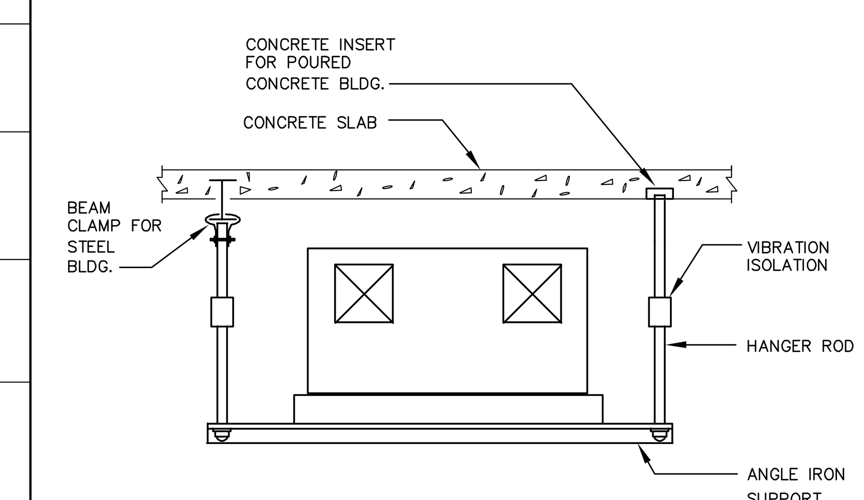
NOTE:
1. FOR WALLS REQUIRING FIRE DAMPERS, SEE OTHER DETAILS.

DETAIL OF CAULKING OF DUCT PIERCING WALLS OR FLOORS WHERE FIRE DAMPERS ARE NOT REQUIRED

INTERPRETATION OF SINGLE LINE DUCTWORK

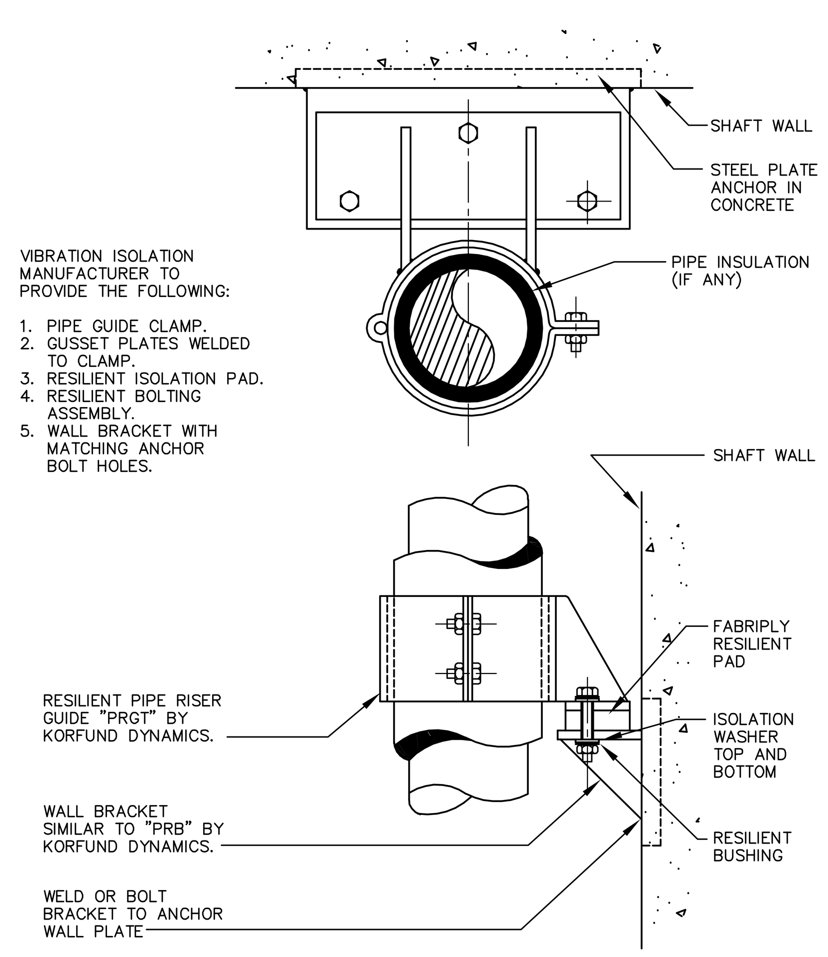
WHERE DUCTWORK IS SHOWN SINGLE LINE, FOLLOWING SHALL APPLY FOR ACTUAL DUCT CONSTR.

SINGLE LINE	ACTUAL CONSTRUCTION
ELBOW	DOUBLE THICKNESS TURNING VANES (EITHER TYPE ELBOW AT CONTR. OPTION–SUBJECT TO SPACE CONDITIONS).
SPLIT OR TAKE–OFF	a b; CONSTANT VOL. SYST.; A,B SHALL BE PROPORTIONAL TO AIR QUANTITY, 4" (10cm) MIN. IF A or B IS LESS THAN 4" (10cm), USE TAP DETAIL. VOLUME DAMPER IN SHORTER BRANCH.; VARIABLE VOL. SYST.
TAP TAKE–OFF	AIR FLOW; SUPPLY; VOLUME DAMPER; ADJUSTABLE TAP UP TO 1000FPM OVER 1000 FPM USE V.D. ONLY; AIR FLOW; RETURN
RISE OR DROP	ELEVATION; OFFSET IN VERTICAL PLANE SHALL BE MADE WITH SMOOTH FITTINGS.
HORIZONTAL OFFSET	OFFSET IN HORIZONTAL PLANE SHALL BE MADE WITH SMOOTH FITTINGS.
PLENUM OVER DIFFUSER; CONN. TO LINEAR DIFFUSER PLENUM	PLENUM OVER LINEAR SUPPLY OR RETURN DIFFUSER OR GRILLE; CONICAL FITTINGS; REGULATION OF VOLUME DAMPER SHALL BE ACCESSIBLE THROUGH THE FACE OF DIFFUSER
FLD; FIRE RATED WALL; FIRE DAMPER	ACCESS DOOR IN DUCT; FLD MOUNTING TYPE DEPENDS ON AIR VELOCITIES AND DUCT SIZE – SEE SPECIFICATIONS.
HTG. COIL; HEATING COIL	AIR FLOW; FLARE/TRANSITION DUCT TO ACCOMMODATE COIL; COIL WITH FLANGED CONNECTION ALL AROUND; ACCESS DOORS



NOTES:
METHOD OF HANGING, TYPE OR INSERT, BEAM CLAMP, ROD, ETC., MUST BE APPROVED BY STRUCTURAL ENGINEER.

TYPICAL FAN EQUIPMENT HANGING DETAIL

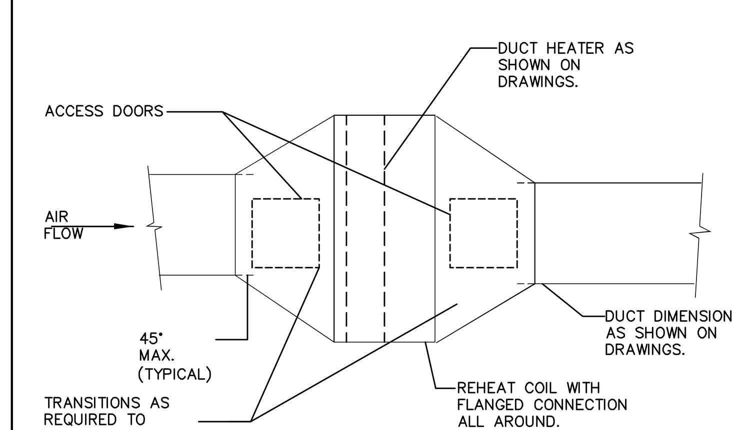


VIBRATION ISOLATION MANUFACTURER TO PROVIDE THE FOLLOWING:

1. PIPE GUIDE CLAMP.
2. GUSSET PLATES WELDED TO CLAMP.
3. RESILIENT ISOLATION PAD.
4. RESILIENT BOLTING ASSEMBLY.
5. WALL BRACKET WITH MATCHING ANCHOR BOLT HOLES.

RESILIENT PIPE RISER GUIDE

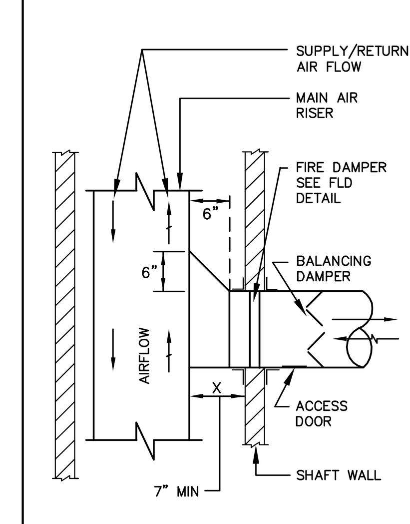
(FOR PIPE DIAMETERS 6" AND SMALLER)



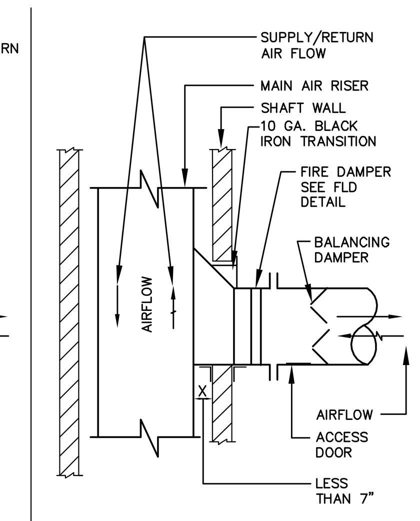
NOTES:
1. PROVIDE APPROVED DUCT HANGERS WITHIN 12" HORIZONTALLY (BOTH UPSTREAM AND DOWNSTREAM) OF THE COIL.
2. FOR PIPE CONNECTIONS, SEE DETAILS AND SPECIFICATIONS.

REHEAT COIL DUCT CONNECTION DETAIL

NO SCALE



TYPE 1 SECTION



TYPE 2 SECTION

NOTES:
1. FOR UPWARD SUPPLY OR DOWNWARD RETURN AIR FLOW, REVERSE DIRECTION OF FLARE TRANSITION.
2. USE TYPE 1 IF "X" DIMENSION IS 7" OR GREATER.
3. USE TYPE 2 IF "X" DIMENSION IS LESS THAN 7".
4. FOR ROUND DUCTWORK–USE CONCENTRIC CONICAL CONNECTION FITTING.

FLARE TRANSITION FOR CONNECTION OF DUCT BRANCHES TO DUCT RISER

(TYPICAL FOR ALL BRANCHES)

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

DEPT OF BLDGS 121185760 Job Number
ES451512025 Scan Code

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

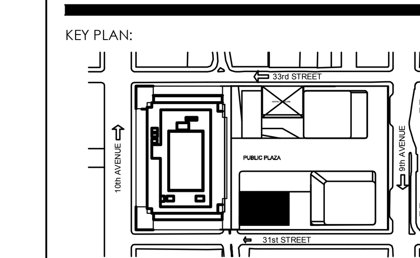
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents

D.O.B. NUMBER:
NB#

NORTH:
Scale: NONE
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
MECHANICAL
DETAILS SHEET NO.5

SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	DL
CHECKED BY:	DD
DWG. No.:	M-505.00
SHEET. No.:	39 of 39

FILE No: I:\120187-02\Mech\M-505(Details).dwg

DEPT OF BLDGS 121185760 Job Number
ES118247463 Scan Code

KEY OF SYMBOLS

NOTE: THE KEY OF SYMBOLS INDICATED IS FOR CONVENIENCE ONLY AND ITEMS INDICATED ARE NOT NECESSARILY WITHIN THE SCOPE OF THE WORK.

Symbol	Description
ST	STORM PIPING
SAN	SOIL OR WASTE PIPING (S) (W)
L	LEADER (L) (LDR)
IW	INDIRECT WASTE
	PIPING INSULATED OVER HEAT TRACING
	VENT PIPING
IR	IRRIGATION PIPING
	COLD WATER PIPING (C.W.)
	HOT WATER PIPING (H.W.)
	HOT WATER CIRCULATING PIPING (H.W.C.)
G	GAS PIPING (G)
F	FIRE STANDPIPE PIPING (F) (FSP)
PD	PUMP DISCHARGE PIPING (P.D.)
SP	SPRINKLER PIPING (SP.)
D	SPRINKLER DRY PIPING (D)
	GATE VALVE (G.V.)
	LOCKSHIELD VALVE (GLOBE VALVE)
	PLUG COCK
	CHECK VALVE (C.V.)
	HOSE BIBB (H.B.) SILL COCK (S.C.)
	VACUUM BREAKER (V.B.)
	PRESSURE RELIEF VALVE PRESS. & TEMP. RELIEF VALVE
	PRESSURE REGULATING VALVE
	STRAINER
	"P" TRAP FOR LAV., SINK, ETC.
	CLEANOUT DECK PLATE (C.O.D.P.)
	SHOCK ABSORBER
	ANCHOR
	GUIDE
	PRESSURE GAUGE
	THERMOMETER
	TEMPERATURE REGULATOR
	WALL HYDRANT (W.H.)
	YARD HYDRANT (Y.H.) (D.H.)
	HWATT
	UNION CONNECTION
	EXPANSION JOINT
	AUTOMATIC AIR VENT VALVE

STACK & RISER SYMBOLS

Symbol	Description
P / X	SOIL WASTE & VENT STACKS & WATER RISERS
L / X	STORM LEADER
	GAS RISER
	RETAIL GAS RISER
F / X	FIRE STANDPIPE RISER
(XXX Ø)	STORM DRAINAGE AREA
[XXX Ø]	VERTICAL WALL ALLOWANCE STORM DRAINAGE AREA
(XXX GPM)	CONTROL FLOW DRAINAGE DRAIN DISCHARGE
WTS	WATER TIGHT SLEEVE

Abbreviation	Meaning
A.B.D.	AUTOMATIC BALL DRIP
A.D.	ACCESS DOOR
A. DR.	AREA DRAIN
B.T.	BATH TUB
C.D.	CANOPY DRAIN
C.F.H.	CUBIC FEET PER HOUR
C.F.M.	CUBIC FEET PER MINUTE
C.F.S.	CUBIC FEET PER SECOND
CLG.	CEILING
C.O.	CLEANOUT
C.O.D.P.	CLEAN OUT DECK PLATE
C.V.	CHECK VALVE
C.V.B.	CHECK VALVE BOX
D.I.	DROP INLET
D.F.	DRINKING FOUNTAIN
DN.	DOWN
DW.	DISHWASHER
EL.	ELEVATION
E.W.C.	ELECTRIC WATER COOLER
F.A.I.	FRESH AIR INLET
F.D. FL. DR.	FLOOR DRAIN
FL.	FLOOR
F.O.	FLOOR OUTLET
F.U.	FIXTURE UNITS
FUN. DR.	FUNNEL DRAIN
F.V.	FLUSH VALVE FLUSHOMETER
G.V.	GATE VALVE
H.C.	HUNG CEILING
H.R.	HOSE RACK
INV.	INVERT
LAV.	LAVATORY
MH.	MANHOLE
M.S.	MOP SINK
N.C.F.	NON CONTROLLED FLOW
N.I.C.	NOT IN CONTRACT
O.S.&Y.	OUTSIDE SCREW & YOKE
P.C.	PLUG COCK
P.O.	PLUGGED OUTLET
R.P.B. F.P.	REDUCED PRESSURE BACKFLOW PREVENTER
R.D.	ROOF DRAIN
R.T.	RUNNING TRAP
R.C.V.	RISER CONTROL VALVE
S.P.O.	SOIL PLUGGED OUTLET
S.H.	SHOWER HEAD
SH.– SHWR.	SHOWER
SK.	SINK
S.S.	SERVICE SINK
S.E.	SEWAGE EJECTOR
T.D.	TERRACE DRAIN
T.E.	TERRACE ELEVATION
T.S.	TAMPER SWITCH
UR.	URINAL
U.O.S.W.	UNDER ANOTHER SECTION OF THE WORK
VAL. O. V.O.	VALVED OUTLET
V.T.R.	VENT THRU ROOF
V.P.O.	VENT PLUGGED OUTLET
VWA	VERTICAL WALL ALLOWANCE
W/D	WASHER/DRYER
W.C.	WATER CLOSET

PLUMBING INSTALLATION CRITERIA

EACH BIDDER SHALL VISIT THE SITE AND BECOME INFORMED AS TO THE CONDITION OF THE PREMISES AND THE EXTENT AND CHARACTER OF WORK REQUIRED. NO ADDITIONAL COMPENSATION WILL BE APPROVED DUE TO FIELD CONDITIONS.

1. PROVIDE ROUGH–IN AND FINAL CONNECTIONS FOR ALL PLUMBING FIXTURES INCLUDING WASTE, VENTS, HOT AND COLD WATER, AND PROVIDE ALL PLUMBING WORK NECESSARY TO MAKE THE BUILDING ENTIRELY OPERABLE AND ACCEPTABLE TO LOCAL HEALTH AND BUILDING OFFICIALS.
2. PLUMBING CONTRACTOR SHALL LOCATE ALL PIPING AND PLUMBING ROUGH–IN FOR PLUMBING FIXTURES IN ACCORDANCE WITH ROUGH–IN DRAWINGS PROVIDED BY EQUIPMENT MANUFACTURERS.
3. ALL VISIBLY EXPOSED PIPE TO EQUIPMENT SHALL BE CHROME PLATED BRASS.
4. PROVIDE SHUT–OFF VALVES FOR EACH PLUMBING FIXTURE AND PIECE OF EQUIPMENT AND EACH RESIDENTIAL UNIT ENTRANCE.
5. PROVIDE TRAPS ON ALL WASTE PIPING FROM PLUMBING FIXTURES AND PIECE OF EQUIPMENT.
6. COORDINATE POSITION OF SLEEVES AND OPENINGS THROUGH FLOOR WITH THE GENERAL CONTRACTOR.
7. PROVIDE VACUUM BREAKERS AND CHECK VALVES FOR THE PLUMBING FIXTURES WHERE AND WHEN REQUIRED BY CODE.
8. ALL PIPING AND EQUIPMENT SHALL BE SUBSTANTIALLY SUPPORTED FROM THE BUILDING STRUCTURE.
   A. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF HANGER RODS IN REQUIRED LOCATIONS, PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND APPROVED.
   B. NO PLUMBING PIPING SHALL BE HUNG FROM THE PIPING OF OTHER TRADES OR DUCTWORK. HANGERS SHALL BE OF HEAVY CONSTRUCTION, SUITABLE FOR THE SIZE OF PIPE TO BE SUPPORTED.
9. PLUMBING FIXTURES TO BE APPROVED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE PLUMBING CONTRACTOR.
10. ALL PLUMBING FIXTURES SPECIFIED BY THE ARCHITECT. SEE ARCHITECTURAL DRAWINGS, SPECIFICATIONS, DETAILS AND ELEVATIONS OF THE PANTRY, BATH, ETC. FOR REQUIRED PLUMBING CONNECTIONS.

NEW YORK CITY BUILDING DEPARTMENT PLUMBING NOTES

THE PLUMBING SYSTEMS (SANITARY, WASTE, VENT, WATER DISTRIBUTION AND GAS) AND ALL ASSOCIATED EQUIPMENT WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE FULL REQUIREMENTS OF THE NEW YORK CITY 2008 PLUMBING CODE. COMPLIANCE WITH THE FULL PROVISIONS OF ALL NEW YORK CITY BUILDING AND PLUMBING CODE ACCESSIBILITY REQUIREMENTS AND PLUMBING FIXTURE FLOW REQUIREMENTS OF THE N.Y.C. 2008 PLUMBING CODE.

1. THE SANITARY SYSTEM SHALL BE PROVIDED IN FULL ACCORDANCE WITH THE GENERAL PROVISIONS OF SECTION PC301.
2. THE MATERIALS USED IN THE PLUMBING SYSTEMS WILL BE PROVIDED IN FULL ACCORDANCE WITH SECTIONS PC302 AND PC303.
3. EQUIPMENT HOOK–UP AND THE JOINING WILL BE FULL COMPLIANCE WITH SECTIONS PC605 AND PC705.
4. THE INSTALLATION OF FIXTURES WILL BE IN FULL ACCORDANCE WITH PC CHAPTER 4.
5. TRAPS FOR FIXTURES AND DRAIN LINES WILL BE PROVIDED AND CLEANOUTS INSTALLED IN FULL COMPLIANCE WITH SECTIONS PC412, PC708 AND PC CHAPTER 10.
6. VERTICAL AND HORIZONTAL PIPING WILL BE HUNG AND SUPPORTED AS DIRECTED IN SPECIFICATIONS AND WITH THE FULL COMPLIANCE WITH SECTION PC308.
7. THE WATER SUPPLY SYSTEMS OF THE SUBJECT BUILDING SHALL BE INSTALLED AND MAINTAINED IN FULL COMPLIANCE WITH PC CHAPTER 6.
8. THE SANITARY DRAINAGE SYSTEM WILL BE SIZED AND INSTALLED IN FULL COMPLIANCE WITH PC CHAPTER 7.
9. THE VENT PIPING FOR THE SANITARY DRAINAGE SYSTEM OF THE SUBJECT BUILDING WILL BE INSTALLED IN FULL COMPLIANCE WITH SECTION PC702 & PC CHAPTER 9.
10. THE STORM DRAINAGE SYSTEM AND PIPING WILL BE INSTALLED IN FULL COMPLIANCE WITH PC CHAPTER 11.
11. GAS PIPING AND EQUIPMENT WILL BE INSTALLED IN FULL COMPLIANCE WITH THE NEW YORK CITY FUEL GAS CODE.
12. ALL TRENCHING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION PC306.
13. RAT PROOFING SHALL BE IN ACCORDANCE WITH SECTION PC304.
14. TEMPORARY TOILET FACILITIES SHALL BE PROVIDED FOR WORKMAN AS PER SECTION PC311.
15. PLUMBING SYSTEMS AND EQUIPMENT SHALL BE CONSTRUCTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE 2008 NEW YORK CITY BUILDING CODE.

Plumbing			
	Drawing No	Description	Scale
	P-001.00	PLUMBING SYMBOLS AND DRAWING LIST	NTS
	P-099.00	PLUMBING UNDERGROUND FLOOR PLAN	1/8"=1'-0"
	P-100.00	PLUMBING CELLAR FLOOR PLAN - SOUTH	1/8"=1'-0"
	P-101.00	PLUMBING CELLAR FLOOR PLAN - NORTH	1/8"=1'-0"
	P-102.00	PLUMBING 1ST FLOOR PLAN - SOUTH	1/8"=1'-0"
	P-103.00	PLUMBING 1ST FLOOR PLAN - NORTH	1/8"=1'-0"
	P-104.00	PLUMBING 2ND FLOOR PLAN	1/8"=1'-0"
	P-106.00	PLUMBING 3RD FLOOR PLAN	1/8"=1'-0"
	P-108.00	PLUMBING 4TH FLOOR PLAN	1/8"=1'-0"
	P-109.00	PLUMBING 5TH THRU 11TH FLOOR PLAN	1/4"=1'-0"
	P-110.00	PLUMBING 12TH & 13TH FLOOR PLAN	1/4"=1'-0"
	P-111.00	PLUMBING 14TH THRU 34TH FLOOR PLAN	1/4"=1'-0"
	P-112.00	PLUMBING 35TH FLOOR PLAN	1/4"=1'-0"
	P-113.00	PLUMBING 36TH FLOOR PLAN	1/4"=1'-0"
	P-114.00	PLUMBING 37TH THRU 51ST FLOOR PLAN	1/4"=1'-0"
	P-115.00	PLUMBING 52ND THRU 55TH FLOOR PLAN	1/4"=1'-0"
	P-116.00	PLUMBING 56TH THRU 61ST FLOOR PLAN	1/4"=1'-0"
	P-117.00	PLUMBING 62ND FLOOR PLAN	1/4"=1'-0"
	P-118.00	PLUMBING 63RD FLOOR PLAN	1/8"=1'-0"
	P-119.00	PLUMBING 64TH FLOOR PLAN	1/8"=1'-0"
	P-301.00	PLUMBING DOMESTIC WATER RISER DIAGRAM #1(35TH THRU 64TH FLOOR)	N.T.S.
	P-302.00	PLUMBING DOMESTIC WATER RISER DIAGRAM #2(CELLAR THRU 34TH FLOOR)	N.T.S.
	P-311.00	PLUMBING SANITARY RISER DIAGRAM #1	N.T.S.
	P-312.00	PLUMBING SANITARY RISER DIAGRAM #2	N.T.S.
	P-313.00	PLUMBING SANITARY RISER DIAGRAM #3	N.T.S.
	P-314.00	PLUMBING SANITARY RISER DIAGRAM #4	N.T.S.
	P-321.00	PLUMBING GAS RISER	N.T.S.
	P-331.00	PLUMBING STORM RISER	N.T.S.
	P-401.00	PLUMBING SCHEDULE SHEET	N.T.S.
	P-501.00	PLUMBING DETAIL SHEET #1	N.T.S.
	P-502.00	PLUMBING DETAIL SHEET #2	N.T.S.

GENERAL NOTES

1. PROVIDE RESTRAINS & SUPPORTS AT BASE OF ALL STACKS & LEADERS.
2. SANITARY & STORM PIPING 8" & LARGER SHALL BE RODDED & CLAMPED AT EACH CHANGE OF DIRECTION.
3. PROVIDE SLEEVES THRU BEAMS AND SHEAR WALLS AS REQUIRED FOR HORIZONTAL AND VERTICAL PIPING, COORDINATE WITH OTHER TRADES AND OTHER CONTRACTORS
4. ALL CLEANOUTS ON PIPING FROM KITCHEN AREAS SHALL HAVE THEIR CLEANOUTS EXTENDED UP TO CLEANOUT DECK PLATES AT THE FLOOR ABOVE.
5. ALL PIPING AT COLUMNS SHALL BE INSTALLED AS CLOSE TO COLUMNS AS POSSIBLE. PROVIDE DETAILS ON SHOP DRAWINGS FOR APPROVAL BY ARCHITECT.
6. PROVIDE DEEP SEAL TRAPS ON ALL FLOOR DRAINS.
7. PROVIDE EXPANSION LOOPS & ANCHORS EVERY 100'–0" ON ALL HW & HWR PIPING.
8. IN ADDITION TO THOSE SHOWN ON THE PLANS & RISERS PROVIDE (5) ADDITIONAL 2" CWVO'S W/RPZ'S FOR HVAC CONTRACTOR. INCLUDE A PRV, FLOOR DRAIN & 4" STANDPIPE DRAIN FOR RELIEF PORT. ASSUME ALL REQUIRED SERVICES SHALL BE WITHIN 50'–0" OF EACH DEVICE.
9. GAS PIPING RUNNING THROUGH PUBLIC SPACES AND EGRESS SHALL BE INSTALLED IN RATED ENCLOSURE.

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects,LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

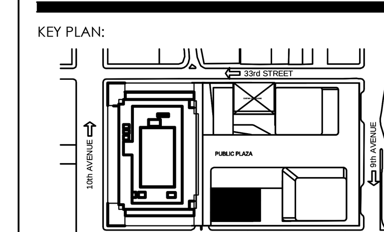
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH:

KEY PLAN:



PROJECT:

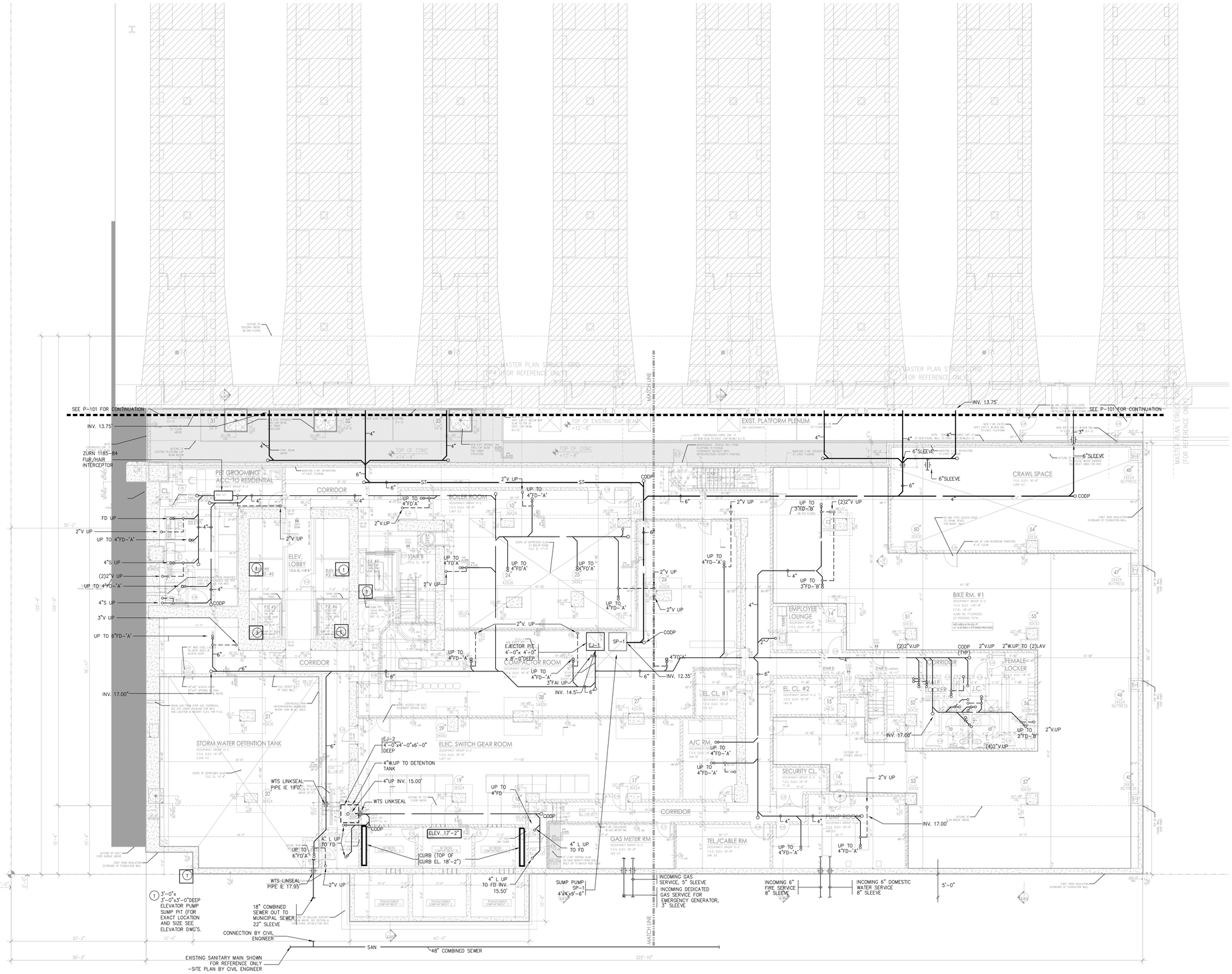
DRAWING TITLE:

SEAL & SIGNATURE:

DATE:
PROJECT No:
DRAWN BY:
CHECKED BY:
DWG. No.:
SHEET. No.:
FILE No:

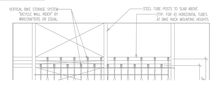
FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-001.dwg SAVED ON 12/8/2014 10:42 AM PLOTTED ON 12/8/2014 11:26 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187502 Job Number
E1578594746G Scan Code



UNDER SLAB PLAN

SC: 1/8" = 1'-0"



* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES. *

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

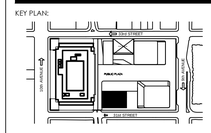
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

O.O.B. NUMBER:
NB#

NORTH
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING CELLAR UNDERGROUND FLOOR PLAN

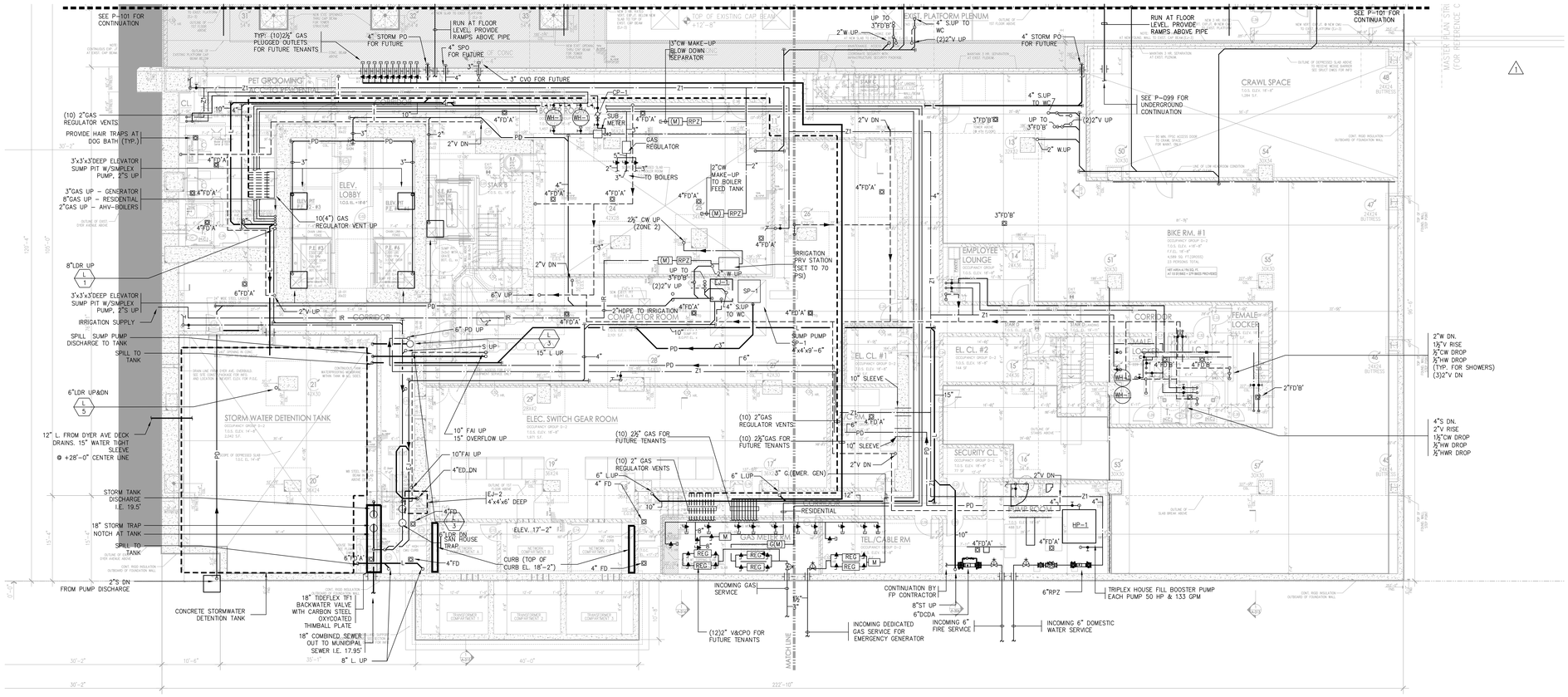
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-099.00
SHEET. No.:	2 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-099 (cellar floor Underground).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-099 (cellar floor Underground).dwg SAVED ON 12/8/2014 12:05 PM PLOTTED ON 12/8/2014 12:07 PM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421189190 Job Number
E350205080 Scan Code



CELLAR FLOOR PLAN - SOUTH

SC: 1/8" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

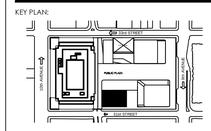
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/8" = 1'- 0"
0 4 8 12 20

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
CELLAR FLOOR PLAN - SOUTH

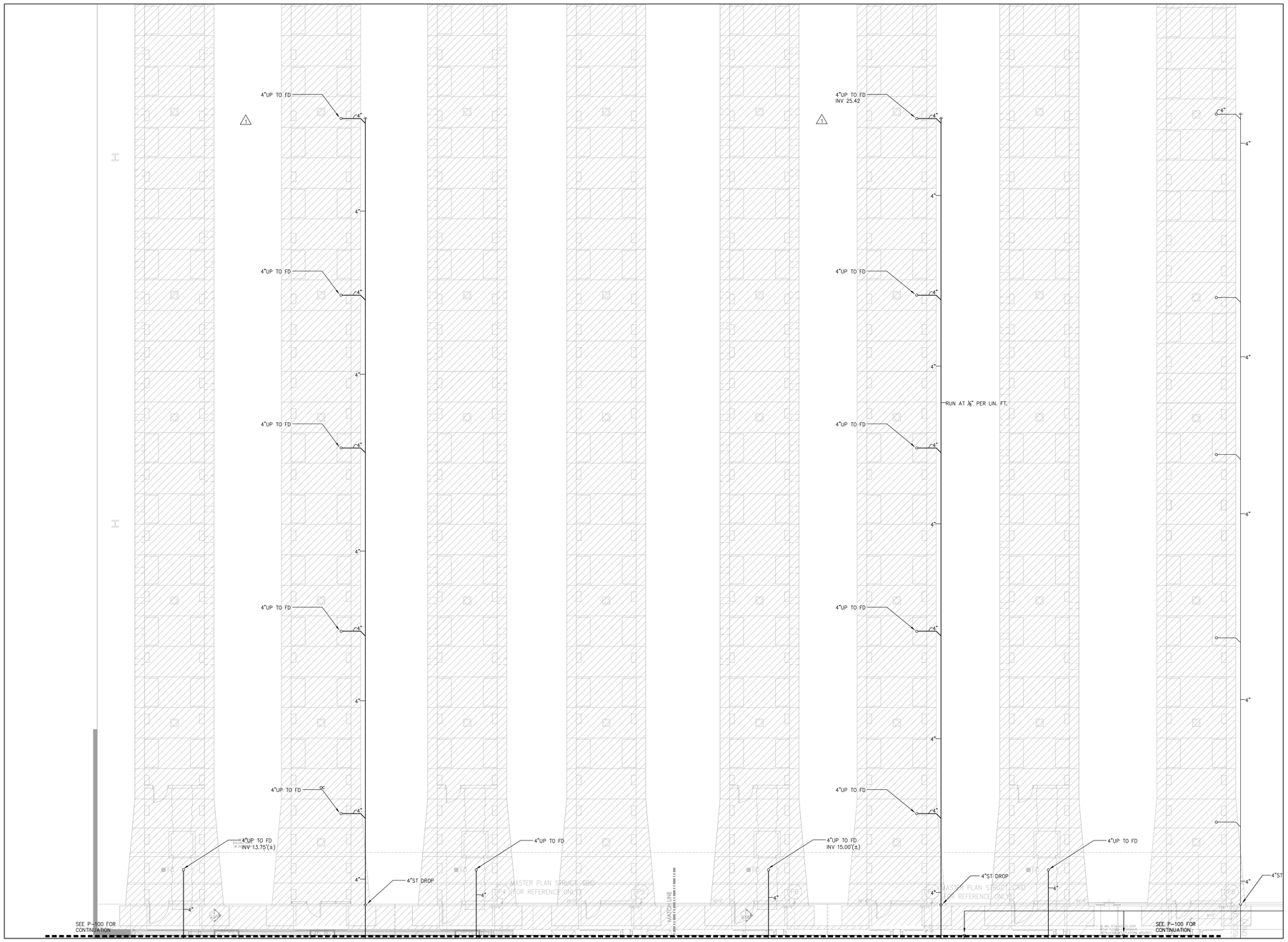
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-100.00
SHEET. No.:	3 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187002P-100 (cellar floor SOUTH) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187002P-100 (cellar floor SOUTH) - DOB.dwg SAVED ON 12/8/2014 11:54 AM PLOTTED ON 12/8/2014 12:07 PM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121185700 Job Number
E5640508973 Scan Code



CELLAR FLOOR PLAN - NORTH

SC: 1/8" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

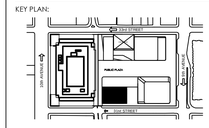
D.O.B. NUMBER:

NB#

NORTH:

Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
CELLAR FLOOR PLAN - NORTH

SEAL & SIGNATURE:

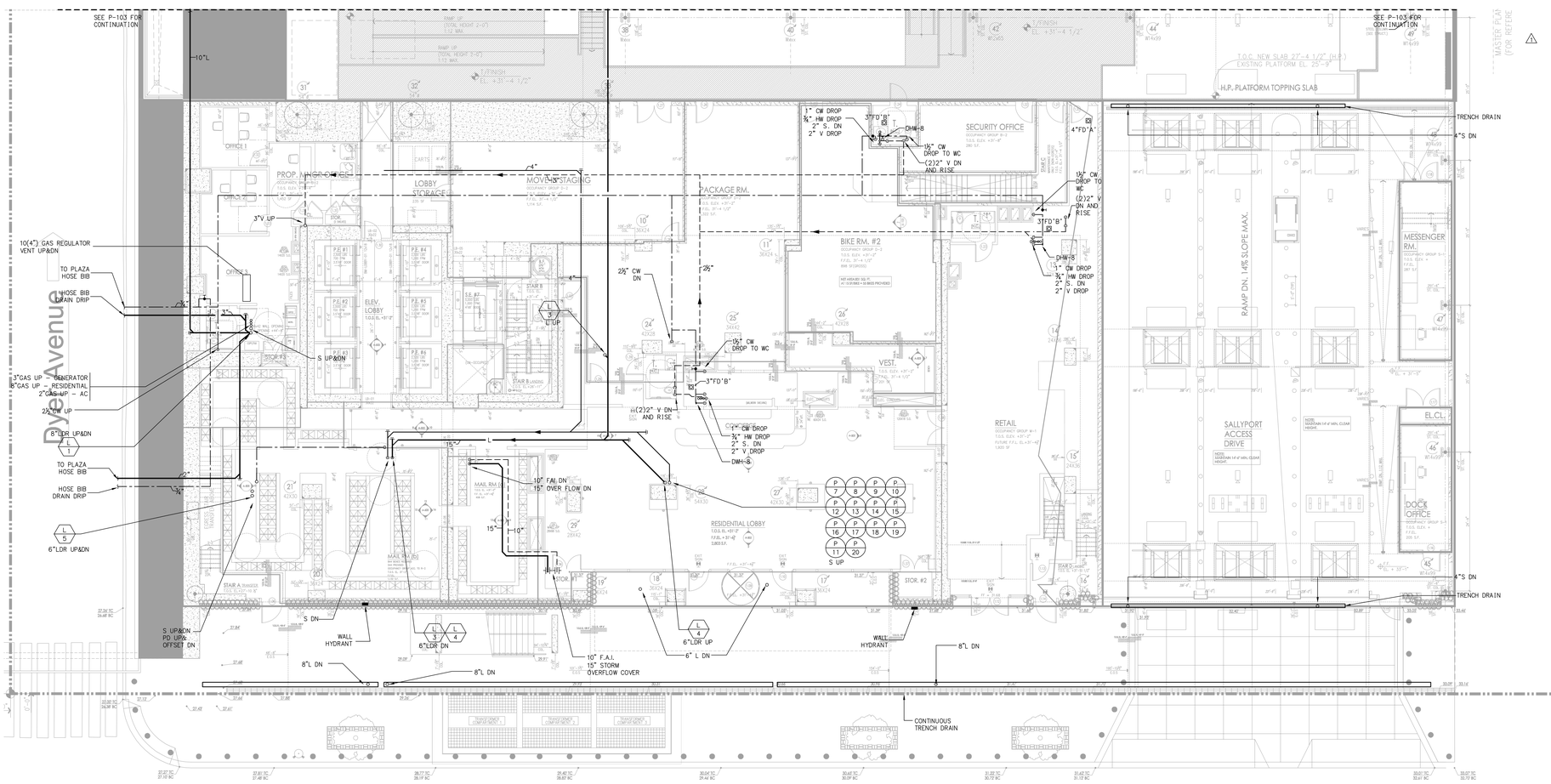
STATE OF NEW YORK · GARY SCHIFF · 038425 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-101.00
SHEET. No.:	4 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-101 (cellar floor NORTH) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-101 (cellar floor NORTH) - DOB.dwg SAVED ON 12/8/2014 11:54 AM PLOTTED ON 12/8/2014 12:07 PM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121189700 Job Number
E500057795 Scan Code



1ST FLOOR PLAN - SOUTH

SC: 1/8" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

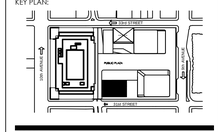
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-08	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/8" = 1'-0"
0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
1ST FLOOR PLAN - SOUTH

SEAL & SIGNATURE:

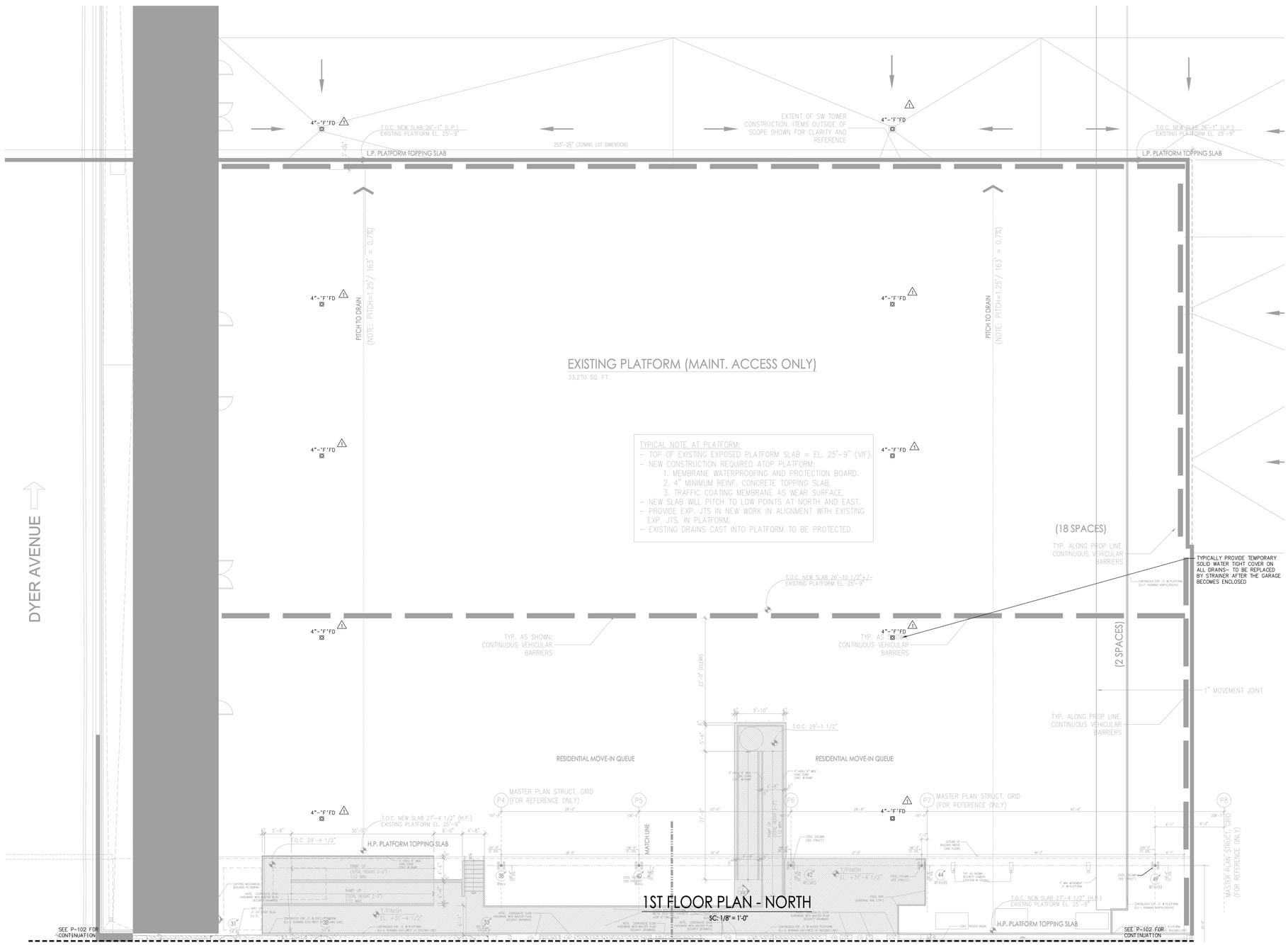
STATE OF NEW YORK · GARY SUSTI · LICENSED PROFESSIONAL ENGINEER

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-102.00
SHEET. No.:	5 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-102 (1st floor SOUTH) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-102 (1st floor SOUTH) - DOB.dwg SAVED ON 12/8/2014 10:43 AM PLOTTED ON 12/8/2014 12:07 PM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121189700 Job Number
E361646770X1 Scan Code



THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

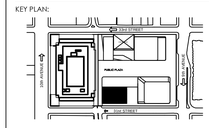
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB filing
2014-03-14	Design Development

D.O.B. NUMBER: NB#

NORTH

Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
1ST FLOOR PLAN - NORTH

SEAL & SIGNATURE:

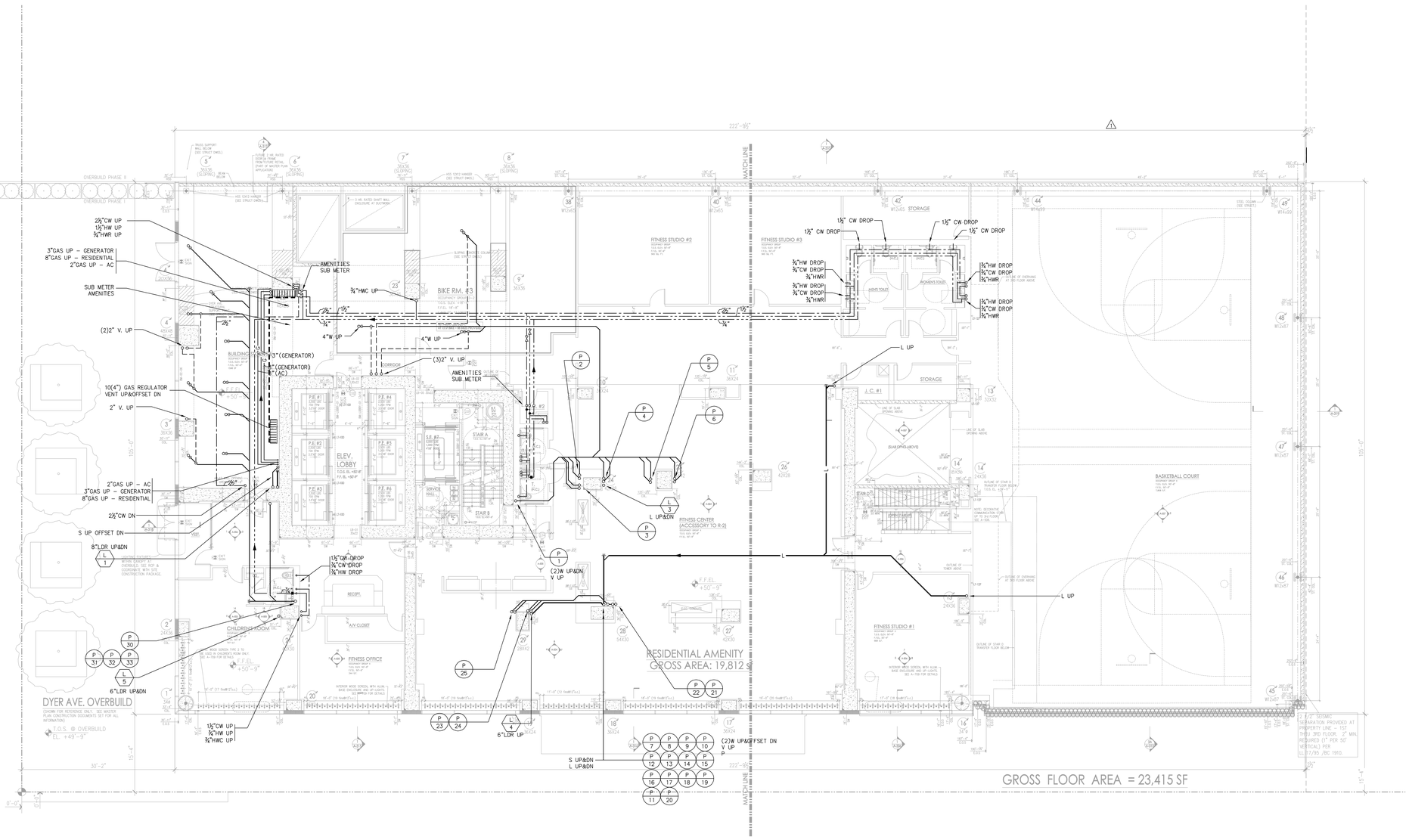
STATE OF NEW YORK · GARY SCHUBERT · 038 · LICENSED PROFESSIONAL ENGINEER

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-103.00
SHEET. No.:	6 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\20187P2P-103 (1st floor NORTH) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\20187P2P-103 (1st floor NORTH) - DOB.dwg SAVED ON 12/8/2014 10:43 AM PLOTTED ON 12/8/2014 12:08 PM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121189150 Job Number
E397249335X Scan Code



2ND FLOOR PLAN

SC: 1/8" = 1'-0"

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

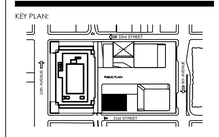
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
2ND FLOOR PLAN

