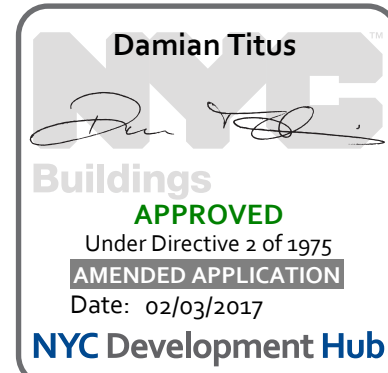


1 FOUNDATION UPPER PLAN
1/8" = 1'-0"

- NOTES:
1. TOP OF FOOTING ELEVATION -7'-4 1/4" UNLESS NOTED OTHERWISE.
 2. REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 3. REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 4. REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES.
 5. REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 6. REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 7. REFER TO SHEETS S-301 THROUGH S-304 FOR CORE WALL CONTINUOUS FOOTINGS SECTIONS AND DETAILS.
 8. REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.
 9. REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 10. REFER TO SHEET S-325 FOR SLAB ON-GRADE SECTIONS AND DETAILS.
 11. REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
 12. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
 13. REFER TO SHEET S-395 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
 14. REFER TO SHEETS S-361 THROUGH S-368 FOR CORE WALL ELEVATIONS.
 15. REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
 16. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
 17. REFER TO SHEET S-401 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 18. REFER TO DRAWINGS PREPARED BY ENTUITIVE FOR ADJACENT PLATFORM STRUCTURE.



**FOUNDATION
UPPER LEVEL
PLAN**

Project No.: 211157	B-SCAN Sheet No.: S-093.02
Date: 22 APR 2016	Sheet No.: S-097B3
Scale: 1/8" = 1'-0"	Page No.:
File No.: S-097B3	



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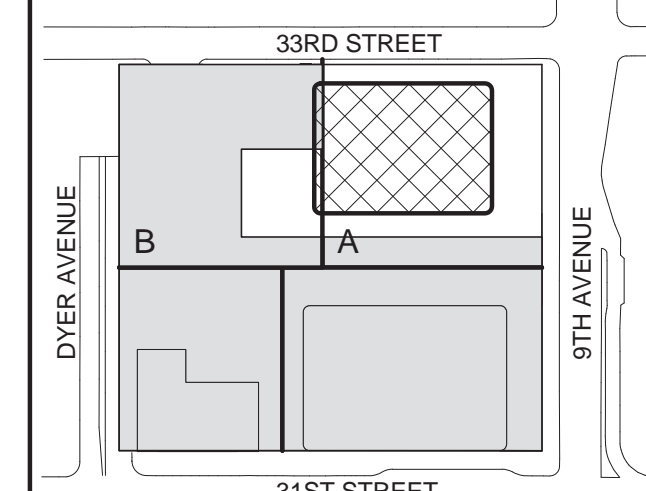
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650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:



Seal & Signature:

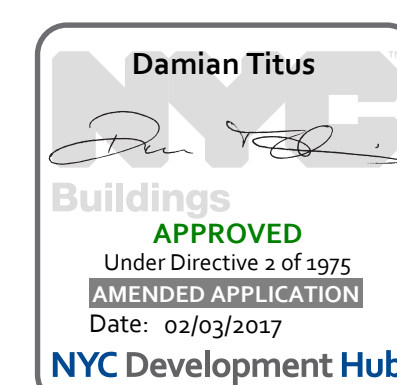


3 22 APR 2016 ISSUED FOR PIA
2 18 DEC 2015 ISSUED FOR PERMIT
1 20 JUN 2014 ISSUED FOR FOUNDATION PERMIT

No. Date Description
Sheet Name:

**CELLAR B1 PITS
FLOOR FRAMING
PLAN**

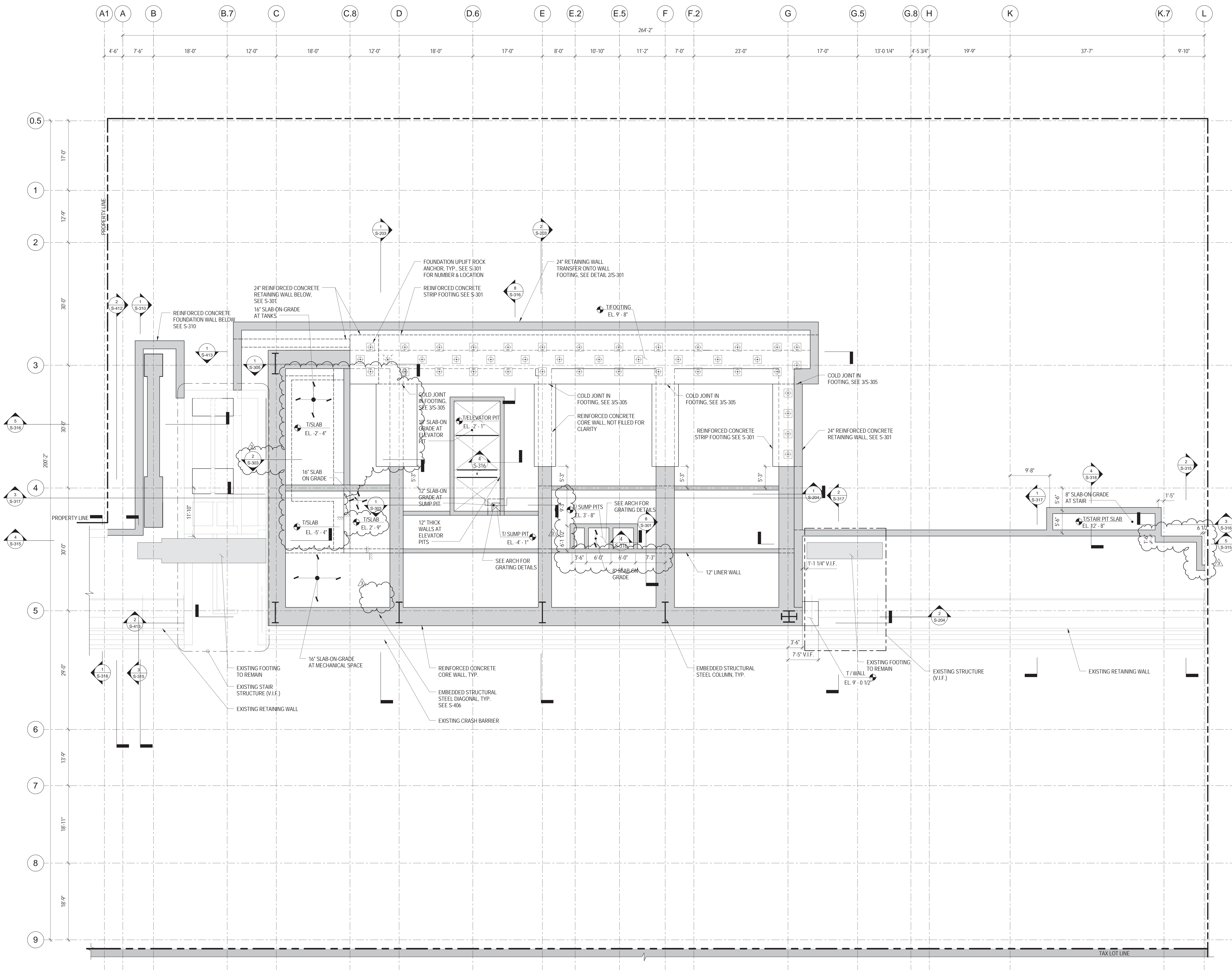
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Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-0982
B-SCAN Sheet No.:
S-094.02
Sheet No.:
S-098B2
Page No.:

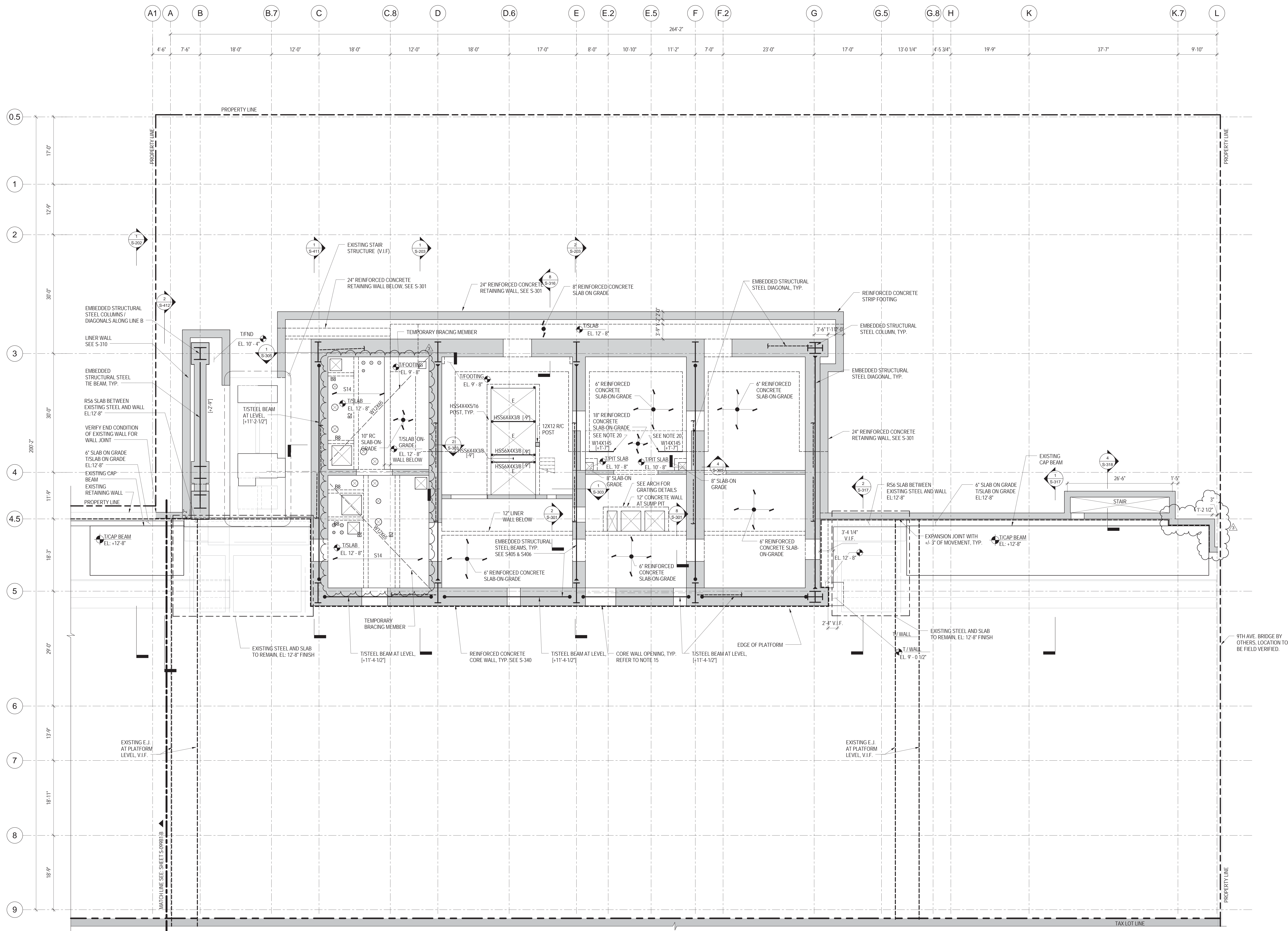


- NOTES:
1. TOP OF SLAB ELEVATION AS NOTED ON PLAN.
 2. FOR EMBEDDED STEEL ELEVATIONS SEE DRAWINGS S411 & S413
 3. REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 4. REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 5. REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES.
 6. REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 7. REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 8. REFER TO SHEETS S-301 THROUGH S-304 FOR CORE WALL CONTINUOUS FOOTINGS SECTIONS AND DETAILS.
 9. REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.
 10. REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 11. REFER TO SHEET S-325 FOR SLAB-ON-GRADE SECTIONS AND DETAILS.
 12. REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
 13. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
 14. REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
 15. REFER TO SHEETS S-361 THROUGH S-368 FOR CORE WALL ELEVATIONS.
 16. REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
 17. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
 18. REFER TO SHEET S-401 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 19. REFER TO DRAWINGS PREPARED BY ENTUITIVE FOR ADJACENT PLATFORM STRUCTURE.

1 CELLAR B1 PITS FRAMING PLAN

1/8" = 1'-0"

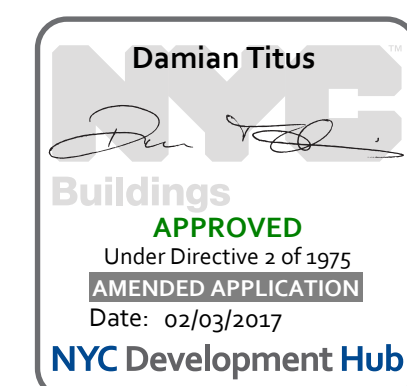




1 CELLAR B1 FLOOR FRAMING PLAN - PART A

1/8" = 1'-0"

- NOTES:
1. TOP OF SLAB ELEVATION = +12'-8", UNLESS NOTED OTHERWISE.
 2. TOP OF STEEL ELEVATION = +11'-3", UNLESS NOTED OTHERWISE.
 3. REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 4. REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 5. REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES.
 6. REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 7. REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 8. REFER TO SHEETS S-301 THROUGH S-304 FOR CORE WALL CONTINUOUS FOOTINGS SECTIONS AND DETAILS.
 9. REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.
 10. REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 11. REFER TO SHEET S-325 FOR SLAB-ON-GRADE SECTIONS AND DETAILS.
 12. REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
 13. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
 14. REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
 15. REFER TO SHEET S-361 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 16. REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
 17. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
 18. REFER TO SHEET S-401 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 19. REFER TO DRAWINGS PREPARED BY ENTITTEE FOR ADJACENT PLATFORM STRUCTURE.
 20. EXACT LOCATION OF EMBEDDED STEEL SECTION IN ELEVATOR PITS TO BE COORDINATED WITH ELEVATOR CONTRACTOR.
 21. REFER TO SHEET S-372 THROUGH S-389 FOR DIMENSIONS OF MEP SLAB OPENINGS INSIDE THE CORE.



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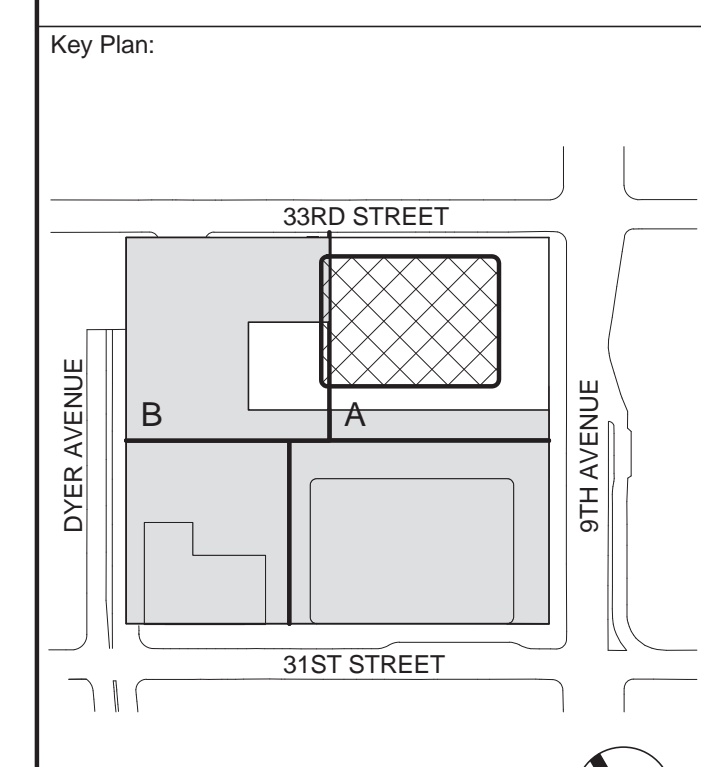
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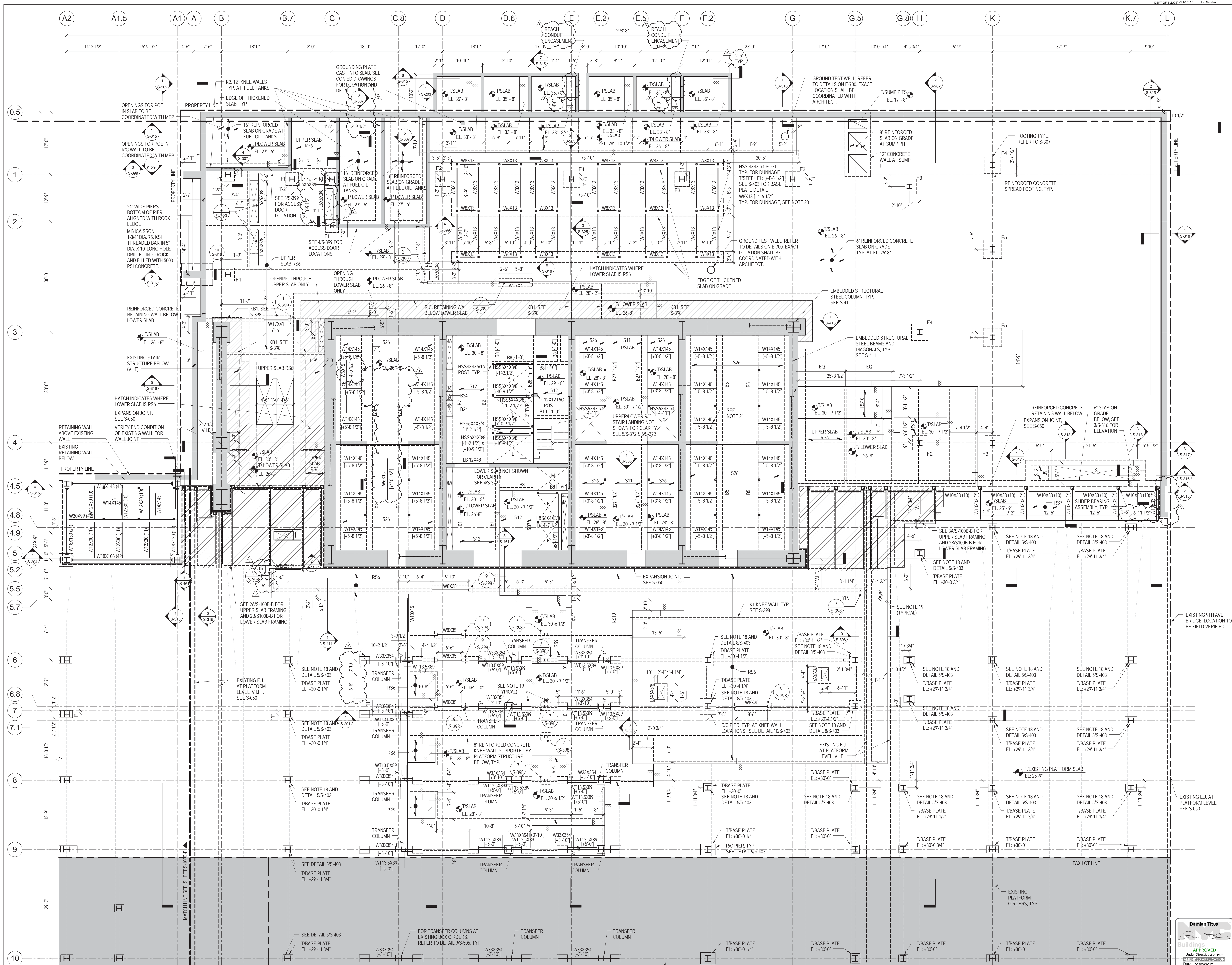
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Seal & Signature

**CELLAR B1
FLOOR FRAMING
PLAN - PART A**

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-099B1-A
B-SCAN Sheet No.:
Sheet No.:
Page No.:
S-095.02
S-099B1-A



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

- NOTES:
1. TOP OF SLAB ELEVATION = +30.8', UNLESS NOTED OTHERWISE.
 2. REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS.
 3. REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES.
 4. REFER TO SHEET S-004 FOR STRUCTURAL CONCRETE NOTES.
 5. REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES.
 6. REFER TO SHEETS S-201 THROUGH S-204 FOR OVERALL BUILDING ELEVATIONS AND SECTIONS.
 7. REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.
 8. REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 9. REFER TO SHEET S-325 FOR SLAB-ON-GRADE SECTIONS AND DETAILS.
 10. REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
 11. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
 12. REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
 13. REFER TO SHEETS S-381 THROUGH S-388 FOR CORE WALL ELEVATIONS.
 14. REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
 15. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
 16. REFER TO SHEETS S-401 AND S-402 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 17. REFER TO DRAWINGS PREPARED BY EXISTING FOR ADJACENT PLATFORM STRUCTURE.
 18. PROVIDE SLIDING BEARING SUPPORT AT TOP OF COLUMN. SEE S-462 AND S-463 FOR DETAILS AND SCHEDULE.
 19. VERIFY IN FIELD BASED ON EXISTING CONDUIT SIZE AND LOCATION.
 20. ALL FRAMING SUPPORTING SWITCHGEAR EQUIPMENT TO BE GALVANIZED. SEE ARCHITECTURAL SHEET S-001 FOR DETAILS.
 21. EXACT LOCATION OF EMBEDDED STEEL SECTION IN ELEVATOR PIT TO BE COORDINATED WITH ELEVATOR CONTRACTOR.
 22. TOP OF STEEL ELEVATION = +25'-1 1/2", UNLESS NOTED OTHERWISE.
 23. REFER TO SHEET S-372 THROUGH S-389 FOR DIMENSIONS OF MEP SLAB OPENINGS INSIDE THE CORE.
 24. PROVIDE SLIDING BEARING SUPPORT AT THE BASE OF THE COLUMN, SEE DETAIL 5/5-463.

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Wind Tunnel Consultant

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Key Plan:

Seal & Signature:

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-1008-A

B-SCAN Sheet No.:
S-097.02
Sheet No.:
S-1008-A
Page No.:

- NOTES:
1. TOP OF SLAB ELEVATION 30'-8", UNLESS NOTED OTHERWISE
 2. TOP OF STEEL ELEVATION 30'-0 1/2", UNLESS NOTED OTHERWISE
 3. SLAB EDGE DIMENSION AT OPENING = 6", UNLESS NOTED OTHERWISE.

2A T/SLAB CELLAR B - UPPER SLAB (WEST)
3/16" = 1'-0"

- NOTES:
1. TOP OF SLAB ELEVATION = +25'-9", UNLESS NOTED OTHERWISE
 2. TOP OF STEEL ELEVATION = +25'-1 1/2", UNLESS NOTED OTHERWISE BY [+X'-X"] OR [-X'-X"], WHICH DENOTE POSITIVE OR NEGATIVE OFFSET RESPECTIVELY

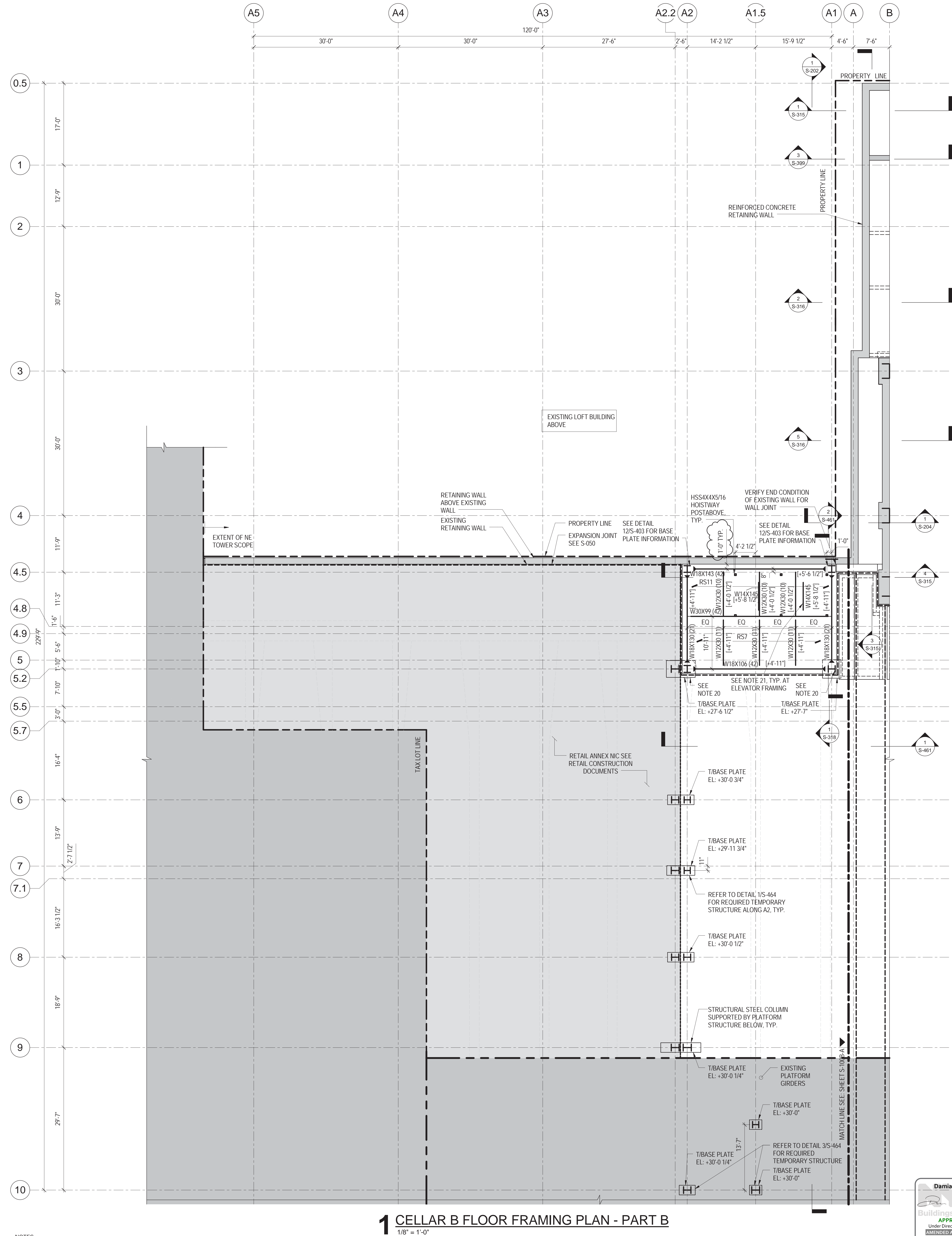
2B T/SLAB CELLAR B - LOWER SLAB (WEST)

- NOTES:
1. TOP OF SLAB ELEVATION = +30'-8". UNLESS NOTED OTHERWISE

3A T/SLAB CELLAR B - UPPER SLAB (EAST)
3/16" = 1'-0"

- NOTES:
1. TOP OF SLAB ELEVATION = +25'-9", UNLESS NOTED OTHERWISE
 2. TOP OF STEEL ELEVATION = +25'-1 1/2", UNLESS NOTED OTHERWISE BY [-X'-X"] OR [-X'-X"], WHICH DENOTE POSITIVE OR NEGATIVE OFFSET RESPECTIVELY

3B T/SLAB CELLAR B - LOWER SLAB (EAST)
3/16" = 1'-0"



1 CELLAR B FLOOR FRAMING PLAN - PART B

- | NOTES: | | 1"= 1'-0" | |
|--------|---|---|---|
| 1. | TOP OF SLAB ELEVATION + 30'-0", UNLESS NOTED OTHERWISE. | 11. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS. | 21. EXACT LOCATION OF EMBEDDED STEEL SECTION IN ELEVATOR PITS WITH ELEVATOR CONTRACTOR. |
| 2. | REFER TO SHEET S-002 FOR STRUCTURAL SYMBOLS AND ABBREVIATIONS. | 12. REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS. | 22. TOP OF SLAB ELEVATION - 0'-05' 1/2", UNLESS NOTED OTHERWISE. |
| 3. | REFER TO SHEET S-003 FOR EXCAVATION AND FOUNDATION NOTES. | 13. REFER TO SHEETS S-360 THROUGH S-368 FOR CORE WALL ELEVATIONS. | |
| 4. | REFER TO SHEETS S-004 FOR STRUCTURAL CONCRETE NOTES. | 14. REFER TO SHEET S-339 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS. | |
| 5. | REFER TO SHEETS S-005 FOR STRUCTURAL STEEL AND METAL DECK NOTES. | 15. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS. | |
| 6. | REFER TO SHEETS S-201 THROUGH S-210 FOR STRUCTURAL STEEL CLIMATE AND SECTIONS. | 16. REFER TO SHEET S-401 AND S-402 FOR STRUCTURAL STEEL CLIMATE SCHEDULE, SECTIONS AND DETAILS. | |
| 7. | REFER TO SHEET S-307 FOR STEEL FOOTING SCHEDULE, SECTIONS AND DETAILS. | 17. REFER TO DRAWINGS PREPARED BY INTUITIVE FOR ADJACENT PLATFORM STRUCTURE. | |
| 8. | REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS. | 18. PROVIDE SLIDING BEARING SUPPORT AT TOP OF COLUMN, SEE S-542 FOR DETAILS AND SCHEDULE. | |
| 9. | REFER TO SHEET S-325 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS. | 19. VERIFY IN FIELD RASD ON EXISTING STRUCTURE LOCATION. | |
| 10. | REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS. | 20. PROVIDE SLIDING BEARING SUPPORT AT THE BASE OF THE COLUMN, SEE DETAIL S-5-463. | |



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

Key Plan:

33RD STREET

DYER AVE

9TH AVE

31ST STREET

Seal & Signature: 



Professional Engineer Seal

3	22 APR 2016	ISSUED FOR PAA

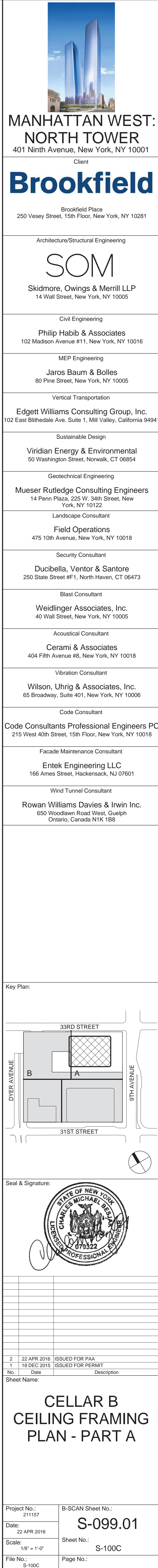
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No.	Date	Description

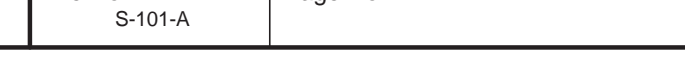
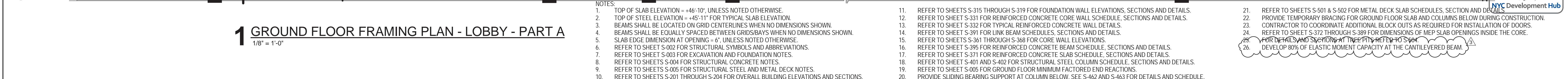
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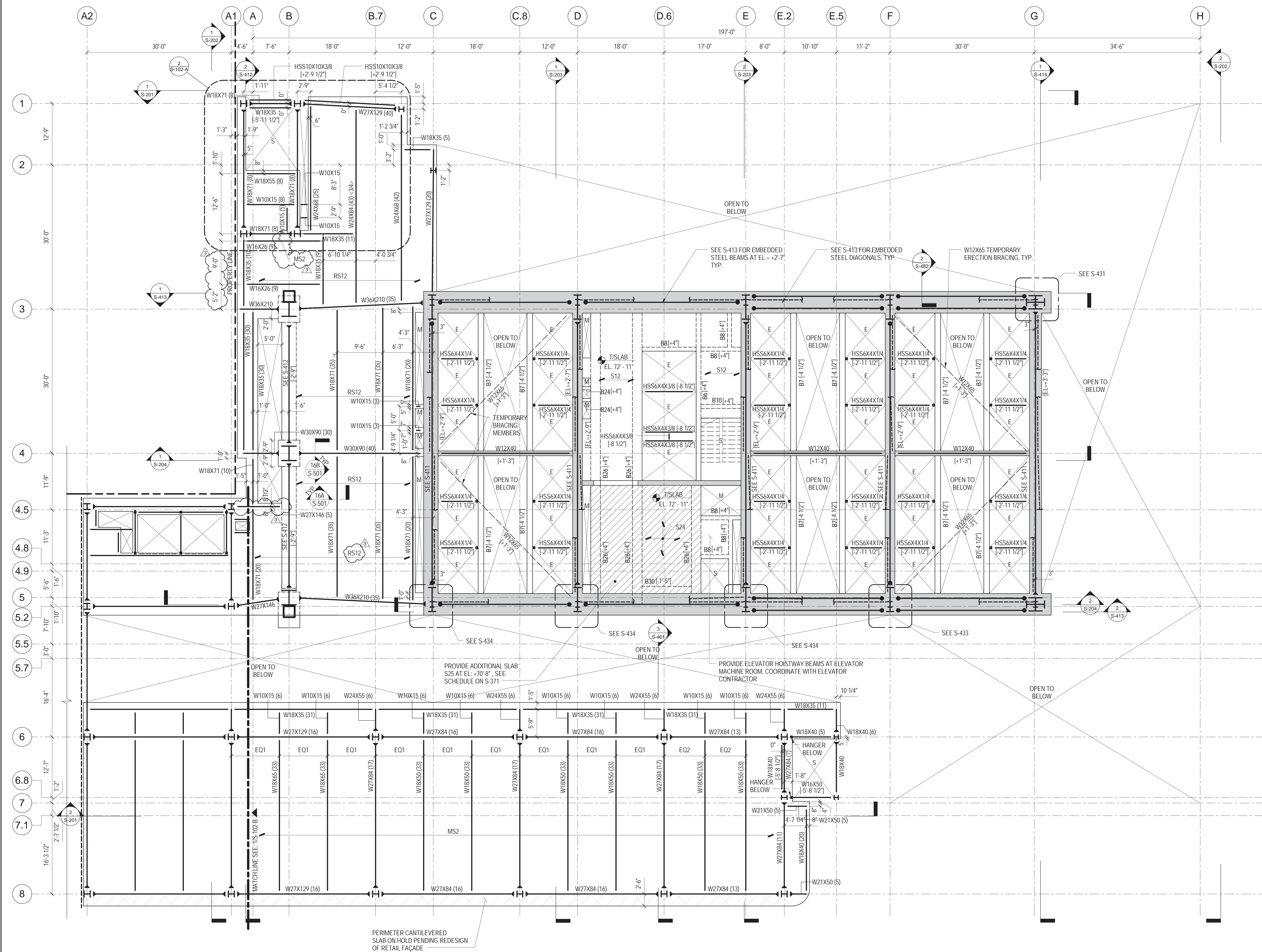
CELLAR B FLOOR
FRAMING PLAN -
PART B

Project No.: 211157	B-SCAN Sheet No.:
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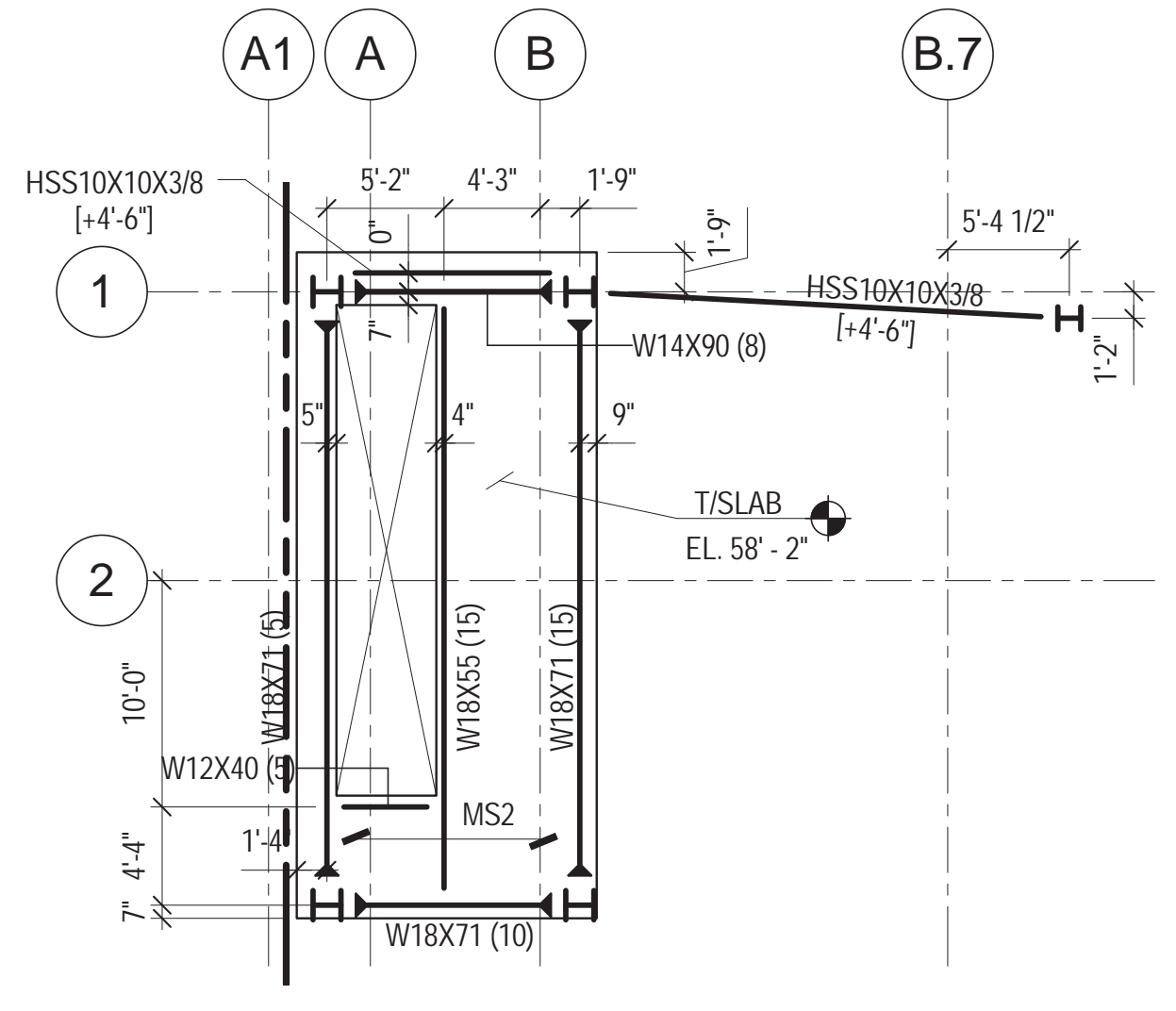
Date: 22 APR 2016	S-098.02
Scale: As indicated	Sheet No.: S-100B-B
File No.:	Case No.:







1 2ND FLOOR FRAMING PLAN - PART A
1/8" = 1'-0"



NOTE:
1. AT STAIR LANDING AT FIRST FLOOR MEZZANINE, ALL TOP OF STEEL ELEVATION = +57'-8 1/2"
2 STAIR LANDING AT FIRST FLOOR MEZZANINE
1/8" = 1'-0"

- NOTES:
- TOP OF SLAB ELEVATION = 72' - 7", UNLESS NOTED OTHERWISE.
 - 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.
 - 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.
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 - REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
 - REFER TO SHEET S-325 FOR SLAB-ON-GRADE 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-361 THROUGH S-368 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 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 - REFER TO DRAWINGS PREPARED BY ENTENTIVE FOR ADJACENT PLATFORM STRUCTURE.
 - REFER TO SHEET S-501 AND S-502 FOR METAL DECK SLAB SCHEDULES, SECTIONS & DETAILS.
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 - REFER TO SHEET S-372 THROUGH S-389 FOR DIMENSIONS OF MEP SLAB OPENINGS INSIDE THE CORE.
 - REFER TO SHEET S-421 FOR BEAM PENETRATION SCHEDULE AND DETAIL.
 - REFER TO SHEET S-030 FOR SLAB EDGE DIMENSION AT CURVED SLAB.

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Key Plan:

Seal & Signature:

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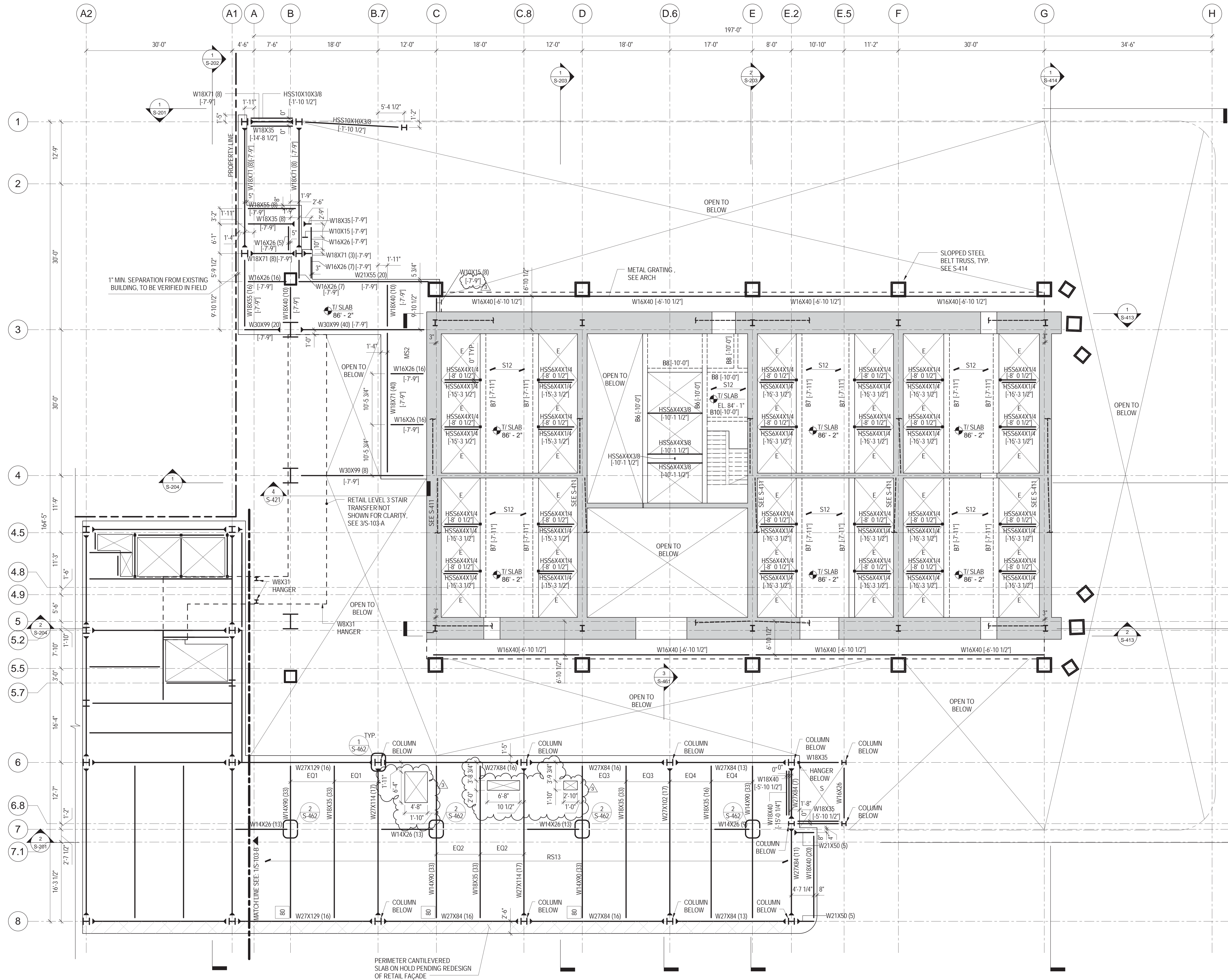
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**2ND FLOOR
FRAMING PLAN -
PART A**

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-102-A

B-SCAN Sheet No.:
S-102.02
Sheet No.:
S-102-A
Page No.:

Damian Titus
Buildings
APPROVED
Under Directive of § 205
AMENDED APPLICATION
NYC Development Hub



1 3RD FLOOR FRAMING PLAN - PART A
1/8" = 1'-0"

- NOTES:
1. TOP OF SLAB ELEVATION = 94'-11", UNLESS NOTED OTHERWISE.
 2. TOP OF STEEL ELEVATION = 93'-5 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 GRID 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 SHEET S-004 FOR STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS AND DETAILS.
 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 SHEETS S-301 THROUGH S-303 FOR CORE WALL CONTINUOUS FOOTINGS SECTIONS AND DETAILS.
 12. REFER TO SHEET S-307 FOR SPREAD FOOTING SCHEDULE, SECTIONS AND DETAILS.

13. REFER TO SHEETS S-315 THROUGH S-319 FOR FOUNDATION WALL ELEVATIONS, SECTIONS AND DETAILS.
14. REFER TO SHEET S-325 FOR SLAB ON GRADE SECTIONS AND DETAILS.
15. REFER TO SHEET S-331 FOR REINFORCED CONCRETE CORE WALL SCHEDULE, SECTIONS AND DETAILS.
16. REFER TO SHEET S-332 FOR TYPICAL REINFORCED CONCRETE WALL DETAILS.
17. REFER TO SHEET S-391 FOR LINK BEAM SCHEDULES, SECTIONS AND DETAILS.
18. REFER TO SHEETS S-361 THROUGH S-368 FOR CORE WALL ELEVATIONS.
19. REFER TO SHEET S-395 FOR REINFORCED CONCRETE BEAM SCHEDULE, SECTIONS AND DETAILS.
20. REFER TO SHEET S-371 FOR REINFORCED CONCRETE SLAB SCHEDULE, SECTIONS AND DETAILS.
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22. REFER TO DRAWINGS PREPARED BY ENTITUTE FOR ADJACENT PLATFORM STRUCTURE.
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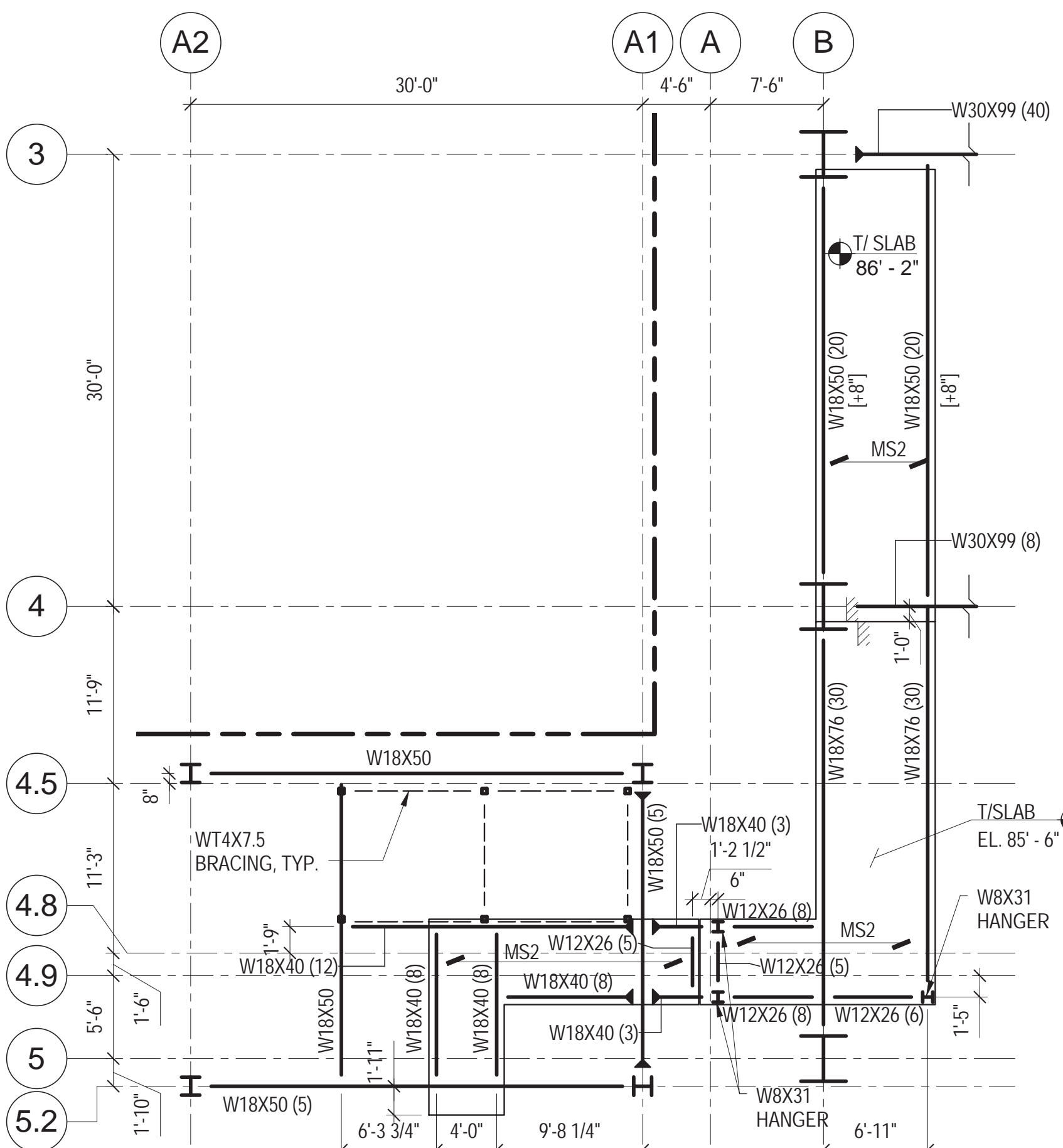
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Sheet Name:

3RD FLOOR FRAMING PLAN - PART A

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-103-A

B-SCAN Sheet No.: S-103.02
Sheet No.: S-103-A
Page No.:



NOTE:
1. AT LEVEL 3 STAIR TRANSFER, ALL TOP OF STEEL ELEVATION = +85'-0 1/2", UNLESS OTHERWISE NOTED

3 3RD FLOOR STAIR TRANSFER FRAMING PLAN
1/8" = 1'-0"

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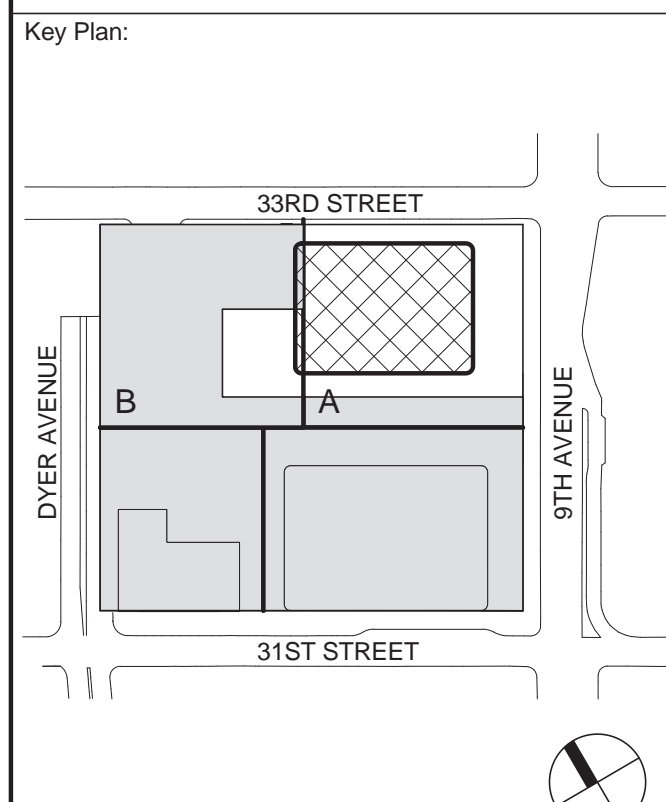
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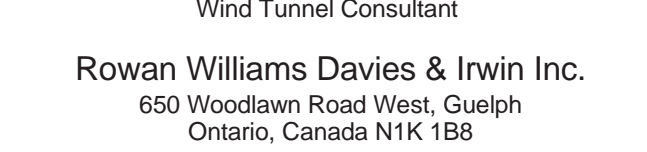
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Key Plan:



Seal & Signature:



Project No.: 211157
Date: 22 APR 2016
Sheet Name: 3RD FLOOR FRAMING PLAN - PART B

B-SCAN Sheet No.: S-174.00
Date: 22 APR 2016
Scale: As indicated
File No.: S-103-B

Project No.: 211157
Date: 22 APR 2016
Sheet No.: S-103-B

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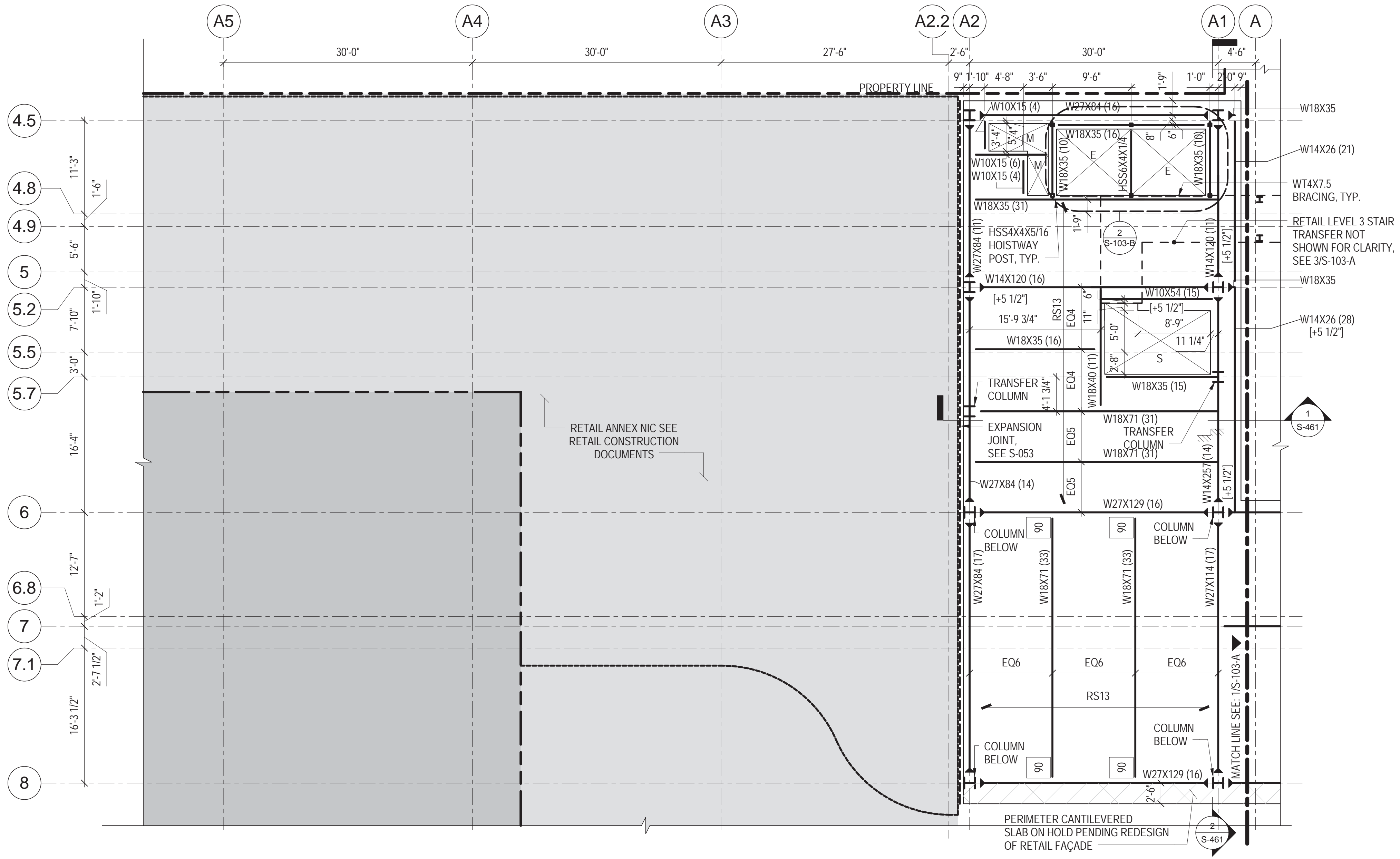
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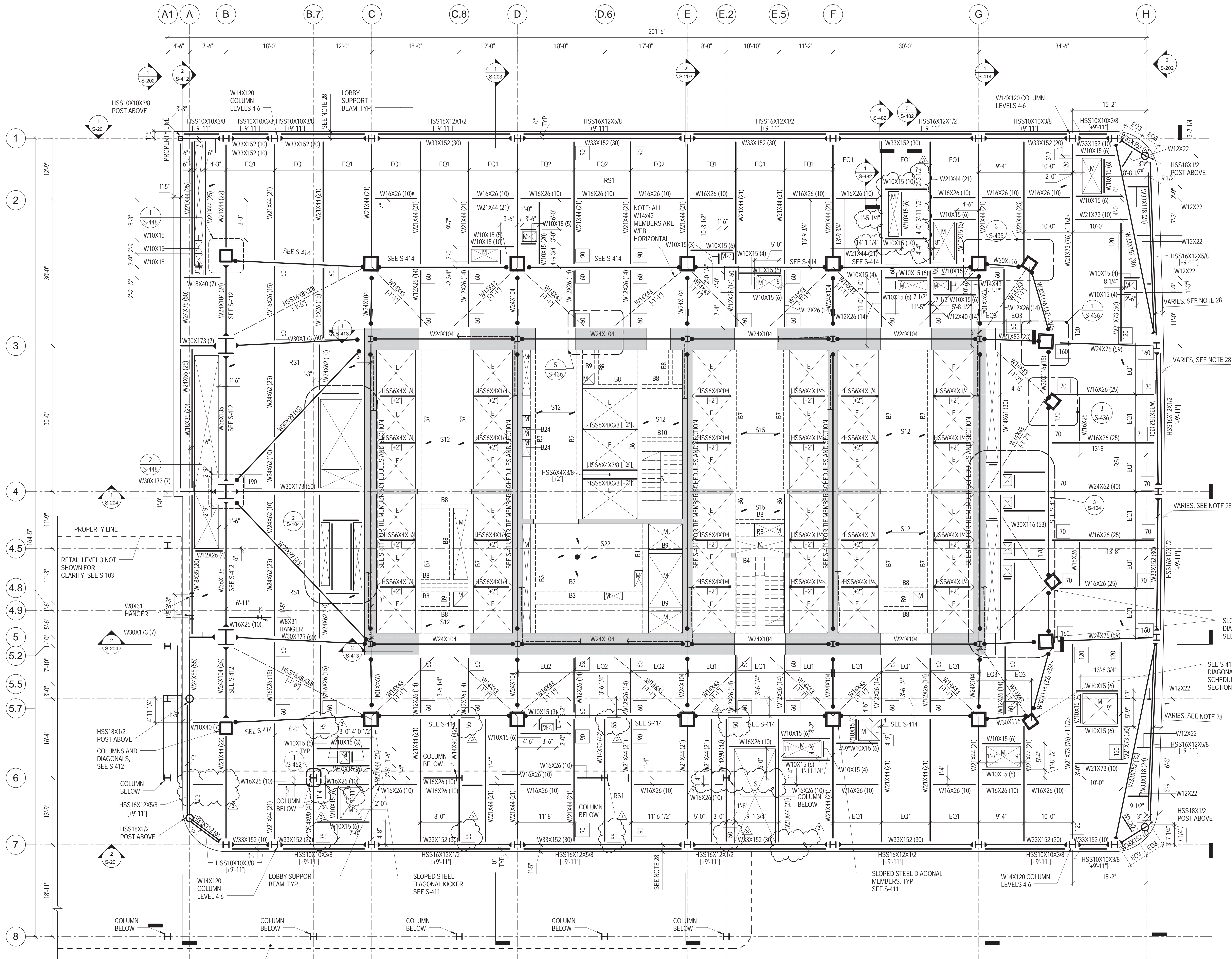
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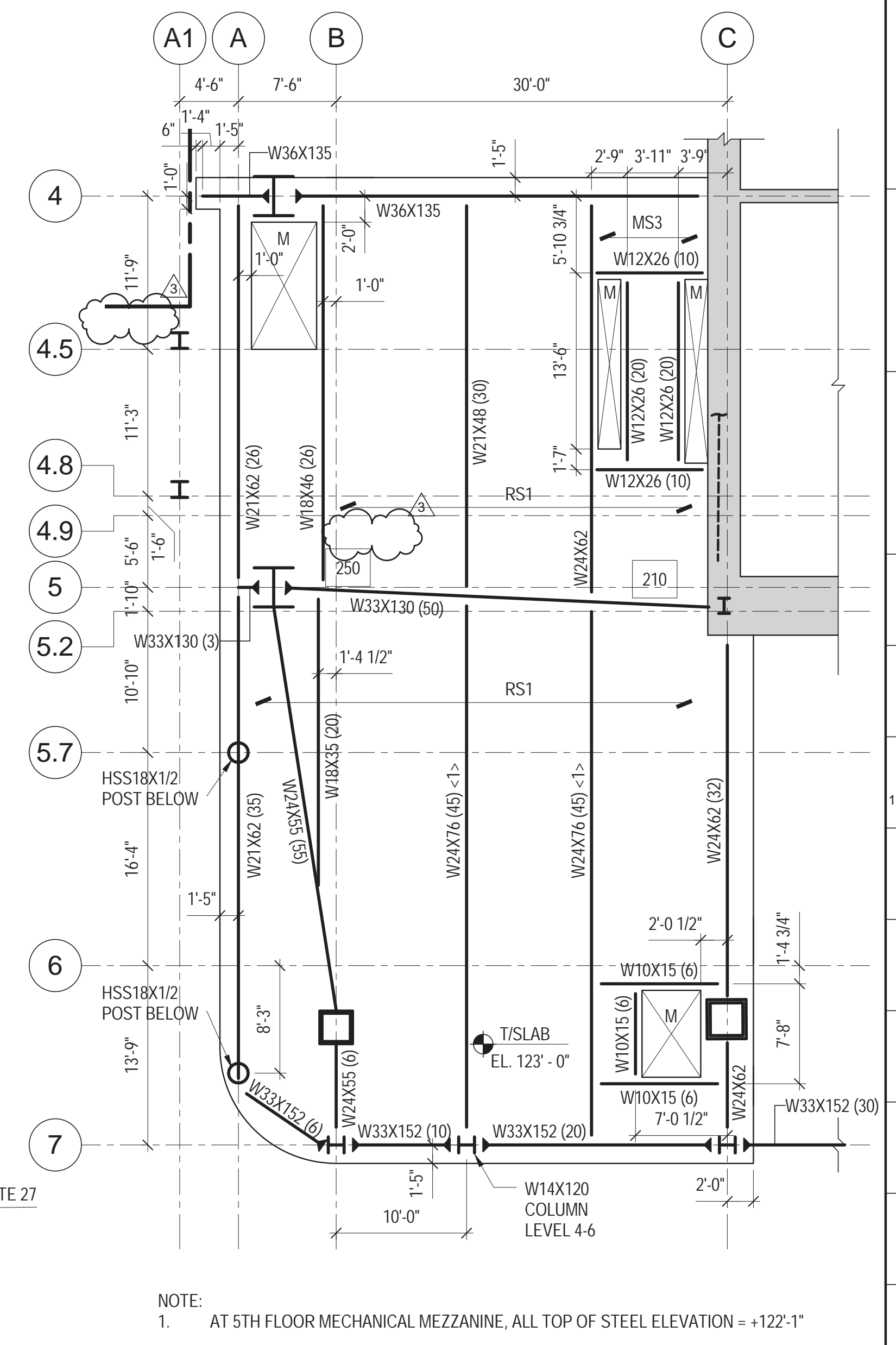
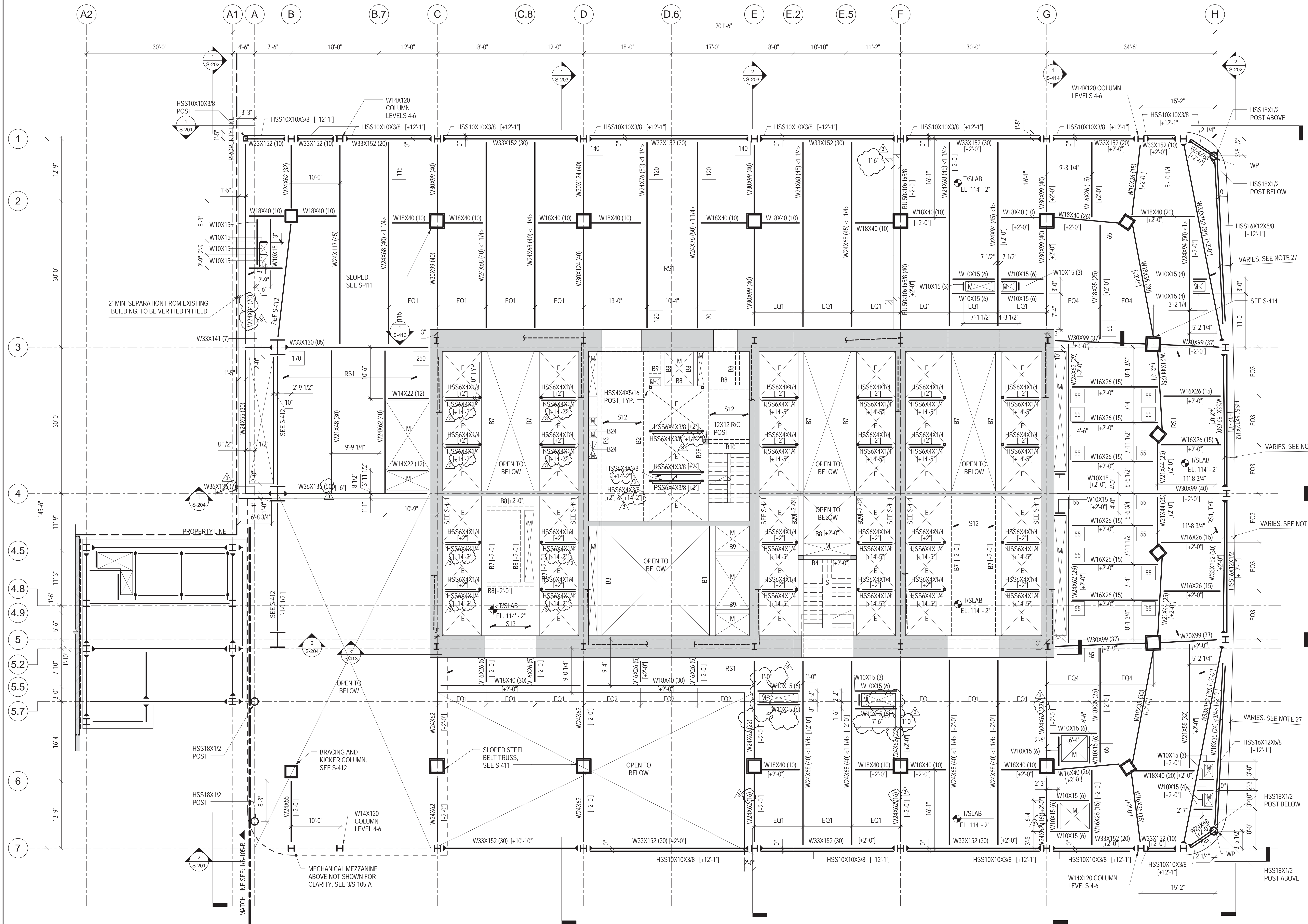
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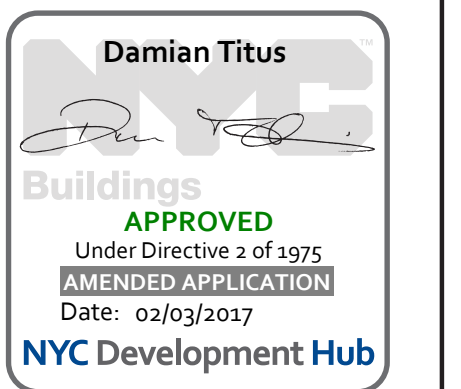






1 5TH FLOOR FRAMING PLAN - MECHANICAL MEZZANINE 1/8" = 1'-0"

- NOTES:
- TOP OF SLAB ELEVATION +12'-2" , UNLESS NOTED OTHERWISE.
 - TOP OF STEEL ELEVATION +11'-9" , UNLESS NOTED OTHERWISE BY [X-X'] OR [X-X'], WHICH DENOTE POSITIVE OR NEGATIVE VERTICAL OFFSET, RESPECTIVELY.
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Key Plan:

Seal & Signature:

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**5TH FLOOR
FRAMING PLAN -
MECHANICAL
MEZZANINE -
PART A**

Project No.: 211157 B-SCAN Sheet No.:
Date: 22 APR 2016 **S-105.02**
Scale: 1/8" = 1'-0" Sheet No.:
File No.: S-105-A Page No.:



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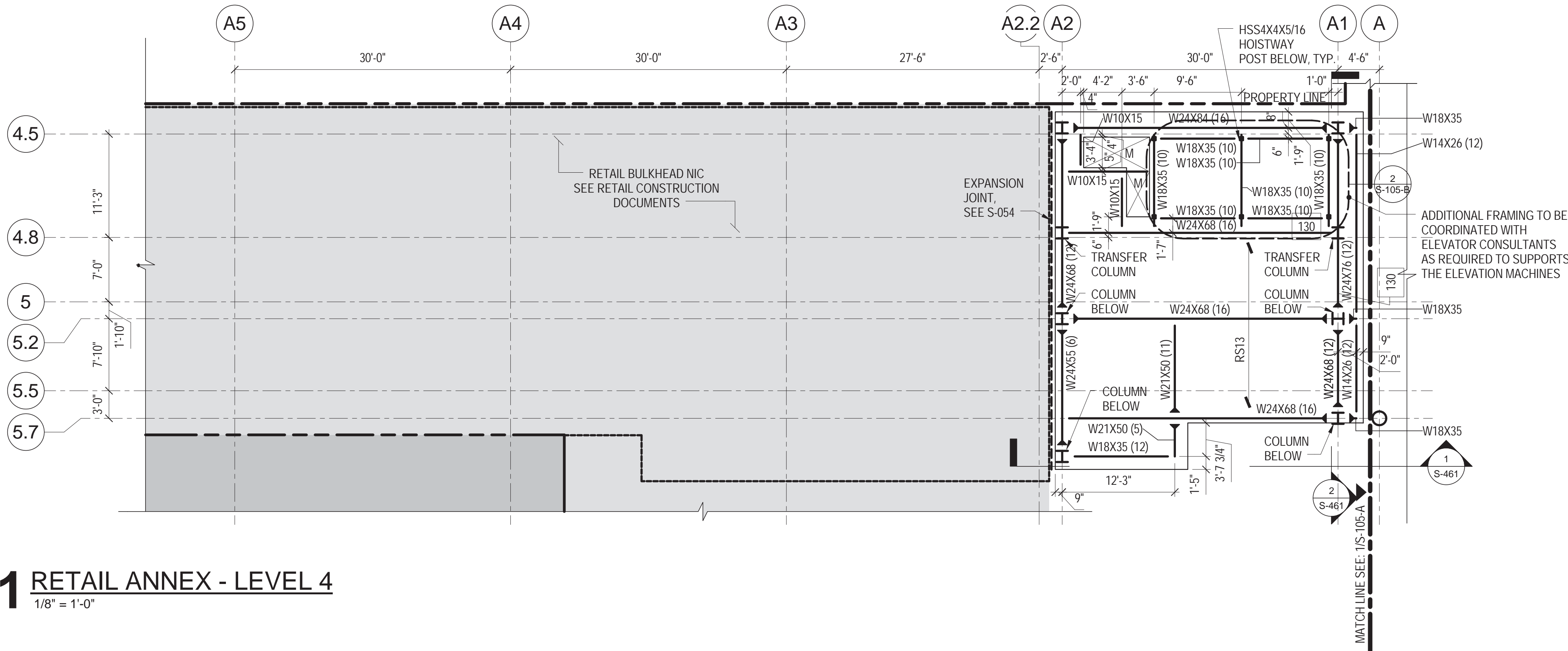
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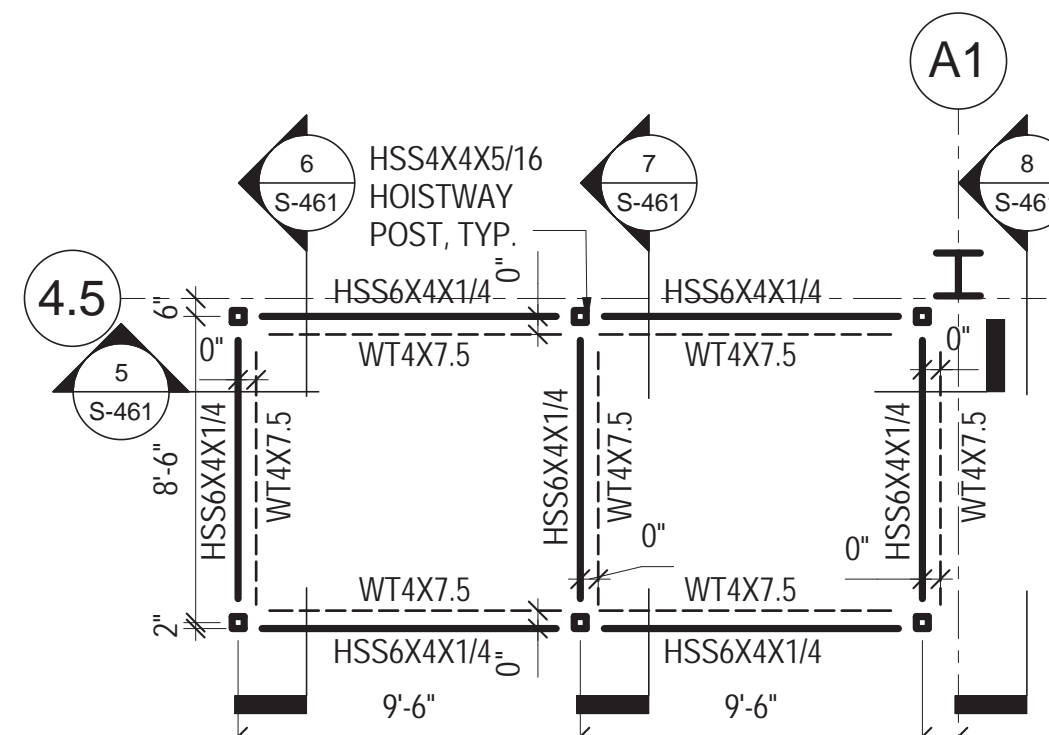
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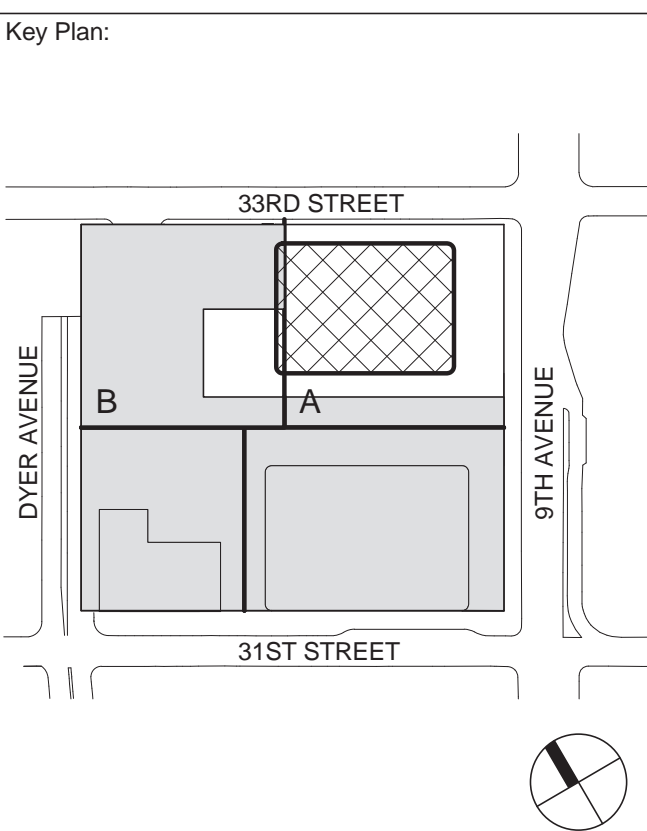
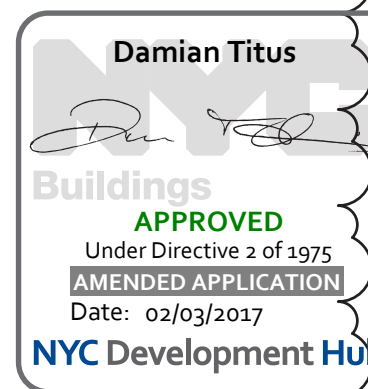


1 RETAIL ANNEX - LEVEL 4
1/8" = 1'-0"



2 RETAIL ELEVATOR FRAMING PLAN
3/16" = 1'-0"

- NOTES:
1. TOP OF SLAB ELEVATION = 116'-6", UNLESS NOTED OTHERWISE.
 2. TOP OF STEEL ELEVATION = 115'-10 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.
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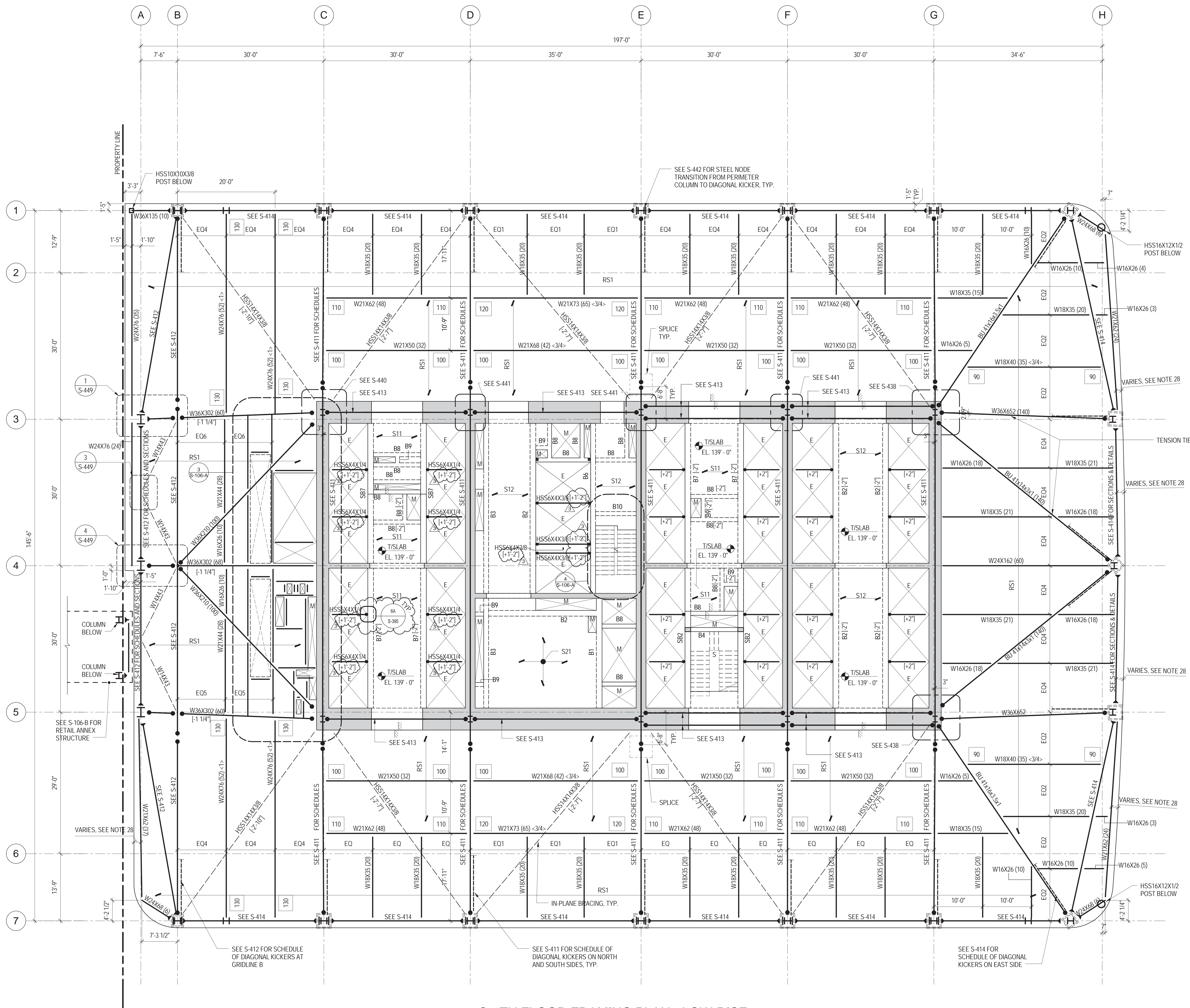


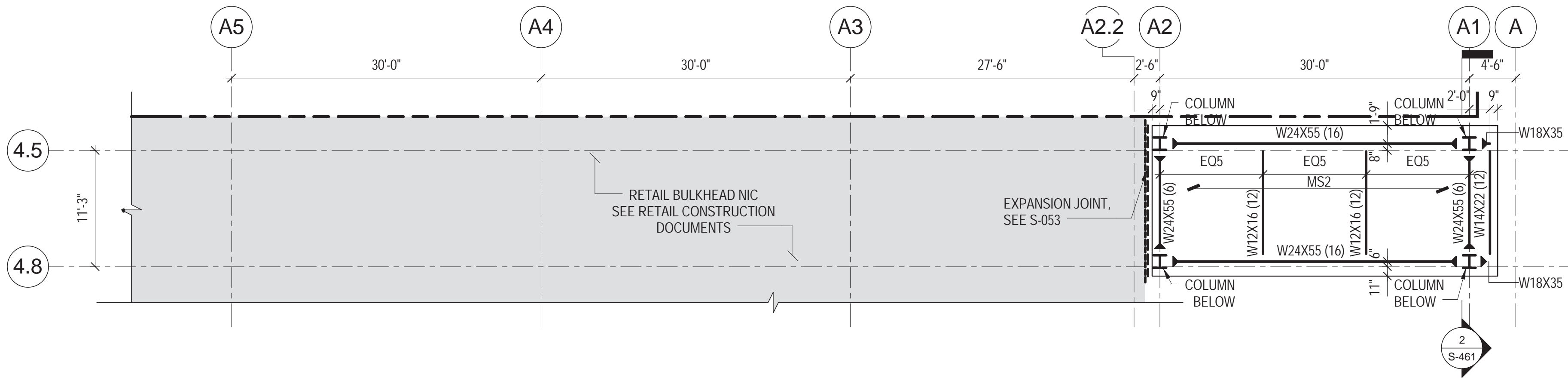
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**5TH FLOOR
FRAMING PLAN -
MECHANICAL
MEZZANINE -
PART B**

