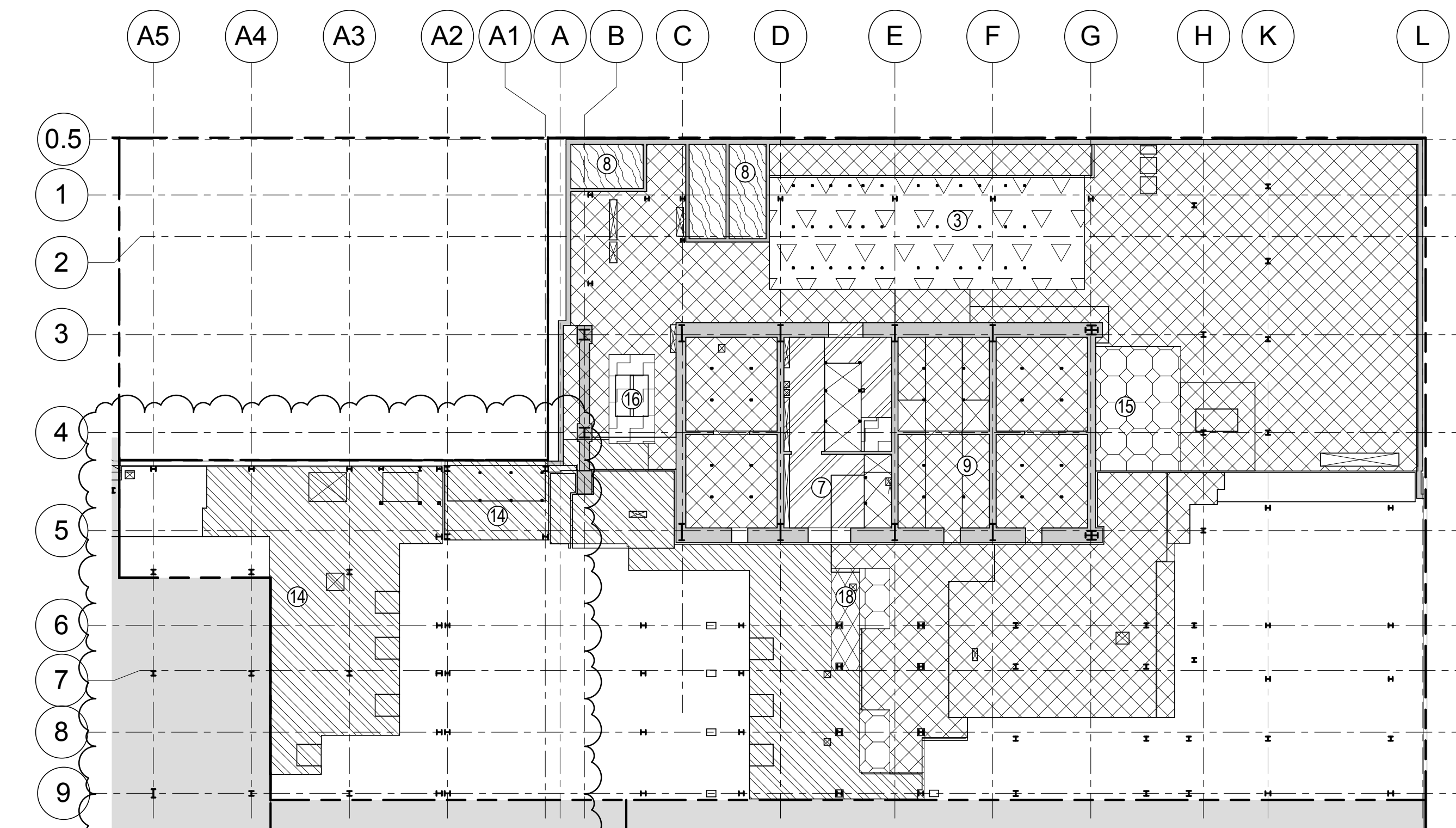


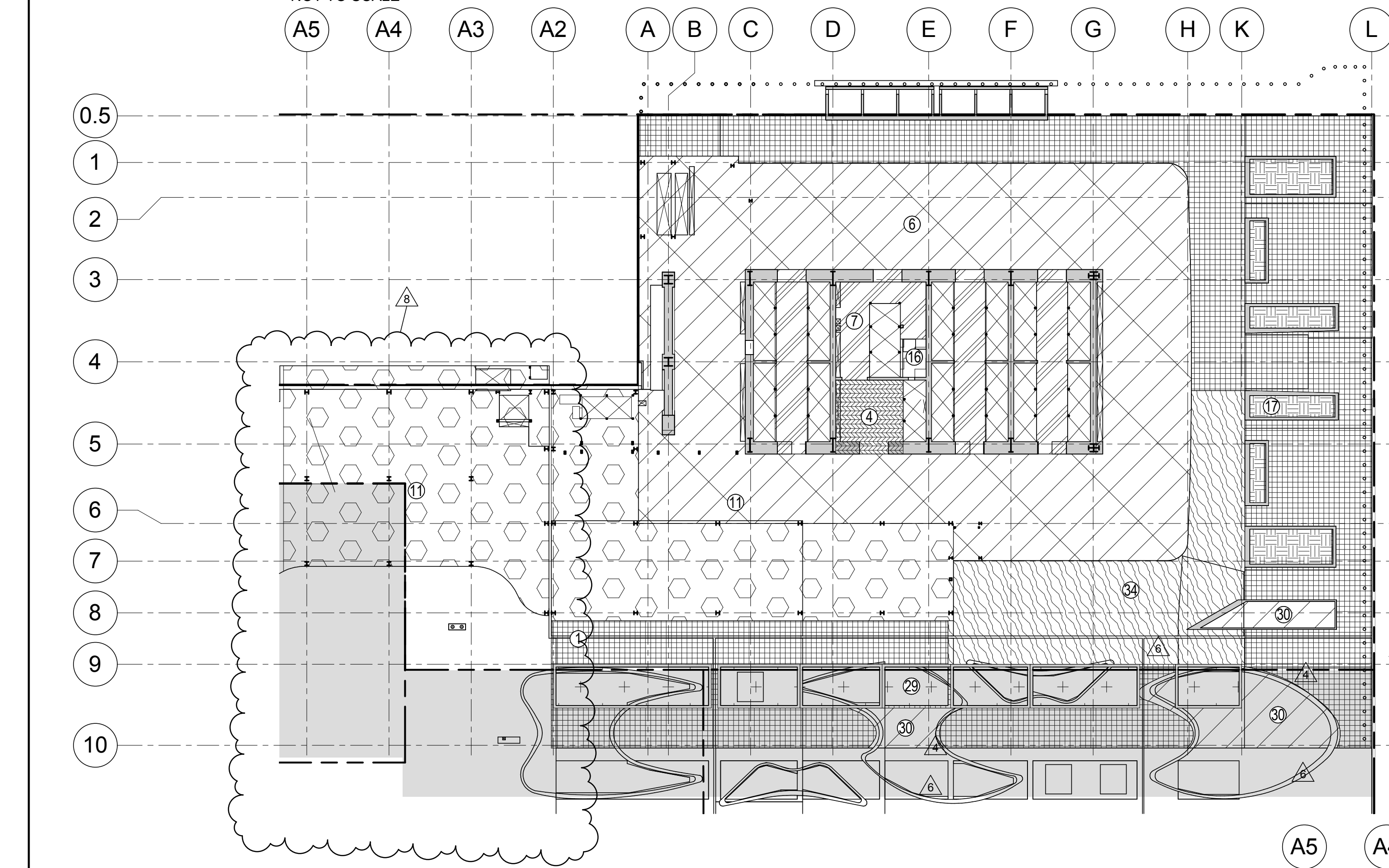
1 LEVEL B1 LOADING DIAGRAM

NOT TO SCALE



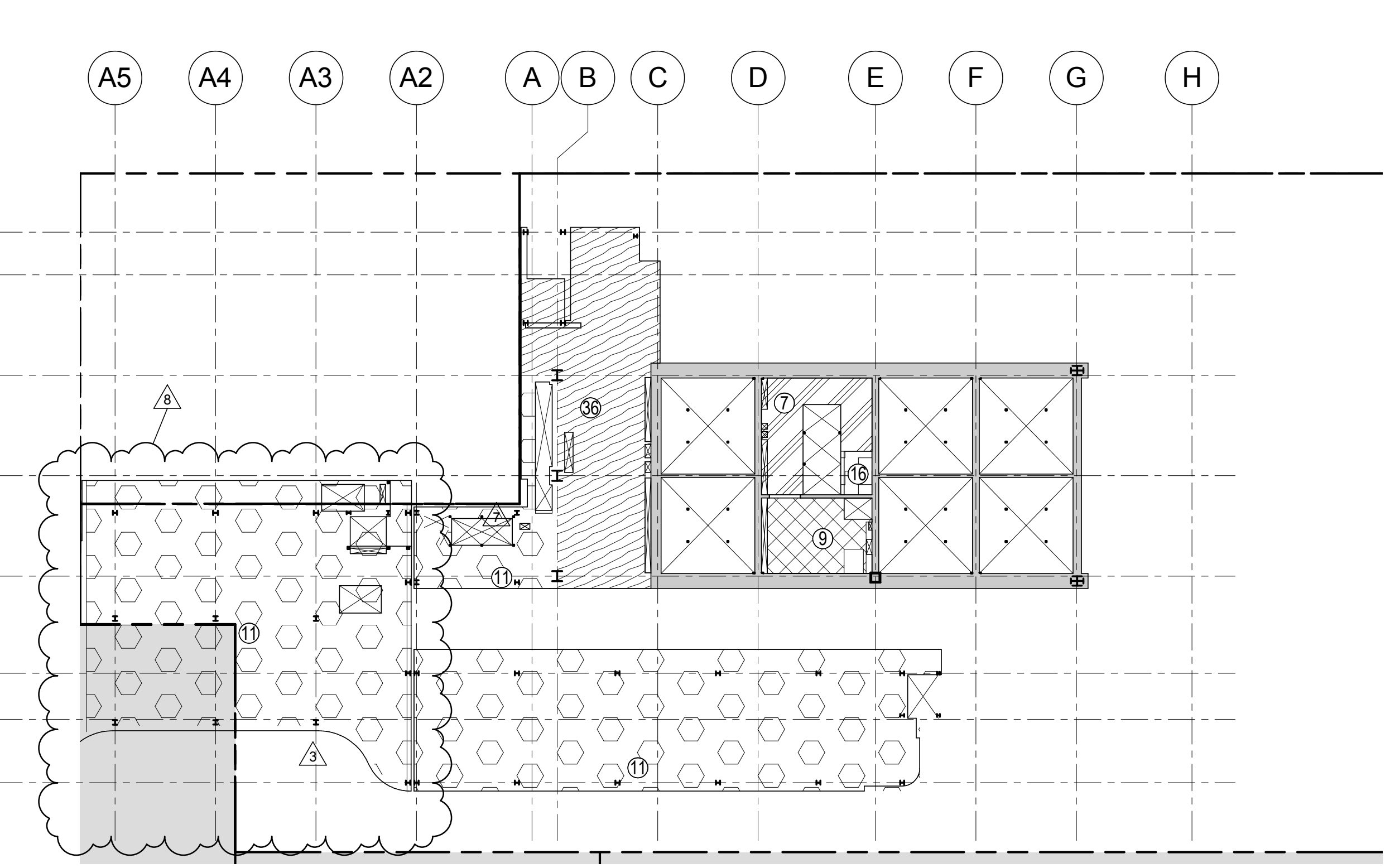
2 CELLAR B LOADING DIAGRAM

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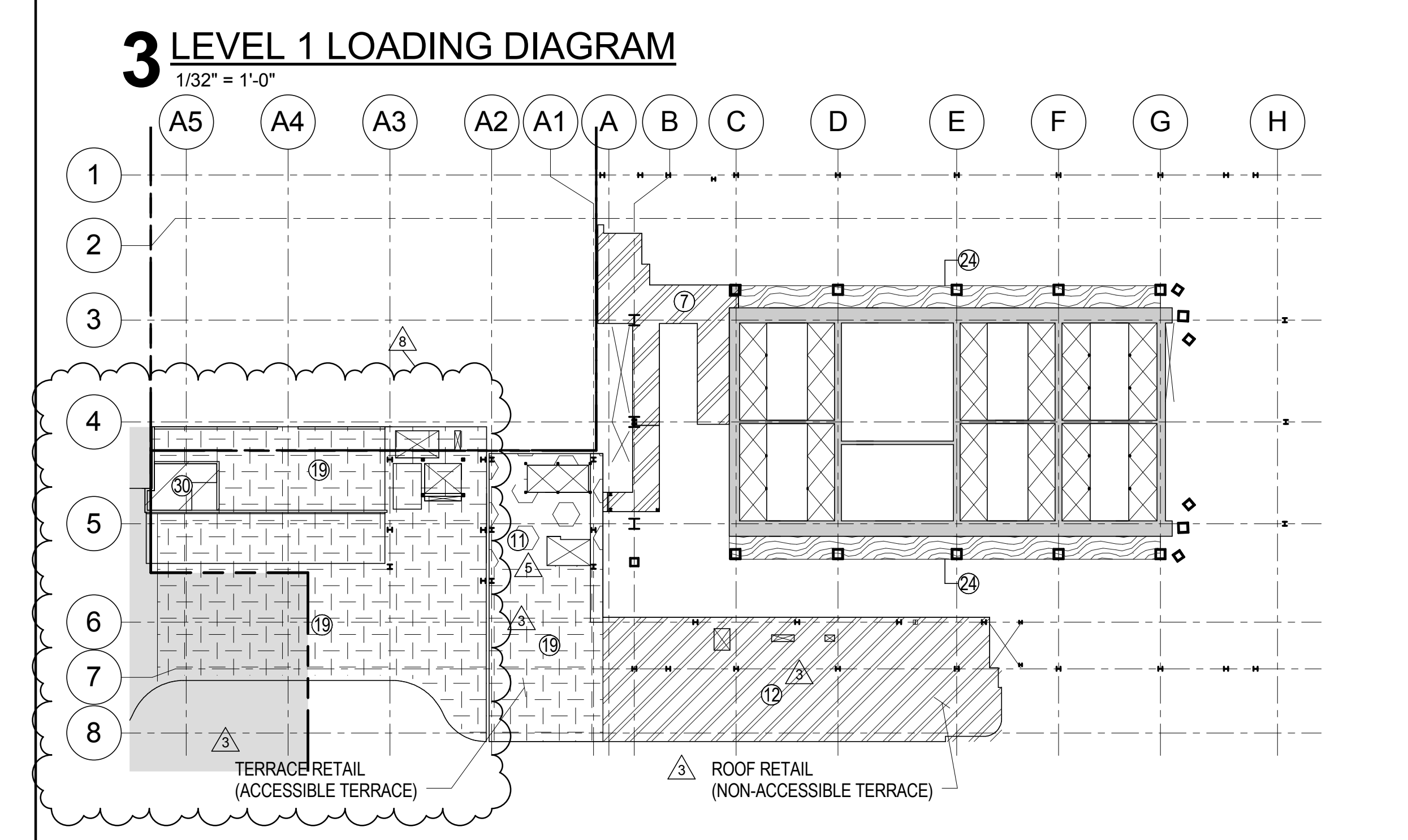
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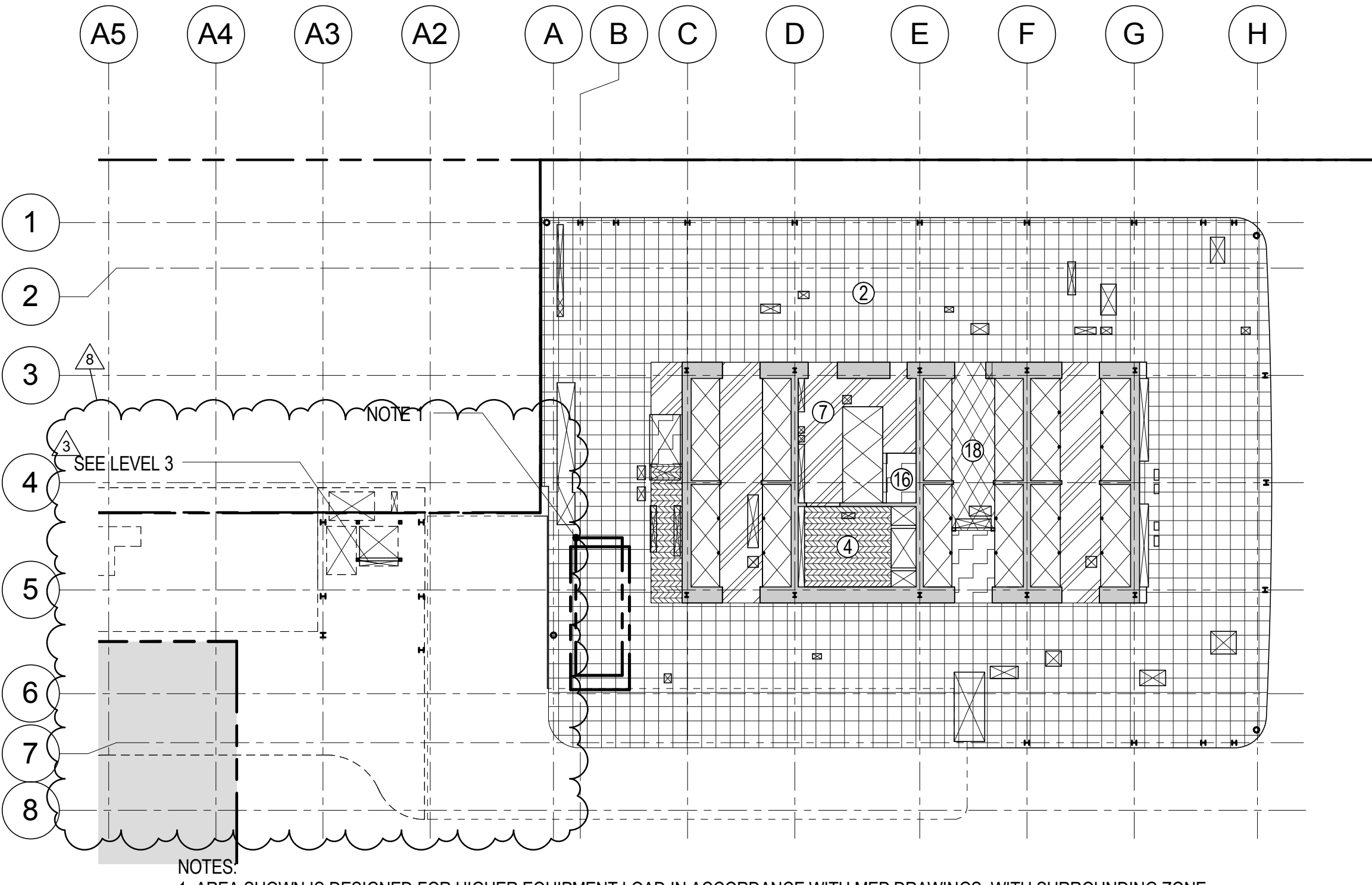
4 LEVEL 2 LOADING DIAGRAM

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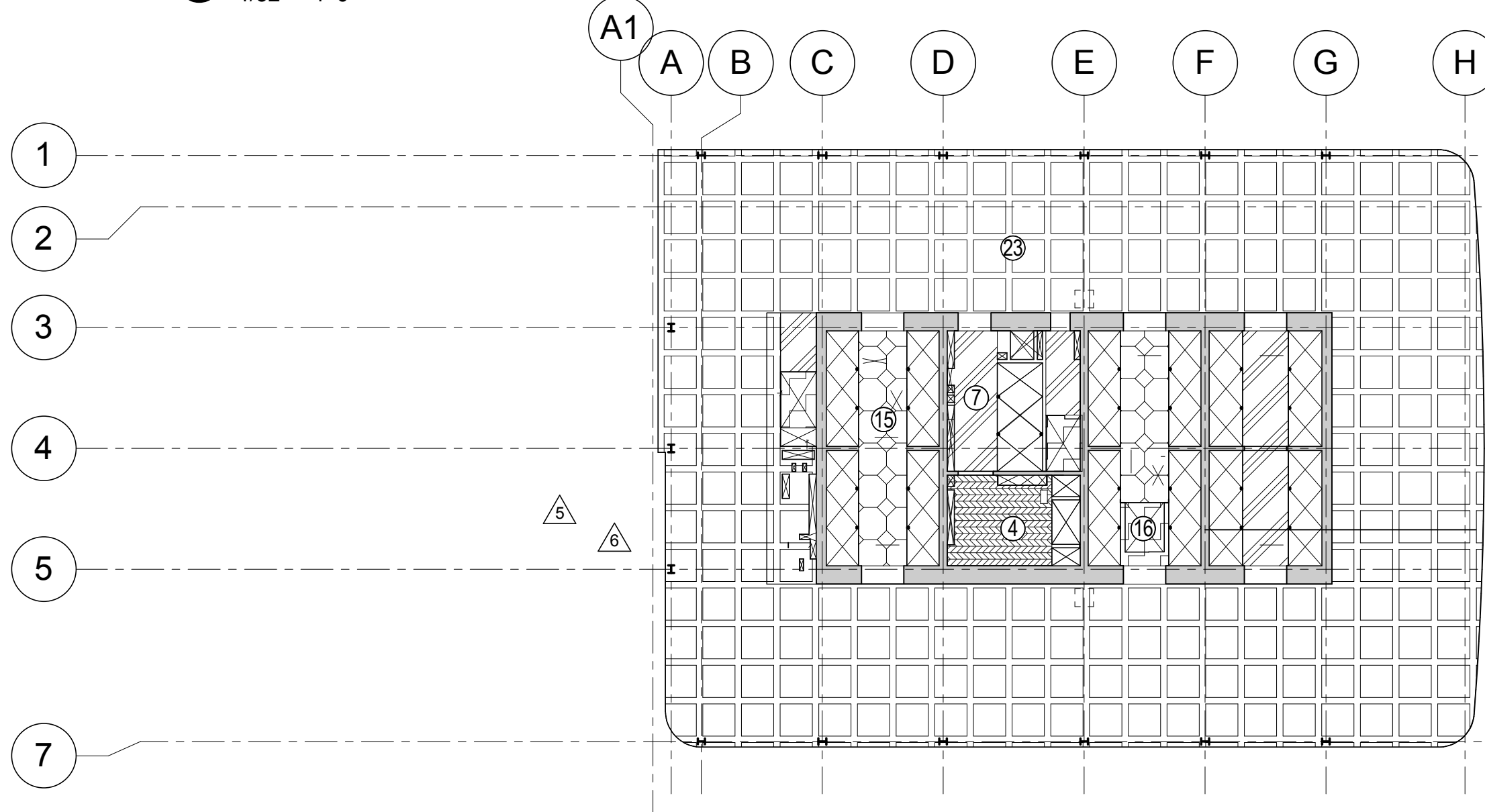
6 LEVEL 3 PART A LOADING DIAGRAM

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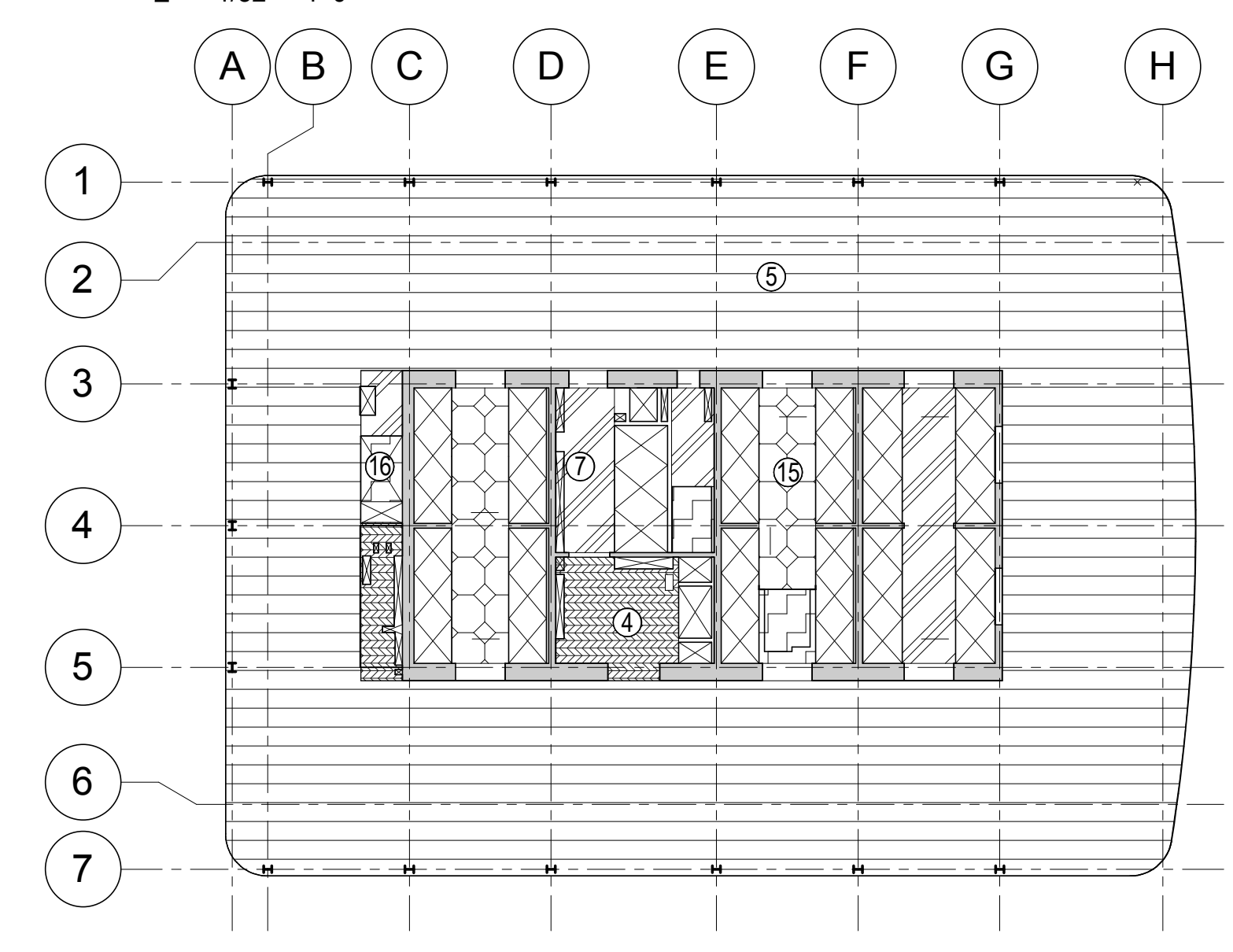
7 LEVEL 4 LOADING DIAGRAM

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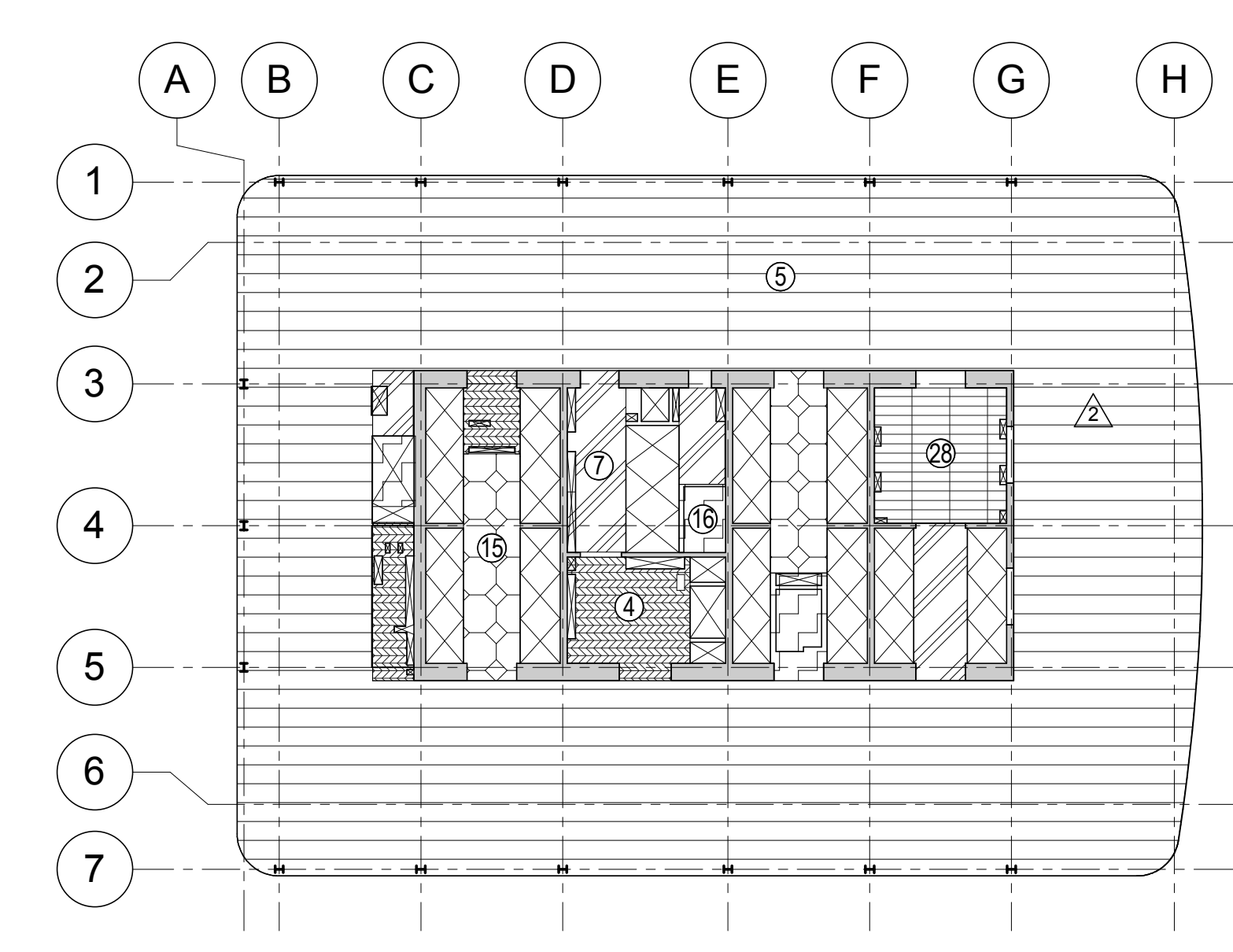
10 LEVEL 6 LOADING DIAGRAM

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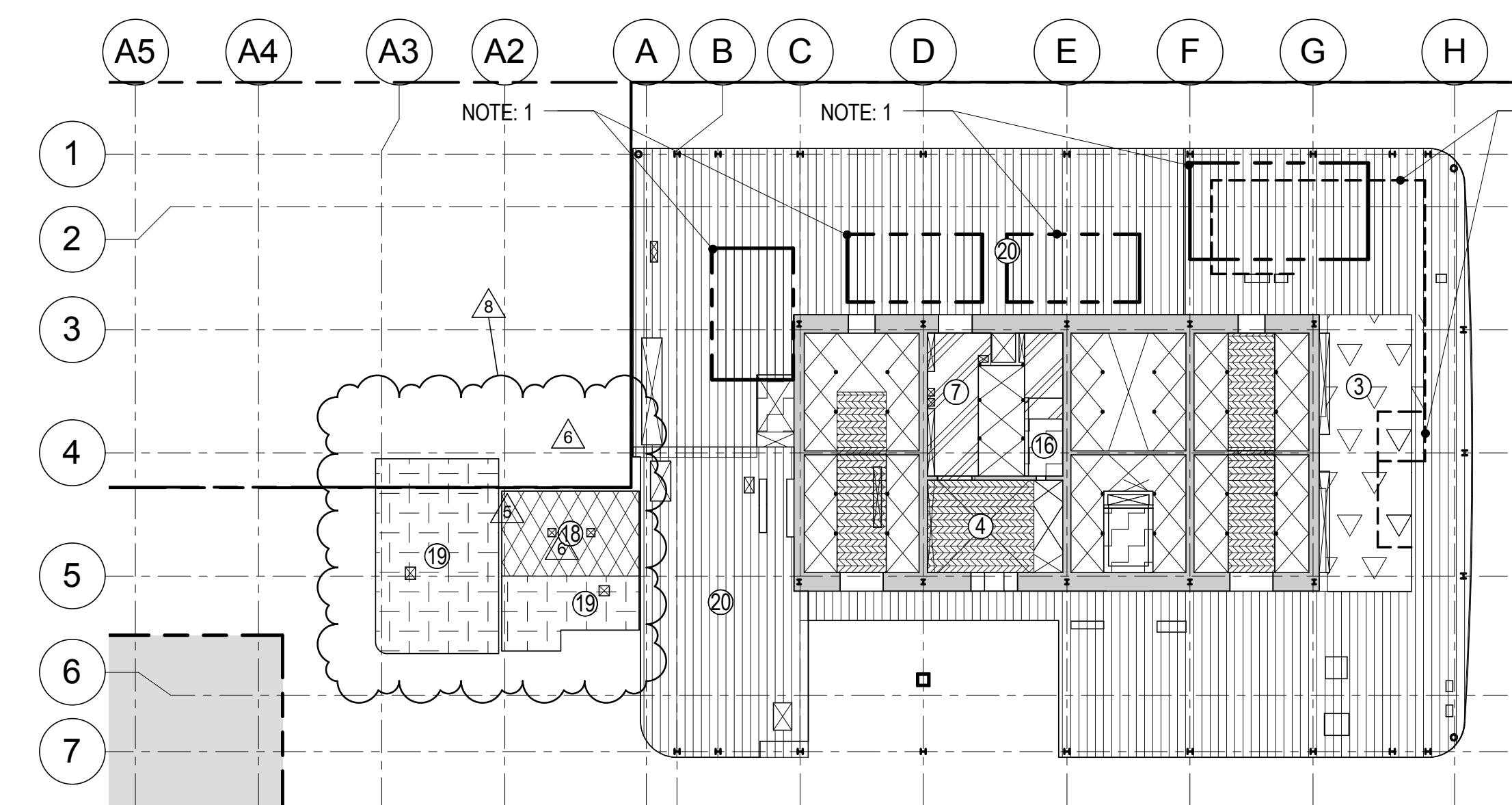
11 LEVEL 7 - 18 LOADING DIAGRAM

1/32" = 1'-0"



12 LEVEL 19-20 LOADING DIAGRAM

1/32" = 1'-0"



9 LEVEL 5 LOADING DIAGRAM

1/32" = 1'-0"

LOADING SCHEDULE				
KEY	FUNCTION	SOL. PSF	LL. PSF	
1	PLAZA	110	110	
2	MECHANICAL	40	150	
3	HEAVY MECHANICAL	40	225	
4	LIGHT MECHANICAL	40	120	
5	OFFICE	35	50	
6	LOBBY	60	100	
7	CORRIDOR/LOBBY	50	100	
8	FUEL TANK	40	880	
9	BACK OF HOUSE	50	50	
10	ROOF MECH	10	250	
11	RETAIL - PLAZA LEVEL	60	100	
12	RETAIL - 2ND FLOOR AND ABOVE	60	75	
13	ROOF RETAIL WITH LANDSCAPE	145	20	
14	ROOF	60	20	
15	LOADING DOCK	50	125	
16	TOILETS	50	50	
17	STAIR	10	100	
18	TREE PITS	525*	50	
19	STORAGE	10	125	
20	TERRACE RETAIL	145	100	
21	MECHANICAL AT LEVELS 5 & 68	60	150	
22	CONSTRUCTION LOADS - HEAVY	10	600	
23	CONSTRUCTION LOADS - TYP.	10	250	
24	OFFICE ABOVE MECHANICAL	150	50	
25	MAINTANCE ACCESS	25	40	
26	FIRE TANK LEVEL 32 & 54	860	0	
27	FIRE TANK LEVEL 51	1050	0	
28	FIRE TANK ACCESS	25	40	
29	ELEVATOR MECH. ROOM	40	150**	
30	HEAVY TREE PIT***	660*	30	
31	LANDSCAPE (NO TREE)	370	50	
32	STORAGE AT TENNANT FLOOR	10	150	
33	ASSEMBLY AREA AT TENNANT FLOOR	35	150	
34	ASSEMBLY AREA AT LEVEL 38 AND 39	35	100	
35	ASSEMBLY AREA AT TENNANT FLOOR	35	150	
36	ASSEMBLY AREA AT LEVEL 38 AND 39	35	100	
37	RETAIL PEDESTRIAN PLAZA AREA	110	150	
38	ROOF RETAIL	55	30	
39	LEVEL 2 MEZZANINE	60	150	

NOTE:
 * TREE WEIGHT NOT INCLUDED, EACH TREE ASSUMED 5K.
 ** ADDITIONAL IMPACT LOAD FROM ELEVATOR REPORT.
 *** MAXIMUM SOIL DEPTHS TO BE 5 FEET, PROVIDE GEOPOLYMER AS REQUIRED.

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Key Plan:

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File No.: S-010

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S-010.01
Sheet No.:
S-010
Page No.:

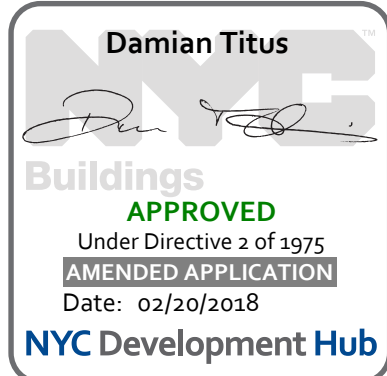
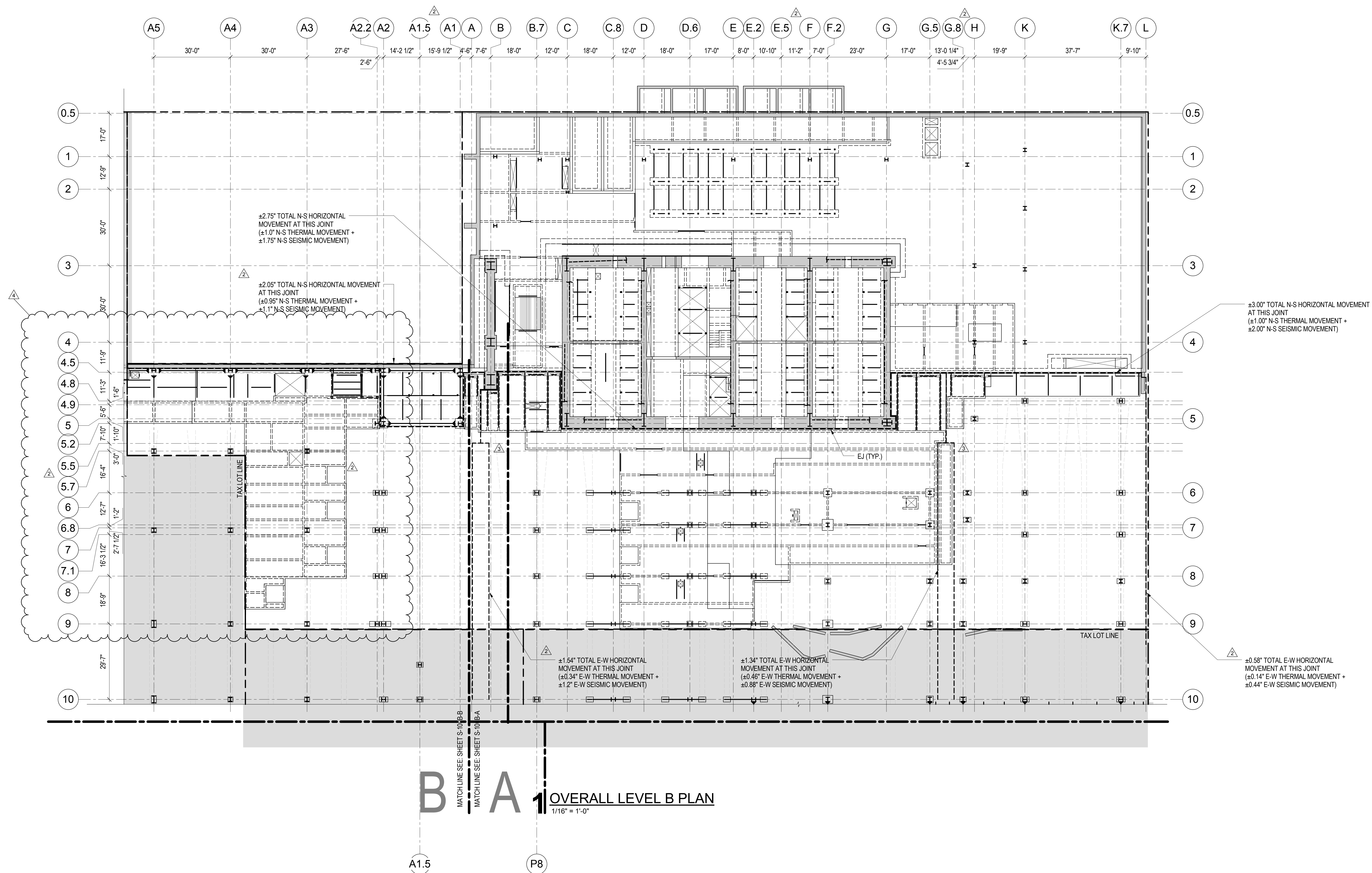
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 4 30 OCT 2015 ISSUED FOR BULLETIN NO. 3
 3 15 OCT 2015 ISSUED FOR BULLETIN NO. 2
 2 14 AUG 2015 ISSUED FOR CONSTRUCTION
 1 26 JUN 2015 ISSUED FOR FOUNDATION BULLETIN #1

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 Sheet Name: _____

Damian Titus

 Under Directive 2 of 1975
 PROFESSIONAL ENGINEER
 Date: 08/28/2017
 NYC Development Hub





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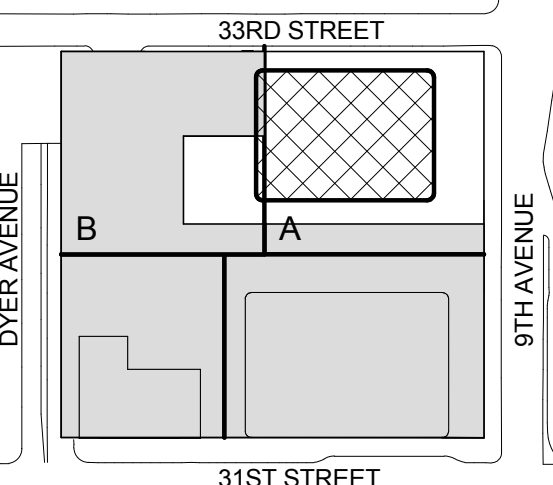
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Key Plan:



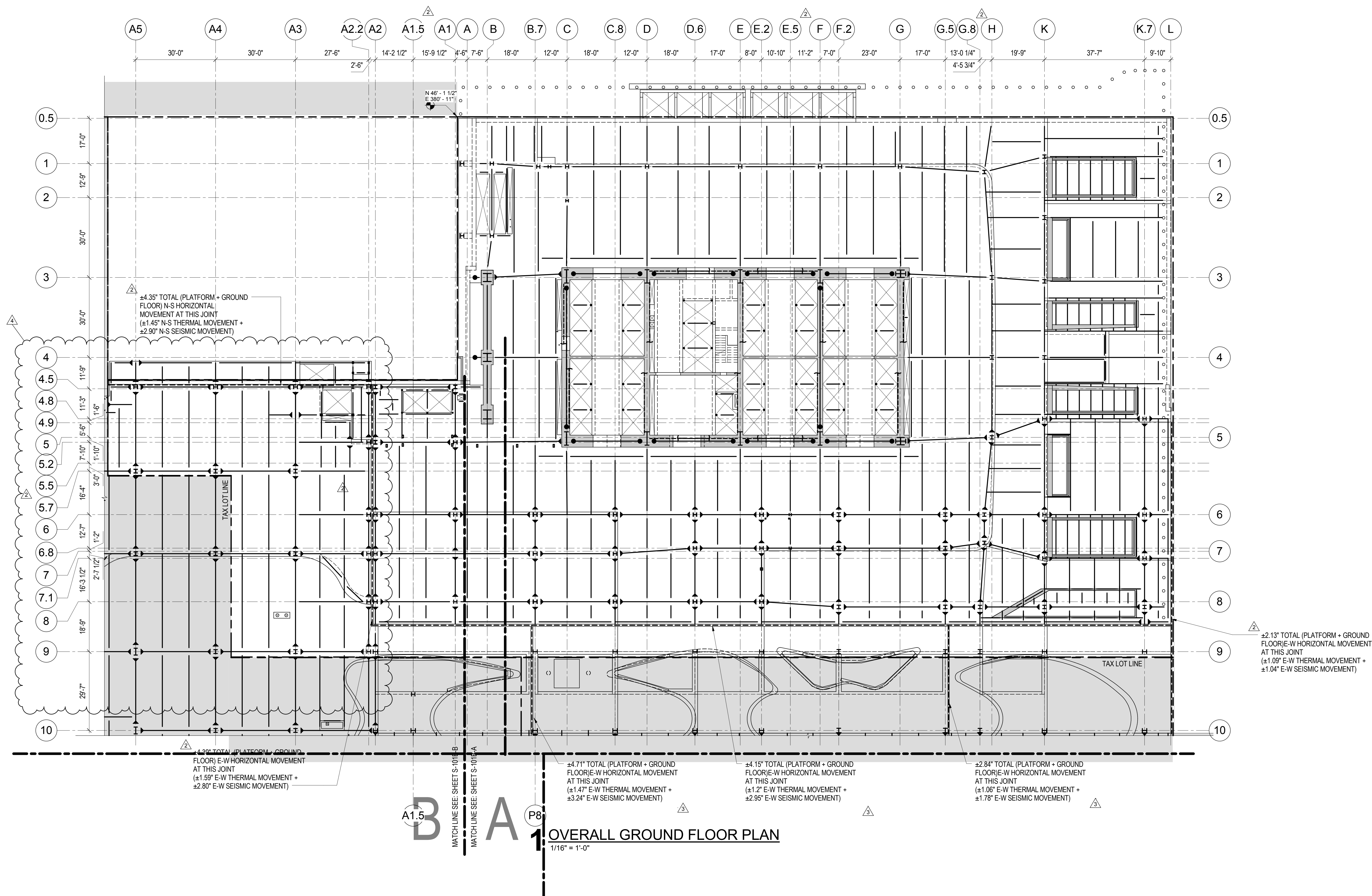
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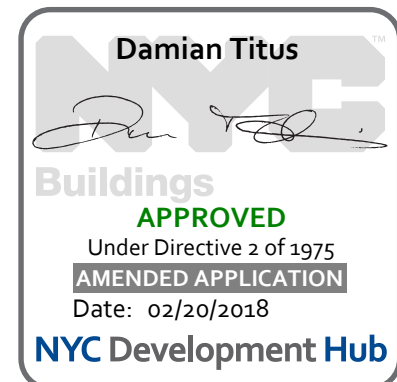
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OVERALL LEVEL B PLAN AND E.J. LOCATIONS



OVERALL GROUND FLOOR PLAN

1/16" = 1'-0"



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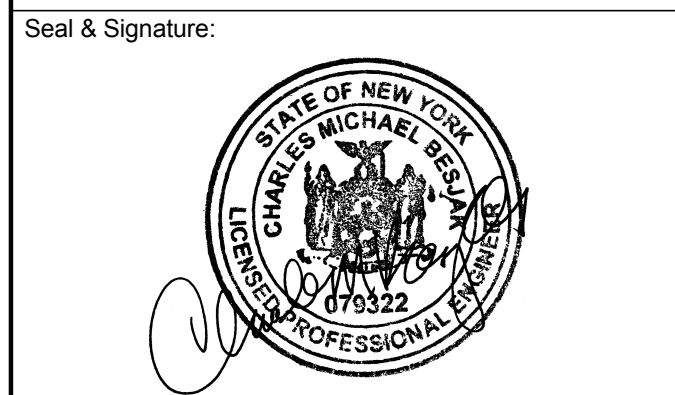
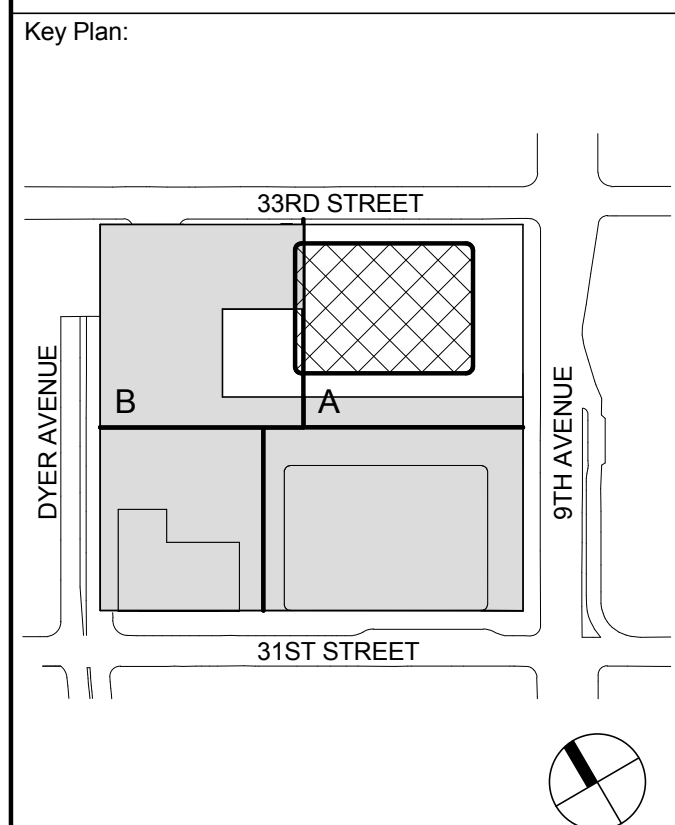
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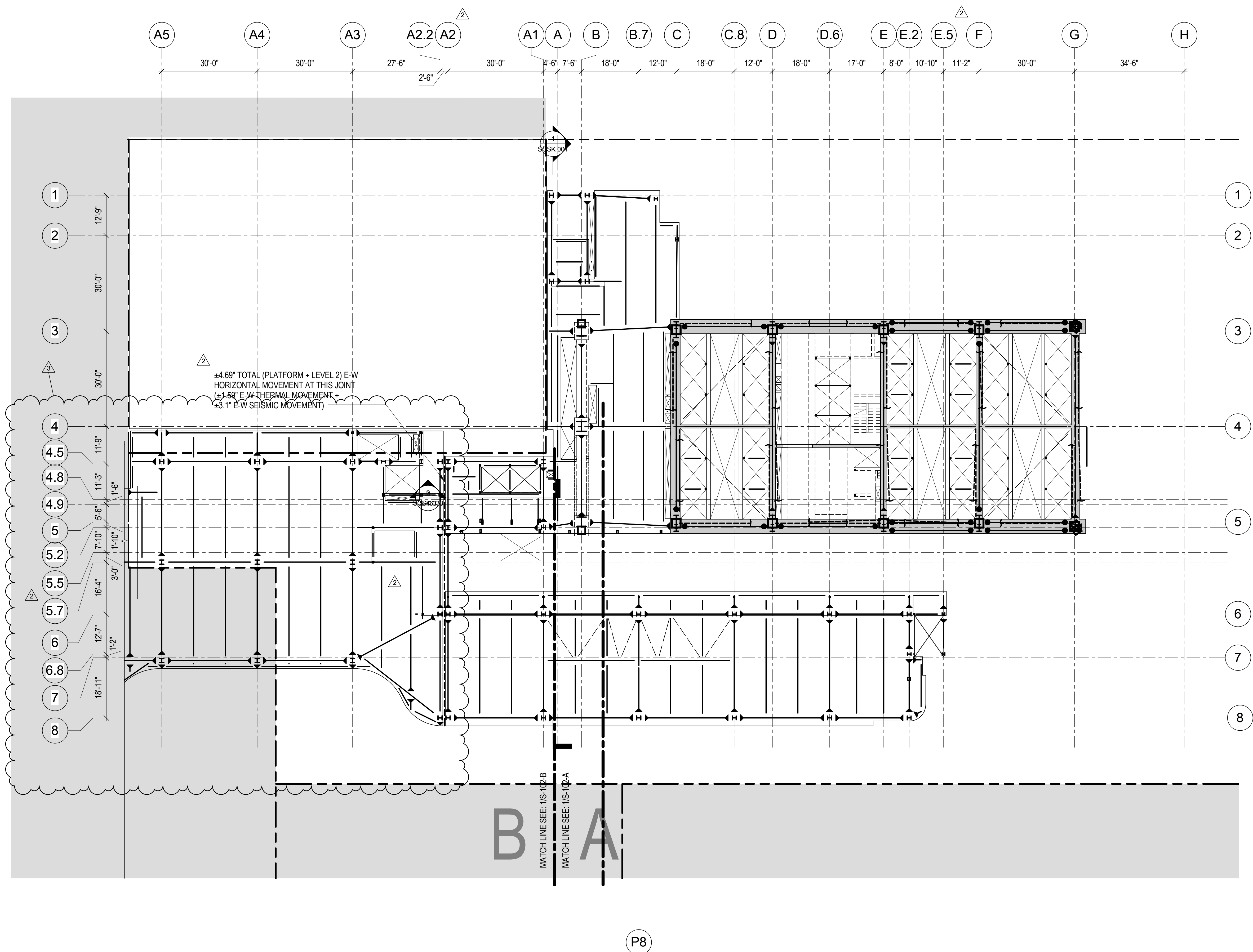
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OVERALL
GROUND FLOOR
FRAMING PLAN
AND E.J.
LOCATIONS

Project No.: 211159	B-SCAN Sheet No.: S-051.01
Date: 23 AUG 2017	Sheet No.: S-051
Scale: 1/16" = 1'-0"	Page No.: 5-051
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1 OVERALL 2ND FLOOR PLAN
1/16" = 1'-0"

Sheet No. 211151



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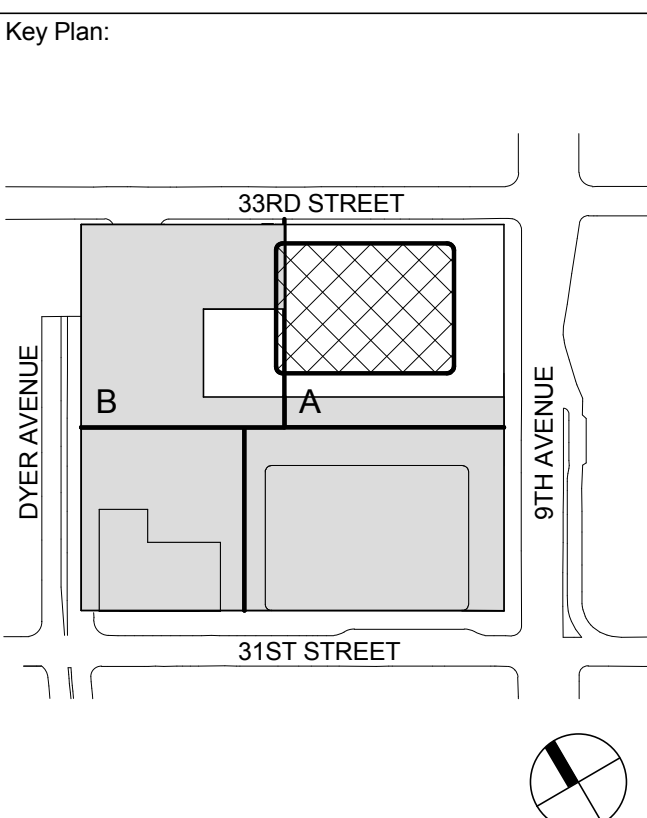
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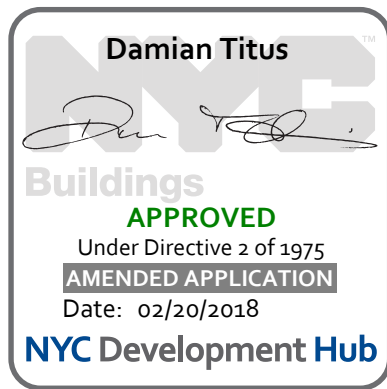
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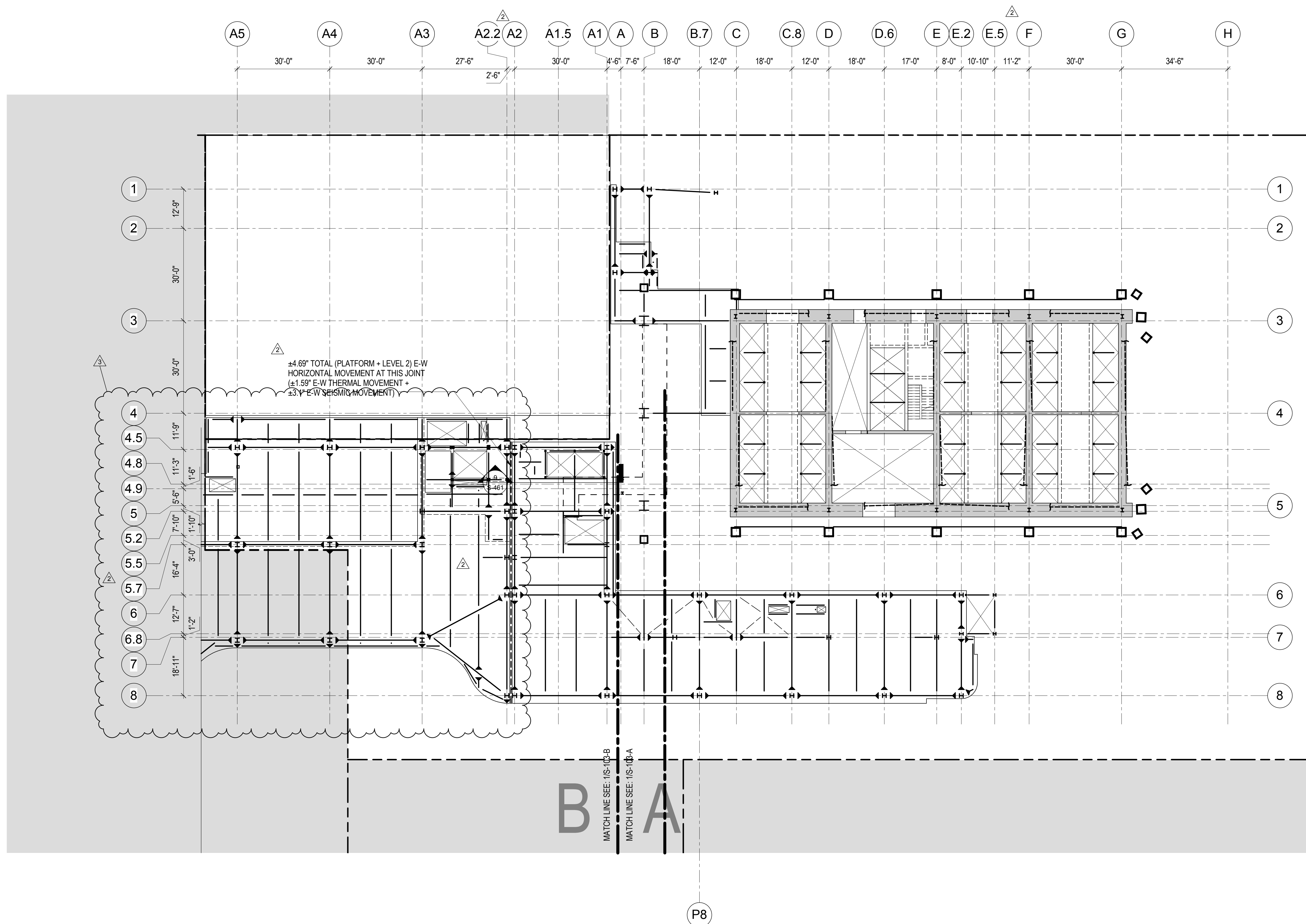
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**OVERALL 2ND
FLOOR PLAN AND
E.J. LOCATIONS**

Project No.: 211151
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B-SCAN Sheet No.: S-052.00
Sheet No.: S-052
Page No.:



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P8

1 OVERALL 3RD FLOOR PLAN

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Sheet No. 211151



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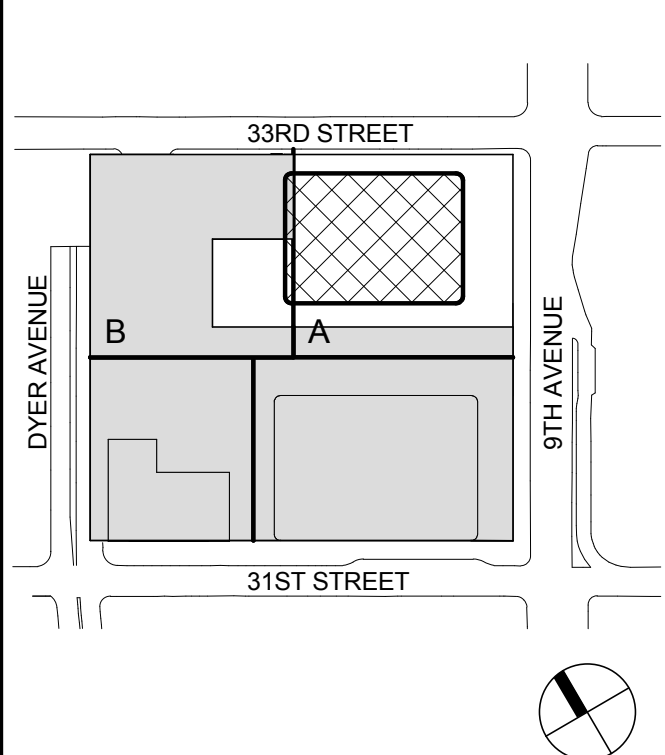
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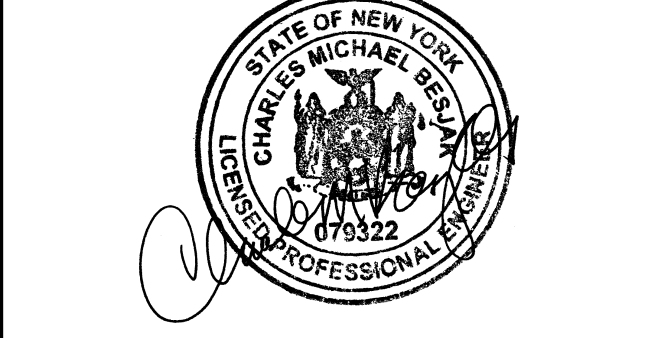
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OVERALL 3RD
FLOOR PLAN AND
E.J. LOCATIONS

Project No.: 211151

Date: 23 AUG 2017

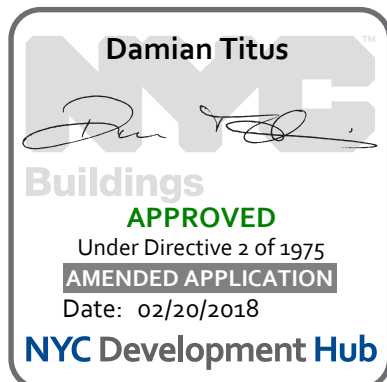
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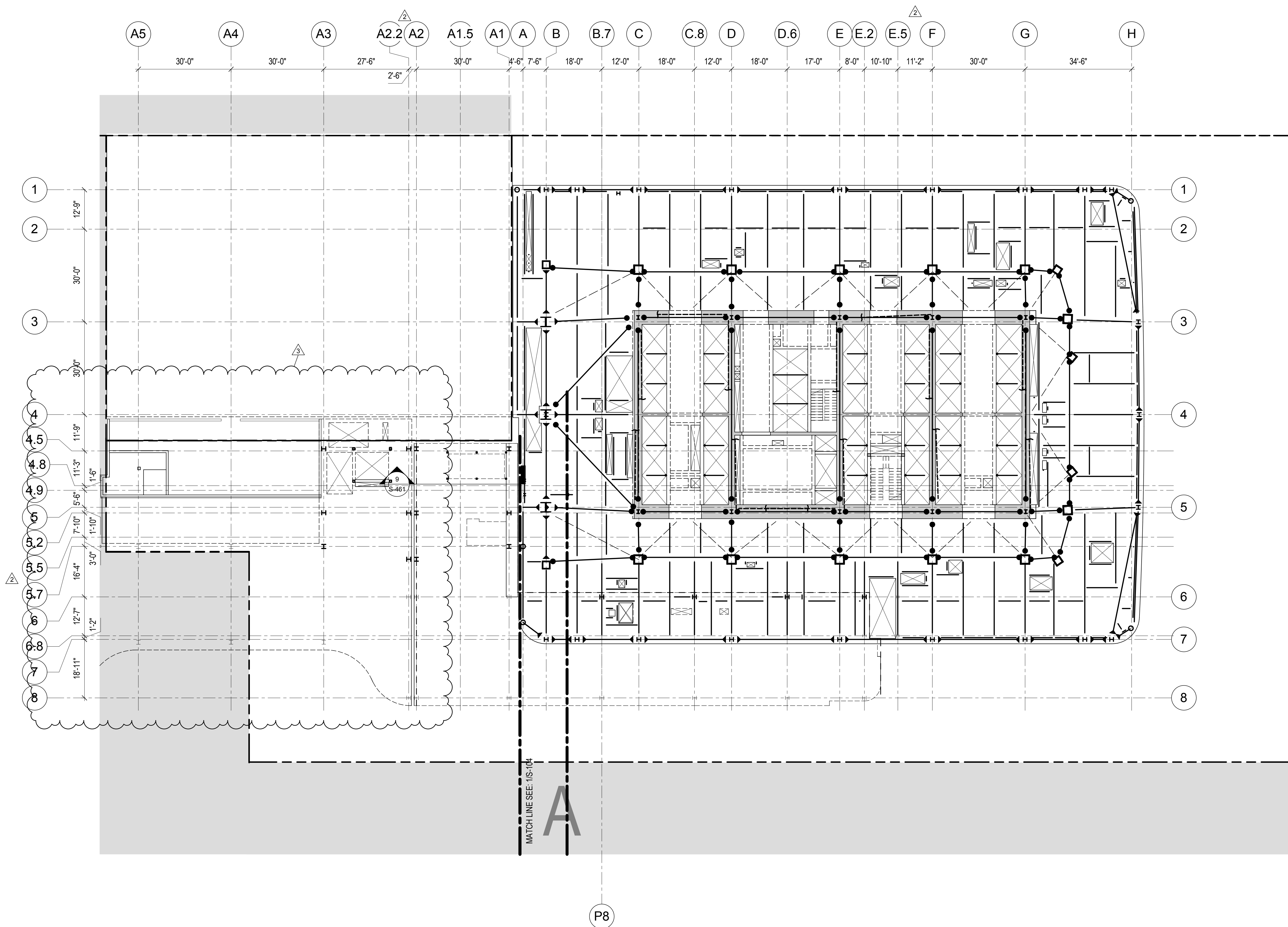
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Sheet No.: S-053

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1 OVERALL 4TH FLOOR PLAN
1/16" = 1'-0"

Sheet No. 211151



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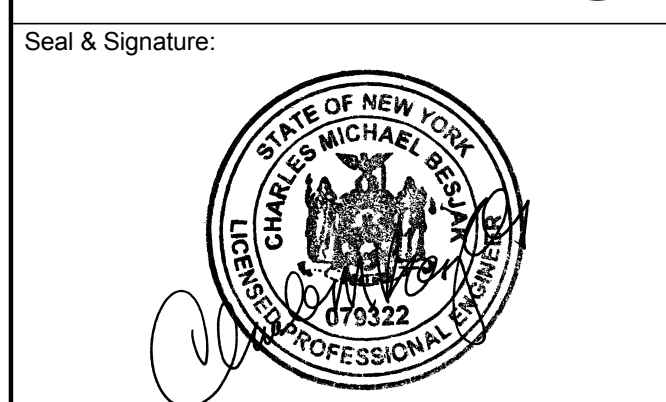
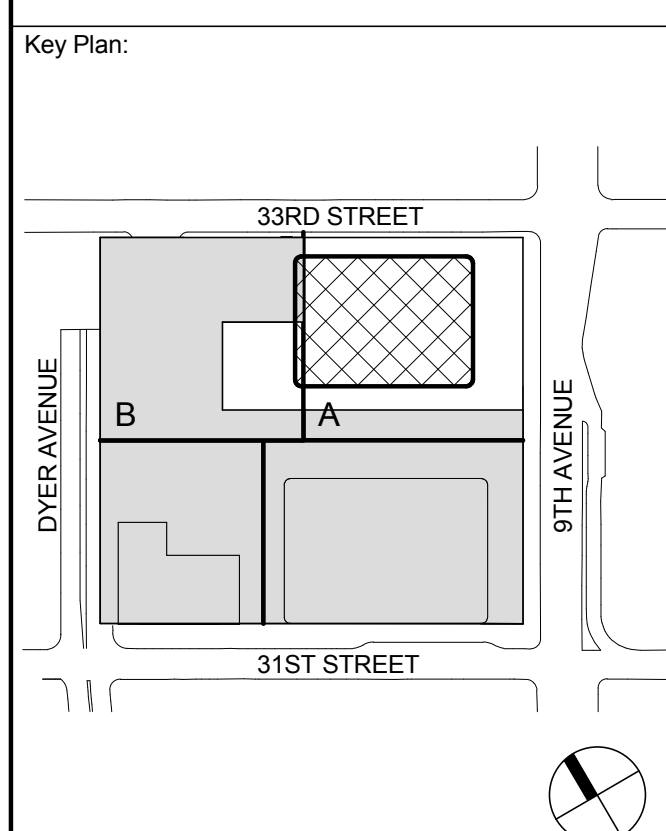
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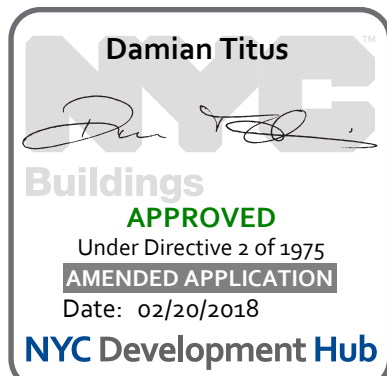
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**OVERALL 4TH
FLOOR PLAN AND
E.J. LOCATIONS**

Project No.: 211151
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B-SCAN Sheet No.: **S-054.00**
Sheet No.: **S-054**
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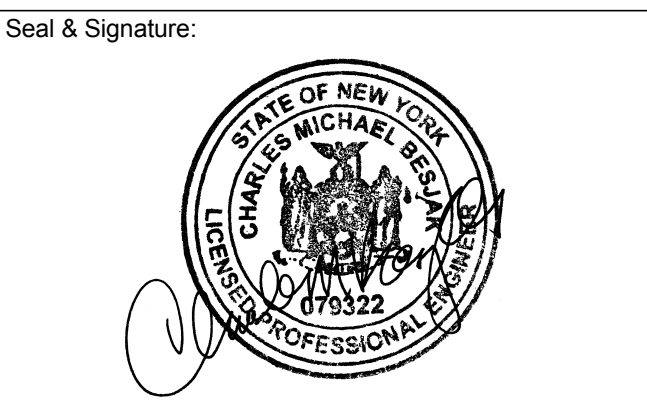
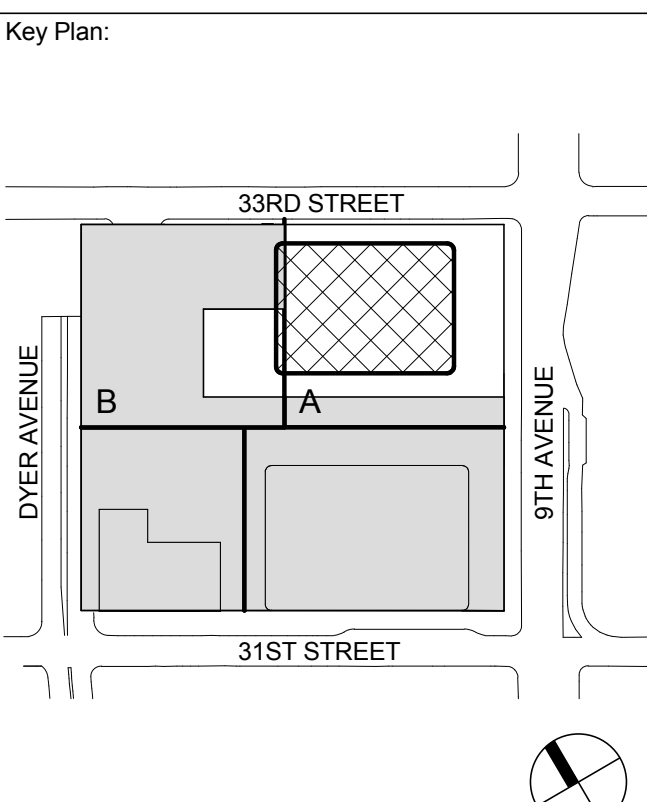
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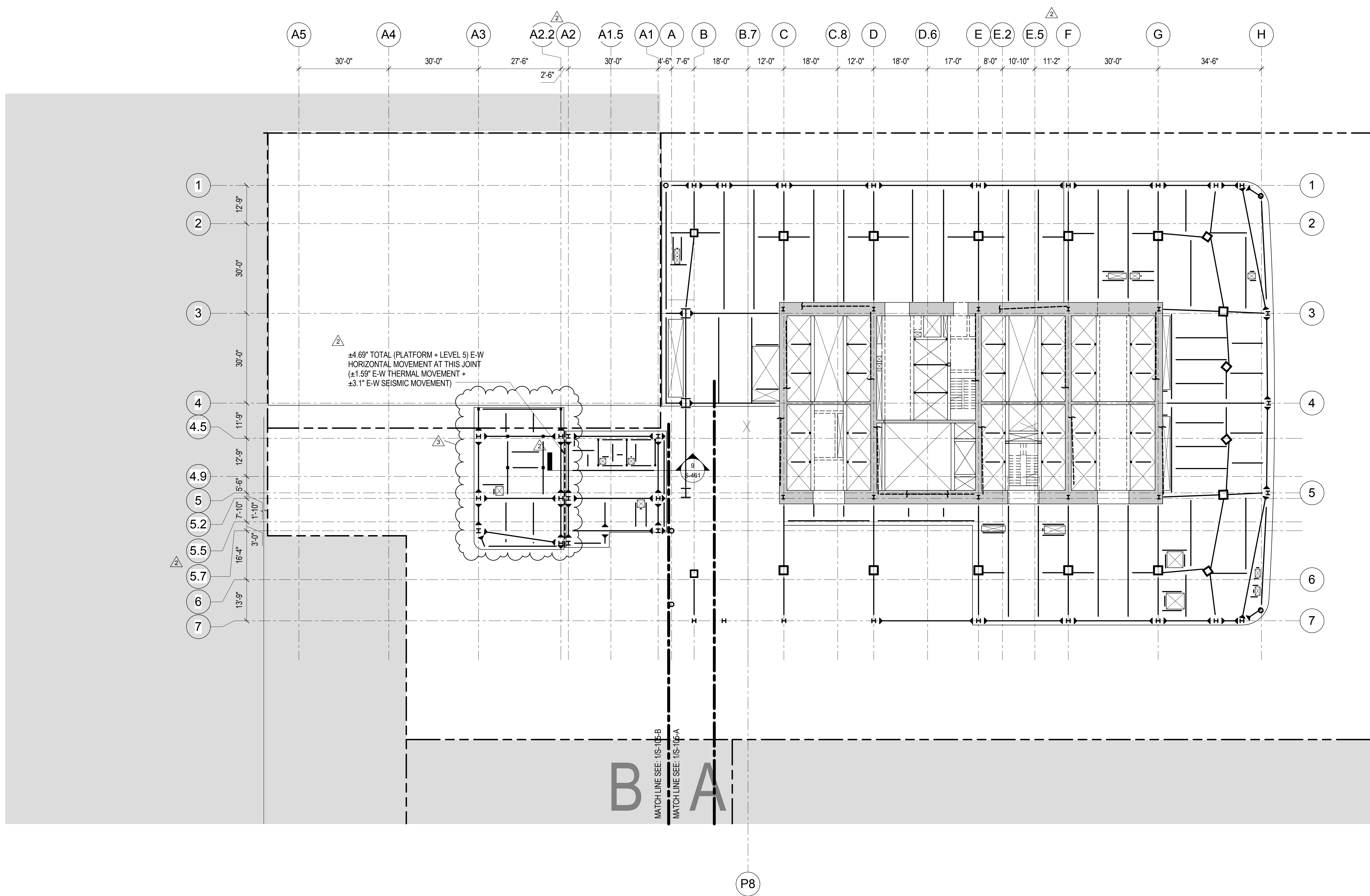
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OVERALL 5TH FLOOR PLAN AND E.J. LOCATIONS

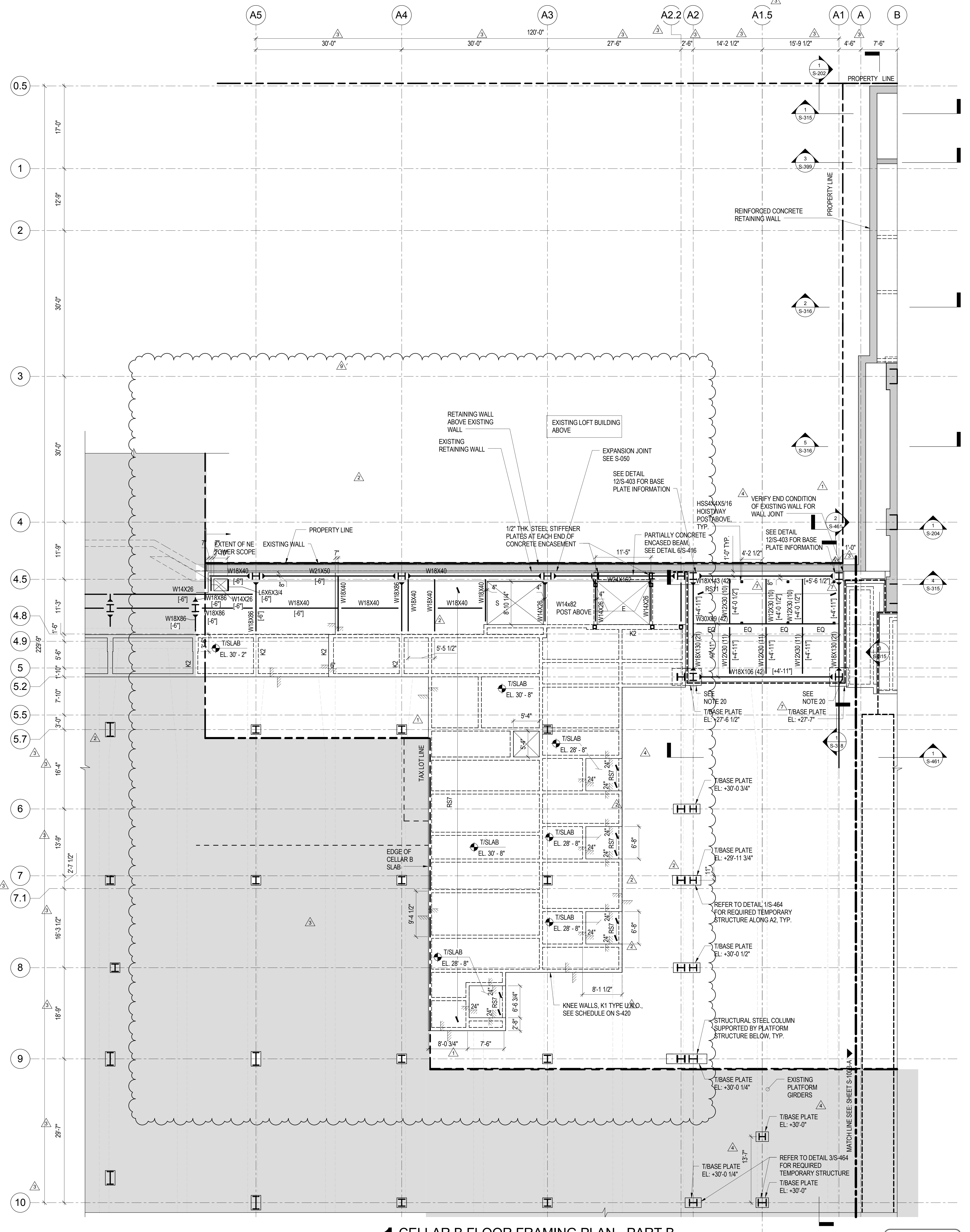
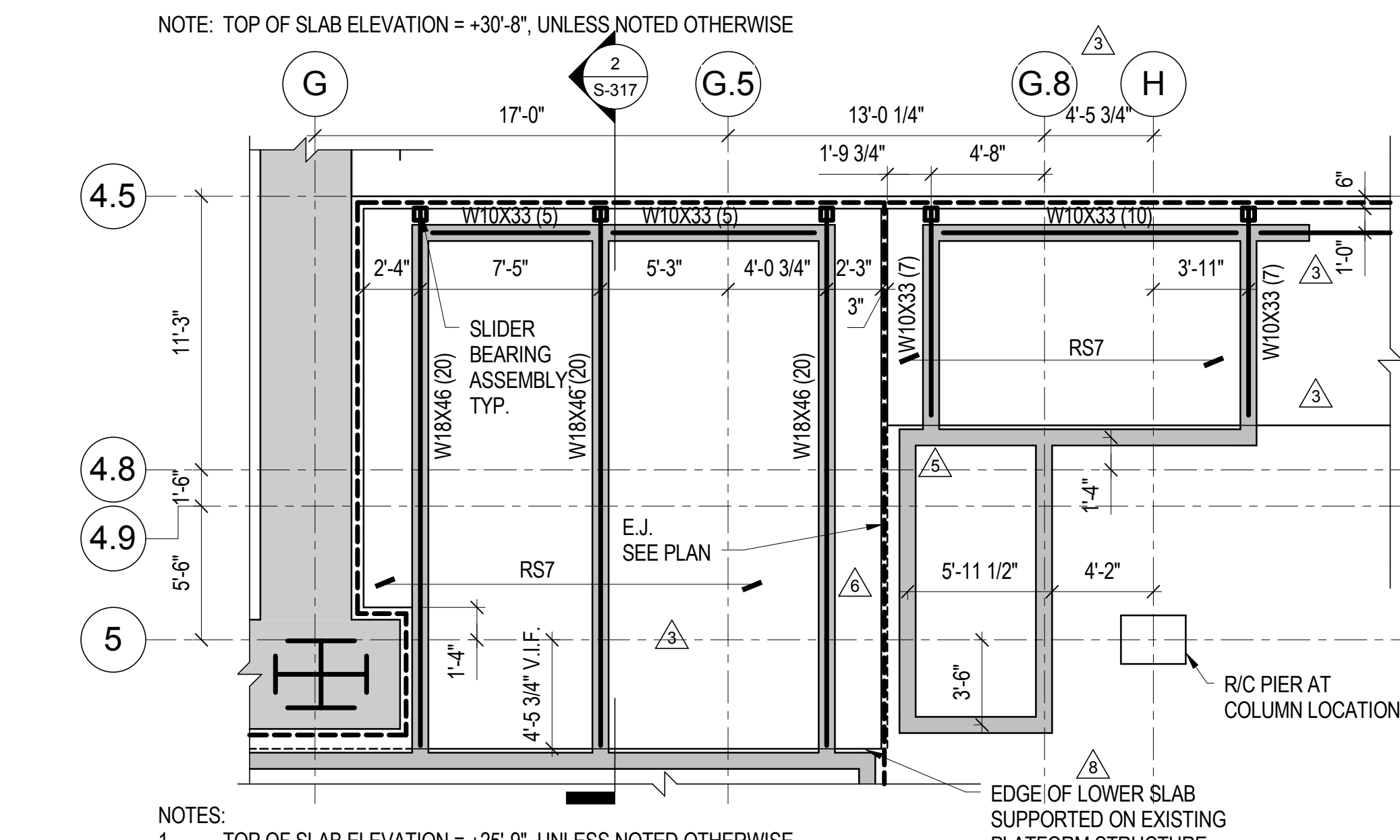
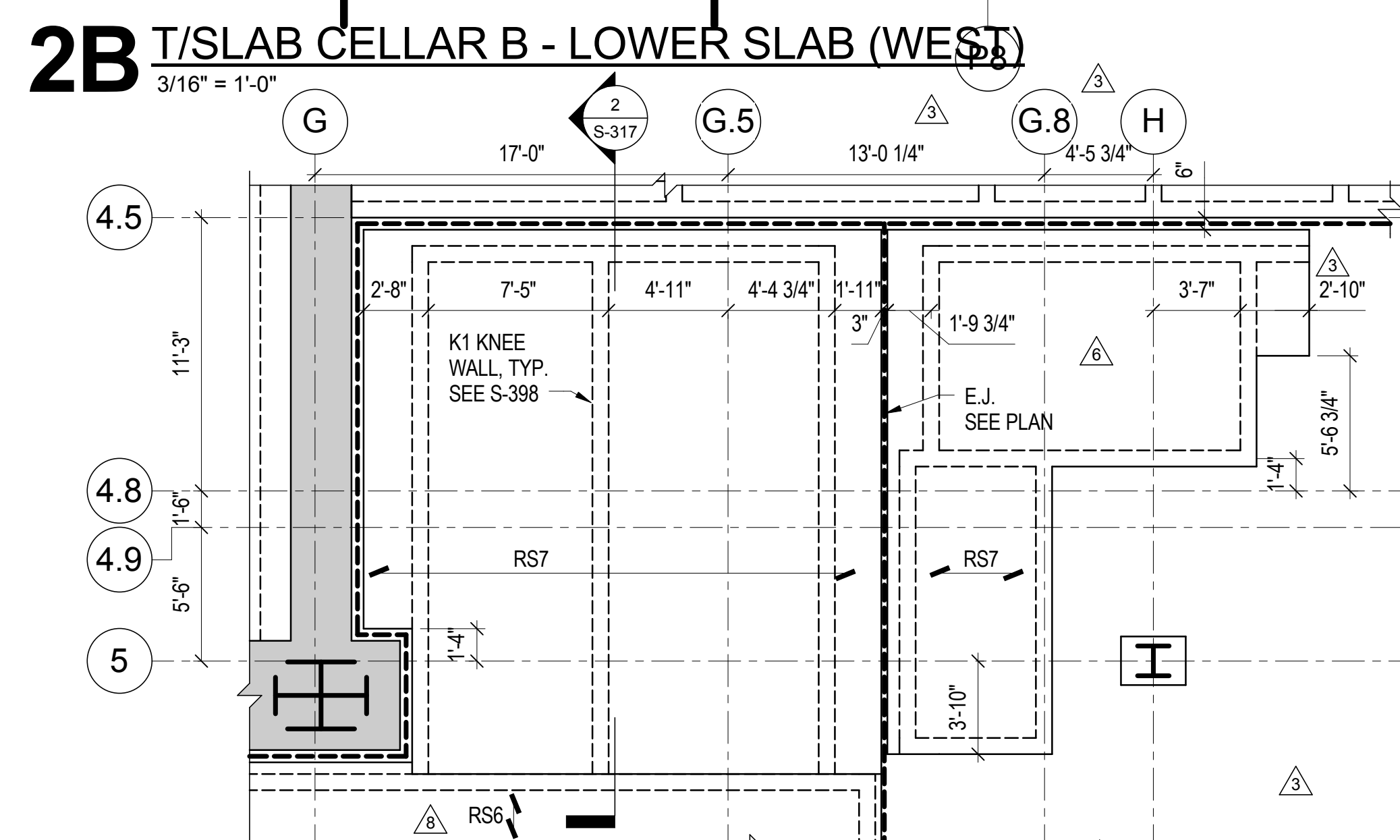
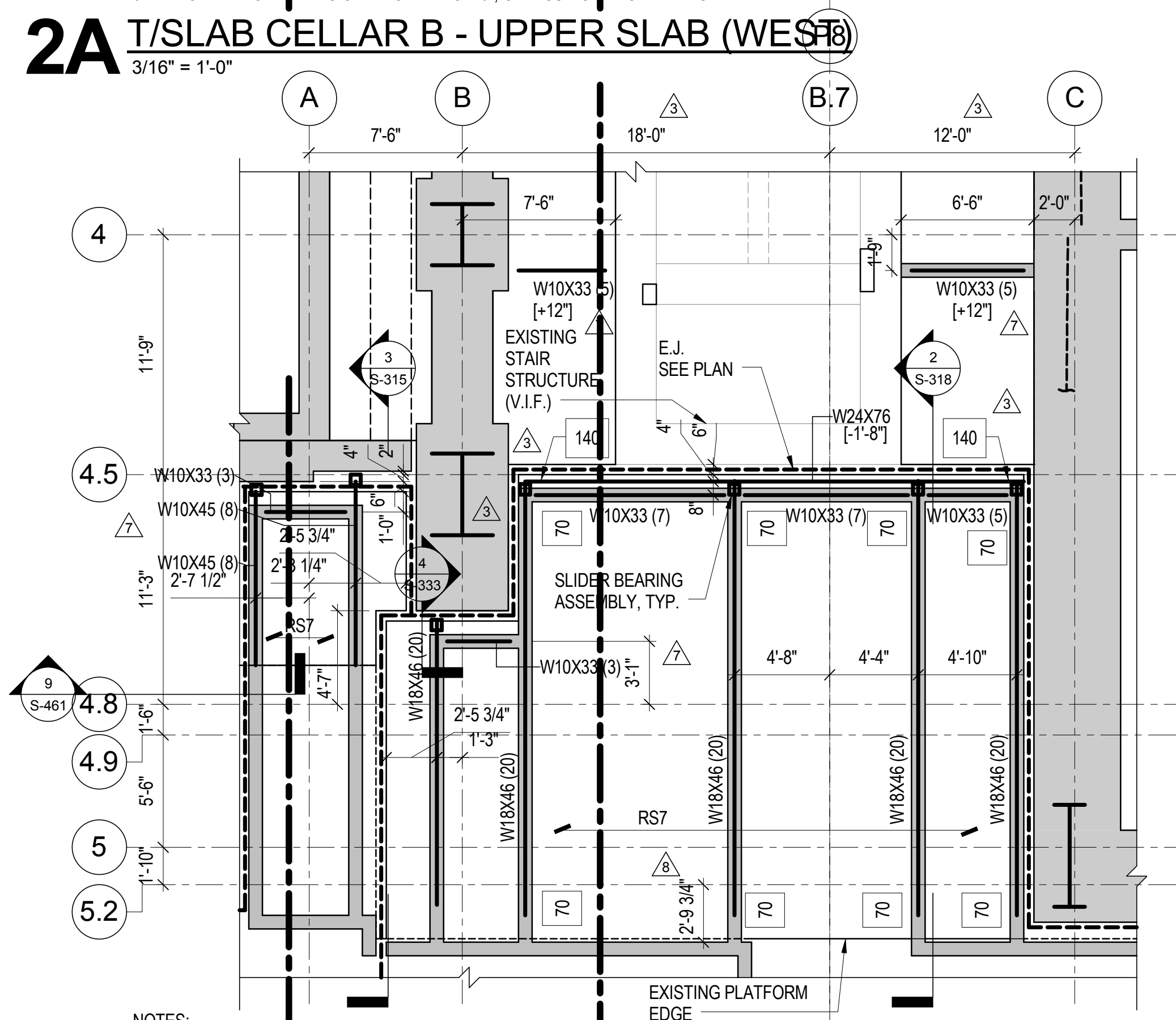
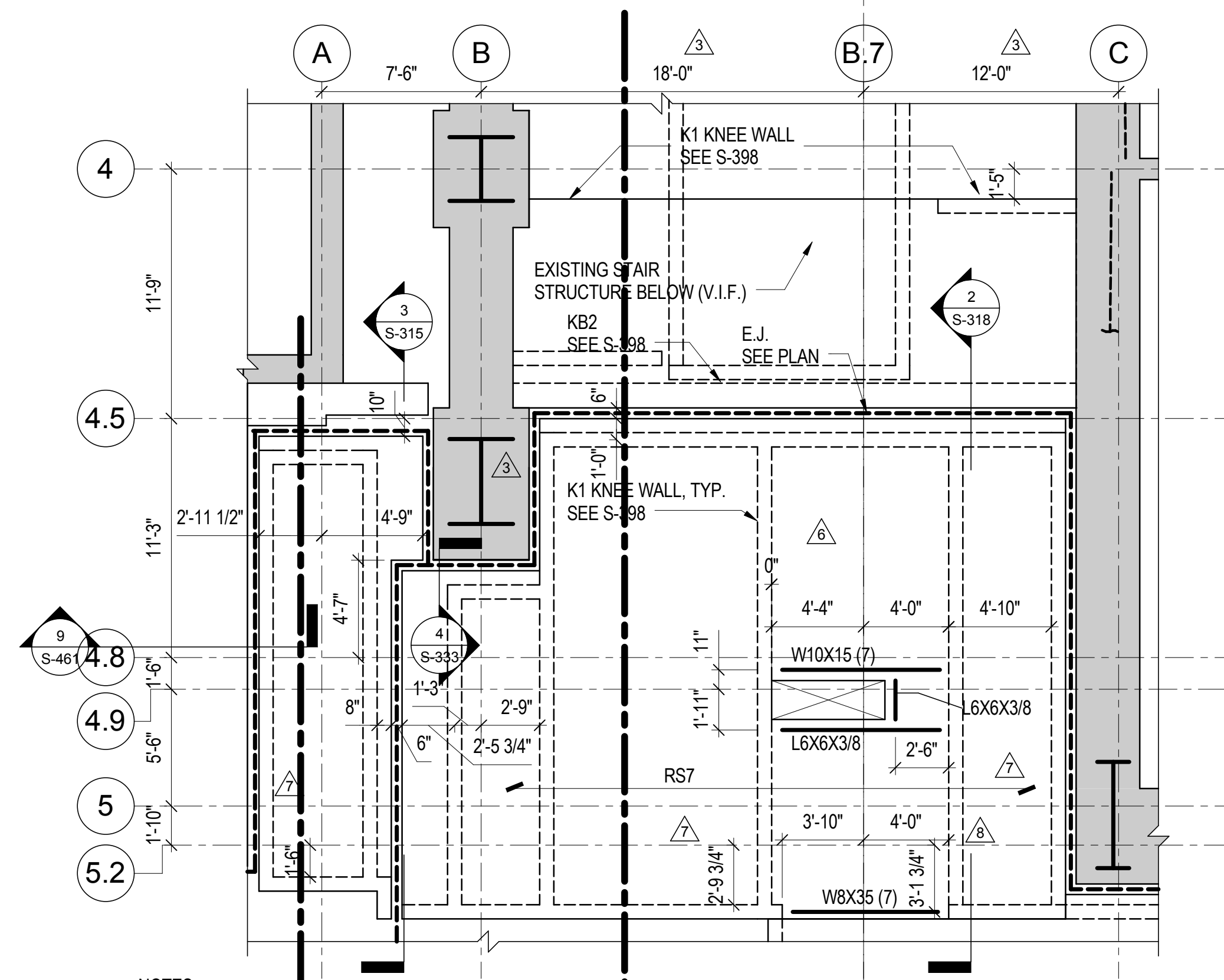
Project No.: 211157
Date: 23 AUG 2017
Scale: 1/16" = 1'-0"
File No.: S-055