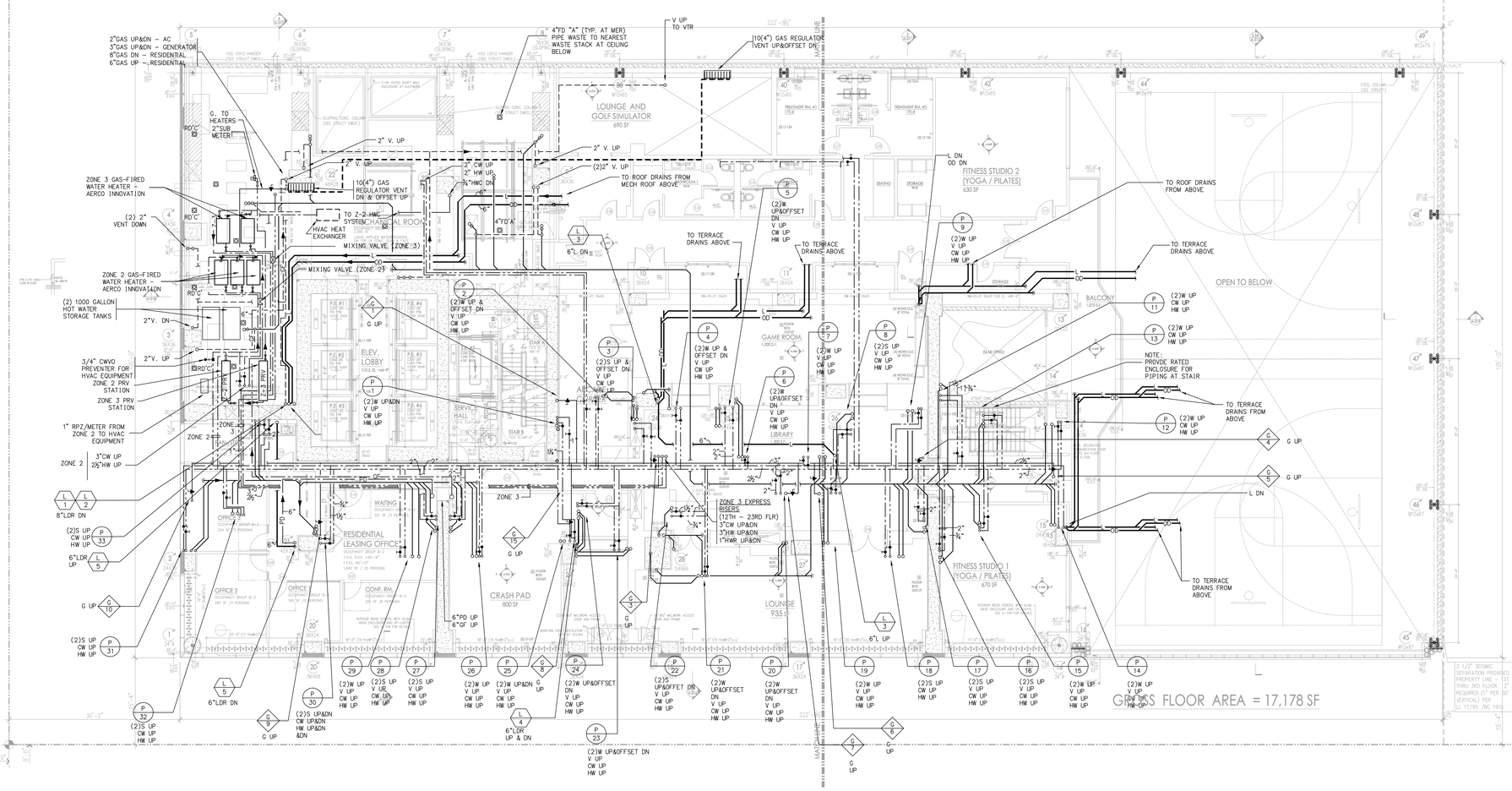
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No.:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-104.00
SHEET. No.:	7 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-104 (2nd floor) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-104 (2nd floor) - DOB.dwg SAVED DN 12/8/2014 12:00 PM PLOTTED BY PELECH, COLLEEN 12/8/2014 12:08 PM PLOTTED DN

DEPT OF BLDGS 121189760 Job Number
E320051396F Scan Code



3RD FLOOR PLAN

SC: 1/8" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILLIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

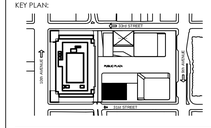
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2013-12-18	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH:

Scale: 1/8" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
3RD FLOOR PLAN

SEAL & SIGNATURE:

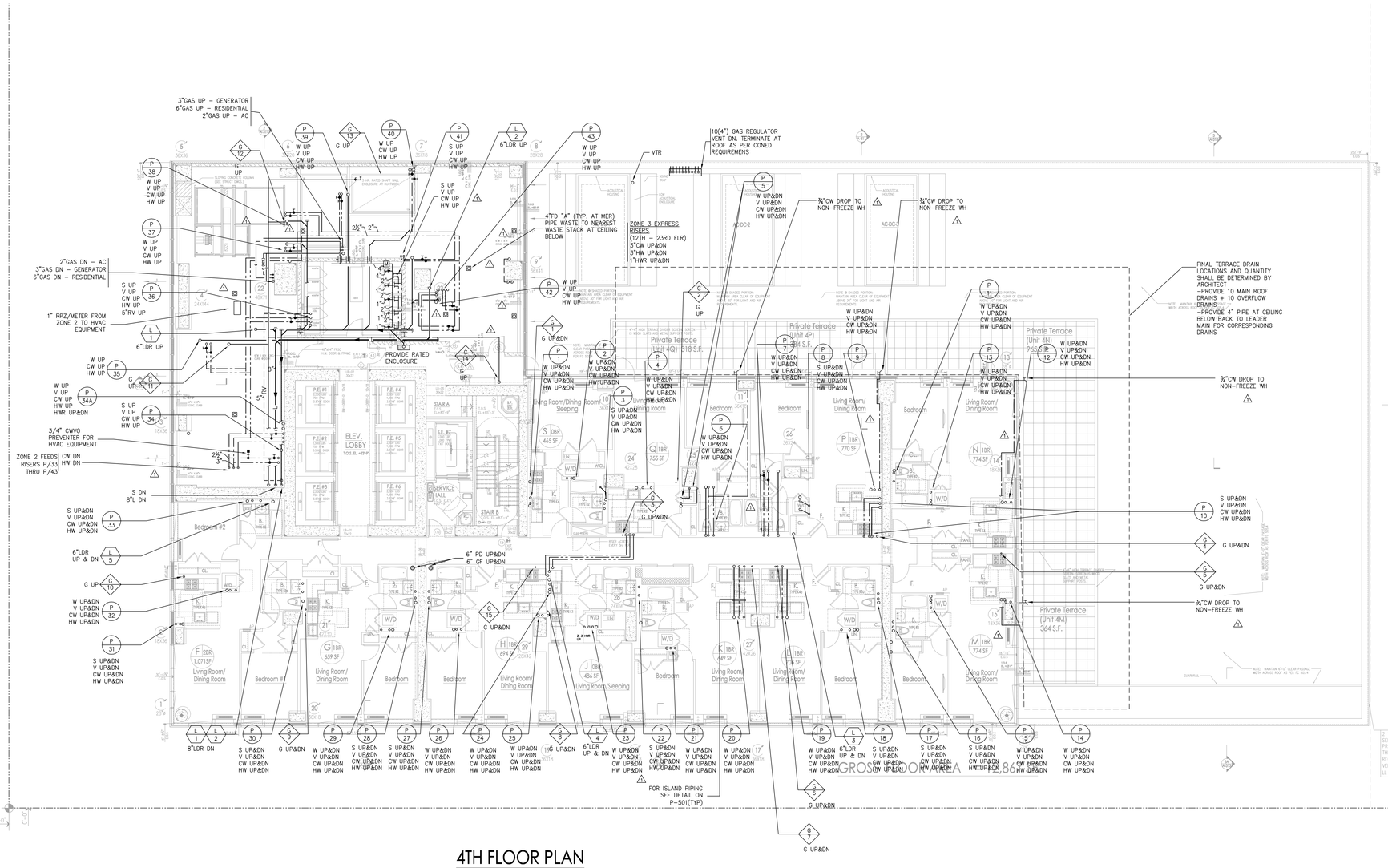
STATE OF NEW YORK · KEVIN WONG · 075 · 075 · LICENSED PROFESSIONAL ENGINEER

DATE:	01/21/14
PROJECT No.:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-106.00
SHEET. No.:	8 of 31

FILE NO: I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-106 (3rd floor) - DOB.dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-106 (3rd floor) - DOB.dwg SAVED DN 12/8/2014 12:01 PM PLOTTED DN 12/8/2014 12:08 PM PLOTTED BY: PELECH, COLLEEN

DEPT OF BLDGS 121189190 Job Number
E3618680405D2 Scan Code



4TH FLOOR PLAN

SC: 1/8" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER: NB#

NORTH

Scale: 1/8" = 1'-0"

KEY PLAN:

PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
4TH FLOOR PLAN

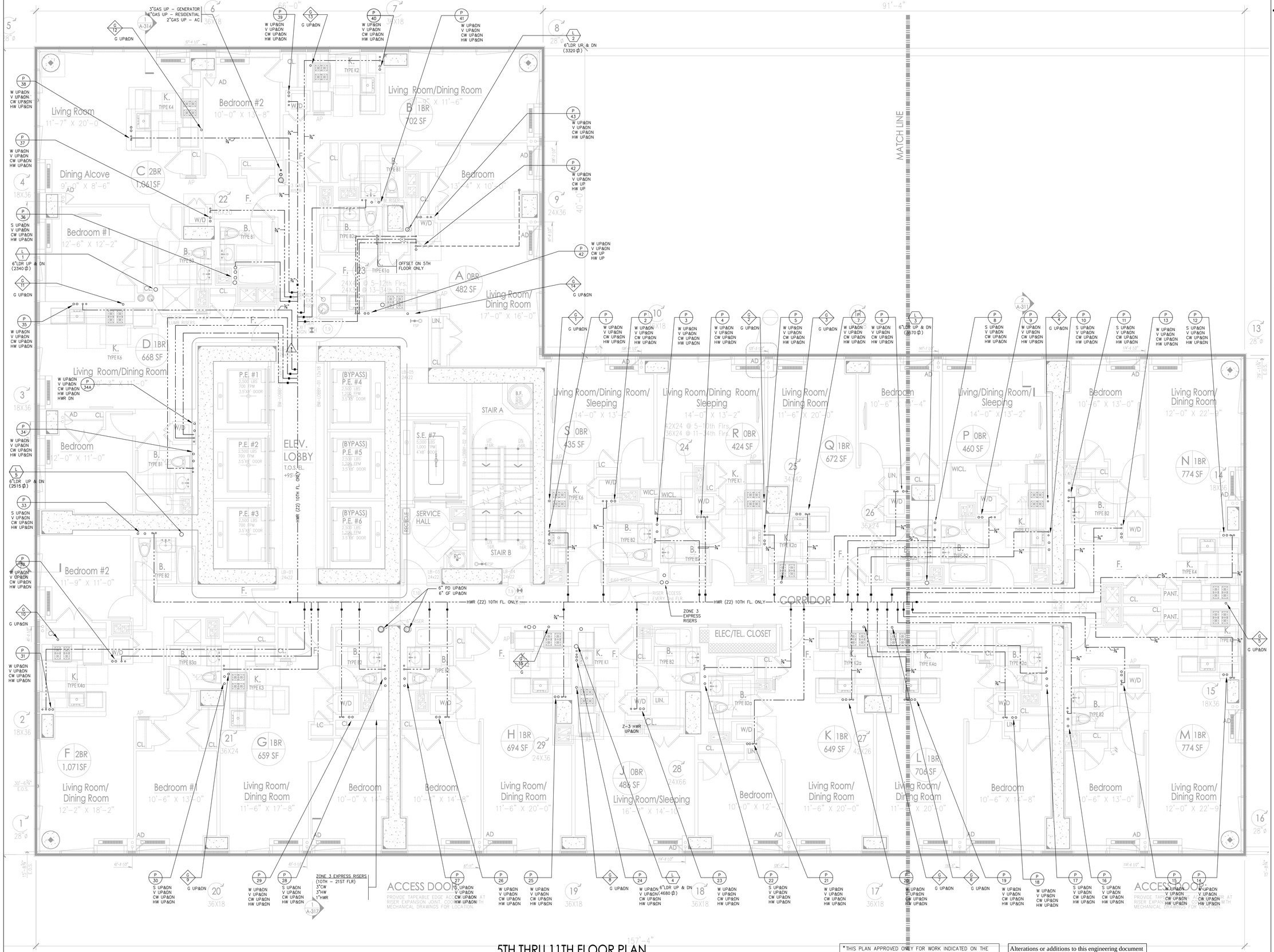
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-108.00
SHEET. No.:	9 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-108 (4th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-108 (4th floor).dwg SAVED ON 12/8/2014 10:45 AM PLOTTED ON 12/8/2014 11:28 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421185190 Job Number
E378454475 Scan Code



5TH THRU 11TH FLOOR PLAN

SC: 1/4" = 1'-0"

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-01-24	50% Design Development
2013-12-18	Schematic Design

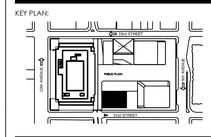
D.O.B. NUMBER:

NB#

NORTH:

Scale: 1/4" = 1'-0"
0 4 8 12 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
5TH THRU 11TH FLOOR PLAN

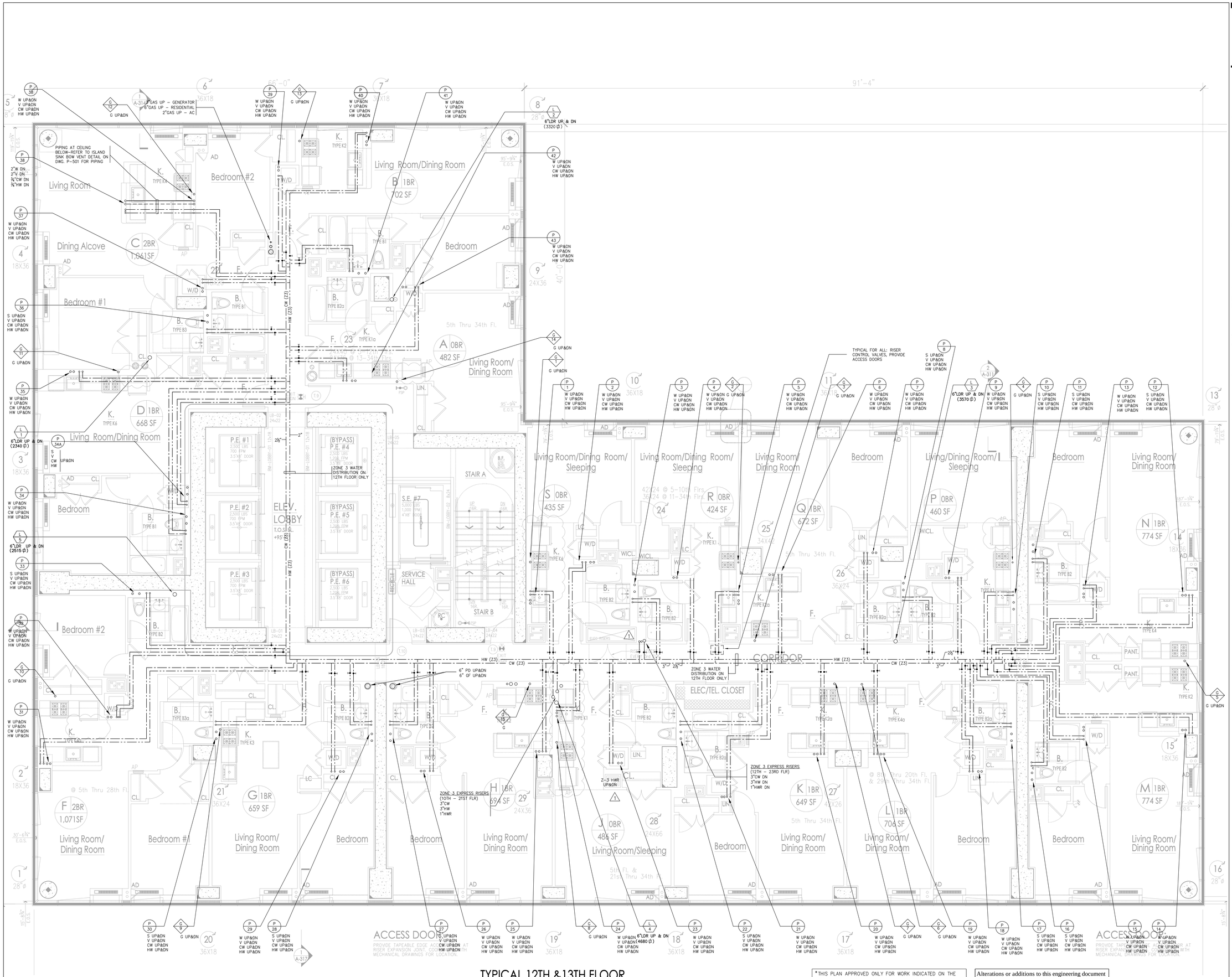
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-109.00
SHEET, No.:	10 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-109 (5th thru 11th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187-02P-109 (5th thru 11th floor).dwg SAVED ON 12/8/2014 10:42 AM PLOTTED ON 12/8/2014 11:28 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187192 Job Number
E1506252281 Scan Code



TYPICAL 12TH &13TH FLOOR

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

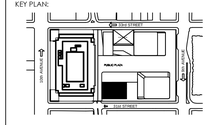
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE	REVISION
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER: NB#

NORTH — Scale: 1/4" = 1'-0" (0, 4, 8, 12, 20)

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
12TH & 13TH FLOOR PLAN

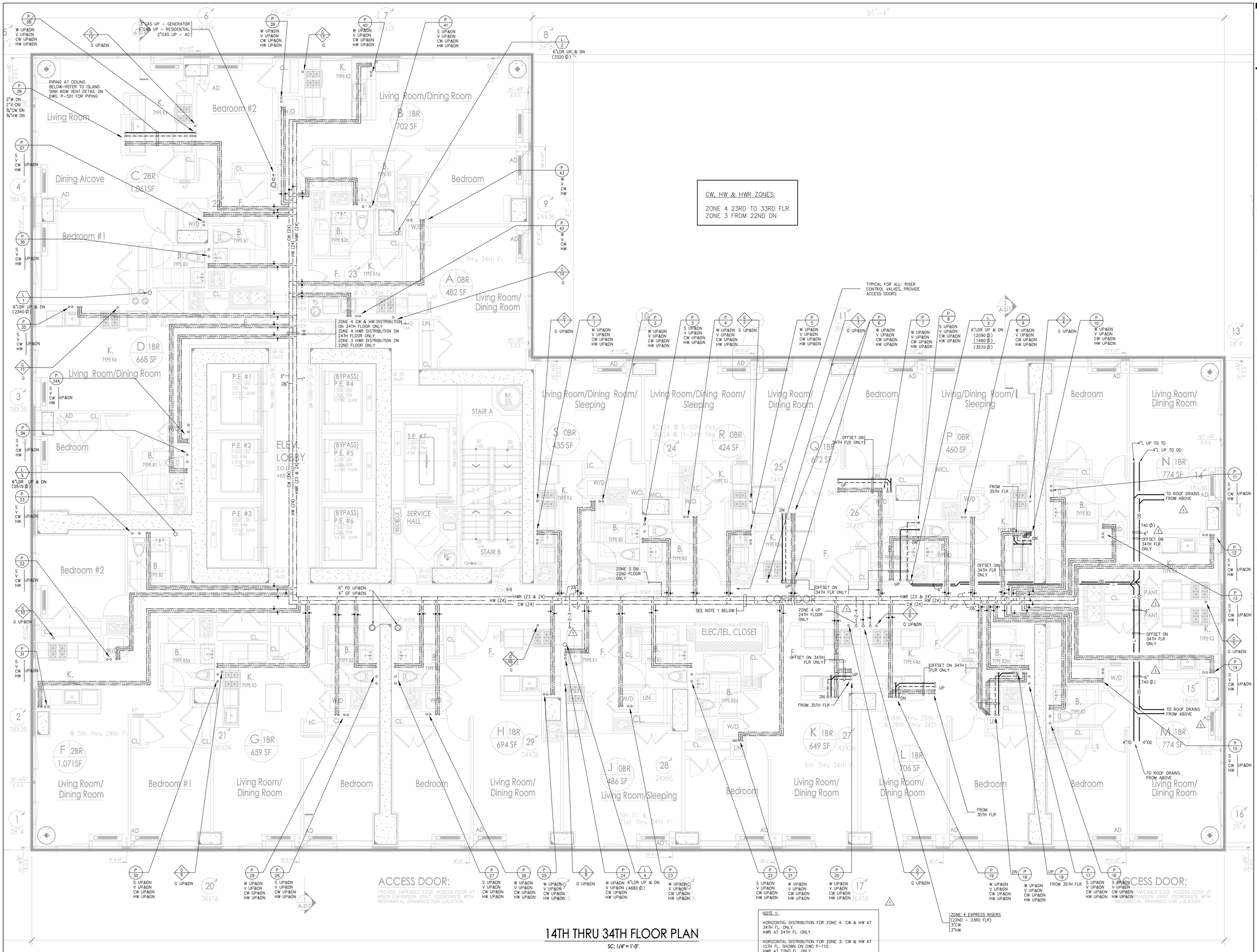
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-110.00
SHEET No.:	11 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-110 (12th - 13th floor).dwg

FILE NAME: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-110 (12th - 13th floor).dwg SAVED ON 12/8/2014 10:41 AM PLOTTED ON 12/8/2014 11:28 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187002 Job Number
E300544237 Scan Code



NOTE 1:

HORIZONTAL DISTRIBUTION FOR ZONE 4: CW & HW AT 34TH FL. ONLY.
HWR AT 24TH FL. ONLY.

HORIZONTAL DISTRIBUTION FOR ZONE 3: CW & HW AT 12TH FL. SHOWN ON DWG P-110.
HWR AT 22ND FL. ONLY.

14TH THRU 34TH FLOOR PLAN

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

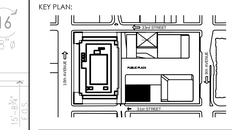
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH

Scale: 1/4" = 1'-0"
0 4 8 12 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
14TH THRU 34TH FLOOR PLAN

SEAL & SIGNATURE:

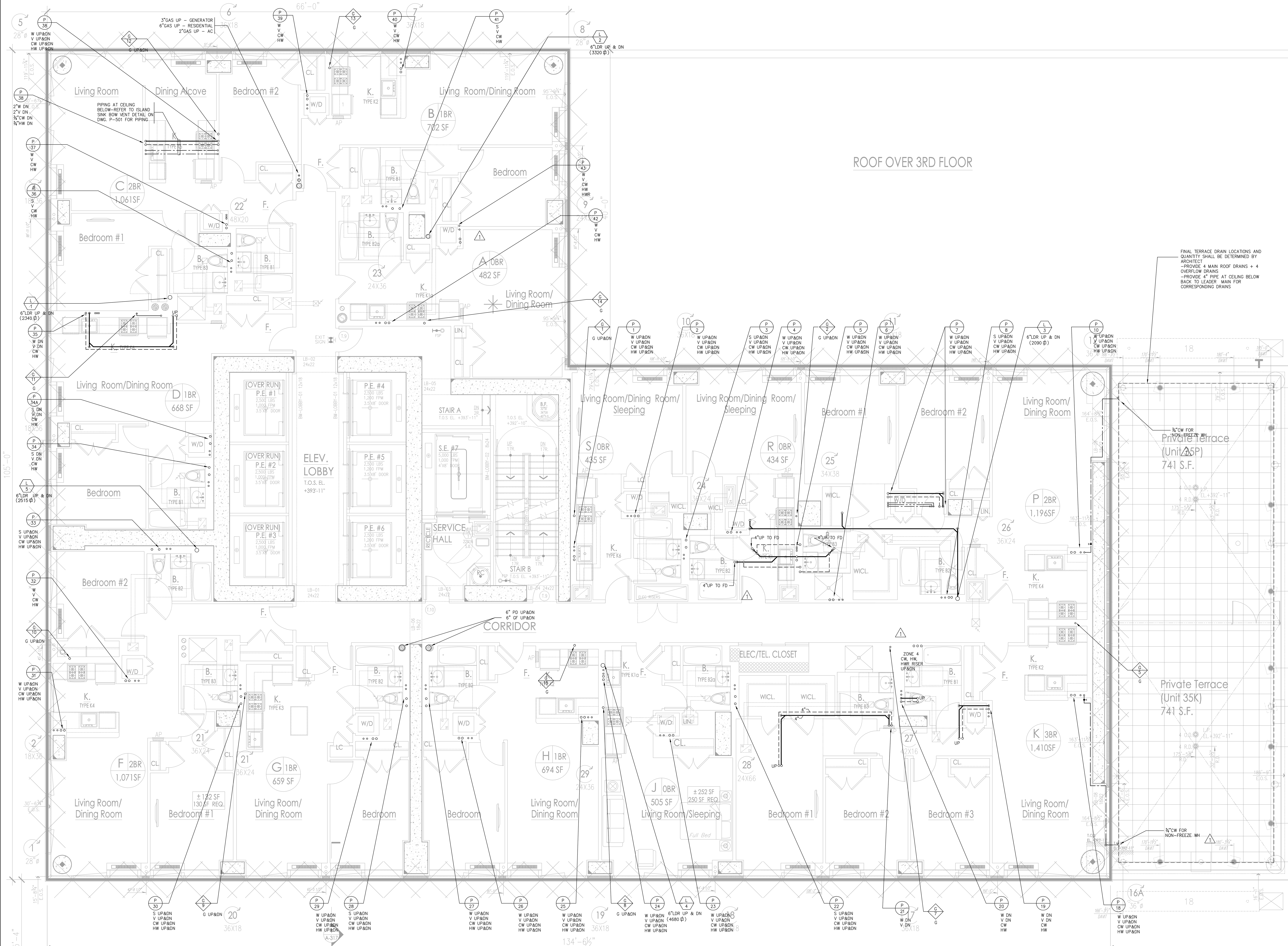
DATE:	01/21/14
PROJECT No.:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-111.00
SHEET. No.:	12 of 31

FILE NO: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-111 (14th thru 34th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-111 (14th thru 34th floor).dwg SAVED ON 12/8/2014 10:40 AM PLOTTED ON 12/8/2014 11:29 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121185760 Job Number
ES214224181 Scan Code

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-112 (35th floor).dwg SAVED ON 12/8/2014 10:37 AM PLOTTED ON 12/8/2014 11:29 AM PLOTTED BY PELECH, COLLEEN



35TH FLOOR PLAN

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE Architects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:
33rd STREET, 10th AVENUE, PUBLIC PLAZA, 9th AVENUE, 31st STREET

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

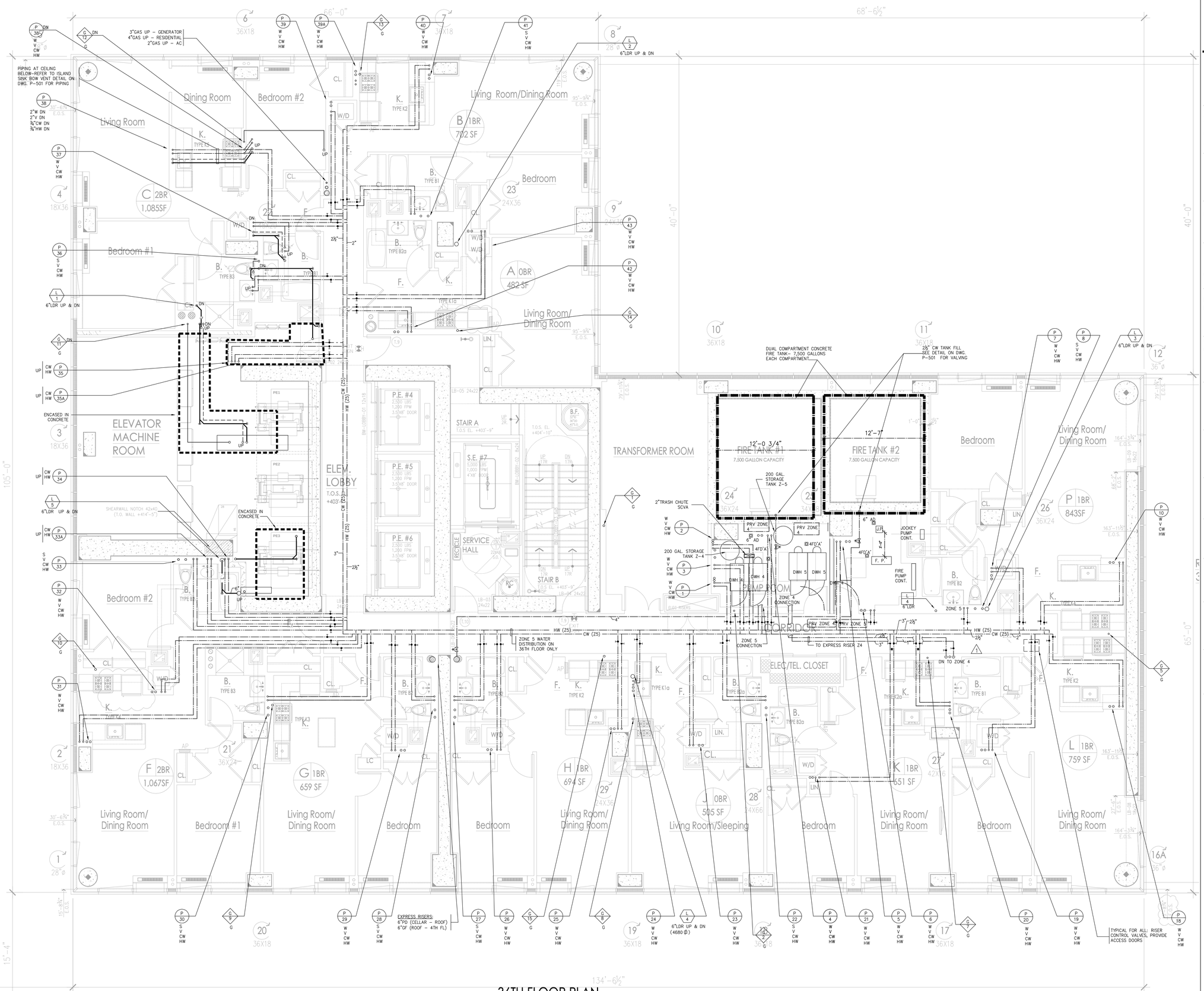
DRAWING TITLE:
PLUMBING
35TH FLOOR PLAN

SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-112.00
SHEET. No.:	13 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-112 (35th floor).dwg

DEPT OF BLDGS 421189760 Job Number
E320495506SB Scan Code



36TH FLOOR PLAN

SC: 1/4" = 1'-0"

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES. *

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

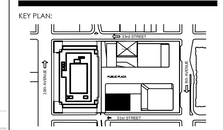
D.O.B. NUMBER:

NB#

NORTH

Scale: 1/4" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
36TH FLOOR PLAN

SEAL & SIGNATURE:

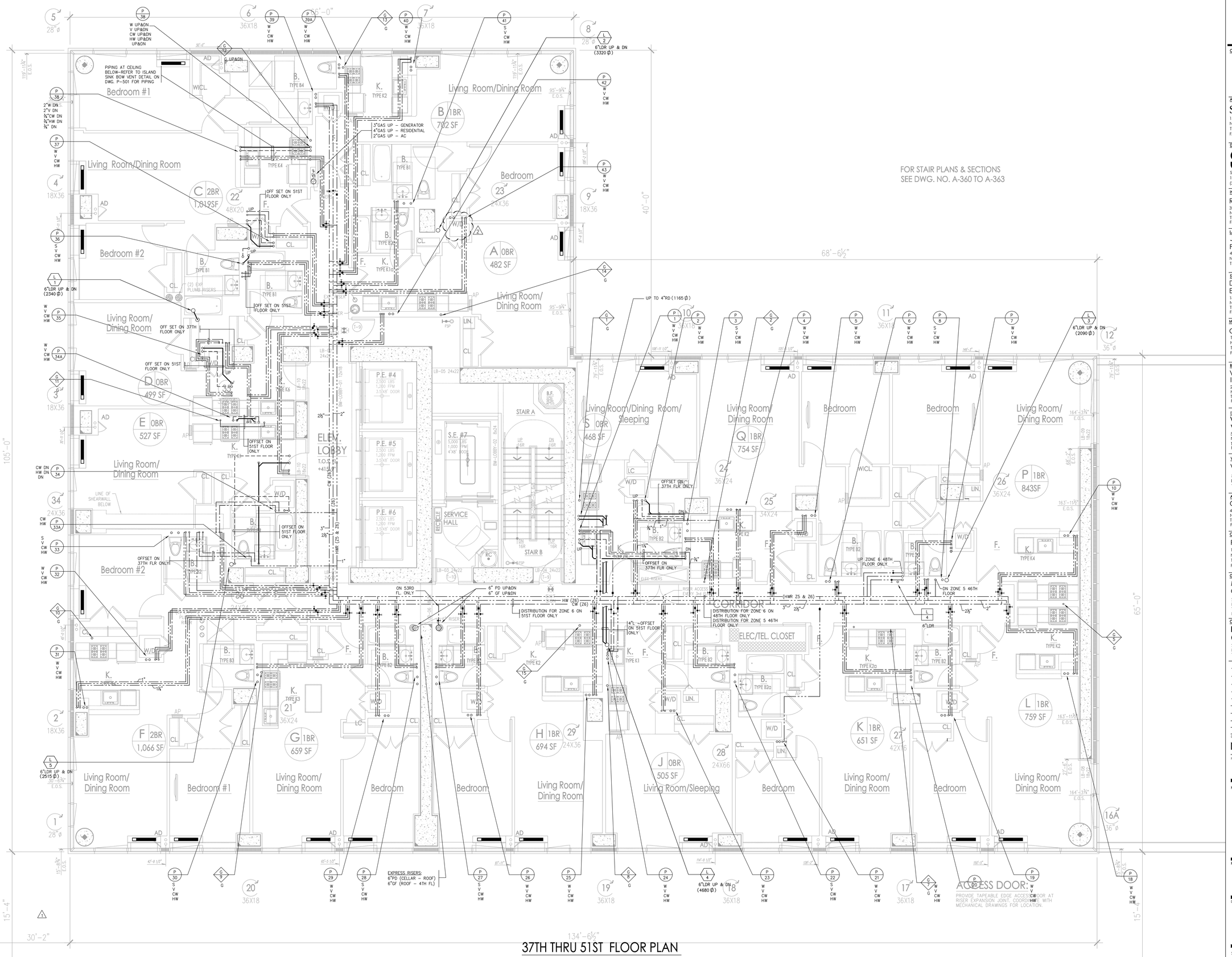
STATE OF NEW YORK · GARY SHATTS · 075-0-0-0 · LICENSED PROFESSIONAL ENGINEER

DATE:	02/17/2014
PROJECT No.:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-113.00
SHEET. No.:	14 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-113 (36th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-113 (36th floor).dwg SAVED ON 12/8/2014 10:37 AM PLOTTED ON 12/8/2014 11:29 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187-02 Job Number
E3254412355 Scan Code



37TH THRU 51ST FLOOR PLAN

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

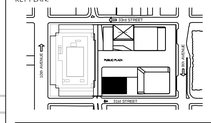
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/4" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
37TH THRU 51ST FLOOR PLAN

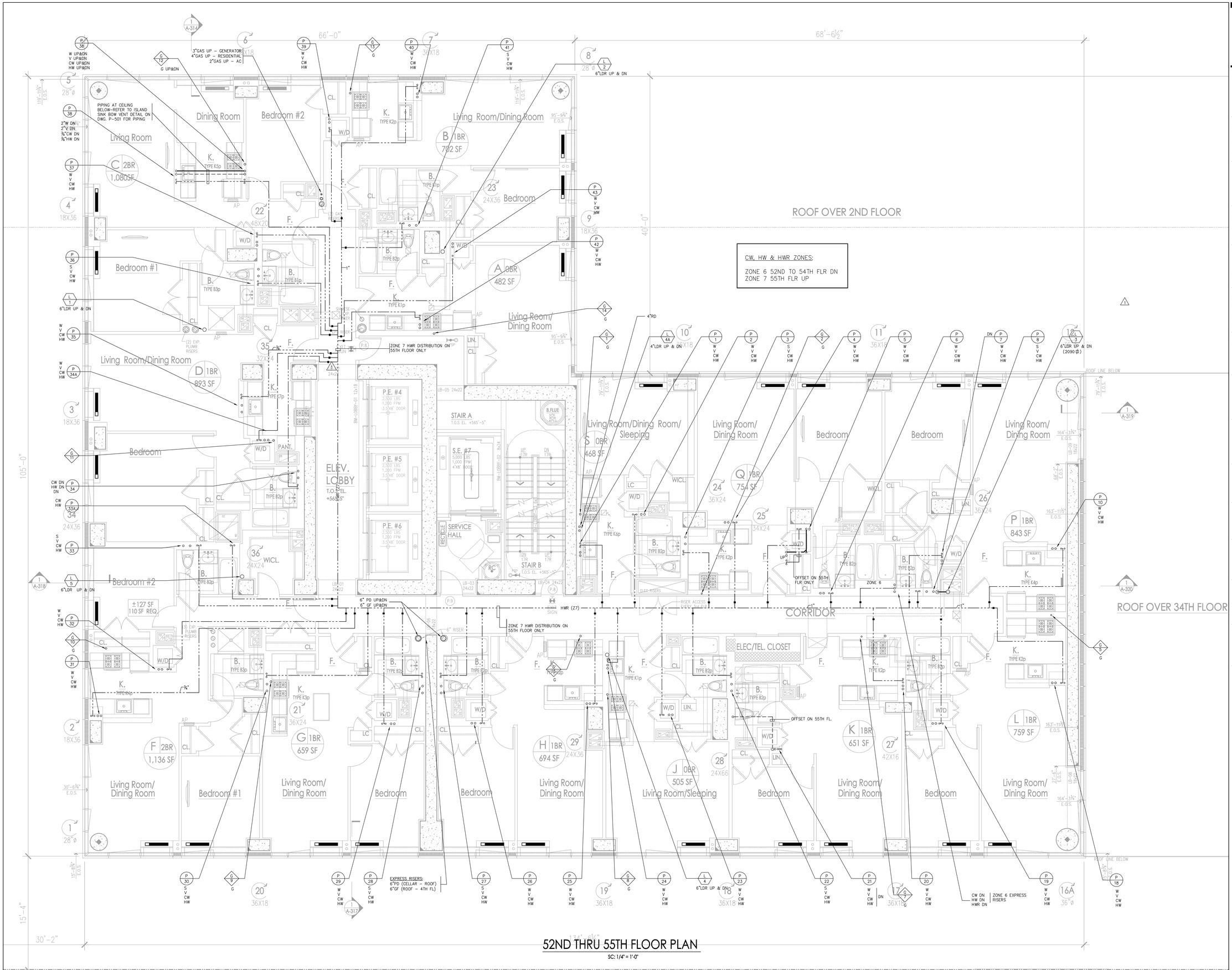
SEAL & SIGNATURE:

DATE:	12/06/2013
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-114.00
SHEET. No.:	15 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187-114 (37th thru 51st floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187-114 (37th thru 51st floor).dwg SAVED ON 12/8/2014 10:37 AM PLOTTED ON 12/8/2014 11:29 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421185700 Job Number
E260109054095 Scan Code



52ND THRU 55TH FLOOR PLAN

SC: 1/4" = 1'-0"

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

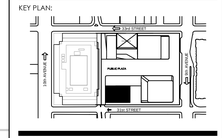
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-04-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/4" = 1'-0"
0 4 8 12 20

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
52ND THRU 55TH FLOOR PLAN

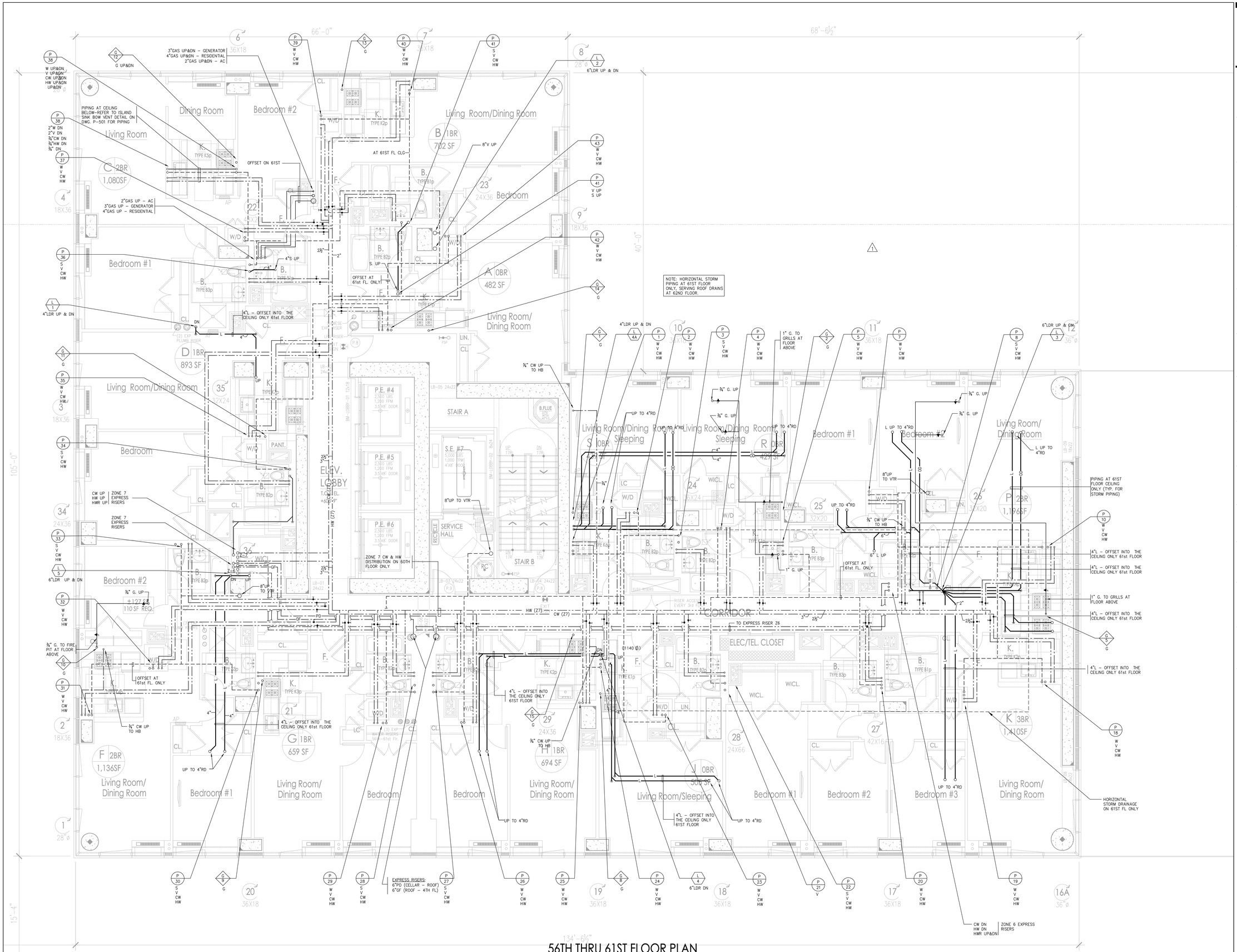
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-115.00
SHEET. No.:	16 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-115(52nd thru 55th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-115(52nd thru 55th floor).dwg SAVED ON 12/8/2014 10:37 AM PLOTTED ON 12/8/2014 11:30 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421185950 Job Number
E3575564307S Scan Code



56TH THRU 61ST FLOOR PLAN

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/4" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
56TH THRU 61ST FLOOR PLAN

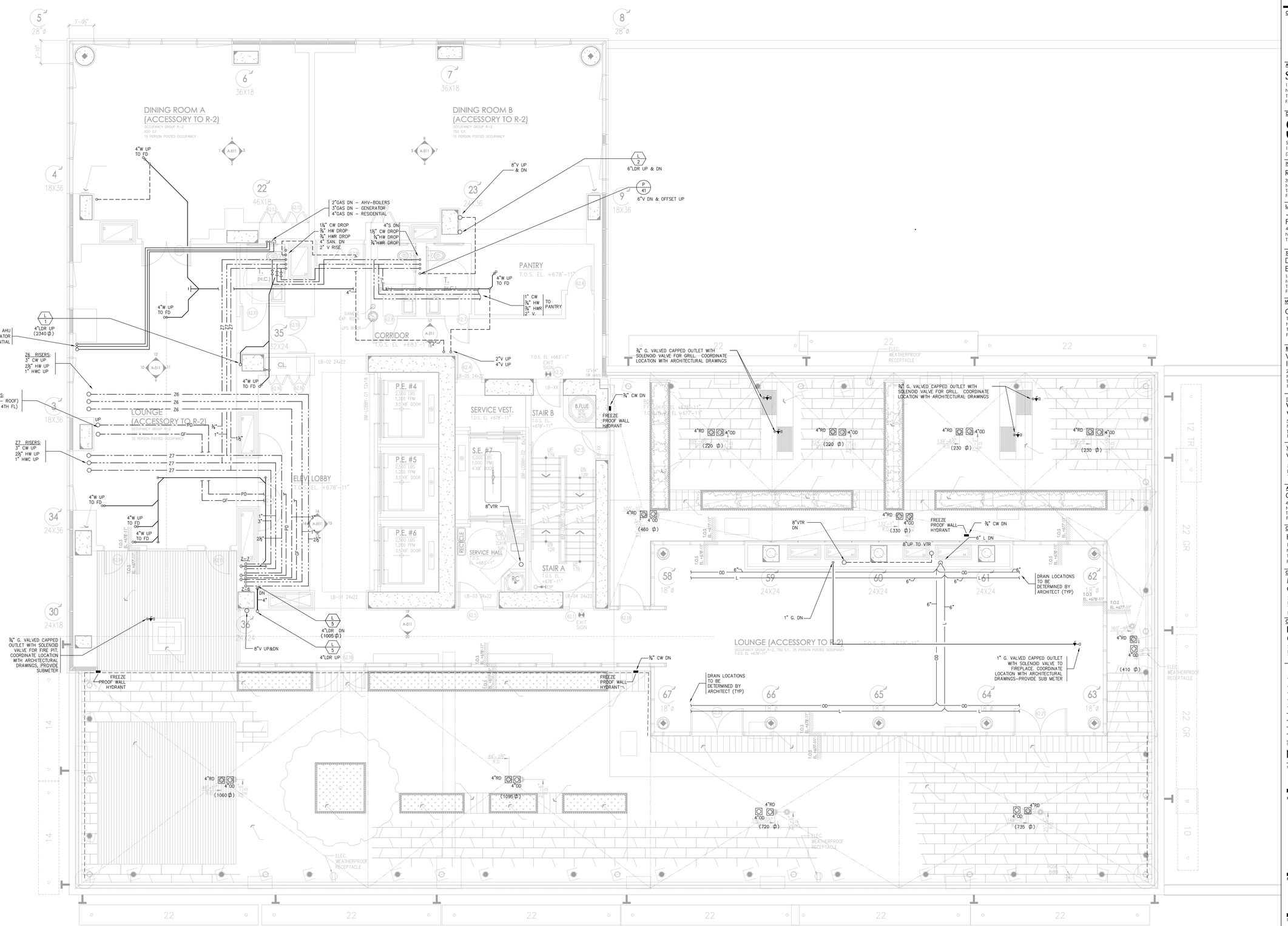
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-116.00
SHEET. No.:	17 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-116(56th thru 61st floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-116(56th thru 61st floor).dwg SAVED DN 12/8/2014 10:36 AM PLOTTED DN 12/8/2014 11:30 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121189760 Job Number
E302110905 Scan Code



62ND FLOOR PLAN

SC: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION, SPECIFICATION, SHEET ... ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

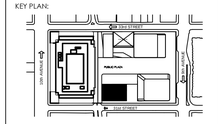
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER: NB#

NORTH

Scale: 1/4" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
62ND FLOOR PLAN

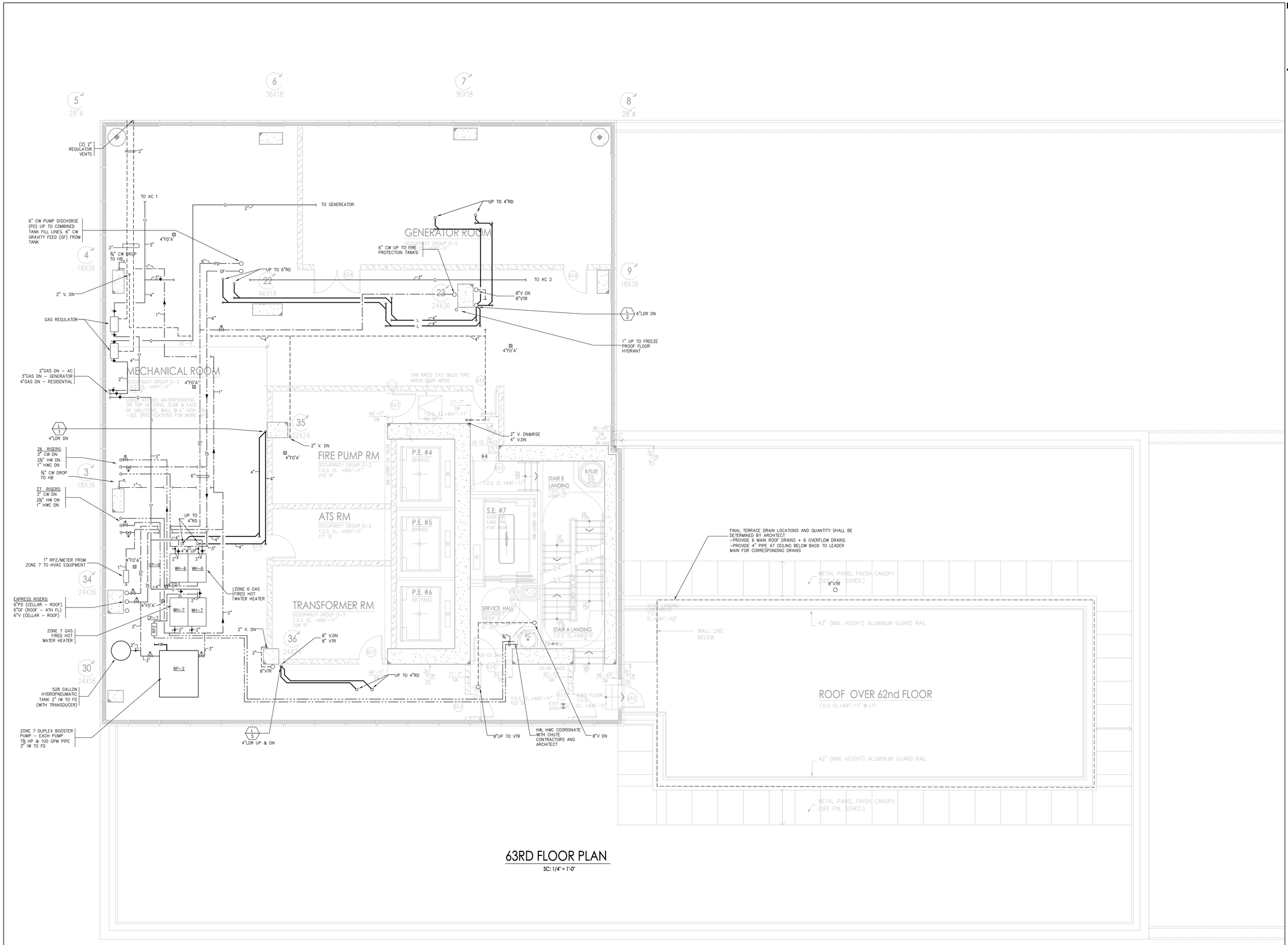
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-117.00
SHEET No.:	18 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-117 (62nd floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187D2P-117 (62nd floor).dwg SAVED ON 12/8/2014 10:36 AM PLOTTED ON 12/8/2014 11:30 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187950 Job Number
E351505595 Scan Code



TOTAL GROSS AREA: 5,188 SF

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES. *

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

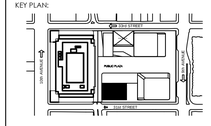
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-14	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: 1/4" = 1'-0"
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
63RD FLOOR PLAN