Project No.: 211157	B-SCAN Sheet No.: S-175.00
Date: 22 APR 2016	Sheet No.: S-105-B
Scale: As indicated	Page No.:
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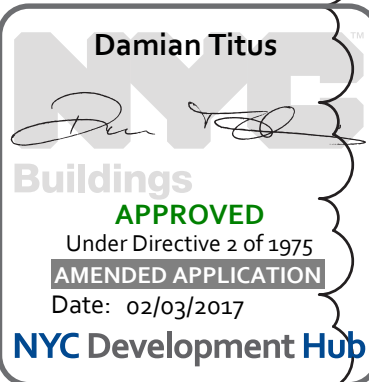


1 RETAIL ANNEX - ROOF

1/8" = 1'-0"


NOTES:

1. TOP OF SLAB ELEVATION = 136'-1", UNLESS NOTED OTHERWISE.
2. TOP OF STEEL ELEVATION = 135'-7 1/2", UNLESS NOTED OTHERWISE BY {+X'-X"} OR {X'-X"}, WHICH DENOTE POSITIVE OR NEGATIVE VERTICAL OFFSET, RESPECTIVELY.
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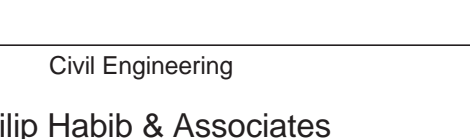
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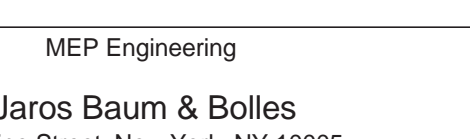
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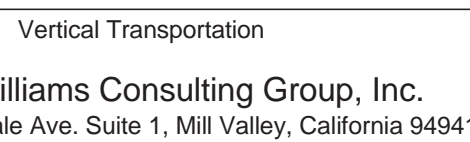
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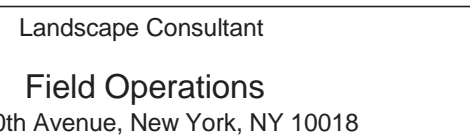
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102 East Blithedale Ave, Suite 1, Mill Valley, California 94041



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



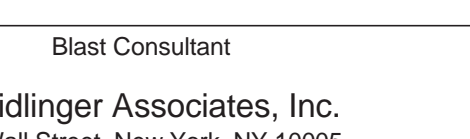
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14 Penn Plaza, 225 W. 34th Street, New York, NY 10122



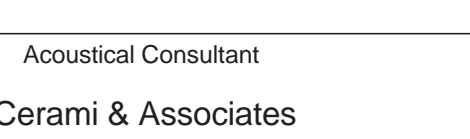
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Field Operations
475 10th Avenue, New York, NY 10018



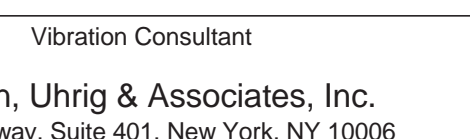
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250 State Street #F1, North Haven, CT 06473



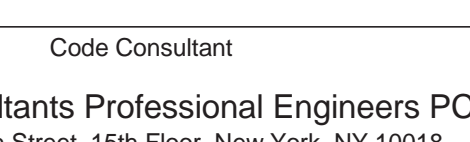
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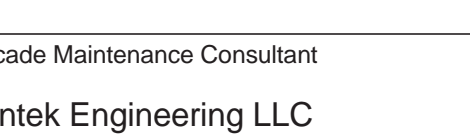
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Cerami & Associates
404 Fifth Avenue #8, New York, NY 10016



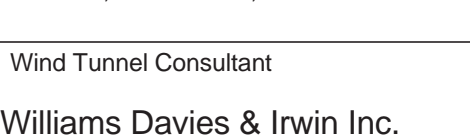
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006



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

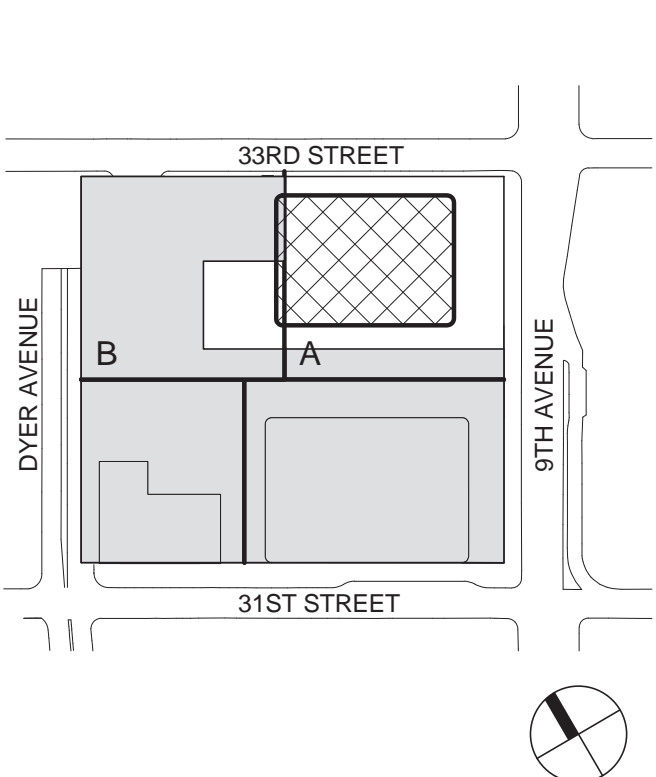


Facade Maintenance Consultant
Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601



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

Key Plan:



Seal & Signature:

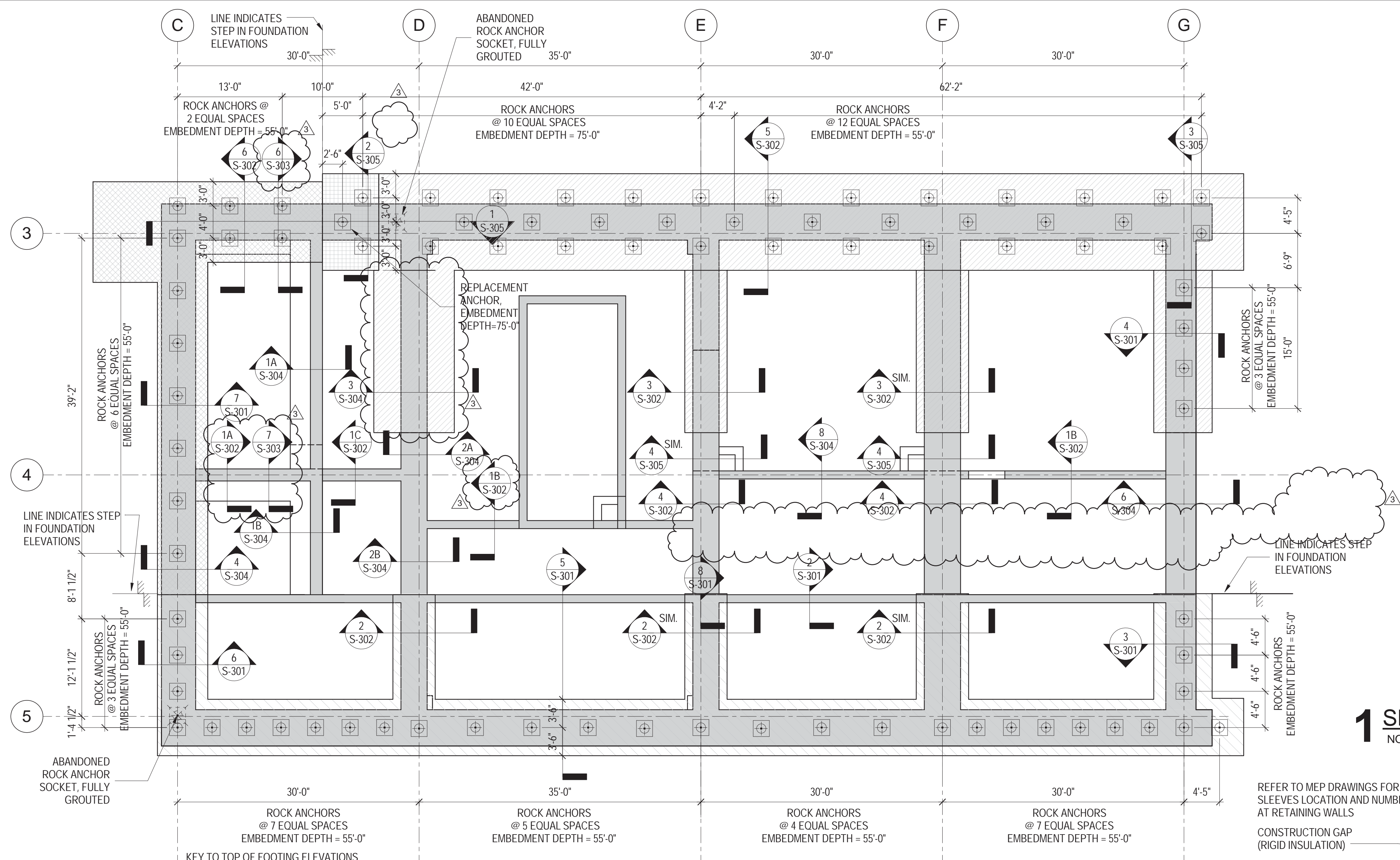


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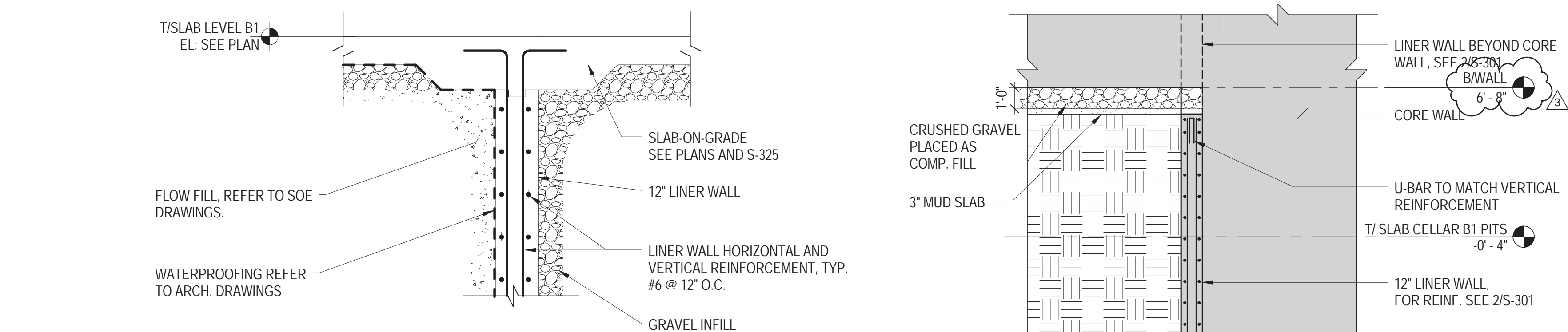
6TH FLOOR FRAMING PLAN - PART B

Project No.: 211157	B-SCAN Sheet No.: S-176.00
Date: 22 APR 2016	Sheet No.: S-106-B
Scale: 1/8" = 1'-0"	Page No.: 5-106-B



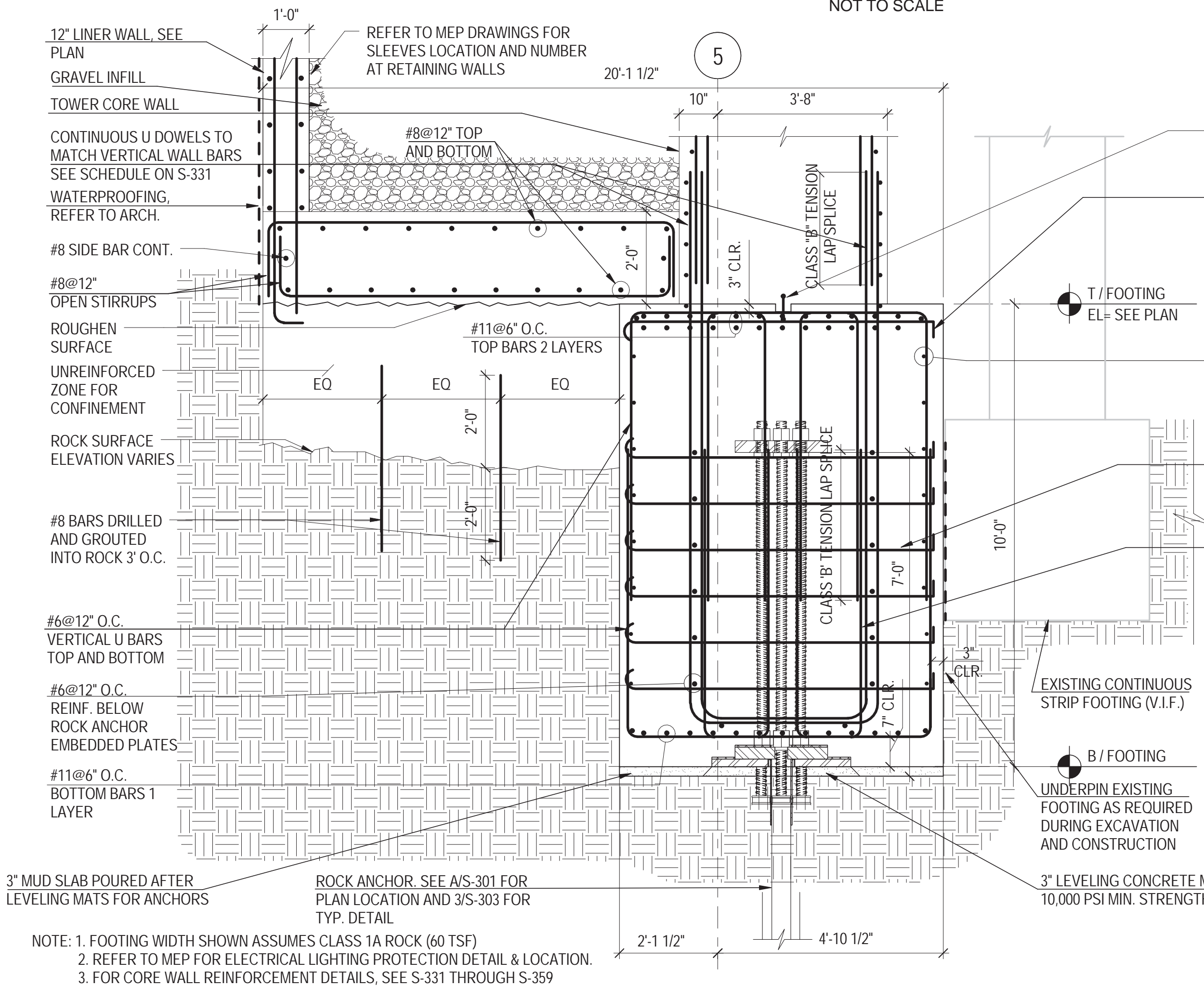
KEY PLAN - TOWER CONCRETE CORE FOUNDATION
NOT TO SCALE

NOTE: SEE PLANS FOR DIMENSIONS OF FOOTINGS AND WALLS AND SLAB ELEVATIONS



NOTE: SLAB REINFORCEMENT NOT SHOWN FOR CLARITY, SEE S-325 FOR TYP. DETAILS

2 SECTION AT SLAB ON LINER WALL
NOT TO SCALE



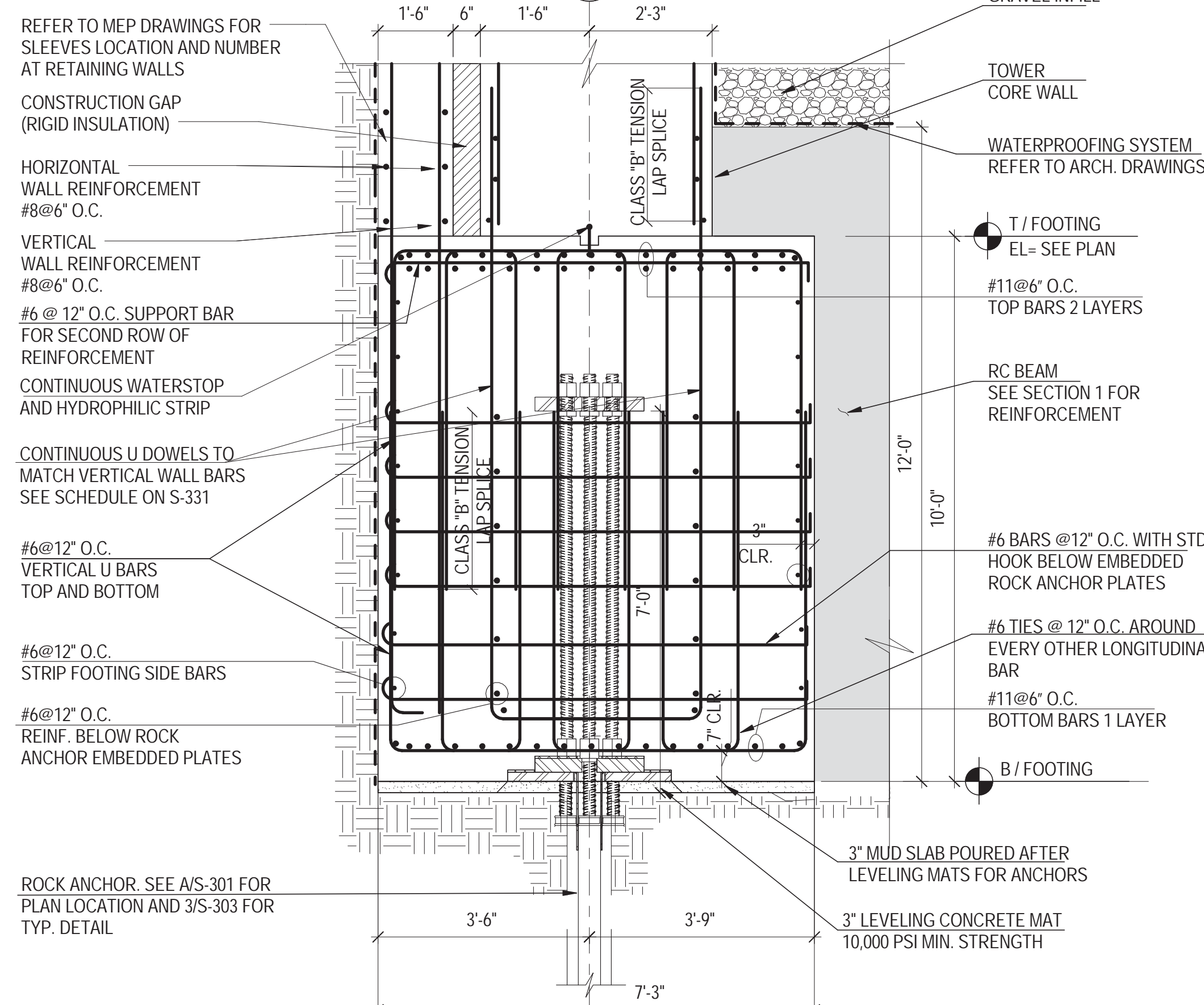
NOTE: 1. FOOTING WIDTH SHOWN ASSUMES CLASS 1A ROCK (60 TSF)
2. REFER TO MEP FOR ELECTRICAL LIGHTING PROTECTION DETAIL & LOCATION
3. FOR CORE WALL REINFORCEMENT DETAILS, SEE S-331 THROUGH S-359

5 SECTION THROUGH SOUTH WALL FOOTING - 1 ANCHOR
NOT TO SCALE

8 LINER WALL AND CORE WALL INTERSECTION DETAIL
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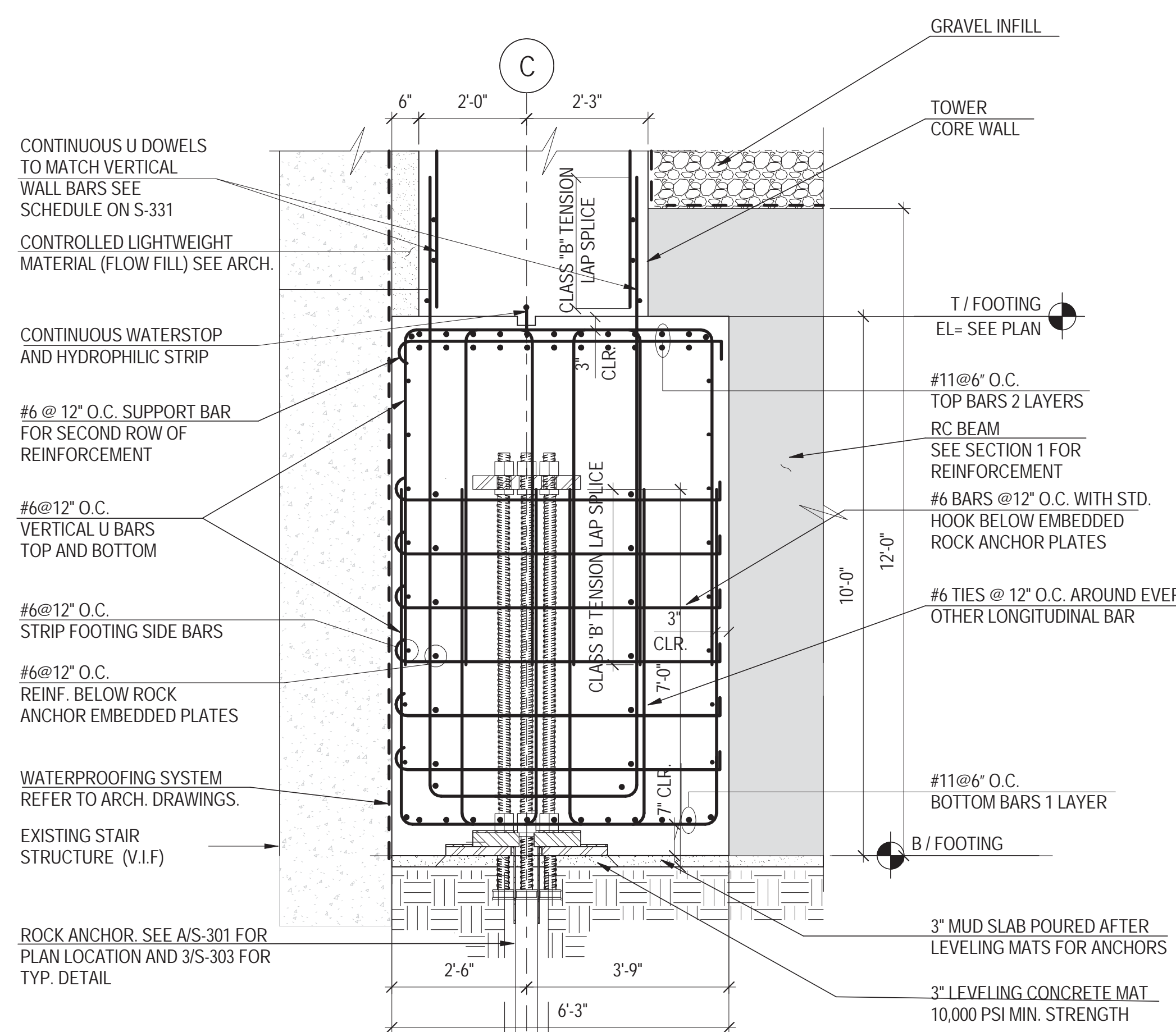
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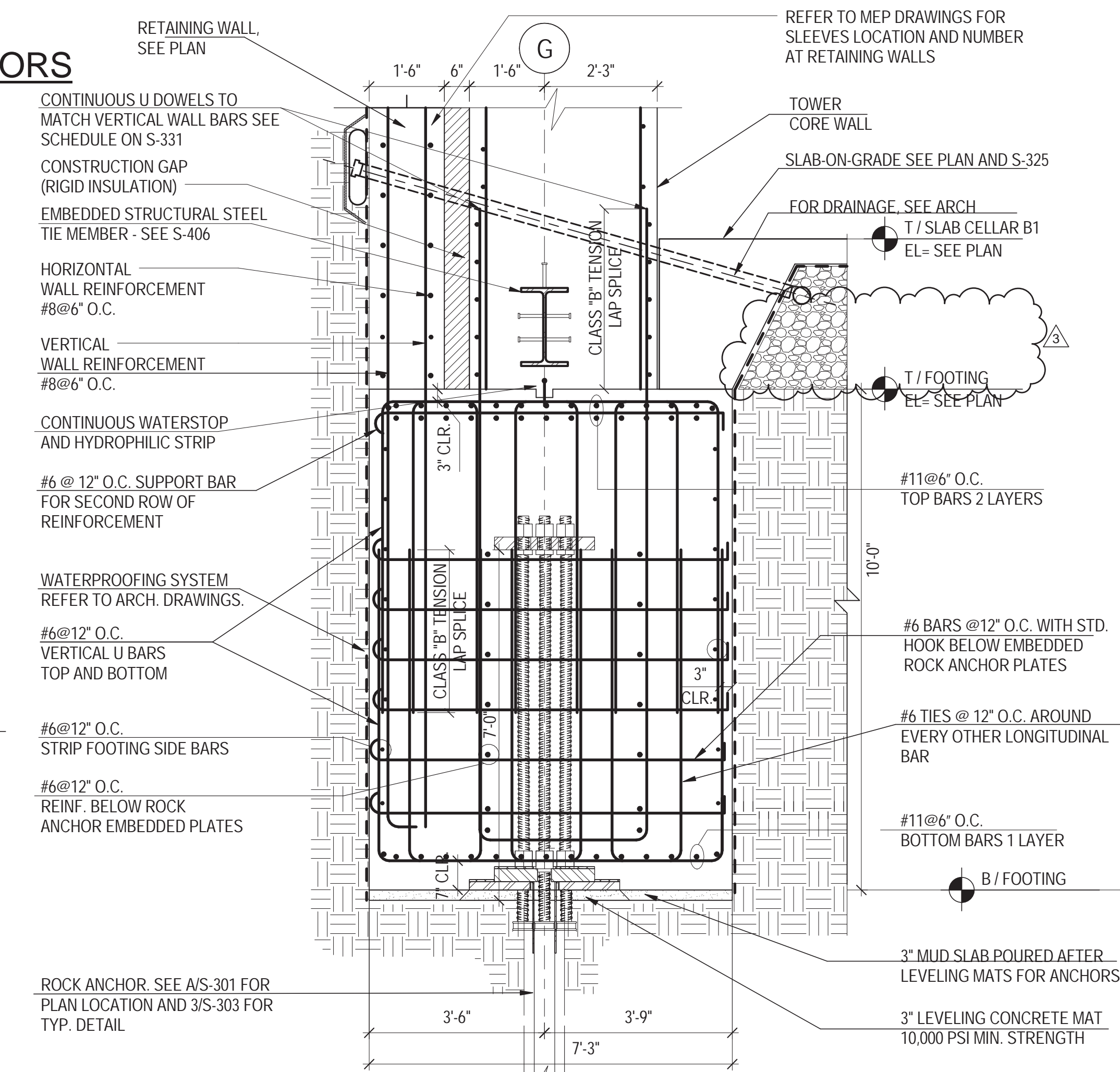
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3 SECTION THROUGH LOWER EAST WALL FOOTING
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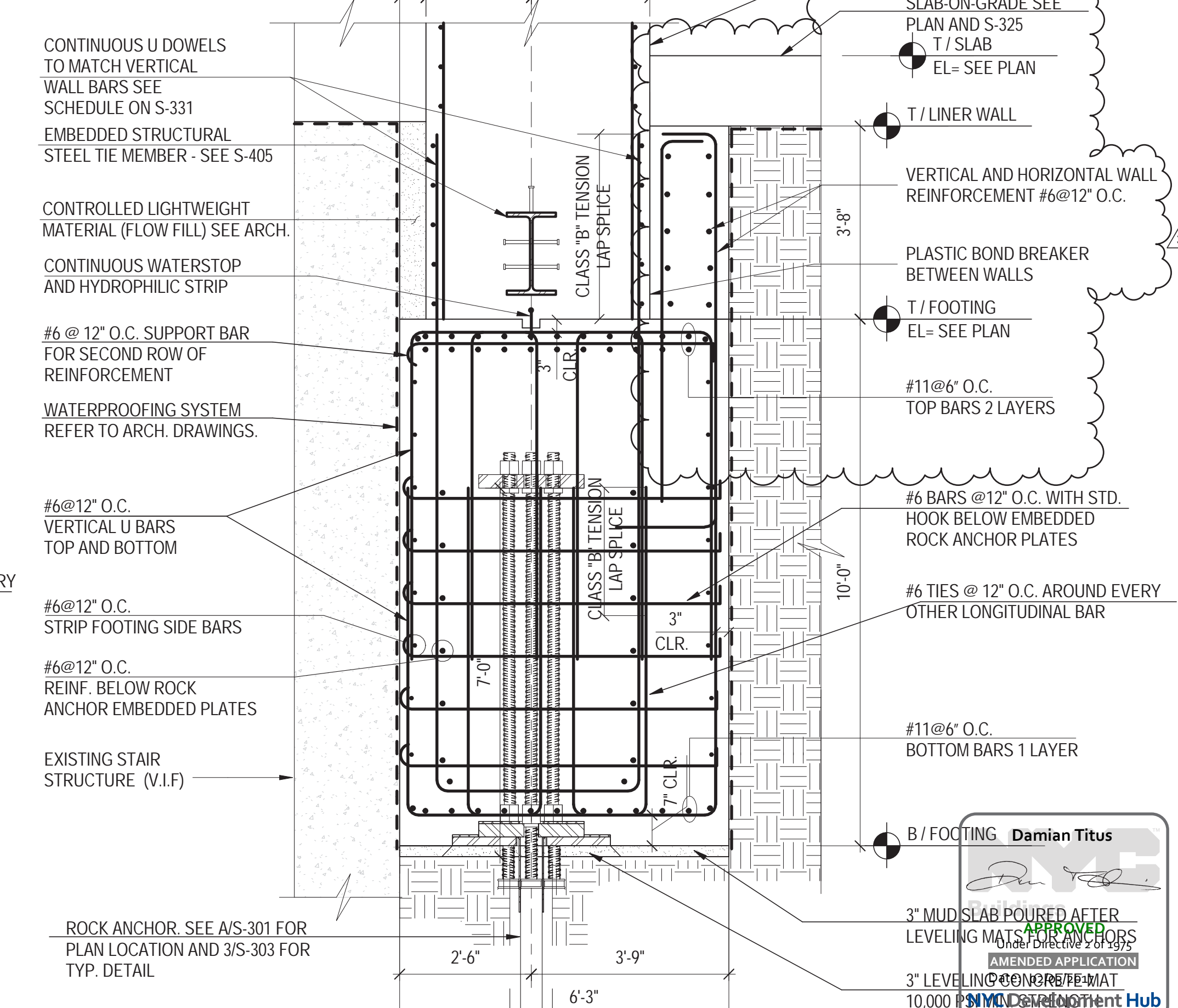
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6 SECTION THROUGH LOWER WEST WALL FOOTING
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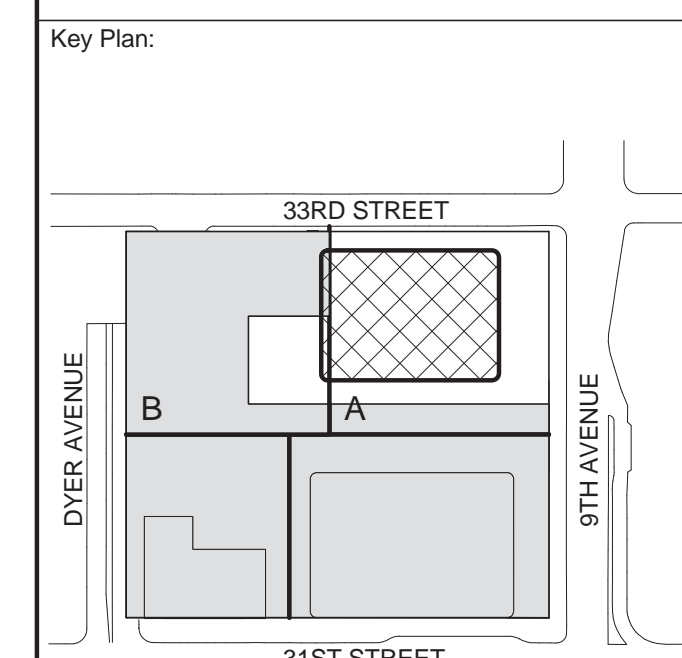
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4. SLAB ON GRADE REINF. NOT SHOWN FOR CLARITY, SEE S-325 FOR TYP. DETAILS

4 SECTION THROUGH UPPER EAST WALL FOOTING
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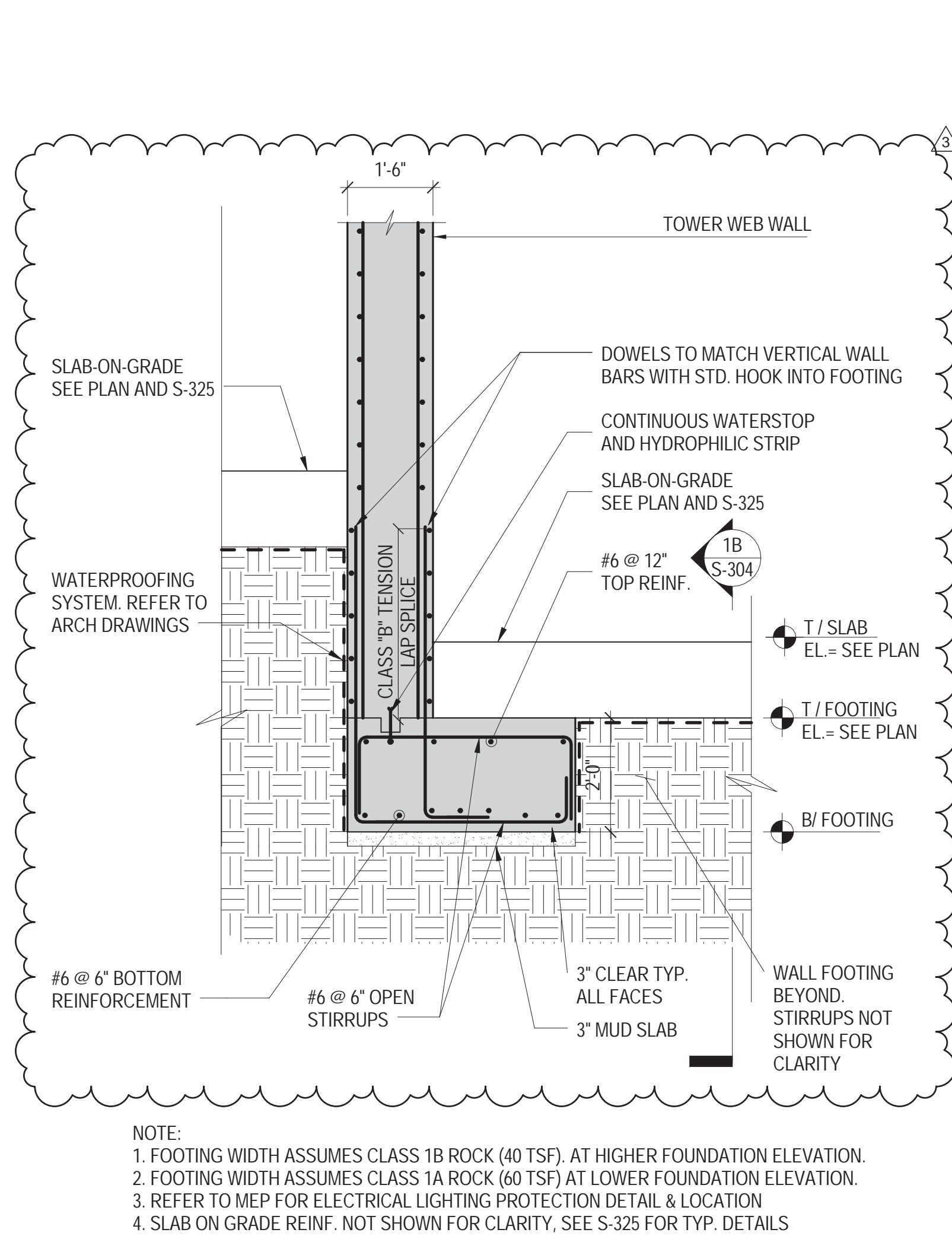
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7 SECTION THROUGH UPPER WEST WALL FOOTING
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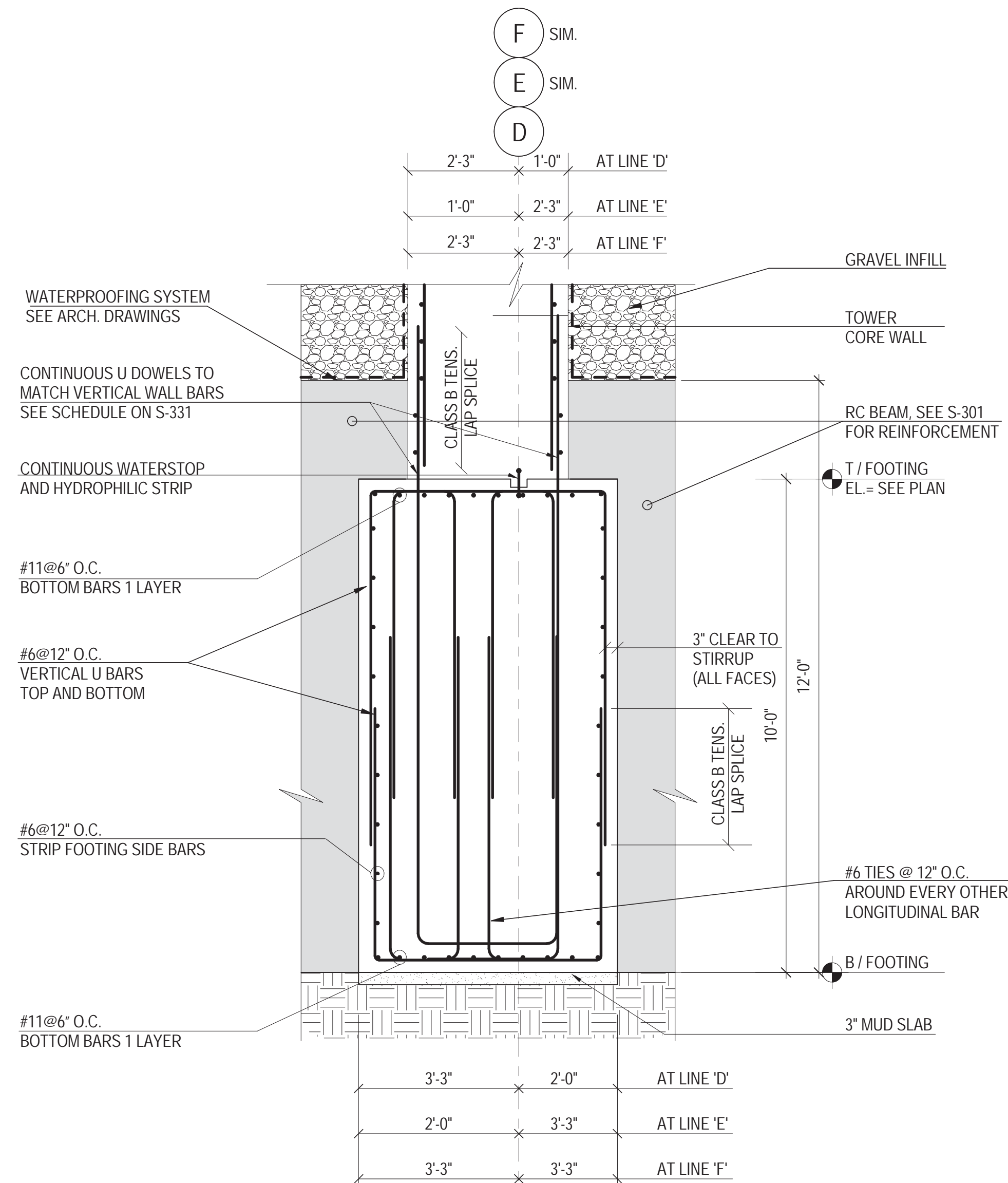
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1	20 JUN 2014	ISSUED FOR FOUNDATION PERMIT

**CORE WALL
CONT. FOOTING
SECTIONS &
DETAILS**



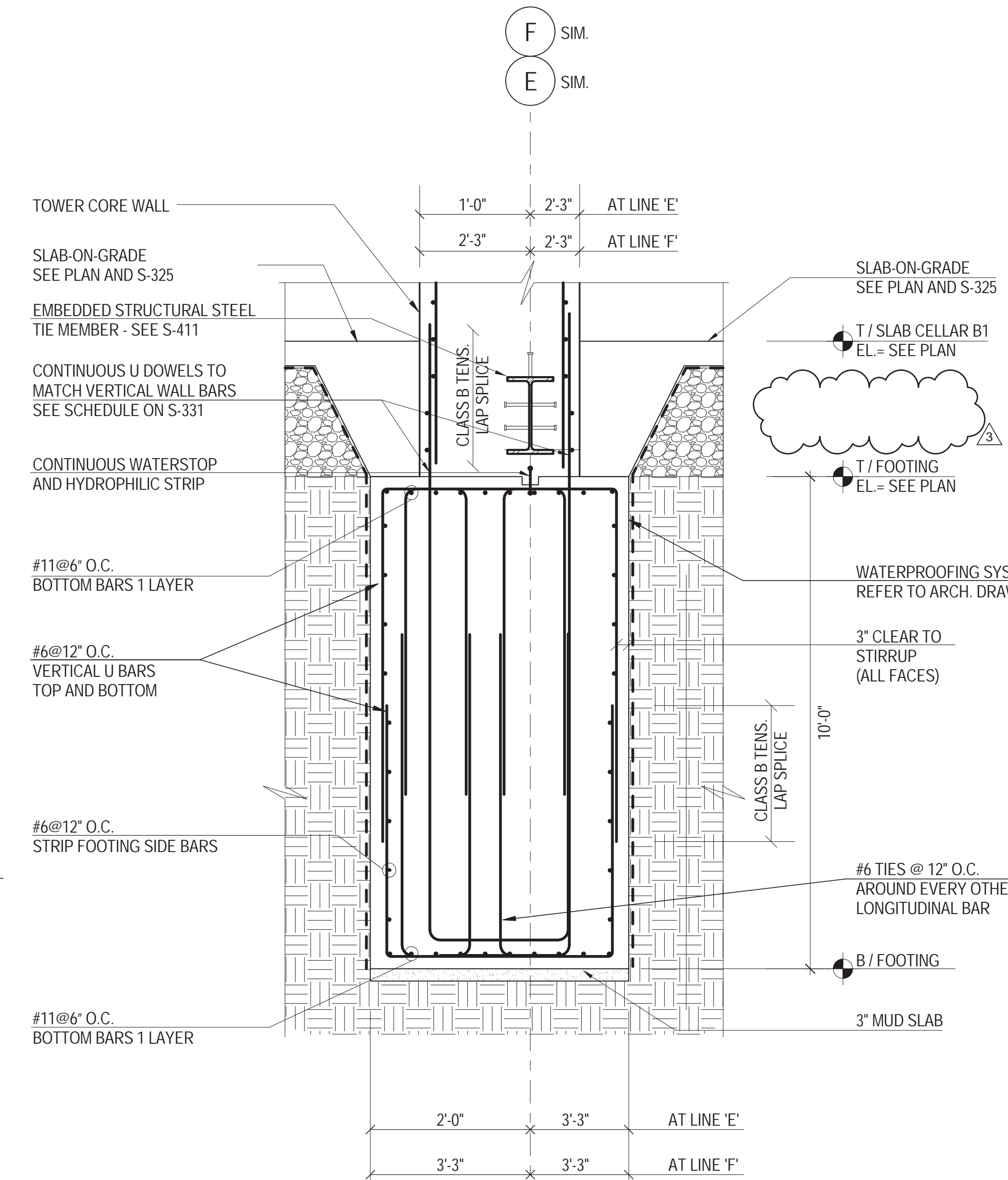
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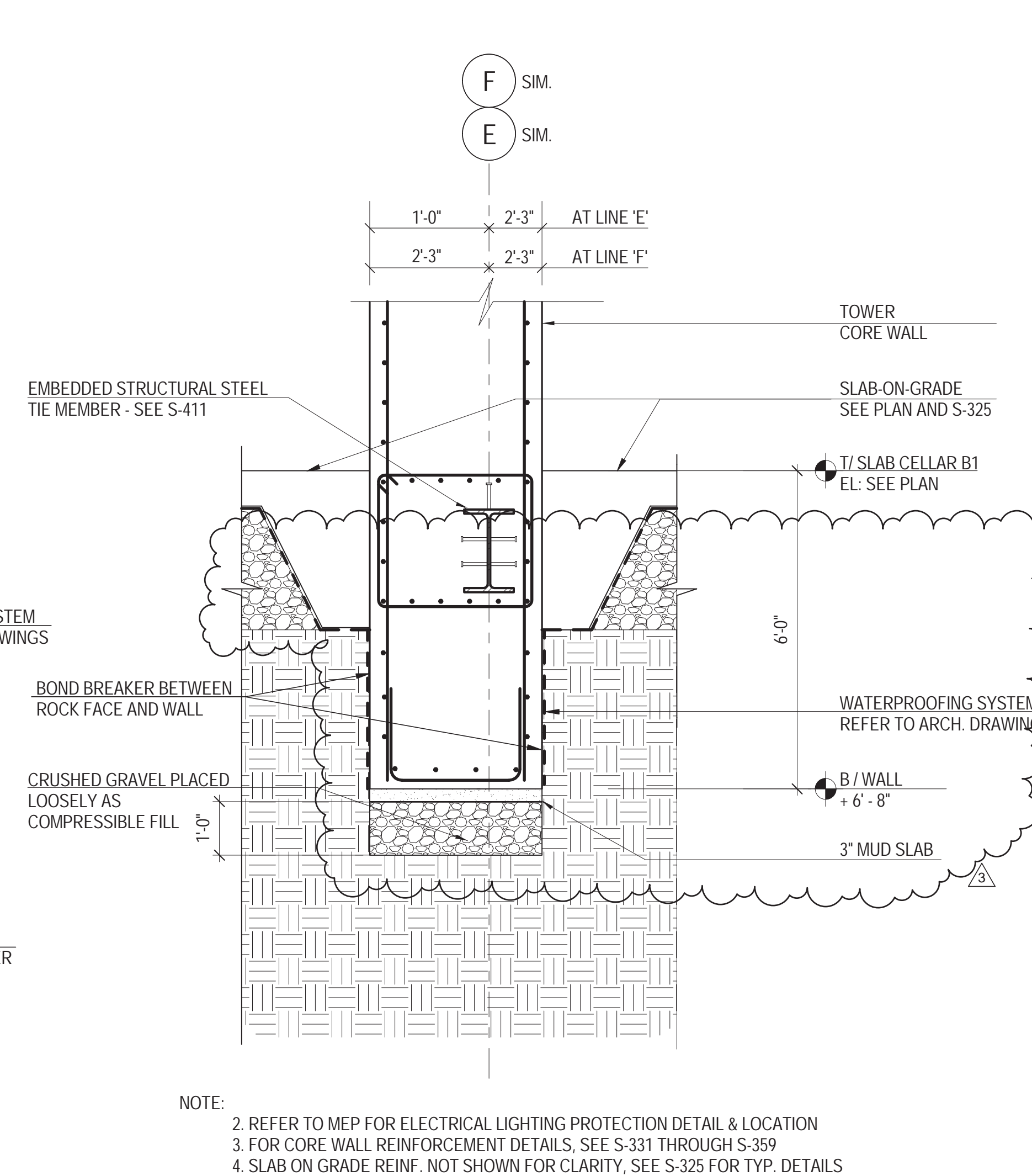
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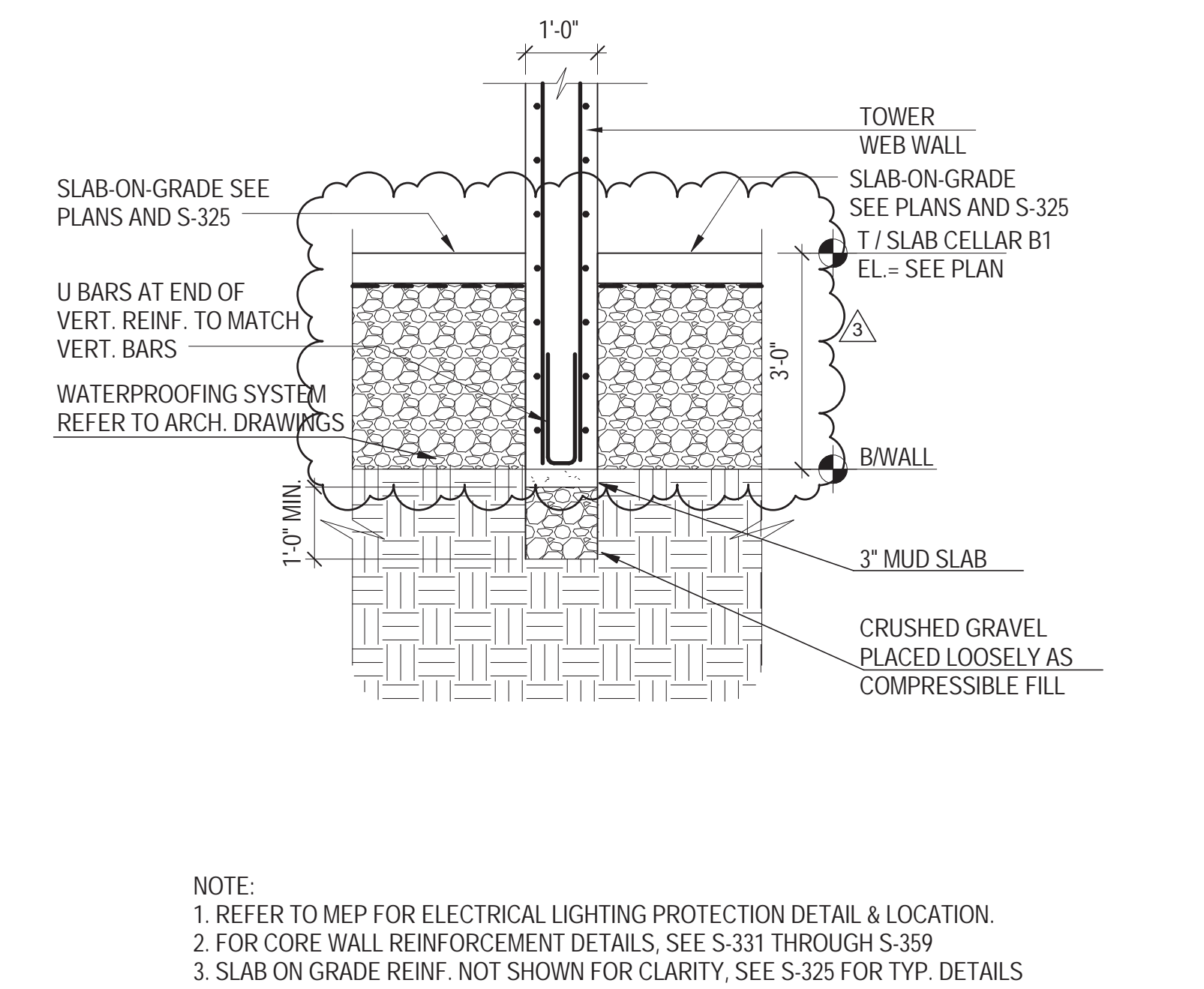
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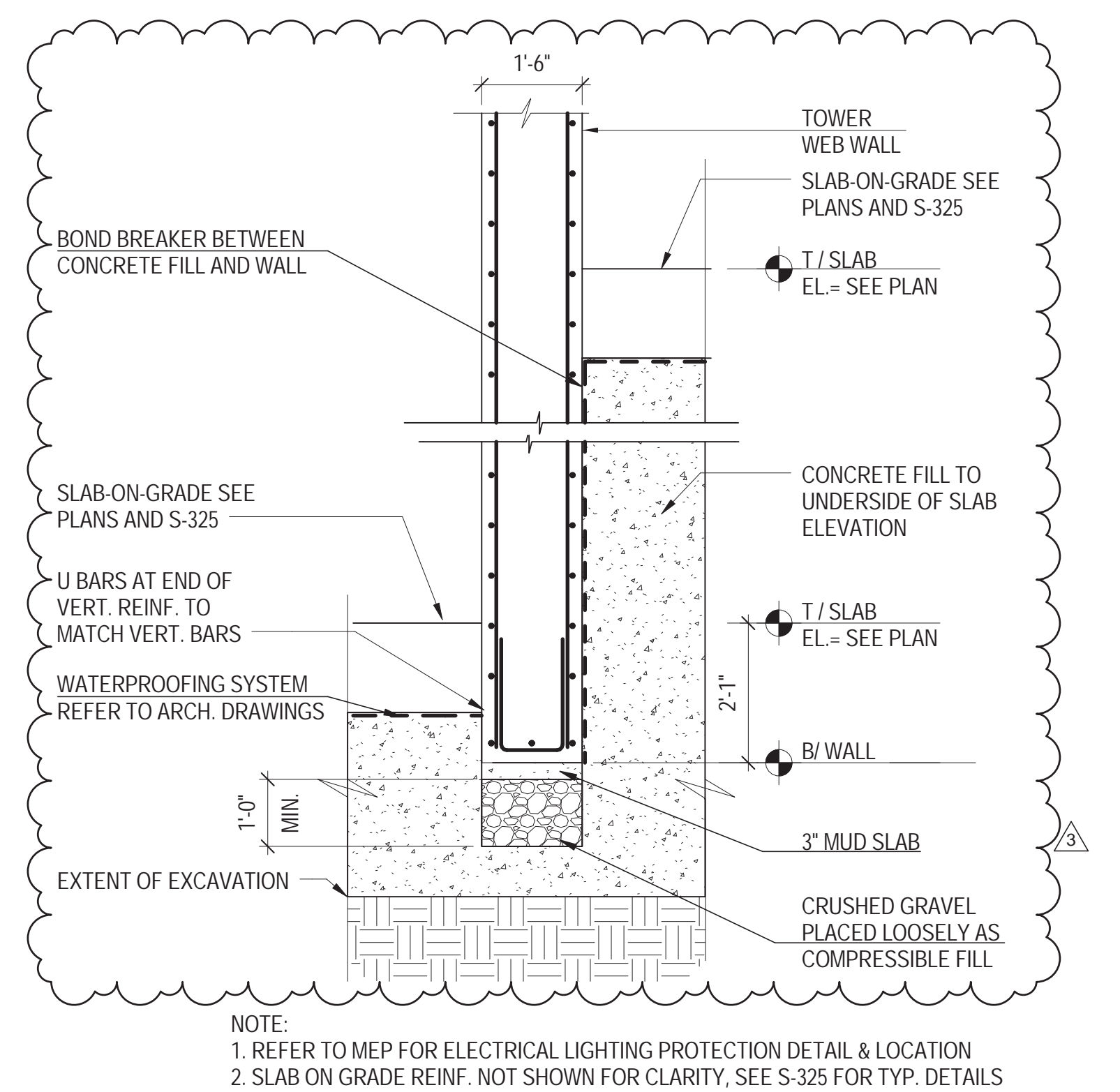
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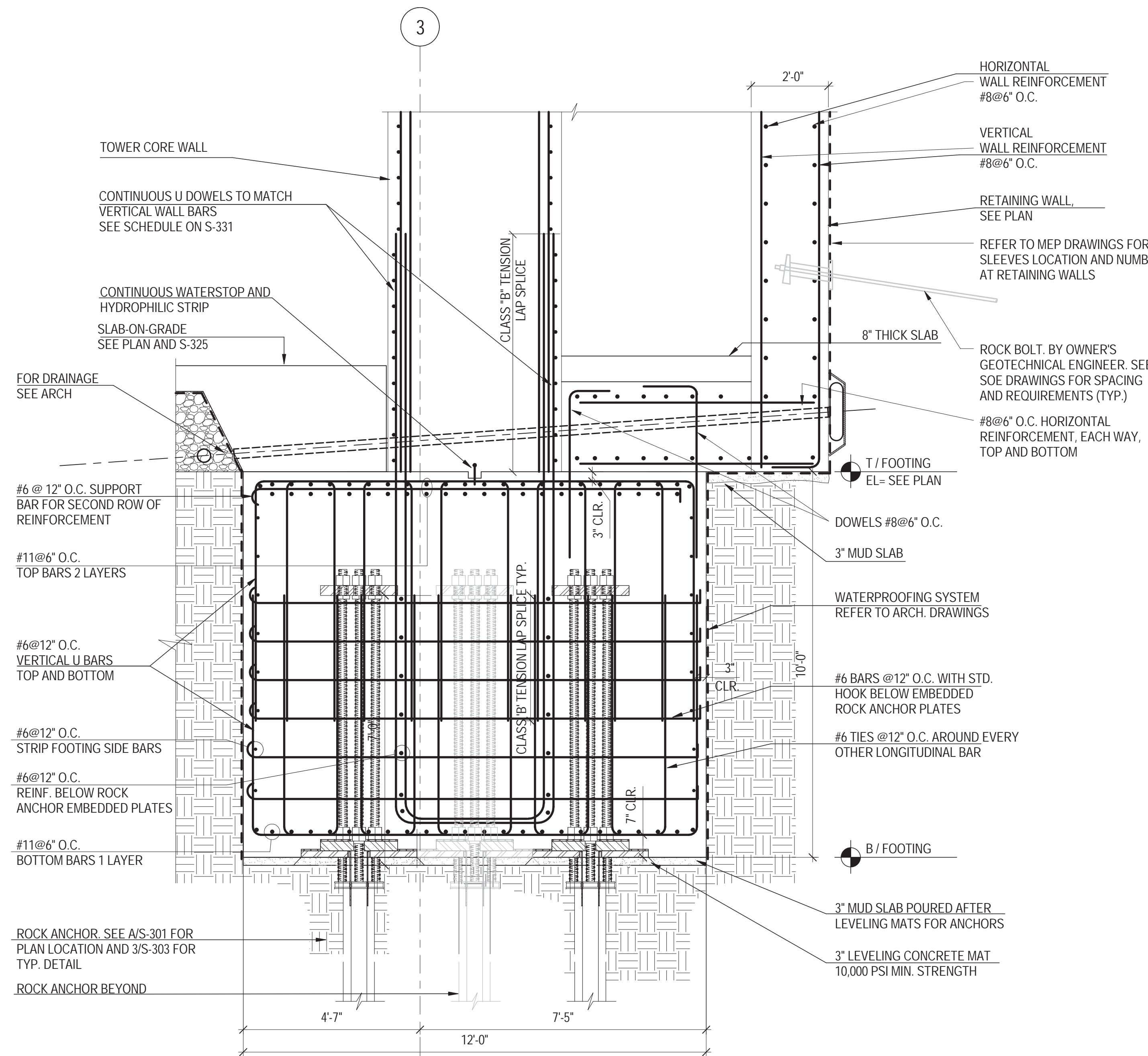
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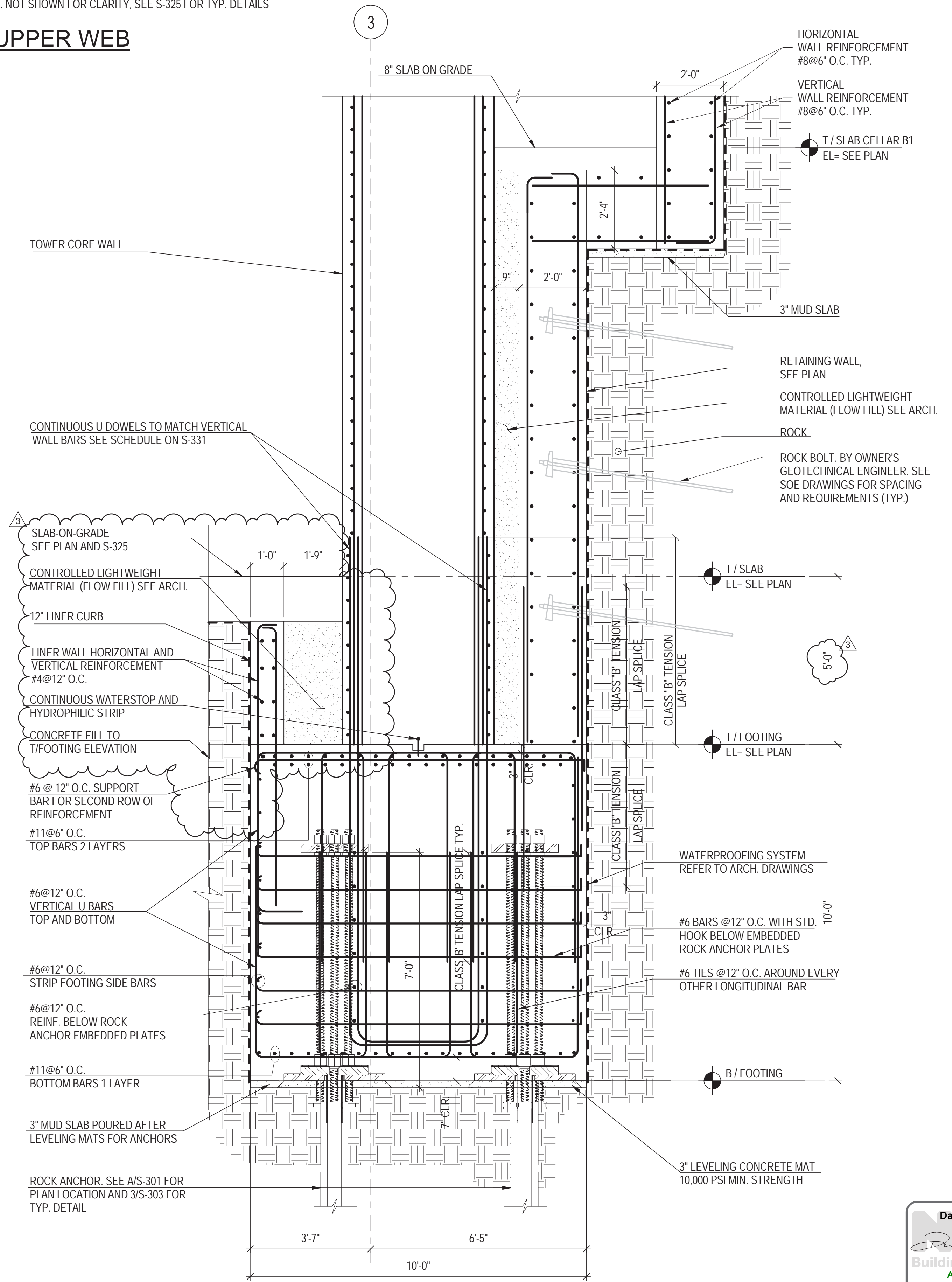
1C SECTION THROUGH WATER TANK WALL ON GRADE

NOT TO SCALE



5 SECTION THROUGH UPPER NORTH WALL FOOTING

NOT TO SCALE



6 SECTION THROUGH LOWER NORTH WALL FOOTING

NOT TO SCALE

**MANHATTAN WEST:
NORTH TOWER**
401 Ninth Avenue, New York, NY 10001
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

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

Key Plan:

Seal & Signature:

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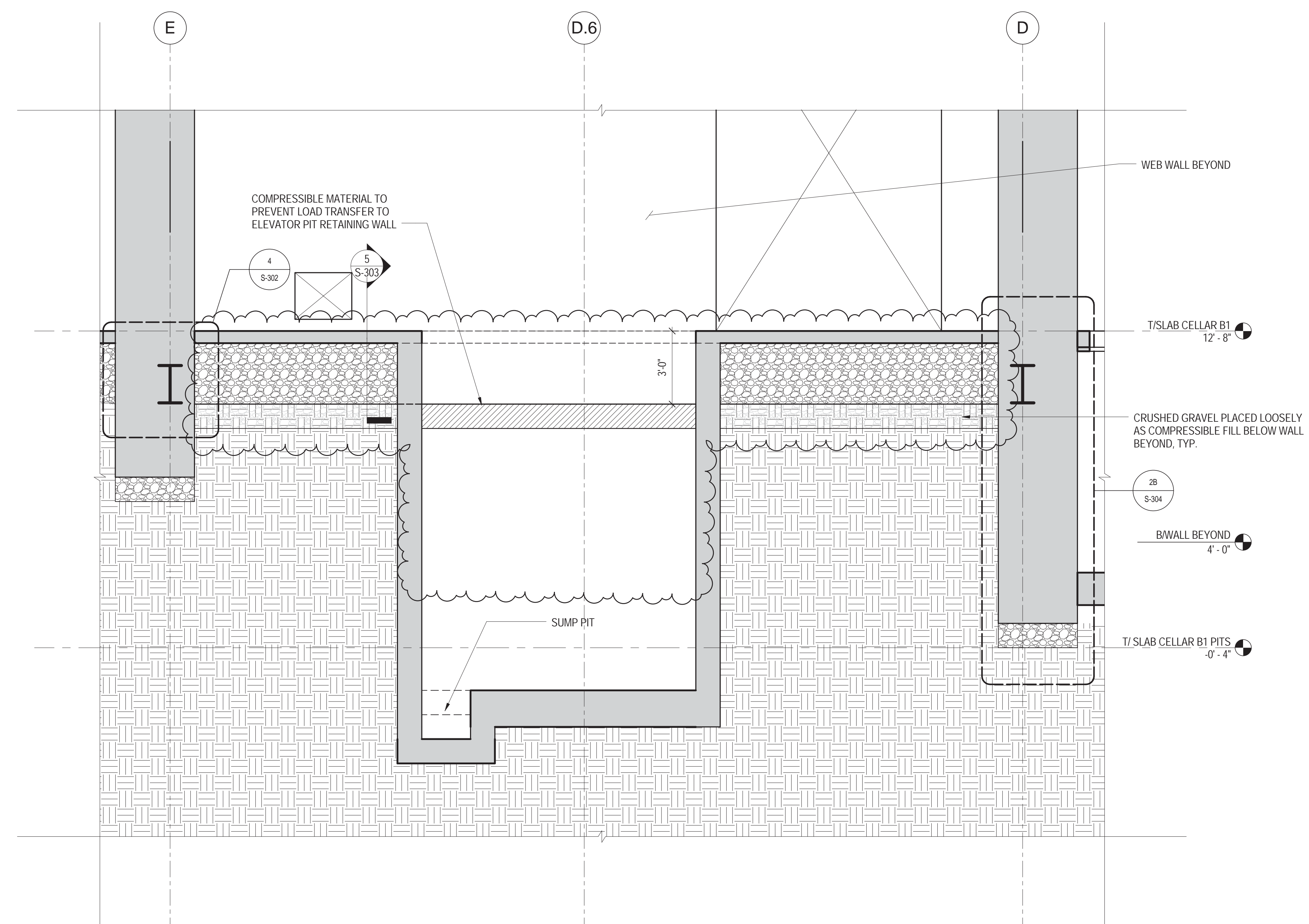
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CORE WALL CONT. FOOTINGS SECTIONS & DETAILS

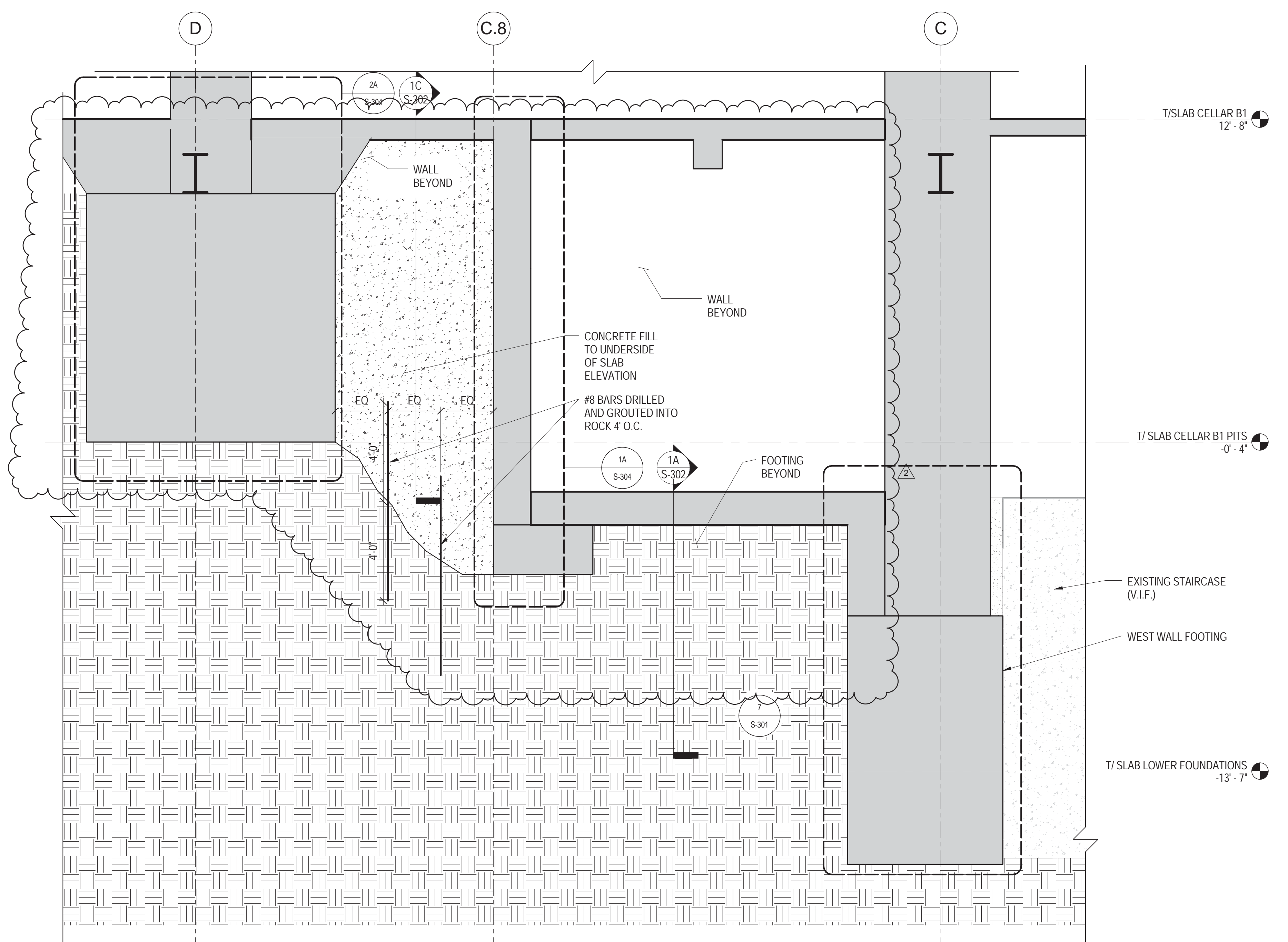
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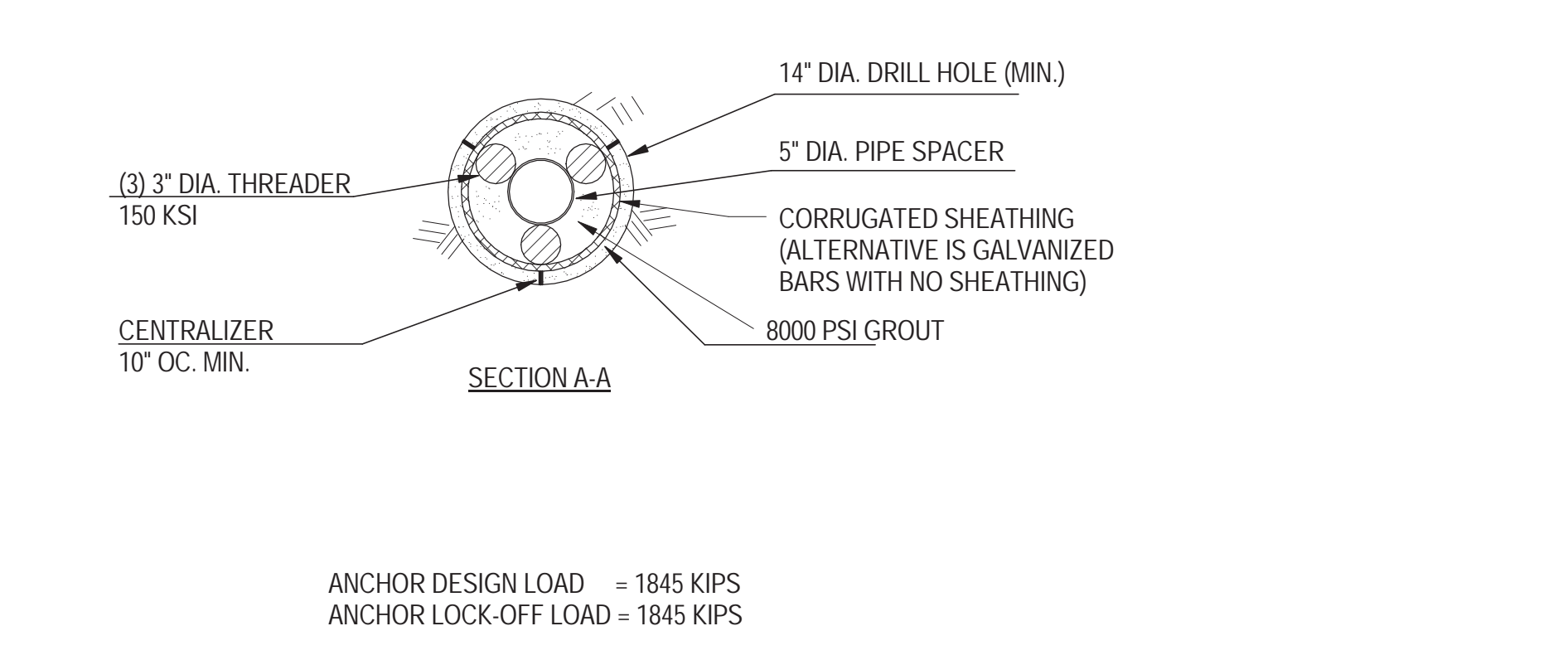
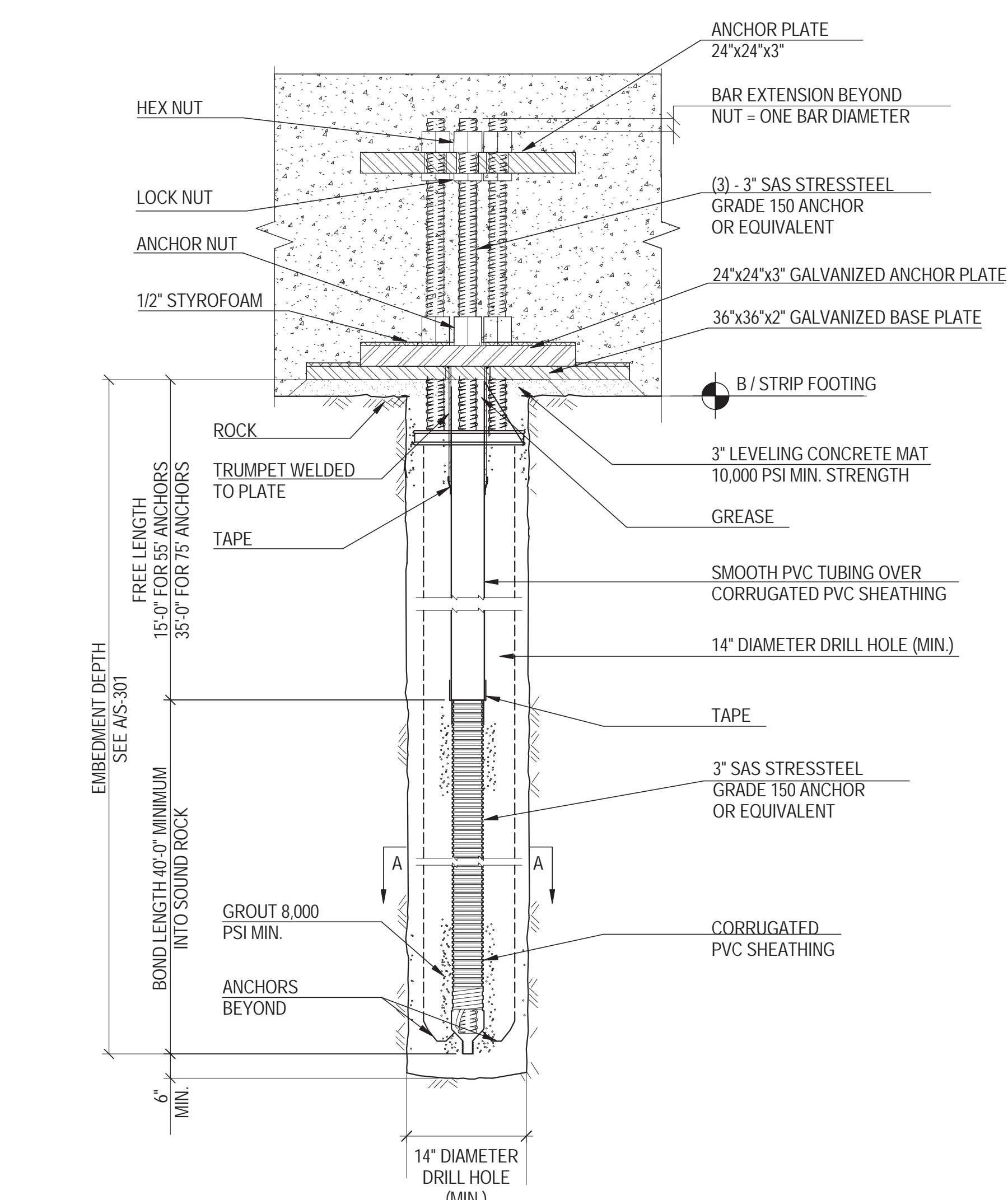
Damian Titus
Buildings
APPROVED
Under Directive of § 207
AMENDED APPLICATION
Date: 02/03/2022
NYC Development Hub



1 SECTION THROUGH WEB WALL AT ELEVATOR PIT
3/8" = 1'-0"



2 SECTION THROUGH WEB WALL AT WATER TANK
3/8" = 1'-0"



3 TYPICAL FOUNDATION ROCK ANCHOR DETAIL
1" = 1'-0"

- GENERAL NOTES**
1. ROCK ANCHORS SHALL BE IN CONFORMANCE WITH PTI (POST TENSIONING INSTITUTE) LATEST RECOMMENDATIONS ON ROCK & SOIL ANCHORS.
 2. ALL ANCHORS SHALL BE 3" DIAMETER SAS STRESSTEEL THREADED BARS OR EQUIVALENT, GRADE 150 KSI, MEETING OR EXCEEDING PROPERTIES OF ASTM A-722.
 3. THE THREADED BAR SHALL BE PROVIDED WITH SHOP-FABRICATED DOUBLE CORROSION PROTECTION. THE ANCHOR BARS SHALL BE ENCAPSULATED WITH HIGH STRENGTH PVC CORRUGATED SHEATHING (COMPRESSIVE STRENGTH-8000 psi) AND PRE-GROUTED.
 4. PLATES SHALL CONFORM TO ASTM A-36.
 5. ANCHOR NUTS & COUPLERS SHALL BE CAPABLE OF DEVELOPING 100% OF THE ULTIMATE STRENGTH OF THREADBAR.
 6. CARE MUST BE TAKEN NOT TO DAMAGE THE THREADED BAR TENDONS. KEEP THREADBARS FREE OF DIRT OR OTHER DELETERIOUS SUBSTANCES.
 7. DO NOT WELD IN THE VICINITY OF THE HIGH STRENGTH BARS.
 8. DO NOT USE ANCHORS AS A GROUND FOR WELDING.
 9. THE FIRST THREE ANCHORS INSTALLED, AND 10% OF THE REMAINING ANCHORS SHALL BE PERFORMANCE TESTED. ALL OTHER ANCHORS SHALL BE PROOF TESTED USING A CALIBRATED CENTER HOLE JACK.
 10. PERFORMANCE TEST SHALL BE CONDUCTED BY CYCLICALLY AND INCREMENTALLY LOADING AND UNLOADING THE ANCHOR AS NOTED BELOW:

AL, 25P, 50P, 75P, 1.00P, 1.20P, 1.33P
P=615 KIPS PER BAR

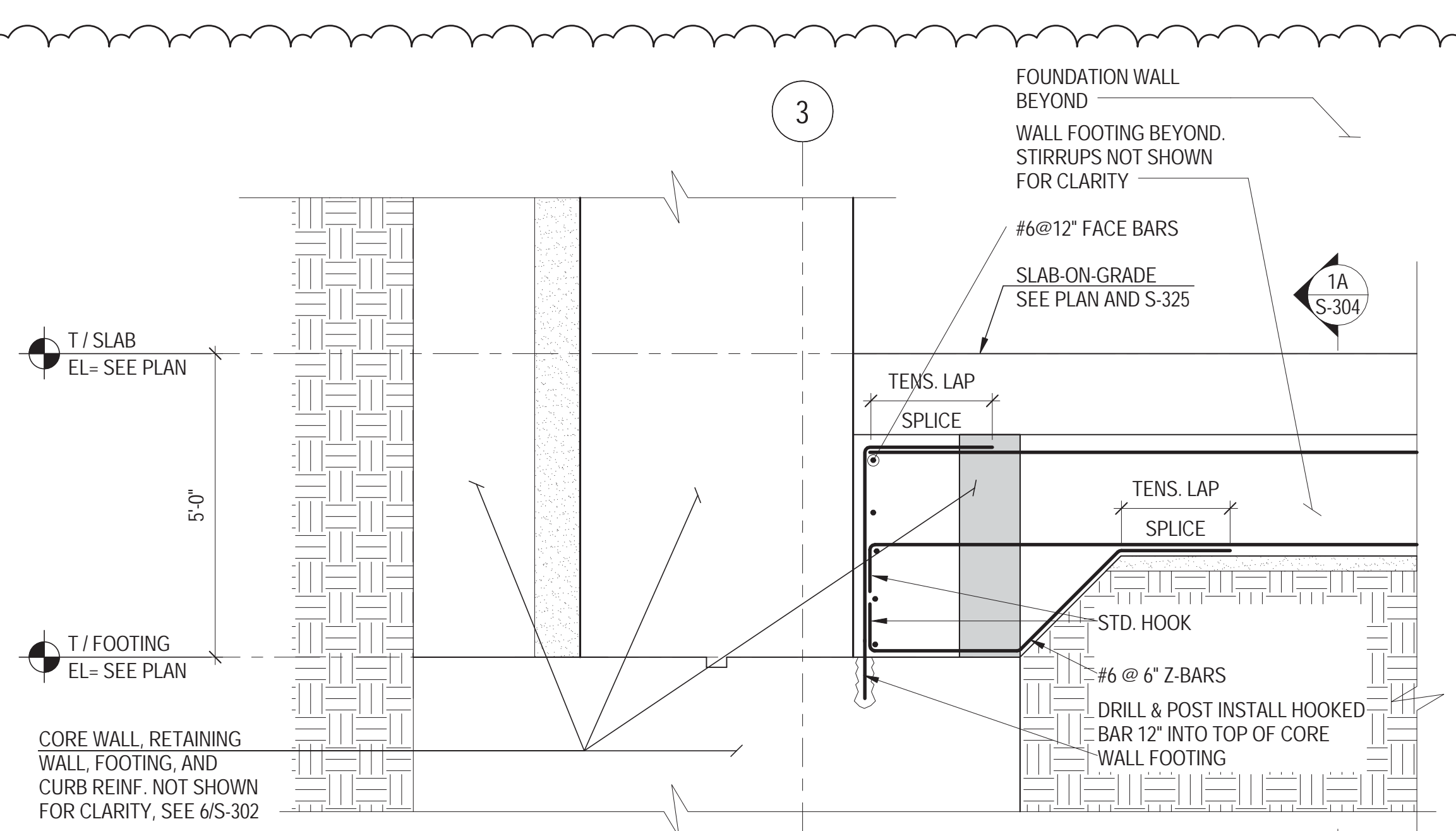
HOLD 1.33P FOR CREEP TEST. RECORD MOVEMENTS USING A DIAL INDICATOR CAPABLE OF READING INCREMENTS OF .001". RECORD READINGS AT 0, 1, 2, 3, 4, 5, 6 AND 10 MINUTES.
THE ANCHOR IS ACCEPTABLE IF THE ANCHOR MOVEMENT BETWEEN THE 1 MIN. AND 10 MIN. DOES NOT EXCEED 0.040". RELEASE TO TRANSFER LOAD AND LOCK OFF ANCHOR NUT.