B-SCAN Sheet No.: **S-055.00**
Sheet No.: **S-055**
Page No.: _____



1 OVERALL 5TH FLOOR PLAN
1/16" = 1'-0"





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Key Plan:

Seal & Signature:

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7. 13 MAY 2016 ISSUED FOR BULLETIN NO. 8
6. 18 MAR 2016 ISSUED FOR BULLETIN NO. 7
5. 16 FEB 2016 ISSUED FOR BULLETIN NO. 6
4. 11 DEC 2015 ISSUED FOR BULLETIN NO. 4
3. 26 OCT 2015 ISSUED FOR BULLETIN NO. 3
2. 14 AUG 2015 ISSUED FOR CONSTRUCTION
1. 26 JUN 2015 ISSUED FOR FOUNDATION BULLETIN #1

No. _____ Date _____ Revision _____
Sheet Name: _____

CELLAR B FLOOR FRAMING PLAN - PART B

Project No.: 211159
Date: 27 AUG 2017
Scale: As indicated
File No.: S-1008-B

B-SCAN Sheet No.: **S-098.03**
Sheet No.: **S-1008-B**
Page No.: _____

Damian Titus
APPROVED
Under Direction of 1975
Professional Engineer
NYC Development Hub



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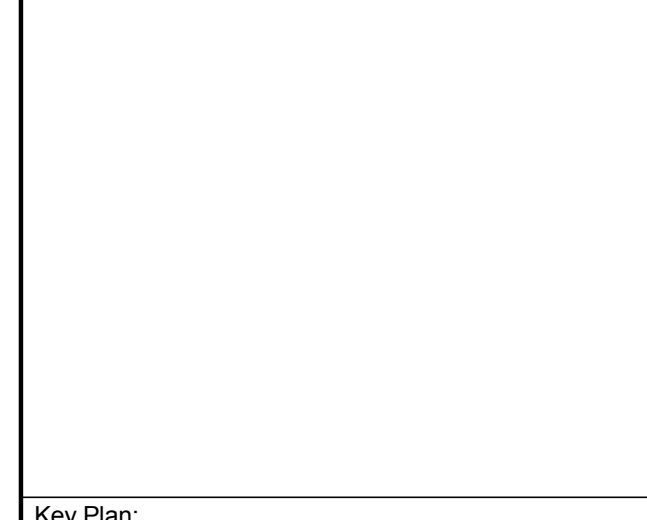
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

Code Consultant
Code Consultants Professional Engineers PC
215 West 40th Street, 15th Floor, New York, NY 10018

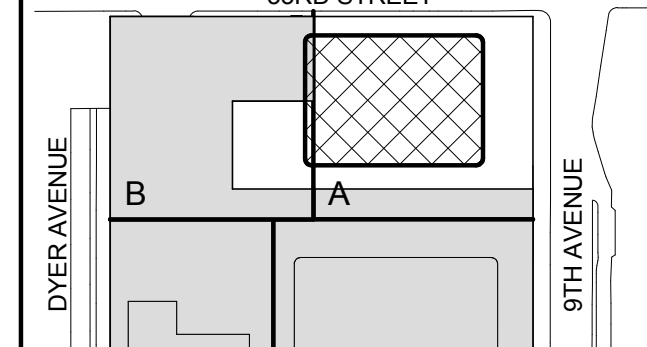
Facade Maintenance Consultant
Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:



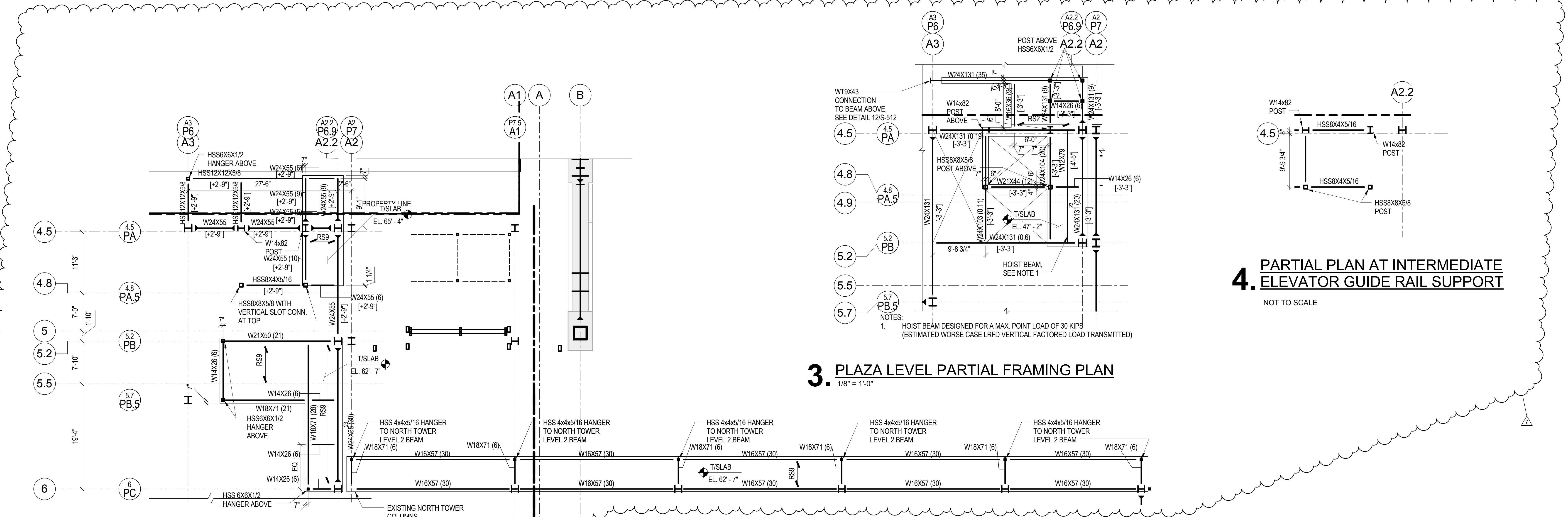
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5	28 OCT 2016	ISSUED FOR BULLETIN NO. 12
4	18 MAR 2016	ISSUED FOR BULLETIN NO. 7
3	11 DEC 2015	ISSUED FOR BULLETIN NO. 4
2	30 OCT 2015	ISSUED FOR BULLETIN NO. 3
1	14 AUG 2015	ISSUED FOR CONSTRUCTION

Project No.:	211159	B-SCAN Sheet No.:	S-101.03
Date:	27 AUG 2017	Sheet No.:	S-101-B
Scale:	1/8" = 1'-0"	Page No.:	
File No.:	S-101-B		

GROUND FLOOR FRAMING PLAN - LOBBY - PART B



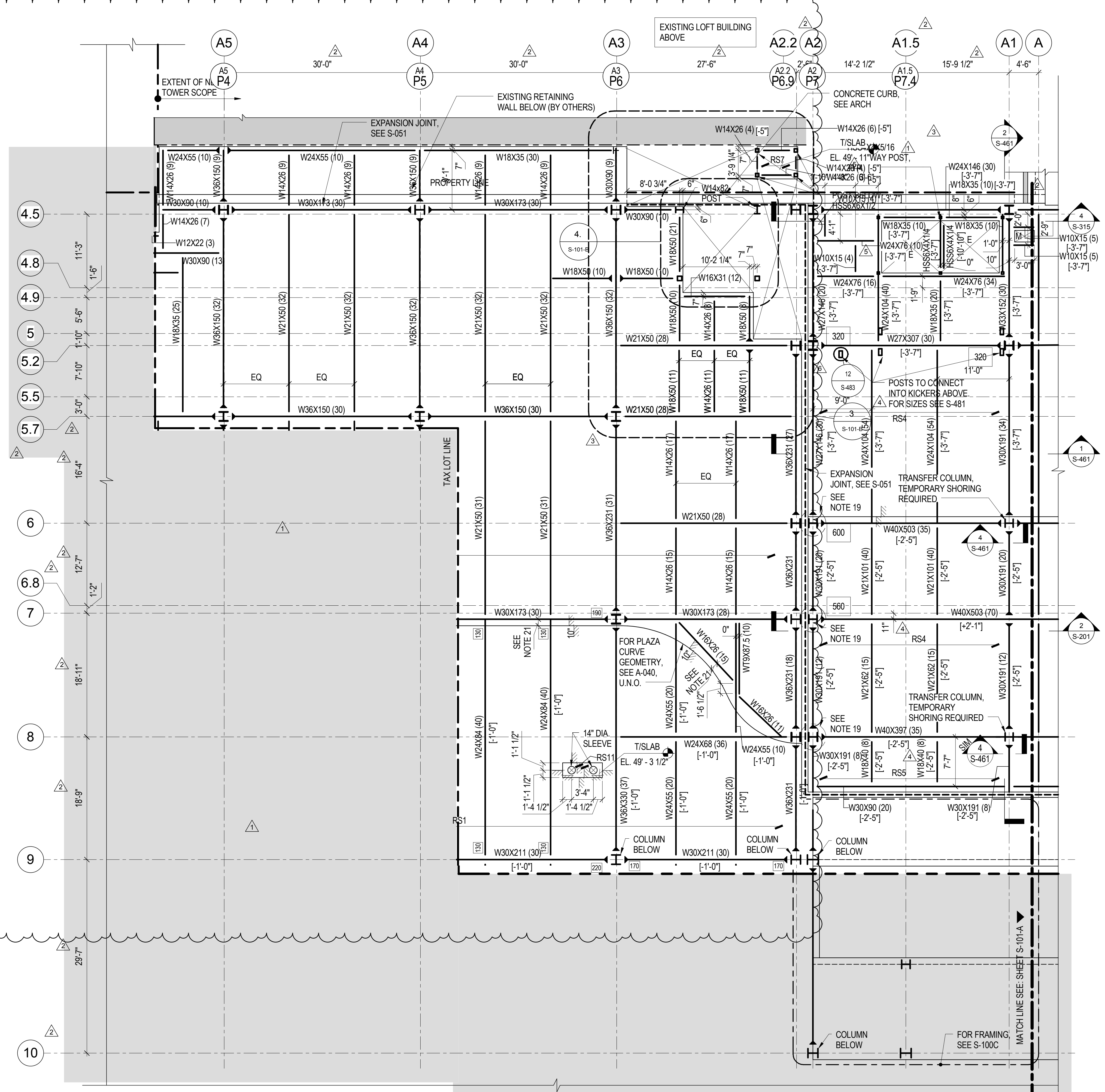
2. 1ST FLOOR MEZZANINE FRAMING PLAN

1/8" = 1'-0"

NOTE:
1. AT LEVEL 1M, ALL TOP OF STEEL ELEVATION = +61'-8 1/2"

3. PLAZA LEVEL PARTIAL FRAMING PLAN

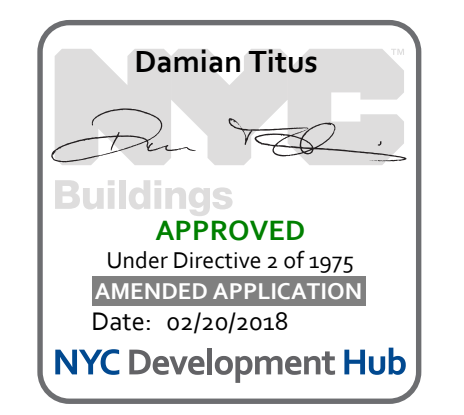
1/8" = 1'-0"



- NOTES:
- TOP OF SLAB ELEVATION = +50'-5", UNLESS NOTED OTHERWISE.
 - TOP OF STEEL ELEVATION = +49'-5" FOR TYPICAL SLAB ELEVATION.
 - BEAMS SHALL BE LOCATED ON GRID CENTERLINES WHEN NO DIMENSIONS SHOWN.
 - BEAMS SHALL BE EQUALLY SPACED BETWEEN GRIDS/BAYS WHEN NO DIMENSIONS SHOWN.
 - SLAB EDGE DIMENSION AT OPENING = 6", UNLESS NOTED OTHERWISE.
 - REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 - REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 - REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES.
 - REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 - REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 - REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 - REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
 - REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
 - REFER TO SHEETS S-391 THROUGH S-398 FOR CORE WALL ELEVATIONS.
 - REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEET S-401 AND S-402 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 - PROVIDE SLIDING BEARING SUPPORT AT COLUMN BELOW. SEE S-462 AND S-463 FOR DETAILS AND SCHEDULE.
 - REFER TO SHEETS S-501 & S-502 FOR METAL DECK SLAB SCHEDULES, SECTION AND DETAILS.

1. GROUND FLOOR FRAMING PLAN - LOBBY - PART B

1/8" = 1'-0"





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Key Plan:
33RD STREET
DYER AVENUE
31ST STREET
9TH AVENUE

Seal & Signature:
DAMIAN TITUS
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW YORK
No. 042402018
Date: 27 AUG 2017

Project No.: 211157
B-SCAN Sheet No.: S-173.01
Date: 27 AUG 2017
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No. Date Description
Sheet Name:

2ND FLOOR
FRAMING PLAN -
PART B

Project No.: 211157
B-SCAN Sheet No.: S-173.01
Date: 27 AUG 2017
Scale: As Indicated
File No.: S-102-B

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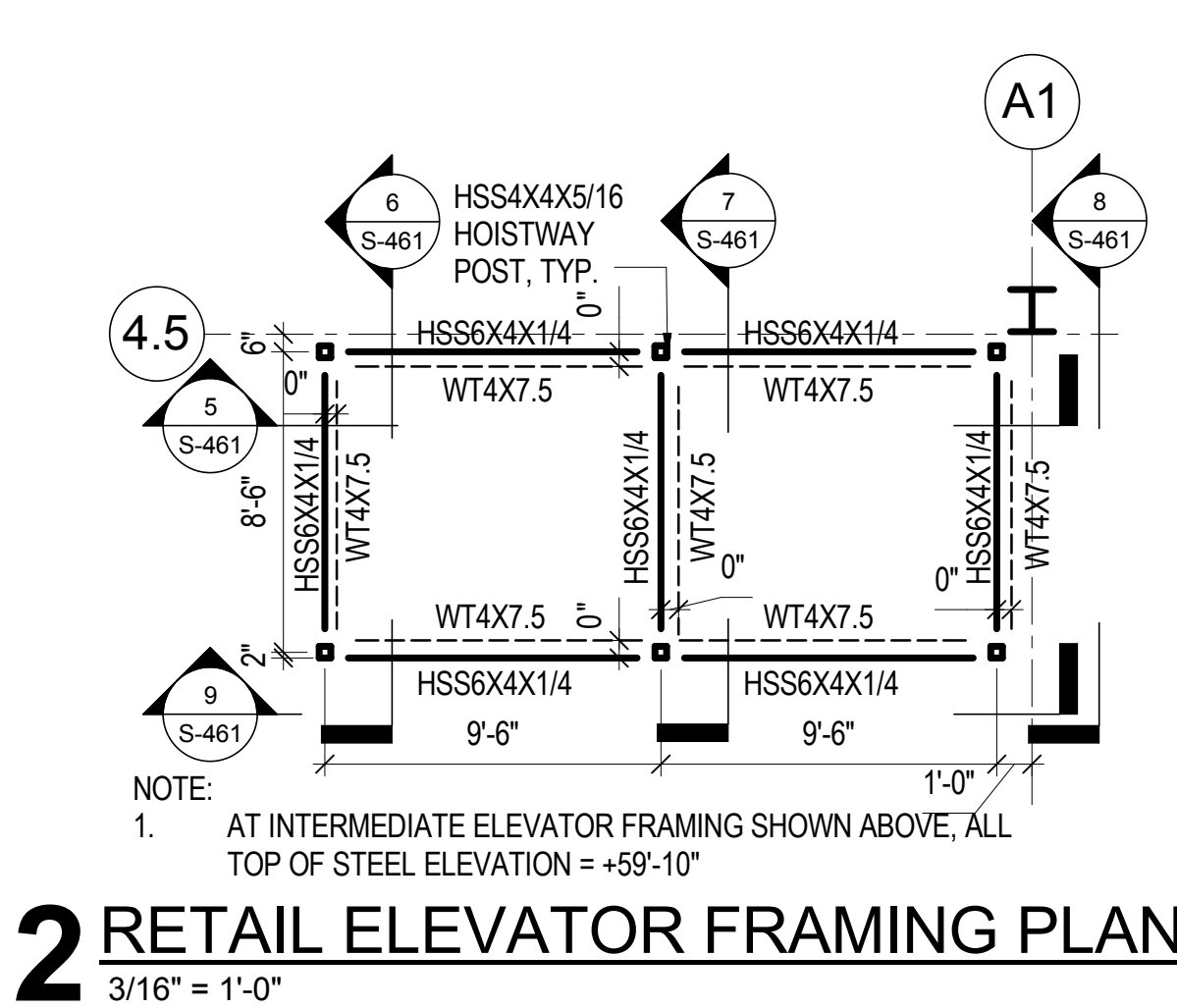
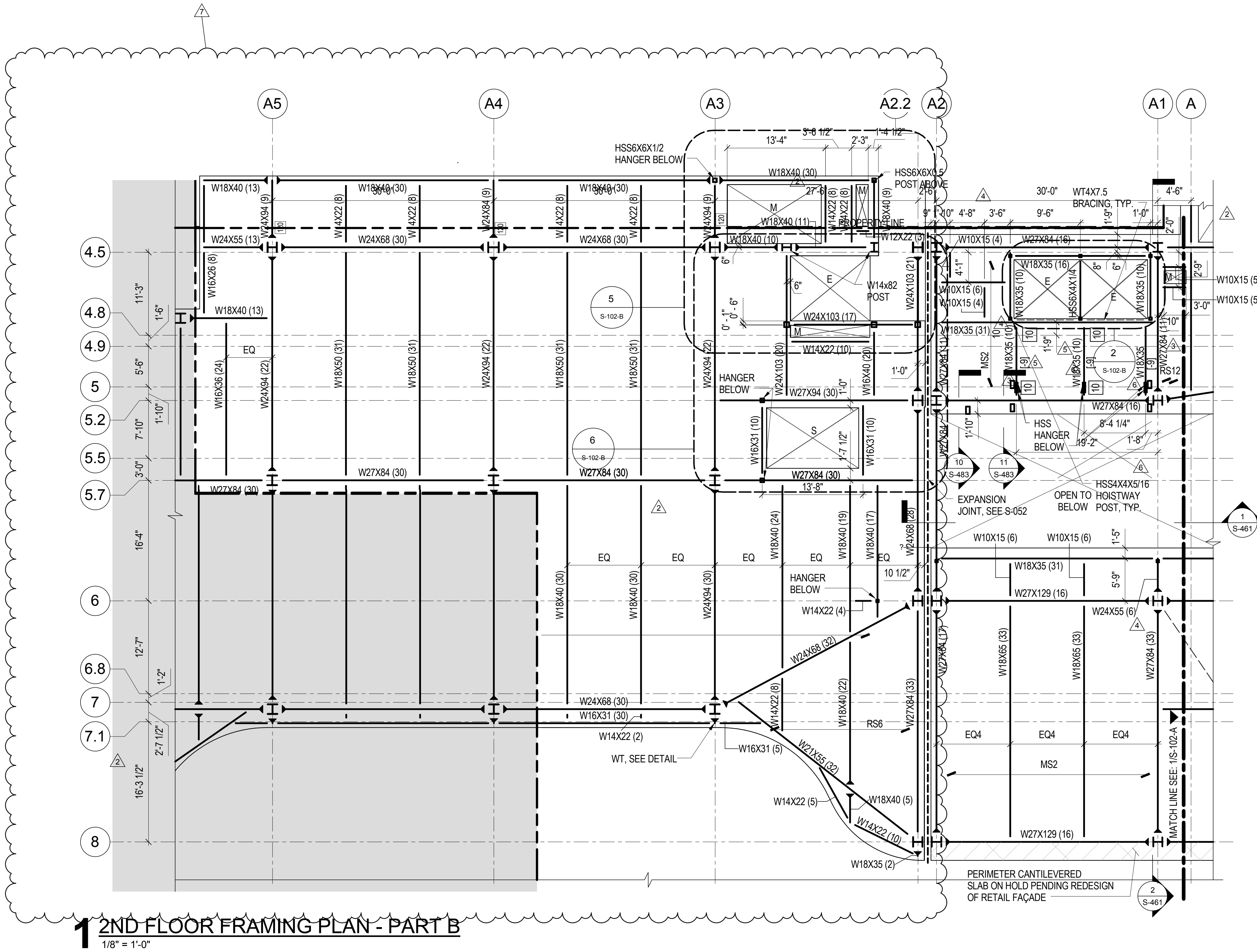
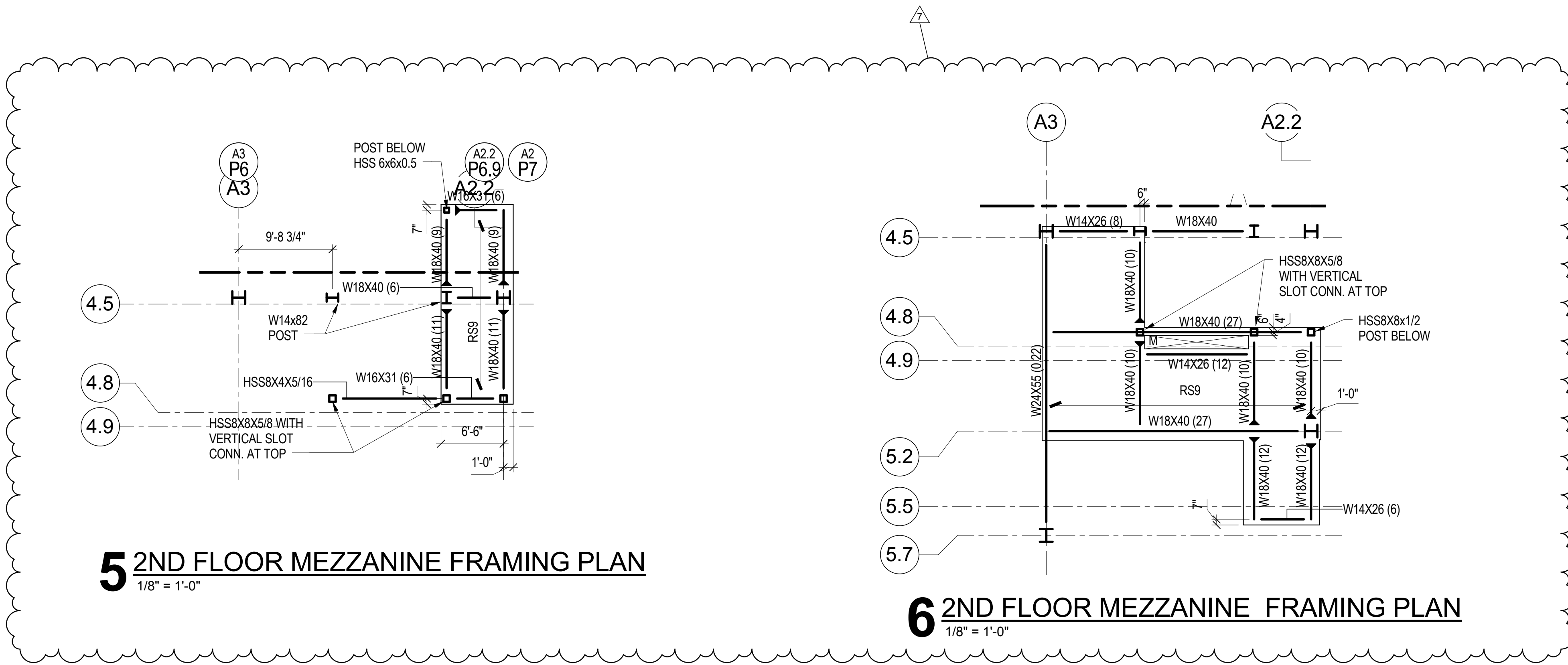
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2ND FLOOR
FRAMING PLAN -
PART B

Project No.: 211157
B-SCAN Sheet No.: S-173.01
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No. Date Description
Sheet Name:



- NOTES:
1. TOP OF SLAB ELEVATION = 72' - 7", UNLESS NOTED OTHERWISE.
 2. TOP OF STEEL ELEVATION = 72' - 1 1/2", UNLESS NOTED OTHERWISE BY [X-X'] OR [X-X''], WHICH DENOTE POSITIVE OR NEGATIVE VERTICAL OFFSET, RESPECTIVELY.
 3. BEAMS SHALL BE LOCATED ON GRID CENTERLINES WHEN NO DIMENSIONS SHOWN.
 4. BEAMS SHALL BE EQUALLY SPACED BETWEEN GRIDS/BAYS WHEN NO DIMENSIONS SHOWN.
 5. SLAB EDGE DIMENSION AT OPENING = 6", UNLESS NOTED OTHERWISE.
 6. REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 7. REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 8. REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES.
 9. REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 10. REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 11. REFER TO SHEET S-401 AND S-402 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 12. REFER TO SHEET S-501 AND S-502 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.

NOTE:
1. AT INTERMEDIATE ELEVATOR FRAMING SHOWN ABOVE, ALL TOP OF STEEL ELEVATION = +59'-10"





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680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:

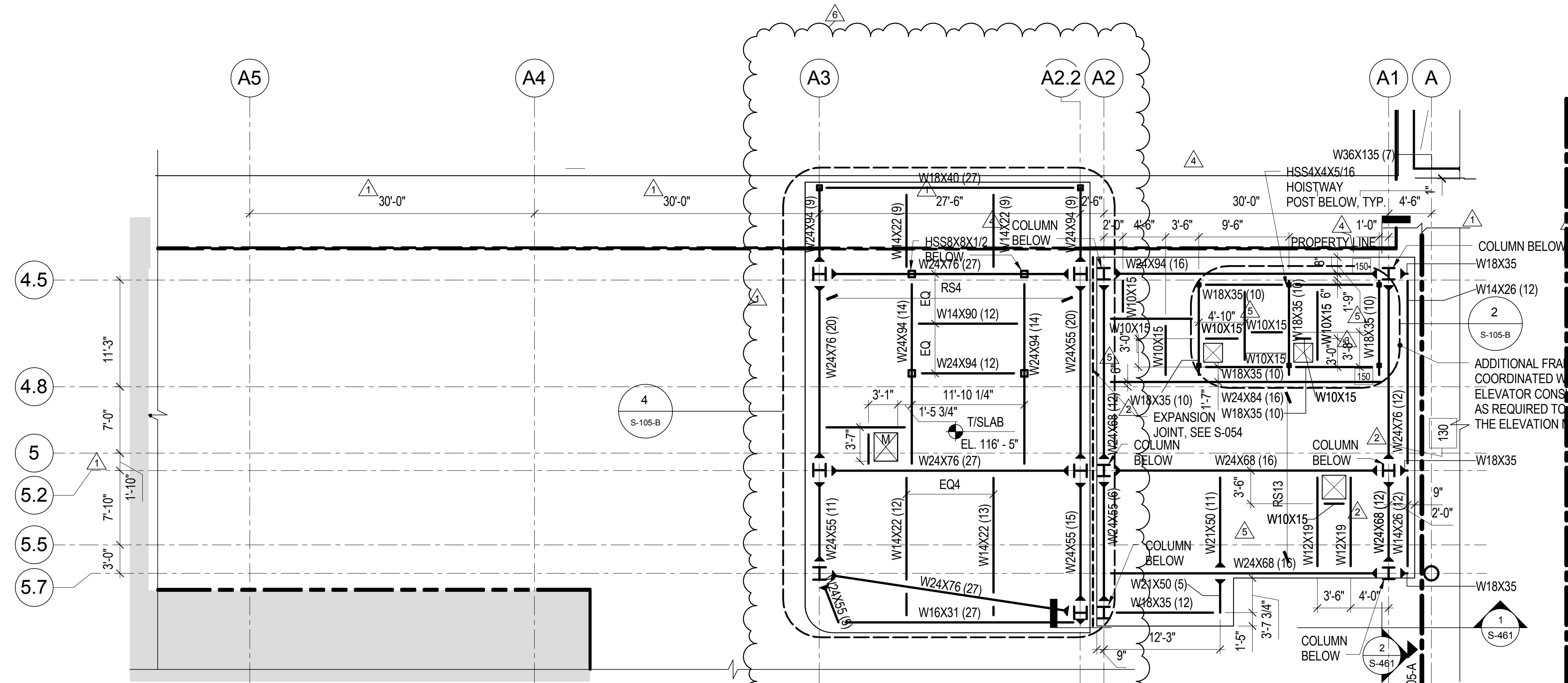
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Under Directive 2 of 1975
S-105-B

Project No.: 211157
Date: 27 AUG 2017
Scale: As Indicated
File No: S-105-B

B-SCAN Sheet No.: S-175.01
Sheet No.: S-105-B
Page No.: 1

5TH FLOOR
FRAMING PLAN -
MECHANICAL
MEZZANINE -
PART B



A. CODES AND STANDARDS

- ### B. DESIGN LOADS

- SUPER-IMPOSED DEAD, AND LIVE FLOOR LOADS ARE INDICATED ON THE STRUCTURAL FLOOR LOADING DIAGRAM PLANS ON S-05X SERIES.

- ## 2. WIND LOADS

THE WIND LOADS PRESENTED HERE ARE BASED ON BC 1609 OF THE NEW YORK CITY BUILDING CODE (2008) AND ASCE 7-05 STRUCTURAL LOAD DATA

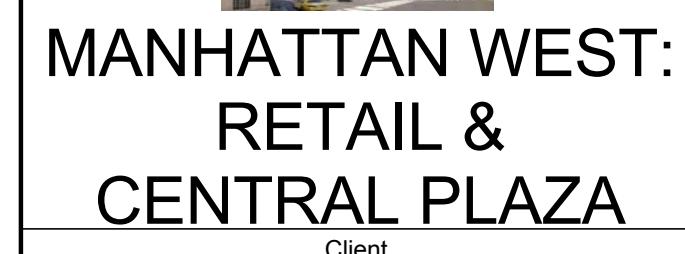
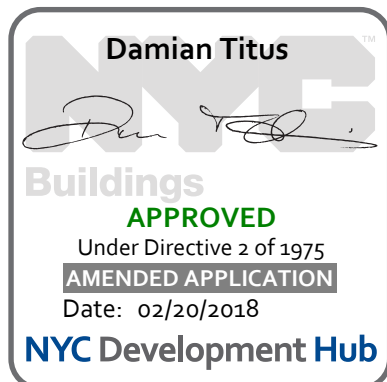
3. SEISMIC LOADS
SEISMIC LOADS WERE DETERMINED IN ACCORDANCE WITH BC 1614 - 1620 OF THE NEW YORK CITY BUILDING CODE(2008) AND ASCE 07-05. ANALYSIS WAS PERFORMED USING THE MODAL RESPONSE SPECTRAL ANALYSIS PROCEDURE.

STRUCTURAL OCCUPANCY CATEGORY	III	(TABLE 1604.5, NEW YORK CITY BUILDING CODE (2008))
IMPORTANCE FACTOR:	1.25	(TABLE 1604.5, NEW YORK CITY BUILDING CODE (2008))
SEISMIC USE GROUP:	II	(TABLE 1604.5, NEW YORK CITY BUILDING CODE (2008))
SEISMIC FORCE-RESISTING SYSTEM:	STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE	(TABLE 1617.6.2, NEW YORK CITY BUILDING CODE (2008))
DESIGN COEFFICIENTS AND FACTORS	$R = 3 / C_d = 3 / 0.3 = 3$	(TABLE 1616.3(1), TABLE 1616.3(2), NEW YORK CITY BUILDING CODE (2008))
SEISMIC DESIGN CATEGORY:	B	
SOIL CLASS:	S	
SPECTRAL RESPONSE ACCELERATIONS:	$S_s = 0.365 / S_1 = 0.071$	(SECTION 1615.1, NEW YORK CITY BUILDING CODE (2008))
SPECTRAL RESPONSE COEFFICIENTS:	$C_s = 0.243 / S_{M1} = 0.047$	
SEISMIC RESPONSE COEFFICIENT:	$C_a = 0.02$	

4. SNOW LOAD:

SNOW LOADS WERE DETERMINED IN ACCORDANCE WITH BC 1608 OF THE NEW YORK CITY BUILDING CODE (2008) AND ASCE 07-05

FLAT-ROOF SNOW LOAD:	25 PSF	
EXPOSURE FACTOR:	1.3	(TABLE 1608.3.1, NEW YORK CITY BUILDING CODE (2008))
IMPORTANCE FACTOR:	1.1	(TABLE 1608.3.2, NEW YORK CITY BUILDING CODE (2008))
THERMAL FACTOR:	1.0	(TABLE 1608.3.3, NEW YORK CITY BUILDING CODE (2008))



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Ontario, Canada N1K 1P8

Seal & Signature: _____



1	02/18/2018	ISSUED FOR BUILDING PERMIT
No.	Date	Description

Sheet Name:

SOUTH RETAIL STRUCTURAL DESIGN CRITERIA

Project No.: 211157	B-SCAN Sheet No.: S-002.00
Date: 02/16/2018	Sheet No.: S-002
Scale: NTS	
File No.: S-002	Page No.:



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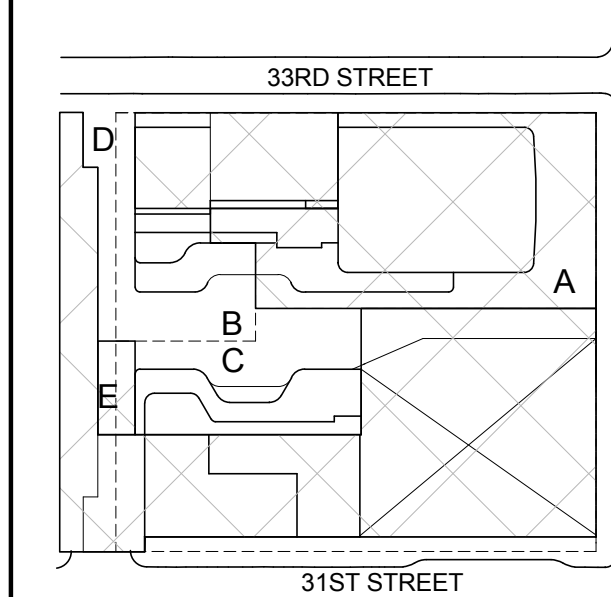
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Key Plan:



Seal & Signature:



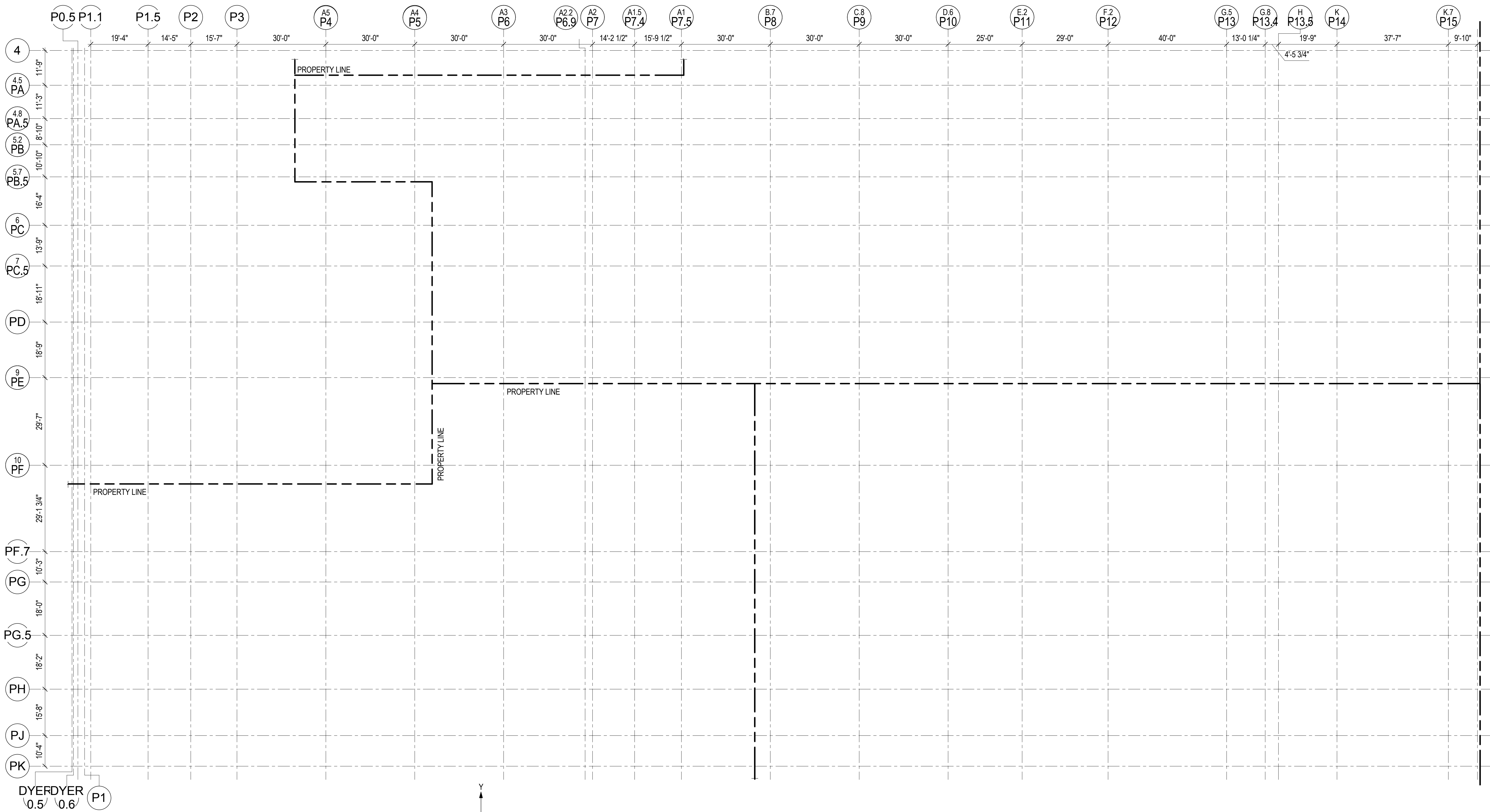
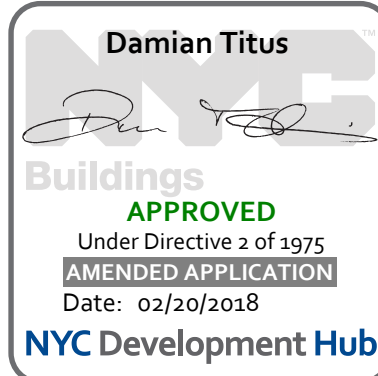
Project No.: 211157
Date: 02/16/2018
Scale: 1/16" = 1'-0"
File No.: S-003

**STRUCTURAL
GRID SET-OUT
PLAN**

B-SCAN Sheet No.: S-003.00

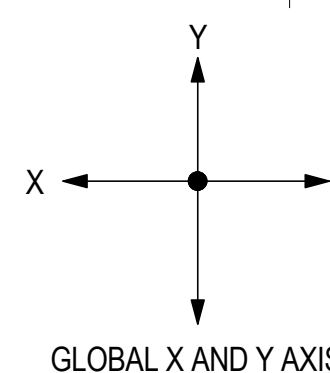
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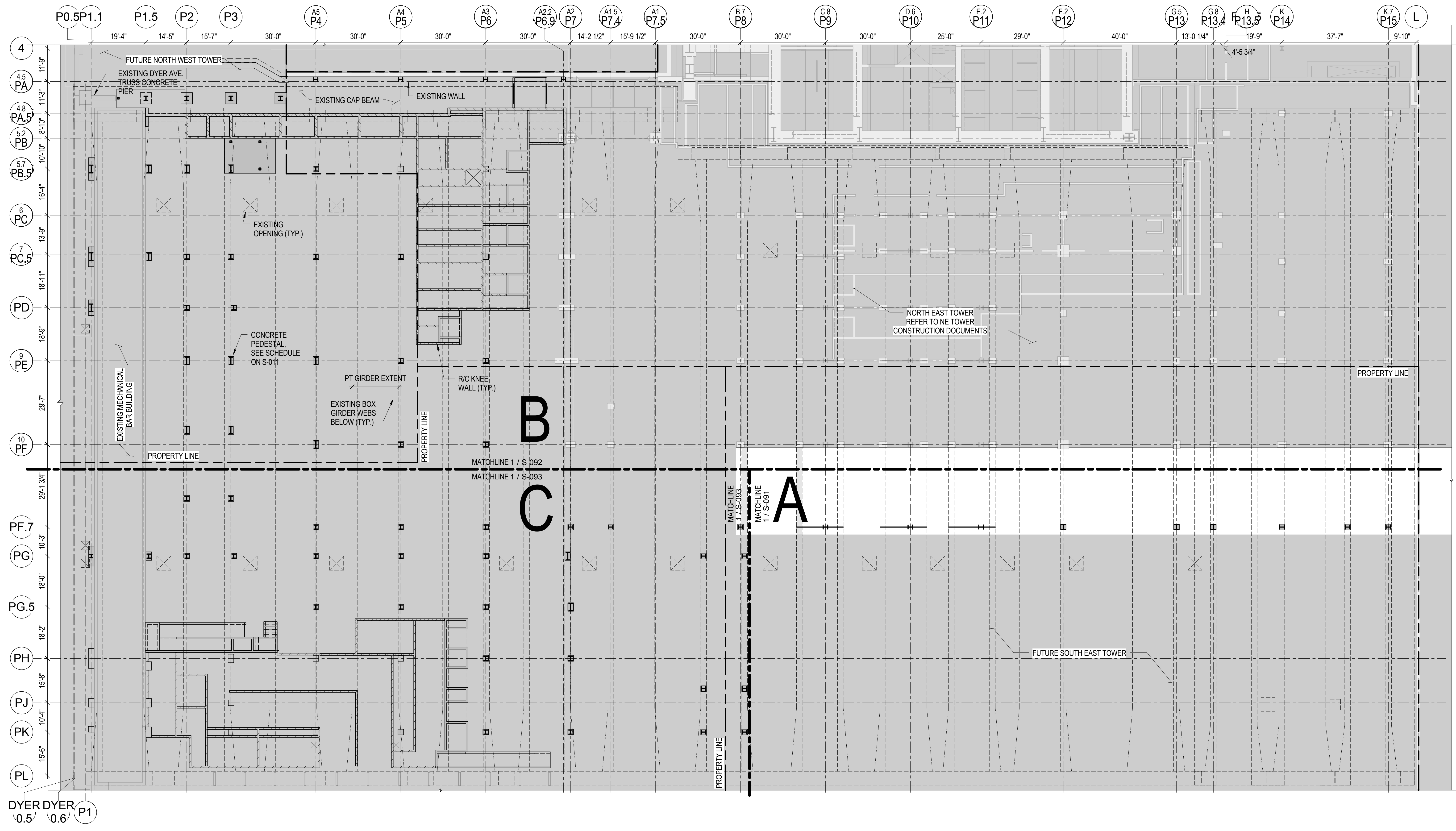
Page No.: 3-003



NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO SITE WIDE BENCHMARK

1 GRID LINE AND PROPERTY LINE KEY PLAN
1/16" = 1'-0"





1 PLATFORM KEY PLAN
1/16" = 1'-0"

- SHADING KEY PLAN
- NOT IN SCOPE
 - GIRDER WEB BELOW
 - NEW CONCRETE STRUCTURE

- GENERAL NOTES:
- REFER TO SHEET S-000 FOR STRUCTURAL SYSTEM DESCRIPTION.
 - REFER TO SHEET S-001 FOR TYPICAL STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 - REFER TO SHEET S-002 FOR STRUCTURAL CONCRETE NOTES.
 - REFER TO SHEET S-003 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 - REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 - REFER TO SHEET S-300 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS.
 - REFER TO SHEETS S-401, S-405 AND S-406 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEET S-410 FOR BEARING SUPPORT ASSEMBLY SCHEDULE AND DETAILS.
 - REFER TO SHEET S-415 AND S-416 FOR FOUNDATION SCHEDULE AND DETAILS.
 - REFER TO SHEETS S-500 AND S-501 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
 - REFER TO SHEETS S-510 AND S-511 FOR STRUCTURAL STEEL SECTIONS AND DETAILS.



**MANHATTAN WEST:
RETAIL &
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Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:

Seal & Signature:

No.	Date	Description
1	02/16/2018	ISSUED FOR BUILDING PERMIT

Sheet Name:

**KEY PLAN -
PLATFORM PLAN**

Project No.: 211157	B-SCAN Sheet No.: S-004.00
Date: 02/16/2018	Sheet No.: S-004
Scale: As indicated	Page No.:
File No: S-004	



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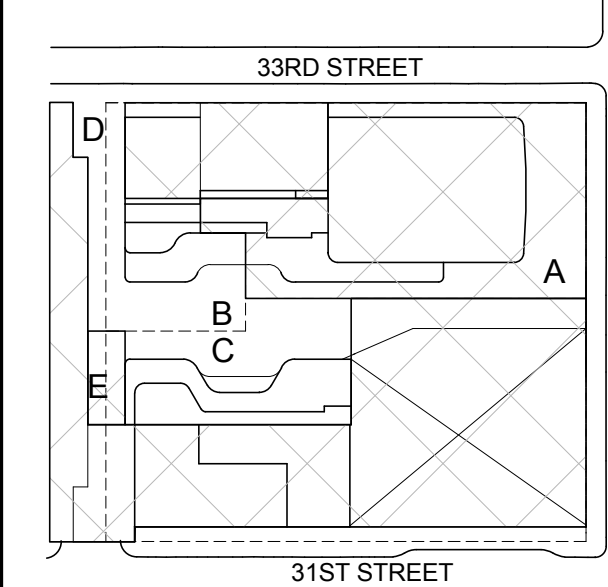
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Key Plan:



Seal & Signature:

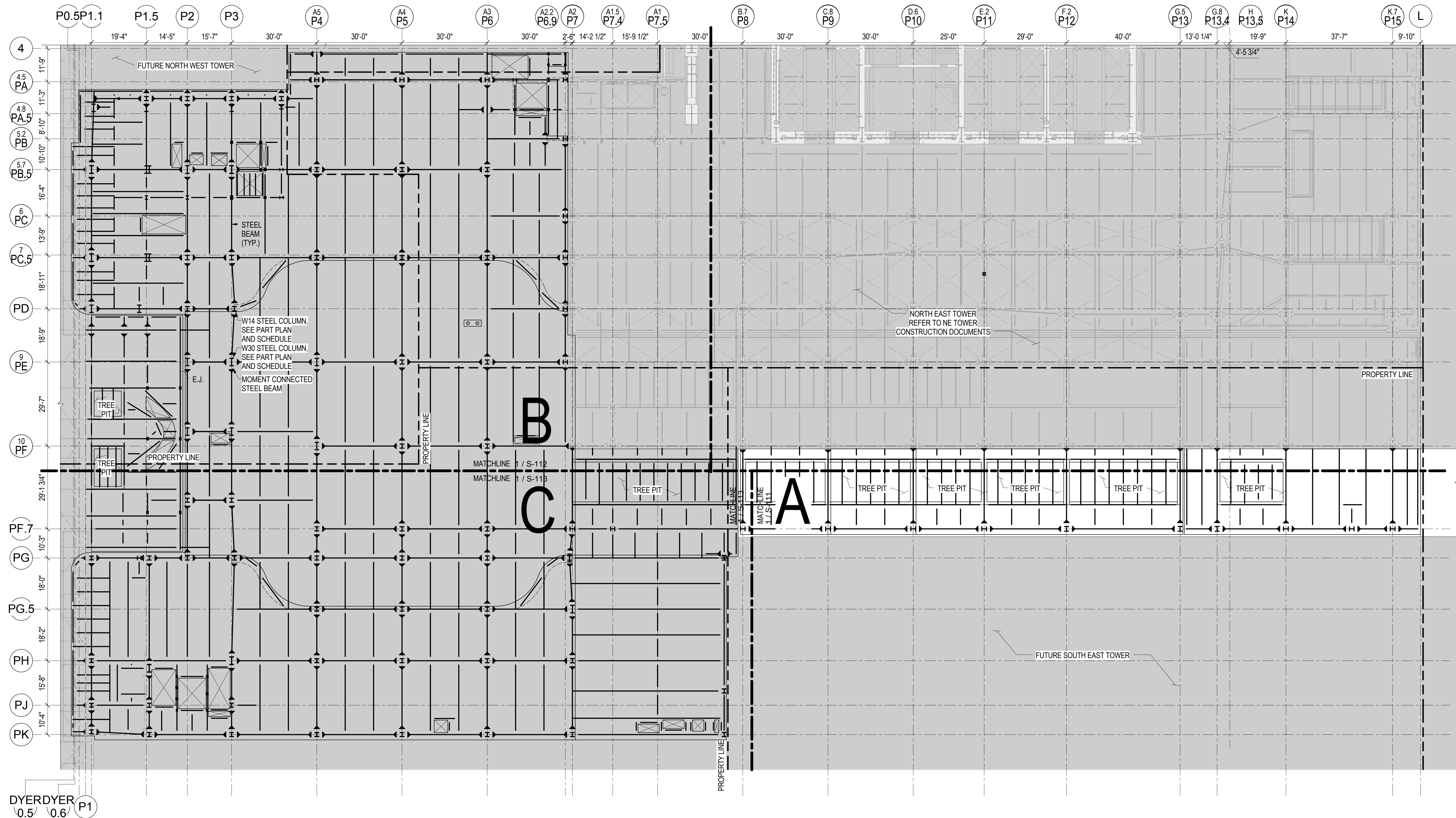


Project No.: 211157
Date: 02/16/2018
Scale: As Indicated
File No.: S-006

Sheet Name: KEY PLAN - PLAZA LEVEL PLAN
Sheet No.: S-006
Page No.: 1

Project No.: 211157
Date: 02/16/2018
Scale: As Indicated
File No.: S-006

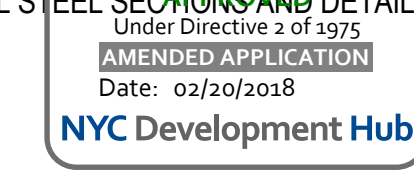
Sheet No.: S-006
Page No.: 1



1 RETAIL PLAZA KEY PLAN
1/16" = 1'-0"

SHADING KEY PLAN
NOT IN SCOPE
GIRDER WEB BELOW
NEW CONCRETE STRUCTURE

- GENERAL NOTES:
- REFER TO SHEET S-000 FOR STRUCTURAL SYSTEM DESCRIPTION.
 - REFER TO SHEET S-001 FOR TYPICAL STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 - REFER TO SHEET S-002 FOR STRUCTURAL CONCRETE NOTES.
 - REFER TO SHEET S-003 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 - REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 - REFER TO SHEET S-210 FOR ESTIMATED HORIZONTAL MOVEMENT AT PLAZA LEVEL.
 - REFER TO SHEET S-300 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS.
 - REFER TO SHEET S-400 FOR ESTIMATED LOADS ONTO PLATFORM.
 - REFER TO SHEETS S-401, S-405 AND S-406 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEET S-415 AND S-416 FOR FOUNDATION SCHEDULE AND DETAILS.
 - REFER TO SHEETS S-500 AND S-501 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
 - REFER TO SHEETS S-510 AND S-511 FOR STRUCTURAL STEEL SECTIONS AND DETAILS.

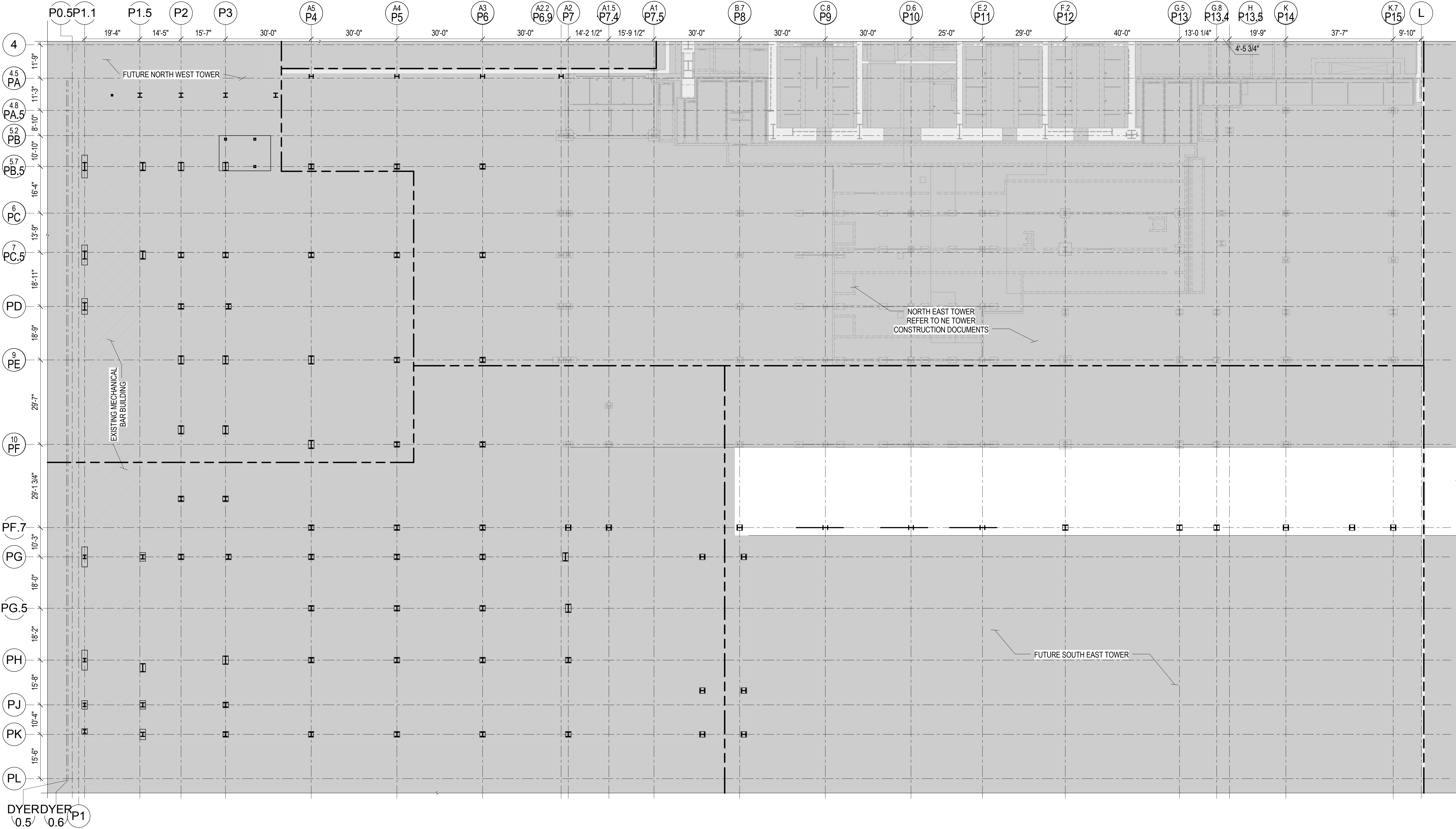


GRID X	GRID Y	T/PEDESTAL ELEVATION
P1.1	PB.5	27'-9 3/4"
	PC.5	27'-10 1/2"
	PD	27'-11"
	PG	27'-11 1/4"
	PH	27'-10 1/2"
P1.5	PJ	27'-10"
	PK	27'-9 3/4"
	PB.5	27'-9 3/4"
	PC.5	27'-10 3/4"
	PH	27'-10 1/4"
P2	PK	27'-9 1/2"
	PB.5	27'-9 1/2"
	PC.5	27'-10 1/2"
	PD	27'-11"
	PE	27'-11 1/2"
P3	PE/PF	27'-11 1/2"
	PF/PF.7	27'-11 1/2"
	PG	27'-11 1/2"
	PH	27'-10 1/2"
	PJ	27'-10"
P4	PK	27'-9 1/2"
	PB.5	27'-9 1/2"
	PC.5	27'-10 1/2"
	PE	27'-11 1/2"
	PF	27'-11 1/2"
P5	PG	27'-11 1/4"
	PH	27'-10 1/2"
	PK	27'-9 1/2"
	PB.5	27'-9 3/4"
	PC.5	27'-10 3/4"
P6	PE	27'-11 1/2"
	PF	27'-11 3/4"
	PG	27'-11 1/2"
	PH	27'-10 1/2"
	PK	27'-9 1/2"
P7	PG.5	27'-11"
	PH	27'-10 1/2"
	PK	27'-9 3/4"
	PG	27'-11 1/4"
	PF.7	27'-11 1/2"
P7.4	PF.7	27'-11 1/2"
P7.5/P8	PG	27'-11 1/4"
	PH/PJ	27'-10"
P8	PK	27'-10"
	PF.7	27'-11 1/4"
P8/P9	PG	27'-11 1/4"
	PH/PJ	27'-10"
P12	PK	27'-10"
P13	PF.7	27'-10 3/4"
P13.4	PF.7	27'-10 3/4"
P14	PF.7	27'-10 3/4"
P14/P15	PF.7	27'-10 3/4"
P15	PF.7	27'-10 3/4"

NOTE: SCHEDULE COMPENSATION VALUES ARE BASED ON ESTIMATED DEFLECTION VALUES PROVIDED BY MCNARY BERGERON ASSOCIATES ON THEIR REPORT DATED 05/02/17 AND BASED ON LOADING DOCUMENTATION ON S-050 AND S-400 ON 04/04/17. REFER TO S-015 FOR DEFLECTION VALUES.

GRID X	GRID Y	B/NEW STEEL COLUMN	REMARKS
P6.9	PB	T/EXISTING (V/F) + 1/2"	SEE 2/S-515
	PC	T/EXISTING (V/F) + 1 1/4"	
	PC.5	T/EXISTING (V/F) + 1 3/4"	
	PD	T/EXISTING (V/F) + 2 1/4"	
P6	PE	T/EXISTING (V/F) + 2 1/2"	SEE 1/S-406
	PF.7	29' - 2 1/4"	


GRID X	GRID Y	T/TRANSFER GIRDER	REMARKS
P9	PF.7	29' - 2 1/2"	SEE 1/S-406
P10	PF.7	29' - 2 1/4"	
P11	PF.7	29' - 2 1/4"	



1 CENTRAL PLAZA KEY PLAN
NOT TO SCALE



MANHATTAN WEST:
RETAIL &
CENTRAL PLAZA
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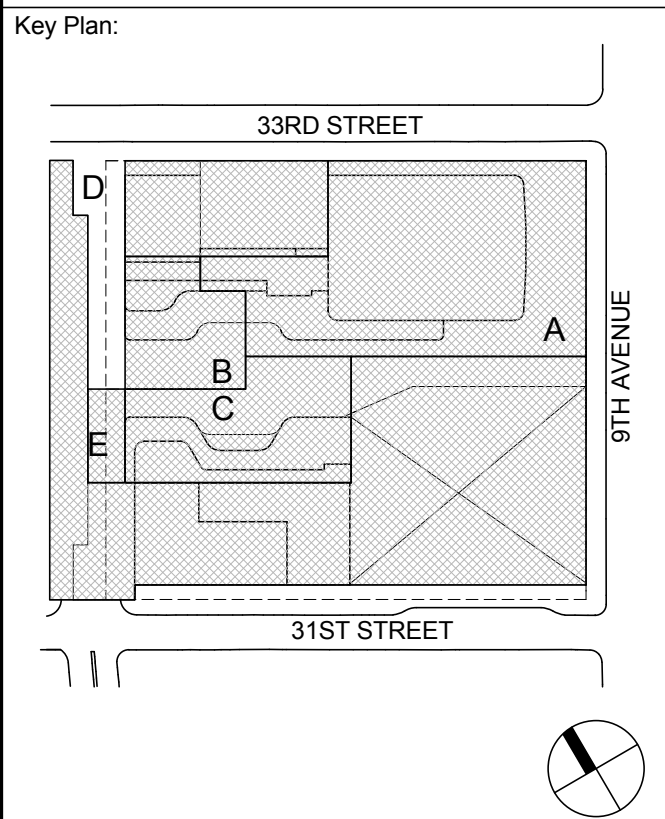
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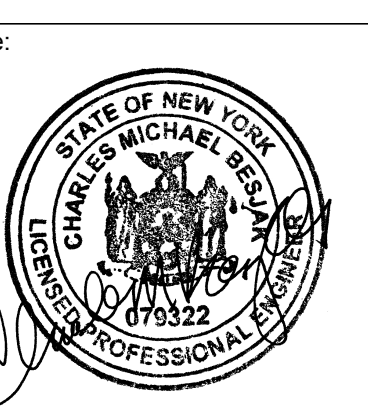
Wind Tunnel Consultant

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680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B6

Key Plan:



Seal & Signature:



No.	Date	Description
1	02/16/2018	ISSUED FOR BUILDING PERMIT

Sheet Name:	
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SUGGESTED COMPENSATION PLAN

Project No.: 211157
Date: 02/16/2018
Scale: 1/16" = 1'-0"
File No.: S-011

B-SCAN Sheet No.: S-011.00
Sheet No.: S-011
Page No.:

Damian Titus



Building
APPROVED
Under Directive 2 of 1975
Date: 02/16/2018
NYC Development Hub

STAGE-WISE CONSTRUCTION OF DIFFERENT AREAS OF PLAZA

STAGE	AREA 1	AREA 2	AREA 3
STAGE 1 SELF-WEIGHT + DEAD LOAD	X		
STAGE 2 SELF-WEIGHT + DEAD LOAD		X	
STAGE 3 SUPER-IMPOSED DEAD LOAD @ PLAZA + RETAIL + LOADING DOCKS	X	X	
STAGE 4 LANDSCAPE LOADS			
STAGE 5 SUPER-IMPOSED DEAD LOAD (WEARING SLAB) @ PLATFORM	X	X	
STAGE 6 SELF-WEIGHT + DEAD LOAD			X
STAGE 7 SUPER-IMPOSED DEAD LOAD @ PLAZA + RETAIL			X
STAGE 8 LANDSCAPE LOADS			X
STAGE 9 SUPER-IMPOSED DEAD LOAD @ PLATFORM			X

STAGE 5 - CUMULATIVE DEAD LOAD DEFLECTION (IN FT)

Column	UNIT 1												UNIT 2										UNIT 3							
	P1.1	P1.5	P1.5/P2	P2	P3	P4	P5	P6	P6.9	P7	P7.4	P7.5	P7.5/P8	P8	P8/P9	P9W	P9E	P10W	P10E	P11W	P11E	P12	P13	P13.4	P13.4/P14	P13.5	P14	P14/P15	P15	
A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A.5/B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B	-	-	-	-	-	-	-	-	-0.040	-0.041	-	-0.034	-	-	-	-	-	-	-	-	-	-	-	-	-0.021	-	-0.001	-	-0.002	
B.5	-0.078	-0.080	-	-0.081	-0.083	-0.081	-0.082	-0.084	-	-	-	-	-	-	-	-	-0.083	-0.079	-0.078	-0.077	-0.076	-0.077	-0.068	-	-0.103	-	-0.105	-	-0.112	
C	-	-	-	-	-	-	-	-	-0.153	-0.153	-	-	-	-	-	-0.099	-0.089	-0.083	-0.079	-0.078	-0.077	-0.076	-0.077	-0.068	-	-0.103	-	-	-	
CC.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
C.5	-0.186	-0.190	-	-0.194	-0.197	-0.193	-0.195	-0.199	-0.205	-0.206	-	-	-	-	-0.156	-	-0.139	-0.132	-0.119	-0.117	-0.115	-0.114	-0.115	-0.102	-	-0.129	-	-	-	
C.5/D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
D	-0.233	-	-	-0.245	-0.248	-	-	-	-0.258	-0.258	-	-	-	-	-0.214	-	-0.192	-0.182	-0.173	-0.169	-0.167	-0.165	-	-	-	-	-	-	-	
DE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
E	-	-	-	-0.284	-0.333	-0.281	-0.282	-0.288	-0.297	-0.297	-	-	-	-0.258	-	-0.232	-0.221	-0.209	-0.204	-0.201	-0.199	-0.201	-0.180	-0.199	-	-	-0.180	-	-0.189	
EF	-	-	-	-0.309	-0.312	-	-	-	-	-	-0.302	-	-	-	-	-	-0.232	-0.221	-0.209	-0.204	-0.201	-0.199	-0.201	-0.180	-0.199	-	-	-0.201	-	
F	-	-	-	-	-	-0.306	-0.307	-0.313	-	-0.321	-0.307	-	-	-0.289	-	-0.259	-0.247	-0.233	-0.228	-0.224	-0.230	-0.223	-0.201	-0.212	-	-	-0.214	-	-0.224	
FF.7	-	-	-	-0.302	-0.306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
F.7	-	-	-	-	-	-0.287	-0.287	-0.292	-	-0.300	-0.284	-	-	-	-0.272	-	-0.242	-0.230	-0.216	-0.211	-0.208	-0.206	-0.206	-0.187	-0.192	-	-	-0.193	-0.196	-0.203
F.7/G	-	-0.278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
G	-0.257	-0.266	-	-0.273	-0.277	-0.270	-0.274	-	-0.281	-	-	-	-0.257	-	-0.255	-	-	-	-	-	-	-	-	-	-	-	-0.189	-0.192	-0.198	
G.5	-	-	-	-	-	-0.228	-0.227	-0.231	-	-0.236	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H	-0.167	-0.162	-	-	-0.177	-0.172	-0.171	-0.173	-	-0.178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
J	-0.109	-0.114	-	-	-	-0.117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
K	-0.070	-0.072	-	-	-0.075	-0.072	-0.072	-0.073	-	-0.074	-	-	-0.067	-	-0.065	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.078	
L	-	-	-0.023	-	-0.025	-0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

STAGE 5 - CUMULATIVE LIVE LOAD DEFLECTION (IN FT)

Column	UNIT 1												UNIT 2												UNIT 3				
	P1.1	P1.5	P1.5/P2	P2	P3	P4	P5	P6	P6.9	P7	P7.4	P7.5	P7.5/P8	P8	P8/P9	P9W	P9E	P10W	P10E	P11W	P11E	P12	P13	P13.4	P13.4/P...	P13.5	P14	P14/P15	P15
A.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.001	-	-0.001
A.5/B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-0.023	-0.023	-	-0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.014	-	-	-
B.5	-0.031	-0.033	-	-0.033	-0.034	-0.036	-0.040	-0.044	-	-0.086	-0.087	-	-	-0.052	-0.047	-0.043	-0.040	-0.038	-0.037	-0.037	-0.039	-0.039	-0.039	-	-0.066	-	-0.066	-	-0.068
CC.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C.5	-0.074	-0.077	-	-0.079	-0.081	-0.086	-0.094	-0.104	-	-0.115	-0.116	-	-	-0.082	-	-0.073	-0.068	-0.059	-0.057	-0.056	-0.056	-0.059	-0.059	-	-0.082	-	-	-	-
C.5/D	-0.093	-	-	-0.100	-0.102	-	-	-	-	-0.144	-0.145	-	-	-0.114	-	-0.100	-0.094	-0.086	-0.083	-0.081	-0.082	-	-	-	-	-	-	-0.091	-0.094
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-0.115	-0.137	-0.125	-0.137	-0.150	-0.165	-0.166	-	-	-	-0.138	-	-0.121	-0.114	-0.104	-0.100	-0.099	-0.099	-0.103	-0.104	-0.125	-	-	-0.112	-	-0.116
E/F	-	-	-	-0.124	-0.127	-	-	-	-	-	-0.182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.130
F	-	-	-	-	-	-0.136	-0.149	-0.163	-	-0.180	-0.185	-	-	-0.156	-	-0.136	-0.127	-0.116	-0.112	-0.110	-0.114	-0.115	-0.116	-0.132	-	-	-0.132	-	-0.137
F.F.7	-	-	-	-0.121	-0.124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F.7	-	-	-	-	-	-0.127	-0.139	-0.152	-	-0.168	-0.172	-	-	-0.148	-	-0.126	-0.118	-0.108	-0.104	-0.103	-0.103	-0.106	-0.107	-0.119	-	-	-0.119	-0.121	-0.124
F.7/G	-	-0.109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	-0.100	-0.104	-	-0.109	-0.112	-0.120	-0.130	-0.143	-	-0.157	-	-	-0.144	-0.139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G.5	-	-	-	-	-	-0.101	-0.110	-0.120	-	-0.133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	-0.064	-0.062	-	-	-0.071	-0.075	-0.082	-0.090	-	-0.100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H/U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J	-0.042	-0.044	-	-	-0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	-0.027	-0.028	-0.028	-	-0.030	-0.032	-0.034	-0.038	-	-0.042	-	-	-0.039	-0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.047
L	-	-	-	-	-0.010	-0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

STAGE 9 - CUMULATIVE DEAD LOAD DEFLECTION (IN FT)

Column	UNIT 1													UNIT 2								UNIT 3								
	P1.1	P1.5	P1.5/P2	P2	P3	P4	P5	P6	P6.9	P7	P7.4	P7.5	P7.5/P8	P8	P8/P9	P9W	P9E	P10W	P10E	P11W	P11E	P12	P13	P13.4	P13.4/P...	P13.5	P14	P14/P15	P15	
A.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A.5/B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.027	-0.001	-	-0.002	
B	-	-	-	-	-	-	-	-	-0.040	-0.041	-	-0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B.5	-0.078	-0.080	-	-0.081	-0.083	-0.081	-0.082	-0.084	-	-0.153	-0.153	-	-	-0.103	-	-0.094	-0.089	-0.085	-0.084	-0.083	-0.083	-0.084	-0.075	-	-0.133	-	-0.138	-	-0.150	
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CC.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
C.5	-0.186	-0.190	-	-0.194	-0.197	-0.193	-0.195	-0.199	-0.205	-0.206	-	-	-	-0.163	-	-0.147	-0.141	-0.128	-0.126	-0.124	-0.124	-0.125	-0.113	-	-0.168	-	-	-	-	
C.5/D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
D	-0.233	-	-	-0.245	-0.248	-	-	-	-0.258	-0.258	-	-	-	-0.224	-	-0.203	-0.195	-0.186	-0.183	-0.181	-0.180	-	-	-	-	-	-	-	-	
DE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
E	-	-	-	-0.284	-0.333	-0.281	-0.282	-0.288	-0.297	-0.297	-	-	-	-0.271	-	-0.247	-0.237	-0.226	-0.222	-0.219	-0.218	-0.221	-0.201	-0.263	-	-	-0.240	-	-0.261	
EF	-	-	-	-0.309	-0.312	-	-	-	-	-	-0.302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.272	-	-0.295
F	-	-	-	-	-	-0.306	-0.307	-0.313	-	-0.321	-0.307	-	-	-0.304	-	-0.277	-0.266	-0.254	-0.249	-0.246	-0.254	-0.248	-0.227	-0.285	-	-	-0.296	-	-0.322	
FF.7	-	-	-	-0.302	-0.306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
F.7	-	-	-	-	-	-0.287	-0.287	-0.292	-	-0.300	-0.284	-	-	-0.287	-	-0.261	-0.250	-0.238	-0.233	-0.231	-0.229	-0.232	-0.213	-0.262	-	-	-0.275	-0.289	-0.304	
F.7/G	-	-0.278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.269	-0.284	-0.298	
G	-0.257	-0.266	-	-0.273	-0.277	-0.270	-0.270	-0.274	-	-0.281	-	-	-0.271	-	-0.269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
G.5	-	-	-	-	-	-0.228	-0.227	-0.231	-	-0.236	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H	-0.167	-0.162	-	-	-0.177	-0.172	-0.171	-0.173	-	-0.178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
J	-0.109	-0.114	-	-	-	-0.117	-	-	-	-	-	-	-	-0.132	-	-0.130	-	-	-	-	-	-	-	-	-	-	-	-	-	
K	-0.070	-0.072	-0.072	-	-0.075	-0.072	-0.072	-0.073	-	-0.074	-	-	-0.071	-	-0.070	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.131	
L	-	-	-0.023	-	-0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

CONCRETE NOTES

A. GENERAL

1. SHOP DRAWINGS FOR FORMWORK AND REINFORCING SHALL BE APPROVED BY THE ENGINEER PRIOR TO FORMWORK CONSTRUCTION OR REINFORCING FABRICATION AND PLACEMENT.
2. IN ADDITION TO CAMBERS SHOWN, CAMBER FORMWORK TO COMPENSATE FOR DEFLECTION OF FORMS UNDER THE WET WEIGHT OF CONCRETE AS REQUIRED TO ACHIEVE THE SPECIFIED TOLERANCES.
3. CONCRETE BEAMS AND SLABS SHALL NOT BE SLEEVED, BOXED-OUT OR HAVE THEIR REINFORCING INTERRUPTED EXCEPT AS SHOWN ON THE STRUCTURAL DRAWINGS.
4. EXPOSED CONCRETE CORNERS SHALL HAVE 3/4 INCH CHAMFERS UNLESS NOTED OTHERWISE.
5. REFER TO ARCHITECTURAL DRAWINGS FOR THE TYPE, SIZE AND LOCATION OF FLOOR FINISHES, FLOOR DEPRESSIONS AND CURBS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING AND DAMP PROOFING REQUIREMENTS.
7. PROVIDE SLEEVES AND BLOCKOUTS AS SHOWN ON THE APPROVED HVAC, ELECTRICAL, FIRE PROTECTION AND PLUMBING SHOP DRAWINGS IN ACCORDANCE WITH THE STRUCTURAL DETAILS.
8. INSERTS AND EMBEDMENTS SHALL BE ANCHORED SECURELY AND POSITIONED SO THAT THEY WILL BE FLUSH WITH THE FINISHED CONCRETE SURFACE TO A TOLERANCE OF 1/8 INCH, UNLESS NOTED OTHERWISE.
9. PERFORM AND SUBMIT INSTRUMENT SURVEYS OF ALL FINISHED REINFORCED CONCRETE AND STEEL DECK CONCRETE SLAB SURFACES.
10. REFER TO SPECIFICATION SECTION 031000, "CONCRETE FORMWORK," SECTION 032000, "CONCRETE REINFORCEMENT," AND SECTION 033000, "CAST-IN-PLACE CONCRETE" FOR ADDITIONAL REQUIREMENTS.
11. REFER TO "STATEMENT OF SPECIAL INSPECTIONS" FOR SPECIAL INSPECTION REQUIREMENTS AND THE SPECIFICATIONS FOR THE REQUIRED PROGRAM OF TESTING AND INSPECTIONS. PROVIDE MATERIAL TESTS, DATA AND ACCESS AS REQUIRED TO FACILITATE SPECIAL INSPECTIONS AND OWNER MONITORING.

B. CONCRETE

1. CAST-IN-PLACE CONCRETE SHALL BE OF THE TYPES AND MINIMUM 28-DAY COMPRESSIVE STRENGTHS AND MAXIMUM WATER CEMENT RATIOS AS SHOWN IN THE CONCRETE MATERIAL SCHEDULE.
2. ALL CONCRETE SHALL CONTAIN A WATER REDUCING OR HIGH-RANGE WATER REDUCING, PLASTICIZING ADMIXTURE. CONCRETE PERMANENTLY EXPOSED TO WEATHER SHALL CONTAIN AN APPROVED AIR-ENTRAINING ADMIXTURE.
4. CONCRETE ELEMENTS WITH A LEAST CROSS SECTIONAL DIMENSION GREATER THAN 48 INCHES SHALL BE CONSIDERED TO BE "MASS CONCRETE."

C. REINFORCING

1. MATERIALS:
 - a. REINFORCING BARS: ASTM A615, GRADE 60
 - b. WELDED WIRE FABRIC (WWF): ASTM A185
 - c. STRUCTURAL MACRO FIBERS: ASTM C1116, MIN. 2 INCH LENGTH
2. CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED, SPACED IN FORMS, AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE LATEST EDITIONS OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318, AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
3. REINFORCING SPLICES SHALL CONFORM TO THE REQUIREMENTS OF ACI 318, BUT NOT LESS THAN 36 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
4. WELDED WIRE FABRIC SPLICES SHALL BE LAPPED EIGHT (8) INCHES AND TIED SECURELY.
5. MECHANICAL COUPLERS SHALL BE USED WHERE NOTED AND OTHERWISE AT THE CONTRACTOR'S OPTION. COUPLERS SHALL DEVELOP IN TENSION 125% OF THE BAR STRENGTH UNLESS NOTED OTHERWISE.
6. DOWELS SHALL MATCH THE SIZE AND NUMBER OF MAIN REINFORCING, UNLESS NOTED OTHERWISE.
7. FIELD WELDING OR BENDING OF REINFORCING IS NOT PERMITTED EXCEPT WHERE SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED.
8. MINIMUM REINFORCING, UNLESS NOTED OTHERWISE:
 - a. WALLS AND STRUCTURAL SLABS: #4 AT 12 EACH WAY, EACH FACE
 - b. SLABS ON GRADE: 1 LAYER 6X6 - W2.9XW2.9 WWF
 - c. FILL/SWEAR SLABS: 1 LAYER 6X6 - W1.4XW1.4 WWF
 - d. MEP EQUIPMENT PADS: 1 LAYER 6X6 - W4.0XW4.0 WWF
9. MINIMUM REINFORCING FOR EXTERIOR AND VEHICLE TRAFFIC SLABS-ON-GRADE, GALVANIZED OR EPOXY COATED UNLESS NOTED OTHERWISE:
 - a. SIDEWALKS, PLAZAS: 1 LAYER 4X4 - W2.9XW2.9 WWF
 - b. AUTO TRAFFIC AREAS: 1 LAYER 4X4 - W6.0XW6.0 WWF
 - c. TRUCK TRAFFIC AREAS: 1 LAYER 4X4 - W7.0XW7.0 WWF
10. BAR SUPPORTS SHALL BE GALVANIZED OR EPOXY COATED. BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES SHALL ALSO BE PLASTIC TIPPED.

D. CONSTRUCTION JOINTS

1. CONSTRUCTION JOINTS IN ALL WALLS, SLABS AND BEAMS SHALL NOT BE FURTHER APART THAN 90 FEET IN ANY DIRECTION.
2. CONSTRUCTION JOINTS SHALL BE WIRE BRUSHED, CLEANED AND MOISTENED IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.
3. PLACE SLABS-ON-GRADE IN STRIP POURS OF A MAXIMUM WIDTH OF 15 FEET WITH A MINIMUM OF 24 HOURS BETWEEN ADJACENT POURS.
4. CONSTRUCTION JOINTS IN STEEL DECK SLABS SHALL BE LOCATED A MINIMUM OF 18 INCHES FROM ANY BEAM LINE.
5. PROVIDE SHEAR KEYS AT ALL BEAM, REINFORCED SUSPENDED SLAB, GRADE BEAM, MAT AND FOUNDATION WALL CONSTRUCTION JOINTS. REFER TO DETAILS FOR SLAB-ON-GRADE AND SLAB ON METAL DECK CONSTRUCTION JOINT REQUIREMENTS.
6. CONSTRUCTION JOINTS SHALL BE LOCATED ONLY IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.
7. ALLOW A MINIMUM OF THREE (3) HOURS BETWEEN PLACEMENT OF CONCRETE FOR COLUMNS, WALLS OR PIERS AND PLACEMENT OF CONCRETE ON THE ADJACENT FLOOR.