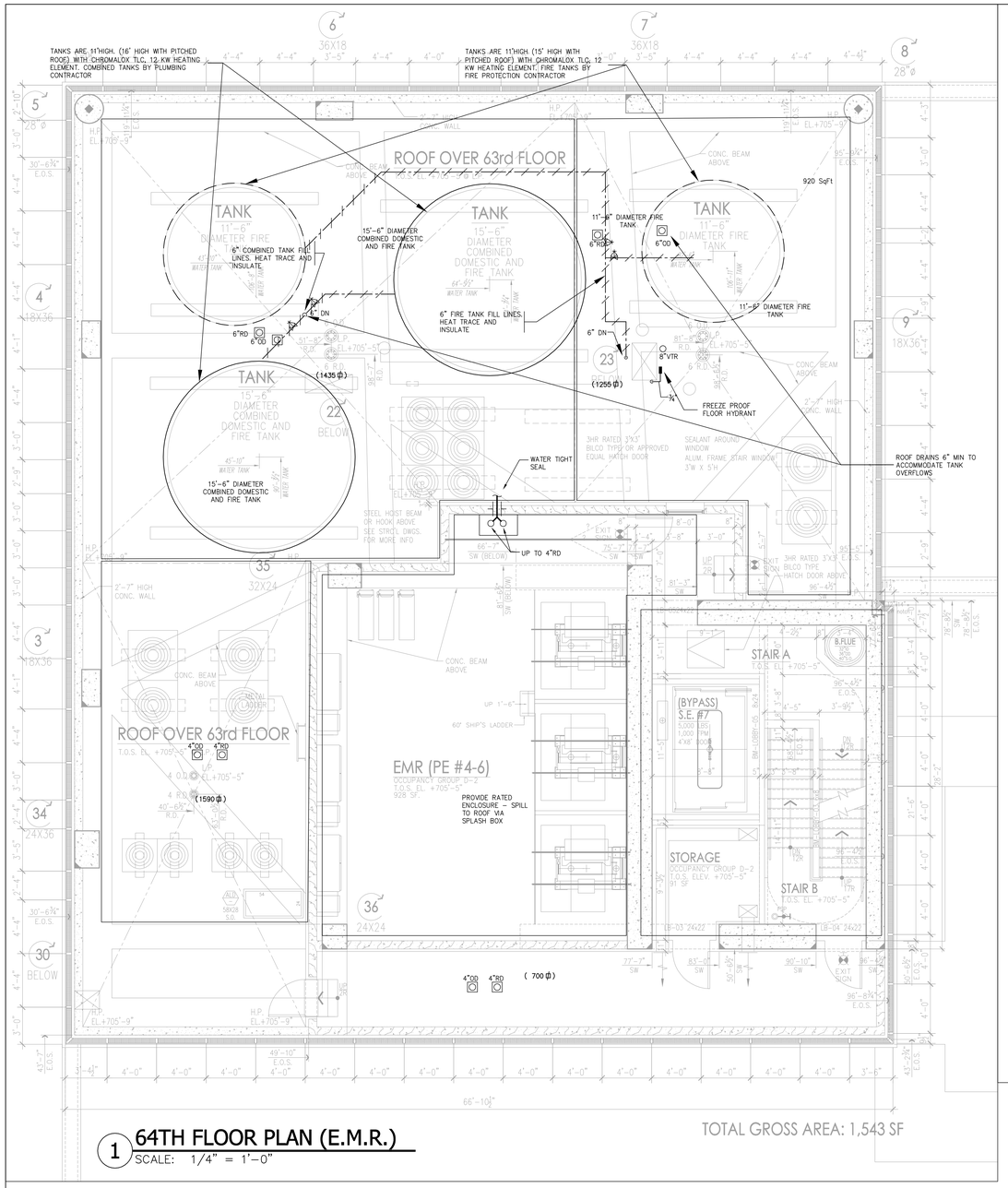
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-118.00
SHEET. No.:	19 of 31

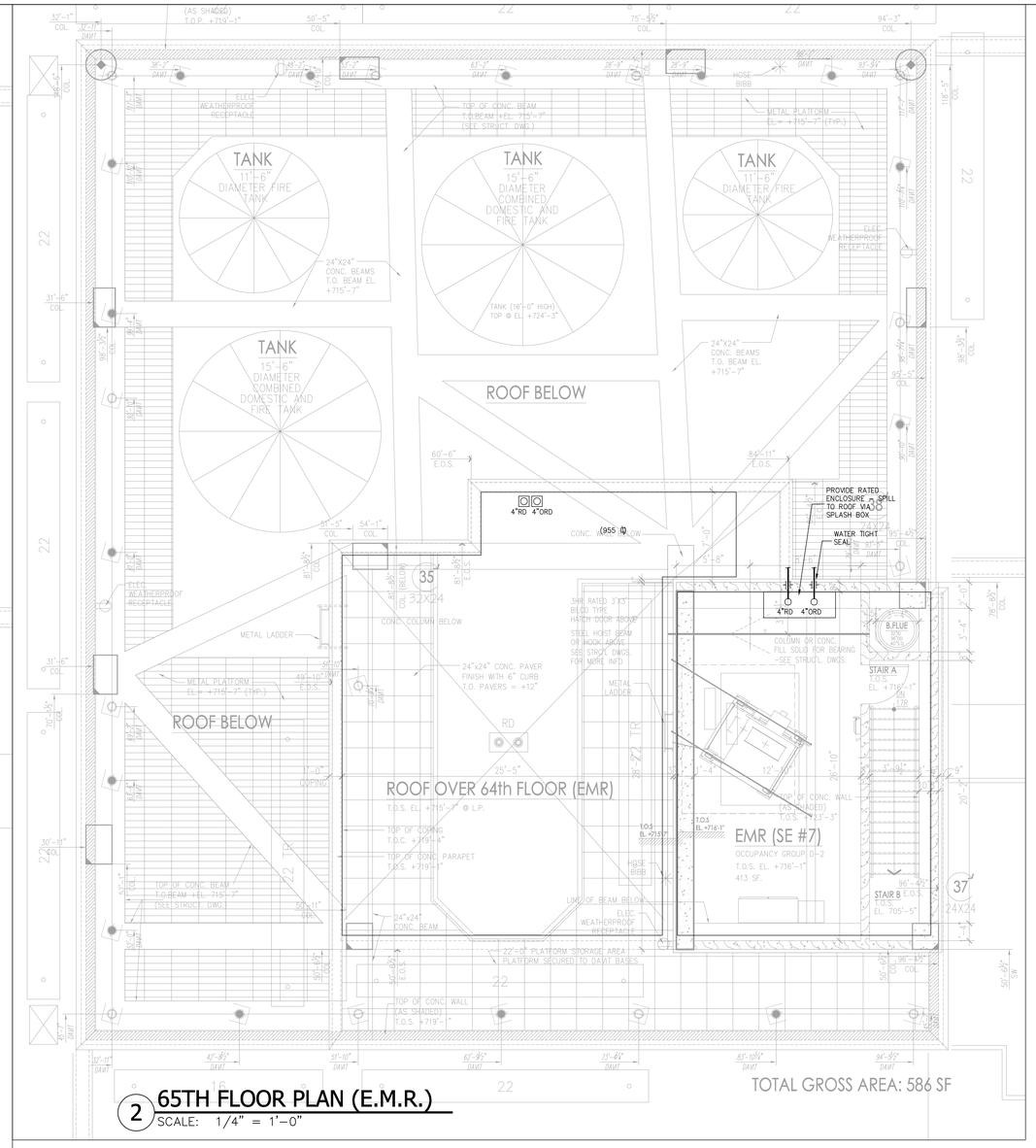
FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\2018702P-118 (63rd floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\2018702P-118 (63rd floor).dwg SAVED ON 12/8/2014 10:36 AM PLOTTED ON 12/8/2014 11:30 AM PLOTTED BY PELECH, COLLEEN

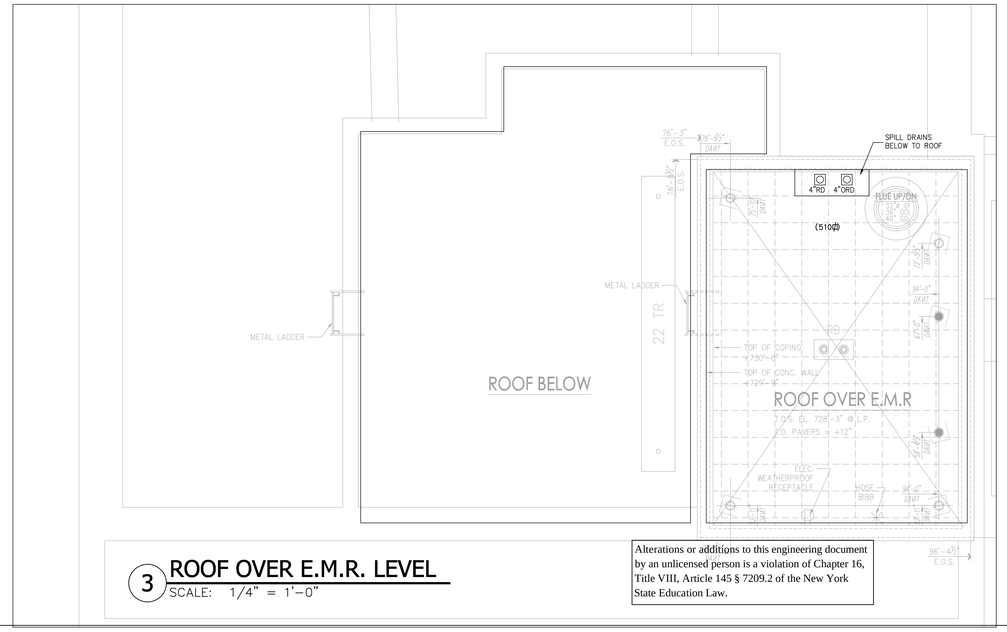
DEPT OF BLDGS 121187702 Job Number
E387074794 Scan Code



1 64TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"



2 65TH FLOOR PLAN (E.M.R.)
SCALE: 1/4" = 1'-0"



3 ROOF OVER E.M.R. LEVEL
SCALE: 1/4" = 1'-0"

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

O.O.B. NUMBER:
NB#

NORTH:
Scale: 1/8" = 1'- 0"
0' 4' 8' 12' 20'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
64TH FLOOR PLAN

SEAL & SIGNATURE:

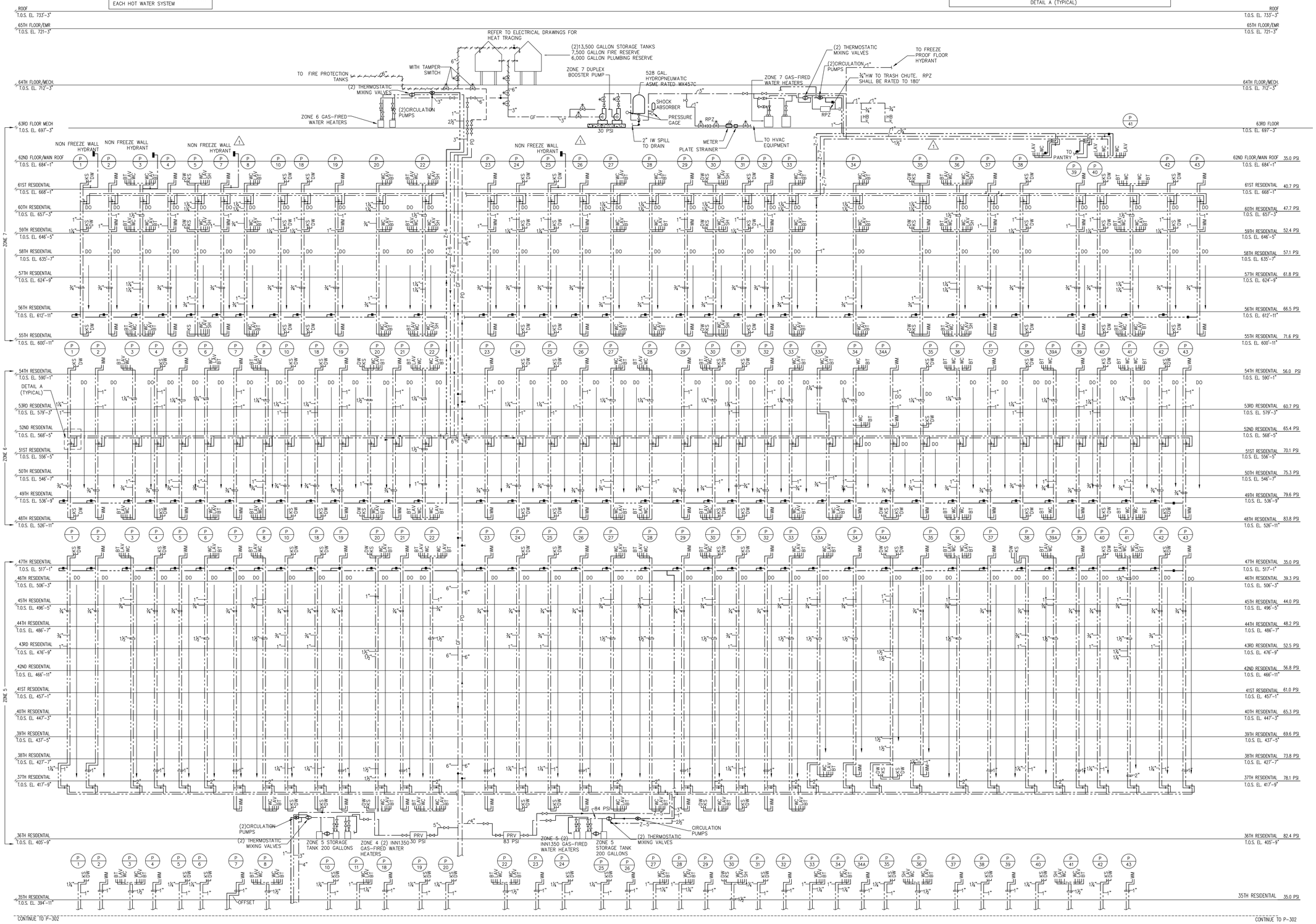
DATE:	12/18/2013
PROJECT No:	120187.02
DRAWN BY:	AT
CHECKED BY:	GS
DWG. No.:	P-119.00
SHEET. No.:	20 of 31

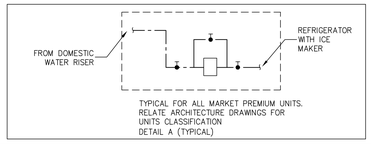
FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187702P-119(64th floor).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187702P-119(64th floor).dwg SAVED DN 12/8/2014 10:40 AM PLOTTED DN 12/8/2014 11:31 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421189160 Job Number
E320505430 Scan Code

NOTES:
1)PROVIDE LOCAL PRVs AT ALL 48TH FLOOR CW&HW BRANCHES TO PLUMBING FIXTURE & APPLIANCES.
2)PROVIDE (2) HOLBY OR EQUIVALENT THERMOSTATIC MIXING VALVES IN PARALLEL FOR EACH HW ZONE.
3)PROVIDE TWO (2) HOT WATER CIRCULATION VALVES IN PARALLEL FOR EACH HOT WATER SYSTEM





PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER:
NB#

NORTH
Scale: N.T.S.
0' 4' 8' 12' 20'

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING DOMESTIC WATER RISER DIAGRAM #1 (35TH THRU 64TH FLOOR)

SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-301.00
SHEET. No.:	21 of 31

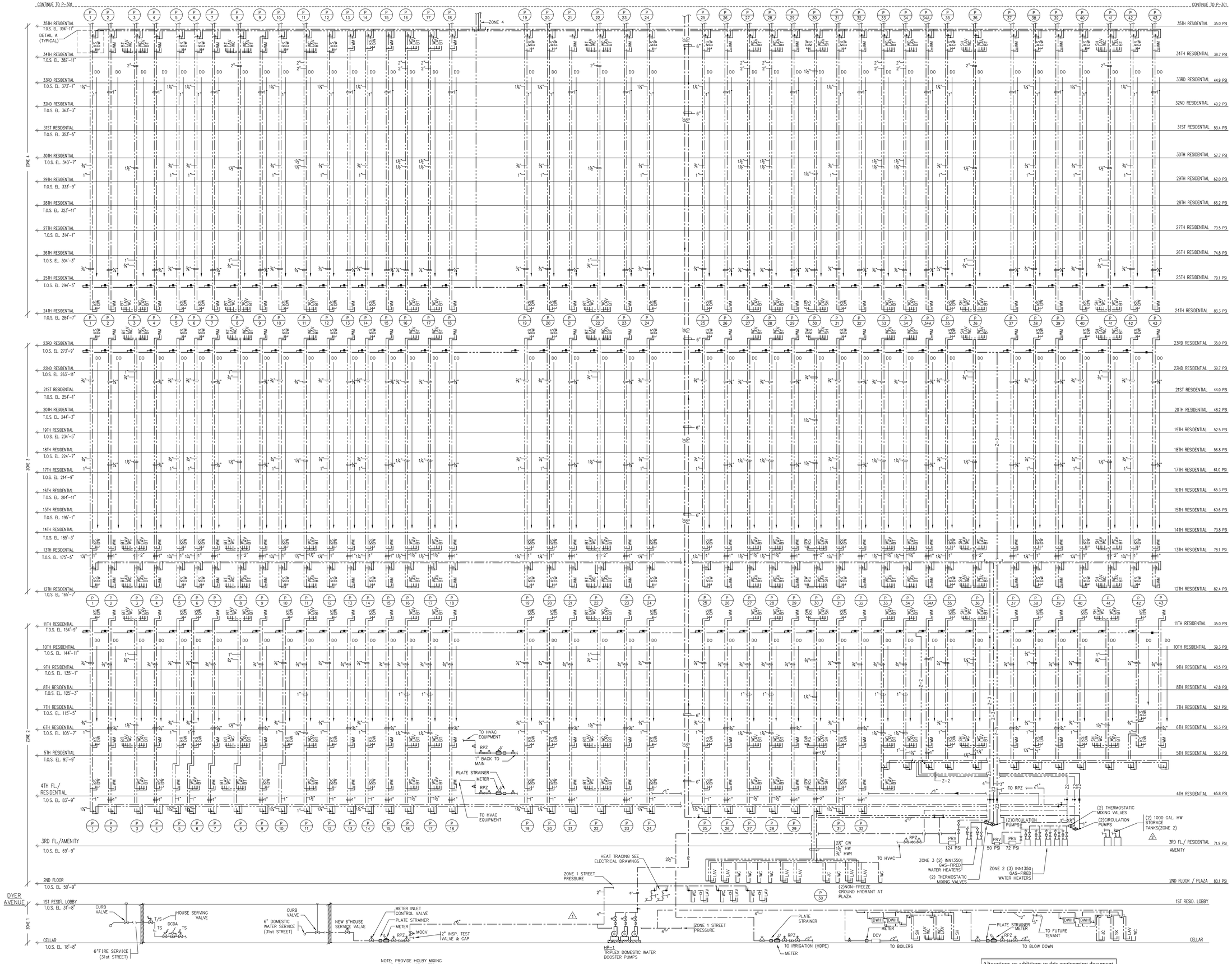
FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-301 (Domestic Water #1).dwg

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-301 (Domestic Water #1).dwg SAVED ON 12/8/2014 10:27 AM PLOTTED ON 12/8/2014 11:31 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421185700 Job Number
E300590050855 Scan Code



* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

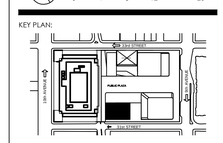
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development
2014-01-24	50% Design Development
2013-12-18	Schematic Design

D.O.B. NUMBER: NB#

NORTH

Scale: N.T.S.
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING DOMESTIC WATER RISER DIAGRAM #2 (CELLAR THRU 34TH FLOOR)

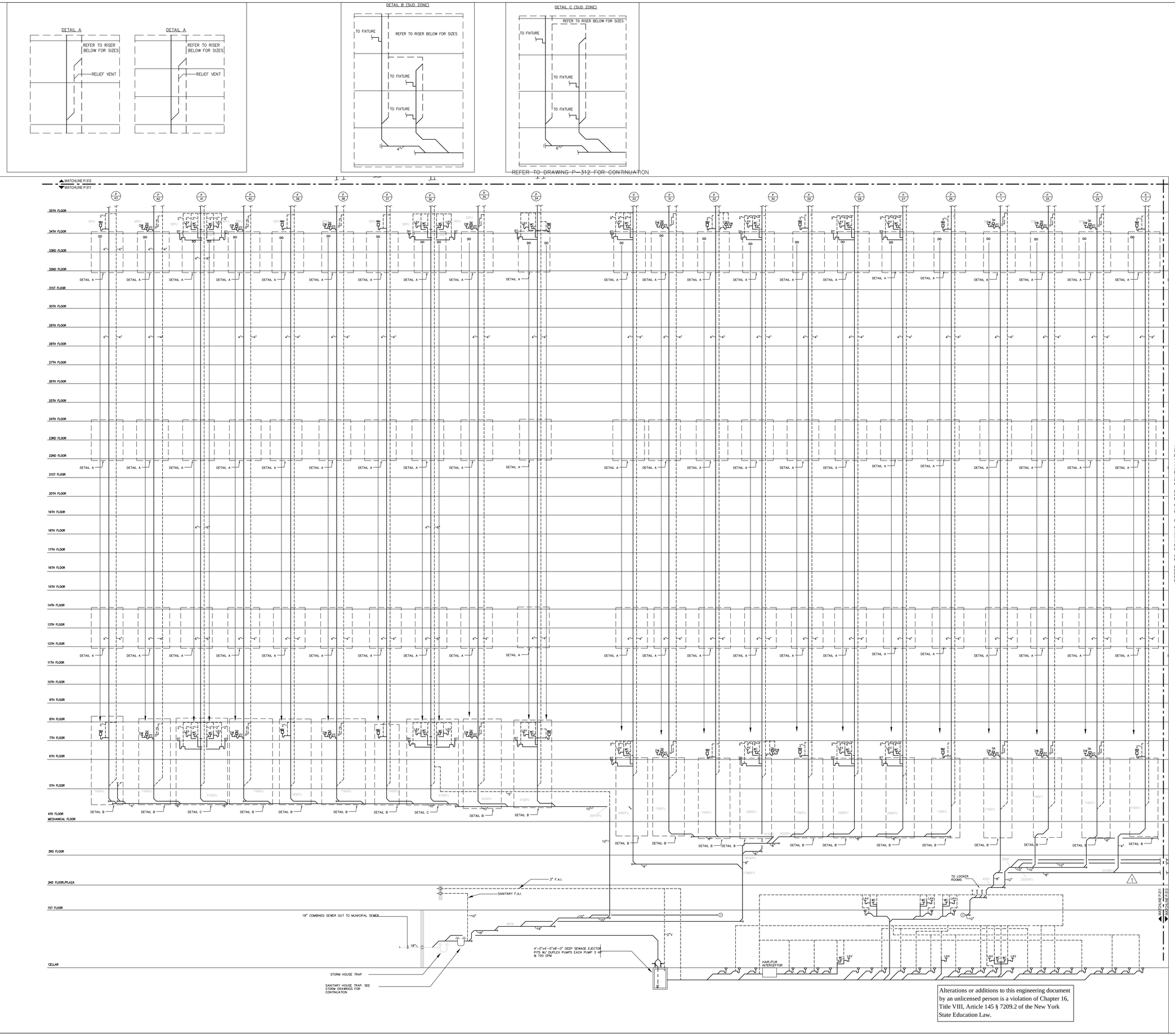
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-302.00
SHEET. No.:	22 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-302 (Domestic Water #2).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-302 (Domestic Water #2).dwg SAVED ON 12/8/2014 10:26 AM PLOTTED ON 12/8/2014 11:31 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187-02 Job Number
E-DOB-FILING-2 Scan Code



Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY. 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:

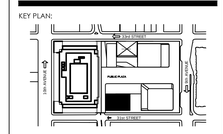
NB#

NORTH:

Scale: N.T.S.

0 4 8 12 20

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
SANITARY RISER DIAGRAM #1

SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID DERMAN · LICENSED PROFESSIONAL ENGINEER

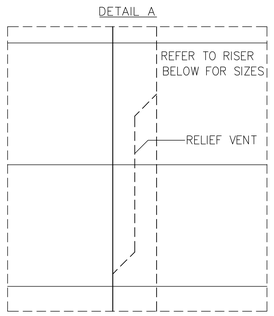
DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	DDR
DWG. No.:	P-311.00
SHEET. No.:	23 of 31

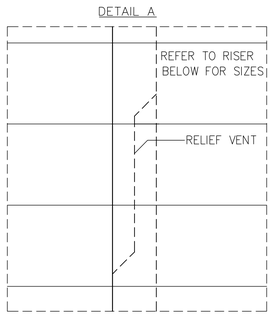
FILE No: E:\120187-02\PLUM\DOB FILING 12-08-14\120187P-311 (SANITARY #1).dwg

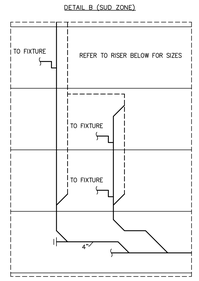
FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-311 (SANITARY #1).dwg SAVED ON 12/8/2014 10:26 AM PLOTTED ON 12/8/2014 11:31 AM PLOTTED BY PELECH, COLLEEN

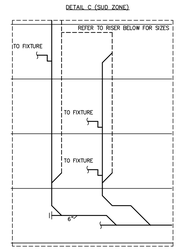
DEPT OF BLDGS 421189700 Job Number

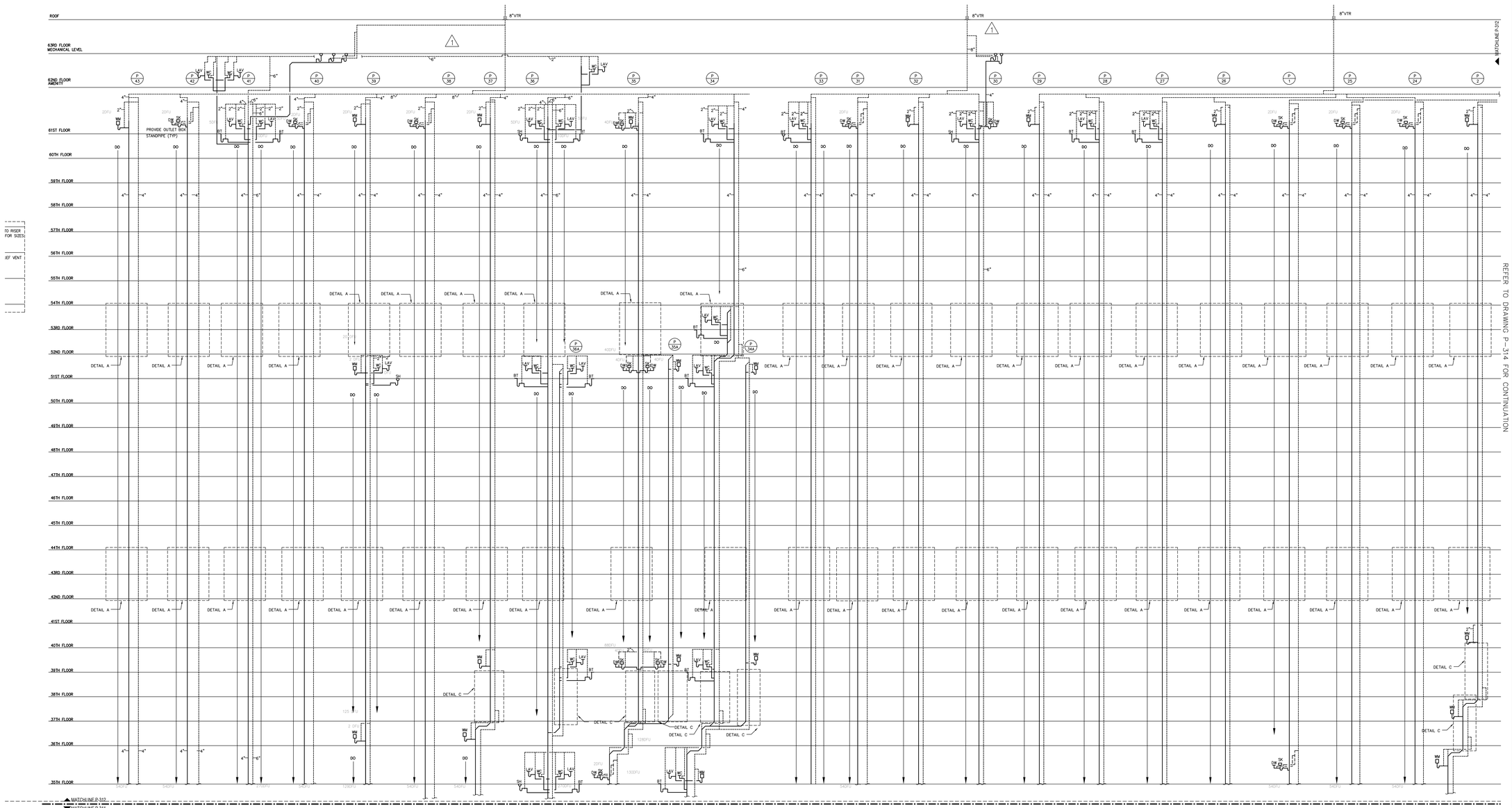
E3575434090 Scan Code











Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:

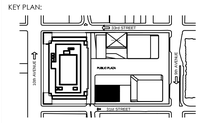
NB#

NORTH

Scale: N.T.S.

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
SANITARY RISER DIAGRAM #2

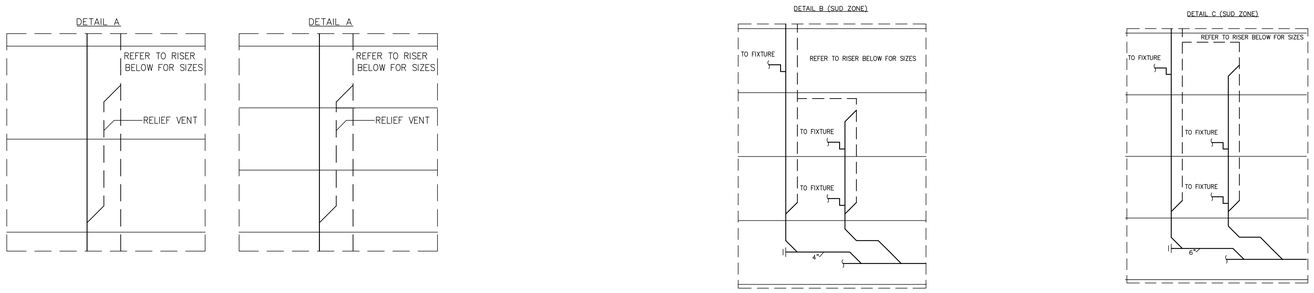
SEAL & SIGNATURE:

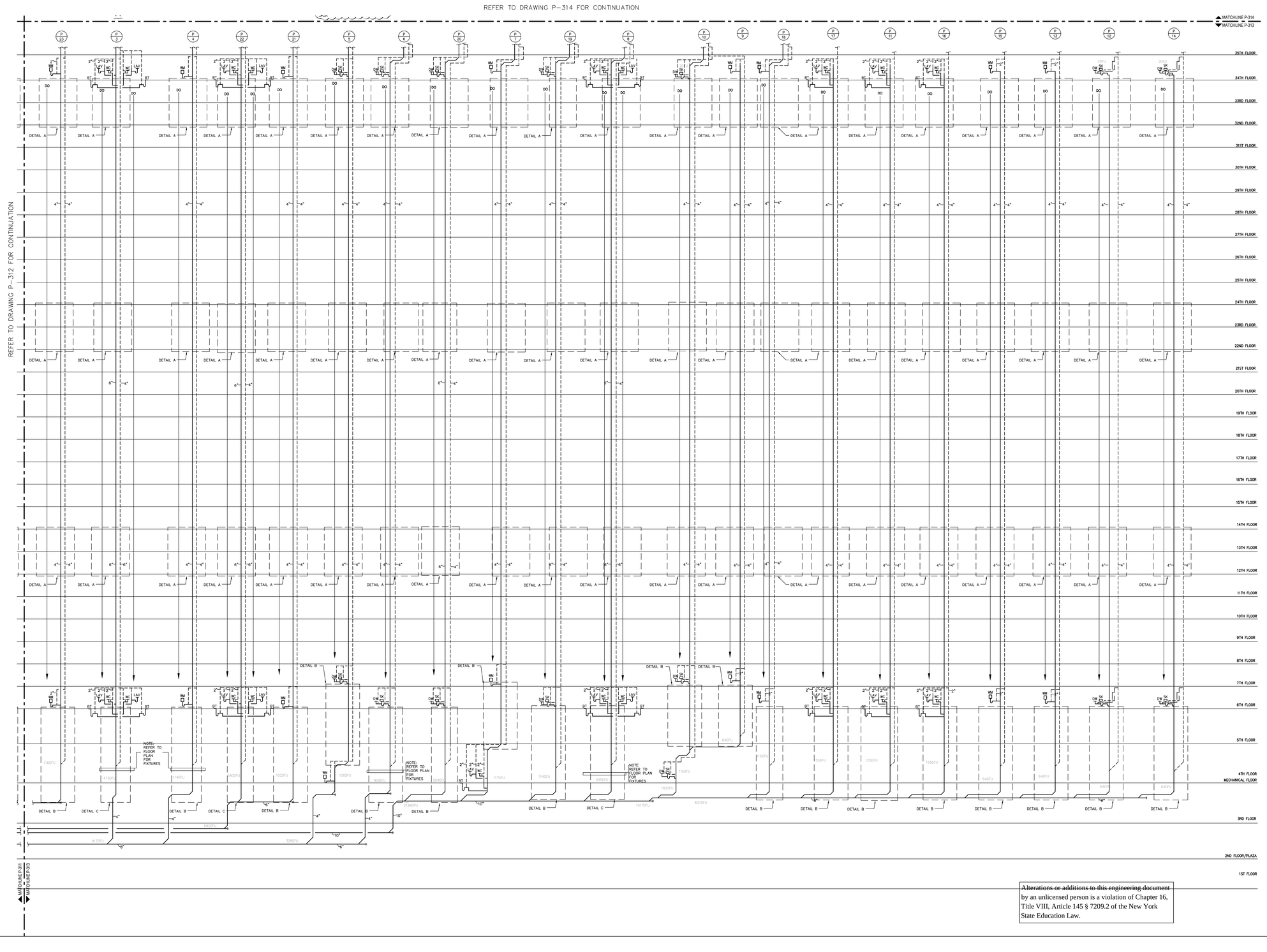
DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	DDR
DWG. No.:	P-312.00
SHEET. No.:	24 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187O2P-312 (SANITARY #2).dwg

FILE NAME: I:\120187-02\PLUM\DOB FILING 12-08-14\120187O2P-312 (SANITARY #2).dwg SAVED ON 12/8/2014 10:25 AM PLOTTED ON 12/8/2014 11:32 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121187500 Job Number
E500450083 Scan Code





Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

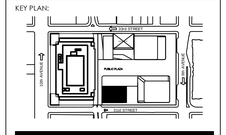
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH
Scale: N.T.S.
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
SANITARY RISER DIAGRAM #3

SEAL & SIGNATURE:

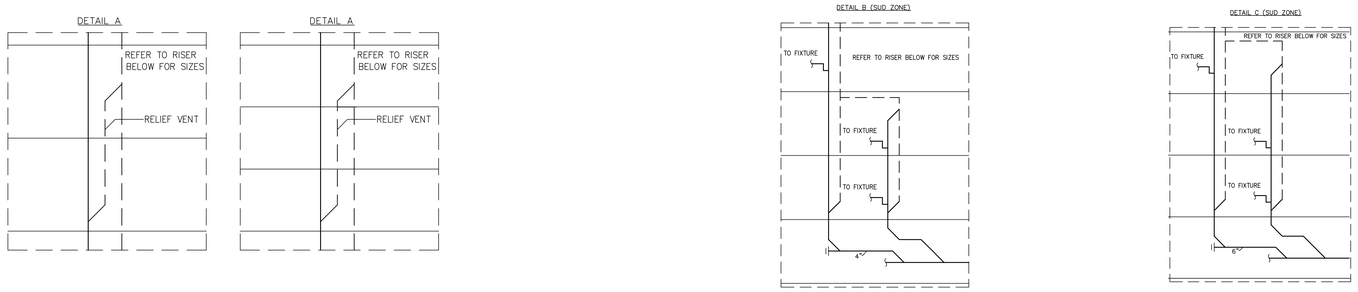
STATE OF NEW YORK · DAVID DE RUITER · 036 · 036 · STATE OF NEW YORK · PROFESSIONAL ENGINEER

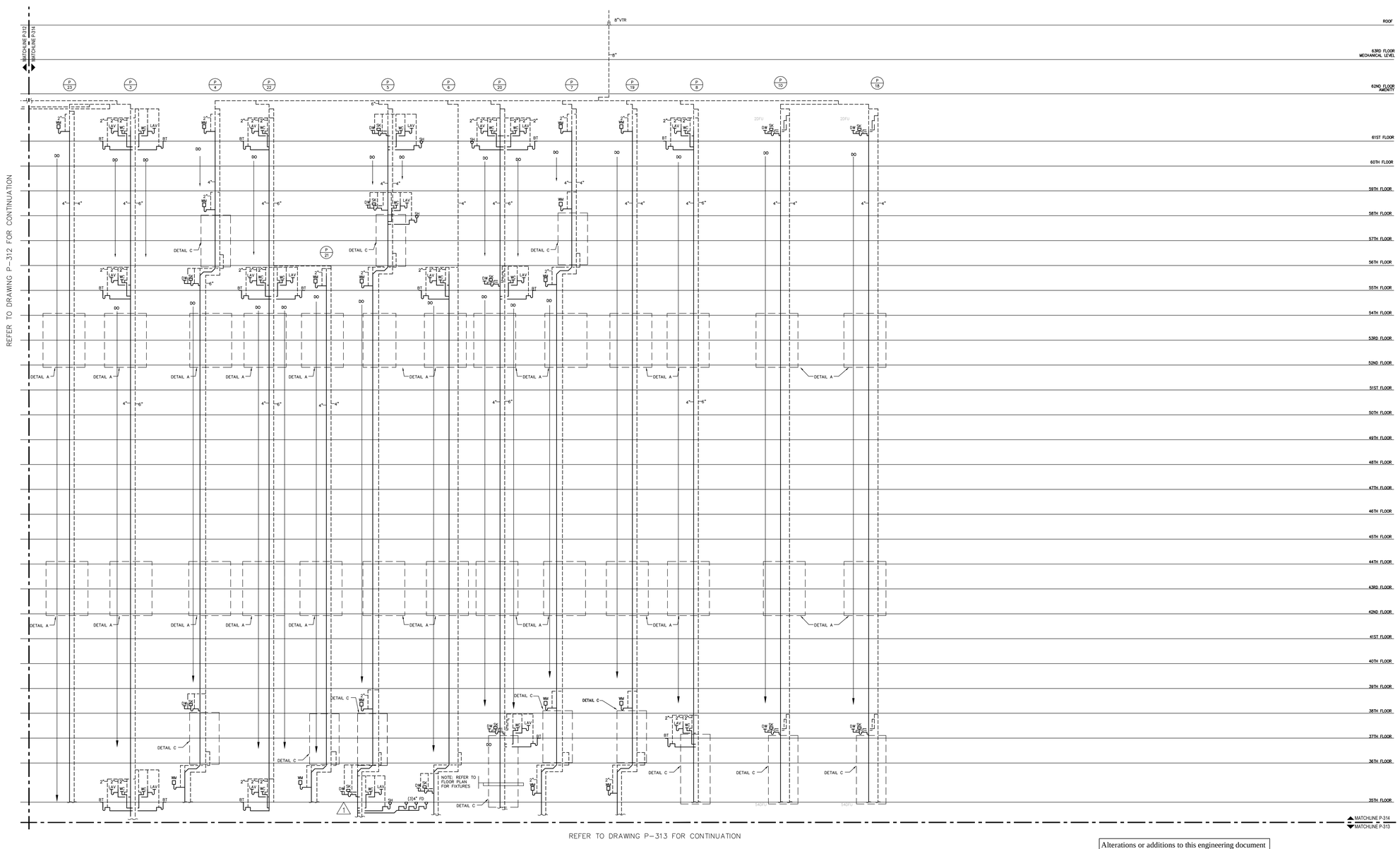
DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	DDR
DWG. No.:	P-313.00
SHEET. No.:	25 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P2-313 (SANITARY #3).dwg

FILE NAME: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P2-313 (SANITARY #3).dwg SAVED ON 12/8/2014 10:25 AM PLOTTED ON 12/8/2014 11:32 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421189900 Job Number
E3449060725 Scan Code





Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd C.O.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,*LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

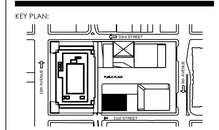
DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER: NB#

NORTH

Scale: N.T.S.
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
SANITARY RISER DIAGRAM #4

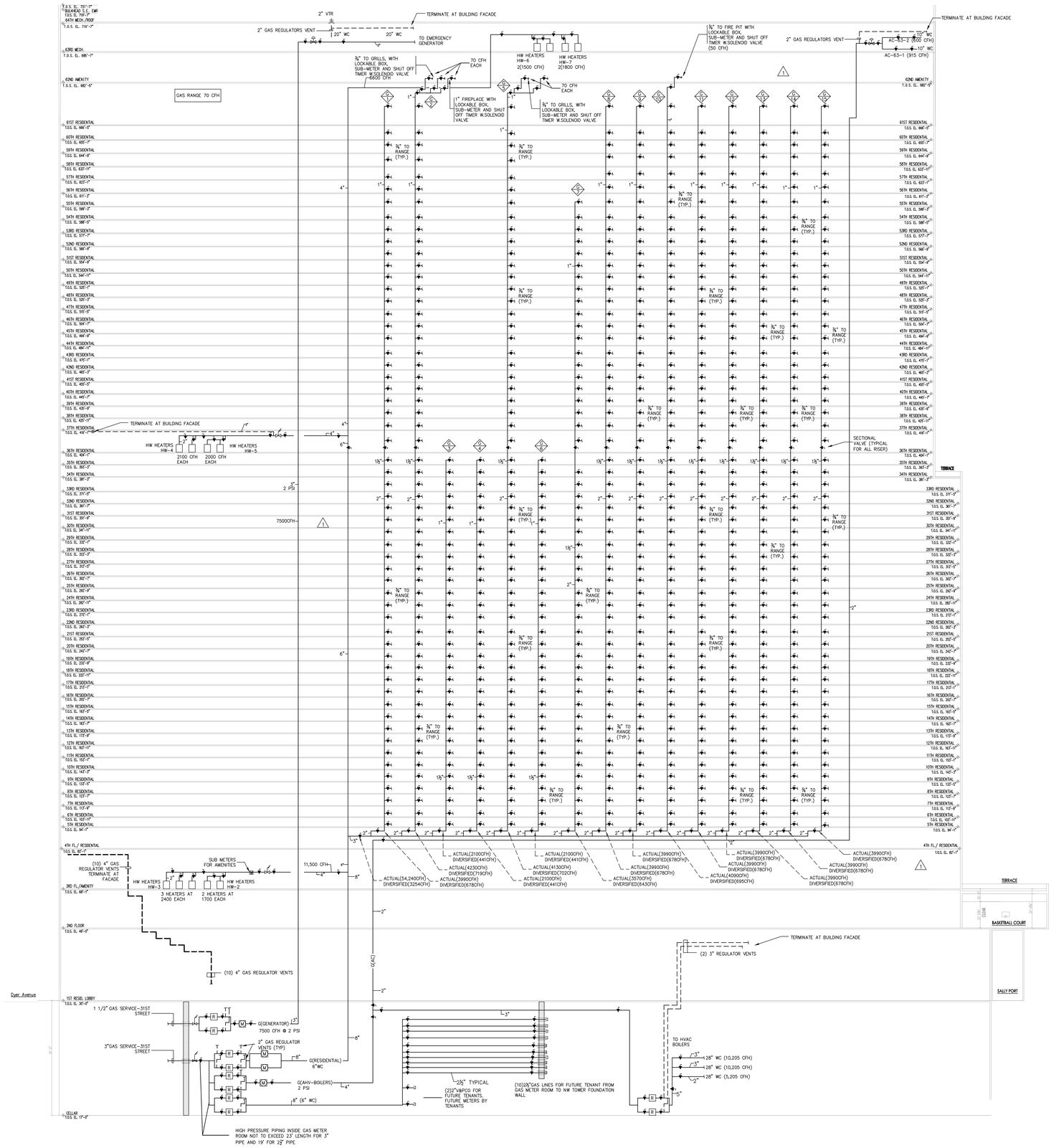
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	DDR
DWG. No.:	P-314.00
SHEET. No.:	26 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P2P-314 (SANITARY #4).dwg

FILE NAME: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P2P-314 (SANITARY #4).dwg SAVED ON 12/8/2014 10:25 AM PLOTTED ON 12/8/2014 11:32 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BUILDINGS 121851900 Job Number
E13.1305036 Scan Code



* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3828
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 4th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH:
Scale: N.T.S.
0 4 8 12 20

KEY PLAN:

PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
GAS RISER DIAGRAM

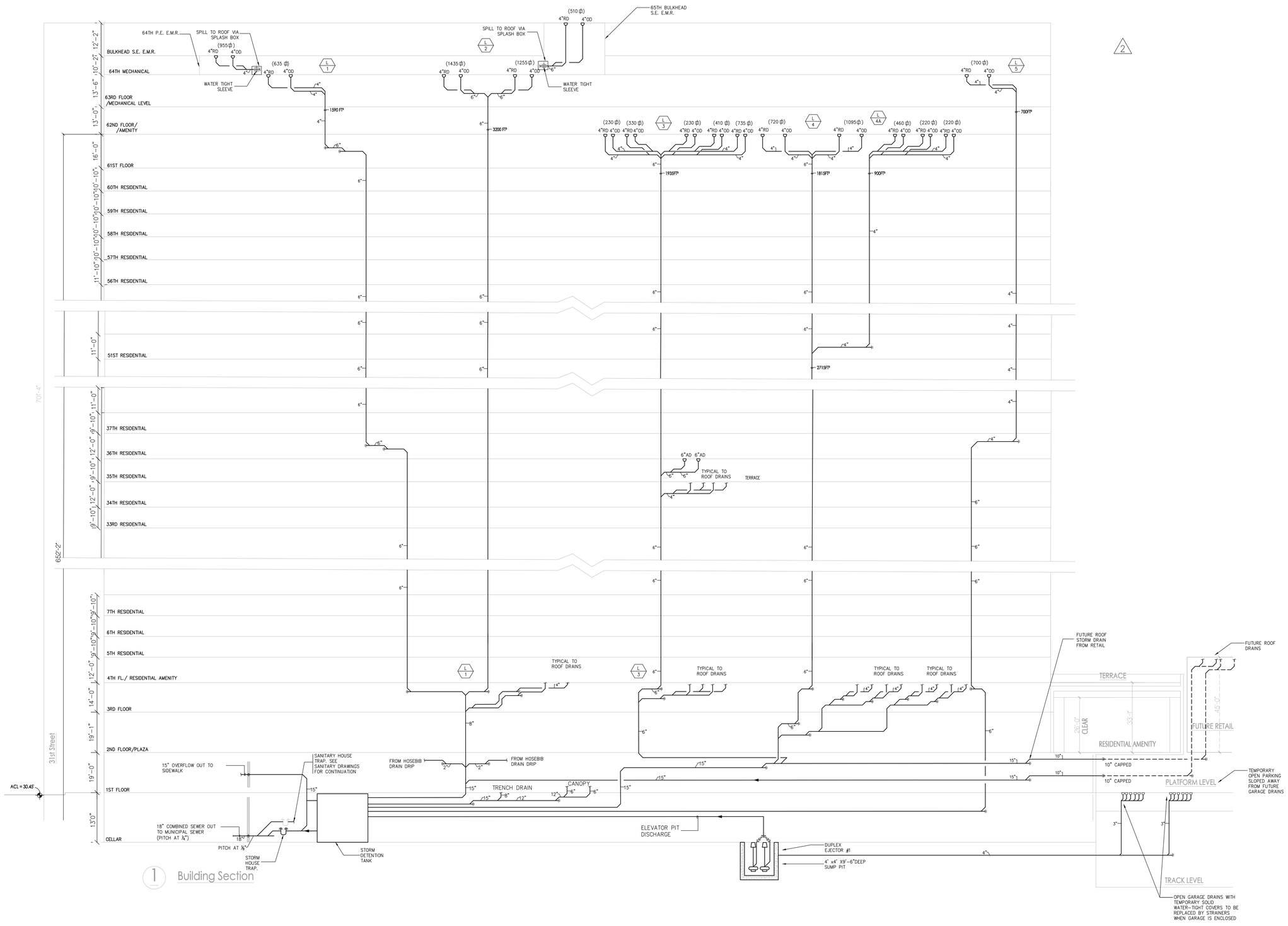
SEAL & SIGNATURE:

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	DDR
DWG. No.:	P-321.00
SHEET. No.:	27 of 31

FILE NO: I:\120187-02\PLUMN\DOB FILING 12-08-14\120187DP-321 (GAS).dwg

FILE NAME I:\120187-02\PLUMN\DOB FILING 12-08-14\120187DP-321 (GAS).dwg SAVED ON 12/8/2014 10:23 AM PLOTTED ON 12/8/2014 11:32 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 421185700 Job Number
E583763545 Scan Code



1 Building Section

2

* THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.*

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:

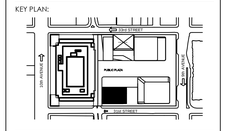
NB#

NORTH

Scale: N.T.S.

0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

PLUMBING
STORM RISER DIAGRAM
AND CLEAR WATER

SEAL & SIGNATURE:

STATE OF NEW YORK · GEORGE SOTIROPOULOS · 038-073-1 · LICENSED PROFESSIONAL ENGINEER

DATE:	01/21/14
PROJECT No:	120187-02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-331.00
SHEET. No.:	28 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-331 (STORM).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\120187P-331 (STORM).dwg SAVED ON 12/8/2014 10:23 AM PLOTTED ON 12/8/2014 11:33 AM PLOTTED BY PELECH, COLLEEN

DEPT OF BLDGS 121185760 Job Number
ES414132533 Scan Code

PUMPS

PUMP CO — ABBREV.
PEERLESS PUMP — P.P.
FLYGT — F
BELL & GOSSETT — B&G
SYNCROFLOW — S
STANCORE — SC

● DESIGNATION/LOCATION	NO. REQUIRED	G.P.M.	T.D.H.	MODEL NO.	STAGES	END SUCTION	VERT. CWSR COUPLED	HORIZ.	WORKING PRESS.	H.P.	R.P.M.	VOLTS	PHASE	CYCLE	MANUAL CONTROL	STARTING STEPS	AUTO CONTROL	PILOT LIGHT	PRESSURE GAUGE RANGE	CONTROL CENTER	EMERGENCY POWER	HYDRO ACUMULATOR AMTROL	NOTES
HP-1 TRIPLEX HOUSE PUMPS	1	133	690'	Peerless MSL050-4	3	–	–	●	–	40 EACH	3550	460	3	60	–	–	●	●	0-300	–	●	–	COMPLETE WITH SOFT STARTER – CELLAR PUMP ROOM
BP-1 – ROOF DUPLEX BOOSTER SYSTEM	1	115	92'	Peerless C1020AM	1	●	–	–	–	7½ EACH	1750	460	3	60	–	–	●	●	0-100	–	–		1 DUPLEX PUMP SYSTEM – BOILER ROOM
EJ-1 DUPLEX EJECTORS	1	285	30'	FLYGHT 4" NP3102	1					3 EACH	1690	460	3	60					0-50	●	●		COMPLETE WITH VALVE TRAIN ASSEMBLY DOUBLE CONTAINMENT/464A IMPELLER – CELLAR
ELEVATOR SIMPLEX SUMP PUMP ESP-1	1	100	40'	STANCOR SE 200						3	3600	460	3	60					–	●	●		SEE PLAN FOR LOCATIONS – NON HYDRAULIC SUMP PUMP COMPLETE WITH FLOAT
ELEVATOR SIMPLEX SUMP PUMP ESP-2	1	50	25'	STANCOR SE 100						1	3600	460	3	60	–	–	–	–	–	●	●		SEE PLAN FOR LOCATIONS – NON HYDRAULIC SUMP PUMP COMPLETE WITH FLOAT
ELEVATOR HYDRAULIC SUMP PUMP OIL MINDER ESP-3	1	50	40'	STANCOR SE 100						1	3500	460	3	60					–	●	●		SEE PLAN FOR LOCATIONS – COMPLETE WITH FLOAT
CP-7 – ZONE #7 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 63RD FL
CP-6 – ZONE #6 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 63RD FL
CP-5 – ZONE #5 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 36TH FL
CP-4 – ZONE #4 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 36TH FL
CP-3 – ZONE #3 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 3RD FL
CP-2 – ZONE #2 RE-CIRCULATION PUMP	2	25	30'	B&G SERIES 60-610S	1	–	–	●	175	½	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM, 3RD FL
CP-1 – ZONE #1 RE-CIRCULATION PUMP	4	25	30'	B&G SERIES 60-610S	1	–	–	●	175	⅓	1750	460	3	60									PROVIDE DISCONNECT SWITCH AND AQUASTAT – TWO PER HW HEATING SYSTEM–CELLAR
SP-1 –DUPLEX SUMP PUMP	1	135	30'	FLYGHT 3" DP3068-471	1					3.2 EACH	1690	460	3	60					0-50	●	●		COMPLETE WITH VALVE TRAIN ASSEMBLY DOUBLE CONTAINMENT/471 IMPELLER
SP-2 –DUPLEX SUMP PUMP	1	135	30'	FLYGHT 3" DP3068-471	1					3.2 EACH	1690	460	3	60					0-50	●	●		COMPLETE WITH VALVE TRAIN ASSEMBLY DOUBLE CONTAINMENT/471 IMPELLER

TANK SCHEDULE

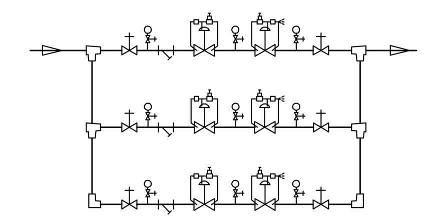
TANK TYPE SERVICE	LOCATION	CAPACITY GALLONS	INSIDE DIMENSIONS, FEET: LENGTH	WIDTH OR DIA.	HEIGHT	MANUFACTURER	NOTES
COMBINED GRAVITY SUPPLY FIRE/DOMESTIC TANK	64TH FL. – ROOF	27,000	–	15'-6" DIAMETER	11' 9'-6" USABLE	ROSENWACH ISSEKS BROS.	(2) WOODEN TANKS REQUIRED– 13,500 EACH
STORM WATER DETENTION TANK	CELLAR	85,000				CAST IN PLACE	CONCRETE TANK ONE SECTION BY GC

SUB-METER SCHEDULES

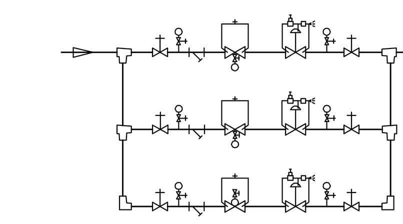
METER No.	TYPE	SYSTEM	CONNECTION SIZE	MAX FLOW GPM	NOTES
M-SC-1	TURBINE	IRRIGATION	3"	60	CELLAR
M-SC-1	TURBINE	COLD WATER PET GROOMING			CELLAR
M-SC-1	TURBINE	HOT WATER PET GROOMING			CELLAR
M-SC-1	TURBINE	HOT WATER RETURN PET GROOMING			CELLAR
M-2-2	TURBINE	COLD WATER LAUNDRY	2"	20	2ND FLOOR
M-2-3	TURBINE	HOT WATER LAUNDRY	2"	20	2ND FLOOR
M-2-4	TURBINE	HOT WATER RETURN LAUNDRY	3/4"	5	2ND FLOOR
M-3-2	TURBINE	COLD WATER LAUNDRY	2"	20	3RD FLOOR
M-3-3	TURBINE	HOT WATER LAUNDRY	2"	20	3RD FLOOR
M-3-4	TURBINE	HOT WATER RETURN LAUNDRY	3/4"	5	3RD FLOOR
M-3-1	TURBINE	COLD WATER AMENITIES	2 1/2"	60	3RD FLOOR
M-3-2	TURBINE	HOT WATER AMENITIES	2"	40	3RD FLOOR
M-3-3	TURBINE	HOT WATER RETURN AMENITIES	1"	10	3RD FLOOR
M-62-1	TURBINE	DOMESTIC COLD WATER AMENITIES	3"	58	62ND FLOOR
M-62-2	TURBINE	DOMESTIC HOT WATER AMENITIES		16	62ND FLOOR
M-62-3	TURBINE	DOMESTIC HOT WATER RETURN AMENITIES		3	62ND FLOOR

NOTE:

1. METER INSTALLATION SHALL COMPLY WITH NYC BUILDING CODE, NYC DEP AND OTHER LOCAL AUTHORITY REQUIREMENTS.
2. COORDINATE LOCATIONS OF REMOTE METER READERS WITH ARCHITECT AND ELECTRICAL CONTRACTOR.