11. PROOF TESTS SHALL BE CONDUCTED BY CYCLICALLY AND INCREMENTALLY LOADING THE ANCHOR AS NOTED BELOW:

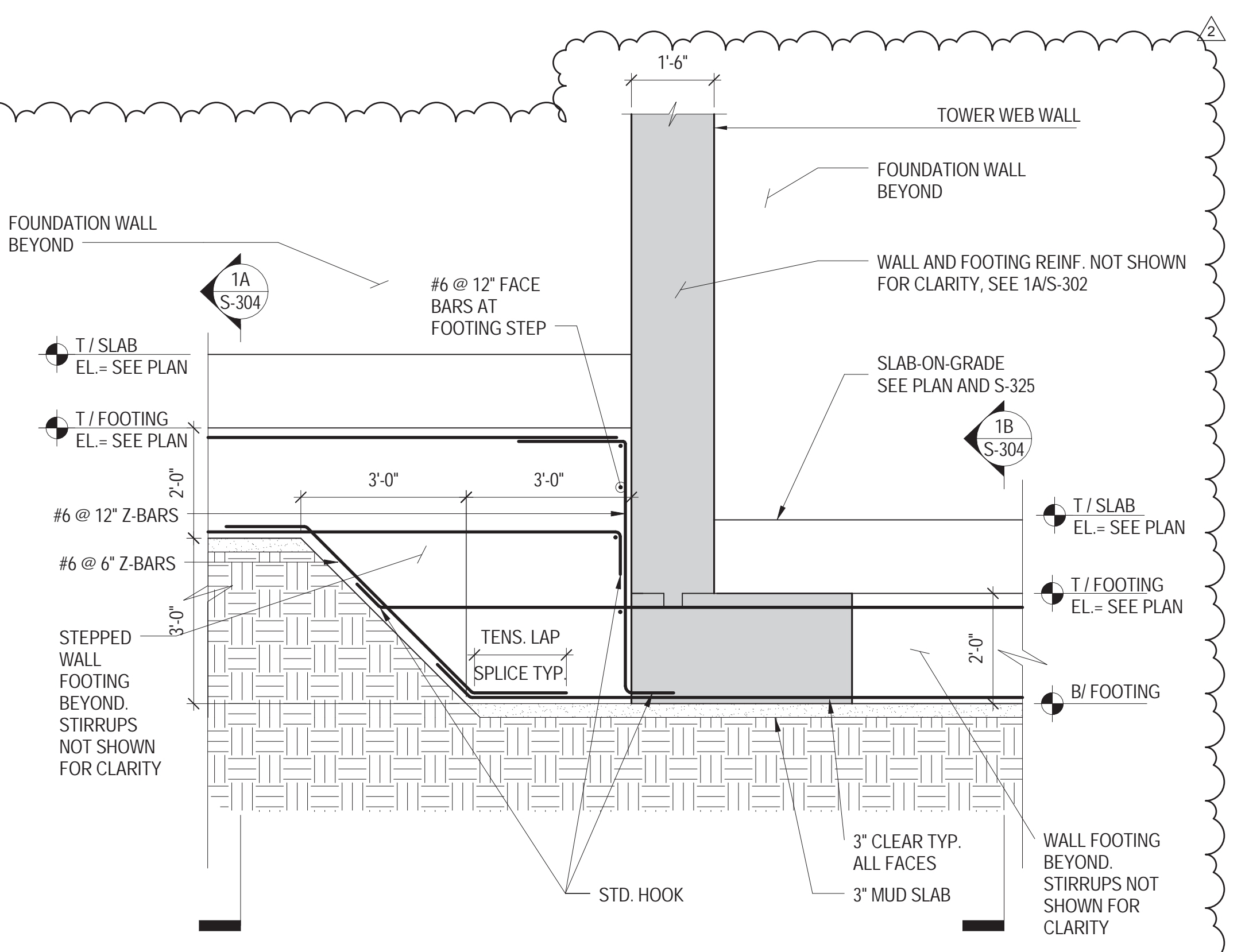
AL, 25P, 50P, 75P, 1.00P, 1.20P, 1.33P

HOLD 1.33P FOR CREEP TEST AS ABOVE.

- INSTALLATION PROCEDURE**
1. DETERMINE ANCHOR LOCATION AS INDICATED ON CONTRACT DRAWINGS.
 2. DRILL 14" MINIMUM DIAMETER HOLE TO SPECIFIED DEPTH.
 3. CLEAN DRILL HOLE OF ALL DRILL CUTTINGS AND DEBRIS.
 4. INSERT A GROUT PIPE AND PREFABRICATED ANCHOR TO THE BOTTOM OF THE ANCHOR HOLE AND PUMP FULL OF CEMENT GROUT DISPLACING ANY STANDING WATER.
 5. AFTER GROUT REACHES SPECIFIED STRENGTH, (3 DAYS FOR PORTLAND CEMENT TYPE III OR 7 DAYS FOR PORTLAND TYPE I OR II) LOAD ANCHORS USING CALIBRATED JACKS.
 6. AFTER SUCCESSFUL TESTING, LOCK OFF ANCHOR AT 1845 KIP, USING EXTERNAL WRENCH AND RELEASE PRESSURE FROM JACK.
 7. INSTALL UPPER PLATE & NUTS AND POUR FOOTING CONCRETE.



6 ELEVATION OF WATER TANK WALL FOOTING TERMINATION INTO NORTH WALL FOOTING
NOT TO SCALE



- NOTE:**
1. FOOTING WIDTH ASSUMES CLASS 1B ROCK (40 TSF) AT HIGHER FOUNDATION ELEVATION.
 2. FOOTING WIDTH ASSUMES CLASS 1A ROCK (60 TSF) AT LOWER FOUNDATION ELEVATION.
 3. REFER TO MEP FOR ELECTRICAL LIGHTING PROTECTION DETAIL & LOCATION.
 4. SLAB ON GRADE REINF. NOT SHOWN FOR CLARITY, SEE S-325 FOR TYP. DETAILS.

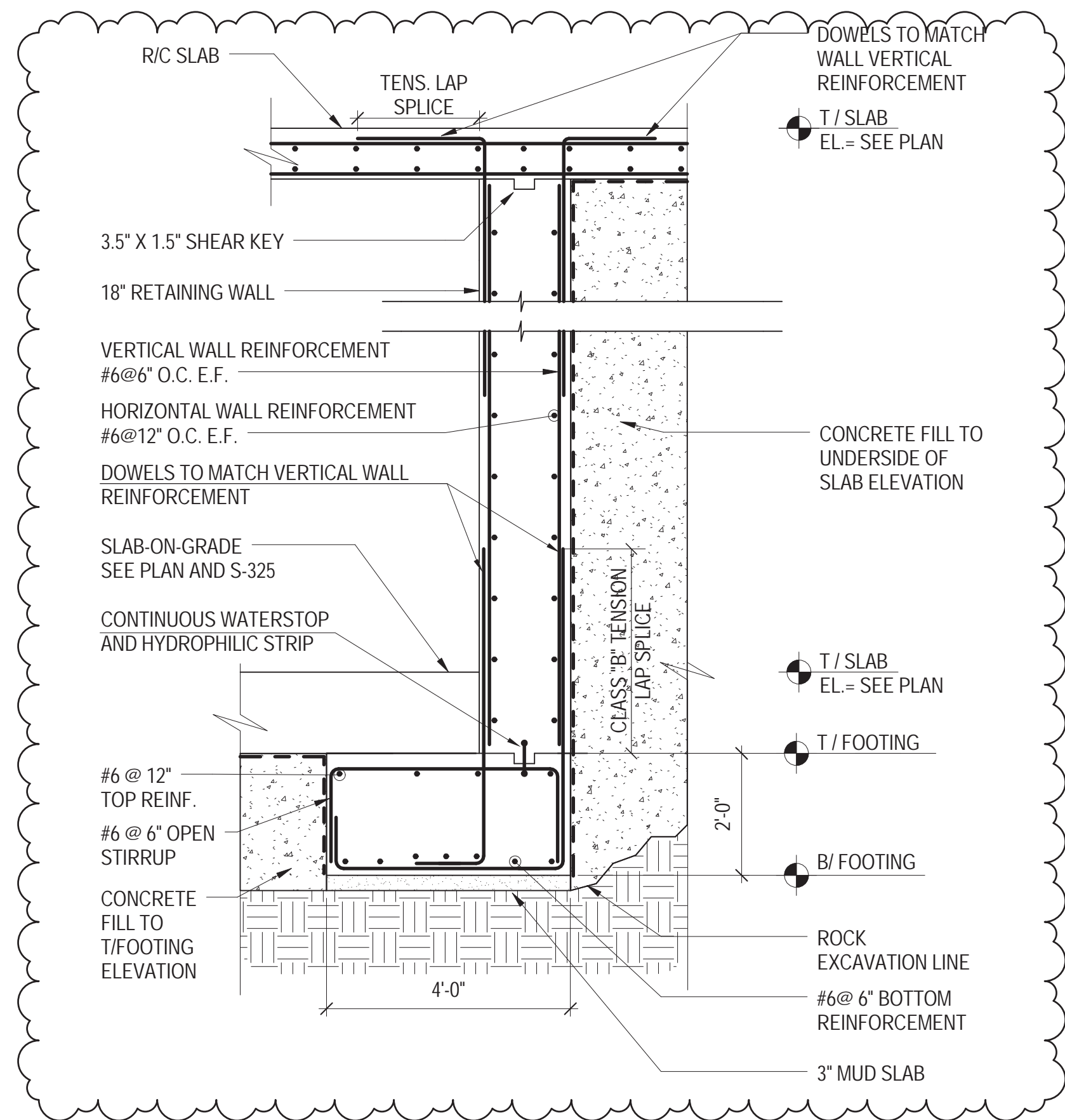
7 ELEVATION AT WATER TANK WALL FOOTING STEP
NOT TO SCALE

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NO LONGER APPLICABLE**

**DETAIL REMOVED
NO LONGER APPLICABLE**

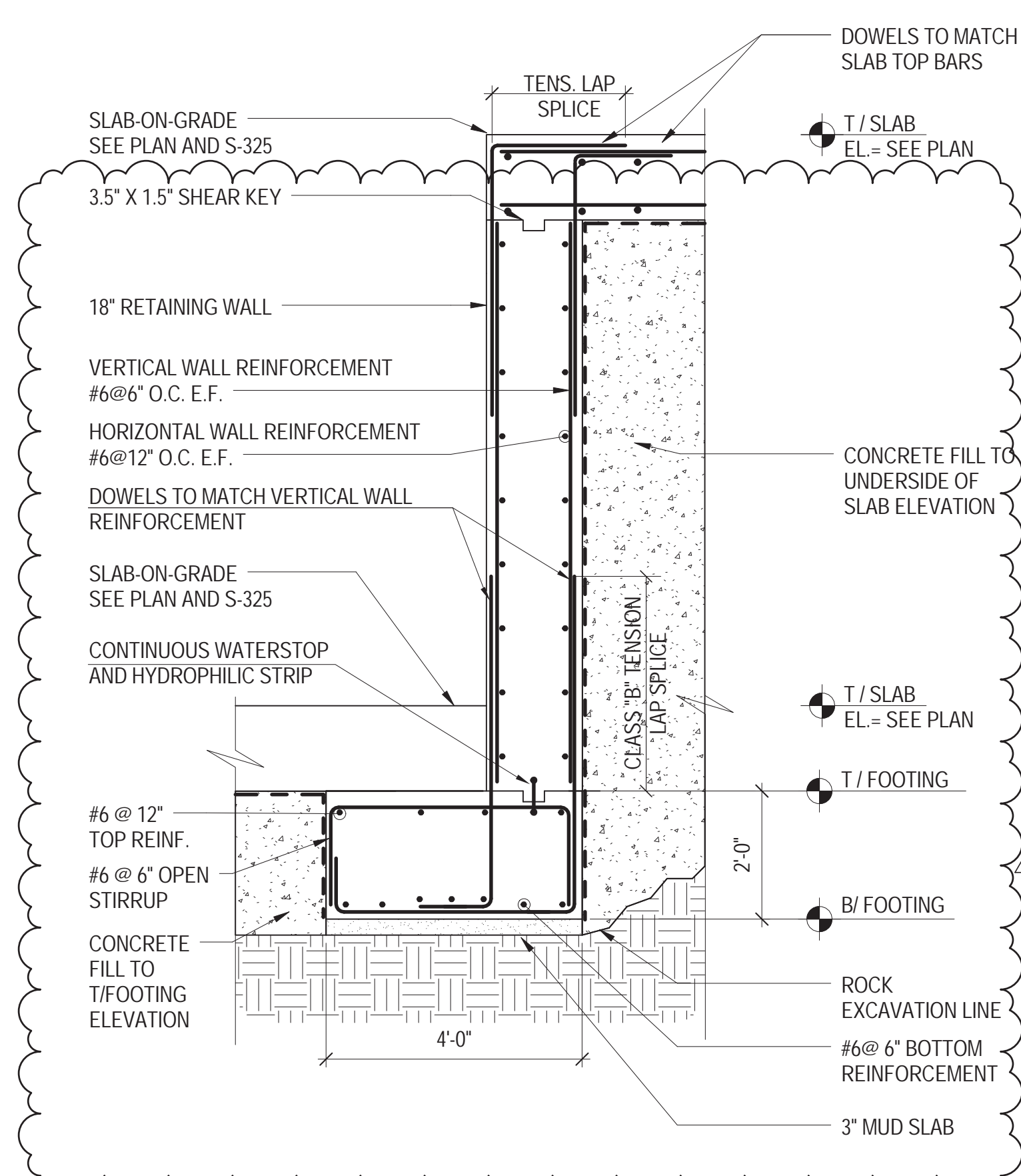
4 SECTION THROUGH WEB WALL ON GRADE
NOT TO SCALE

5 TYPICAL SECTION THROUGH WEB WALL ON GRADE
NOT TO SCALE



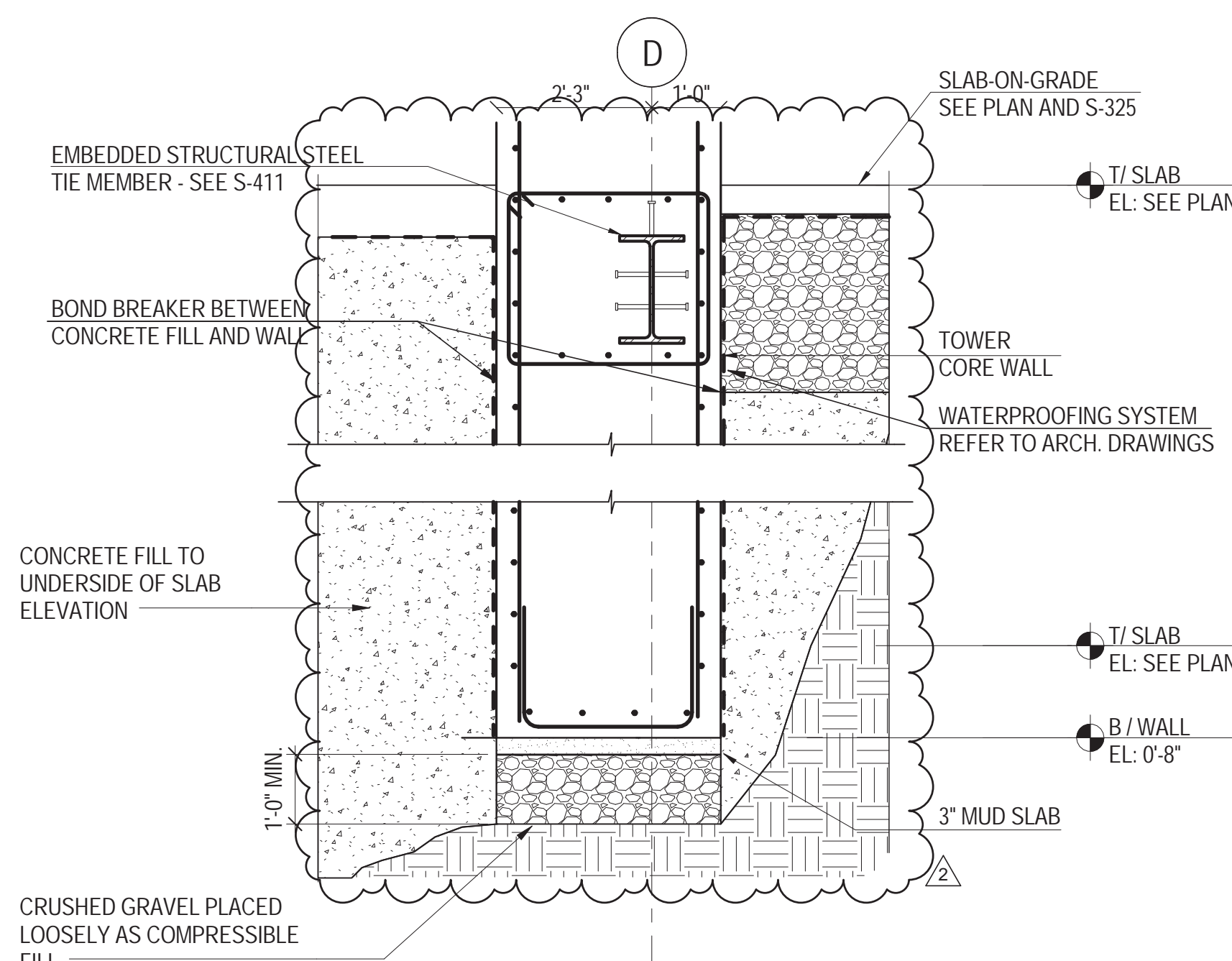
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1A SECTION THROUGH WATER TANK WALL WITH FOOTING
NOT TO SCALE



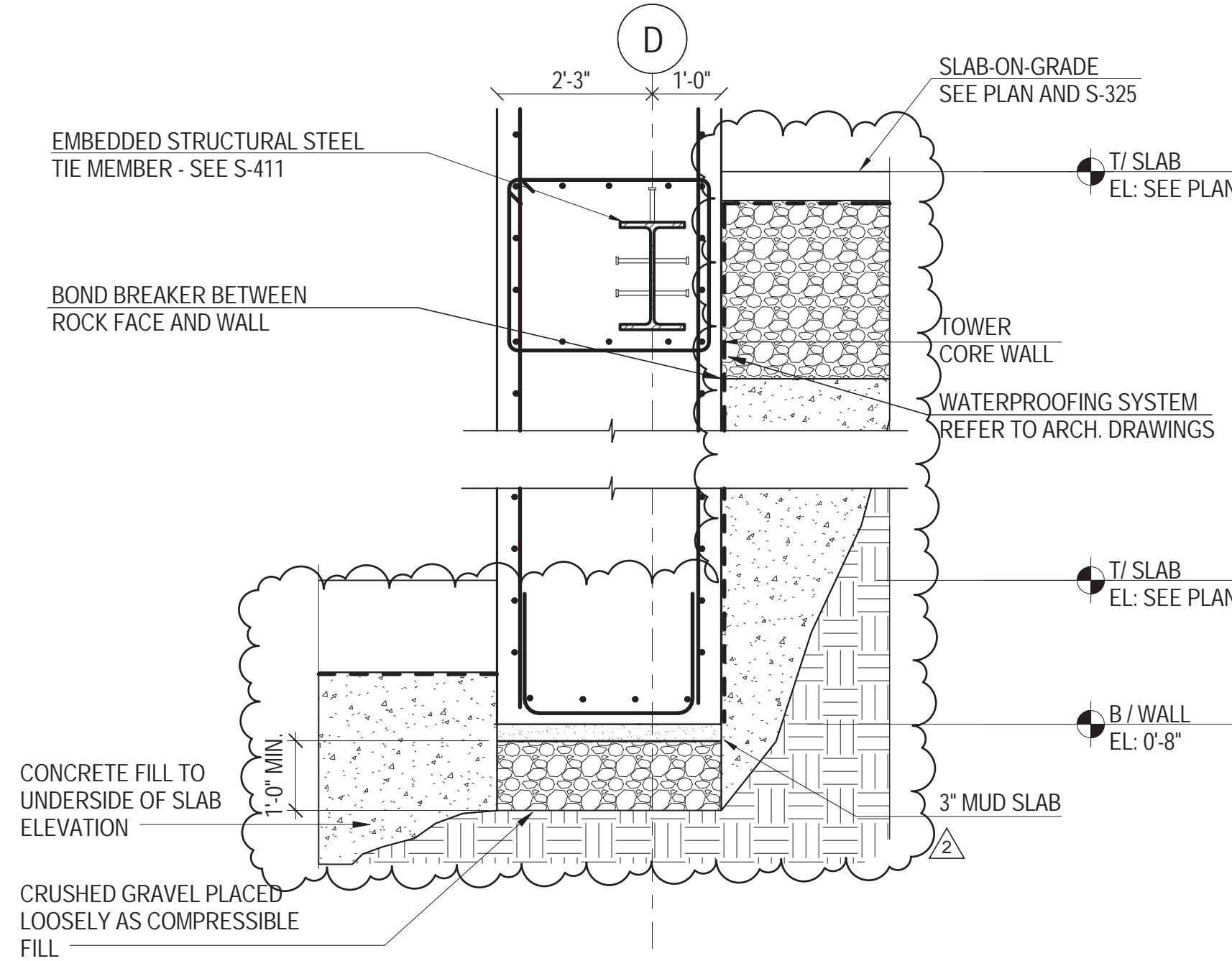
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1B SECTION THROUGH WATER TANK WALL WITH FOOTING
NOT TO SCALE



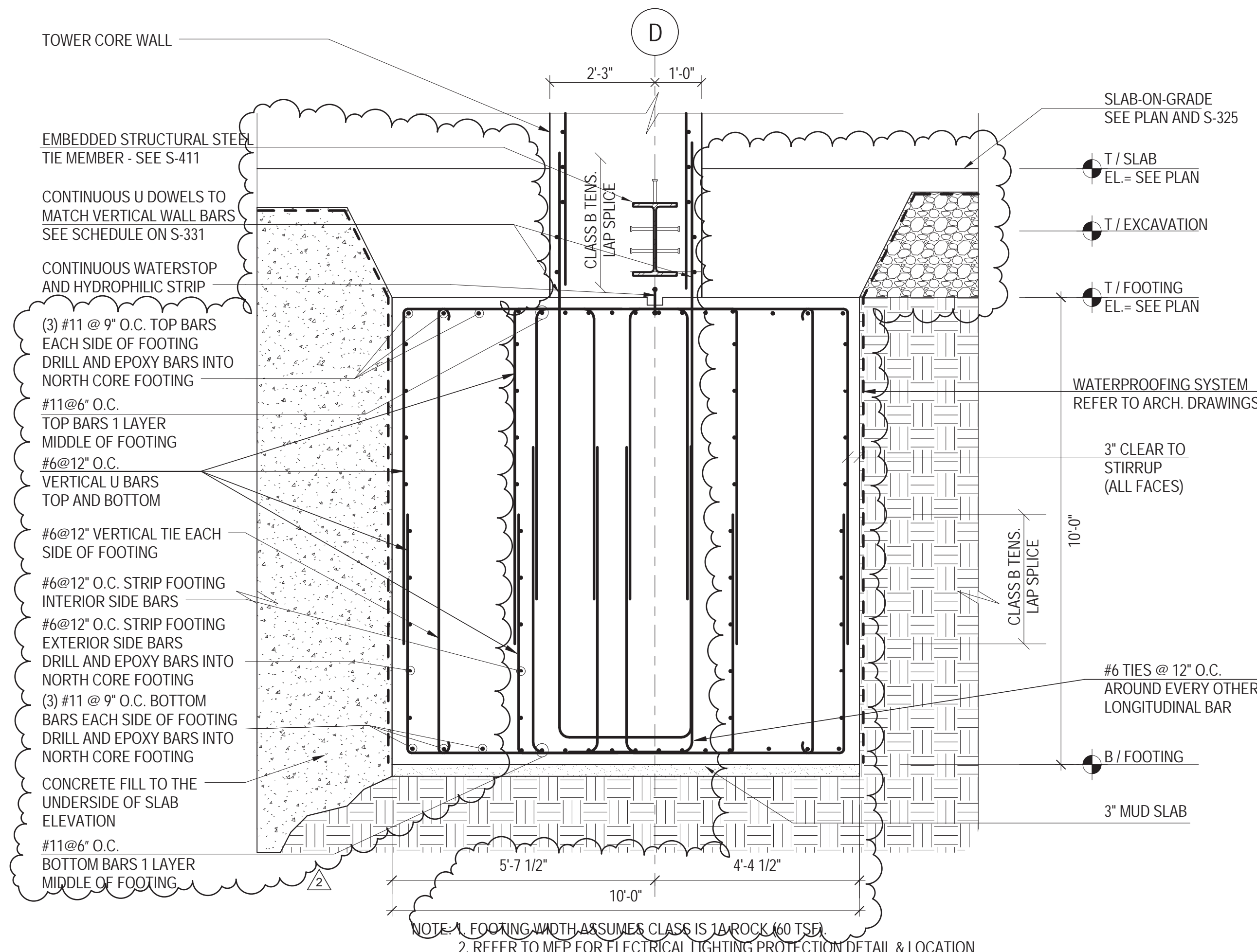
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2A SECTION THROUGH WEB WALL ON GRADE AT STEP IN ELEVATION
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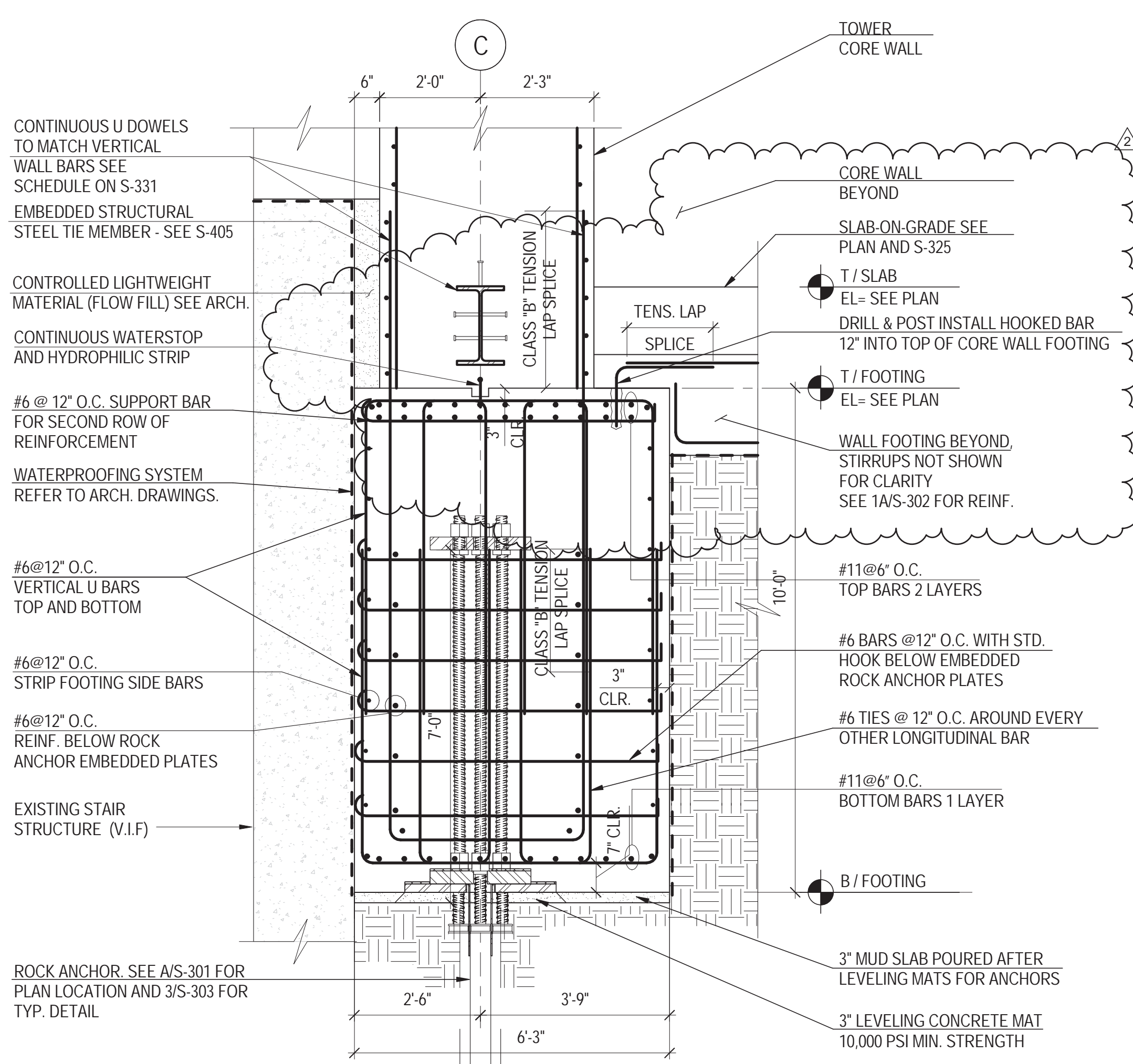
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2B SECTION THROUGH WEB WALL ON GRADE AT STEP IN ELEVATION
NOT TO SCALE



NOTE: 1. FOOTING WIDTH ASSUMES CLASS 1B ROCK (40 TSF)
2. REFER TO MEP FOR ELECTRICAL LIGHTING PROTECTION DETAIL & LOCATION

3 SECTION THROUGH UPPER WEB WALL FOOTING AT STEP IN ELEVATION
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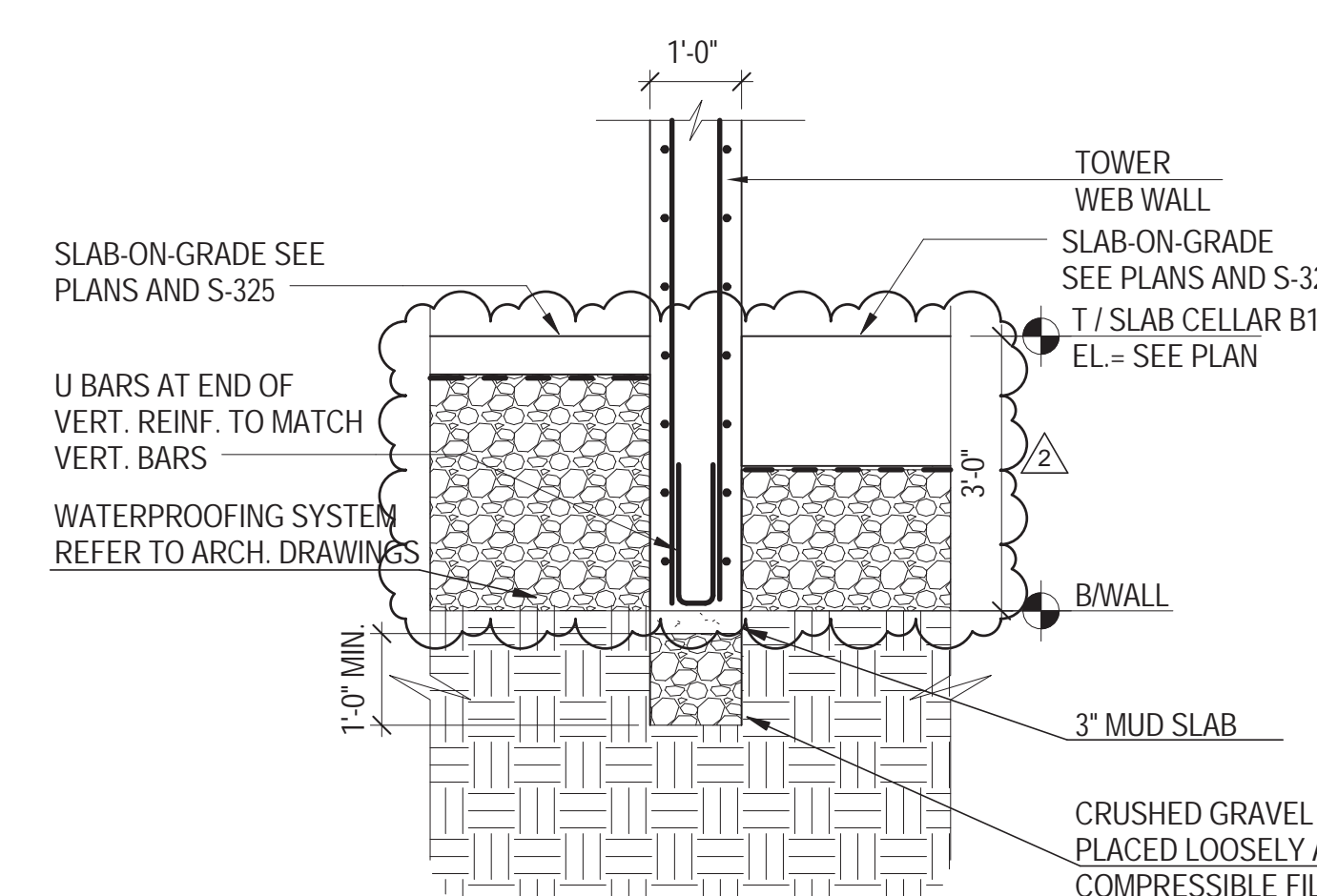


NOTE: 1. FOOTING WIDTH SHOWN ASSUMES CLASS 1B ROCK (40 TSF)
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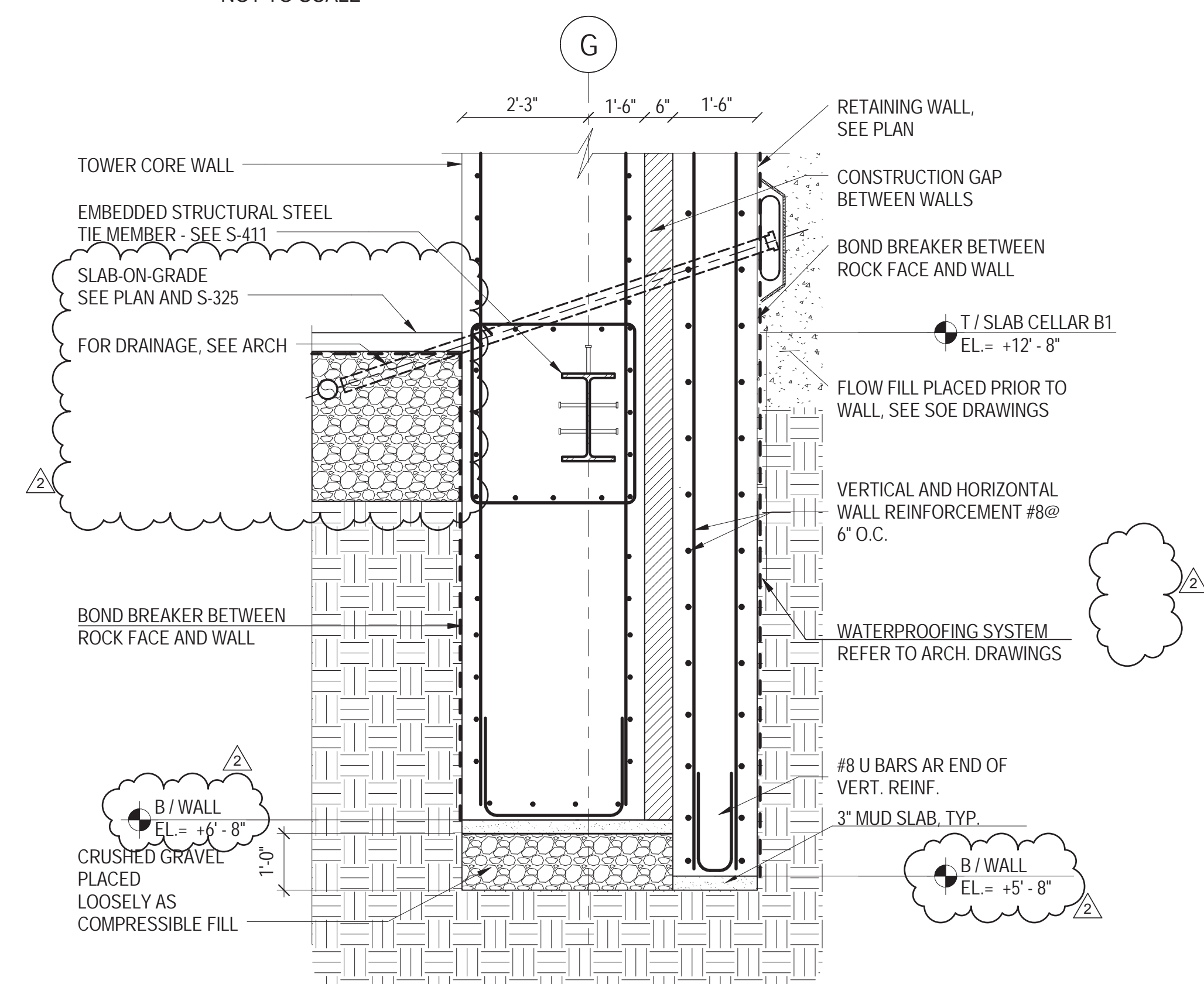
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5 SECTION THROUGH UPPER NORTH WALL FOOTING
NOT TO SCALE



NOTE:
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2. FOR CORE WALL REINFORCEMENT DETAILS, SEE S-331 THROUGH S-359
3. SLAB ON GRADE REINF. NOT SHOWN FOR CLARITY, SEE S-325 FOR TYP. DETAILS

8 TYPICAL SECTION THROUGH WEB WALL ON GRADE
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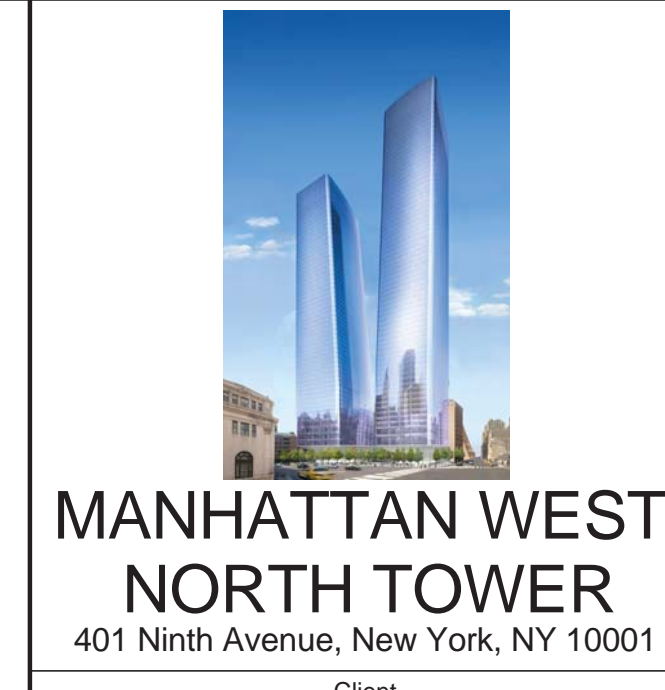


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4. SLAB ON GRADE REINF. NOT SHOWN FOR CLARITY, SEE S-325 FOR TYP. DETAILS

6 SECTION THROUGH EAST WALL ON GRADE
NOT TO SCALE

**DETAIL REMOVED
NO LONGER APPLICABLE**

7 SECTION THROUGH EAST WALL ON GRADE
NOT TO SCALE



Brookfield

Brookfield Place
15th Floor, New York, NY 10021

Architecture/Structural Engineering

SOM

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

Civil Engineering
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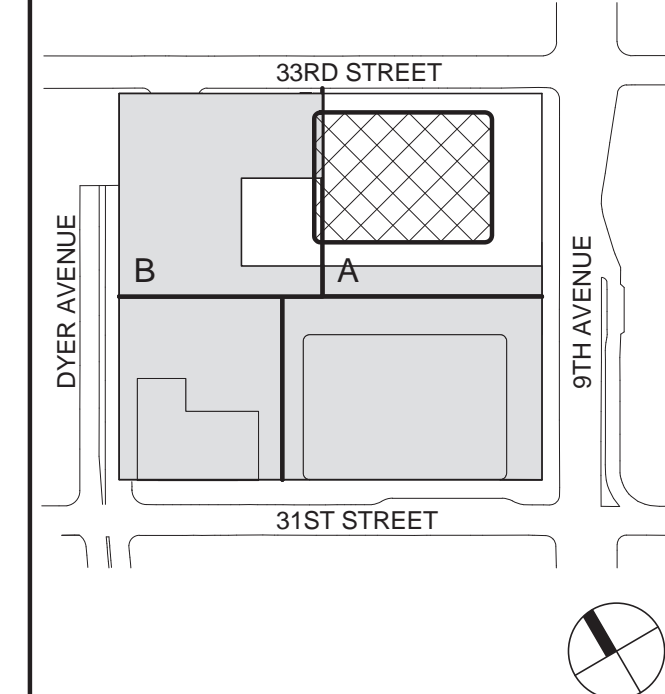
Vibration Consultant
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65 Broadway, Suite 401, New York, NY 10006

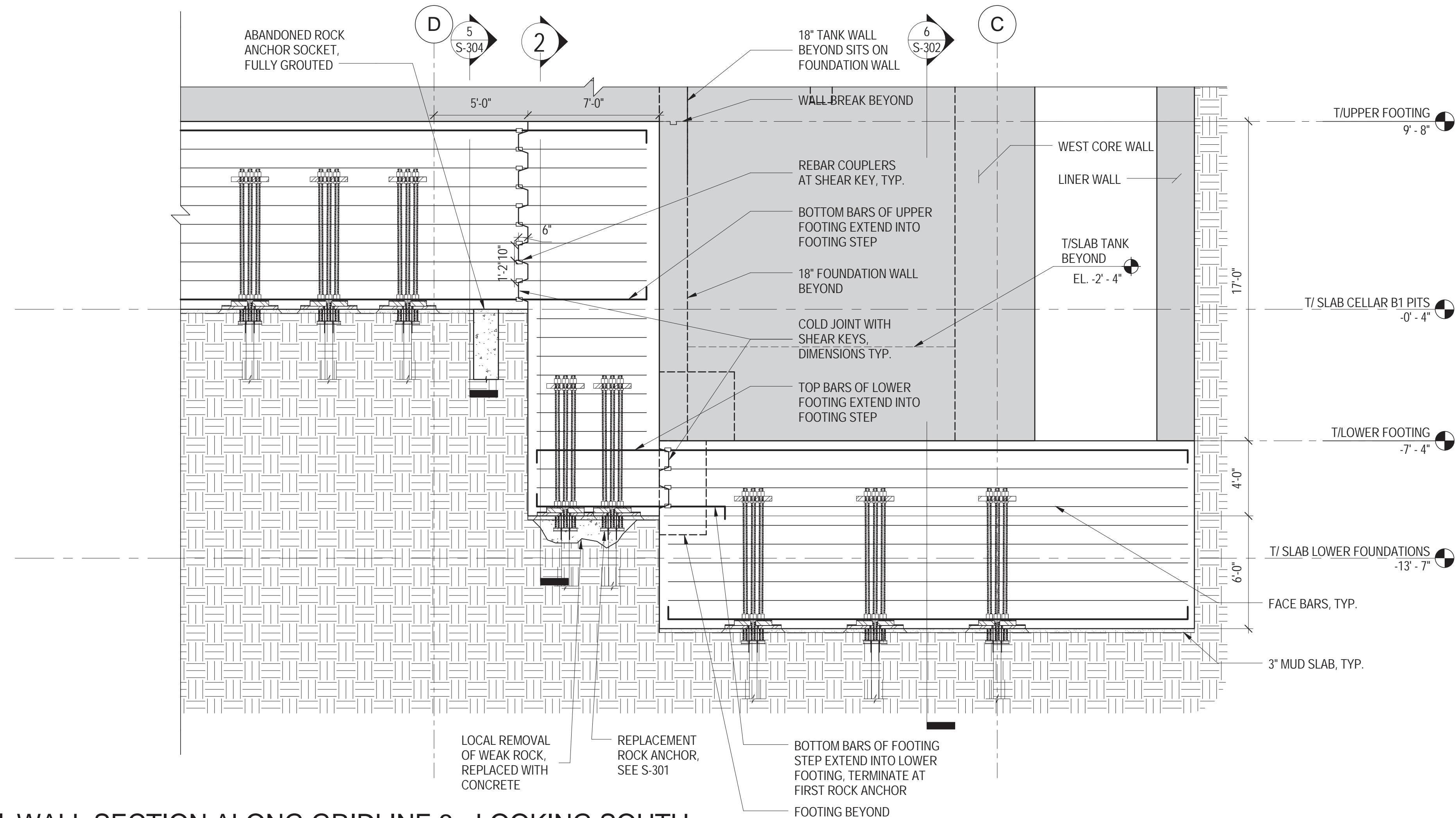
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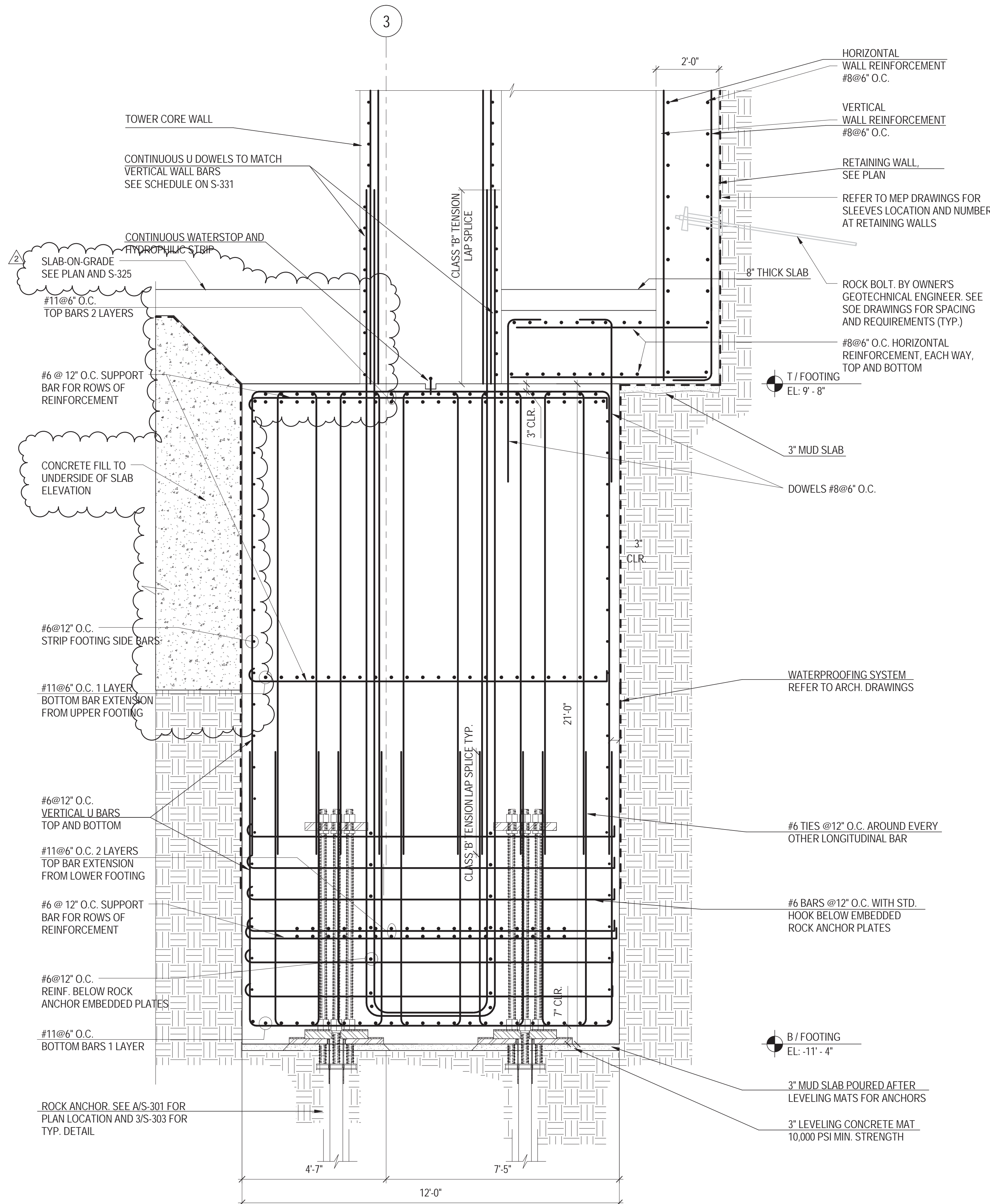
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650 Woodlawn Road West, Guelph Ontario, Canada N1K 1B8

Key Plan:

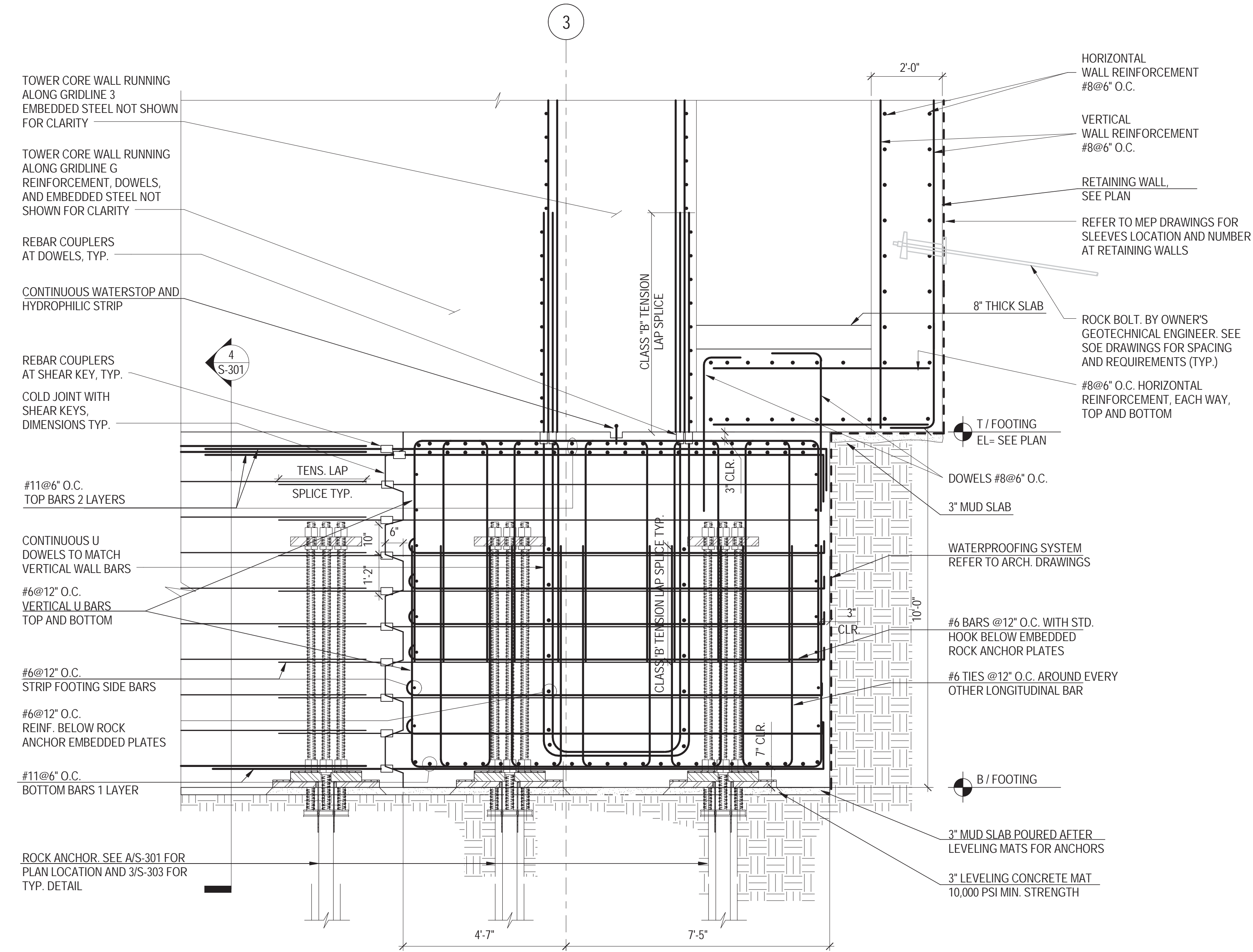




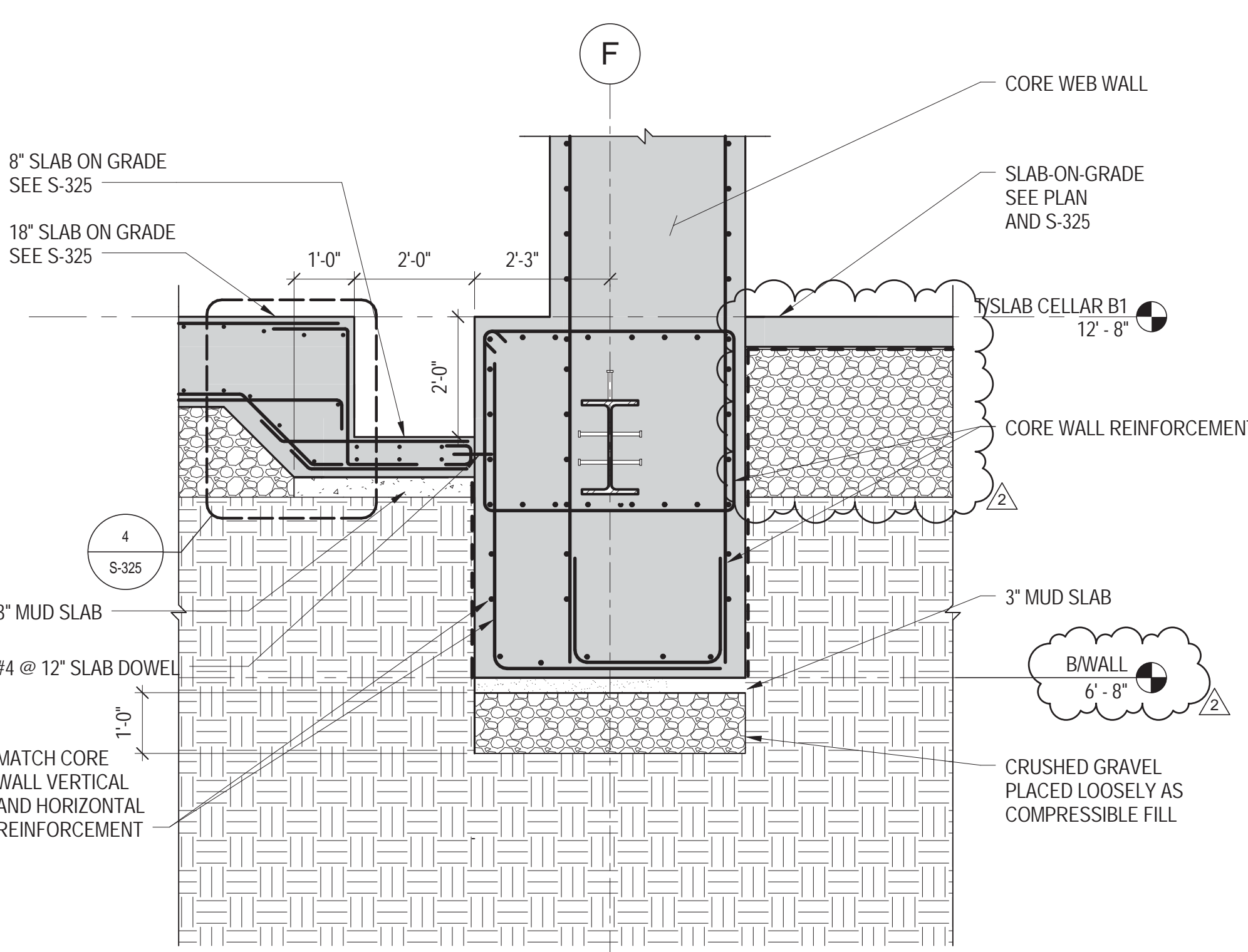
1 WALL SECTION ALONG GRIDLINE 3 - LOOKING SOUTH
1/4" = 1'-0"



2 SECTION THROUGH UPPER NORTH WALL FOOTING AT FOUNDATION STEP
1/2" = 1'-0"



3 SECTION THROUGH UPPER NORTH WALL FOOTING AT GRIDLINE G
NOT TO SCALE



4 SUMP PIT AT CELLAR B1
NOT TO SCALE



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 Bluffside Ave., Suite 1, Mill Valley, California 94941

Sustainable Design

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

Geotechnical Engineering

Mueser Rutledge Consulting Engineers
14 Penn Plaza, 225 W. 34th Street, New York, NY 10122

Field Operations

475 10th Avenue, New York, NY 10018

Security Consultant

Ducibella, Ventor & Santoro
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

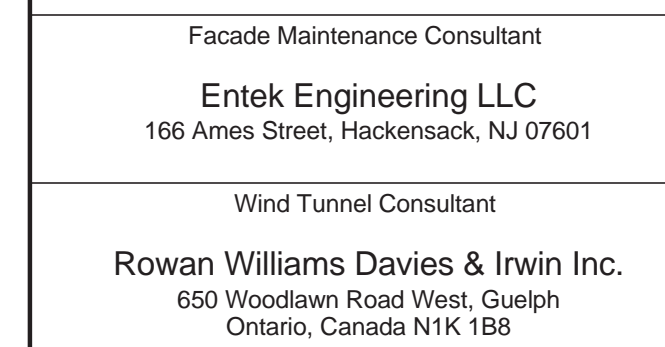
Facade Maintenance Consultant

Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West, Guelph Ontario, Canada N1K 1B6

Key Plan:



Seal & Signature:



2 22 APR 2016 ISSUED FOR P&A

1 16 DEC 2015 ISSUED FOR PERMIT

No. Date Description

Sheet Name:

CORE WALL CONT. FOOTINGS SECTIONS & DETAILS

Project No.: 211157

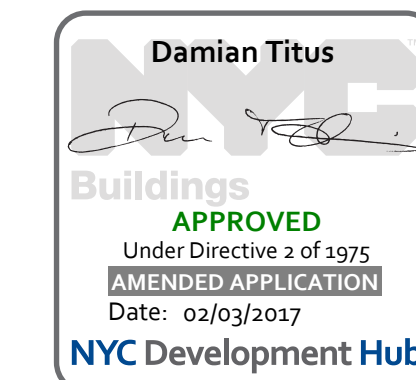
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Date: 22 APR 2016

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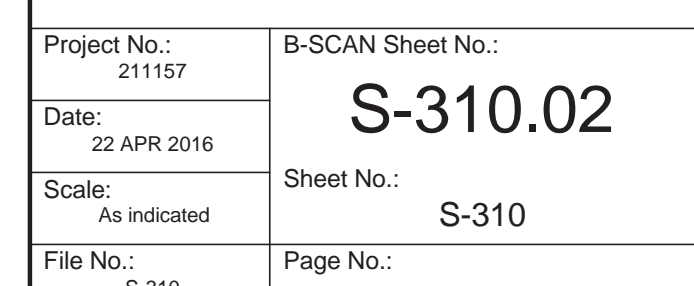
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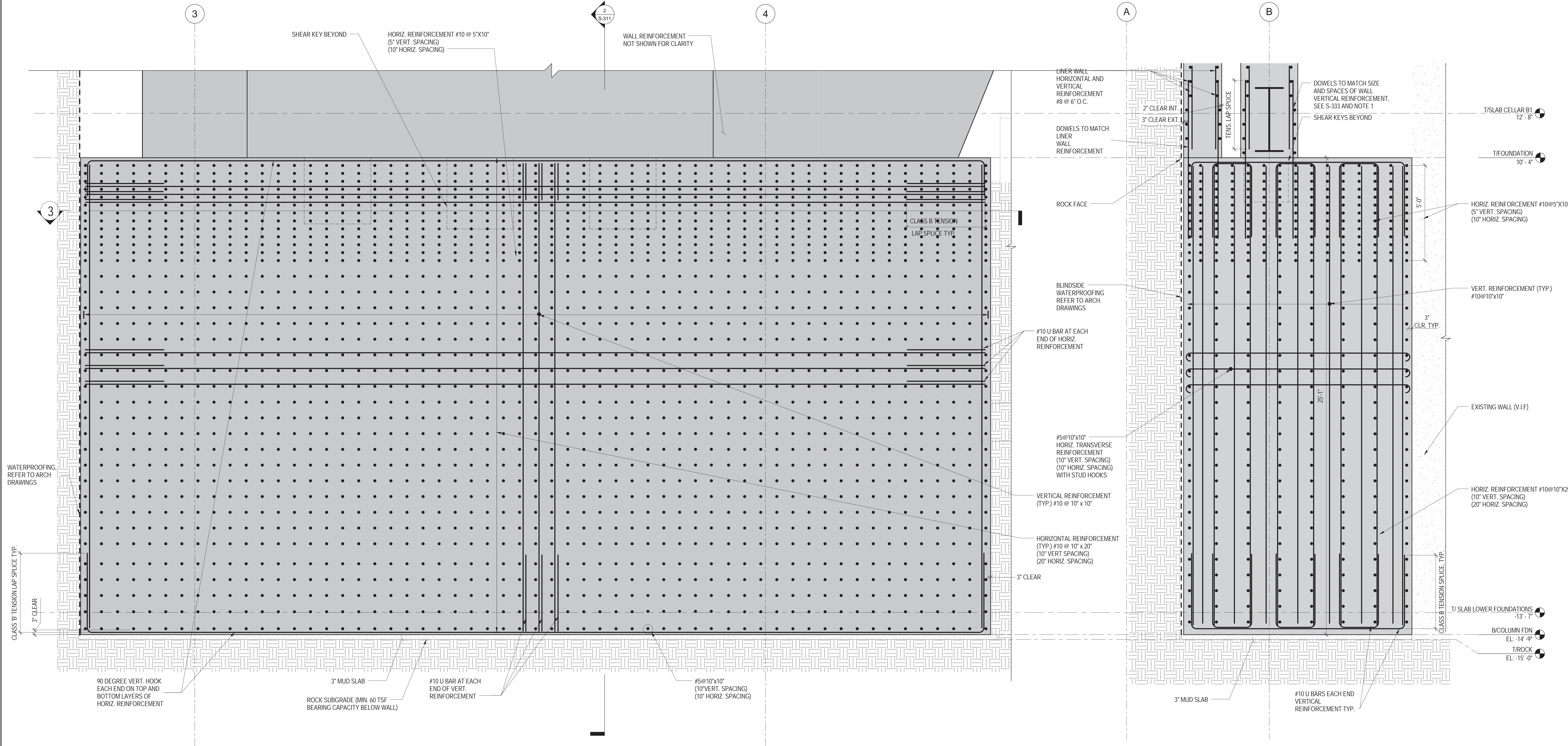
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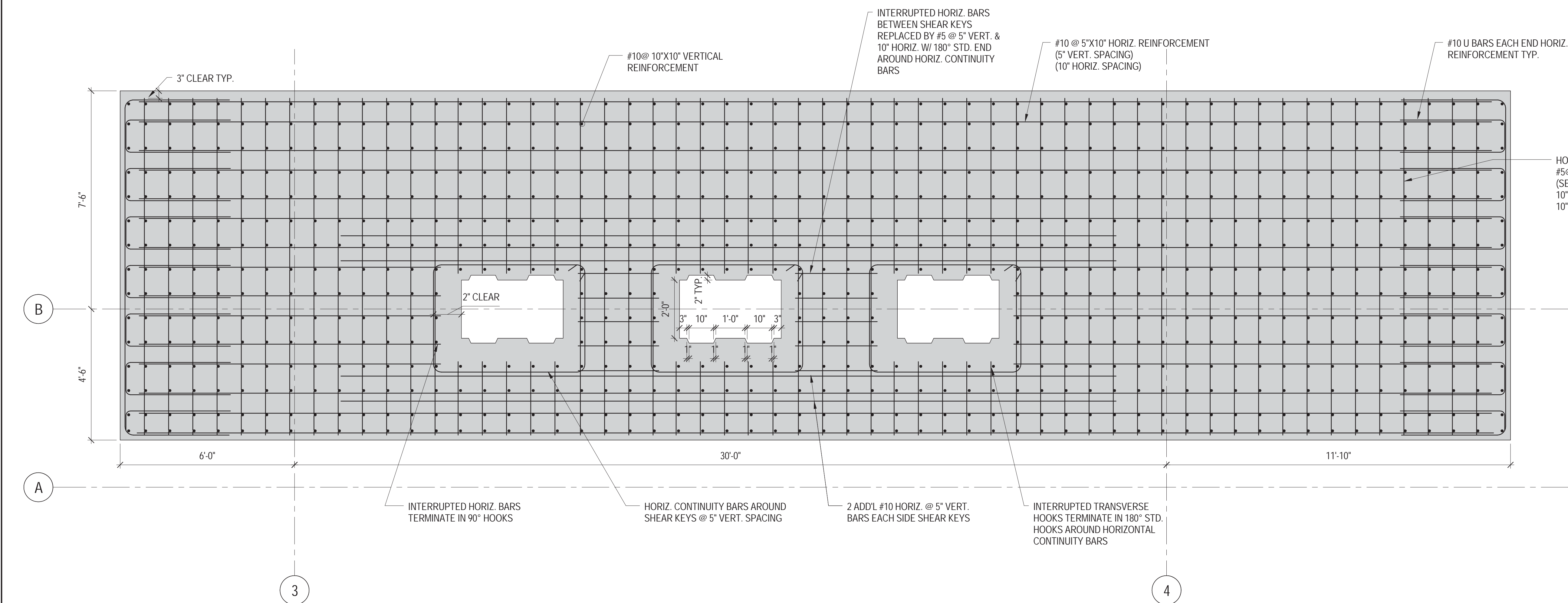
3 WEST COLUMN SHEAR KEY DETAIL



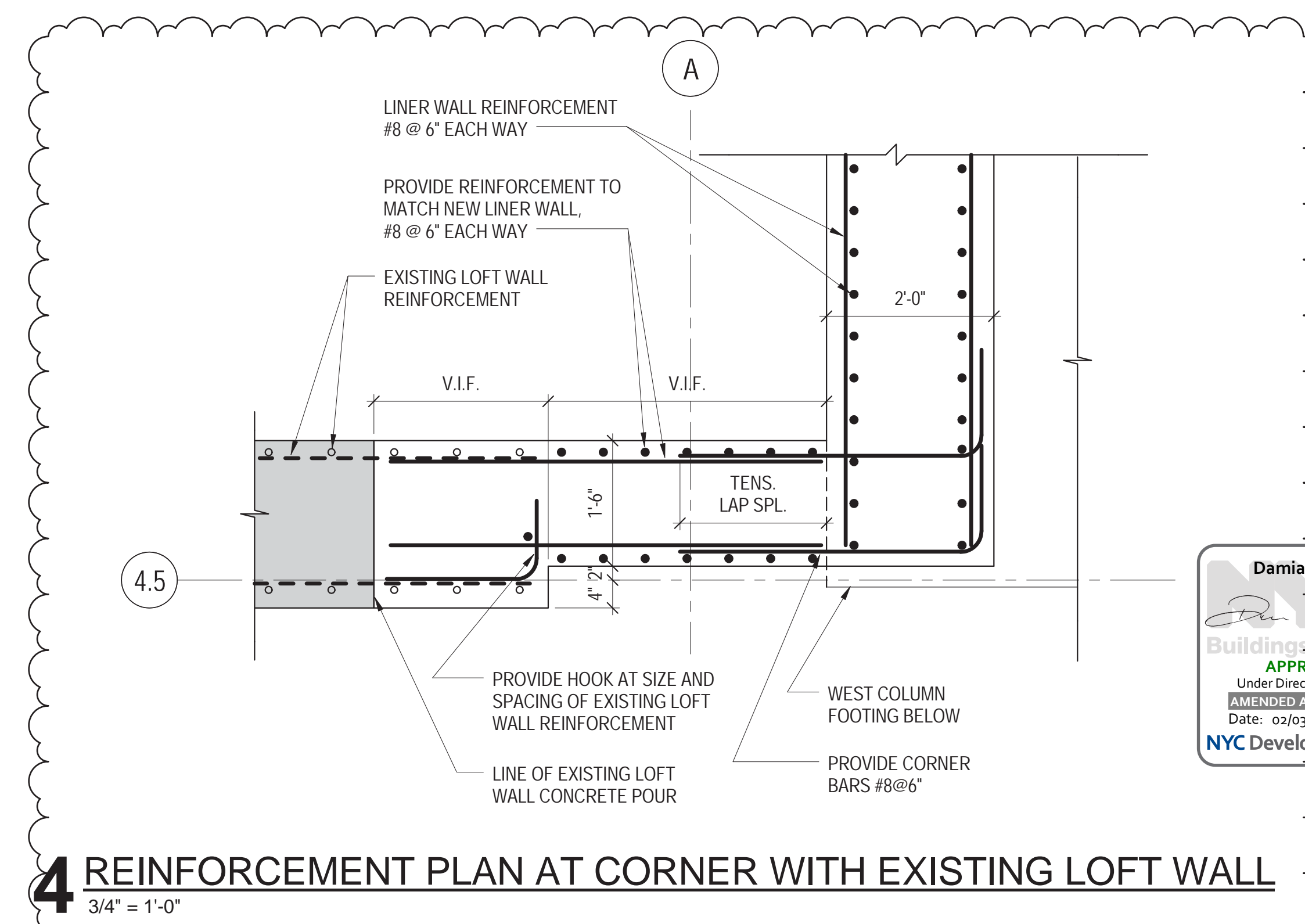


1 REINFORCEMENT ELEVATION WEST COLUMN FOUNDATION
NOT TO SCALE

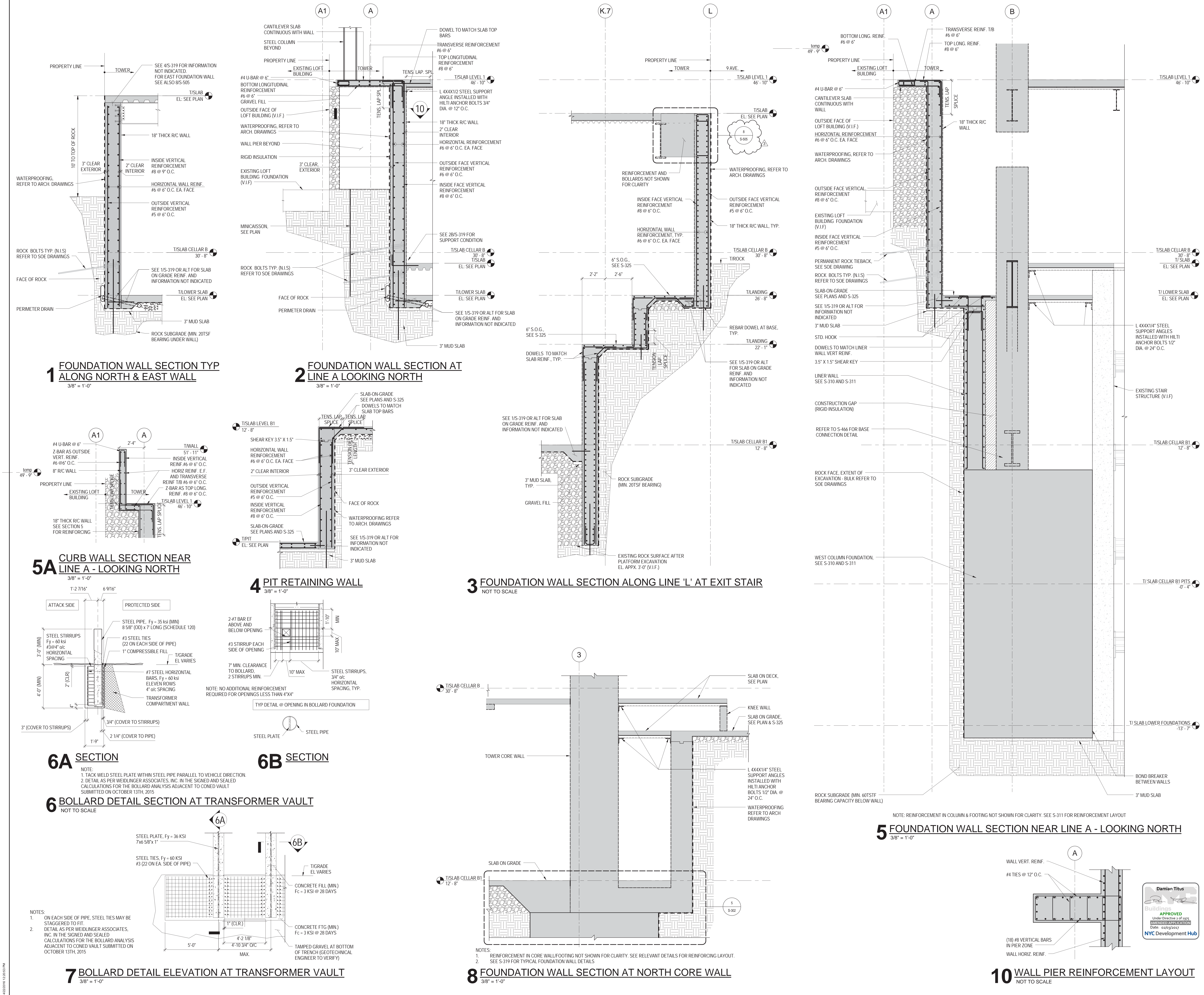
2 TRANSVERSE SECTION AT FOUNDATION WALL FOR COLUMNS/DIAGONALS ALONG LINES 'A' AND 'B'
NOT TO SCALE



3 REINFORCEMENT PLAN WEST COLUMN FOUNDATION
NOT TO SCALE



4 REINFORCEMENT PLAN AT CORNER WITH EXISTING LOFT WALL
3/4" = 1'-0"



**MANHATTAN WEST:
NORTH TOWER**
401 Ninth Avenue, New York, NY 10001
Client

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

Architecture/Structural Engineering
SOM
Skidmore, Owings & Merrill LLP
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102 Madison Avenue #11, New York, NY 10016

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

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Edgett Williams Consulting Group, Inc.
102 East Blithedale Ave., Suite 1, Mill Valley, California 94941

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

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

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

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

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

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

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Code Consultants Professional Engineers PC
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Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B6

Key Plan:

Seal & Signature:

Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-316

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Sheet No.: S-316
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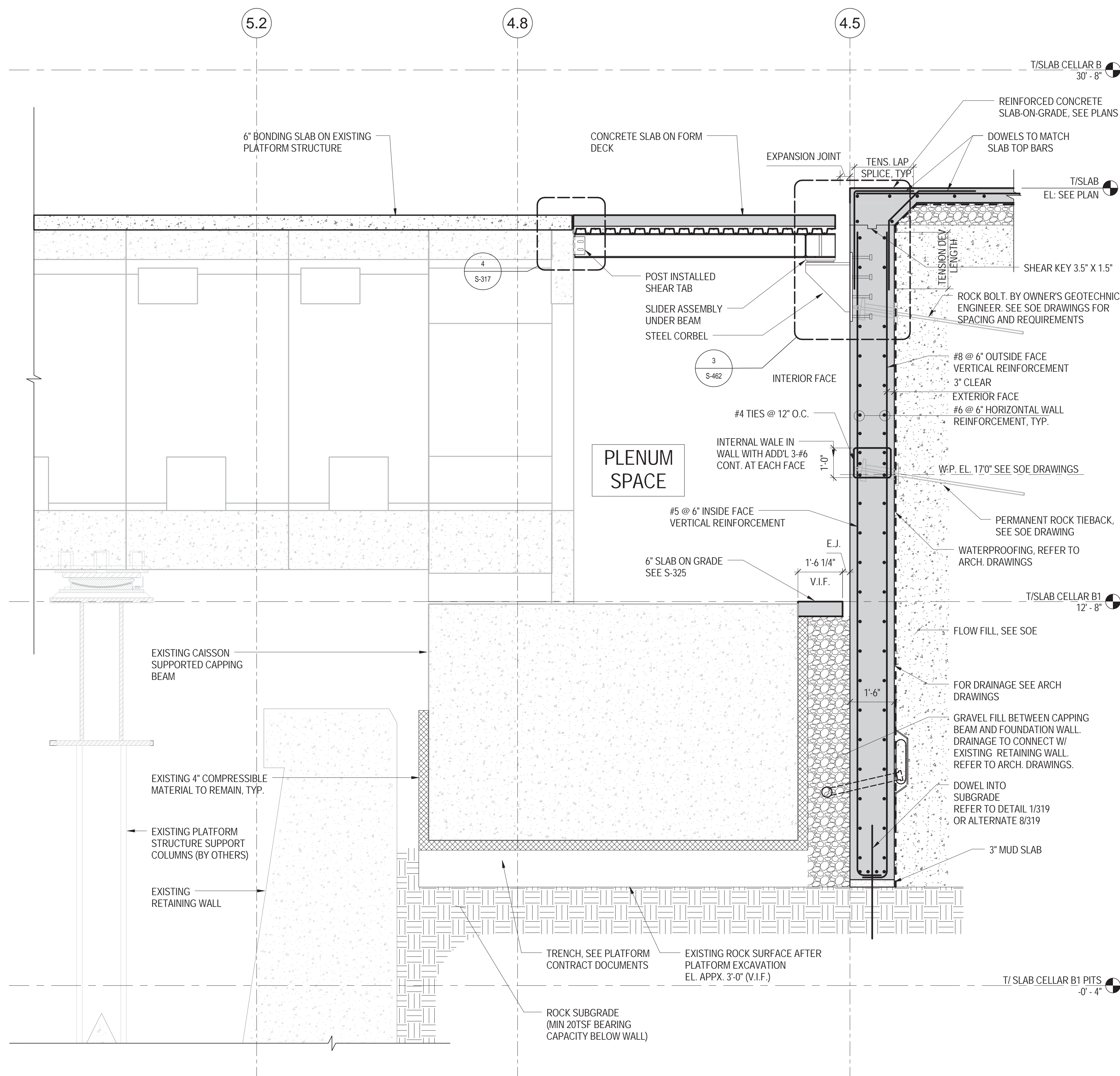
3 22 APR 2016 ISSUED FOR P&A
2 18 DEC 2015 ISSUED FOR PERMIT
1 20 JUN 2014 ISSUED FOR FOUNDATION PERMIT

No. Date Description

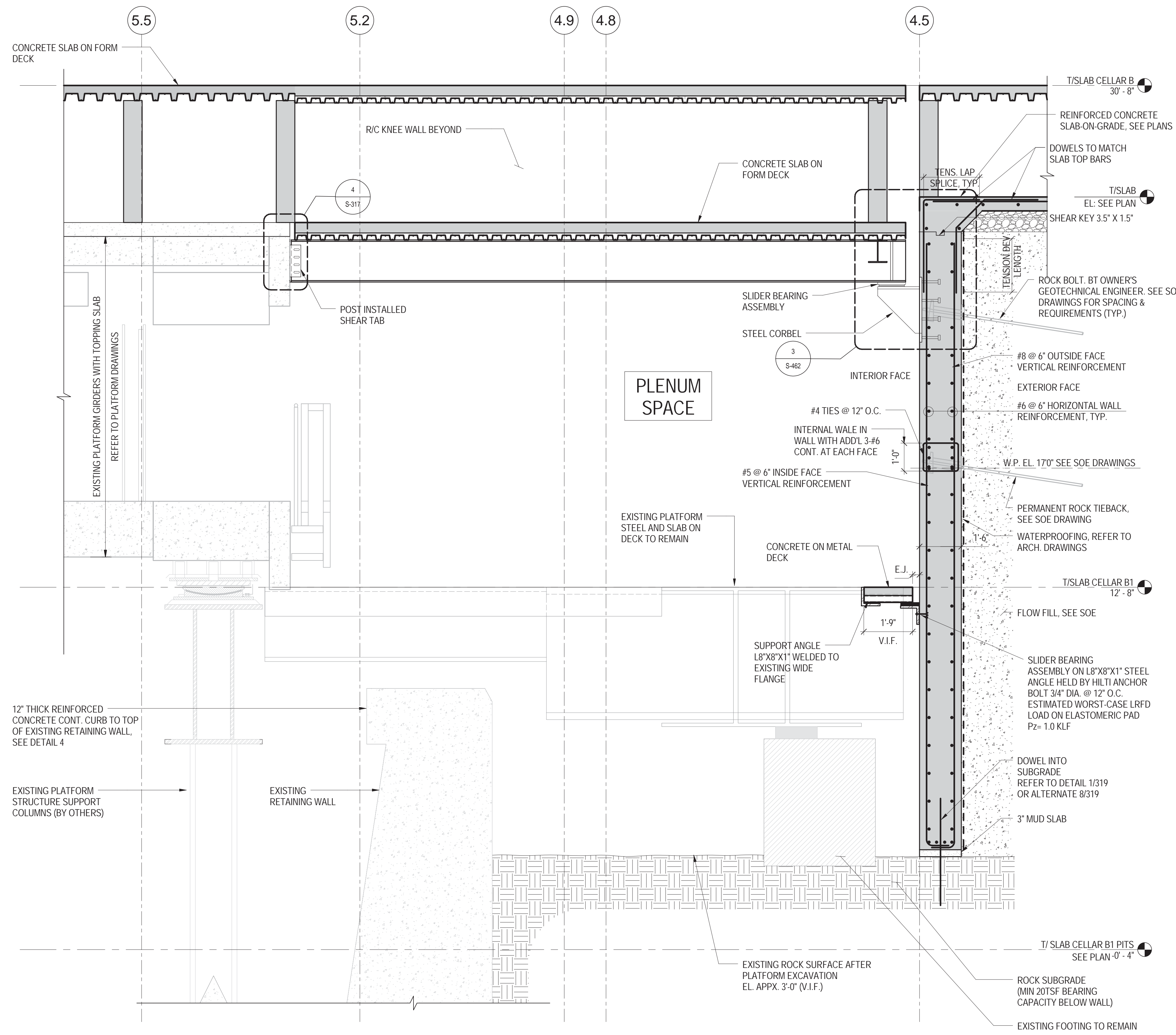
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**FOUNDATION
WALL SECTIONS
& DETAILS**

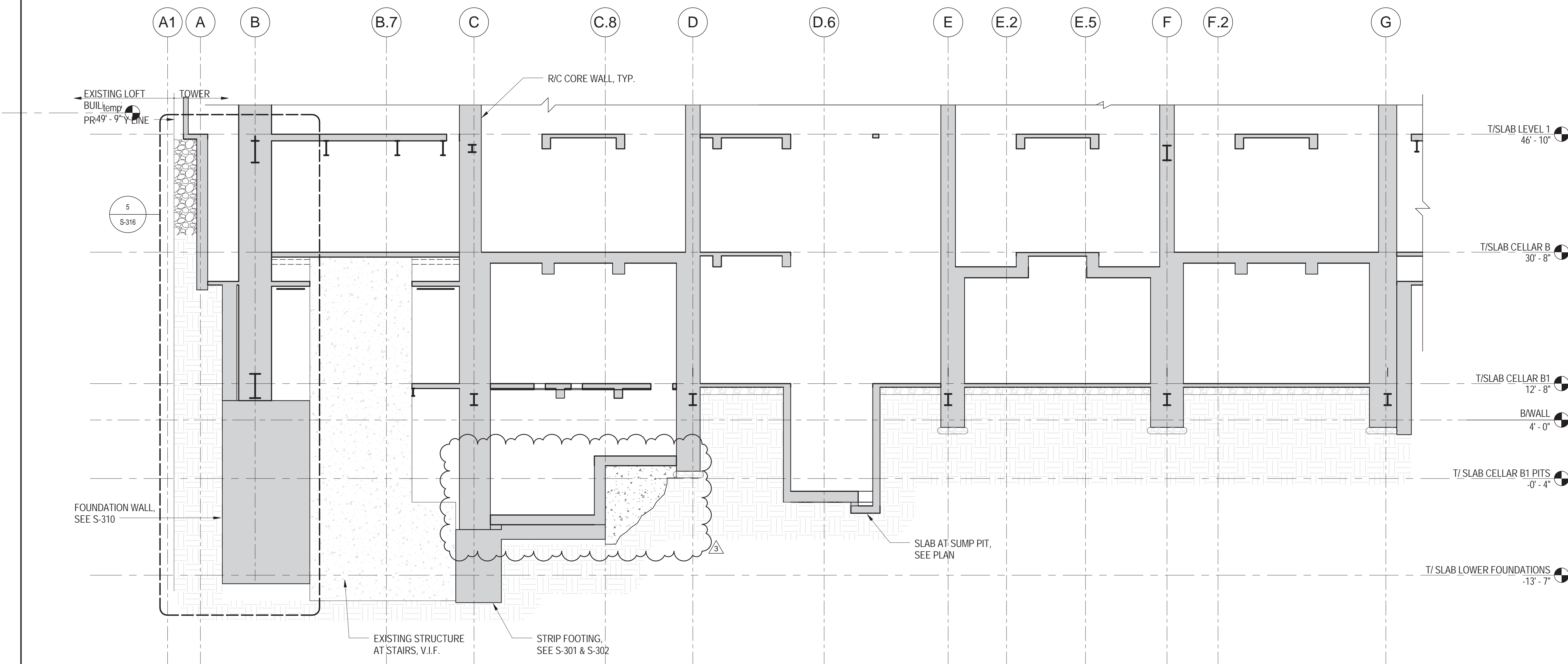
Damian Titus
Buildings
APPROVED
Under Directive 1 of 2015
Date: 02/03/2017
NYC Development Hub



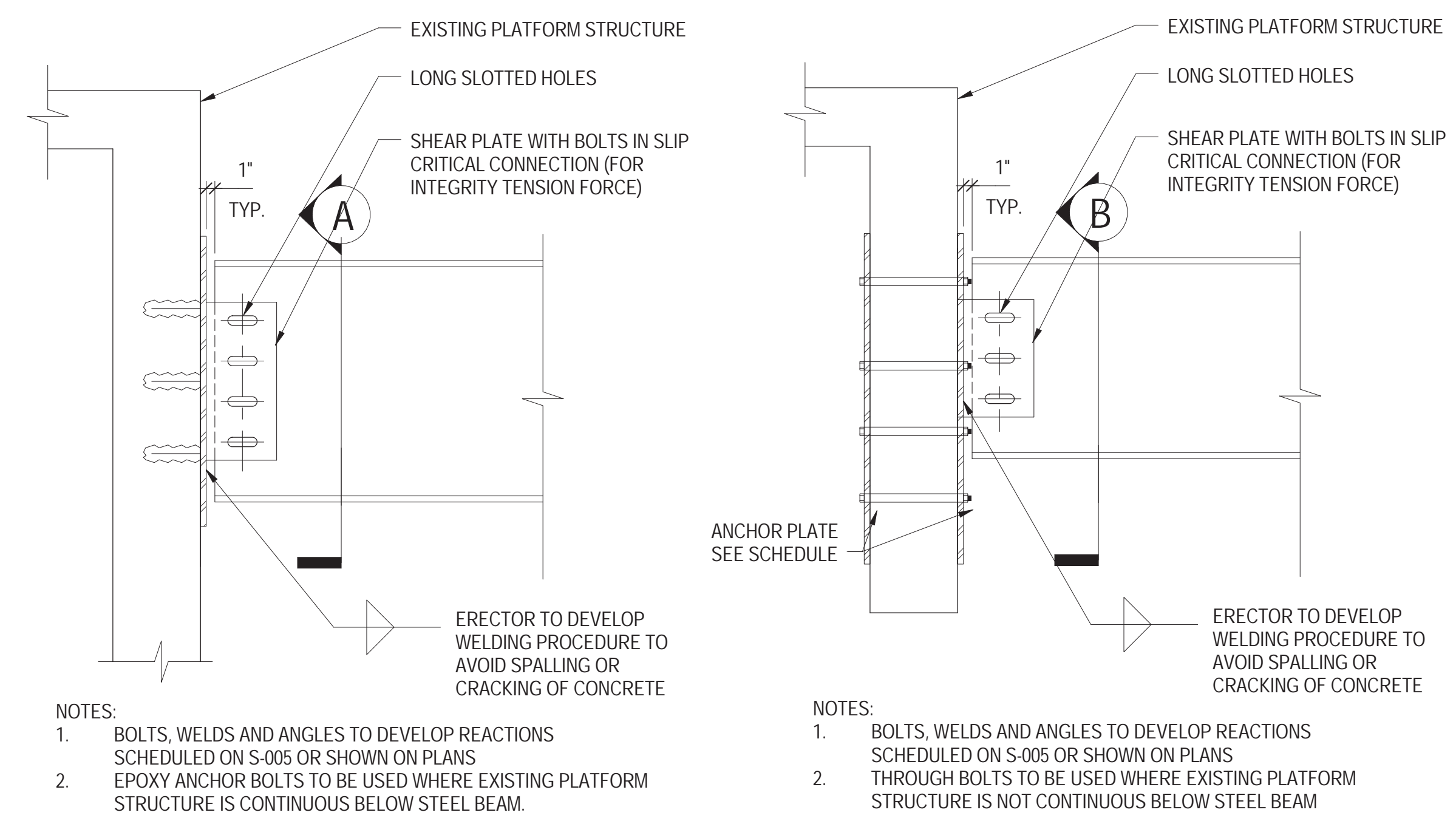
1 SECTION AT RETAINING WALL NORTH OF PLATFORM
1/2" = 1'-0"



2 SECTION AT RETAINING WALL NORTH OF PLATFORM ADJACENT TO TOWER CORE
1/2" = 1'-0"



3 SECTION AT WEB WALLS ALONG GL 4
1/8" = 1'-0"



SECTION A

ANCHOR PLATE SCHEDULE

MAXIMUM BEAM SIZE	PLATE THICKNESS (IN)	ANCHOR DIAMETER (IN)	ANCHORS (ROW X COL)	EDGE DIST. e (IN)	HORIZ. SPACING Sx (IN)	VERT. SPACING Sy (IN)
W8	5/8	3/4	2 X 2	2	4	4
W10	5/8	1	2 X 2	3	12	12
W18	5/8	1	3 X 4	3	6	8

PLATES: ASTM A572 GR 50, U.N.C.