E. ELECTRICAL CONDUIT

1. CONDUIT SHALL BE STEEL OR RIGID PLASTIC ONLY.
2. MAXIMUM CONDUIT DIAMETER IS 1/6 THE SLAB DEPTH.
3. CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 3 TIMES THE CONDUIT DIAMETER.
4. CONDUIT SHALL NOT BE LOCATED CLOSER TO POST-TENSIONING TENDONS THAN 12 INCHES HORIZONTALLY OR 1 1/2 INCHES VERTICALLY.
5. CONDUIT SHALL BE SECURELY TIED TO REINFORCING TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT.
6. CONDUIT SHALL BE PLACED ONLY IN ACCORDANCE WITH SHOP DRAWINGS APPROVED BY THE STRUCTURAL ENGINEER.

F. CURING AND SEALING

1. PROVIDE APPROVED CURING COMPOUND AND SEALER FOR THE TOP SURFACE OF ALL SLAB WORK, UNLESS NOTED OTHERWISE.
2. PROVIDE APPROVED CURING COMPOUND, SEALER, AND HARDENER FOR ALL SLABS IN M.E.P. AND STORAGE AREAS, UNLESS NOTED OTHERWISE.
3. MOIST CURE PARKING SLABS FOR A MINIMUM OF 7 DAYS.
4. MOIST CURE CONCRETE FILLS AND TOPPINGS PLACED OVER STRUCTURAL SLABS.
5. CURE FORMED CONCRETE IN FORMS OR PROVIDE APPROVED CURING COMPOUND.

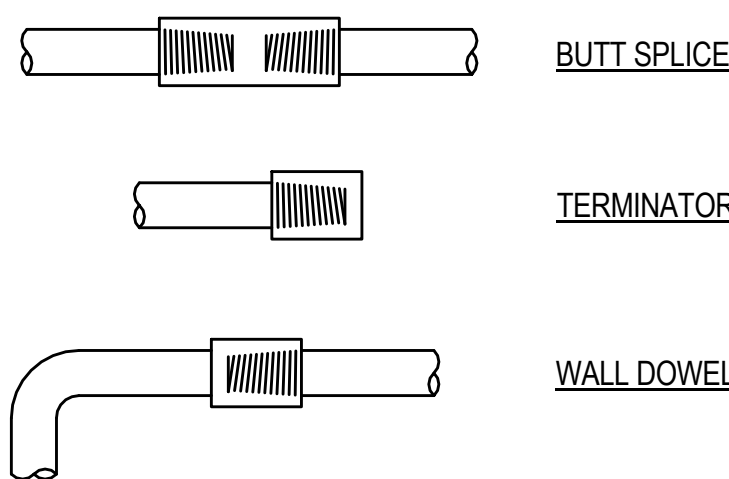
G. DRILLED IN ANCHORS AND REINFORCING BARS

1. DRILLED IN EXPANSION ANCHORS, ADHESIVE ANCHORS AND GROUTED BARS MAY BE USED ONLY WHERE SHOWN ON THE DRAWINGS.
2. DRILLED IN BARS SHALL BE ADHESIVE ANCHORED UNLESS NOTED OTHERWISE.
3. CONDUCT A PRECONSTRUCTION CONFERENCE AT LEAST 14 DAYS PRIOR TO INSTALLATION OF ANCHORS TO VERIFY MATERIALS AND PROCEDURES.
4. ADHESIVE ANCHORED BARS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

H. FLOWABLE CONCRETE

1. AFTER THE REQUIRED POWER TROWELING OF ALL FLOOR SLAB SURFACES, AND IN ORDER TO ACHIEVE THE APPROPRIATE FLOOR LEVELNESS, THE CONTRACTOR SHALL INSTALL AN ACCEPTABLE LATEX BASED, CEMENTITIOUS FLOWABLE FILL MATERIAL SYSTEM IN ALL INTERIOR FLOOR SLAB AREAS WHICH WILL RECEIVE APPLIED, NON-CEMENTITIOUS, ARCHITECTURAL FLOOR FINISH INTERIOR SYSTEMS (CARPET, WOOD, THIN SET STONE) AS THE FINAL FINISH SYSTEM. THE LOCATIONS, EXTENT, AND THICKNESS OF THE FLOWABLE FILL WILL BE ESTABLISHED FROM THE REVIEW OF THE CONTRACTOR'S UNSHORED HARDENED CONCRETE FLOOR SLAB SURVEYS. THESE THIN FLOWABLE CONCRETE FILL MATERIALS SHALL BE PROTECTED FROM DETEIORATION PRIOR TO THE PLACEMENT OF THE FINAL...
 2. THE CONTRACTOR SHALL ALLOW FOR PROVIDING 1/2 INCH AVERAGE DEPTH OF AN ACCEPTABLE LATEX BASED, CEMENTITIOUS FLOWABLE FILL.

LENTON MECHANICAL SPLICES



NOTE: USE LENTON MECHANICAL SPLICES OR MECHANICAL SPLICES THAT MEET OR EXCEED STRENGTH OF EQUIVALENT LENTON SPLICE.

CONCRETE MATERIALS SCHEDULE

LOCATION	COMPRESSIVE STRENGTH (28 DAY U.N.O.)	MAX. SIZE AGGREGATE	SUPPLEMENTARY MATERIALS	MAXIMUM W/C RATIO	AIR CONTENT
FOUNDATIONS / FOOTINGS	8,000 PSI	3/4"	-	0.45	3% MAXIMUM
BASEMENT / KNEEWALLS	5,000 PSI	3/4"	-	0.45	3% MAXIMUM
SLABS AND BEAMS	4,000 PSI	3/4"	-	0.50	3% MAXIMUM
EXPOSED TO FREEZING	4,000 PSI @ 28 DAYS	3/4"	-	0.45	4.5% TO 7.5%
SLABS ON STEEL DECK	4,000 PSI @ 28 DAYS	3/4"	MACRO FIBERS	0.50	3% MAXIMUM
TIGHT POURS	COORDINATE W/ ELEMENTS	3/4"	COORDINATE W/ ELEMENTS	COORDINATE W/ ELEMENTS	3% MAXIMUM
TOPPING/FILL SLABS	4,000 PSI @ 28 DAYS	3/4"	MACRO FIBERS FLY ASH AND/ OR SLAG	0.40	3% INTERIOR, 3% TO 7% EXTERIOR

NOTES:

1. ALL CONCRETE NORMAL WEIGHT UNLESS NOTED OTHERWISE.

MINIMUM CONCRETE COVER

CONCRETE SURFACE EXPOSURE	MINIMUM CONCRETE CLEAR COVER
SLAB - ON - GRADE	2"
SLABS	3/4"
BEAMS	1-1/2"
COLUMNS	1-1/2"
SLAB ON COMPOSITE DECK	3/4"
FOUNDATION WALLS	2" O.F./1" I.F.

COMPRESSION LAP SPLICE LENGTH AND COMPRESSION DEVELOPMENT LENGTH

BAR SIZE	COMPRESSION LAP SPLICE	COMPRESSION DEVELOPMENT LENGTH	
		f _c = 4000 psi	f _c = 5000 psi
#3	12	8	8
#4	15	10	9
#5	19	12	12
#6	23	15	14
#7	27	17	16
#8	30	19	18
#9	34	22	21
#10	39	25	23
#11	43	27	26
#14	SEE NOTE 2	33	31
#18	SEE NOTE 2	44	41

NOTES:

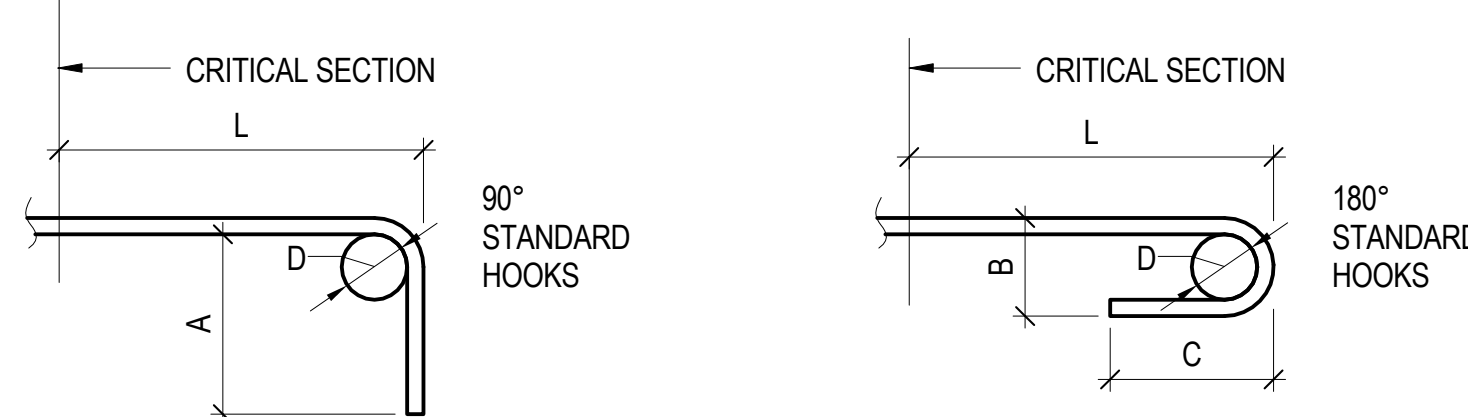
1. TABULATED COMPRESSION DEVELOPMENT LENGTHS AND COMPRESSION LAP SPLICES ARE GIVEN IN INCHES, AND ARE CALCULATED FOR REINFORCEMENT CONFORMING TO ASTM A615 GRADE 60 FOR BARS #3 TO #9 AND GRADE 80 FOR BARS #9 TO #14, AS PER THE REQUIREMENTS OF ACI 318.
2. USE MECHANICAL SPLICE FOR #14 AND #18 BAR SIZE.

TENSION DEVELOPMENT LENGTH AND CLASS 'A' TENSION LAP SPLICE LENGTH

BAR SIZE	f _c = 4000 psi				f _c = 5000 psi			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	19	28	15	22	17	25	13	19
#4	25	37	19	29	22	33	17	26
#5	31	47	24	36	28	42	22	32
#6	37	56	29	43	33	50	26	38
#7	54	81	42	63	49	73	37	56
#8	62	93	48	71	55	83	43	64
#9	70	105	54	81	61	94	48	72
#10	79	118	61	91	70	105	54	81
#11	87	131	67	101	78	117	60	90
#14	105	157	81	121	94	140	72	108
#18	139	209	107	161	125	187	96	144

NOTES:

1. TABULATED TENSION DEVELOPMENT LENGTHS ARE GIVEN IN INCHES, AND ARE CALCULATED FOR REINFORCEMENT CONFORMING TO ASTM A615 GRADE 60 AS PER THE REQUIREMENTS OF ACI 318.
2. CASES 1 AND 2 DEPEND UPON CONCRETE COVER AND THE CENTER-TO-CENTER SPACING OF THE BARS, DEFINED AS FOLLOWS:
 - CASE 1: CLEAR SPACING AT LEAST ONE (1) BAR DIAMETER
CLEAR COVER AT LEAST ONE (1) BAR DIAMETER
STIRRUPS OR TIES THROUGHOUT THE DEVELOPMENT LENGTH NOT LESS THAN THE CODE MINIMUM
OR
CASE 2: ALL OTHER CASES
3. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
4. TABULATED TENSION DEVELOPMENT LENGTHS HAVE BEEN CALCULATED WITH RESPECT TO NORMAL WEIGHT CONCRETE. FOR LIGHTWEIGHT CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3.
5. FOR EPOXY COATED BARS, MULTIPLY THE TABULATED VALUES BY ONE OF THE FOLLOWING FACTORS:
 - 1.5 FOR EPOXY COATED BARS WITH COVER LESS THAN 3 BAR DIAMETERS, OR CLEAR SPACING LESS THAN 6 BAR DIAMETERS
 - 1.2 FOR ALL OTHER EPOXY COATED BARS
6. LAP SPLICE LENGTHS (ACI 12.15.1) ARE MULTIPLES OF TENSION DEVELOPMENT LENGTHS:
 - CLASS A: 1.0 LD, WHERE 50% OR LESS BARS ARE LAP SPICED AT A SECTION FOR A DISTANCE EQUAL TO THE REQUIRED LAP SPLICE LENGTH OR
 - CLASS B: 1.3 LD, AT ALL OTHER LOCATIONS
7. ALL ADJACENT LAP SPLICES IN SLAB-ON-GRADE SHALL BE STAGGERED BY A MINIMUM DISTANCE EQUAL TO THE REQUIRED LAP SPLICE LENGTH.
8. USE MECHANICAL SPLICE FOR #14 AND #18 BAR SIZES.



STANDARD HOOK DETAILING GEOMETRY AND TENSION DEVELOPMENT LENGTH

BAR SIZE	D	90° HOOKS		180° HOOKS		TENSION DEVELOPMENT LENGTH	
		A	B	C	f _c = 4000 psi	f _c = 5000 psi	
#3	2 1/4	6	3	5	7	7	
#4	3	8	4	6	10	9	
#5	3 3/4	10	5	7	12	11	
#6	4 1/2	12	6	8	15	13	
#7	5 1/4	14	7	10	17	15	
#8	6	16	8	11	19	17	
#9	9 1/2	119	11 3/4	15	22	19	
#10	10 3/4	22	13 1/4	17	24	22	
#11	12	24	14 3/4	19	27	24	
#14	18 1/4	31	21 3/4	27	32	29	
#18	24	41	28 1/2	36	43	39	

NOTES:

1. TABULATED TENSION DEVELOPMENT LENGTHS AND STANDARD HOOK DETAILING GEOMETRY DIMENSIONS ARE GIVEN IN INCH, AND ARE CALCULATED FOR ASTM A615 GRADE 60 AS PER THE REQUIREMENTS OF ACI 318 (2009).
2. 'D' REPRESENTS THE STANDARD HOOK FINISHED INSIDE BEND DIAMETER.
'A', 'B', AND 'C' REPRESENT DETAILING DIMENSIONS AS DEFINED IN THE KEY DETAILS.
TABULATED TENSION DEVELOPMENT LENGTHS HAVE BEEN CALCULATED WITH RESPECT TO NORMAL WEIGHT CONCRETE.
FOR LIGHTWEIGHT CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3
FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY 1.2



MANHATTAN WEST:
RETAIL &
CENTRAL PLAZA

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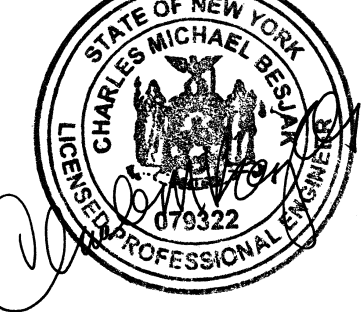
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Rowan Williams Davies & Irwin Inc.
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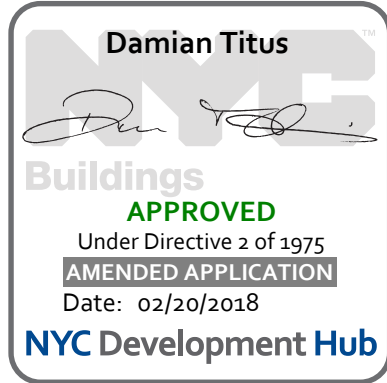
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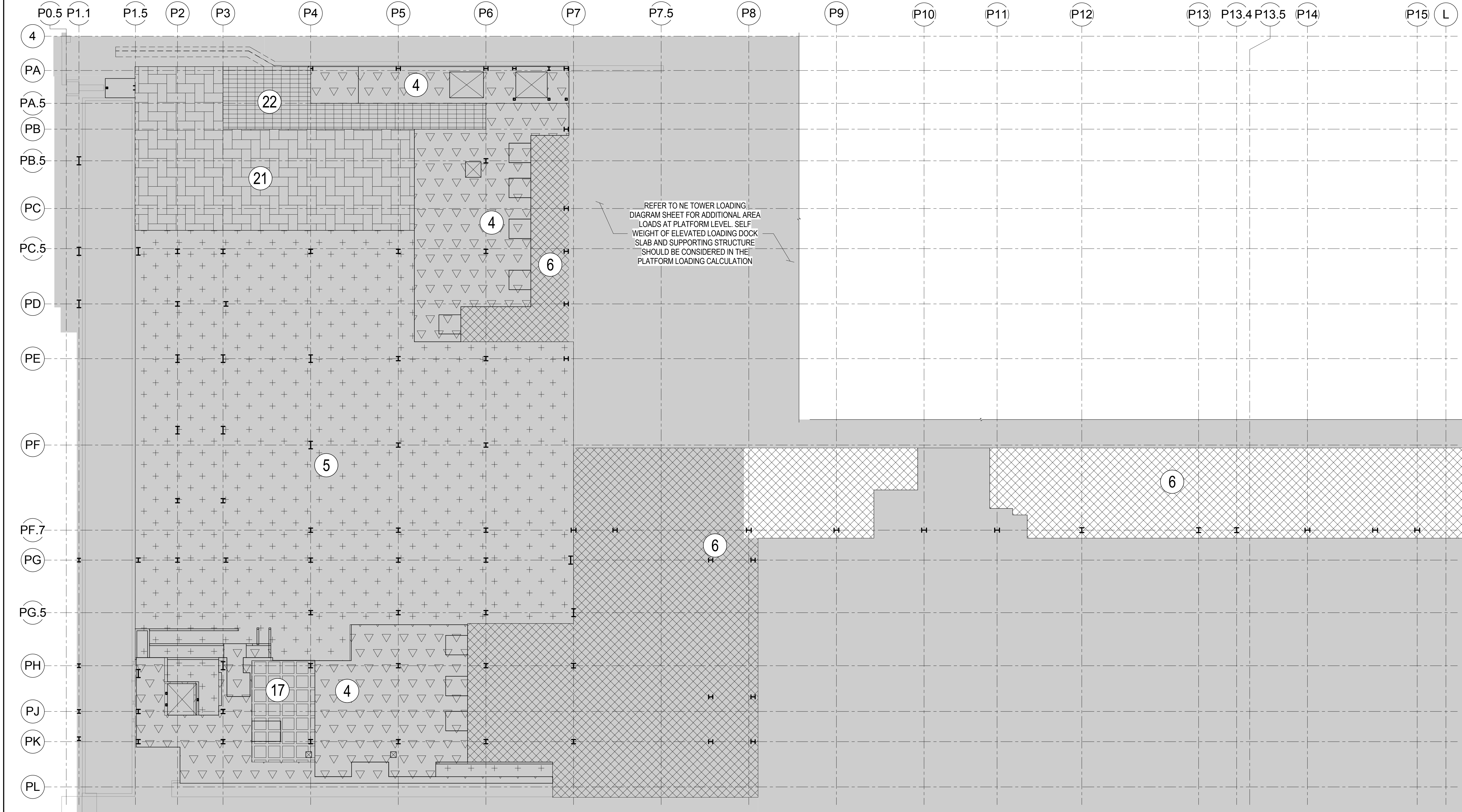
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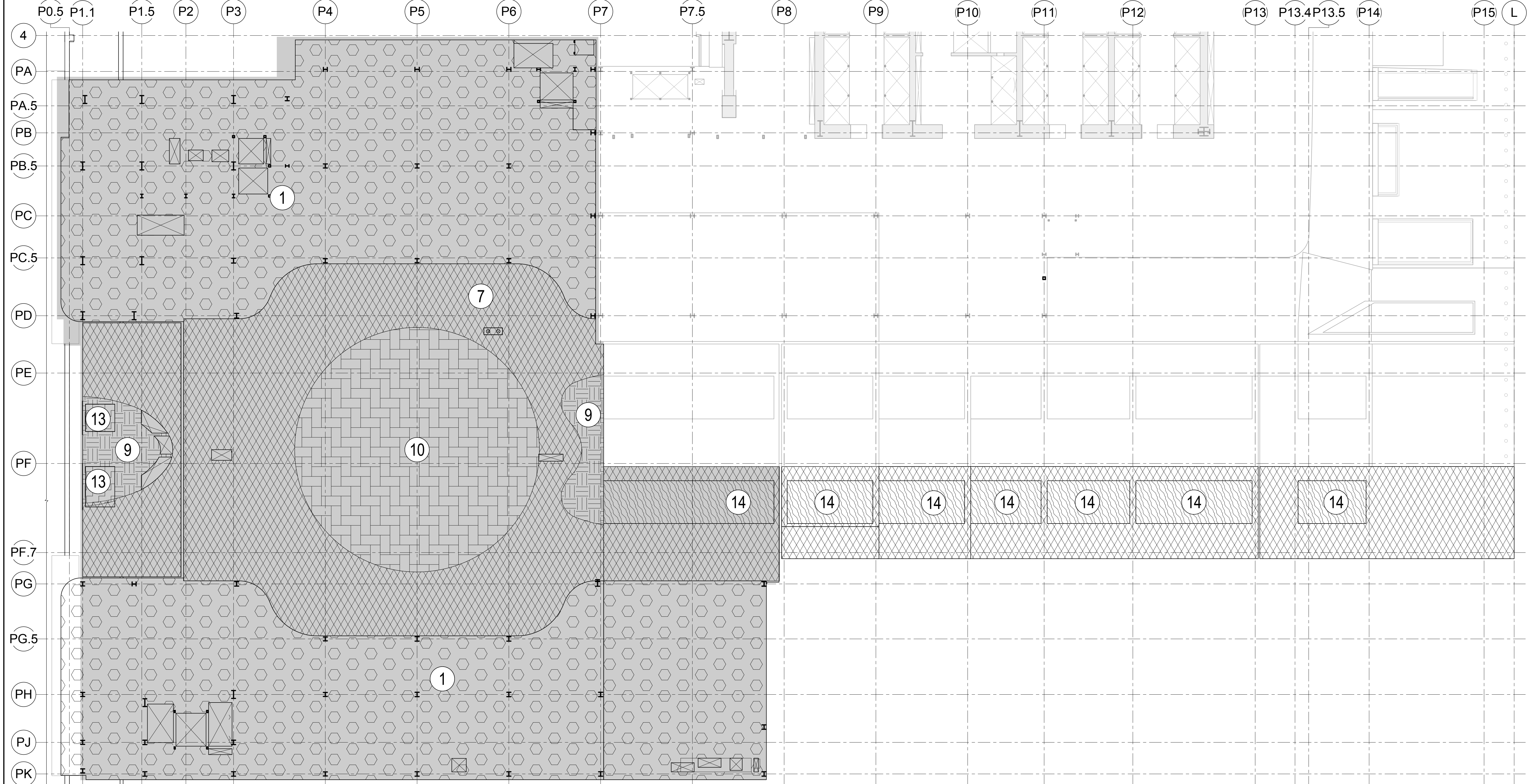
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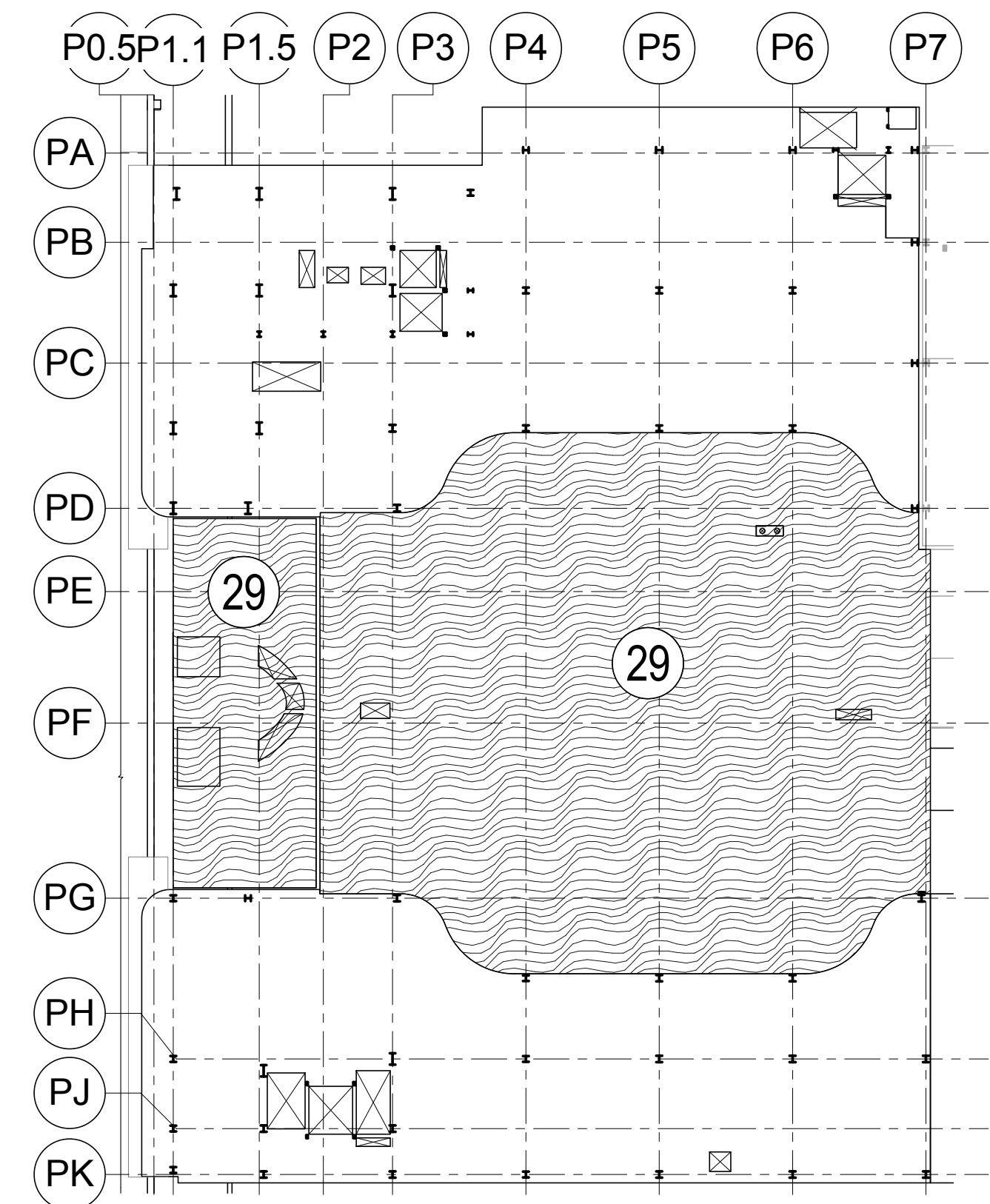
1 CELLAR B LOADING DIAGRAM
NOT TO SCALE



2 PLAZA LOADING DIAGRAM
NOT TO SCALE

LOADING SCHEDULE					
KEY	FUNCTION	SELF-WEIGHT PSF	SDL PSF	LL PSF	SL PSF
1	RETAIL		60	100	0
2	TERRACE		60	75	0
3	ROOF		145	100	25
4	ELEVATED SLAB AT LOADING DOCK		55	30	10
5	PARKING		120	20	125
6	PARKING/DRIVEWAY WITH TRUCKS		0	40	-
7	PLAZA		0	250	-
8	AMENITY SPACE		110	100	25
9	LANDSCAPE (NO TREES)		145	100	-
10	LANDSCAPE (WITH TREES)		370	50	25
11	CENTRAL PLAZA ASSEMBLY		140	150	25
12	MECHANICAL		20	100	-
13	TERRACE - WITHOUT PLANTERS		75	100	25
14	TREE PITS		525	50	25
15	HEAVY TREE PITS		660	50	25
16	EGRESS		20	100	-
17	PLENUM		0	20	-
18	OFFICE	120	35	50	-
19	TERRACE PAVERS		50	100	25
20	TERRACE PLANTERS		220	50	25
21	LIGHT MECHANICAL	120	45	120	-
22	ELEVATED AREA - AMENITIES	100	20	50	-
23	ELEVATED AREA - CORRIDORS	100	20	100	-
24	3'-6" TERRACE PLANTERS		315	50	25
25	METAL TRELLIS		100	100	25
26	TREE PIT AT TERRACE		250	50	25
27	BACK OF HOUSE - KITCHEN		50	50	-
28	TERRACE BAR		50	50	-
29	TERRACE BAR ROOF		60	100	25
30	EMR		50	150	-

NOTE:
1. THE SLAB FOR OPEN PLAZA (MARKED AS #7) IS DESIGNED TO CARRY AXLE LOADS FROM THE STAGE SL100 AND TRUCK EQUIVALENT TO F-250. MAX. AXLE LOAD SUPPORTED BY SLAB IS 14 KIPS (7 KIPS PER TIRE). POSTS SUPPORTING SL100 IN DEPLOYED FORM SHALL HAVE A MINIMUM BEARING AREA OF 36 IN2 (6'x6'). MAXIMUM LOAD ALLOWED FOR POSTS 1.5 KIPS. COORDINATE FINAL LOADING WITH NORTH WEST TOWER PROJECT.
2. REFER TO LANDSCAPE DRAWINGS FOR FINAL LOCATION OF PLANTERS AND TRELLIS LOCATION AT NORTH RETAIL TERRACE.



LOADING SCHEDULE			
KEY	FUNCTION	SDL PSF	LL PSF
29	CONSTRUCTION LOADS - TYP.	10	200

3 PLAZA LEVEL CONSTRUCTION LOADING DIAGRAM
1/32" = 1'-0"

SHADING KEY PLAN
NOT IN SCOPE
GIRDER WEB BELOW
NEW CONCRETE STRUCTURE



**MANHATTAN WEST:
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Key Plan:

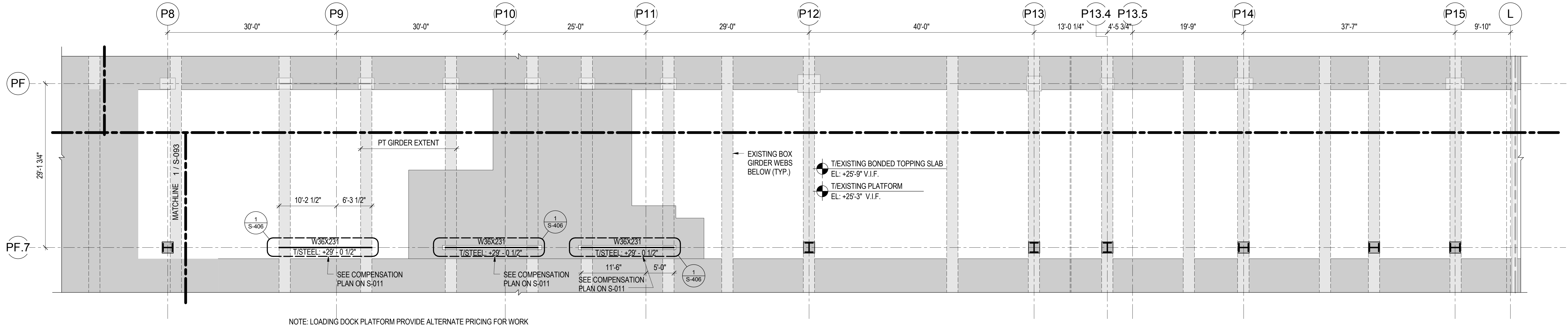
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**LOADING
DIAGRAMS -
CELLAR AND
PLAZA LEVEL**

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B-SCAN Sheet No.: **S-060.00**
Sheet No.: S-050
Page No.:



1 PLATFORM PLAN - PART A

1/8" = 1'-0"

GENERAL NOTES:

- BEAMS SHALL BE LOCATED ON GRID CENTERLINES WHEN NO DIMENSIONS SHOWN.
- BEAMS SHALL BE EQUALLY SPACED BETWEEN GRIDS/BAYS WHEN NO DIMENSIONS SHOWN.
- SLAB EDGE DIMENSION AT OPENING = 7" UNLESS NOTED OTHERWISE.
- REFER TO SHEET S-000 FOR STRUCTURAL SYSTEM DESCRIPTION.
- REFER TO SHEET S-001 FOR TYPICAL STRUCTURAL SYMBOLS AND ABBREVIATIONS.
- REFER TO SHEET S-002 FOR STRUCTURAL CONCRETE NOTES.
- REFER TO SHEET S-003 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
- REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
- REFER TO SHEET S-300 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS.
- REFER TO SHEETS S-401, S-405 AND S-406 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
- REFER TO SHEETS S-500 AND S-501 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
- REFER TO SHEETS S-510 AND S-511 FOR STRUCTURAL STEEL SECTIONS AND DETAILS.
- ALL FOOTINGS CENTERED ON COLUMNS U.N.O.

SHADING KEY PLAN

- NOT IN SCOPE
- GIRDER WEB BELOW
- NEW CONCRETE STRUCTURE



MANHATTAN WEST: RETAIL & CENTRAL PLAZA

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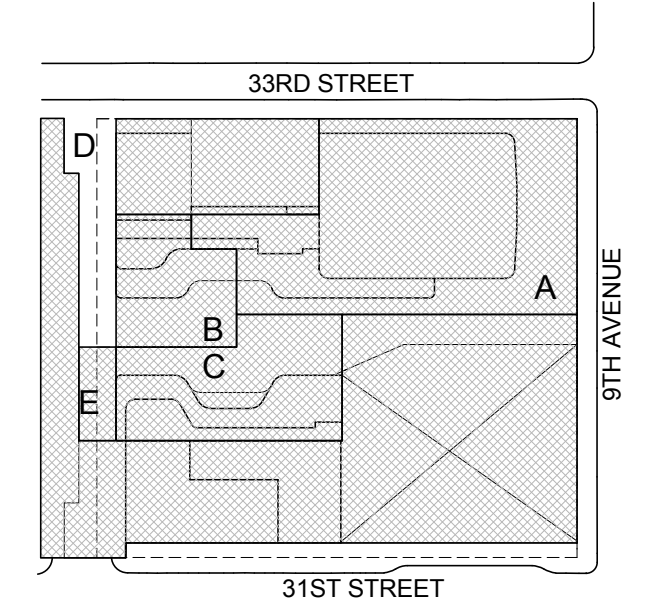
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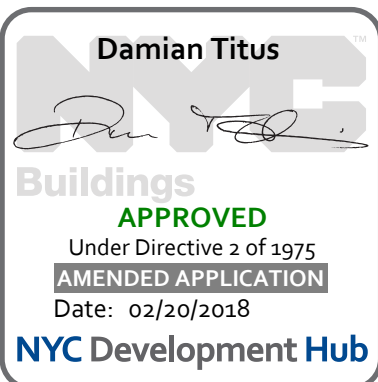
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PLATFORM PLAN - PART A

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File No: S-091

B-SCAN Sheet No.: S-091.00
Sheet No.: S-091
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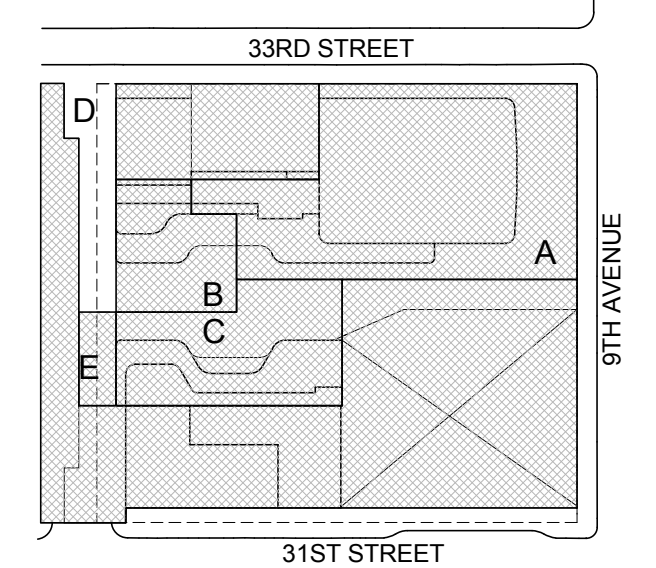
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Key Plan:



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Sheet Name: CELLAR B FRAMING PLAN - PART A

Project No.: 211157
Date: 02/16/2018
Scale: As Indicated
File No: S-101

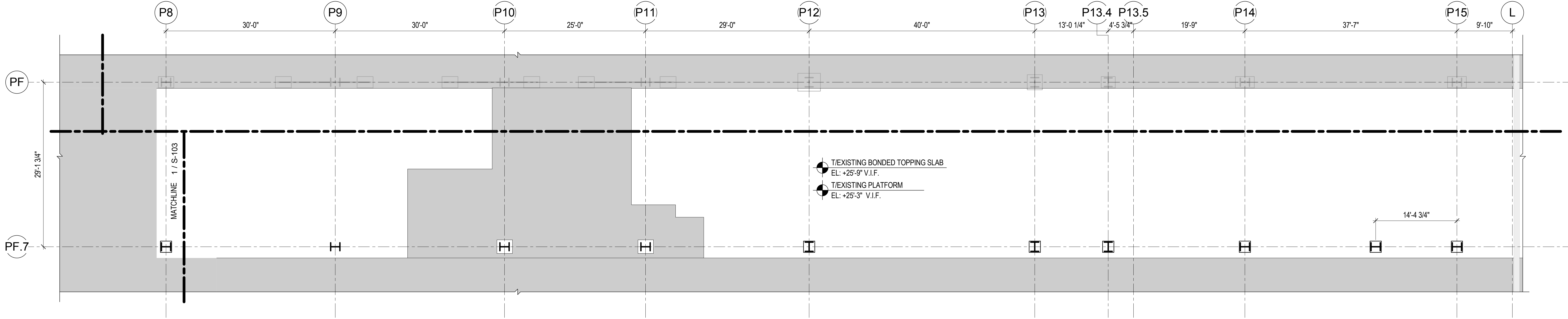
Sheet No.: S-101

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B-SCAN Sheet No.: S-081.00

Sheet No.: S-101

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NOTE: LOADING DOCK PLATFORM PROVIDE ALTERNATE PRICING FOR WORK

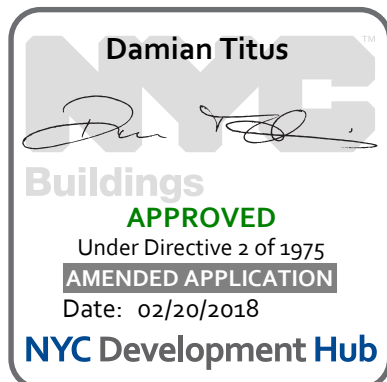
1 CELLAR B FRAMING PLAN - PART A
1/8" = 1'-0"

GENERAL NOTES:

- BEAMS SHALL BE LOCATED ON GRID CENTERLINES WHEN NO DIMENSIONS SHOWN.
- BEAMS SHALL BE EQUALLY SPACED BETWEEN GRIDS/BAYS WHEN NO DIMENSIONS SHOWN.
- SLAB EDGE DIMENSION AT OPENING = 7", UNLESS NOTED OTHERWISE.
- REFER TO SHEET S-000 FOR STRUCTURAL SYSTEM DESCRIPTION.
- REFER TO SHEET S-001 FOR TYPICAL STRUCTURAL SYMBOLS AND ABBREVIATIONS.
- REFER TO SHEET S-002 FOR STRUCTURAL CONCRETE NOTES.
- REFER TO SHEET S-003 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
- REFER TO SHEETS S-201 THROUGH S-206 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
- REFER TO SHEET S-300 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS.
- REFER TO SHEETS S-401 THROUGH S-407 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
- REFER TO SHEETS S-500 THROUGH S-502 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
- REFER TO SHEETS S-510 THROUGH S-515 FOR STRUCTURAL STEEL SECTIONS AND DETAILS.
- FOR EXTERIOR EDGE OF SLAB DIMENSION, SEE A-040 THROUGH A-042, U.N.O.

SHADING KEY PLAN

- NOT IN SCOPE
- GIRDER WEB BELOW
- NEW CONCRETE STRUCTURE





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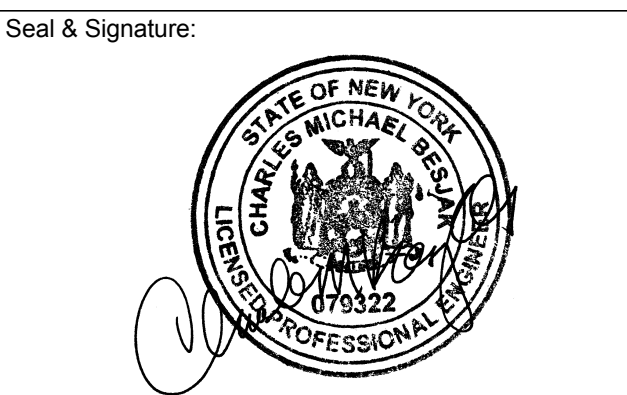
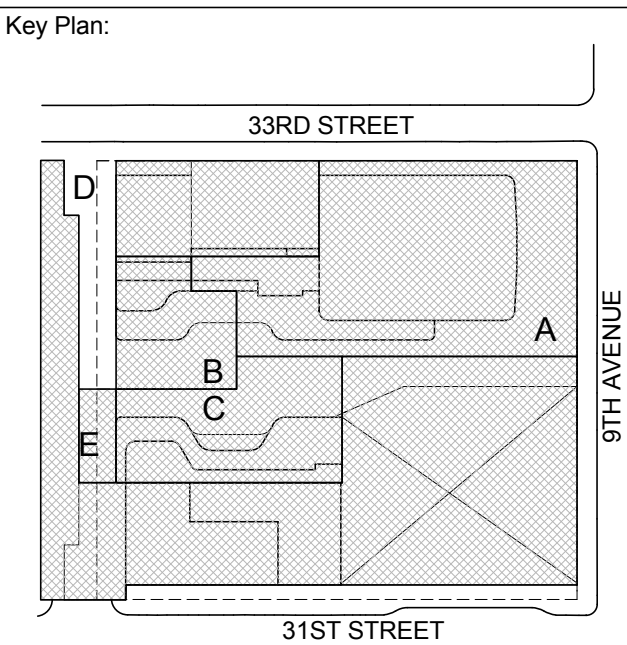
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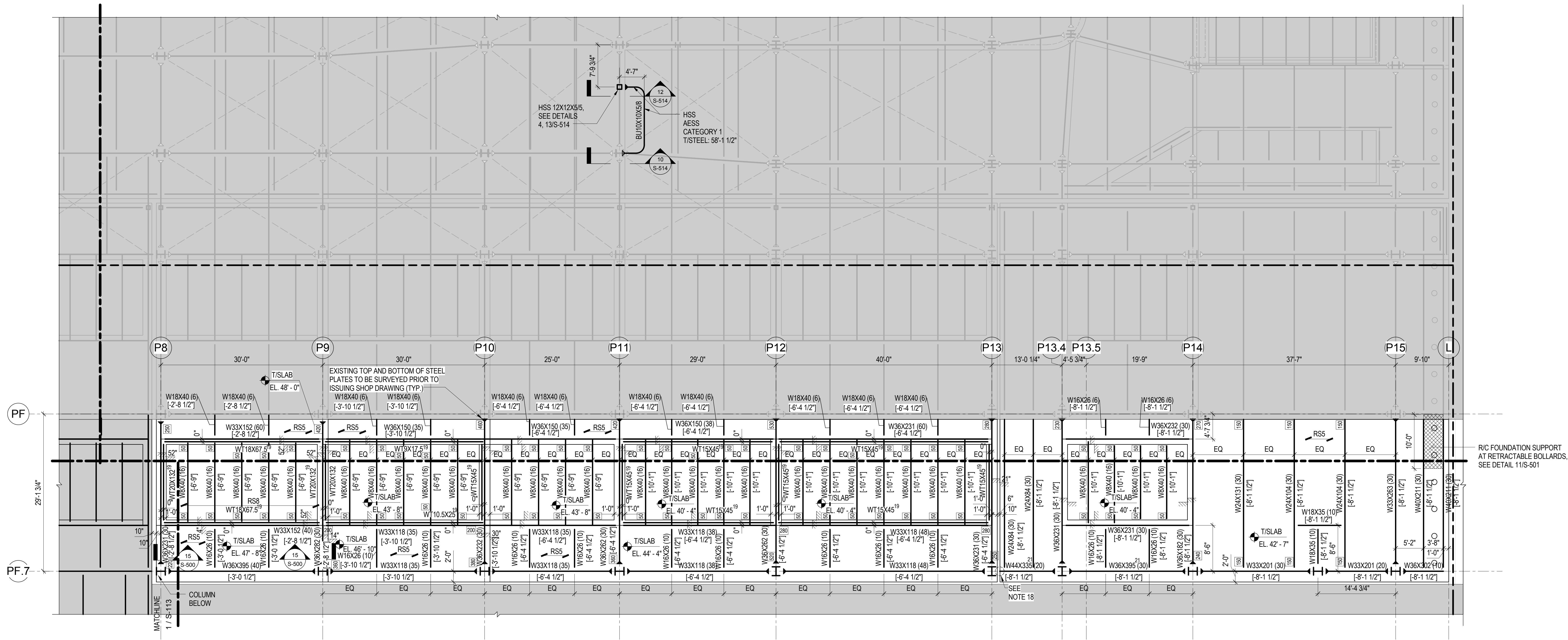
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PLAZA LEVEL
FRAMING PLAN -
PART A

Project No.: 211100
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B-SCAN Sheet No.: S-111.00
Sheet No.: S-111
Page No.: 1



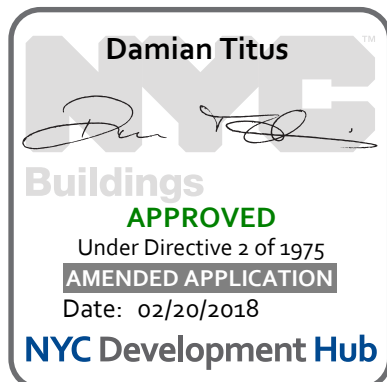
1 PLAZA LEVEL PLAN - PART A
1/8" = 1'-0"

GENERAL NOTES:

- NOTES:
- TOP OF SLAB ELEVATION = 50' - 5", UNLESS NOTED OTHERWISE.
- TOP OF STEEL ELEVATION = 49' - 9 1/2" UNLESS NOTED OTHERWISE BY [X-X] OR [Y-Y].
- WHICH DENOTE POSITIVE OR NEGATIVE VERTICAL OFFSET, RESPECTIVELY.
- BEAMS SHALL BE LOCATED ON GRID CENTERLINES WHEN NO DIMENSIONS SHOWN.
- BEAMS SHALL BE EQUALLY SPACED BETWEEN GRIDS/BAYS WHEN NO DIMENSIONS SHOWN.
- SLAB EDGE DIMENSION AT OPENING = 7", UNLESS NOTED OTHERWISE.
- REFER TO SHEET S-000 FOR STRUCTURAL SYSTEM DESCRIPTION.
- REFER TO SHEET S-001 FOR TYPICAL STRUCTURAL SYMBOLS AND ABBREVIATIONS.
- REFER TO SHEET S-002 FOR STRUCTURAL CONCRETE NOTES.
- REFER TO SHEET S-003 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
- REFER TO SHEETS S-201 THROUGH S-205 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
- REFER TO SHEET S-210 FOR ESTIMATED HORIZONTAL MOVEMENT AT PLAZA LEVEL.
- REFER TO SHEET S-300 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS.
- REFER TO SHEET S-400 FOR ESTIMATED LOADS ONTO PLATFORM.
- REFER TO SHEETS S-401, THROUGH S-407 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
- REFER TO SHEET S-415 AND S-416 FOR FOUNDATION SCHEDULE AND DETAILS.
- REFER TO SHEETS S-500 THROUGH S-502 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
- REFER TO SHEETS S-510 THROUGH S-515 FOR STRUCTURAL STEEL SECTIONS AND DETAILS.
- PROVIDE SLIDING BEARING SUPPORT AT TOP OF COLUMN. SEE S-410 FOR DETAILS AND SCHEDULE.
- WT SHAPE TO BE WELDED TO THE UNDERSIDE OF BEAM SECTION ABOVE.
- ALL STEEL MEMBERS EXPOSED TO EXTERIOR WEATHER TO BE PAINTED AS PER ARCH SPECIFICATIONS. SEE NOTE ON S-021.
- REFER TO MOMENT CONNECTION SCHEDULE ON S-510.

SHADING KEY PLAN

- NOT IN SCOPE
- GRID WEB BELOW
- NEW CONCRETE STRUCTURE



EXISTING 450 W. 33RD ST BUILDING

FUTURE NW TOWER

EXISTING LOFT BUILDING

NE TOWER

FUTURE SE TOWER

EXISTING SW TOWER

NOTES:

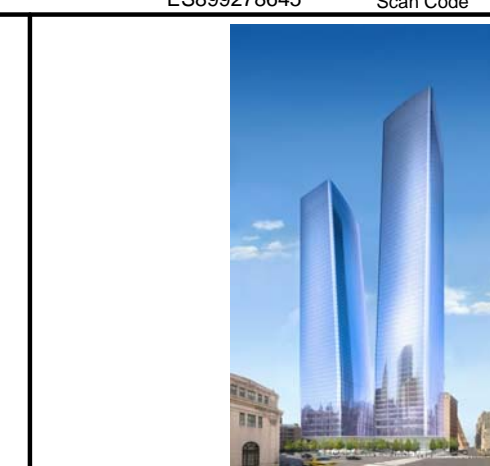
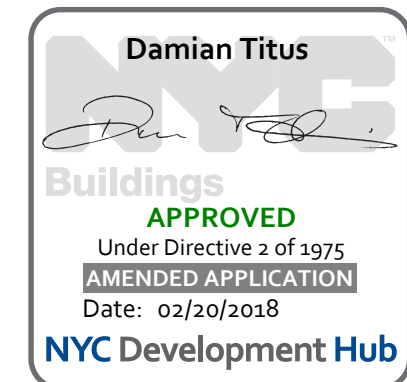
- "E-W MOVEMENT" CORRESPONDS TO A TRANSLATION IN THE LEFT-TO-RIGHT DIRECTION ON THE PLAN (I.E. PARALLEL TO THE GRID "P5").
- "N-S MOVEMENT" CORRESPONDS TO A TRANSLATION IN THE UP-AND-DOWN DIRECTION ON THE PLAN (I.E. PARALLEL TO GRID "P5").
- INDICATED MOVEMENTS SHOW THE EXPECTED PLATFORM MOVEMENT (PROVIDED BY PLATFORM ENGINEER) FOR SEISMIC AND THERMAL MOVEMENTS FIRST, THEN THE EXPECTED PLAZA MOVEMENTS (CALCULATED BY SOM). TOTAL MOVEMENT OF THE JOINT WOULD BE THE SUM OF THE TWO VALUES.
- THE ACTUAL SPACE REQUIRED BETWEEN ADJACENT STRUCTURES TO ACCOMMODATE THE INDICATED MOVEMENTS MUST INCLUDE THE COMPRESSIBILITY RATIO OF THE EXPANSION JOINT ASSEMBLY. THIS WILL LIKELY REQUIRE 2X THE GAP INDICATED HERE.

1 ESTIMATED HORIZONTAL MOVEMENT AT PLAZA LEVEL

1/16" = 1'-0"

SHADING KEY PLAN

- NOT IN SCOPE
- GIRDER WEB BELOW
- NEW CONCRETE STRUCTURE



MANHATTAN WEST:
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MOVEMENT AT
PLAZA LEVEL

Project No.: 211157

Date: 02/16/2018

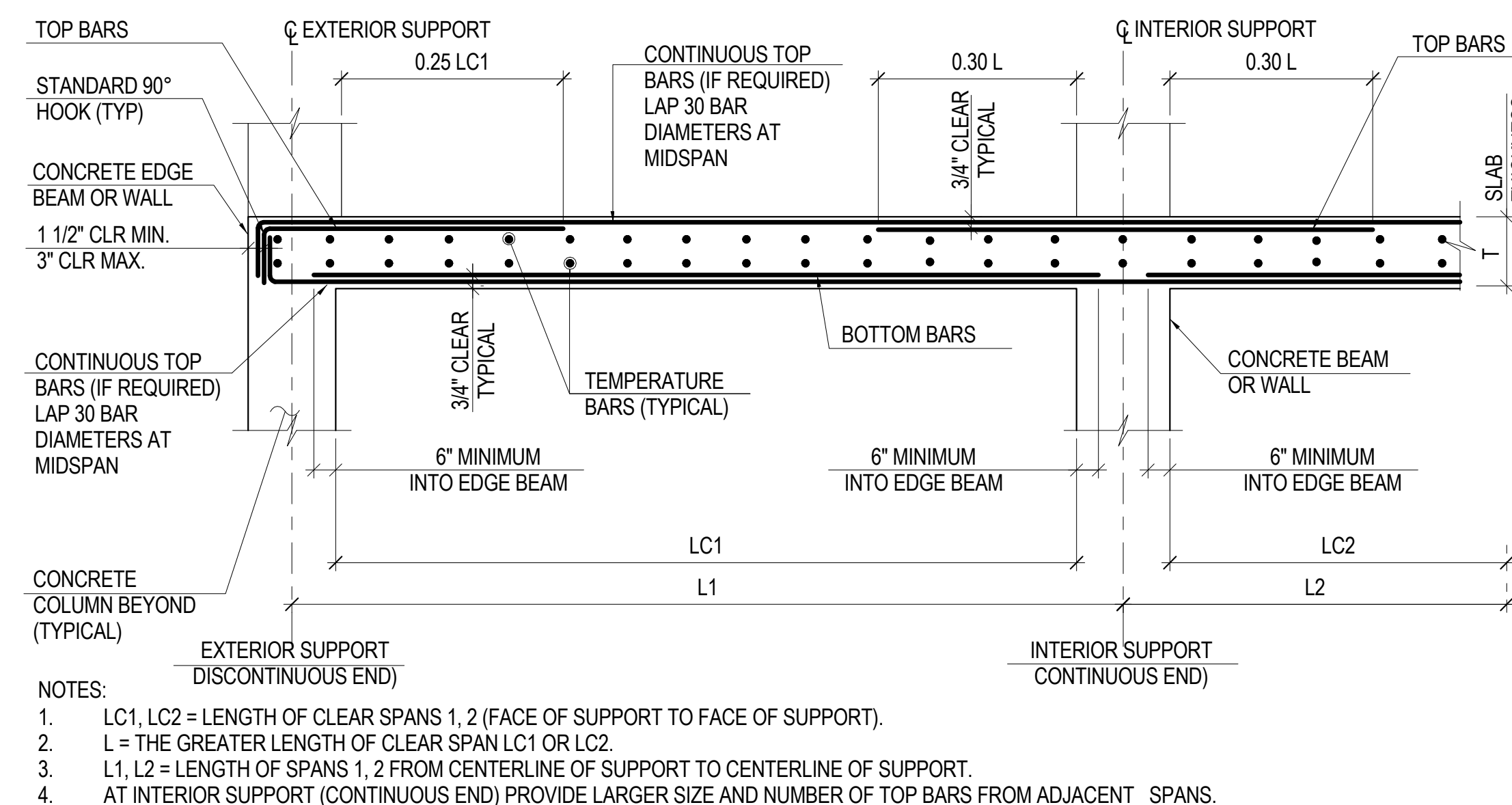
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File No: S-210

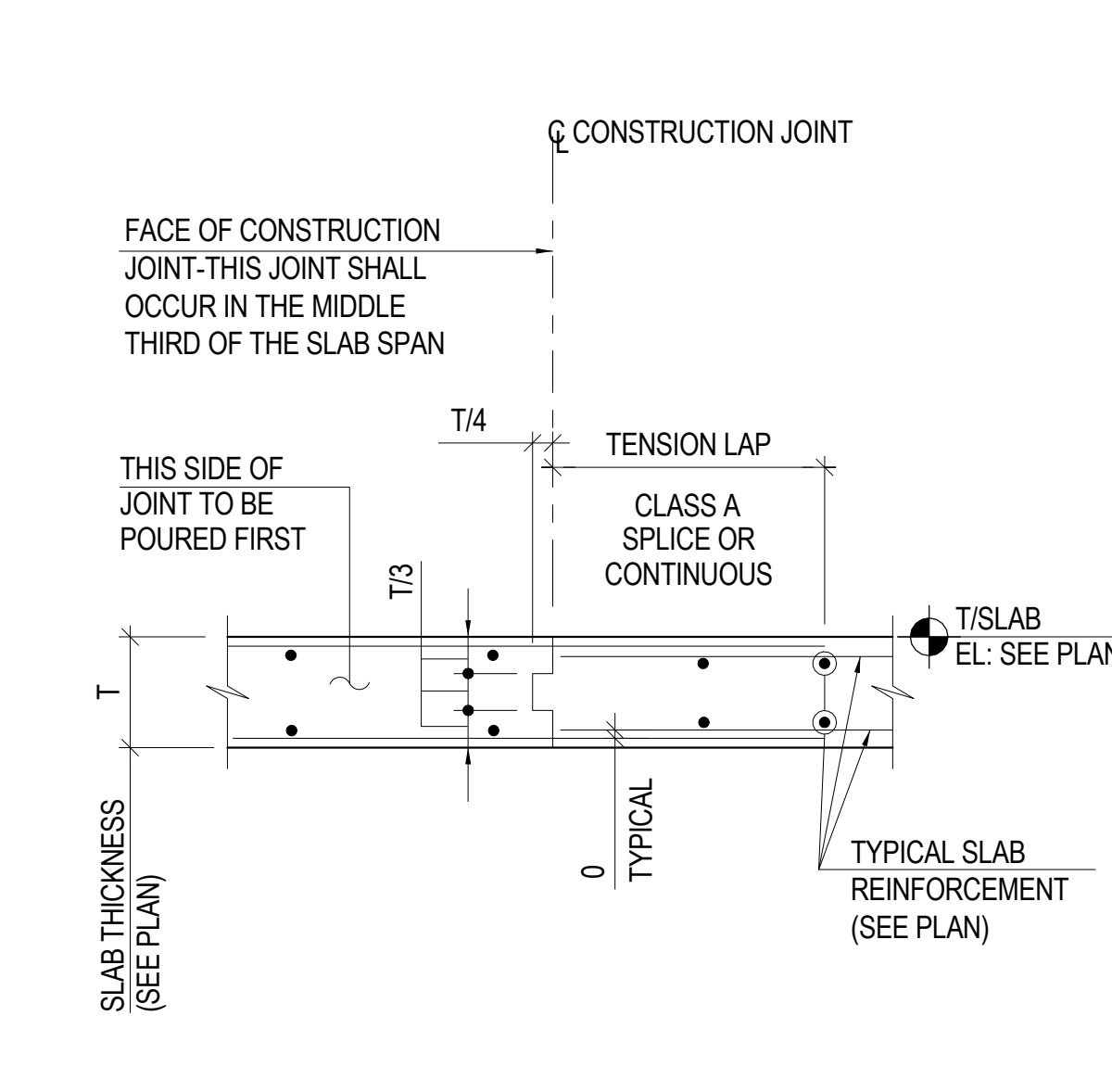
B-SCAN Sheet No.: S-210.00

Sheet No.: S-210

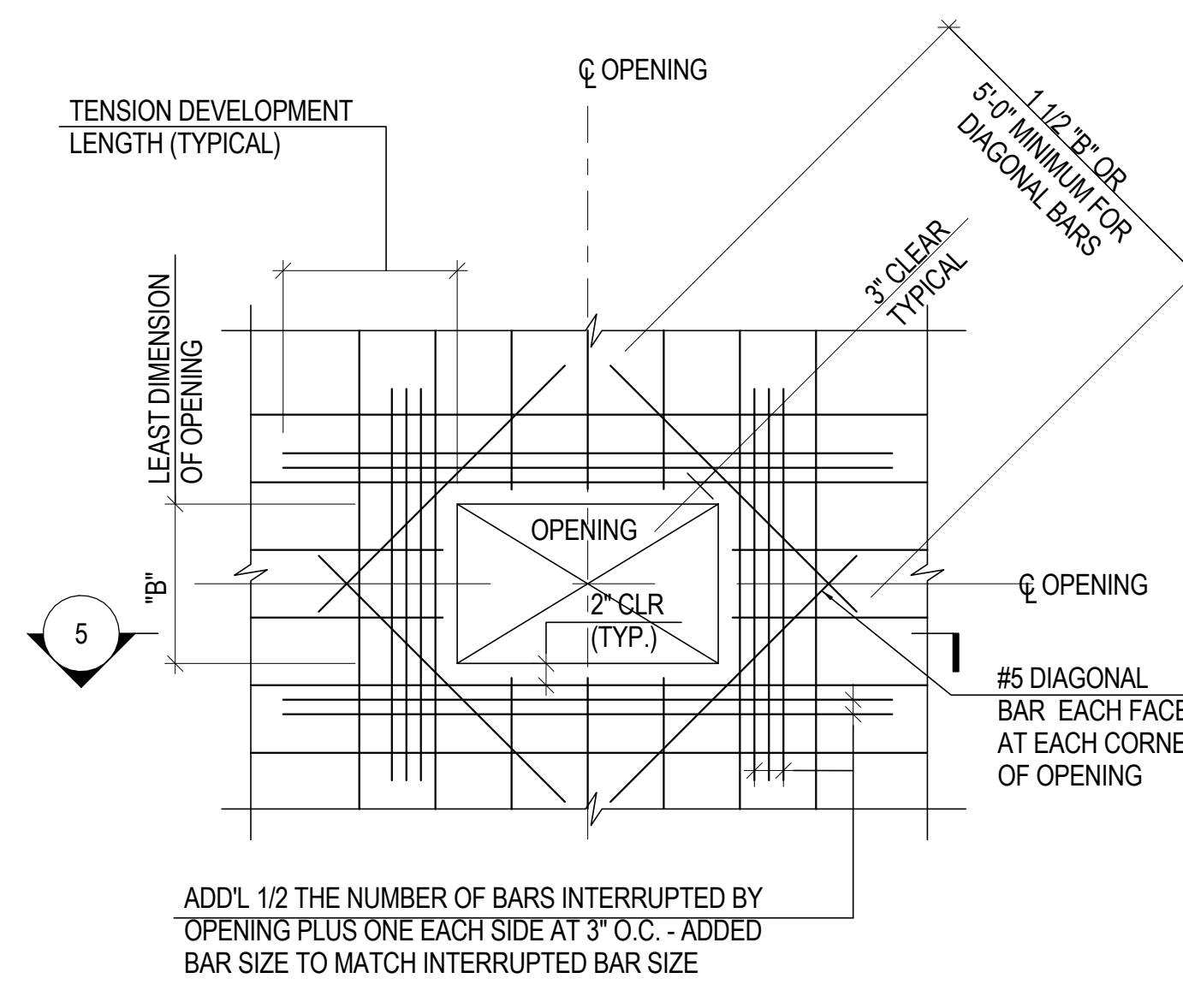
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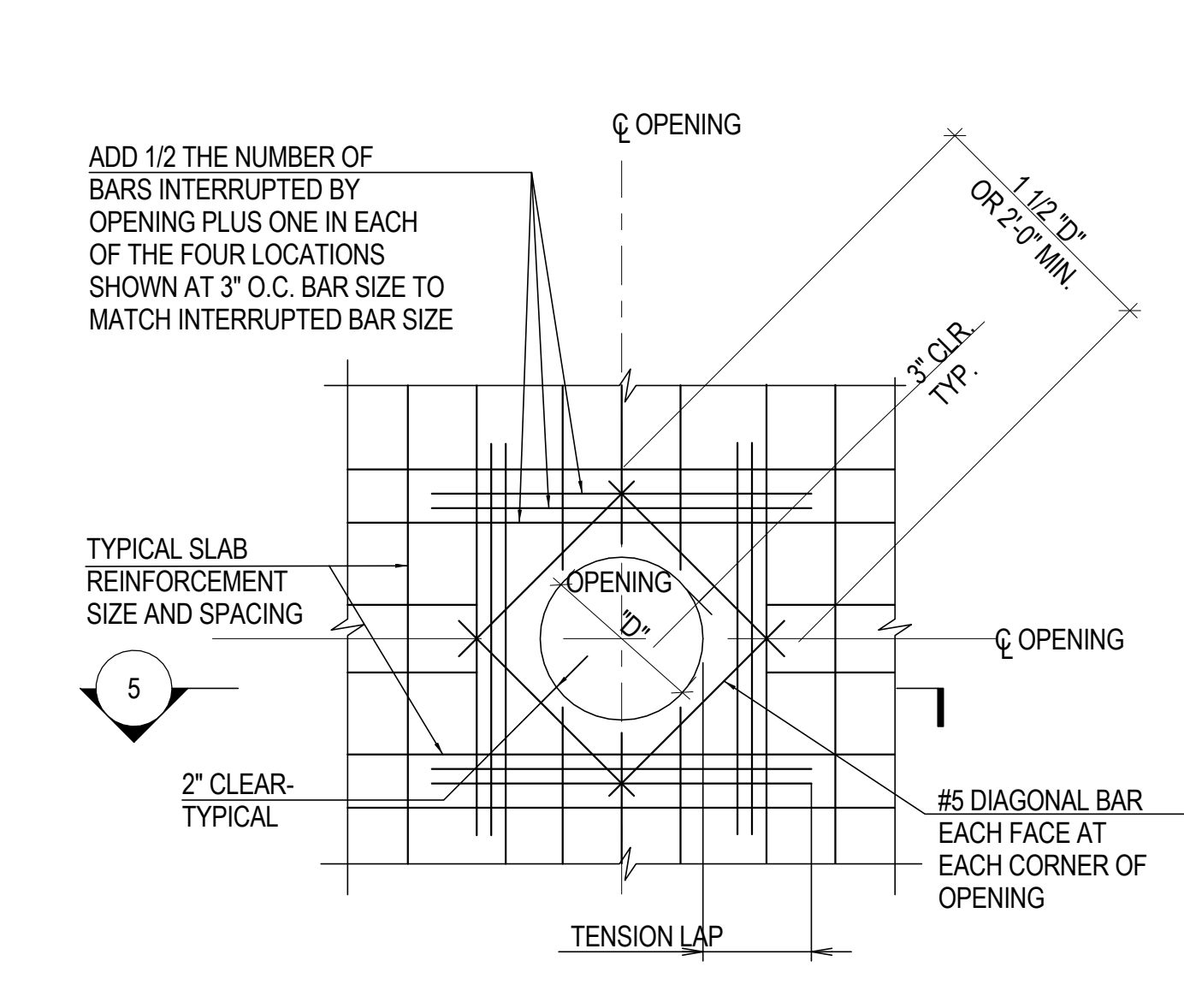
1 TYPICAL ONE WAY SLAB
NOT TO SCALE



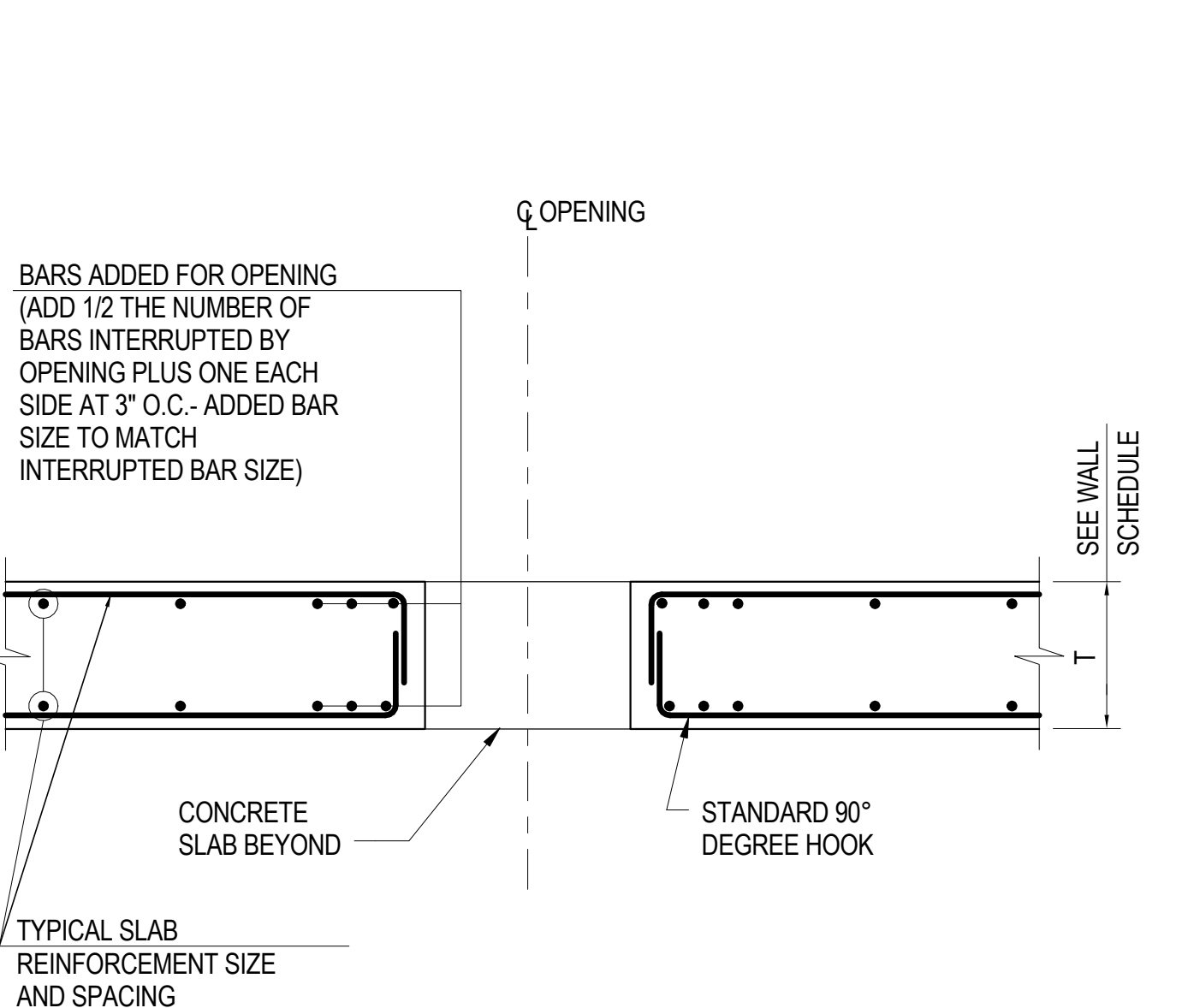
2 TYPICAL CONCRETE SLAB CONSTRUCTION JOINT
NOT TO SCALE



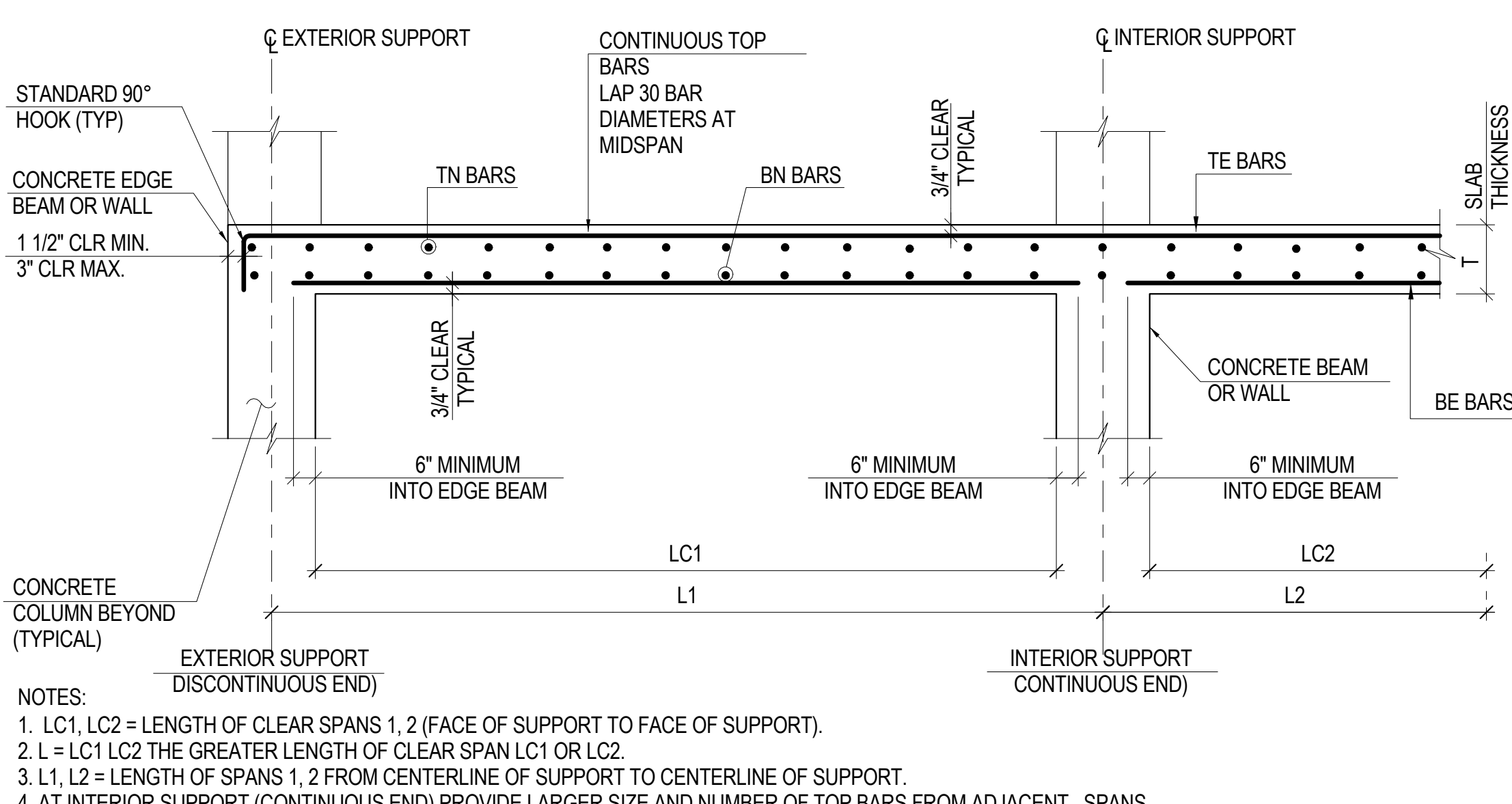
3 TYPICAL MEP RECTANGULAR SLAB OPENING DETAIL
NOT TO SCALE



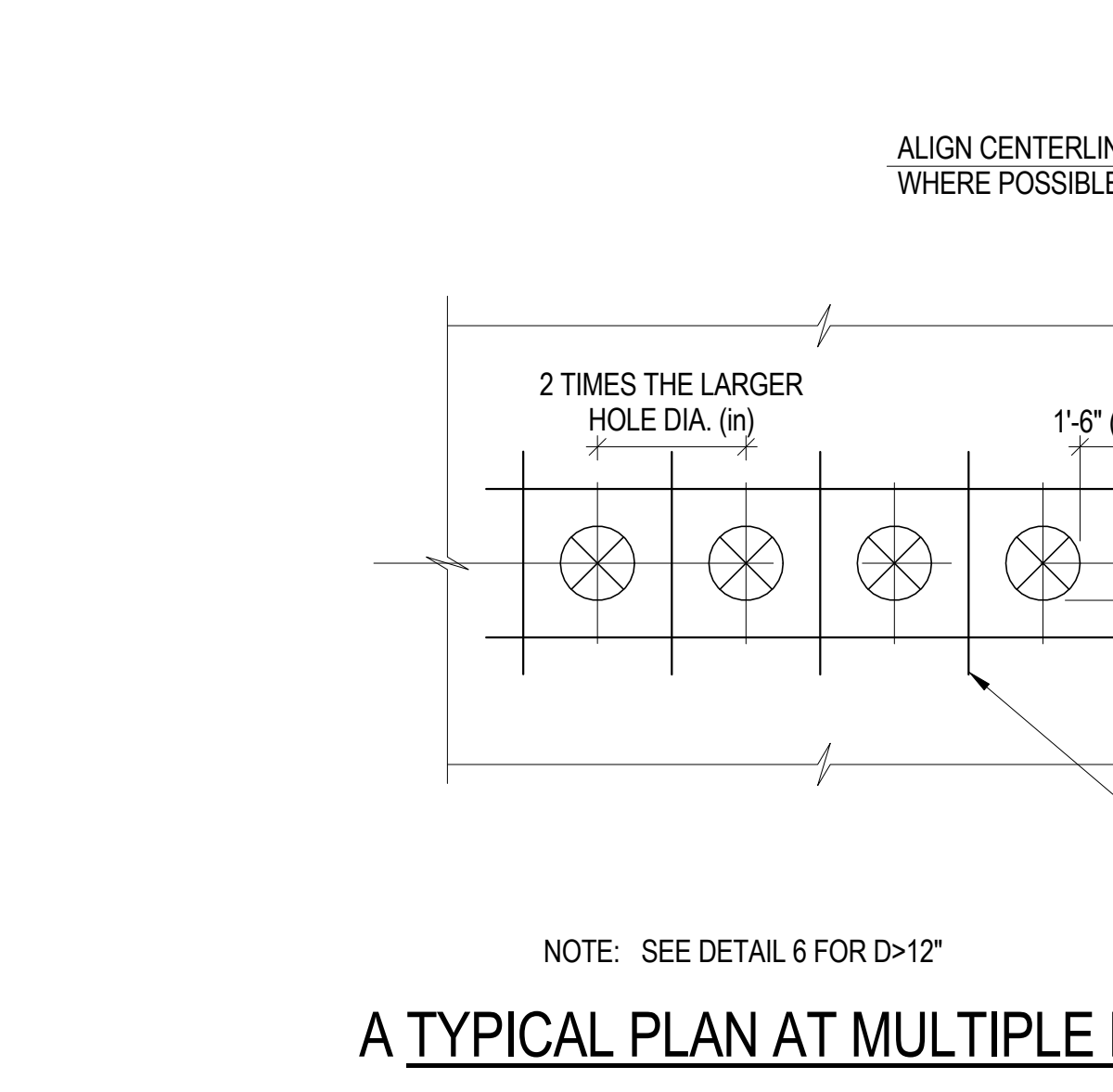
4 TYPICAL MEP CIRCULAR SLAB OPENING DETAIL D > 12"
NOT TO SCALE



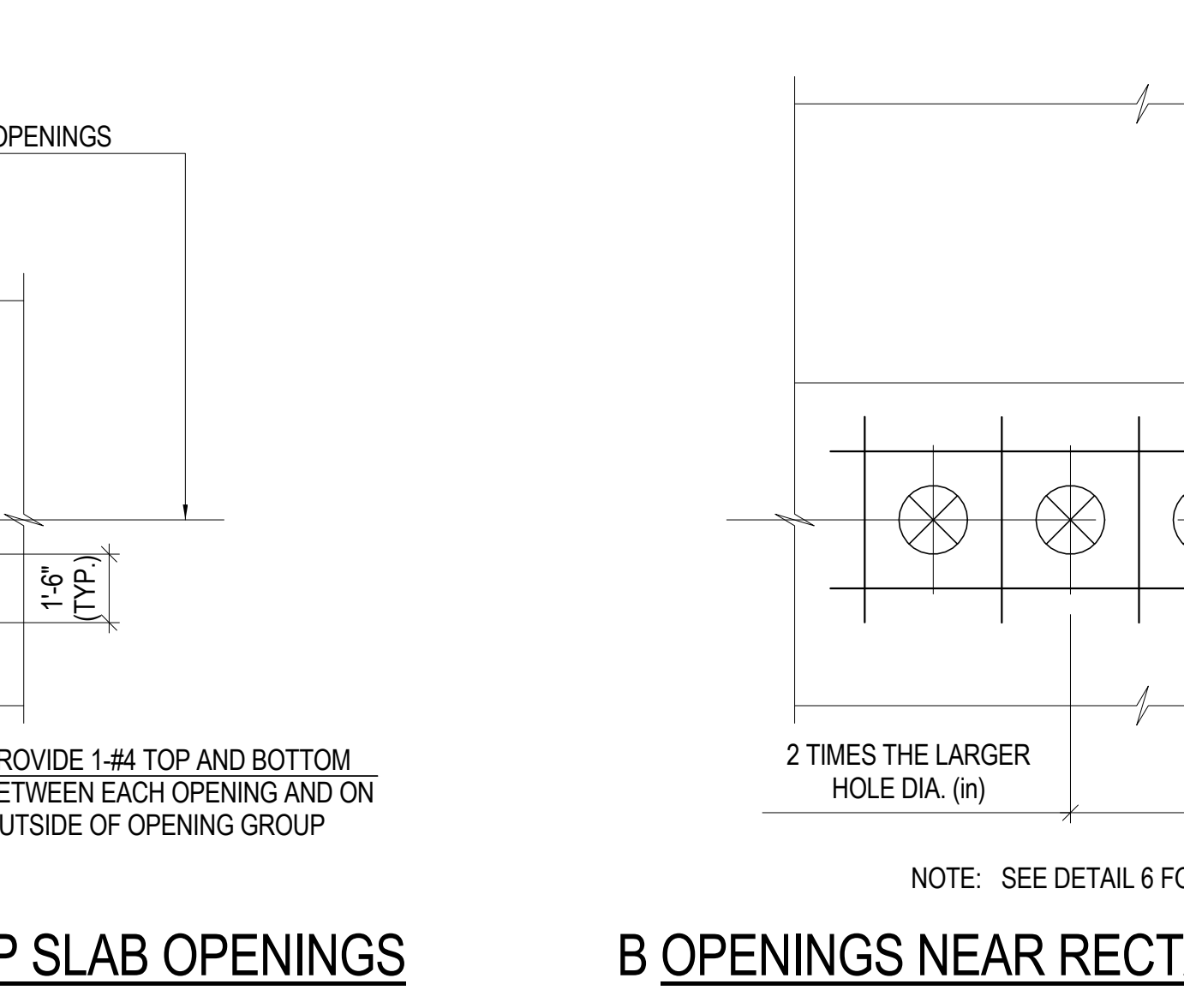
5 TYPICAL SECTION AT MEP SLAB OPENING
NOT TO SCALE



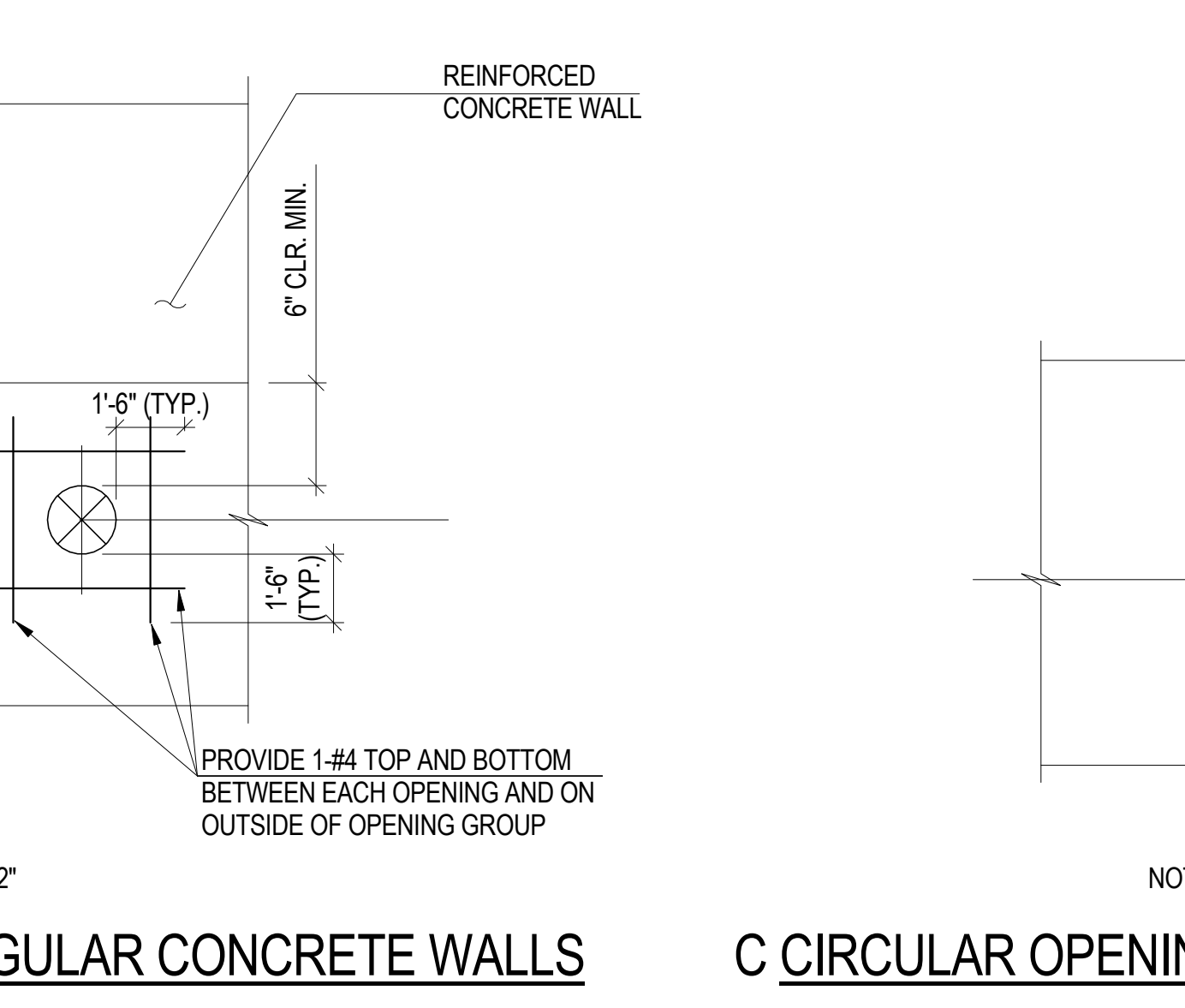
6 TYPICAL TWO WAY SLAB
NOT TO SCALE



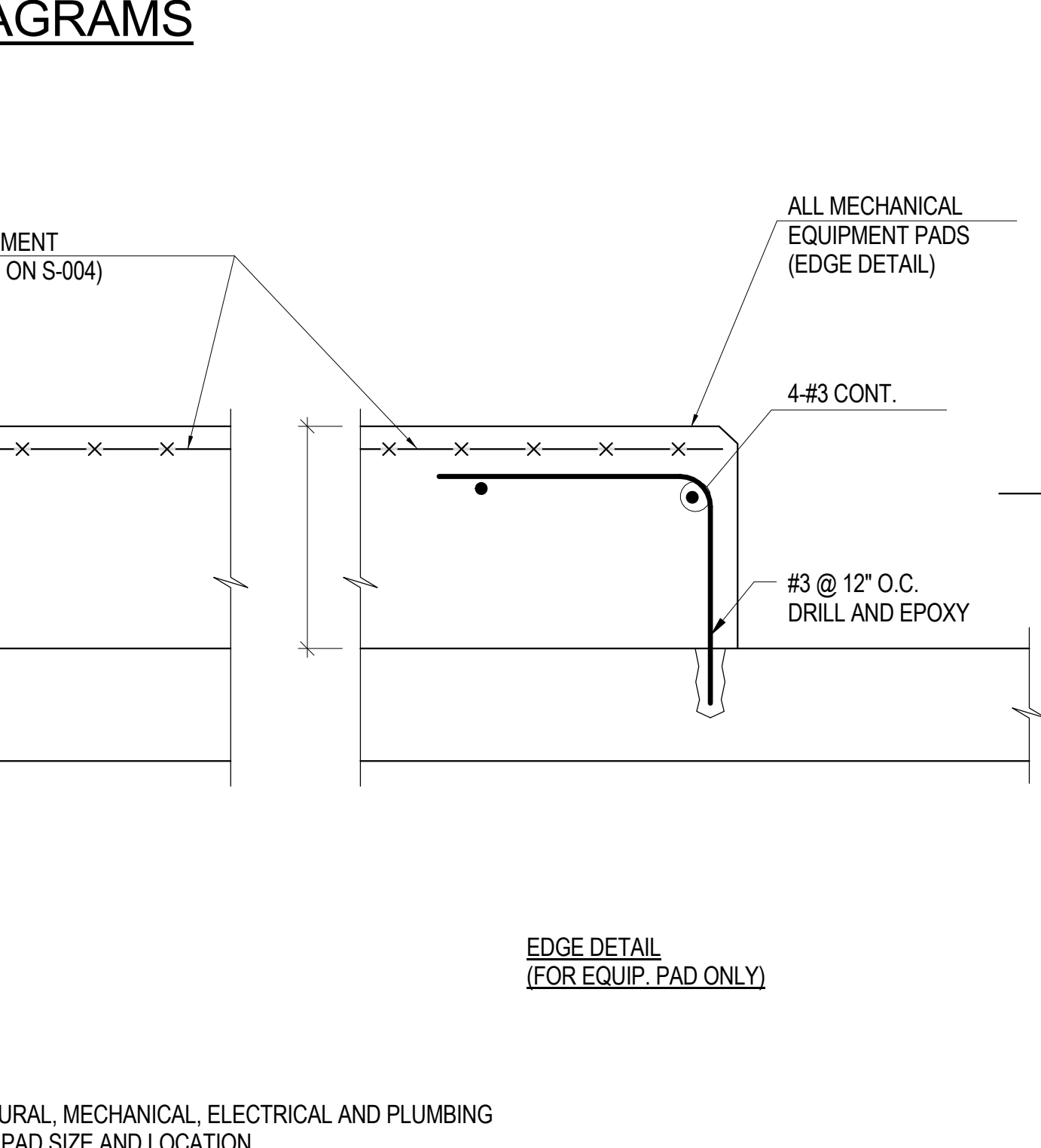
7 SLAB OPENING SYSTEM DIAGRAMS
NOT TO SCALE