1 = PRESSURE REDUCING VALVE, CLA-VAL 990, 150 LB FLG'D, BBSST, RANGE 30-300 PSI
2 = EXCESS PRESSURE SAFETY VALVE (XPSV), CLA-VAL 50G-33KXHI, 150 LB FLG'D, BBBT, 20-200 PSI
A = ISOLATION VALVE, 150 LB FLG'D, BRONZED BODY, FULL PORTED
B = Y STRAINER, 150 LB THREADED, PERF SS STRAINER
C = PRESSURE GAUGE WITH ISO VALVE, 0-300 PSI, 4" SS CASE, OIL FILLED



1 = PRESSURE REDUCING VALVE, CLA-VAL 990, 150 LB FLG'D, BBSST, RANGE 30-300 PSI
2 = EXCESS PRESSURE SAFETY VALVE (XPSV), CLA-VAL 50G-33KXHI, 150 LB FLG'D, BBBT, 20-200 PSI
A = ISOLATION VALVE, 150 LB FLG'D, BRONZED BODY, FULL PORTED
B = Y STRAINER, 150 LB THREADED, PERF SS STRAINER
C = PRESSURE GAUGE WITH ISO VALVE, 0-300 PSI, 4" SS CASE, OIL FILLED

PRESSURE REDUCING VALVE SCHEDULE

DES.	LOCATION	SERVICE	PRV SIZE	INLET PSI	OUTLET #1 PSI	OUTLET #2 PSI	XPSV PSI	SYSTEM CAPACITY
PRV Z2	3RD FLOOR	ZONE #2	3"	278	–	72	–	–
PRV Z3	3RD FLOOR	ZONE #3	3"	278	–	124	–	–
PRV Z4	36TH FLOOR	ZONE #4	3"	137	–	30	–	–
PRV Z5	36TH FLOOR	ZONE #5	3"	155	–	83	–	–
PRV	CELLAR	IRRIGATION	2"	300	–	80	–	–

PRV DETAIL AND SCHEDULE

NOT TO SCALE

NOTE: REFER TO SPECIFICATIONS.

DRAINS

DESIGNATION	ZURN SERIES No.	BODY: CAST IRON	GALVANIZED	ALL BRONZE	SECONDARY CLAMP	CLAMPING DEVICE	DECK CLAMP	BACK WATER VALVE	ROOF SUMP RECEIVER	INSIDE CAULK	STAINLESS STEEL	STRAINER: DUCTILE IRON	CAST IRON	GALVANIZED	ALL BRONZE	NICKEL BRONZE	CHROME PLATED	SEDIMENT BUCKET	SECONDARY STRAINER	POLISHED FINISH	SATIN FINISH	TRACTOR GRATE	S.S. MESH SCREEN	FUNNEL TOP	FLAT TOP	DOME	RAISED LIP	EXTENSION	SECURED GRATE	ANGLE GRATE	CENTER HOLE	½" GRATE	REMARKS: LOCATION
FD'A'	Z532	●								●			●					●				●			●								MECHANICAL ROOMS
FD'B'	ZN415B-VP	●								●						●									●				●				FINISHED AREA, TOILET & SHOWER RMS
FD'C'	Z415E																																CELLAR MECH ROOM
FD'D'	Z880																																POOL DECK DRAIN – ACID RESISTANT
FD'E'	Z532-AR	●								●			●					●				●			●								POOL EQUIPMENT/STORAGE ROOMS – ACID RESISTANT
FD'F'	Z534-HP-Y-C	●											●					●							●								GARAGE DRAIN
RD'A'	ZC100-85	●				●				●			●													●		●					ROOF GENERAL UNDER PAVERS CAST IN CONCRETE
OD'A'	ZC100-E-W3	●				●				●			●													●		●					ROOF OVERFLOW DRAIN (3"INTERNAL STANDPIPE)
FS'A'	Z1900	●								●			●					●				●			●								PUBLIC WASHING RECEPTOR – ACID RESISTANT
FS'B'	Z1750									●	●		●					●				●			●								POOL RECEPTOR AND LAUNDRY DRAIN – STAINLESS STEEL
RD'B'	Z-161-45																									●		●					CANOPY DRAIN
RD'C'	ZN150-VP-Y	●								●			●			●		●							●				●				PLAZA DRAIN/AREA DRAIN – 14"SQ HEEL PROOF GRATE
TD'A'	Z882-U4-GHPD																																PARKING GARAGE TRENCH DRAIN
TD'B'	JR SMITH 9818																																GROUND FLOOR TRENCH DRAIN AS DETERMINED BY ARCHITECT

DOMESTIC WATER HEATERS

HTR. MANUF. — ABBREV.
PVI INDUSTRIES — PVI
EEMAX — E
LOCHINVAR — L
PATTERSON–KELLEY — PK

DESIGNATION/LOCATION	NO. REQUIRED	MANUFACTURER & MODEL NO.	TANK DATA: STORAGE CAP.,GALS. EACH	PRESSURE RATING	RECOVERY PER HEATER AT 100°F TEMP.RISE (AVAILABLE GPM/ HEATER)	ELECTRIC DATA: TOTAL REQ. GPM/HEATER	MOTOR HP	VOLTS	PHASE	CYCLE	ELEC. COIL ELEMENT DATA: UPPER ELEMENT	LOWER ELEMENT	TOTAL K.W.	VOLTS	PHASE	GAS DATA: GAS PRESS.,W.C.	INPUT IN MBH	DOMESTIC HW TEMP. OUT	NOTES
DWH 1 LOW ZONE #1 – FLOOR	4	HUBBELL HSE	40					460	3	60			8					140°	CELLAR
DWH 2 LOW ZONE #2 – 3RD FLOOR	3	AERCO INN 1350	20	160	26	16		120	1	60						4"	2400	140°	WITH WHM SEQUENCER WITH 1000 GAL STORAGE TANK
DWH 3 MID ZONE #3 – 3RD FLOOR	2	AERCO INN 1350	20	160	26	17		120	1	60						4"	1700	140°	WITH WHM SEQUENCER WITH 1000 GAL STORAGE TANK
DWH 4 MID ZONE #4 –36TH FLOOR	2	AERCO INN 1350	20	160	26	21		120	1	60						4"	2100	140°	WITH WHM SEQUENCER
DWH 5 MID ZONE #5 – 36TH FLOOR	2	AERCO INN 1350	20	160	26	20		120	1	60						4"	2000	140°	WITH WHM SEQUENCER
DWH 6 HIGH ZONE #6 – 63RD FL ROOF MECH. ROOM	2	AERCO INN 1350	20	160	26	15		120	1	60						4"	1500	140°	WITH WHM SEQUENCER
DWH 7 HIGH ZONE #7 – 63RD FL ROOF MECH. ROOM	2	AERCO INN 1350	20	160	26	18		120	1	60						4"	1800	140°	WITH WHM SEQUENCER
DOMESTIC HOUSE TANK HEATING ELEMENT,	2	CHROMALOX TLS						120	1	60			12						12 KW EACH, AT 64TH FL
DWH 8	3	EEMAX						120	1	60			1						CELLAR, 1ST FL, 2ND FL

NOTE: ALL DOMESTIC HOT WATER HEATERS DWH1 THRU DWH7 SHALL BE PROVIDED WTH THERMOSTATIC MIXING VALVES

FOR PLUMBING FIXTURES AND APPLIANCES SCHEDULE REFER TO ARCHITECTURAL INTERIOR SPECIFICATIONS

FIXTURE BRANCH PIPE SUPPLY CONNECTION SCHEDULE *

FIXTURE	SYMBOL	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	GAS
WATER CLOSET (FLUSH TANK)	WC	4" NOTE ***	2"	1/2"	---	
WATER CLOSET (FLUSH VALVE)	WC	4"	2"	1-1/4"	---	
URINAL	UR	2"	1-1/2"	3/4"	---	
LAVATORY	LAV	1-1/4" x1-1/2"	1-1/2"	1/2"	1/2"	
BATHTUB**	BT	1-1/2" x 2	1-1/2 "	1/2"	1/2"	
KITCHEN SINK	SINK	2"	1-1/2 "	1/2"	1/2"	
SHOWER**	SH.	2"	1-1/2"	3/4"**	3/4"**	
LAUNDRY SINK	L.SK.	3"	2"	1/2"	1/2"	
SERVICE SINK	S.S.	3"	2"	1/2"	1/2"	
WASHING MACHINE (DOMESTIC)	WM	2"	1-1/2"	1/2"	1/2"	
WASHING MACHINE CELLAR LAUNDRY	WM	3" INDIRECT	2"	3/4"	3/4"	3/4"
RESIDENTIAL GAS RANGE	R	--	--	--	--	¾"
RESIDENTIAL FIRE PLACE	FP	--	--	--	--	½"
COFFEE MAKER ICE MAKER	CM IM	--	--	NOTE: ½" PROVIDE FILTER	--	--
DISHWASHER	DW	¾" PD		--	½"	

*NOTE – PROVIDE REQUIRED ADAPTORS AND/OR REDUCING FITTINGS TO CONNECTIONS TO MATCH FIXTURE TRIM CONNECTION SIZES

**NOTE – BRANCH HOT AND CW WATER PIPING SERVING A BATHTUB AND SHOWER FIXTURE SHALL BE 1" IN SIZE.

***NOTE – REPLACE PLASTIC ELBOW SUPPLIED WITH GERBERIT TOILETS BY CAST IRON ELBOW.

NOTE:
ALL FIXTURES TO BE MOUNTED PER ARCHITECTURAL DIMENSIONS. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL REQUIREMENTS.

NOTE:
ALL RESIDENTIAL AND AMENITY FIXTURES TO BE SELECTED BY THE ARCHITECT. SEE ARCHITECTURAL INTERIORS PACKAGE FOR SELECTIONS.

NOTE:
COORDINATE THE EXACT LOCATION OF THE ELEVATOR SUMP PITS WITH ELEVATOR CONSULTANT/STRUCTURAL ENGINEER.

GAS METER SCHEDULE

METER No.	TYPE	SYSTEM	CONNECTION SIZE	NOTES
G-1		2ND FLOOR LAUNDRY	2"	
G-2		3RD FLOOR LAUNDRY	2"	
G-3		63RD FLOOR BBQ GRILLS	1"	
G-4		63RD FLOOR BBQ GRILLS	1"	
G-5		63RD FLOOR BBQ GRILLS	1"	
G-6		63RD FLOOR BBQ GRILLS	1"	
G-7		63RD FLOOR FIRE PIT	1"	
G-8		63RD FLOOR FIREPLACE	1"	

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:
Manhattan West Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

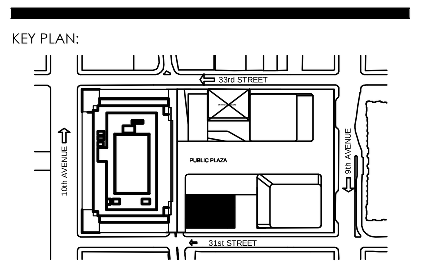
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER: NB#

NORTH: Scale: NTS 0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING SCHEDULES

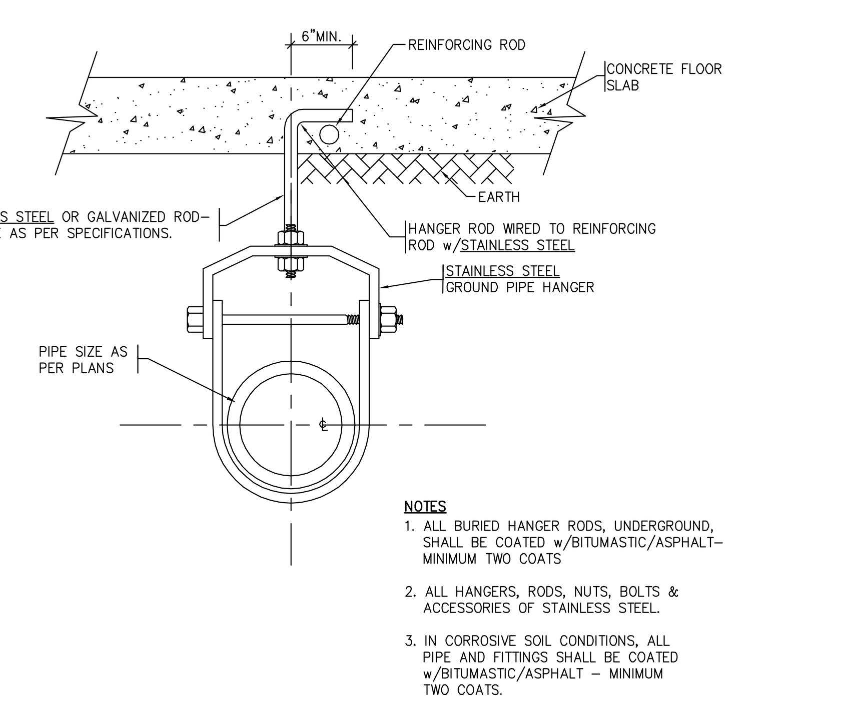
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-401.00
SHEET. No.:	29 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-401(Schedules).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-401(Schedules).dwg SAVED ON 12/8/2014 10:22 AM PLOTTED ON 12/8/2014 11:33 AM PLOTTED BY PELECH, COLLEEN

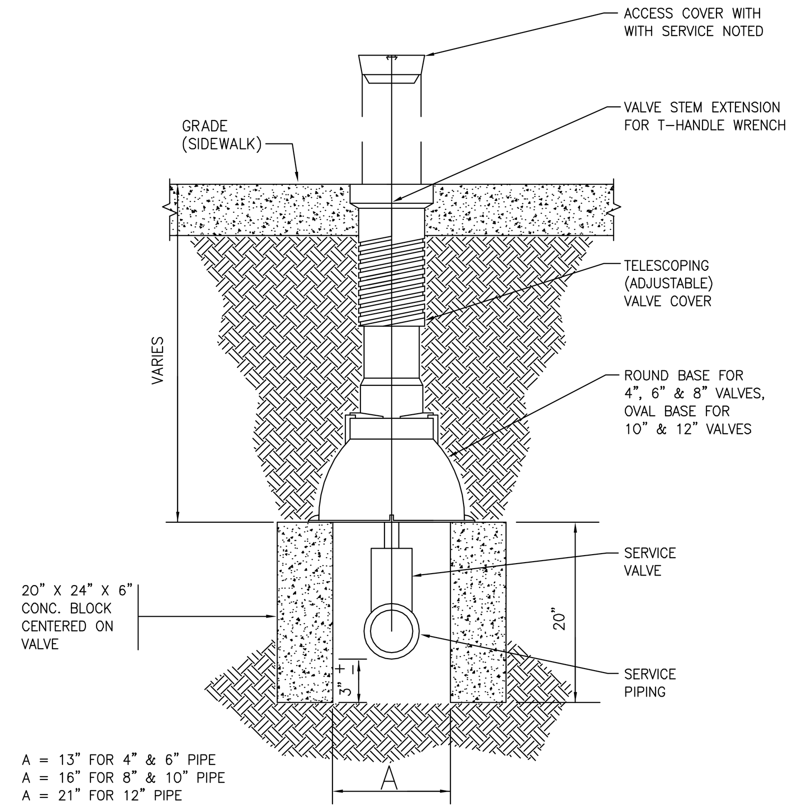
DEPT OF BLDGS 121185760 Job Number
ES507540569 Scan Code



NOTES
1. ALL BURIED HANGER RODS, UNDERGROUND, SHALL BE COATED w/BITUMASTIC/ASPHALT– MINIMUM TWO COATS
2. ALL HANGERS, RODS, NUTS, BOLTS & ACCESSORIES OF STAINLESS STEEL.
3. IN CORROSIVE SOIL CONDITIONS, ALL PIPE AND FITTINGS SHALL BE COATED w/BITUMASTIC/ASPHALT – MINIMUM TWO COATS.

PIPE SUPPORT FOR UNDERGROUND DRAINAGE PIPING

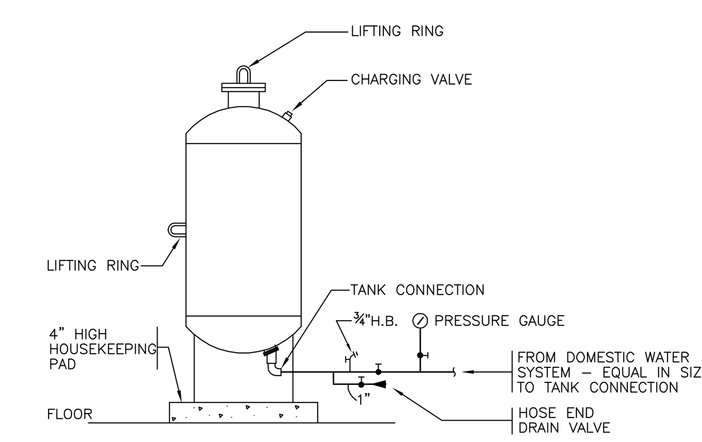
NOT TO SCALE



A = 13" FOR 4" & 6" PIPE
A = 16" FOR 8" & 10" PIPE
A = 21" FOR 12" PIPE

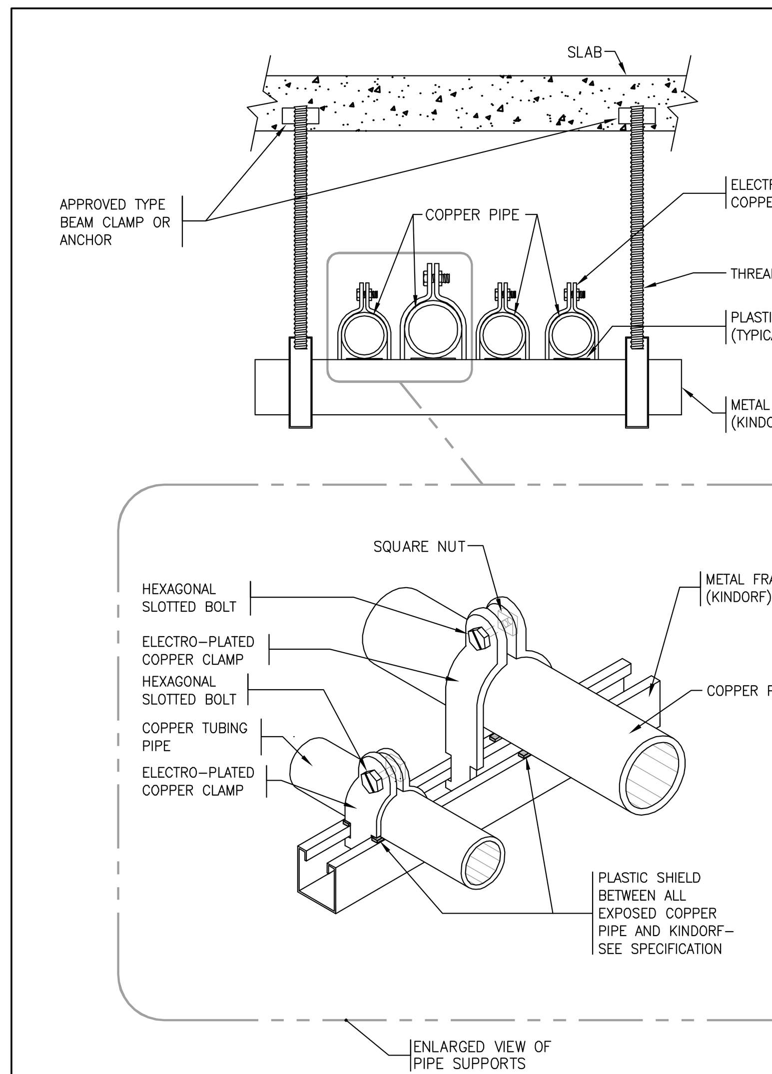
TYPICAL SERVICE VALVE BOX DETAIL

NOT TO SCALE



SCHEMATIC DIAGRAM OF DOMESTIC WATER HYDROPNEUMATIC TANK

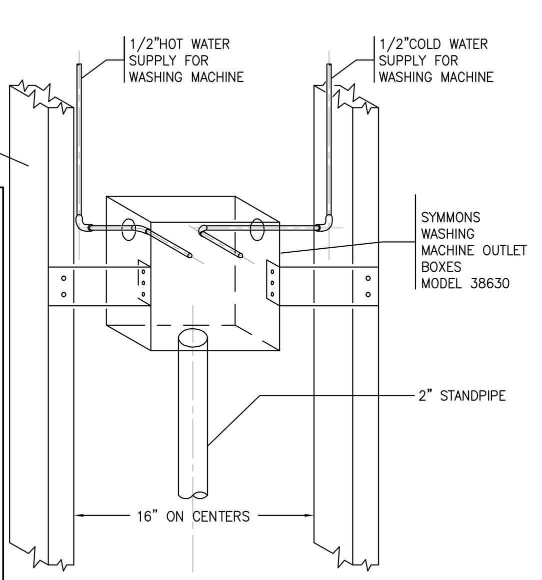
NOT TO SCALE



TYPICAL SUPPORT DETAIL

NOT TO SCALE

1. PROVIDE INTELLIFLOW AUTOMATIC WASHING MACHINE SHUT OFF VALVE, WATTS MODEL A2C–M1 AND A2C–WB–M1, ALSO INCLUDE A LEAK SENSOR, MODEL (A2C–LS).
2. PLUMBING CONTRACTOR TO COORDINATE THE INSTALLATION OF OUTLET BOX WITH OTHER TRADES. CONTRACTOR TO VERIFY THE LOCATIONS OF ANY OTHER DEVICES OR EQUIPMENT INSTALLED IN WALL AREA AT CLOTHES WASHING MACHINE AND MAKE ANY NEED OUTLET BOX LOCATION ADJUSTMENTS.
3. ALL DISCHARGE PIPING FROM WATER DRYER SHALL BE COPPER TUBING.
4. PLUMBING CONTRACTOR TO SUPPLY AND INSTALL A GALVANIZED STEEL PAN HAVING A MIN. THICKNESS OF 24 GAGE. PAN TO BE NO LESS THEN 1½" IN DEPTH AND SHALL BE OF SUFFICIENT SIZE AND SHAPE TO RECEIVE ALL DRIPPINGS & CONDENSATE FROM DRYER.

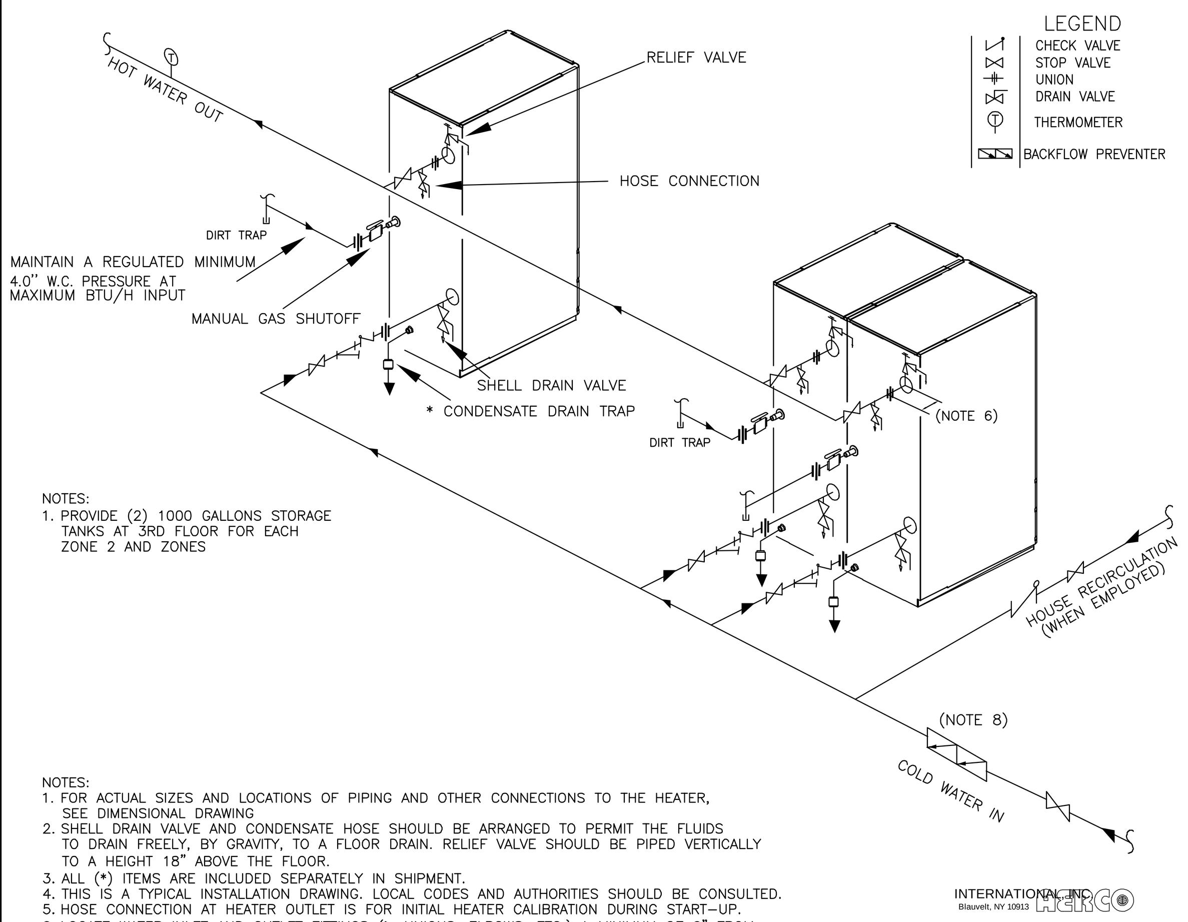


TYPICAL INSTALLATION DETAIL OF SUPPLY & DRAIN IN WALL FIXTURE

NOT TO SCALE

GAS FIRE WATER HEATER

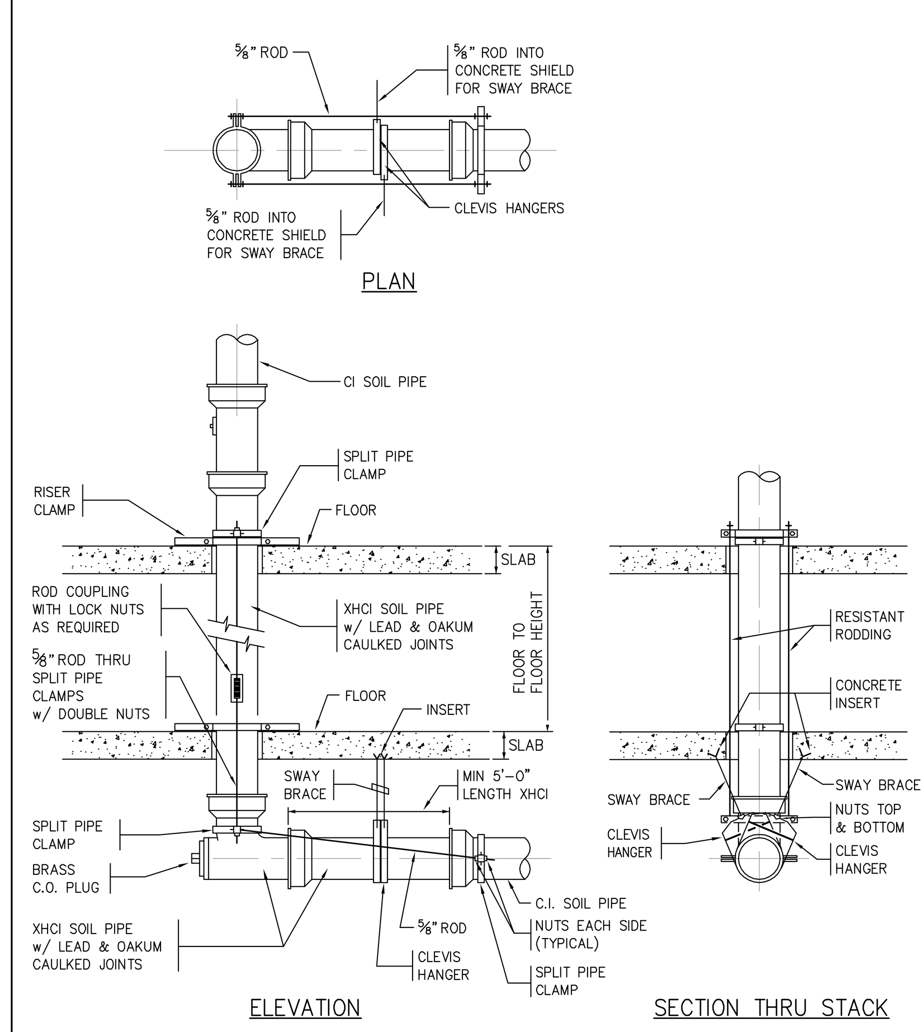
NOT TO SCALE



NOTES:
1. PROVIDE (2) 1000 GALLONS STORAGE TANKS AT 3RD FLOOR FOR EACH ZONE 2 AND ZONES

NOTES:
1. FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE HEATER, SEE DIMENSIONAL DRAWING
2. SHELL DRAIN VALVE AND CONDENSATE HOSE SHOULD BE ARRANGED TO PERMIT THE FLUIDS TO DRAIN FREELY, BY GRAVITY, TO A FLOOR DRAIN. RELIEF VALVE SHOULD BE PIPED VERTICALLY TO A HEIGHT 18" ABOVE THE FLOOR.
3. ALL (*) ITEMS ARE INCLUDED SEPARATELY IN SHIPMENT.
4. THIS IS A TYPICAL INSTALLATION DRAWING. LOCAL CODES AND AUTHORITIES SHOULD BE CONSULTED.
5. HOSE CONNECTION AT HEATER OUTLET IS FOR INITIAL HEATER CALIBRATION DURING START–UP.
6. LOCATE WATER INLET AND OUTLET FITTINGS (i.e.UNIONS, ELBOWS, ETC.) A MINIMUM OF 6" FROM WATER HEATER FITTINGS, TO PREVENT INTERFERENCE WITH REMOVAL OF HEATER PANELS.
7. HEATERS SHOULD BE PIPED REVERSE RETURN AS SHOWN OR BALANCING DEVICES ON THE OUTLETS OF THE HEATERS SHOULD BE EMPLOYED.
8. IF PERMITTED BY LOCAL CODES, A CHECK VALVE MAY BE USED IN PLACE OF A BACKFLOW PREVENTER.

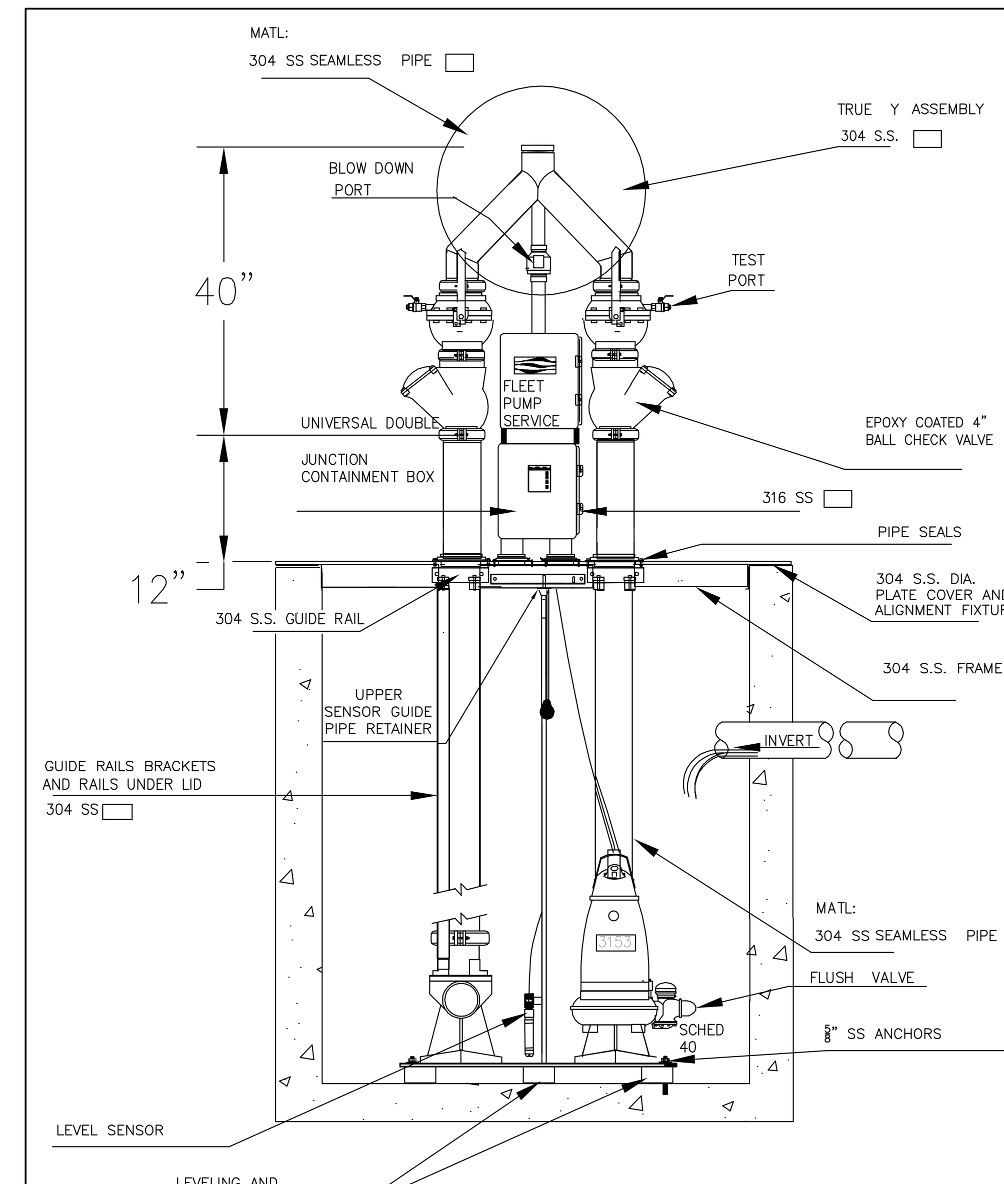
INTERNATIONAL, INC. HERCO
Blauvelt, NY 10913
INNOVATION GAS FIRED
(2 ZERO–SIDE & 1 SEPARATE)



DETAIL OF PIPING AT BASE OF STACKS
BASE OF LEADERS SIMILAR

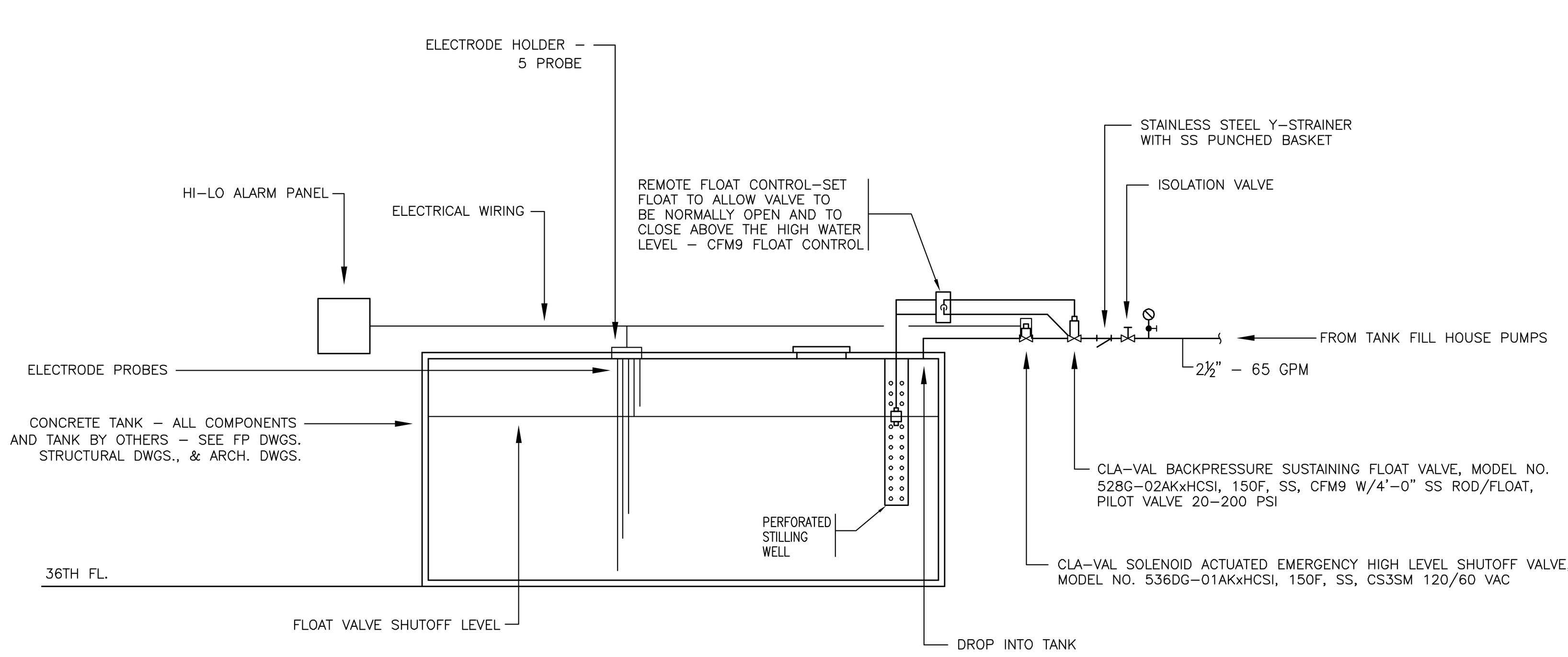
NO SCALE

THIS DETAIL USED @ BASE OF HIGH RISE BUILDINGS STACKS (WHERE HIGH HEAD CONDITIONS MIGHT OCCUR DUE TO LINE BLOCKAGES, HIGH STATIC HEADS, ETC).



EJECTOR PUMP

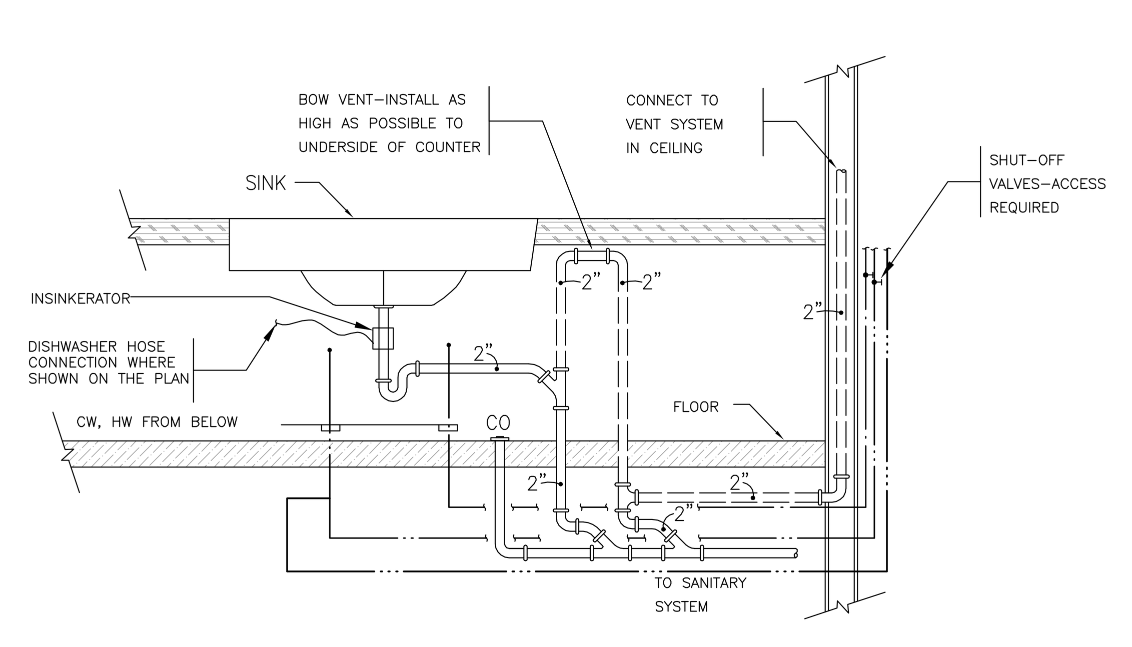
NO SCALE



NOTE: PLUMBING CONTRACTOR RESPONSIBLE FOR THE FILL–LINE AND ALL CONTROLS ON THIS DETAIL. PLUMBING CONTRACTOR IS NOT RESPONSIBLE FOR THE TANK, OVERFLOW, MANHOLE, LADDER, & OUTLET PIPING. COORDINATE WITH OTHER CONTRACTORS.

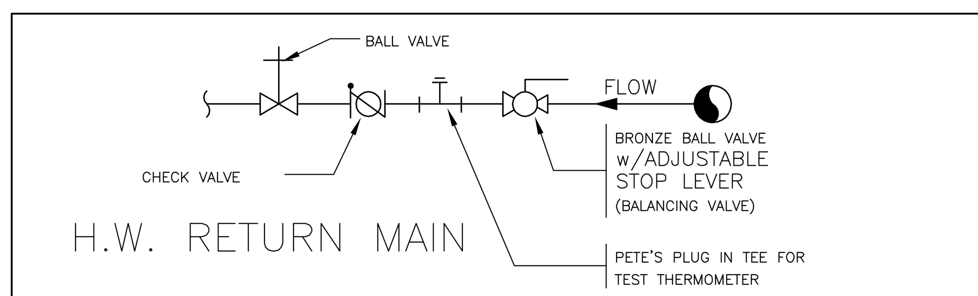
SCHEMATIC DIAGRAM OF THE
FIRE RESERVE WATER TANK FILL DETAIL – 36TH FLOOR

NOT TO SCALE



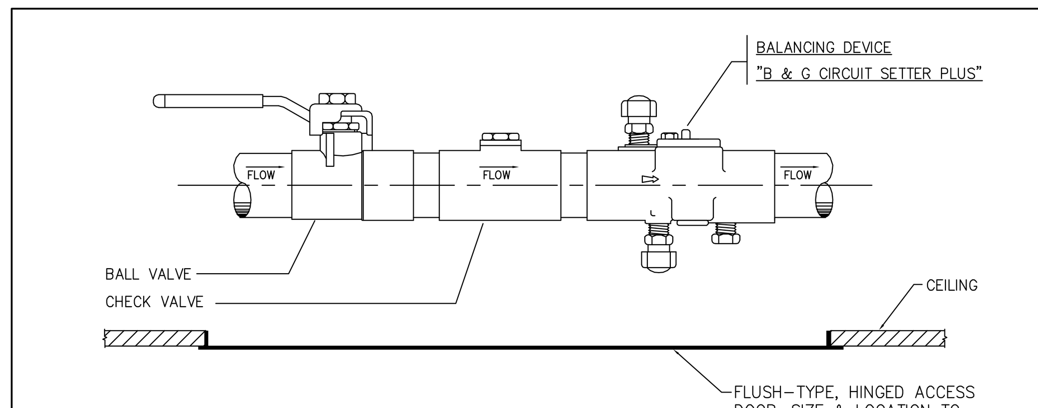
DETAIL OF ISLAND SINK BOW VENT

SCALE: NONE



TYPICAL BALANCING VALVE RIG

NOT TO SCALE



(ALTERNATE)TYPICAL BALANCING VALVE RIG

NO SCALE

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCEArchitects,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

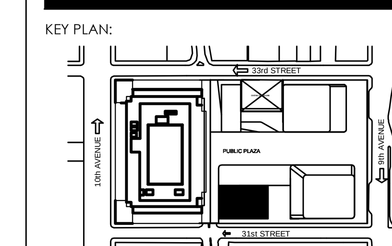
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

DATE:	REVISION:
2014-12-08	ISSUED FOR DOB FILING
2014-10-09	Bulletin #1
2014-09-09	Issued for Construction
2014-08-01	90% Construction Documents
2014-06-03	Issued for 50% Construction Documents
2014-05-12	Issued for DOB Filing
2014-03-14	Design Development

D.O.B. NUMBER:
NB#

NORTH:
Scale: NTS
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
PLUMBING
DETAIL SHEET #1

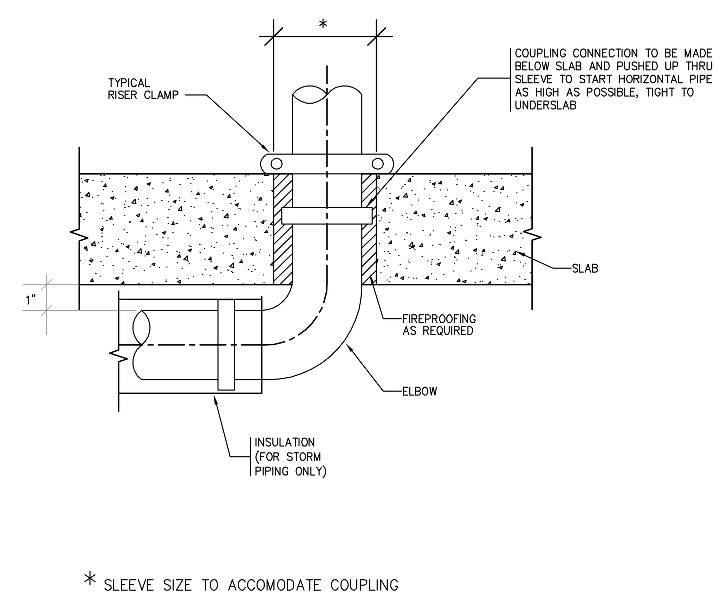
SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-501.00
SHEET. No.:	30 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-501.0(Details).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-501.0(Details).dwg SAVED ON 12/8/2014 10:22 AM PLOTTED ON 12/8/2014 11:33 AM PLOTTED BY PELECH, COLLEEN

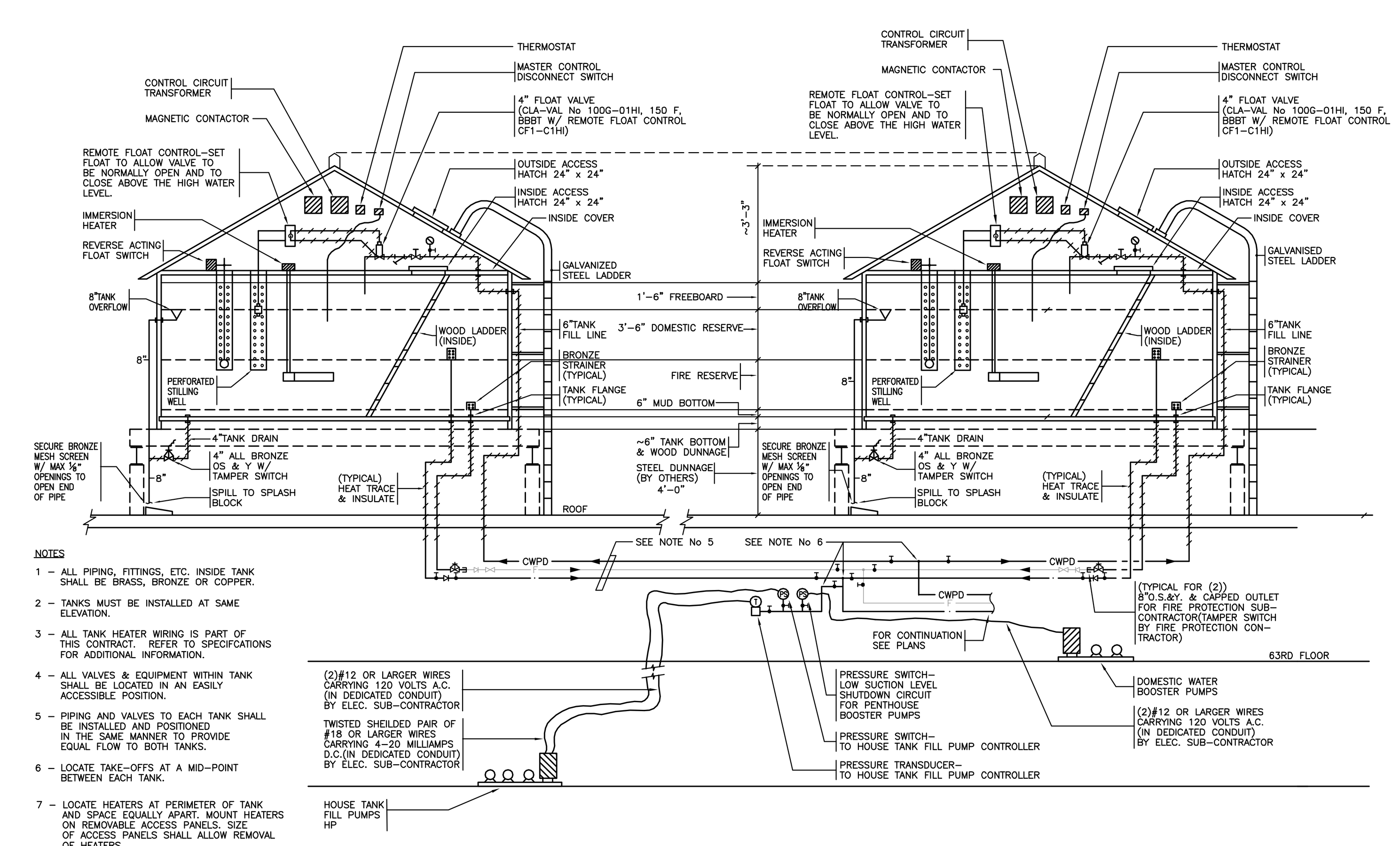
DEPT OF BLDGS 121185760 Job Number
ES293017623 Scan Code



* SLEEVE SIZE TO ACCOMODATE COUPLING

TYPICAL VERTICAL–TURN–HORIZONTAL DRAIN PIPING DETAIL

NO SCALE



NOTES

1 – ALL PIPING, FITTINGS, ETC. INSIDE TANK SHALL BE BRASS, BRONZE OR COPPER.

2 – TANKS MUST BE INSTALLED AT SAME ELEVATION.

3 – ALL TANK HEATER WIRING IS PART OF THIS CONTRACT. REFER TO SPECIFCATIONS FOR ADDITIONAL INFORMATION.

4 – ALL VALVES & EQUIPMENT WITHIN TANK SHALL BE LOCATED IN AN EASILY ACCESSIBLE POSITION.

5 – PIPING AND VALVES TO EACH TANK SHALL BE INSTALLED AND POSITIONED IN THE SAME MANNER TO PROVIDE EQUAL FLOW TO BOTH TANKS.

6 – LOCATE TAKE–OFFS AT A MID–POINT BETWEEN EACH TANK.

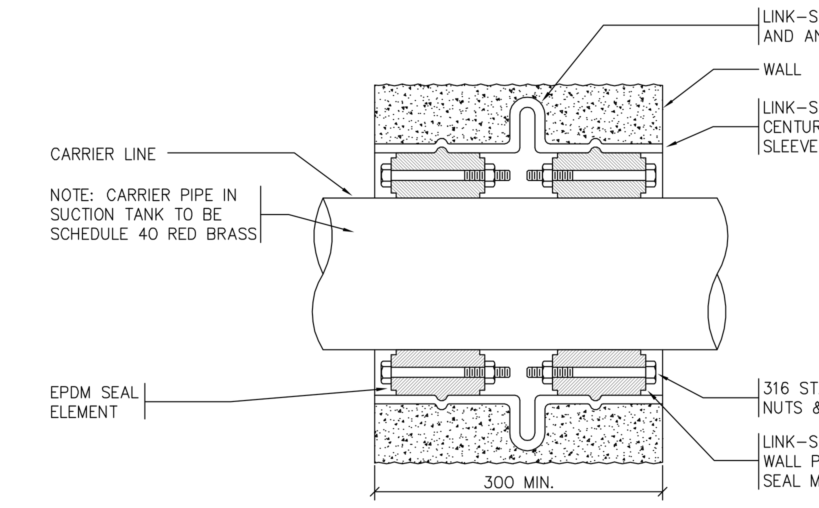
7 – LOCATE HEATERS AT PERIMETER OF TANK AND SPACE EQUALLY APART. MOUNT HEATERS ON REMOVABLE ACCESS PANELS. SIZE OF ACCESS PANELS SHALL ALLOW REMOVAL OF HEATERS.