SECTION B

ANCHOR PLATE SCHEDULE-ALTERNATE DETAIL

MAXIMUM BEAM SIZE	PLATE THICKNESS (IN)	ANCHORS (ROW X COL)	HORIZ. SPACING Sx (IN)	VERT. SPACING Sy (IN)
W10	5/8	2 X 2	8	8
W18	5/8	4 X 2	8	8

PLATES: ASTM A572 GR 50, U.N.C.

4 POST INSTALLED SHEAR PLATE DETAIL
NOT TO SCALE

**MANHATTAN WEST:
NORTH TOWER**
401 Ninth Avenue, New York, NY 10001
Client

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

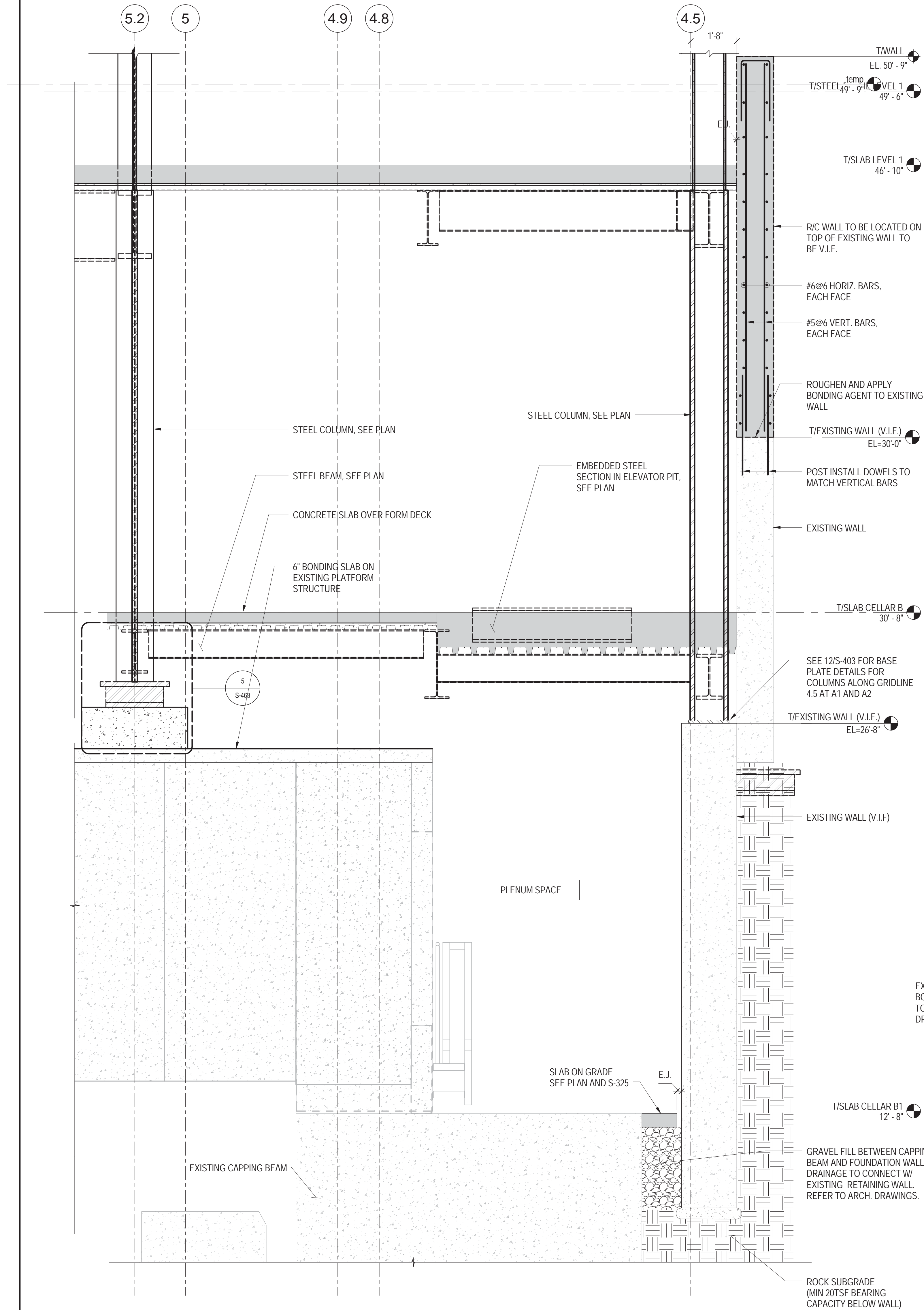
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Seal & Signature:

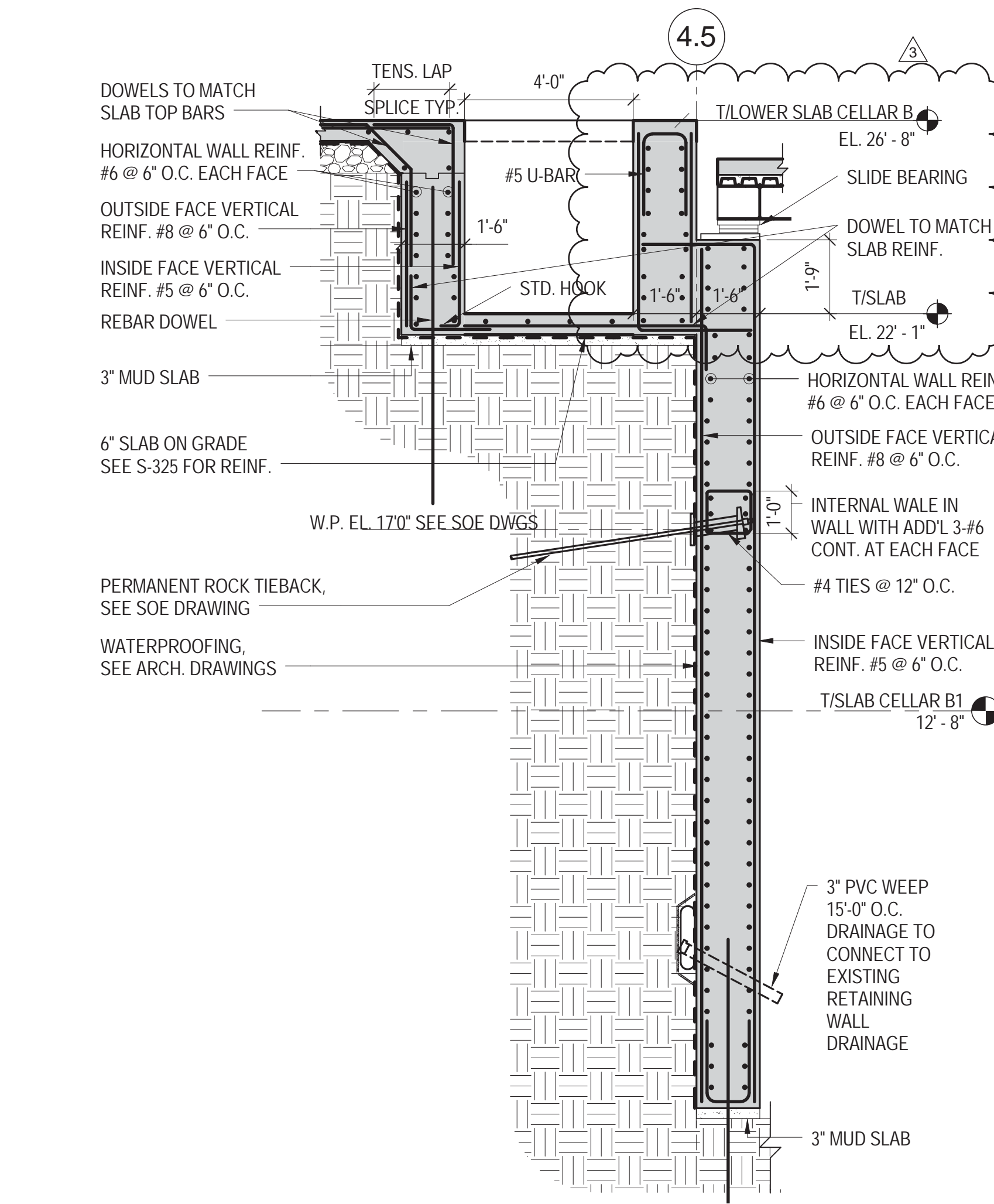
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Date: 22 APR 2016
Scale: As Indicated
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S-317.02
Sheet No.:
S-317
Page No.:

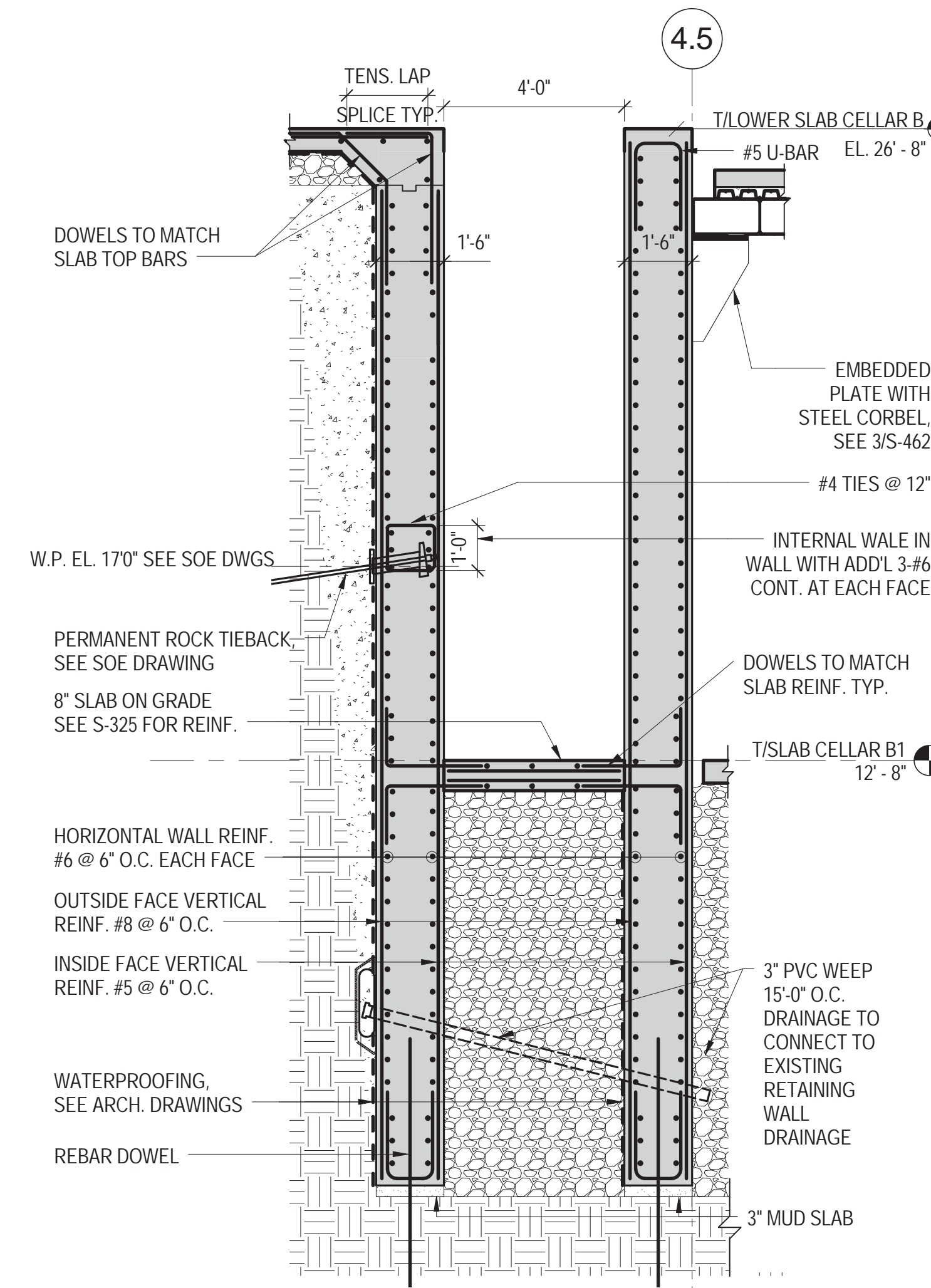
FOUNDATION WALL SECTIONS & DETAILS



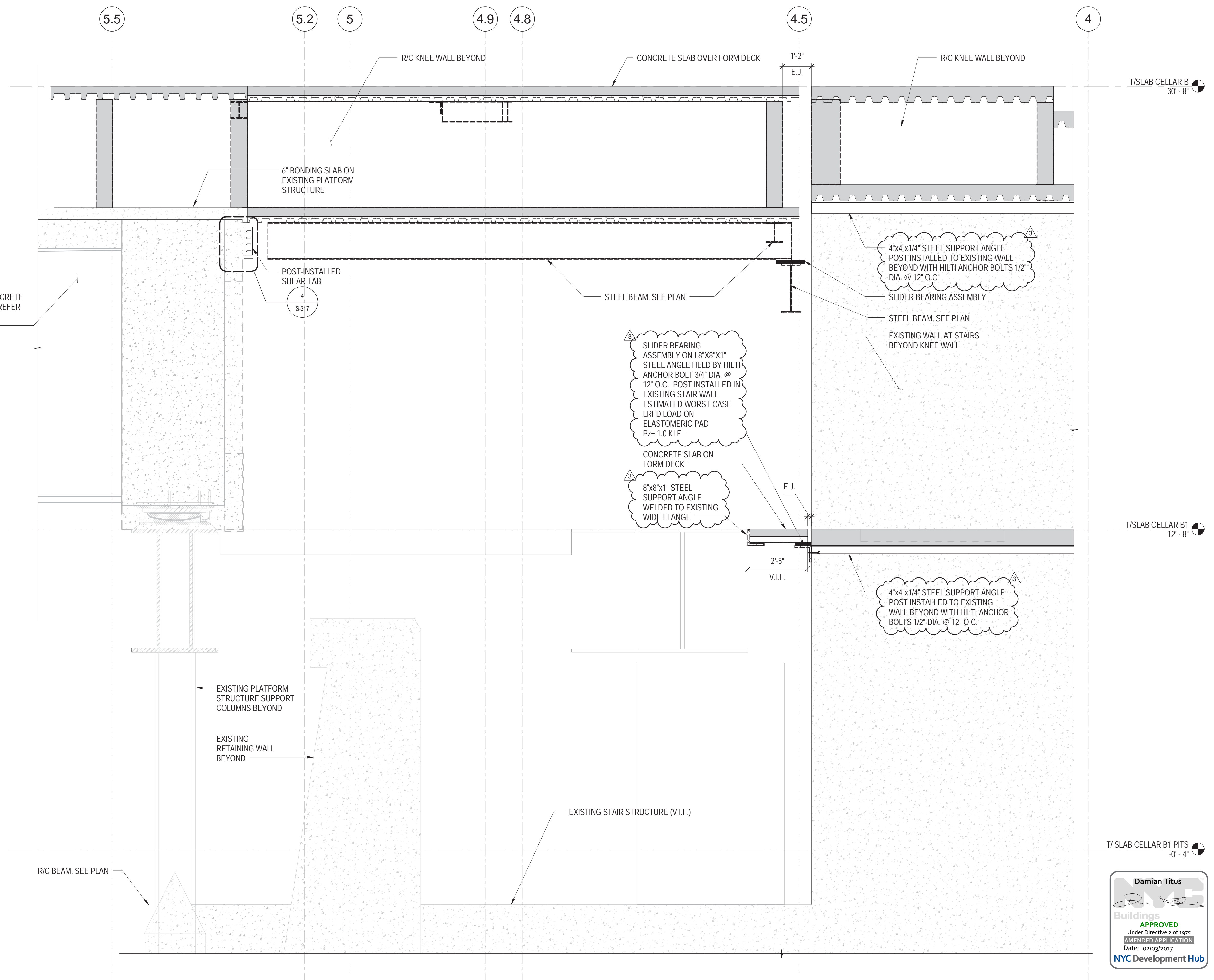
1 WALL SECTION AT PLENUM LOOKING WEST
1/2" = 1'-0"



3 PLENUM ACCESS STAIR DETAIL
3/8" = 1'-0"




4 PLENUM ACCESS STAIR DETAIL
3/8" = 1'-0"



2 FOUNDATION SECTION AT EXISTING WALL NEAR AMTRAK STAIRS ALONG GL B LOOKING WEST
NOT TO SCALE

A RETAINING WALL WEST OF TOWER



**MANHATTAN WEST:
NORTH TOWER**
401 Ninth Avenue, New York, NY 10001
Client

Brookfield
250 Vesey Street, 15th Floor, New York, NY 10021
Architecture/Structural Engineering

SOM
Skidmore, Owings & Merrill LLP
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Philip Habb & Associates
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Acoustical Consultant

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

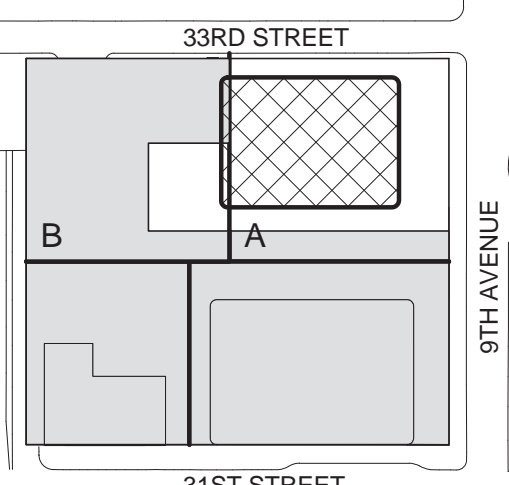
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006
Code Consultant

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

Key Plan:



Seal & Signature:



Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-318

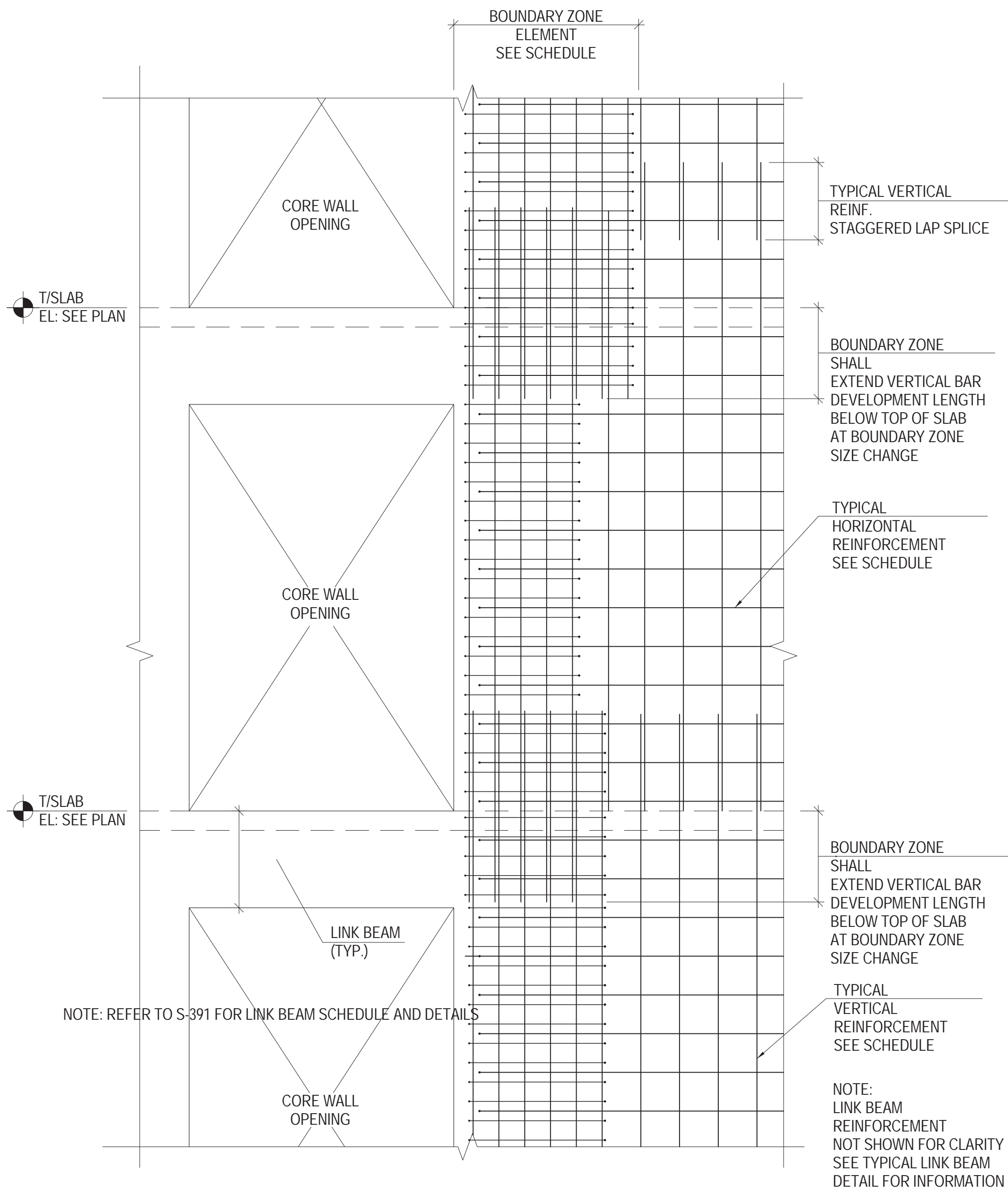
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S-318
Page No.:

**FOUNDATION
WALL SECTIONS
& DETAILS**

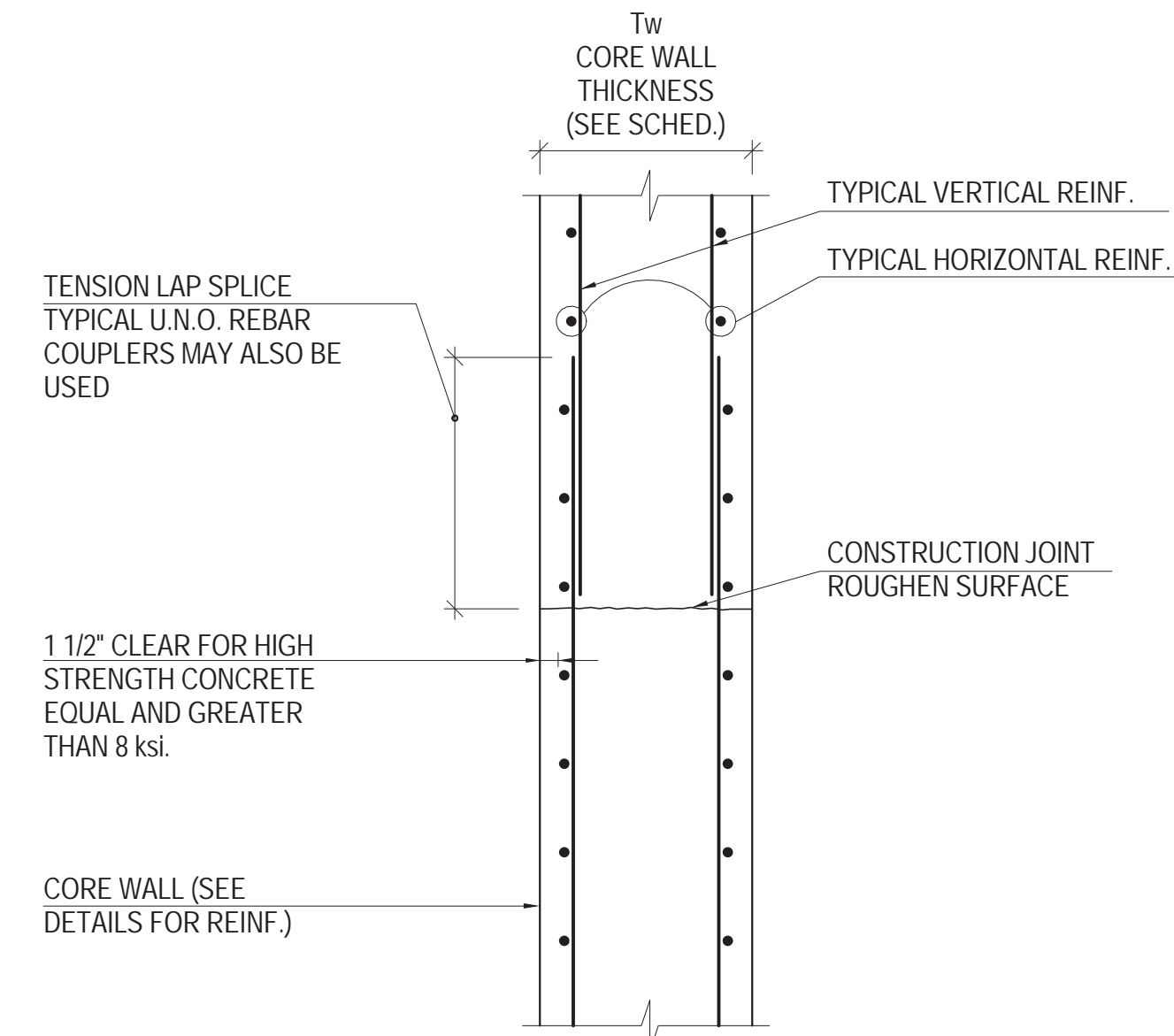
Damian Titus
Buildings
APPROVED
Under Directive 1 of § 205
AMENDED APPLICATION
Date: 02/03/2017
NYC Development Hub

REINFORCED CONCRETE CORE WALL SCHEDULE FOR NORTH TOWER																							CONCRETE: AS NOTED REINFORCEMENT: REFER TO S-004																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
WALL MARK LEVEL	CONCRETE (PSI)	WALL C	WALL D	WALL E	WALL F	WALL G	WALL 3C	WALL 3D	WALL 3D.5	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 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3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	WALL 3D	WALL 3E	WALL 3F	WALL 3G	WALL 3C	

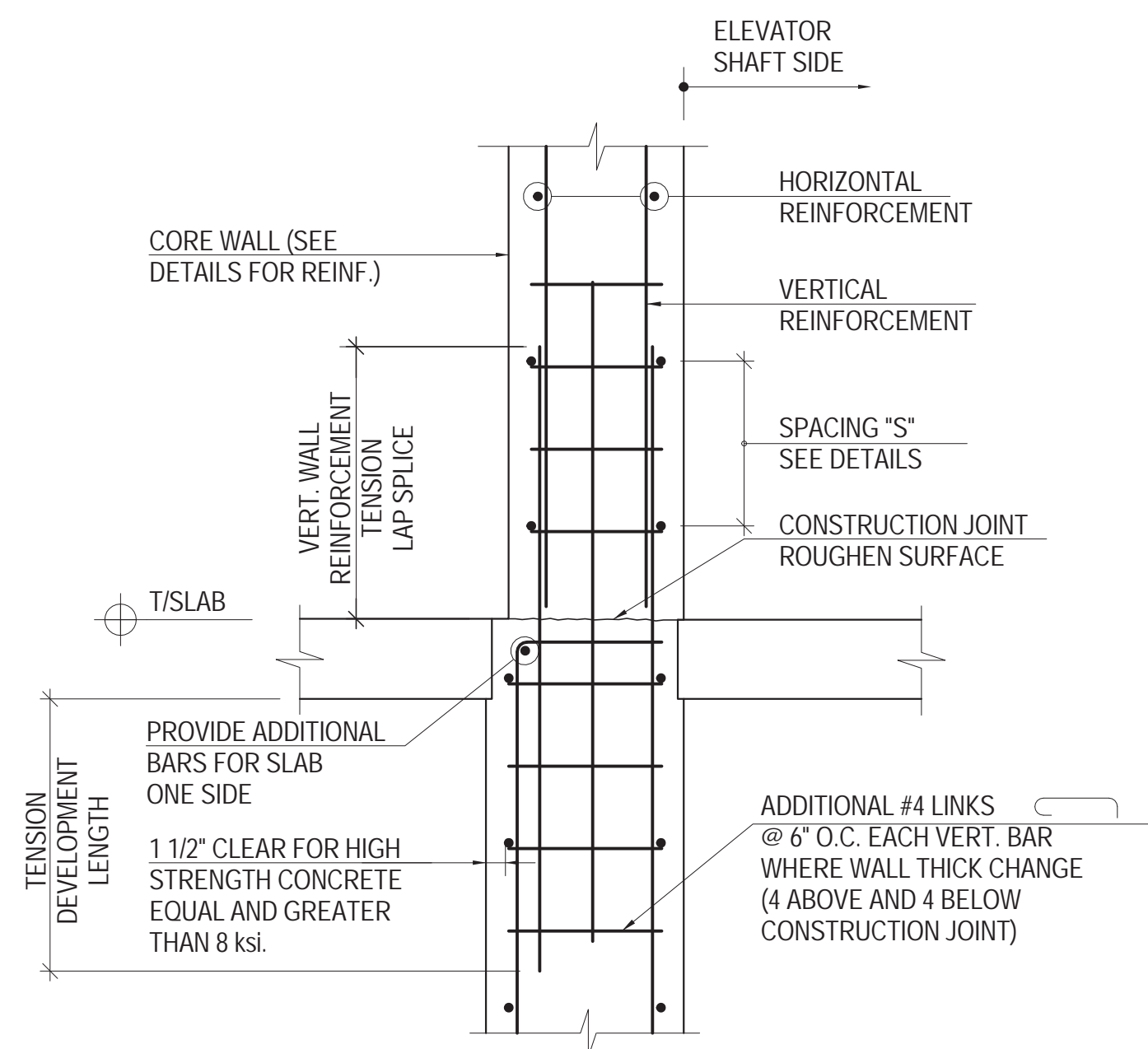
NOTE: FOR WALL LOCATION IN PLAN REFER TO SHEETS S-372 THROUGH S-380



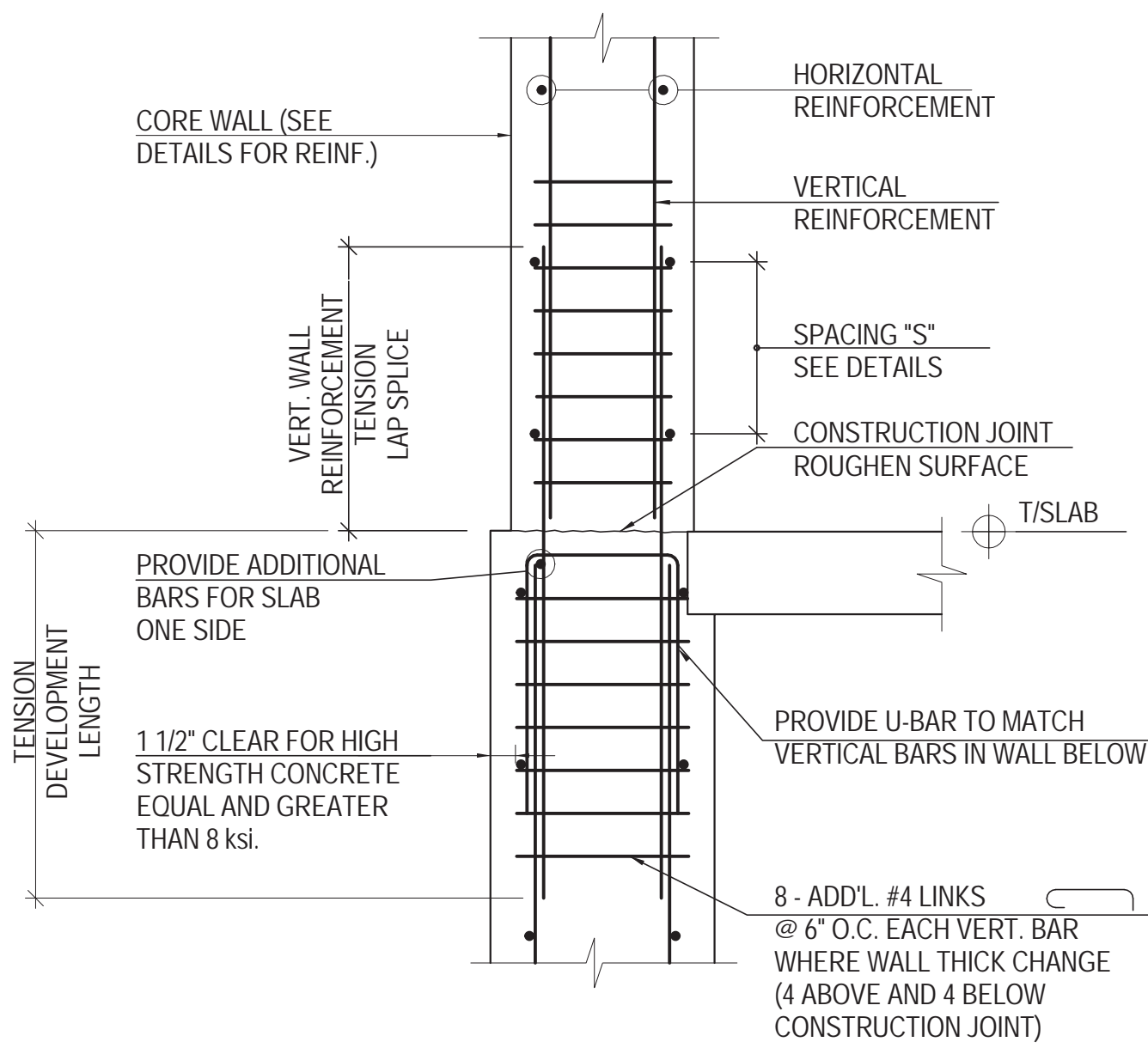
1 TYPICAL SHEAR WALL TIE REINFORCEMENT
1/2" = 1'-0"



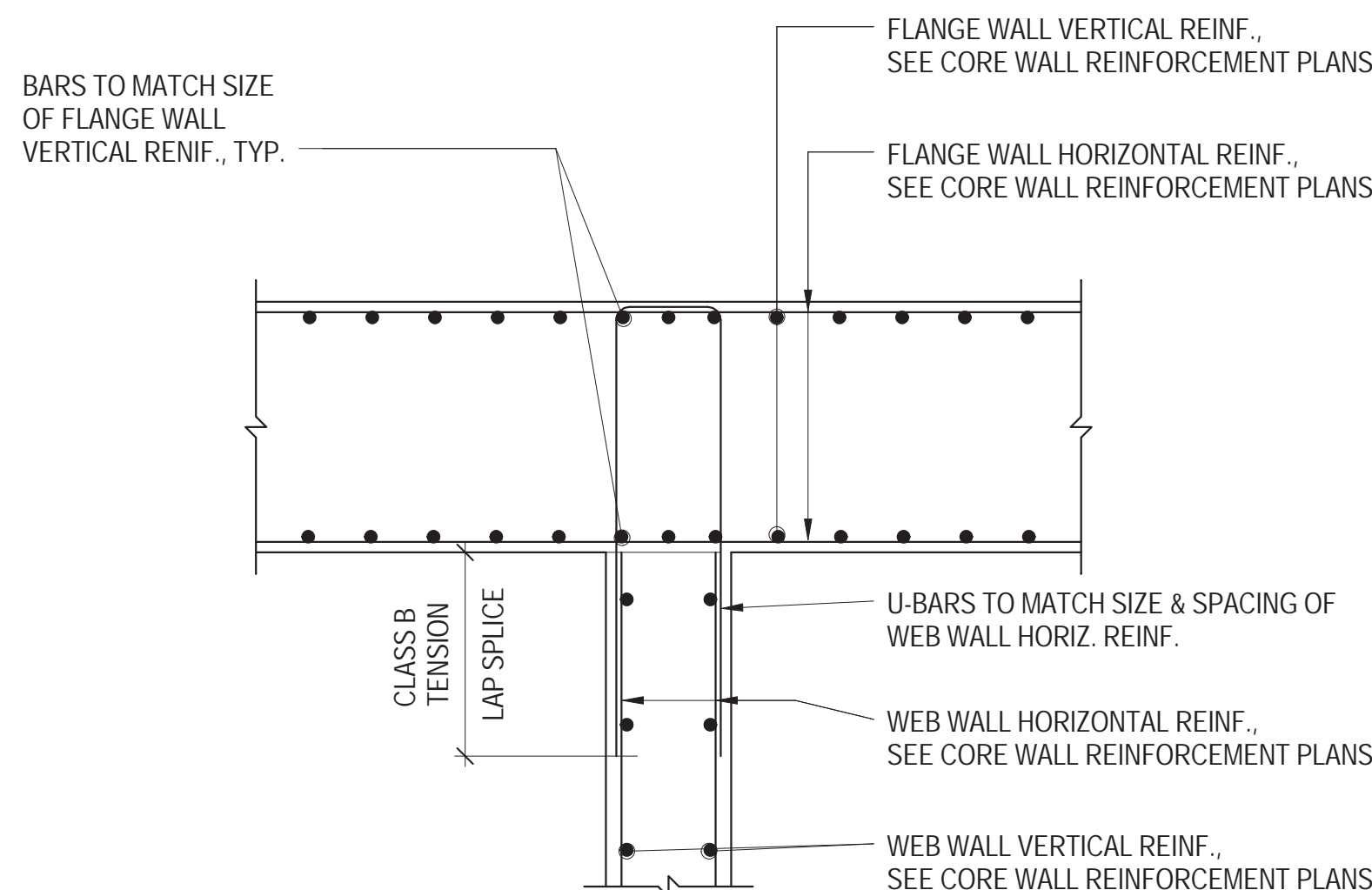
2 TYPICAL CORE WALL SPLICE
1" = 1'-0"



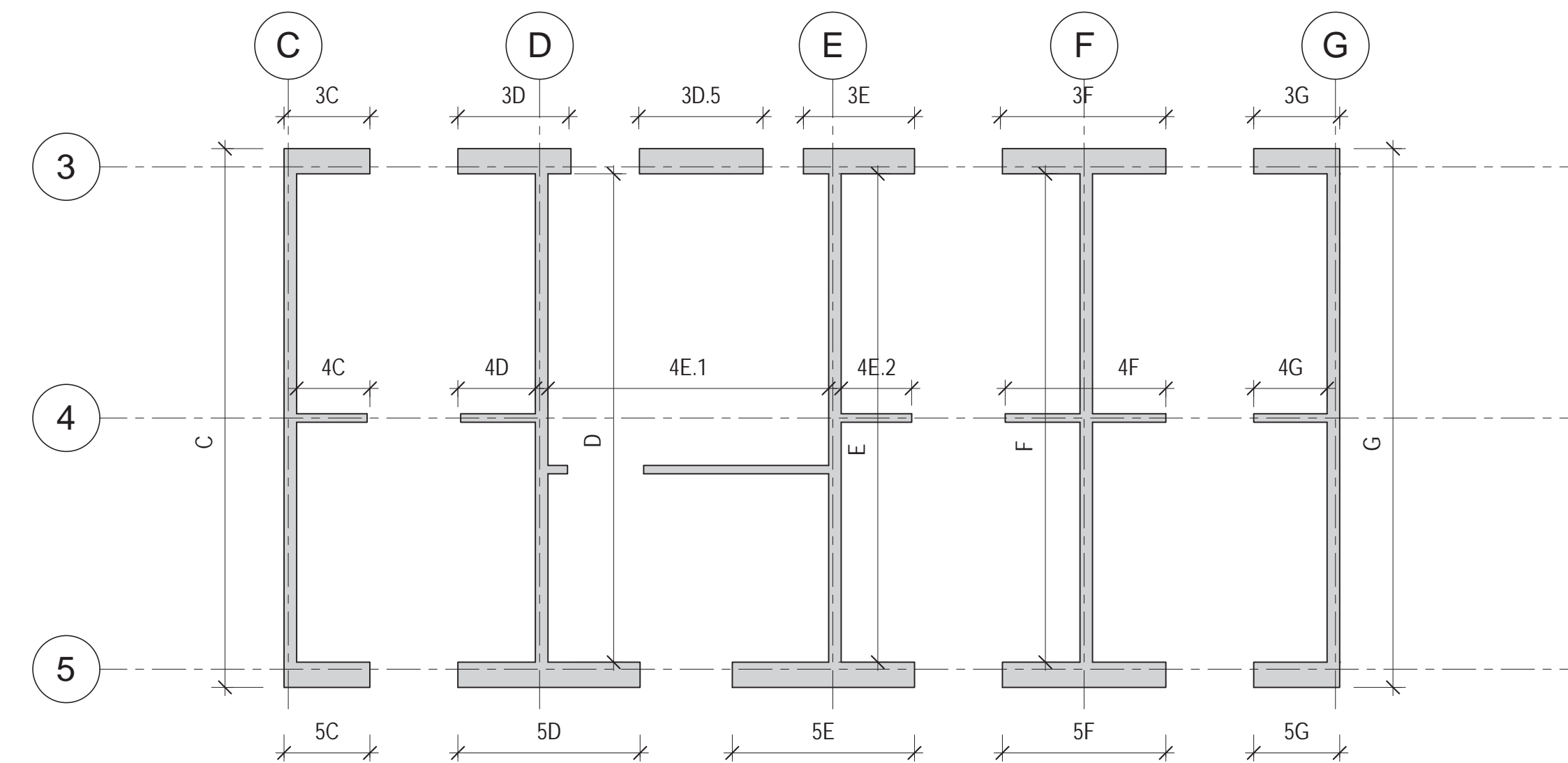
4 TYPICAL CORE WALL SPLICE WITH WALL THICKNESS
NOT TO SCALE



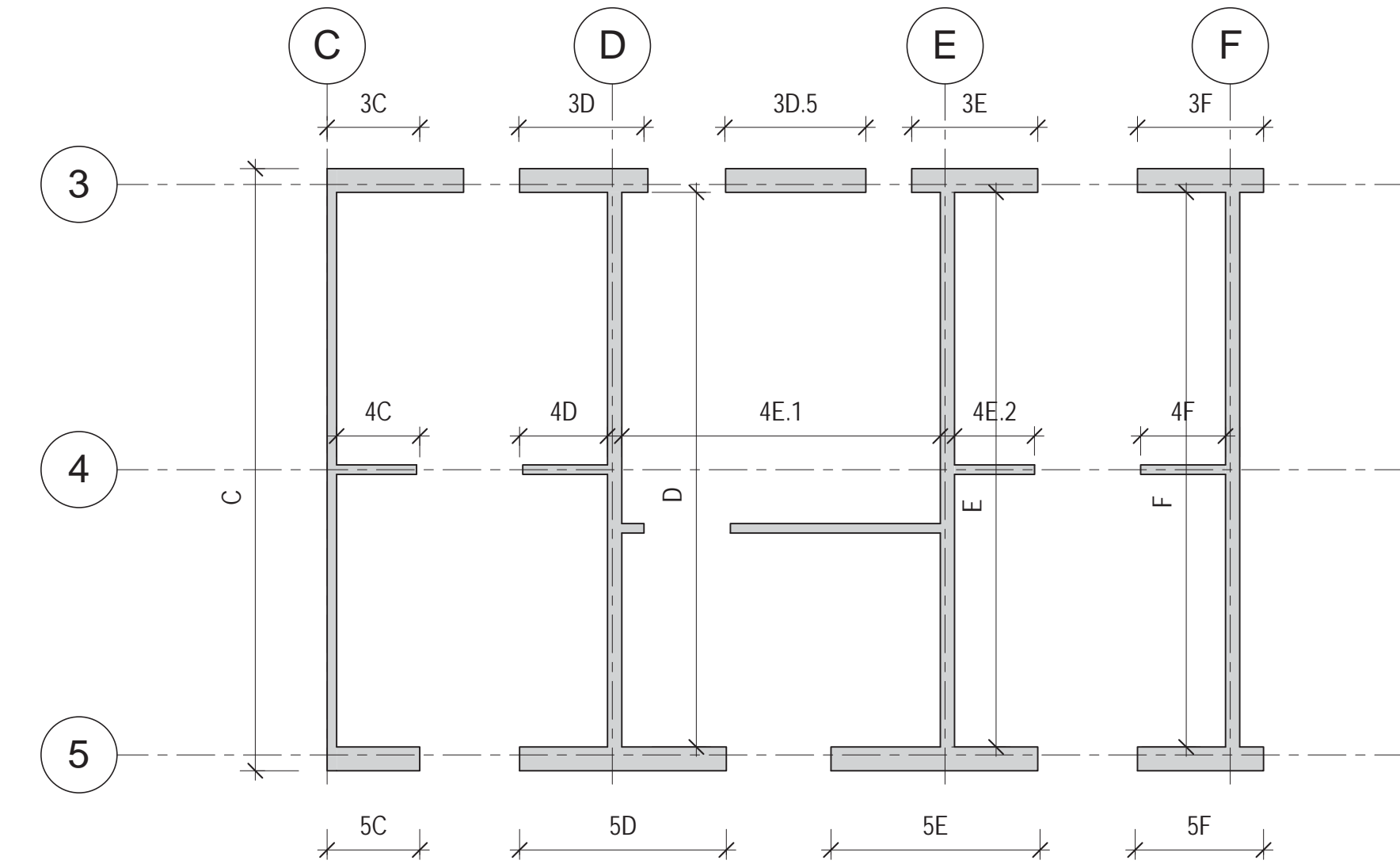
3 TYPICAL CORE WALL SPLICE WITH WALL THICKNESS CHANGE
NOT TO SCALE



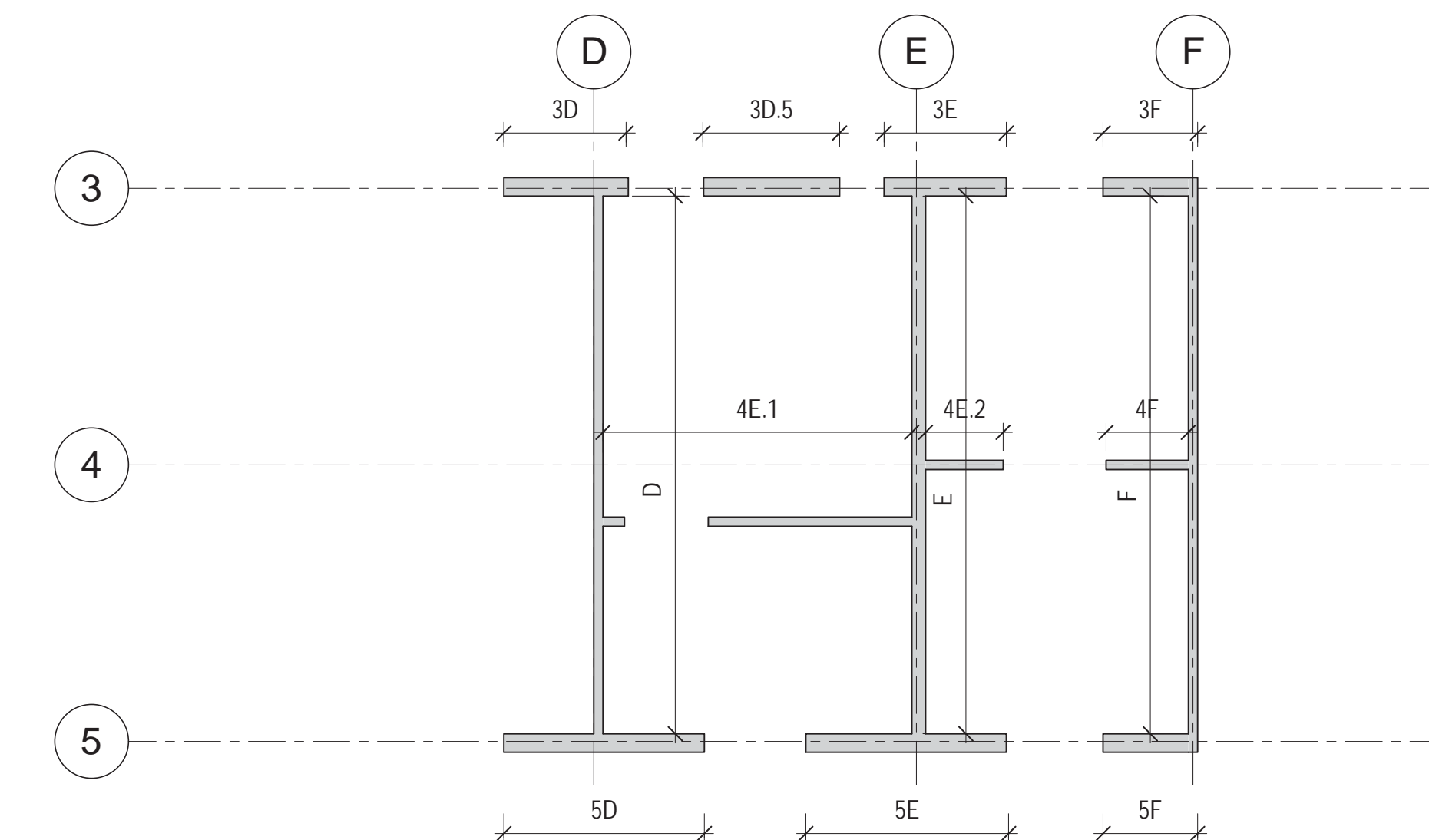
5 TYPICAL CORE FLANGE/WEB WALL INTERSECTION DETAIL
NOT TO SCALE



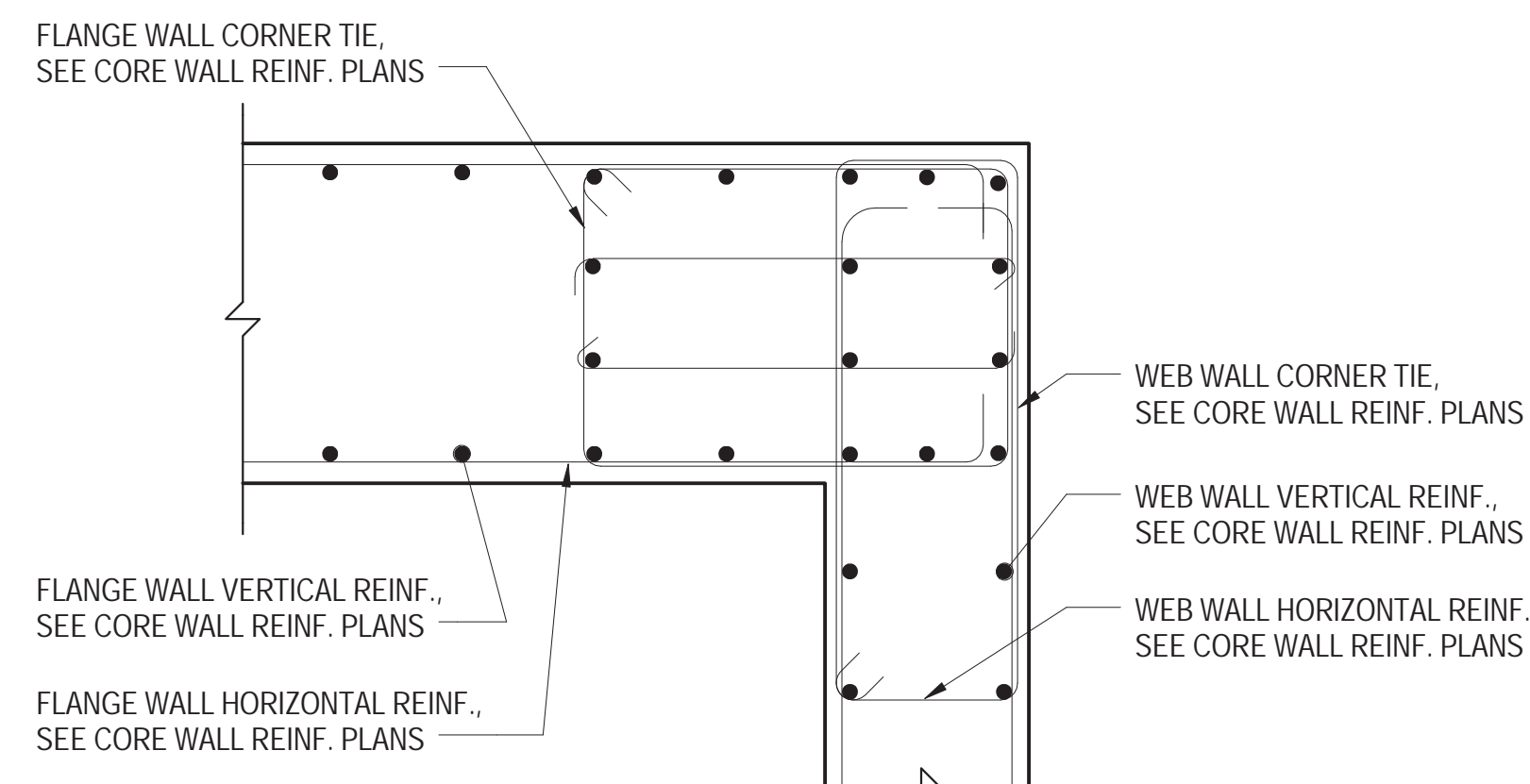
A KEY PLAN A - UP TO LEVEL 31
1/16" = 1'-0"



B KEY PLAN B - LEVEL 31 TO LEVEL 53
1/16" = 1'-0"



C KEY PLAN C - LEVEL 53 TO ROOF
1/16" = 1'-0"



6 TYP. CORE FLANGE/WEB WALL CORNER DETAIL
NOT TO SCALE

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Key Plan:

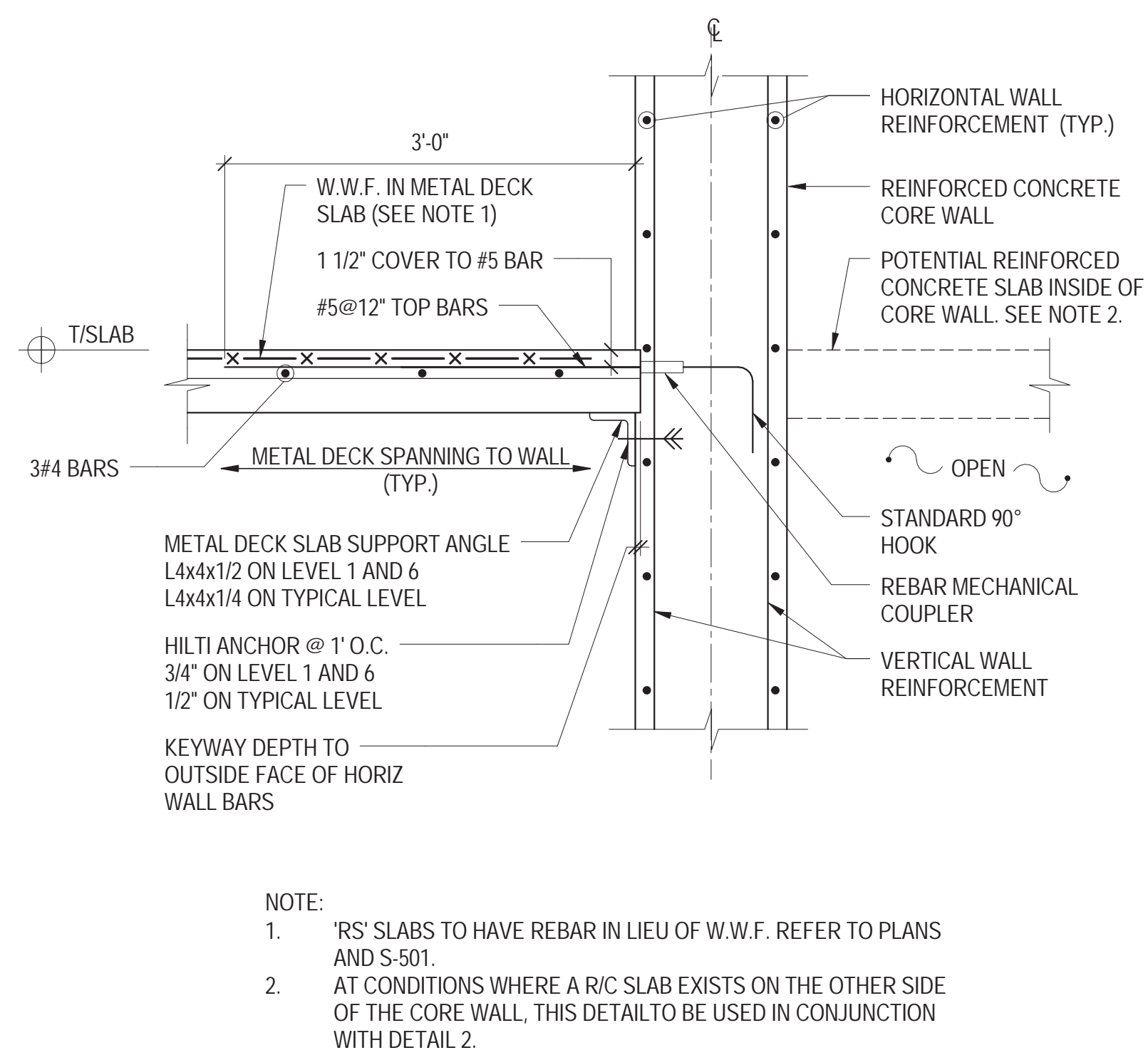
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2 - 22 APR 2016 ISSUED FOR P&A
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No. Date Description
Sheet Name:

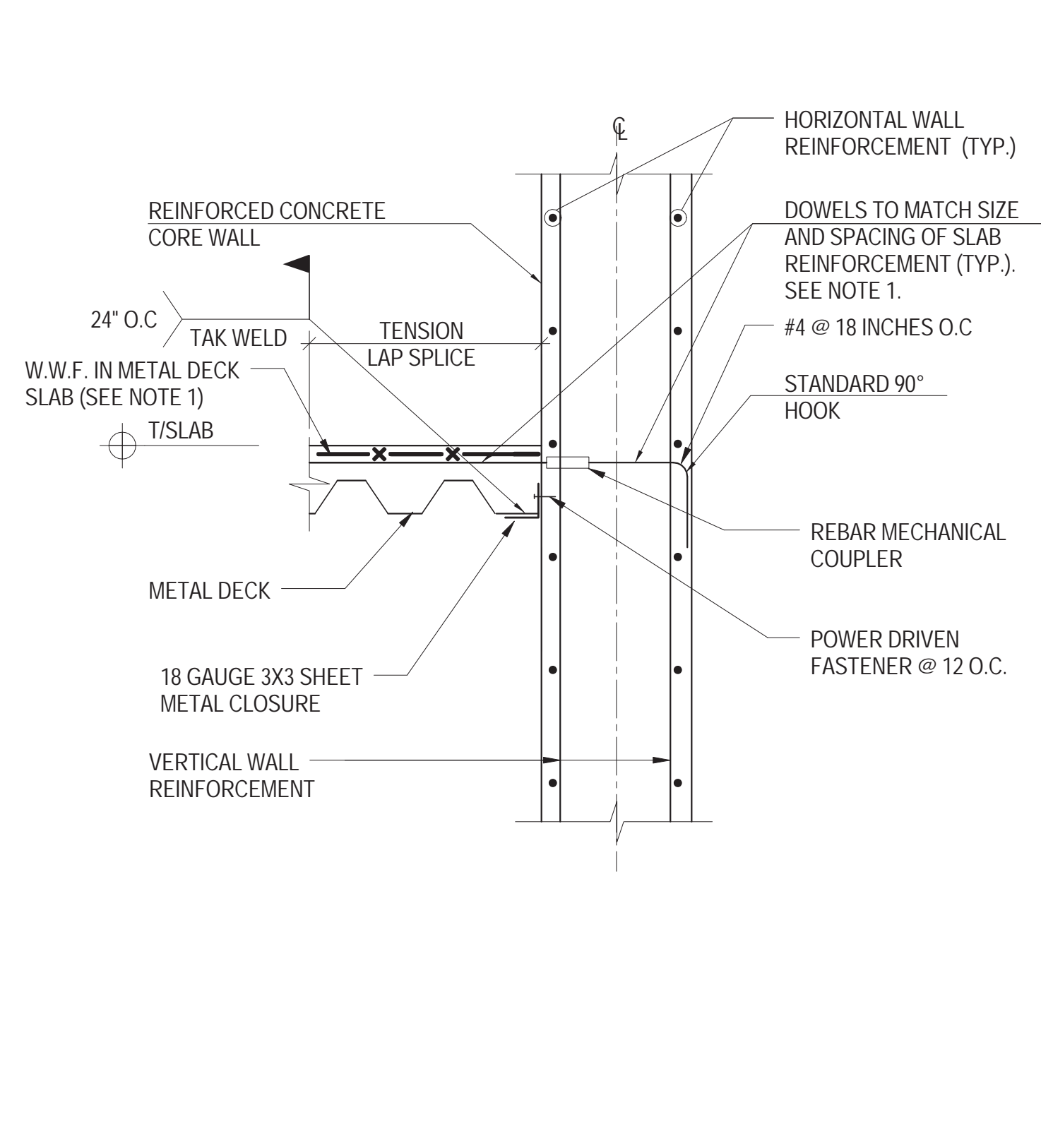
**REINFORCED
CONCRETE CORE
WALL SCHEDULE**

Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-331

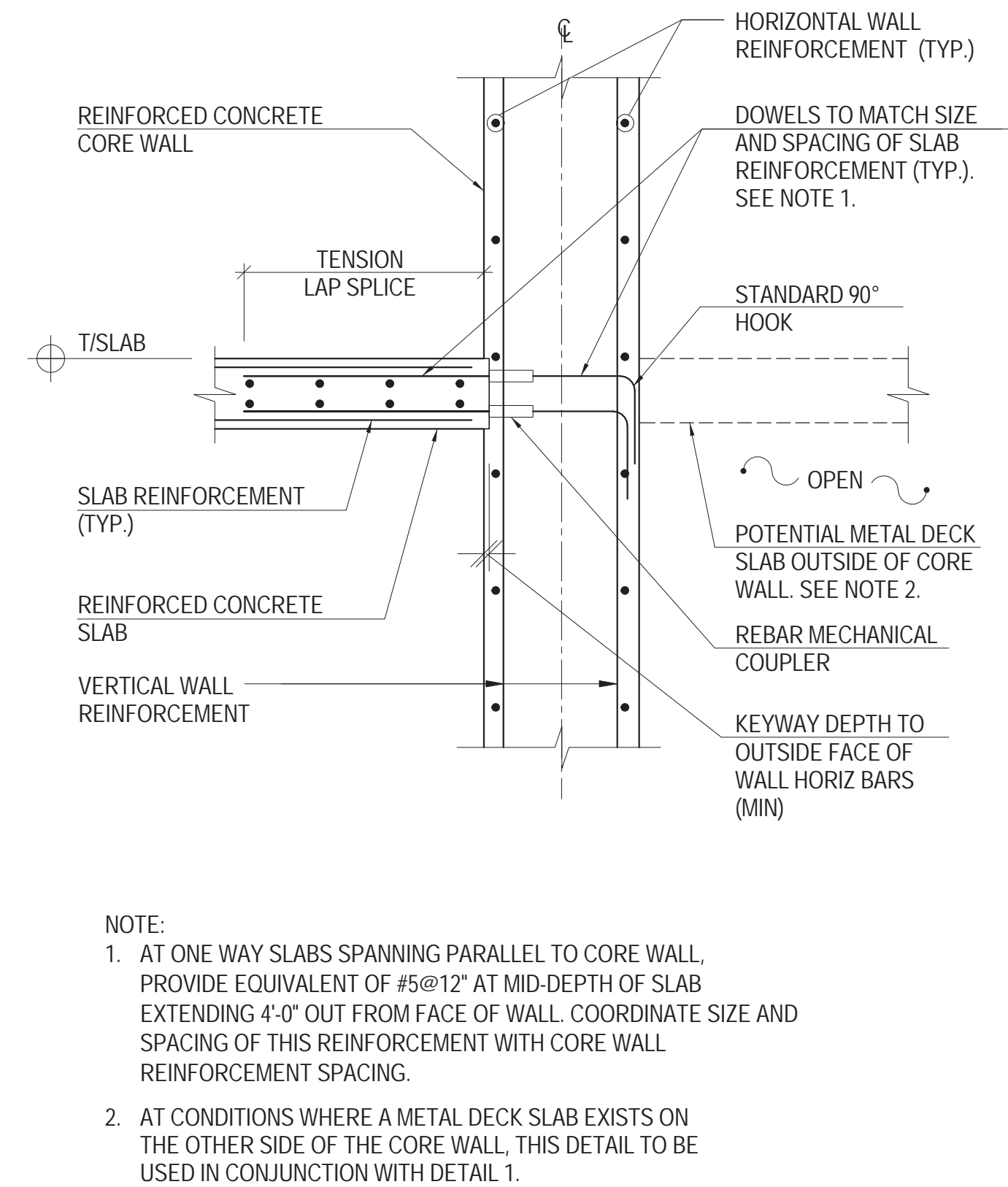
B-SCAN Sheet No.:
S-331.01
Sheet No.:
S-331
Page No.:



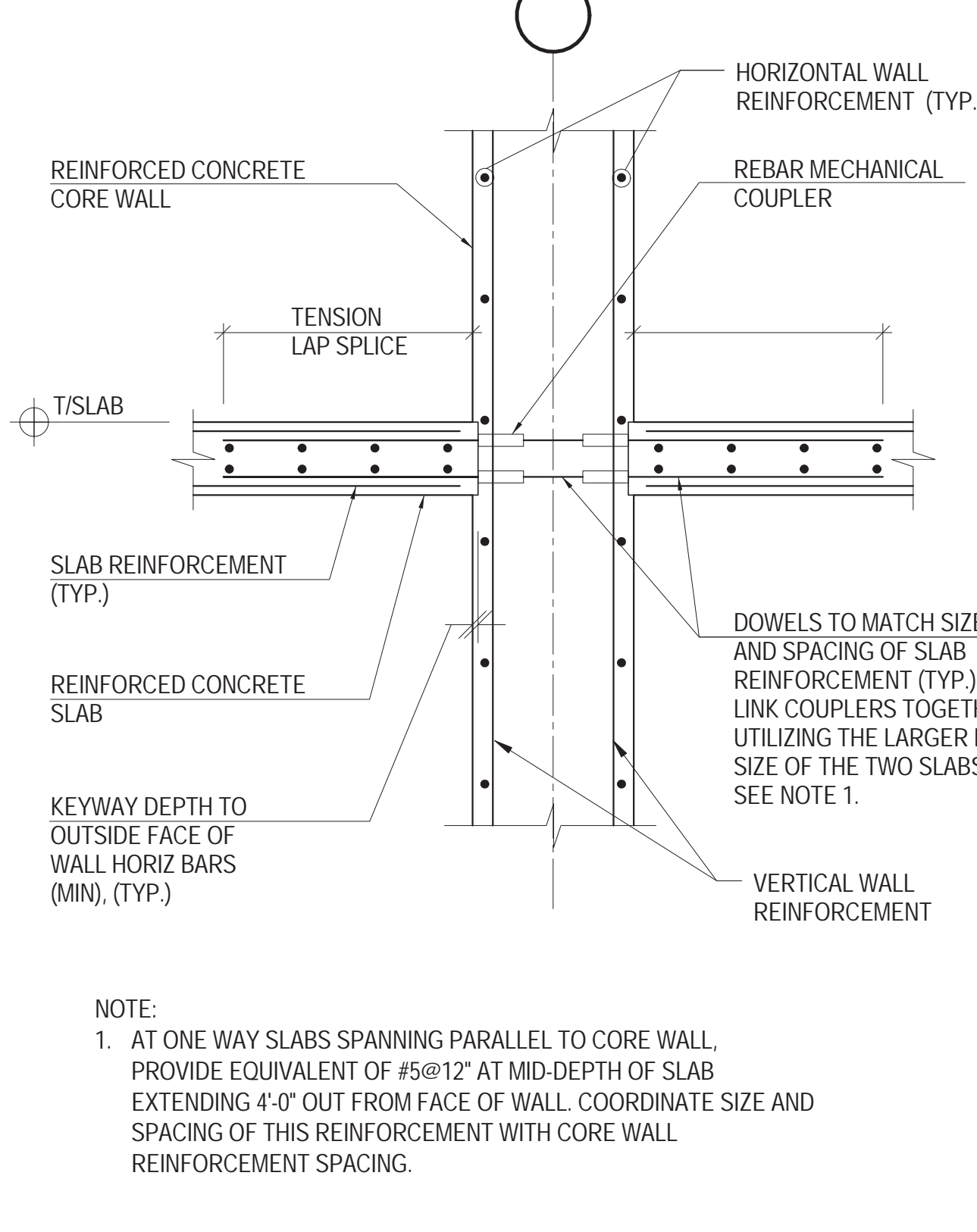
1A METAL DECK PERPENDICULAR TO WALL
NOT TO SCALE



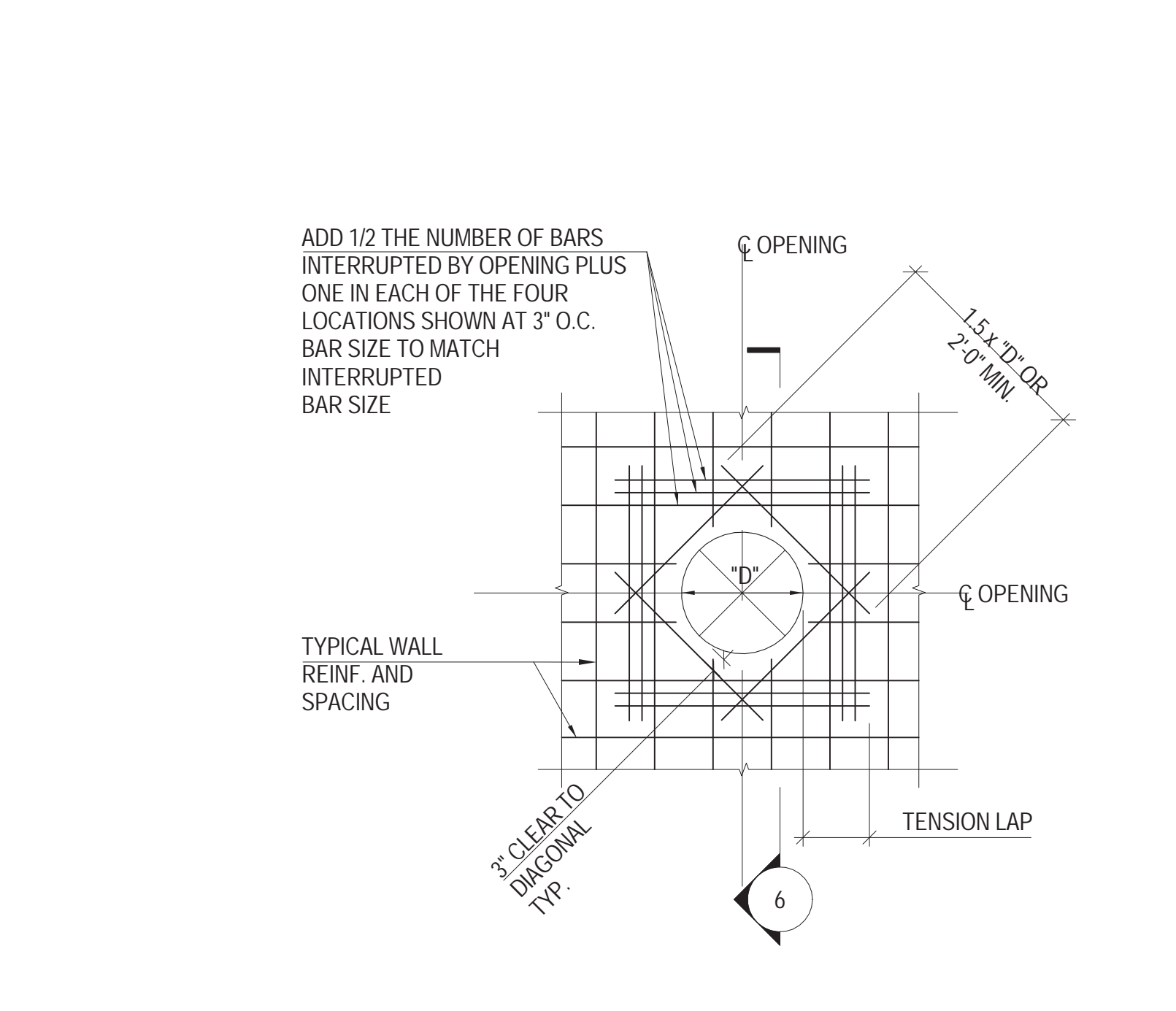
1B DECK PARALLEL TO WALL
1" = 1'-0"