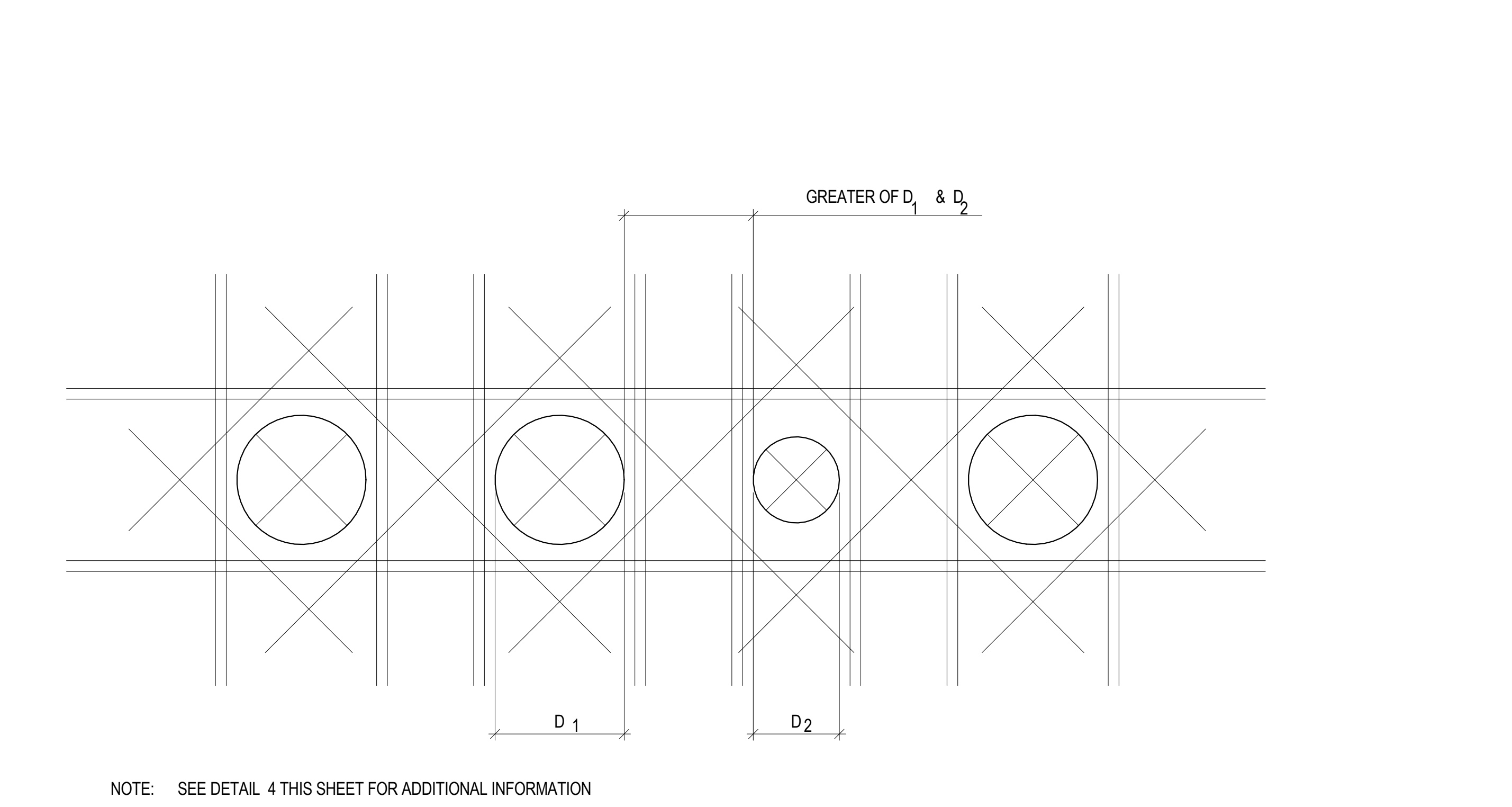
8 TYPICAL CONCRETE CURB OR PARAPET AT REINFORCED CONCRETE SLAB (H < 1'-6\")
NOT TO SCALE



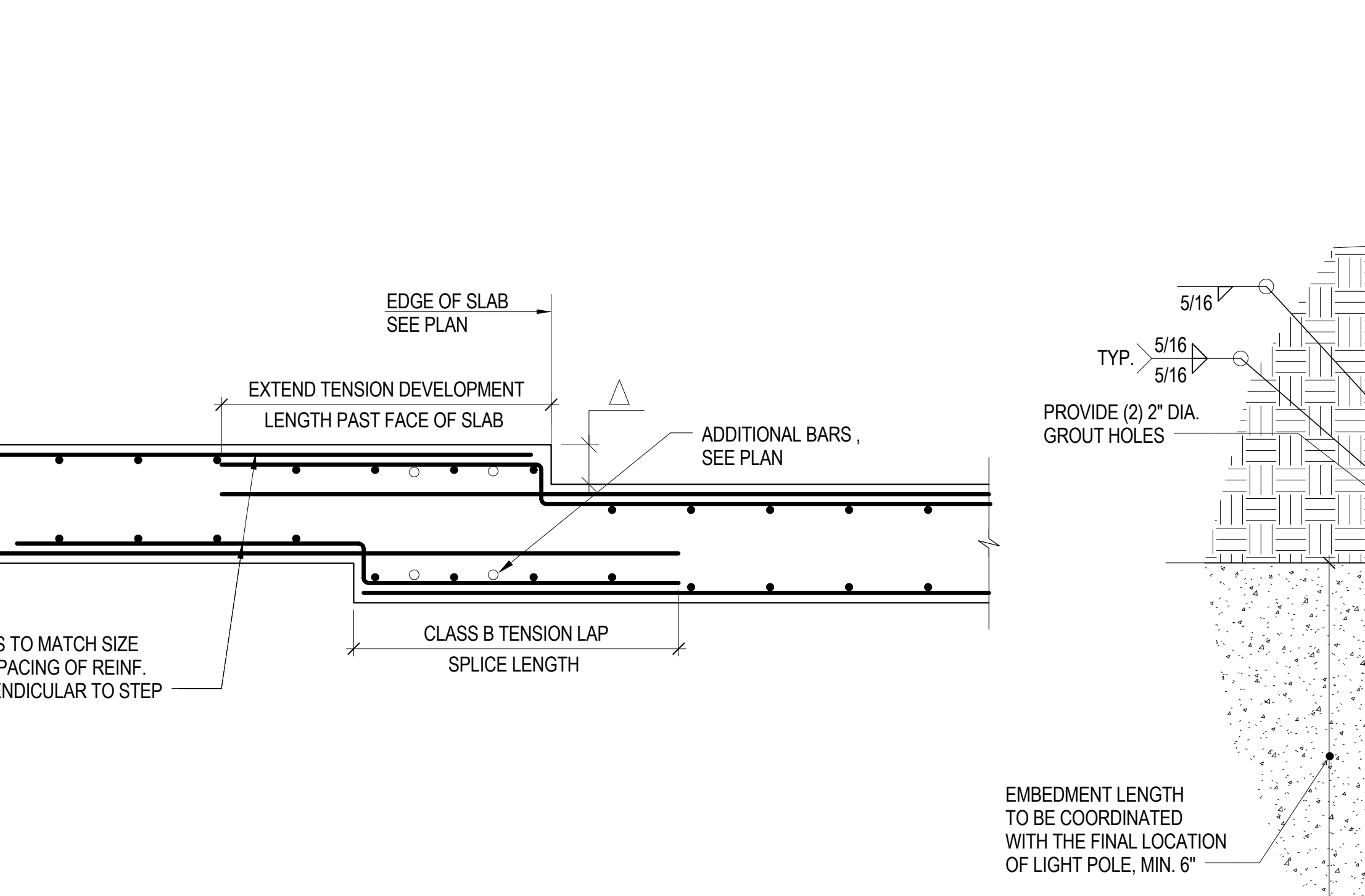
9 TYPICAL CONCRETE CURB OR PARAPET AT REINFORCED CONCRETE SLAB (H ≥ 1'-6\")
NOT TO SCALE



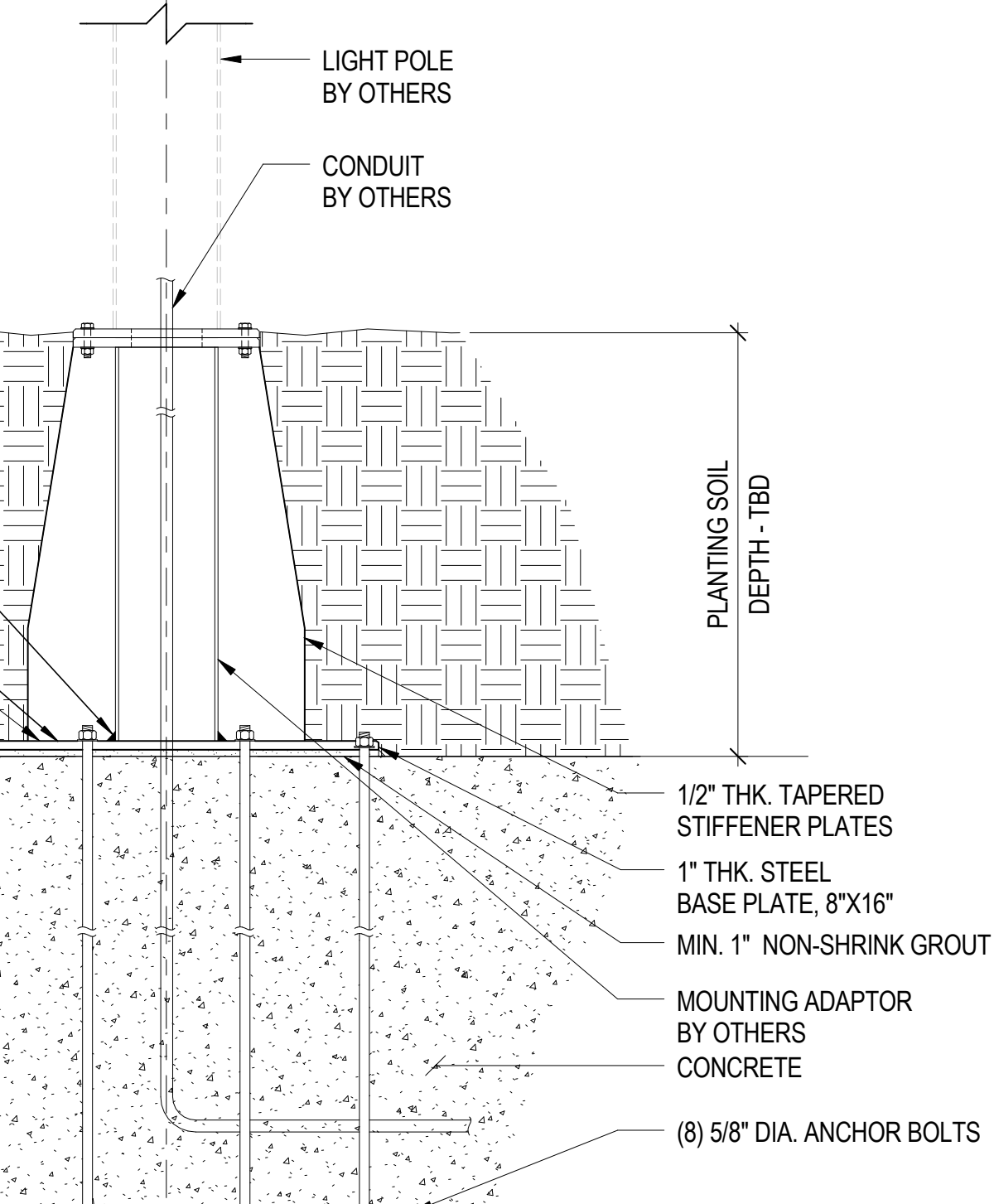
10 TYPICAL SECTION AT CONCRETE PAD OR FILL
NOT TO SCALE



11 TYPICAL DETAIL AT ALIGNED SLAB OPENING (D GREATER THAN 12\")
NOT TO SCALE



12 SLAB STEP DETAIL
NOT TO SCALE



13 PLANTER LIGHT POLE DETAIL
NOT TO SCALE

MANHATTAN WEST: RETAIL & CENTRAL PLAZA
Client
Brookfield
250 Vesey Street, 15th Floor, New York, NY 10021

Architecture/Structural Engineering
SOM
Skidmore, Owings & Merrill LLP
14 Wall Street, New York, NY 10005

Civil Engineering
Philip Habib & Associates
102 Madison Avenue #11, New York, NY 10016

MEP Engineering
Jaros Baum & Bolles
80 Pine Street, New York, NY 10005

Vertical Transportation
Edgett Williams Consulting Group, Inc.
102 East 81st Street, Suite 1, Mill Valley, California 94041

Sustainable Design
Viridian Energy & Environmental
50 Washington Street, Newark, CT 06854

Geotechnical Engineering
Mueser Rutledge Consulting Engineers
14 Penn Plaza, 22nd W, 34th Street, New York, NY 10122

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475 10th Avenue, New York, NY 10018

Security Consultant
Ducibella, Ventor & Santore
250 State Street #F1, North Haven, CT 06473

Blast Consultant
Weidinger Associates, Inc.
40 Wall Street, New York, NY 10005

Acoustical Consultant
Cerami & Associates
404 Fifth Avenue #8, New York, NY 10016

Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

Code Consultant
Code Consultants Professional Engineers PC
215 West 40th Street, 15th Floor, New York, NY 10018

Facade Maintenance Consultant
Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Seal & Signature

1. 02/16/2018 ISSUED FOR BUILDING PERMIT
No. Date Description
Sheet Name:

REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS, & DETAILS

Project No.: 211157 B-SCAN Sheet No.:
Date: 02/16/2018 **S-300.00**
Scale: As indicated Sheet No.:
File No.: S-300 Page No.: **S-300**

PLATFORM COLUMN REACTIONS										
UNIT	GRID X	GRID Y	DEAD (KIPS)	SDL (KIPS)	LANDSCAPE (KIPS)	LIVE (KIPS)	LANDSCAPE LIVE (KIPS)	SNOW (KIPS)	SHEAR X (KIPS)	SHEAR Y (KIPS)
UNIT 1	P1.1	PB.5	203	149	0	147	0	14	2	12
	P1.1	PC.5	173	115	0	122	0	11	5	14
	P1.1	PD	116	66	-1	64	0	7	4	9
	P1.1	PG	143	54	0	85	0	9	2	2
	P1.1	PH	210	98	0	137	0	12	1	-3
	P1.1	PJ	90	52	0	52	0	4	1	2
	P1.1	PK	48	35	-1	18	0	1	3	2
	P1.5	PB.5	222	258	-1	204	0	26	6	0
	P1.5	PC.5	149	142	0	148	0	17	6	0
	P1.5	PG	172	95	0	125	0	14	7	6
	P1.5	PH	172	225	1	140	0	9	0	10
	P1.5	PJ	87	127	0	49	0	10	1	1
	P1.5	PK	67	186	-1	35	0	3	3	3
	P2	PB.5	65	47	0	52	0	2	6	17
	P2	PC.5	54	23	0	39	0	1	8	8
	P2	PD	108	65	7	67	1	9	9	9
	P2	PE	56	52	58	38	8	13	5	13
	P2	PE/PF	135	58	168	23	22	16	5	13
	P2	PF/PF.7	116	64	90	39	12	15	10	6
	P2	PG	64	36	4	42	0	4	6	5
	P3	PB.5	323	517	3	316	0	37	5	18
	P3	PC.5	220	229	1	213	0	21	8	8
	P3	PD	114	69	2	64	0	9	7	9
	P3	PE	79	58	12	53	2	14	5	15
	P3	PE/PF	72	41	57	35	8	13	5	15
	P3	PF/PF.7	62	46	14	41	2	12	10	7
	P3	PG	247	129	0	167	0	23	6	6
	P3	PH	227	264	7	187	1	16	5	18
	P3	PJ	106	143	6	51	1	12	2	6
	P3	PK	92	222	0	54	0	4	6	5
	P4	PB.5	291	224	97	270	0	25	8	8
	P4	PC.5	253	204	0	210	0	26	6	8
	P4	PE	132	125	7	124	1	26	3	15
	P4	PF	103	99	19	99	3	20	3	15
	P4	PF.7	74	66	6	64	1	14	6	8
	P4	PG	63	46	-1	42	0	10	6	8
	P4	PH	122	256	20	93	0	12	6	7
	P4	PK	120	120	30	176	5	17	6	7
UNIT 2	P5	PB.5	263	180	96	254	0	22	6	8
	P5	PC.5	235	195	0	198	0	27	6	8
	P5	PE	134	142	1	152	0	26	6	9
	P5	PF	122	138	3	153	0	24	6	9
	P5	PF.7	85	88	-3	95	0	16	6	9
	P5	PG	58	44	1	40	0	10	6	7
	P5	PG.5	121	62	34	89	0	16	6	7
	P5	PH	188	100	29	154	3	14	6	8
	P5	PK	148	154	25	102	6	9	6	6
	P6	PB.5	280	166	102	212	5	23	5	8
	P6	PC.5	238	207	27	210	5	28	6	9
	P6	PE	128	122	-8	105	0	25	7	10
	P6	PF	115	108	16	73	2	22	6	10
	P6	PF.7	84	73	11	48	1	16	6	9
	P6	PG	70	48	1	46	0	11	6	10
	P6	PG.5	134	72	21	102	0	12	6	8
	P6	PH	225	112	31	176	5	17	6	9
	P6	PK	165	159	23	107	5	10	6	7
	P6.9	PB	125	56	26	80	1	10	2	12
	P6.9	PC	115	87	20	97	3	10	1	10
	P6.9	PC.5	31	12	4	18	0	2	1	11
	P6.9	PD	83	56	10	54	1	8	1	9
	P6.9	PE	27	19	43	2	0	5	14	4
	P7	PB	159	65	35	108	0	1	0	0
	P7	PC	214	136	64	165	0	14	1	4
	P7	PC.5	85	37	10	50	0	2	4	5
	P7	PD	208	125	37	116	0	16	4	7
	P7	PE	156	39	301	34	24	18	30	10
	P7	PF	150	37	326	12	32	16	38	7
	P7	PF.7	126	51	180	30	14	17	17	4
	P7	PG	279	120	37	180	-3	22	5	37
	P7	PG.5	99	46	3	80	0	2	4	33
	P7	PH	414	221	12	326	3	33	6	14
	P7	PK	200	271	6	109	1	14	5	9
	P7.4	PE/PF	81	19	189	10	17	8	2	6
	P7.4	PF	80	25	63	26	8	5	48	8
	P7.4	PF.7	45	28	2	28	6	18	0	0
	P7.5	PB	275	112	41	177	0	3	0	0
UNIT 3	P7.5/P8	PG	179	75	0	115	0	13	0	0
	P7.5/P8	PH/PJ	178	89	1	109	0	11	0	0
	P7.5/P8	PK	77	84	-1	32	0	3	0	0
	P8	PC	411	272	93	279	0	22	0	3
	P8	PC.5	188	82	20	107	0	4	0	3
	P8	PD	407	260	79	203	0	34	0	3
	P8	PE	171	55	278	44	21	20	1	3
	P8	PF	221	77	409	59	32	29	3	4
	P8	PF.7	131	48	198	41	16	17	2	3
	P8/P9	PG	145	61	0	94	0	10	0	0
	P8/P9	PH/PJ	150	73	1	90	0	9	0	0
	P8/P9	PK	63	68	-1	26	0	3	0	0
	P9 (W)	PC	71	46	14	43	0	3	1	1
	P9 (W)	PC.5	32	10	1	13	0	0	1	1
	P9 (W)	PD	74	47	16	30	0	6	1	1
	P9 (W)	PE	56	19	92	15	7	7	3	1
	P9 (W)	PF	78	29	142	23	11	11	6	2
	P9 (W)	PF.7	35	11	49	9	4	4	3	1
	P9 (E)	PC	90	59	17	54	0	4	1	1
	P9 (E)	PC.5	39	12	1	16	0	0	1	1
	P9 (E)	PD	59	58	39	39	0	6	1	1
	P9 (E)	PE	68	23	116	18	9	9	4	2
	P9 (E)	PF	98	37	178	30	14	14	7	2
	P9 (E)	PF.7	44	14	61	11	5	5	4	2
	P10 (W)	PC	70	45	14	43	0	3	1	1
	P10 (W)	PCPC.5	32	12	2	16	0	0	1	1
	P10 (W)	PD	73	47	14	34	0	6	1	1
	P10 (W)	PE	40	12	70	9	6	5	2	1
	P10 (W)	PF	57	11	139	4	5	5	1	1
	P10 (W)	PF.7	24	8	37	6	3	3	2	1
	P10 (E)	PC	141	93	29	89	0	7	1	1
	P10 (E)	PCPC.5	61	24	4	33	0	0	1	1
	P10 (E)	PD	150	97	29	70	0	13	2	2
	P10 (E)	PE	81	24	150	17	12	10	4	2
	P10 (E)	PF	116	23	287	10	27	16	10	2
	P10 (E)	PF.7	48	16	79	13	6	6	5	2

- NOTES:
- LOADS ARE SERVICE LEVEL.
 - DEAD LOAD INCLUDES BOTH SELF WEIGHT AND SUPERIMPOSED DEAD LOADS.
 - SHEAR X AND SHEAR Y USE $\frac{1}{2} = X$ AND $\frac{1}{2} = Y$.
 - PROVIDE MINIMUM SHEAR OF 1 KIP IN X AND Y DIRECTIONS.
 - REACTIONS FOR PXX (E) IN THE TABLE REPRESENTS THE REACTIONS ON TOP OF GIRDER WEB THAT IS LOCATED ON EAST SIDE OF THE COLUMN ON THE GRID.
 - REACTIONS FOR PXX (W) IN THE TABLE REPRESENTS THE REACTIONS ON TOP OF GIRDER WEB THAT IS LOCATED ON WEST SIDE OF THE COLUMN ON THE GRID.
 - LATERAL LOADS IMPOSED BY OVERLYING STRUCTURE ON PLATFORM:
 $V_x = 697$ KIPS
 $V_y = 869$ KIPS

PLATFORM COLUMN REACTIONS										
UNIT	GRID X	GRID Y	DEAD (KIPS)	SDL (KIPS)	LANDSCAPE (KIPS)	LIVE (KIPS)	LANDSCAPE LIVE (KIPS)	SNOW (KIPS)	SHEAR X (KIPS)	SHEAR Y (KIPS)
UNIT 2	P11 (W)	PC	45	24	7	24	0	2	1	1
	P11 (W)	PCPC.5	31	14	2	16	0	1	1	1
	P11 (W)	PD	45	24	6	21	0	4	1	1
	P11 (W)	PE	29	9	47	7	4	3	2	1
	P11 (W)	PF	43	11	92	7	8	6	4	1
	P11 (W)	PF.7	18	6	24	5	2	2	2	1
	P11 (E)	PC	120	65	19	65	0	5	2	1
	P11 (E)	PCPC.5	79	36	4	43	0	3	1	1
	P11 (E)	PD	119	66	16	56	0	11	2	2
	P11 (E)	PE	74	22	131	20	11	9	4	2
	P11 (E)	PF	116	29	264	18	23	16	11	2
	P11 (E)	PF.7	46	17	68	14	5	6	6	3
UNIT 3	P12	PC	142	52	4	82	0	0	0	3
	P12	PCPC.5	171	58	1	79	0	11	0	4
	P12	PD/PE	127	76	0	104	0	17	0	4
	P12	PE	154	41	315	40	26	20	1	8
	P12	PF	206	85	366	71	28	30	3	9
	P12	PF.7	87	35	147	29	11	12	1	7
	P13	PC	114	43	2	73	0	0	0	2
	P13	PCPC.5	130	44	0	64	0	8	0	2
	P13	PD/PE	97	60	-1	83	0	14	0	2
	P13	PE	92	28	155	29	14	12	1	4
	P13	PF	140	55	217	48	17	20	2	6
	P13	PF.7	53	20	68	18	5	7	1	5
UNIT 3	P13.5	PA.5/PB	166	69	14	105	-1	7	0	1
	P13.4/P13.5	PC	87	29	-10	39	-1	5	0	2
	P13.4/P13.5	PCPC.5	39	21	15	27	-2	4	1	2
	P13.4	PD/PE	48	29	1	36	0	6	1	3
	P13.4	PE	73	22	124	22	11	9	2	6
	P13.4	PF	100	25	210	11	21	13	3	5
	P13.4	PF.7	54	19	53	17	4	6	2	5
	P14	PA.5	168	63	157	73	16	24	1	1
	P14	PC	170	54	156	79	16	23	1	1
	P14	PC.5/PD	96	25	91	30	9	12	1	2
	P14	PD/PE	102	23	94	32	14	13	1	3
	P14	PE	132	26	211	30	23	18	6	3
P14	PF	182	-26	427	-2	50	25	11	3	
P14	PF.7	64	22	73	19	7	8	1	4	
P14	PF.7/PG	69	37	33	35	3	9	1	0	
P14	PG.5	151	92	82	87	6	23	0	0	
P14	PF.7	57	21	54	18	7	8	5	1	
P14/P15	PF.7/PG	49	14	94	11	7	6	1	0	
P14/P15	PG.5	93	0	204	22	16	13	0	0	
P15	PA.5	165	124	127	69	13	22	0	1	
P15	PC	143	162	65	68	6	19	0	2	
P15	PC.5/PD	86	92	64	31	7	10	1	2	
P15	PD/PE	95	94	61	32	9	12	1	3	
P15	PE	117	128	60	49	8	15	5	4	
P15	PF	159	159	169	43	23	21	10	5	
P15	PF.7	62	33	31	30	4	5	4	1	
P15	PF.7/PG	40	65	-5	21	0	5	1	5	
P15	PG.5	97	151	-16	55	-1	12	0	6	
P15	PJ	197	256	88	106	7	28	0	0	

NORTH RETAIL - STRUCTURAL STEEL COLUMN SCHEDULE																					
LOCATION	P1.1				P1.5				P2						P3						P3/P4
	PA	PB.5	PC.5	PD	PA	PB.5	PC.5	PD	PA	PB.5	PC.5	PD	PE/PF	PF	PA	PB.5	PC.5	PD	PE	PE/PF	PA
LEVEL 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W30x211	-	-	-	-	-
LEVEL 4	-	-	-	-	W30x211	W30x211	-	-	-	-	-	-	-	-	W30x211	W30x211	-	-	-	-	-
LEVEL 2	W30x211	W30x211	W30x211	W30x211	W30x211	W30x211	W30x211	W30x211	-	-	-	-	-	-	W30x211	W30x211	W14x398	W14x398	-	-	W14x176
LEVEL 1	W30x211 (280)	W30x211	W30x211	W30x211	W30x211 (350)	W30x211 (630)	W30x211 (560)	W30x211 (200)	-	-	-	-	-	-	W30x211 (420)	W30x211	W14x398	W14x398	-	-	W14x176 (350)
BASE PLATE	1.5" BASE PLATE SEE DETAIL 3/S-407				1.5" BASE PLATE SEE DETAIL 11A/S-513	33x17.5x1.5 w/ 8 3/4" BOLTS SEE DETAIL 4/S-407	33x17.5x1.5 w/ 8 3/4" BOLTS SEE DETAIL 4/S-407	33x17.5x1.5 w/ 8 3/4" BOLTS SEE DETAIL 4/S-407							1.5" BASE PLATE SEE DETAIL 11A/S-513						1.5" BASE PLATE SEE DETAIL 11A/S-513
PLATFORM	-	W30x357 SEE DETAIL 3/S-406	W30x357 SEE DETAIL 3/S-406	W30x292 SEE DETAIL 3/S-406	W14X311	W30x357 SEE DETAIL 2/S-405	W30x357 SEE DETAIL 2/S-405	-	W14X311	W30x391 SEE DETAIL 2/S-405	W14X398 SEE DETAIL 3/S-405	W14X398 SEE DETAIL 3/S-405	W30X211 SEE DETAIL 2/S-405	W30X211 SEE DETAIL 2/S-405	W14X311	W30x357 SEE DETAIL 2/S-405	W14X398 SEE DETAIL 3/S-405	W14X398 SEE DETAIL 3/S-405	W30X211 SEE DETAIL 2/S-405	W30X211 SEE DETAIL 2/S-405	W14X311
BASE PLATE		SLIDER			SLIDER				SLIDER						SLIDER						SLIDER
CAP BEAM	-	-	-	-	W14X311 SEE DETAIL 1/S-415	-	-	-	W14X311 SEE DETAIL 1/S-415	-	-	-	-	-	W14X311 SEE DETAIL 1/S-415	-	-	-	-	-	W14X311 SEE DETAIL 1/S-415
BASE PLATE	SEE DETAIL 2/S-415																				
NOTES: * BASE PLATES SHOULD BE CENTERED ABOUT THE COLUMN CENTER, UNLESS NOTED OTHERWISE																					
1	NOMENCLATURE FOR BASE PLATE DIMENSIONS: WHERE, L = LENGTH ALONG MAJOR AXIS OF THE COLUMN SECTION W = LENGTH ALONG MINOR AXIS OF THE COLUMN SECTION T = THICKNESS OF BASE PLATE										2 TRANSFER COLUMN LOADS INDICATED IN SCHEDULE ARE FACTORED LRFD LOADS IN KIPS.										

NORTH RETAIL - STRUCTURAL STEEL COLUMN SCHEDULE CONT.

LOCATION		P4					P5					P6					P6.9							
LEVEL		PA	PB.5	PC.5	PE	PF	PA	PB.5	PC.5	PE	PF	PA	PB	PB.5	PC.5	PE	PF	PA	PB	PB.5/PC	PC	PC.5	PD	PE
LEVEL 5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEVEL 4		-	-	-	-	-	-	-	-	-	-	W14X211	W14X211 (100) 1.5" BASE PLATE SEE DETAIL 2/S-407	W14X211	-	-	-	W14X211	W14X211	W14X211 (100) 1.5" BASE PLATE SEE DETAIL 2/S-407	-	-	-	-
LEVEL 2		W14X145	W14X211	W14X211	-	-	W14X311	W14X211	W14X176	-	-	W14X233	-	W14X211	W14X176	-	-	W14X211	W14X211	-	W14X176	-	W14X176	-
LEVEL 1		W14X176	W14X211	W14X211	-	-	W14X311	W14X211	W14X176	-	-	W14X233	-	W14X211	W14X176	-	-	W14X211	W14X211	-	W14X176	-	W14X176	-
PLATFORM		W14X311	W14X370	W14X311	W30X191	W30X191	W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	-	W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	-	W14X311	W14X311	W14X311	W14X311
		SLIDER					SLIDER					SLIDER						SLIDER						
BASE PLATE		SEE DETAIL 1/S-416	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 2/S-405	SEE DETAIL 2/S-405	SEE DETAIL 1/S-416	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 1/S-416		-	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 1/S-416	SEE DETAIL 2/S-515	-	SEE DETAIL 2/S-515	SEE DETAIL 2/S-515	SEE DETAIL 2/S-515	SEE DETAIL 2/S-515
NOTES: * BASE PLATES SHOULD BE CENTERED ABOUT THE COLUMN CENTER, UNLESS NOTED OTHERWISE																								
1	NOMENCLATURE FOR BASE PLATE DIMENSIONS: WHERE, L = LENGTH ALONG MAJOR AXIS OF THE COLUMN SECTION W = LENGTH ALONG MINOR AXIS OF THE COLUMN SECTION T = THICKNESS OF BASE PLATE											2 TRANSFER COLUMN LOADS INDICATED IN SCHEDULE ARE FACTORED LRFD LOADS IN KIPS.												

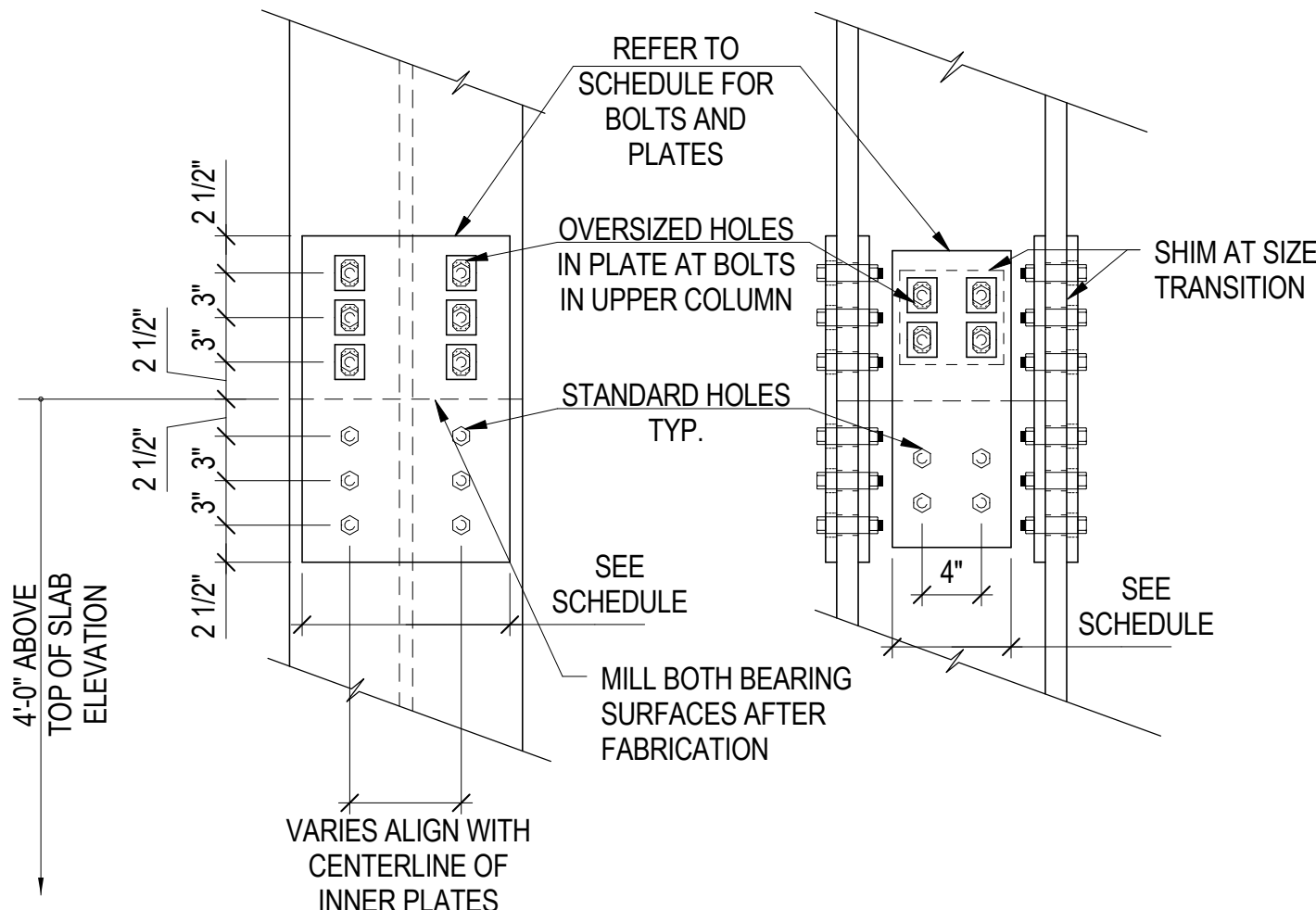
SOUTH RETAIL - STRUCTURAL STEEL COLUMN SCHEDULE

LOCATION	P1.1				P1.5				P2				P3						P4						P5						P6										
LEVEL	PG	PH	PJ	PK		PG	PG/PG.5	PH	PJ	PK	PF/PF.7	PG	PK	PL	PF/PF.7	PG	PG.5/PH	PH	PJ	PK	PL	PF.7	PG	PG.5	PH	PJ	PK	PL	PF.7	PG	PG.5	PH	PK	PF.7	PG	PG.5	PH	PJ	PK		
ROOF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LEVEL 3	-	W14X145 (160)	W14X145 (100)	W14X145 (100)	-	W14x257 (170)	-	W14X211	W14X211	-	-	-	-	-	-	-	W14x257 (170)	-	W14X211	W14X211	-	-	-	-	-	W14X311 (100)	W14X211	-	-	-	-	-	-	-	W14X311	-	-	-	-	W14X311 (100)	W14X311
BASE PLATE		1.5" BASE PLATE SEE DETAIL 2/S-407	1.5" BASE PLATE SEE DETAIL 2/S-407	1.5" BASE PLATE SEE DETAIL 2/S-407		2.5" BASE PLATE SEE DETAIL 3/S-407											2.5" BASE PLATE SEE DETAIL 3/S-407								2.25" BASE PLATE SEE DETAIL 3/S-407												2.25" BASE PLATE SEE DETAIL 3/S-407				
LEVEL 2	W14X211	W14X211	W14X211	W14X211	W14X193	-	W30X148	W14X211	W14X211	-	-	-	-	-	-	W14X311	-	W30X191	W14X211	W14X211	-	-	-	-	W14X193 (490)	-	W14X211	-	-	-	-	-	-	W14X311	-	-	-	W14X311 (440)	-	W14X311	
BASE PLATE																									1.75" BASE PLATE SEE DETAIL 2/S-407												1.75" BASE PLATE SEE DETAIL 2/S-407				
LEVEL 1	W14X211	W14X211	W14X211	W14X211	W14X193 (500)	-	W30X191	W14X311	W14X311	-	-	-	-	-	-	W14X311	-	W30X211	W14X311	W14X311	-	-	-	W14X145	W14X193	-	W14X211	-	-	-	W14X311	W14X311	W14X311	-	-	W14X311	W14X311	-	W14X311		
BASE PLATE					1.5" BASE PLATE SEE DETAIL 11A/S-513																					W14X211	-	-	-	W14X311	W14X311	W14X311			W14X311	W14X311	-	W14X311			
PLATFORM	W14X211	W14X283	W14X211	W14X211	W14X311	-	W30X357	W14X311	W14X311	W14X311	W14X311				W14X311	W14X311	-	W30X357	W14X311	W14X311			W14X311	W14X311	W14X311	-	W14X311		W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	W14X311	-	W14X311		
BASE PLATE	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405 & PLAN FOR PEDESTAL DIMENSIONS		SEE DETAIL 2/S-405	SEE DETAIL 3/S-405 (SEE NOTE 3)	SEE DETAIL 3/S-405 (SEE NOTE 3)	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405				SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 2/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405		SEE DETAIL 3/S-405		SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405		SEE DETAIL 3/S-405	
NOTES: * BASE PLATES SHOULD BE CENTERED ABOUT THE COLUMN CENTER, UNLESS NOTED OTHERWISE																																									
1	NOMENCLATURE FOR BASE PLATE DIMENSIONS: WHERE, L = LENGTH ALONG MAJOR AXIS OF THE COLUMN SECTION W = LENGTH ALONG MINOR AXIS OF THE COLUMN SECTION T = THICKNESS OF BASE PLATE										2 TRANSFER COLUMN LOADS INDICATED IN SCHEDULE ARE FACTORED LRFD LOADS IN KIPS.										3 SEE PLAN FOR PEDESTAL DIMENSIONS																				

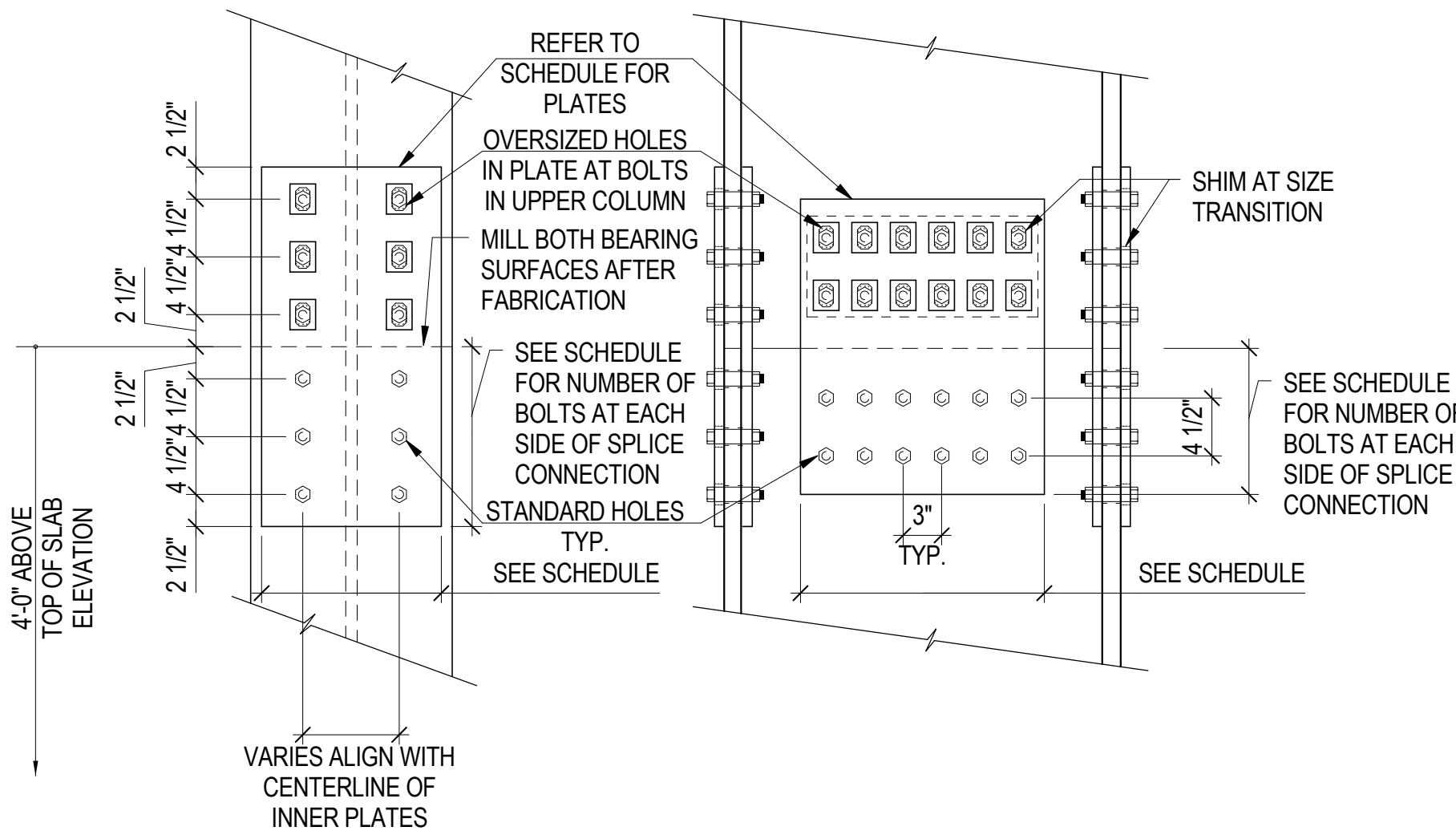
SOUTH RETAIL - STRUCTURAL STEEL COLUMN SCHEDULE CONT.

LOCATION	P7						P7.4	P7/P7.5						P7.5			P7.5/P8			P8						P9	P10	P11	P12	P13	P13.4	P14	P14/P15	P15		
	PF.7	PG	PG.5	PG.5/PH	PH	PJ	PK	PF.7	PK/PL	PK/PL	PL	PL	PK	PL	PG.5/PH	PJ	PK	PG	PH/PJ	PK	PF.7	PG	PH	PH/PJ	PK	PK	PL	PF.7	PF.7	PF.7	PF.7	PF.7	PF.7	PF.7	PF.7	PF.7
ROOF	-	-	-															-	-	-	-															
LEVEL 3	-	-	-	NO LONGER APPLICABLE	-	W14X311 (100)	W14X311 (100)	-										-	-	-	-				W14X90	W14X90	-	-	-	-	-	-	-	-	-	-
LEVEL 2	-	W14X370	-	-	W14X311	-	W14X311	-										-	-	-	-	W14X370	-	W14X311	W14X311	-	-	-	-	-	-	-	-	-	-	
LEVEL 1	-	W14X370	-	-	W14X311	-	W14X311	-										-	-	-	-	W14X370	-	W14X311	W14X311	-	-	-	-	-	-	-	-	-	-	
PLATFORM	W14X311	W30X357	W30X292	-	W14X398	-	W14x311	W14X311										W14X311	W14X311	W14X311	W14X500	W14X311	-	W14X311	W14X311	-	-	W14X500	W14X500	W14X500	W14X500	W14X500	W14X500	W14X500	W14X500	W14X500
BASE PLATE	SEE DETAIL 3/S-405	SEE DETAIL 2/S-405	SEE DETAIL 2/S-405		23" X 23" X 2" SEE DETAIL 3/S-405		SEE DETAIL 3/S-405	SEE DETAIL 3/S-405										SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	20x18.5x2						SEE DETAIL 1/S-406	SEE DETAIL 1/S-406	SEE DETAIL 1/S-406	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405	SEE DETAIL 3/S-405
NOTES: * BASE PLATES SHOULD BE CENTERED ABOUT THE COLUMN CENTER, UNLESS NOTED OTHERWISE																																				
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2 COLUMN TO BE CONNECTED TO EXISTING GIRDER BELOW, VERIFY EXISTING GIRDER LOCATION AND ELEVATION IN FIELD																																				
3 TRANSFER COLUMN LOADS INDICATED IN SCHEDULE ARE FACTORED LRFD LOADS IN KIPS.																																				

NORTH RETAIL BAR BULKHEAD- STRUCTURAL STEEL COLUMN SCHEDULE																
LOCATION	P1.1/P1.5				P1.5		P1.5/P2		P2/P3		P3		P3/P4			
LEVEL	PA.5/PB	PB/PB.5	PB.5/PC	PC	PA.5/PB	PC	PC	PC	PB/PB.5	PC	PA.5/PB	PB/PB.5	PB.5/PC	PC		
OVERRUN	-	-		-	-	-		-						-		
LEVEL 5 BASE PLATE	-	-	-	-	-	-	-	-	HSSR 625x0.5 (150)							
									1.5" Base Plate Sim. To detail 13S-514	HSSR 625x0.5	HSS6x0.5	HSSR 625x0.5	HSSR 625x0.5	HSS6x0.5		
LEVEL 4	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)	HSS6x0.5 (100)		HSSR 625x0.5 (150)	HSS6x0.5 (100)	HSSR 625x0.5 (150)	HSS6 625x0.5 (150)	HSS6x0.5 (100)		
	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	-	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514	1.5" Base Plate Sim. To detail 13S-514		



1 TYPICAL COLUMN SPLICE
NOT TO SCALE



2 TYPICAL W30 COLUMN SPLICE
NOT TO SCALE

STEEL COLUMN SPLICE SCHEDULE							
COLUMN SIZE	BOLTS	WEB (BOTH SIDES)	FLANGE		# OF BOLTS - WEB (ROW X COLUMN)	# OF BOLTS - FLANGE (ROW X COLUMN)	
			INNER PLATE	OUTER PLATE			
W12X65	1-1/8 A490-X	9/16 X 8	9/16 X 4	7/16 X 12	3 X 2 = 6	3 X 2 = 6	
W12X79	1-1/8 A490-X	9/16 X 8	9/16 X 4	7/16 X 12	3 X 2 = 6	4 X 2 = 8	
W12X96	1-1/8 A490-X	9/16 X 8	9/16 X 4	7/16 X 12	3 X 2 = 6	4 X 2 = 8	
W12X170	1-1/8 A490-X	5/8 X 8	3/4 X 4	1/2 X 12	4 X 2 = 8	5 X 2 = 10	
W12X210	1-1/8 A490-X	3/4 X 8	3/4 X 4	1/2 X 12	4 X 2 = 8	6 X 2 = 12	
W14X61	1-1/8 A490-X	9/16 X 8	9/16 X 3-1/2	7/16 X 10	3 X 2 = 6	3 X 2 = 6	
W14X82	1-1/8 A490-X	9/16 X 8	9/16 X 3-1/2	7/16 X 10	3 X 2 = 6	3 X 2 = 6	
W14X90	1-1/8 A490-X	9/16 X 8	9/16 X 5	7/16 X 14	4 X 2 = 8	4 X 2 = 8	
W14X145	1-1/8 A490-X	9/16 X 8	9/16 X 5	7/16 X 15	4 X 2 = 8	6 X 2 = 12	
W14X176	1-1/8 A490-X	9/16 X 8	3/4 X 5	1/2 X 15	4 X 2 = 8	6 X 2 = 12	
W14X193	1-1/8 A490-X	3/4 X 8	3/4 X 5	1/2 X 15	4 X 2 = 8	6 X 2 = 12	
W14X211	1-1/8 A490-X	3/4 X 8	7/8 X 5	5/8 X 15	4 X 2 = 8	6 X 2 = 12	
W14X233	1-1/8 A490-X	5/8 X 8	7/8 X 5	5/8 X 15	4 X 2 = 8	6 X 2 = 12	
W14X257	1-1/8 A490-X	5/8 X 8	7/8 X 5-1/2	5/8 X 16	4 X 2 = 8	7 X 2 = 14	
W14X311	1-1/8 A490-X	1 X 8	7/8 X 5-1/2	5/8 X 16	4 X 2 = 8	7 X 2 = 14	
W14X370	1-1/8 A490-X	1-1/4 X 8	7/8 X 5-1/2	5/8 X 16	4 X 2 = 8	9 X 2 = 18	
W14X398	1-1/8 A490-X	1-1/4 X 8	1-1/4 X 5-1/2	7/8 X 16	4 X 2 = 8	9 X 2 = 18	
W14X500	1-1/8 A490-X	1-1/2 X 8	1-1/4 X 5-1/2	7/8 X 16	4 X 2 = 8	9 X 2 = 18	
W30X145	1-1/8 A490-X	9/16 X 19	3/4 X 5-1/2	1/2 X 10	6 X 2 = 12	5 X 2 = 10	
W30X191	1-1/8 A490-X	9/16 X 19	3/4 X 5-1/2	1/2 X 15	6 X 2 = 12	6 X 2 = 12	
W30X211	1-1/8 A490-X	9/16 X 19	3/4 X 5-1/2	1/2 X 15	6 X 2 = 12	7 X 2 = 14	
W30X292	1-1/8 A490-X	3/4 X 19	1 X 5-1/2	3/4 X 15	6 X 2 = 12	7 X 2 = 14	
W30X357	1-1/8 A490-X	3/4 X 19	1 X 5-1/2	3/4 X 15	6 X 2 = 12	7 X 2 = 14	



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650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:
33RD STREET
31ST STREET
9TH AVENUE

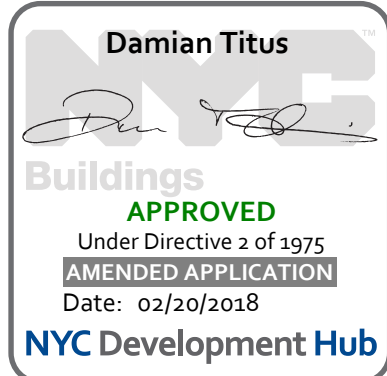
Seal & Signature:
Seal of the City of New York
Professional Engineer
Damian Titus
No. 014322

Project No.: 211157
Date: 02/16/2018
Scale: 1" = 1'-0"

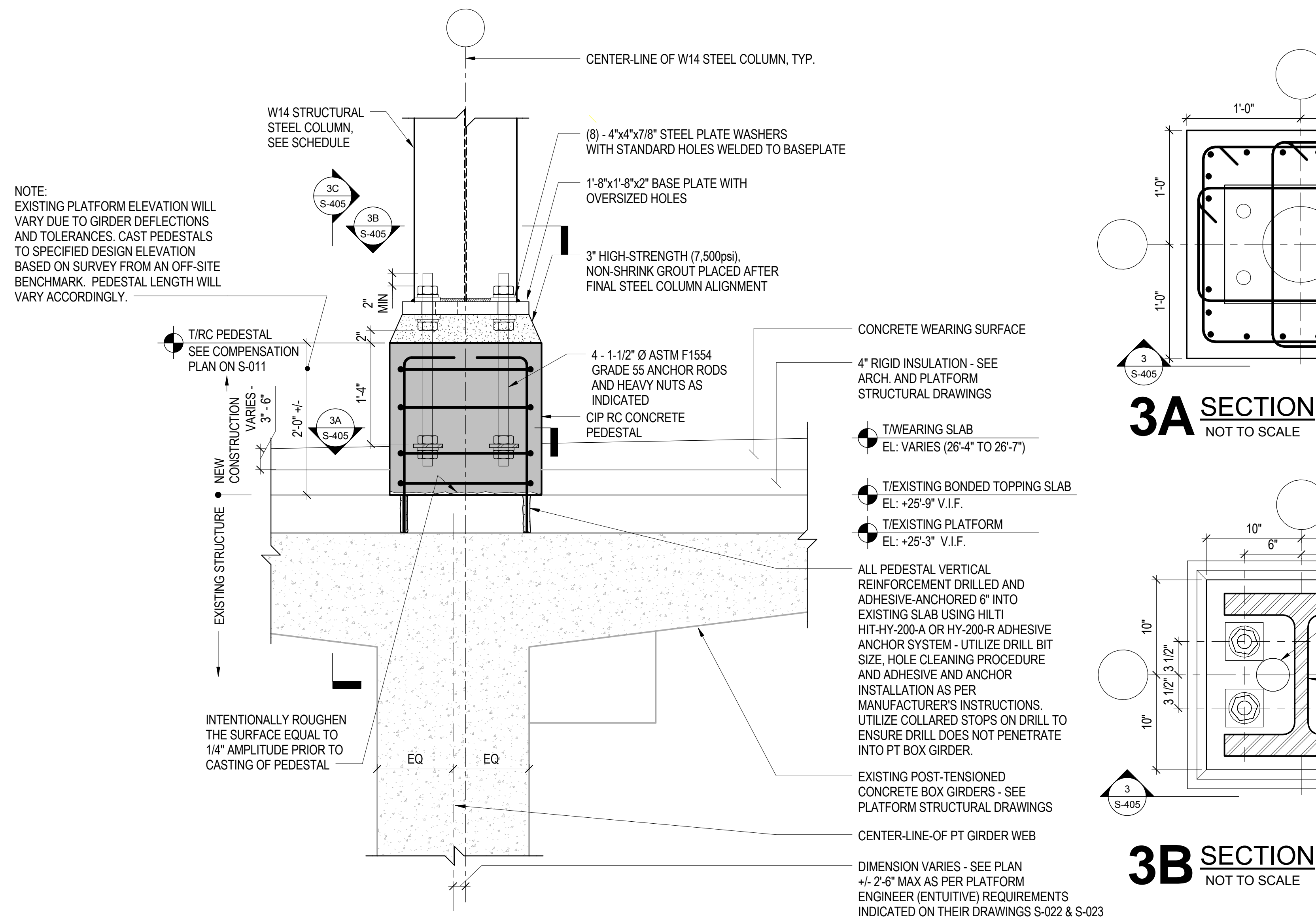
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Sheet No.: S-402
Page No.: 3-402

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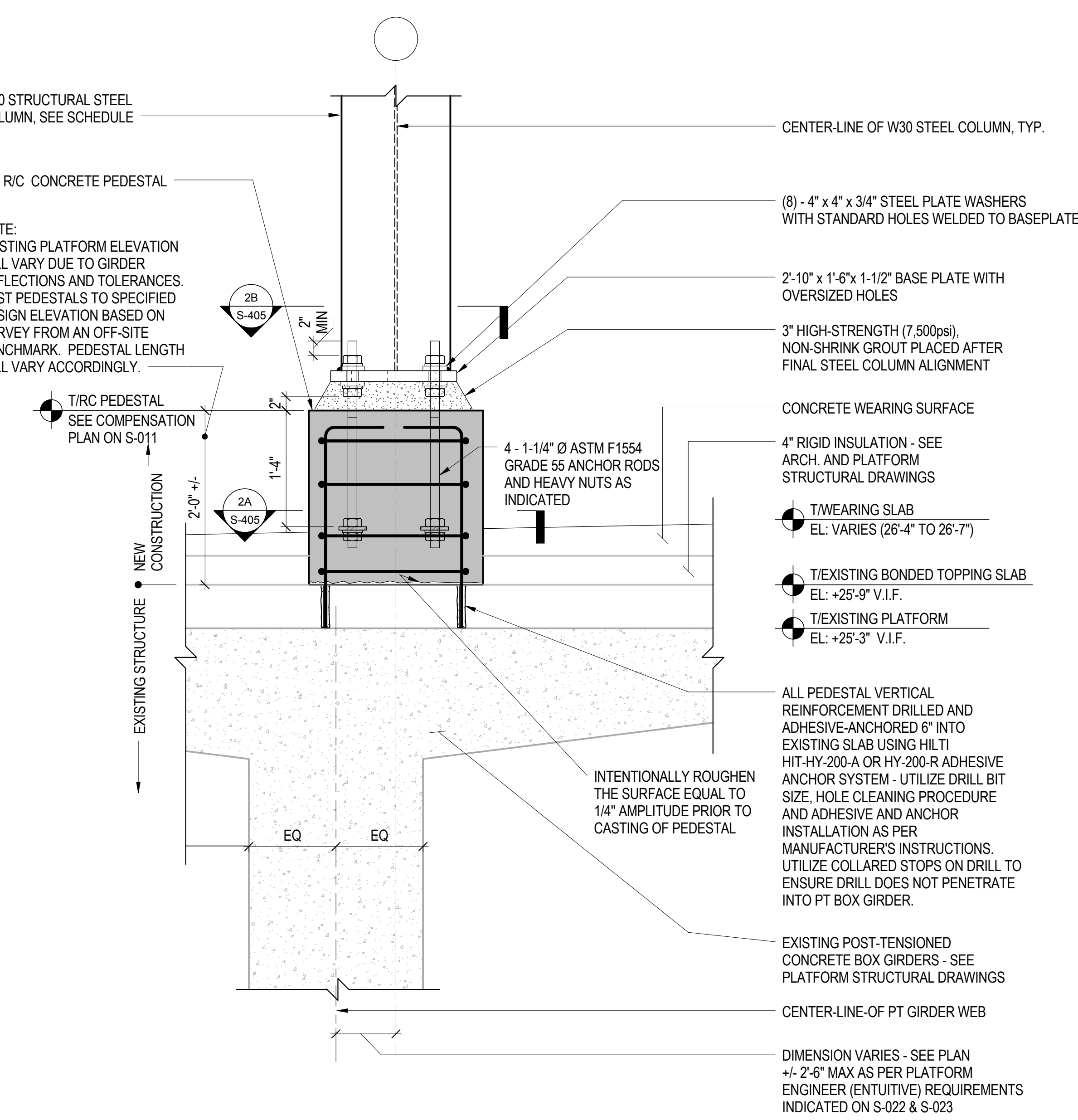
STRUCTURAL
STEEL COLUMN
SCHEDULE,
SECTIONS &
DETAILS



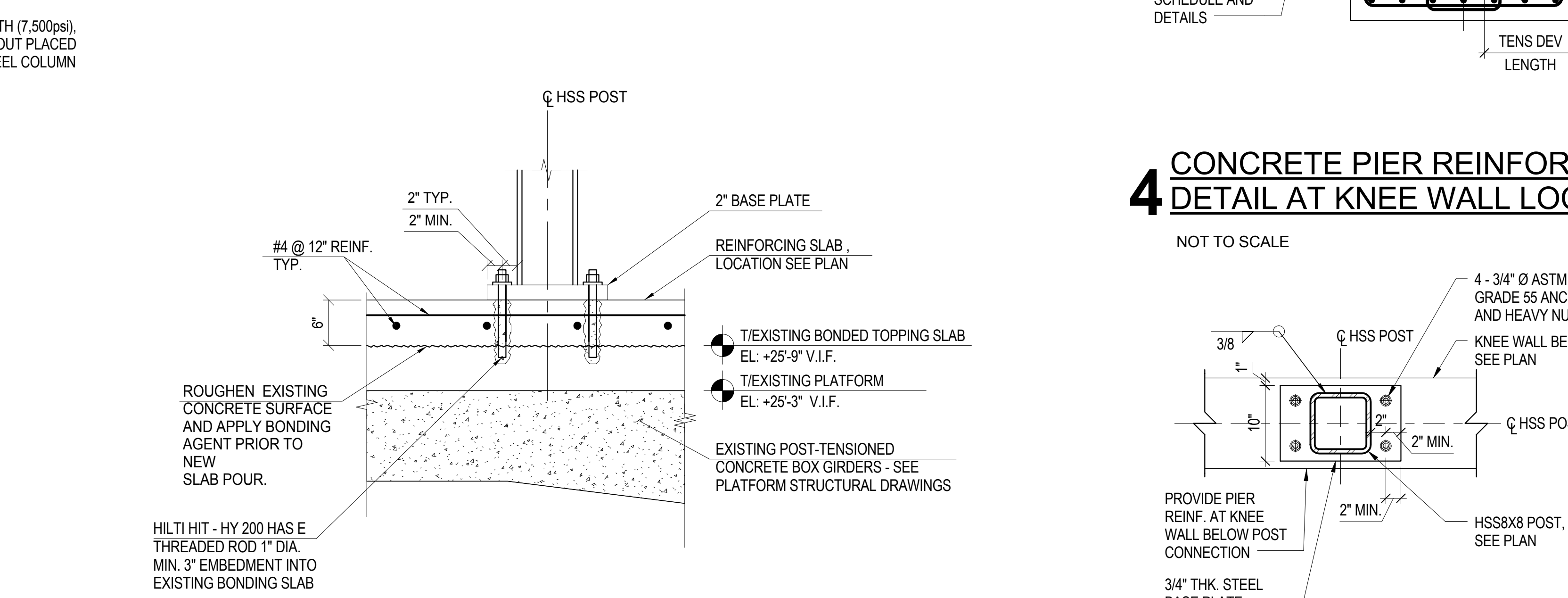
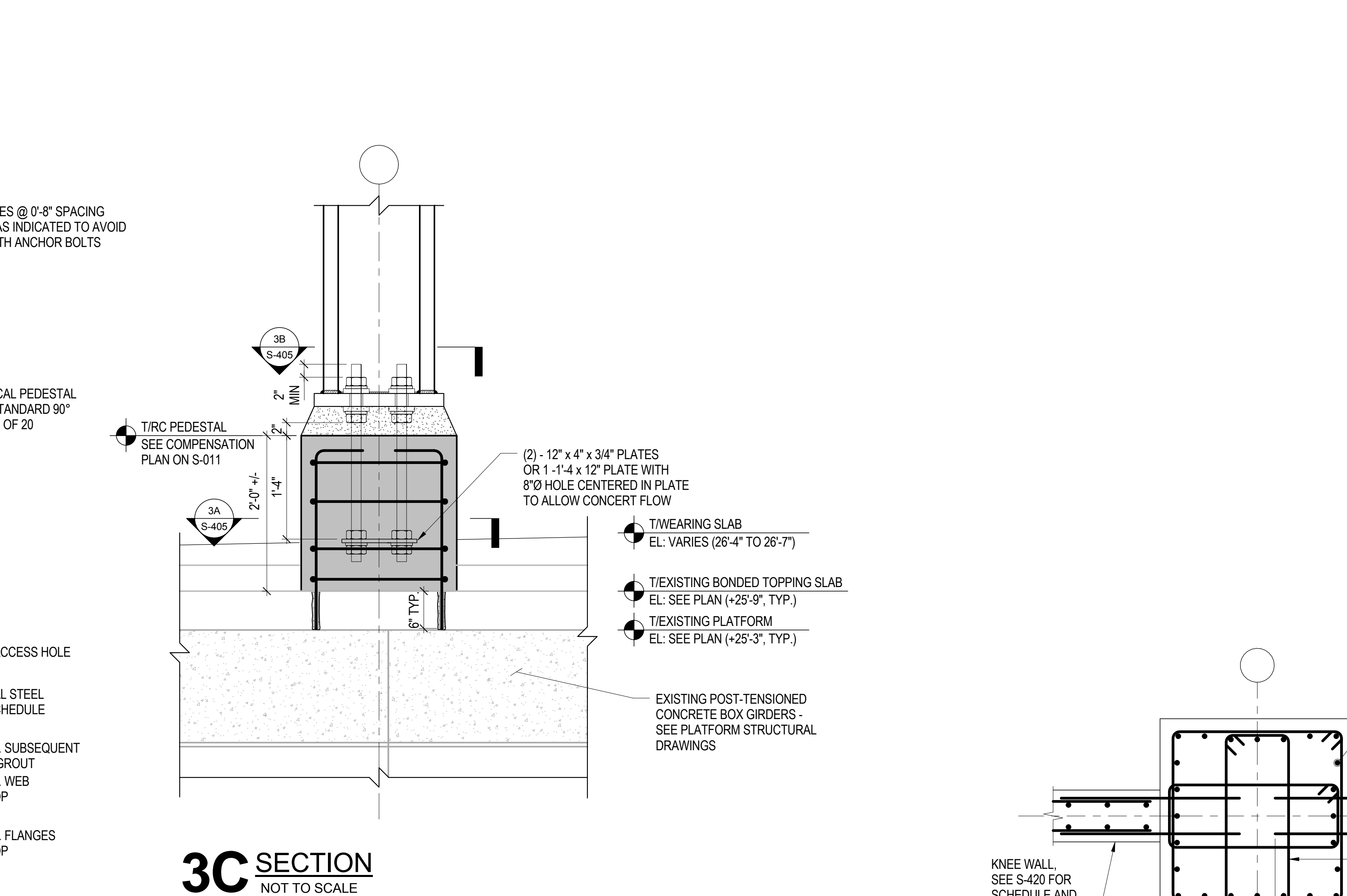
1 STEEL AND CONCRETE W12 COLUMN-TO-PEDESTAL & CONCRETE PEDESTAL-TO-PLATFORM DETAIL



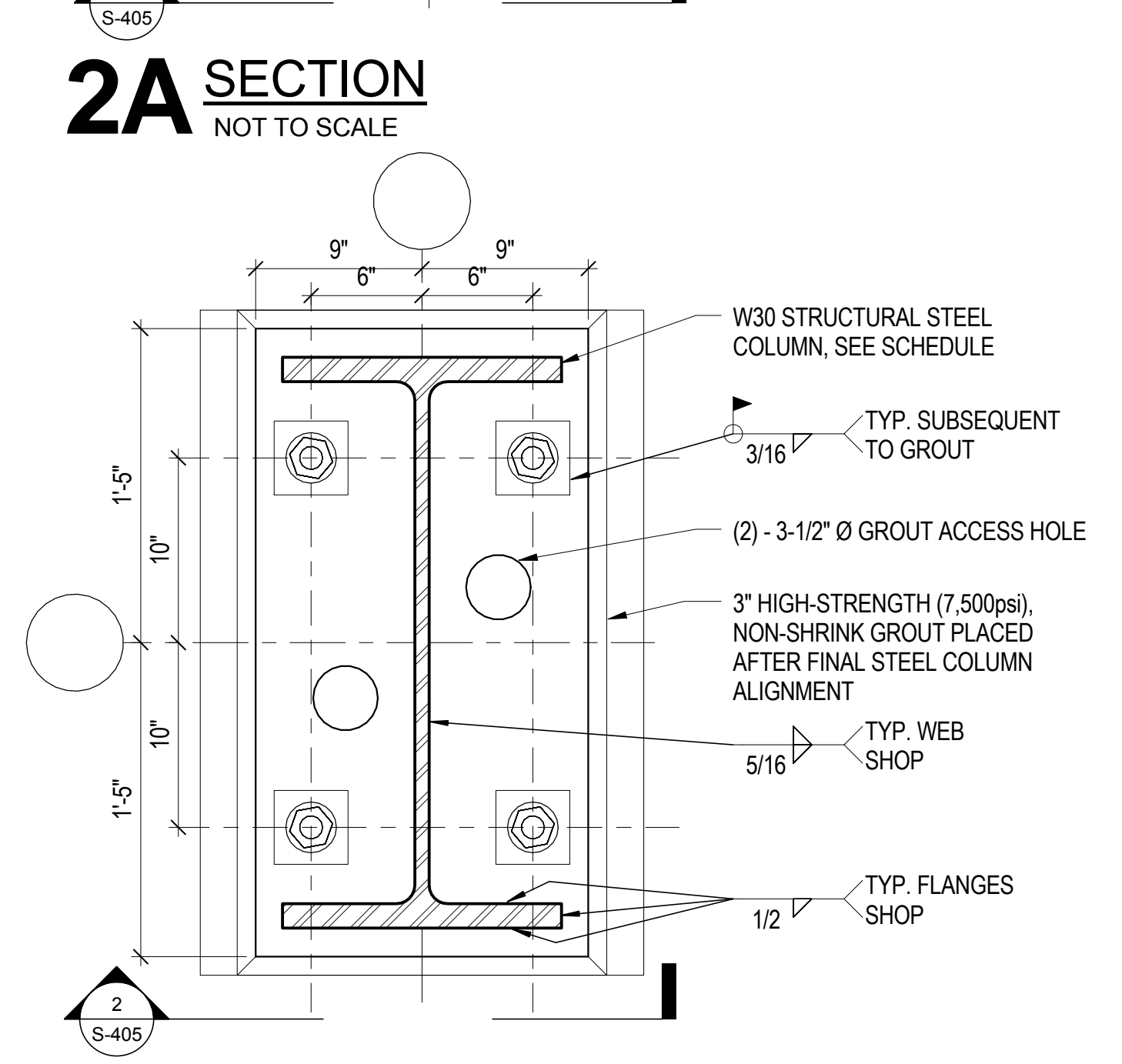
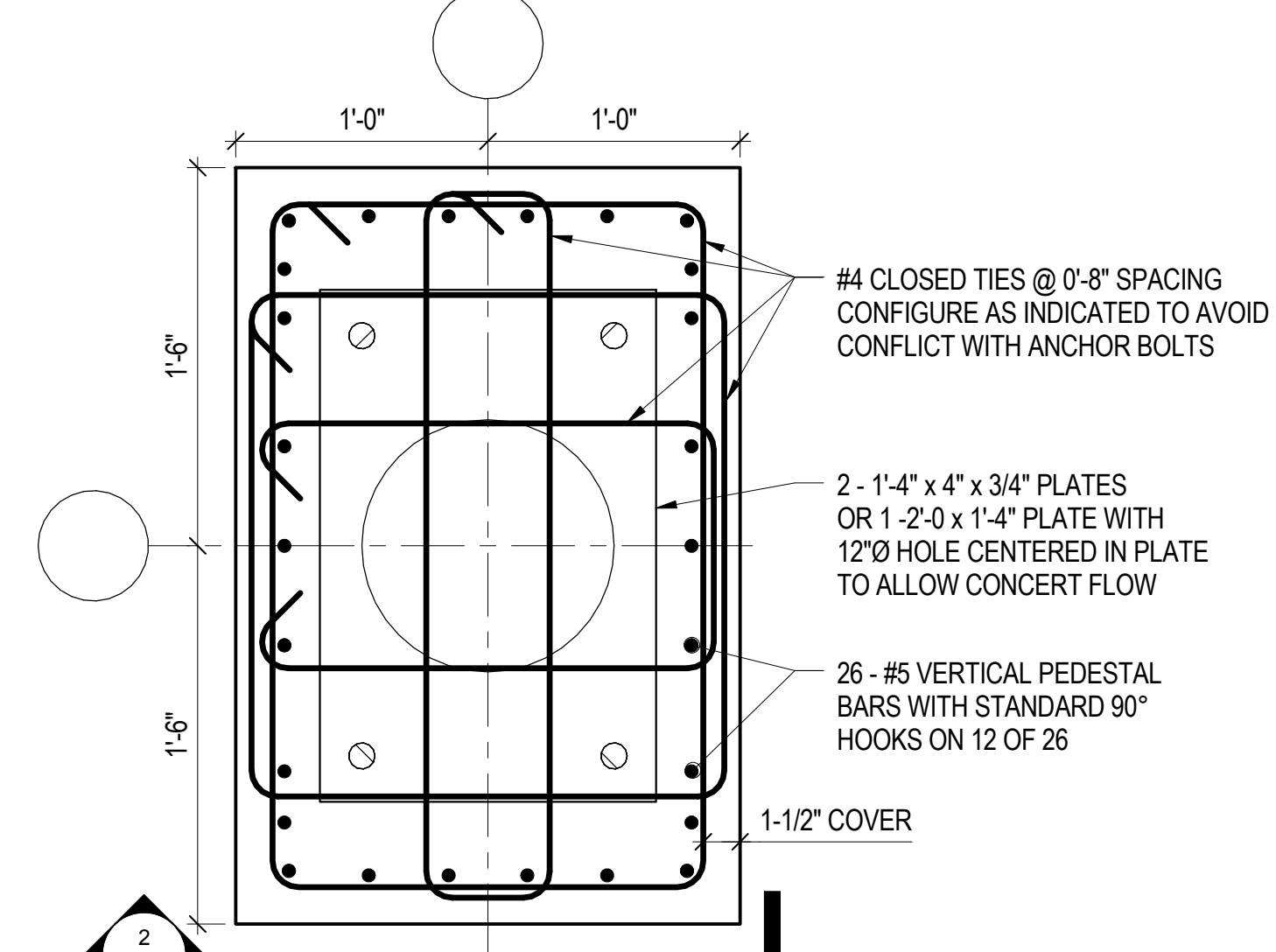
3 STEEL AND CONCRETE W14 COLUMN-TO-PEDESTAL & CONCRETE PEDESTAL-TO-PLATFORM DETAIL



2 STEEL AND CONCRETE W30 COLUMN-TO-PEDESTAL & CONCRETE PEDESTAL-TO-PLATFORM DETAIL



6 TYPICAL ELEVATOR POSTS TO PLATFORM & REINFORCING SLAB DETAIL



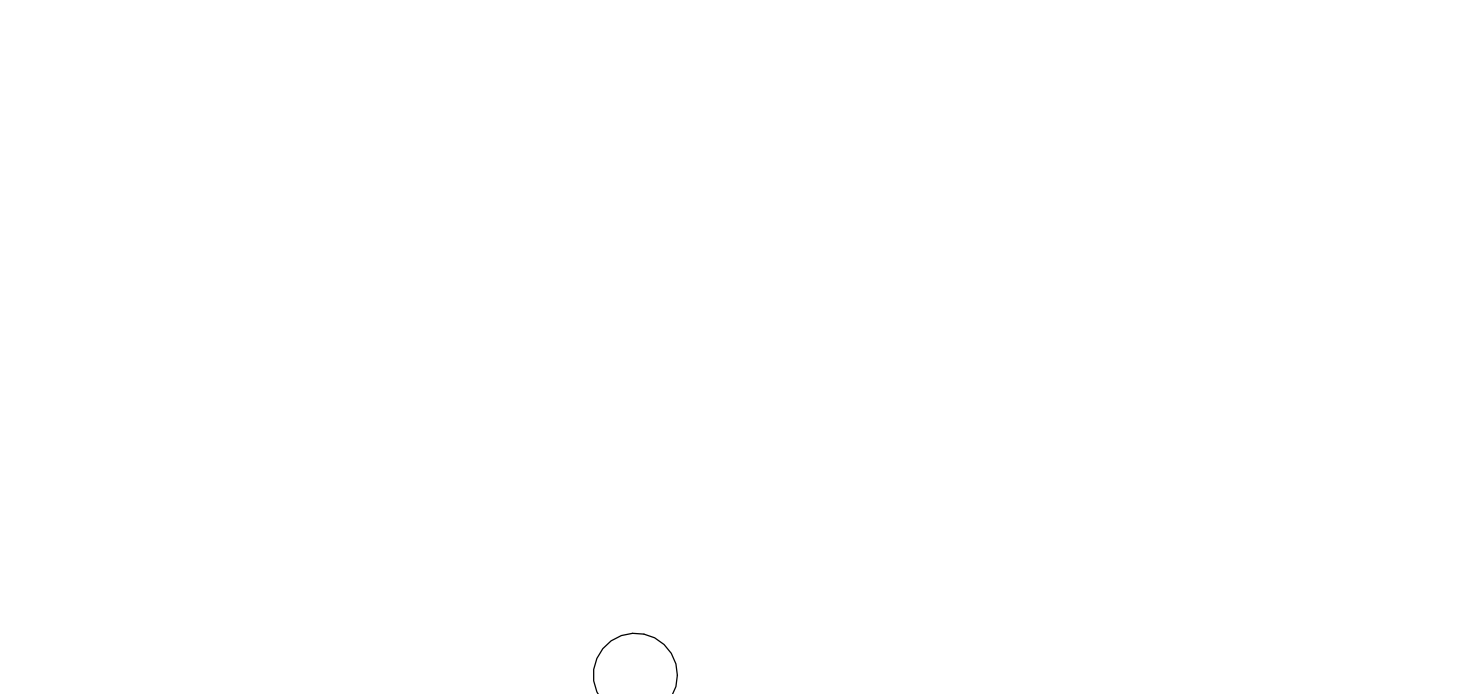
2B SECTION

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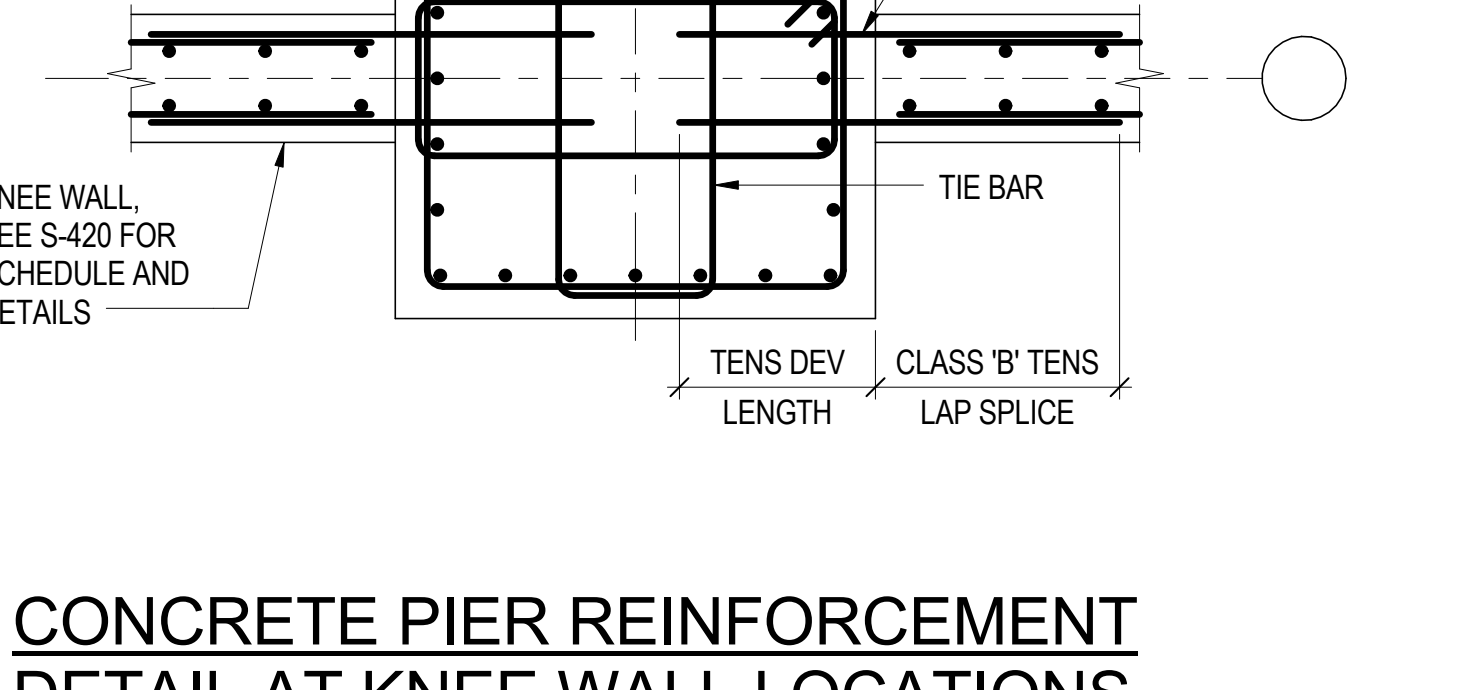
4 CONCRETE PIER REINFORCEMENT DETAIL AT KNEE WALL LOCATIONS

NOT TO SCALE



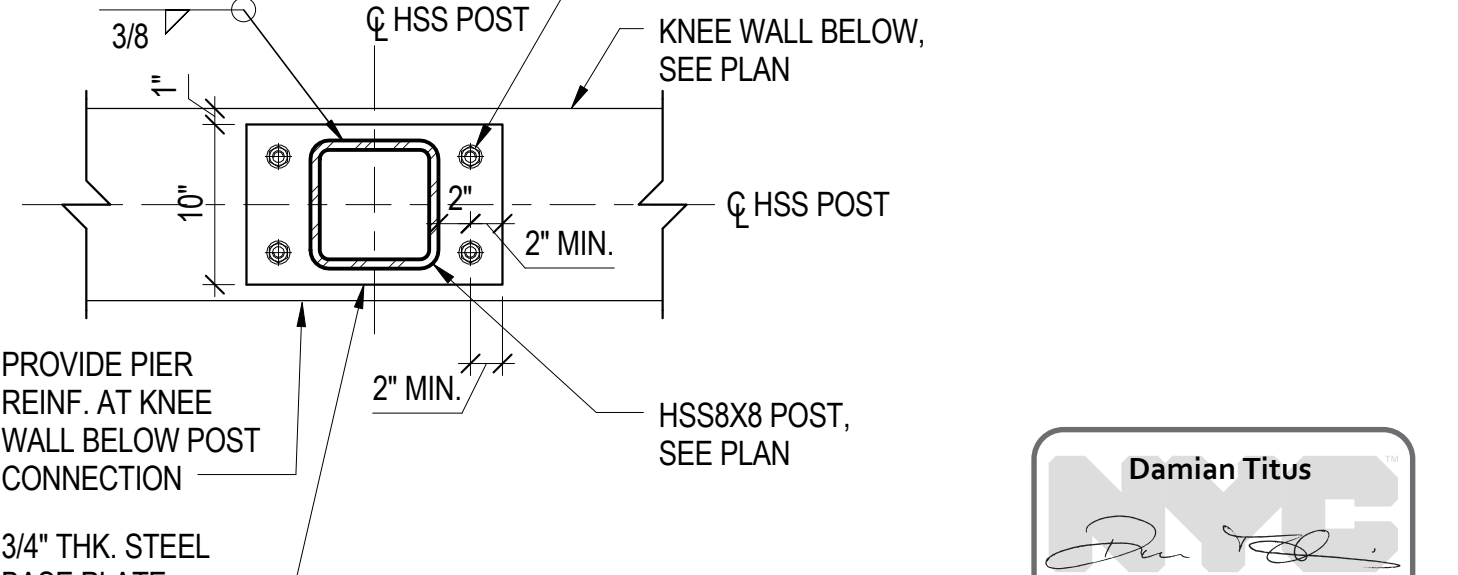
5 HSS POST TO KNEE WALL CONNECTION DETAIL

NOT TO SCALE



5 HSS POST TO KNEE WALL CONNECTION DETAIL

NOT TO SCALE



5 HSS POST TO KNEE WALL CONNECTION DETAIL

NOT TO SCALE

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1. 02/16/2018 ISSUED FOR BUILDING PERMIT
No. Date Description
Sheet Name:
**STRUCTURAL
STEEL COLUMN
BASE PLATE
DETAILS**
Project No.: 211157 B-SCAN Sheet No.:
Date: 02/16/2018 **S-405.00**
Scale: As indicated Sheet No.:
File No.: S-405 Page No.: **S-405**