8 – LOCATE TEMPERATURE PROBE IN CENTER OF TANK.

9 – REFER TO PLANS FOR LOCATIONS OF PIPE CONNECTIONS TO TANK.

SCHEMATIC DIAGRAM OF THE COMBINATION DOMESTIC/FIRE RESERVE HOUSE TANKS –

NOT TO SCALE

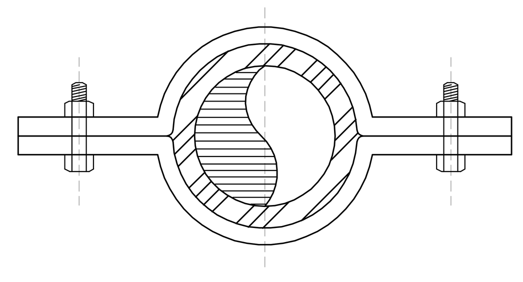


NOTE: WATER STOP AND SEAL ELEMENT SIZE TO BE AS PER MANUFACTURERS RECOMMENDATIONS, AND MATERIAL AND PIPE SIZE.

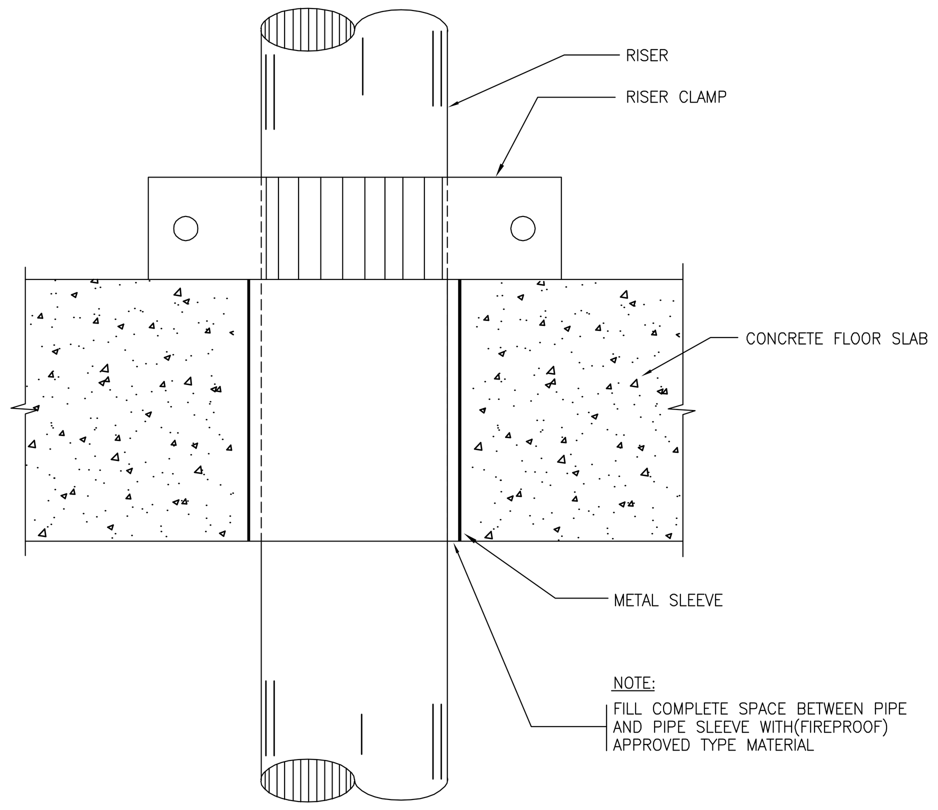
SCHEMATIC DETAIL WATERTIGHT SLEEVES THRU FOUNDATION WALLS

NO SCALE

MANUFACTURED BY CENTURY–LINE SLEEVE & LINK SEAL PIPE–THRU–WALL PENETRATION ASSEMBLY DETAIL THUNDERLINE CORPORATION, BELLEVILLE, MI 48111

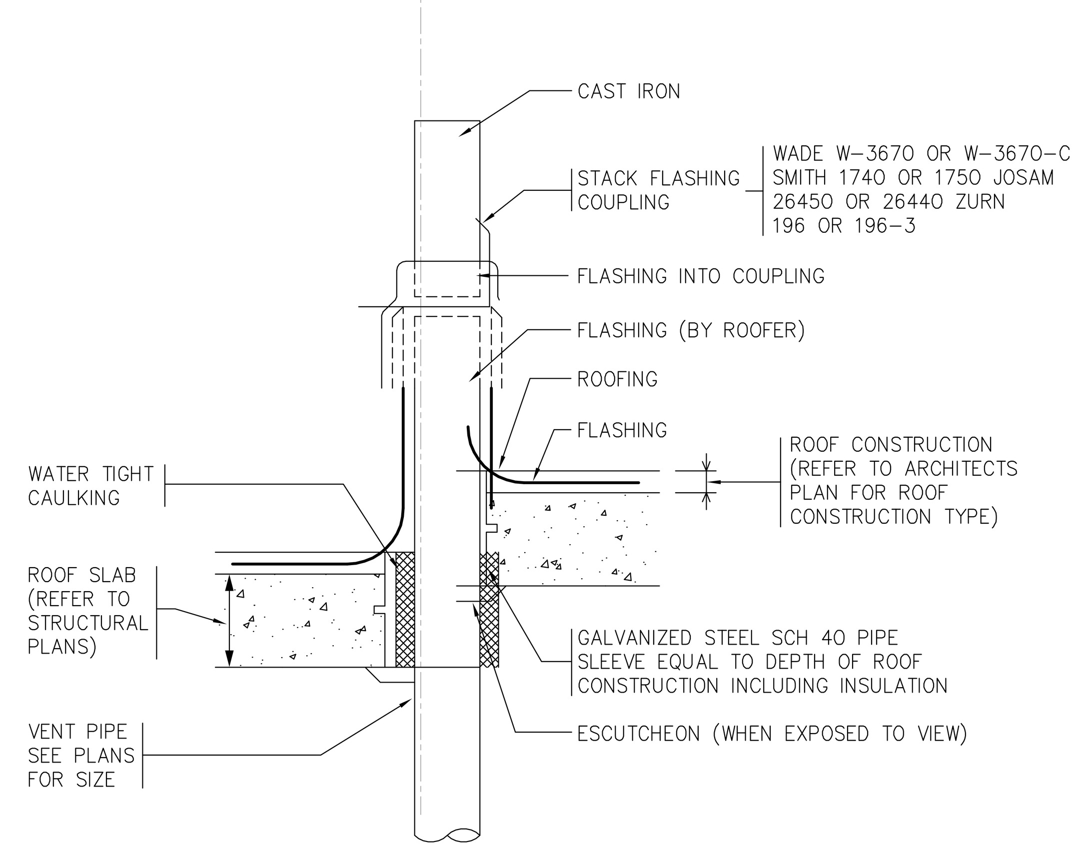


PLAN VIEW



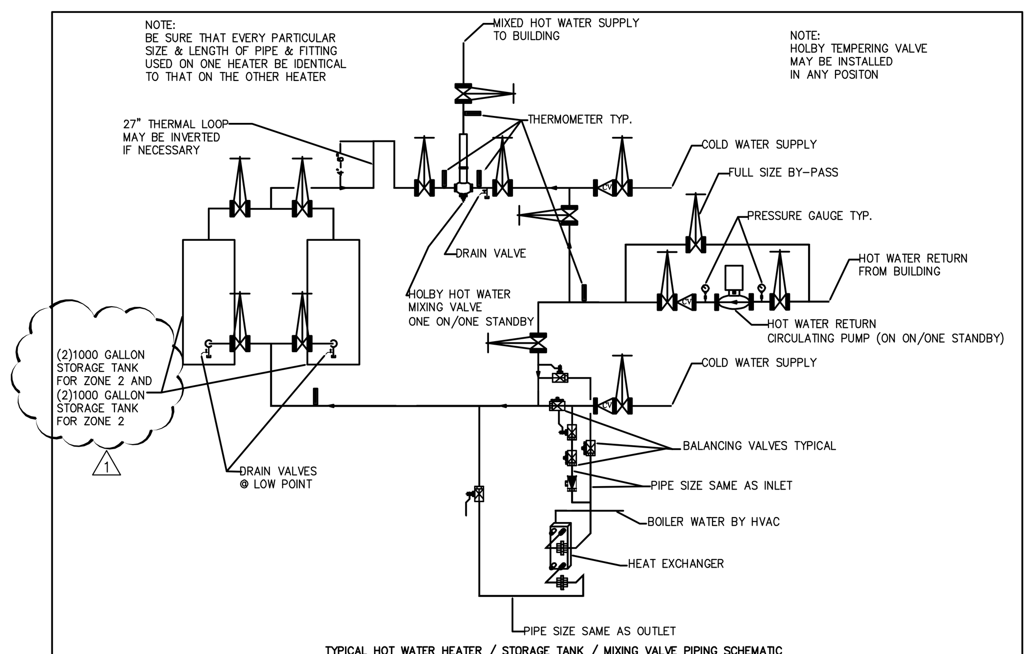
TYPICAL RISER ANCHOR DETAIL

NO SCALE

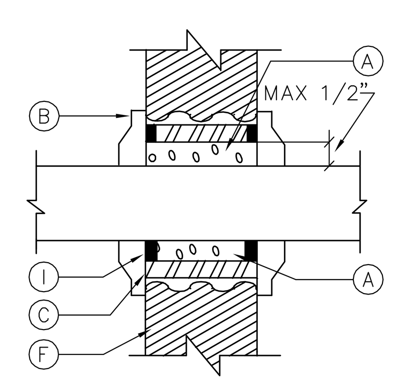


VENT THRU ROOF – FLASHING

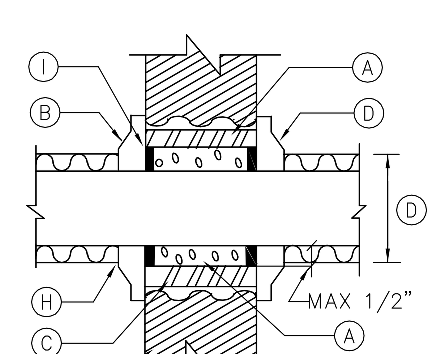
NO SCALE



TYPICAL HOT WATER HEATER / STORAGE TANK / MIXING VALVE PIPING SCHEMATIC ZONE 2 . SIMILAR SYSTEM FOR ZONE 3



BARE PIPE



INSULATED HOT PIPE

(A) ALL SPACES PACKED FULL DEPTH WITH MINERAL WOOL OR OTHER EQUALLY APPROVED FIRE RESISTIVE MATERIAL (ASBESTOS OR FIBERGLASS SHALL NOT BE USED)

FIRE RESISTANT FOAM SEALANT CHASE FOAM CTC P2–855 INSTALLATION AS PER MANUFAC– TURER.

(B) ESCUTCHEON BOTH SIDES

(C) SLEEVE

(D) DIAMETER OF INSULATED PIPE

(E) ANHYDROUS CALCIUM SILICATE INSULATION THRU SLEEVE

(F) FIRE RATED PARTITION WALL OR FLOOR

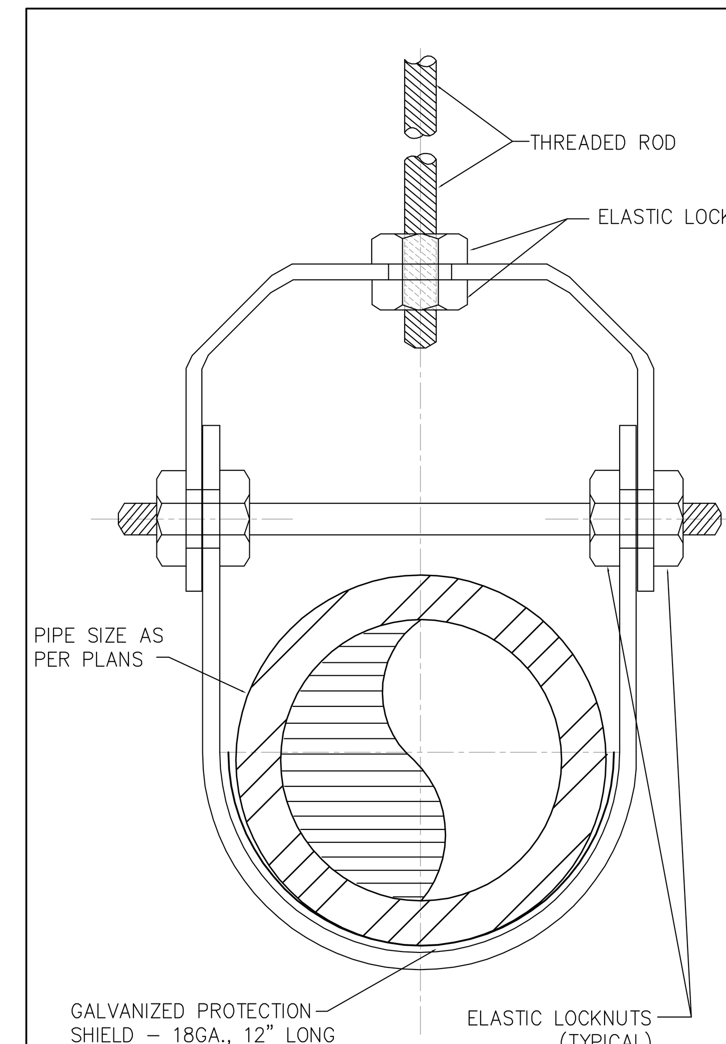
(G) FIBERGLASS INSULATION

(H) TERMINATE INSULATION AT ESCUTCHEON

(I) 1/2" DEPTH FIRE STOP FINISH SEALANT

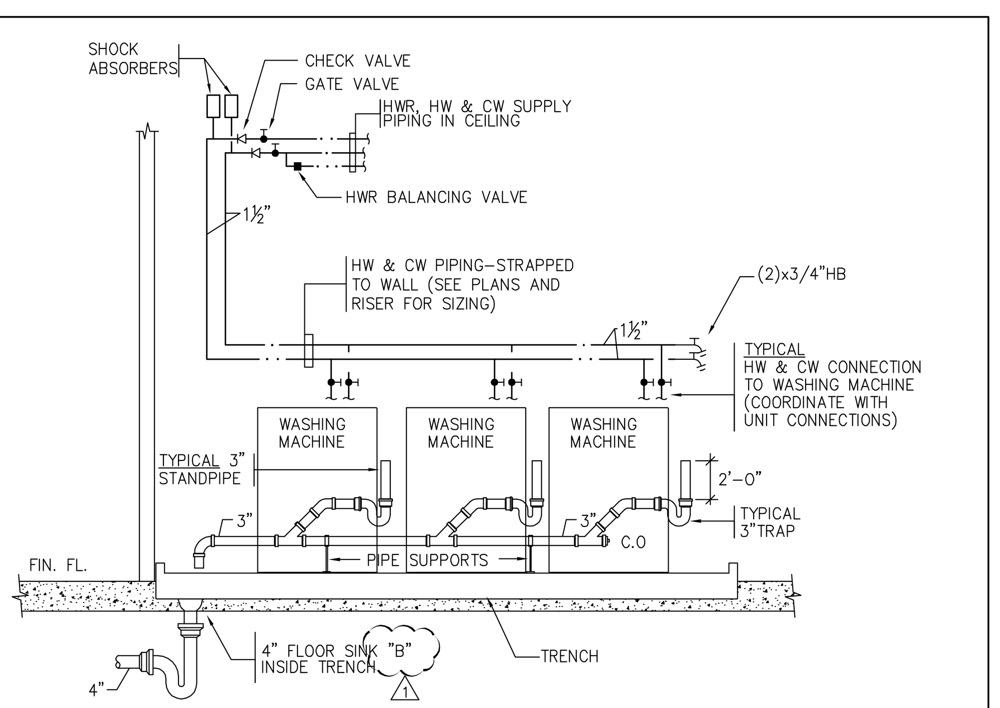
DETAIL OF PIPING PIERCING FIRE RATED PARTITIONS, WALLS AND FLOORS

NO SCALE



CLEVIS HANGER

NO SCALE



WASHING MACHINE PIPING SCHEMATIC

NO SCALE

THIS PLAN APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Alterations or additions to this engineering document by an unlicensed person is a violation of Chapter 16, Title VIII, Article 145 § 7209.2 of the New York State Education Law.

PROJECT:

Manhattan West Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects, LLP*
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
	2014-12-08	ISSUED FOR DOB FILING
1	2014-10-09	Bulletin #1
	2014-09-09	Issued for Construction
	2014-08-01	90% Construction Documents
	2014-06-03	Issued for 50% Construction Documents
	2014-05-12	Issued for DOB Filing
	2014-03-14	Design Development

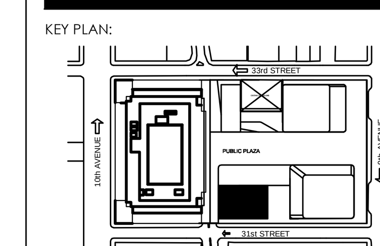
D.O.B. NUMBER:

NB#

NORTH:

Scale: NTS
0' 4' 8' 12' 20'

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

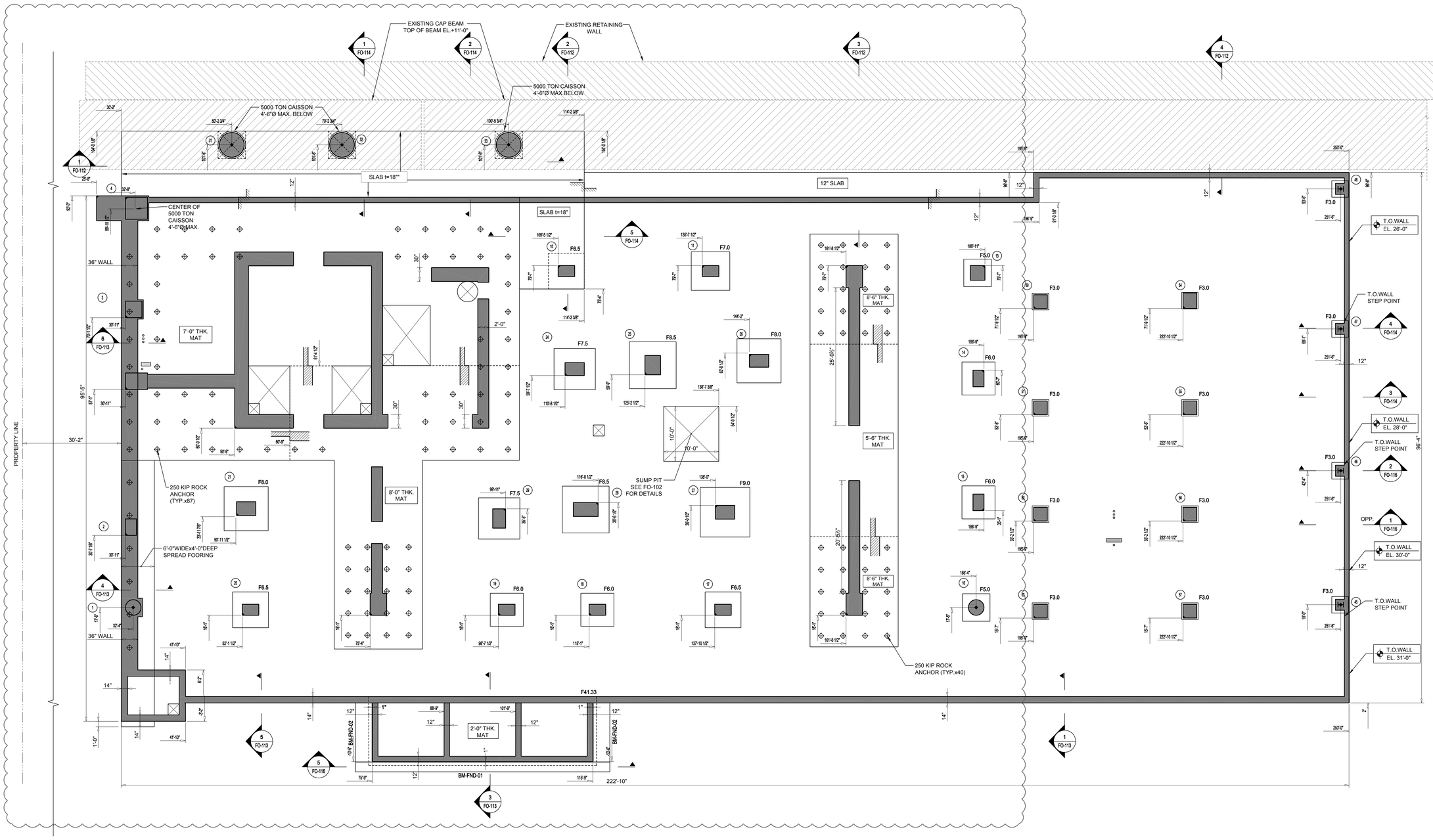
PLUMBING
DETAIL SHEET #2

SEAL & SIGNATURE:

DATE:	02/17/2014
PROJECT No:	120187.02
DRAWN BY:	KW
CHECKED BY:	GS
DWG. No.:	P-502.00
SHEET. No.:	31 of 31

FILE No: I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-502.0(Details).dwg

FILE NAME I:\120187-02\PLUM\DOB FILING 12-08-14\12018702P-502.0(Details).dwg SAVED ON 12/8/2014 10:43 AM PLOTTED ON 12/8/2014 11:33 AM PLOTTED BY PELECH, COLLEEN



FOOTING SCHEDULE

MARK	LENGTH	WIDTH	DEPTH (IN)	BOTTOM REINFORCEMENT		REMARKS
				PARALLEL TO LENGTH	PARALLEL TO WIDTH	
F3.0	3'-0"	3'-0"	24	6-#6	6-#6	HOOK BARS
F5.0	5'-0"	5'-0"	27	10-#8	10-#8	HOOK BARS
F6.0	6'-0"	6'-0"	33	14-#8	14-#8	HOOK BARS
F6.5	6'-6"	6'-6"	36	14-#9	14-#9	HOOK BARS
F7.0	7'-0"	7'-0"	39	18-#9	18-#9	HOOK BARS
F7.5	7'-6"	7'-6"	45	20-#9	20-#9	HOOK BARS
F8.0	8'-0"	8'-0"	45	22-#9	22-#9	HOOK BARS
F8.5	8'-6"	8'-6"	48	24-#9	24-#9	HOOK BARS
F9.0	9'-0"	9'-0"	54	26-#9	26-#9	HOOK BARS
F41.33	41'-4"	12'-8"	48	25-#9	82-#9	HOOK BARS

FOUNDATION WALL SCHEDULE

THICKNESS	VERTICAL REINFORCEMENT		HORIZONTAL REINFORCEMENT	TIES	REMARKS
	INSIDE FACE	OUTSIDE FACE			
1'-2"	#7@12"	#5@12"	#4@12" EA. FACE	NONE	
1'-0"	#7@12"	#5@12"	#4@12" EA. FACE	NONE	

SLAB THICKNESS U.O.N.: t = 18"

SLAB CONCRETE STRENGTH: f'c = 5 ksi

TOP OF SLAB ELEVATION U.O.N.: SEE PLAN

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
4. 6" SLAB ON GRADE SHALL HAVE WWF 6x6 W2.0x 2.0 AT MIDHEIGHT.
5. TOP OF FOOTING OR FOUNDATION MAT SHALL BE 1'-6" BELOW TOP OF SLAB ON GRADE WHERE UNDER SLAB GRAVEL IS USED. WHERE UNDER SLAB GRAVEL IS NOT USED, TOP OF FOOTING OR FOUNDATION MAT SHALL MATCH BOTTOM OF SLAB.
6. FOR FOUNDATION DETAILS AND SECTIONS SEE FO-111 TO F0-115.
7. FOR FOUNDATION MAT PART PLANS AND SECTIONS SEE FO-121 TO FO-122.
8. FOR FOOTING SCHEDULE AND FOUNDATION WALL SCHEDULE SEE FO-101.
9. CONCRETE STRENGTH OF SHEAR WALLS TO MATCH STRENGTH OF COLUMNS.
10. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
11. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
12. FOR TYPICAL STEEL DETAILS SEE DRAWINGS S-601 TO S-603.
13. CONCRETE STRENGTH OF STRUCTURE SHOWN ON PLAN SHALL BE THE FOLLOWING, U.O.N.
    - FOOTINGS 6 KSI
    - FOUNDATION MATS 8 KSI
    - FOUNDATION WALLS 5 KSI
14. ⊕ INDICATES TIE DOWN ROCK ANCHOR WITH 250 KIPS CAPACITY.
15. REINFORCE 18" SLAB WITH # 6@12" EACH WAY, TOP AND BOTTOM.
16. REINFORCE 12" SLAB WITH #5 @ 12" EACH WAY, TOP AND BOTTOM.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5655

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

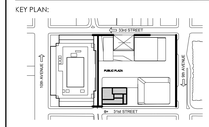
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



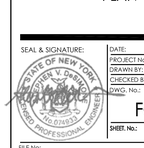
PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

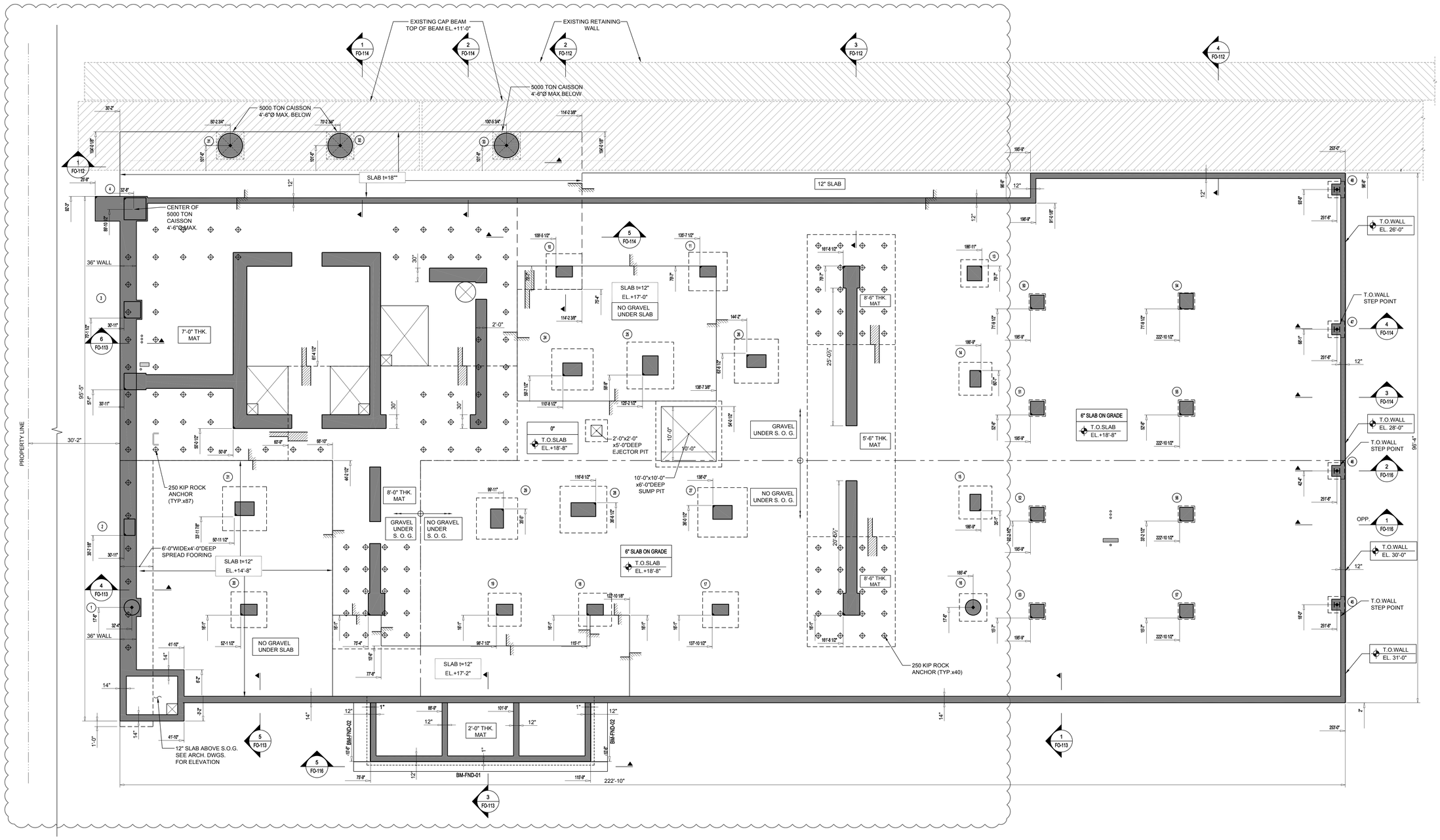
FOUNDATION PLAN

SEAL & SIGNATURE:



DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	MB
CHECKED BY:	JS
DWG. No.:	FO-101.00
SHEET. No.:	02 of 70

FILE No: 13168-002-FO-101.dwg



SLAB THICKNESS U.O.N.: t = 6"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: f'c = 5 ksi	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION U.O.N.: SEE PLAN	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S S-410 TO -S432..
	4. 6" SLAB ON GRADE SHALL HAVE WWF 6x6 W2.0x 2.0 AT MIDHEIGHT.
	5. TOP OF FOOTING OR FOUNDATION MAT SHALL BE 1'-6" BELOW TOP OF SLAB ON GRADE WHERE UNDER SLAB GRAVEL IS USED. WHERE UNDER SLAB GRAVEL IS NOT USED, TOP OF FOOTING OR FOUNDATION MAT SHALL MATCH BOTTOM OF SLAB.
	6. FOR FOUNDATION DETAILS AND SECTIONS SEE FO-111 TO F0-115.
	7. FOR FOUNDATION MAT PART PLANS AND SECTIONS SEE FO-121 TO FO-122.
	8. FOR FOOTING SCHEDULE AND FOUNDATION WALL SCHEDULE SEE FO-101.
	9. CONCRETE STRENGTH OF SHEAR WALLS TO MATCH STRENGTH OF COLUMNS.
	10. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	11. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	12. FOR TYPICAL STEEL DETAILS SEE DRAWINGS S-601 TO S-603.
	13. CONCRETE STRENGTH OF STRUCTURE SHOWN ON PLAN SHALL BE THE FOLLOWING, U.O.N. FOOTINGS 6 KSI; FOUNDATION MATS 8 KSI; FOUNDATION WALLS 5 KSI
	14. INDICATES TIE DOWN ROCK ANCHOR WITH 250 KIPS CAPACITY.
	15. REINFORCE 18" SLAB WITH #6@12" EACH WAY, TOP AND BOTTOM.
	16. REINFORCE 12" SLAB WITH #5 @ 12" EACH WAY, TOP AND BOTTOM.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

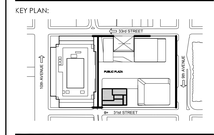
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

CELLAR PLAN

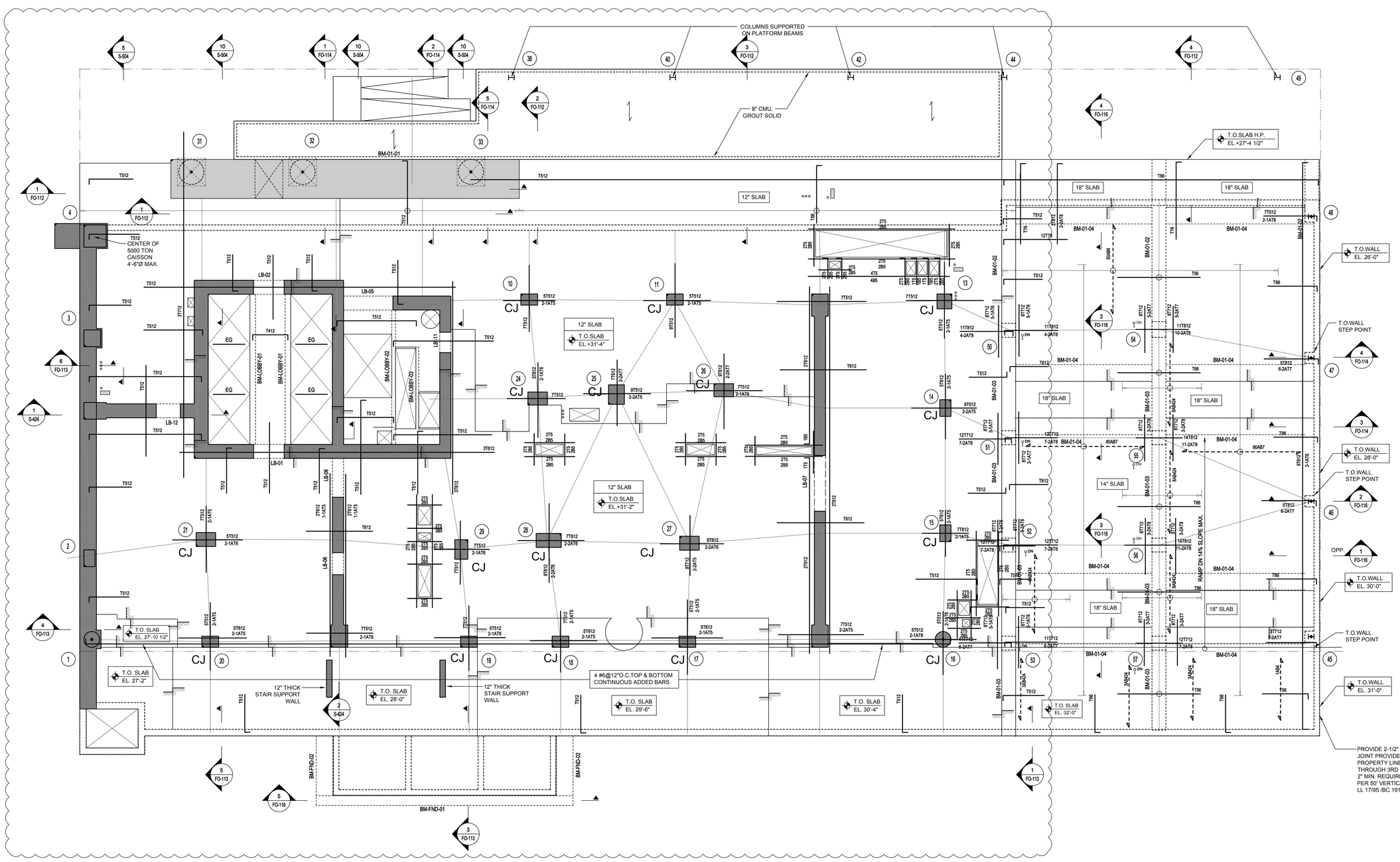
SEAL & SIGNATURE:

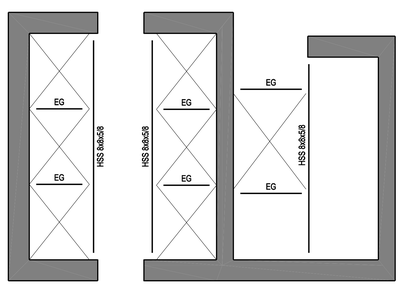
STATE OF NEW YORK · JOHN V. DeSIMONE · 048 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	FO-102.00
SHEET. No.:	03 of 70

FILE No: 13168-003-FO-102.dwg

DEPT OF BLDGS 421185160 Job Number
E3A2097B200 Scan Code

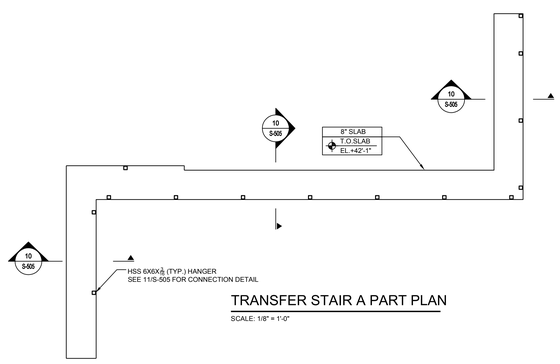




ELEVATOR STEEL PART PLAN

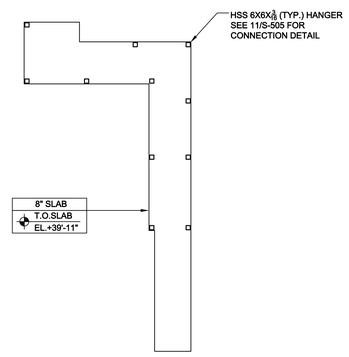
SCALE: 5/32" = 1'-0"

NOTE:
TOP OF STEEL AT ELEV. +41'-2".



TRANSFER STAIR A PART PLAN

SCALE: 1/8" = 1'-0"



TRANSFER STAIR D PART PLAN

SCALE: 5/32" = 1'-0"

SLAB THICKNESS U.O.N.: t = 12"	
SLAB CONCRETE STRENGTH: 8.5 KSI	
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" AND 14" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. DENOTES 3½" LT. WT. CONCRETE OVER 3" - 18 GAGE METAL DECK (6½" TOTAL DEPTH) f'c = 3 KSI.
15. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
16. DENOTES MOMENT FRAME CONNECTIONS.
17. T.O. STEEL SHALL BE 6¼" BELOW T.O. SLAB, U.O.N.
18. FOR FOUNDATION DETAILS AND SECTIONS SEE FO-111 TO FO-113.
19. FOR FOUNDATION WALL SCHEDULE SEE FO-101.
20. CJ DENOTES COLUMN JACKET, SEE DETAIL 1 ON S-403.
21. FOR 18" SLAB, SEE FO-116 FOR TOP AND BOTTOM REINF. CALLOUT.
22. FOR 8" SLAB, PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOMA BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

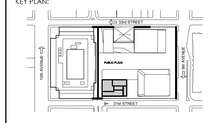
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

1ST FLOOR REINFORCEMENT PLAN

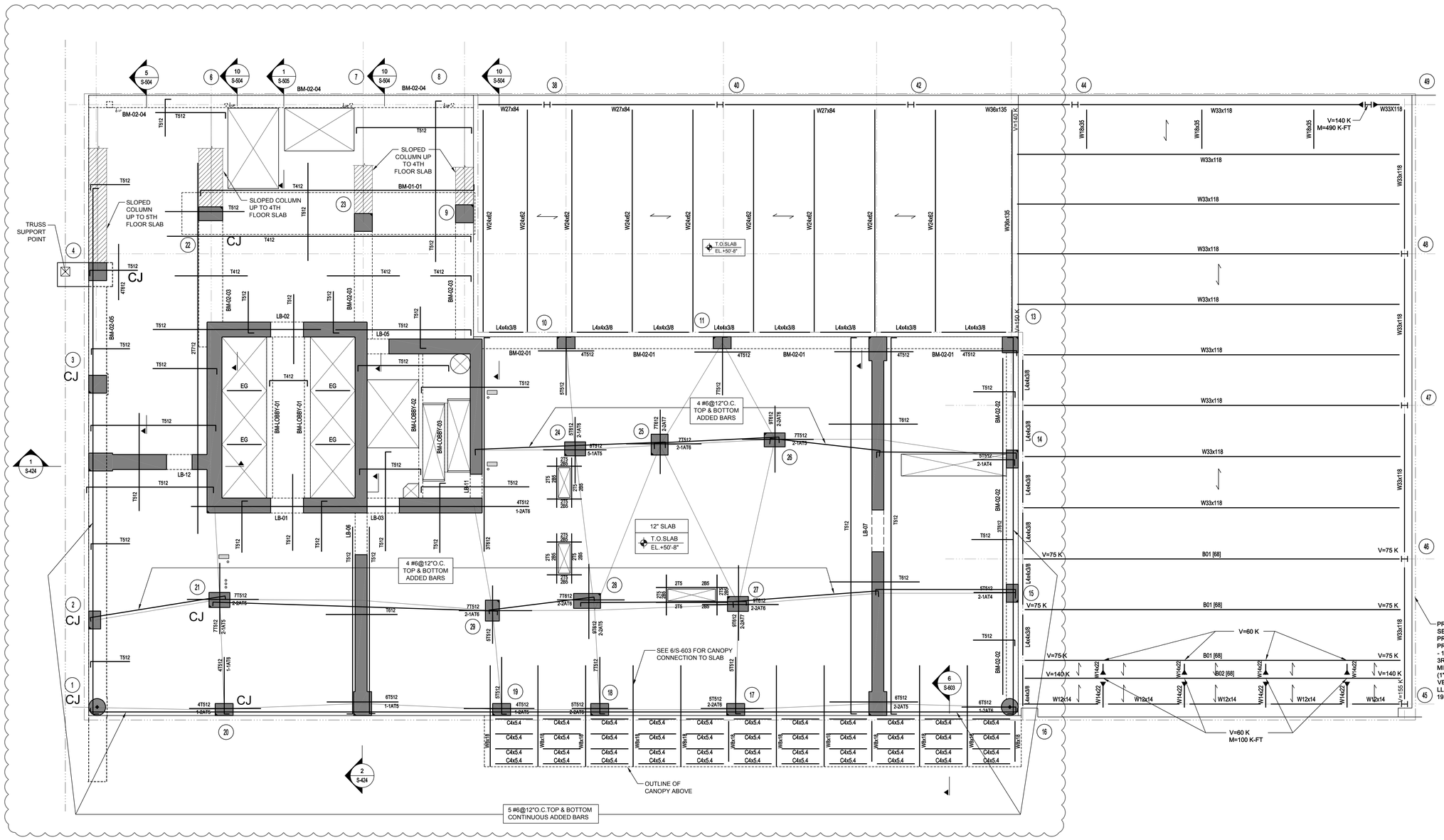
SEAL & SIGNATURE:

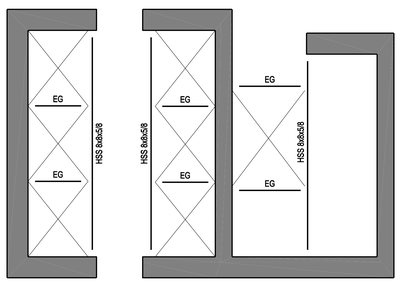
STATE OF NEW YORK — JOSEPH V. DESIMONE — 040,070823 — LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-201.00
SHEET. No.:	12 of 70

FILE No: 13168-012-S-201.dwg

DEPT OF BLDGS 421859760 Job Number
E344603963 Scan Code





ELEVATOR STEEL PART PLAN

SCALE: 1/8" = 1'-0"

NOTE:
TOP OF STEEL AT ELEV. +41'-2".

SLAB THICKNESS U.O.N.: t = 12"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: 8.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6½" TOTAL DEPTH) f'c = 3 KSI.
	15. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
	16. DENOTES MOMENT FRAME CONNECTIONS.
	17. T.O. STEEL SHALL BE 6¼" BELOW T.O. SLAB, U.O.N.
	18. CJ DENOTES COLUMN JACKET, SEE DETAIL 1 ON S-403.
	19. V = ... DENOTES FACTORED BEAM REACTIONS FOR CONNECTION DESIGN M = ... DENOTES FACTORED MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

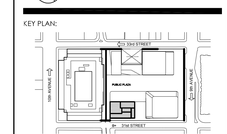
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH:
5/32"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

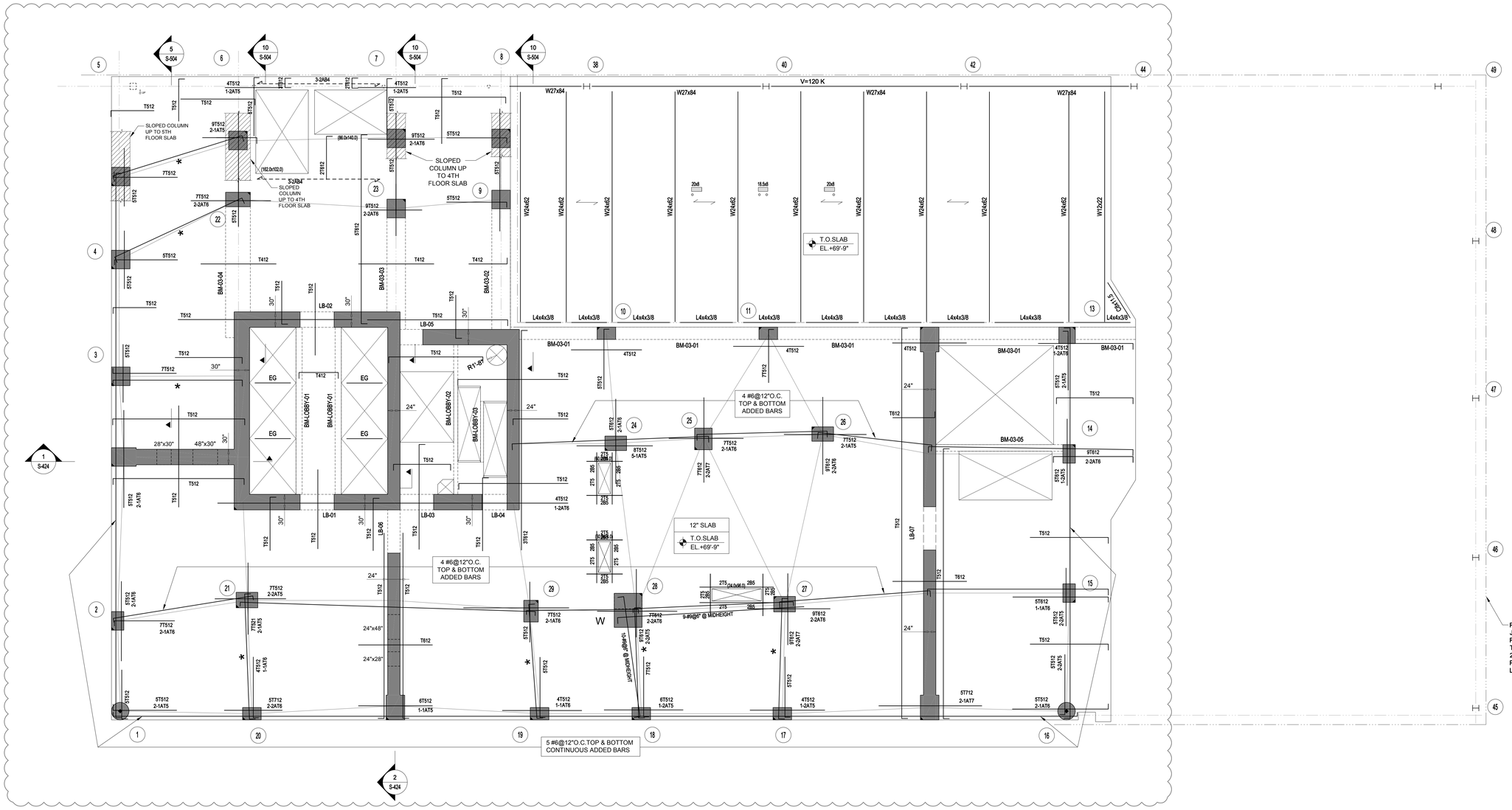
DRAWING TITLE:
2ND FLOOR REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-202.00
SHEET. No.:	13 of 70

FILE No: 13168-013-S-202.dwg

DEPT OF BLDGS 421859760 Job Number
E285517258SL Scan Code



SLAB THICKNESS U.O.N.:	t = 12"
SLAB CONCRETE STRENGTH:	8.5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" SLAB PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM.
7. * DENOTES 5 #5@12"O.C. TOP AND BOTTOM ADDED BARS.
8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
13. T DENOTES COLUMN TRANSFER.
14. W DENOTES COLUMN WALK.
15. DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6¼" TOTAL DEPTH) f'c = 3 KSI.
16. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
17. ▶—— DENOTES MOMENT FRAME CONNECTIONS.
18. T.O. STEEL SHALL BE 6¼" BELOW T.O. SLAB, U.O.N.
19. V = ... DENOTES FACTORED BEAM REACTIONS FOR CONNECTION DESIGN
    M = ... DENOTES FACTORED MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (917) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

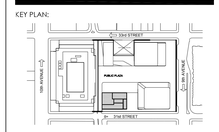
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER:
NB#

NORTH:
5/32"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

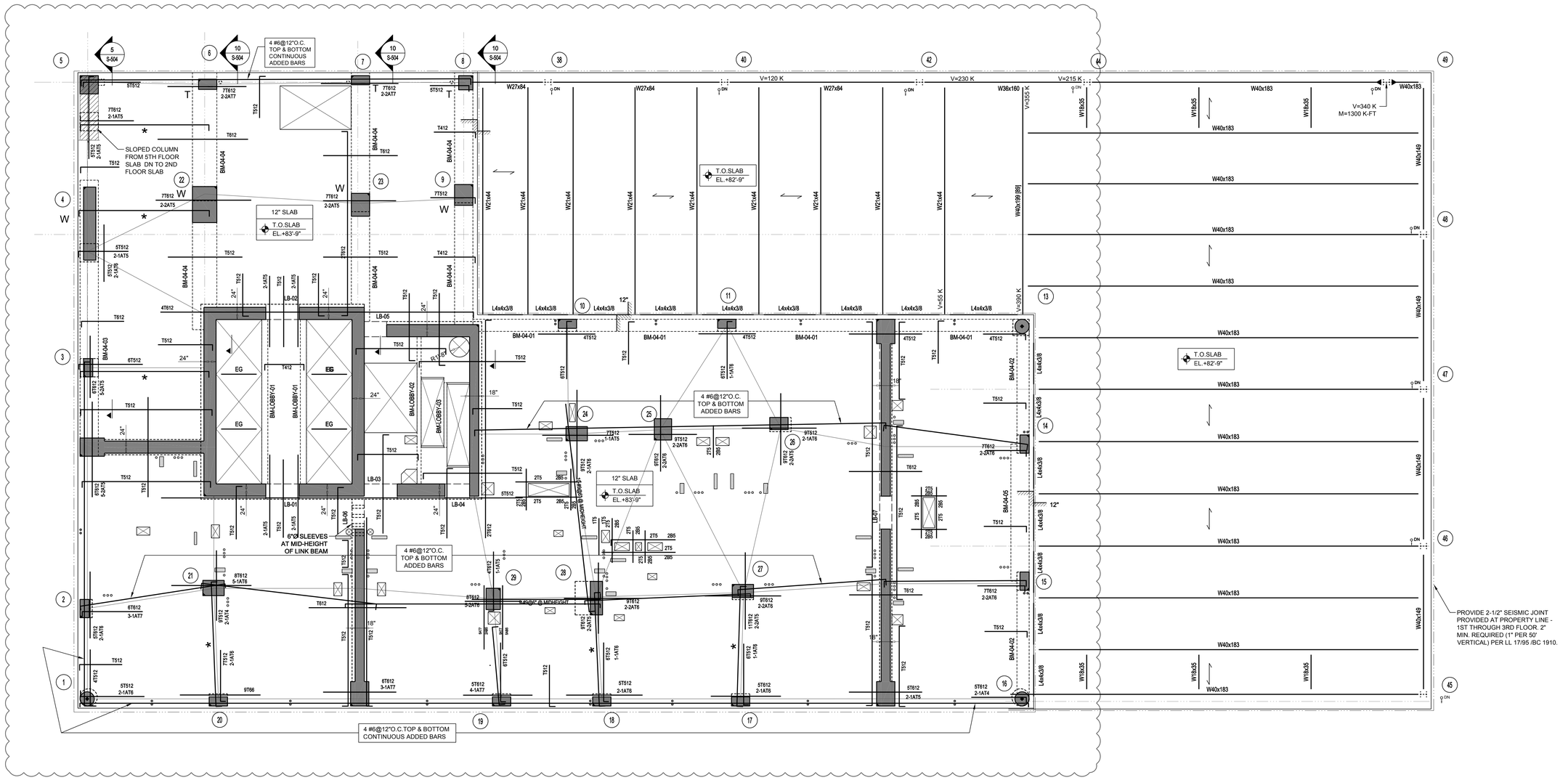
DRAWING TITLE:
3RD FLOOR PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	1318.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-203.00
SHEET. No.:	13 of 70

FILE No: 1318-013-S-203.dwg

DEPT OF BLDGS 421859760 Job Number
E302586970 Scan Code



SLAB THICKNESS U.O.N.:	t = 12"
SLAB CONCRETE STRENGTH:	8.5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" SLAB PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM.
7. * DENOTES 5 #5@12"O.C. TOP AND BOTTOM ADDED BARS.
8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
13. T DENOTES COLUMN TRANSFER.
14. W DENOTES COLUMN WALK.
15. ⟷ DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6½" TOTAL DEPTH) f'c = 3 KSI.
16. ALL BEAMS SHALL HAVE ¾"Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
17. ▶— DENOTES MOMENT FRAME CONNECTIONS.
18. T.O. STEEL SHALL BE 6½" BELOW T.O. SLAB, U.O.N.
19. V = ... DENOTES **FACTORED** BEAM REACTIONS FOR CONNECTION DESIGN
    M = ... DENOTES **FACTORED** MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

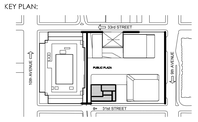
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER:
NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