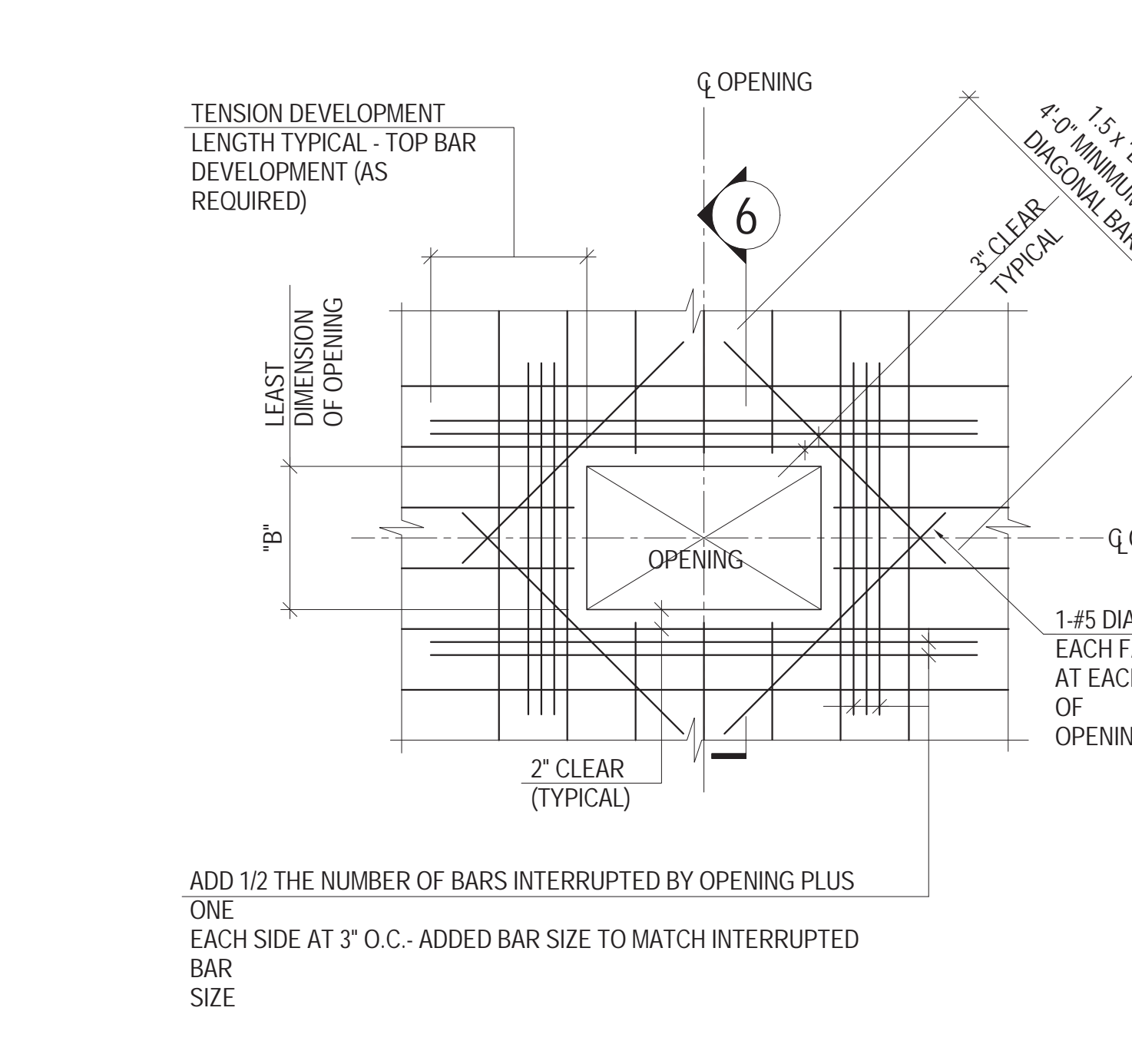
2 TYPICAL R/C SLAB CONNECTION DETAIL: ONE-SIDED
NOT TO SCALE



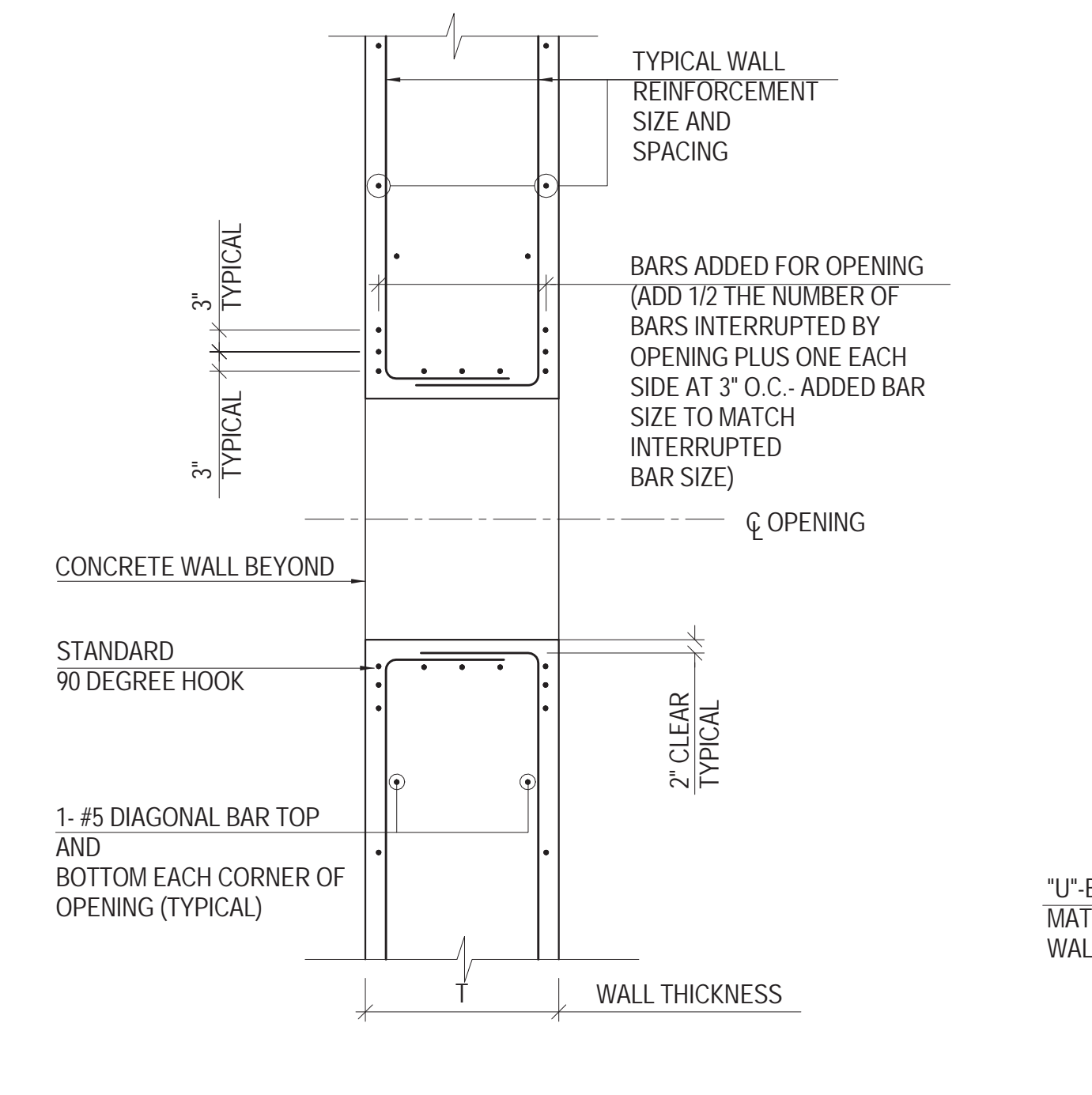
3 TYPICAL R/C SLAB CONNECTION DETAIL: TWO-SIDED
NOT TO SCALE



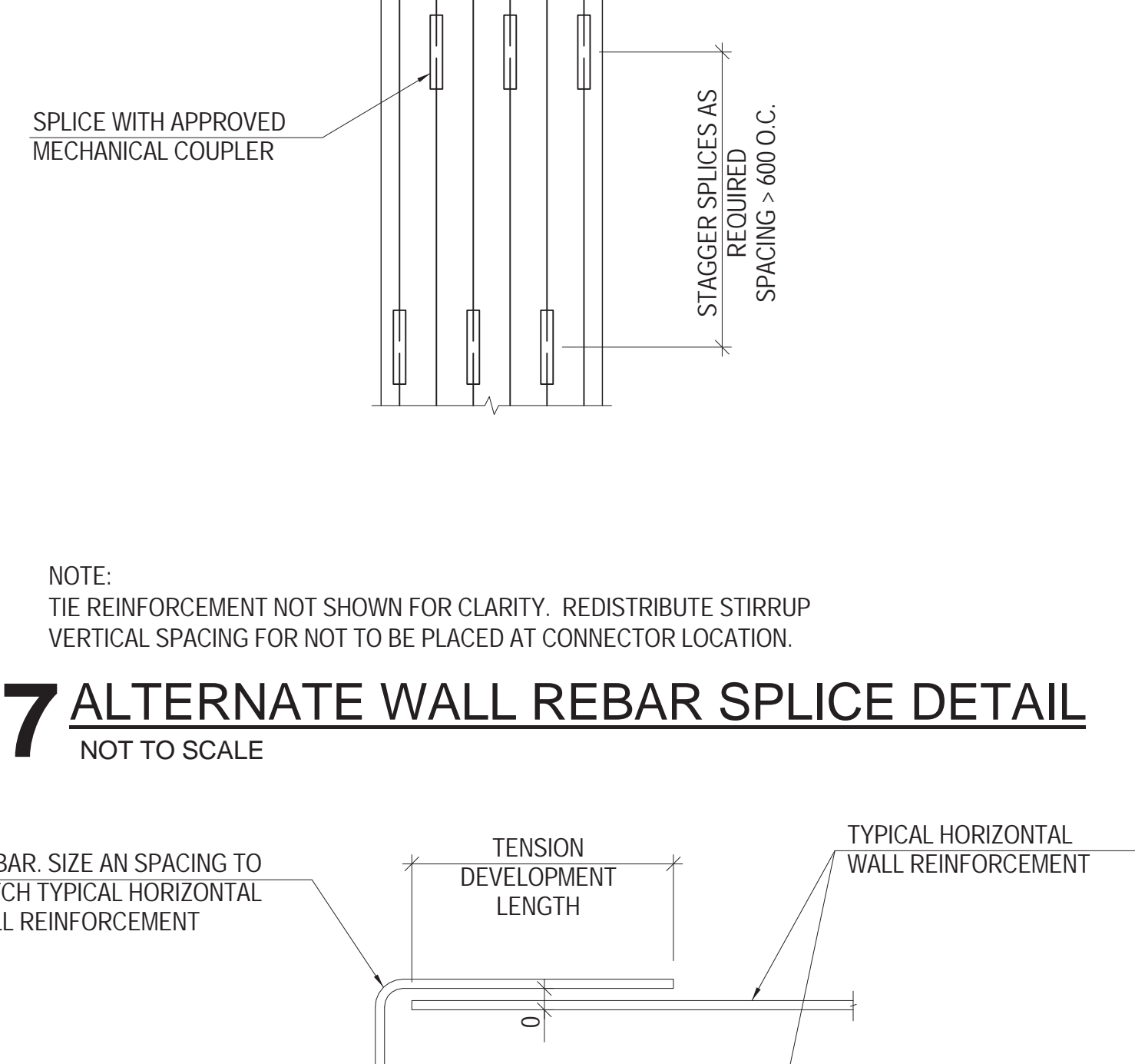
4 TYPICAL RECTANGULAR CORE WALL OPENING DETAIL
NOT TO SCALE



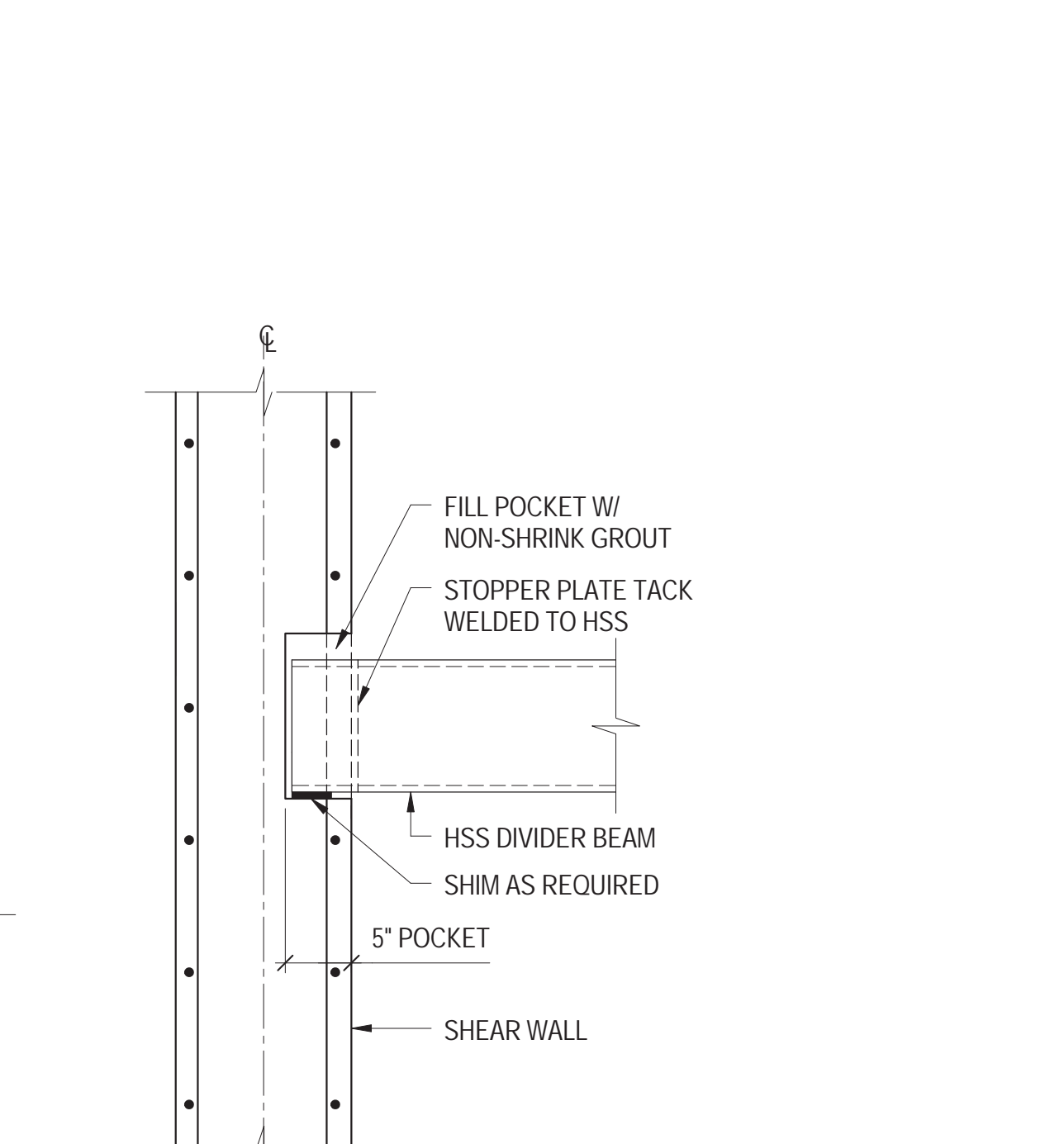
5 TYPICAL RECTANGULAR CORE WALL OPENING DETAIL
NOT TO SCALE



6 TYPICAL RECTANGULAR/CIRCULAR CORE WALL OPENING DETAIL
NOT TO SCALE

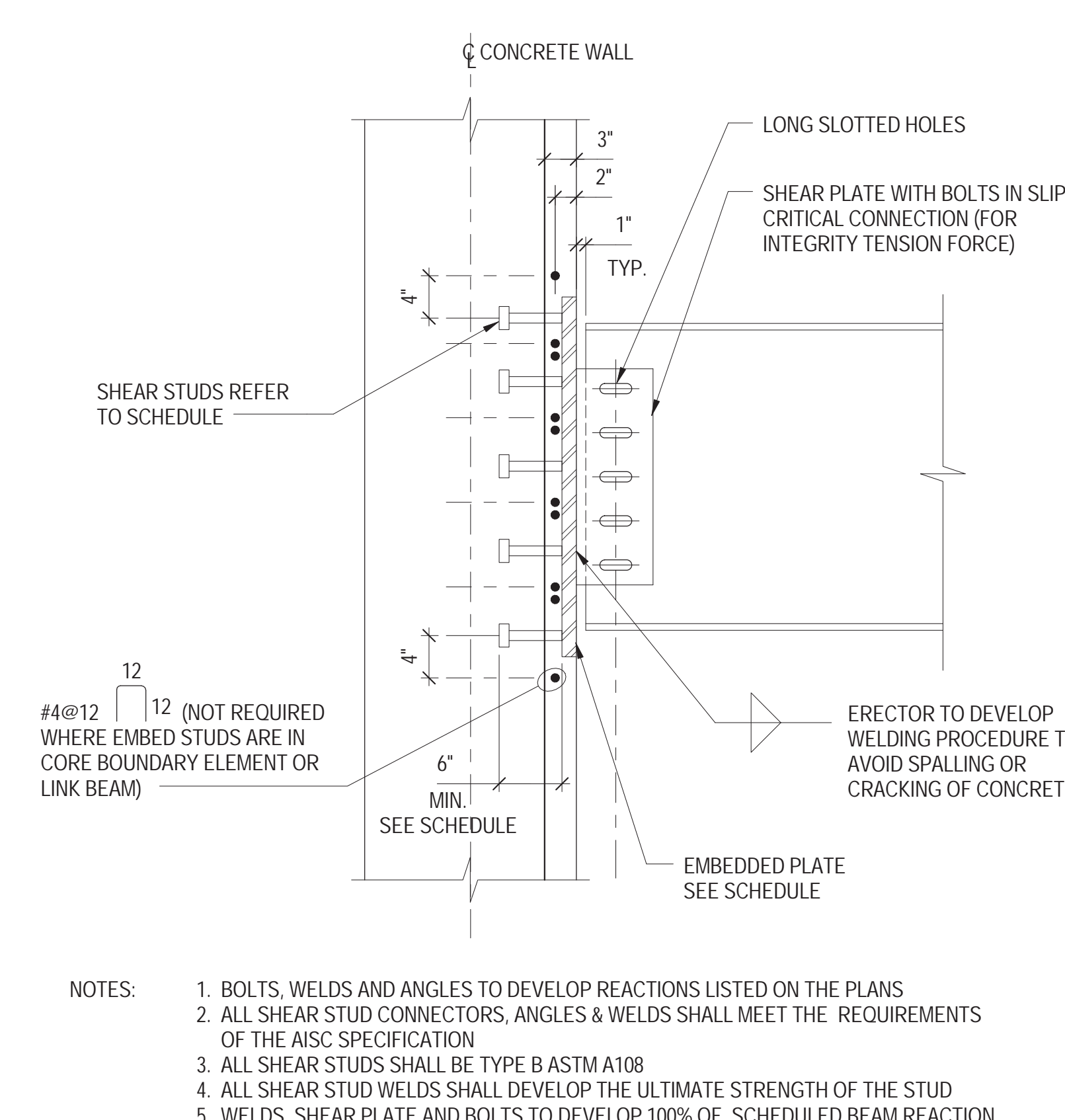


7 ALTERNATE WALL REBAR SPLICE DETAIL
NOT TO SCALE

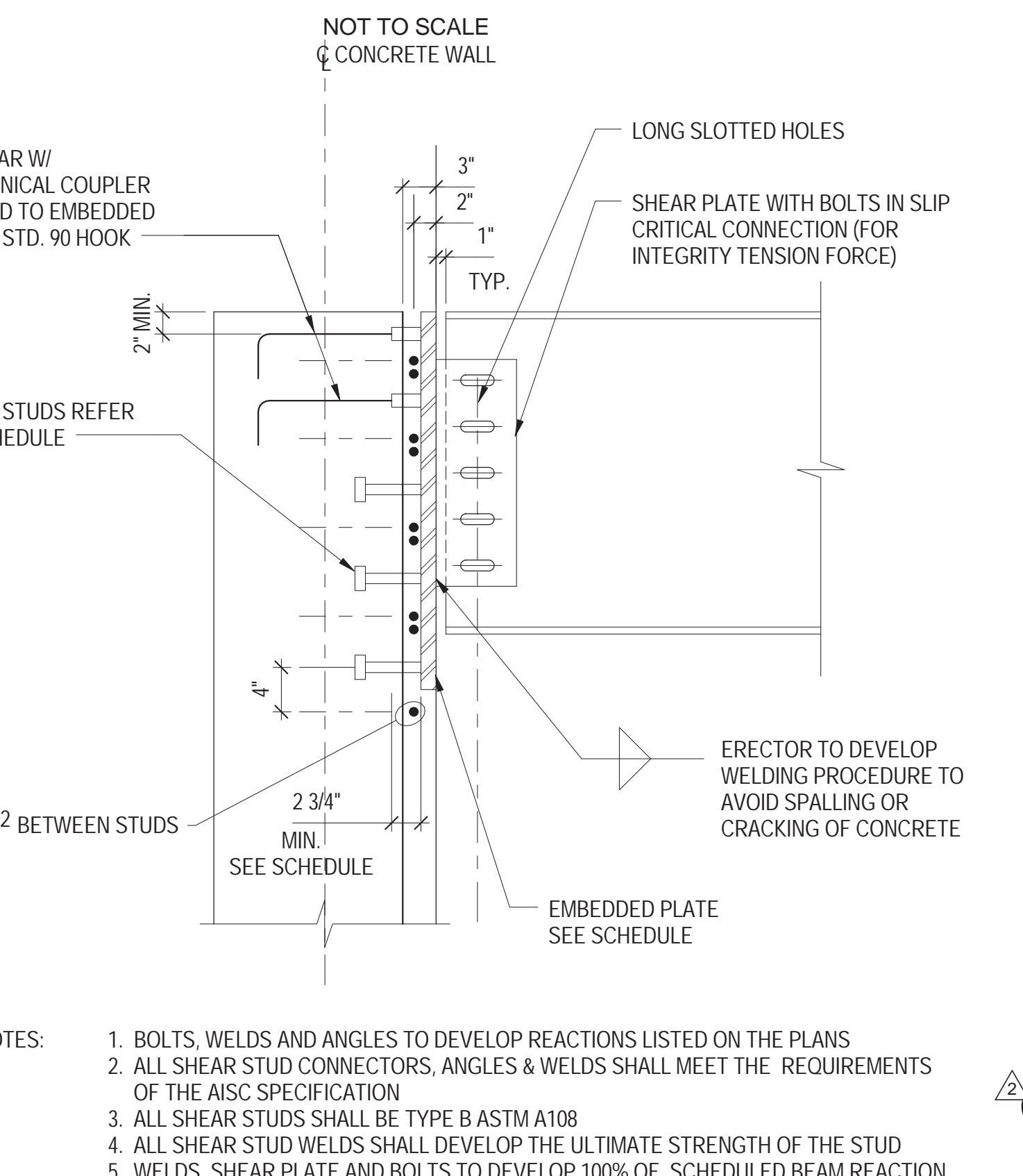


8 REBAR DETAIL AT R/C WALL END
NOT TO SCALE

10 DETAIL OF ELEVATOR DIVIDER BEAM CONNECTION AT SHEAR WALLS
NOT TO SCALE

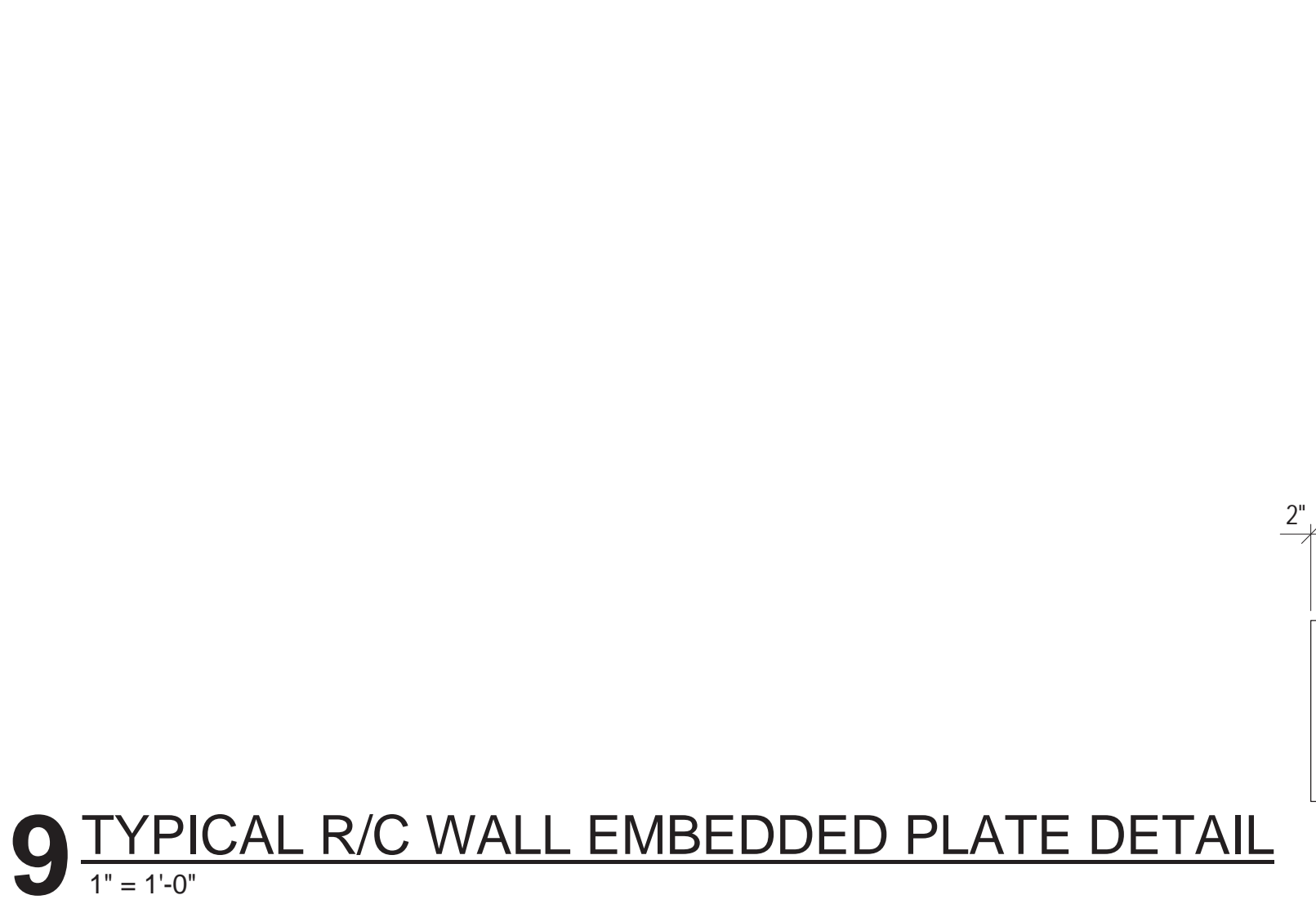


A TYPICAL R/C WALL EMBEDDED PLATE DETAIL
1" = 1'-0"

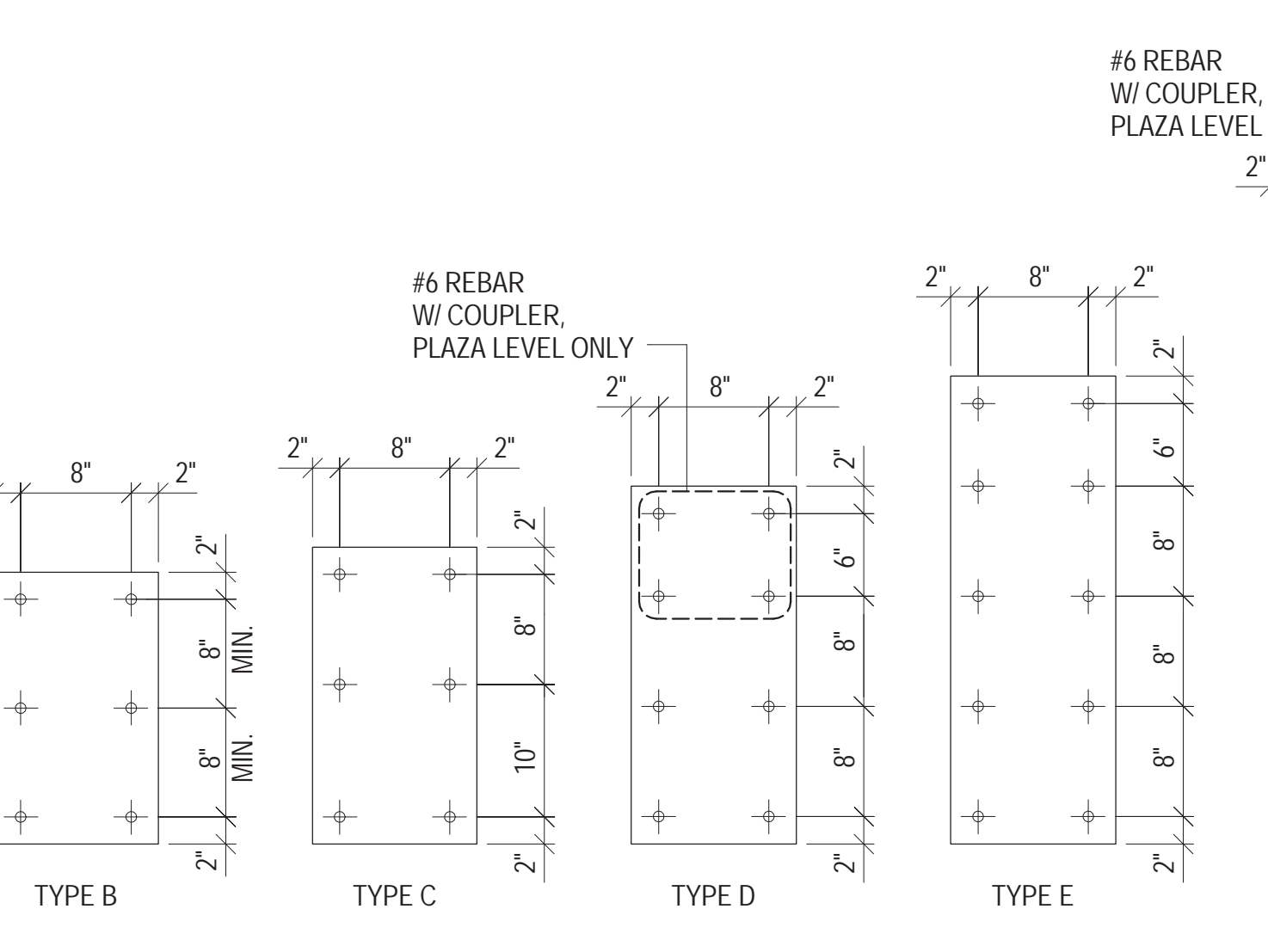


B TYPICAL R/C WALL EMBEDDED PLATE DETAIL AT PLAZA LEVEL
1" = 1'-0"

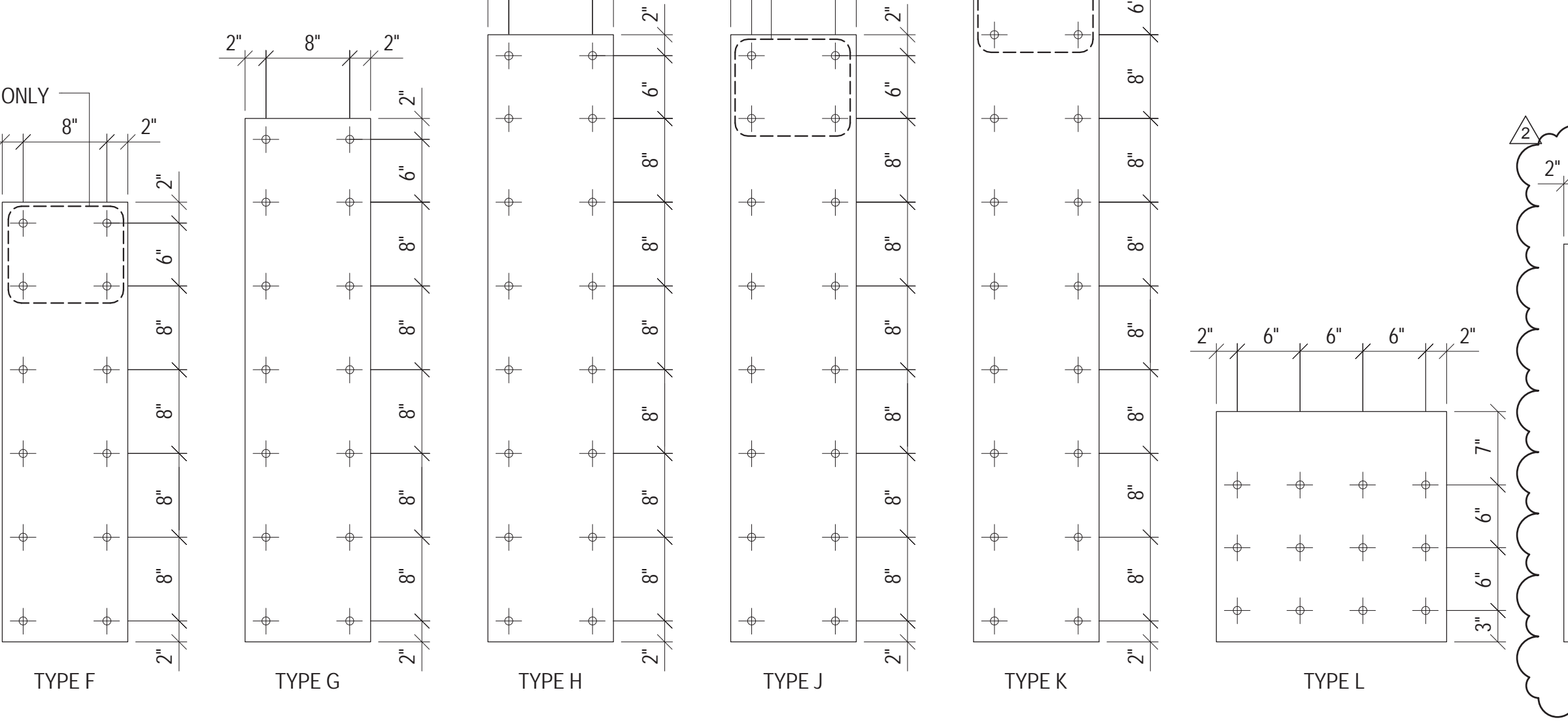
EMBEDDED PLATE SCHEDULE					PLATES: ASTM A572 GR 50, U.N.O.	
MAXIMUM BEAM SIZE	TYPE	PLATE (T x W x L) (IN)	STUDS	FACTORED SHEAR CAPACITY (KIPS)	TIE FORCE (KIPS)	COMMENT
W8, W10, W12	A	5/8x12x14	4 - 5/8x6	50	55	
W14, W16, W18	B	5/8x12x20	6 - 5/8x6	70	75	
W21	C	3/4x12x22	6 - 3/4x8	100		
W24X55 TO W24X84	D	3/4x12x26	8 - 3/4x8	115		
W24X94 & LARGER W27	E	3/4x12x34	10 - 3/4x8	155		
W30	F	3/4x12x42	12 - 3/4x8	180		
W33	G	3/4x12x50	14 - 3/4x8	205		
W36	H	1x12x58	16 - 1x10	210	120	
W18	D	3/4x12x26	8 - 3/4x8	115		PLAZA LEVEL ONLY, SEE DETAIL 9B
W24	F	3/4x12x42	12 - 3/4x8	180		PLAZA LEVEL ONLY, SEE DETAIL 9B
W36	J	1-1/4x12x58	12 - 1x10 (4 #6)	360		PLAZA LEVEL ONLY, SEE DETAIL 9B
W40	K	1-1/2x12x66	14 - 1x10 (4 #6)	450		PLAZA LEVEL ONLY, SEE DETAIL 9B
W18	L	5/8x22x22	12 - 5/8x6	60		LINK BEAMS WITH BU EMBEDDED PLATE
.....	M	1x28x38	15 - 1/2x6	-		SERVICE ELEVATOR PIT



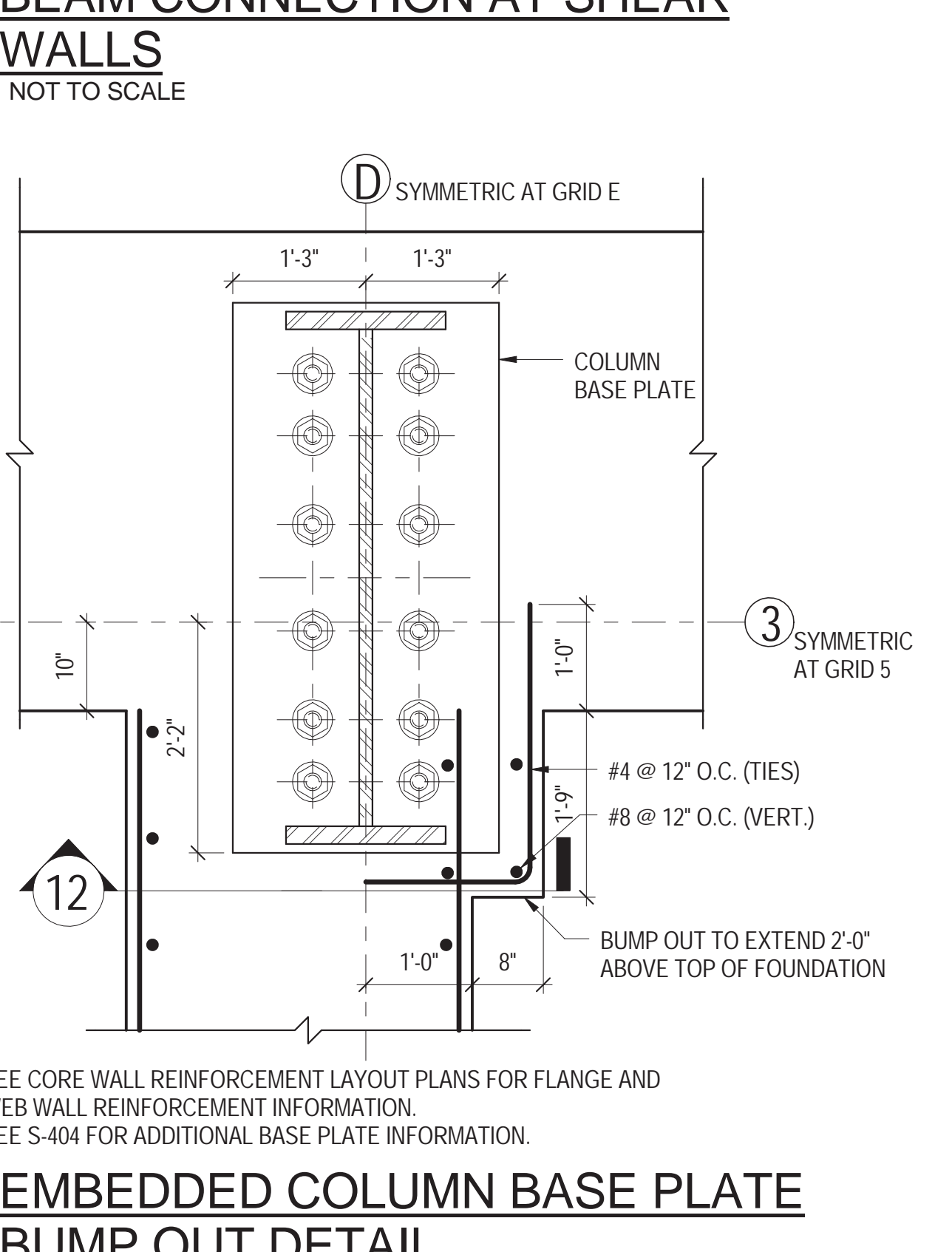
9 TYPICAL R/C WALL EMBEDDED PLATE DETAIL
1" = 1'-0"



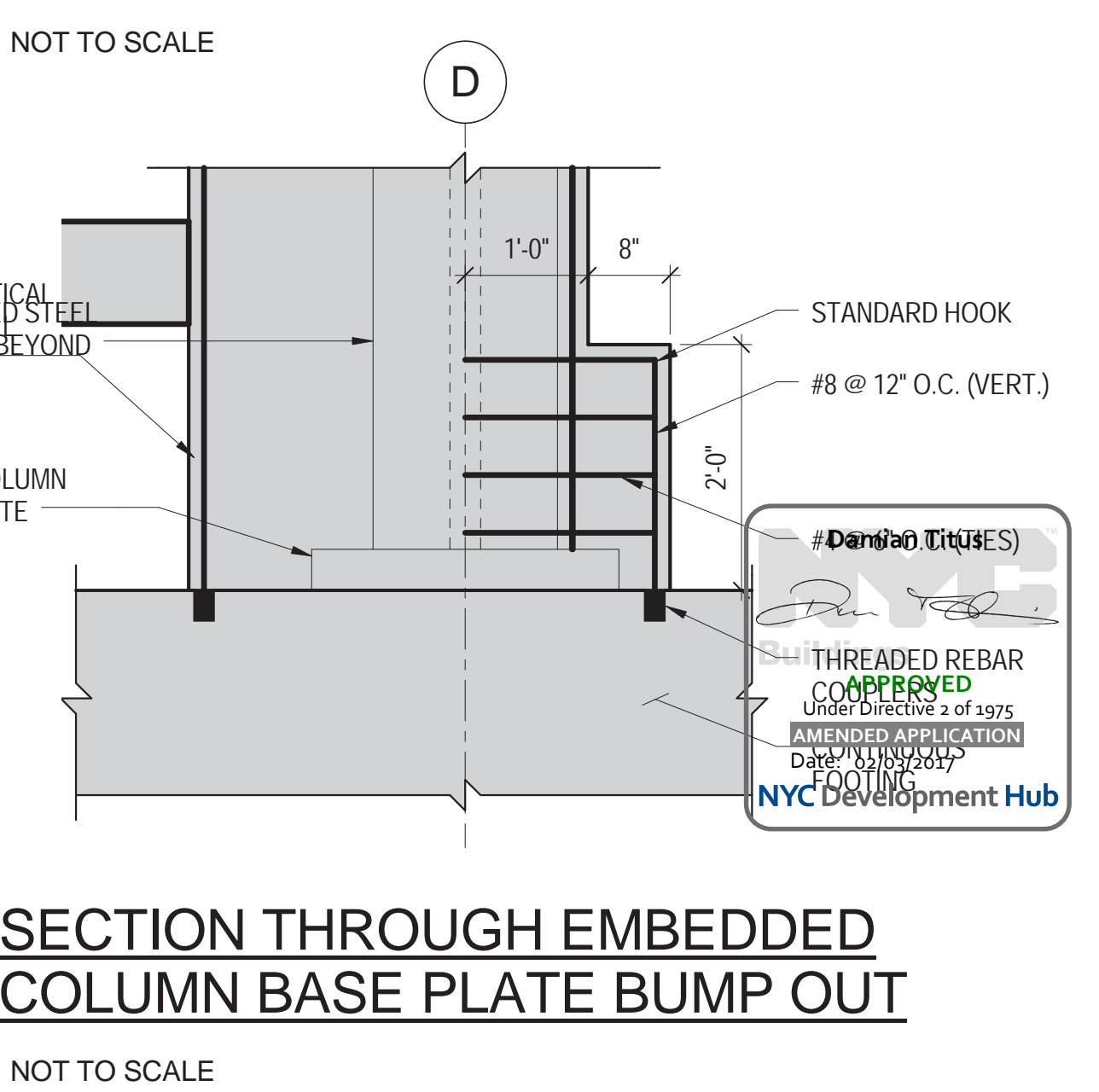
B TYPICAL R/C WALL EMBEDDED PLATE DETAIL AT PLAZA LEVEL
1" = 1'-0"



B TYPICAL R/C WALL EMBEDDED PLATE DETAIL AT PLAZA LEVEL
1" = 1'-0"



11 EMBEDDED COLUMN BASE PLATE BUMP OUT DETAIL
NOT TO SCALE



12 SECTION THROUGH EMBEDDED COLUMN BASE PLATE BUMP OUT
NOT TO SCALE

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Key Plan:

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TYPICAL REINFORCED CONCRETE WALL SECTIONS & DETAILS

Project No.: 211157 B-SCAN Sheet No.:
Date: 22 APR 2016 S-332.01
Scale: As indicated Sheet No.:
File No: S-332 Page No.:



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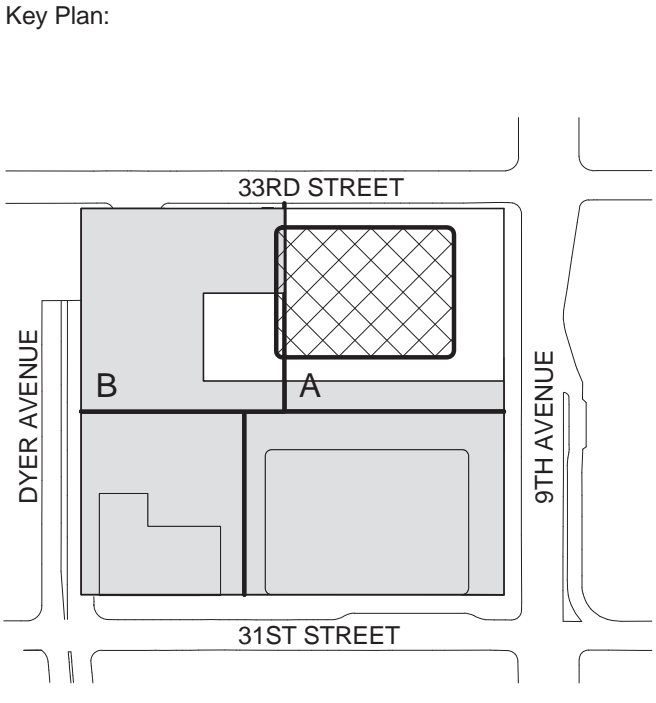
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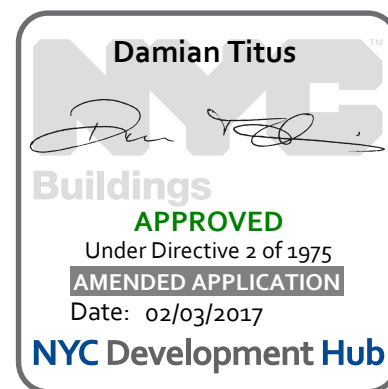
Wind Tunnel Consultant
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650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B6



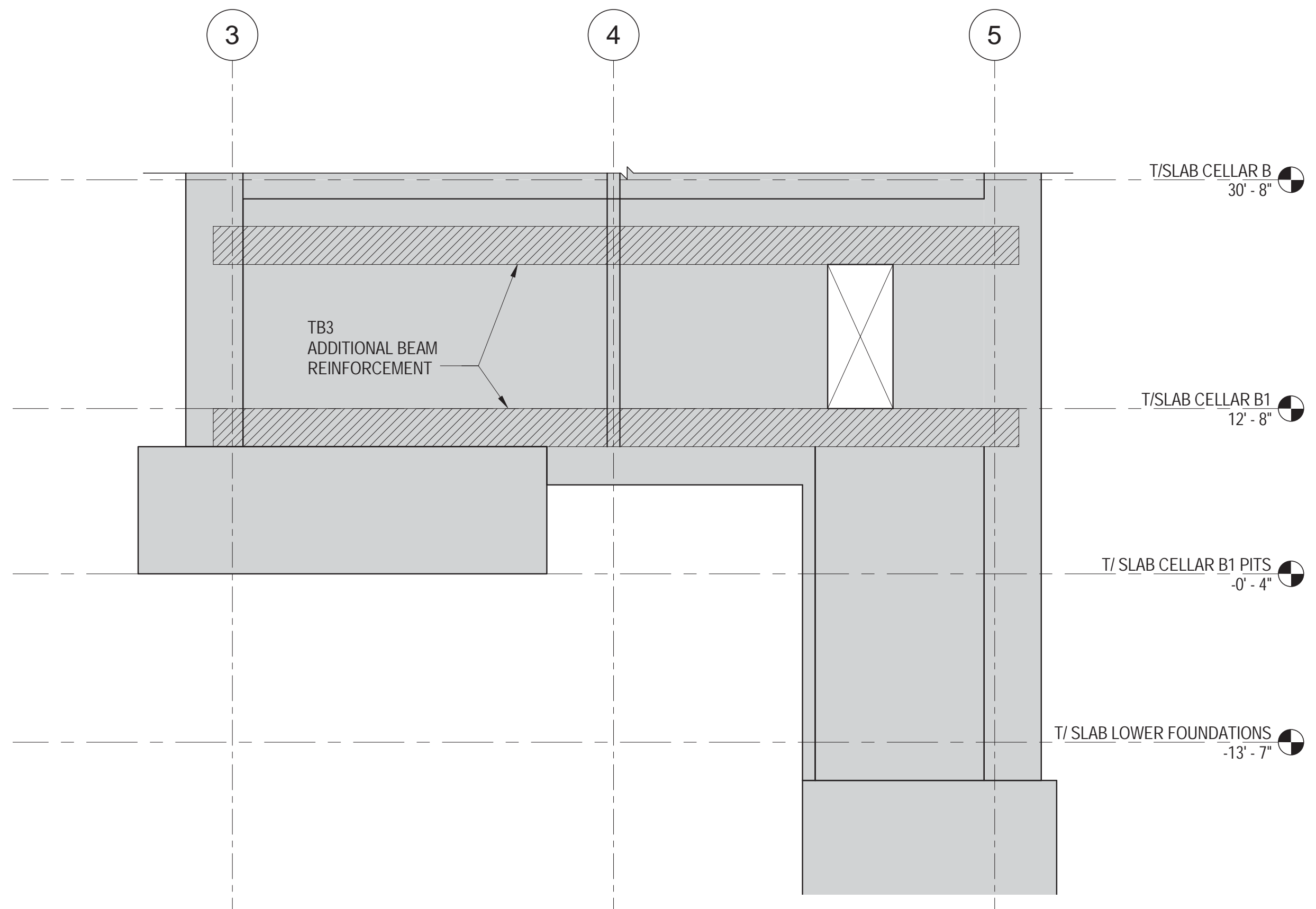
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CORE WALL REINFORCEMENT LAYOUT

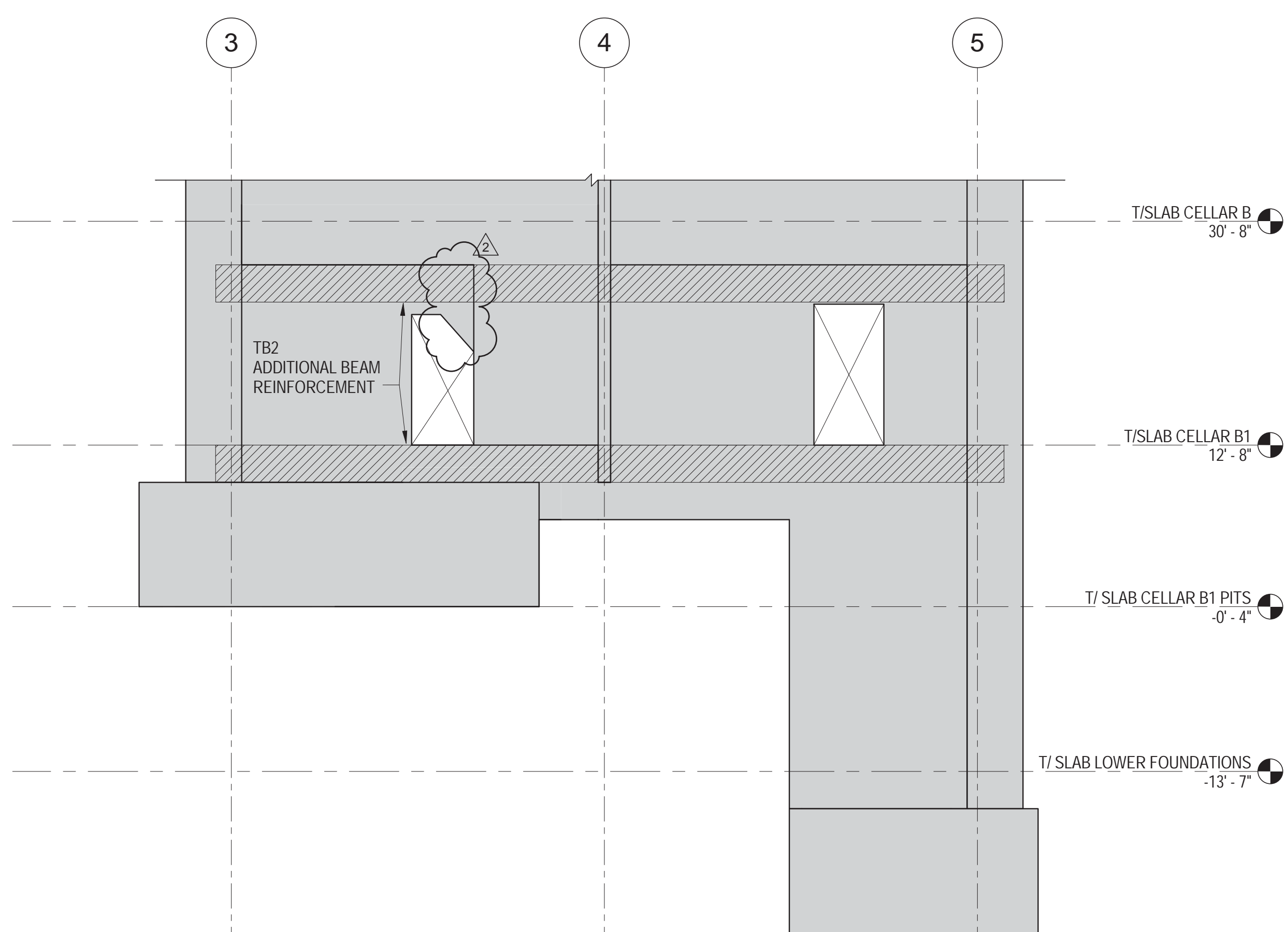
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Date: 22 APR 2016	Sheet No.: S-339
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File No.: S-339	



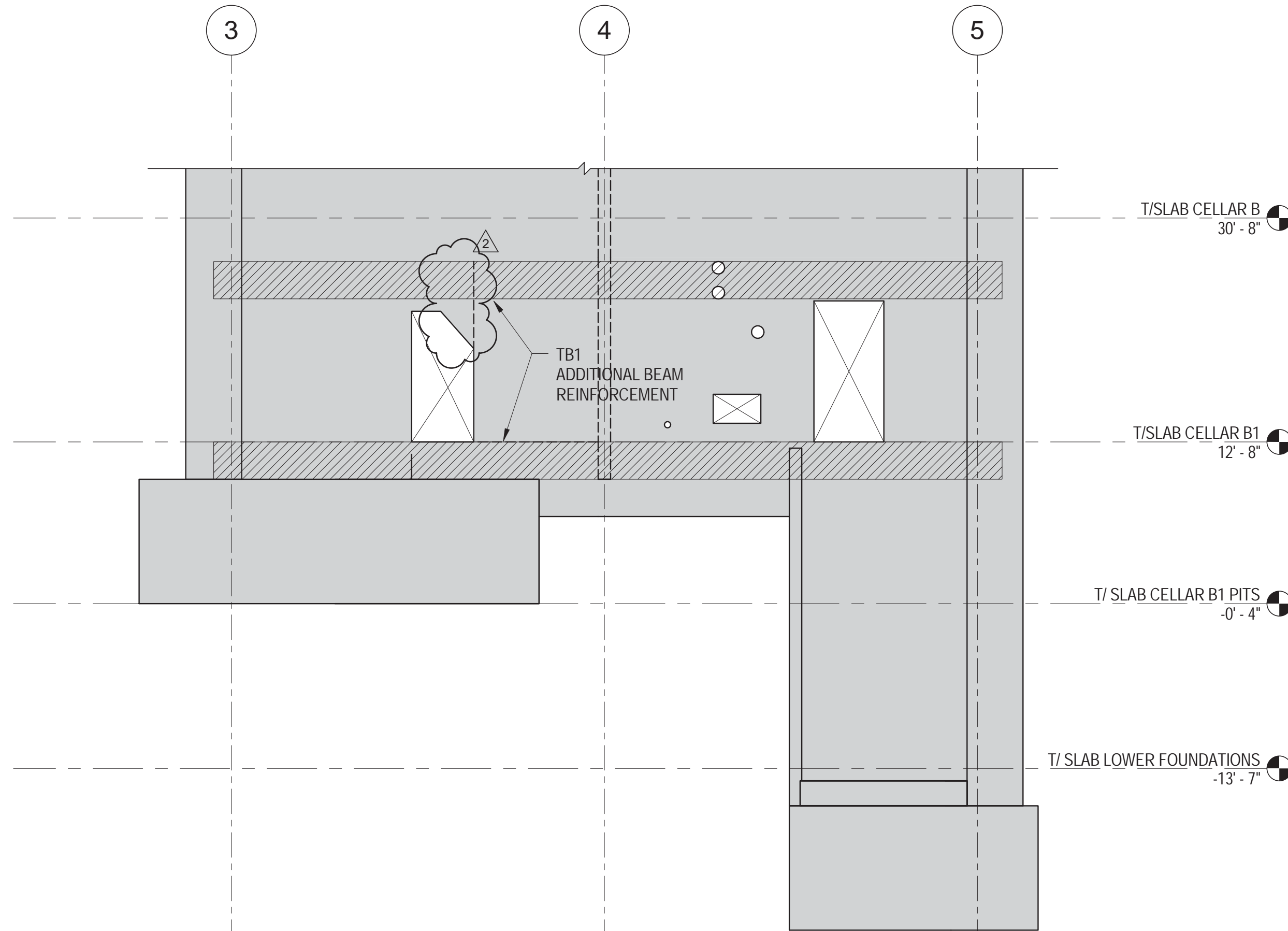
- ABBREVIATION KEY:
- V: VERTICAL REINFORCEMENT
 - H: HORIZONTAL REINFORCEMENT
 - T: HORIZONTAL TIE REINFORCEMENT
 - DC: DOUBLE CURTAIN OF REINFORCEMENT
 - IC: INNER CURTAIN OF REINFORCEMENT
 - EC: EXTERIOR CURTAIN OF REINFORCEMENT
 - Ld: TENSION DEVELOPMENT LENGTH
- NOTE:
- REFER TO S-098B2 - S-172 FOR FLOOR FRAMING PLANS
 - FOR DIMENSION OF MECHANICAL OPENINGS INDICATED ON THIS PLAN, REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 3 ON S-361
 - FOR DIMENSION OF MECHANICAL OPENINGS INDICATED ON THIS PLAN, REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 5 ON S-362
 - REFER TO S-372 - S-386 FOR LARGE PARTIAL PLANS INSIDE CORE
 - REFER TO S-FDN & S-097B3 FOR CORE WALL FOUNDATION PLANS
 - REFER TO S-501 - S-502 FOR COMPOSITE METAL DECK SCHEDULE
 - REFER TO S-331 - S-332 FOR CORE WALL SCHEDULE AND DETAILS
 - REFER TO S-391 - S-394 FOR LINK BEAM SCHEDULE AND DETAILS
 - REFER TO S-395 FOR RC BEAM SCHEDULE AND DETAILS
 - REFER TO S-371 FOR RC CONCRETE SLAB SCHEDULE AND DETAILS
 - REFER TO S-411 - S-413 FOR EMBEDDED STEEL ELEVATIONS AND SCHEDULES
 - REFER TO S-332 FOR EMBEDDED SHEAR TAB CONNECTION SCHEDULE
 - REFER TO S-004 FOR CONCRETE AND REBAR MATERIAL PROPERTIES AND DEVELOPMENT LENGTH SCHEDULE



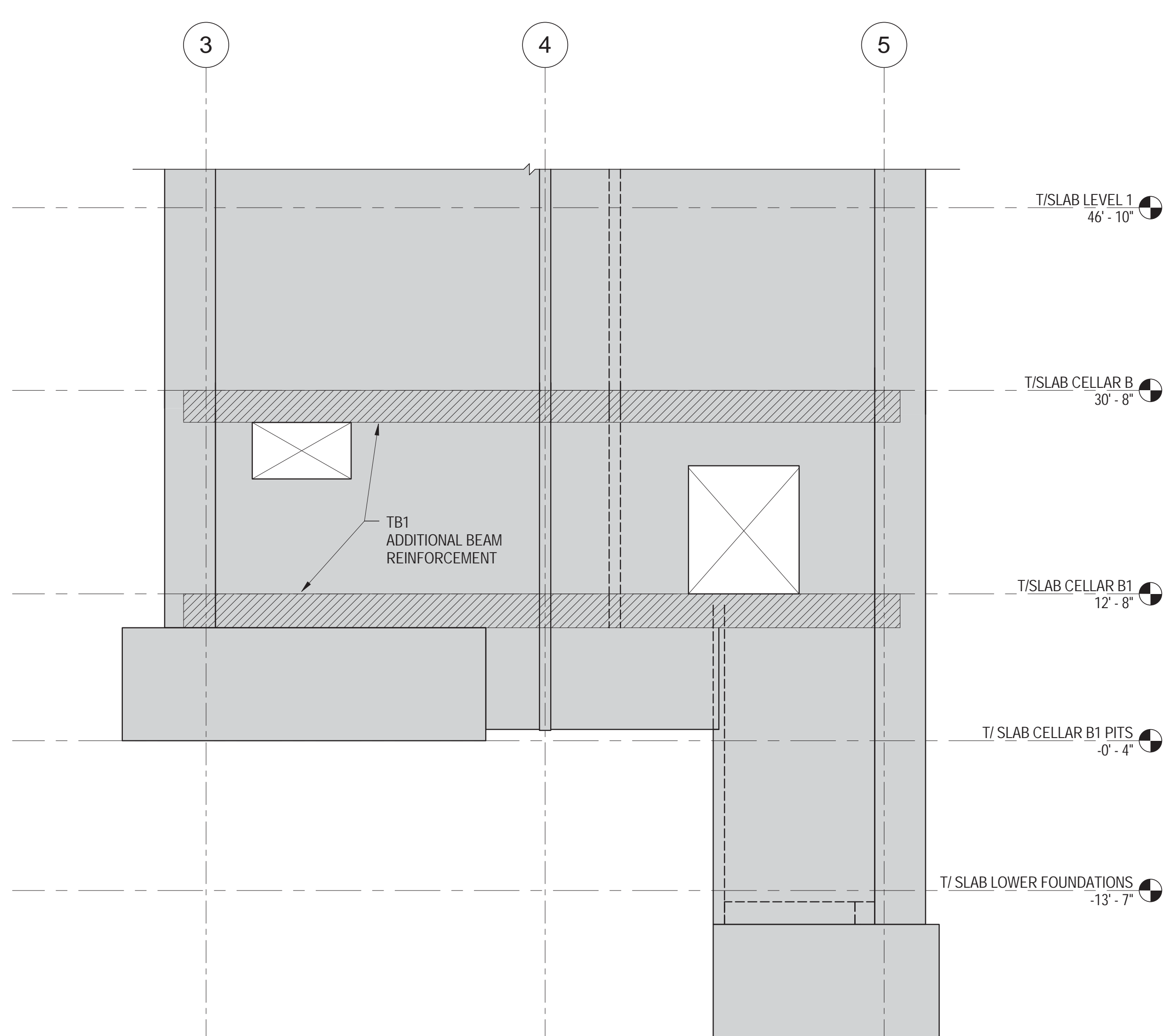
5 DETAIL ELEVATION ALONG LINE G
NOT TO SCALE



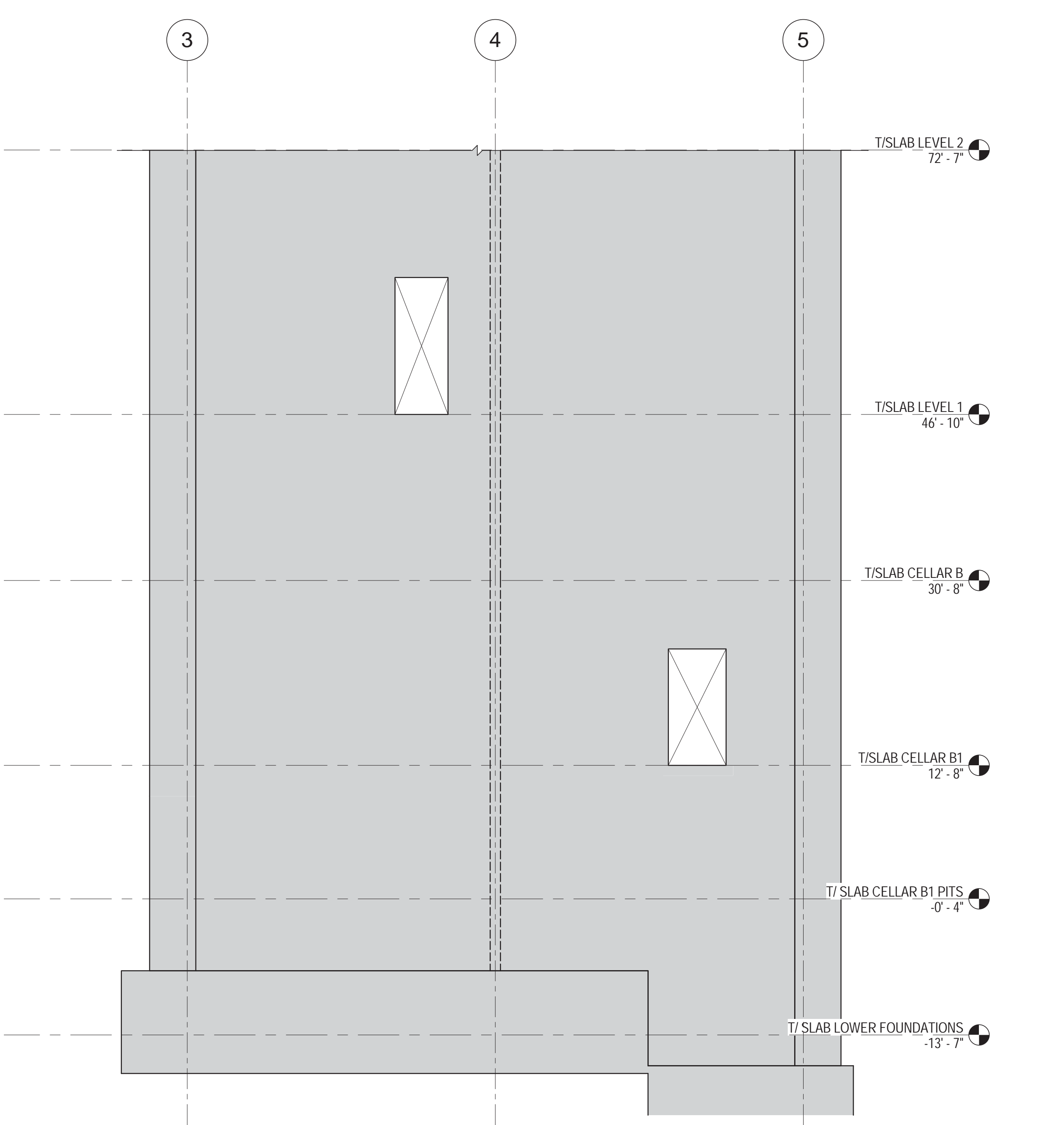
4 DETAIL ELEVATION ALONG LINE F
NOT TO SCALE



3 DETAIL ELEVATION ALONG LINE E
NOT TO SCALE



2 DETAIL REINFORCEMENT ELEVATION ALONG LINE D
NOT TO SCALE



1 DETAIL ELEVATION ALONG LINE C
NOT TO SCALE



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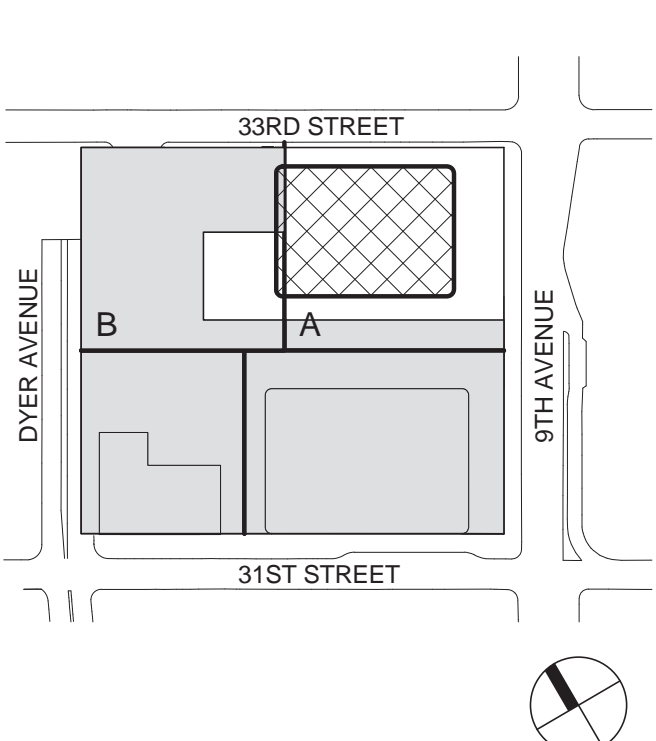
Facade Maintenance Consultant

Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

Wind Tunnel Consultant

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

Key Plan:



Seal & Signature:

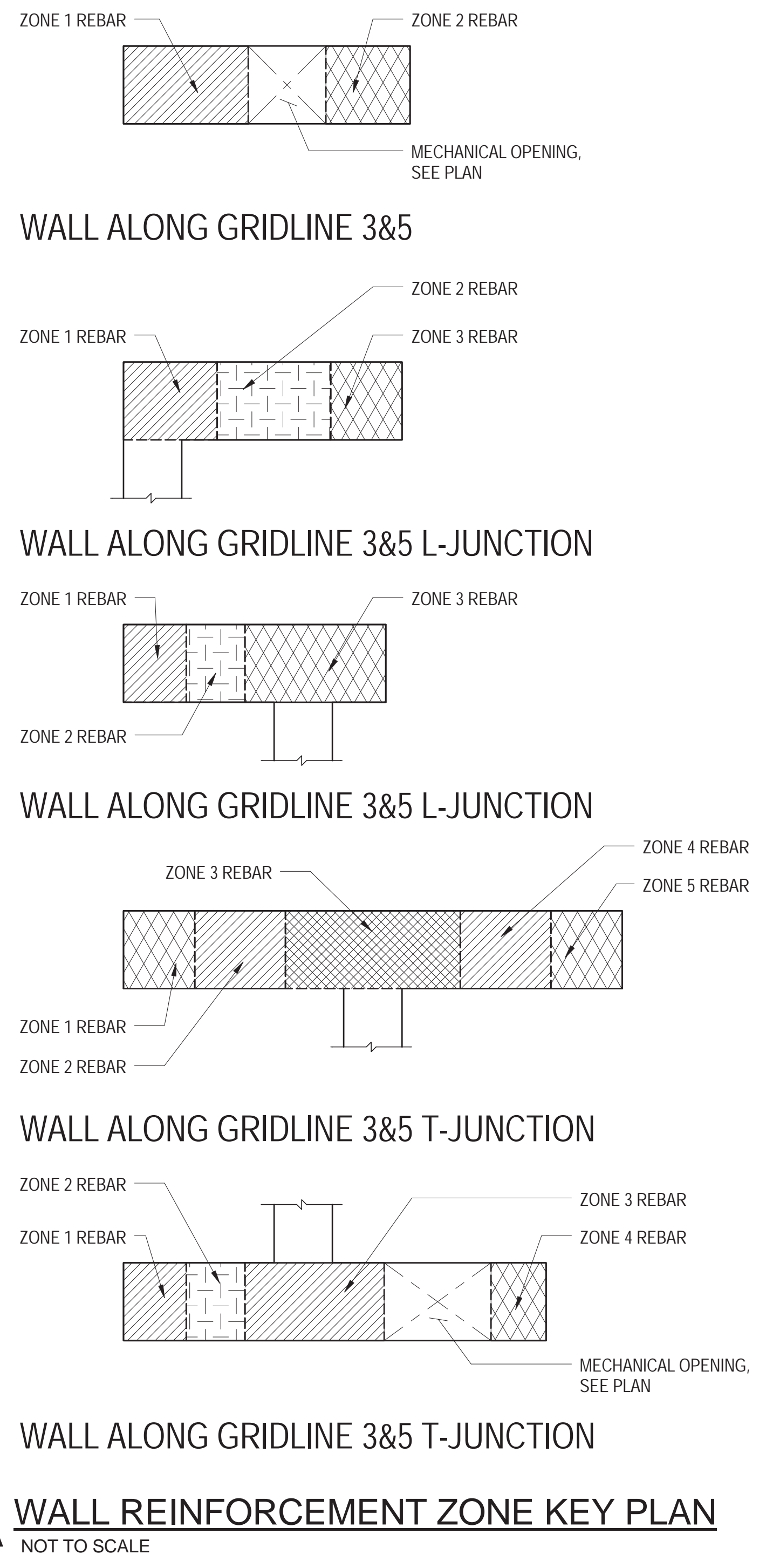


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2	18 DEC 2015	ISSUED FOR PERMIT
1	20 JUN 2014	ISSUED FOR FOUNDATION PERMIT

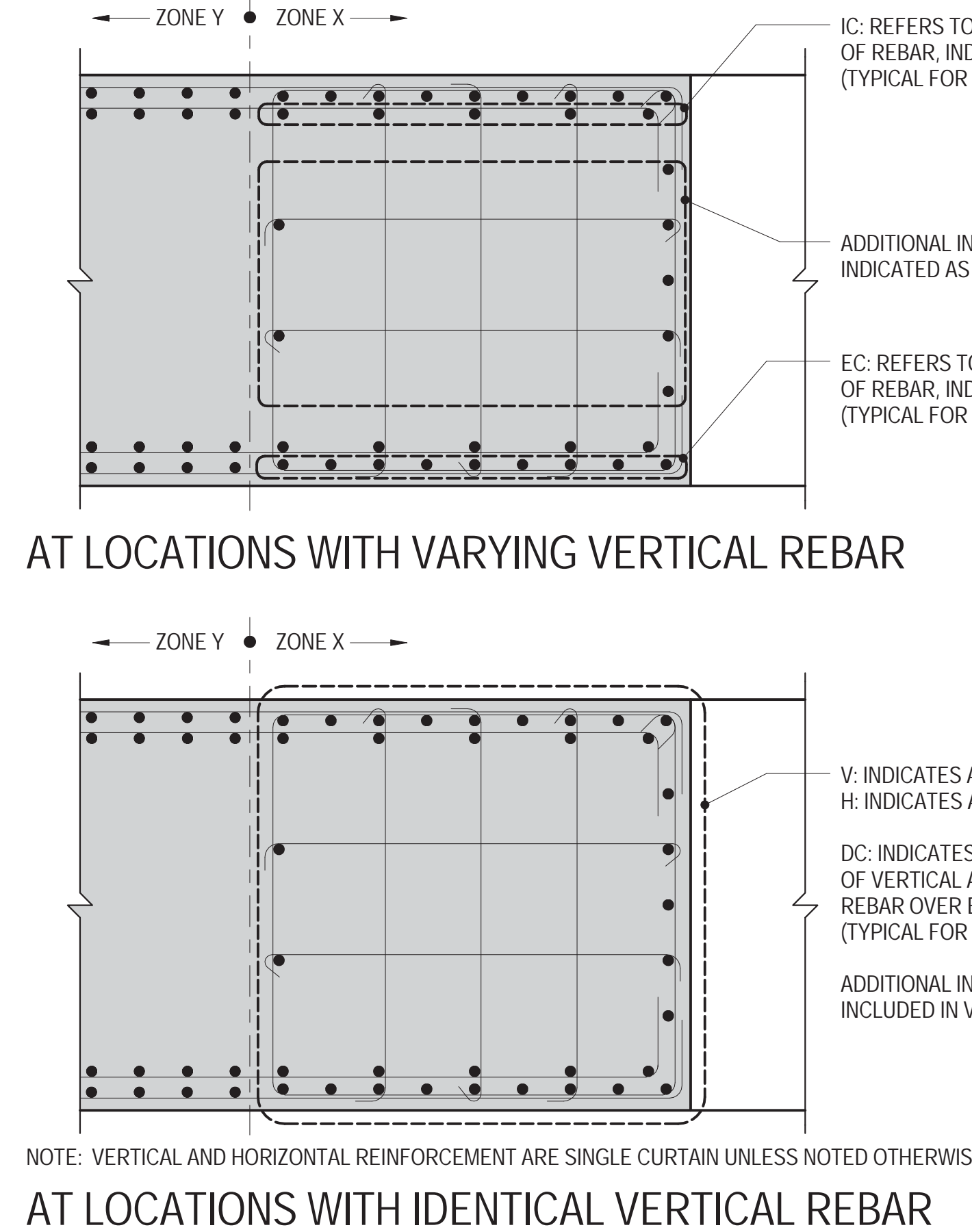
CORE WALL REINFORCEMENT LAYOUT

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File No.: S-341

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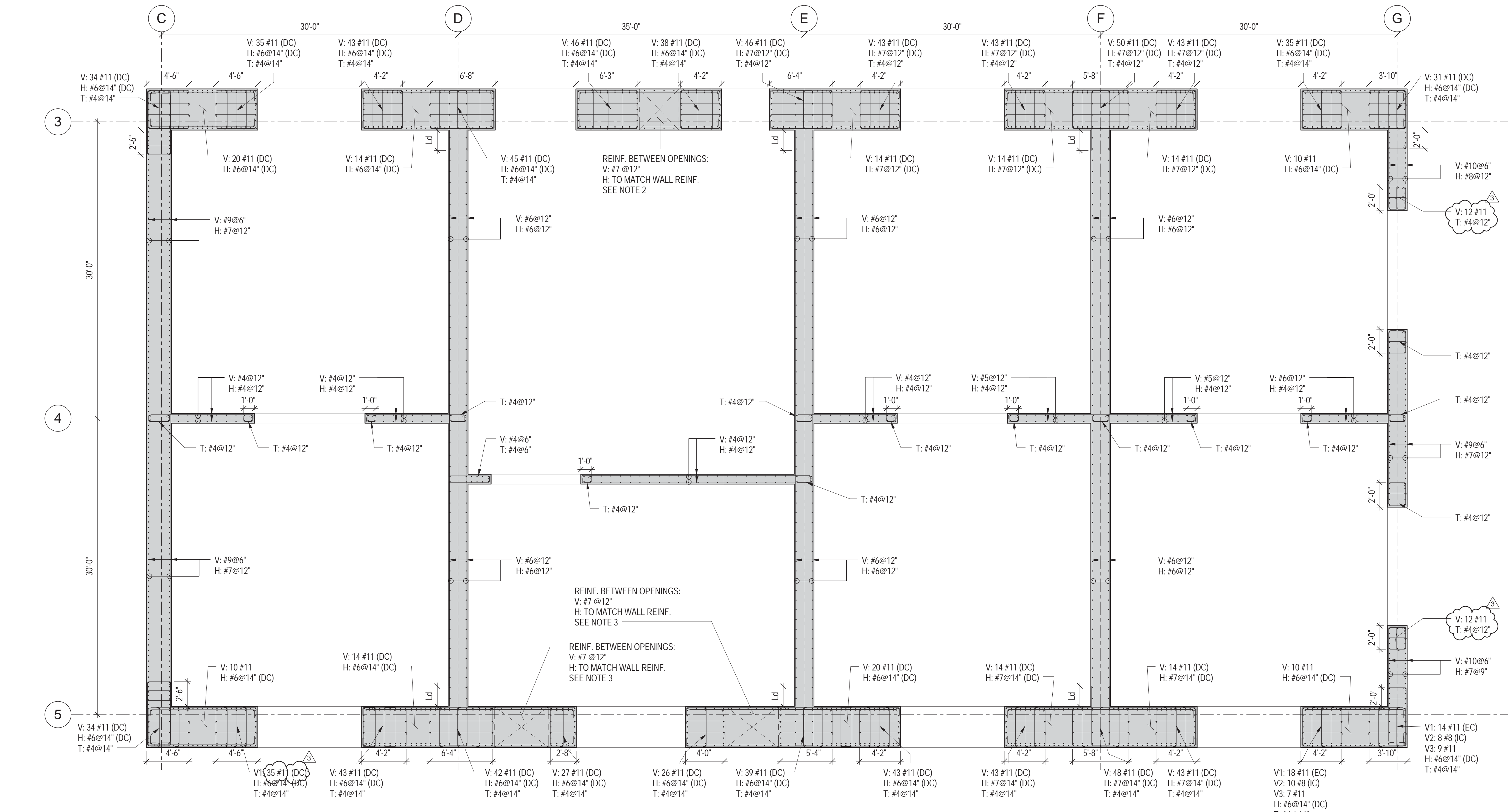
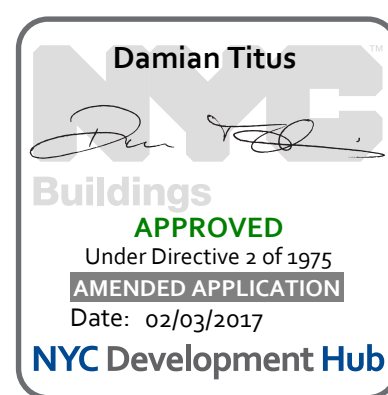


WALL REINFORCEMENT ZONE KEY PLAN
NOT TO SCALE

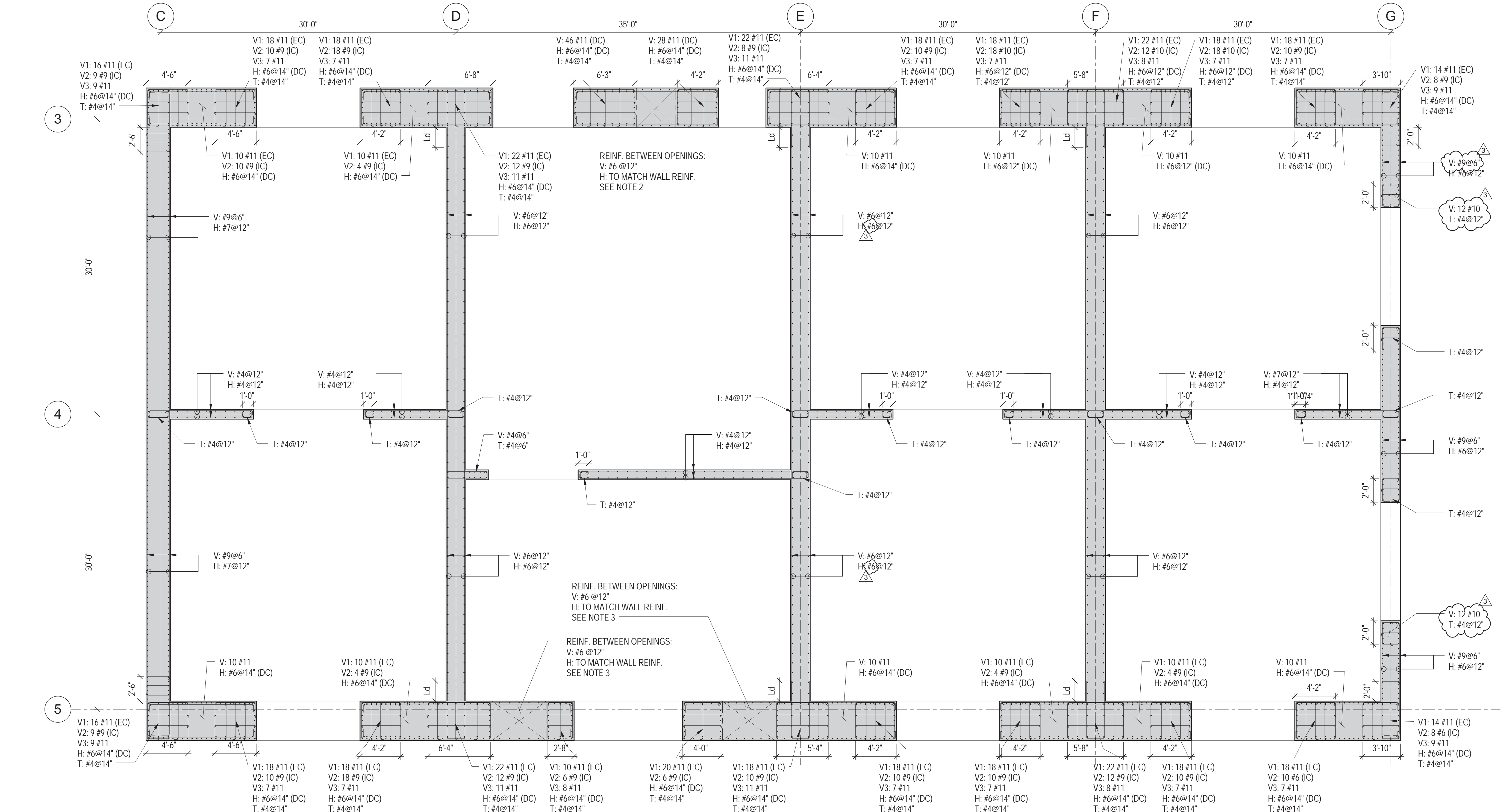


WALL REINFORCEMENT LAYOUT KEY PLAN
NOT TO SCALE

- ABBREVIATION KEY:
- V: VERTICAL REINFORCEMENT
 - H: HORIZONTAL REINFORCEMENT
 - T: HORIZONTAL TIE REINFORCEMENT
 - DC: DOUBLE CURTAIN OF REINFORCEMENT
 - IC: INNER CURTAIN OF REINFORCEMENT
 - EC: EXTERIOR CURTAIN OF REINFORCEMENT
 - Ld: TENSION DEVELOPMENT LENGTH
- NOTE:
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 - REFER TO S-004 FOR CONCRETE AND REBAR MATERIAL PROPERTIES AND DEVELOPMENT LENGTH SCHEDULE