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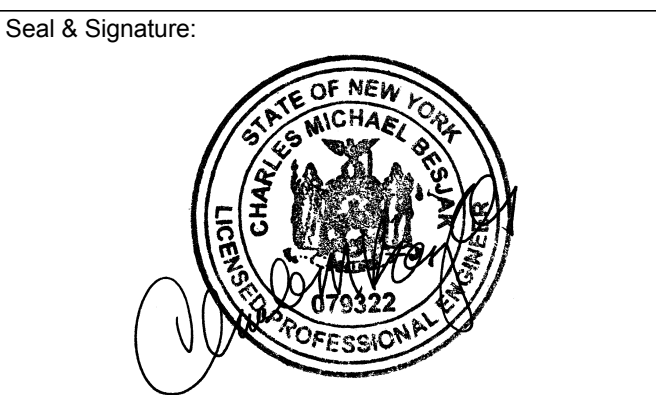
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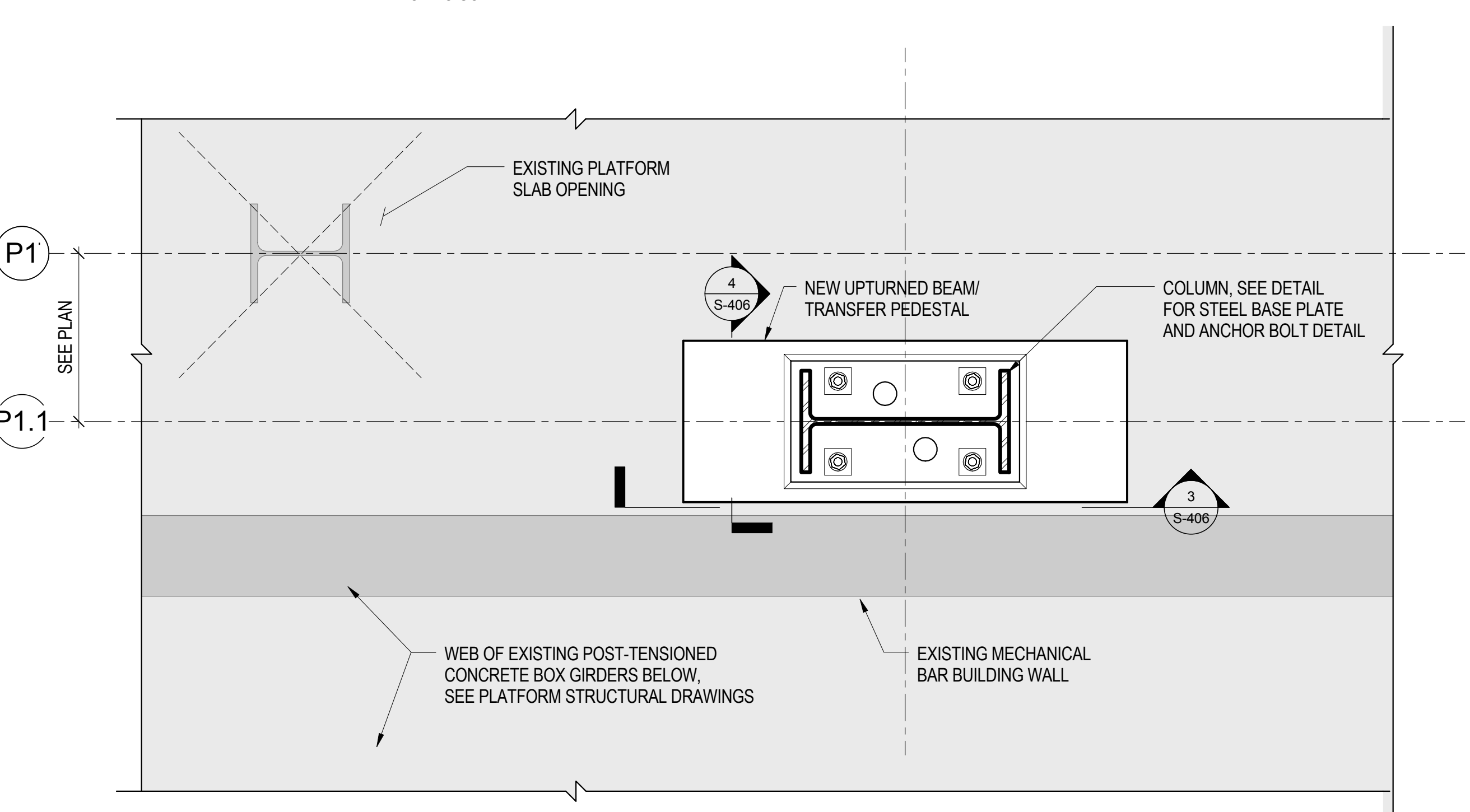
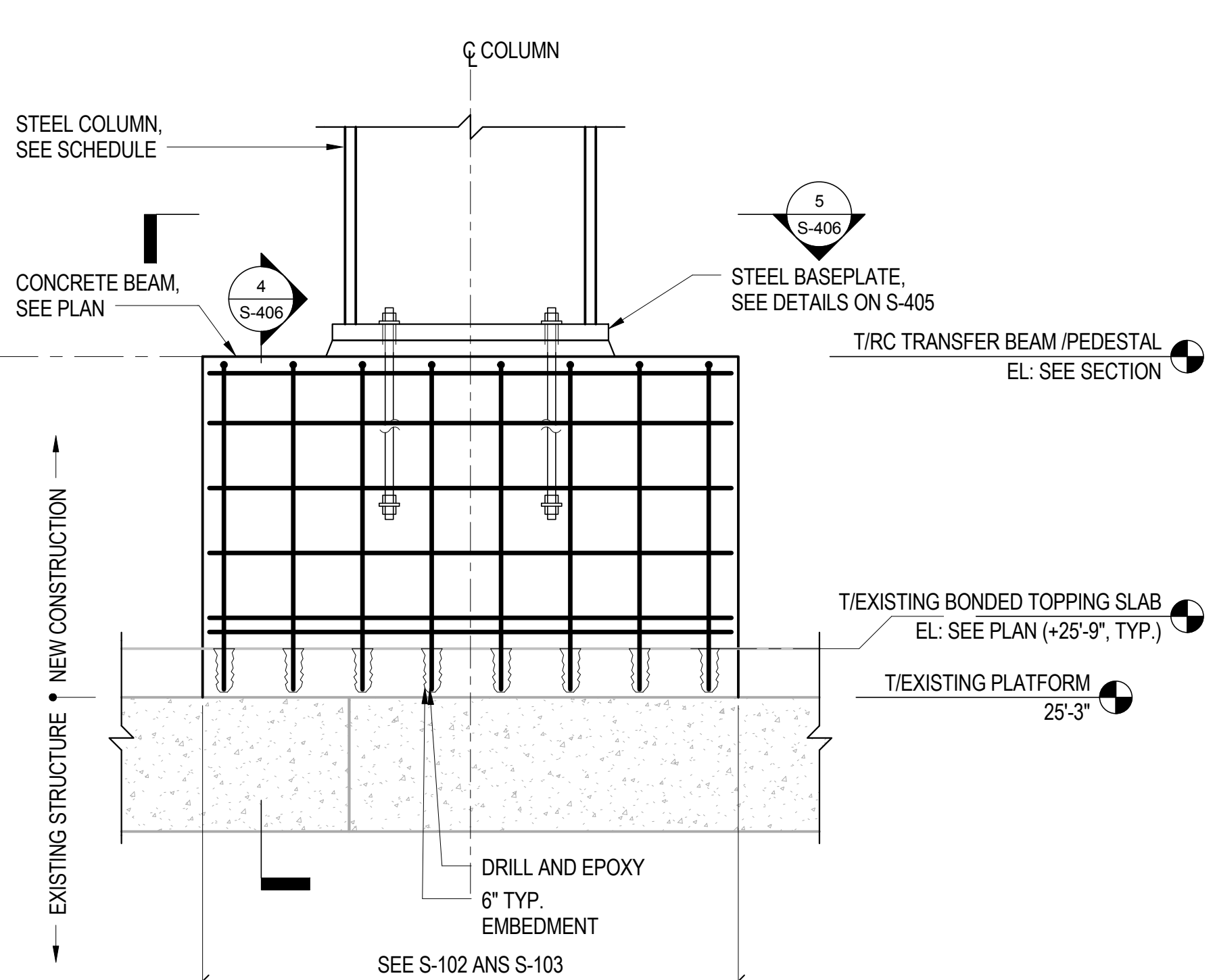
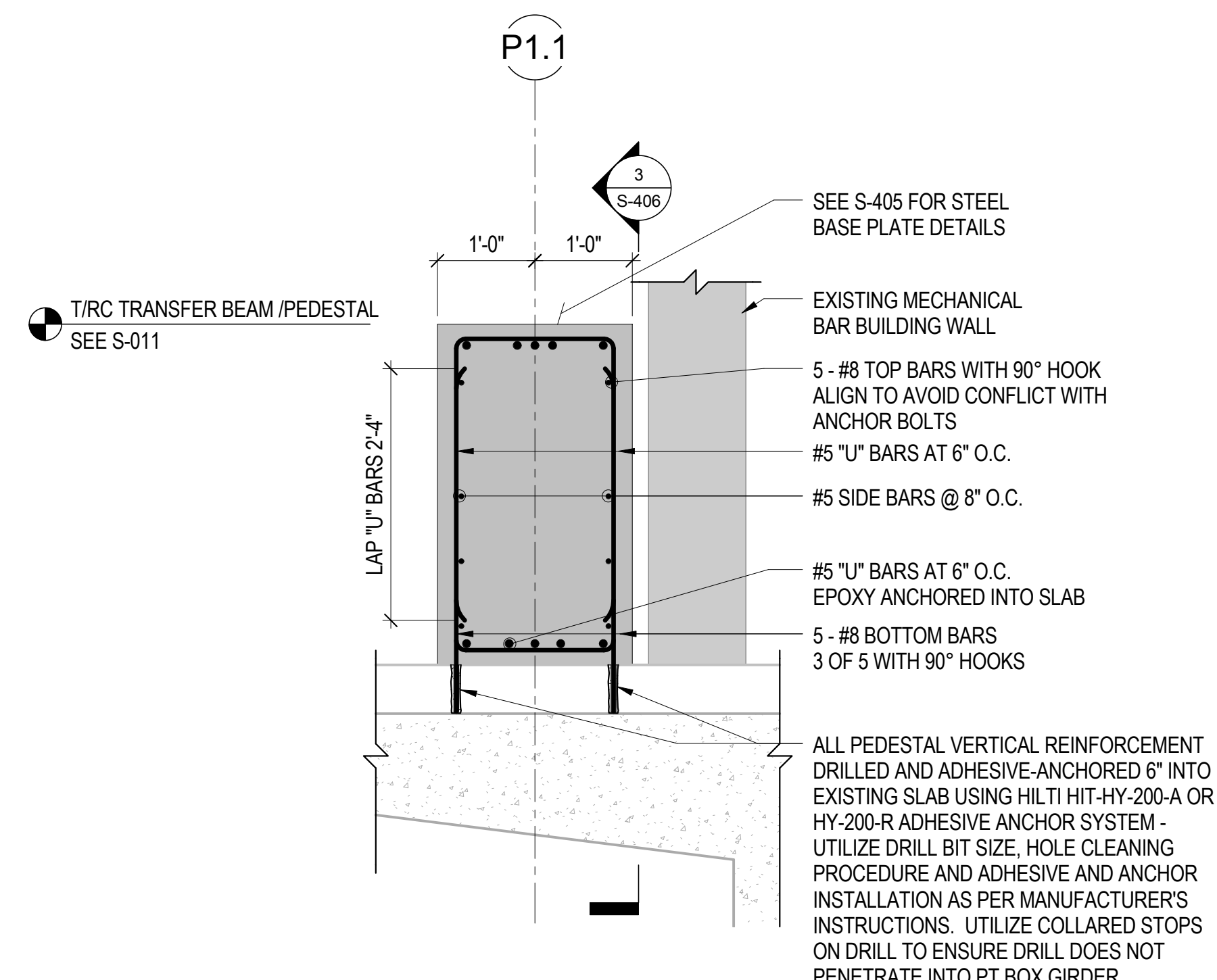
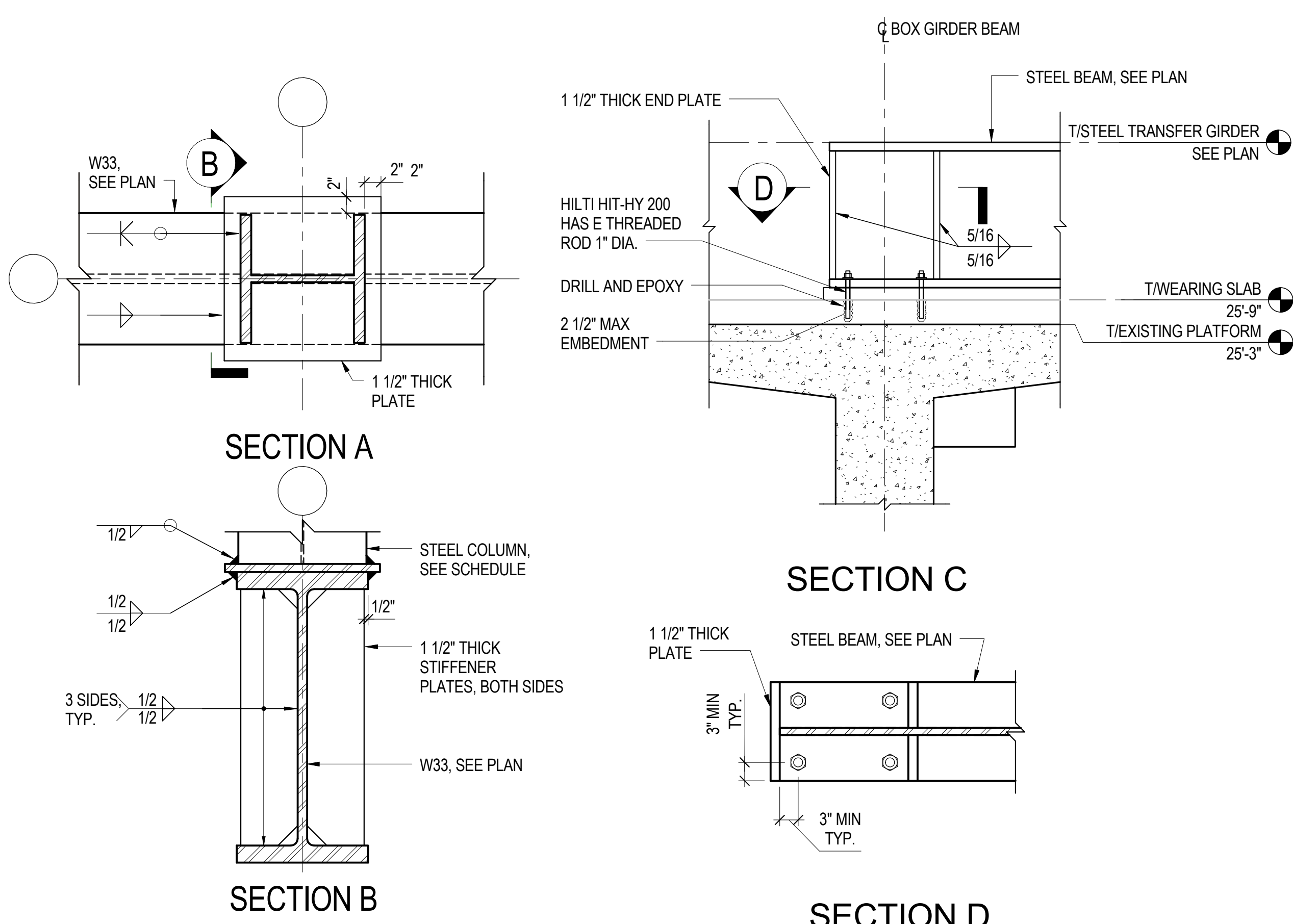
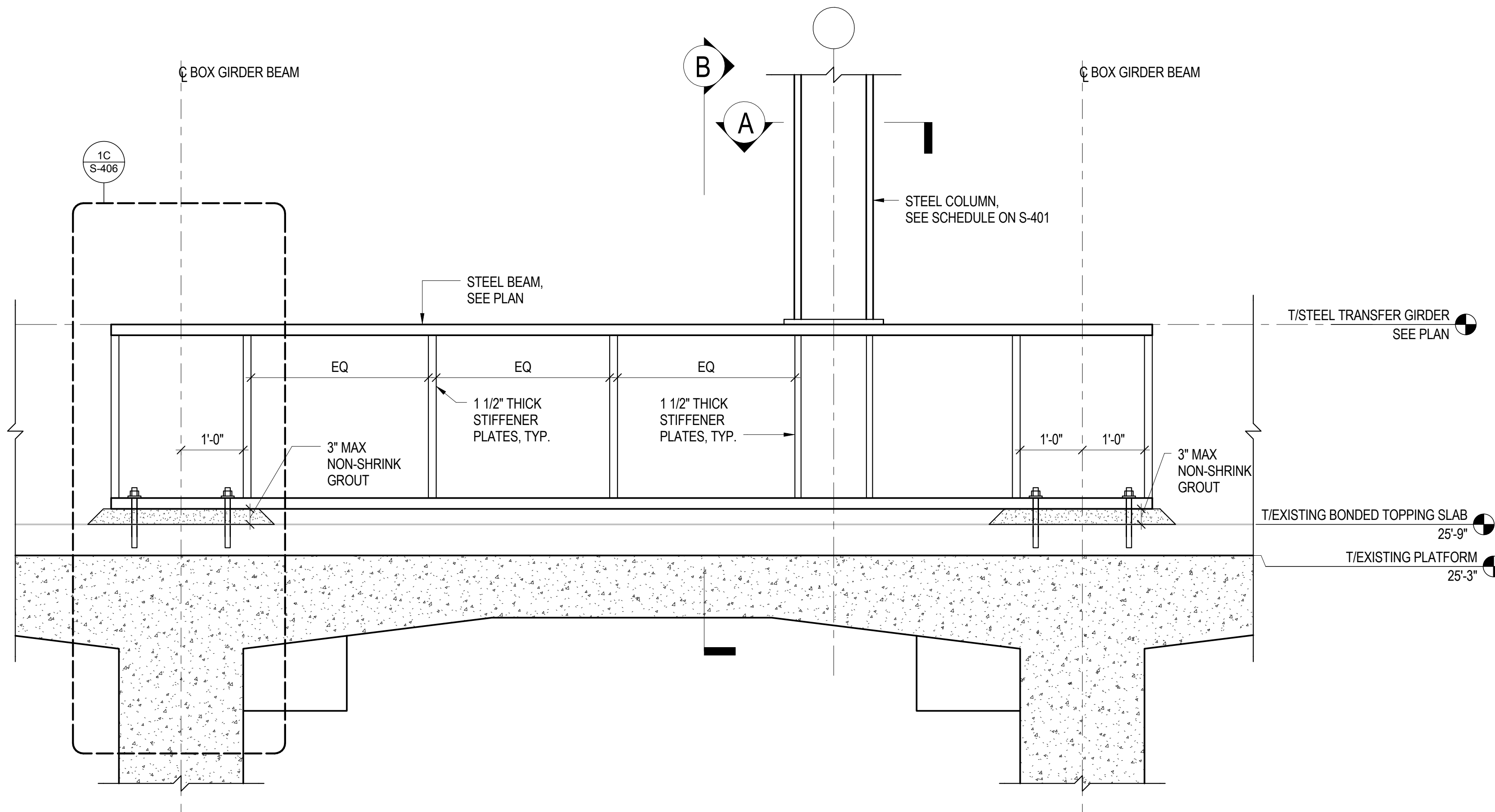
Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8



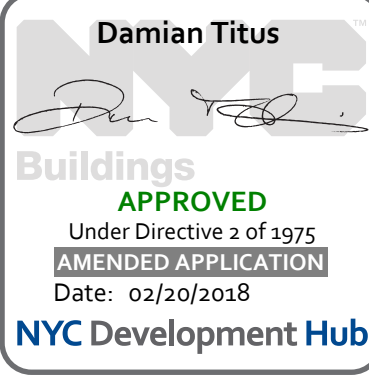
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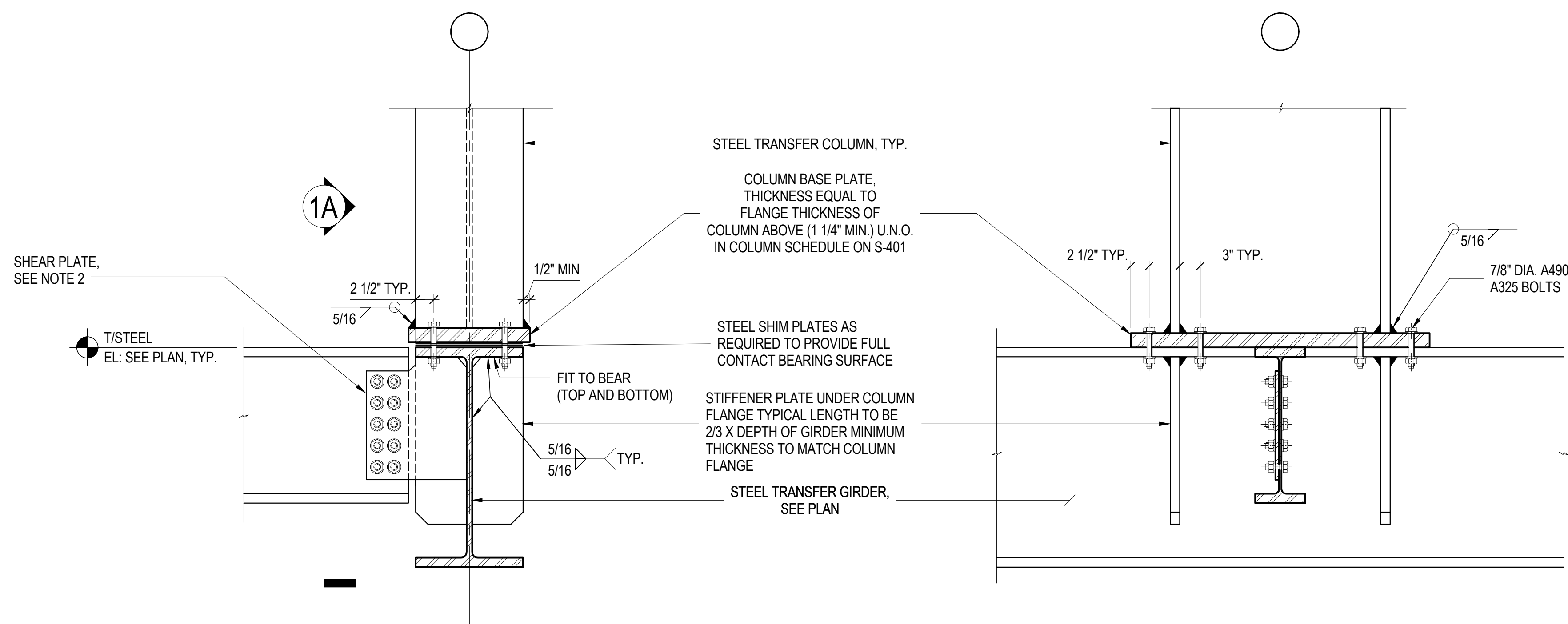
**STRUCTURAL
STEEL COLUMN
BASE PLATE
DETAILS**

Project No.: 211157
Date: 02/16/2018
Scale: As Indicated
File No.: S-406
B-SCAN Sheet No.: S-406.00
Sheet No.: S-406
Page No.:



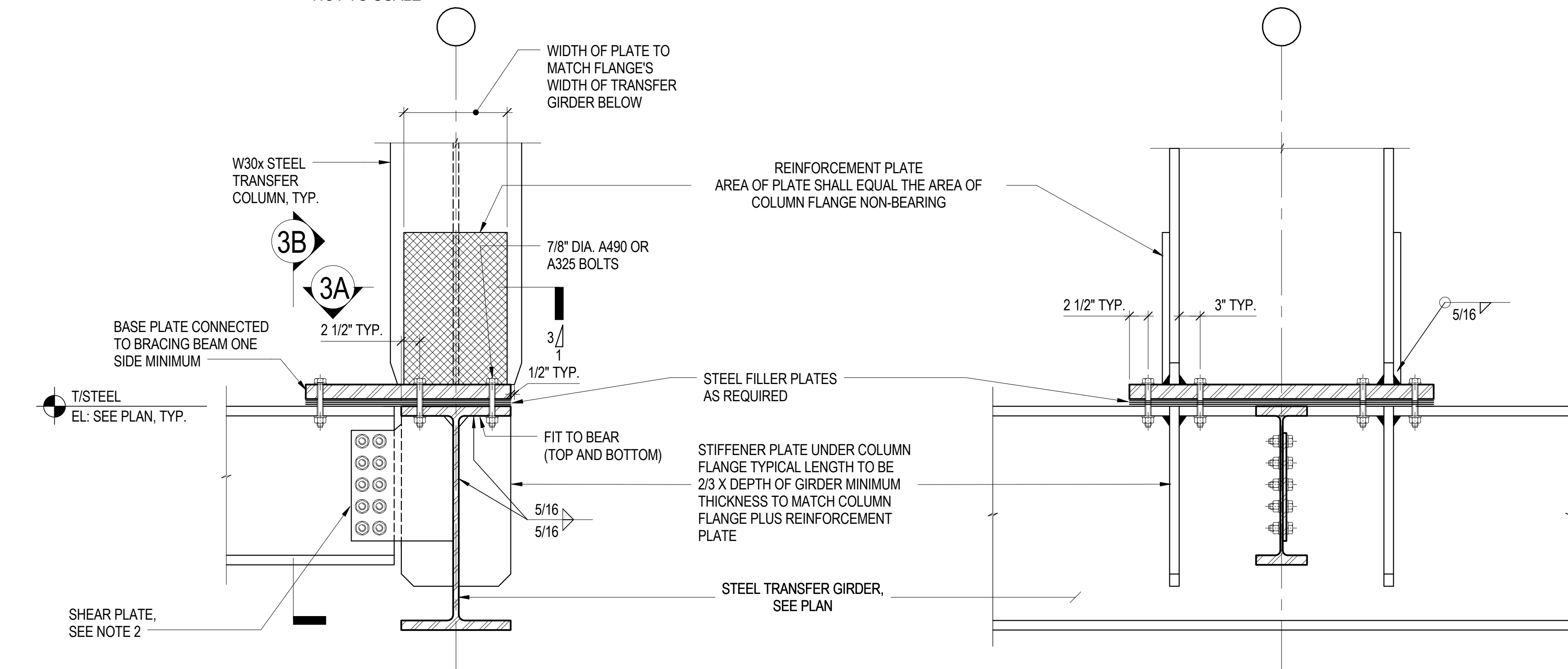
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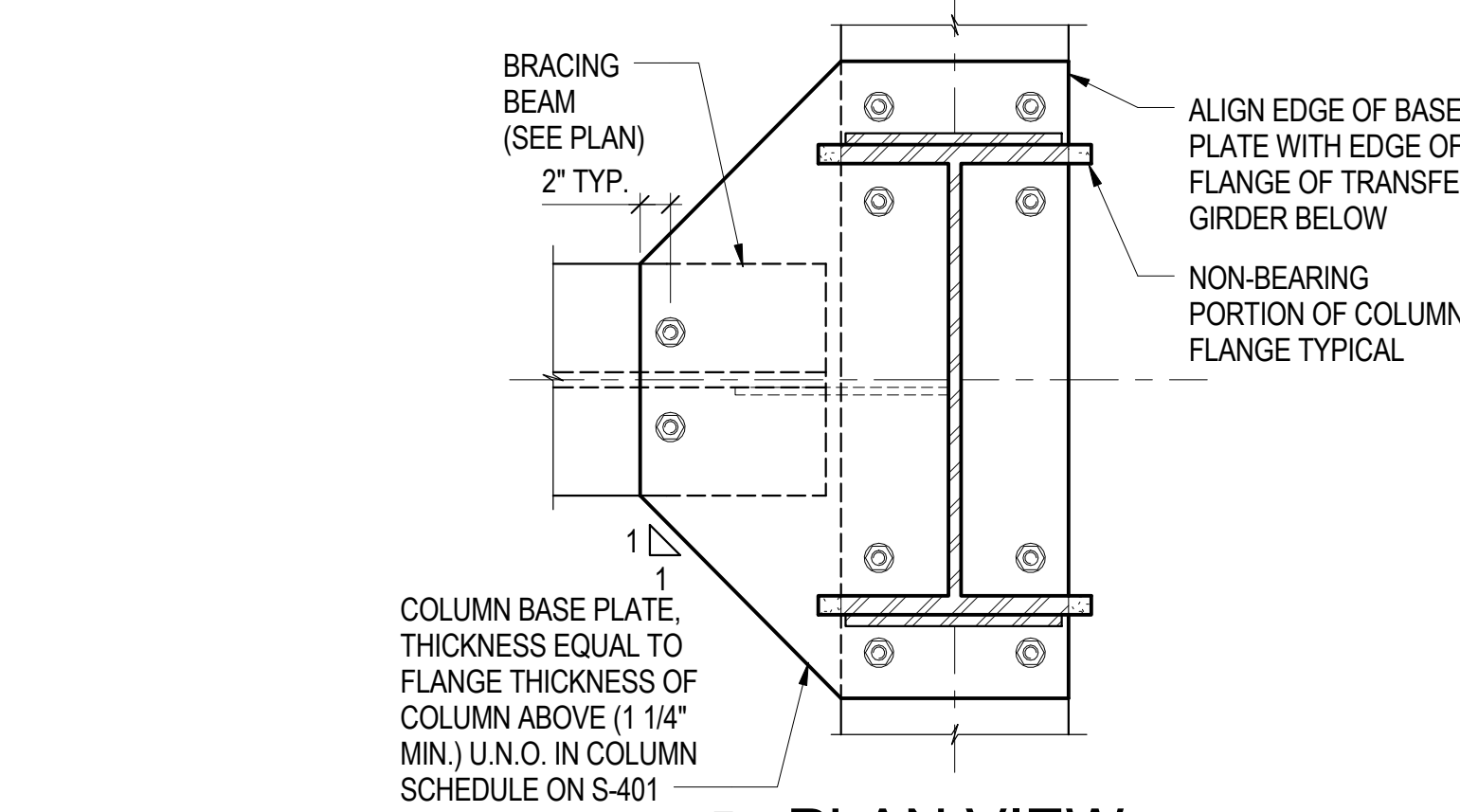


NOTE:
1. FIELD SURVEY AND SET FILLER PLATES TO CORRECT ELEVATION PRIOR TO ERECTING COLUMN.
2. CONNECTION TO DEVELOP THE BEAM REACTION SCHEDULED ON S-021.

1 TRANSFER CONNECTION DETAIL
NOT TO SCALE



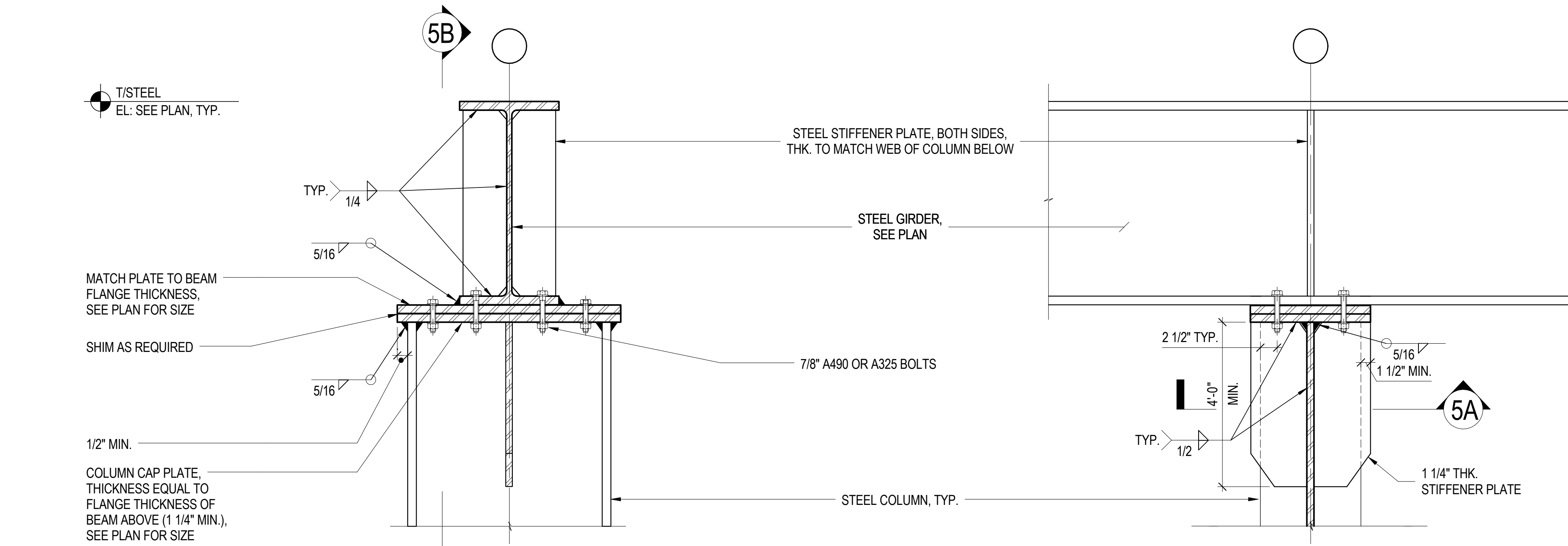
3B TRANSFER CONNECTION DETAIL



3A PLAN VIEW

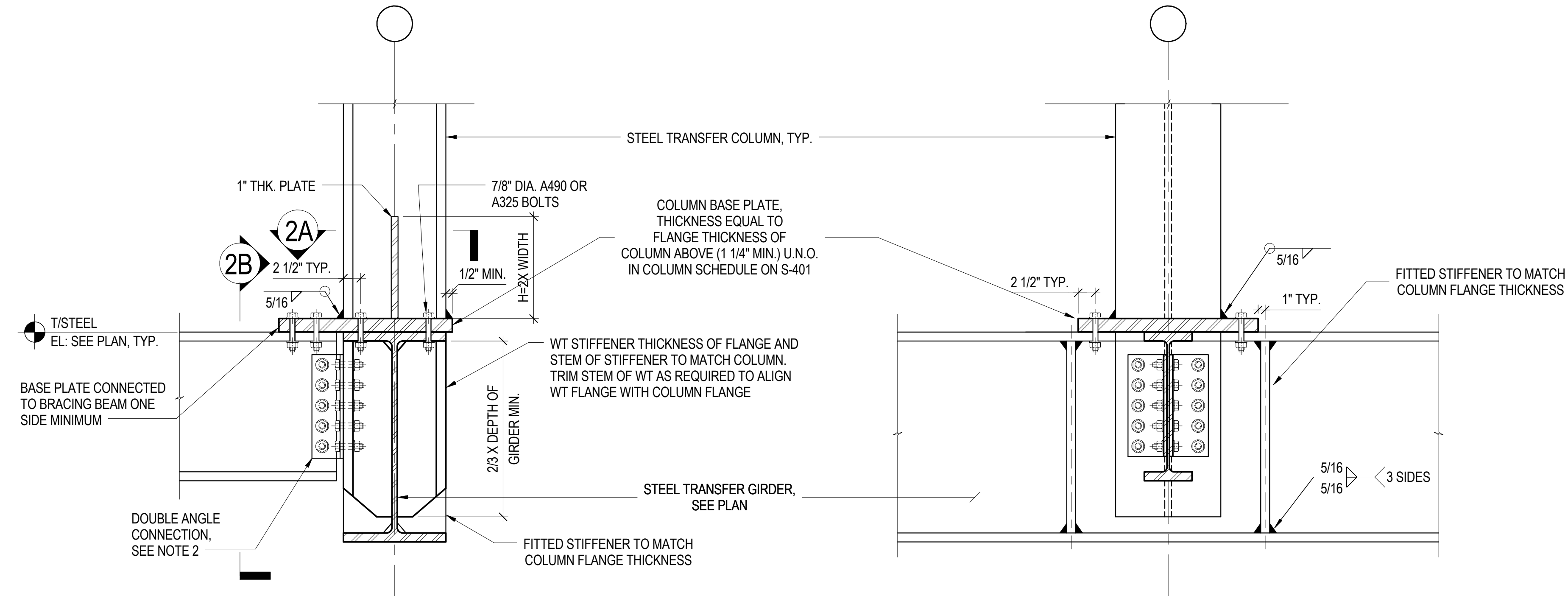
NOTE:
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2. CONNECTION TO DEVELOP THE BEAM REACTION SCHEDULED ON S-021.

3 TRANSFER CONNECTION DETAIL
NOT TO SCALE

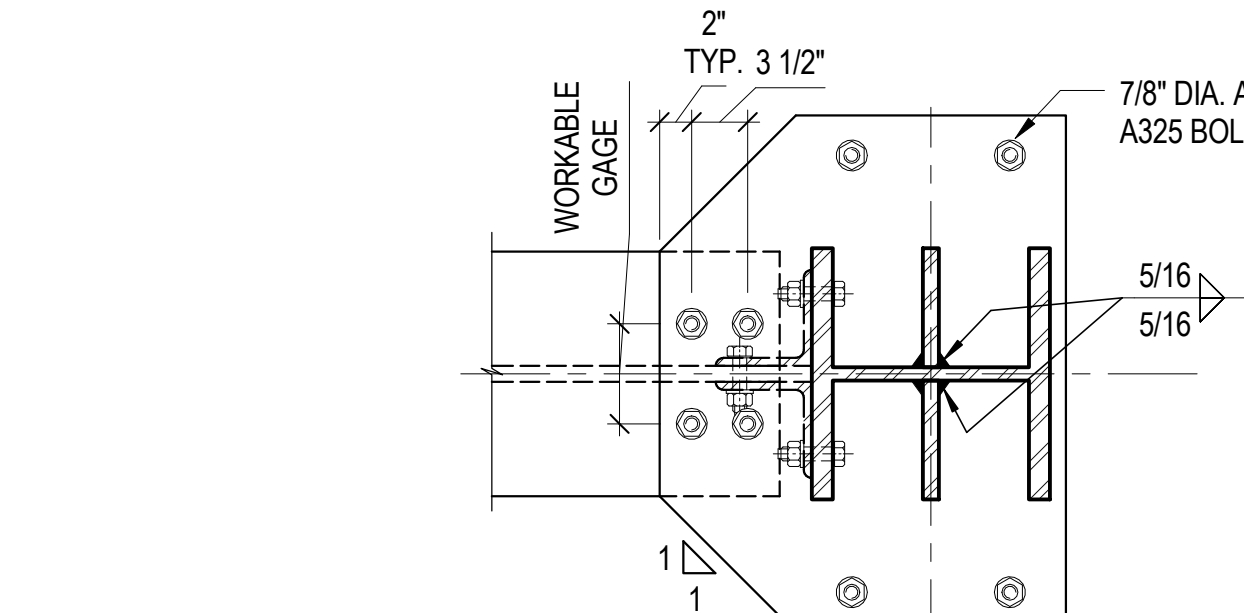


5B TRANSFER CONNECTION DETAIL

5 CONNECTION DETAIL AT PERPENDICULAR GIRDER
NOT TO SCALE



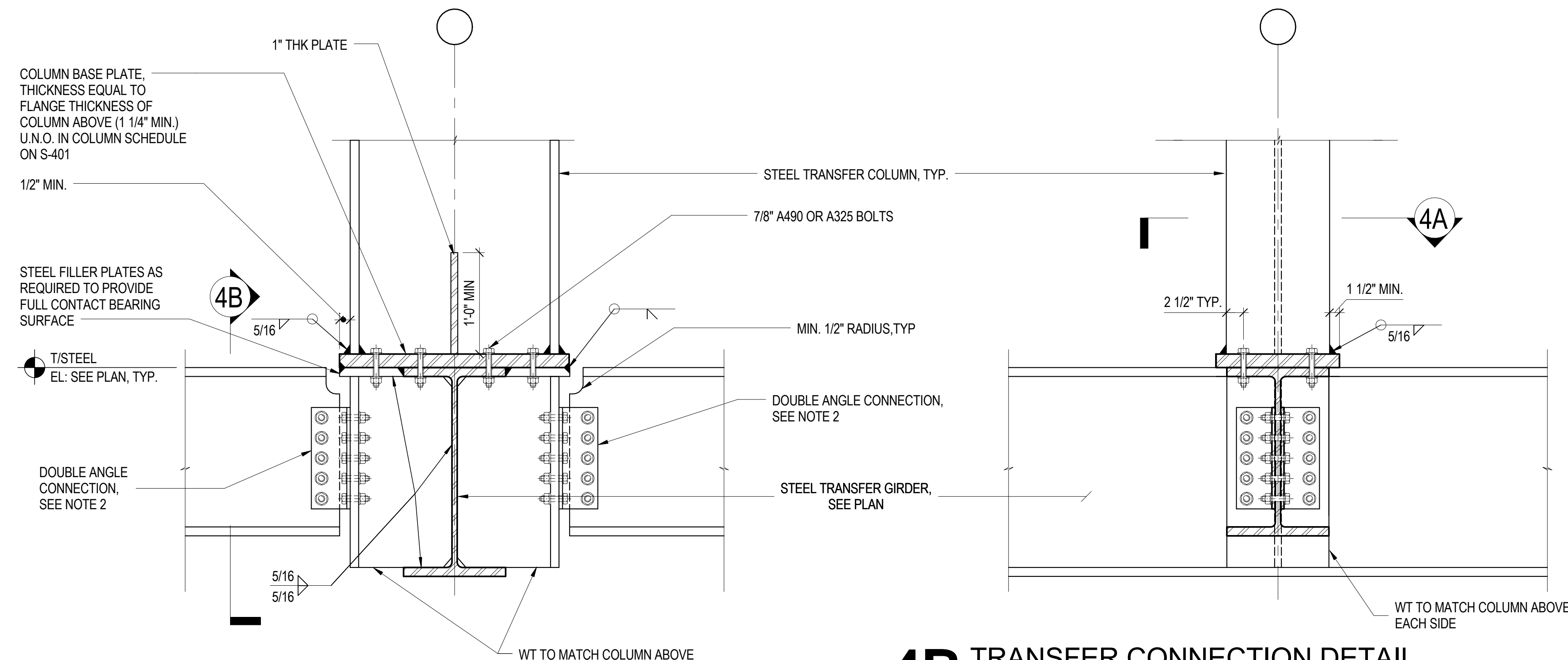
2B TRANSFER CONNECTION DETAIL



2A PLAN VIEW

NOTE:
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2. CONNECTION TO DEVELOP THE BEAM REACTION SCHEDULED ON S-021.

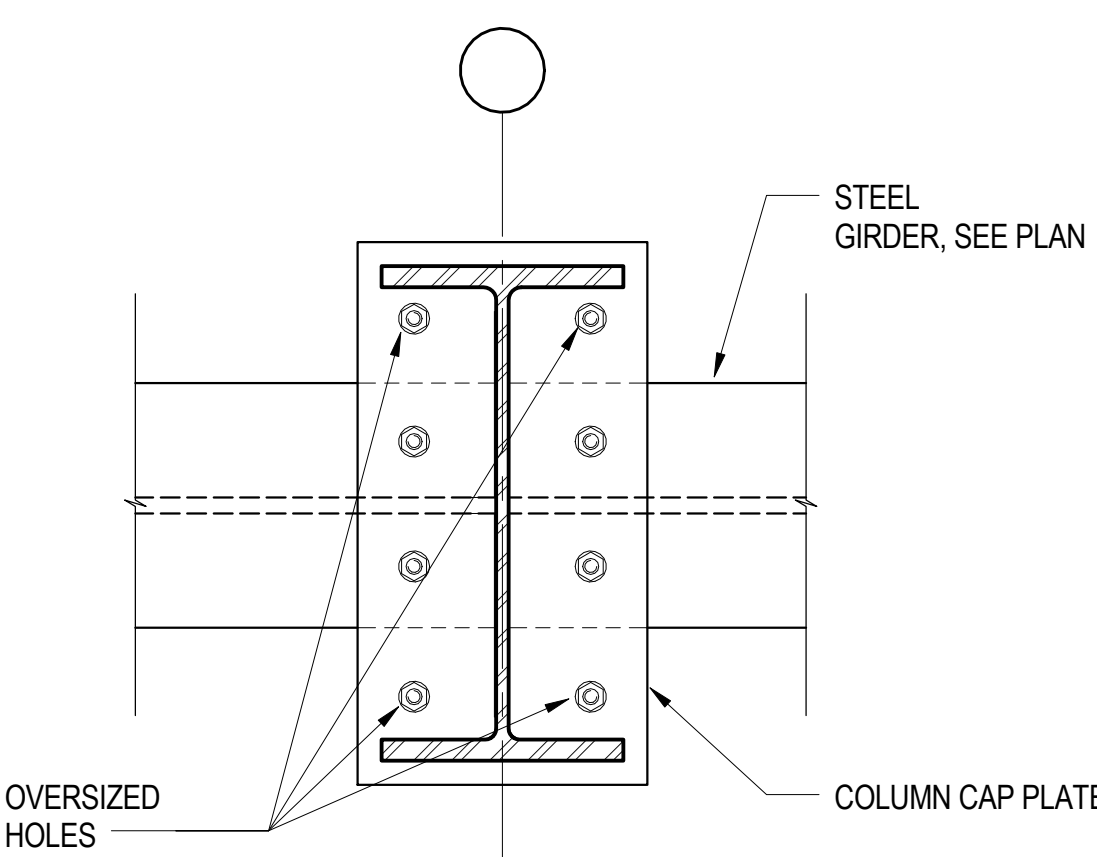
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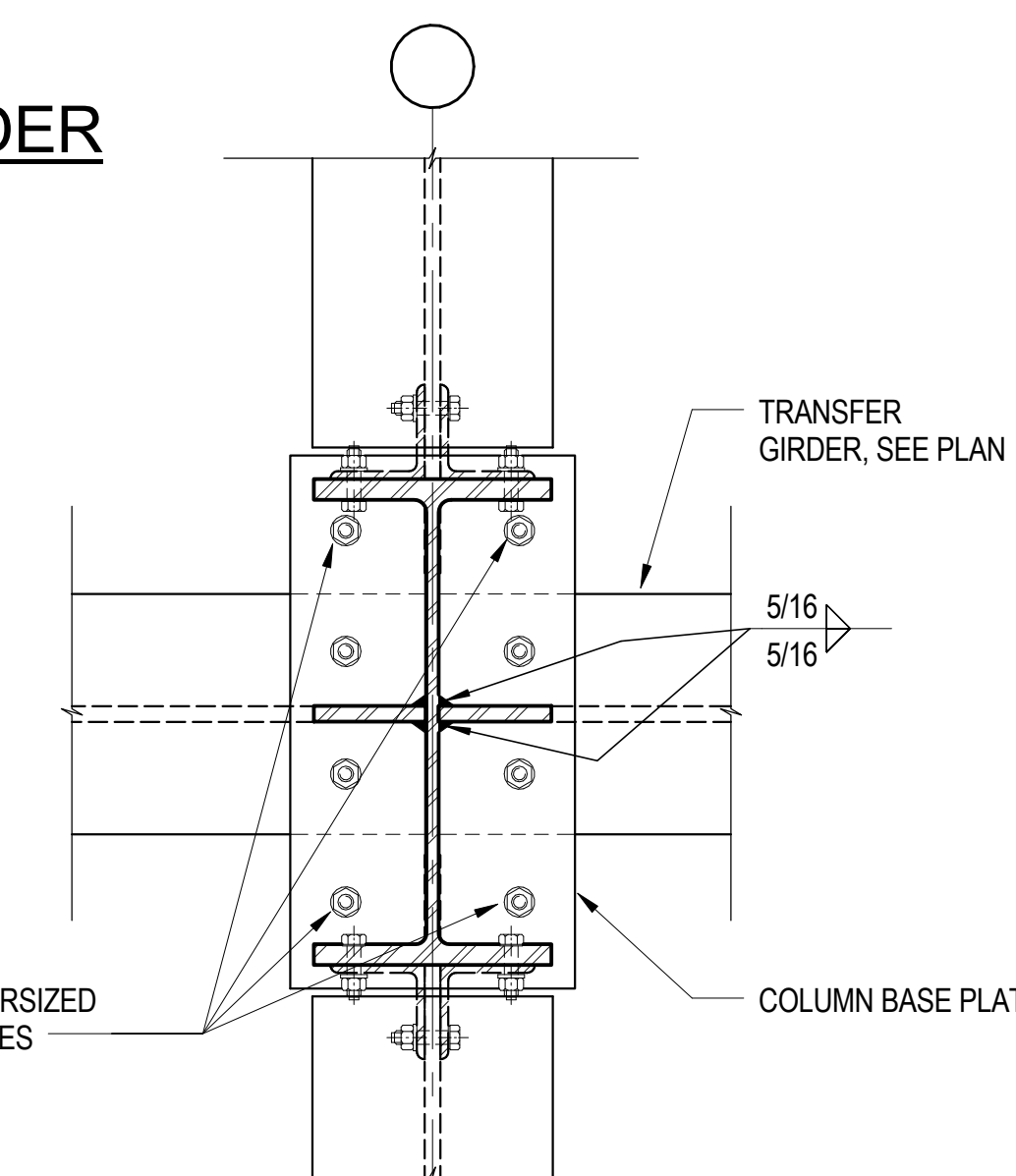
4B TRANSFER CONNECTION DETAIL

NOTE:
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2. CONNECTION TO DEVELOP THE BEAM REACTION SCHEDULED ON S-021.

4 TRANSFER CONNECTION DETAIL AT PERPENDICULAR TRANSFER GIRDER
NOT TO SCALE



5A TRANSFER CONNECTION DETAIL



4A DETAIL 4A
NOT TO SCALE



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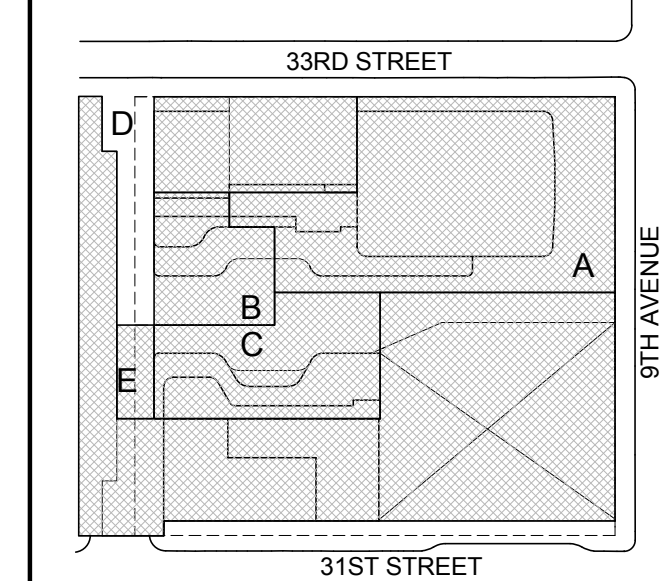
Facade Maintenance Consultant

Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant

Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:



Seal & Signature

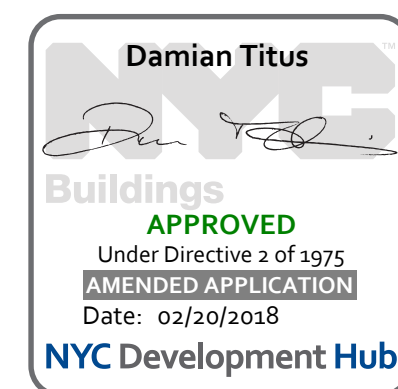


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Date: 02/16/2018
Scale: 1" = 1'-0"

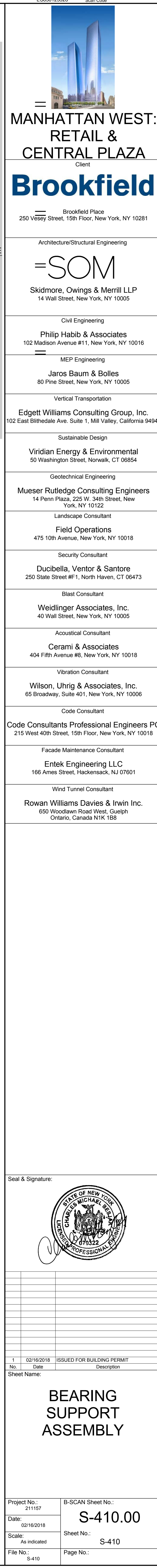
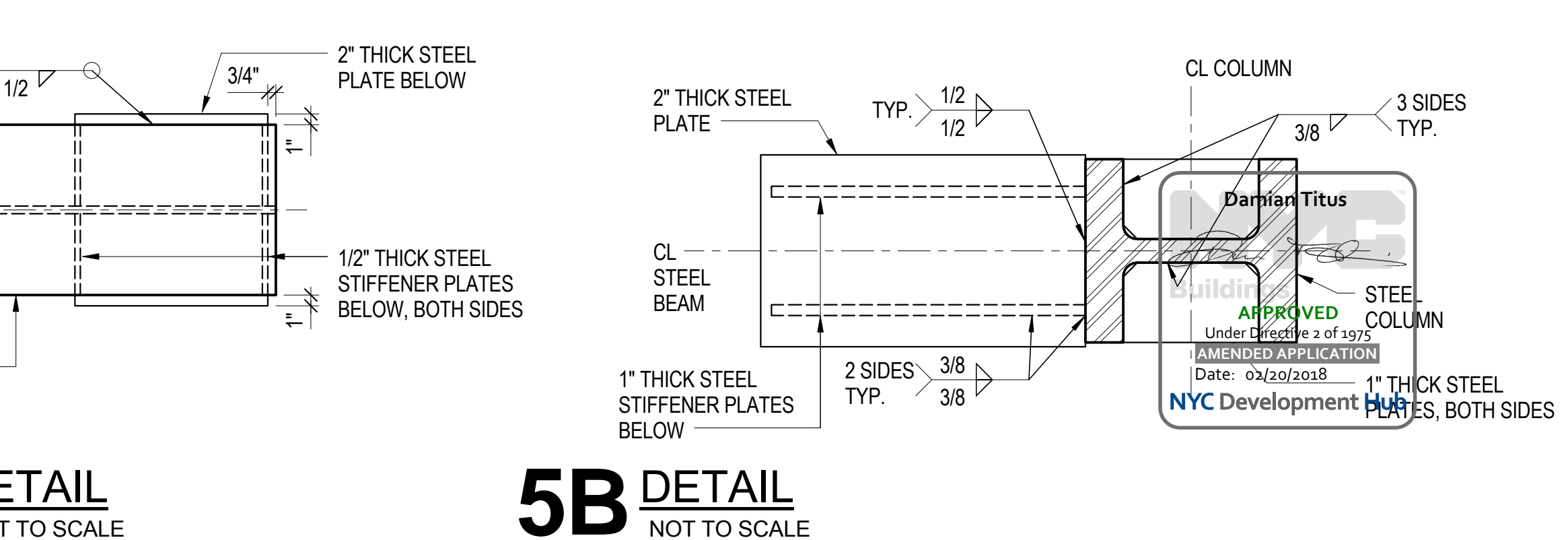
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Page No.: 5-407

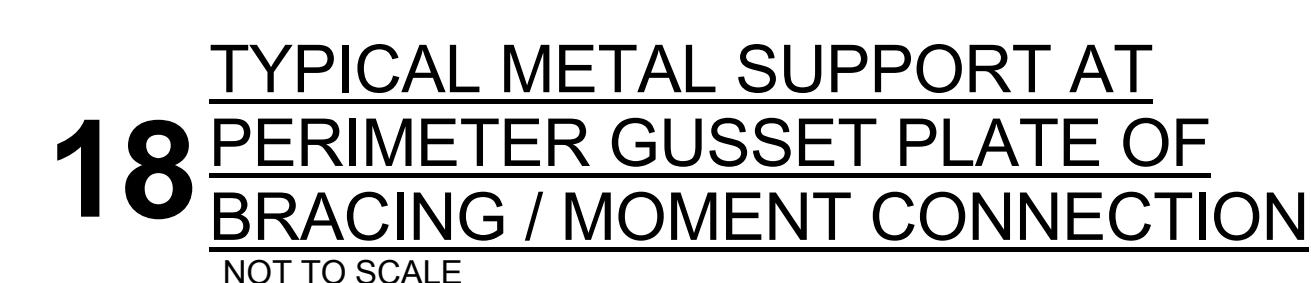
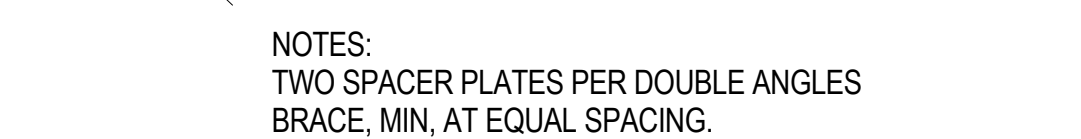
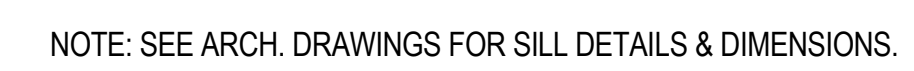
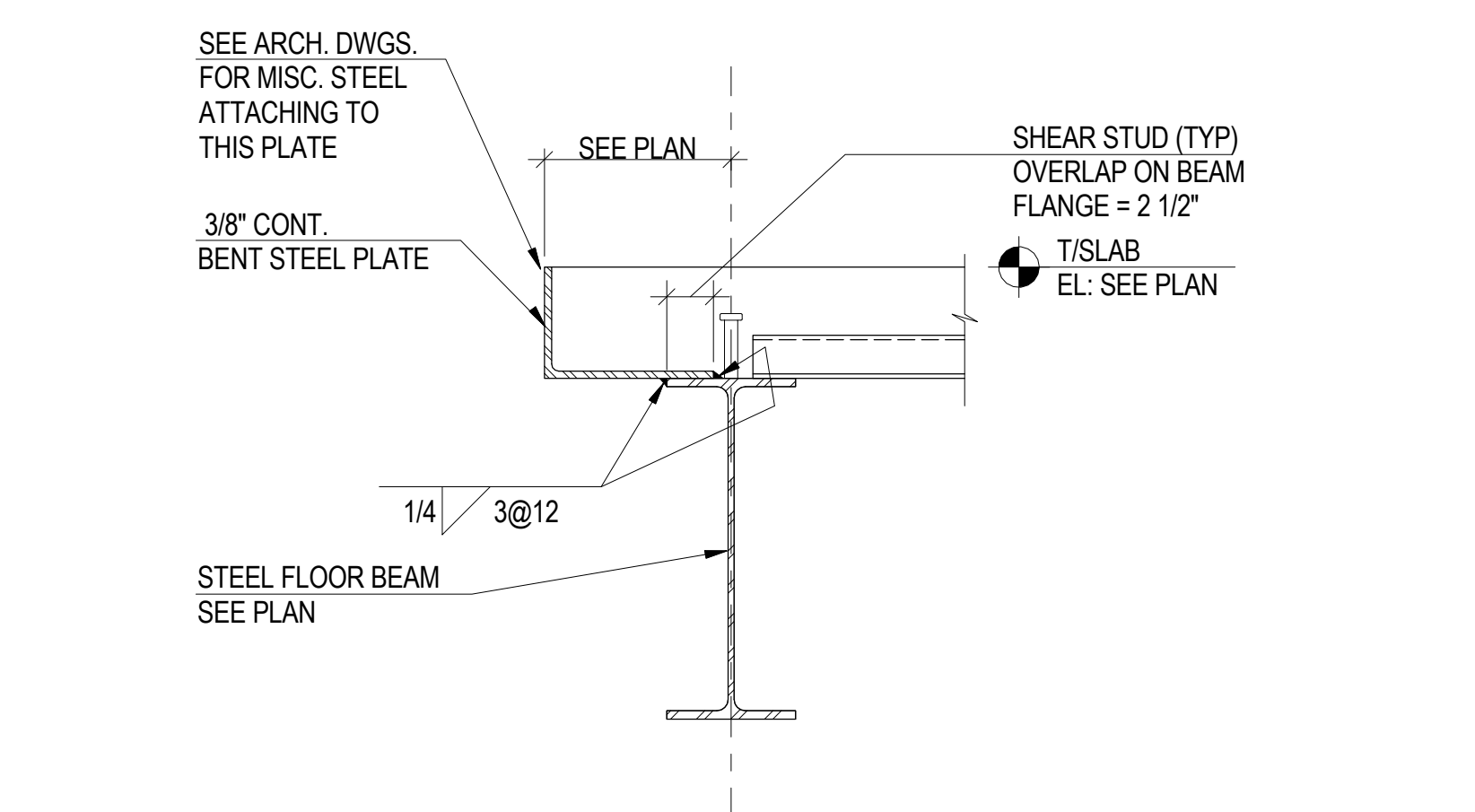
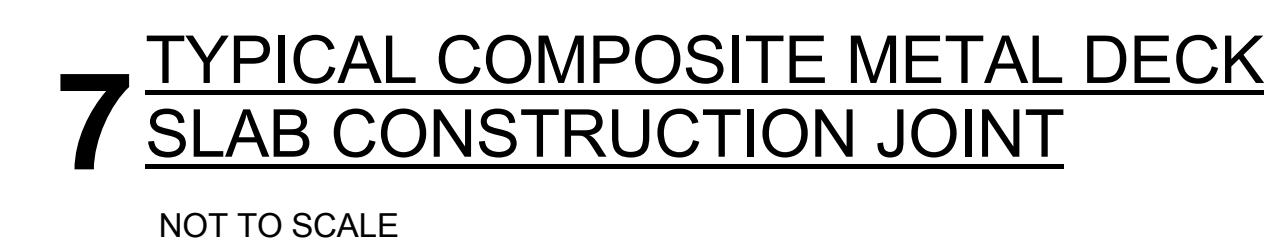
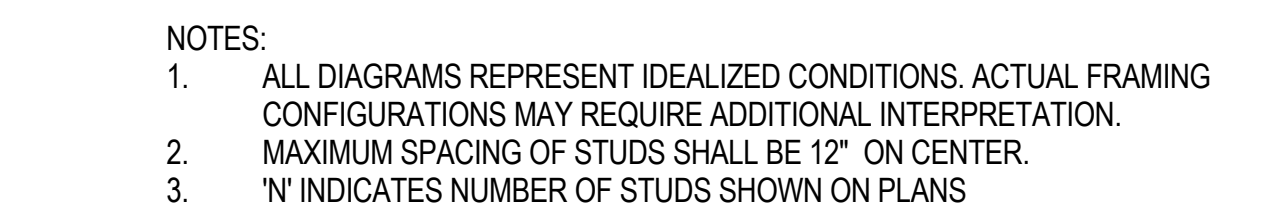
**STRUCTURAL
STEEL TRANSFER
COLUMN DETAIL**



DL, LL, SNOW, WIND, EQ, GIRD, DEF, DL, GIRD, DEF, LL, ROTATION
 1. $X' - X \times 10^6$
 (P)-34"X34"
 UPPER BEARING PLATE DIMENSION
 (P) POT BEARING ASSEMBLY
 (S) SLIDE BEARING ASSEMBLY
 REQUIRED SERVICE BEARING LOADS (KIPS). SEE NOTE 6
 BEARING ROTATION (RADIAN)
 TOP OF LOWER BEARING PLATE ELEVATION
 UPPER BEARING PLATE
 CARBON STEEL
 STAINLESS STEEL
 BEARING PAD WITH PTFE
 LOWER BEARING PLATE
 SLIDE BEARING
 POT BEARING
 UPPER BEARING PLATE
 STAINLESS STEEL
 PISTON WITH PTFE
 NEOPRENE
 POT

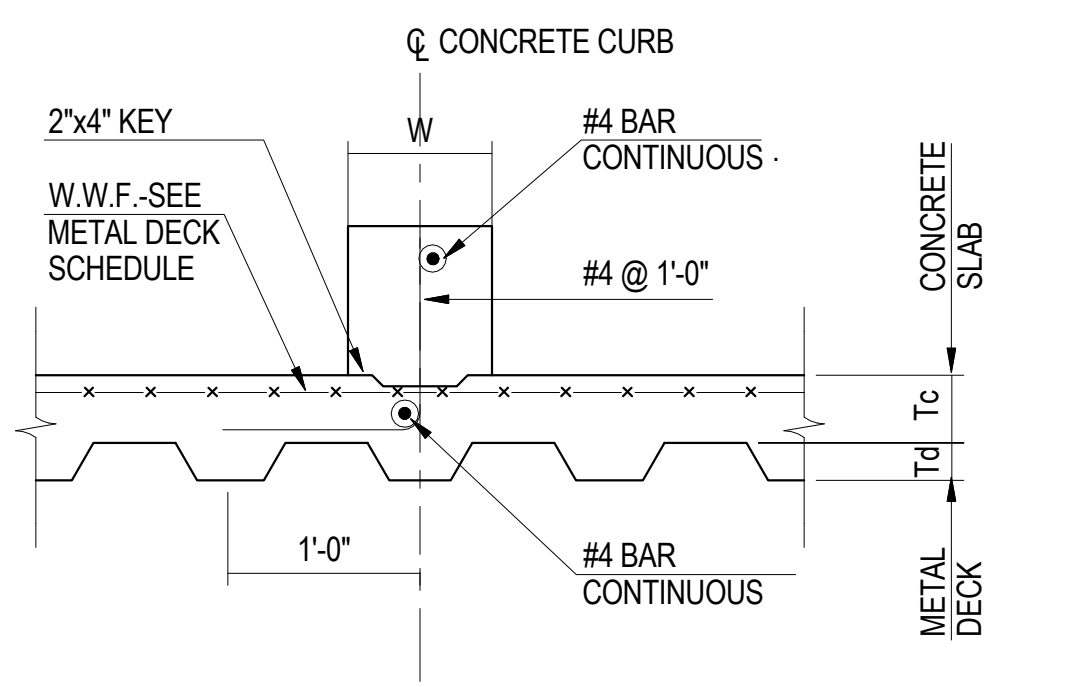
2. LOWER BEARING PLATE IS 2 1/2" SHORTER AT EACH SIDE OF UPPER BEARING PLATE.
3. ALL BEARING PLATE SIZES NEED TO BE COORDINATED AND VERIFIED WITH POT BEARING/SLIDE BEARING MANUFACTURERS' REQUIREMENT.
4. POT BEARING/SLIDE BEARING TO ACCOMMODATE +2.5 IN MOVEMENT IN BOTH X AND Y DIRECTION, AND ROTATION OF 0.003 RADIAN.
5. THE ELEVATION OF TOP OF LOWER BEARING PLATE SHALL BE COORDINATED WITH THE BEARING CONTRACTOR.
6. BEARING LOADS IN PARENTHESES INDICATES UPLIFT FORCE.





NOTES:
1. SEE DETAIL 6 FOR TYPICAL COMPOSITE METAL DECK SLAB DETAIL.
2. PROVIDE FIRE PROOFING UNDER SLAB.
3. PROVIDE 3/4" DIA. SHEAR STUD. U.N.O.

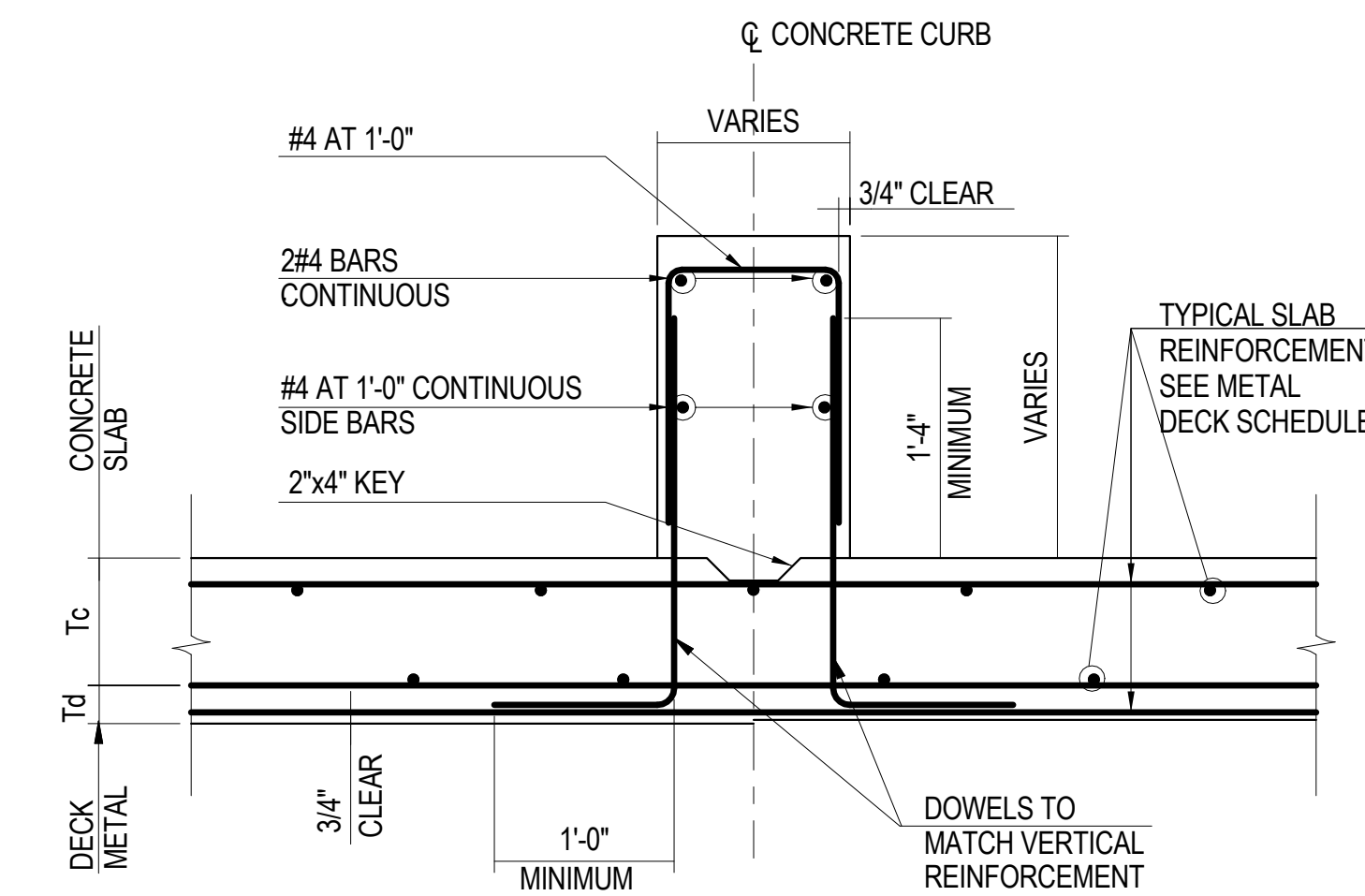




NOTES: 1. THIS DETAIL APPLIES WHEN W=6".
2. FOR CURB SIZE AND LOCATION, SEE ARCHITECTURAL DRAWINGS.
3. PROVIDE 3/4" CLEAR COVER TO BARS UNLESS NOTED OTHERWISE.

1 TYPICAL DETAILS FOR CONCRETE CURBS

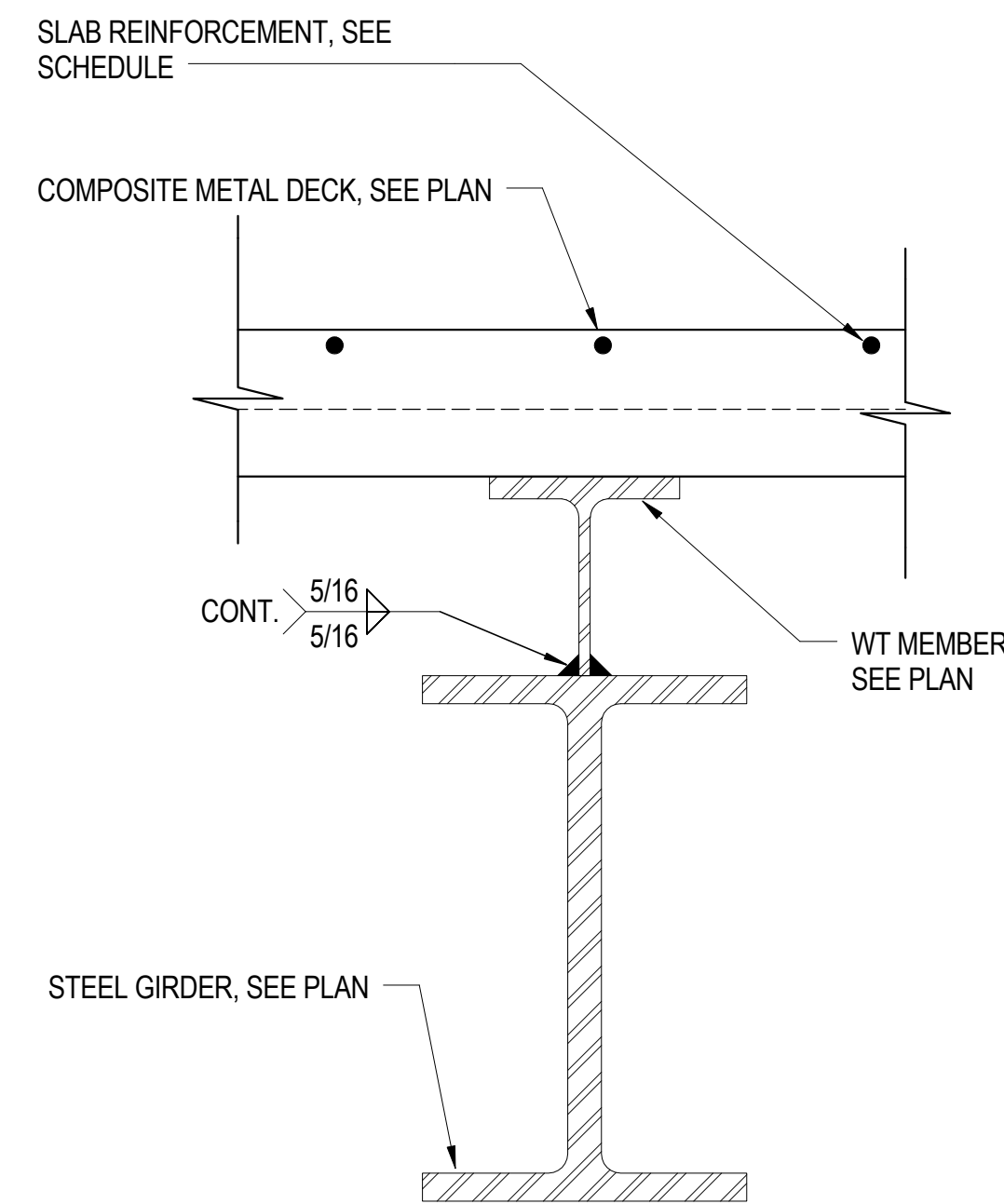
NOT TO SCALE



NOTES: 1. THIS DETAIL APPLIES WHEN W=6".
2. FOR CURB SIZE AND LOCATION, SEE ARCHITECTURAL DRAWINGS.
3. PROVIDE 3/4" CLEAR COVER TO BARS UNLESS NOTED OTHERWISE.

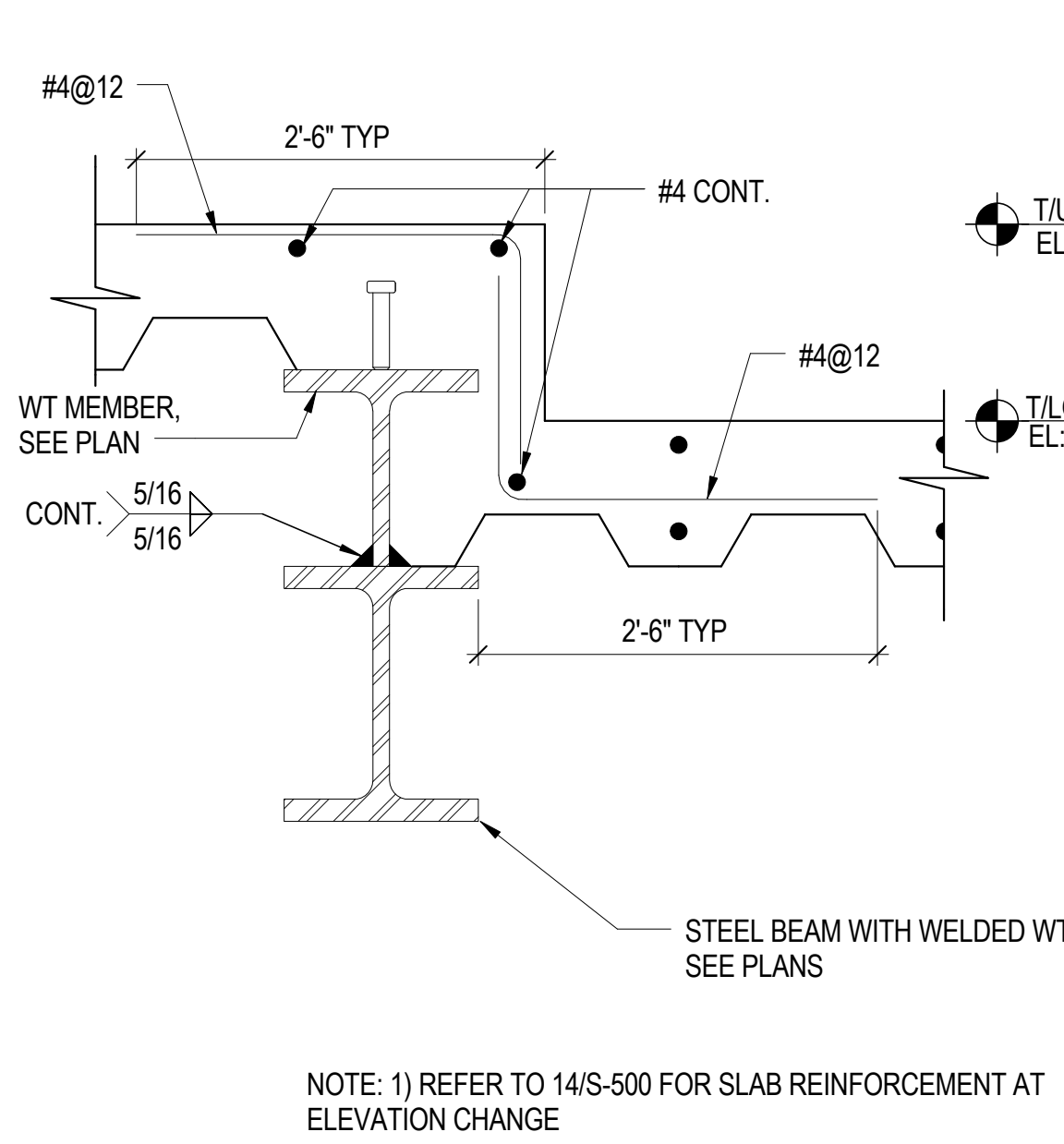
2 TYPICAL DETAILS FOR CONCRETE CURBS ON METAL DECK SLAB

NOT TO SCALE



3 TYPICAL STEEL BEAM WITH WT SLAB SUPPORT DETAIL

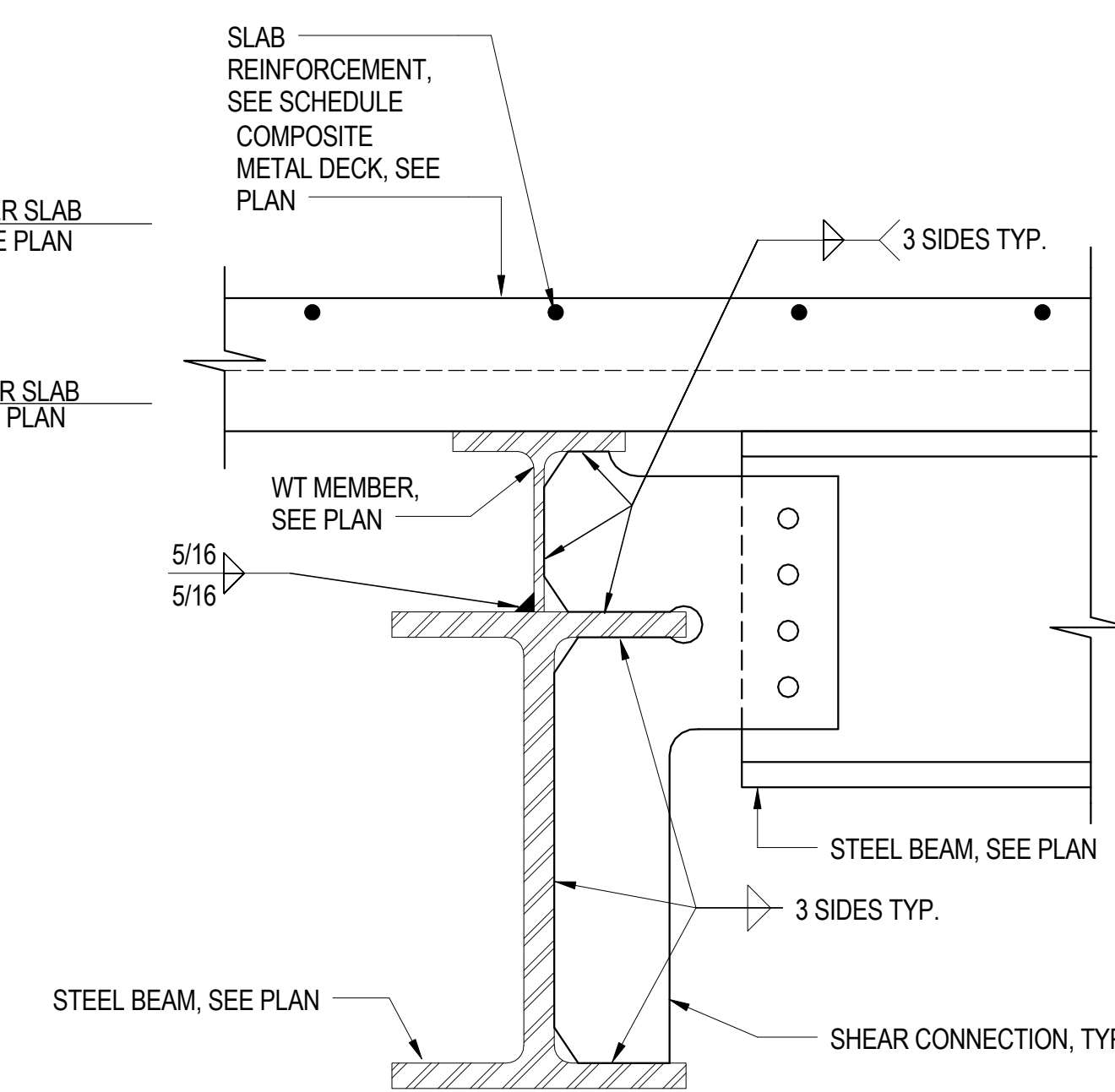
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NOTE: 1) REFER TO 14/S-500 FOR SLAB REINFORCEMENT AT ELEVATION CHANGE

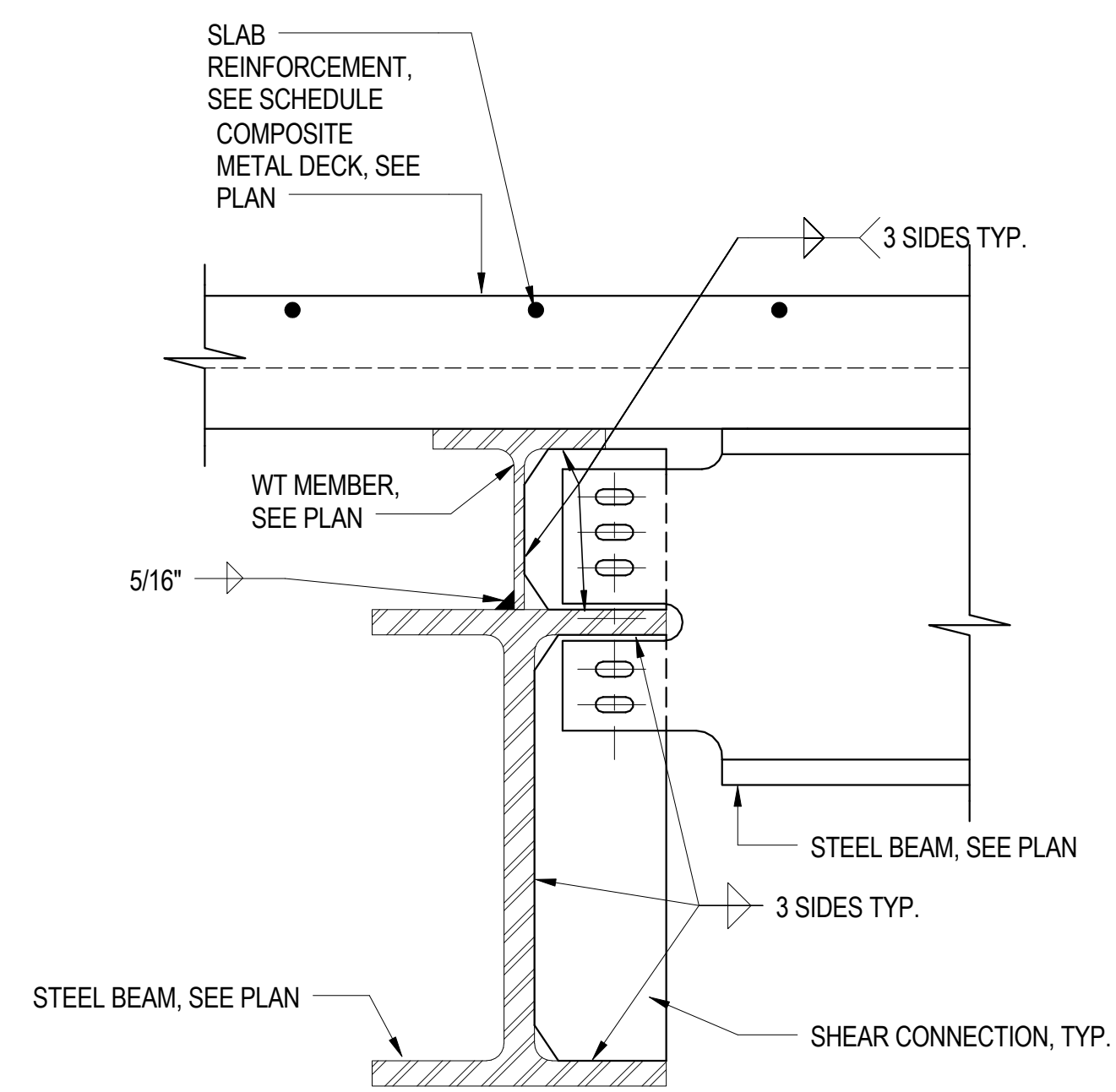
4 TYPICAL STEEL BEAM WITH WT SLAB SUPPORT DETAIL AT ELEVATION CHANGE

NOT TO SCALE



5 STEEL BEAM FRAMING INTO BEAM WITH WT SLAB SUPPORT DETAIL

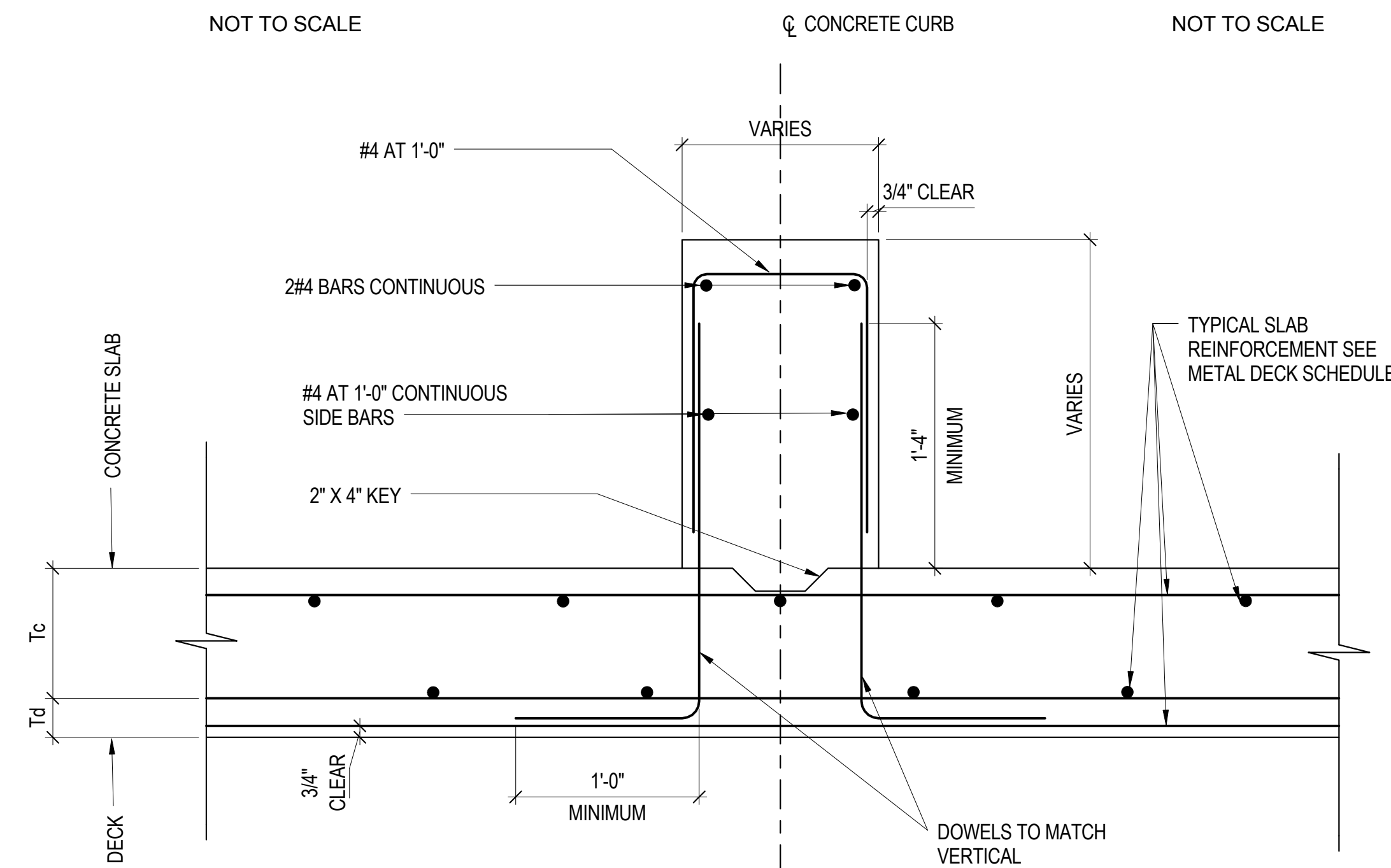
NOT TO SCALE



5A STEEL BEAM FRAMING INTO BEAM WITH WT SLAB SUPPORT DETAIL - ALTERNATE

NOT TO SCALE

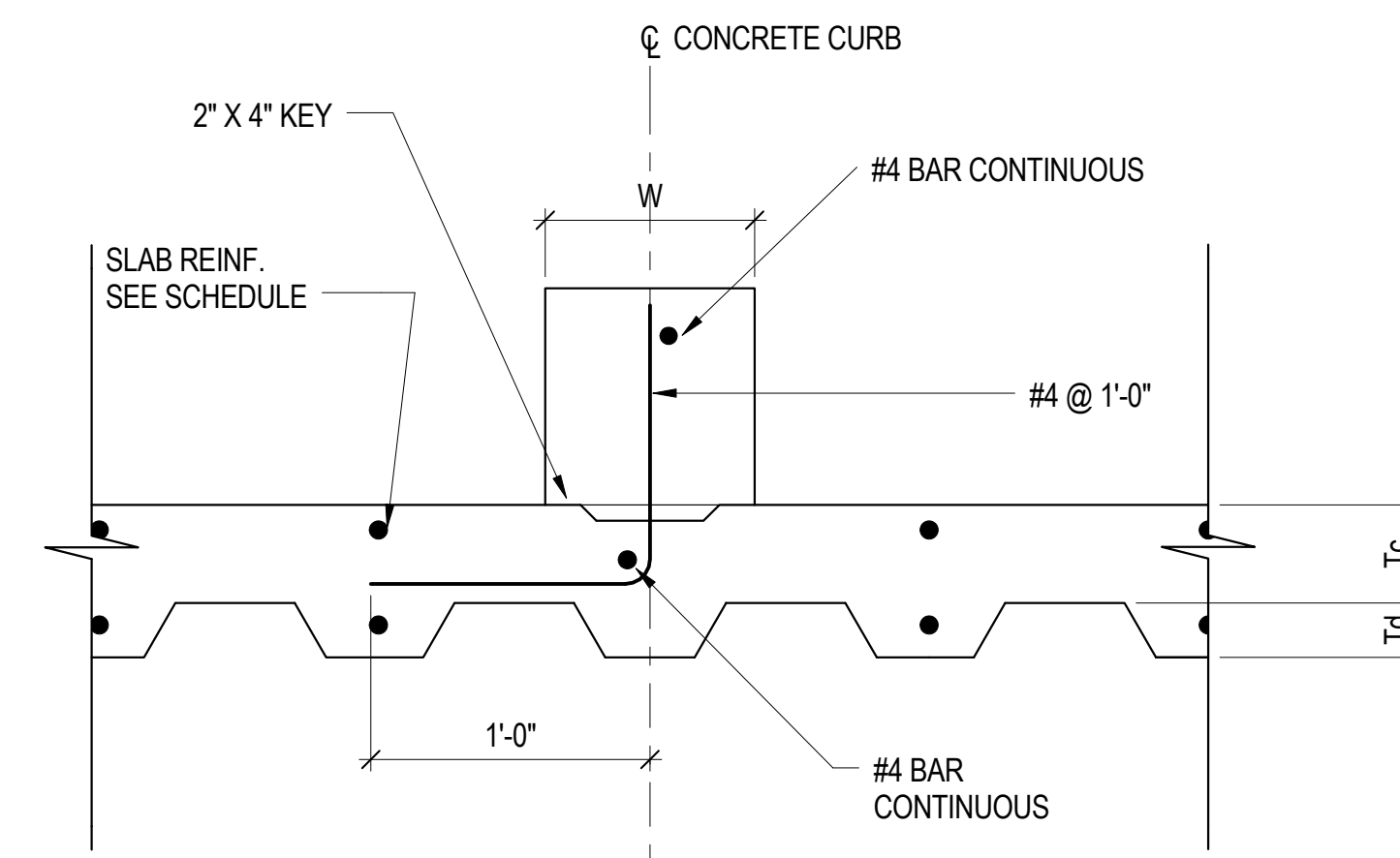
DETAIL REMOVED,
NO LONGER APPLICABLE



NOTES: 1. THIS DETAIL APPLIES WHEN W=6".
2. FOR CURB SIZE AND LOCATION, SEE ARCHITECTURAL DRAWINGS.
3. PROVIDE 3/4" CLEAR COVER TO BARS UNLESS NOTED OTHERWISE.
4. PROVIDE HORIZONTAL REBARS FROM CURB INTO FILL SLAB AS REQUIRED. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.