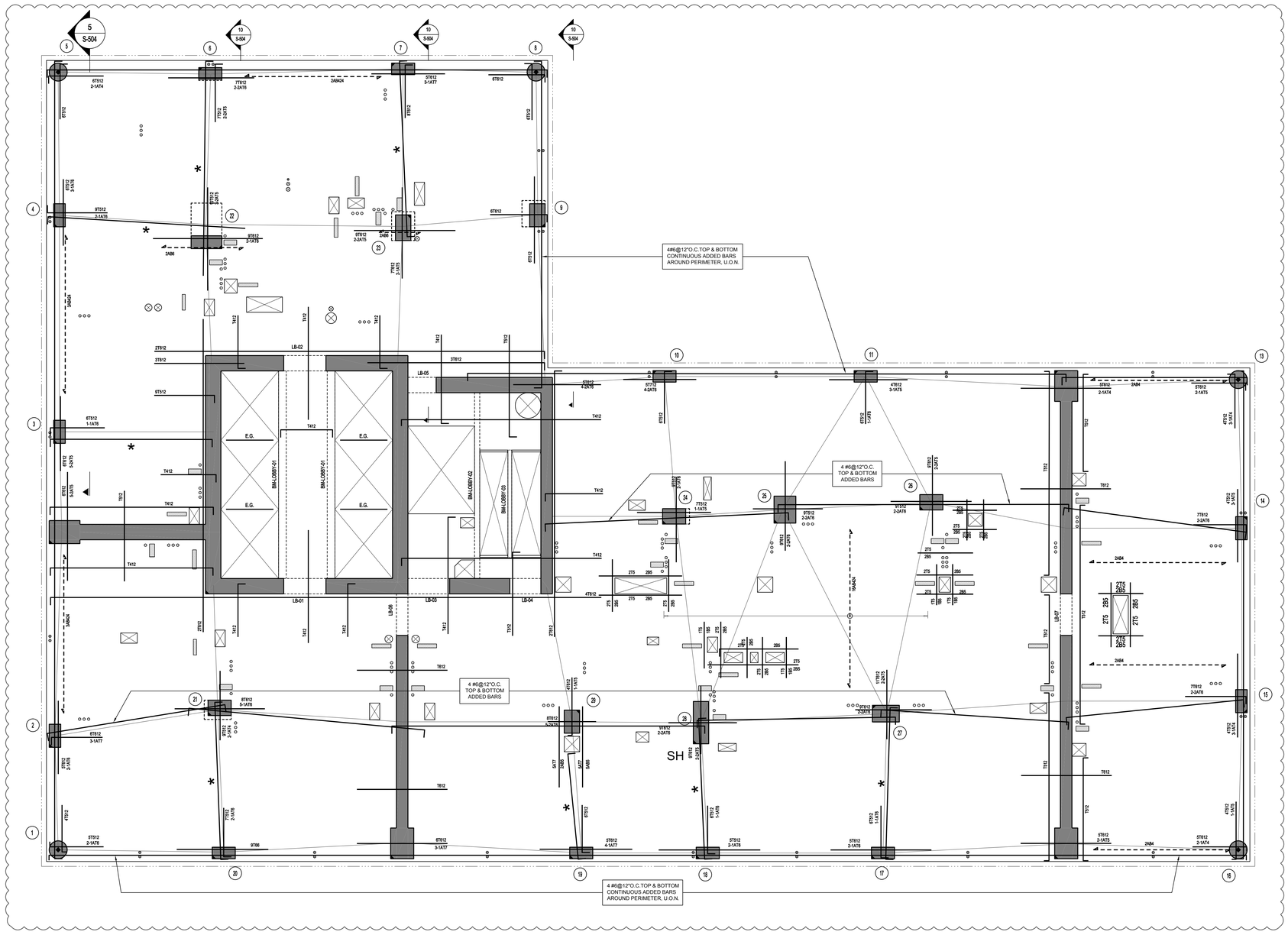
DRAWING TITLE:
4TH FLOOR REINFORCEMENT PLAN

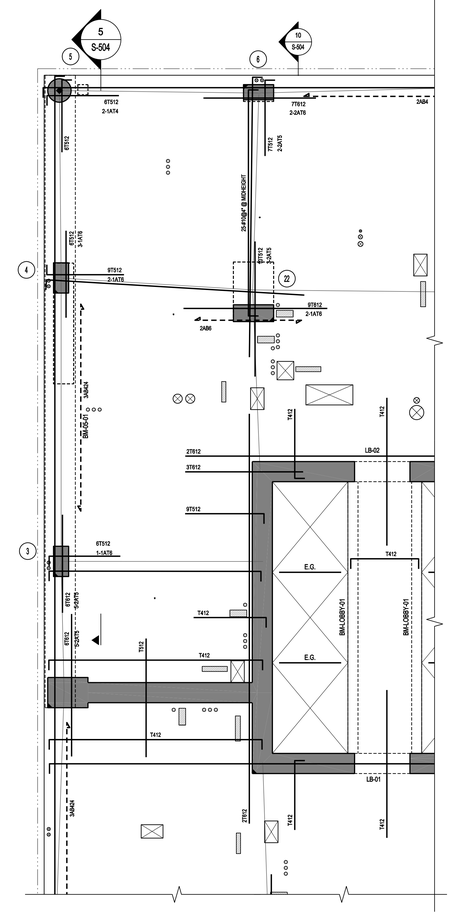
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13148.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-204.00
SHEET. No.:	15 of 70

FILE No: 13158-015-S-204.dwg

DEPT OF BLDGS 421859760 Job Number
E342750840US Scan Code





5TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	SEE NOTES
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. SLAB CONCRETE STRENGTH SHALL BE:
   5TH - 21ST 8.5 KSI
   22ND - 34TH 7 KSI
7. FOR 8" SLAB ON FLOORS 5 TO 10 PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM
   FOR 8" SLAB ON FLOORS 11 TO 15 PROVIDE #4@12"O.C. E.W. TOP AND BOTTOM.
8. FOR 8" SLAB ON FLOORS 16 TO 34 PROVIDE #4@12"O.C. BOTTOM BARS E.W.,
   'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS,
   'AT' DENOTES ADDITIONAL TOP BARS.
9. * DENOTES 5#5 @12"O.C. TOP AND BOTTOM ADDED BARS ON FLOORS 5 TO 15.
10. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
11. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
12. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
13. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
14. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
15. T DENOTES COLUMN TRANSFER.
16. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILLIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

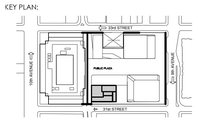
	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:

NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

5TH-34TH FLOOR REINFORCEMENT PLAN

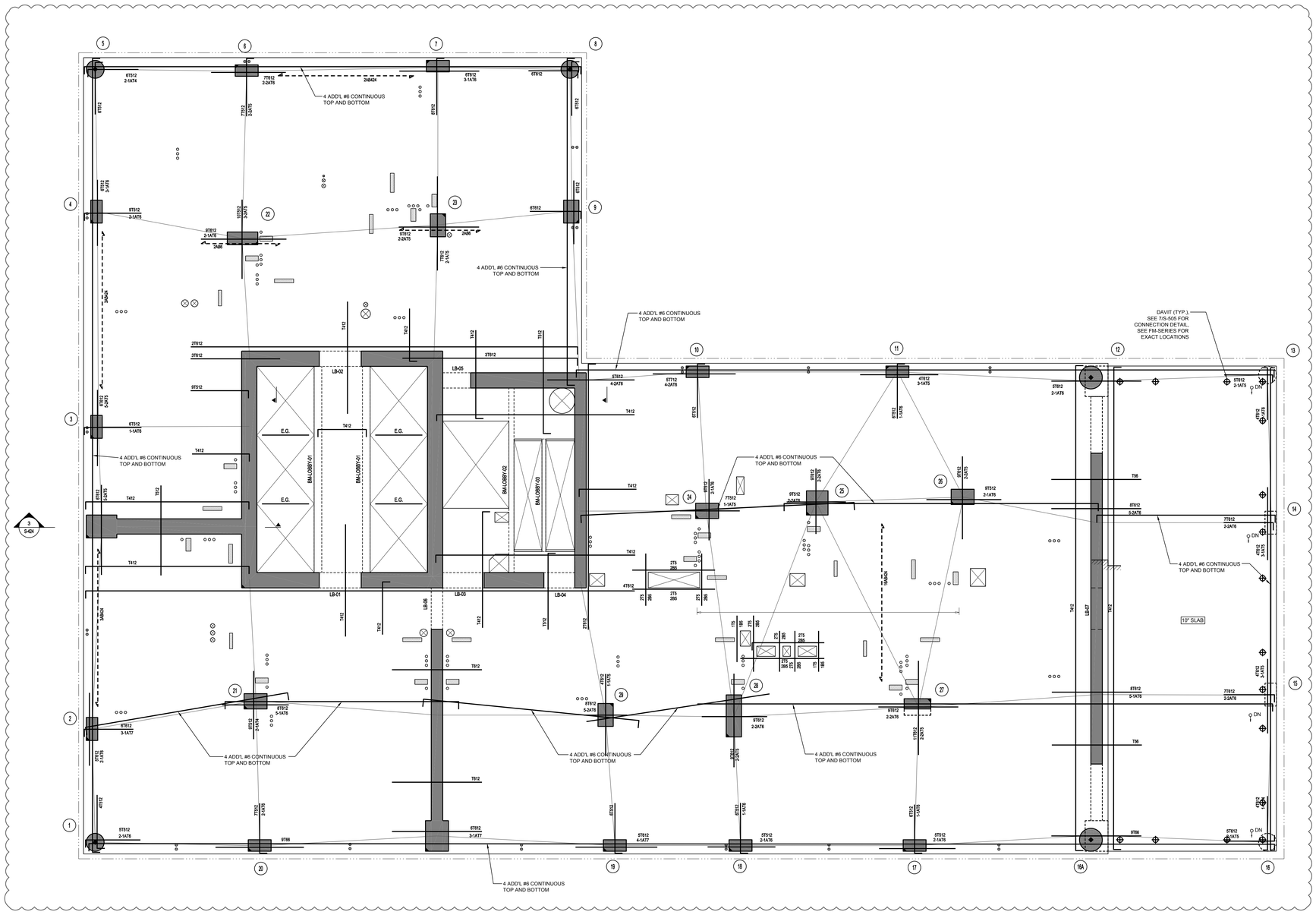
SEAL & SIGNATURE:

STATE OF NEW YORK · DIMITRY V. DESIMONE · 040 070 015 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-205.00
SHEET. No.:	16 of 70

FILE No: 13168-016-S-205.dwg

DEPT OF BLDGS 421185760 Job Number
E350607256B8 Scan Code



SLAB THICKNESS U.O.N.: t = 8"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c=6.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W, 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. FOR 10" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W, 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

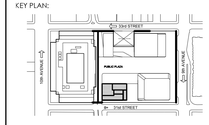
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

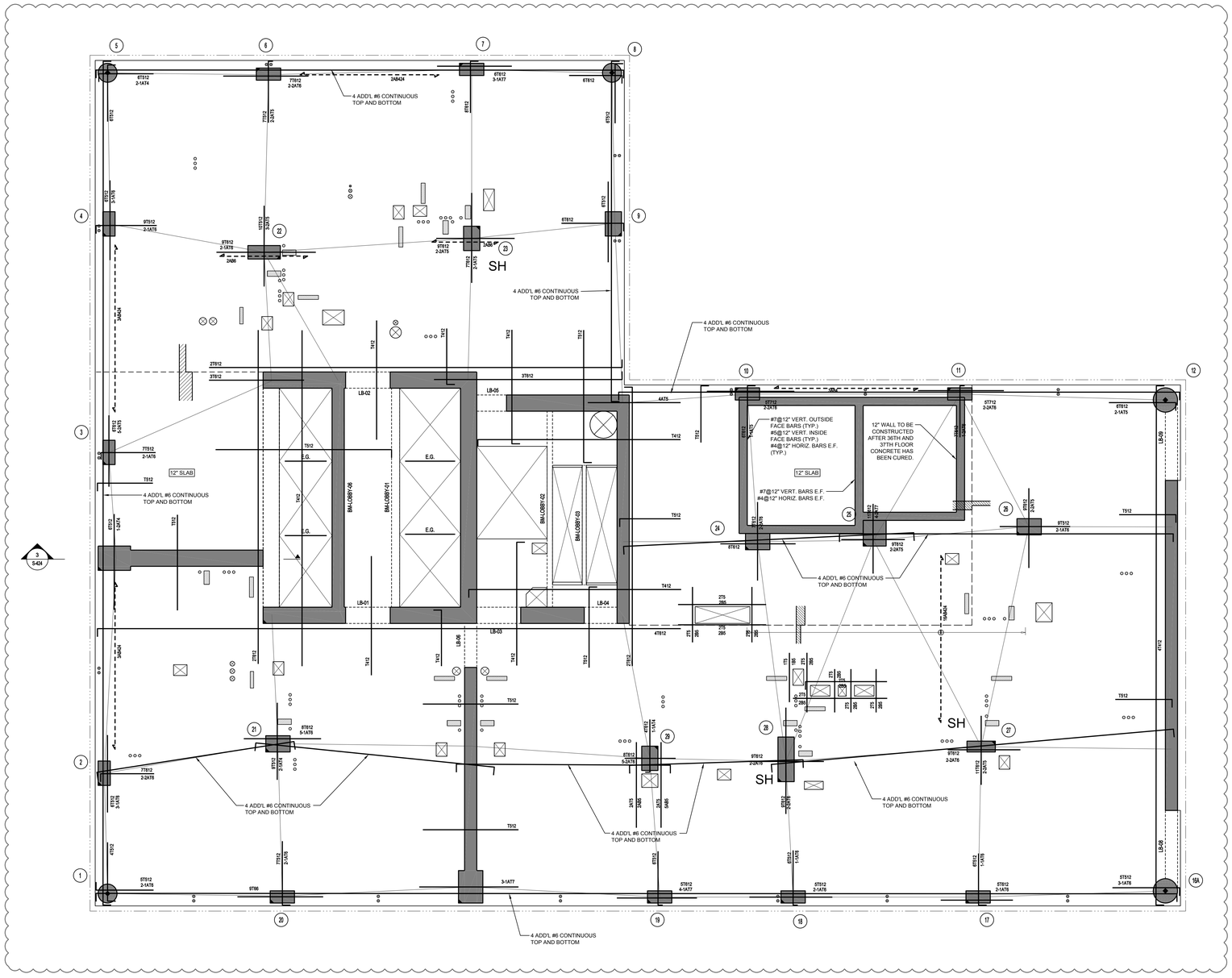
DRAWING TITLE:
35TH FLOOR REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-235.00
SHEET. No.:	17 of 70

FILE No: 13168-017-S-235.dwg

DEPT OF BLDGS 121859760 Job Number
E360426372880 Scan Code



SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	f'c = 6.5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. FOR 12" SLAB, PROVIDE #5@12" O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12" O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1774
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

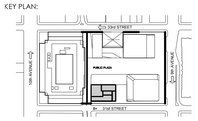
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER: NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

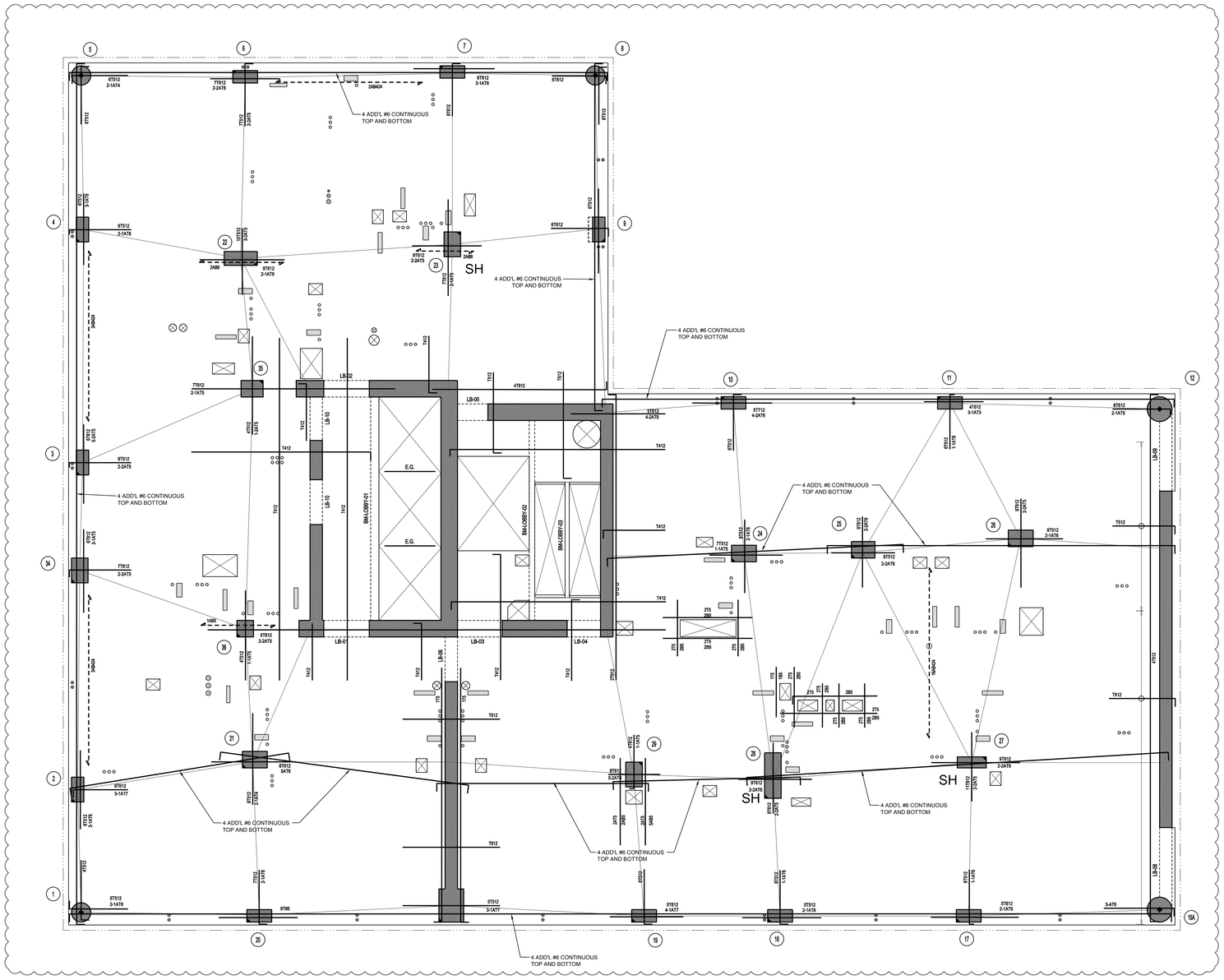
DRAWING TITLE:
36TH FLOOR REINFORCEMENT PLAN

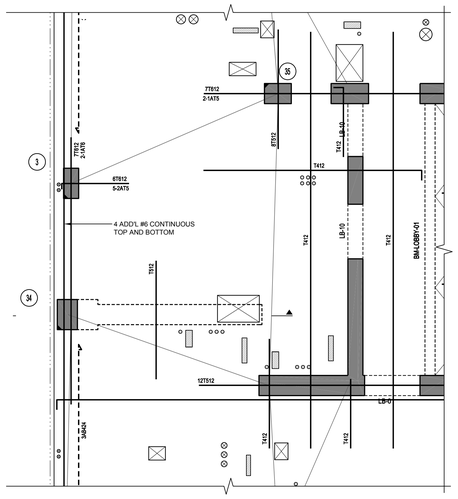
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	MB
CHECKED BY:	JS
DWG. No.:	S-236.00
SHEET. No.:	18 of 70

FILE No: 13168-019-S-236.dwg

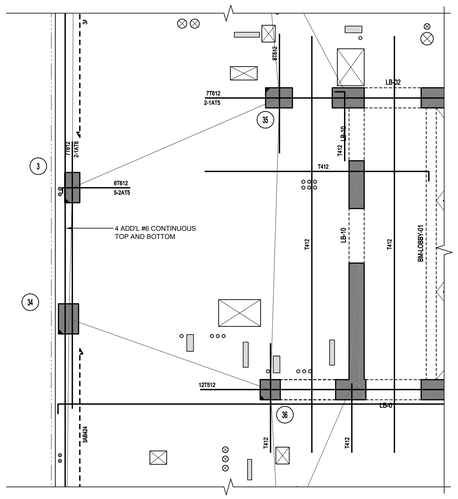
DEPT OF BLDGS 421185190 Job Number
E386905543 Scan Code





37TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"



38TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	SEE NOTES
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. SLAB CONCRETE STRENGTH SHALL BE:
   35TH - 41ST 6.5 KSI
   42ND - 51ST 6 KSI
7. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W, 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
13. T DENOTES COLUMN TRANSFER.
14. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

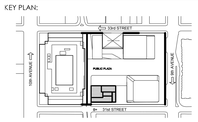
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH:
3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

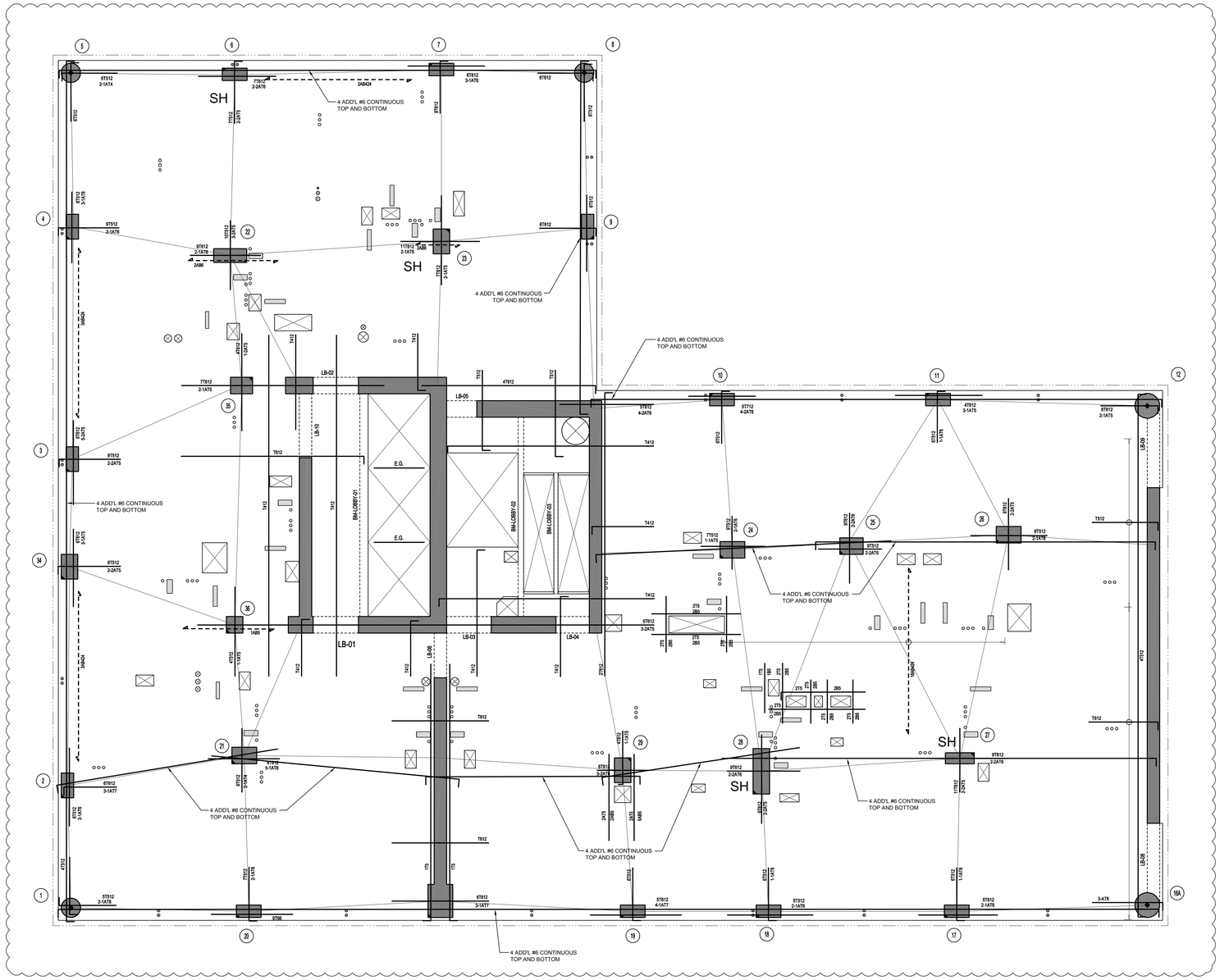
DRAWING TITLE:
37TH-51ST FLOOR REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No.:	1318.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-237.00
SHEET. No.:	19 of 70

FILE No: 1318-019-S-237.dwg

DEPT OF BLDGS 421185760 Job Number
E390034999 Scan Code



SLAB THICKNESS U.O.N.: t = 8"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994-9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

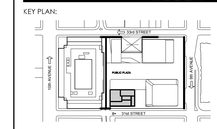
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

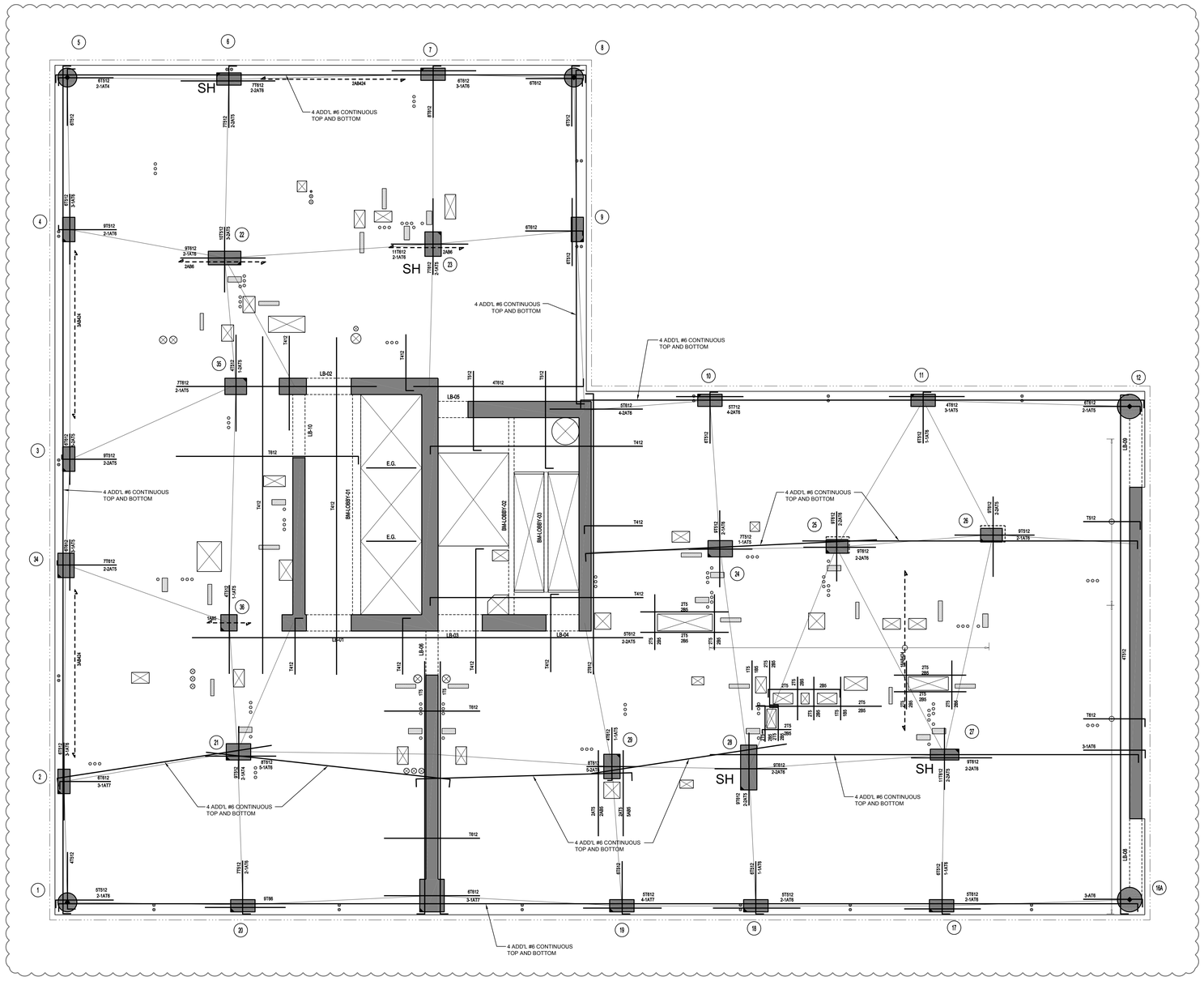
DRAWING TITLE:
52ND-55TH FLOOR REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	1318.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-252.00
SHEET. No.:	20 of 70

FILE No: 1318-020-S-252.dwg

DEPT OF BLDGS 421859700 Job Number
E302256713S Scan Code



SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	f'c = 5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS. 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

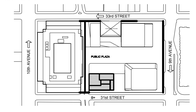
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-4800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER: NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



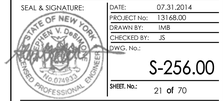
PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

56TH-61ST FLOOR REINFORCEMENT PLAN

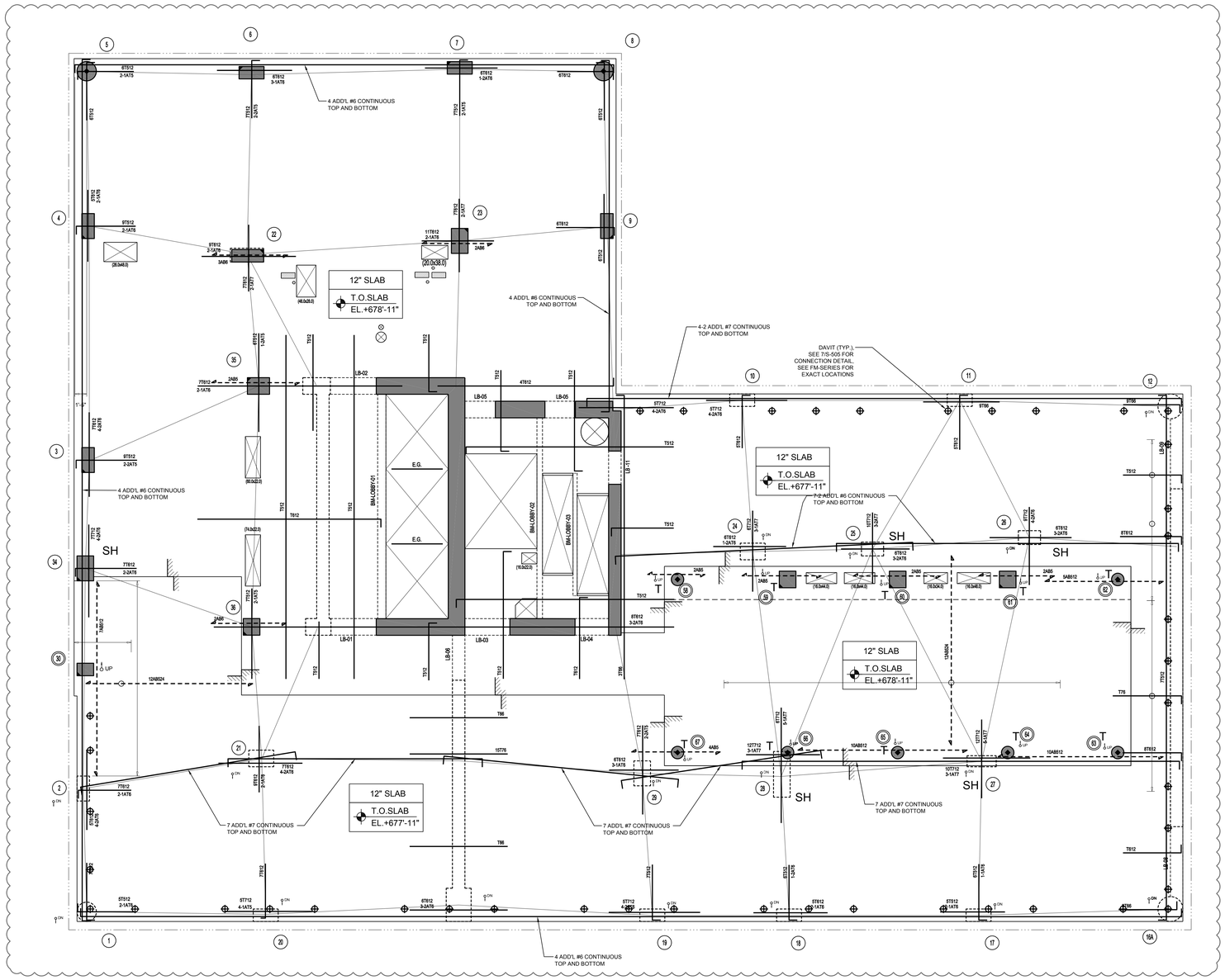
SEAL & SIGNATURE:



DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-256.00
SHEET. No.:	21 of 70

FILE No: 13168-021-S-256.dwg

DEPT OF BLDGS 421185160 Job Number
E397508306X Scan Code



SLAB THICKNESS U.O.N.:	t = 12"
SLAB CONCRETE STRENGTH:	f'c = 5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILLIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

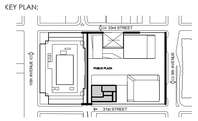
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER: NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

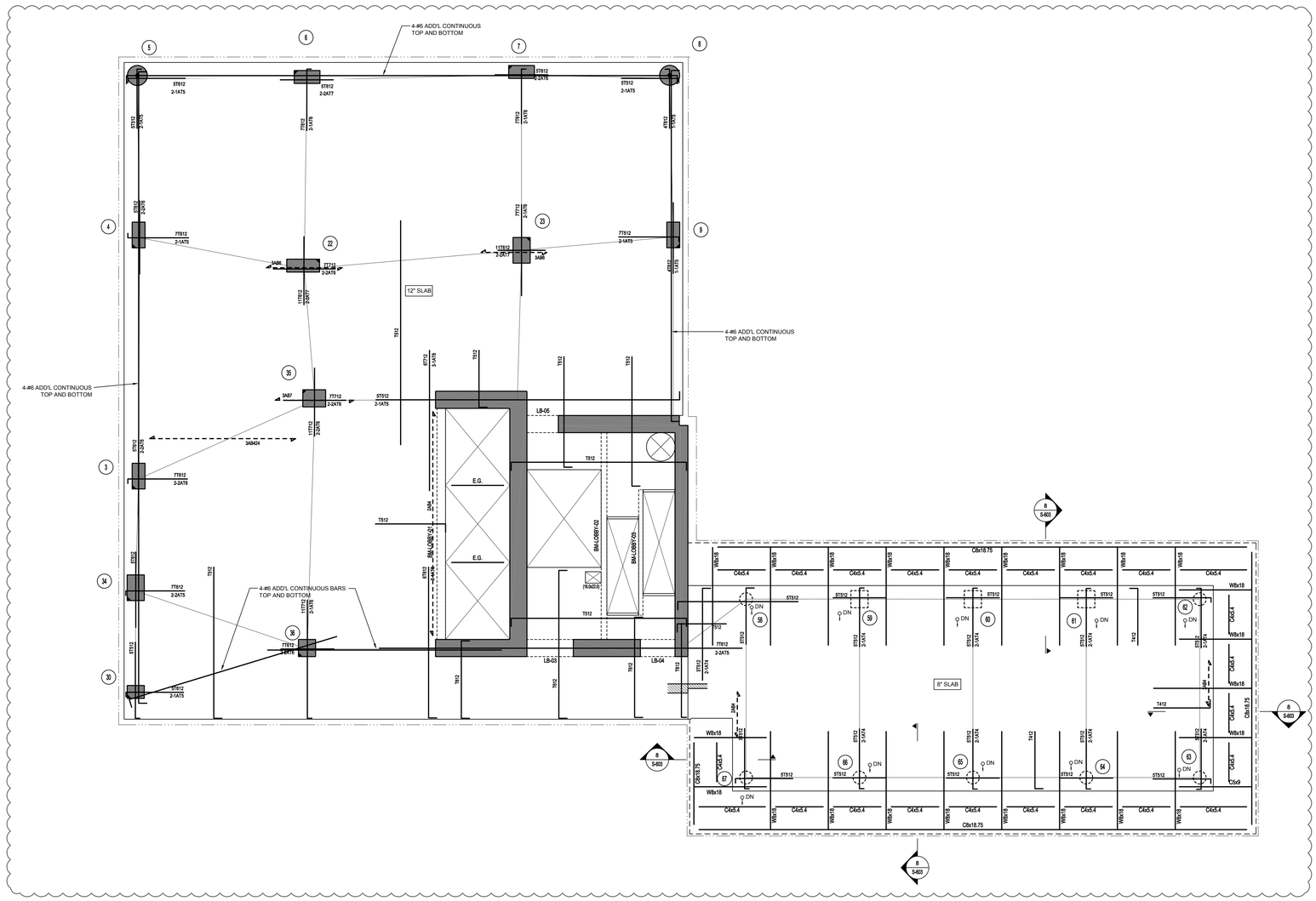
62ND FLOOR
MAIN ROOF
REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-262.00
SHEET. No.:	22 of 70

FILE No: 13168-022-S-262.dwg

DEPT OF BLDGS 421185160 Job Number
E367736540 Scan Code



SLAB THICKNESS U.O.N.:	t = 12"
SLAB CONCRETE STRENGTH:	f'c = 5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

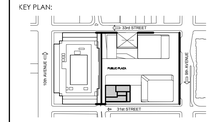
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
10	10-23-2014	BULLETIN #2
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING
2	01-24-2014	50% DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

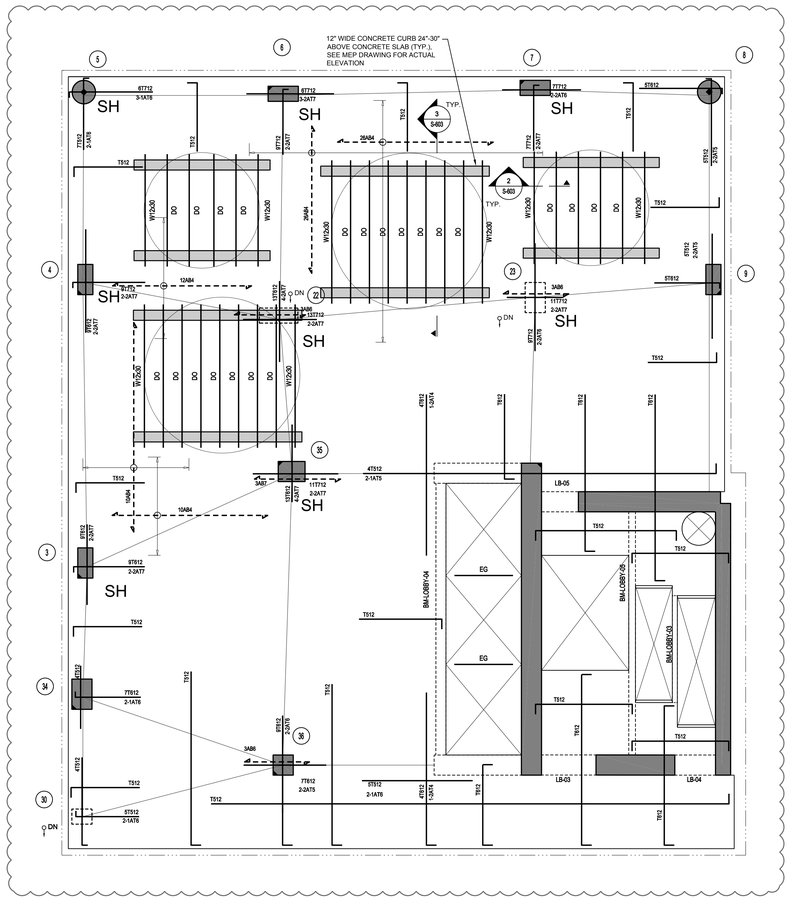
DRAWING TITLE:
63RD MECH. FLOOR REINFORCEMENT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-263.00
SHEET. No.:	23 of 70

FILE No: 13168-023-S-263.dwg

DEPT OF BLDGS 421185190 Job Number
E3S0405905MS Scan Code



SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 14" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

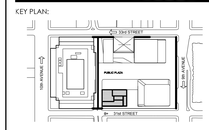
	DATE:	REVISION:
12	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER:
NB#

NORTH:

3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

64TH MECH. FLOOR REINFORCEMENT PLAN

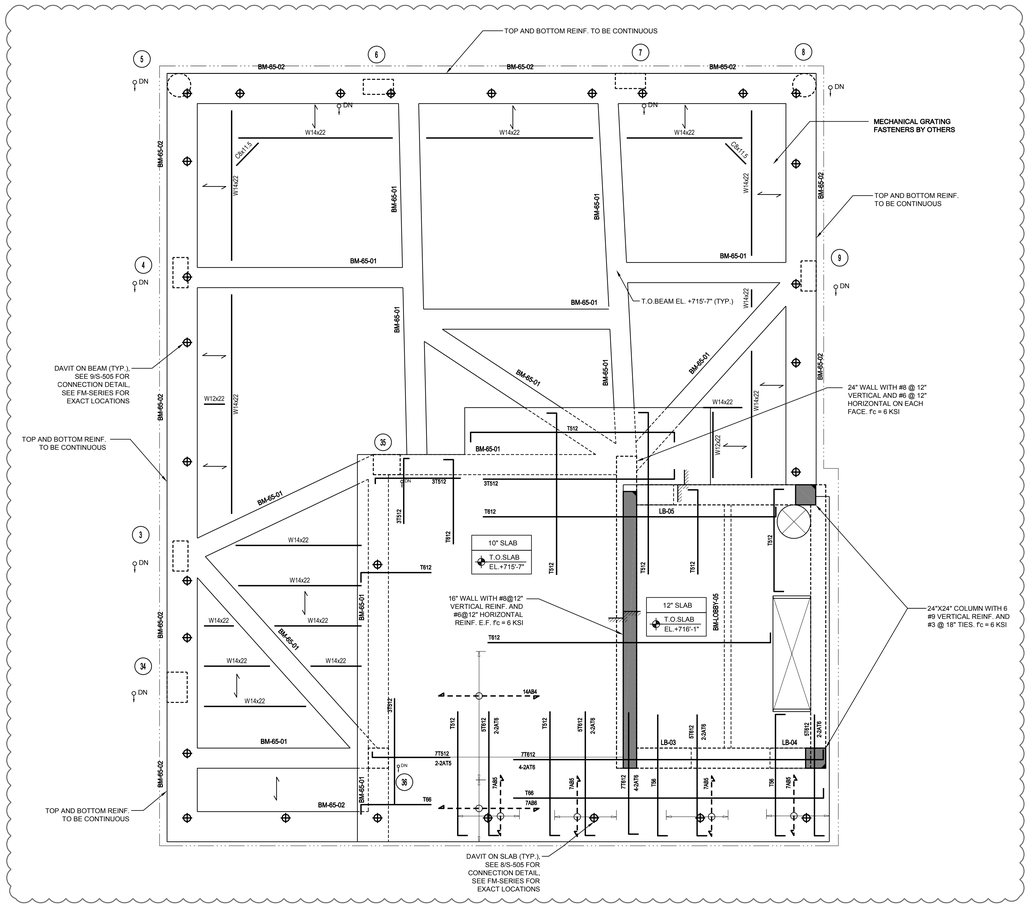
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-264.00
SHEET. No.:	24 of 70

FILE No: 13168-024-S-264.dwg

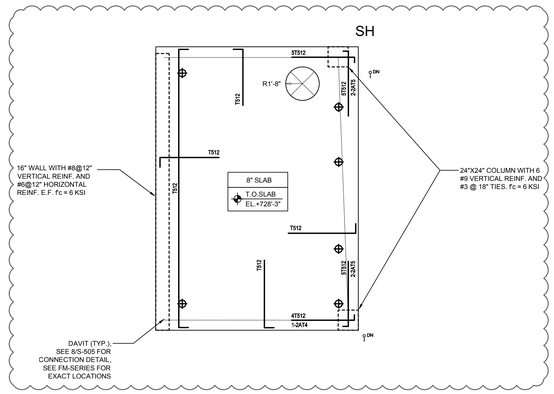
DeSimone Consulting Engineers – Paul Zheng,PLY-6.PMKSVP – Drawing id: F:\Projects\13168\13168.00\DWGS\Struct\Plot CD's\4th Building Work\13168-024-S-264.dwg [Drawing: S64B] - Date = November 06, 2014 – 3:42PM
APP: acad.exe
DWG: F:\Projects\13168\13168.00\DWGS\Struct\13168-s-700a-264B.dwg
XREF: F:\Projects\13168\13168.00\DWGS\Arch\13168-s-700a-264B.dwg, xref:13168-1-dpr-sdw-rfl-1049.dwg
F:\Projects\13168\13168.00\DWGS\Arch\13168-s-sh-00-1049.dwg

DEPT OF BLDGS 121185150 Job Number
E290561456US Scan Code



65TH FLOOR EMR PLAN

SCALE: 3/16" = 1'-0"



66TH FLOOR EMR ROOF PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB AND 10" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. FOR 12" SLAB, PROVIDE #5@12" O.C. BOTTOM BARS E.W. 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12" MID STRIP TOP BARS. 'AT' DENOTES ADDITIONAL TOP BARS.
	15. ⟷ DENOTES 1X⅛ TYPE W-19-4 GRATE (FROM GRATING PACIFIC CATALOG)

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

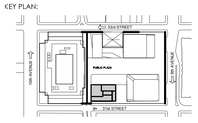
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-4800

	DATE:	REVISION:
11	11-07-2014	ISSUED FOR DOB FILING
11	10-23-2014	BULLETIN #2
10	09-26-2014	STRUCTURAL REVISIONS
9	09-09-2014	ISSUED FOR CONSTRUCTION
8	08-01-2014	90% CONSTRUCTION DOCUMENTS
7	06-03-2014	50% CONSTRUCTION DOCUMENTS
6	05-16-2014	BID SET
5	05-09-2014	DOB FILING
4	03-14-2014	DESIGN DEVELOPMENT
3	02-14-2014	FOUNDATION FILING

D.O.B. NUMBER: NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

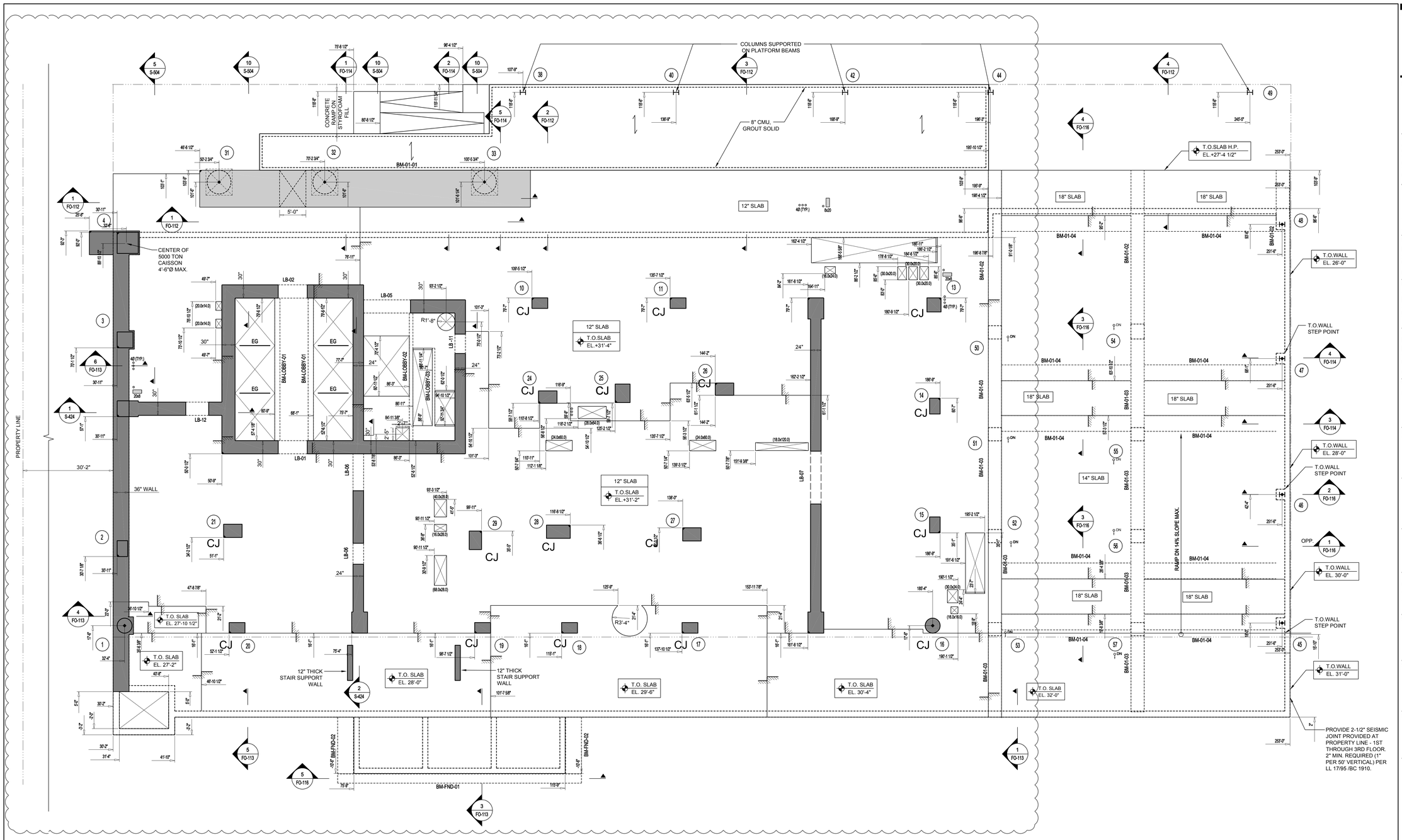
DRAWING TITLE:
65TH & 66TH FLOOR, EMR AND EMR ROOF REINFORCEMENT PLANS

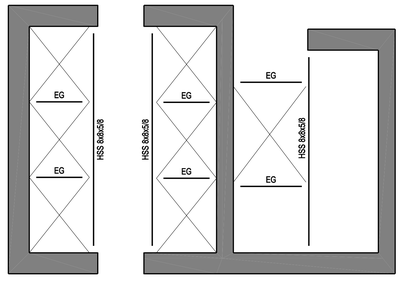
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-265.00
SHEET. No.:	25 of 70

FILE No: 13168-025-S-265.dwg

DEPT OF BLDGS 421859760 Job Number
E3586071324 Scan Code

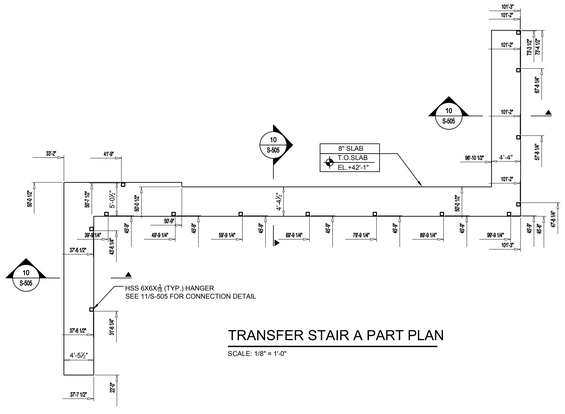




ELEVATOR STEEL PART PLAN

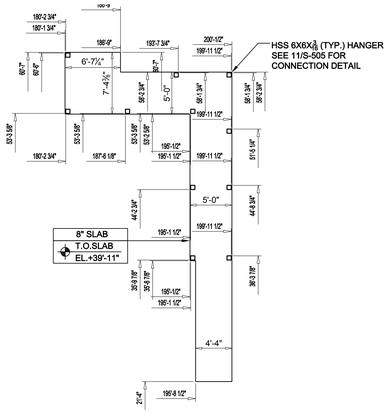
SCALE: 5/32" = 1'-0"

NOTE:
TOP OF STEEL AT ELEV. +41'-2".