1 REINFORCEMENT LAYOUT - LEVEL 7 TO LEVEL 11
NOT TO SCALE



2 REINFORCEMENT LAYOUT - LEVEL 11 TO LEVEL 16
NOT TO SCALE



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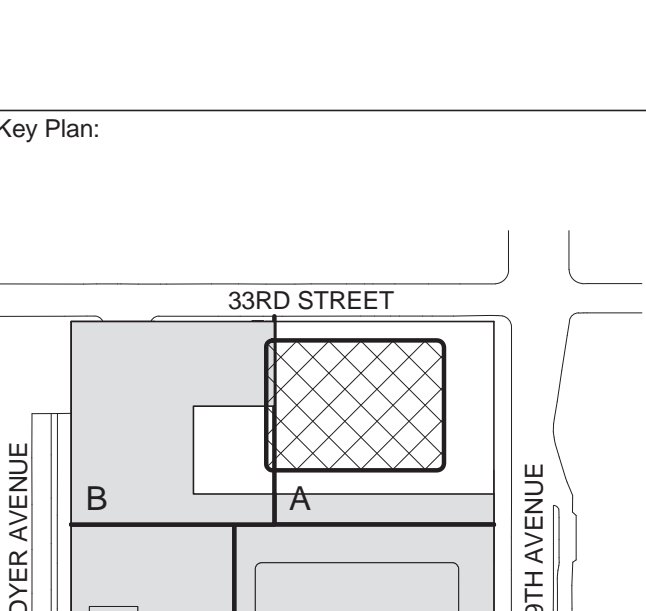
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Key Plan:



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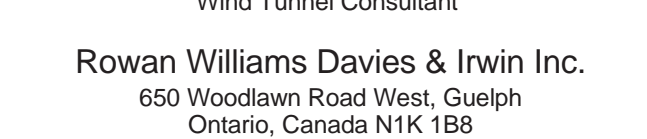
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Key Plan:



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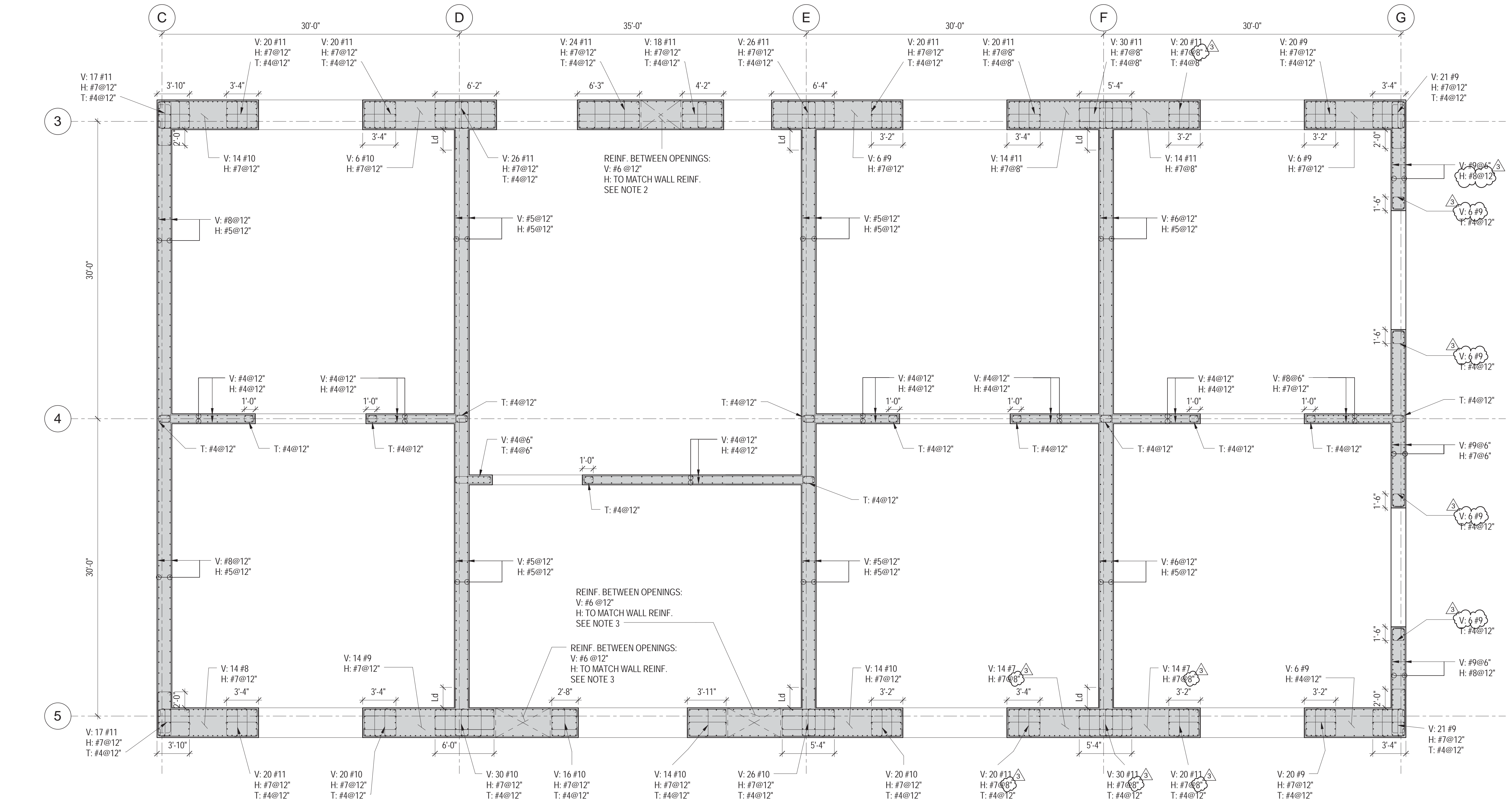
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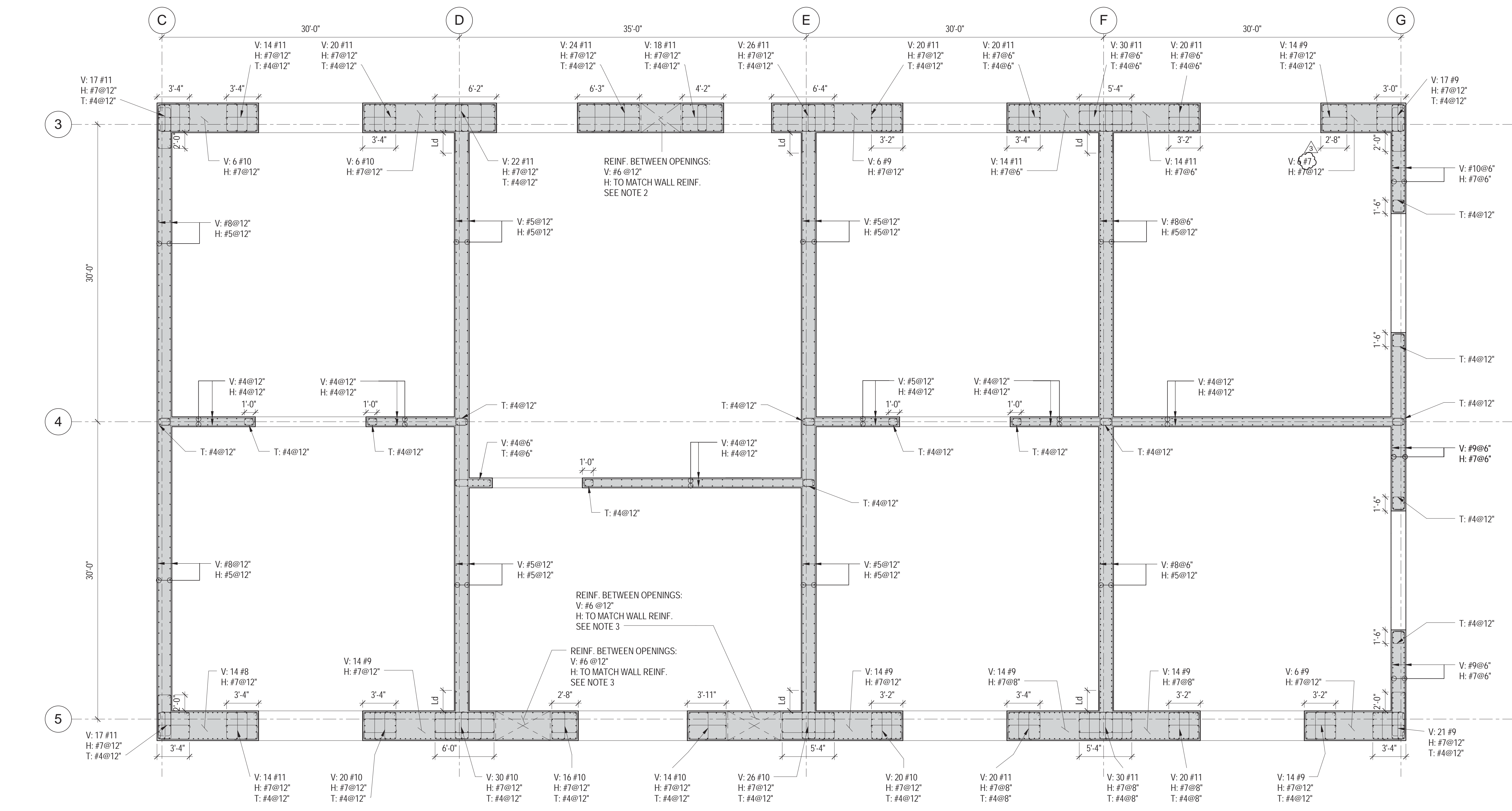
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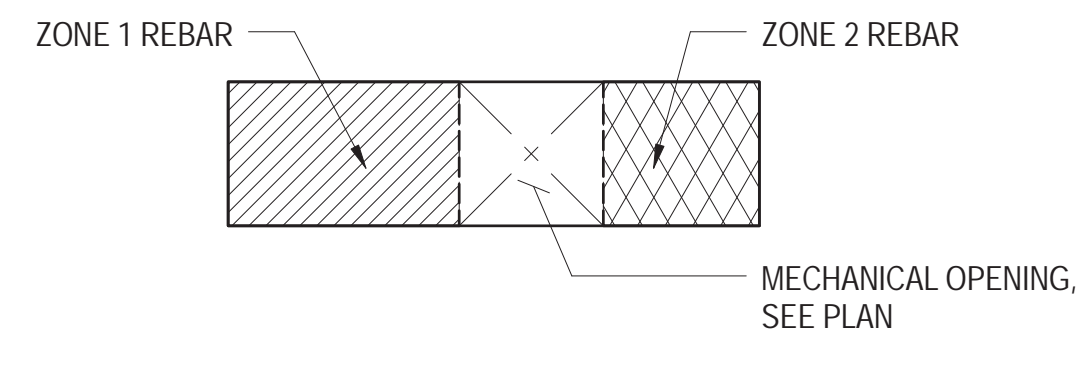
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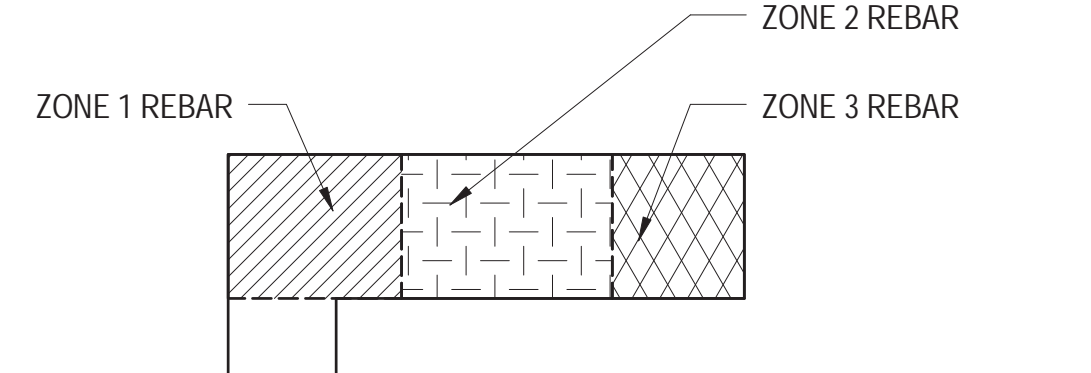
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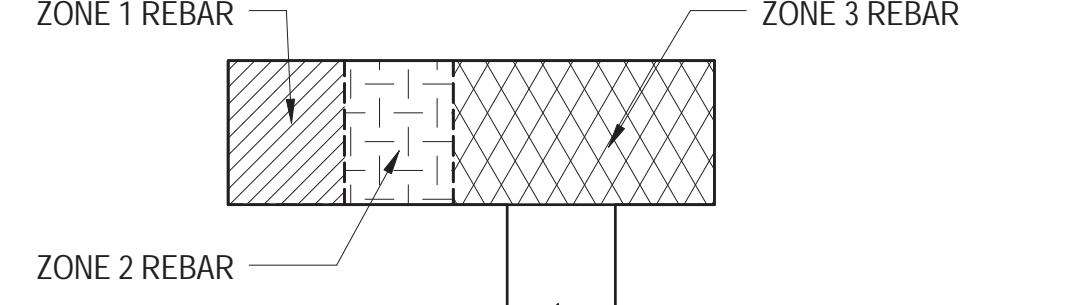
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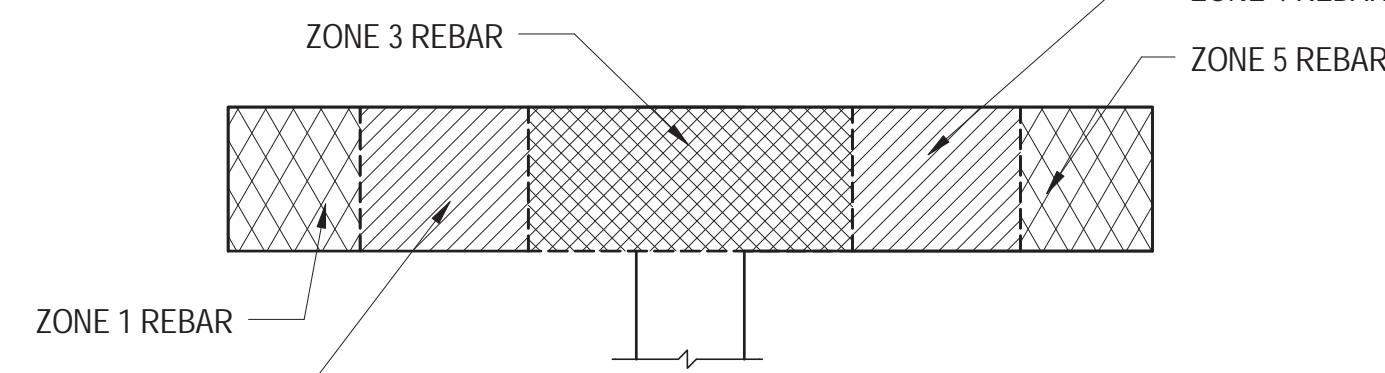
WALL ALONG GRIDLINE 3&5



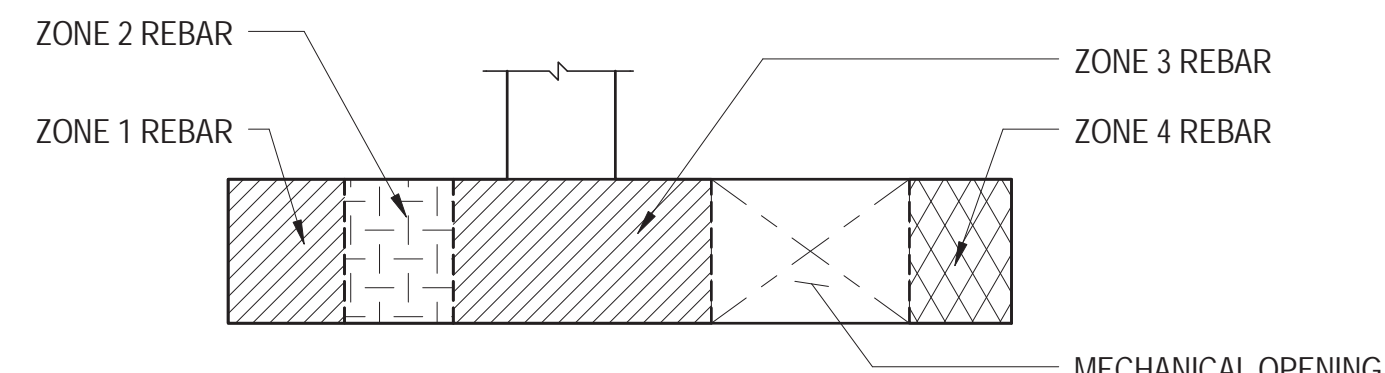
WALL ALONG GRIDLINE 3&5 L-JUNCTION



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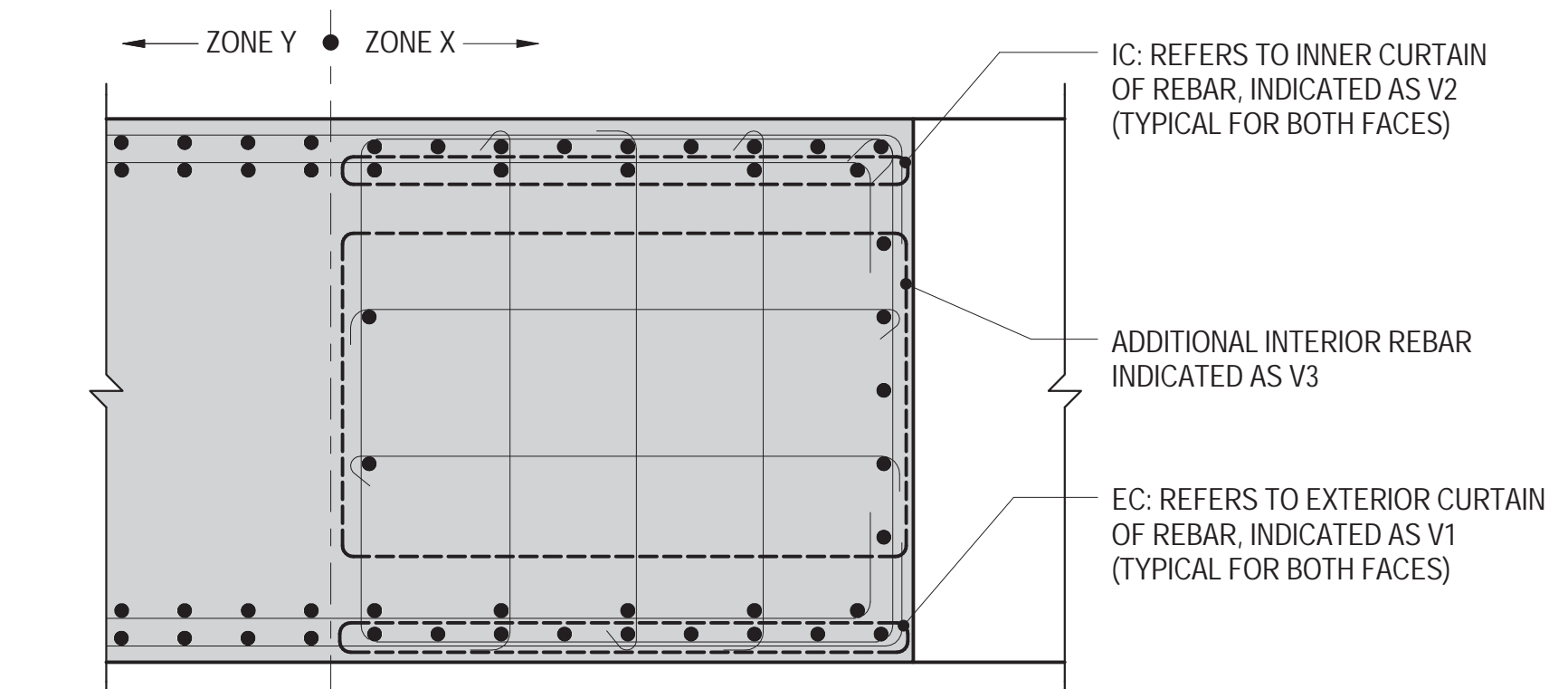


WALL ALONG GRIDLINE 3&5 T-JUNCTION

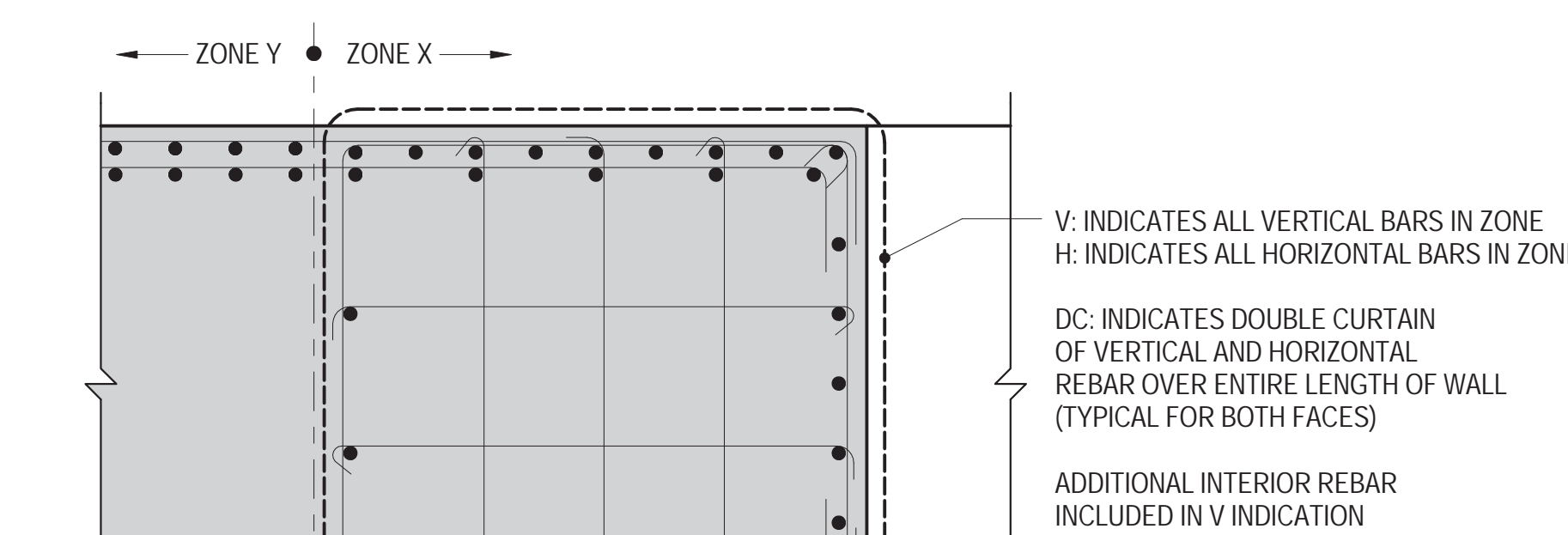


WALL ALONG GRIDLINE 3&5 T-JUNCTION

A WALL REINFORCEMENT ZONE KEY PLAN
NOT TO SCALE



AT LOCATIONS WITH VARYING VERTICAL REBAR



AT LOCATIONS WITH IDENTICAL VERTICAL REBAR

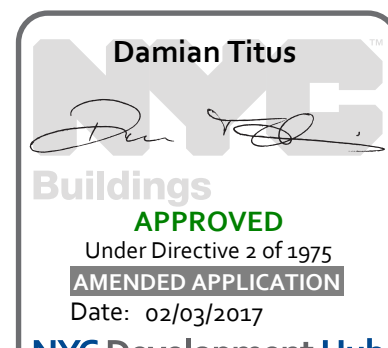
B WALL REINFORCEMENT LAYOUT KEY PLAN
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DYER AVENUE
31ST STREET
9TH AVENUE

Seal & Signature:
MICHAEL J. TITUS
Professional Engineer
No. 079322
Date: 02/03/2017

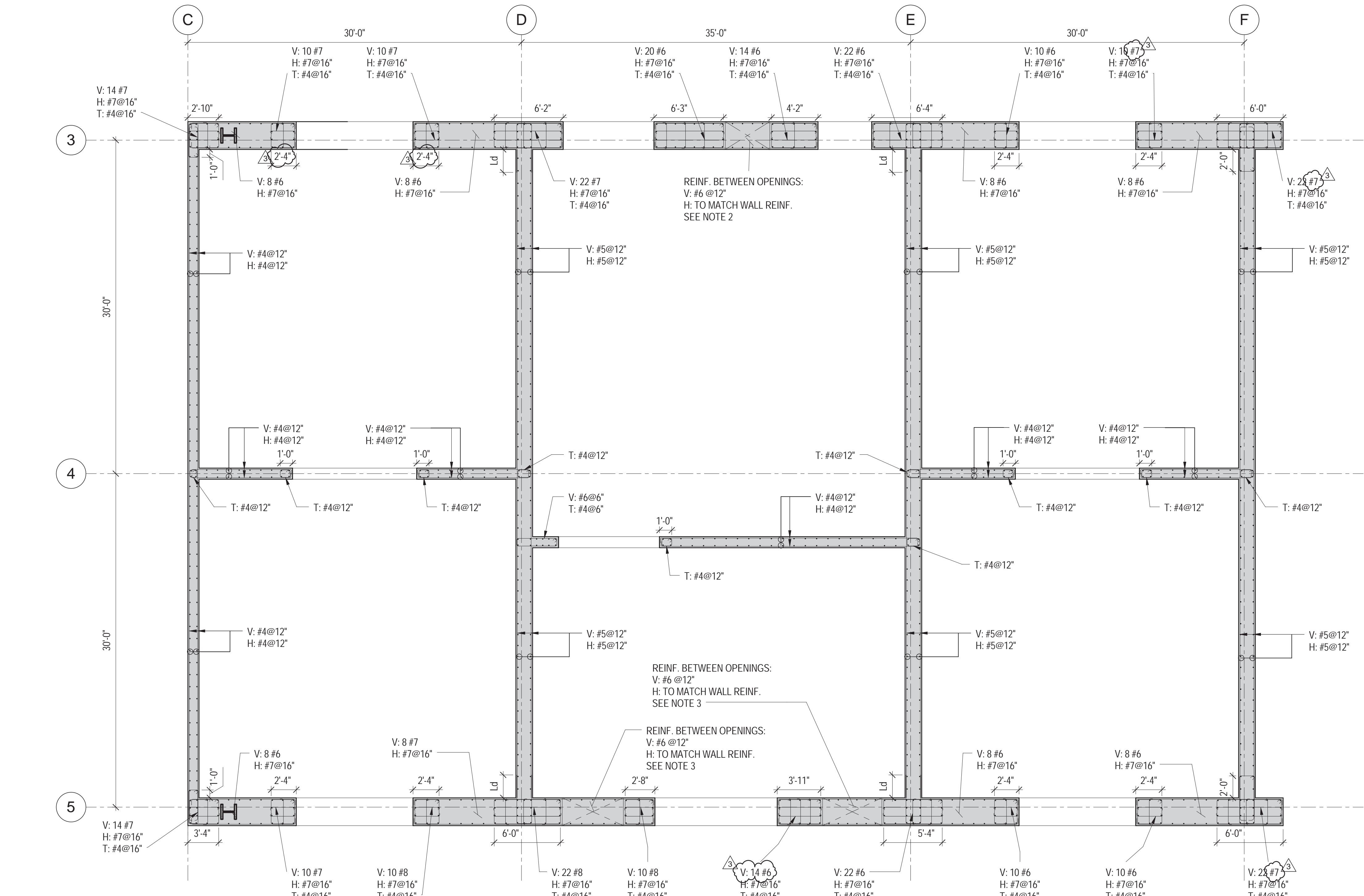
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B-SCAN Sheet No.: S-346.02
Date: 22 APR 2016
Scale: As Indicated
File No.: S-346

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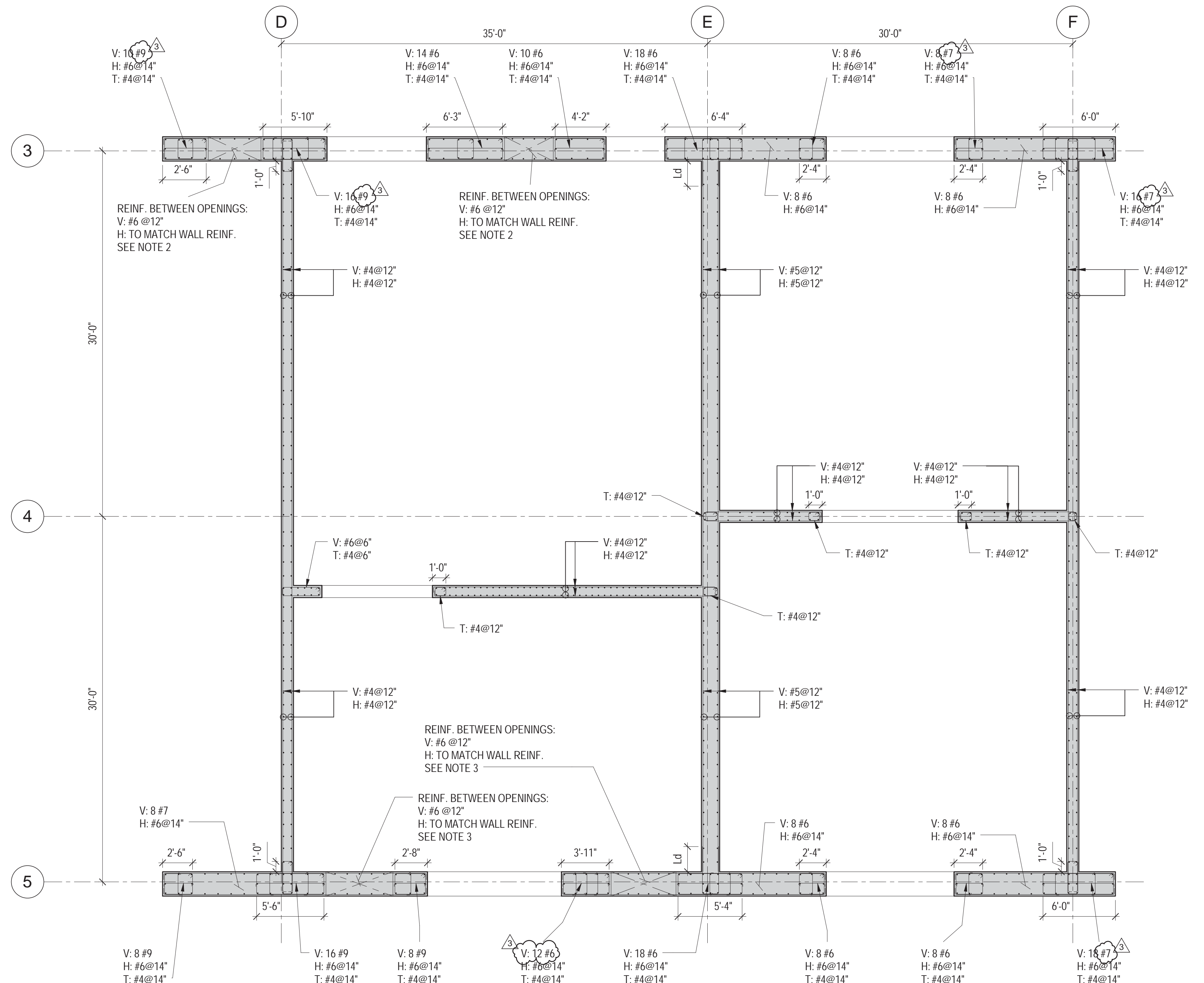
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**CORE WALL
REINFORCEMENT
LAYOUT**

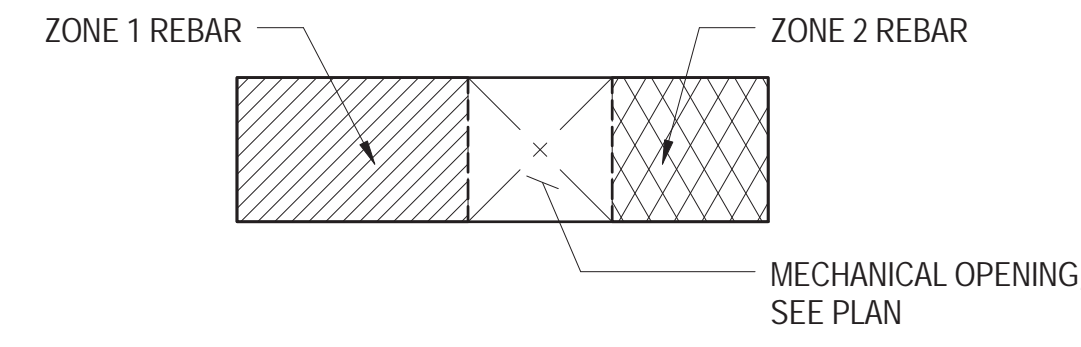
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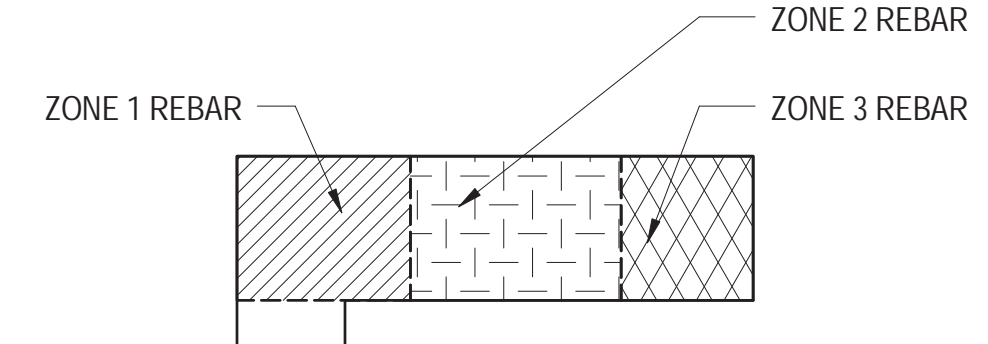
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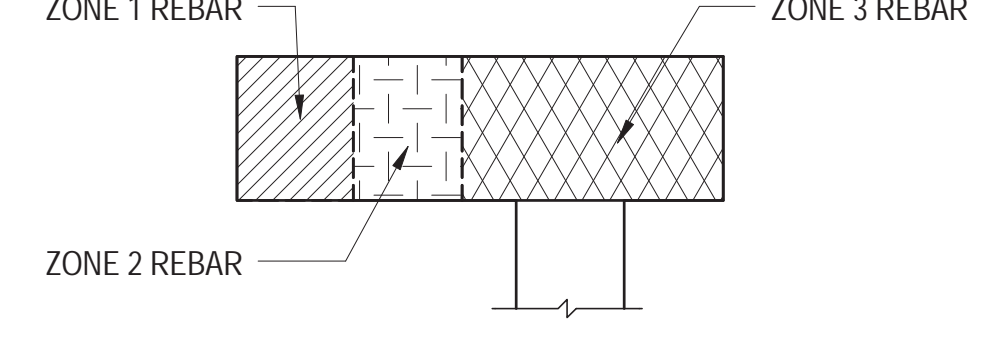
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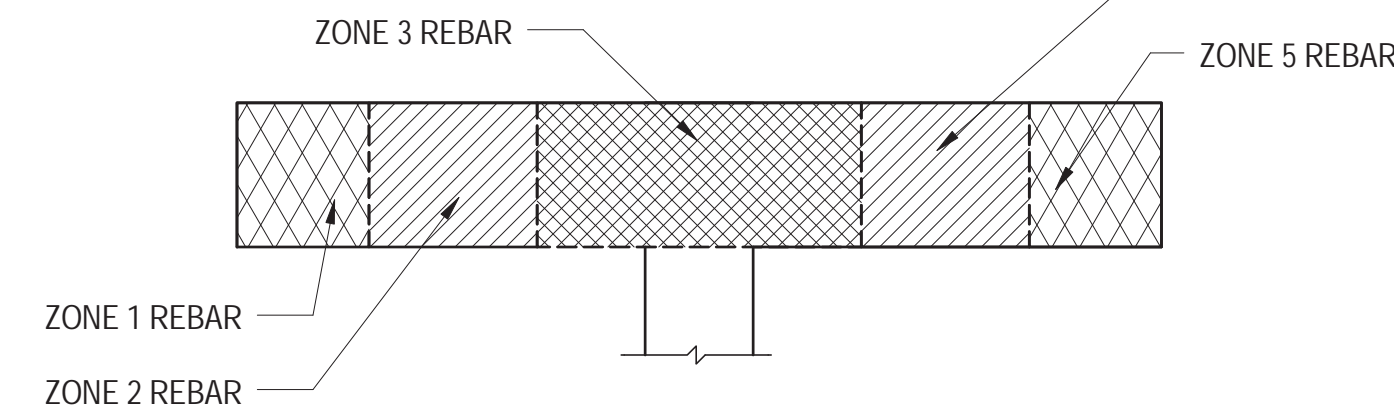
WALL ALONG GRIDLINE 3&5



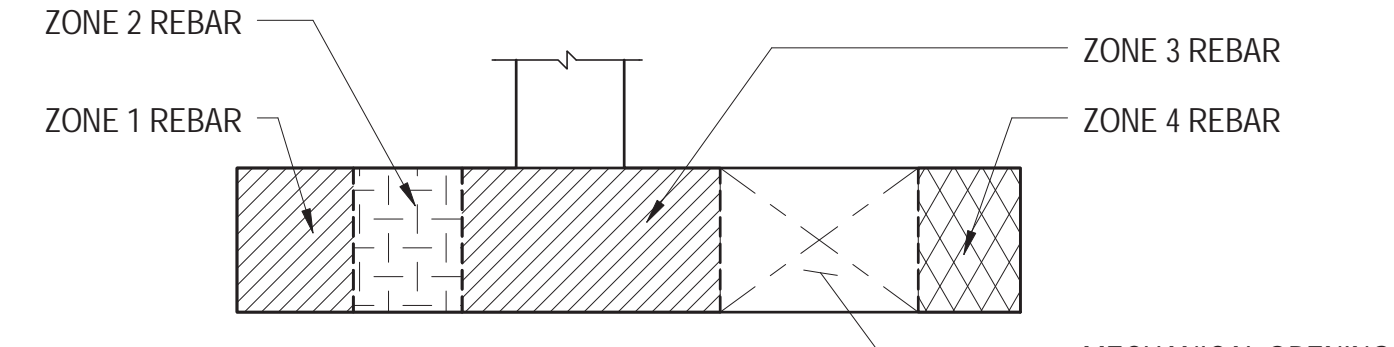
WALL ALONG GRIDLINE 3&5 L-JUNCTION



WALL ALONG GRIDLINE 3&5 L-JUNCTION

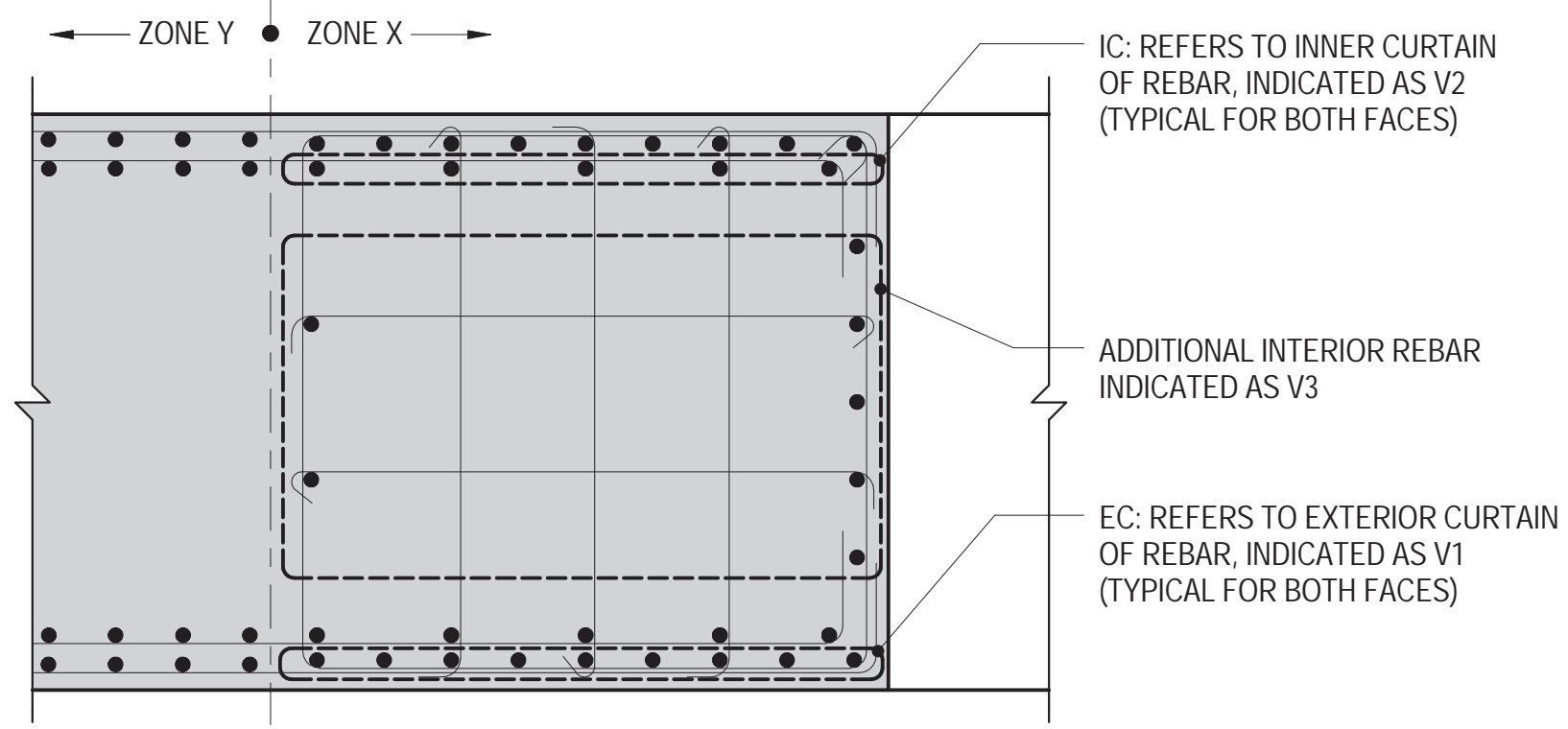


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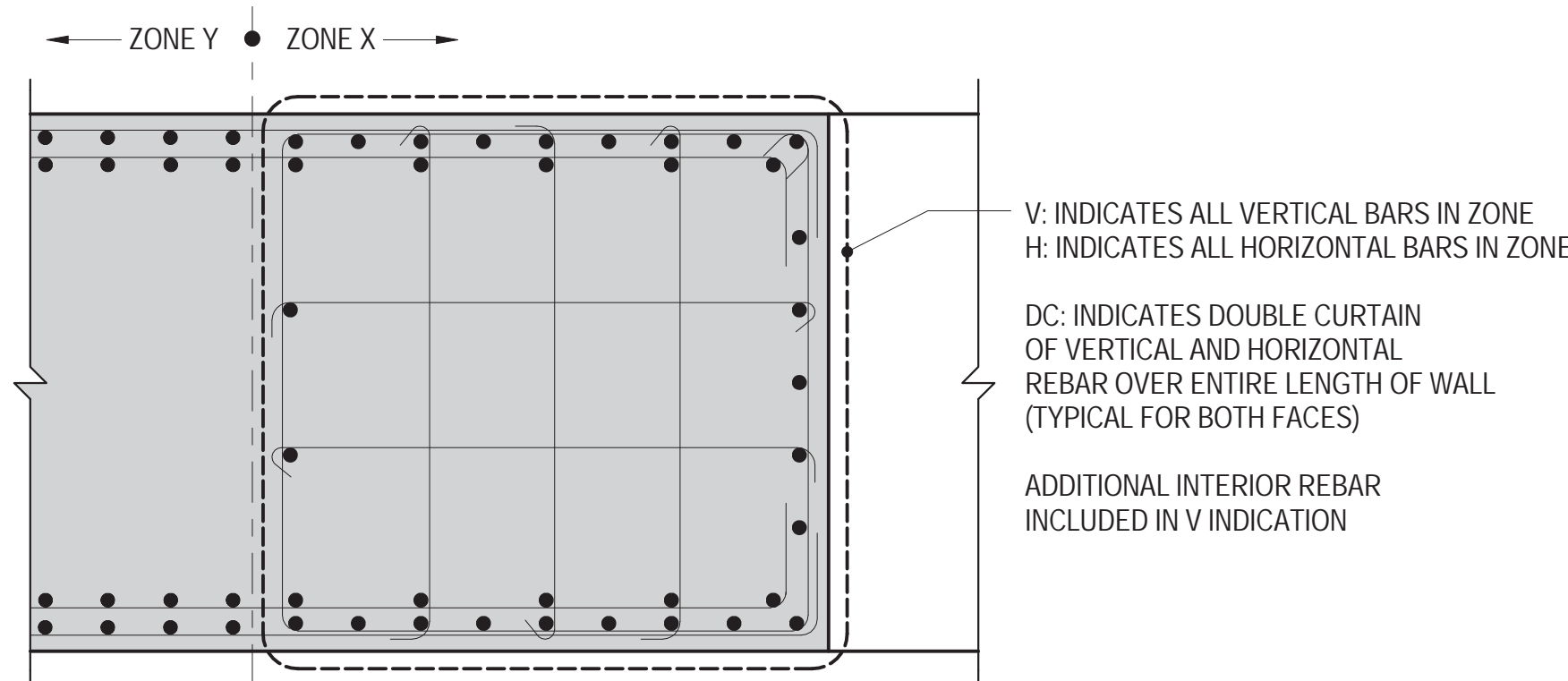


WALL ALONG GRIDLINE 3&5 T-JUNCTION

A WALL REINFORCEMENT ZONE KEY PLAN
NOT TO SCALE



AT LOCATIONS WITH VARYING VERTICAL REBAR



NOTE: VERTICAL AND HORIZONTAL REINFORCEMENT ARE SINGLE CURTAIN UNLESS NOTED OTHERWISE

AT LOCATIONS WITH IDENTICAL VERTICAL REBAR

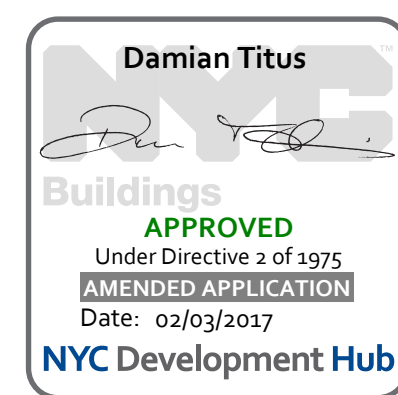
B WALL REINFORCEMENT LAYOUT KEY PLAN
NOT TO SCALE

ABBREVIATION KEY:

- V: VERTICAL REINFORCEMENT
- H: HORIZONTAL REINFORCEMENT
- T: TENSION DEVELOPMENT LENGTH
- DC: DOUBLE CURTAIN OF REINFORCEMENT
- IC: INNER CURTAIN OF REINFORCEMENT
- EC: EXTERIOR CURTAIN OF REINFORCEMENT
- Ld: TENSION DEVELOPMENT LENGTH

NOTE:

- REFER TO S-098B2 - S-172 FOR FLOOR FRAMING PLANS
- REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 3 ON S-361
- REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 5 ON S-362
- REFER TO S-372 - S-386 FOR LARGE PARTIAL PLANS INSIDE CORE
- REFER TO S-FDN & S-D97B3 FOR CORE WALL FOUNDATION PLANS
- REFER TO S-501 - S-502 FOR COMPOSITE METAL DECK SCHEDULE
- REFER TO S-331 - S-332 FOR CORE WALL SCHEDULE AND DETAILS
- REFER TO S-391 - S-394 FOR LINK BEAM SCHEDULE AND DETAILS
- REFER TO S-395 FOR RC BEAM SCHEDULE AND DETAILS
- REFER TO S-371 FOR RC CONCRETE SLAB SCHEDULE AND DETAILS
- REFER TO S-411 - S-413 FOR EMBEDDED STEEL ELEVATIONS AND SCHEDULES
- REFER TO S-332 FOR EMBEDDED SHEAR TAB CONNECTION SCHEDULE
- REFER TO S-004 FOR CONCRETE AND REBAR MATERIAL PROPERTIES AND DEVELOPMENT LENGTH SCHEDULE





A WALL REINFORCEMENT ZONE KEY PLAN



AT LOCATIONS WITH IDENTICAL VERTICAL REBAR

B WALL REINFORCEMENT LAYOUT KEY PLAN

ABBREVIATION KEY:

V: VERTICAL REINFORCEMENT
H: HORIZONTAL REINFORCEMENT
T: HORIZONTAL TIE REINFORCEMENT
DC: DOUBLE CURTAIN OF REINFORCEMENT
IC: INNER CURTAIN OF REINFORCEMENT
EC: EXTERIOR CURTAIN OF REINFORCEMENT
Ld: TENSION DEVELOPMENT LENGTH

NOTE:

1. REFER TO S-098R2 - S-172 FOR FLOOR FRAMING PLANS.
2. FOR DIMENSION OF MECHANICAL OPENINGS INDICATED ON THIS PLAN, REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 3 ON S-361
3. FOR DIMENSION OF MECHANICAL OPENINGS INDICATED ON THIS PLAN, REFER TO SHEAR WALL ELEVATION FOR GRIDLINE 3 ON S-361
4. REFER TO S-572 - S-586 FOR LARGE PARTIAL PLANS INSIDE CORE
5. REFER TO S-578 & S-097R3 FOR CORE WALL FOUNDATION PLANS
6. REFER TO S-501 - S-503 FOR CONNECTIONS TO OTHER SCHEDULE
7. REFER TO S-531 - S-532 FOR CORE WALL SCHEDULE AND DETAILS
8. REFER TO S-591 - S-594 FOR LINK BEAM SCHEDULE AND DETAILS
9. REFER TO S-596 FOR RC BEAM SCHEDULE AND DETAILS
10. REFER TO S-571 FOR RC CONCRETE SCHEDULE AND DETAILS
11. REFER TO S-541 - S-543 FOR EMBEDDED STEEL ELEVATIONS AND SCHEDULES
12. REFER TO S-532 FOR EMBEDDED STEEL BAR CONNECTION SCHEDULE
13. REFER TO S-004 FOR CONCRETE AND REBAR MATERIAL PROPERTIES
14. REFER TO S-001 FOR CONCRETE AND REBAR MATERIAL PROPERTIES





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

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

Seal & Signature:
STATE OF NEW YORK
MICHAEL J. HARRIS
079322
PROFESSIONAL ENGINEER

Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: 3-348

B-SCAN Sheet No.:
S-348.02
Sheet No.:
S-348
Page No.:

3 22 APR 2016 ISSUED FOR PIA
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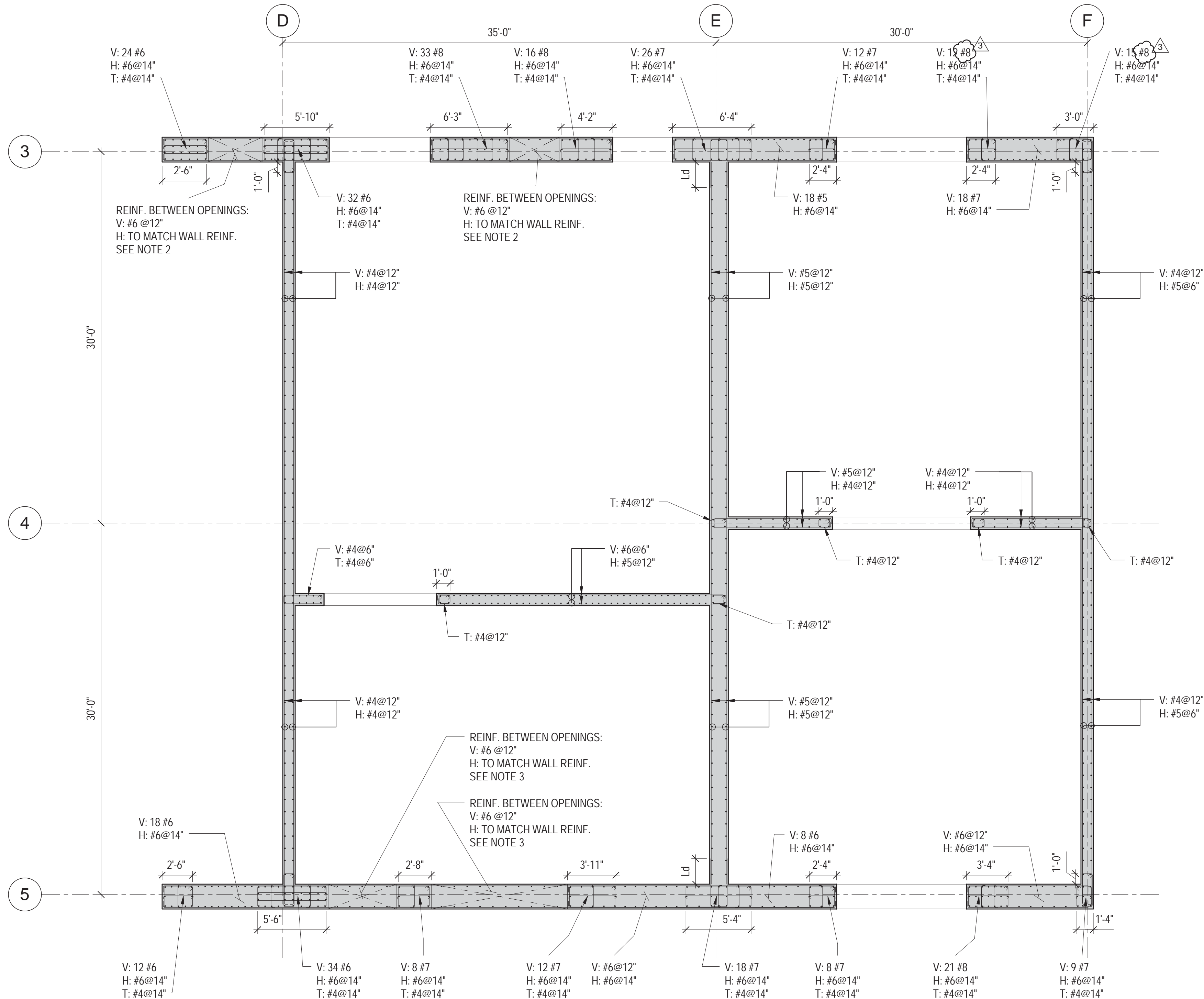
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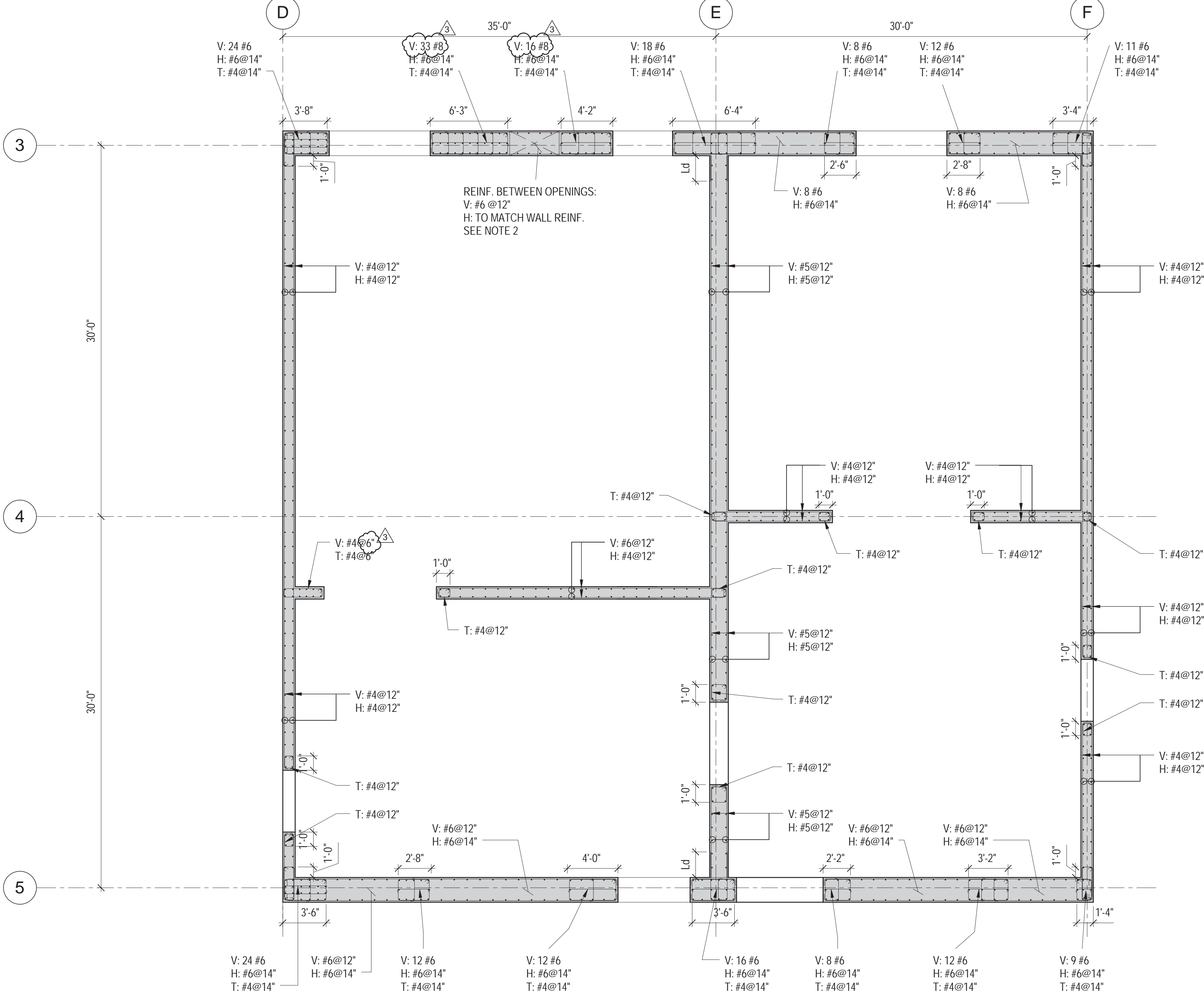
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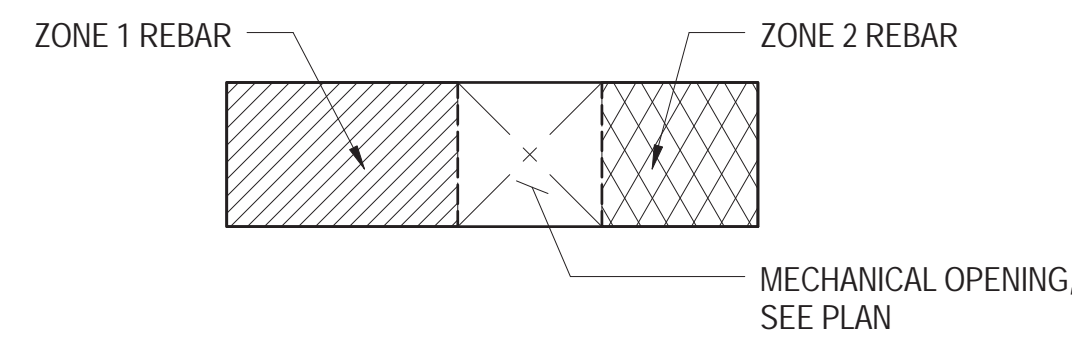
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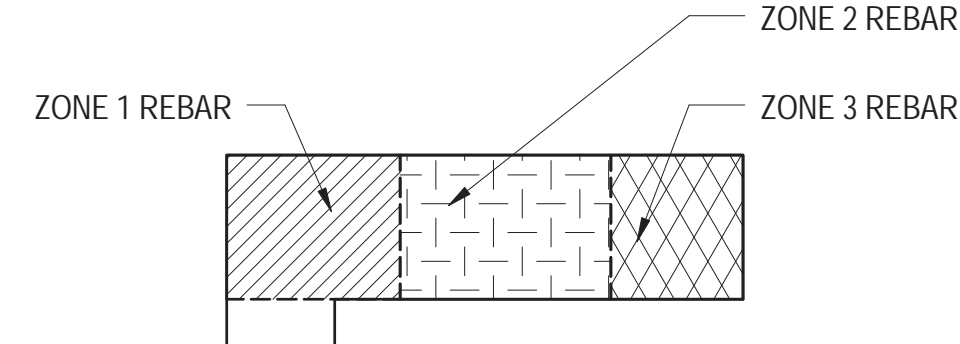
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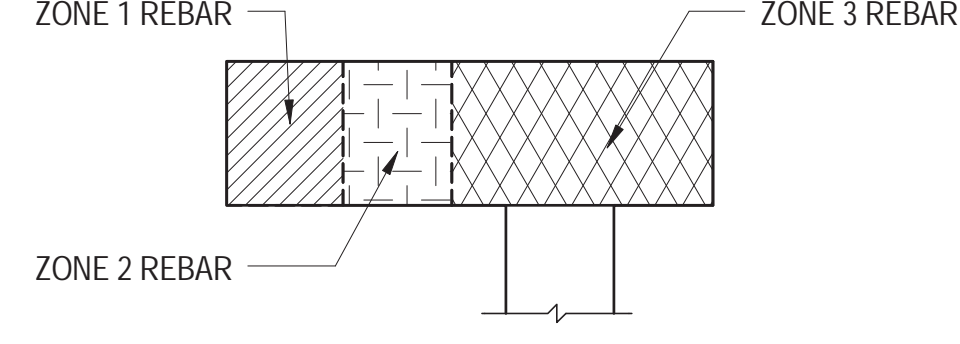
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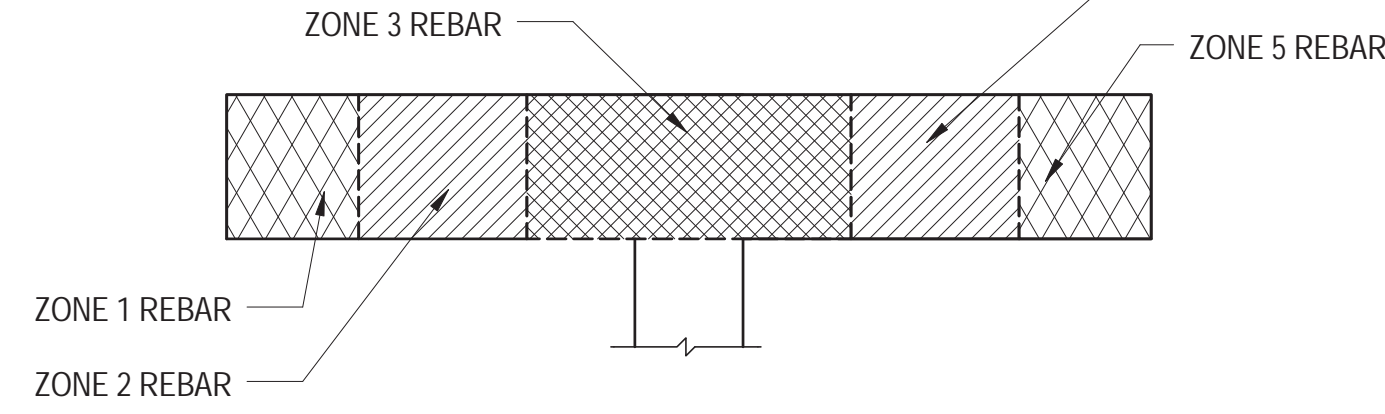
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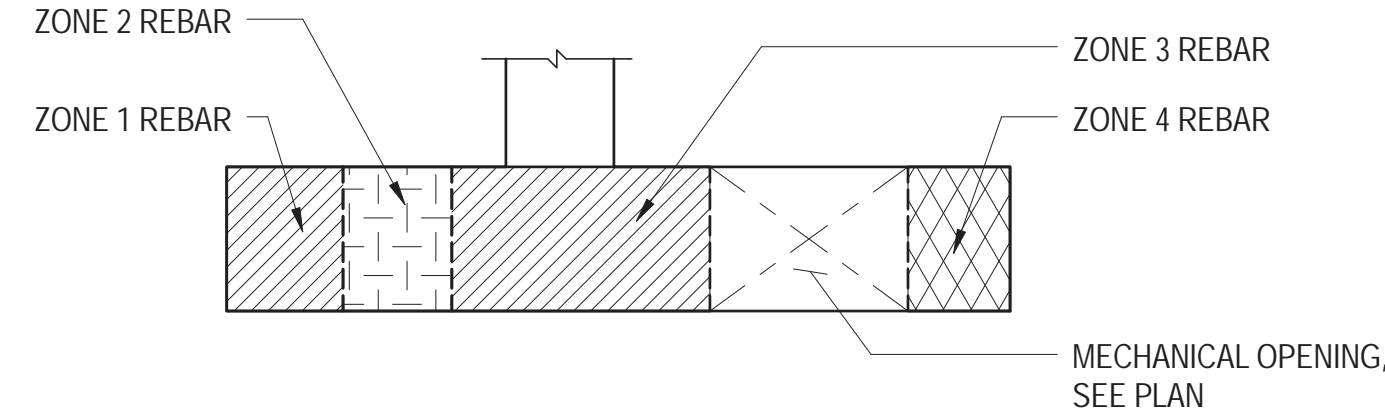
WALL ALONG GRIDLINE 3&5 L-JUNCTION



WALL ALONG GRIDLINE 3&5 L-JUNCTION

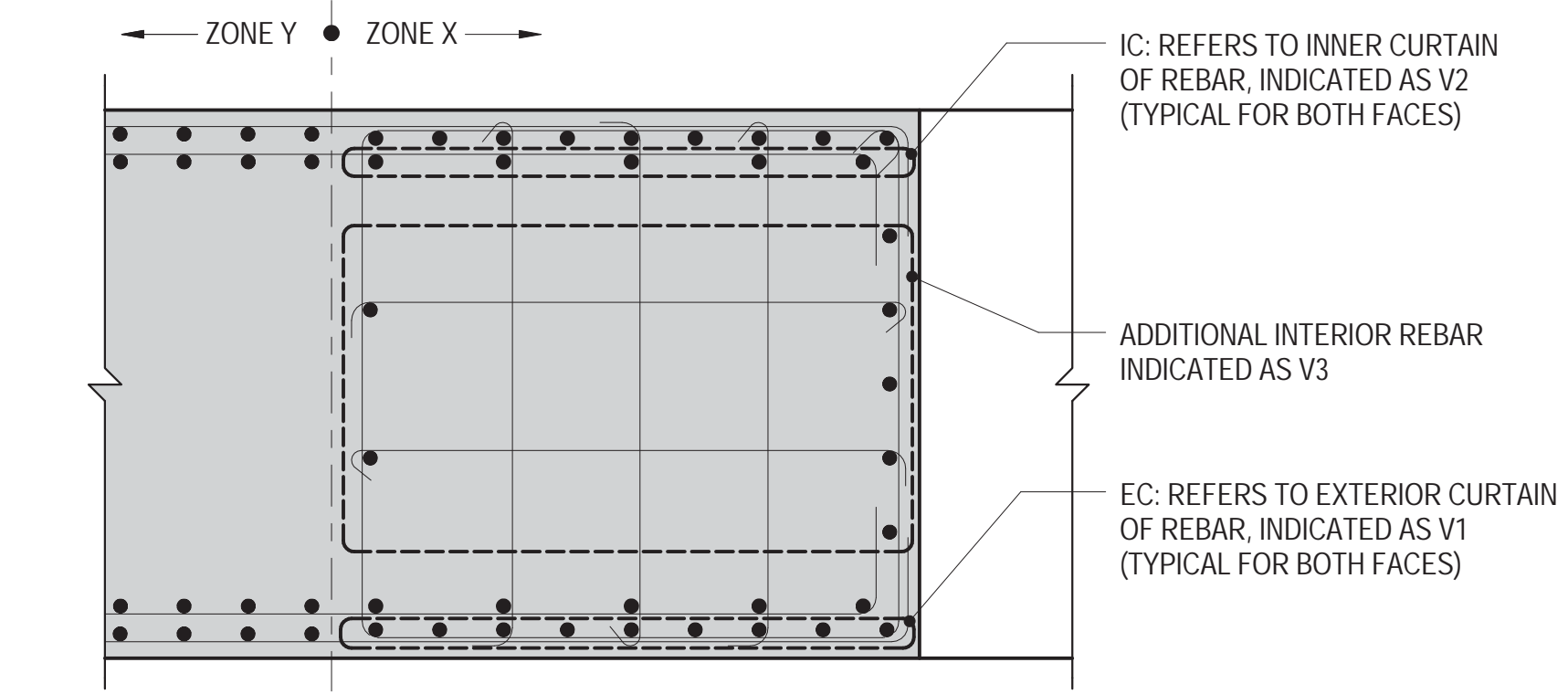


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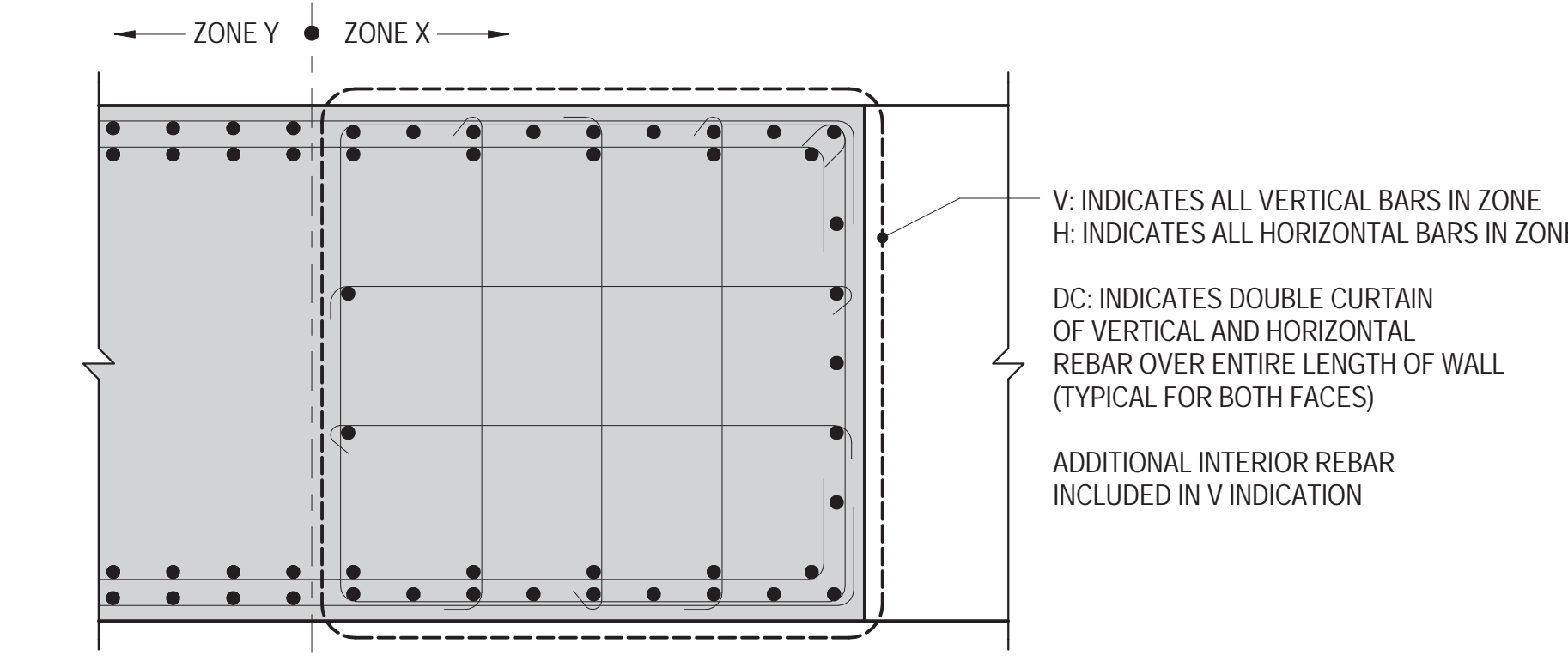