7 TYPICAL DETAILS FOR CONCRETE CURBS

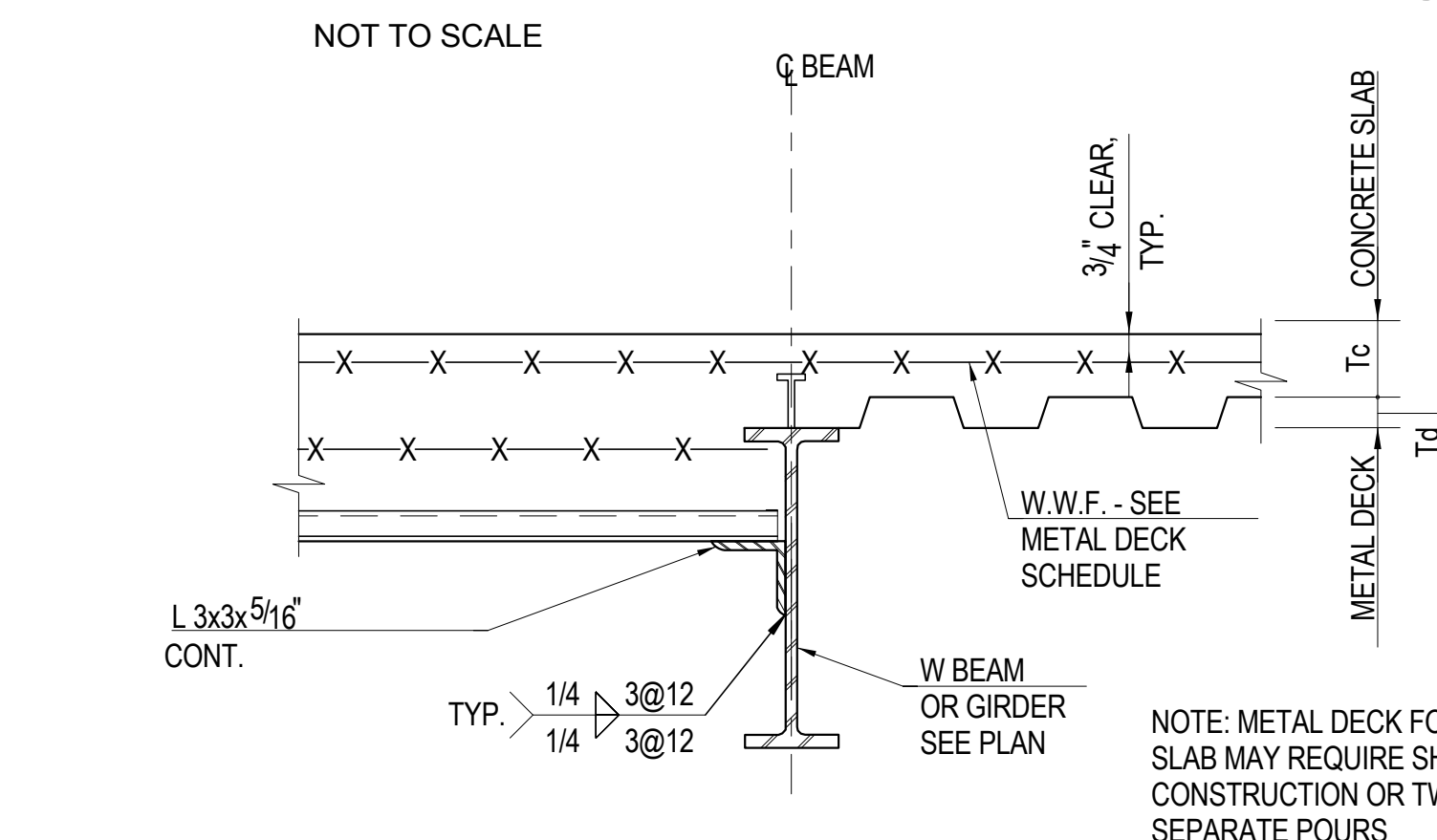
NOT TO SCALE



NOTE: 1. THIS DETAIL APPLIES WHEN W=6".
2. FOR CURB SIZE AND LOCATION, SEE ARCHITECTURAL DRAWINGS.
3. PROVIDE 3/4" CLEAR COVER TO BARS UNLESS NOTED OTHERWISE.
4. FIRE PROOFING NOT SHOWN FOR CLARITY.
5. PROVIDE HORIZONTAL REBARS FROM CURB INTO FILL SLAB AS REQUIRED. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.

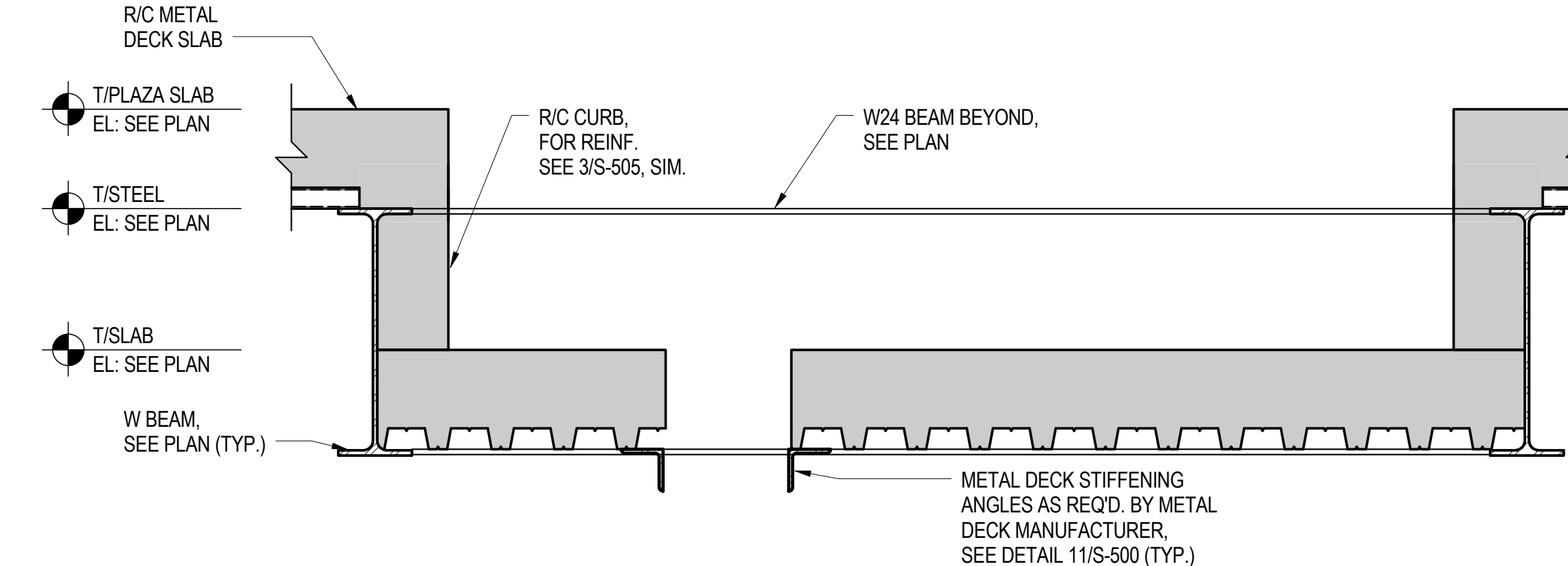
8 TYPICAL DETAIL FOR CONCRETE CURB ON METAL DECK SLAB

NOT TO SCALE



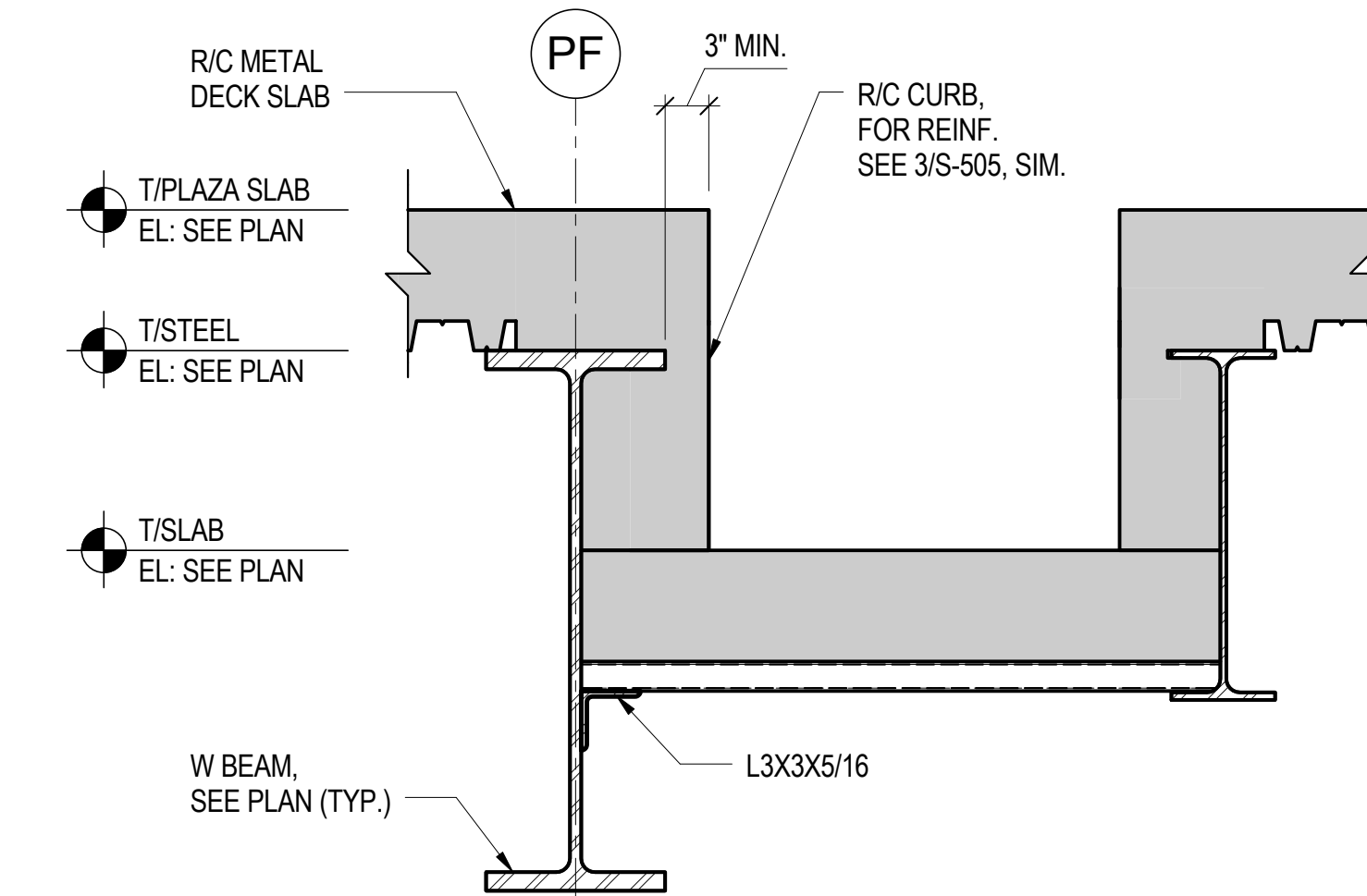
9 TYPICAL METAL DECK AT DEPTH CHANGE

NOT TO SCALE



16 PLAZA LEVEL - ELECTRICAL ACCESS HATCH DETAIL

NOT TO SCALE

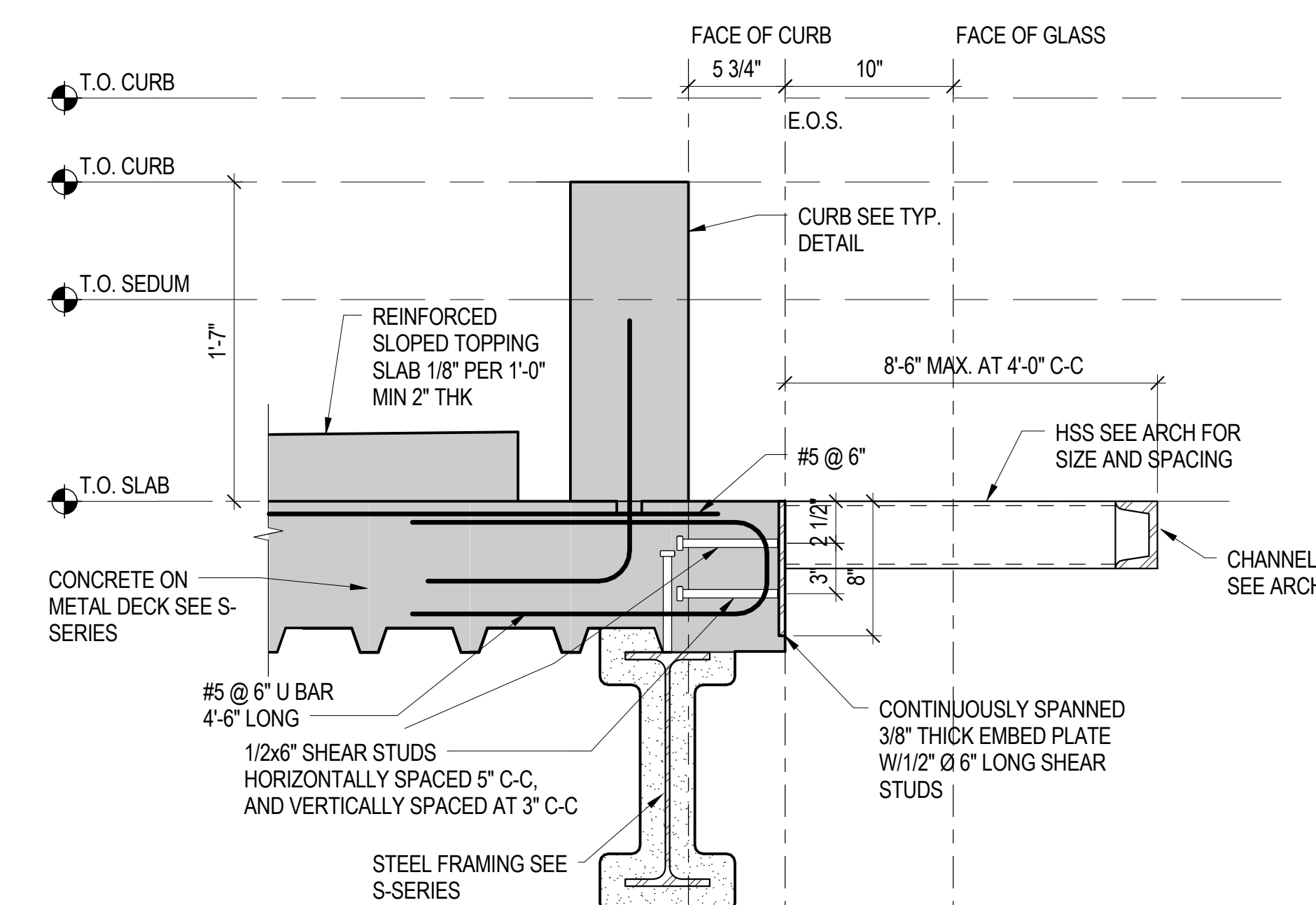


17 PLAZA LEVEL - ELECTRICAL ACCESS HATCH DETAIL

NOT TO SCALE

6 CMU DUCT CONNECTION DETAIL

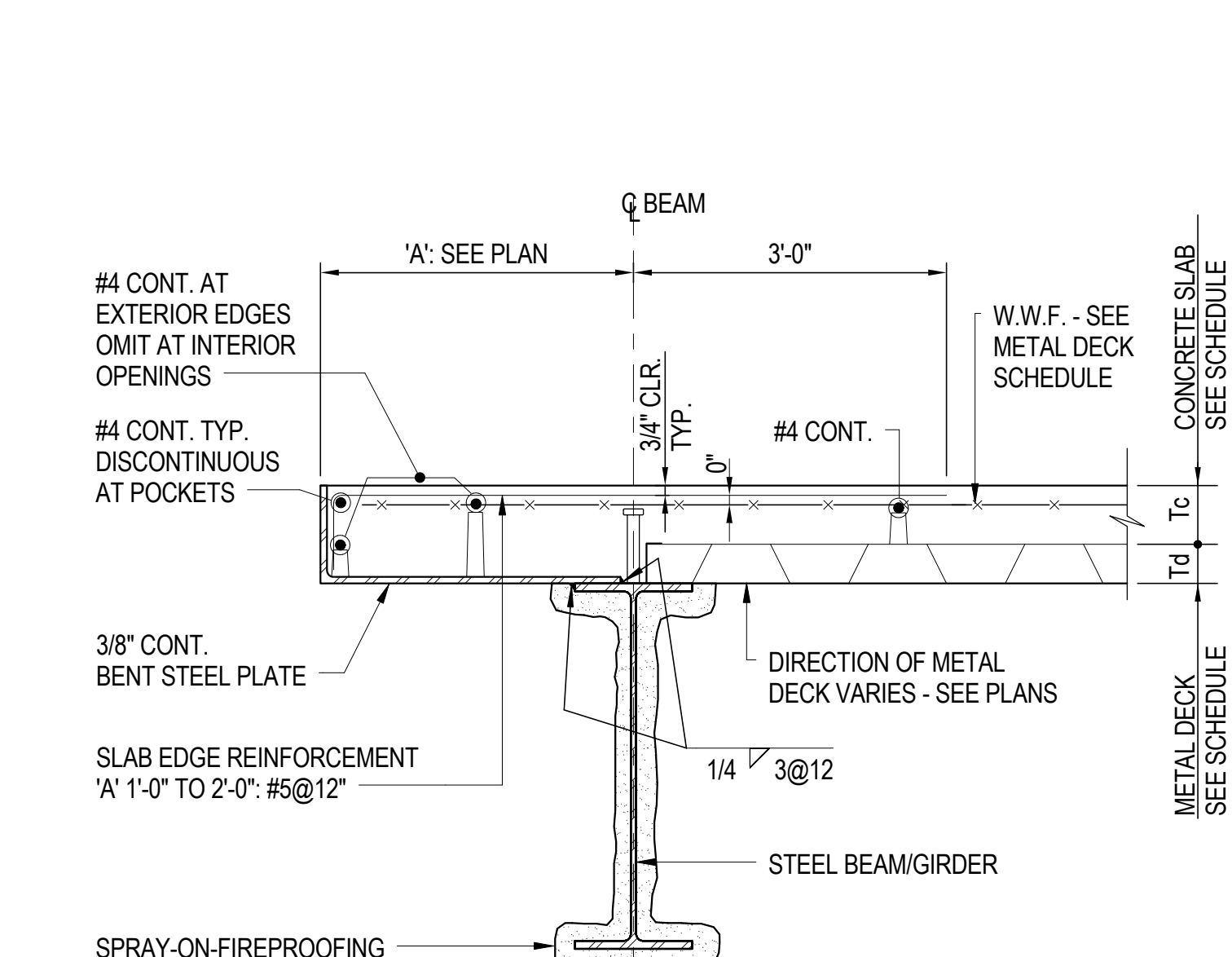
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NOTES: 1. FOR ADDITIONAL INFORMATION SEE ARCHITECTURAL DRAWING A-577.

10 TYPICAL SLAB EDGE DETAIL AT 3RD FLOOR

NOT TO SCALE

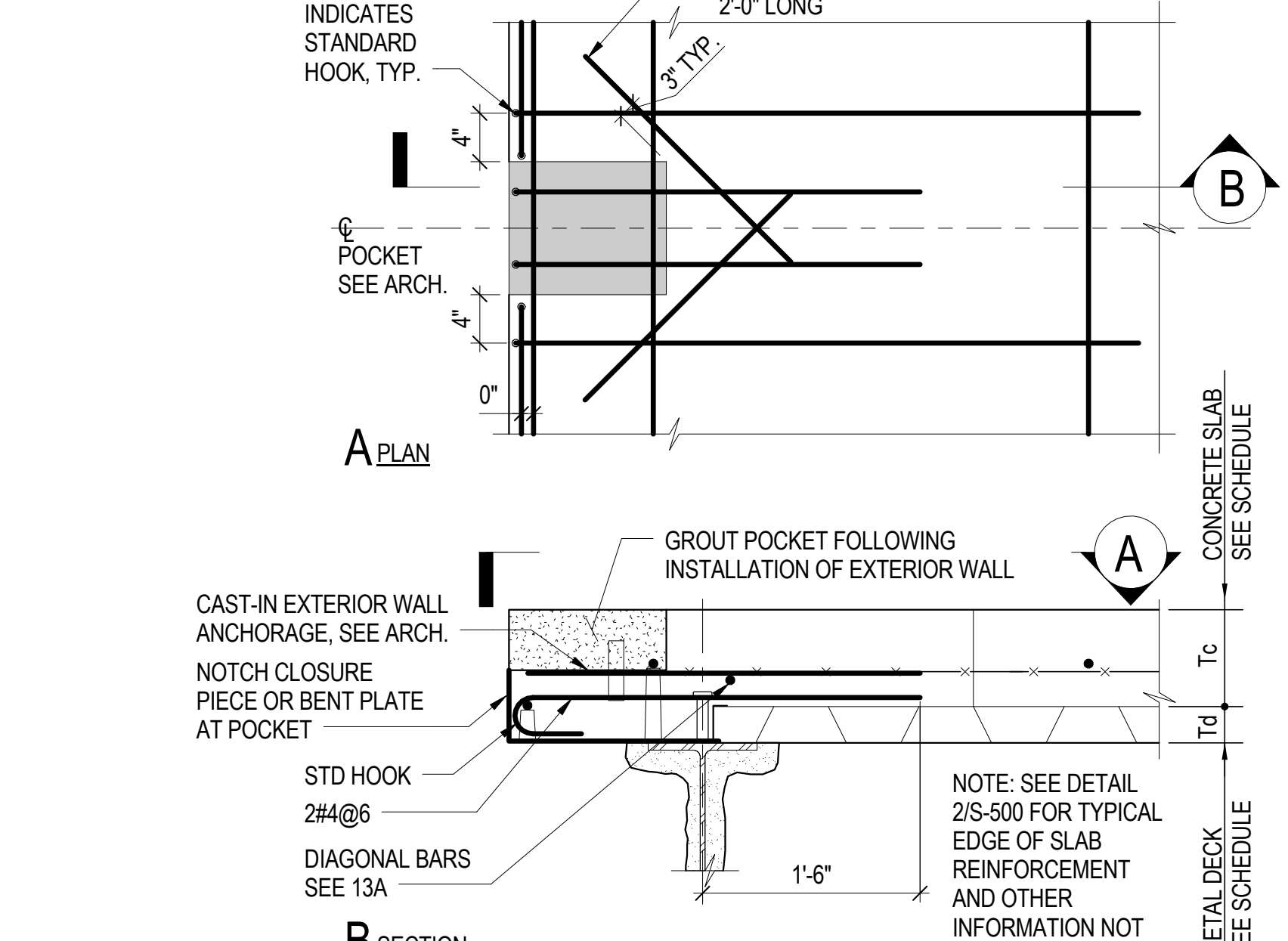


12 TYPICAL METAL DECK SLAB EDGE DETAIL FOR 1'-0" <= A' <= 2'-0"

NOT TO SCALE

11 FOUNDATION SUPPORT DETAIL AT RETRACTABLE BOLLARD

NOT TO SCALE

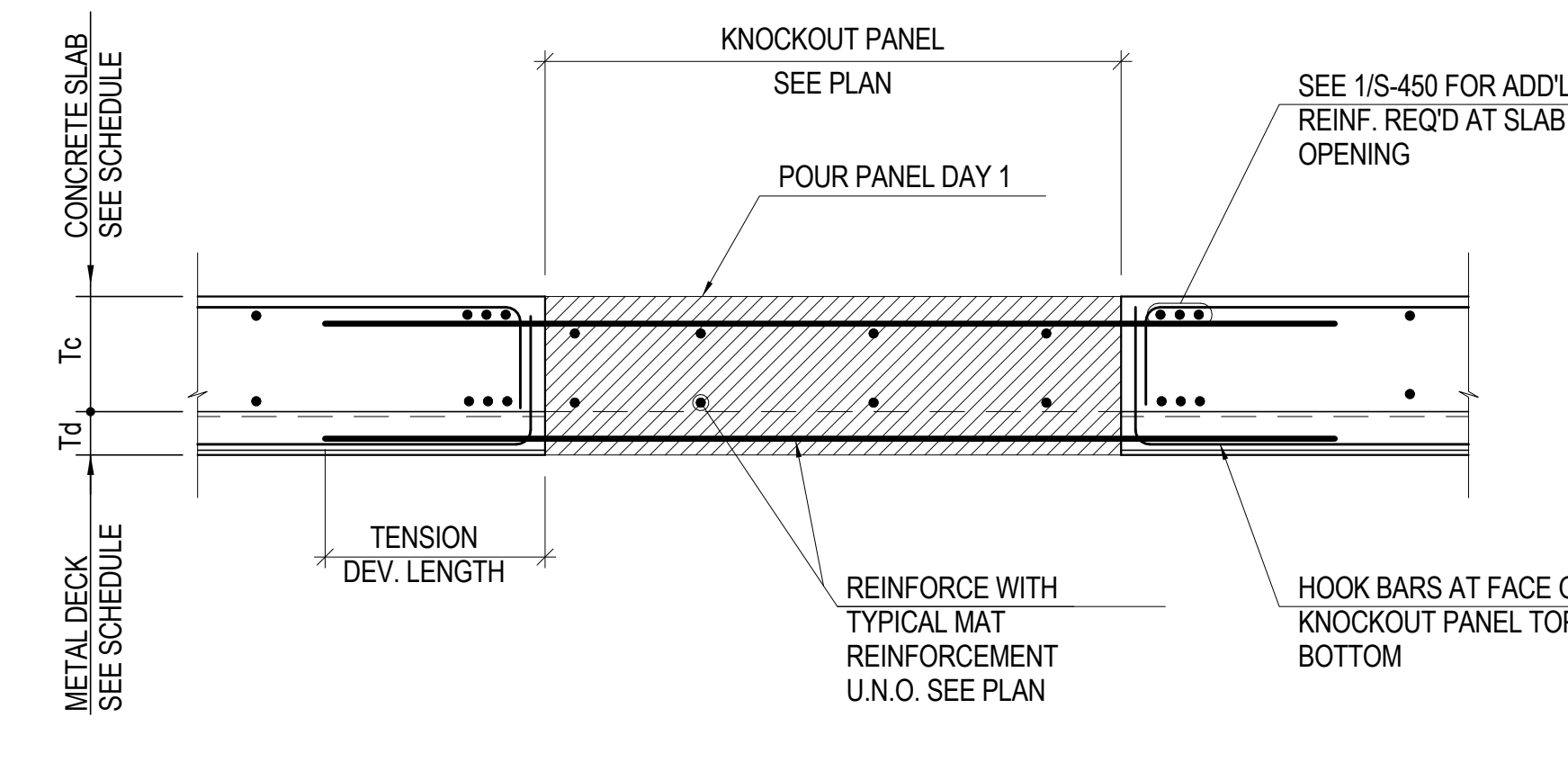


13 TYPICAL METAL DECK SLAB POCKET DETAIL

NOT TO SCALE

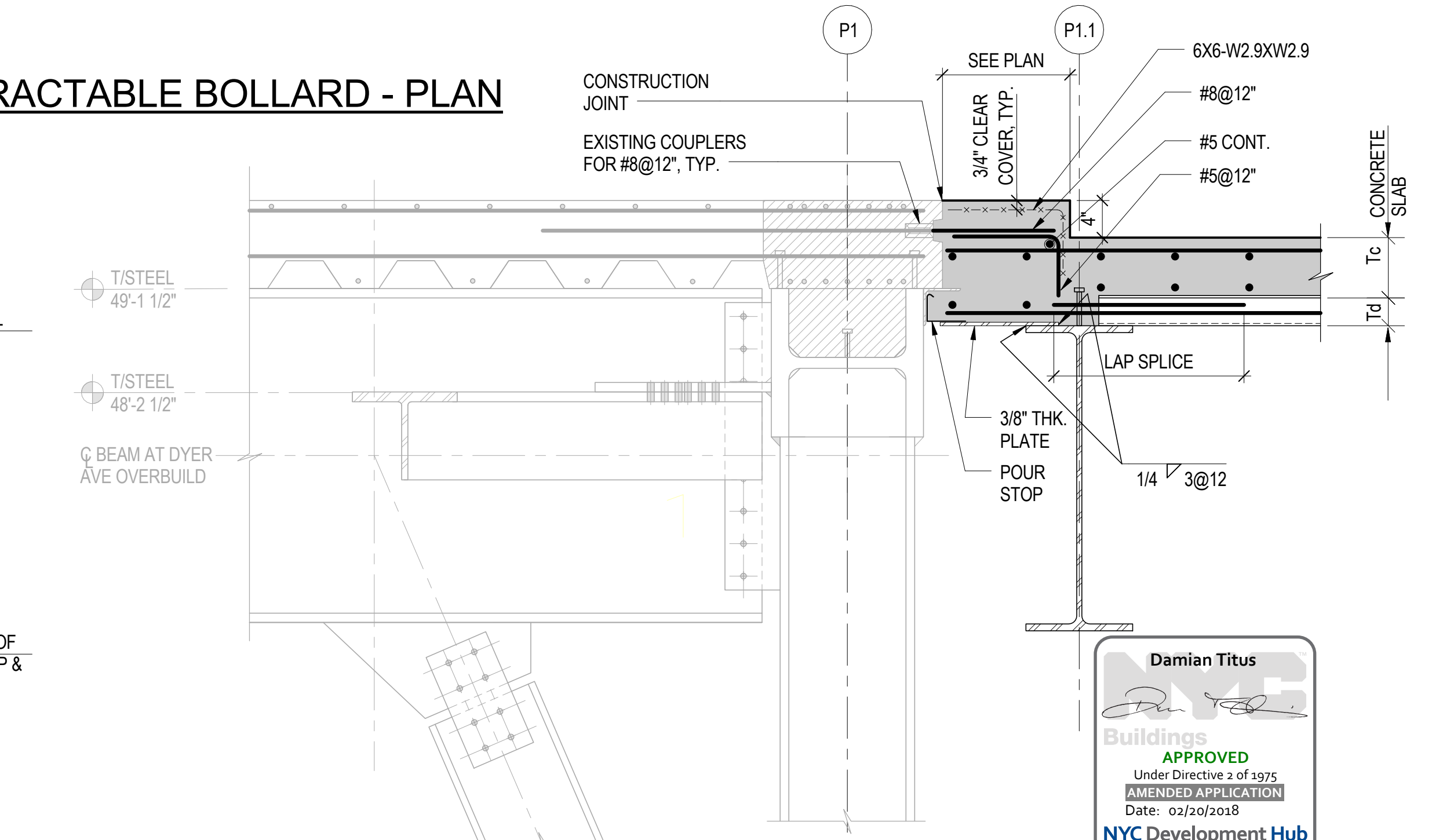
11A FOUNDATION SUPPORT DETAIL AT RETRACTABLE BOLLARD - PLAN

NOT TO SCALE



14 KNOCKOUT SLAB DETAIL

NOT TO SCALE



15 METAL DECK SLAB EDGE DETAIL AT DYER AVE OVERBUILD TRUSS

NOT TO SCALE



MANHATTAN WEST: RETAIL & CENTRAL PLAZA

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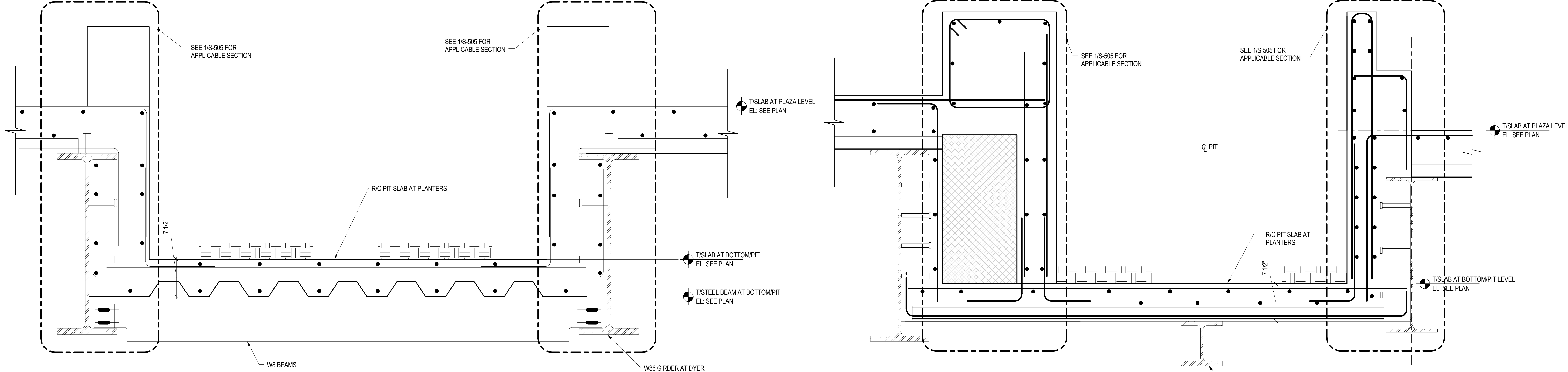


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Sheet Name:

**METAL DECK
SLAB SECTIONS &
DETAILS**

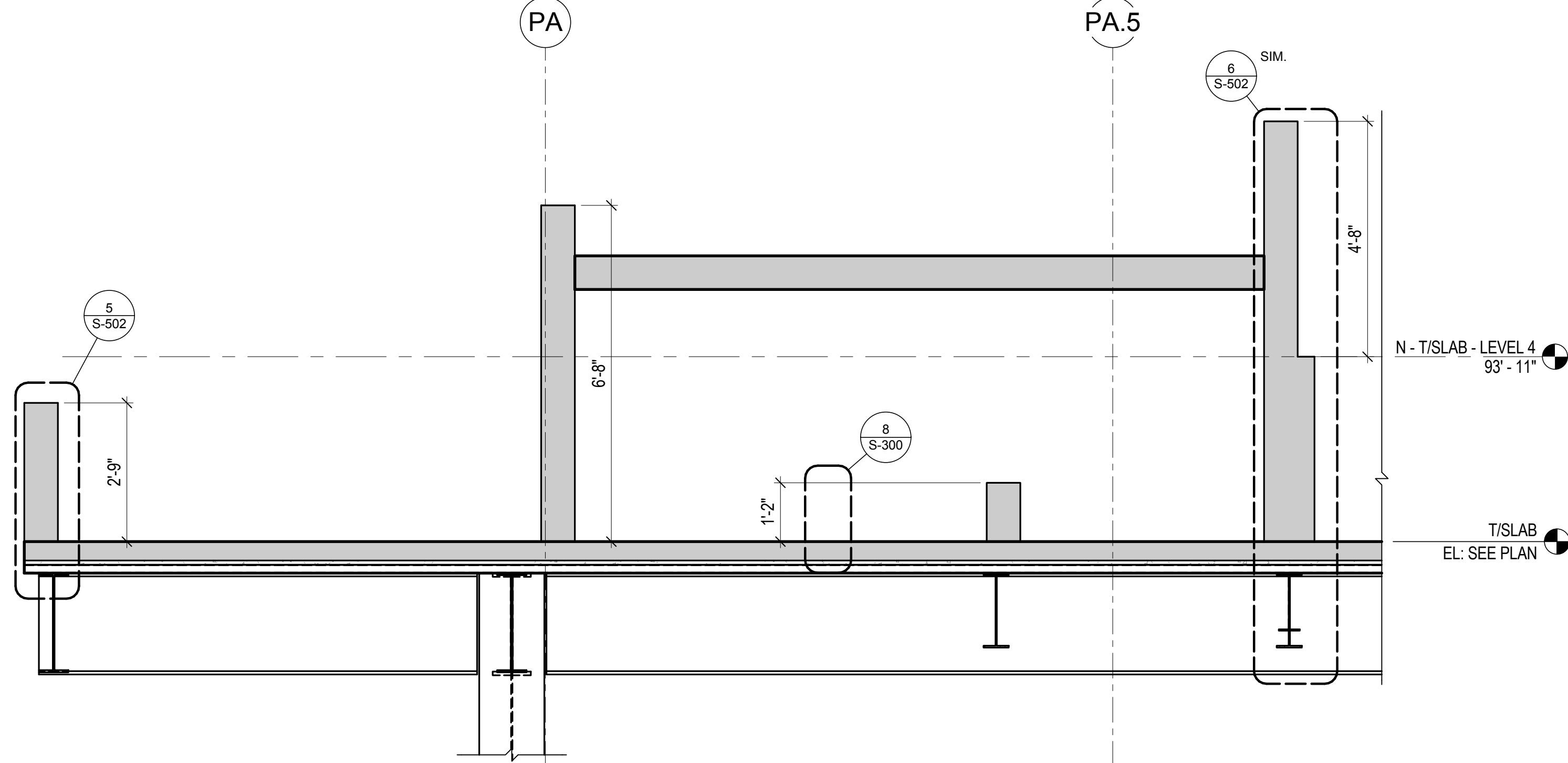
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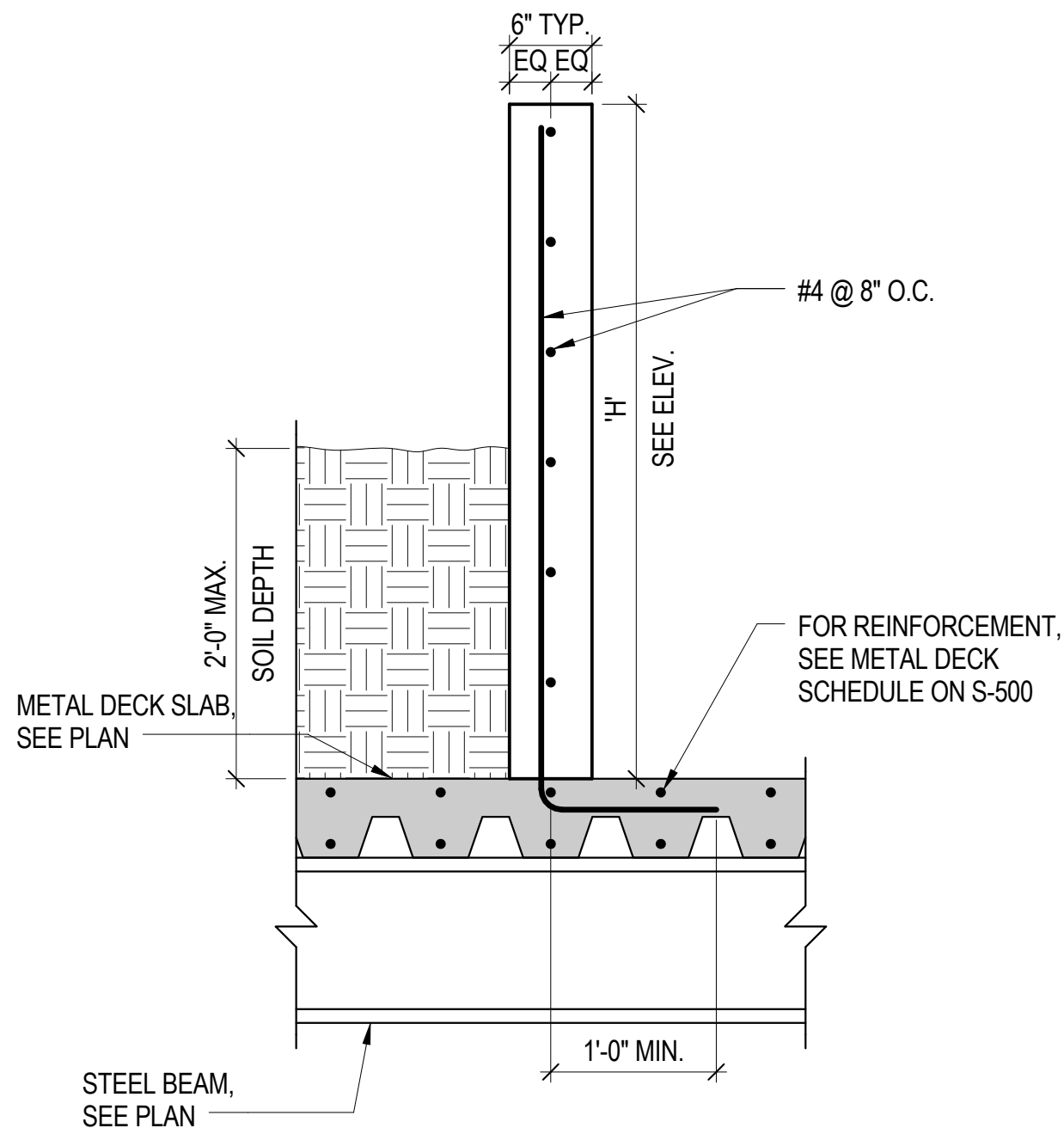


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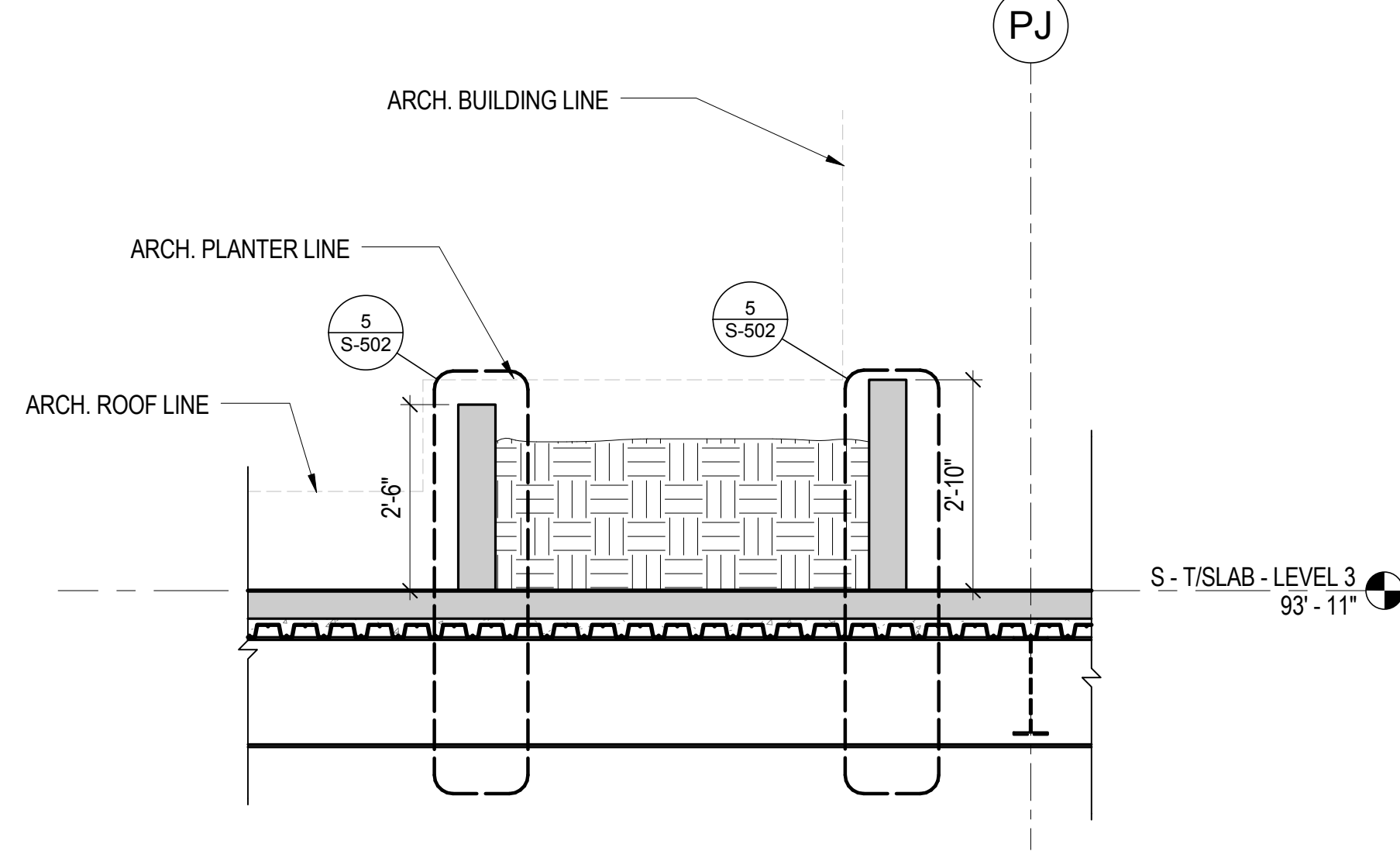
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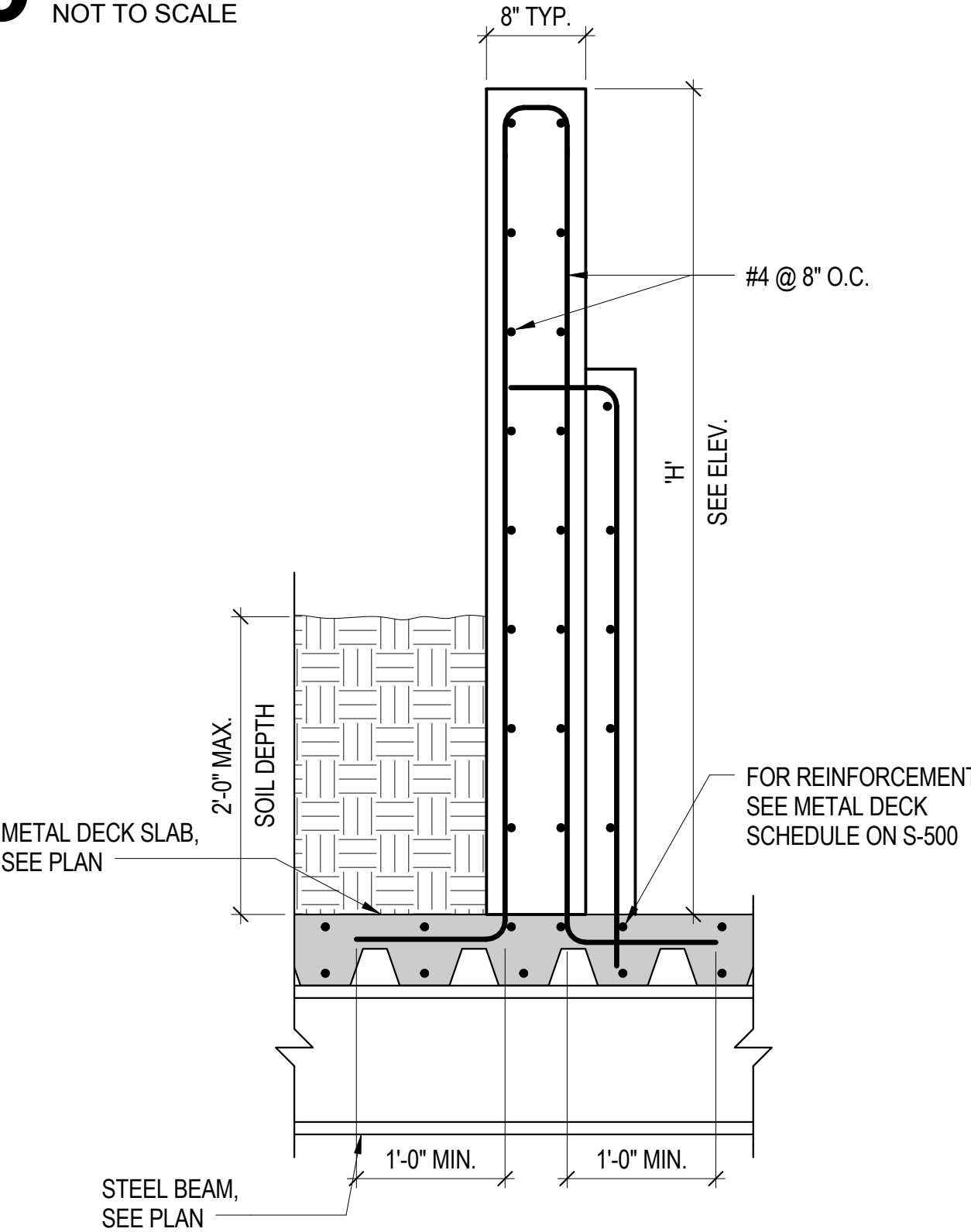
3 BUILDING SECTION ALONG GRIDLINE P5 - LOOKING EAST
1/2" = 1'-0"



5 PLANTER WALL REINFORCEMENT DETAIL
NOT TO SCALE



4 BUILDING SECTION ALONG GRIDLINE P5 - LOOKING EAST
1/2" = 1'-0"



6 PLANTER WALL REINFORCEMENT DETAIL
NOT TO SCALE



Sheet No. S-505.00



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1. 02/16/2018 ISSUED FOR BUILDING PERMIT
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Project No.: 211157
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B-SCAN Sheet No.:
S-505.00
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Page No.:

PLAZA LEVEL
SECTIONS AND
DETAILS

Project No.: 211157
Date: 02/16/2018
Scale: As indicated
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Project No.: 211157
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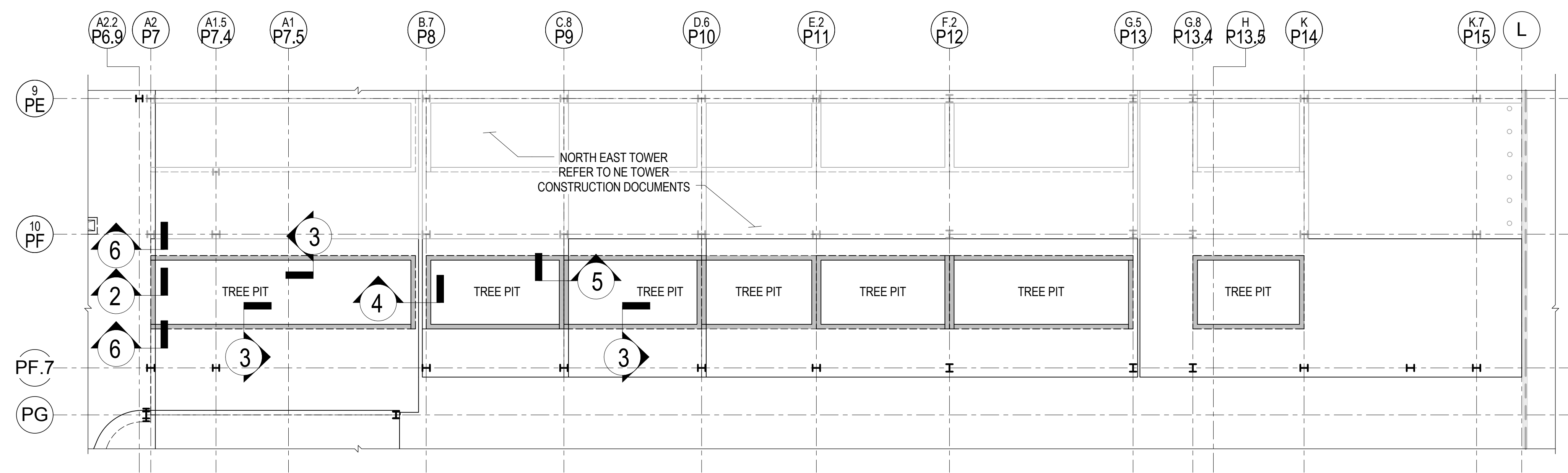
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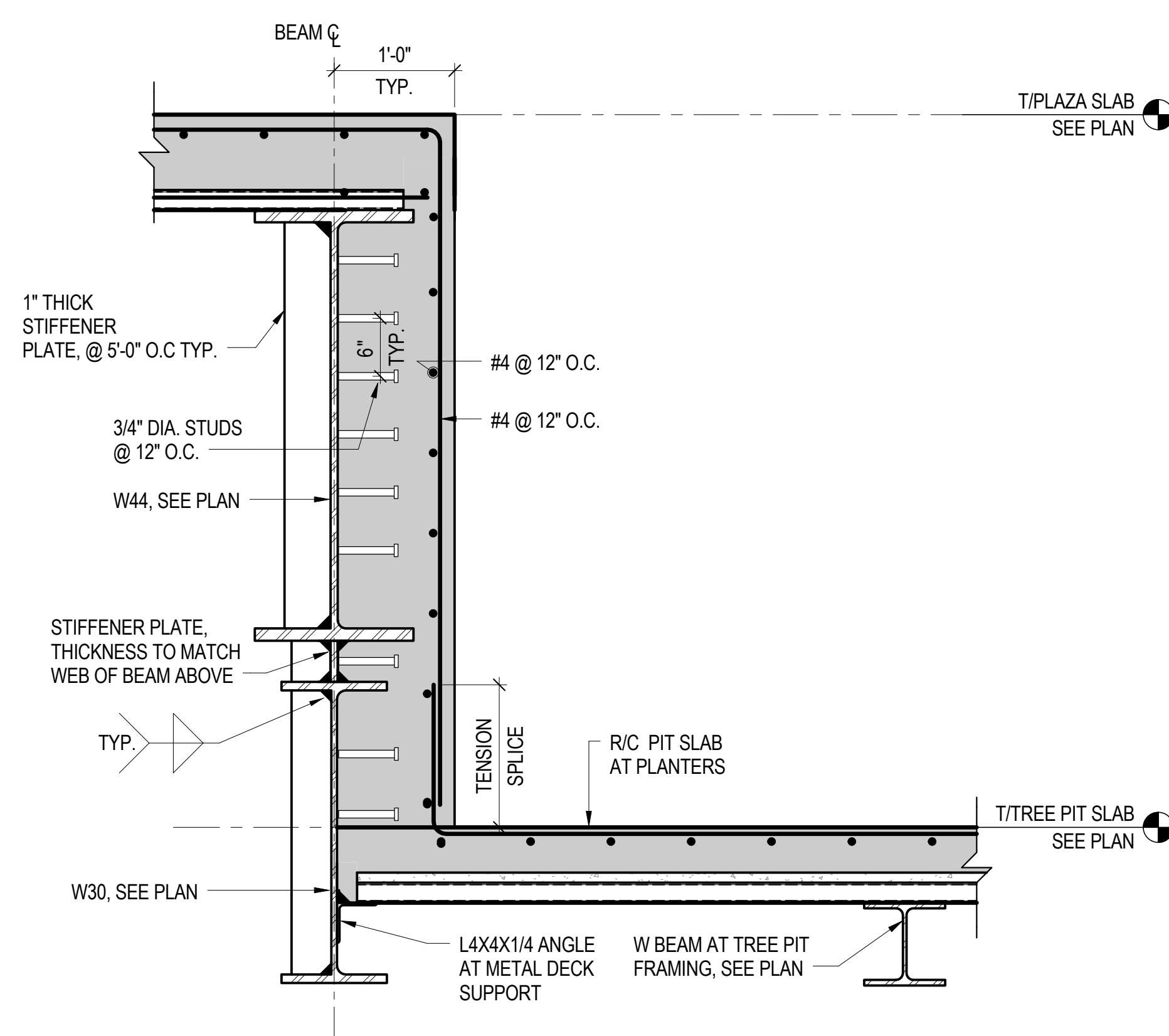
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Scale: As indicated
File No.: S-505

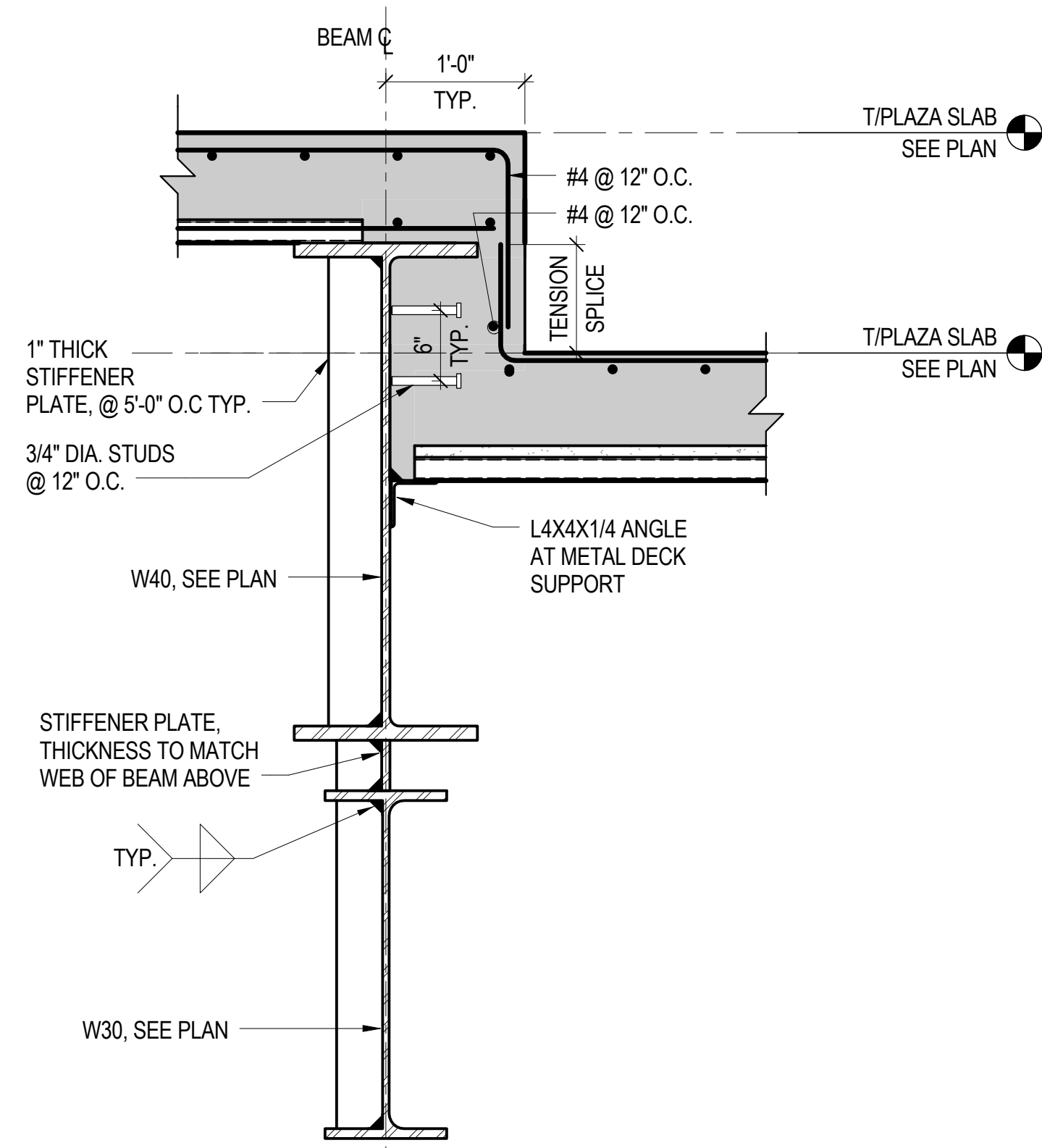
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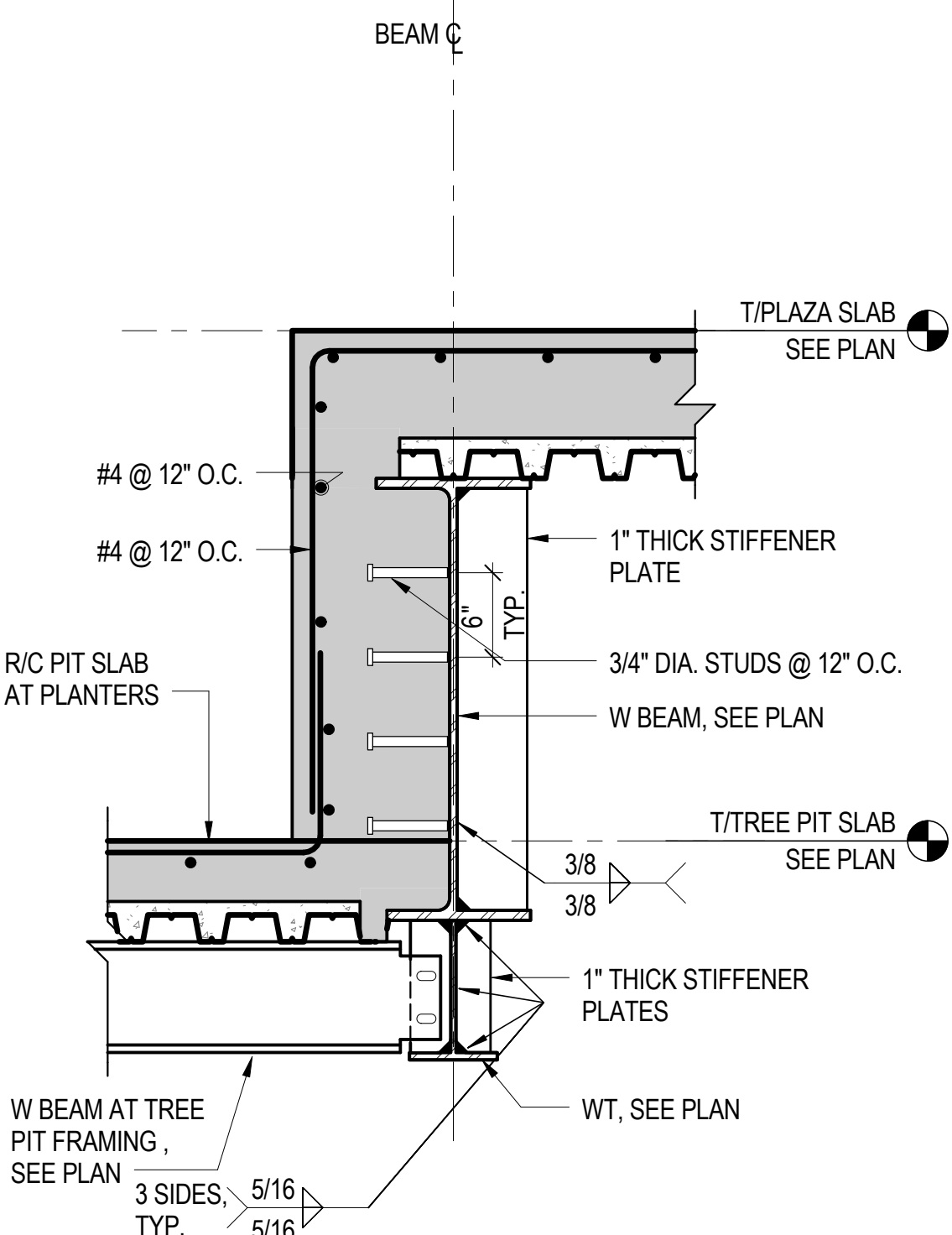
1 PLAZA PLANTERS - KEY PLAN
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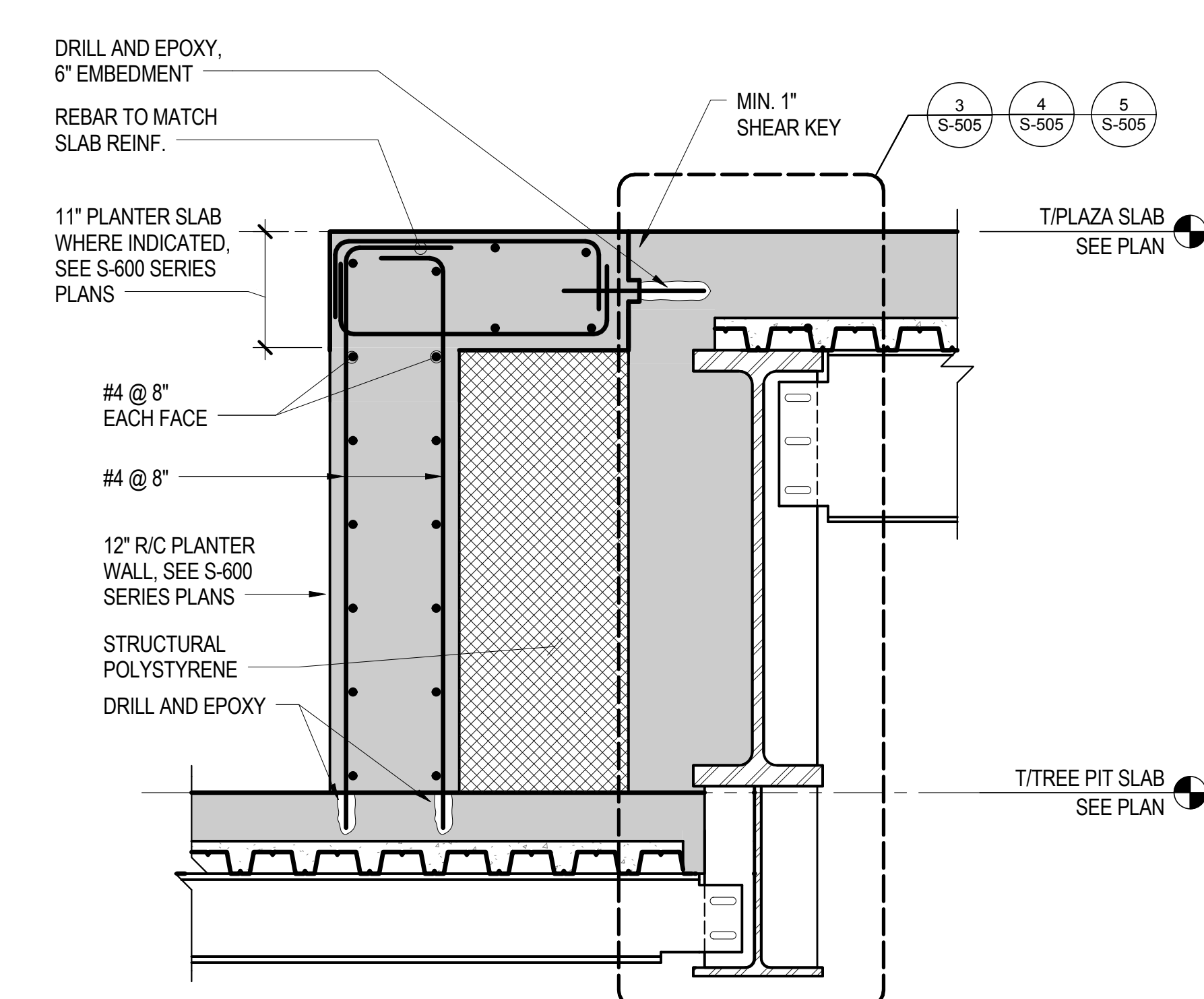
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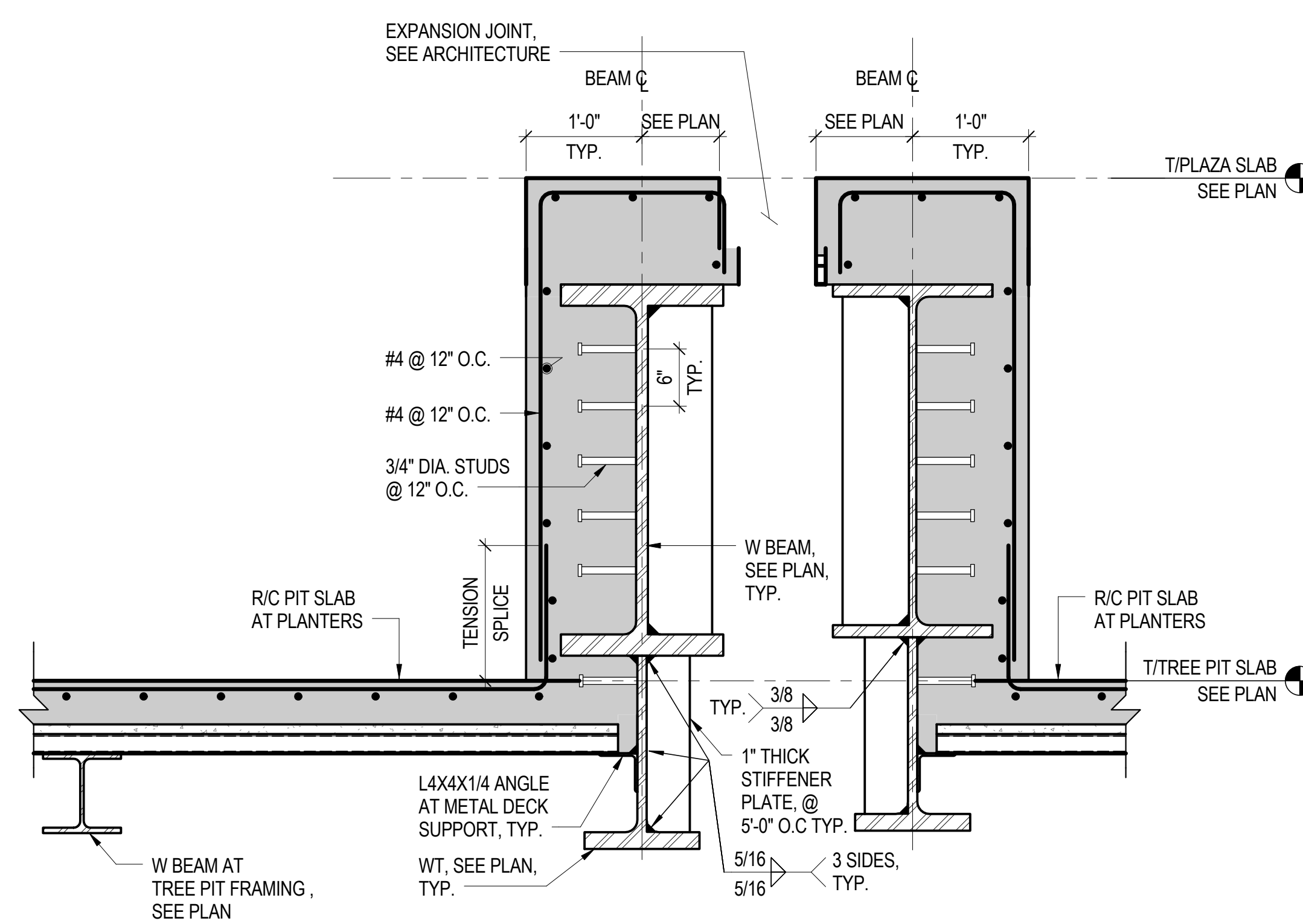
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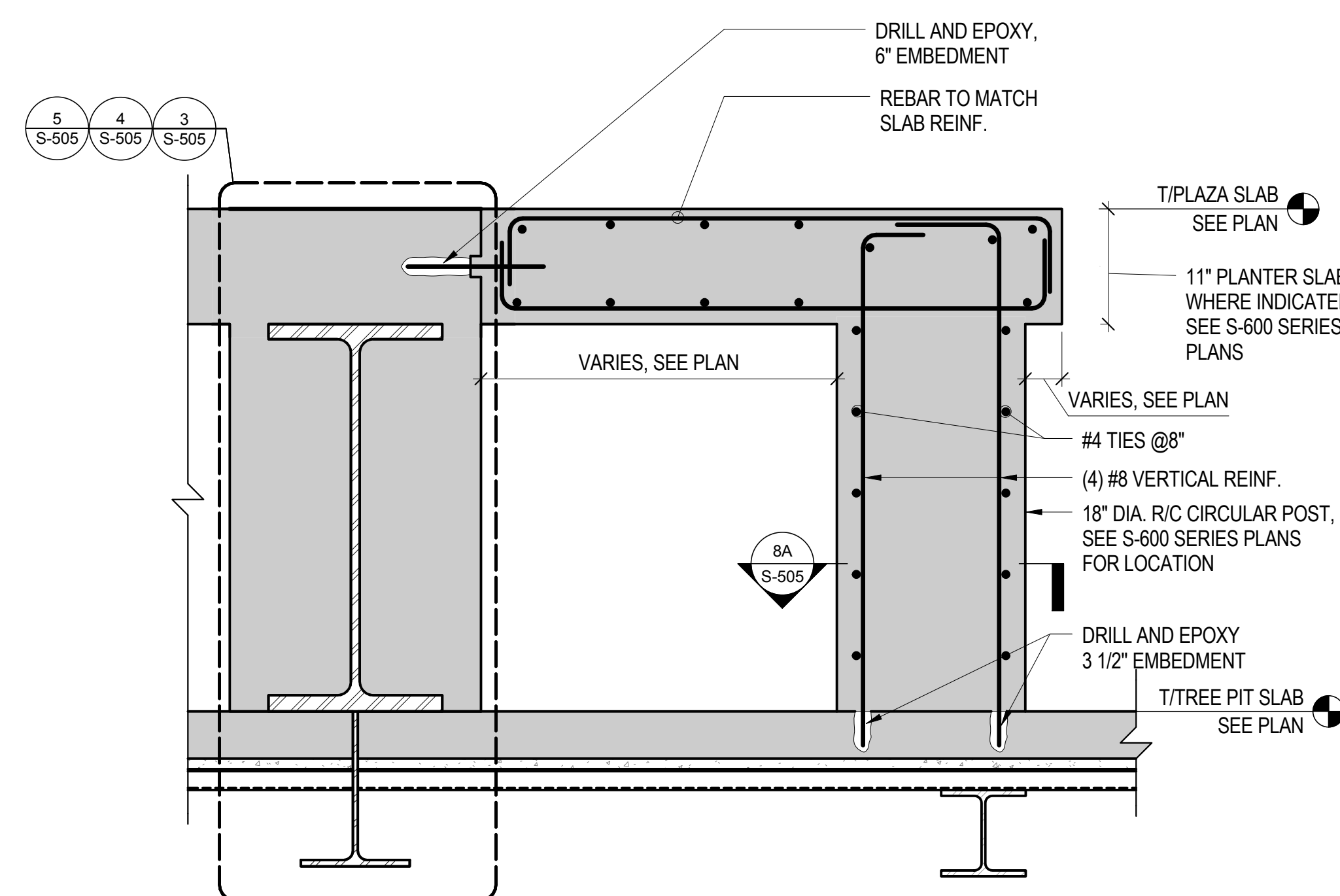
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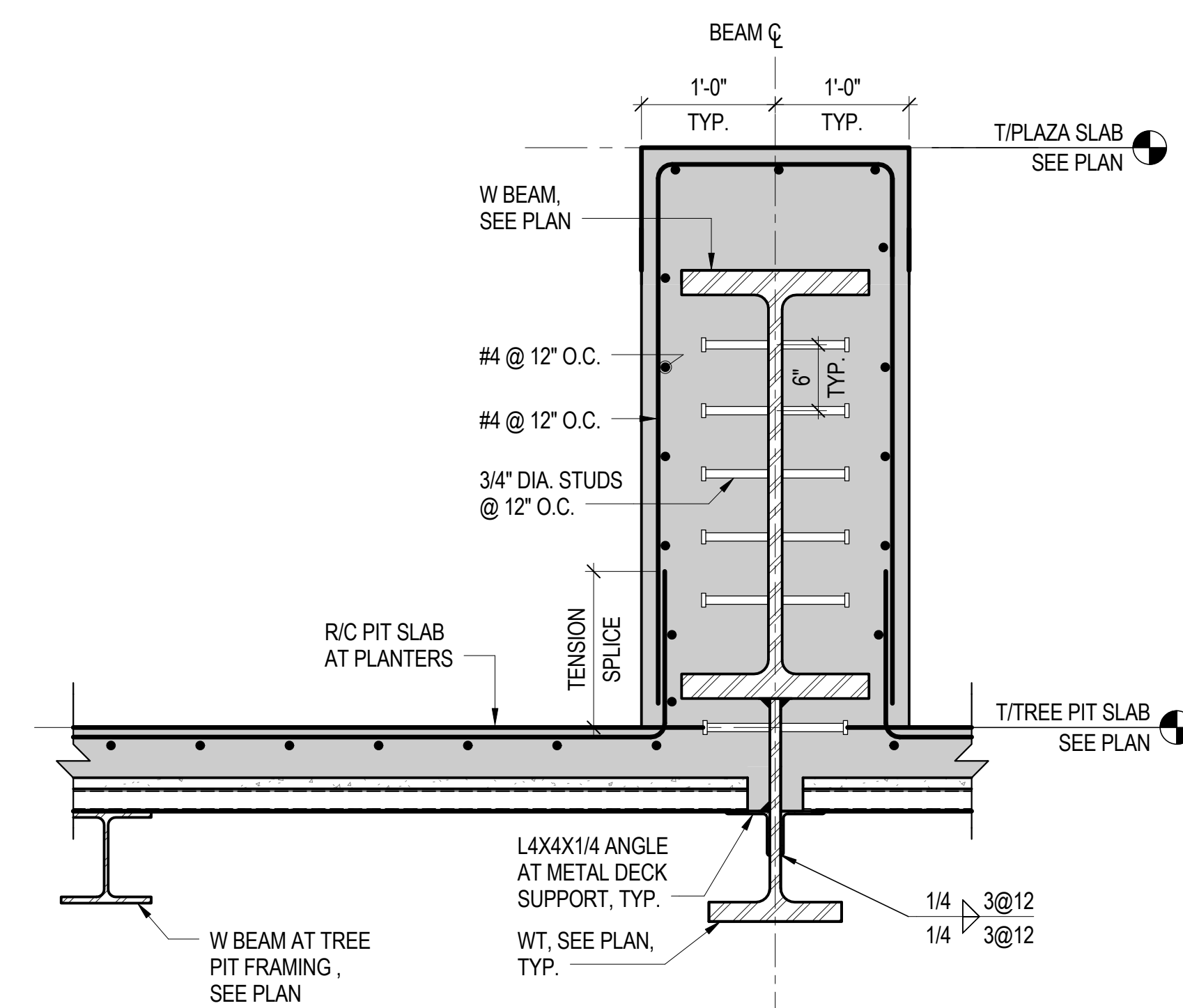
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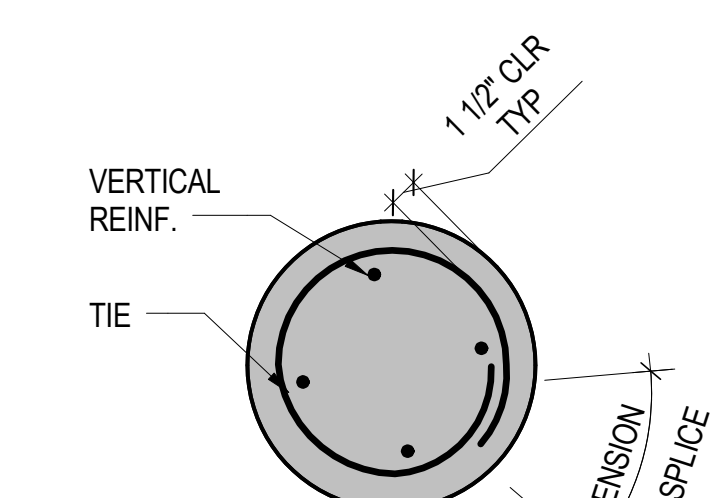
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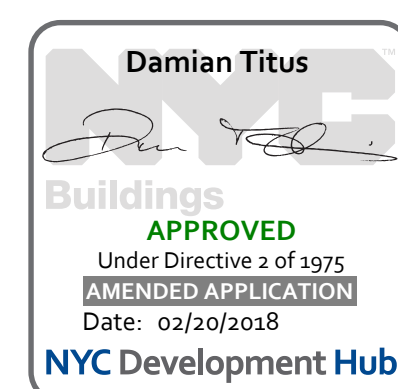
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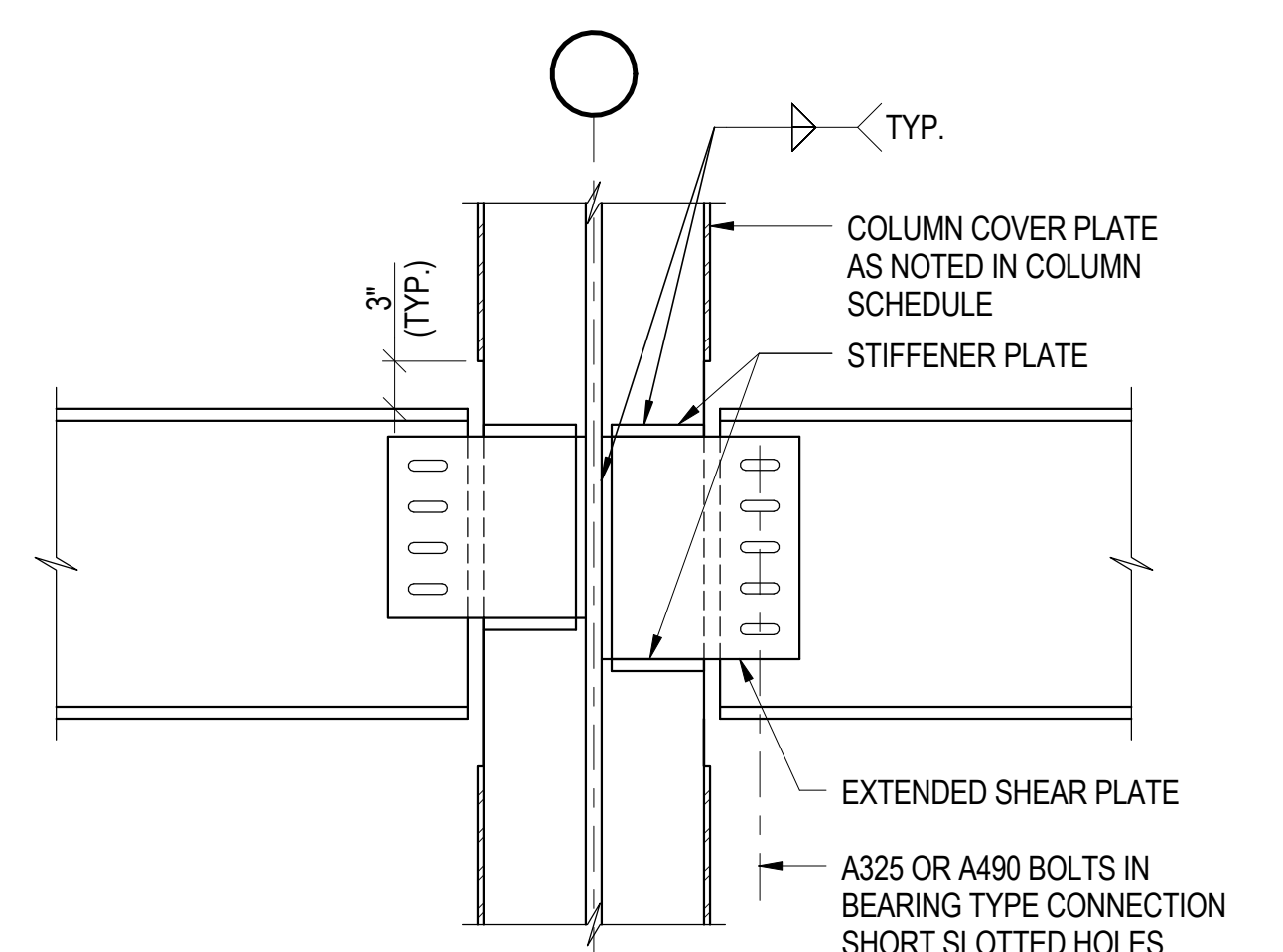
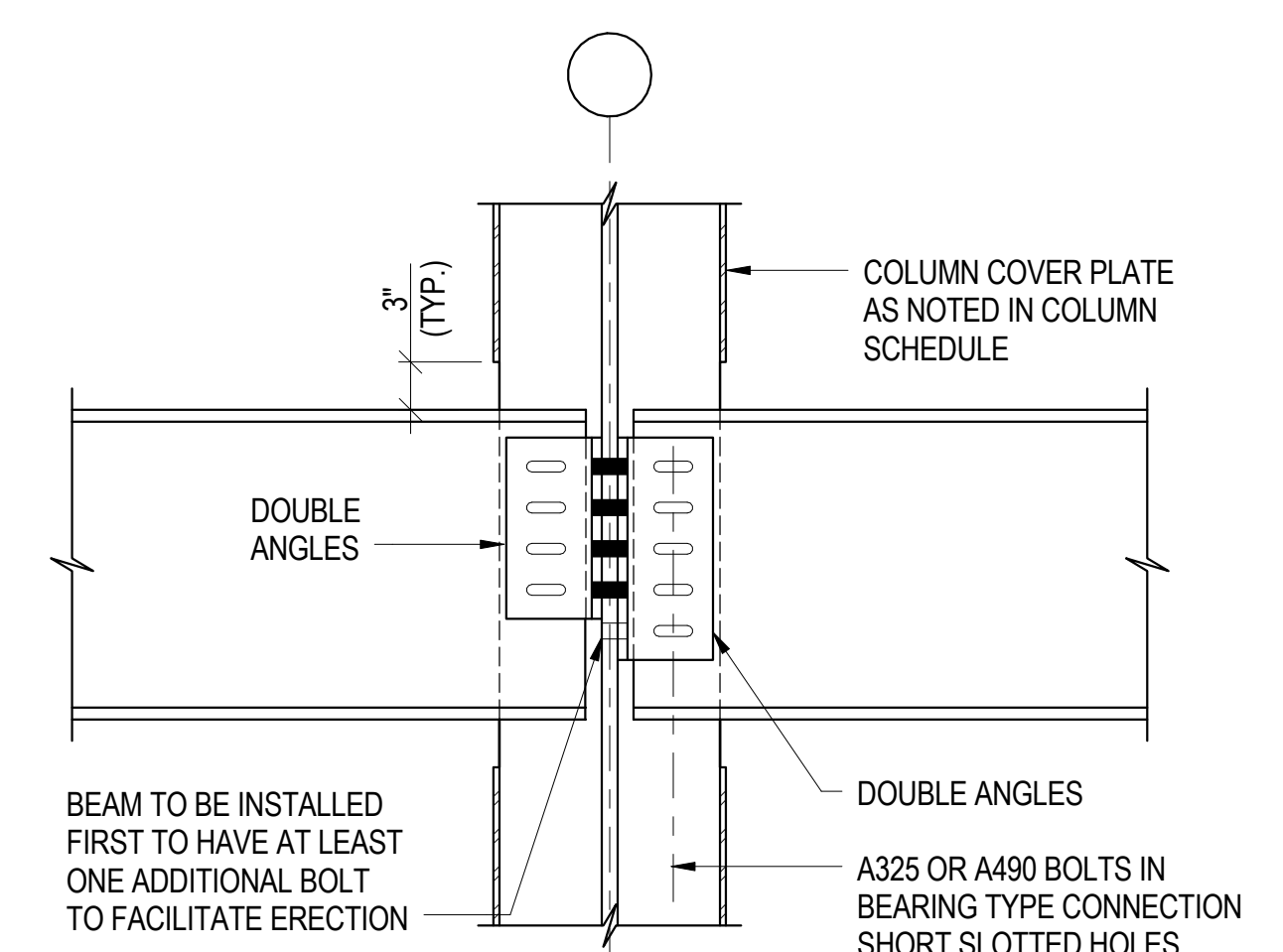
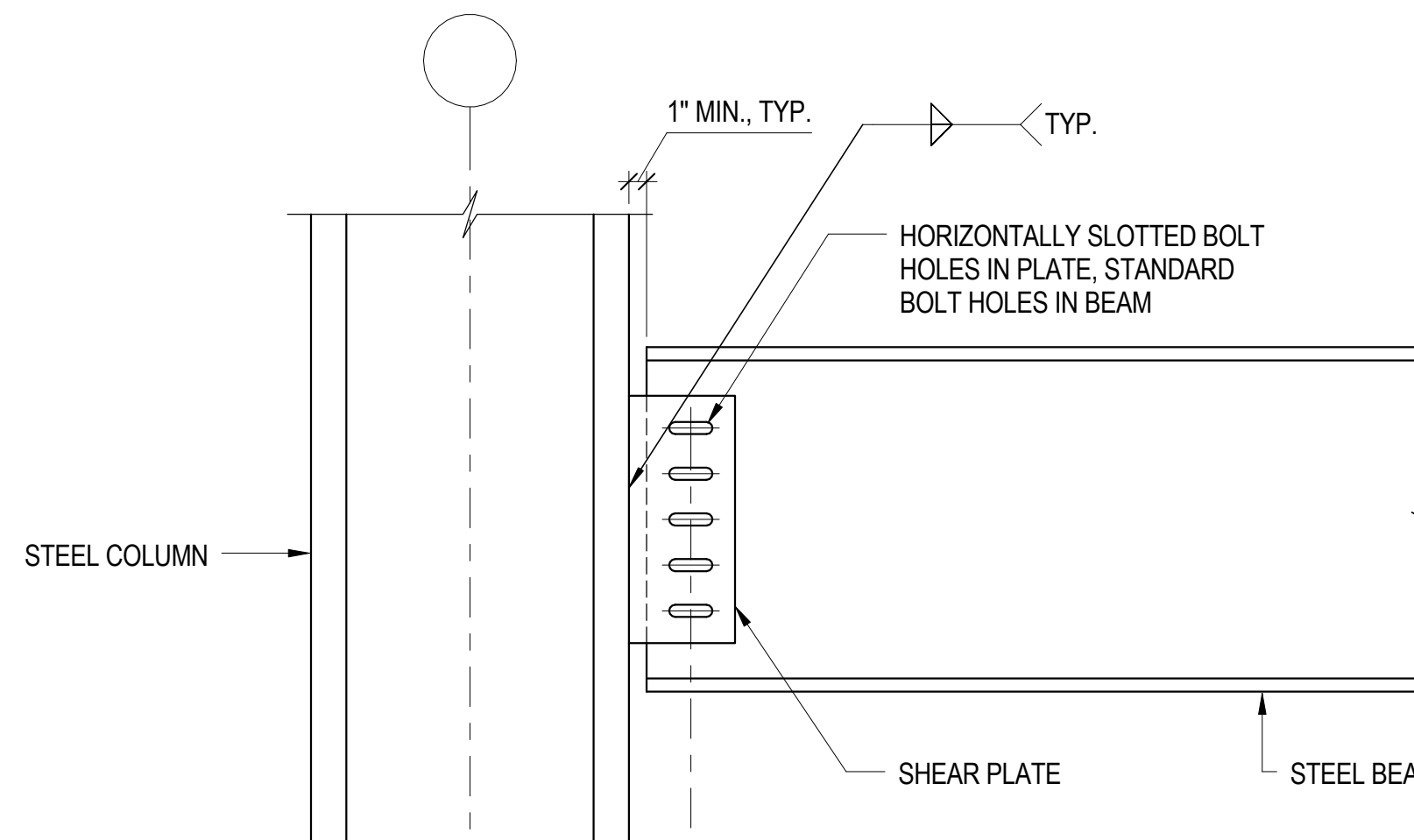
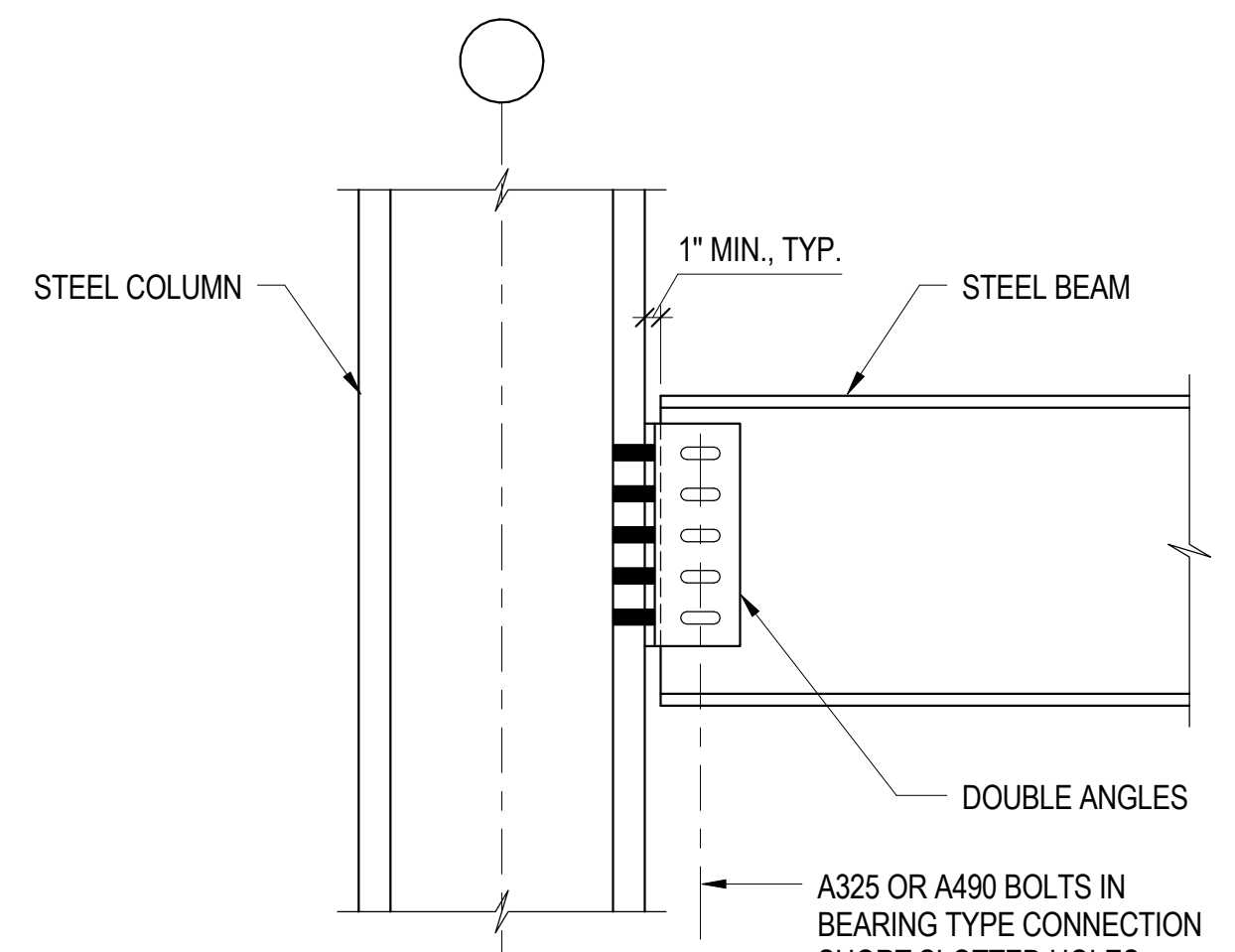
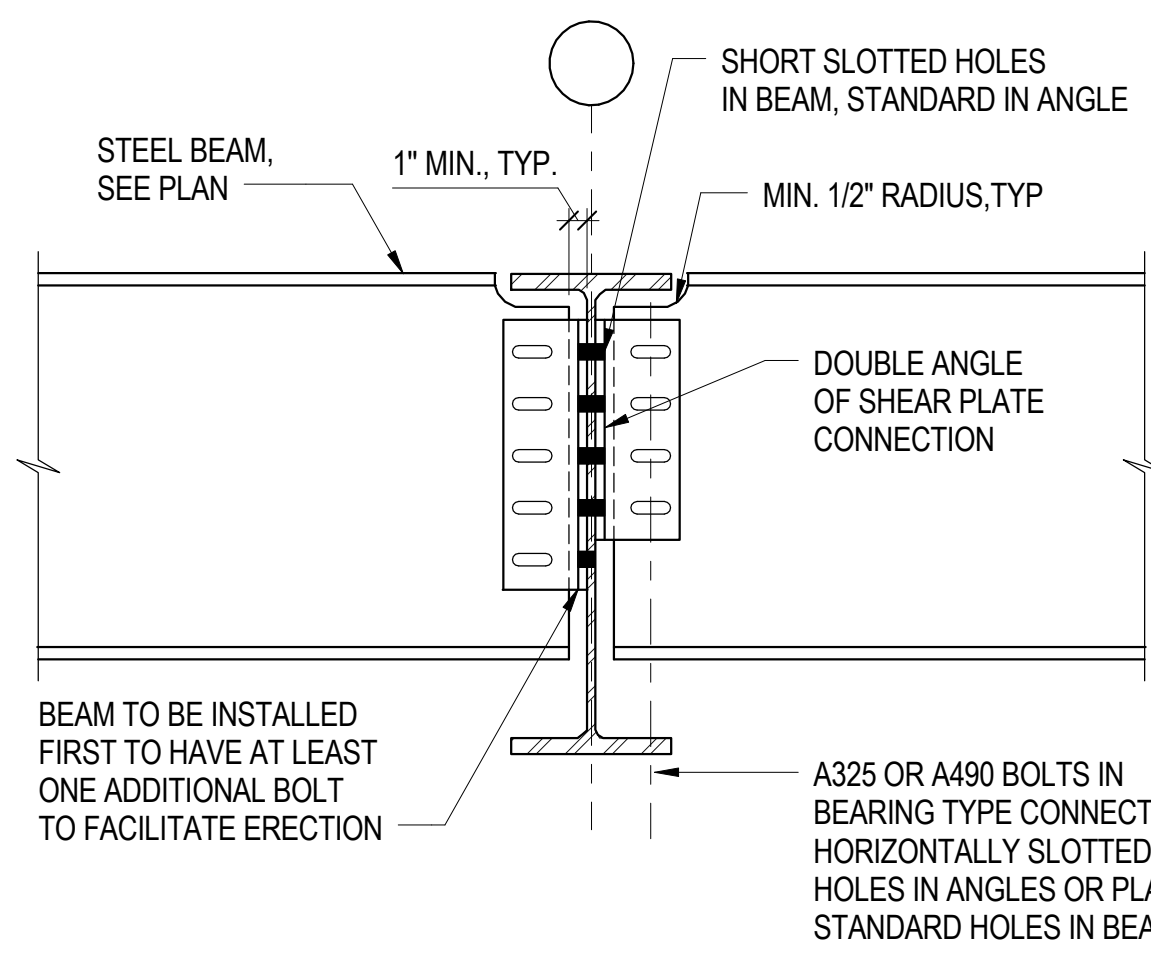