TRANSFER STAIR A PART PLAN

SCALE: 1/8" = 1'-0"



TRANSFER STAIR D PART PLAN

SCALE: 5/32" = 1'-0"

SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: 8.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" AND 14" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. ⟵ DENOTES 3½" LT. WT. CONCRETE OVER 3" - 18 GAGE METAL DECK (6¼" TOTAL DEPTH) fc = 3 KSI.
	15. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 6½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
	16. ►— DENOTES MOMENT FRAME CONNECTIONS.
	17. T.O. STEEL SHALL BE 6¼" BELOW T.O. SLAB, U.O.N.
	18. FOR FOUNDATION DETAILS AND SECTIONS SEE FO-111 TO FO-113.
	19. FOR FOUNDATION WALL SCHEDULE SEE FO-101.
	20. CJ DENOTES COLUMN JACKET, SEE DETAIL 1 ON S-403.
	21. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	22. FOR 8" SLAB, PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOMA BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

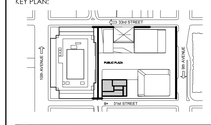
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-4800

	DATE:	REVISION:
5	11-07-2014	ISSUED FOR DOB FILING
4	10-23-2014	BULLETIN #2
3	09-26-2014	STRUCTURAL REVISIONS
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



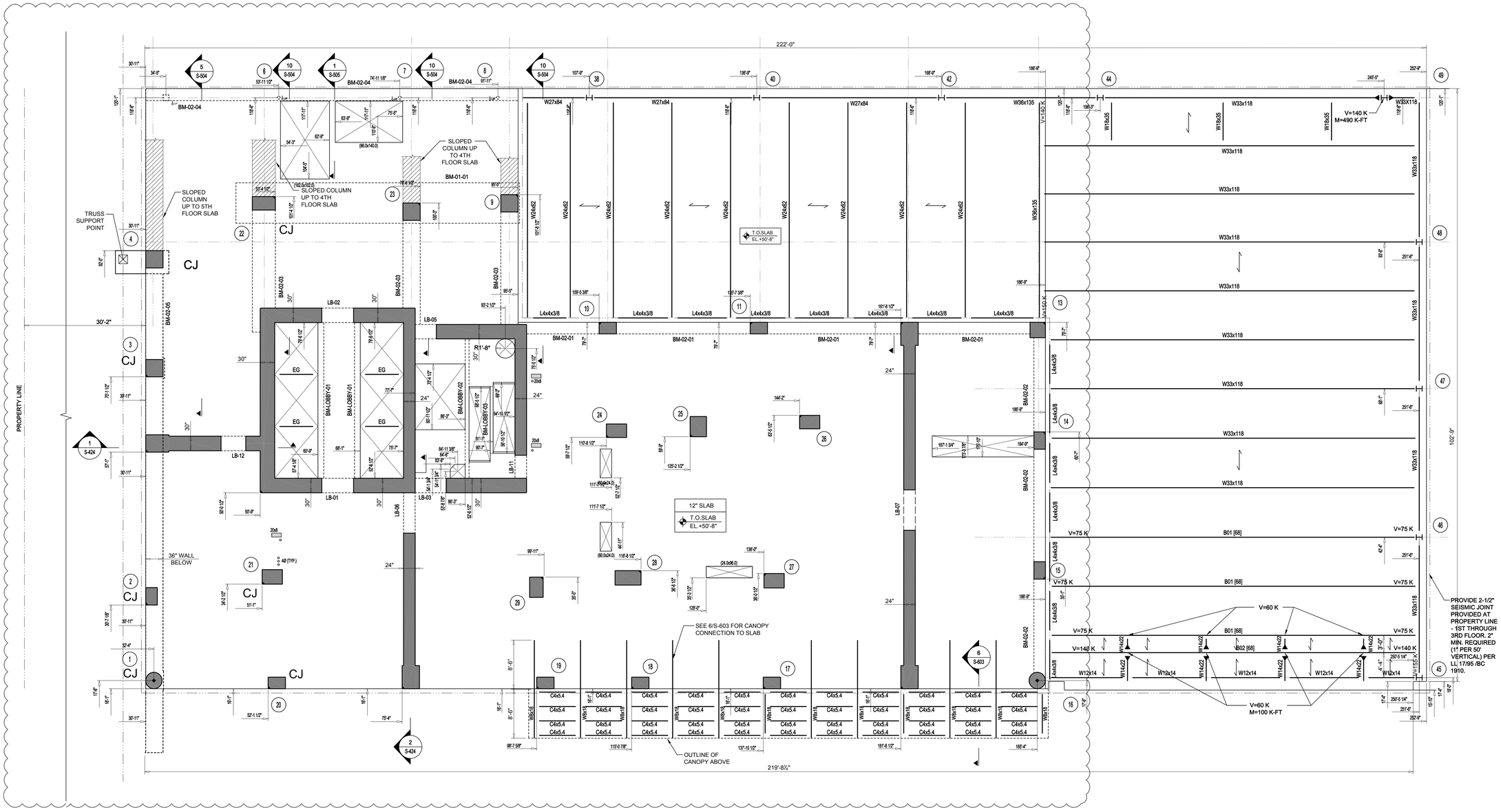
PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

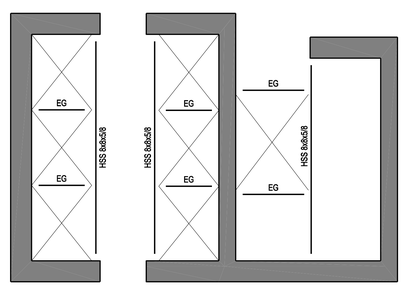
DRAWING TITLE:
1ST FLOOR LAYOUT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-301.00
SHEET. No.:	26 of 70

FILE No: 13168-025-S-301.dwg





ELEVATOR STEEL PART PLAN

SCALE: 1/8" = 1'-0"

NOTE:
TOP OF STEEL AT ELEV. +41'-2".

SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: 8.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6½" TOTAL DEPTH) fc = 3 KSI.
	15. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
	16. DENOTES MOMENT FRAME CONNECTIONS.
	17. T.O. STEEL SHALL BE 6½" BELOW T.O. SLAB, U.O.N.
	18. CJ DENOTES COLUMN JACKET, SEE DETAIL 1 ON S-403.
	19. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	20. V = ... DENOTES FACTORED BEAM REACTIONS FOR CONNECTION DESIGN M = ... DENOTES FACTORED MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

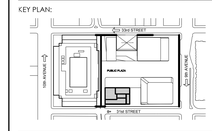
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

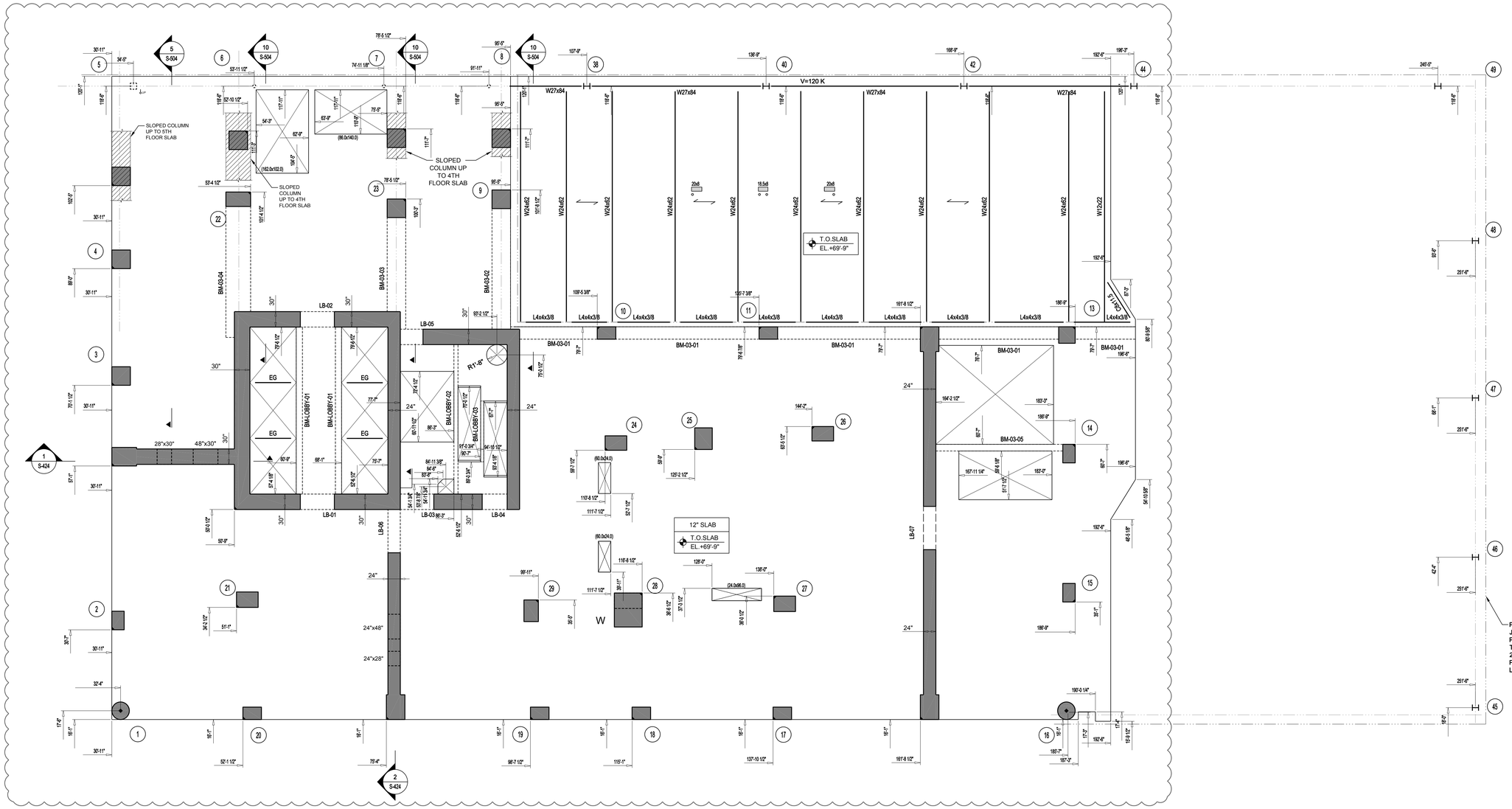
DRAWING TITLE:
2ND FLOOR LAYOUT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-302.00
SHEET. No.:	27 of 70

FILE No: 13168-027-S-302.dwg

DEPT OF BLDGS 421859760 Job Number
E3527475353SE Scan Code



SLAB THICKNESS U.O.N.: t = 12"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: 8.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" SLAB PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM.
	7. ★ DENOTES 5 #5@12"O.C. TOP AND BOTTOM ADDED BARS.
	8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	13. T DENOTES COLUMN TRANSFER.
	14. W DENOTES COLUMN WALK.
	15. ⟷ DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6½" TOTAL DEPTH) f'c = 3 KSI.
	16. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
	17. ▶— DENOTES MOMENT FRAME CONNECTIONS.
	18. T.O. STEEL SHALL BE 6½" BELOW T.O. SLAB, U.O.N.
	19. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	20. V = ... DENOTES **FACTORED** BEAM REACTIONS FOR CONNECTION DESIGN M = ... DENOTES **FACTORED** MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:

SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

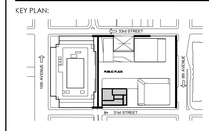
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

3RD FLOOR LAYOUT PLAN

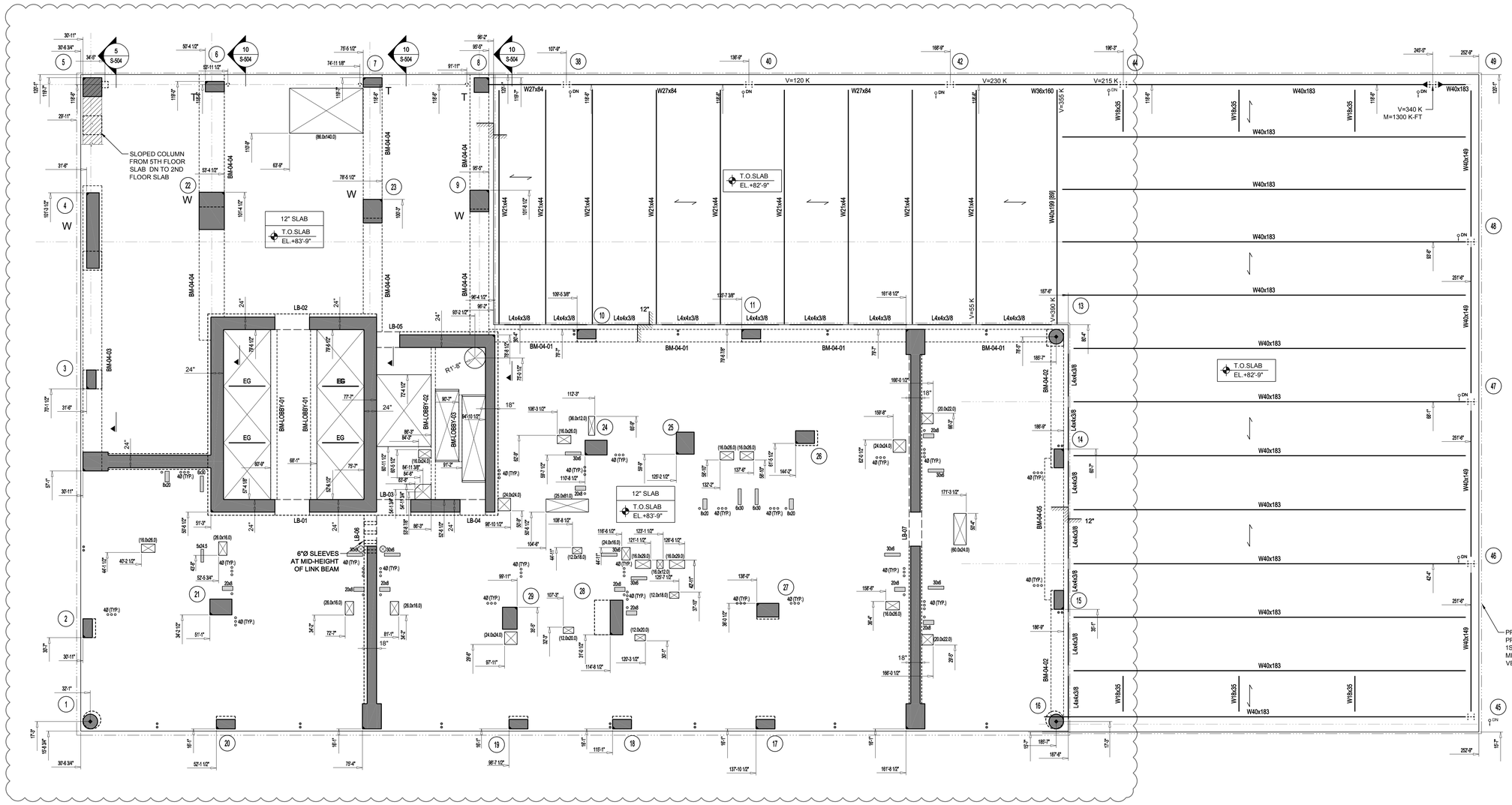
SEAL & SIGNATURE:

STATE OF NEW YORK · JAMES V. DeSIMONE · 037-20121 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-303.00
SHEET. No.:	28 of 70

FILE No: 13168-028-S-303.dwg

DEPT OF BLDGS 421189160 Job Number
E364506539X01 Scan Code



SLAB THICKNESS U.O.N.: t = 12"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: 8.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" SLAB PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM.
	7. * DENOTES 5 #5@12"O.C. TOP AND BOTTOM ADDED BARS.
	8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	13. T DENOTES COLUMN TRANSFER.
	14. W DENOTES COLUMN WALK.
	15. ⟵ DENOTES 3½" LT. WT. CONCRETE OVER 3"-18 GAGE METAL DECK (6½" TOTAL DEPTH) f'c = 3 KSI.
	16. ALL BEAMS SHALL HAVE ¾" Ø HEADED STUDS x 5½" LONG @ 1'-0" O.C. UNLESS OTHERWISE NOTED [...].
	17. ▶— DENOTES MOMENT FRAME CONNECTIONS.
	18. T.O. STEEL SHALL BE 6¼" BELOW T.O. SLAB, U.O.N.
	19. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	20. V = ... DENOTES **FACTORED** BEAM REACTIONS FOR CONNECTION DESIGN M = ... DENOTES **FACTORED** MOMENT FOR CONNECTION DESIGN

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

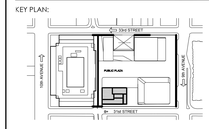
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-8800

	DATE:	REVISION:
5	11-07-2014	ISSUED FOR DOB FILING
4	10-23-2014	BULLETIN #2
3	09-26-2014	STRUCTURAL REVISIONS
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB#

NORTH: 5/32"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

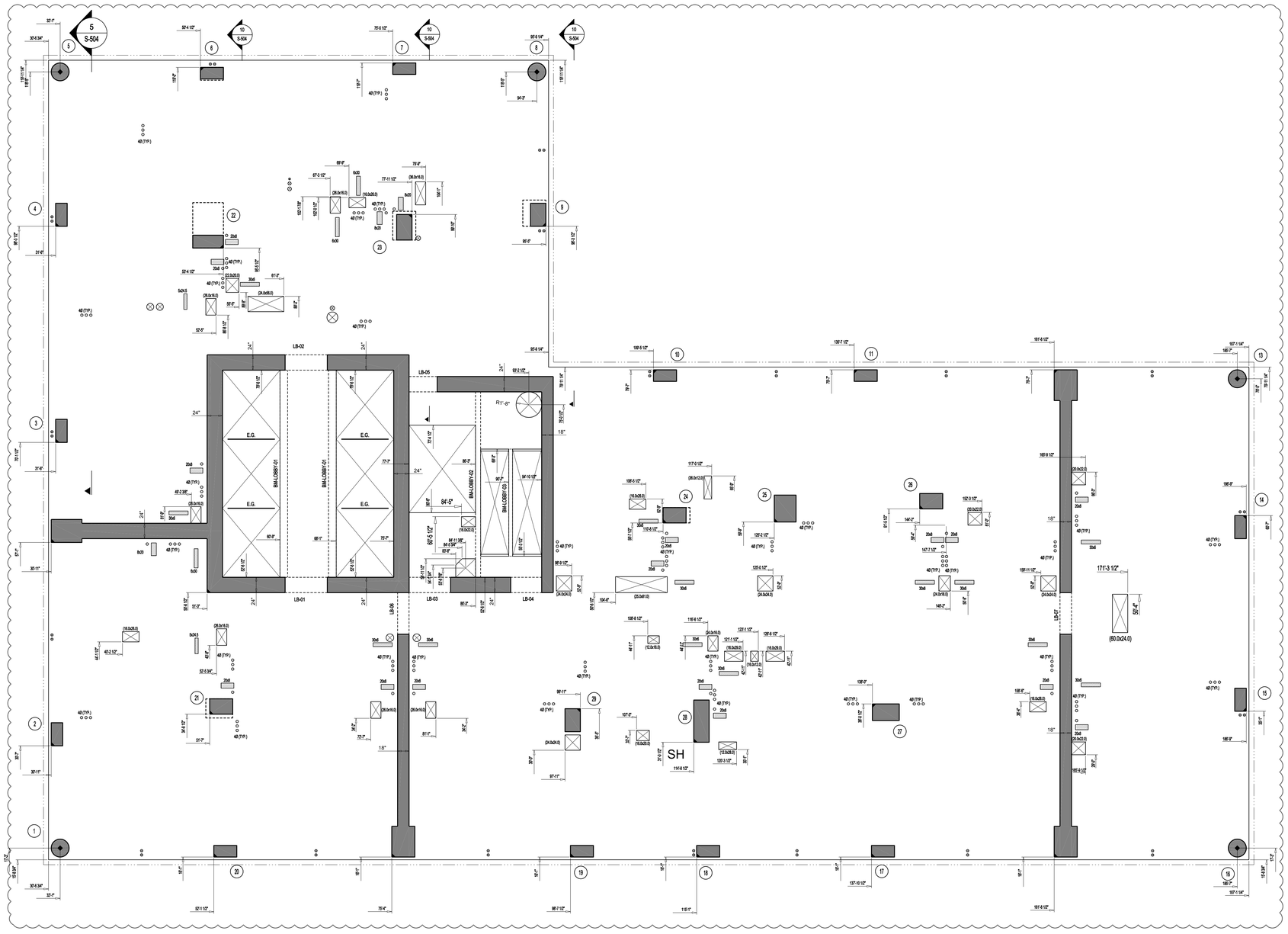
DRAWING TITLE:
4TH FLOOR LAYOUT PLAN

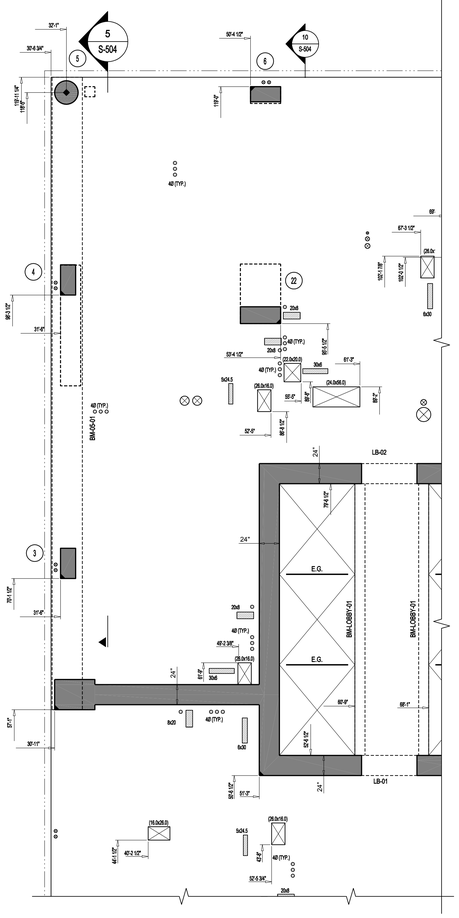
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT NO:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-304.00
SHEET. No.:	29 of 70

FILE No: 13168-029-S-304.dwg

DEPT OF BLDGS 121185190 Job Number
E527245006 Scan Code





5TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	SEE NOTES
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. SLAB CONCRETE STRENGTH SHALL BE:
   5TH - 21ST 8.5 KSI
   22ND - 34TH 7 KSI
7. FOR 8" SLAB ON FLOORS 5 TO 10 PROVIDE #5@12"O.C. E.W. TOP AND BOTTOM
   FOR 8" SLAB ON FLOORS 11 TO 15 PROVIDE #4@12"O.C. E.W. TOP AND BOTTOM.
8. FOR 8" SLAB ON FLOORS 16 TO 34 PROVIDE #4@12"O.C. BOTTOM BARS E.W.,
   'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS,
   'AT' DENOTES ADDITIONAL TOP BARS.
9. ★ DENOTES 5#5 @12"O.C. TOP AND BOTTOM ADDED BARS ON FLOORS 5 TO 15.
10. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
11. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
12. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
13. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
14. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
15. T DENOTES COLUMN TRANSFER.
16. W DENOTES COLUMN WALK.
15. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

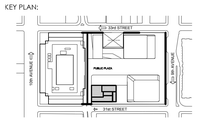
	DATE	REVISION
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH

3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

5TH-34TH FLOOR LAYOUT PLAN

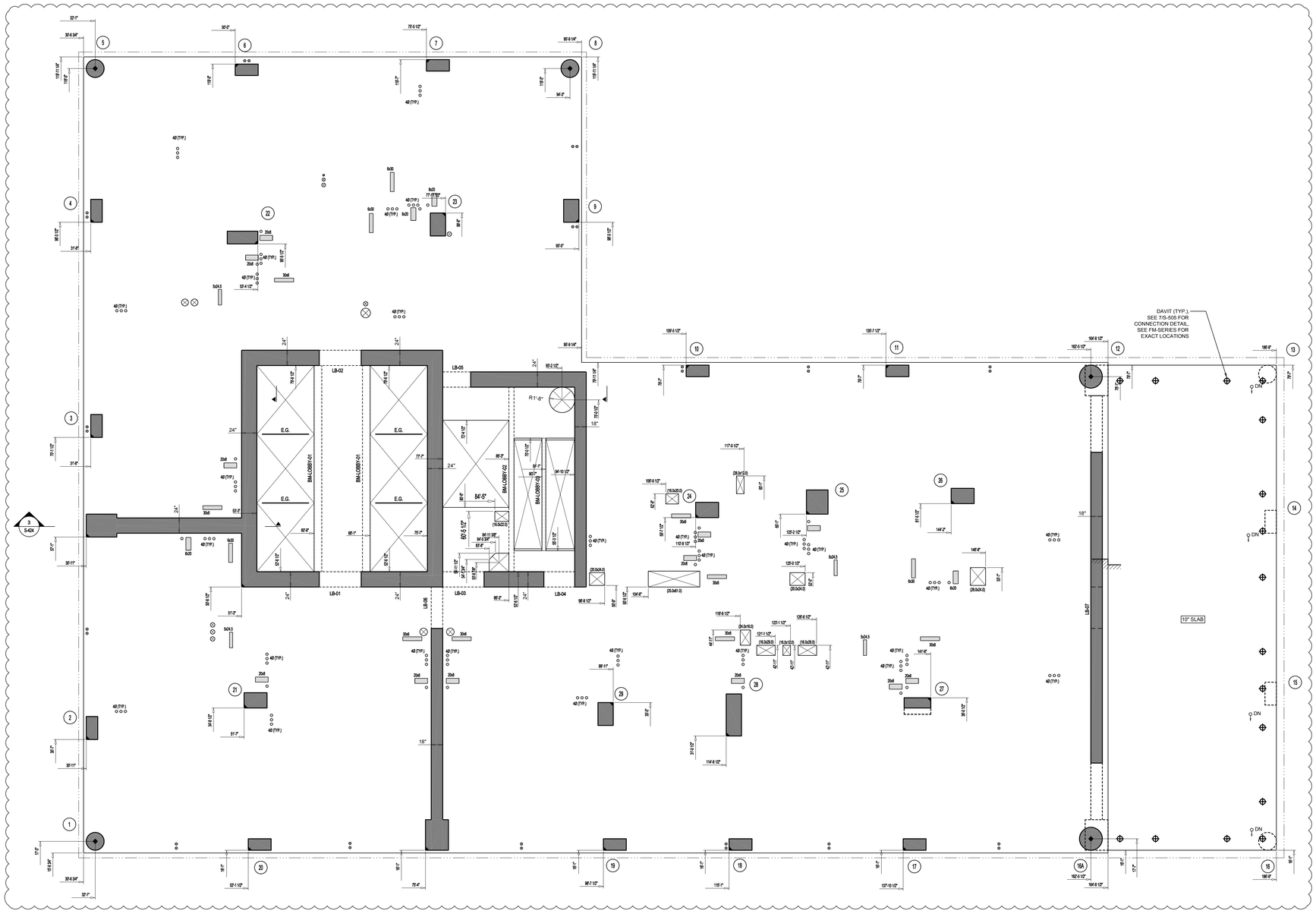
SEAL & SIGNATURE:

STATE OF NEW YORK · DAVID V. D'ARIA · 065-074733 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-305.00
SHEET. No.:	30 of 70

FILE No: 13168-030-S-305.dwg

DEPT OF BLDGS 421859760 Job Number
E390556986 Scan Code



SLAB THICKNESS U.O.N.: t = 8"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c=6.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W, 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-8800

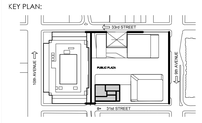
	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH:

3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

35TH FLOOR
LAYOUT PLAN

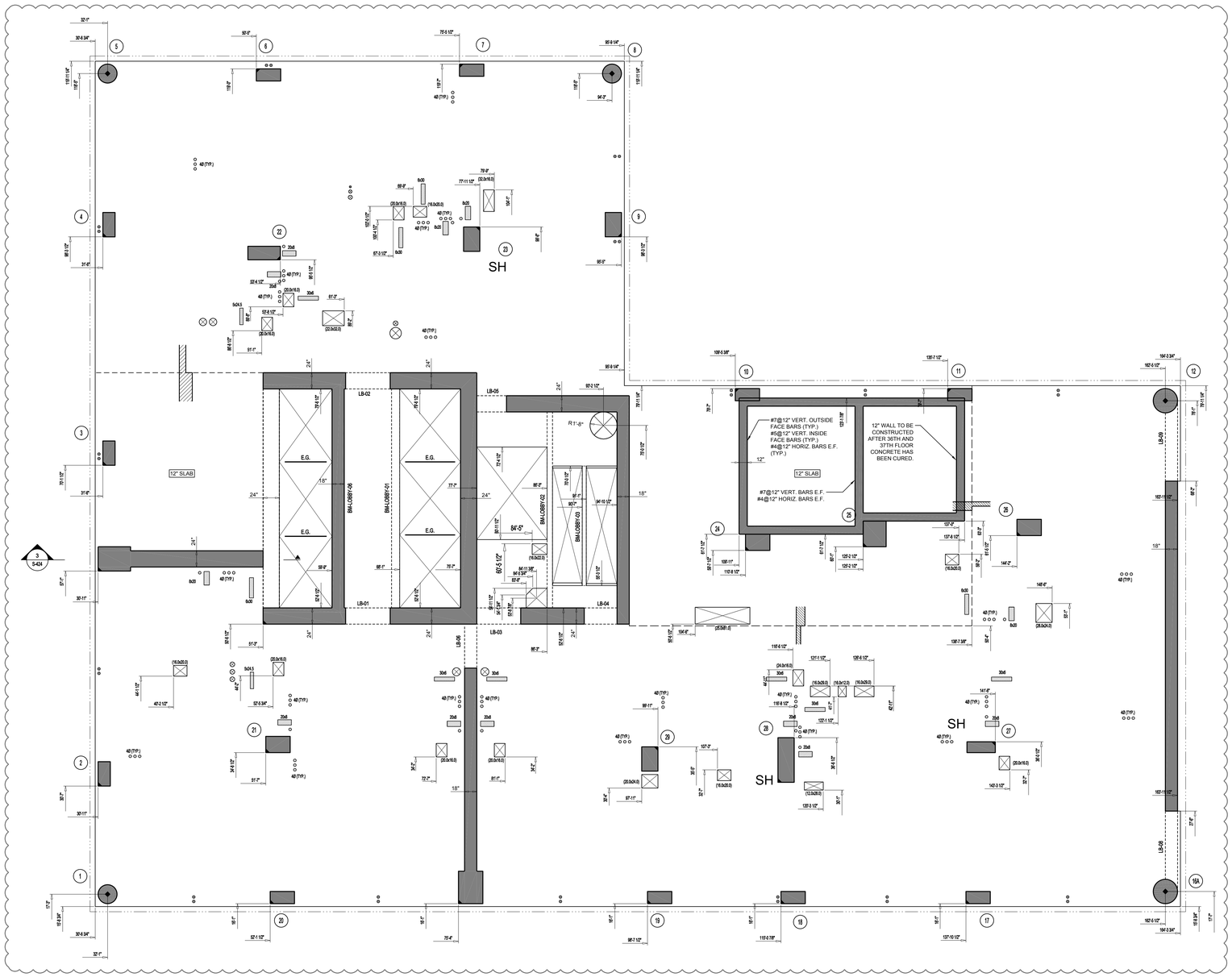
SEAL & SIGNATURE:

STATE OF NEW YORK · JAMES SCHUMACHER · 040.070873 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-335.00
SHEET. No.:	31 of 70

FILE No: 13168-031-S-335.dwg

DEPT OF BLDGS 421185160 Job Number
E300305906009 Scan Code



SLAB THICKNESS U.O.N.: t = 8"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: f'c = 6.5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. FOR 12" SLAB, PROVIDE #5@12" O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12" O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	15. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

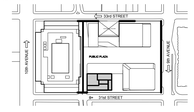
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

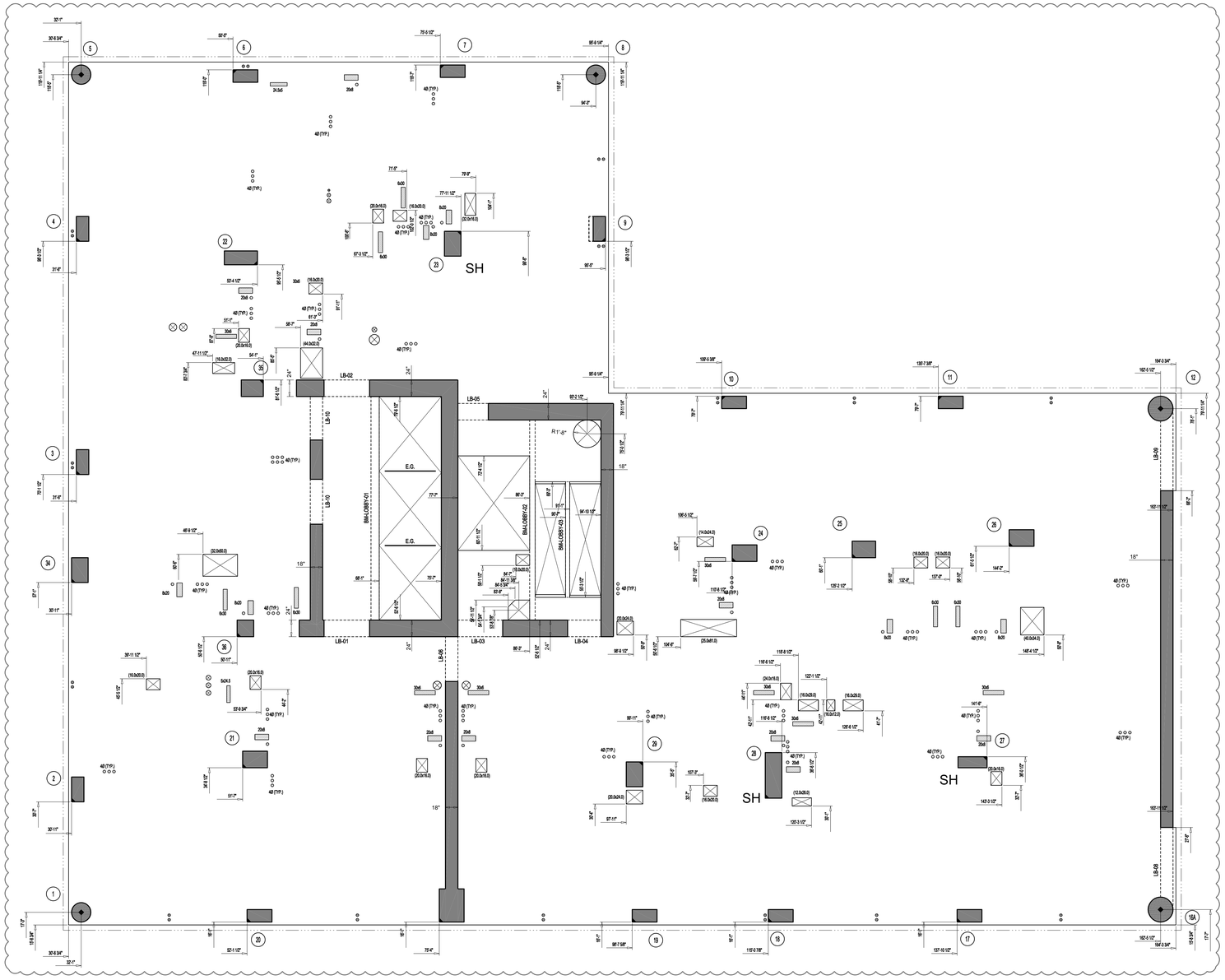
DRAWING TITLE:
36TH FLOOR LAYOUT PLAN

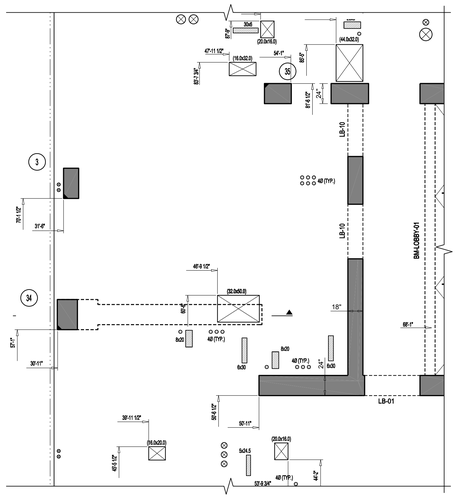
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-336.00
SHEET. No.:	32 of 70

FILE No: 13168-032-S-336.dwg

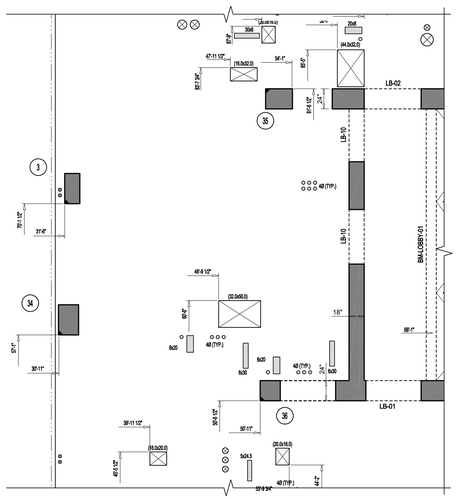
DEPT OF BLDGS 421859760 Job Number
E5235646564 Scan Code





37TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"



38TH FLOOR PART PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.: t = 8"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: SEE NOTES	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. SLAB CONCRETE STRENGTH SHALL BE: 35TH - 41ST 6.5 KSI; 42ND - 51ST 6 KSI
	7. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W, 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	8. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	9. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	10. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	11. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	12. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	13. T DENOTES COLUMN TRANSFER.
	14. W DENOTES COLUMN WALK.
	15. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*, LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

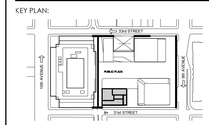
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

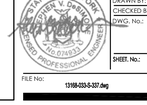
KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
37TH-51ST FLOOR LAYOUT PLAN

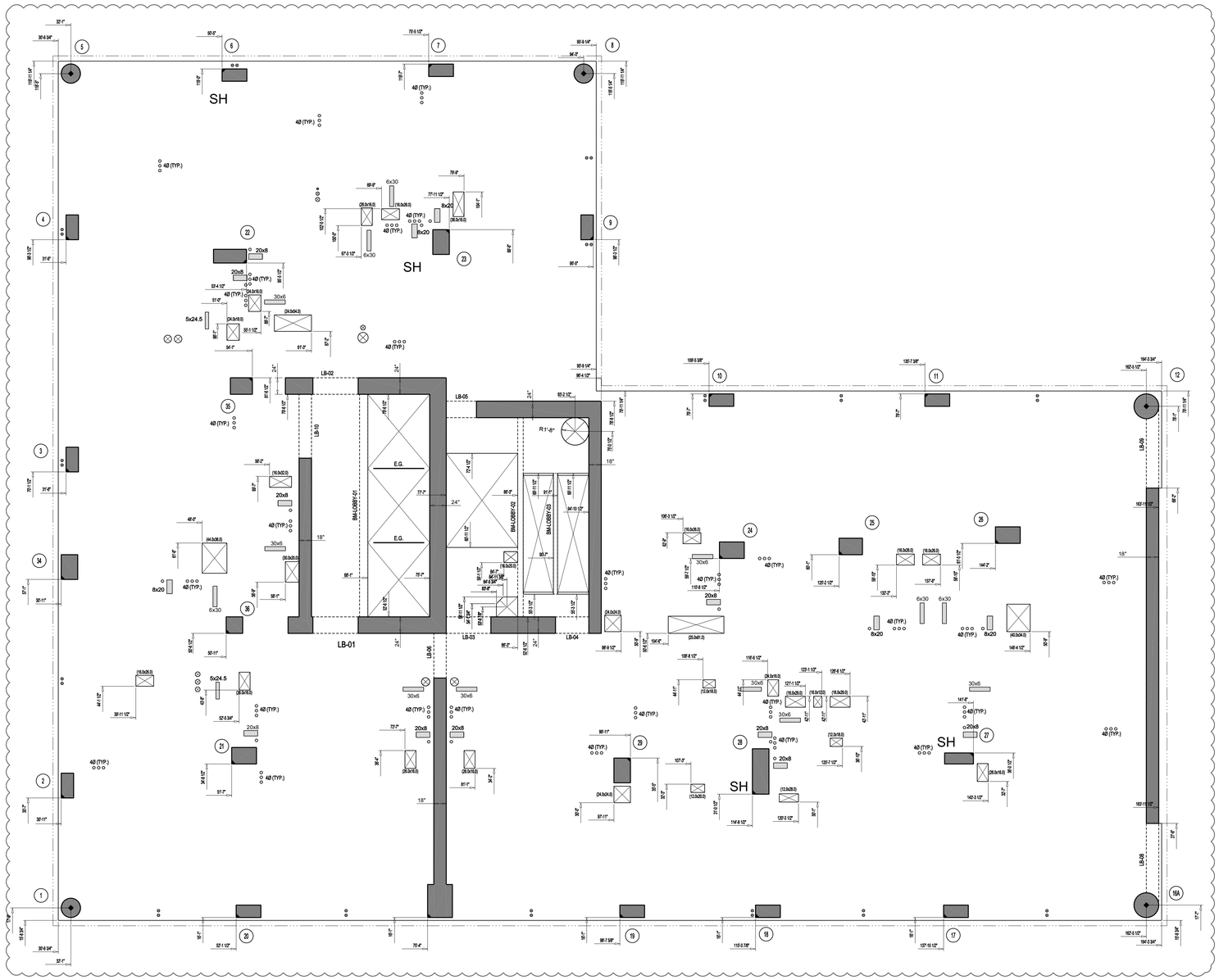
SEAL & SIGNATURE:



DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-337.00
SHEET. No.:	33 of 70

FILE No: 13168-033-S-337.dwg

DEPT OF BLDGS 421,859,950 Job Number
E-2058852058B5 Scan Code



DRAWING NOTES:

SLAB THICKNESS U.O.N.:	t = 8"
SLAB CONCRETE STRENGTH:	f'c = 5 KSI
TOP OF SLAB ELEVATION, U.O.N.:	SEE COLUMN SCHEDULE

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

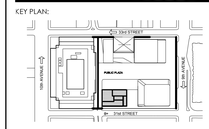
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

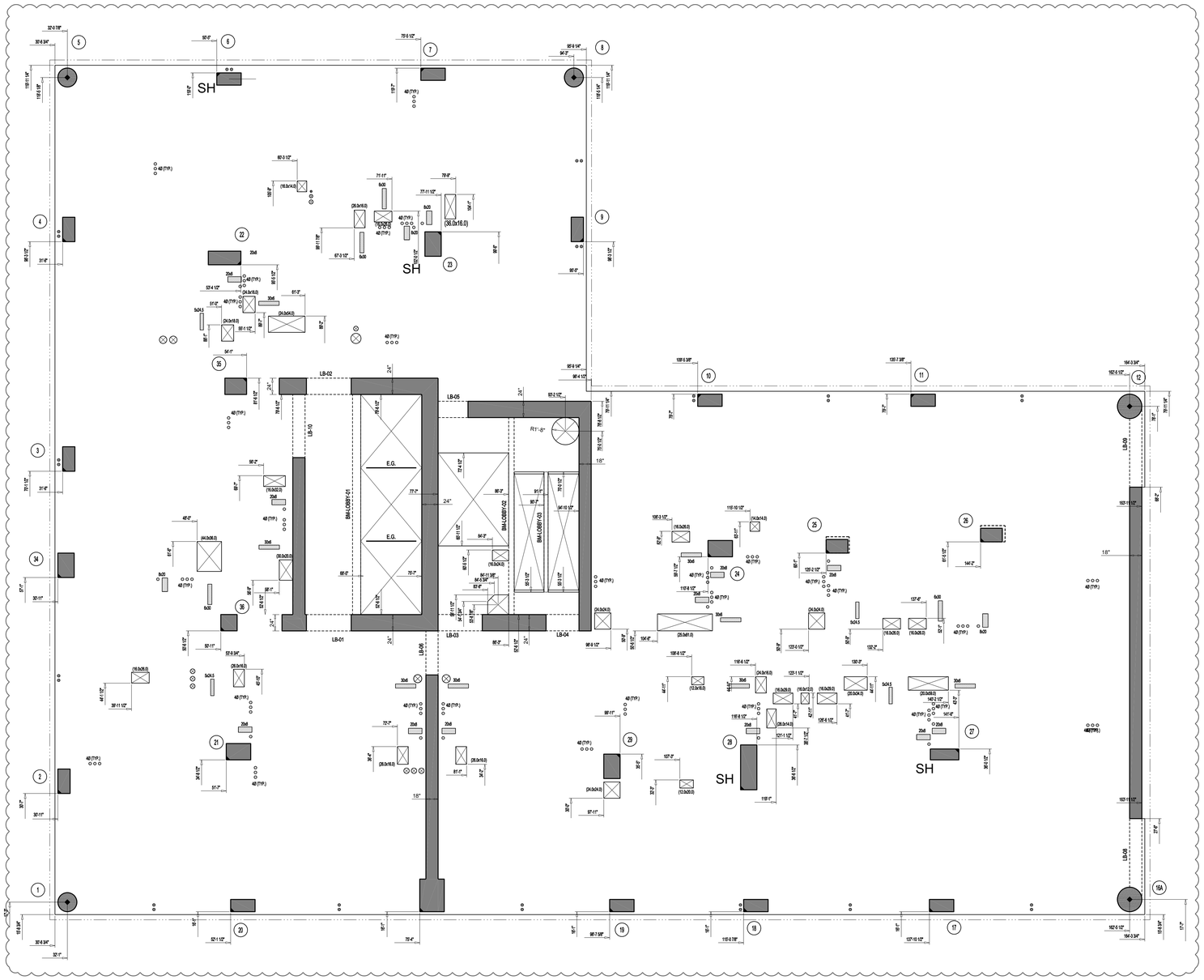
DRAWING TITLE:
52ND-55TH FLOOR LAYOUT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	1318.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-352.00
SHEET. No.:	34 of 70

FILE No: 1318-034-S-352.dwg

DEPT OF BLDGS 421859760 Job Number
E562766577403 Scan Code



SLAB THICKNESS U.O.N.: t = 8"

SLAB CONCRETE STRENGTH: f'c = 5 KSI

TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

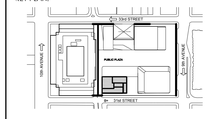
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER: NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

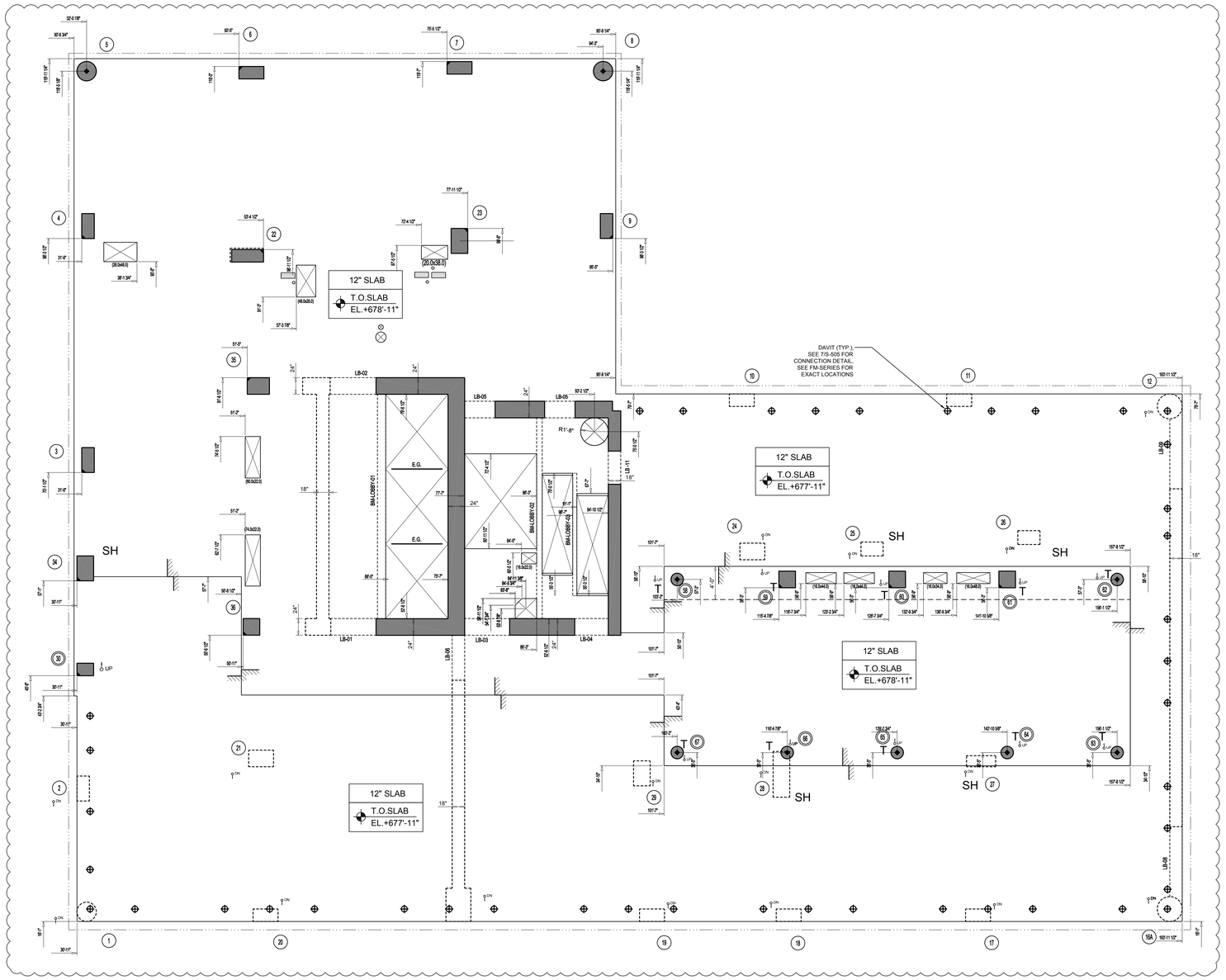
56TH-61ST FLOOR LAYOUT PLAN

SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-356.00
SHEET. No.:	35 of 70

FILE No: 13168-035-S-356.dwg

DEPT OF BLDGS 421185190 Job Number
E320561064X2 Scan Code



SLAB THICKNESS U.O.N.: t = 12"	
SLAB CONCRETE STRENGTH: f'c = 5 KSI	
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	

DRAWING NOTES:

1. FOR GENERAL NOTES SEE S-001.
2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
4. FOR BEAM SCHEDULES SEE S-441 TO S-451.
5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
12. T DENOTES COLUMN TRANSFER.
13. W DENOTES COLUMN WALK.
14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

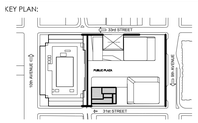
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH:
3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
62ND FLOOR
MAIN ROOF
LAYOUT PLAN

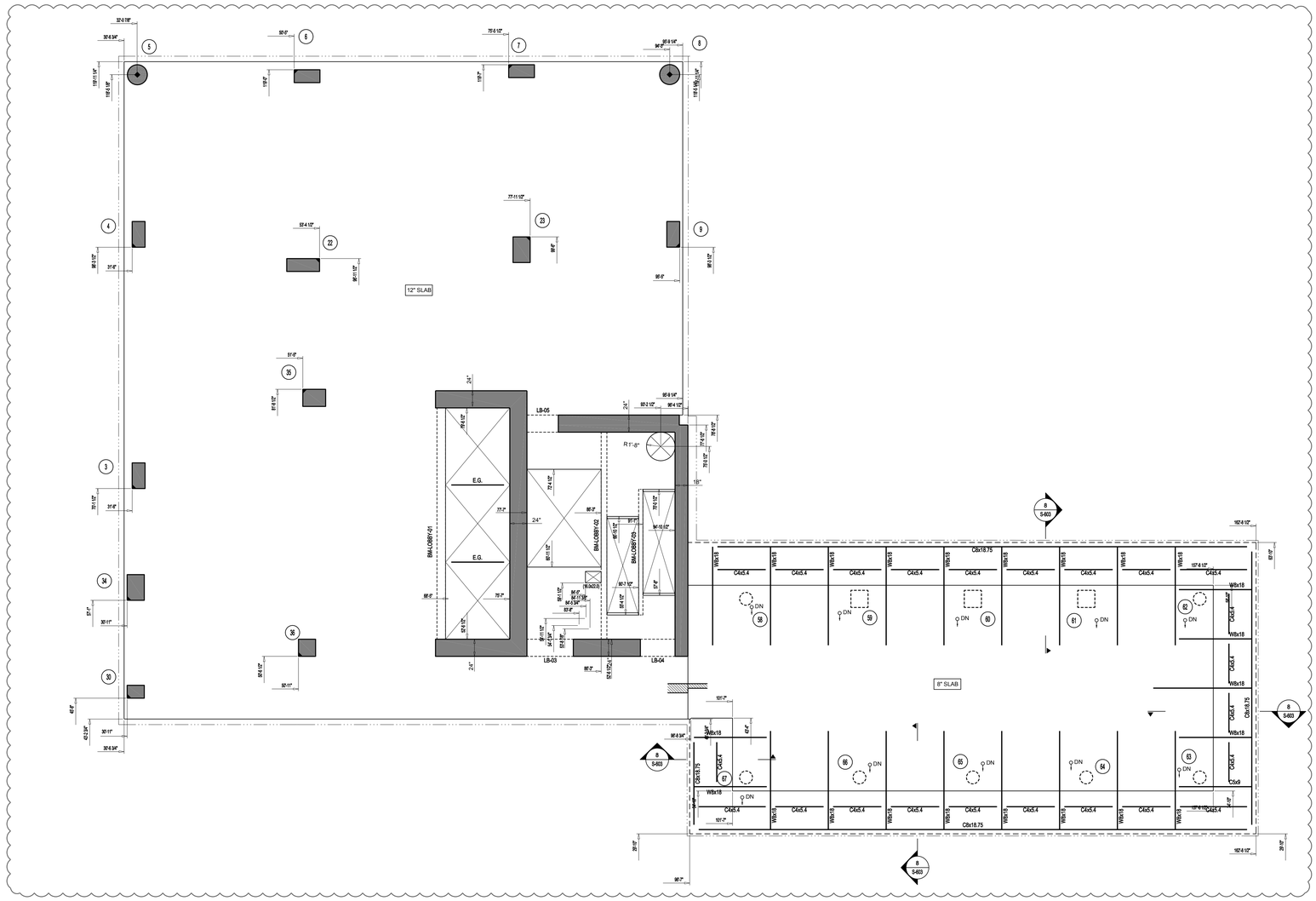
SEAL & SIGNATURE:

STATE OF NEW YORK · JOSHUA V. DRAWNE · 048.076933 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-362.00
SHEET. No.:	36 of 70

FILE No: 13168-036-S-362.dwg

DEPT OF BLDGS 421859760 Job Number
E5203170229 Scan Code



SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 12" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	15. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-5600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

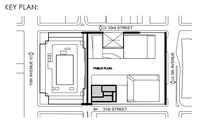
	DATE:	REVISION:
4	11-07-2014	ISSUED FOR DOB FILING
3	10-23-2014	BULLETIN #2
2	09-08-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH

3/16"=1'-0"

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

63RD MECH. FLOOR
LAYOUT PLAN

SEAL & SIGNATURE:

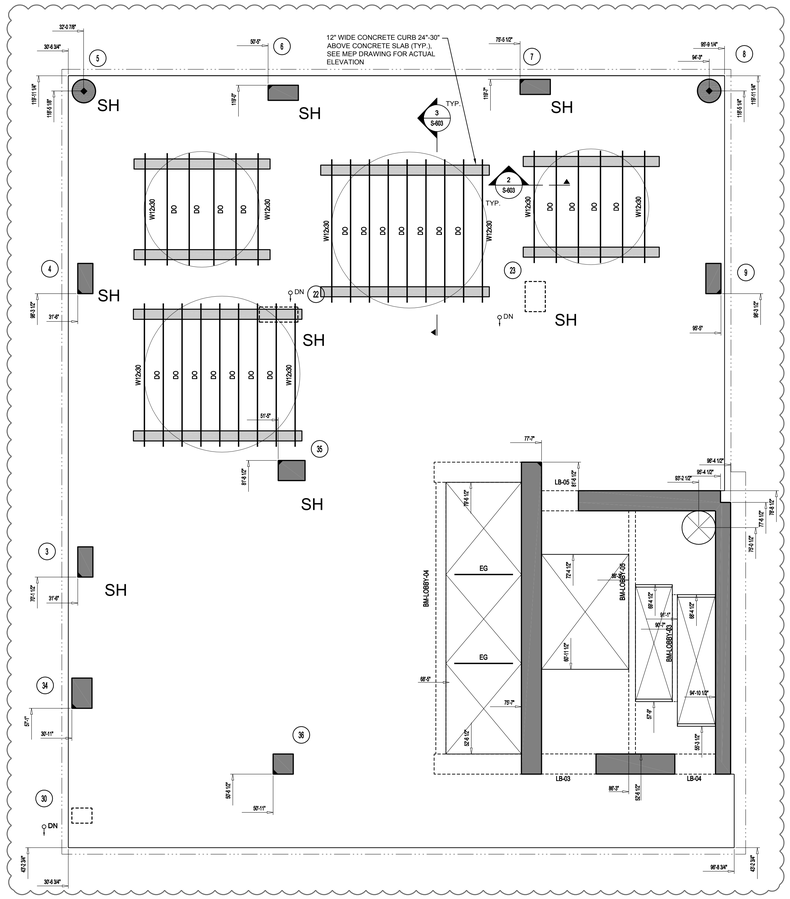
STATE OF NEW YORK · JULIEN V. DESANTIS · 020-076033 · LICENSED PROFESSIONAL ENGINEER

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-363.00
SHEET. No.:	37 of 70

FILE No: 13168-037-S-363.dwg

DeSimone Consulting Engineers - Paul Zhang,PE/-6TMKSVY - Drawing id: F:\Projects\13168\00\DWG\Sheet\13168-S-363.dwg - Date: November 06, 2014 - 3:38PM
DWG: S-363
XREF(S): F:\Projects\13168\00\DWG\Xrefs\13168-S-001.dwg F:\Projects\13168\00\DWG\Xrefs\13168-S-003-Grid-01-Plan-Sub-Bldg.dwg F:\Projects\13168\00\DWG\Xrefs\13168-S-003-Grid-02-Plan-Tow-Bldg.dwg F:\Projects\13168\00\DWG\Xrefs\13168-S-003-Grid-03-Plan-Tow-Bldg.dwg

DEPT OF BLDGS 421185760 Job Number
E2620589779 Scan Code



SLAB THICKNESS U.O.N.: t = 12"	DRAWING NOTES:
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO -S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 14" SLAB PROVIDE #5@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #5@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :
RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :
DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

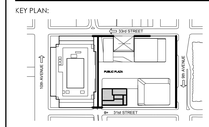
CONSTRUCTION MANAGER:
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE	REVISION
5	11-07-2014	ISSUED FOR DOB FILING
4	10-23-2014	BULLETIN #2
3	09-26-2014	STRUCTURAL REVISIONS
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



PROJECT:
MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:
64TH MECH. FLOOR
REINFORCEMENT PLAN

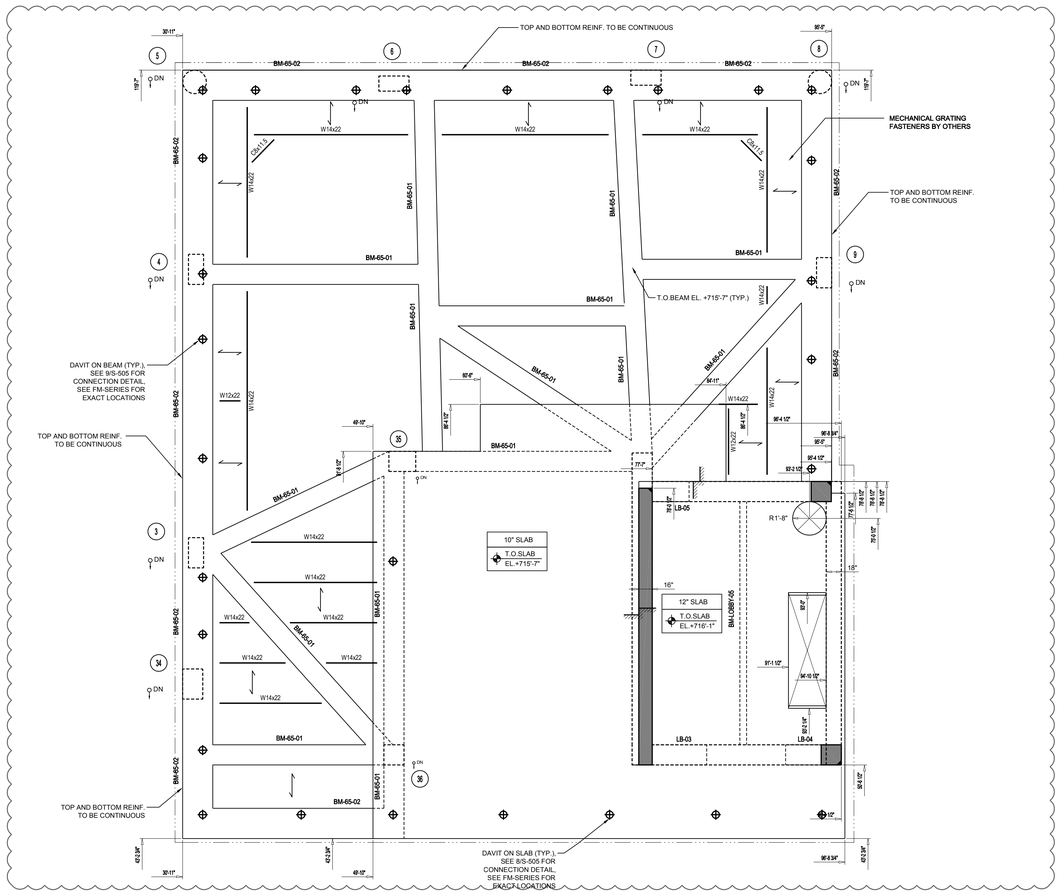
SEAL & SIGNATURE:

DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	IMB
CHECKED BY:	JS
DWG. No.:	S-364.00
SHEET. No.:	38 of 70

FILE No: 13168-038-S-364.dwg

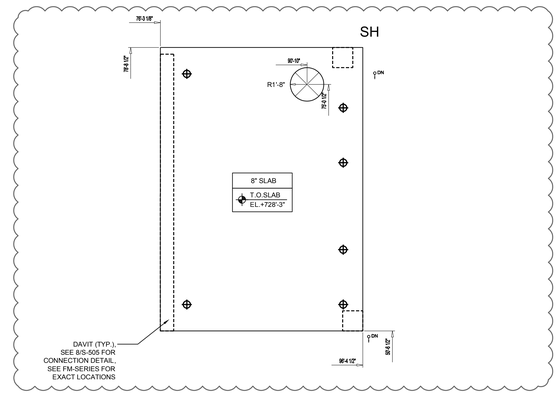
DeSimone Consulting Engineers - Paul Zheng,PE<zheng@desimone.com> - Drawing: F:\Projects\13168\13168.00\DWGS\Structl\Plot CD\4th Building Wave\13168-038-S-364.dwg [Drawing:36x48] - Date: November 06, 2014 - 3:38PM
WP: 13168-038-S-364.wp
F:\Projects\13168\13168.00\DWGS\Structl\13168-S-Title-364.dwg
F:\Projects\13168\13168.00\DWGS\Structl\13168-S-Xr-Sch-364.dwg
F:\Projects\13168\13168.00\DWGS\Structl\13168-S-Xr-SLB-364.dwg

DEPT OF BLDGS 421185160 Job Number
E3621558609N4 Scan Code



65TH FLOOR EMR PLAN

SCALE: 3/16" = 1'-0"



66TH FLOOR EMR ROOF PLAN

SCALE: 3/16" = 1'-0"

SLAB THICKNESS U.O.N.: t = 12"	**DRAWING NOTES:**
SLAB CONCRETE STRENGTH: f'c = 5 KSI	1. FOR GENERAL NOTES SEE S-001.
TOP OF SLAB ELEVATION, U.O.N.: SEE COLUMN SCHEDULE	2. FOR COLUMN SCHEDULE AND DETAILS SEE S-401 TO S-403.
	3. FOR SHEAR WALL PLANS AND DETAILS, SEE S-410 TO S-432.
	4. FOR BEAM SCHEDULES, SEE S-441 TO S-451.
	5. SHEAR WALL CONCRETE STRENGTH TO MATCH COLUMN CONCRETE STRENGTH.
	6. FOR 8" SLAB PROVIDE #4@12"O.C. BOTTOM BARS E.W., 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12"O.C. MID STRIP TOP BARS, 'AT' DENOTES ADDITIONAL TOP BARS.
	7. OUTERMOST REINFORCEMENT RUNS NORTH-SOUTH.
	8. ALL LINK BEAMS DENOTED 'LB' SHALL BE STEEL W-SHAPES EMBEDDED IN CONCRETE. CONCRETE STRENGTH TO MATCH SLAB.
	9. FOR TYPICAL CONCRETE DETAILS SEE S-501 TO S-503.
	10. FOR TYPICAL STEEL DETAILS SEE S-601 TO S-603.
	11. CONTRACTOR TO LOCATE AND VERIFY ALL OPENINGS THROUGH SLAB FROM ARCHITECTURAL AND MEP DRAWINGS.
	12. T DENOTES COLUMN TRANSFER.
	13. W DENOTES COLUMN WALK.
	14. FOR 8" SLAB, PROVIDE #4@12" O.C. BOTTOM BARS E.W. 'AB' DENOTES ADDITIONAL BOTTOM BARS. PROVIDE #4@12" MID STRIP TOP BARS. 'AT' DENOTES ADDITIONAL TOP BARS.
	15. OPENING DIMENSIONS ARE GIVEN AS N-S BY E-W.
	16. ⟷ DENOTES 1X2 TYPE W-19-4 GRATE (FROM GRATING PACIFIC CATALOG)

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

RW STUDIO
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th, STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

CONSTRUCTION MANAGER:

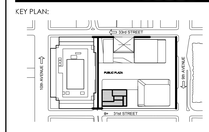
HUNTER ROBERTS CONSTRUCTION GROUP
225 LIBERTY STREET, 6th FLOOR
NEW YORK, NY 10281
TEL.: (212) 321-6800

	DATE:	REVISION:
5	11-07-2014	ISSUED FOR DOB FILING
4	10-23-2014	BULLETIN #2
3	09-26-2014	STRUCTURAL REVISIONS
2	09-09-2014	ISSUED FOR CONSTRUCTION
1	08-01-2014	90% CONSTRUCTION DOCUMENTS

D.O.B. NUMBER:
NB#

NORTH: 3/16"=1'-0"

KEY PLAN:



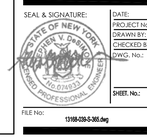
PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

65TH & 66TH FLOOR, EMR AND EMR ROOF LAYOUT PLANS

SEAL & SIGNATURE:



DATE:	07.31.2014
PROJECT No:	13168.00
DRAWN BY:	MB
CHECKED BY:	JS
DWG. No.:	S-365.00
SHEET. No.:	39 of 70

FILE No: 13168-039-S-365.dwg

DeSimone Consulting Engineers - Paul Zheng,PE\r-07MCSV - Drawing-of:\Projects\13168\13168.00\DWGS\Struct\Struct CD\L4R Building Mesh\13168-039-S-365.dwg [Drawing-36x48] - Date= November 06, 2014 - 3:38PM
REF: xref: 1 F:\Projects\13168\13168.00\DWGS\Xrefs\13168-x-Title-36-48.dwg
2 F:\Projects\13168\13168.00\DWGS\Xrefs\13168-x-Plan-Mesh-Struct-Lvl-65-66.dwg
3 F:\Projects\13168\13168.00\DWGS\Xrefs\13168-x-Plan-Mesh-Struct-Lvl-67-70.dwg
4 F:\Projects\13168\13168.00\DWGS\Xrefs\13168-x-Sec-Mesh-Struct-Lvl-65-70.dwg
5 F:\Projects\13168\13168.00\DWGS\Xrefs\13168-x-SEC-Mesh-Struct-Lvl-65-70.dwg

DEPT OF BLDGS 421185160 Job Number
E366956436 Scan Code

LIST OF DRAWINGS

SOE–100.00 – SUPPORT OF EXCAVATION – GENERAL AND EXCAVATION NOTES

SOE–101.00 – SUPPORT OF EXCAVATION – PLAN

SOE–110.00 – SUPPORT OF EXCAVATION – SECTIONS 1 OF 2

SOE–111.00 – SUPPORT OF EXCAVATION – SECTIONS 2 OF 2

SOE–120.00 – SUPPORT OF EXCAVATION – DETAILS

LIST OF ABBREVIATIONS:

℄ – CENTERLINE

DIA. – DIAMETER

ELEC. – ELECTRICAL

EL. – ELEVATION

EXIST. – EXISTING

FTG. – FOOTING

NO. – NUMBER

O.C. – ON CENTER

℘ – PROPERTY LINE

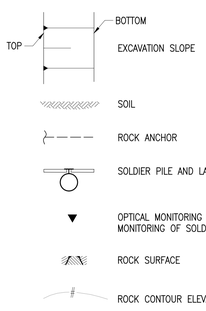
SCHED. – SCHEDULE

SOE – SUPPORT OF EXCAVATION

TYP. – TYPICAL

W.P. – WORKING POINT

LIST OF SYMBOLS:



GENERAL NOTES:

1. CONTRACTOR MAY ELECT TO SUBMIT VALUE ENGINEERING AND OWN DESIGN FOR SUPPORT OF EXCAVATION, INCLUDING ALL MEASURES REQUIRED TO SUPPORT ADJACENT STRUCTURES, STREETS, SIDEWALKS AND UTILITIES, PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK FOR REVIEW BY THE ENGINEER–OF–RECORD.

2. ELEVATIONS ON PLANS ARE GIVEN RELATIVE TO DATUM NAVD88.

3. THE SUPPORT OF EXCAVATION SYSTEM HAS BEEN DESIGNED FOR 600 PSF AT EXISTING GRADE ALONG THE EXTERIOR OF THE SITE.

4. MATERIALS:

A. ALL STEEL (U.O.N.):	ASTM A572, GRADE 50
B. SOLDIER PIPE PILES:	ASTM A 252, CLASS 3
C. TIMBER LAGGING:	SOUTHERN PINE OR EQUAL FB = 1250 PSI (MIN) FV = 175 PSI (MIN)
D. STEEL THREAD BAR:	ASTM A722, GRADE 150
E. ROCK BOLTS:	ASTM A615 GRADE 75
F. ROCK PIN REINFORCING:	ASTM A615, GRADE 60
G. GROUT:	MIN. 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS
H. WELDING:	AWS D1.1, E70XX ELECTRODES

5. SOLDIER (DRILLED–IN) PIPE PILES:

   A. ALL SOLDIER PILES SHALL BE INSTALLED PLUMB IN DRILLED HOLES. ANY DEVIATIONS OF THE PILE ALIGNMENT BEYOND THOSE SPECIFIED SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER PRIOR TO EXCAVATION.

   B. ALL PILES SHALL BE FILLED WITH GROUT.

   C. PILE SPLICES SHALL DEVELOP THE FULL MOMENT AND SHEAR CAPACITY OF THE PILES.

6. ALL ANCHORS SHALL BE INSTALLED AND TESTED ACCORDING TO THE DETAILS AND PROCEDURES ON DRAWING SOE–120.00.

7. ALL ROCK BOLTS SHALL BE INSTALLED ACCORDING TO THE DETAILS AND PROCEDURES SHOWN ON DRAWING SOE–120.00.

8. FOUNDATION PLAN PREPARED BY DeSIMONE CONSULTING ENGINEERS P.L.L.C., DATED 2–28–2014.

GENERAL EXCAVATION NOTES:

1. GENERAL EXCAVATION ACROSS THE SITE SHALL NOT EXTEND DEEPER THAN THE SLAB–ON–GRADE GRANULAR FILL SUBGRADE ELEVATION. DEEPER EXCAVATIONS SHALL BE EXCAVATED INDIVIDUALLY, ON A LOCALIZED BASIS DOWN FROM SUBGRADE. CONTRACTOR TO VERIFY ELEVATIONS PRIOR TO COMMENCING WORK.

2. CONTRACTOR SHALL VERIFY AND RECORD ROCK ELEVATIONS DURING SOLDIER (DRILLED–IN) PIPE PILE INSTALLATION. ACTUAL TOP OF ROCK ELEVATIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO EXCAVATION.

3. SOIL EXCAVATION SHALL NOT PROCEED DEEPER THAN 2 FEET BELOW THE LAST INSTALLED LAGGING. ALL LAGGING SHALL BE PLACED HORIZONTAL AND BACKPACKED PRIOR TO ADVANCING THE EXCAVATION. THE EXCAVATION SHALL BE SEQUENCED SO THAT STABILITY OF ADJACENT STRUCTURES WITHIN 10° OF THE LAGGING IS MAINTAINED AT ALL TIMES.

4. ROCK EXCAVATION:

   A. LINE DRILL AS REQUIRED.

   B. PLUG ALL SEEMS AND LENSES IN ROCK WITH GROUT AS REQUIRED IF WATER BEARING.

   C. INSTALL ROCK BOLTS AS REQUIRED AND AS DIRECTED BY THE ENGINEER.

   D. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING TIMING AND EFFECTS OF BLASTING (IF USED) WITH EXISTING RAILROAD OPERATIONS PER THE RECOMMENDATIONS OF THE OWNER'S BLAST CONSULTANT.

   E. NO BLASTING SHALL OCCUR WITHIN A 50–FOOT RADIUS OF NEWLY PLACED CONCRETE STRUCTURES BEFORE 7 DAYS OF CURING, UNLESS WRITTEN PERMISSION IS OBTAINED FROM THE ENGINEER OF RECORD.

   F. ALL BLASTING OPERATIONS SHALL COMPLY WITH ALL LOCAL AND STATE LAWS, RULES, AND REGULATIONS, AND AMTRAK AND LIRR BLASTING SPECIFICATIONS.

6. CONTRACTOR SHALL LOCATE ALL UTILITIES AND EXISTING UNDERGROUND STRUCTURES PRIOR TO INSTALLING SOLDIER PILES, TIEBACKS OR ROCK BOLTS. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, RELOCATING AND REINSTALLING EXISTING UTILITIES THAT INTERFERE WITH PROPOSED EXCAVATION AND SUPPORT OF EXCAVATION MEMBERS.

7. THE CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND MINIMIZE SETTLEMENT OF EXISTING OR NEW CONSTRUCTION INSIDE OR OUTSIDE PROJECT LIMITS.

8. MONITORING:

   A. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING MONITORING POINTS ON THE SOE. THE CONTRACTOR SHALL FREQUENTLY READ AND RECORD ALL MOVEMENTS OR SETTLEMENTS DURING EXCAVATION AND REPORT MOVEMENTS TO CONSTRUCTION MANAGER.

   B. CONTRACTOR SHALL SUBMIT AND CONDUCT A VIBRATION MONITORING PLAN AND PROGRAM AS PER AMTRAK/LIRR REQUIREMENTS AS APPROVED BY ENGINEER.

9. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT FOR THE DEWATERING SYSTEM IF REQUIRED. THE DEWATERING SYSTEM SHALL MAINTAIN THE WATER LEVEL TO A MINIMUM OF 3 FEET BELOW THE DEEPEST SUBGRADE AT ALL TIMES. THIS LEVEL SHALL BE MAINTAINED UNTIL ALL LOWER LEVEL AND GROUND FLOOR SLABS, PERIMETER WALLS AND WATERPROOFING ARE INSTALLED AND THE PERMANENT BUILDING DRAINAGE SYSTEM IS FULLY OPERATIONAL.

10. PROPOSED WORK ON DRAWINGS ARE SUBJECT TO SPECIAL INSPECTION IN ACCORDANCE WITH THE NEW YORK CITY BUILDING CODE.

11. NOTIFICATION TO BE PROVIDED TO THE D.O.B. 24–48 HOURS PRIOR TO COMMENCEMENT OF EARTHWORK AS PER BC 3304.3.1. 3

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

	DATE:	REVISION:
3	10-16-2014	REVISED PER DOB COMMENT
2	05-16-2014	ISSUED FOR BID
1	03-14-2014	DESIGN DEVELOPMENT

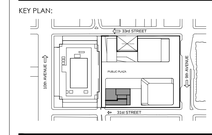
D.O.B. NUMBER:

NB#

NORTH:

Scale: AS NOTED

KEY PLAN:



PROJECT:

DRAWING TITLE:

SUPPORT OF EXCAVATION
GENERAL AND EXCAVATION
NOTES

SEAL & SIGNATURE:

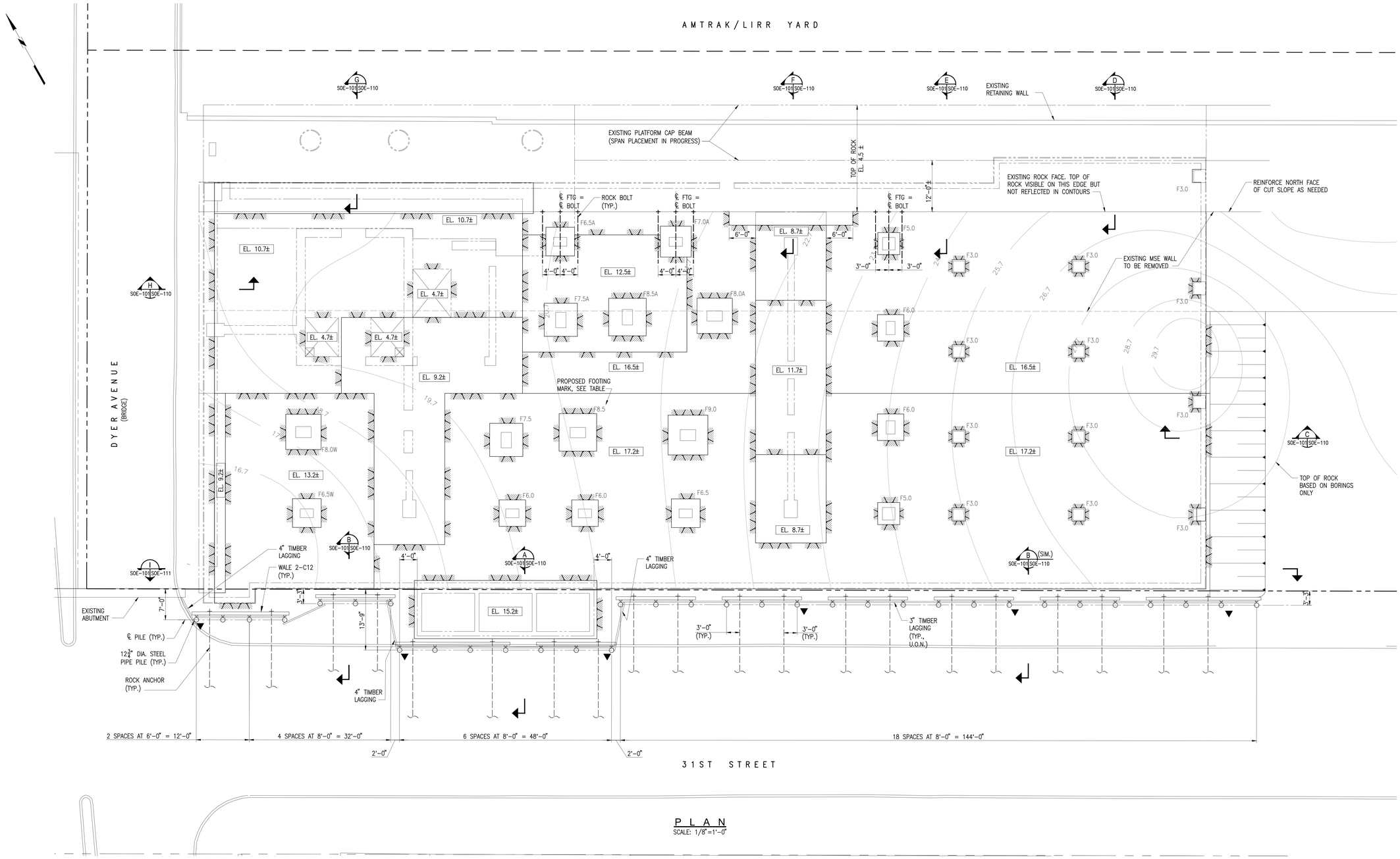
STATE OF NEW YORK · DAVID R. GUSTAFSON · 048224 · LICENSED PROFESSIONAL ENGINEER

DATE:	12.18.2013
PROJECT No:	13168.00
DRAWN BY:	K.J
CHECKED BY:	EB
DWG. No.:	SOE-100.00
SHEET. No.:	00

FILE No: SOE-100.00.dwg

Printed by: Kenneth Gafstein
Printed on: Thursday, Oct 16, 2014 – 04:16:01 PM
Last saved by: kafstein on: Thursday, Oct 16, 2014 – 4:15:43 PM
G:\DWGS\95\9560\9560E\SOE-100.00.dwg

DEPT OF BLDGS 421185760 Job Number
E162264498999 Scan Code



PLAN

SCALE: 1/8"=1'-0"

FOOTING SUBGRADE SCHEDULE	
MARK	SUBGRADE ELEVATION
F3.0	15.2
F5.0	14.9
F6.0	14.4
F6.5	14.2
F6.5A	10.2
F6.5W	10.2
F7.0	13.9
F7.0A	9.9
F7.5	13.4

NOTES:

1. SEE DRAWING SOE-100 FOR GENERAL NOTES, LIST OF ABBREVIATIONS AND LIST OF SYMBOLS.
2. ELEVATIONS REFER TO NAVD88.
3. SEE FO SERIES DRAWINGS FOR REINFORCED CONCRETE AT ROCK EDGES AT NORTH AND WEST SIDES.

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT :

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
230 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

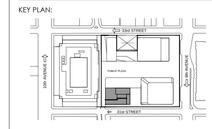
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

	DATE:	REVISION:
2	05-16-2014	ISSUED FOR BID
1	03-14-2014	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH:
Scale: AS NOTED

KEY PLAN:



PROJECT:

DRAWING TITLE:

SUPPORT OF EXCAVATION PLAN

SEAL & SIGNATURE:

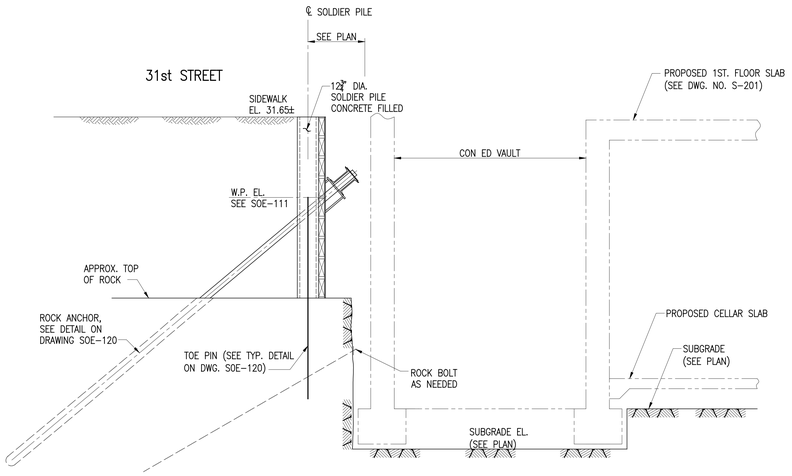
STATE OF NEW YORK
DAVID R. GOLDSTEIN
No. 060844
LICENSED PROFESSIONAL ENGINEER

DATE:	12.18.2013
PROJECT No:	13168.00
DRAWN BY:	KJ
CHECKED BY:	EB
DWG. No.:	SOE-101.00
SHEET. No.:	00

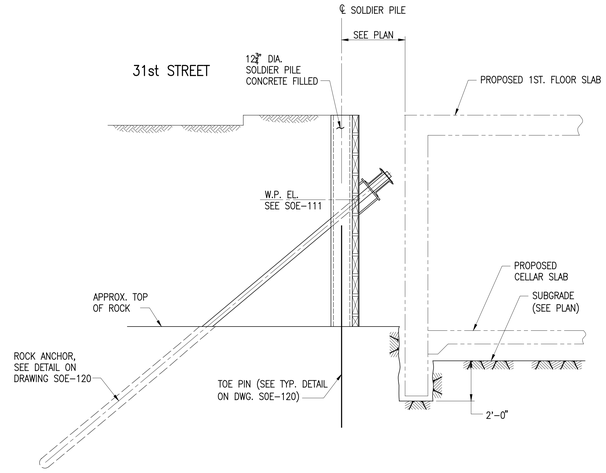
FILE No: SOE-101.00.dwg

Printed by: Larisa Rego
Printed on: Friday, May 16, 2014 - 03:17:23 PM
Last saved by: Rego on Friday, May 16, 2014 - 2:53:09 PM
G:\DWGS\95\9560\9560E\SOE-101.00.dwg

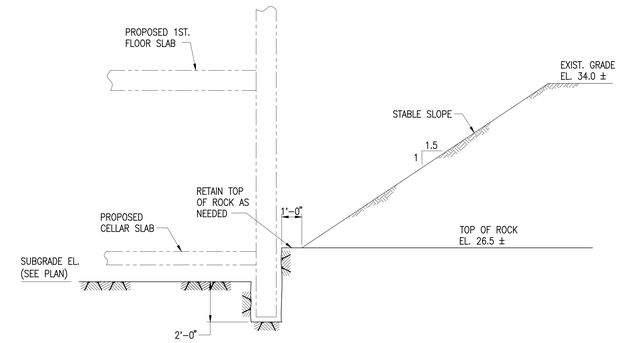
DEPT OF BLDGS 421185760 Job Number
B00035397.I1 Scan Code



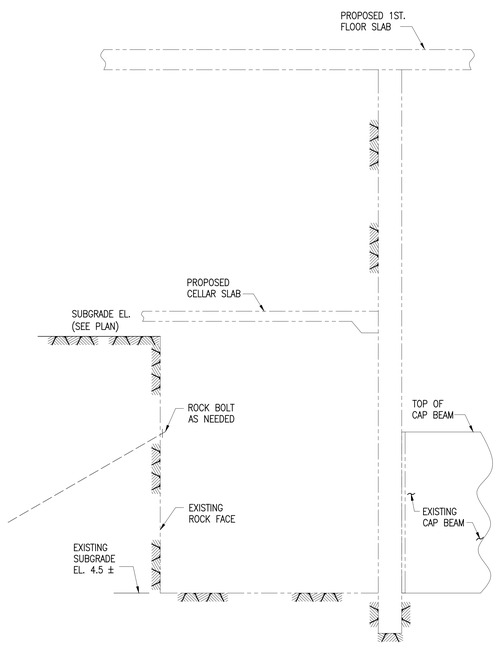
SECTION A
SCALE: 3/8"=1'-0" SOE-101 SOE-110



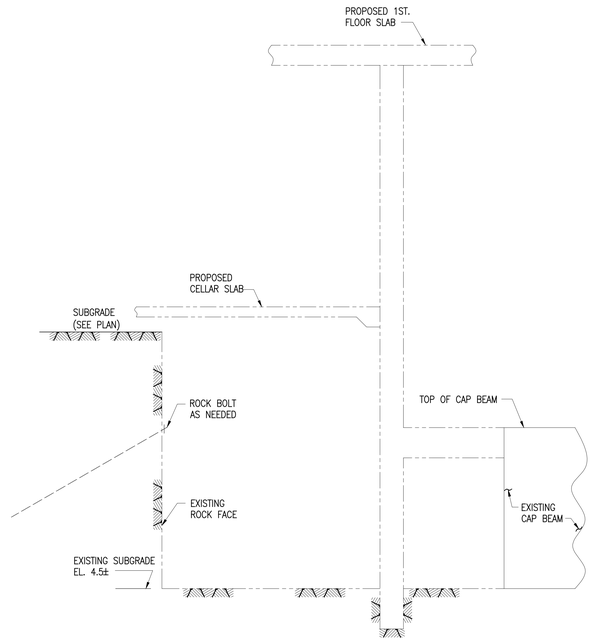
SECTION B
SCALE: 3/8"=1'-0" SOE-101 SOE-110



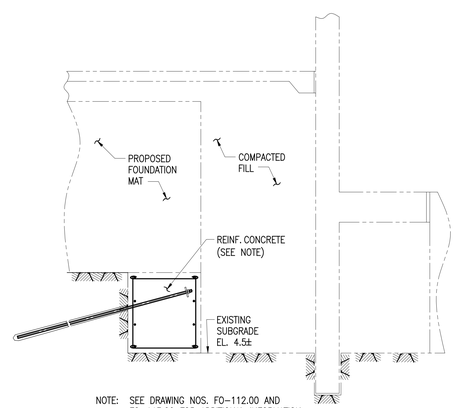
SECTION C
SCALE: 3/8"=1'-0" SOE-101 SOE-110



SECTION D
SCALE: 3/8"=1'-0" SOE-101 SOE-110

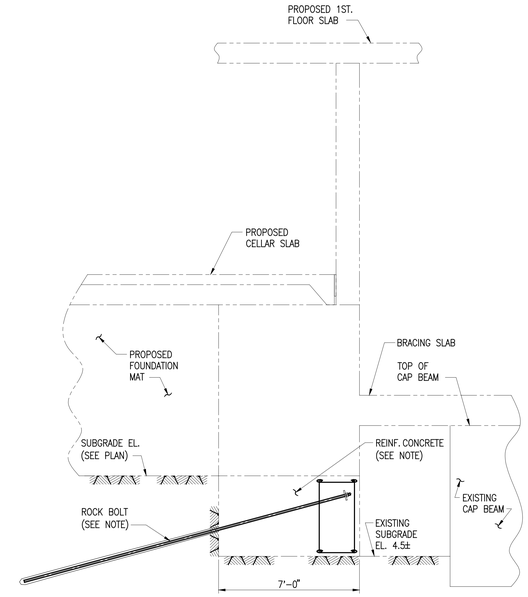


SECTION E
SCALE: 3/8"=1'-0" SOE-101 SOE-110



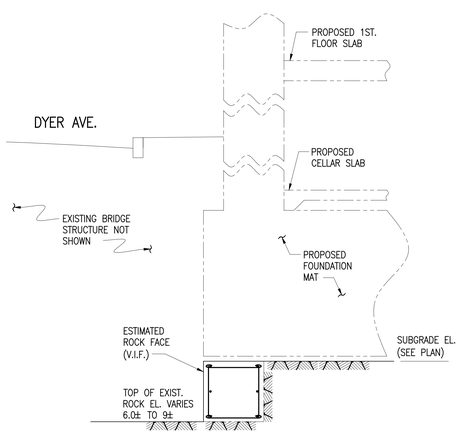
NOTE: SEE DRAWING NOS. FO-112.00 AND FO-113.00 FOR ADDITIONAL INFORMATION.

SECTION F
SCALE: 3/8"=1'-0" SOE-101 SOE-110



NOTE: SEE DRAWING NOS. FO-102.00 AND FO-113.00 FOR ADDITIONAL INFORMATION.

SECTION G
SCALE: 3/8"=1'-0" SOE-101 SOE-110



SECTION H
SCALE: 3/8"=1'-0" SOE-101 SOE-110

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

	DATE:	REVISION:
2	05-16-2014	ISSUED FOR BID
1	03-14-2014	DESIGN DEVELOPMENT

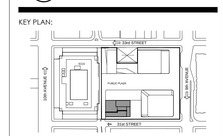
D.O.B. NUMBER:

NB#

NORTH:

Scale: AS NOTED

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SUPPORT OF EXCAVATION
SECTIONS

SEAL & SIGNATURE:

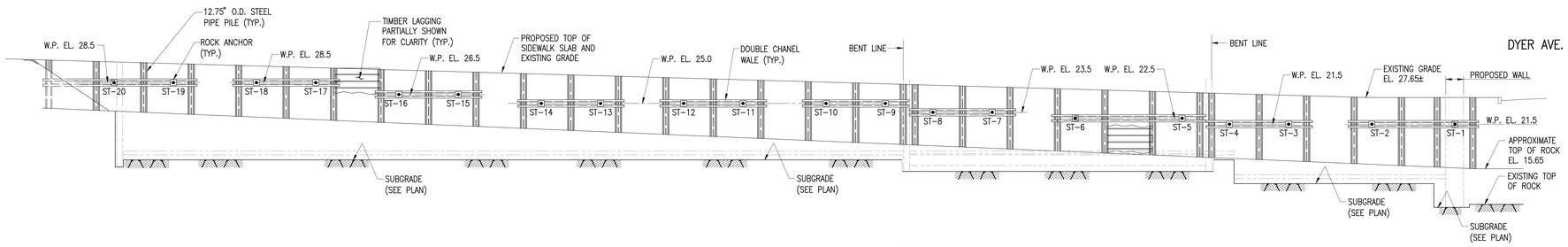
STATE OF NEW YORK
DAVID H. GOLDSTEIN
No. 038896-1
LICENSED PROFESSIONAL ENGINEER

DATE:	12.18.2013
PROJECT No:	13168.00
DRAWN BY:	KJ
CHECKED BY:	EB
DWG. No.:	SOE-110.00
SHEET. No.:	00

FILE No: SOE-110.00.dwg

Printed by: Larisa Reva
Printed on: Friday, May 16, 2014 - 03:17:28 PM
Last saved by: Reva on: Friday, May 16, 2014 - 2:09:20 PM
G:\DWGS\95\9560\9560E\SOE-110.00.dwg

DEPT OF BLDGS 421185760 Job Number
E350845760SS Scan Code



SECTION H
SCALE: 1/8"=1'-0" SOE-101 SOE-111

PROJECT:

Manhattan West
Southwest Residential Tower

PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:

Brookfield

BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT :

SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN :

ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:

JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER :

DeSIMONE CONSULTING
ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER :

COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:

VIDARIS INC. /
ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:

VIDARIS INC. /
VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:

VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:

CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER :

PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

GEOTECHNICAL ENGINEER :

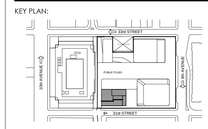
MUESER RUTLEDGE
CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

	DATE:	REVISION:
2	05-16-2014	ISSUED FOR BID
1	03-14-2014	DESIGN DEVELOPMENT

D.O.B. NUMBER:
NB#

NORTH:
Scale: AS NOTED

KEY PLAN:



PROJECT:

MANHATTAN WEST
NEW YORK , NEW YORK

DRAWING TITLE:

SUPPORT OF EXCAVATION
SECTIONS
2 OF 2

SEAL & SIGNATURE:

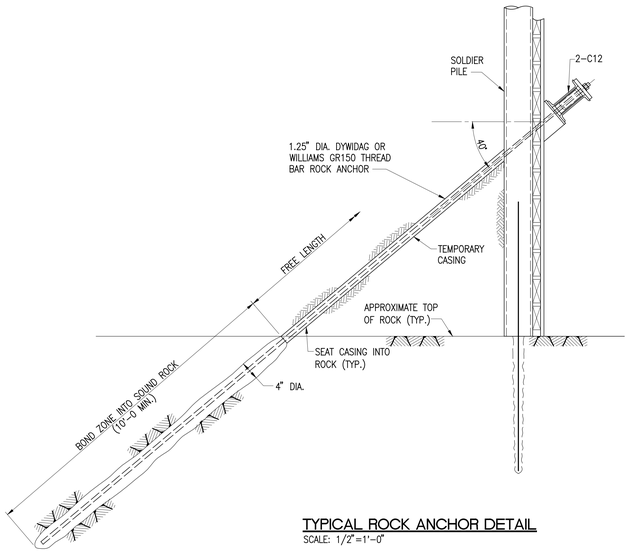
STATE OF NEW YORK · DAVID R. GEORGE · LICENSED PROFESSIONAL ENGINEER

DATE:	12.18.2013
PROJECT No:	1316.00
DRAWN BY:	KJ
CHECKED BY:	EB
DWG. No.:	SOE-111.00
SHEET. No.:	00

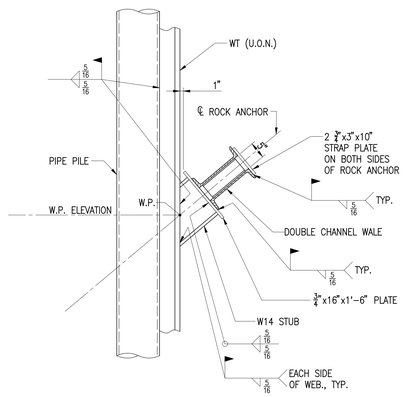
FILE No: SOE-111.00.dwg

Printed by: Larisa Rava
Printed on: Friday, May 16, 2014 – 03:17:32 PM
Last saved by: Larisa on Tuesday, May 13, 2014 – 3:30:33 PM
G:_DWGS\95\9560\9560E\SOE-111.00.dwg

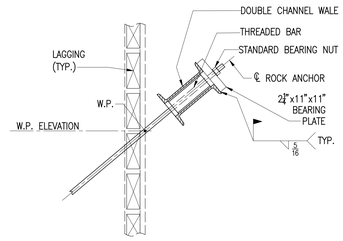
DEPT OF BLDGS 421189760 Job Number
E-520550000245 Scan Code



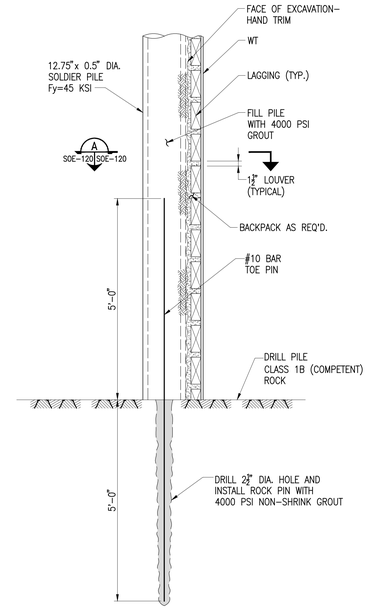
TYPICAL ROCK ANCHOR DETAIL
SCALE: 1/2"=1'-0"



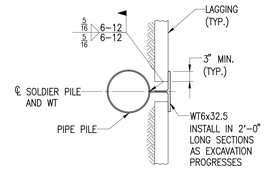
TYPICAL WALE TO PILE CONNECTION
SCALE: 3/4"=1'-0"



TYPICAL SECTION AT ROCK ANCHOR
SCALE: 3/4"=1'-0"



TYPICAL PILE TO ROCK CONNECTION
SCALE: 3/4"=1'-0"



SECTION A
SCALE: 3/4"=1'-0" S0E-120 S0E-120

ANCHOR PERFORMANCE TESTING PROCEDURE:

1. A PERFORMANCE TEST SHALL BE EXECUTED ON A MINIMUM OF 2 ANCHORS. TEST LOADS FOR THESE ANCHORS SHALL BE 133 TIMES THE ROCK ANCHOR DESIGN LOAD (DL = 70 KIP).
2. LOAD AND UNLOAD ANCHORS IN THE FOLLOWING PATTERN, WHERE DL AND AL STANDS FOR DESIGN LOAD AND ALIGNMENT LOAD (0.1•DL), RESPECTIVELY:

CYCLE:	
1	AL
	0.25DL
2	AL
	0.25DL
	0.5DL
3	AL
	0.25DL
	0.5DL
	0.75DL
4	AL
	0.25DL
	0.5DL
	0.75DL
	1.0DL
5	AL
	0.25DL
	0.5DL
	0.75DL
	1.0DL
	1.20DL
4	AL
	0.25DL
	0.5DL
	0.75DL
	1.0DL
	1.2DL
	1.33DL-TEST LOAD (HOLD FOR 10 MINUTES)
5	ADJUST TO LOCK OFF LOAD OF 1.0DL

3. HOLD EACH INCREMENT OF LOAD JUST LONG ENOUGH TO OBTAIN A MOVEMENT READING. RECORD MOVEMENT READING, JACKING PRESSURE, AND LOAD.
4. WHILE HOLDING THE TEST LOAD (1.33DL), RECORD TOTAL MOVEMENTS MEASURED AT MINUTES 1 THROUGH 6 AND MINUTE 10. IF TOTAL MOVEMENT EXCEEDS 1.0MM, HOLD THE TEST LOAD FOR AN ADDITIONAL 50 MINUTES AND RECORD ADDITIONAL MOVEMENT READINGS.
5. ONCE THE ANCHOR IS LOCKED OFF AT 1.0 DL, VERIFY THAT THE LOAD IS WITHIN 5 PERCENT OF THE SPECIFIED LOCK OFF LOAD.

ANCHOR PROOF TESTING PROCEDURE:

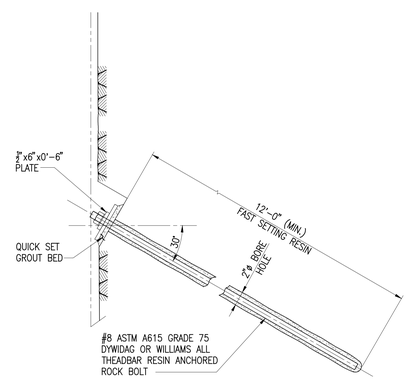
1. PROOF TEST ALL ANCHORS NOT PERFORMANCE TESTED.
2. LOAD EACH ANCHOR IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, WHERE DL AND AL STANDS FOR DESIGN LOAD AND ALIGNMENT LOAD (0.1•DL), RESPECTIVELY:

LOAD
AL
0.25DL
0.50DL
0.75DL
1.00DL
1.33DL – TEST LOAD (HOLD ANCHOR FOR 10 MINUTES)
ADJUST LOAD TO 1.0DL AND LOCK OFF ANCHOR

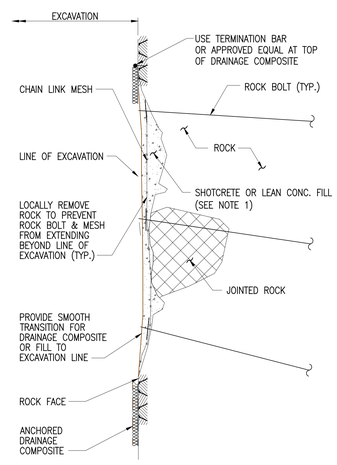
3. HOLD EACH INCREMENT OF LOAD JUST LONG ENOUGH TO OBTAIN A MOVEMENT READING. RECORD MOVEMENT READING, JACKING PRESSURE, AND LOAD.
4. WHILE HOLDING THE TEST LOAD (1.33DL), RECORD TOTAL MOVEMENTS MEASURED AT MINUTES 1 THROUGH 6 AND MINUTE 10. IF TOTAL MOVEMENT EXCEEDS 1.0MM, HOLD THE TEST LOAD FOR AN ADDITIONAL 50 MINUTES AND RECORD ADDITIONAL MOVEMENT READINGS.
5. AFTER THE ANCHOR IS LOCKED OFF AT 1.0DL, PERFORM A LIFT OFF TEST TO VERIFY THAT THE LOAD IS WITHIN 5 PERCENT OF THE SPECIFIED LOCK OF LOAD.

ANCHOR ACCEPTANCE CRITERIA:

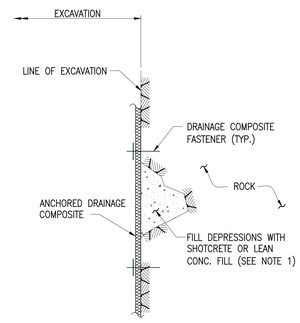
1. ACCEPT ANCHORS IF:
   A. THE TOTAL ELASTIC MOVEMENT OBTAINED AT THE TEST LOAD WITH A 10 MINUTE LOAD HOLD EXCEEDS 80% OF THE THEORETICAL ELASTIC ELONGATION OF THE STRESSING LENGTH, BUT LESS THAN THE STRESSING LENGTH PLUS HALF OF THE BOND LENGTH.
   B. THE CREEP RATE WITH A 60 MINUTE LOAD HOLD DOES NOT EXCEED 2.0 MM PER LOG CYCLE DURING THE FINAL LOG CYCLE OF THE PERFORMANCE TEST OR PROOF TEST REGARDLESS OF THE TENDON LENGTH AND LOAD.



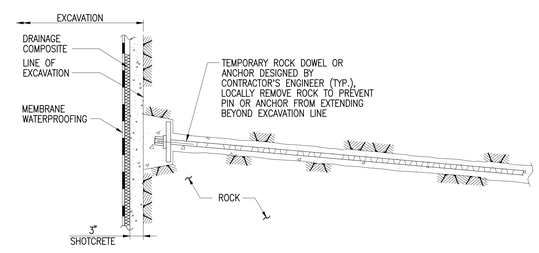
TYPICAL ROCK BOLT DETAIL
SCALE: 1 1/2"=1'-0"



ROCK FACE SUPPORT WITH CHAIN LINK MESH (WEAK ROCK)
NO SCALE



ROCK SURFACE PREPARATION (FOR WATERPROOFING)
NO SCALE



NOTE: INTERFACE BETWEEN DRAINAGE COMPOSITE AND PERMANENT PIPING NOT SHOWN. SEE CONTRACT DOCUMENTS

ROCK FACE SUPPORT IN AREA WITH MEMBRANE WATERPROOFING
NO SCALE

PROJECT:
Manhattan West
Southwest Residential Tower
PART OF THE MANHATTAN WEST MASTER PLAN
West 31st street & Dyer Avenue
New York, NY.

OWNER/DEVELOPER:
Brookfield
BOP West 31st Street LLC
Brookfield Properties W 33rd CO.L.P.
Brookfield Place, 250 Vesey Street
New York, NY 10281

ARCHITECT:
SLCE*Architects*,LLP
1359 BROADWAY
NEW YORK, NY 10018
TEL.: (212) 979-8400
FAX.: (212) 979-8387

DESIGN ARCHITECT / MASTER PLAN ARCHITECT:
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street New York, NY 10005
(212) 298-9300

INTERIOR DESIGN:
ROMAN AND WILLIAMS
BUILDINGS AND INTERIORS
324 LAFAYETTE STREET, 6TH FLOOR
NEW YORK, NY 10012
TEL.: (212) 625-3808
FAX.: (212) 625-3807

LANDSCAPE ARCHITECT:
JAMES CORNER
FIELD OPERATIONS
475 TENTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 433-1450

STRUCTURAL ENGINEER:
DeSIMONE CONSULTING ENGINEERS, P.L.L.C.
18 WEST 18TH STREET
NEW YORK, NY 10011
TEL.: (212) 532-2211
FAX.: (212) 481-6108

MECHANICAL ENGINEER:
COSENTINI ASSOCIATES
TWO PENN PLAZA
NEW YORK, N.Y. 10121
TEL.: (212) 615-3600
FAX.: (212) 615-3700

BUILDING ENVELOPE CONSULTANT:
VIDARIS INC. / ISRAEL BERGER & ASSOCIATES, INC.
232 MADISON AVENUE
NEW YORK, NY
TEL.: (212) 689-5389
FAX.: (212) 689-6449

ENERGY / ENVIRONMENTAL CONSULTANT:
VIDARIS INC. / VIRIDIAN ENERGY & ENVIRONMENTAL
50 WASHINGTON STREET
NORWALK, CT 06854
TEL.: (203) 299-1411
FAX.: (203) 299-1656

VERTICAL TRANSPORTATION CONSULTANT:
VAN DEUSEN & ASSOCIATES
5 REGENT STREET, SUITE 524
LIVINGSTON, NJ 07039
TEL.: (973) 994.9220

ACOUSTICAL CONSULTANT:
CERAMI ASSOCIATES
404 FIFTH AVENUE
NEW YORK, NY 10018
TEL.: (212) 370-1776
FAX.: (212) 370-1736

CIVIL ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FL.
NEW YORK, NY 10016
TEL.: (212) 929-5656
FAX.: (212) 929-5605

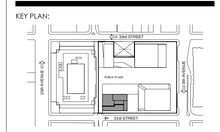
GEOTECHNICAL ENGINEER:
MUESER RUTLEDGE CONSULTING ENGINEERS
225 WEST 34th. STREET
NEW YORK, NY 10122
TEL.: (917) 339-9300
FAX.: (917) 339-9400

	DATE:	REVISION:
2	05-16-2014	ISSUED FOR BID
1	03-14-2014	DESIGN DEVELOPMENT

D.O.B. NUMBER: NB#

NORTH: Scale: AS NOTED

KEY PLAN:



PROJECT:

DRAWING TITLE:
SUPPORT OF EXCAVATION SECTIONS AND DETAILS

SEAL & SIGNATURE:
STATE OF NEW YORK · EDWARD R. BOLLO · No. 066844 · LICENSED PROFESSIONAL ENGINEER

DATE:	12.18.2013
PROJECT No.:	13168.00
DRAWN BY:	KJ
CHECKED BY:	EB
DWG. No.:	SOE-120.00
SHEET. No.:	00

FILE No: SOE-120.00.dwg

Printed by: Larisa Rios
Printed on: Friday, May 16, 2014 - 03:17:37 PM
Last saved by: rmight on Friday, Mar 14, 2014 - 3:27:33 PM
G:\DWGS\93\9360\9360E\SOE-120.00.dwg