WALL ALONG GRIDLINE 3&5 T-JUNCTION

WALL REINFORCEMENT ZONE KEY PLAN
NOT TO SCALE



AT LOCATIONS WITH VARYING VERTICAL REBAR



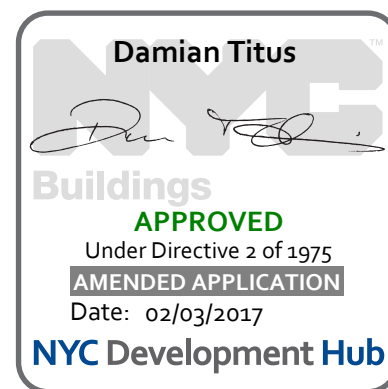
AT LOCATIONS WITH IDENTICAL VERTICAL REBAR

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NOT TO SCALE

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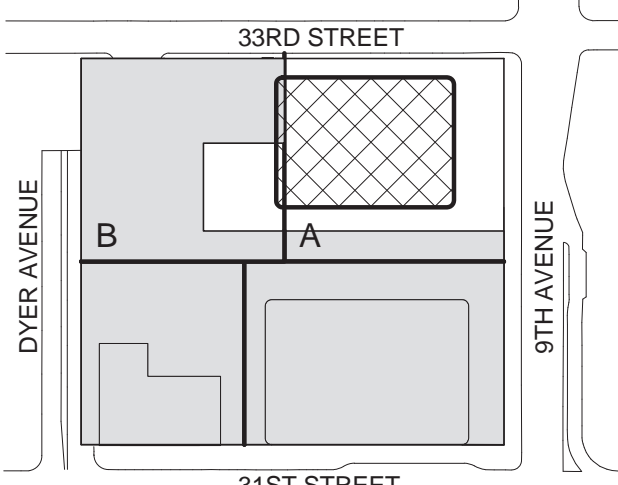
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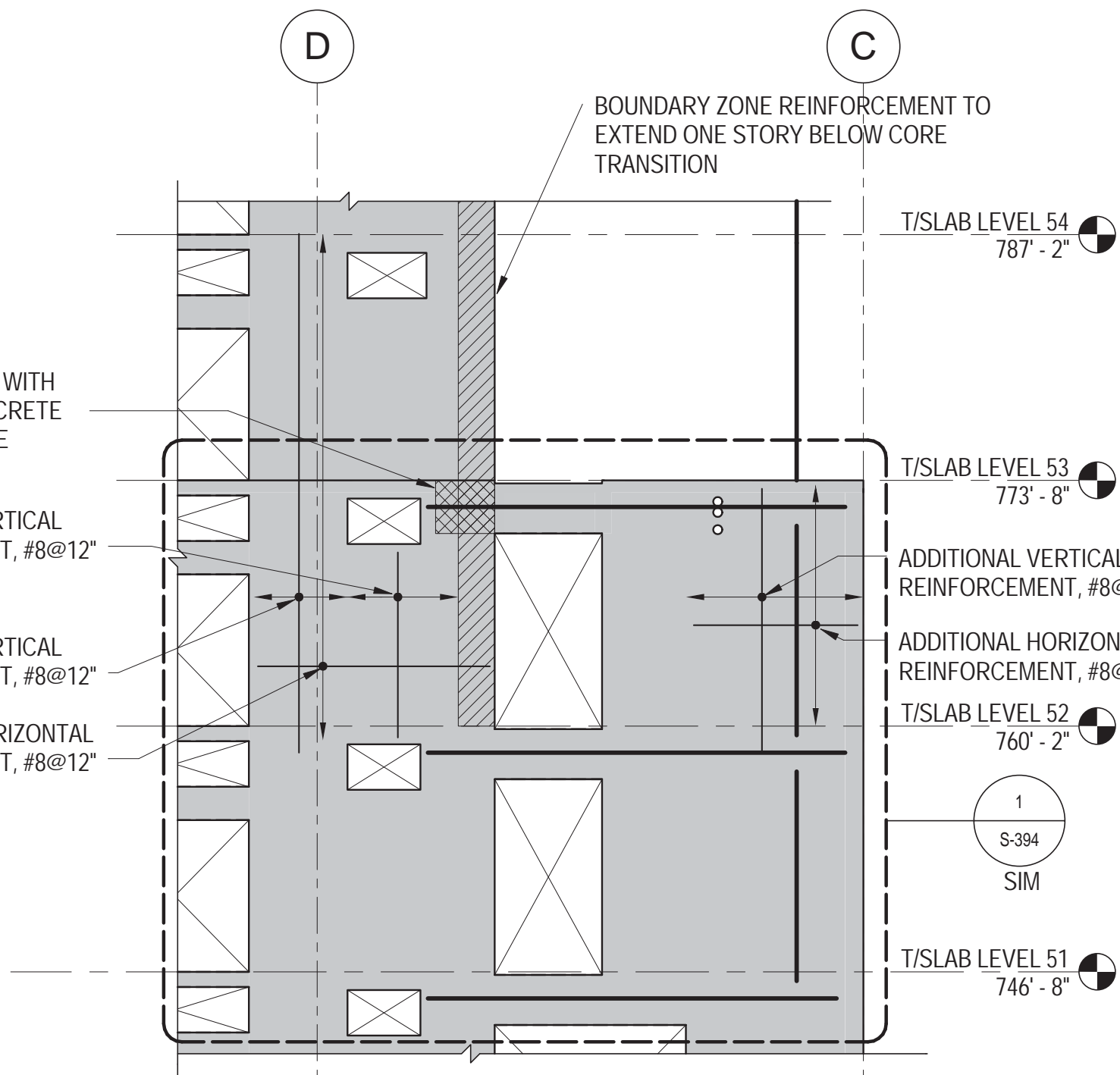
Code Consultant
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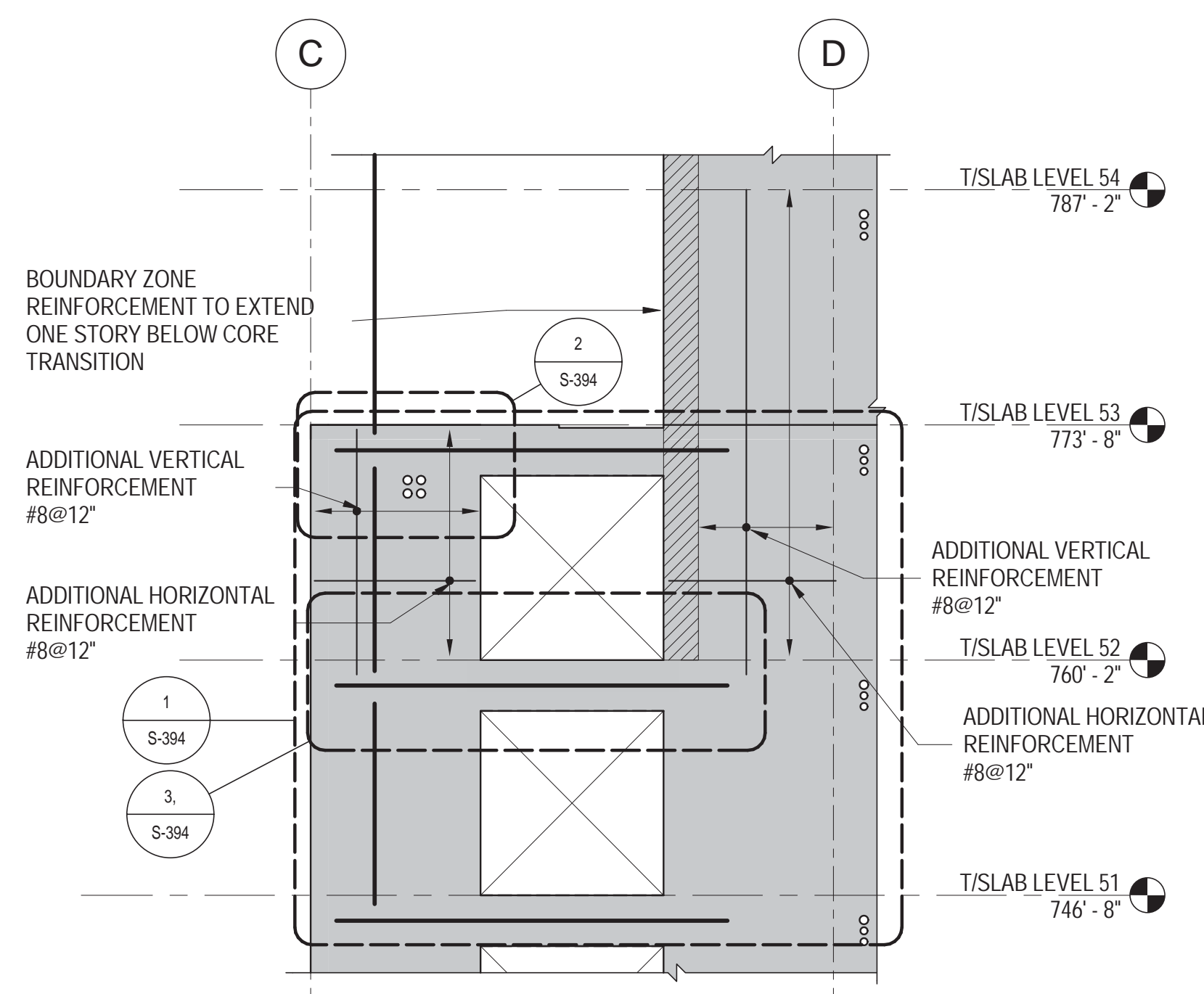
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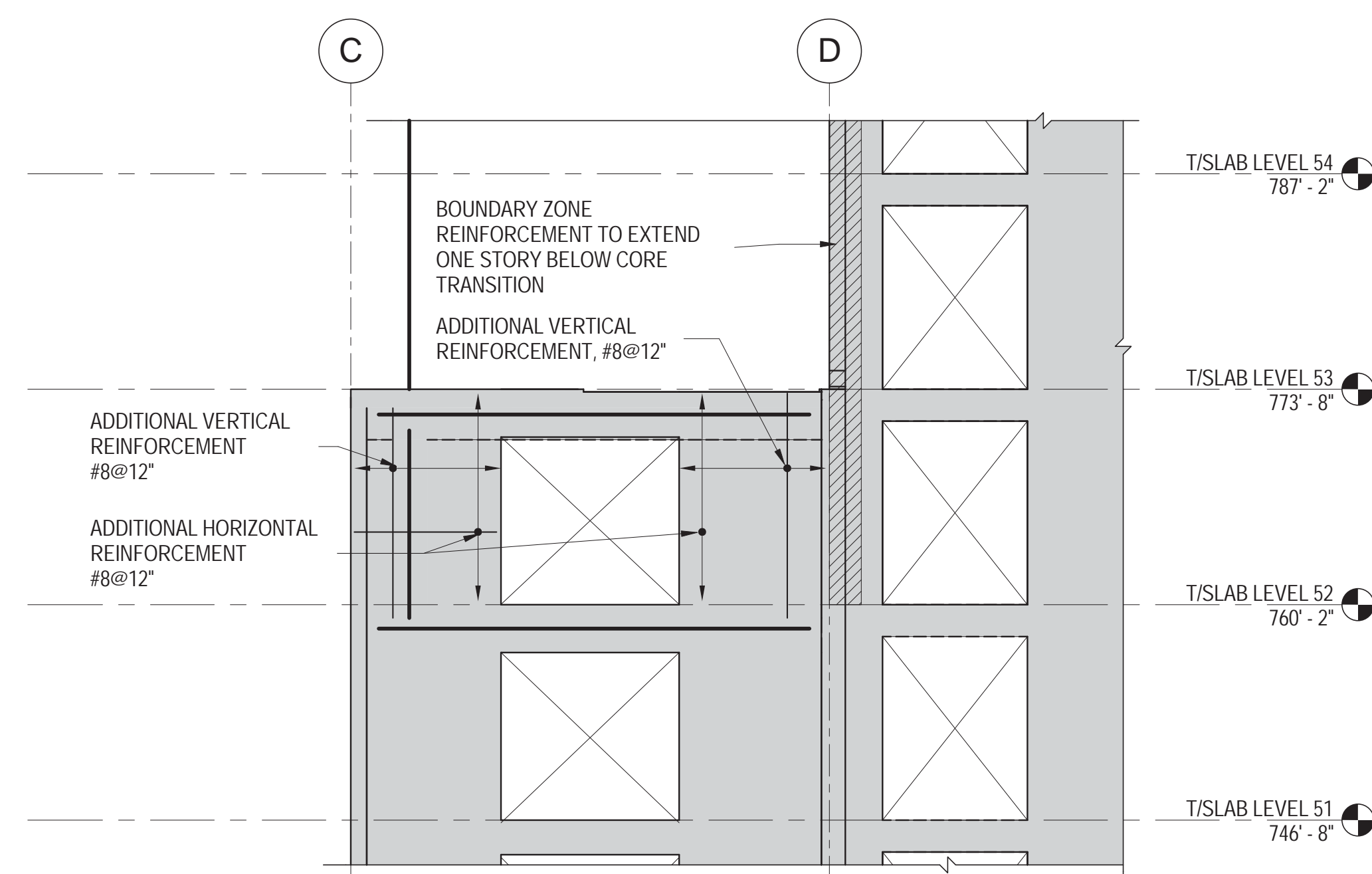
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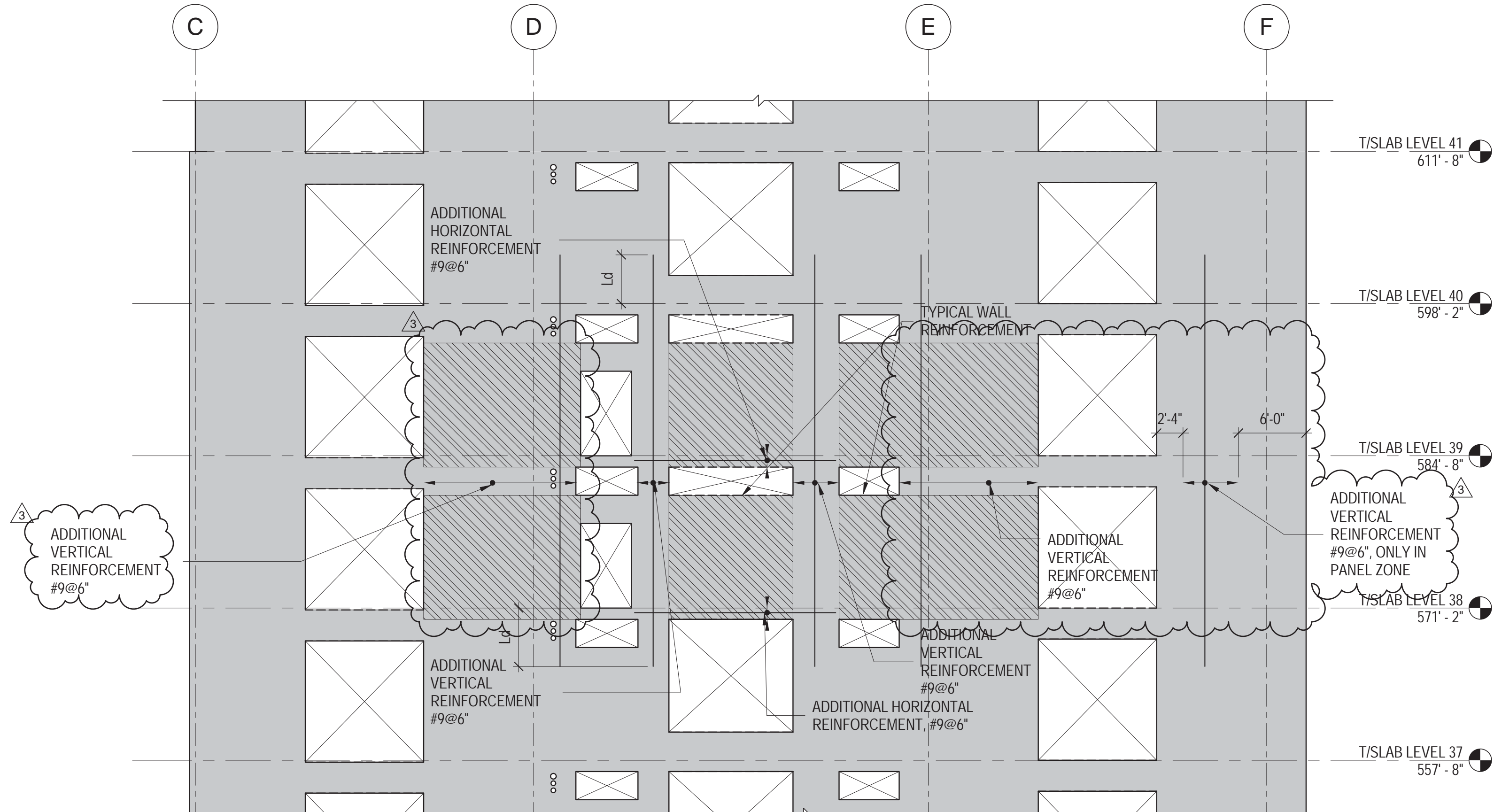
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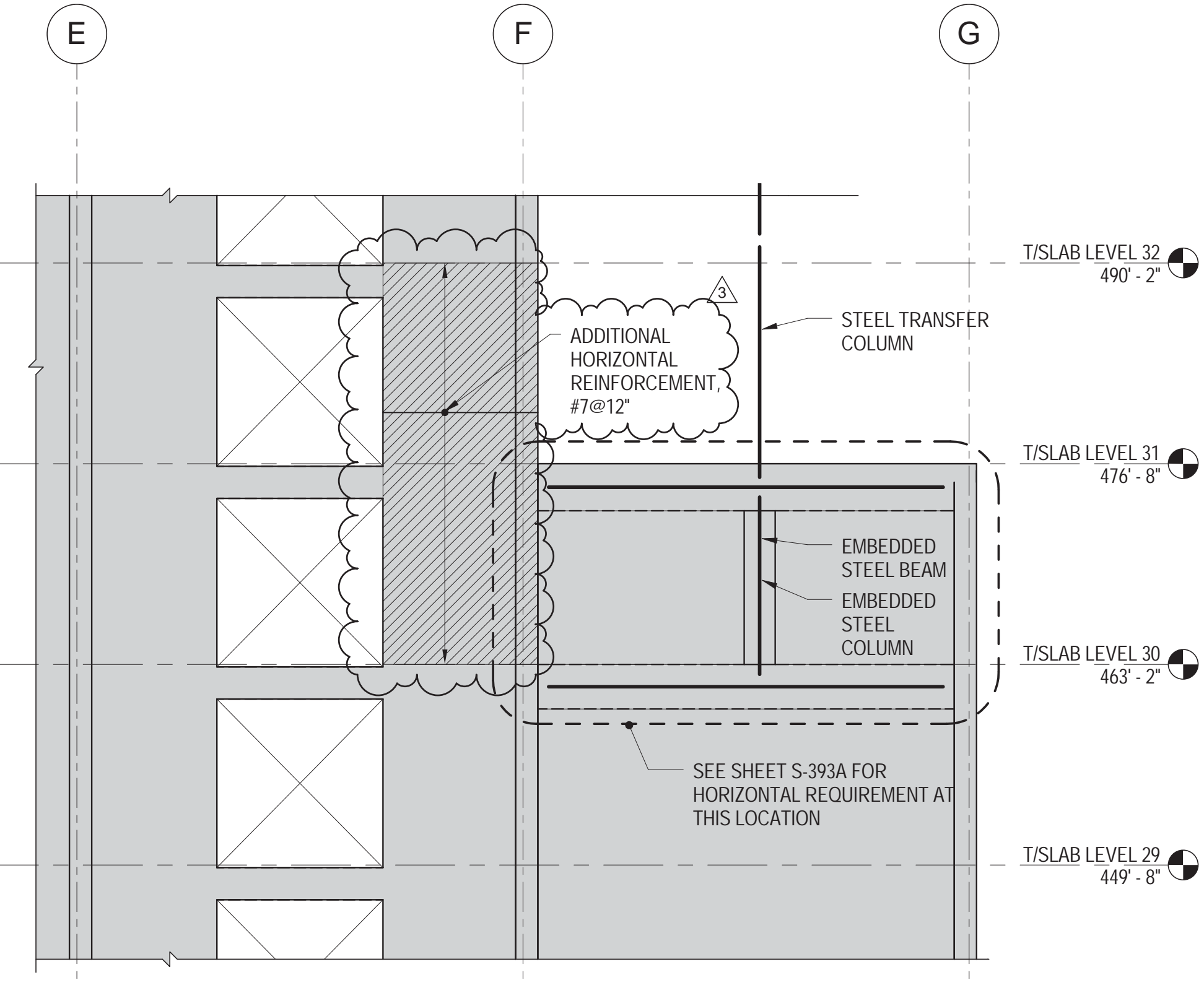
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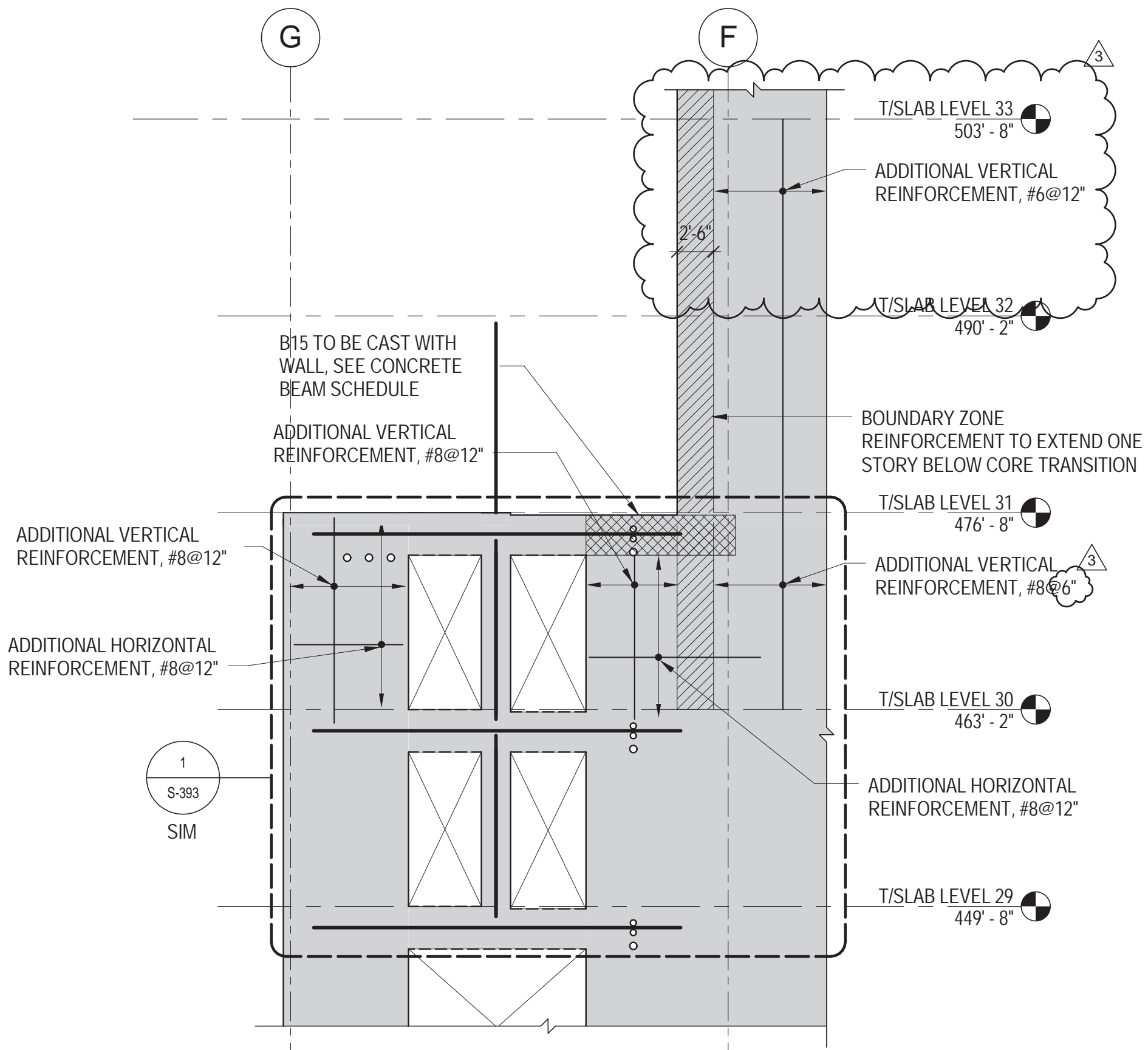
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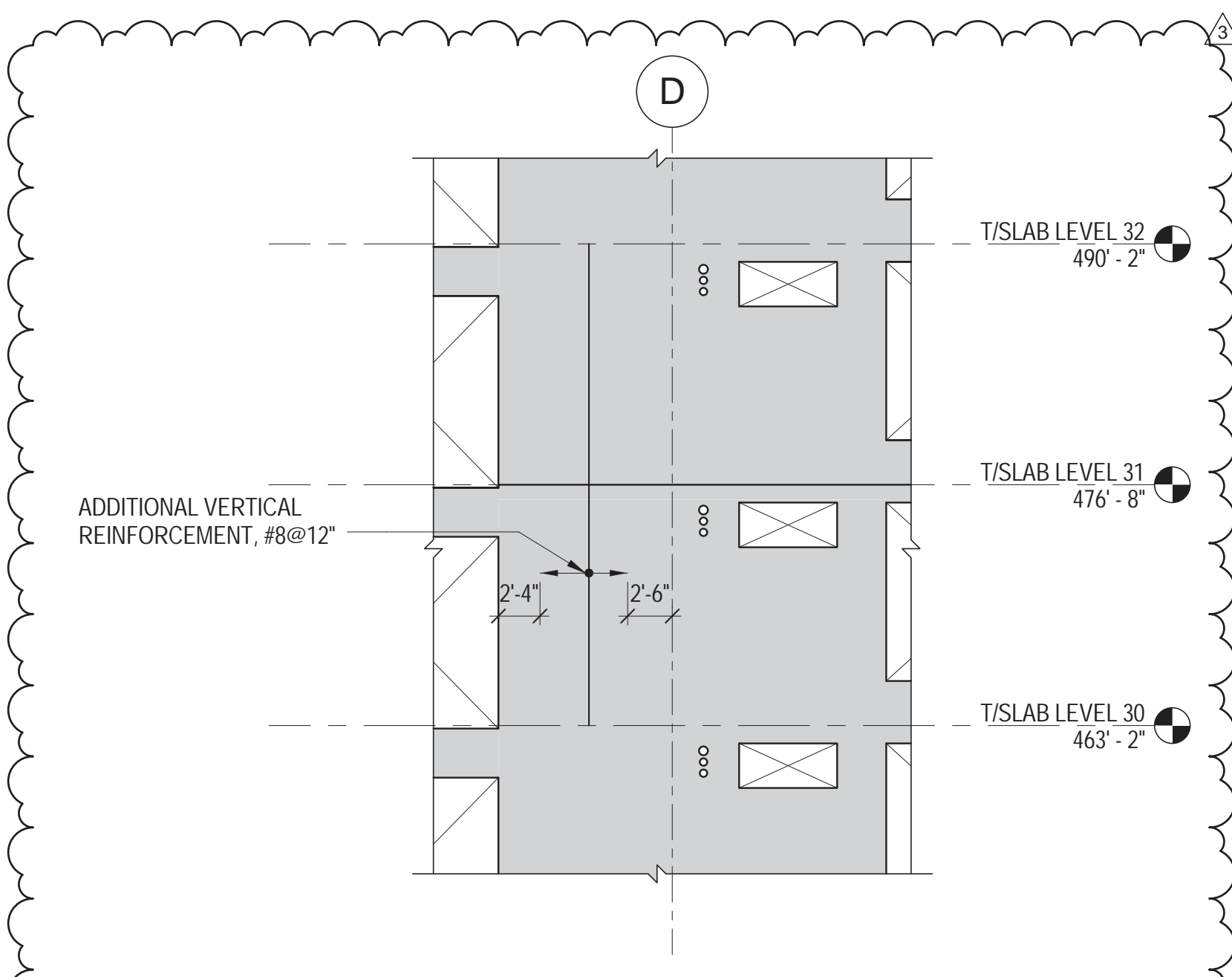
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ADDITIONAL REINFORCEMENT

NOT TO SCALE



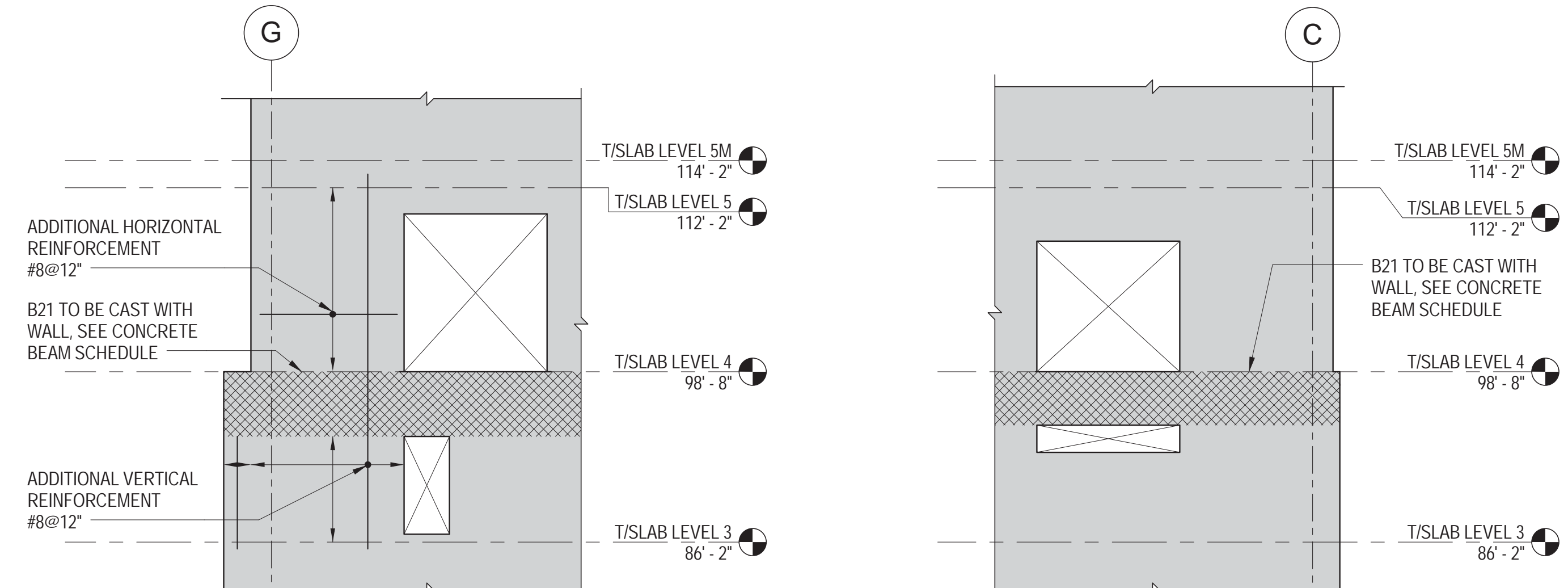
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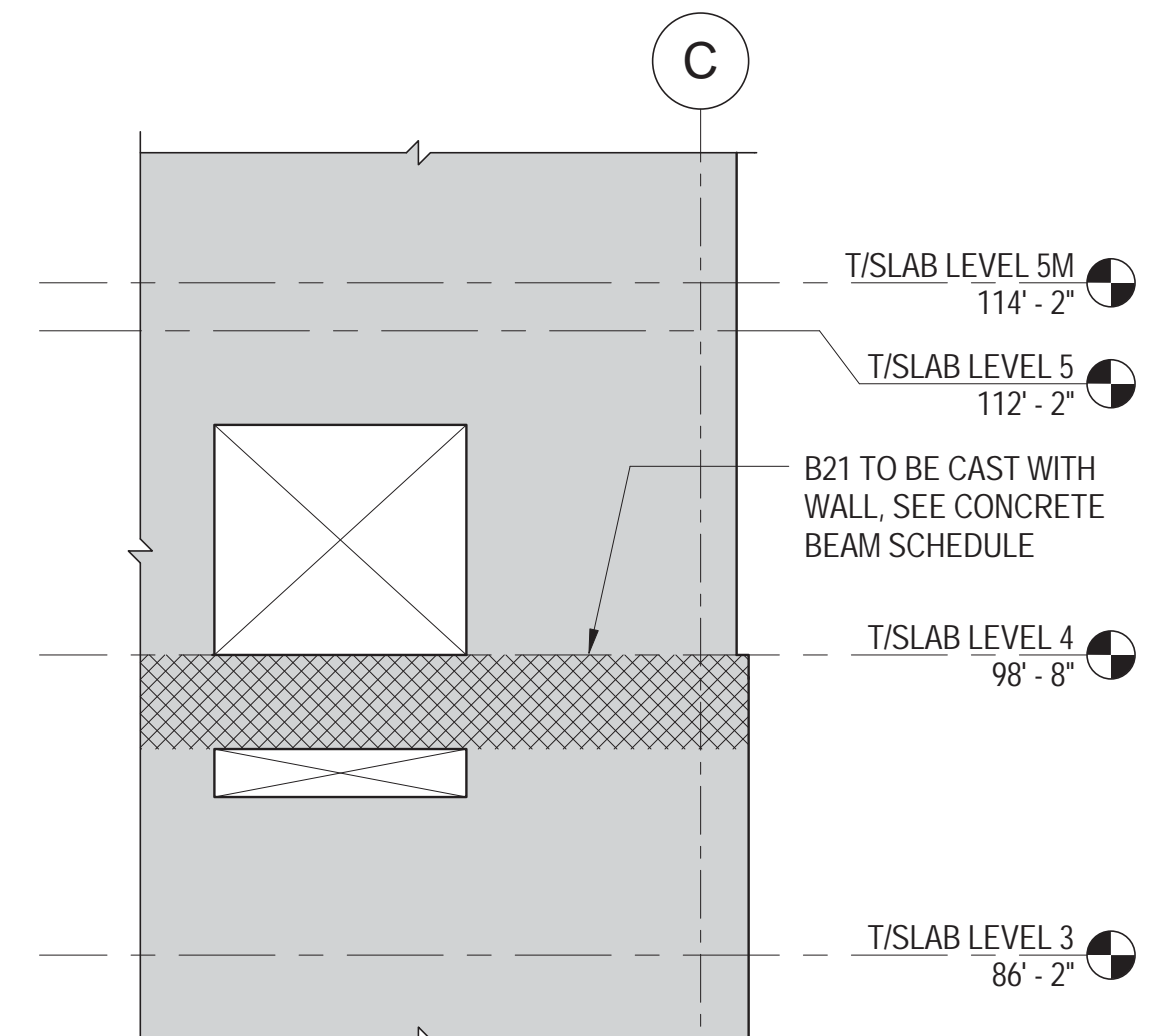
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REINFORCEMENT

NOT TO SCALE



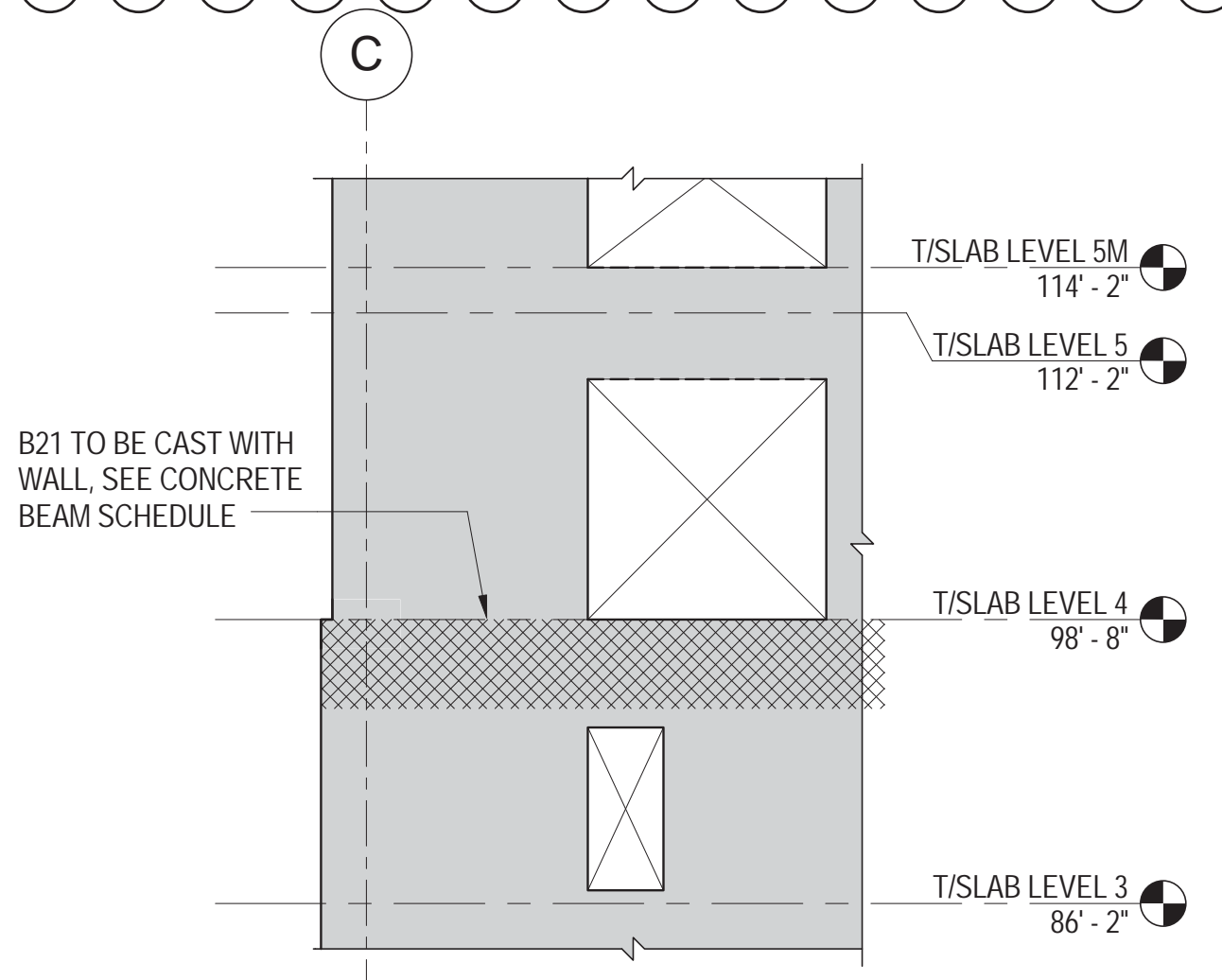
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REINFORCEMENT

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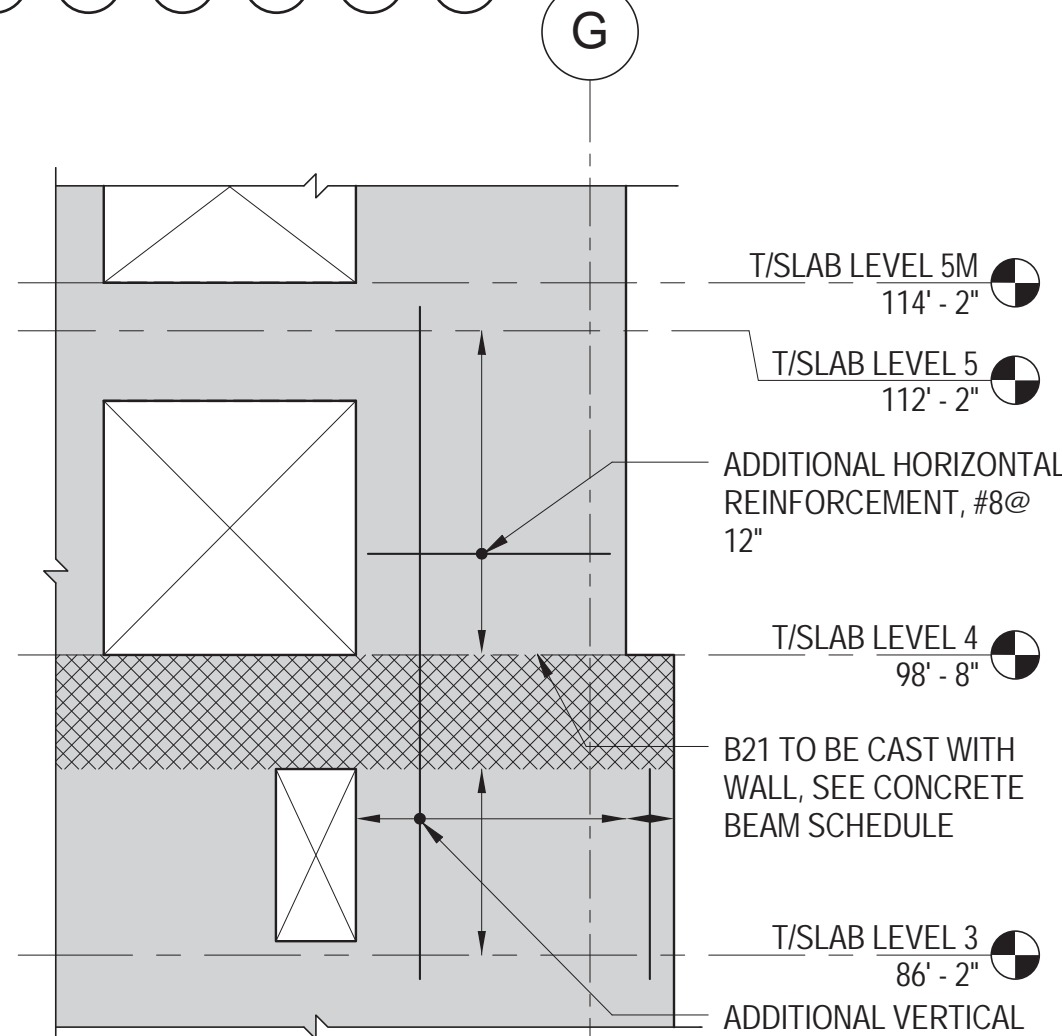
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REINFORCEMENT

NOT TO SCALE



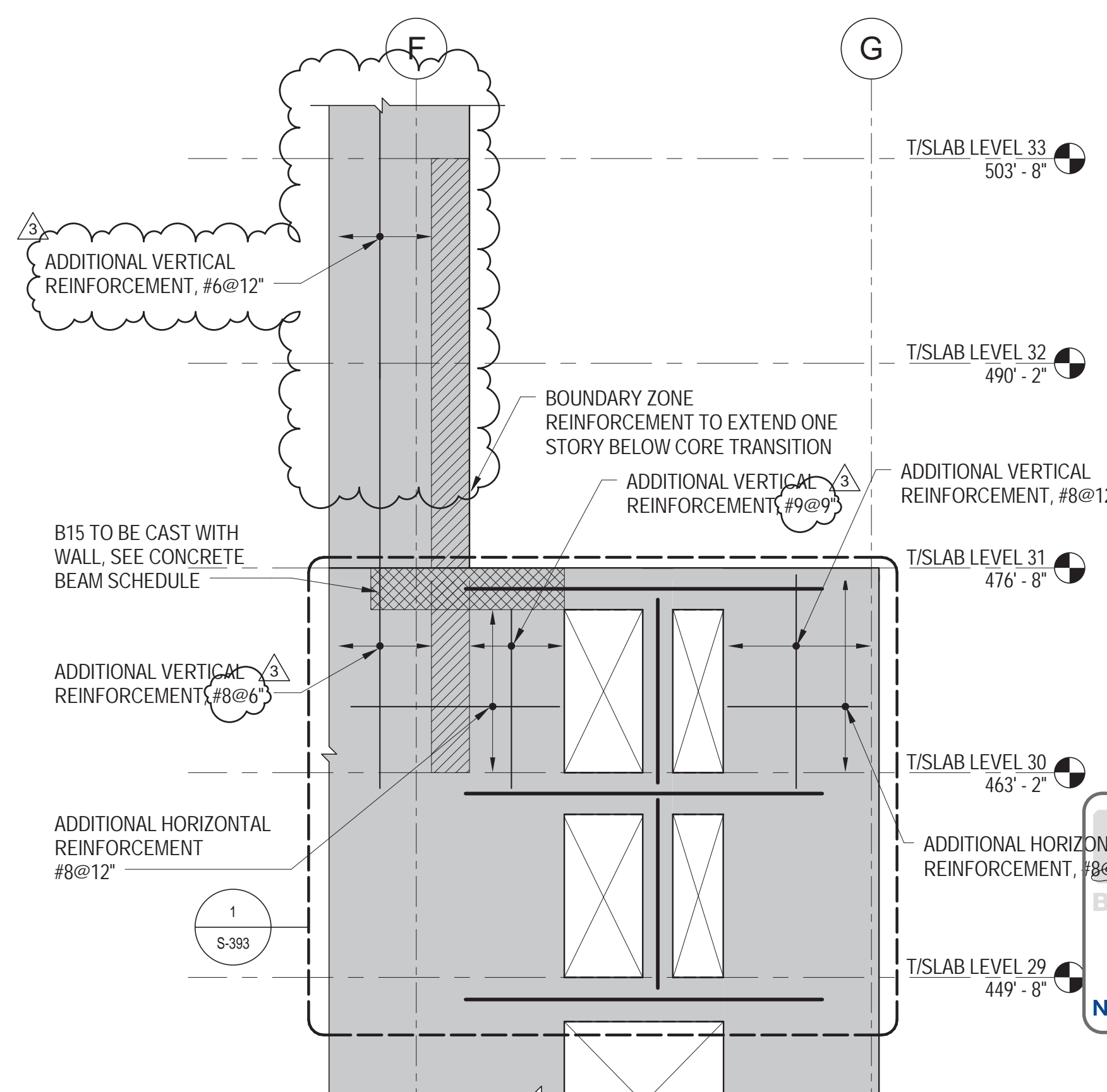
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LOOKING NORTH - ADDITIONAL
REINFORCEMENT

NOT TO SCALE



6 SECTION ALONG GRID LINE 5
LOOKING NORTH - ADDITIONAL
REINFORCEMENT

NOT TO SCALE



7 SECTION ALONG GRID LINE 5 LOOKING NORTH -
ADDITIONAL REINFORCEMENT

NOT TO SCALE

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Key Plan:

Seal & Signature:

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**CORE WALL
REINFORCEMENT
LAYOUT**

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-350

B-SCAN Sheet No.: **S-350.02**
Sheet No.: **S-350**
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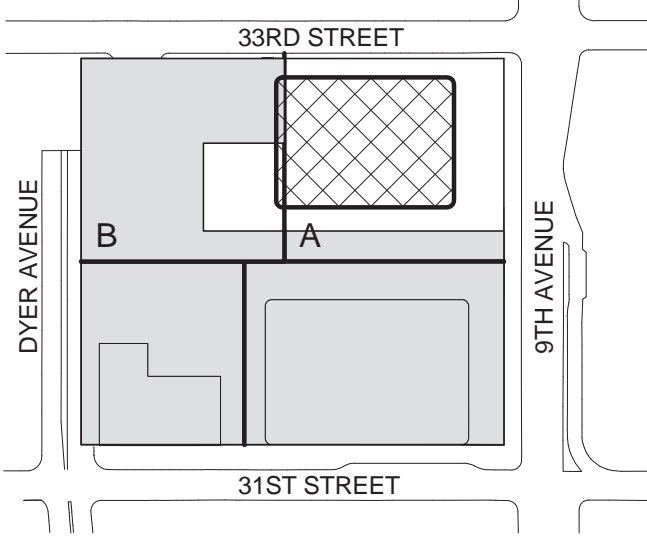
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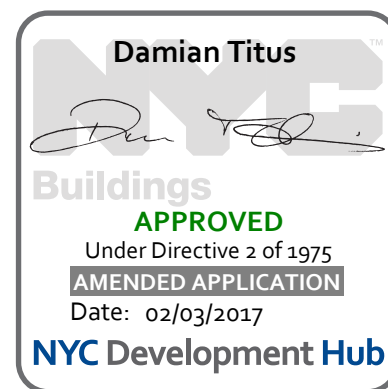


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1/8" = 1'-0"

File No.:

S-351

B-SCAN Sheet No.:

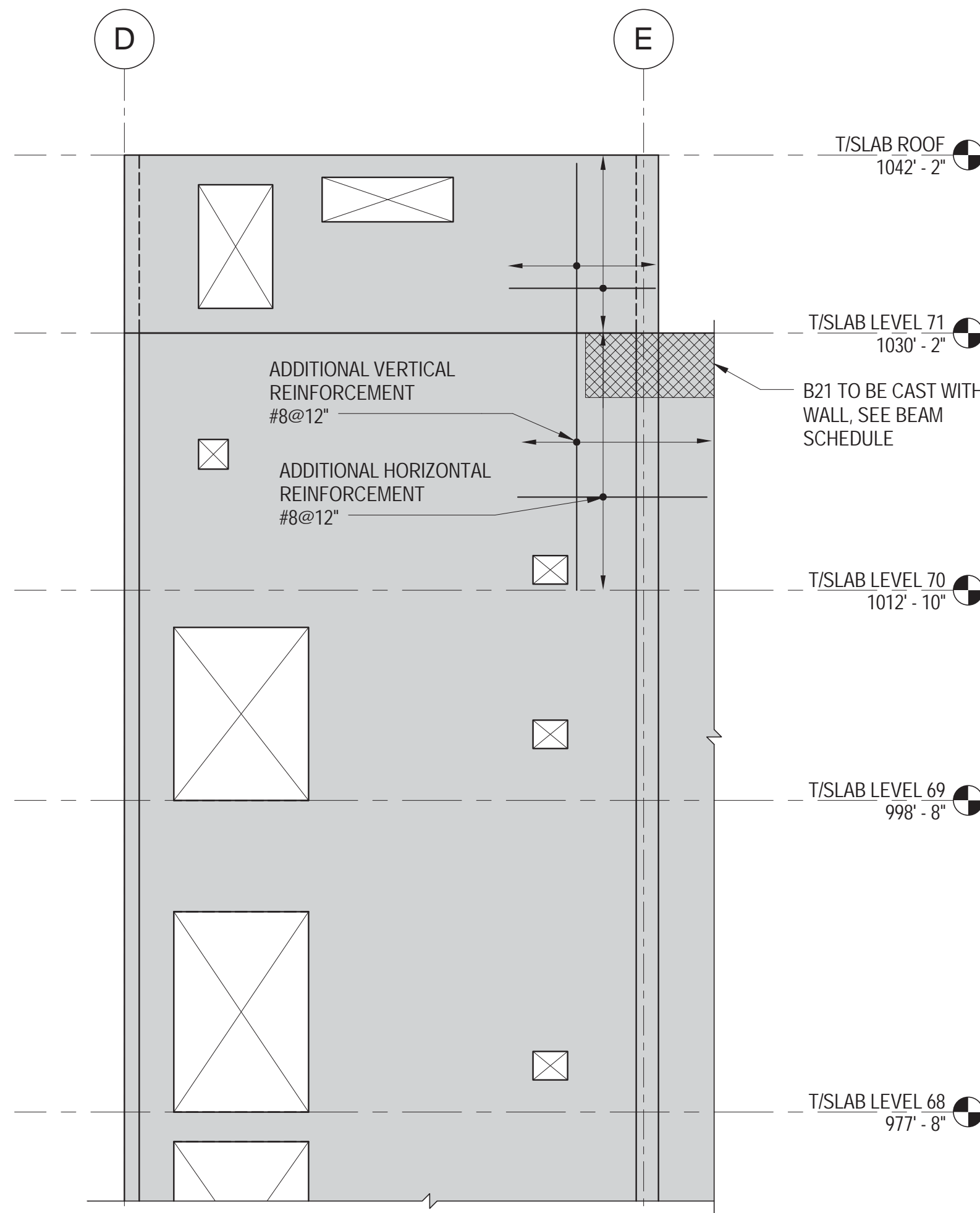
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Sheet No.:

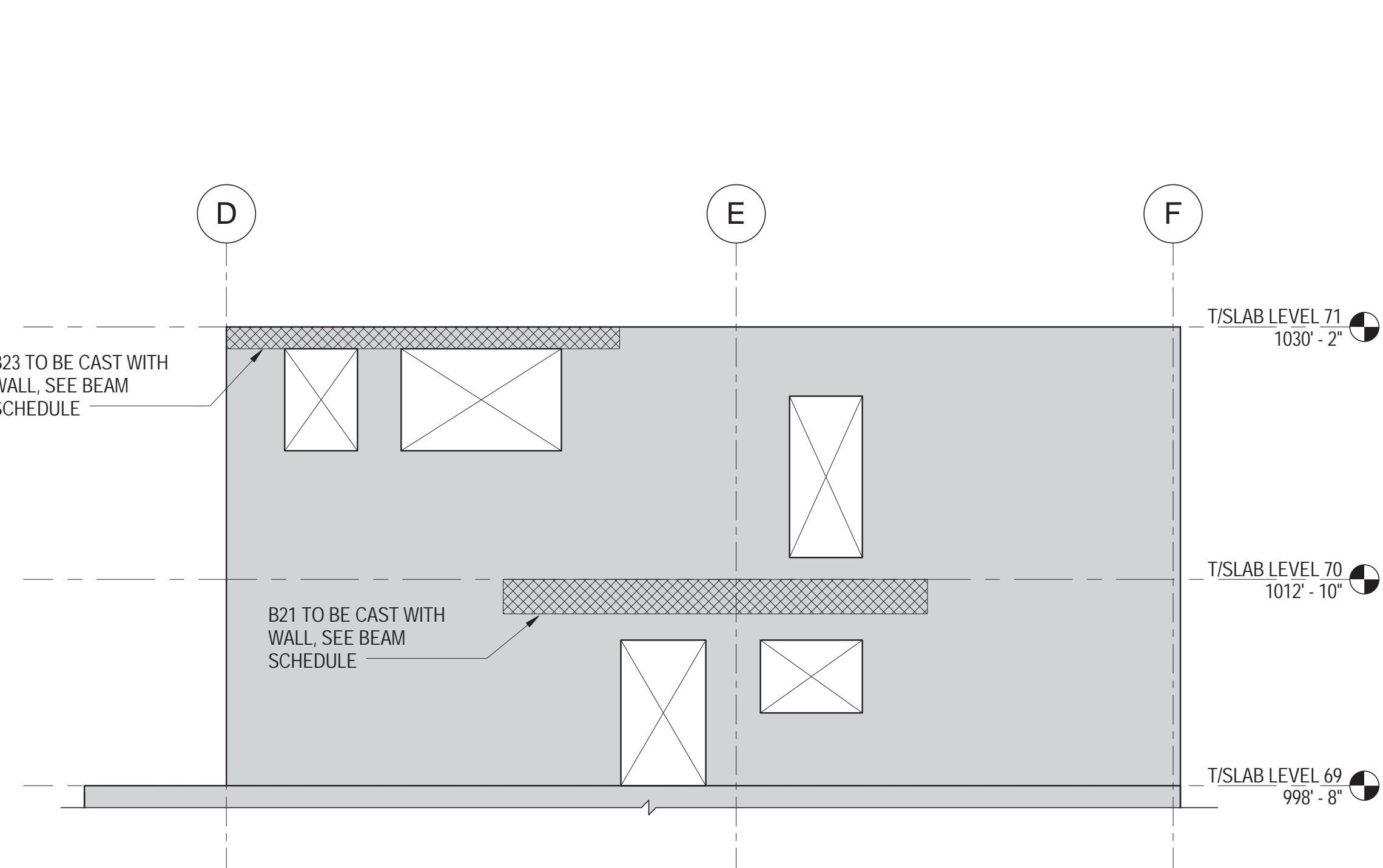
S-351

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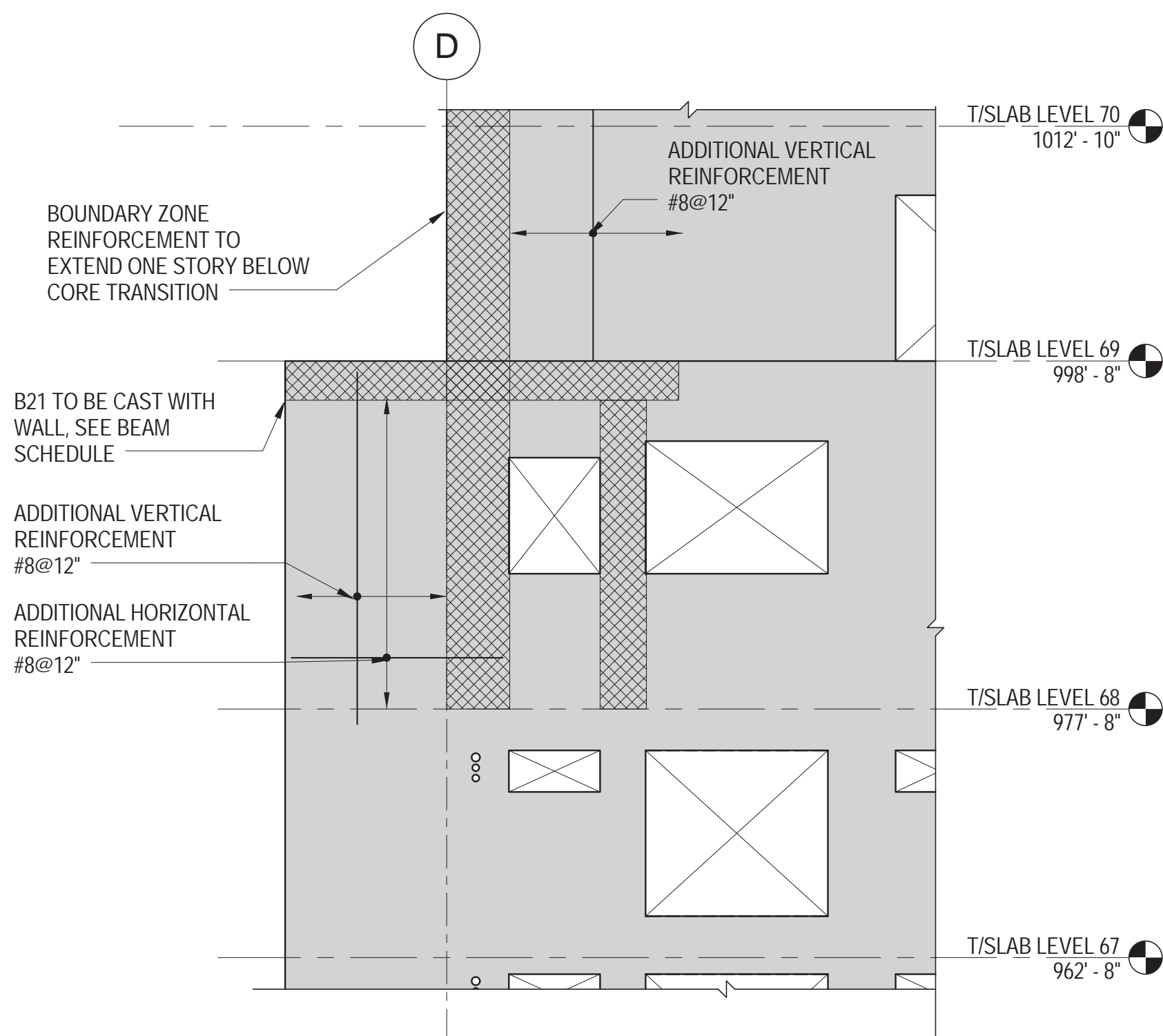
S-351

**10 SECTION ALONG GRID LINE 4 LOOKING NORTH - ADDITIONAL REINFORCEMENT**

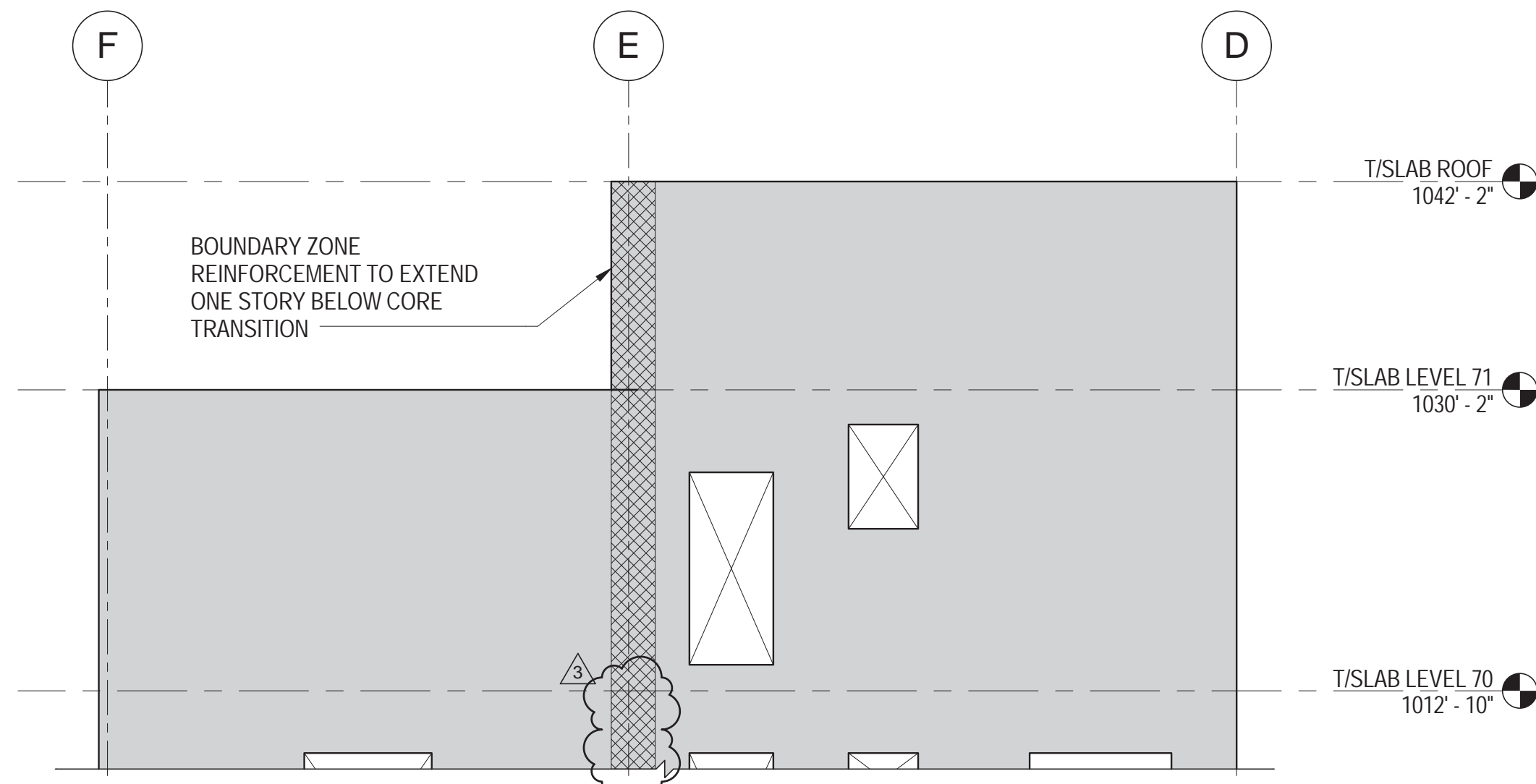
NOT TO SCALE

**8 SECTION ALONG GRID LINE 5 LOOKING NORTH - ADDITIONAL REINFORCEMENT**

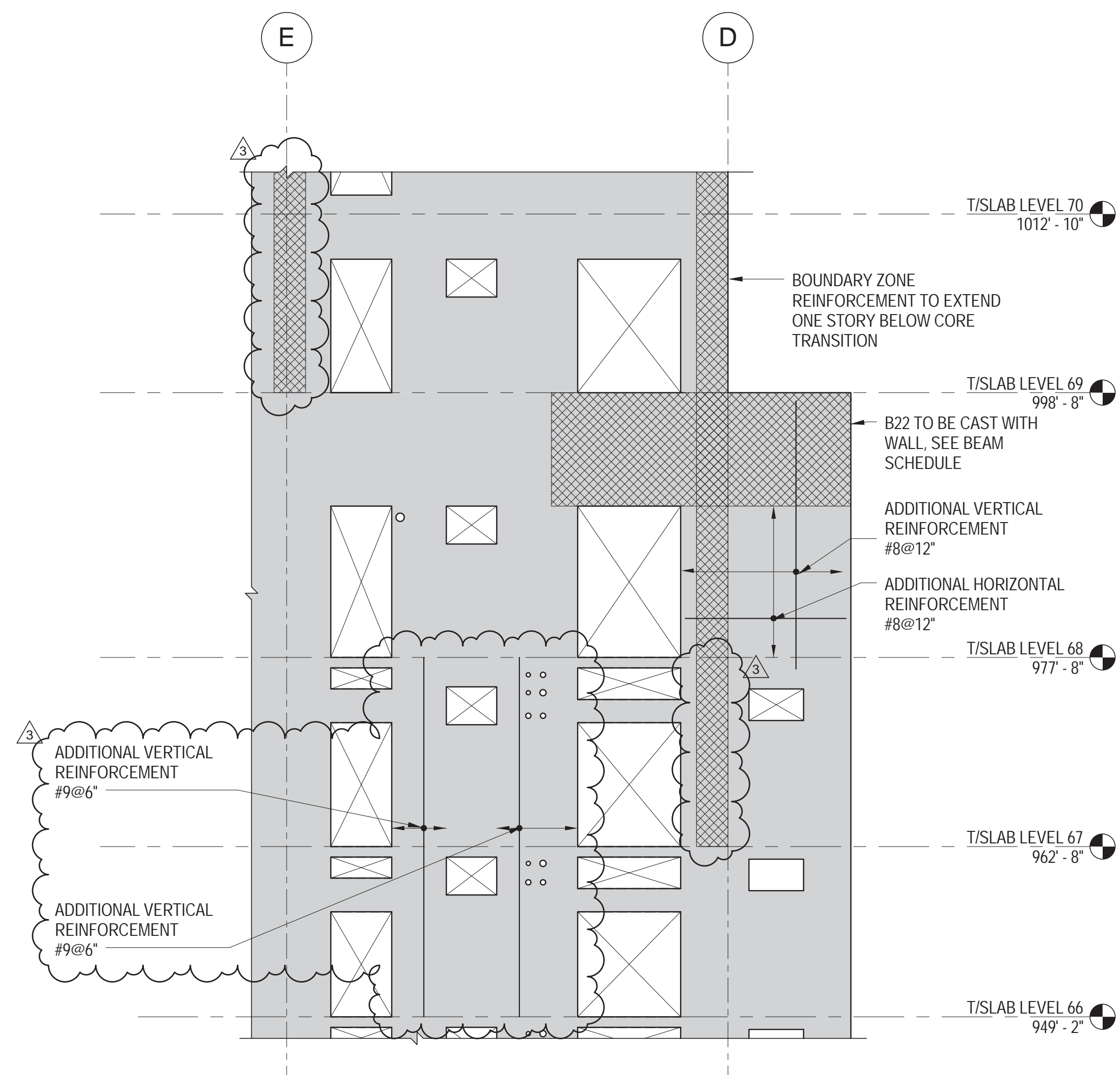
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**7 SECTION ALONG GRID LINE 5 LOOKING NORTH - ADDITIONAL REINFORCEMENT**

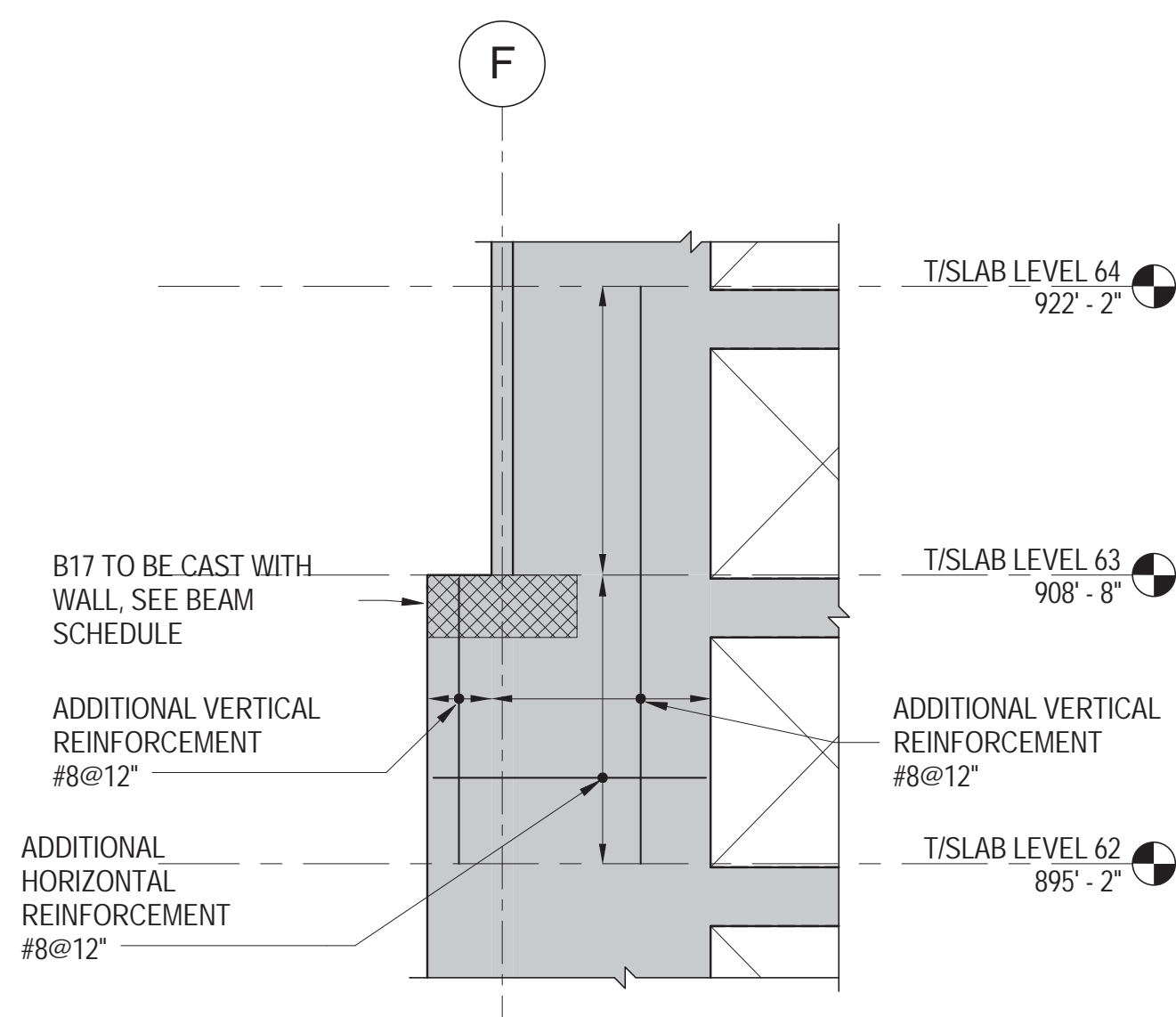
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**3 SECTION ALONG GRID LINE 3 LOOKING SOUTH - ADDITIONAL REINFORCEMENT**

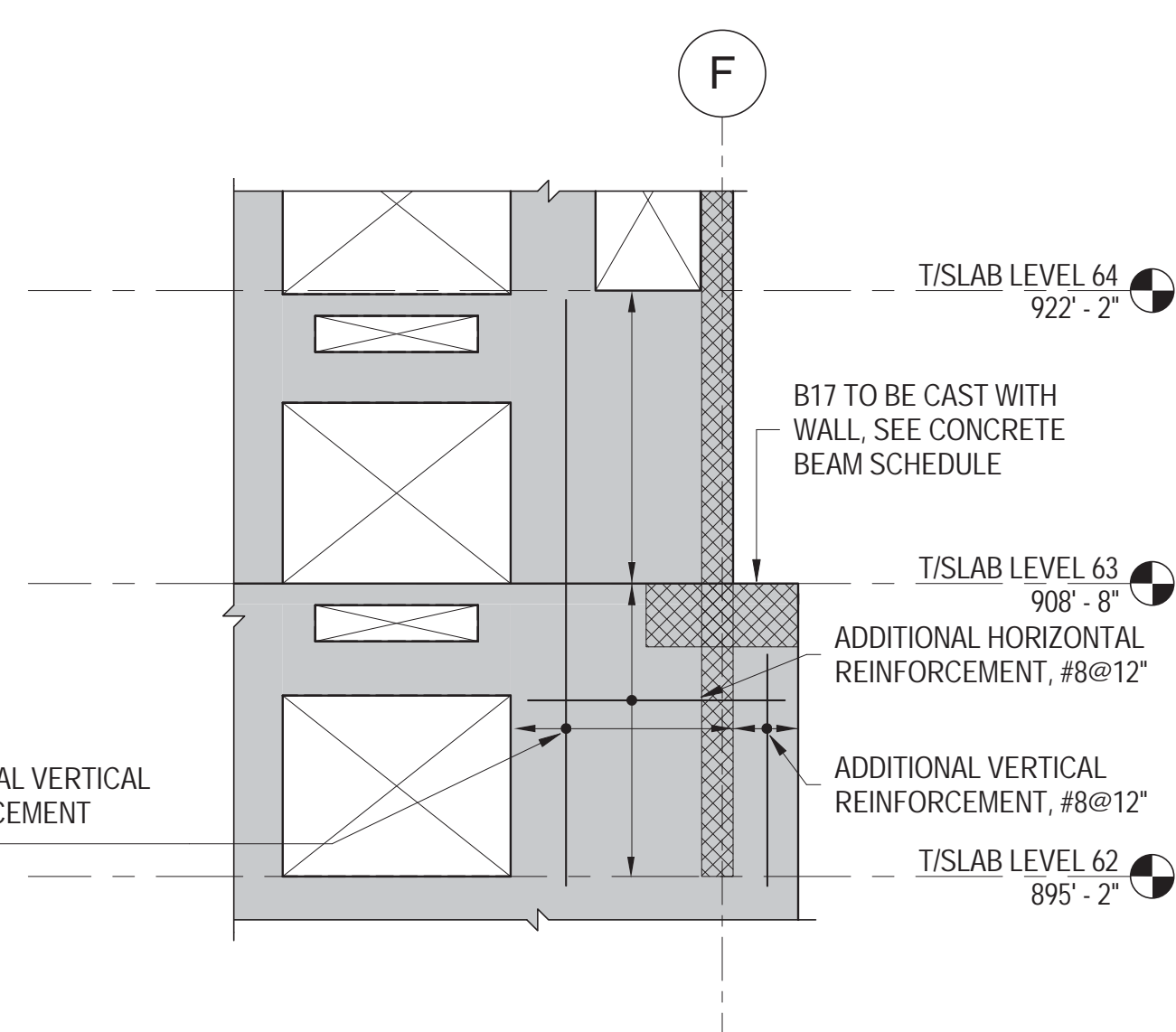
NOT TO SCALE

**2 SECTION ALONG GRID LINE 3 LOOKING SOUTH - ADDITIONAL REINFORCEMENT**

NOT TO SCALE

**1 SECTION ALONG GRID LINE 3 LOOKING SOUTH - ADDITIONAL REINFORCEMENT**

NOT TO SCALE

**6 SECTION ALONG GRID LINE 5 LOOKING NORTH - ADDITIONAL REINFORCEMENT**

NOT TO SCALE



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

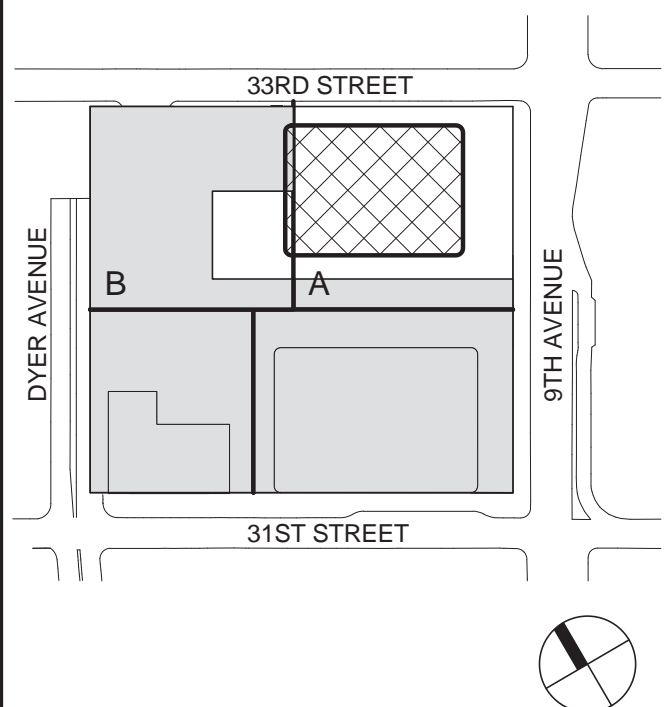
Facade Maintenance Consultant

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:



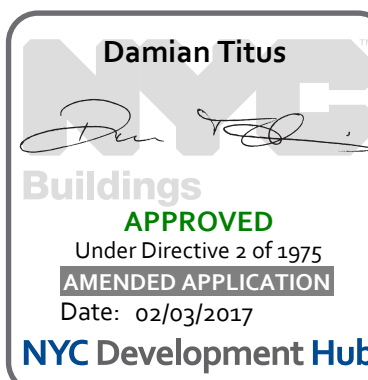
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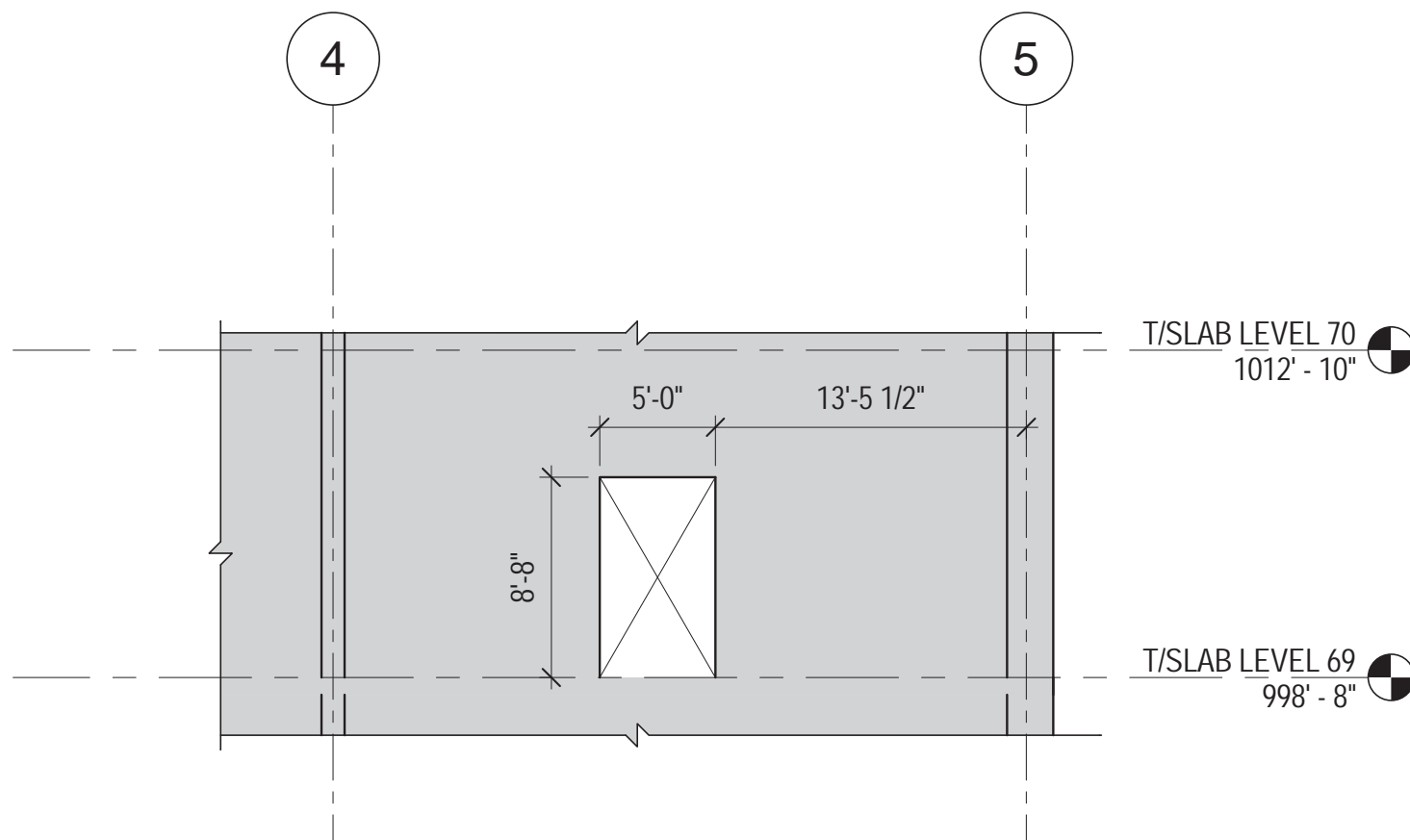
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2	18 DEC 2015	ISSUED FOR PERMIT
1	20 JUN 2014	ISSUED FOR FOUNDATION PERMIT

Sheet Name:

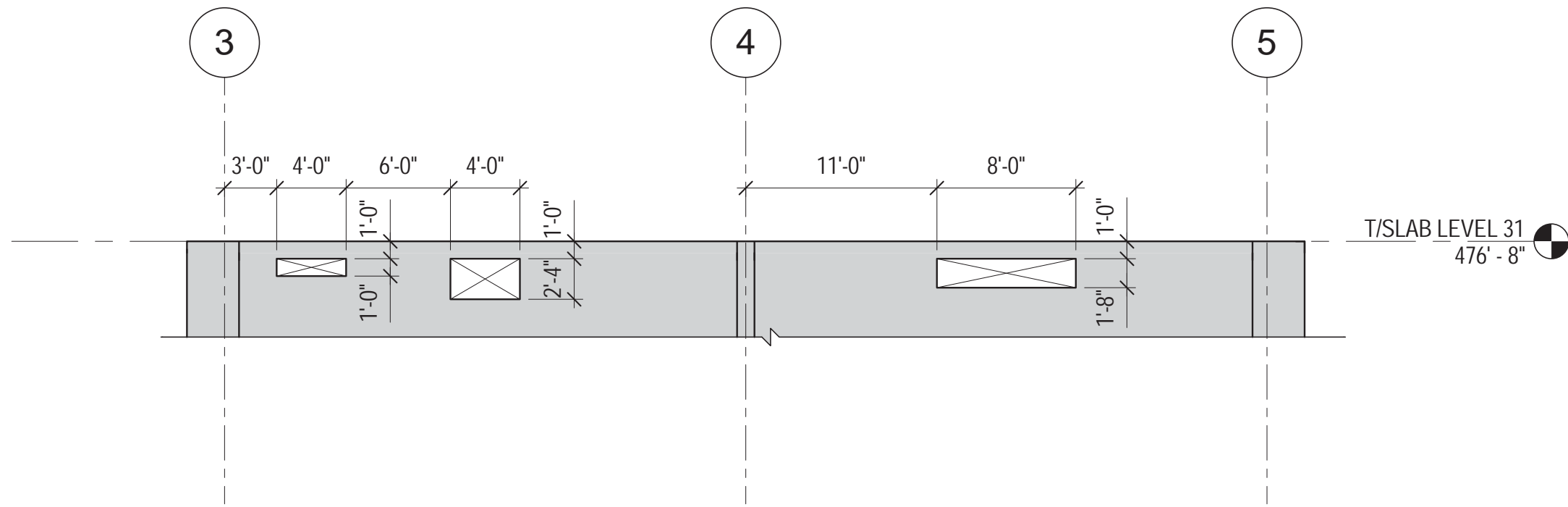
**CORE WALL
DETAIL
ELEVATIONS
ALONG LINE F & G**



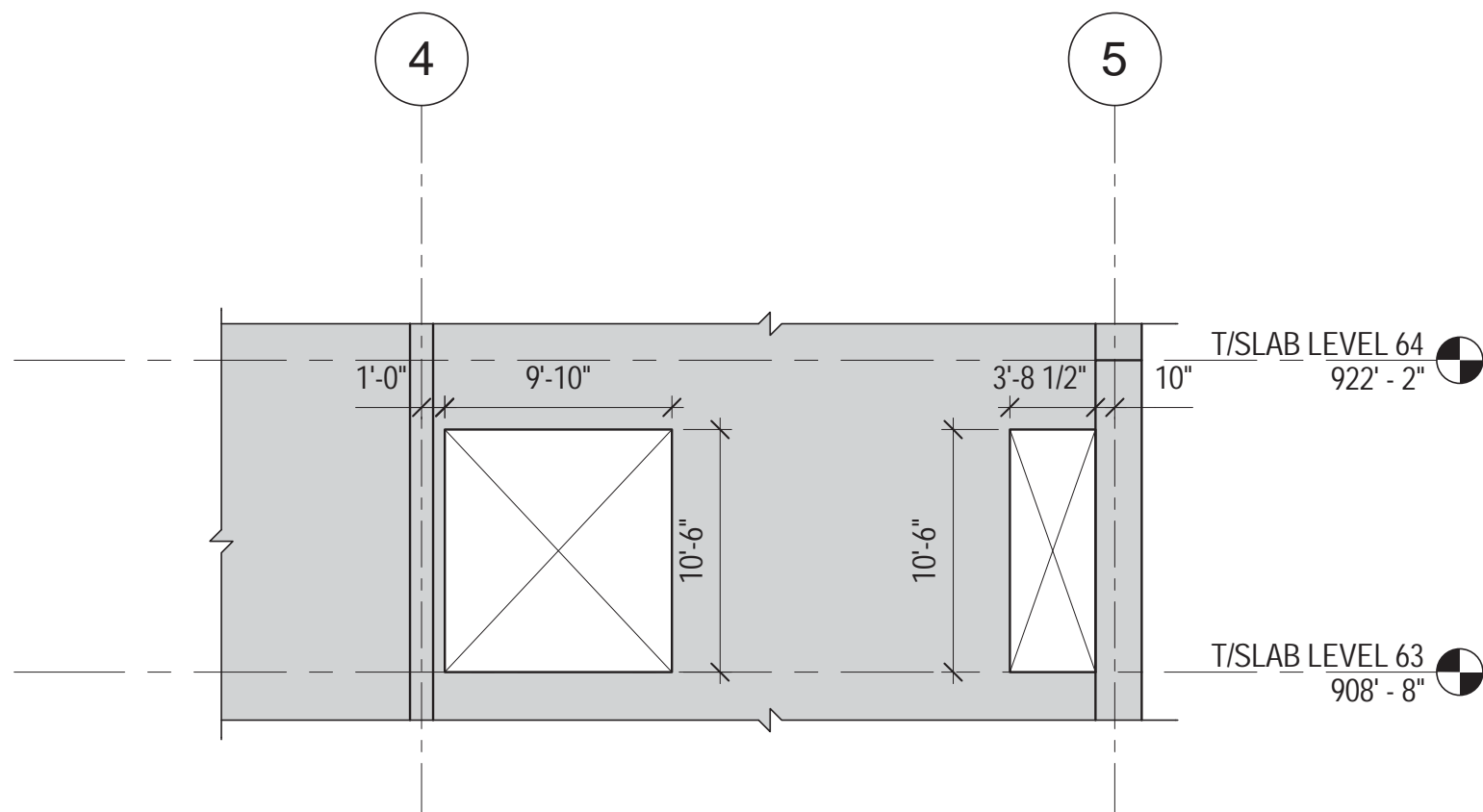
Project No.: 211157	B-SCAN Sheet No.: S-360.02
Date: 22 APR 2016	Sheet No.: S-367B
Scale: 1/8" = 1'-0"	Page No.: 5-367B
File No.: S-367B	



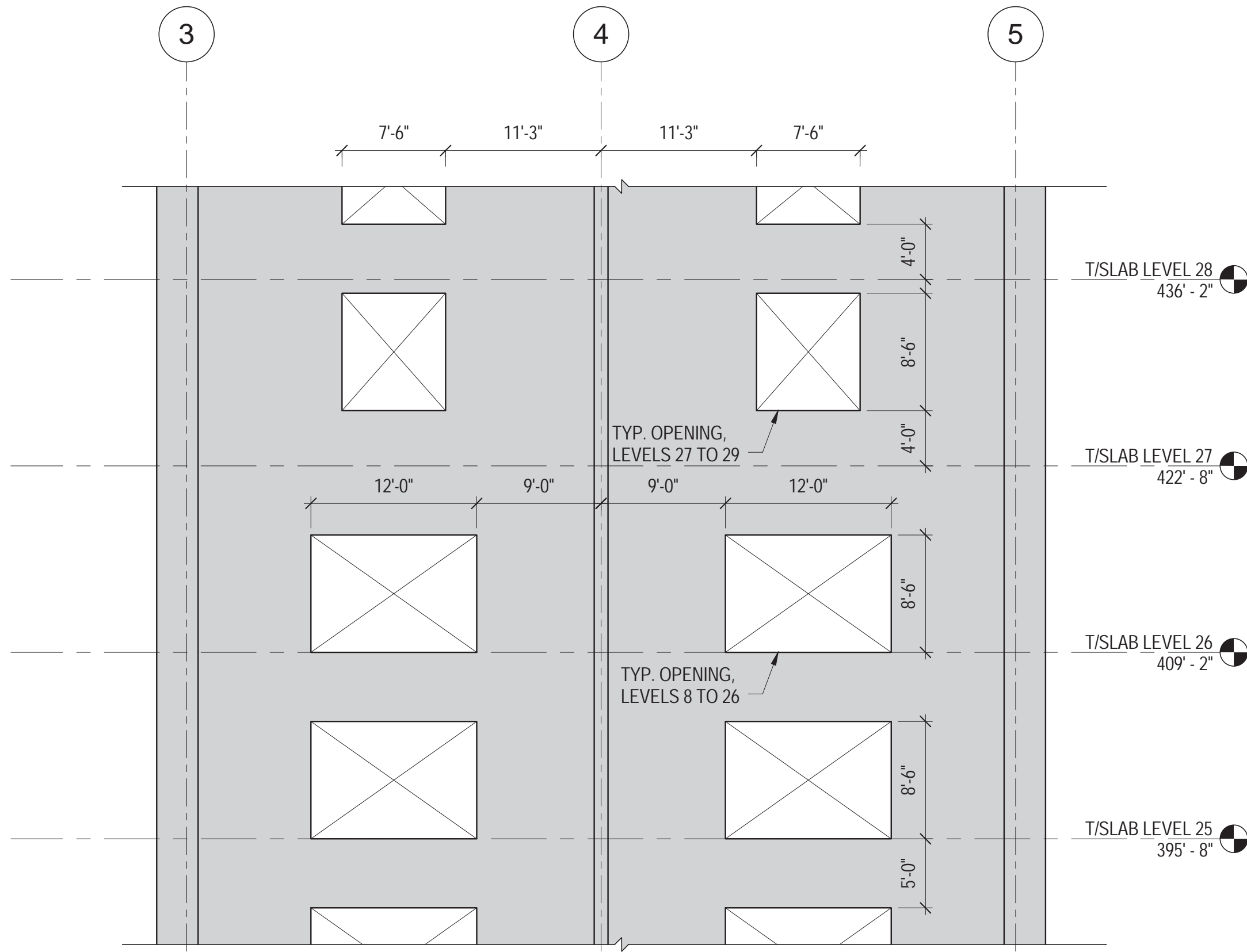
6 DETAIL ELEVATION ALONG LINE F
1/8" = 1'-0"