5 PLANTER SECTION
NOT TO SCALE



8A CIRCULAR POST
REINF. DETAIL
NOT TO SCALE





1 TYPICAL BEAM-TO-BEAM SHEAR CONNECTION

NOT TO SCALE

2 TYPICAL BEAM-TO-COLUMN FLANGE SHEAR CONNECTION OPTION #1

NOT TO SCALE

3 TYPICAL BEAM-TO-COLUMN FLANGE SHEAR CONNECTION OPTION #2

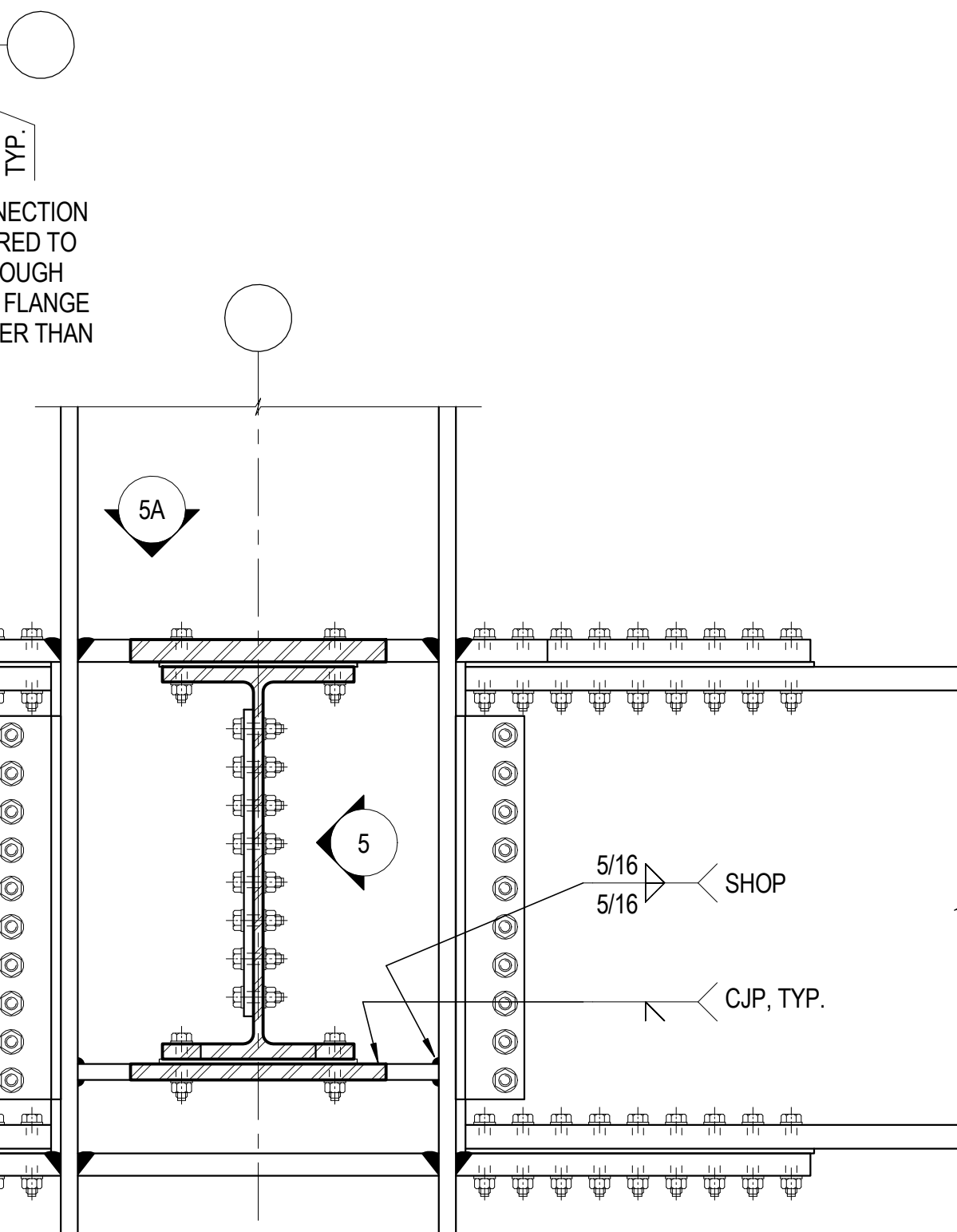
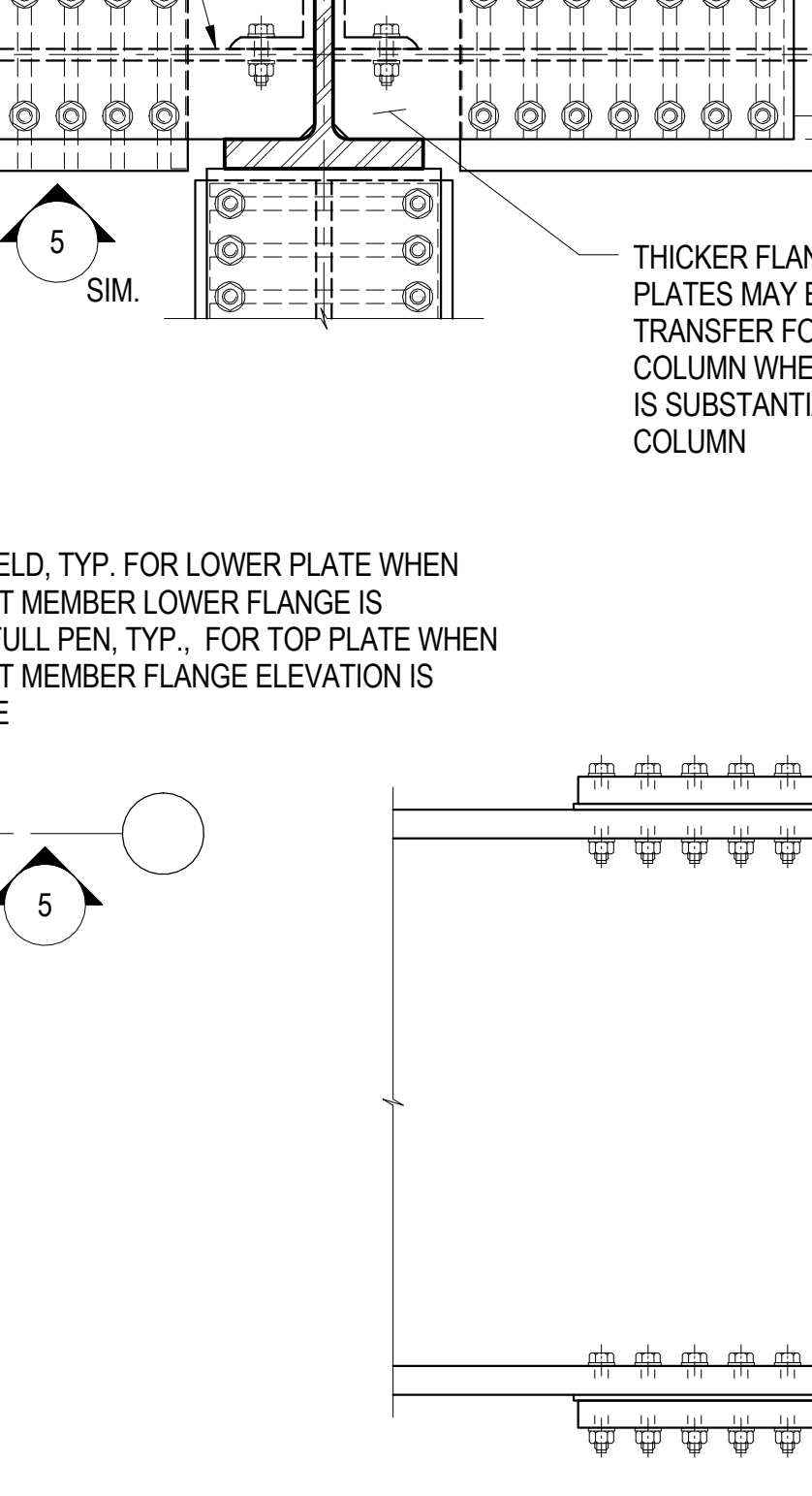
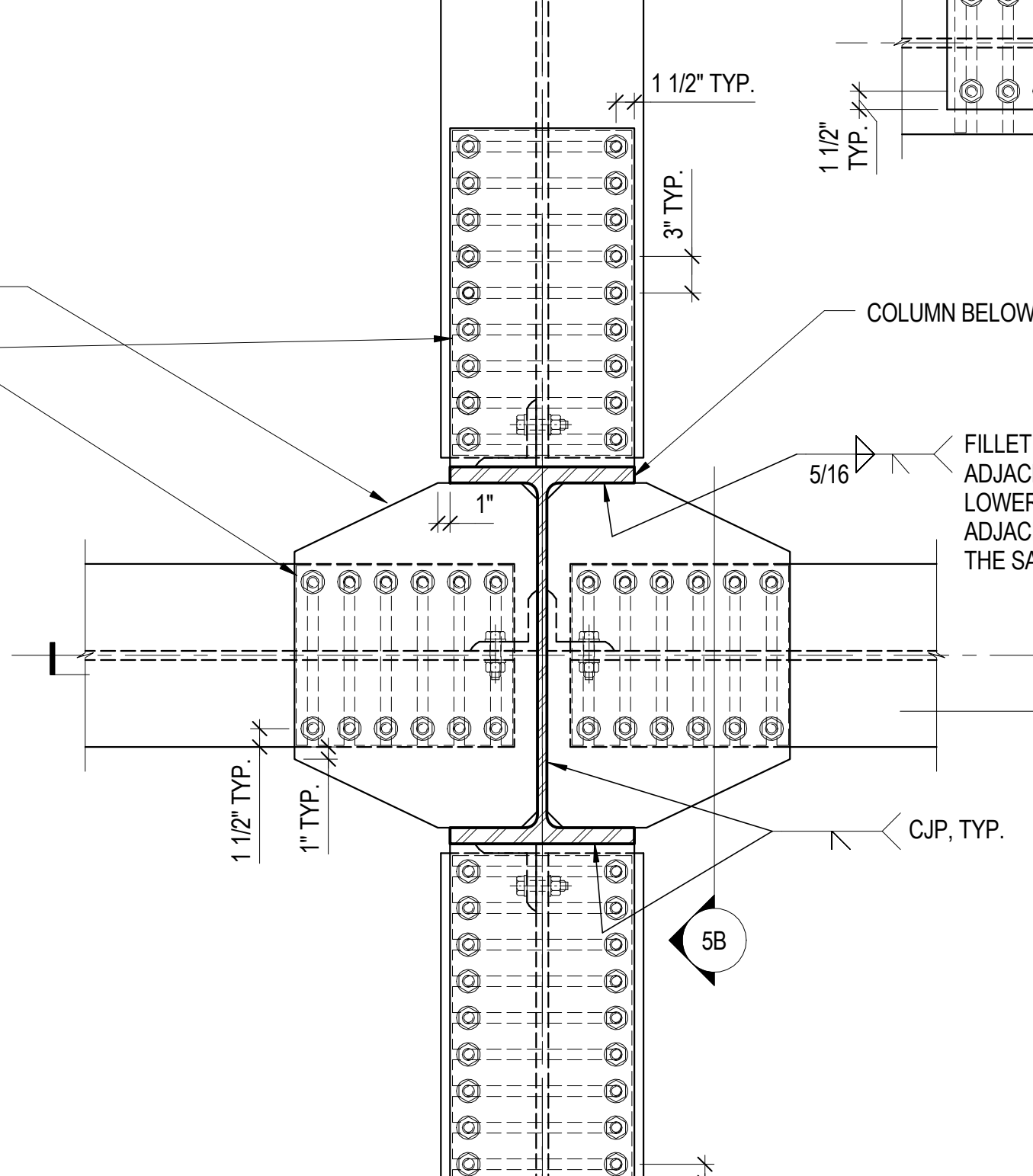
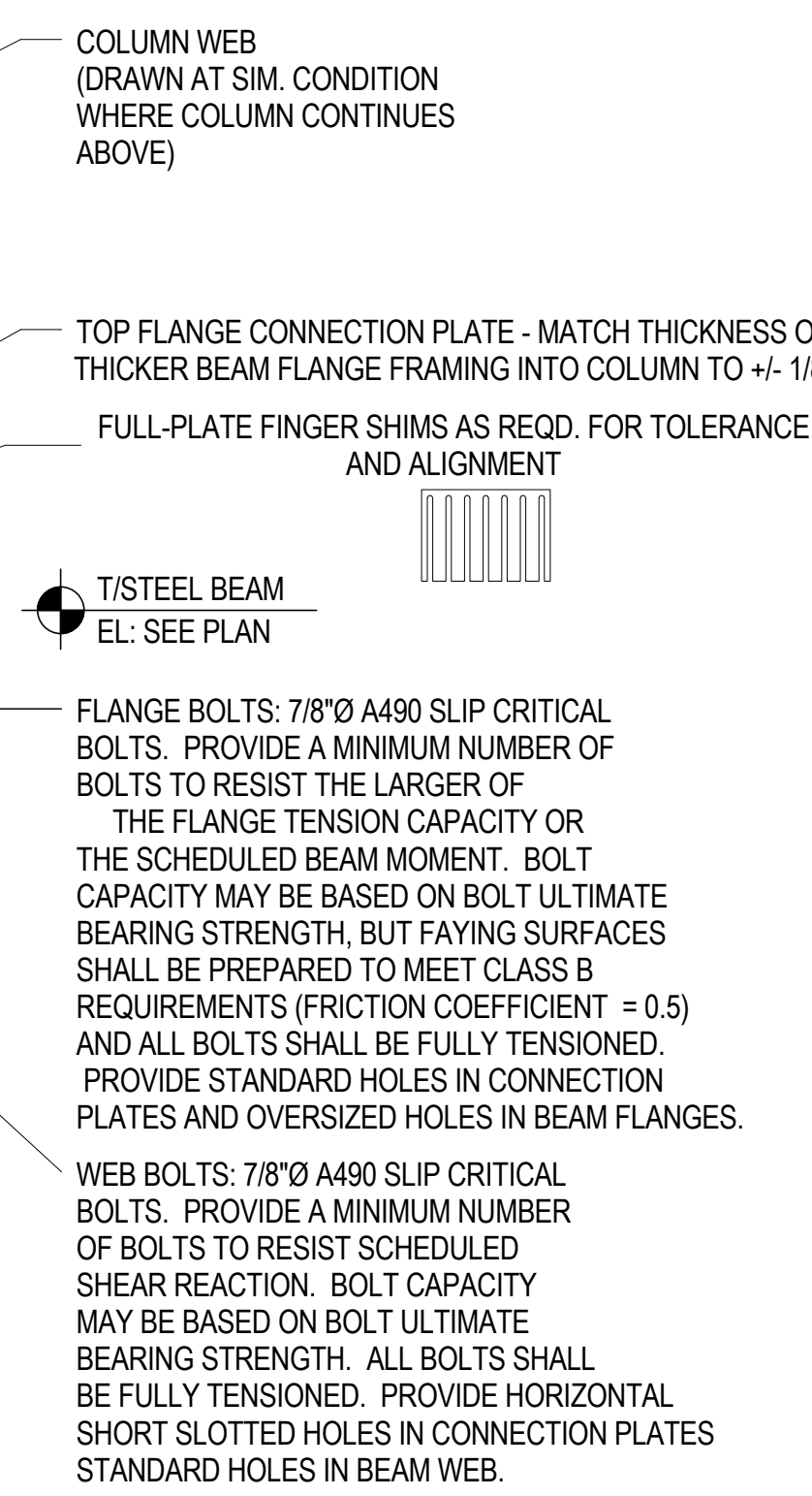
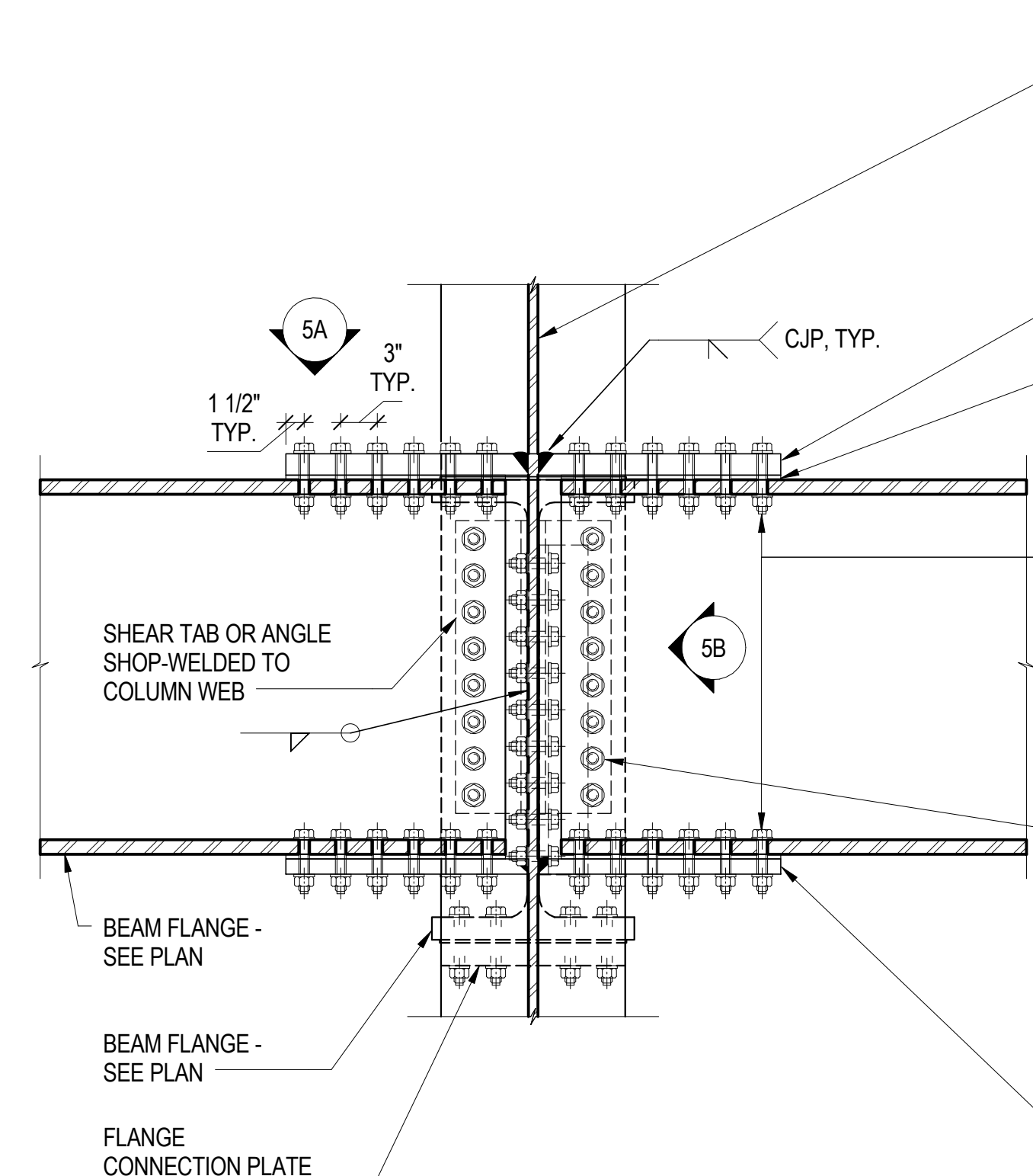
NOT TO SCALE

4A TYPICAL BEAM-TO-COLUMN WEB SHEAR CONNECTION

NOT TO SCALE

4B ALTERNATIVE BEAM-TO-COLUMN WEB SHEAR CONNECTION

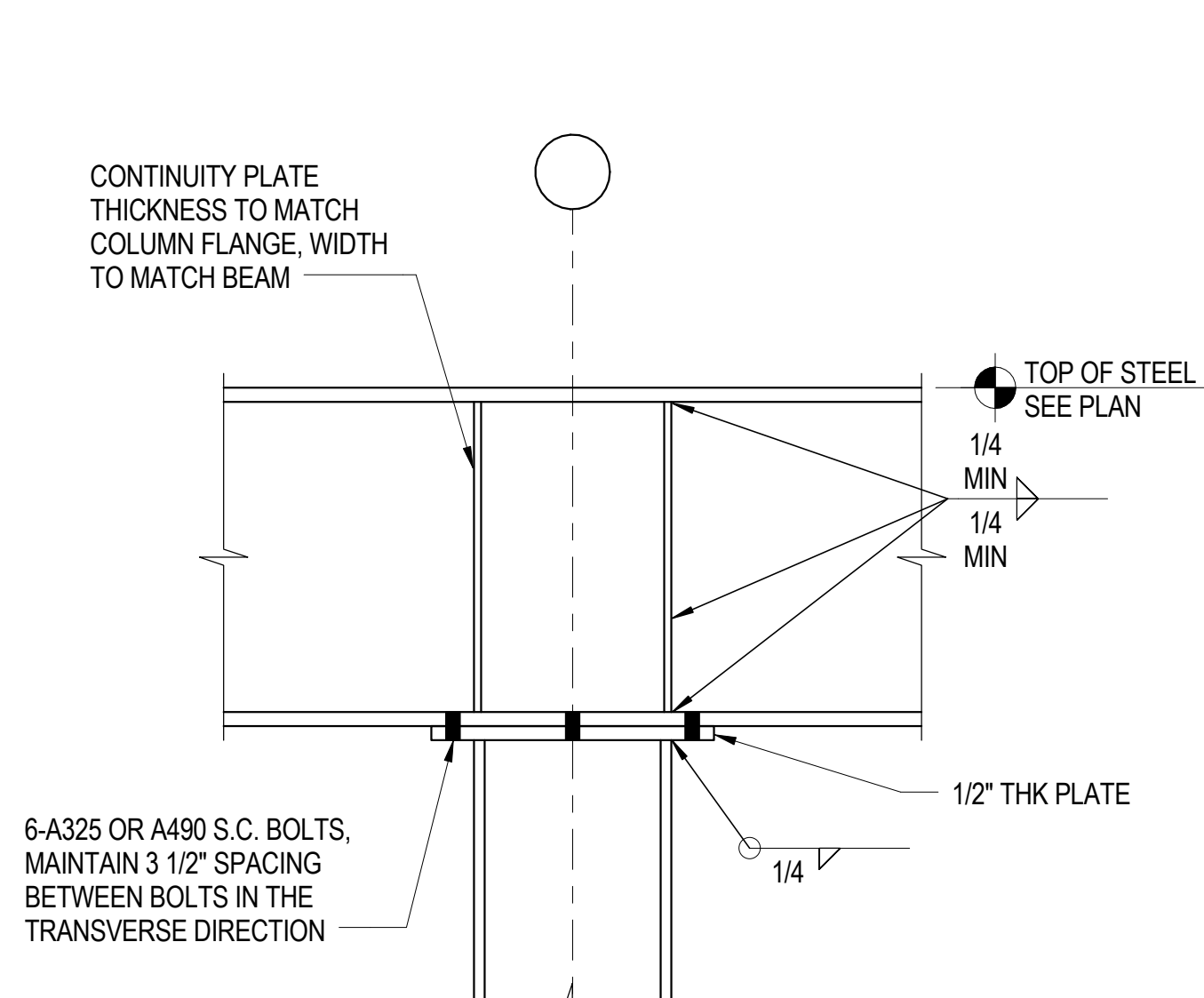
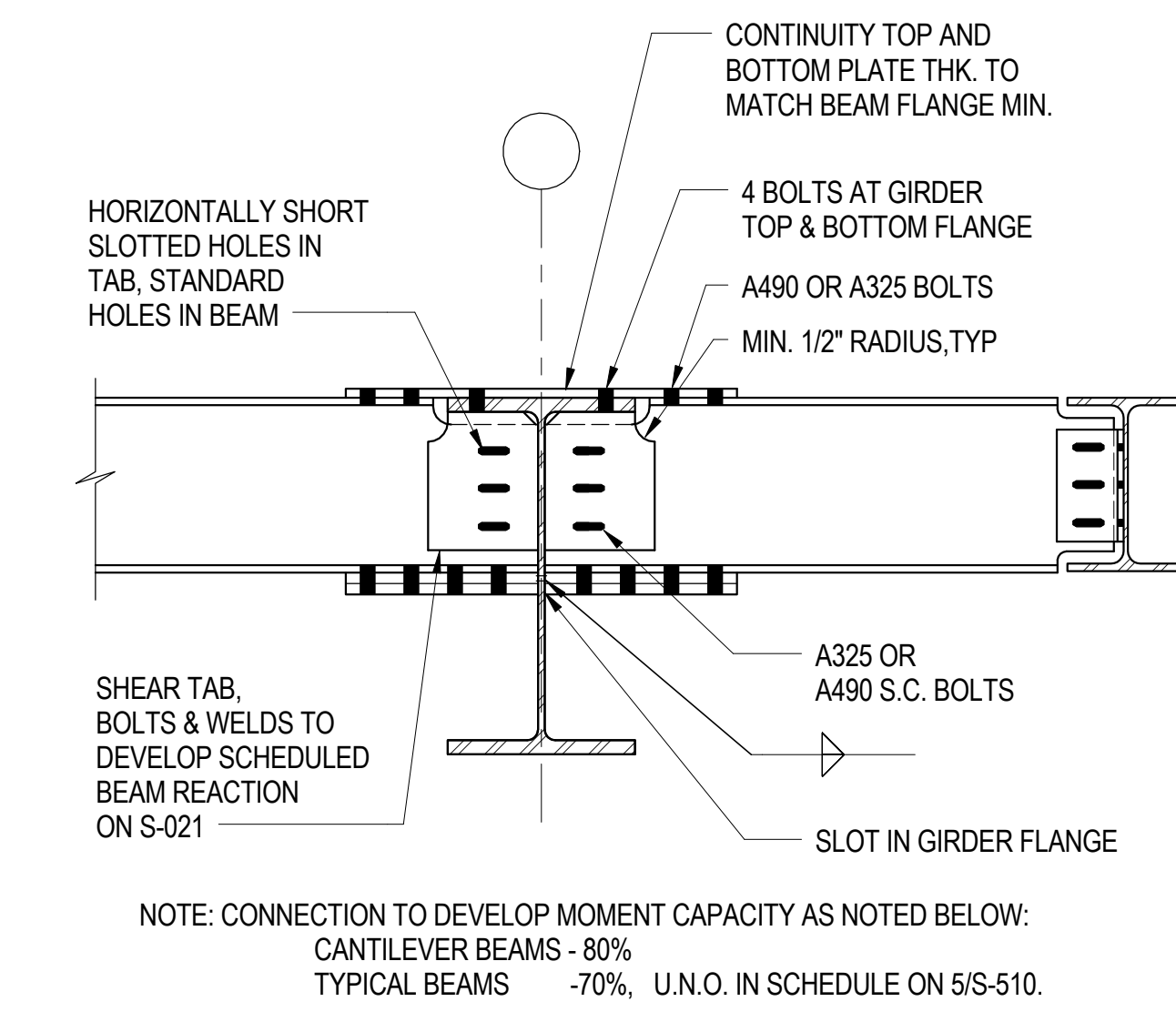
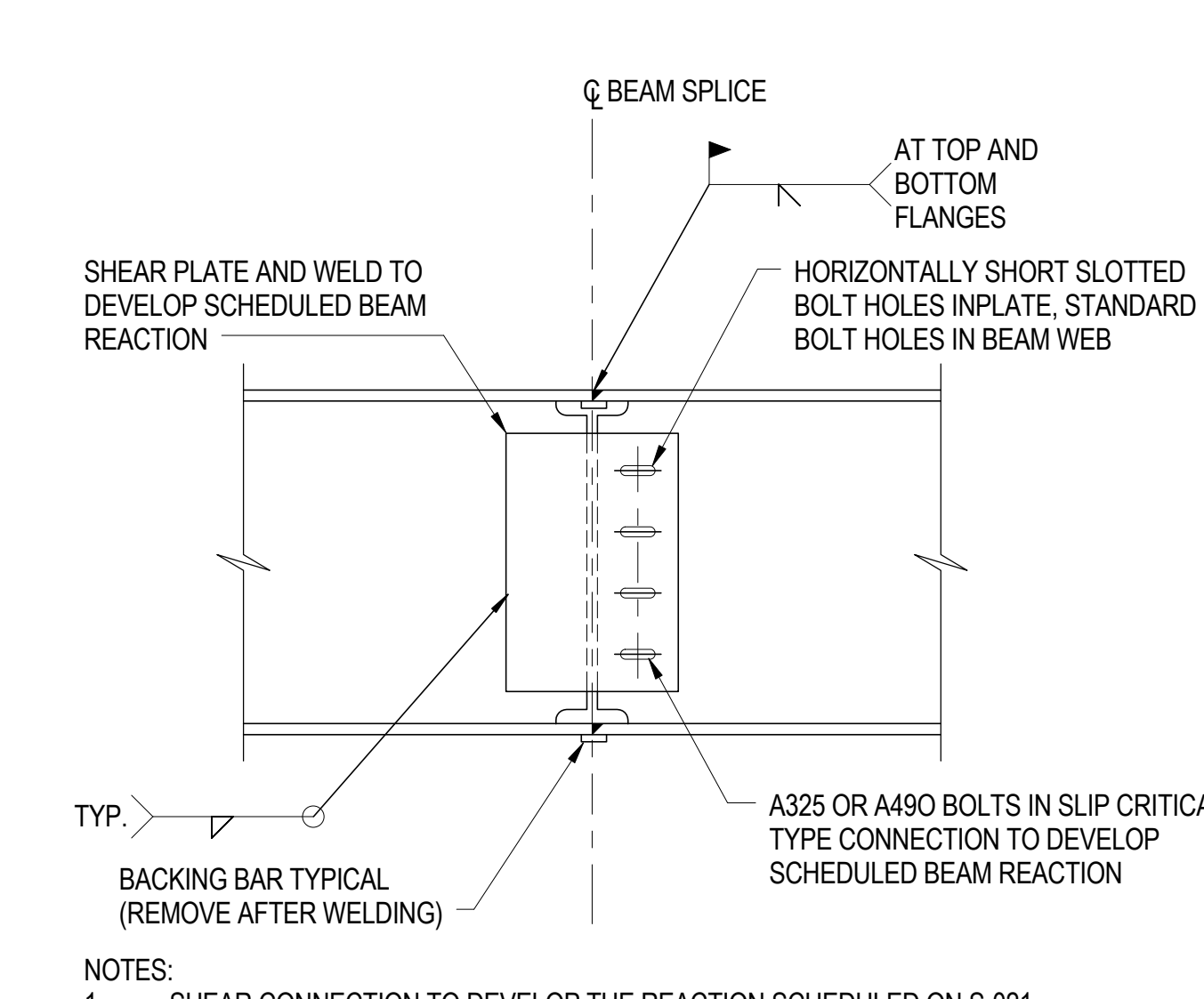
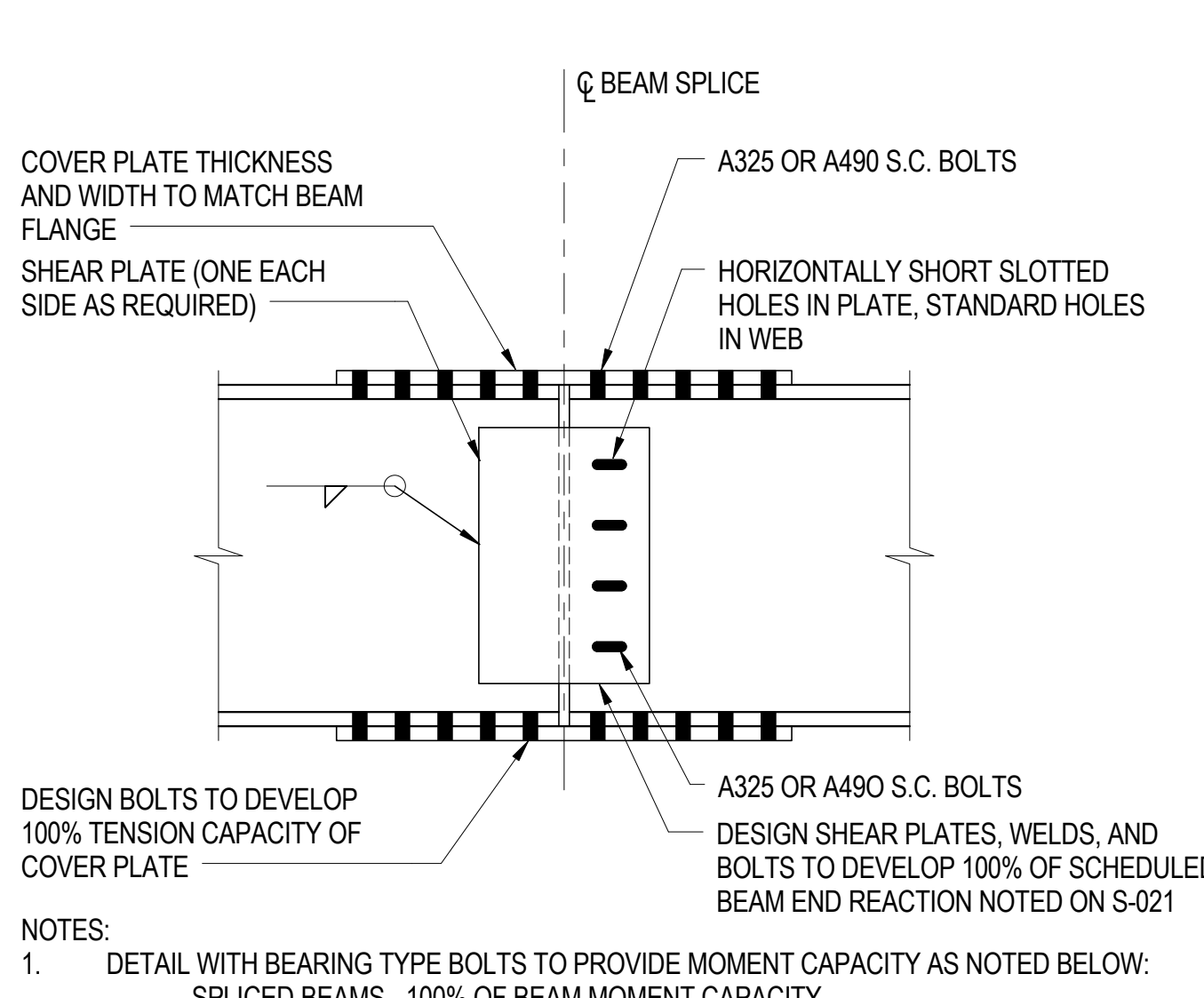
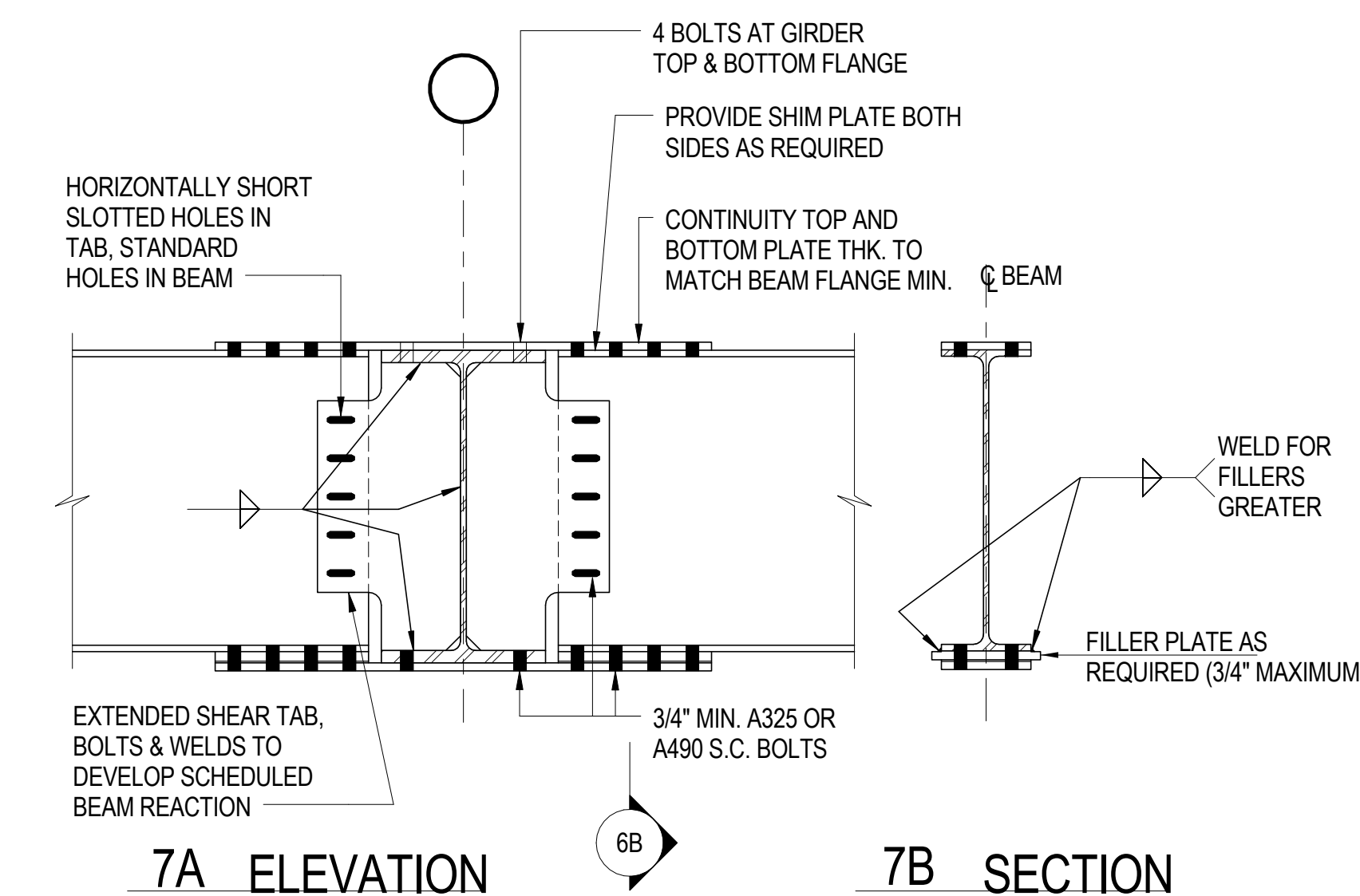
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MOMENT CONNECTION DESIGN FORCES				
BEAM SIZE	V (kips)	M (kip-ft)	NOTES	
W24X55	95	405	GL PC & P6.9 @ 1ST FLOOR MEZZANINE	
W24X131	95	1115	GL PB & P6.9 @ PLAZA LEVEL	
W36X395	210	5200	GL PF.7 & P13.4 @ PLAZA LEVEL	
W44X335	300	5865	GL PF.7 & P13.4 @ PLAZA LEVEL	

5 TYPICAL STEEL MOMENT FRAME CONNECTION DETAIL

NOT TO SCALE



6 TYPICAL BEAM-TO-GIRDER MOMENT CONNECTION

NOT TO SCALE

7 TYPICAL BEAM-TO-BEAM MOMENT SPLICE: BOLTED

NOT TO SCALE

8 TYPICAL BEAM-TO-BEAM MOMENT SPLICE: FIELD-WELDED

NOT TO SCALE

9 BEAM TO GIRDER MOMENT CONNECTION

NOT TO SCALE

10 BEAM OVER TOP OF COLUMN

NOT TO SCALE

**MANHATTAN WEST:
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CENTRAL PLAZA**
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1. 02/16/2018 ISSUED FOR BUILDING PERMIT

No. Date Description

Sheet Name:

**TYPICAL
STRUCTURAL
STEEL SECTIONS
AND DETAILS**

Project No.: 211157 B-SCAN Sheet No.: S-510.00

Date: 02/16/2018 Sheet No.: S-510

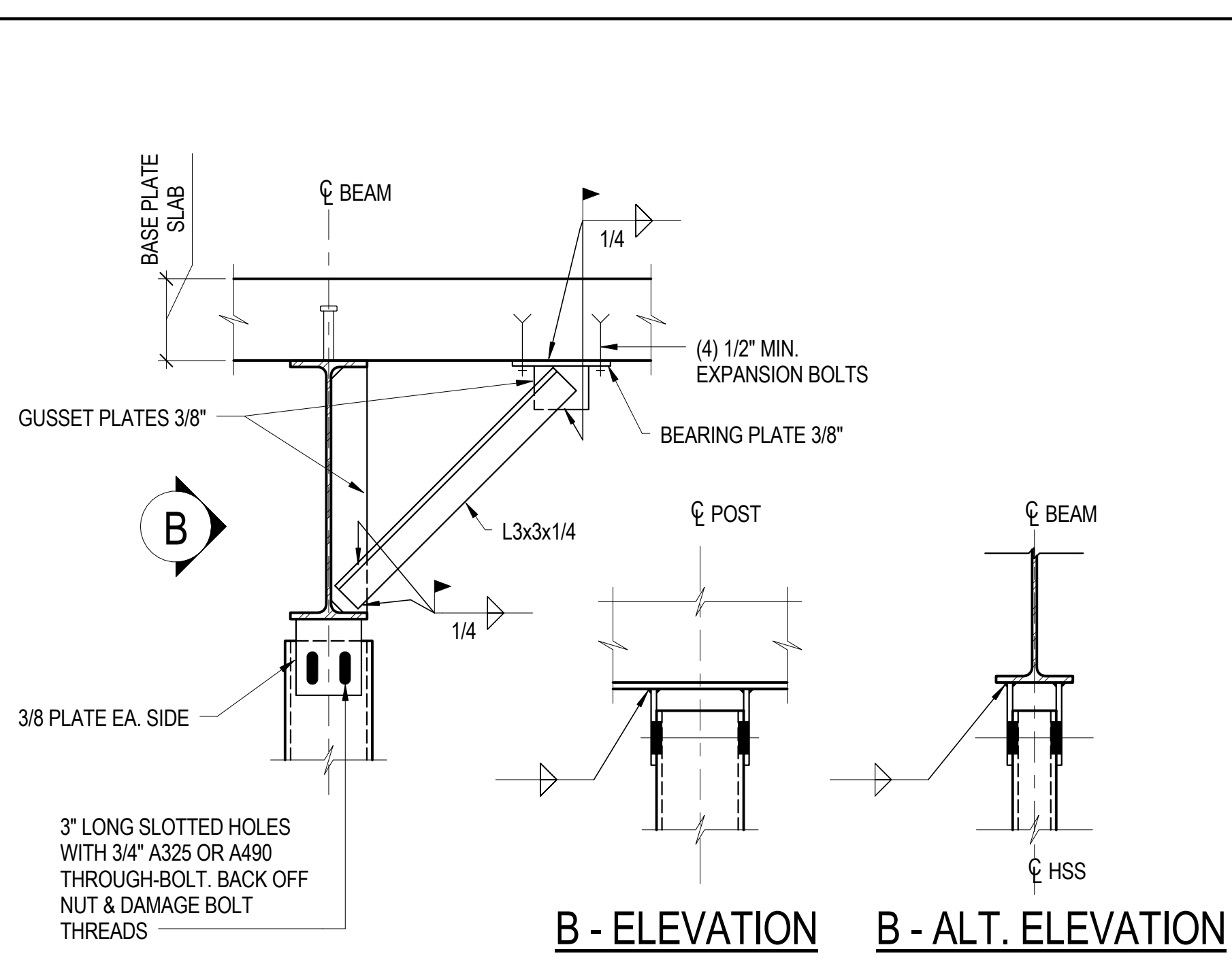
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File No.: S-510

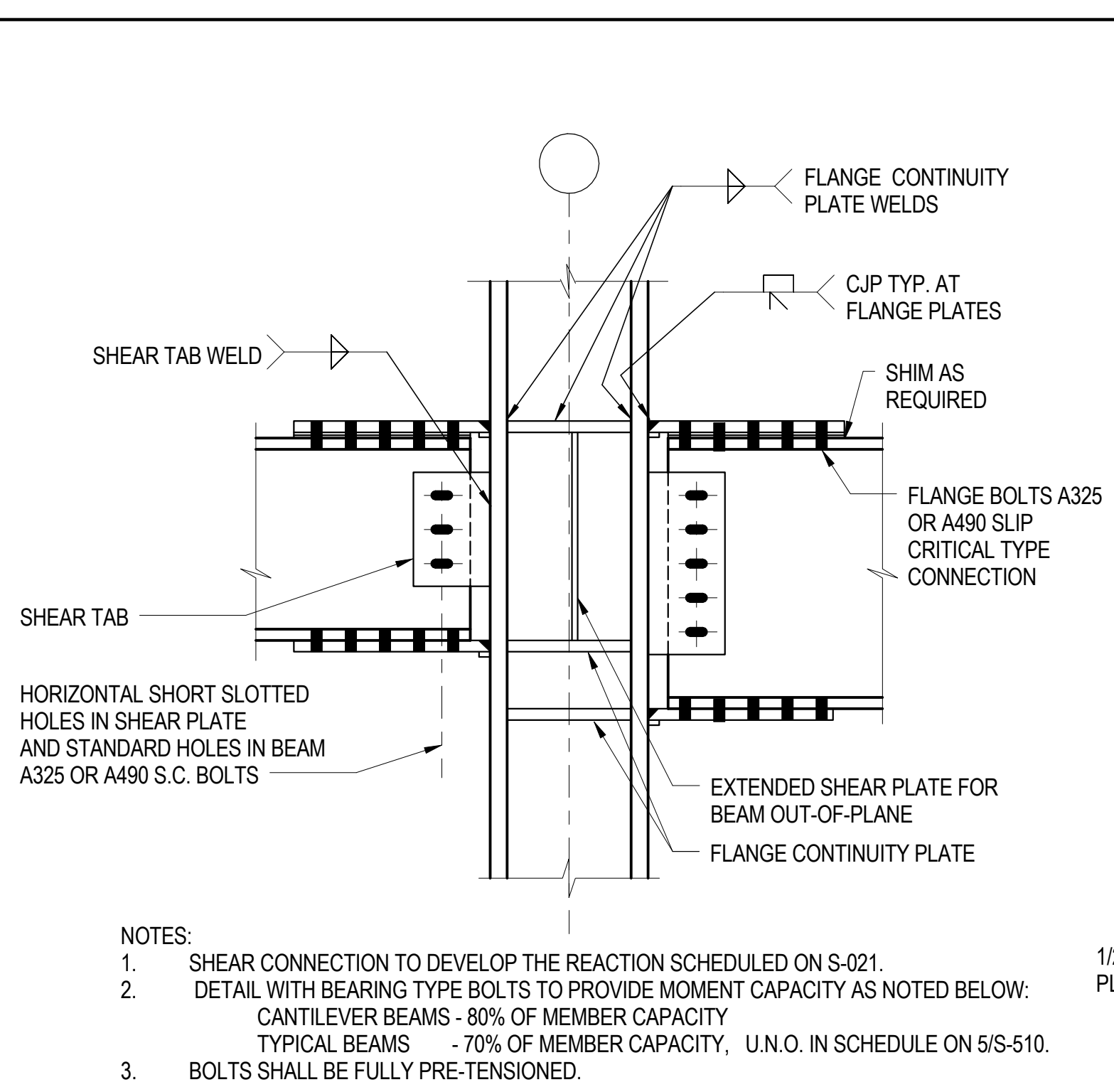
Damiano Titus

Building Professional

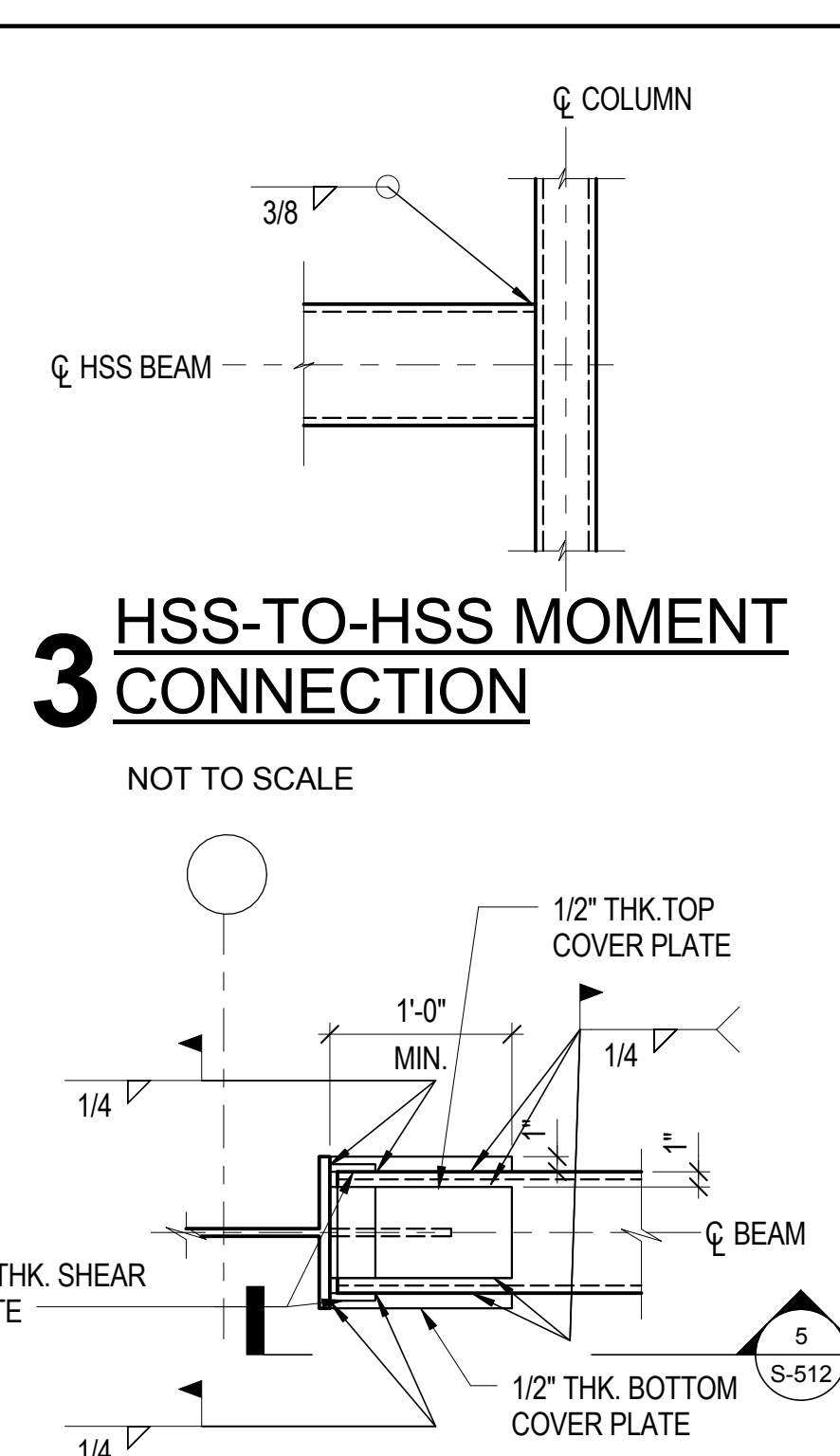
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Under Directive 2 of 1975
Date: 02/16/2018
NYC Development Hub



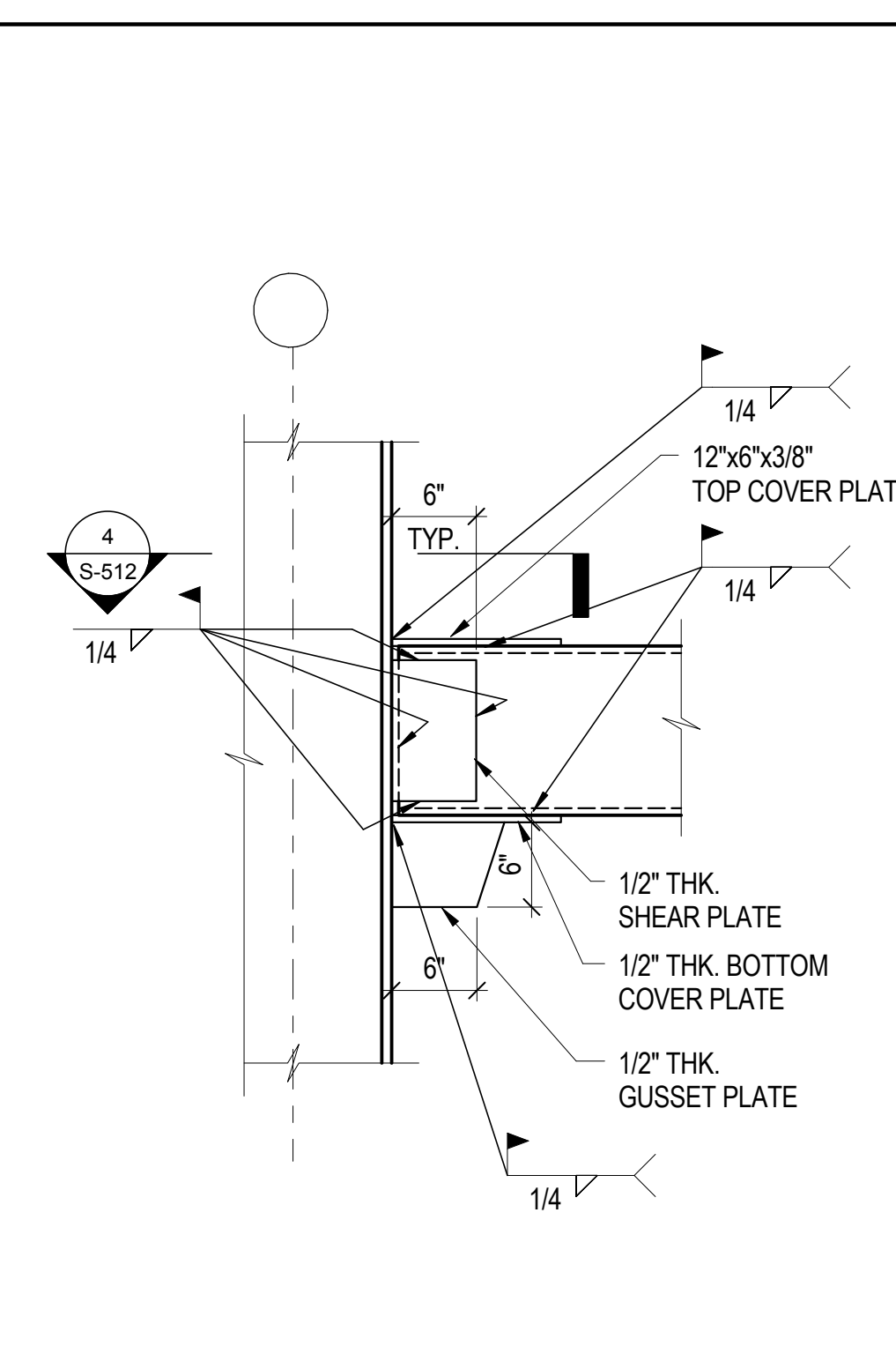
1 TYPICAL HSS POST SLIP CONNECTION
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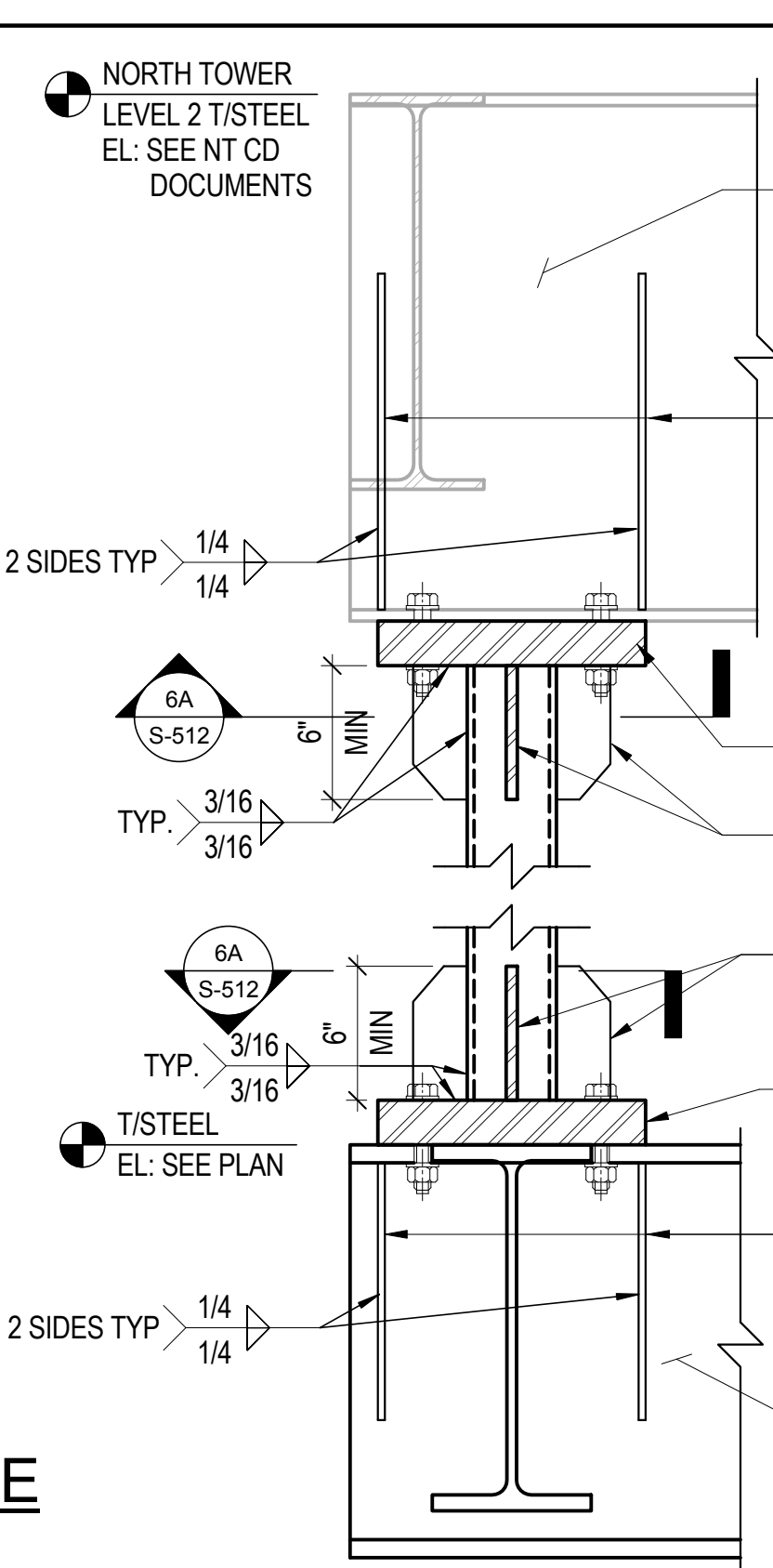
2 TYPICAL BEAM-TO-COLUMN FLANGE MOMENT CONNECTION AT VARIABLE DEPTH BEAMS
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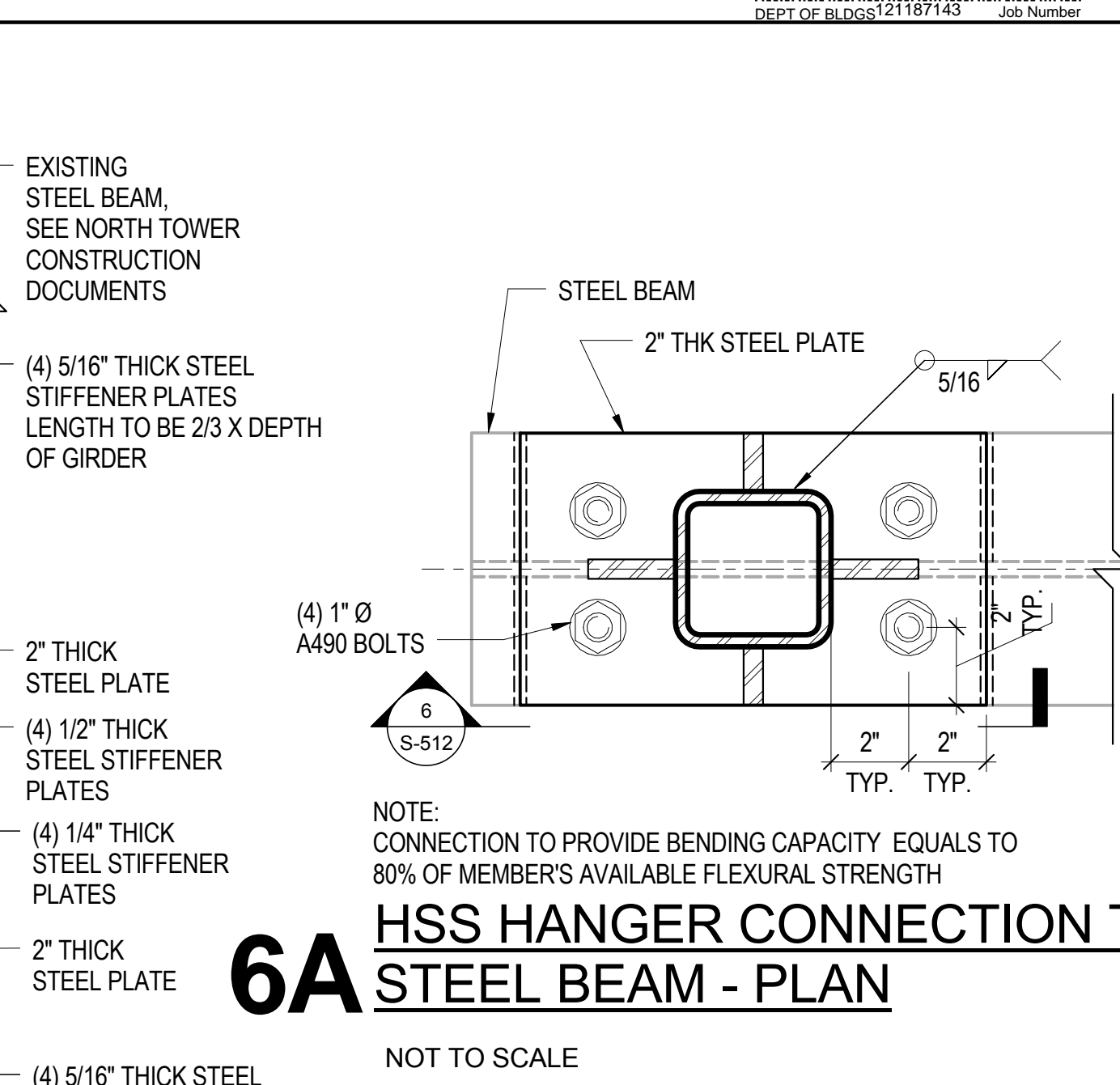
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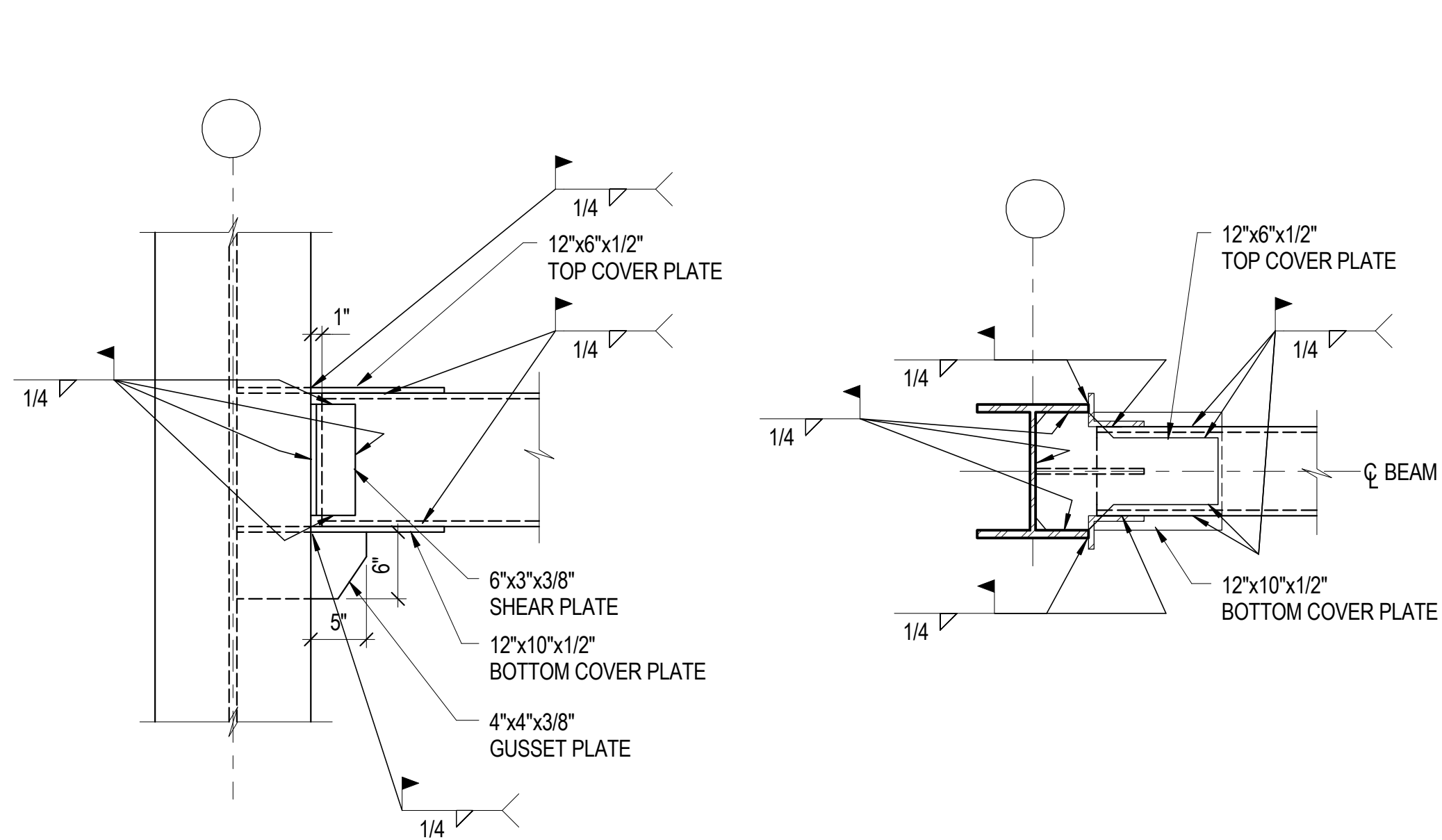
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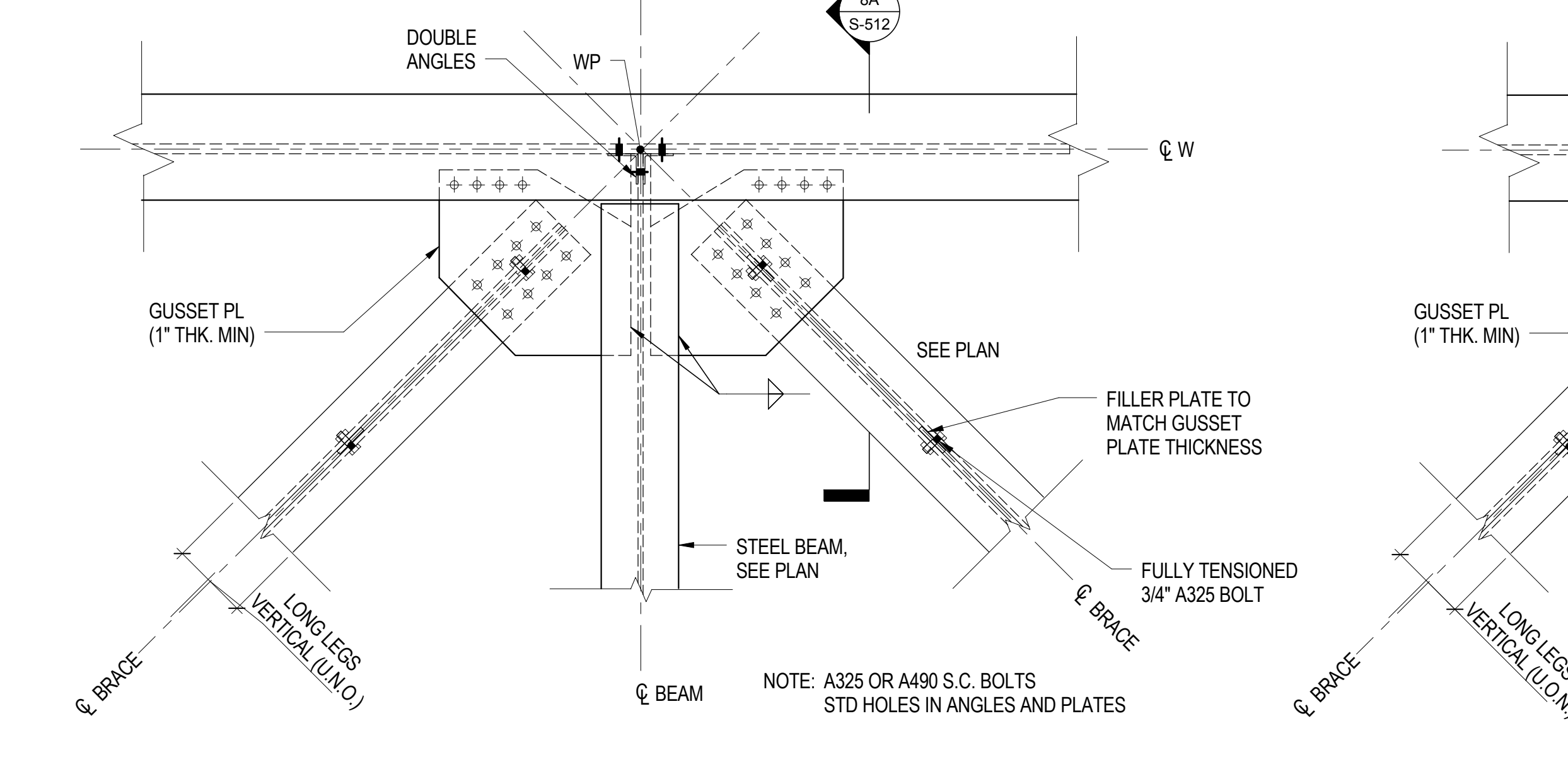
5 HSS HANGER CONNECTION TO STEEL BEAM - SECTION
NOT TO SCALE



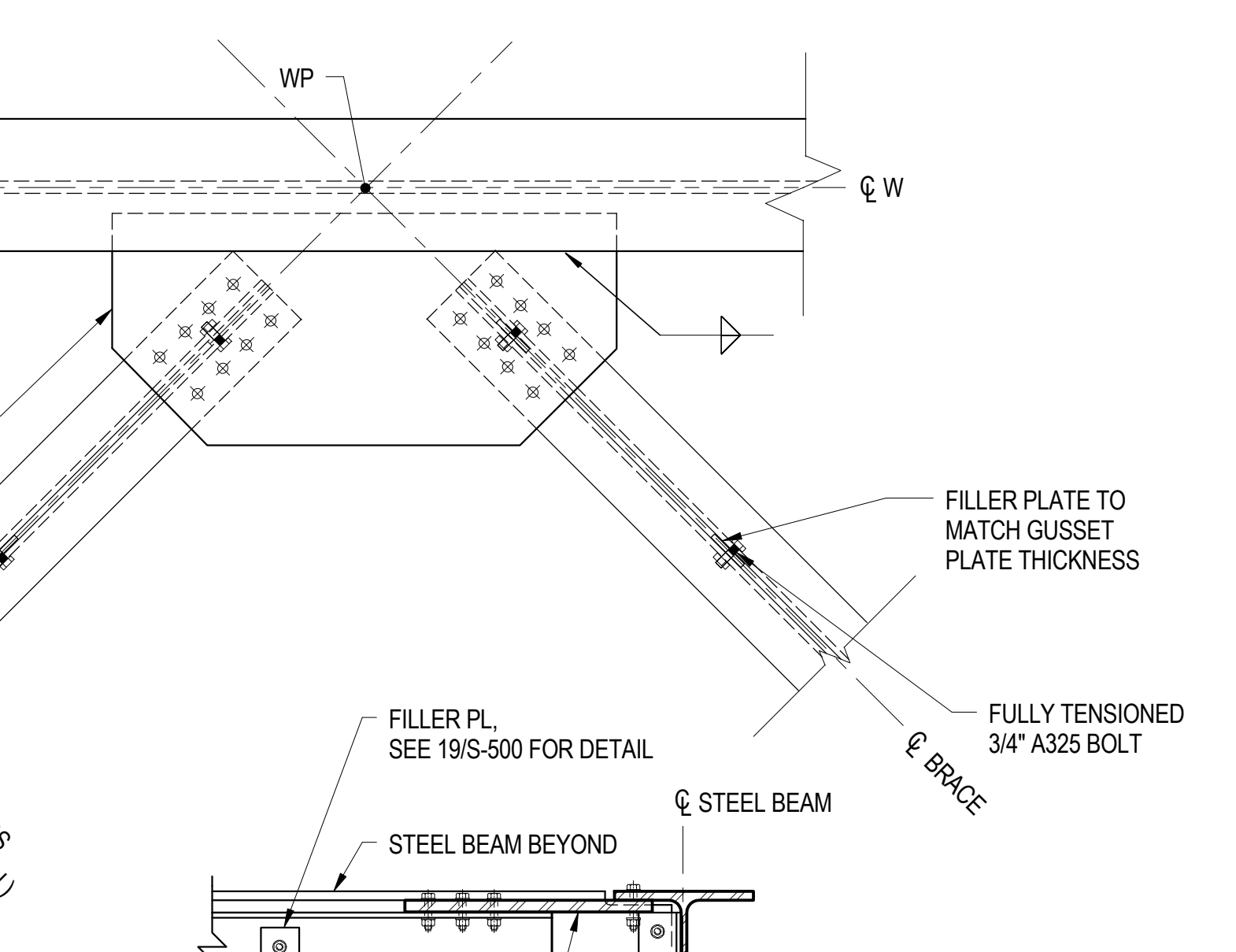
6A HSS HANGER CONNECTION TO STEEL BEAM - PLAN
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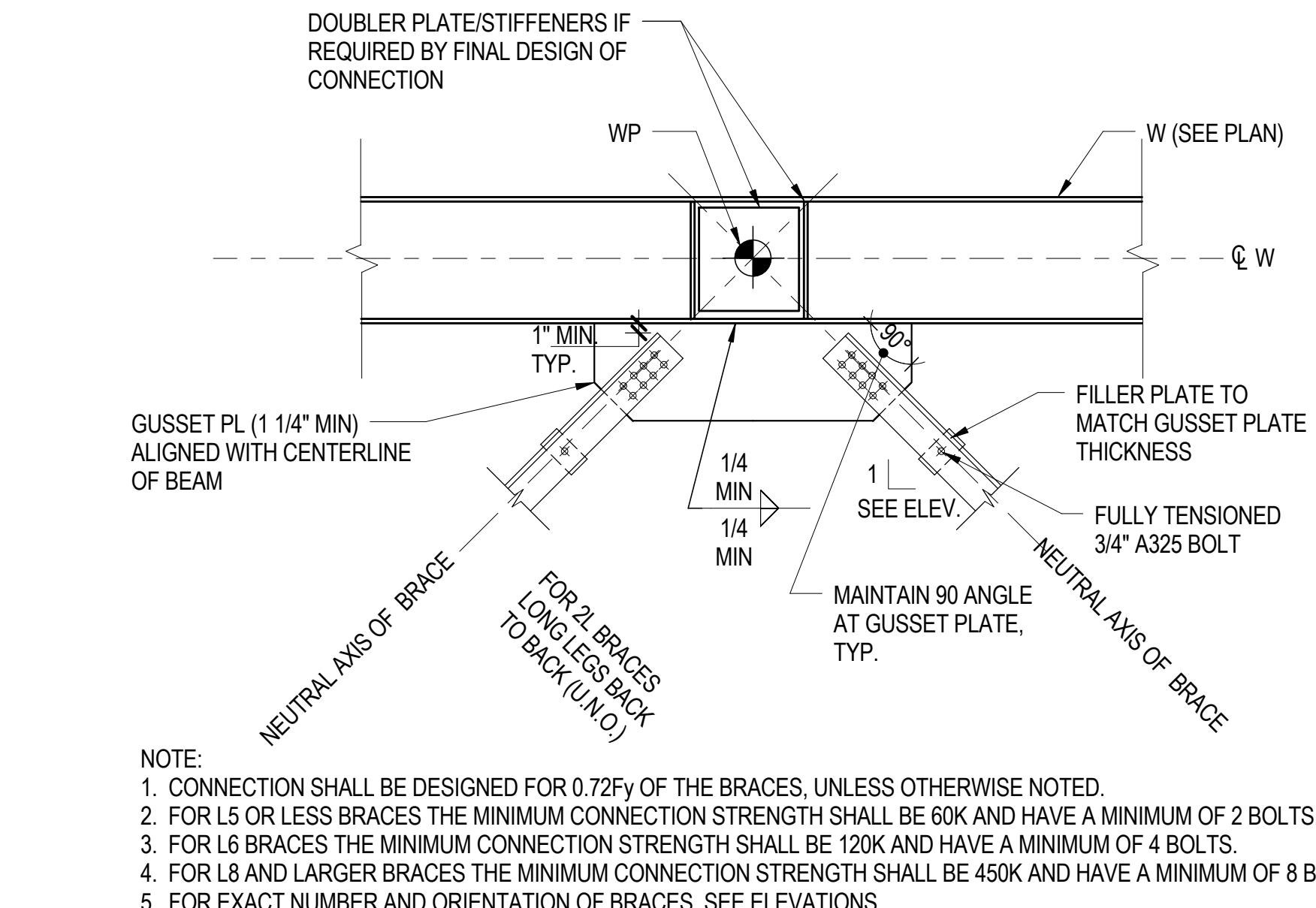
7 HSS BEAM-TO-COLUMN WEB MOMENT CONNECTION
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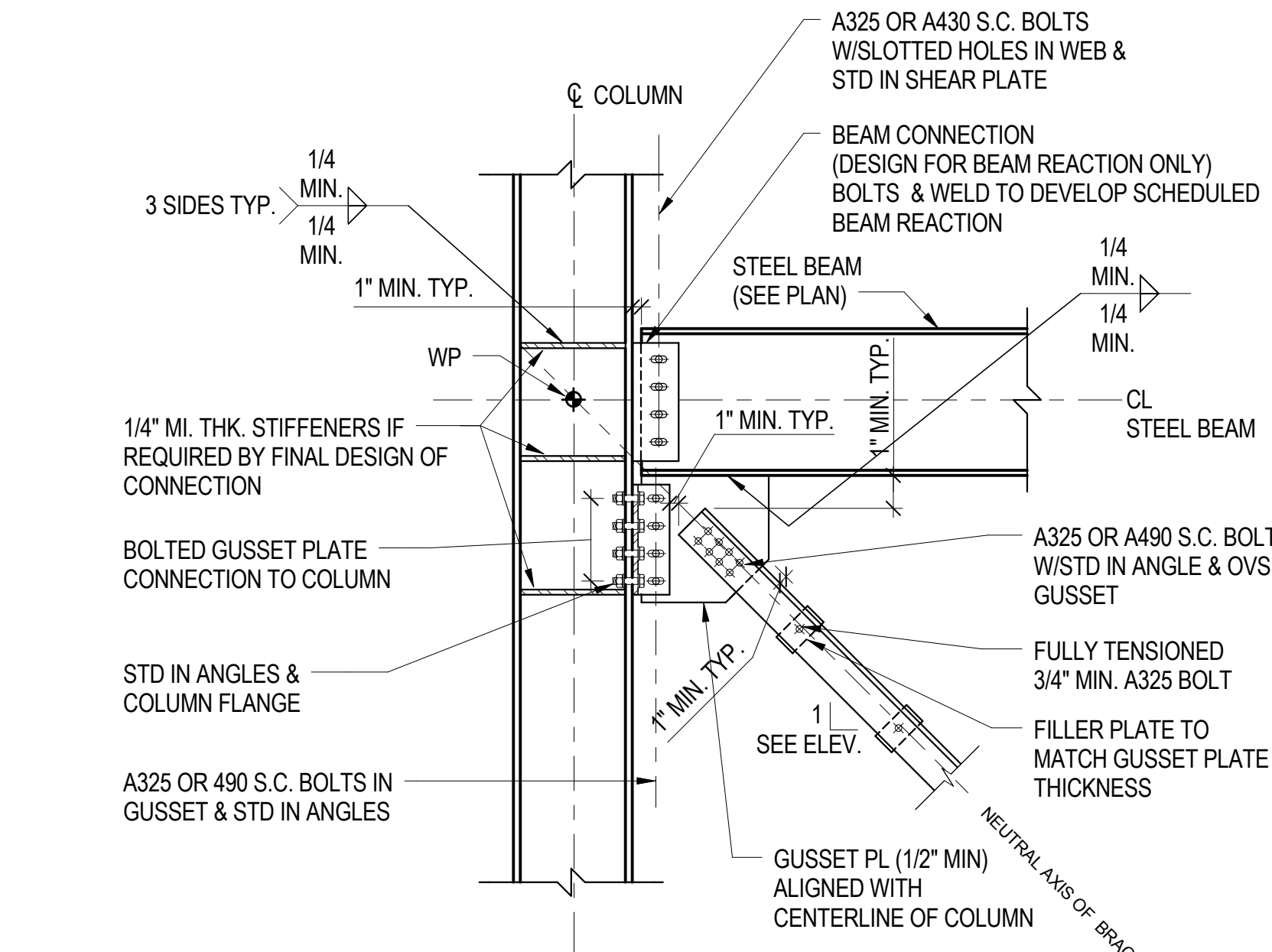
8 IN-PLANE BRACING
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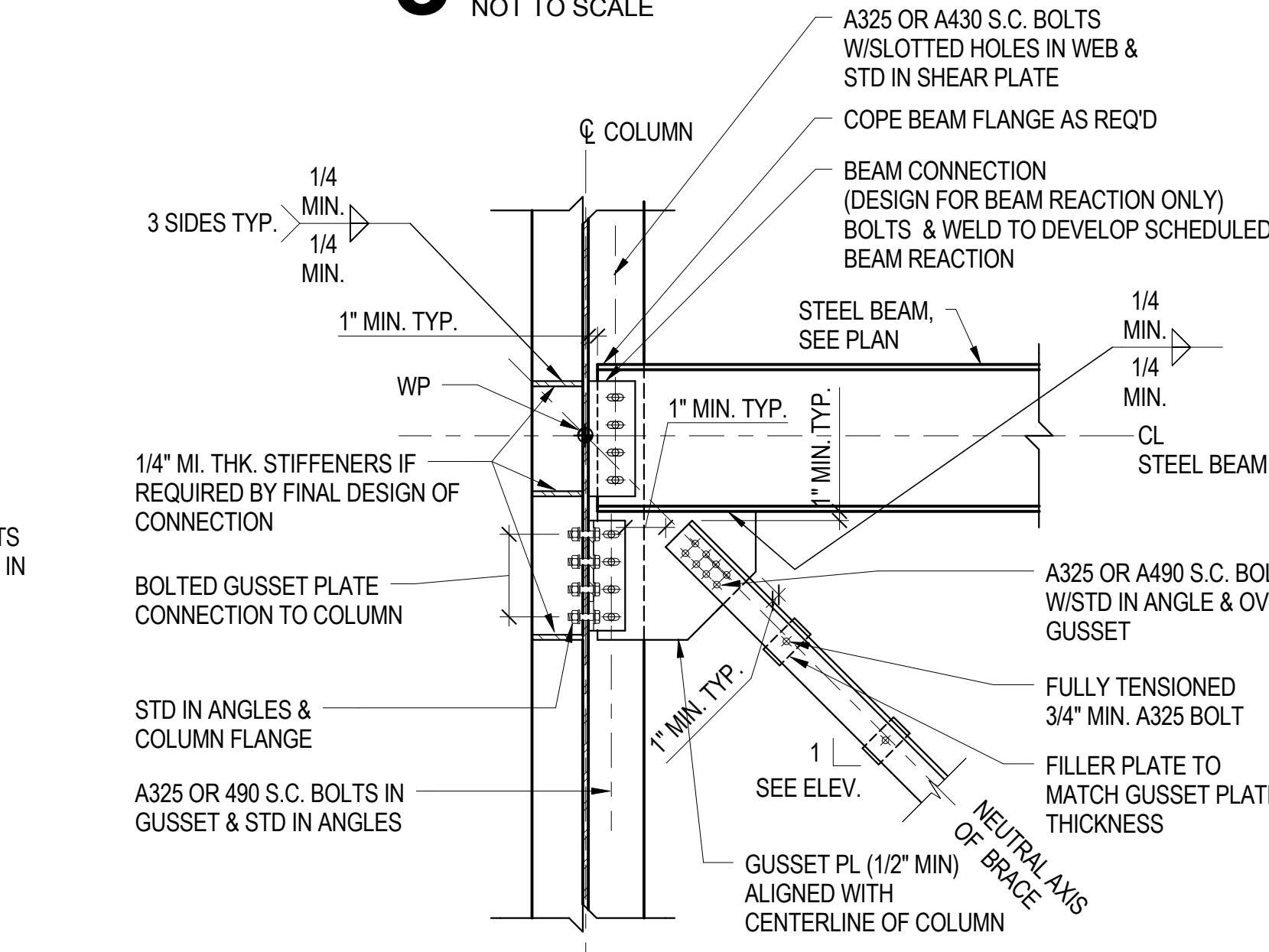
8B DETAIL
3/4\"/>



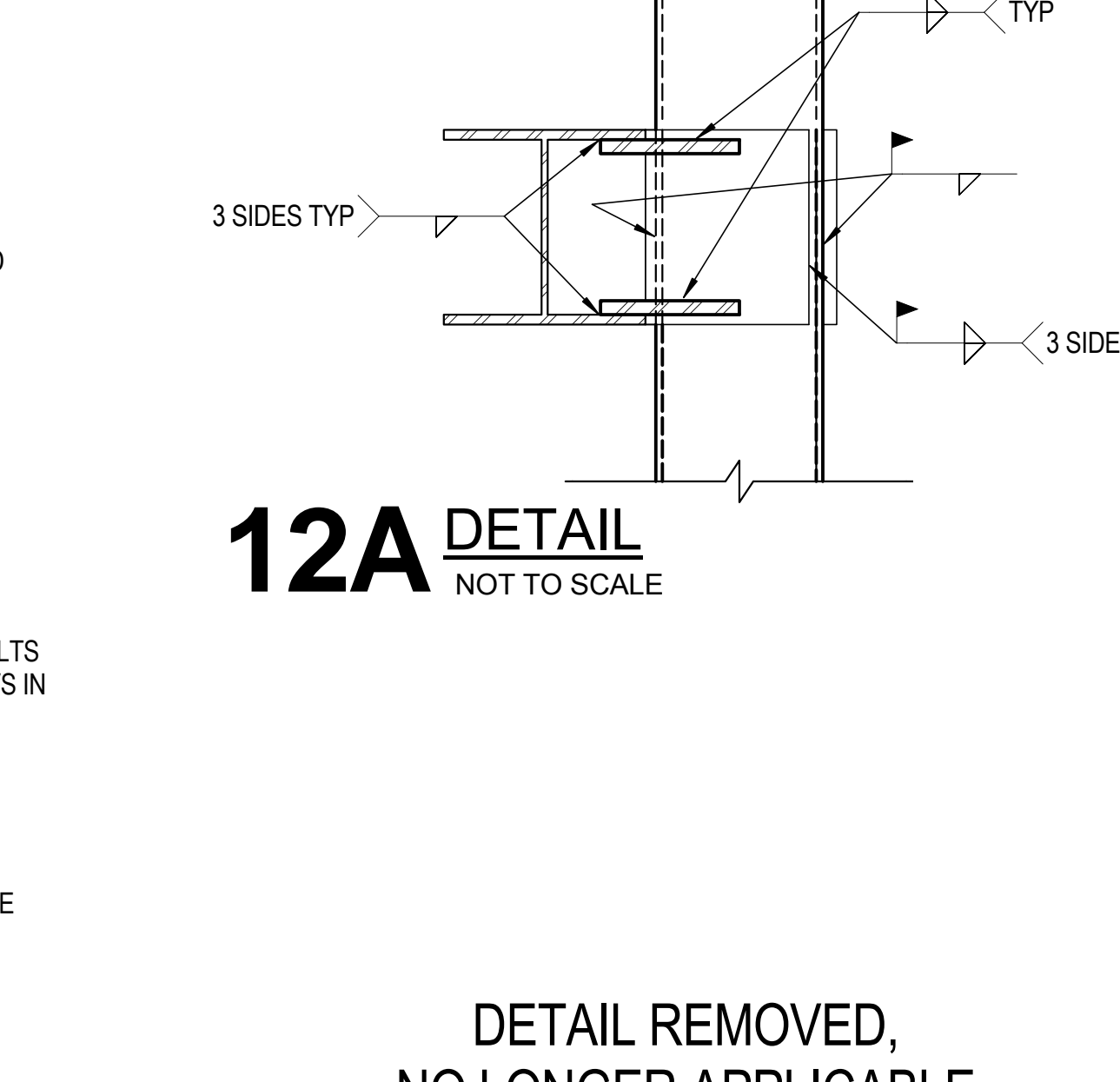
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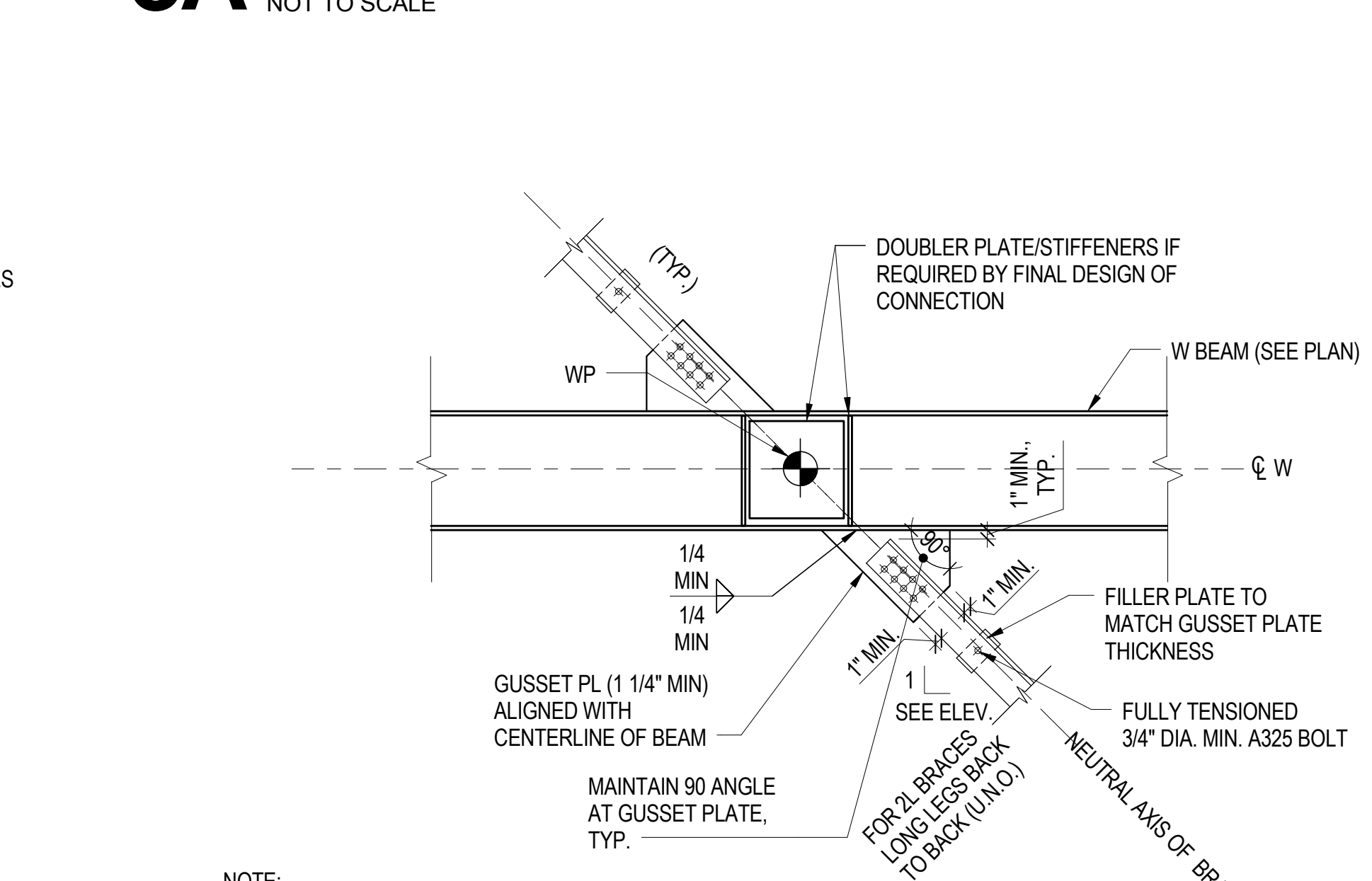
10 BRACE CONNECTION TO FLANGE
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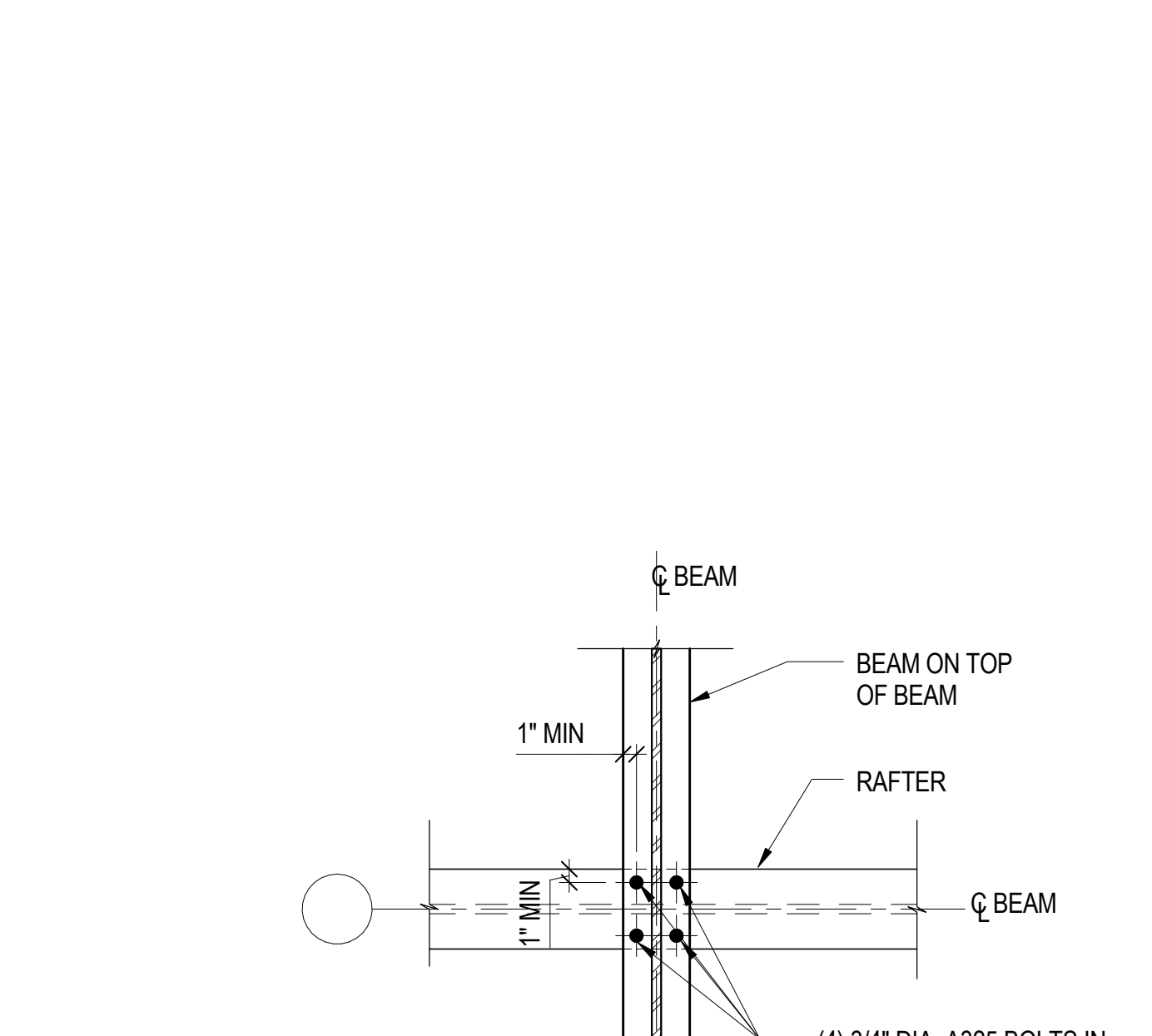
11 BRACE CONNECTION TO WEB
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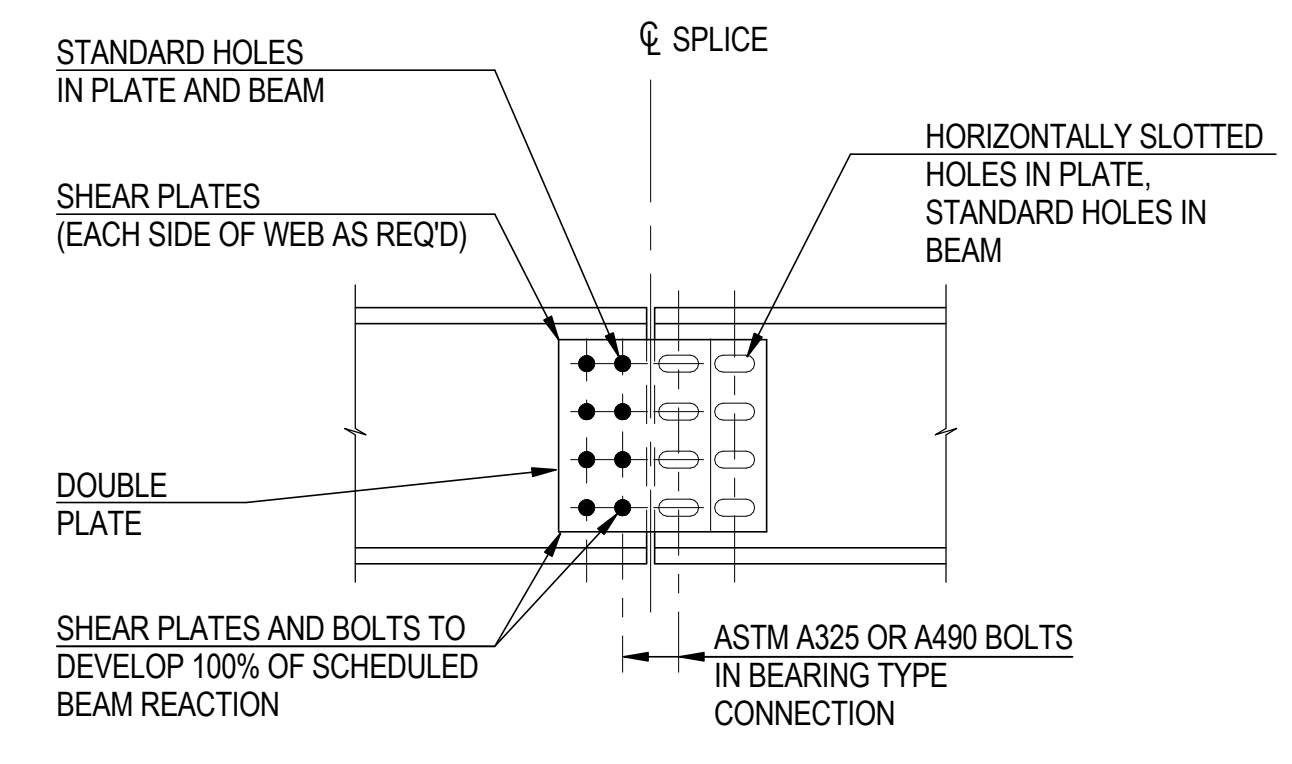
12 INTERMEDIATE HSS BEAM-TO-COLUMN WEB MOMENT CONNECTION
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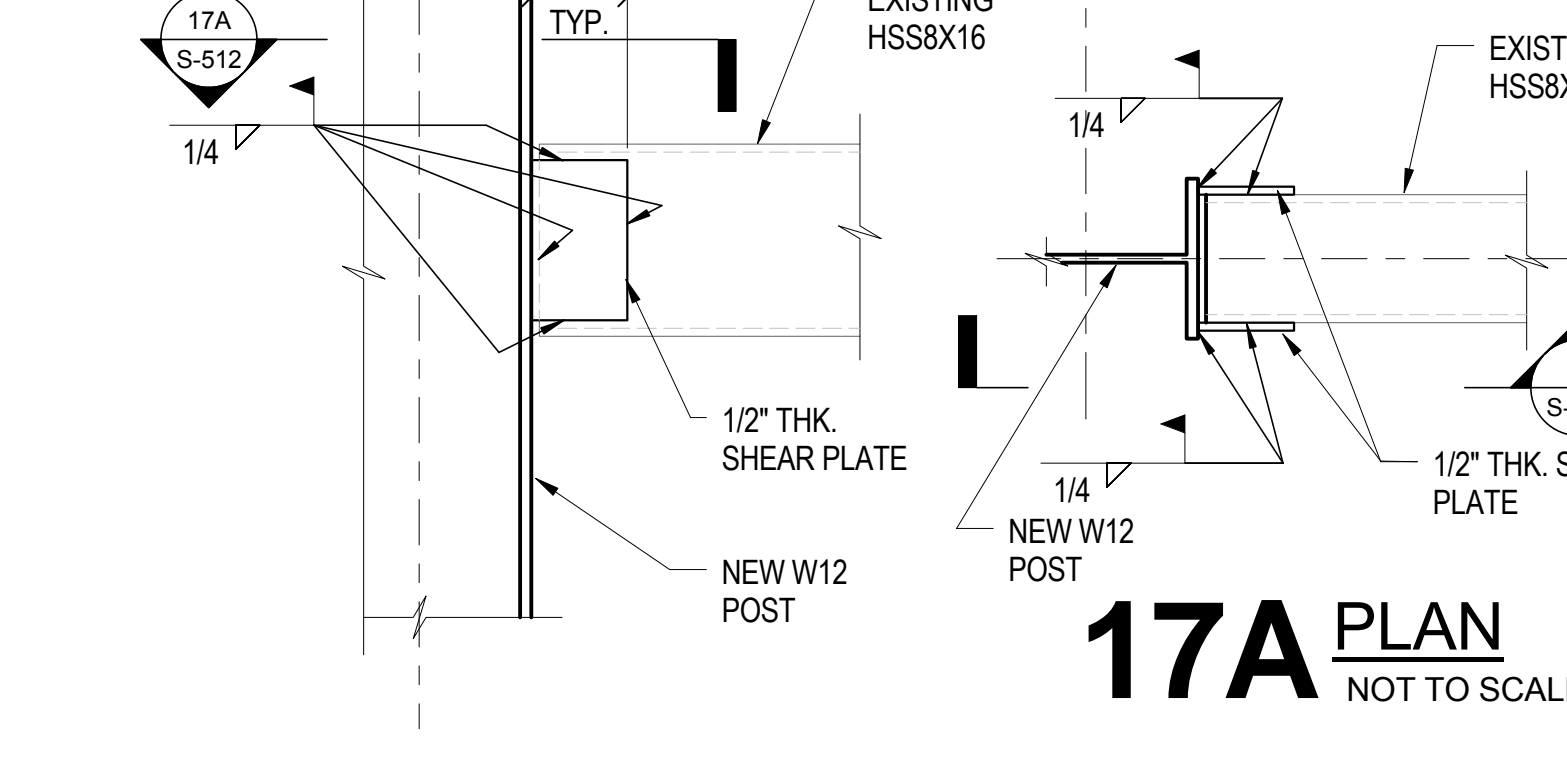
13 PLAZA CONNECTION DETAIL
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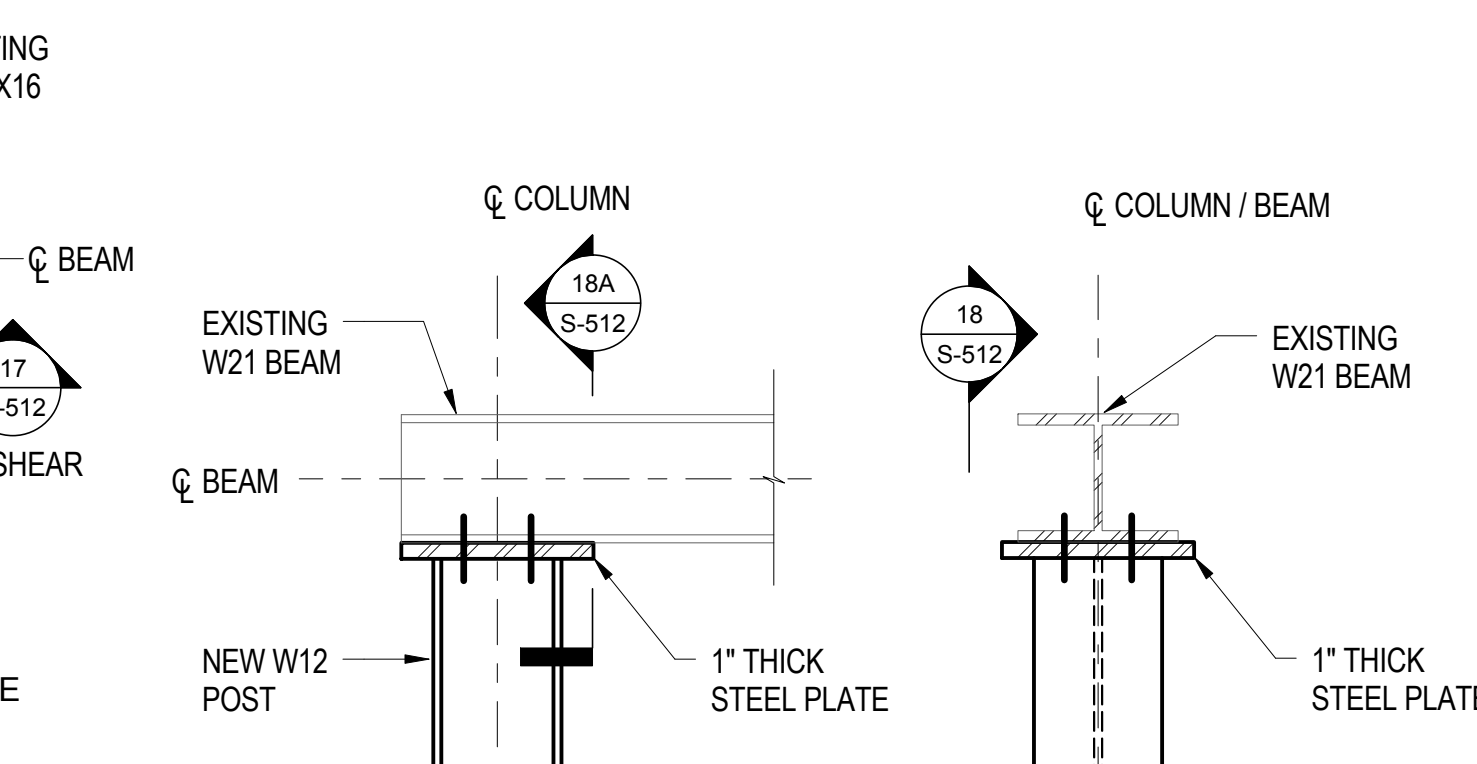
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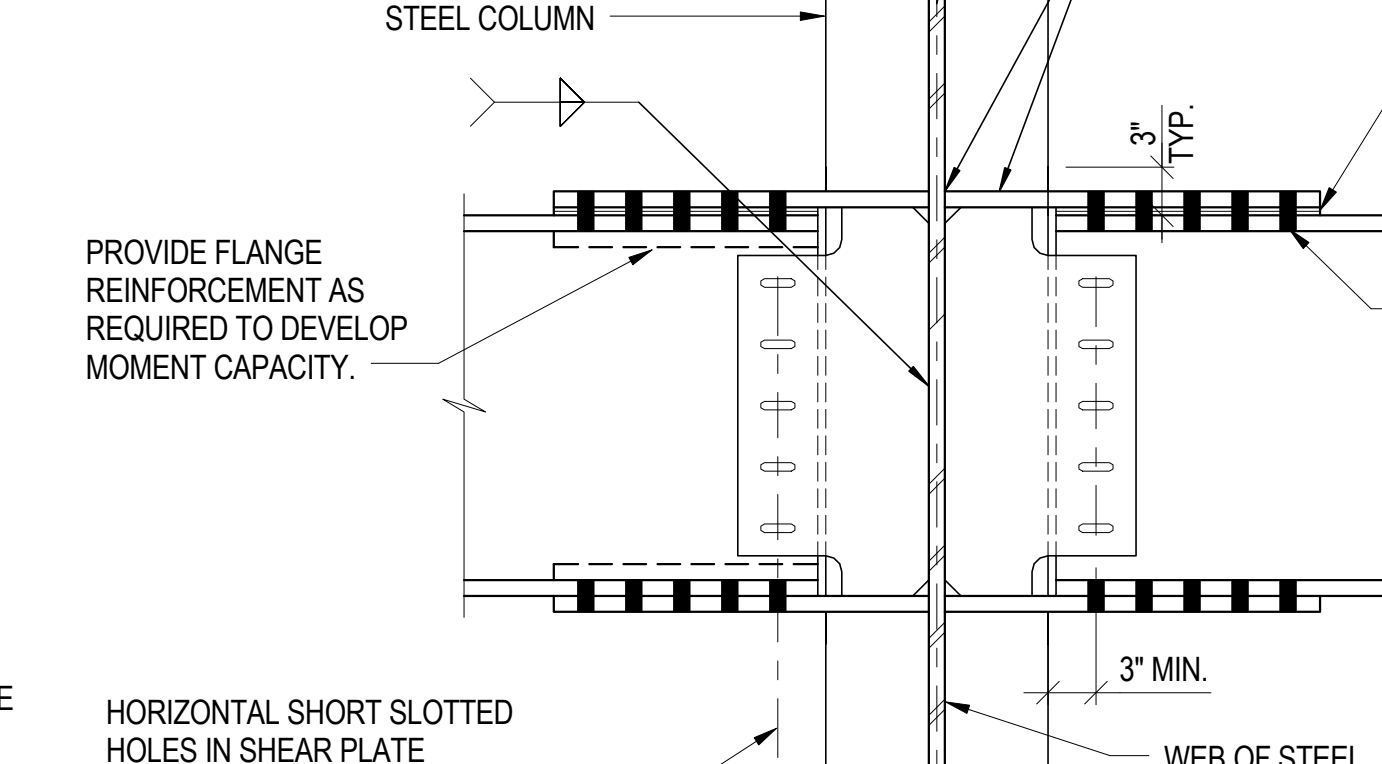
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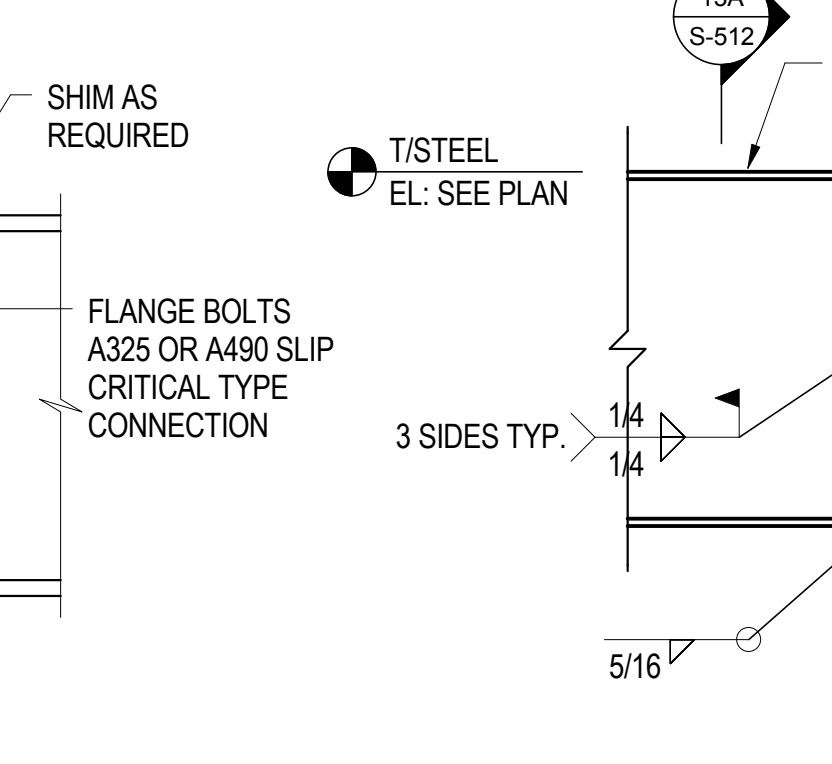
16 LEVEL 4 STEPPED SLAB
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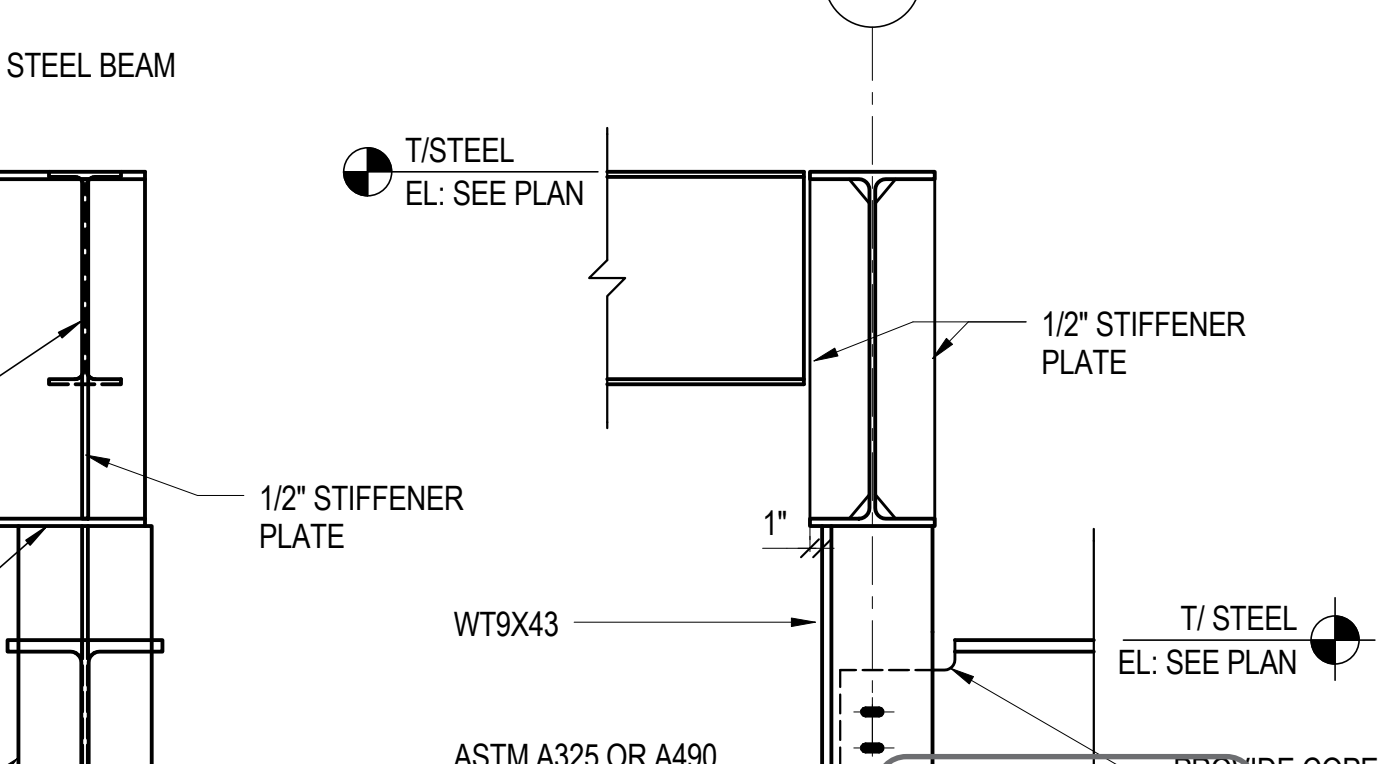
17 EXISTING HSS BEAM-TO-NEW POST-ELEV
NOT TO SCALE



18 EXISTING BEAM-TO-NEW COLUMN
NOT TO SCALE



18A SECTION
NOT TO SCALE



19 TYPICAL BEAM-TO-COLUMN WEB MOMENT CONNECTION
NOT TO SCALE

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Brookfield
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Rowan Williams Davies & Irwin Inc.
680 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:

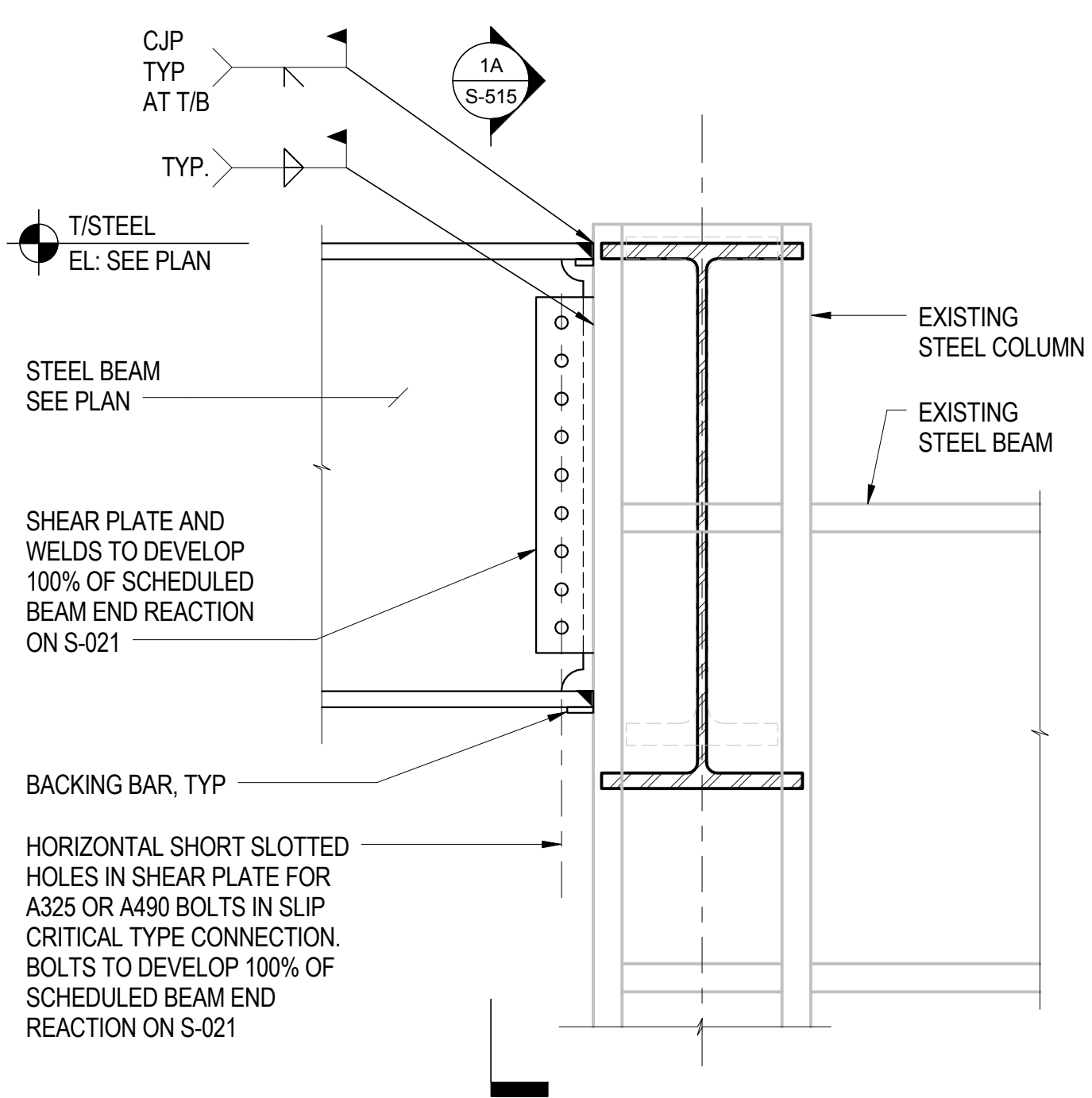
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Project No.: 211157
Date: 02/16/2018
Scale: As indicated
File No.: S-512

B-SCAN Sheet No.:
S-512.00
Sheet No.: S-512
Page No.:

TYPICAL STRUCTURAL STEEL SECTIONS AND DETAILS

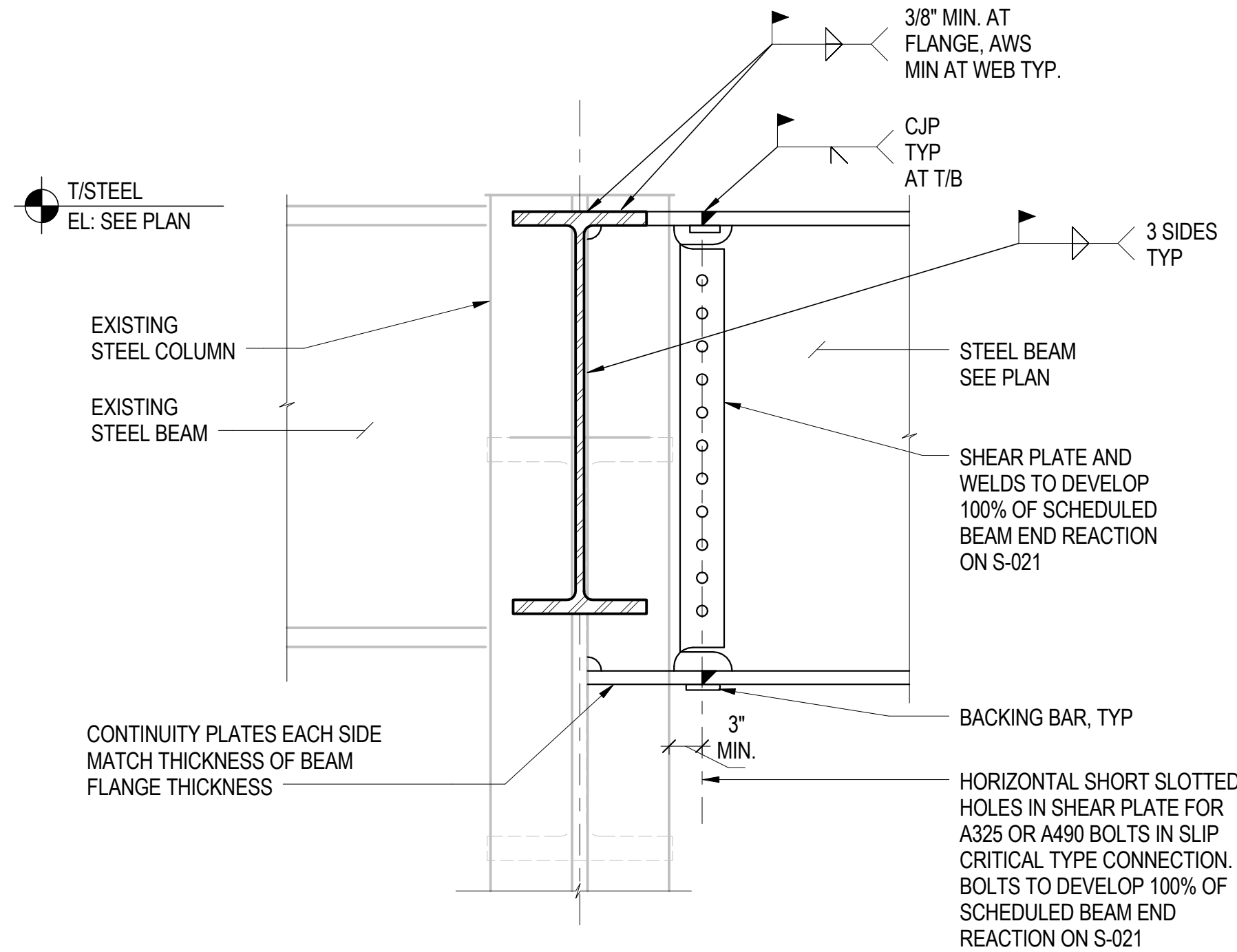
Under Directed 2 of 1975
NYC Development Hub



- NOTES:
1. VERIFY FACE OF EXISTING COLUMN IN FIELD PRIOR TO PREPARING SHOP DRAWING OF NEW TOP COLUMN.
 2. REMOVE RUST, MILL SCALE, DIRT, OIL/GREASE AND CLEAN SURFACE OF STEEL TO PREPARE WELDING.

1 BEAM TO COLUMN MOMENT CONNECTION - FIELD WELDED

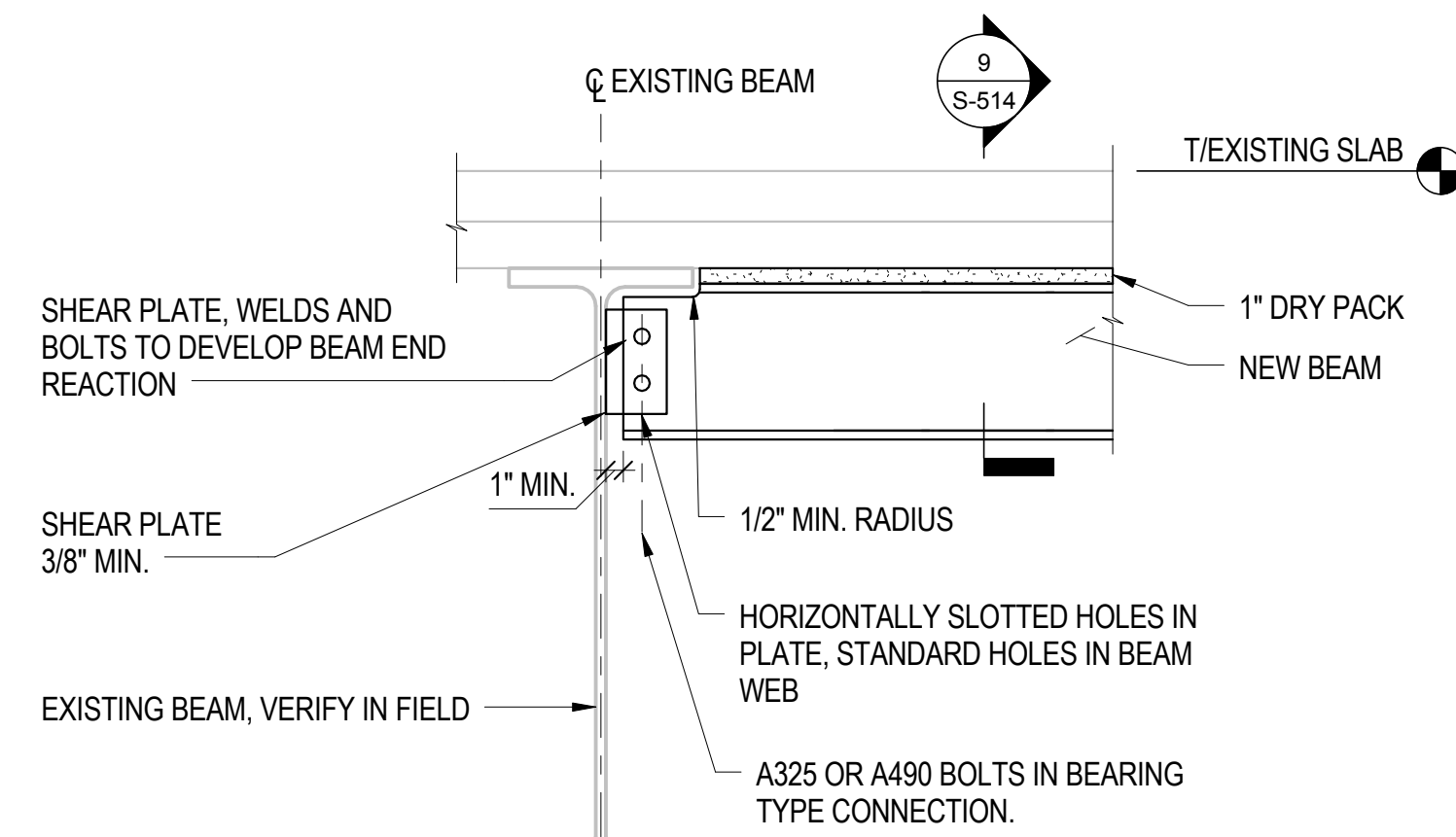
NOT TO SCALE



- NOTES:
1. VERIFY FACE OF EXISTING COLUMN IN FIELD PRIOR TO PREPARING SHOP DRAWING OF NEW TOP COLUMN.
 2. REMOVE RUST, MILL SCALE, DIRT, OIL/GREASE AND CLEAN SURFACE OF STEEL TO PREPARE WELDING.

1A BEAM TO COLUMN MOMENT CONNECTION - FIELD WELDED TO WEAK AXIS OF COLUMN

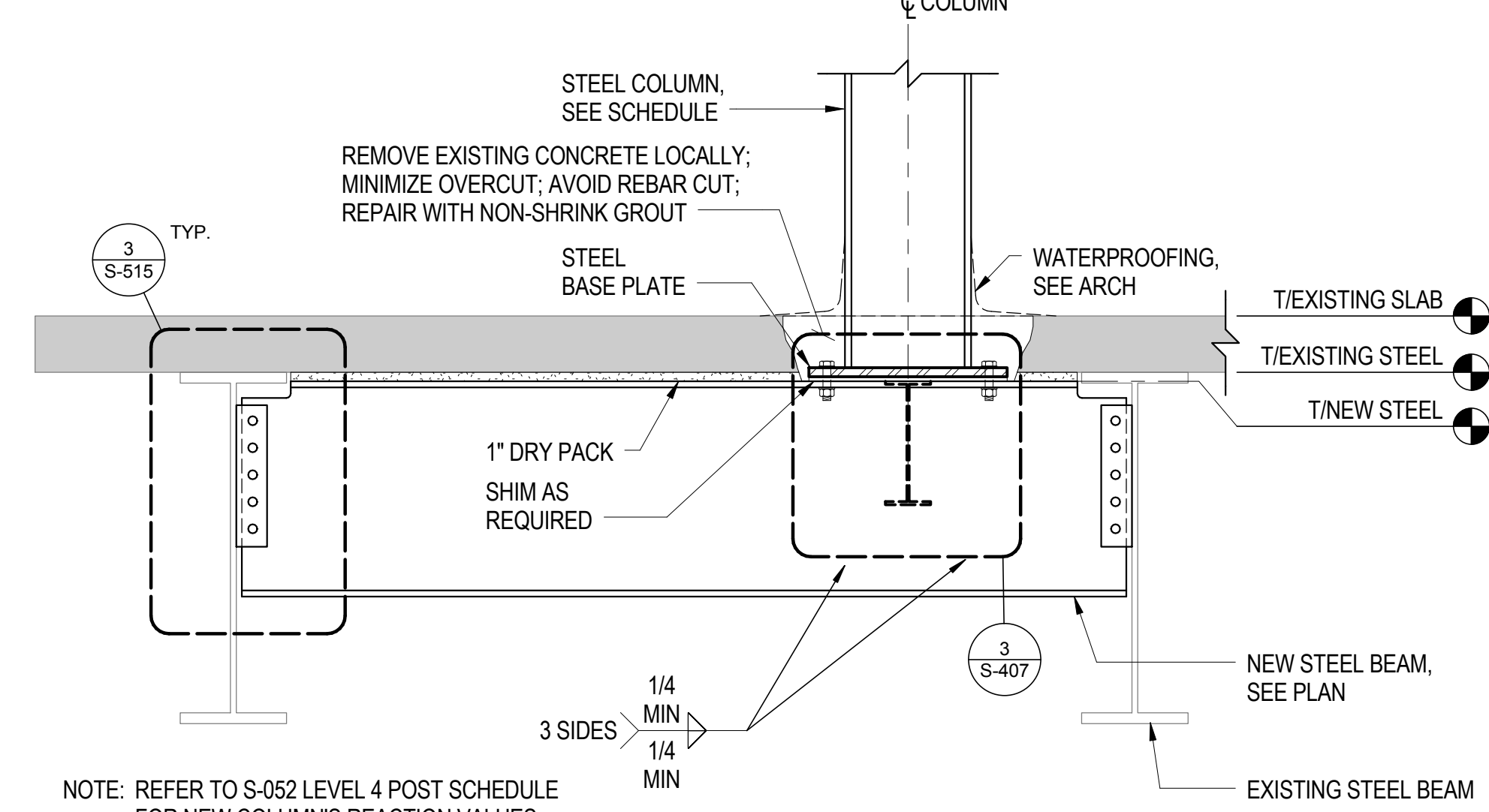
NOT TO SCALE



- NOTES:
1. STEEL REQUIRES HOT-DIP GALVANIZING; ALL BOLTS, WASHER, NUTS, BASE PLATES, GUSSET PLATES, STIFFENER PLATES, ANCHOR BOLTS FOR CONNECTION OF HOT-DIP GALVANIZED STEEL SHALL BE GALVANIZED.
 2. SHEAR CONNECTION TO DEVELOP REACTIONS SCHEDULED ON S-021 OR AS SHOWN ON PLAN.

3 TYP. CONNECTION NEW BEAM TO EXISTING BEAM

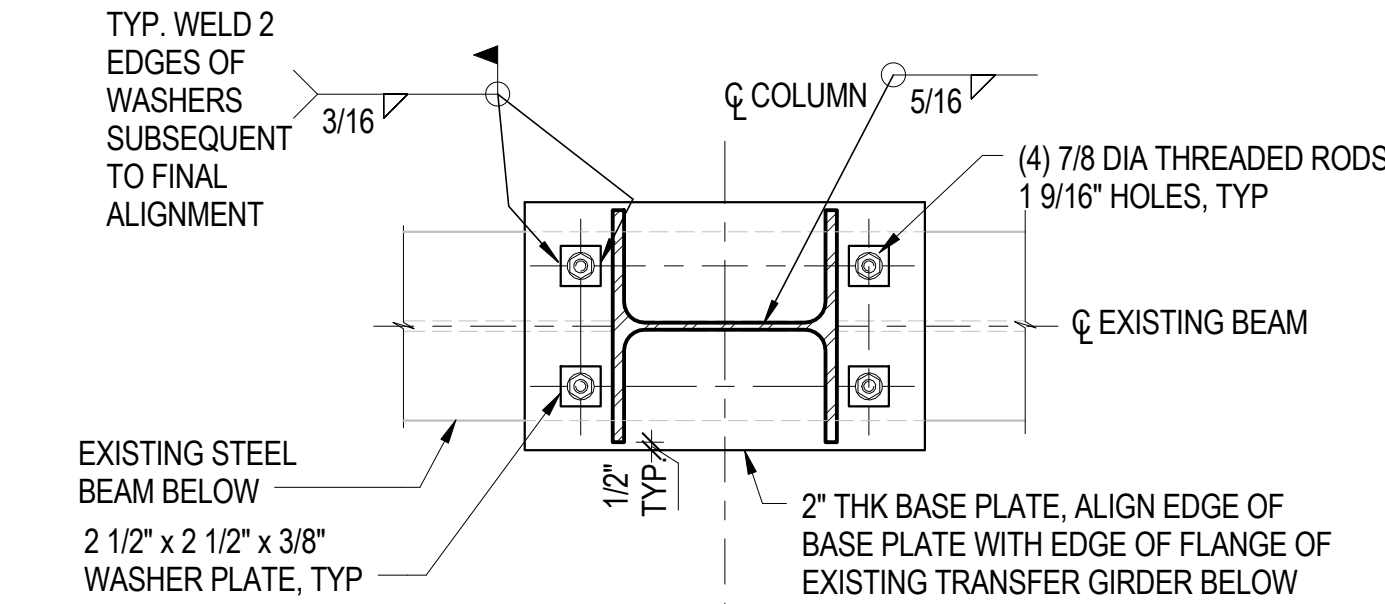
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NOTE: REFER TO S-062 LEVEL 4 POST SCHEDULE FOR NEW COLUMN'S REACTION VALUES

4 NEW STEEL COLUMN AND BEAM CONNECTION AT EXISTING SW TOWER

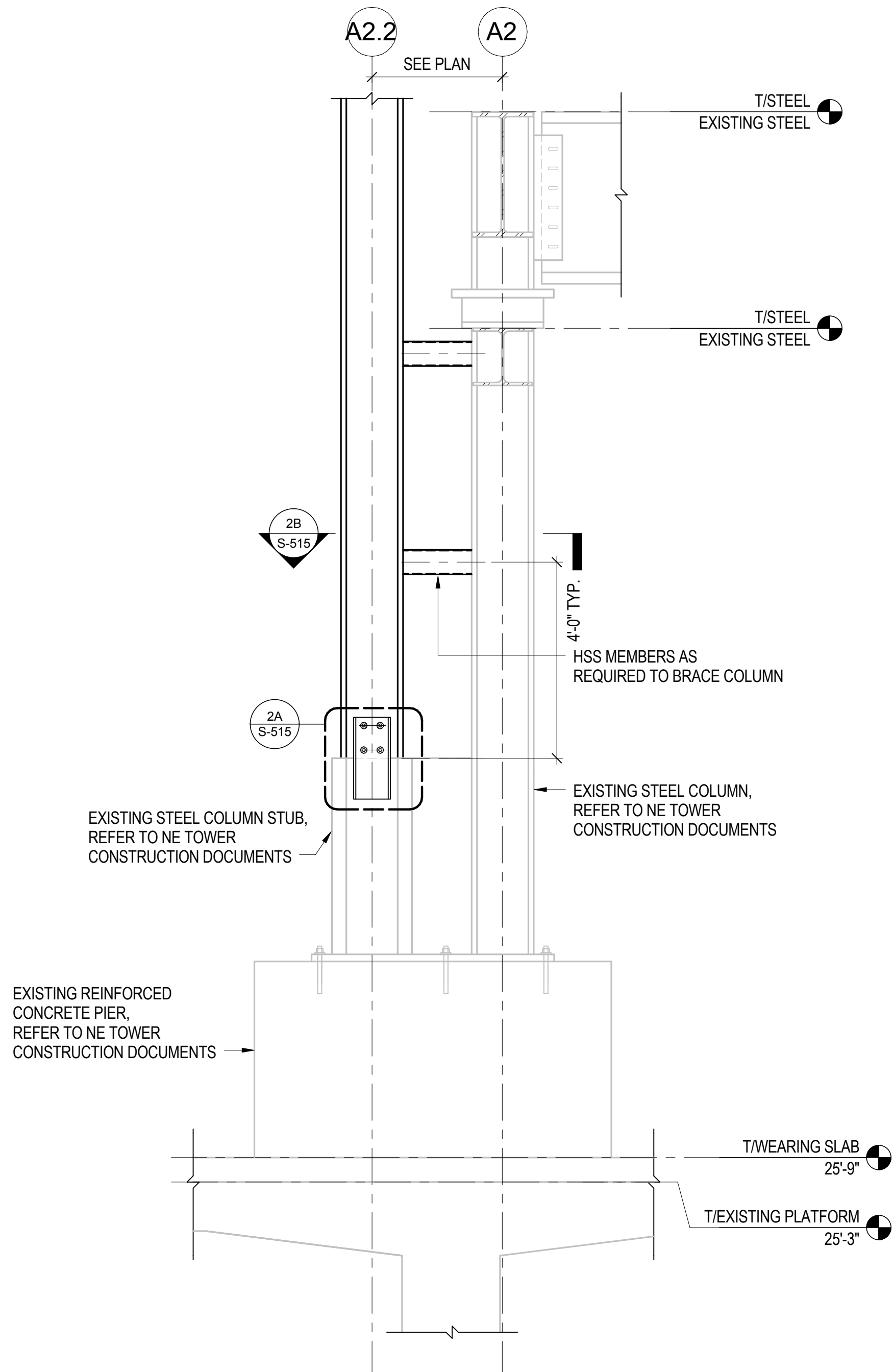
NOT TO SCALE



- NOTES:
1. SCREEN WALL SUPPORTING STEEL REQUIRES HOT-DIP GALVANIZING; ALL BOLTS, WASHER, NUTS, BASE PLATES, GUSSET PLATES, STIFFENER PLATES, ANCHOR BOLTS FOR CONNECTION OF HOT-DIP GALVANIZED STEEL SHALL BE GALVANIZED.
 2. NOTE: REFER TO S-062 LEVEL 4 POST SCHEDULE FOR NEW COLUMN'S REACTION VALUES.

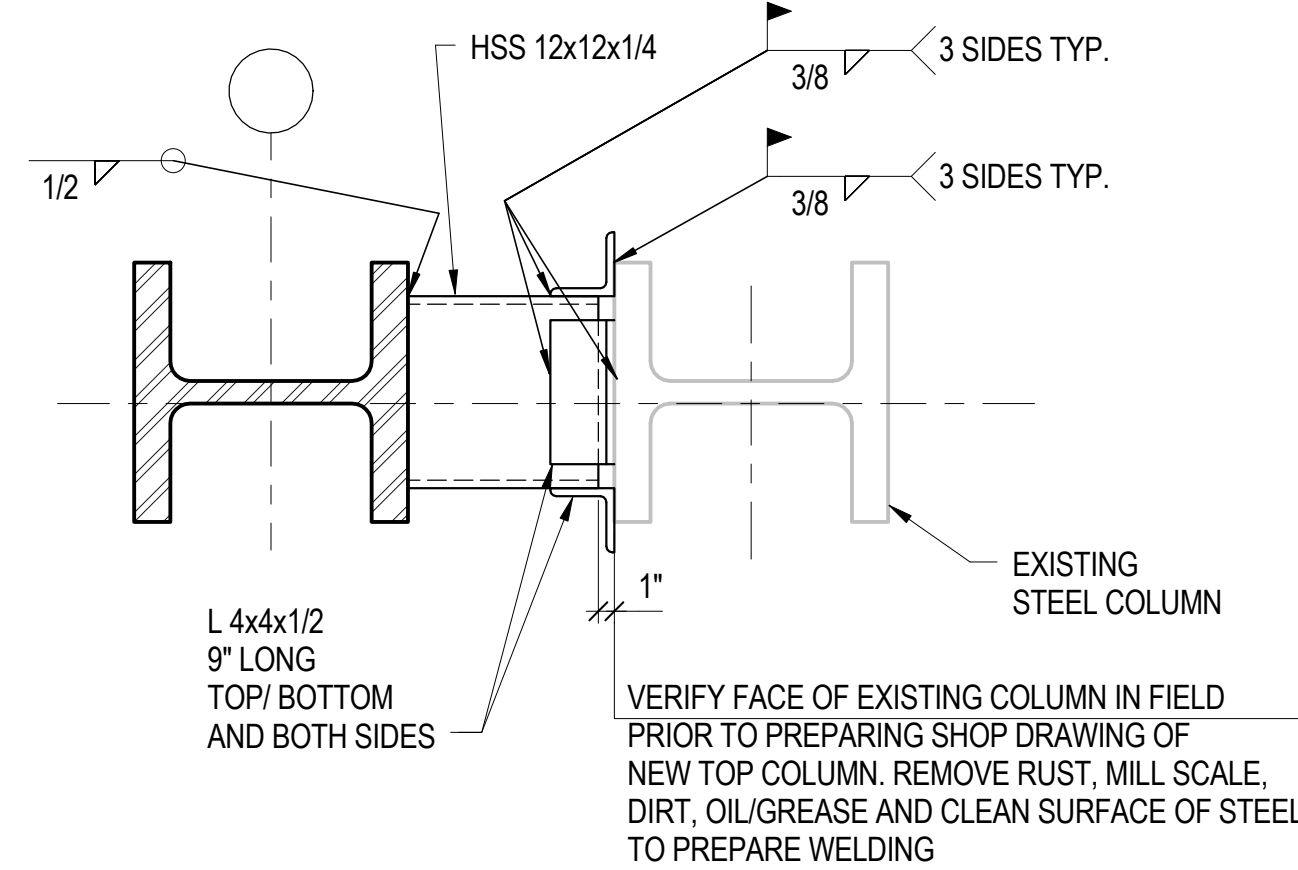
5 TYPICAL SOUTH BULKHEAD COLUMN CONNECTION TO EXISTING STRUCTURE

NOT TO SCALE



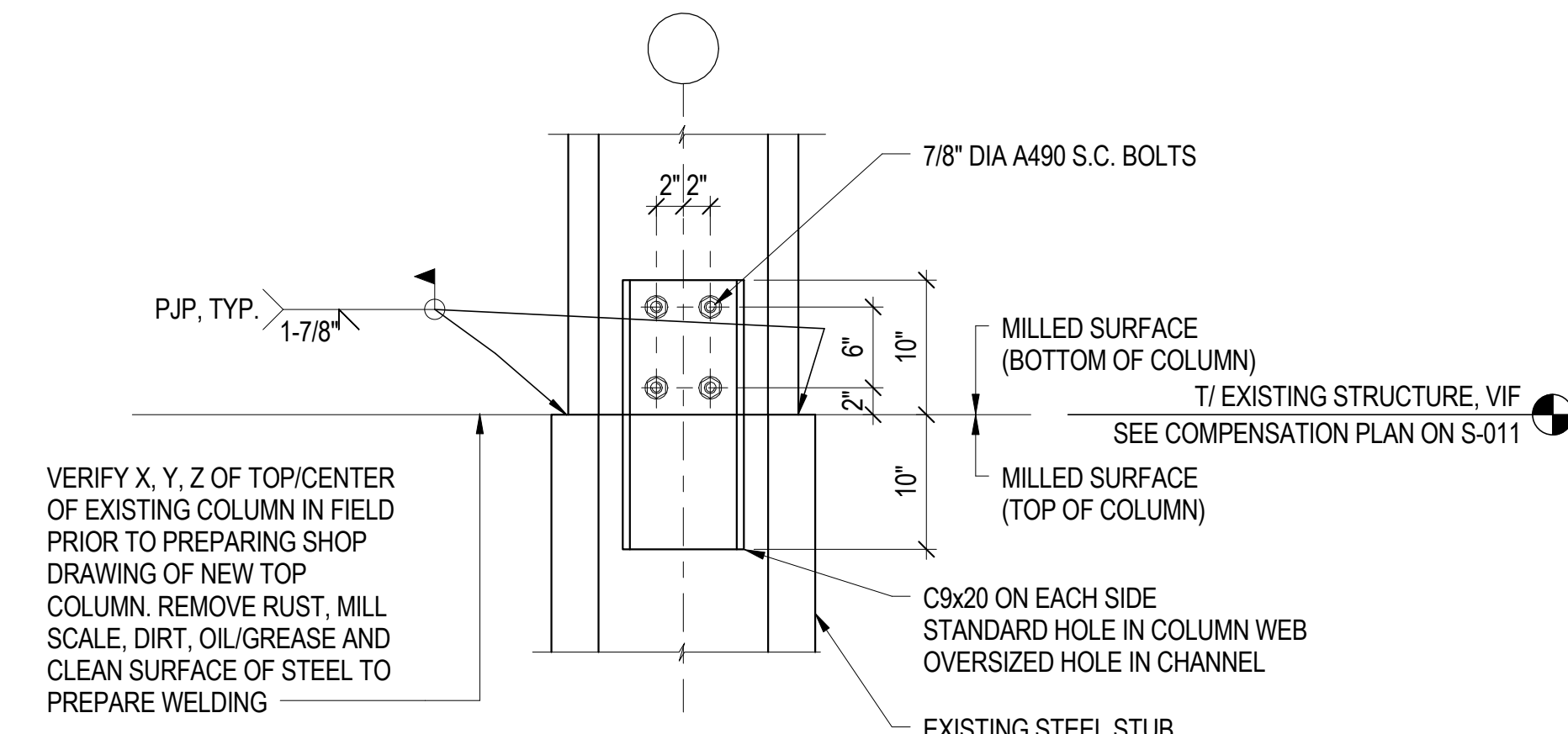
2 ADJACENT COLUMNS ALONG GRIDLINE A2 - LOOKING NORTH

NOT TO SCALE



2B HSS BRACE DETAIL AT EXISTING STEEL COLUMN

NOT TO SCALE



- NOTE:
1. TT = FLANGE THICKNESS OF TOP COLUMN

2A COLUMN SPLICE DETAIL AT EXISTING STEEL STUB COLUMN

NOT TO SCALE



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Code Consultants Professional Engineers PC
215 West 40th Street, 15th Floor, New York, NY 10018

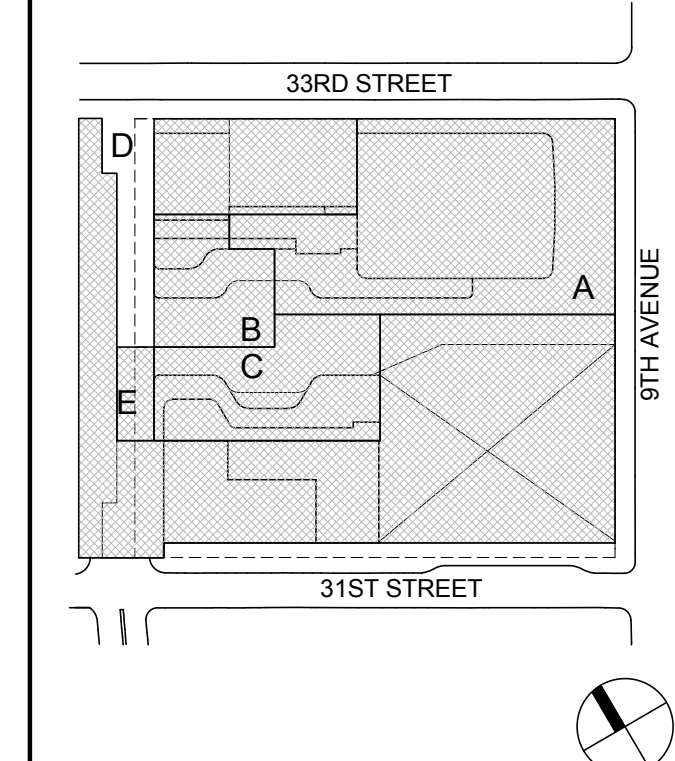
Facade Maintenance Consultant

Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:



Seal & Signature:

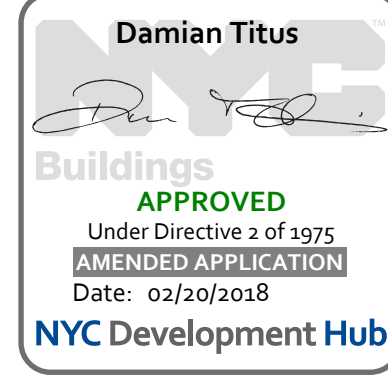


1. 02/16/2018 ISSUED FOR BUILDING PERMIT
No. Date Description
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TYPICAL STRUCTURAL STEEL SECTIONS AND DETAILS

Project No.: 211157
Date: 02/16/2018
Scale: As Indicated
File No.: S-515

B-SCAN Sheet No.: S-515.00
Sheet No.: S-515
Page No.:



211157
211157
211157



MANHATTAN WEST:
RETAIL &
CENTRAL PLAZA
Client

Brookfield

Brookfield Place
250 Vesey Street, 15th Floor, New York, NY 10021

Architecture/Structural Engineering

SOM

Skidmore, Owings & Merrill LLP
14 Wall Street, New York, NY 10005

Civil Engineering

Philip Habib & Associates
102 Madison Avenue #11, New York, NY 10016

MEP Engineering

Jaros Baum & Bolles
80 Pine Street, New York, NY 10005

Vertical Transportation

Edgett Williams Consulting Group, Inc.
102 East 8th Street, Suite 1, Mill Valley, California 94041

Sustainable Design

Viridian Energy & Environmental
50 Washington Street, Newark, CT 06854

Geotechnical Engineering

Mueser Rutledge Consulting Engineers
14 Penn Plaza, 22nd W, 34th Street, New York, NY 10122

Landscape Consultant

Field Operations
475 10th Avenue, New York, NY 10018

Security Consultant

Ducibella, Ventor & Santore
250 State Street #1, North Haven, CT 06473

Blast Consultant

Weidinger Associates, Inc.
40 Wall Street, New York, NY 10005

Acoustical Consultant

Cerami & Associates
404 Fifth Avenue #8, New York, NY 10016

Vibration Consultant

Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

Code Consultant

Code Consultants Professional Engineers PC
215 West 40th Street, 15th Floor, New York, NY 10018

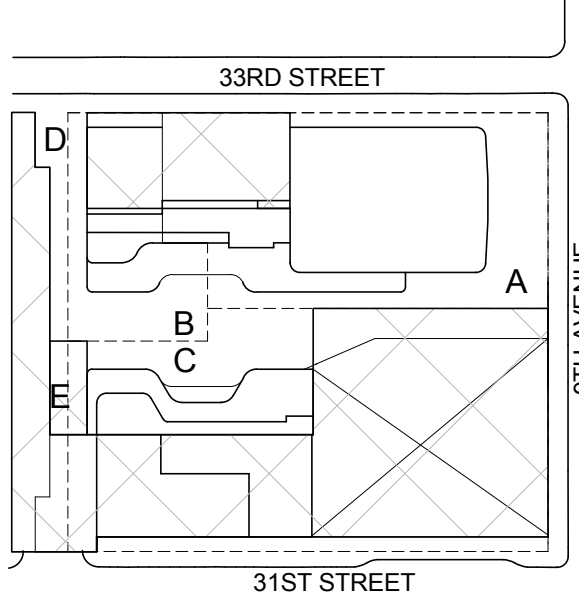
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Key Plan:



Seal & Signature:

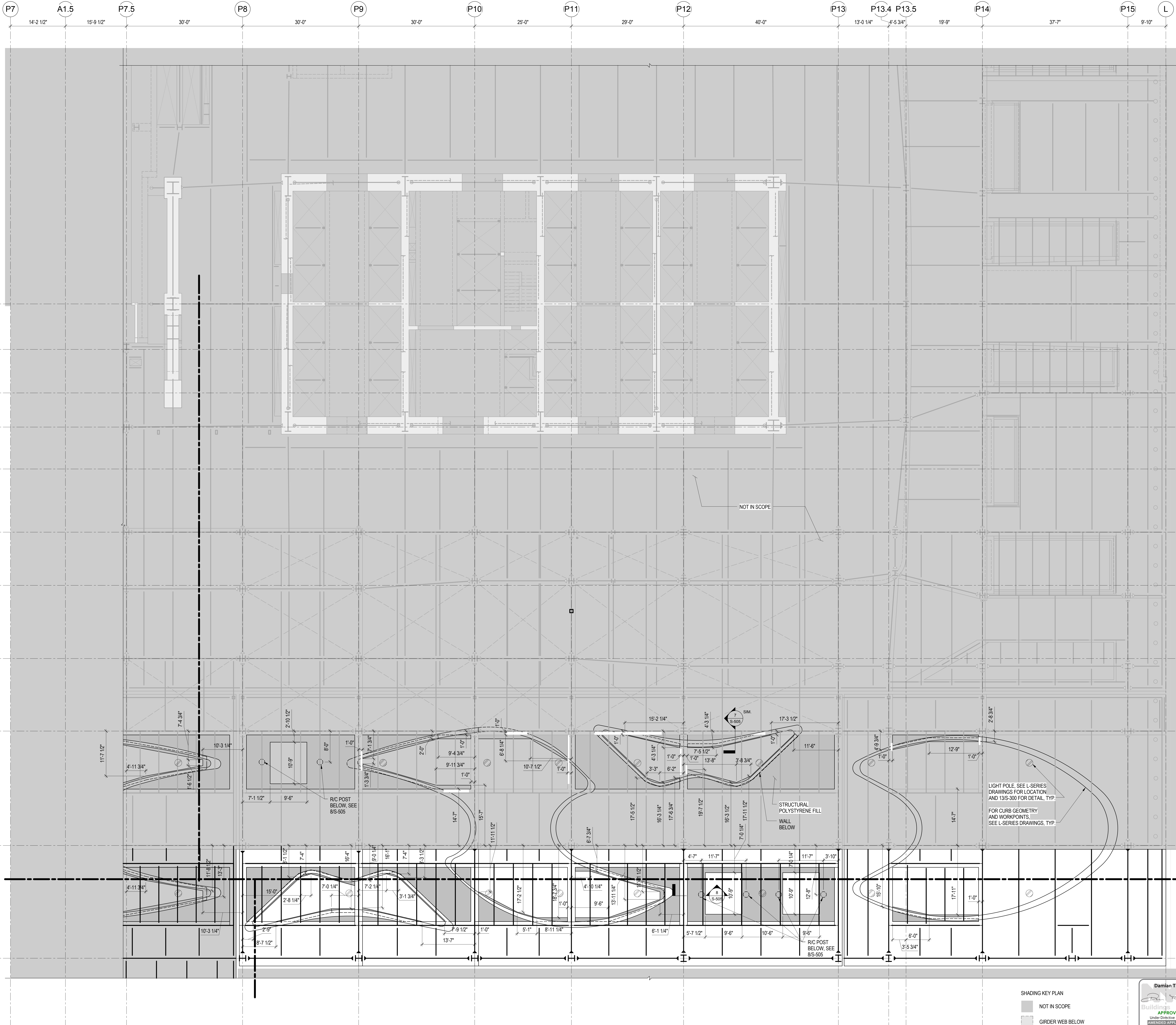


1 02/16/2018 ISSUED FOR BUILDING PERMIT
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PLAZA LEVEL
(PLANTER
WALL/LIGHT FILL)
PLAN - PART A

Project No.: 211157
Date: 02/16/2018
Scale: As indicated
File No.: S-611

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Sheet No.: S-611
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1 PLAZA LEVEL (PLANTER WALL/LIGHT FILL) PLAN - PART A
1/8" = 1'-0"

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