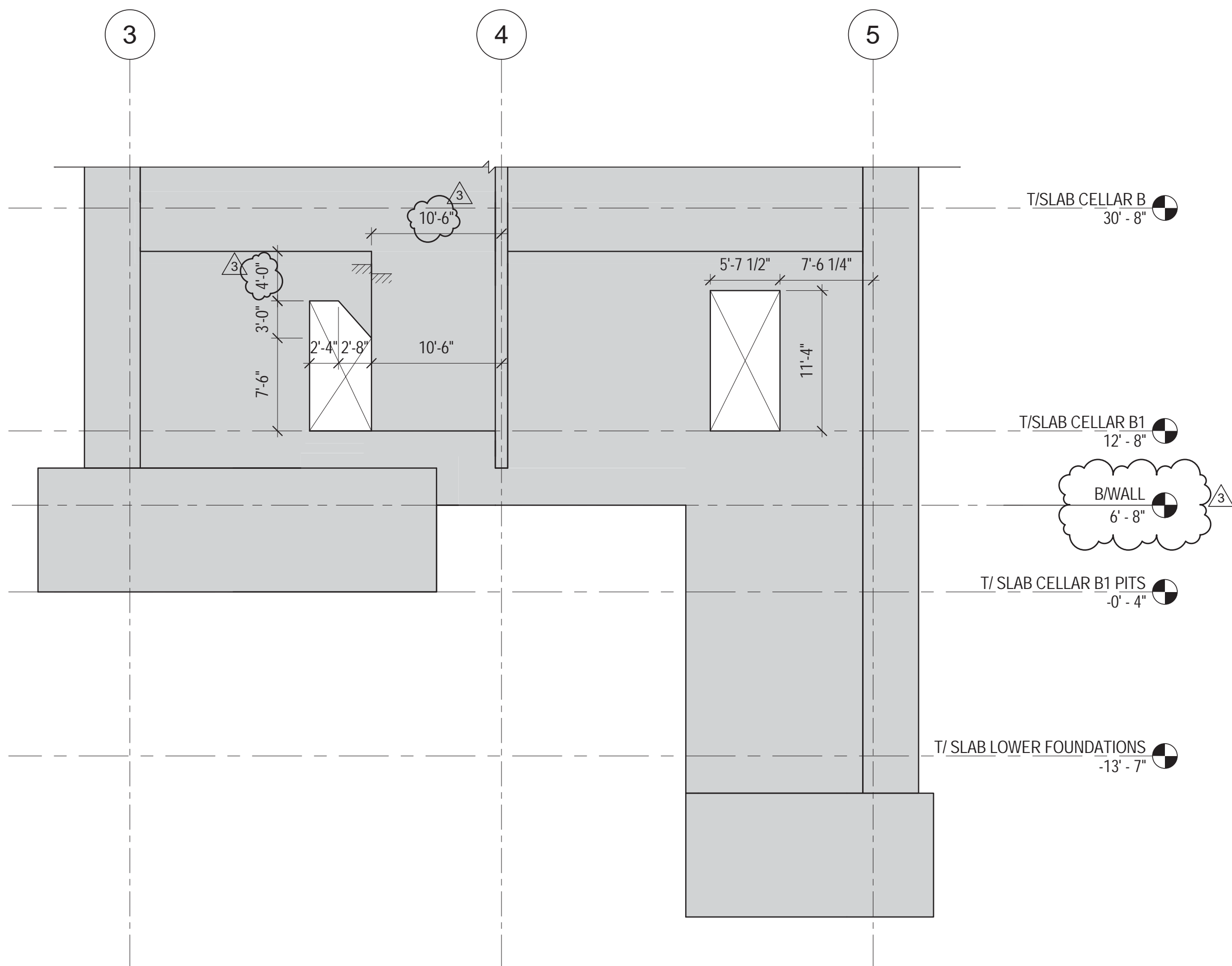
5 DETAIL ELEVATION ALONG LINE G
1/8" = 1'-0"



2 DETAIL ELEVATION ALONG LINE F
1/8" = 1'-0"

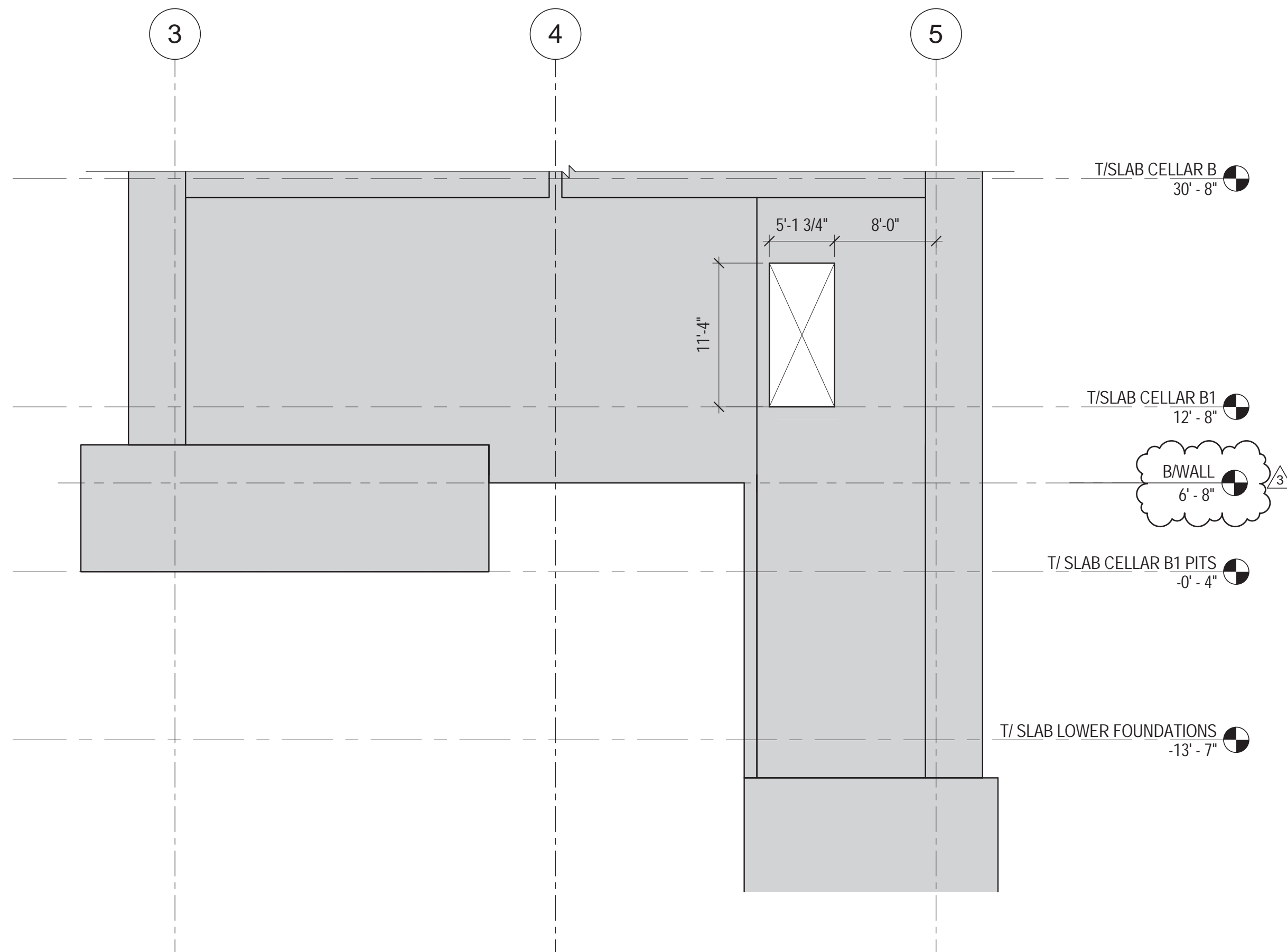


4 DETAIL ELEVATION ALONG LINE G
1/8" = 1'-0"



1 DETAIL ELEVATION ALONG LINE F
1/8" = 1'-0"

NOTES:
1. REFER TO S-411 FOR EMBEDDED STEEL SECTIONS IN CORE WALL



3 DETAIL ELEVATION ALONG LINE G
1/8" = 1'-0"

NOTES:
1. REFER TO S-411 FOR EMBEDDED STEEL SECTIONS IN CORE WALL



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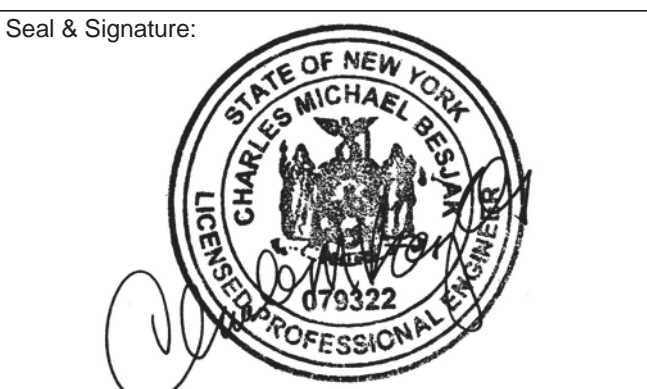
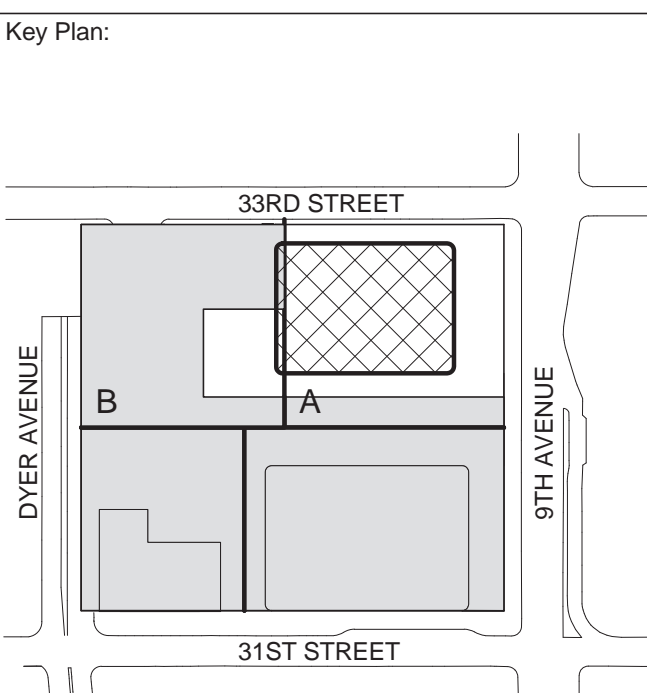
Acoustical Consultant
Cerami & Associates
404 Fifth Avenue #8, New York, NY 10016

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

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Wind Tunnel Consultant
Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B6

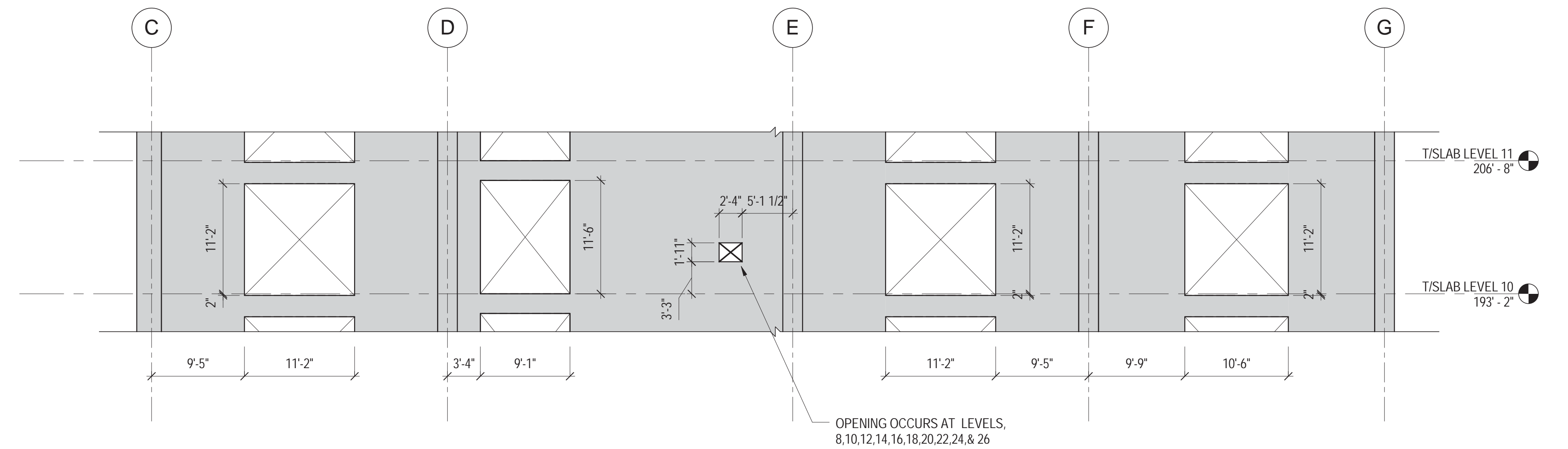


No.	Date	Description
2	22 APR 2016	ISSUED FOR P&A
1	16 DEC 2015	ISSUED FOR PERMIT

Sheet Name: CORE WALL
DETAIL ELEVATIONS
ALONG LINE 4

Project No.: 211157
Date: 22 APR 2016
Scale: 1/8" = 1'-0"
File No.: S-368A

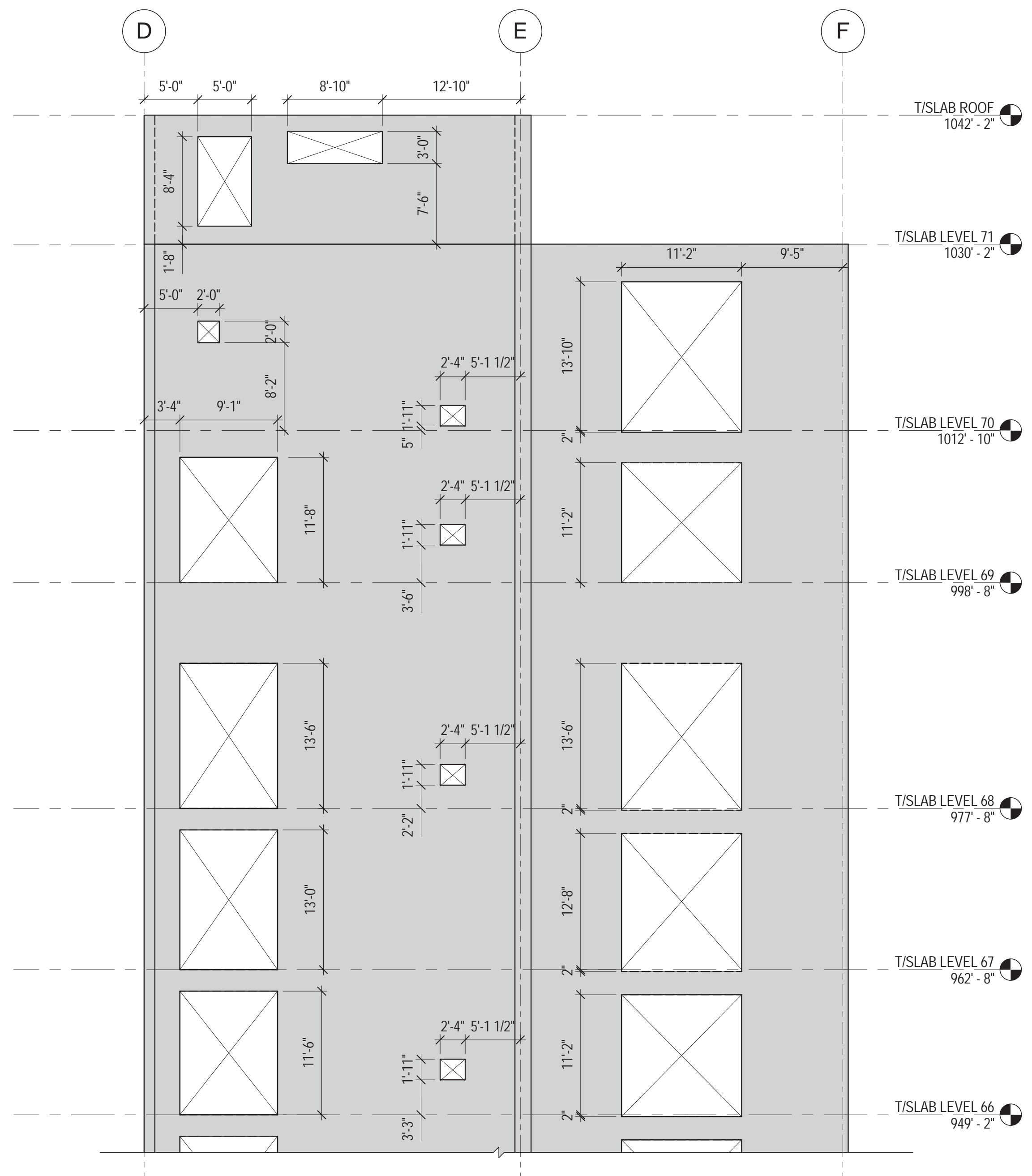
B-SCAN Sheet No.: S-369.01
Sheet No.: S-368A
Page No.:



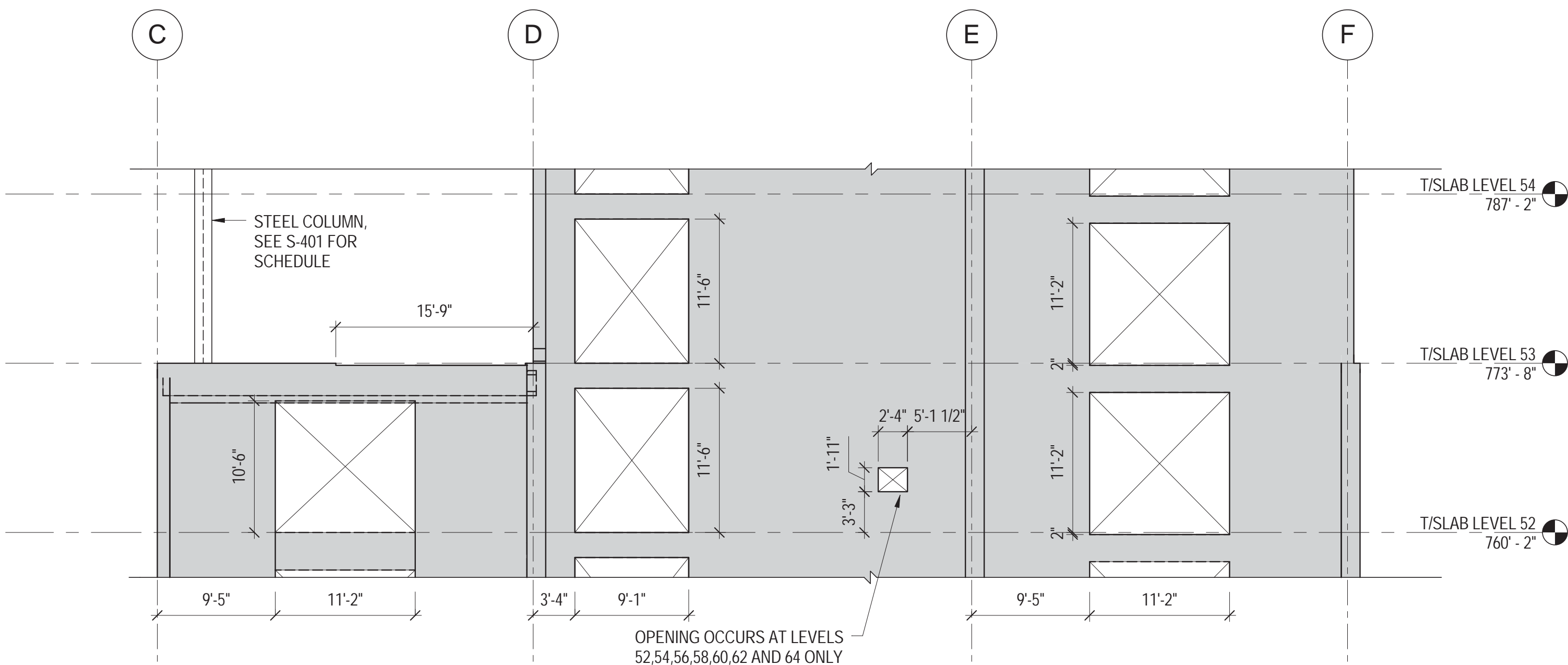
2 DETAIL ELEVATION ALONG LINE 4 - TYPICAL LEVELS 7-27
1/8" = 1'-0"



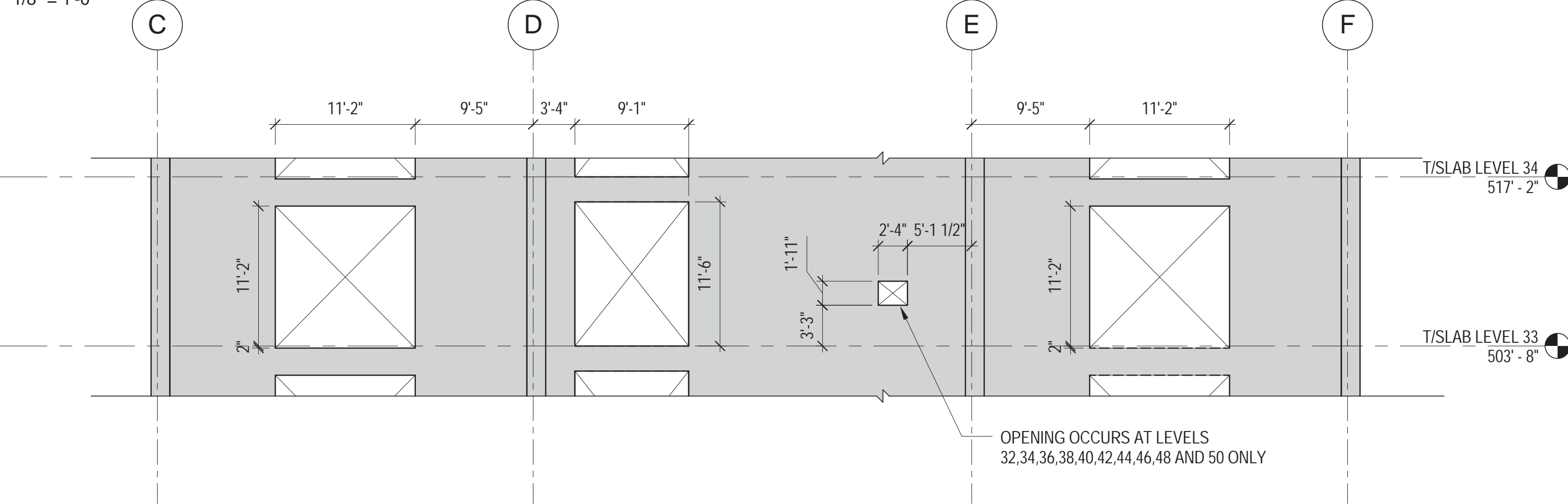
1 DETAIL ELEVATION ALONG LINE 4 - CELLAR B - LEVEL 6
1/8" = 1'-0"



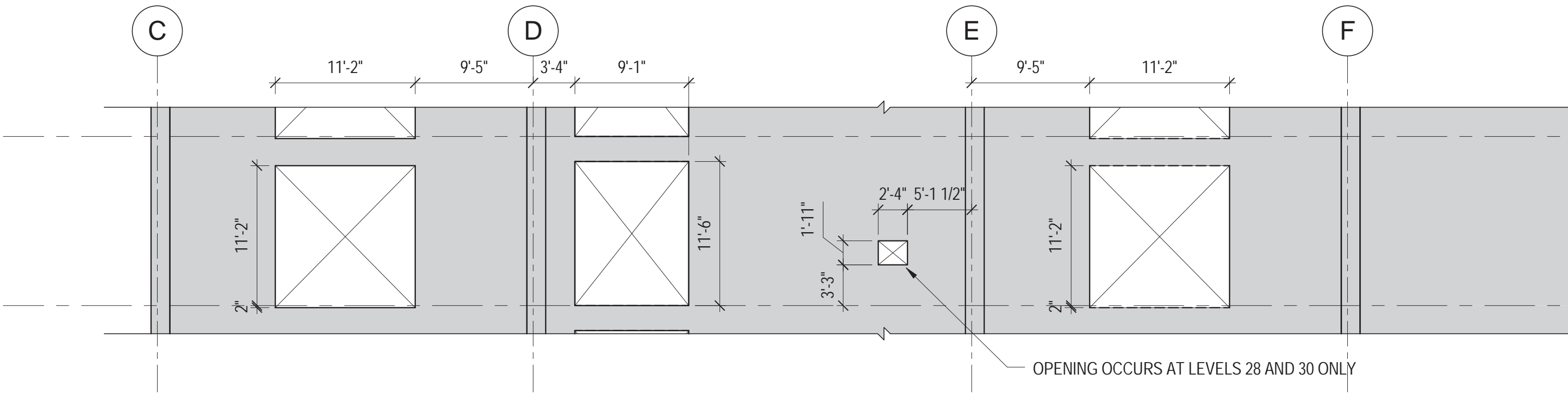
6 DETAIL ELEVATION ALONG LINE 4
1/8" = 1'-0"



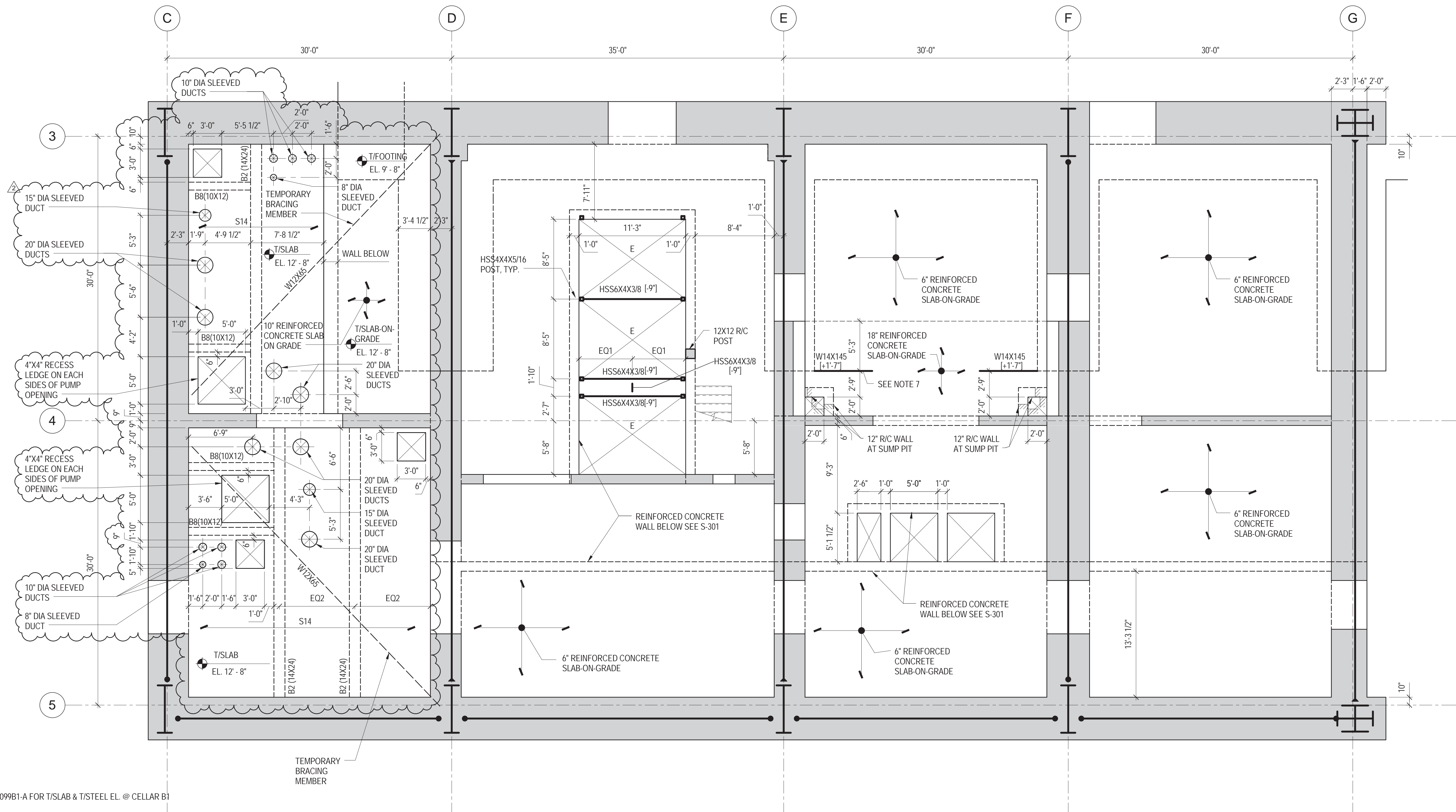
5 DETAIL ELEVATION ALONG LINE 4 - LEVEL 52 AND TYPICAL LEVELS 53-65
1/8" = 1'-0"



4 DETAIL ELEVATION ALONG LINE 4 - TYPICAL LEVELS 31-51
1/8" = 1'-0"



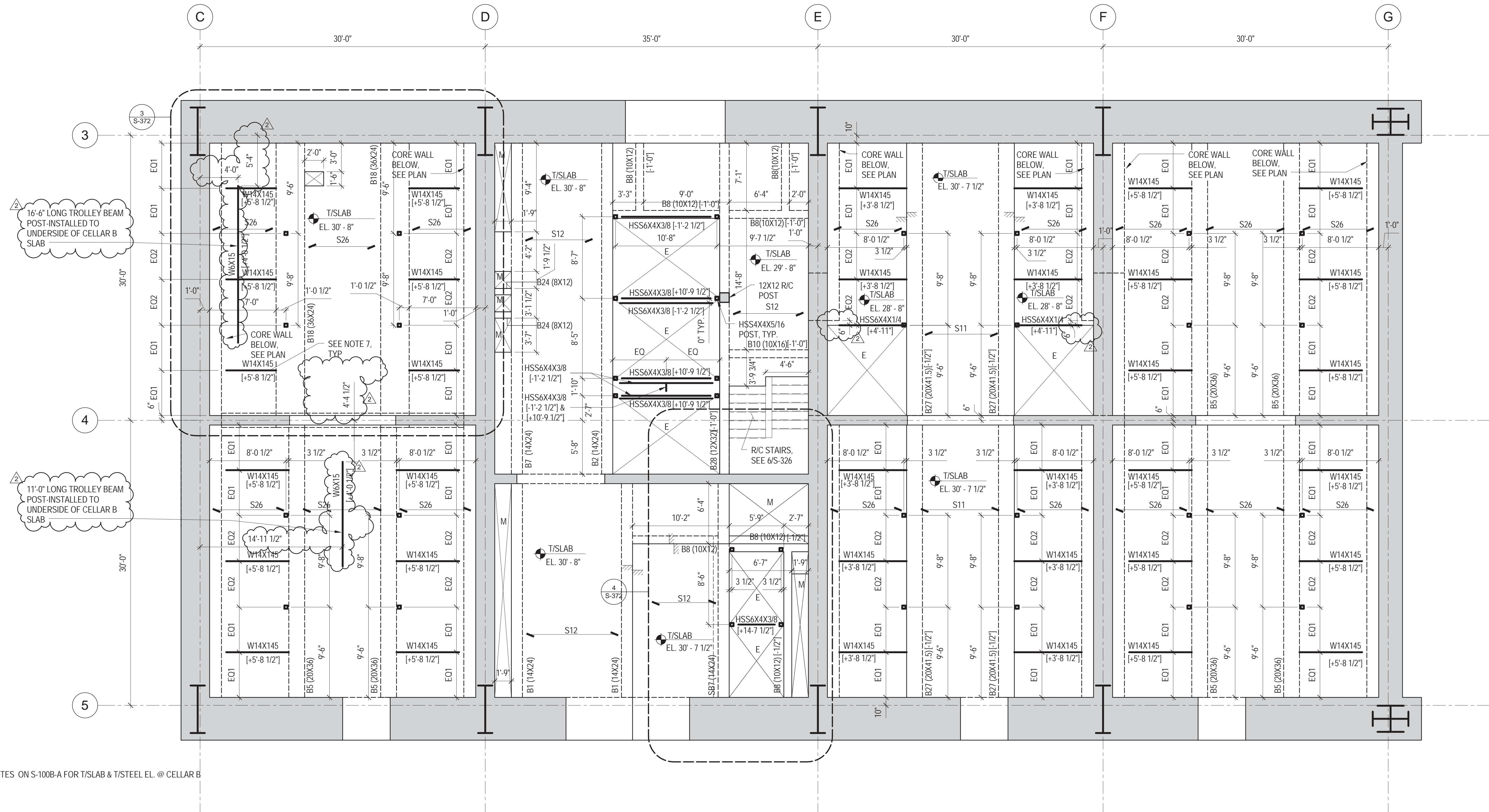
3 DETAIL ELEVATION ALONG LINE 4 - TYPICAL LEVELS 28-30
1/8" = 1'-0"



NOTES:
1. SEE NOTES ON S-099B1-A FOR T/SLAB & T/STEEL EL. @ CELLAR B1

1 CELLAR B1 CORE PARTIAL FRAMING PLAN

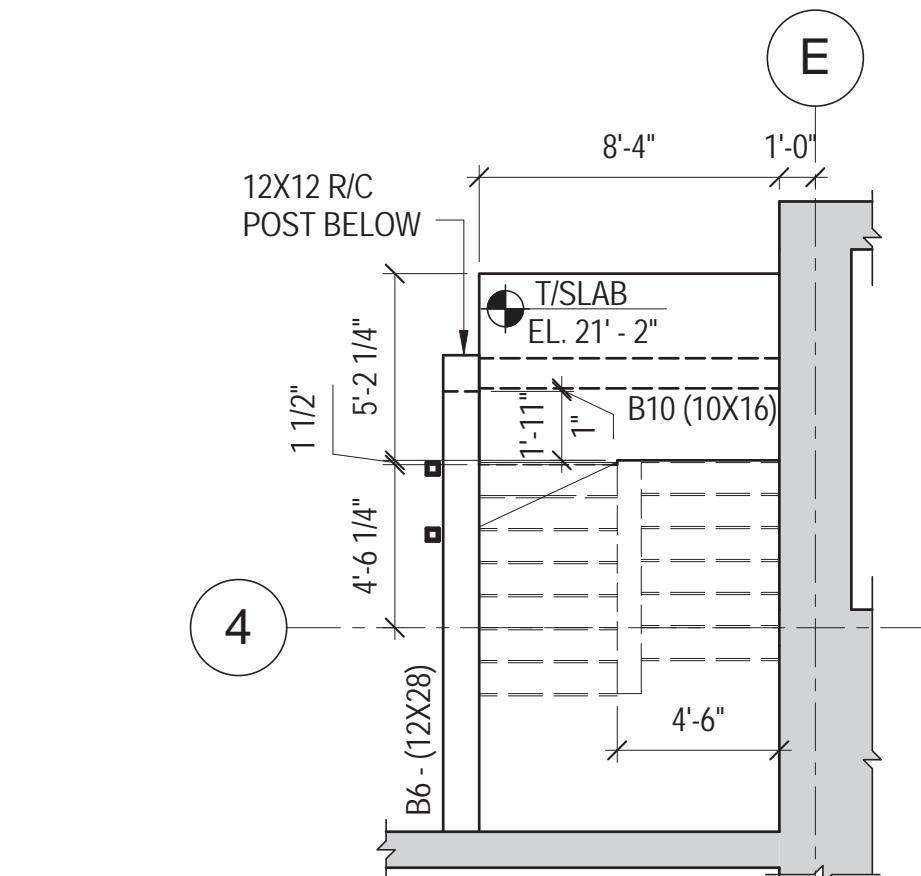
3/16" = 1'-0"



NOTES:
1. SEE NOTES ON S-100B-A FOR T/SLAB & T/STEEL EL. @ CELLAR B

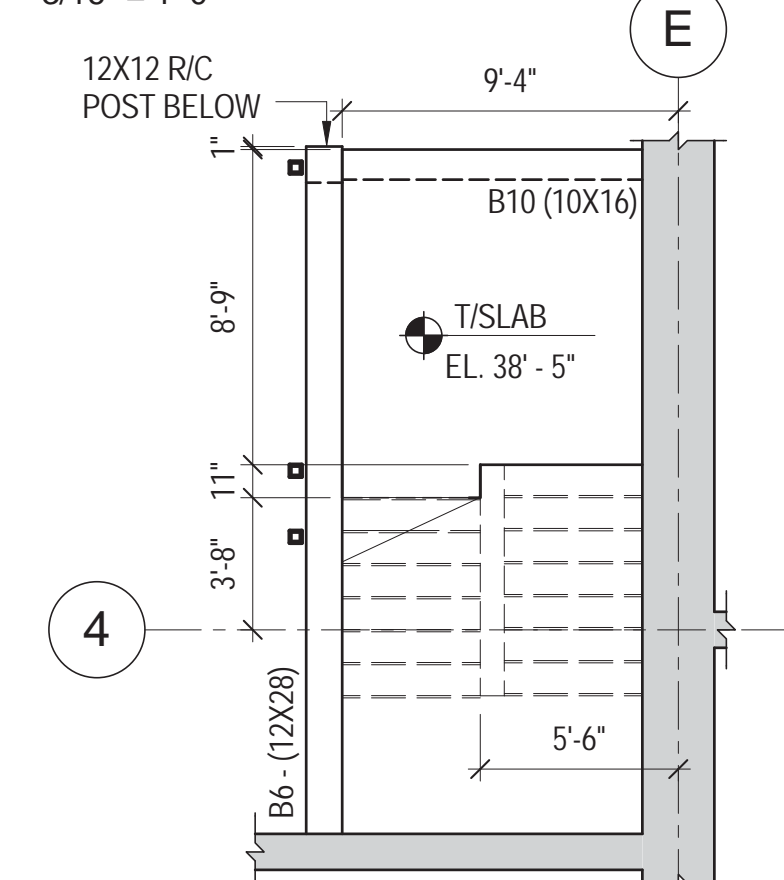
2 CELLAR B CORE PARTIAL FRAMING PLAN

3/16" = 1'-0"



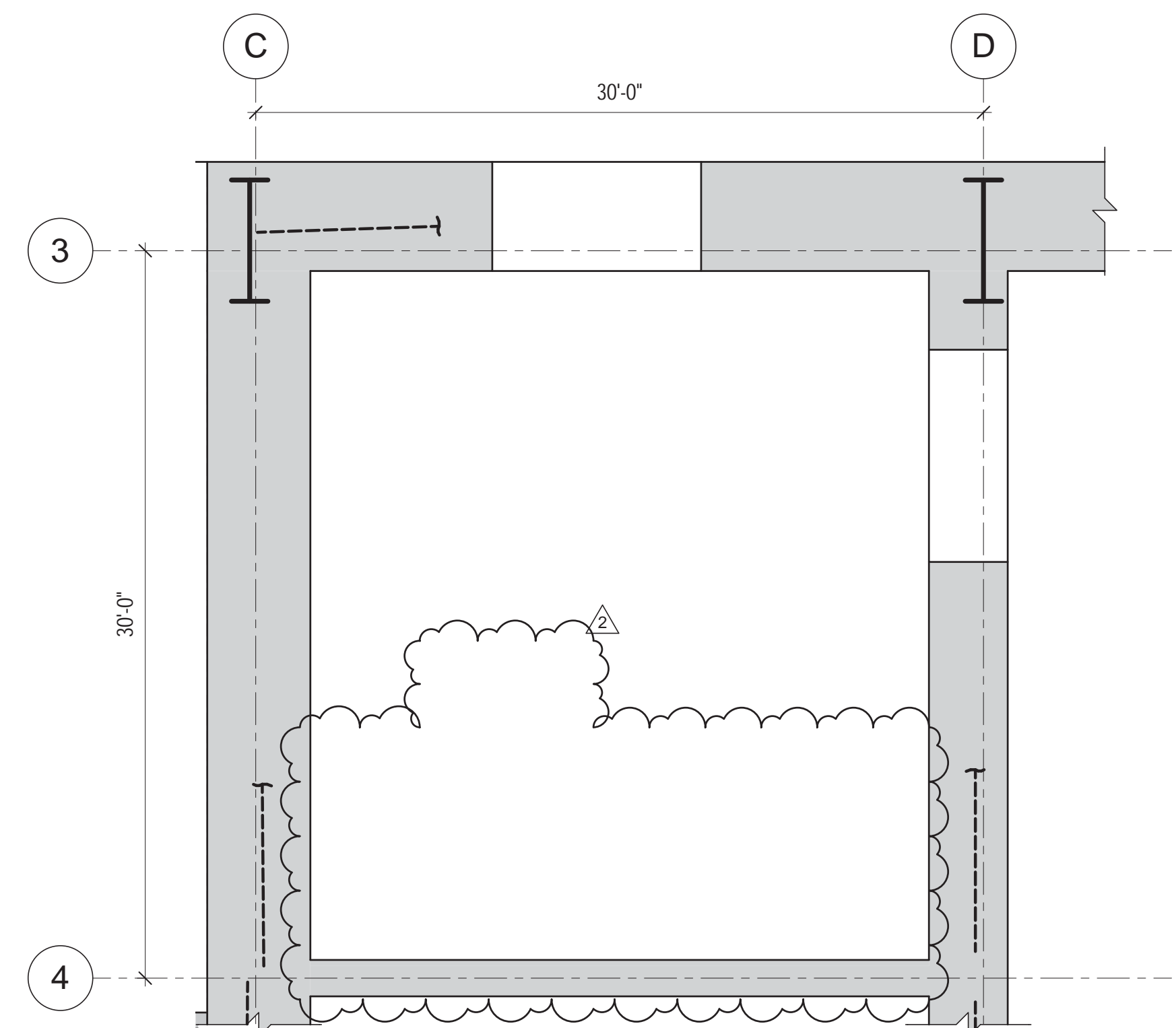
6 R/C STAIR LANDING BTWN. CELLAR B1 & CELLAR B

3/16" = 1'-0"



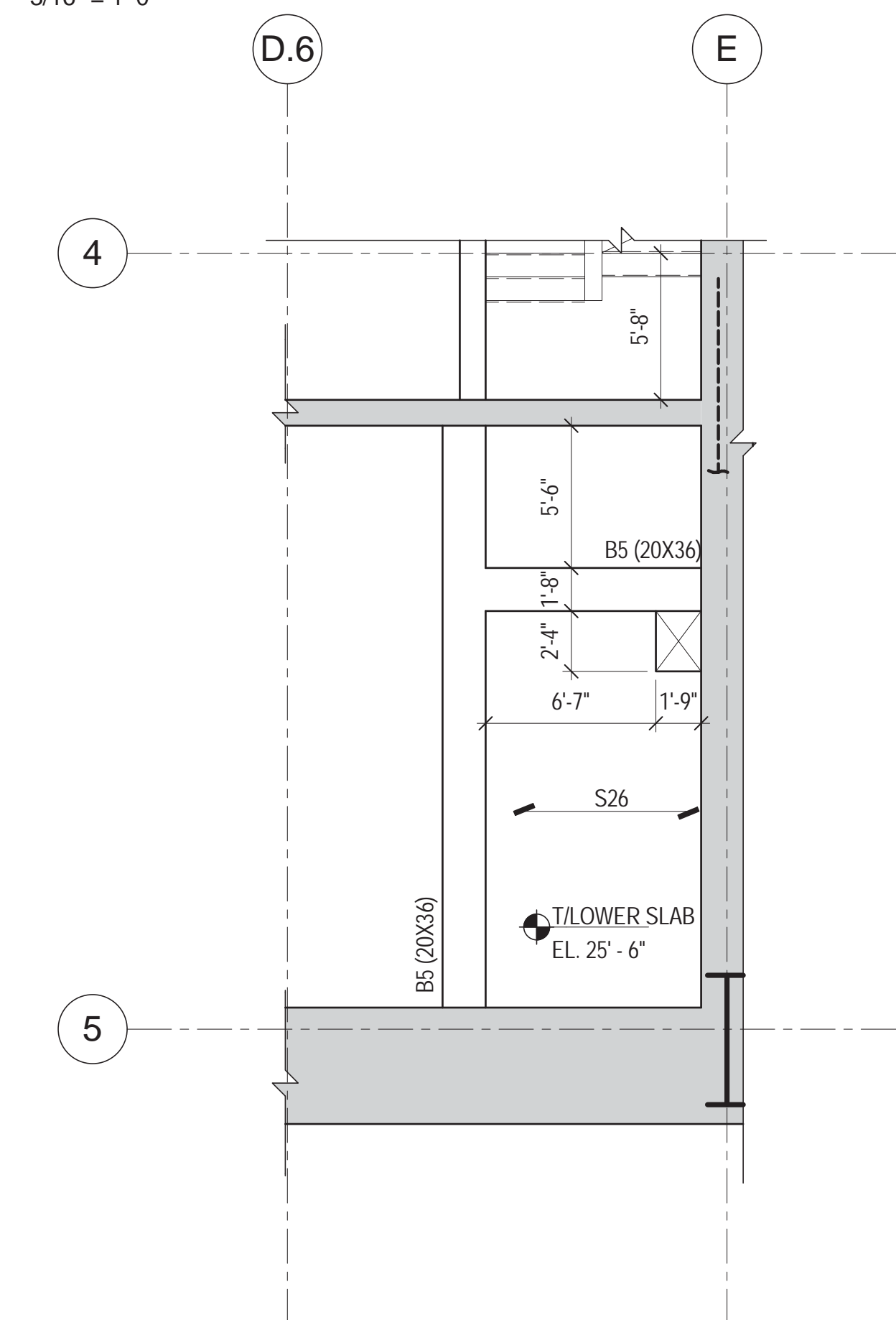
5 STAIR LANDING BTWN. CELLAR B & GROUND FLOOR

3/16" = 1'-0"



3 CELLAR B - LOWER SLAB CORE PARTIAL FRAMING PLAN

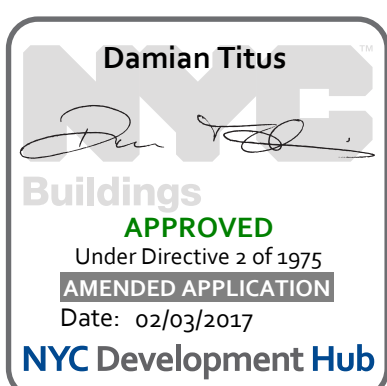
3/16" = 1'-0"



4 CELLAR B - ELEVATOR PIT CORE PARTIAL FRAMING PLAN

3/16" = 1'-0"

NOTES:
1. REINFORCEMENT NOT SHOWN FOR CLARITY.
2. FOR LINK BEAM SCHEDULE SEE S-39.
3. FOR REINFORCED CONCRETE WALL REINFORCEMENT SEE S-332 THROUGH S-349.
4. FOR REINFORCED CONCRETE WALL SCHEDULE SEE S-331.
5. FOR REINFORCED CONCRETE SLAB SCHEDULE SEE S-371.
6. FOR EMBEDDED STEEL SCHEDULE SEE SHEETS S-411 THROUGH S-415.
7. EXACT LOCATION OF EMBEDDED STEEL SECTION IN ELEVATOR PITS TO BE COORDINATED WITH ELEVATOR CONTRACTOR.



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Cerami & Associates
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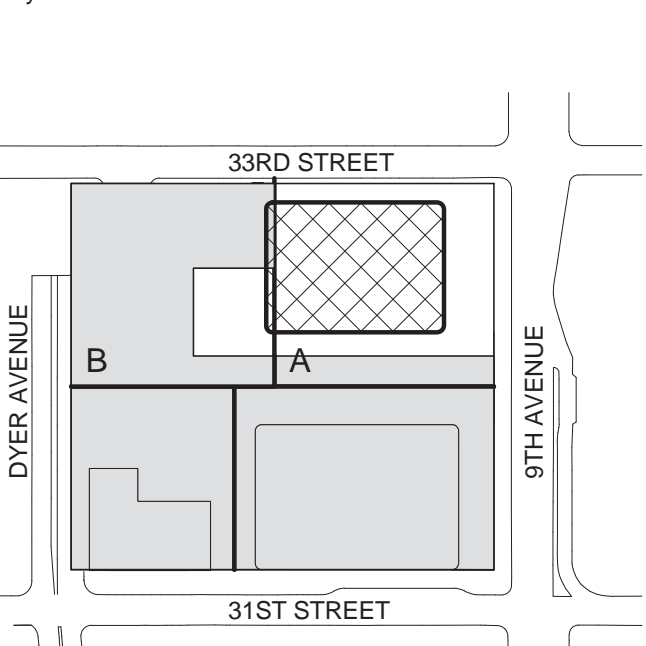
Vibration Consultant
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Key Plan:



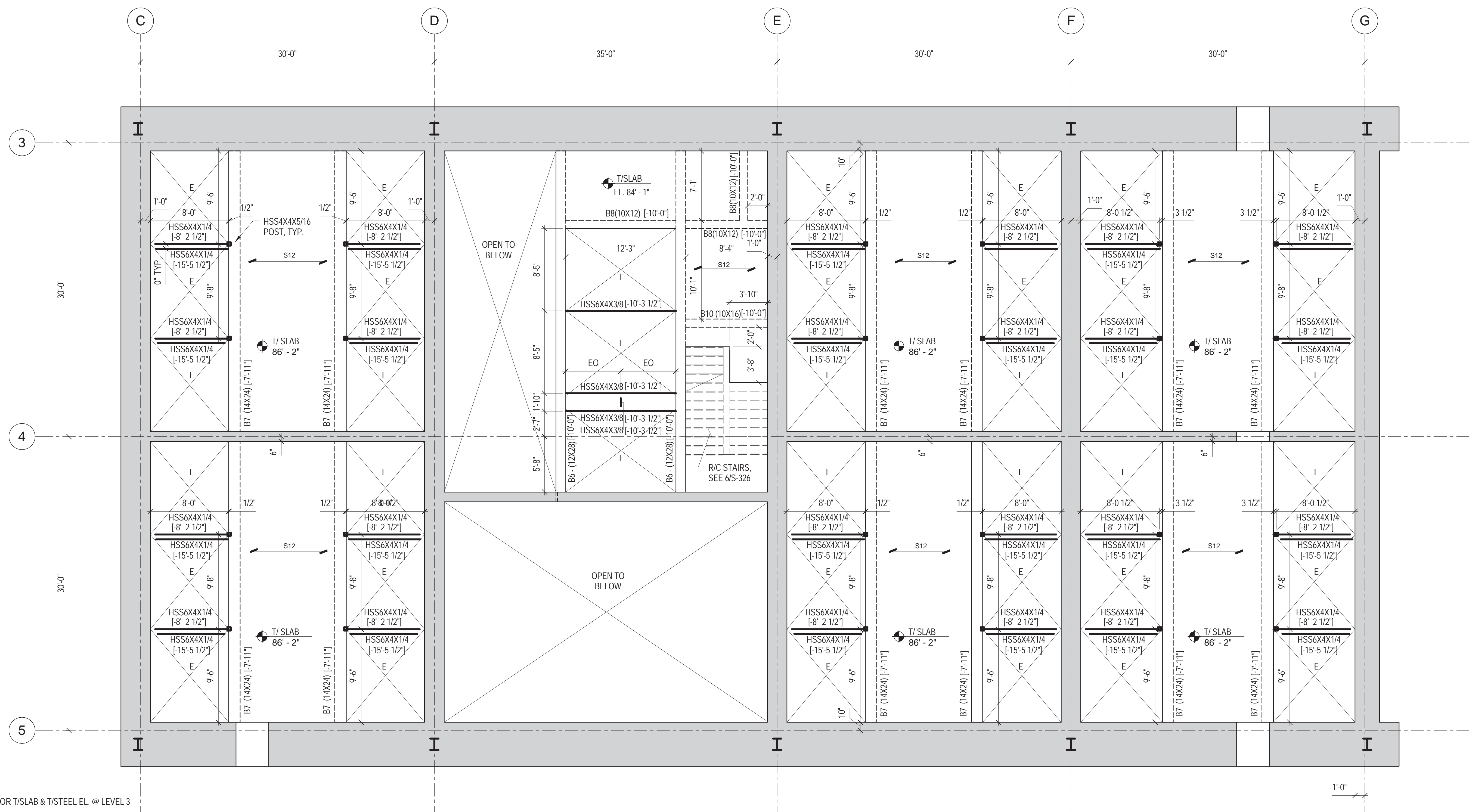
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2 22 APR 2016 ISSUED FOR PAA
1 16 DEC 2015 ISSUED FOR PERMIT
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Sheet Name:

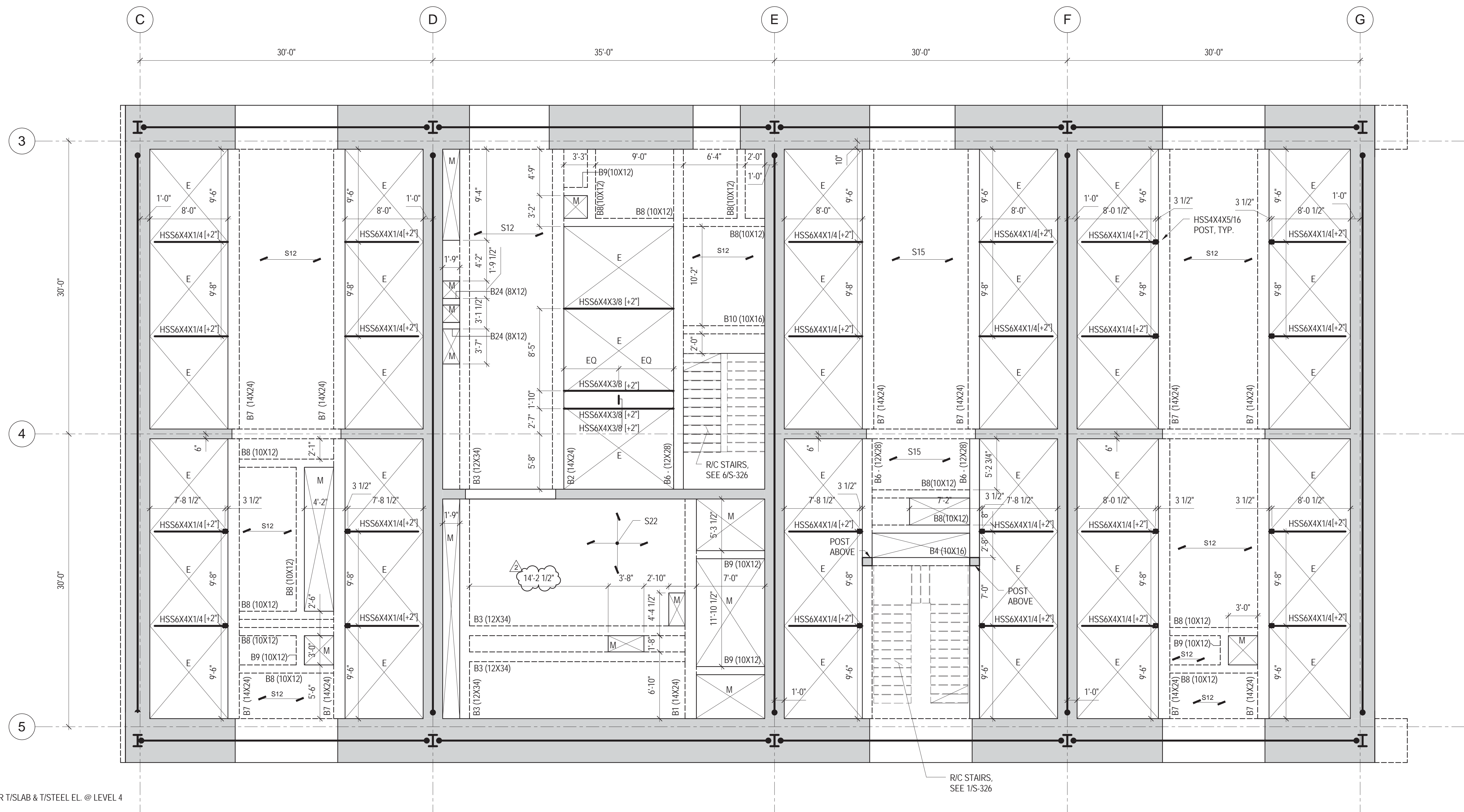
REINFORCED CONCRETE SLAB PARTIAL PLAN WITHIN CORE

Project No.: 211157
Date: 22 APR 2016
Scale: 3/16" = 1'-0"
File No.: S-372
B-SCAN Sheet No.: S-372.01
Sheet No.: S-372
Page No.:



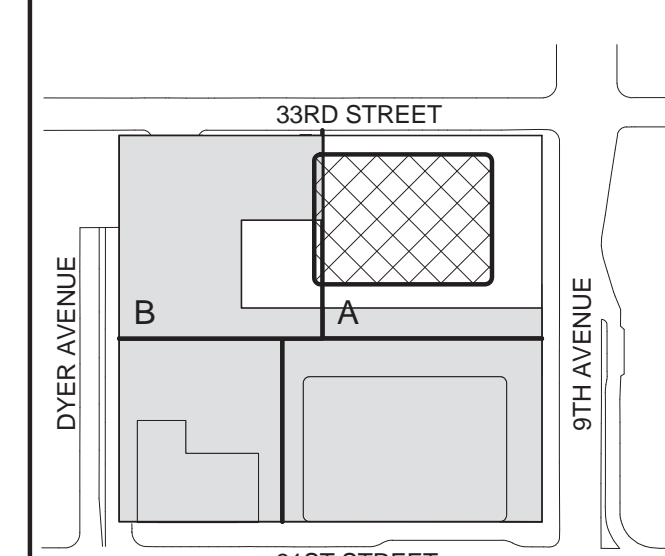
NOTES:
1. SEE NOTES ON S-103-A FOR T/SLAB & T/STEEL EL. @ LEVEL 3

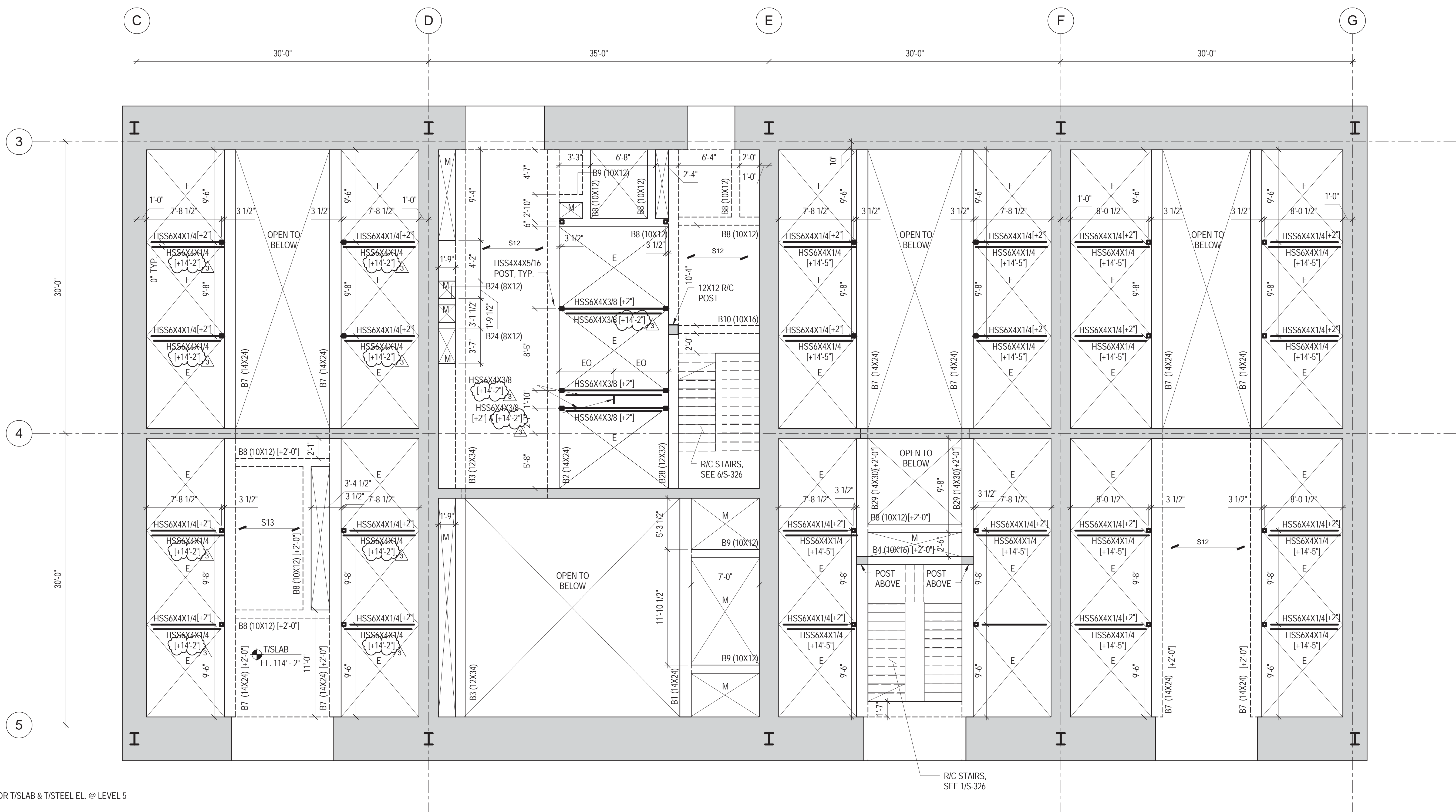
1 3RD FLOOR CORE PARTIAL FRAMING PLAN
3/16" = 1'-0"



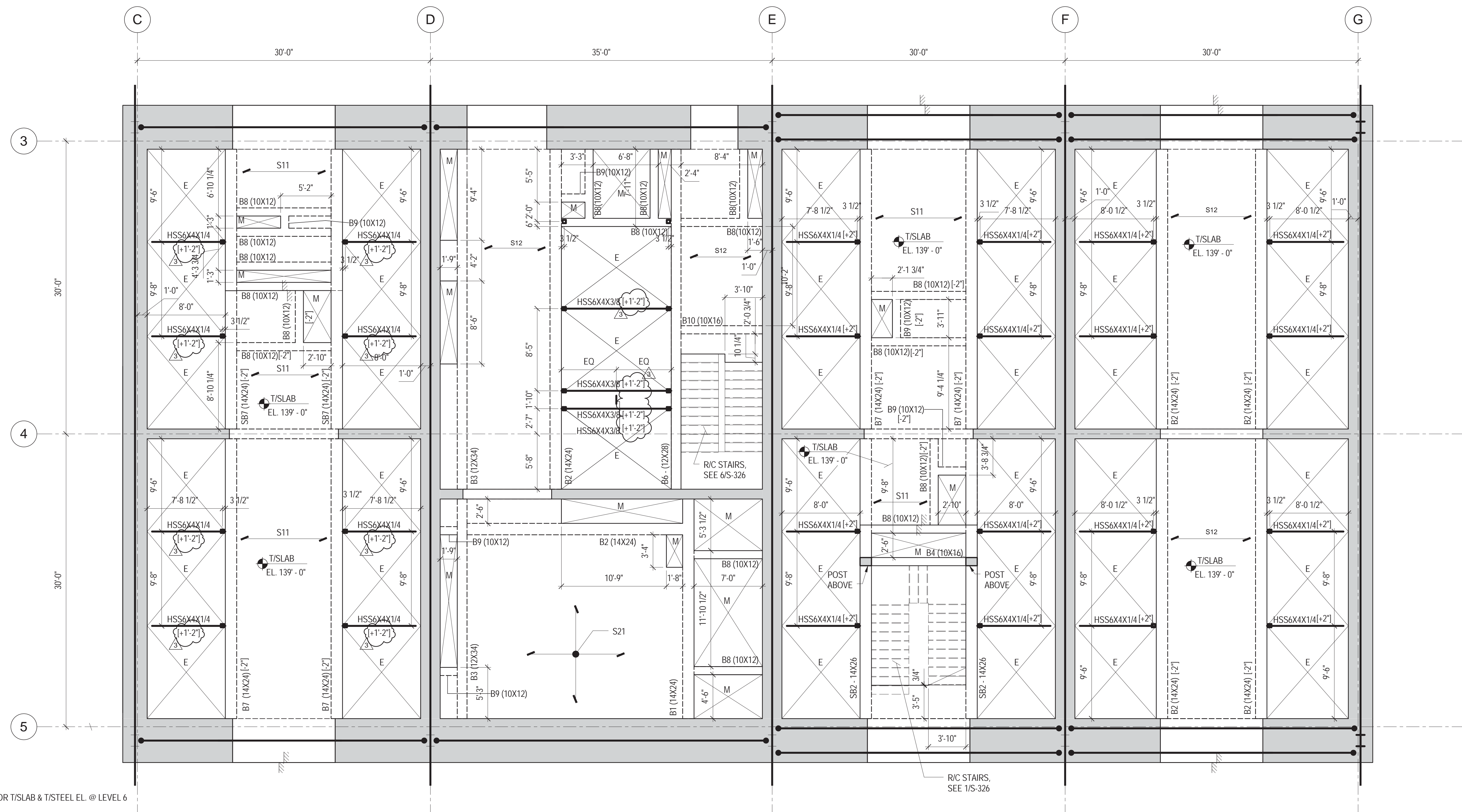
NOTES:
1. SEE NOTES ON S-104 FOR T/SLAB & T/STEEL EL. @ LEVEL 4

2 24TH FLOOR CORE PARTIAL FRAMING PLAN
3/16" = 1'-0"

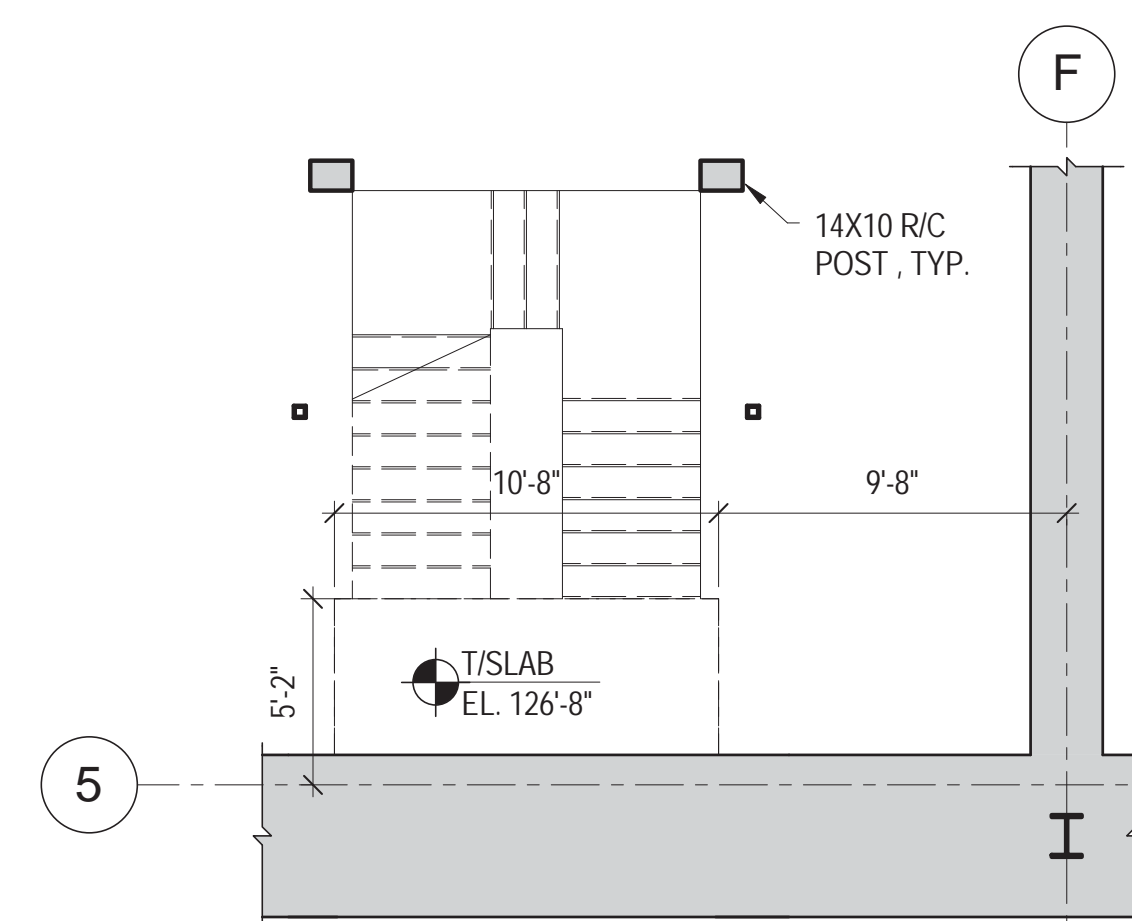




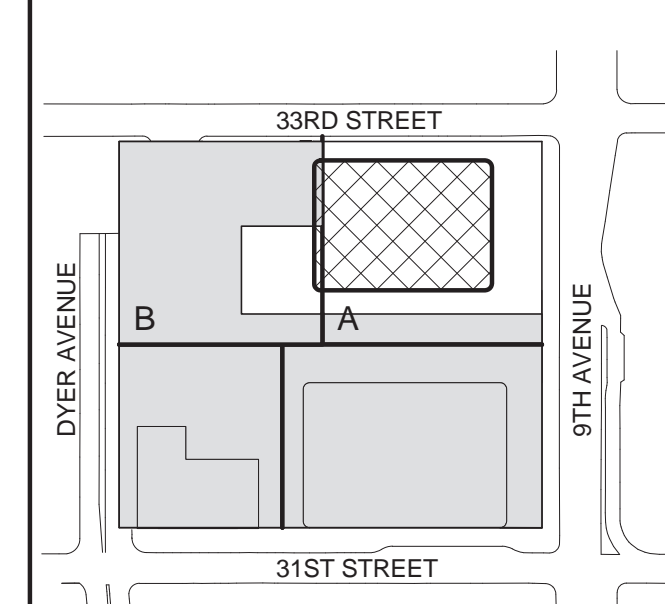
1 5TH FLOOR CORE PARTIAL FRAMING PLAN
3/16" = 1'-0"



2 6TH FLOOR CORE PARTIAL FRAMING PLAN
3/16" = 1'-0"



3 STAIR LANDING BTWN. LEVELS 5 & 6
3/16" = 1'-0"



REINFORCED CONCRETE CORE WALL LINK BEAM SCHEDULE

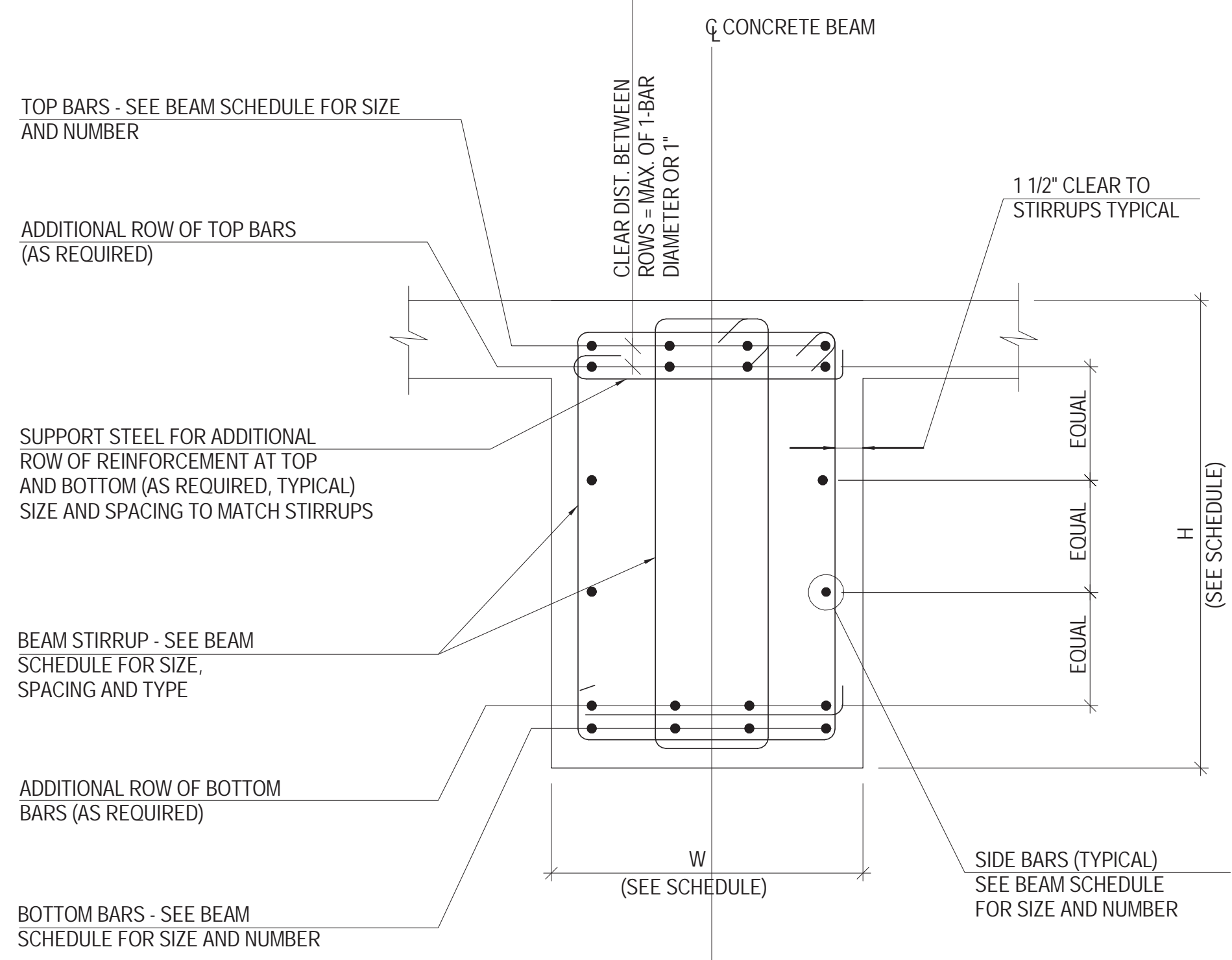
										fy = SEE NOTE 2
										fy = 50 KSI, BUILT-UP PLATES
										f'c = SEE NOTE 3
										E = SEE NOTE 3
LEVEL	LOCATION (SEE KEY PLAN)	DIMENSIONS DEPTH "D" (ft)	WIDTH "W" (ft)	TOP AND BOTTOM REINFC.	SIDE REINF. (EACH FACE)	STIRRUPS SIZE/ SPACING	NUMBER OF LEGS	EMBEDDED STEEL SECTION	EMBED. LENGTH (ft)	REMARKS
71	LB2	42	12	7 #5	4 #5	#4 @ 8"	2	-	-	-
70	LB1	24	36	2 #5	2 #4	#4 @ 8"	2	-	-	-
	LB3	32	24	4 #5	3 #4	#4 @ 8"	4	-	-	-
	LB4	33	24	4 #5	3 #4	#4 @ 8"	4	-	-	-
	LB5	33	36	4 #5	3 #4	#4 @ 8"	4	-	-	-
68	LB6	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB7	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB8	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB9	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
65-67	LB10	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB11	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB12	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB13	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
64	LB14	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB15	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB16	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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	LB20	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB21	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
59-62	LB22	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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	LB24	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB25	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
54-58	LB26	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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	LB28	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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53-55	LB30	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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47-48	LB46	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB47	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB48	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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42-46	LB50	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
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41	LB54	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB55	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB56	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB57	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
40	LB58	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB59	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB60	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB61	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
39	LB62	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB63	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB64	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB65	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
38	LB66	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB67	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB68	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB69	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
37	LB70	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB71	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB72	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB73	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
32-36	LB74	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB75	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB76	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-
	LB77	24	12	3 #2	1 #4	#4 @ 8"	2	-	-	-

REINFORCED CONCRETE CORE WALL LINK BEAM SCHEDULE

REINFORCED CONCRETE CORE WALL LINK BEAM SCHEDULE										fy = SEE NOTE 2			
										fy = 50 KSI, BUILT-UP PLATES			
										f'c = SEE NOTE 3			
										E = SEE NOTE 3			
LEVEL	LOCATION (SEE KEY PLAN)	DIMENSIONS		TOP AND BOTTOM REINF.	SIDE REINF. (EACH FACE)	STIRRUPS		EMBEDDED STEEL		REMARKS			
		DEPTH "D" (ft)	WIDTH "W" (ft)			SIZE/ SPACING	NUMBER OF LEGS	SECTION	EMBED. LENGTH (ft)				
30-31	LB1, LB6	33	36	3 X 7 #9	2 #4	#5 @ 6"	7	-	-				
	LB2	22	36	2 X 12 #9	1 #4	#4 @ 8"	2	PL 10 X 1.75 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS			
	LB3	32	36	11 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS, 8 #9 + 2 #9			
	LB4, LB8	33	36	28 #9	1 #4	#4 @ 8"	2	PL 17 X 1.25 + RPL 3" X 1/2" (4)	30	8 #9 + 8 #9 + 8 #9			
	LB5	33	36	4 #6	3 #4	#4 @ 8"	2	BU 24 X 19 X 4 X 2	NOTE 6	STEPPED LINK BEAM, SEE NOTE 6			
	LB9	33	36	4 #6	3 #4	#4 @ 8"	2	BU 24 X 19 X 4 X 2	NOTE 6	SEE NOTE 6			
	LB7	42	36	18 #9	4 #4	#5 @ 6"	8	-	-	UPTURNED LINK BEAM, 8 #9 + 8 #9 + 2 #9			
	LB10	26	12	2 X 2 #9	2 #4	#5 @ 5"	2	-	-				
	LB11	24	12	7 #9	1 #4	#5 @ 4"	2	-	-	3 #9 + 2 #9 + 2 #9			
	LB12	26	12	2 #6	2 #4	#4 @ 12"	2	BU 11 X 5 X 1.25 X 1	44				
	LB13	33	36	4 #6	1 #4	#4 @ 12"	2	BU 24 X 18 X 4 X 2	NOTE 6				
	LB14, LB15	12	18	4 #9	8 #4	#4 @ 6"	4	-	-	SEE NOTE 6 APPLIES AT LEVEL 31 ONLY			
	29	LB1, LB6	33	36	3 X 7 #9	2 #4	#5 @ 6"	7	-	-			
LB2		22	36	2 X 12 #9	1 #4	#4 @ 8"	2	PL 10 X 1.75 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS			
LB3		32	36	11 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS, 8 #9 + 2 #9			
LB4, LB8		33	36	28 #9	1 #4	#4 @ 8"	2	PL 17 X 1.25 + RPL 3" X 1/2" (4)	30	8 #9 + 8 #9 + 8 #9 + 4 #9			
LB5		33	36	4 #6	3 #4	#4 @ 8"	2	BU 24 X 19 X 4 X 2	NOTE 6	STEPPED LINK BEAM, SEE NOTE 6			
LB9		33	36	4 #6	3 #4	#4 @ 8"	2	BU 24 X 19 X 4 X 2	NOTE 6	SEE NOTE 6			
LB7		42	36	18 #9	4 #4	#5 @ 6"	8	-	-	UPTURNED LINK BEAM, 8 #9 + 8 #9 + 2 #9			
LB10		26	12	2 X 2 #9	2 #4	#5 @ 5"	2	-	-				
LB11		24	12	7 #9	1 #4	#5 @ 4"	2	-	-	3 #9 + 2 #9 + 2 #9			
LB12		26	12	2 #6	2 #4	#4 @ 12"	2	BU 11 X 5 X 1.25 X 1	44				
LB14, LB15		60	26	4 #9	8 #4	#4 @ 6"	4	-	-	8 + 8 + 4 (RPL) FROM TOS			
LB1, LB6		33	36	20 #9	3 #4	#5 @ 6"	6	-	-	8 + 8 + 4 (RPL) FROM TOS			
28		LB2	22	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 11 X 1.5 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS		
	LB3	32	36	7 #9	3 #4	#5 @ 6"	6	-	-	EL TOP OF LINK BEAM + 30" FROM TOS			
	LB4	30	36	18 #9	2 #4	#5 @ 6"	8	-	-				
	LB8	33	36	20 #9	2 #4	#5 @ 6"	8	-	-	8 + 8 + 4 (RPL) FROM TOS			
	LB5	33	36	26 #9	1 #4	#4 @ 8"	2	PL 15.5 X 1.5 + RPL 3" X 1/2" (4)	34	8 #9 + 8 #9 + 8 #9 + 2 #9, STEPPED LINK BEAM			
	LB9	33	36	26 #9	1 #4	#4 @ 8"	2	PL 15.5 X 1.5 + RPL 3" X 1/2" (4)	34	8 #9 + 8 #9 + 8 #9 + 2 #9			
	LB7	42	36	2 X 8 #9	4 #4	#5 @ 6"	6	-	-	UPTURNED LINK BEAM			
	LB10	26	12	2 X 2 #9	2 #4	#5 @ 5"	2	-	-				
	LB11	24	12	3 X 2 #9	1 #4	#5 @ 4"	2	-	-				
	LB12	26	12	8 #9	1 #4	#4 @ 5"	2	PL 10 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 3 #9 + 2 #9			
	LB13	33	36	7 #9	1 #4	#5 @ 5"	2	-	-	3 #9 + 2 #9 + 2 #9			
	LB14, LB15	108	18	4 #9	8 #4	#4 @ 6"	4	-	-	7 #9 + 3 #9 + 6 #9			
	27	LB1, LB6	33	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 11 X 1.5 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS		
LB2		22	36	7 #9	3 #4	#5 @ 6"	6	-	-	EL TOP OF LINK BEAM + 30" FROM TOS			
LB4, LB8		33	36	20 #9	2 #4	#5 @ 6"	8	-	-	8 #9 + 8 #9 + 4 #9			
LB5, LB9		33	36	26 #9	1 #4	#4 @ 8"	2	PL 15.5 X 1.5 + RPL 3" X 1/2" (4)	34	8 #9 + 8 #9 + 8 #9 + 2 #9			
LB7		42	36	2 X 8 #9	4 #4	#5 @ 6"	6	-	-	UPTURNED LINK BEAM			
LB10		26	12	2 X 2 #9	2 #4	#5 @ 5"	2	-	-				
LB11		24	12	3 X 2 #9	1 #4	#5 @ 4"	2	-	-				
LB12		26	12	8 #9	1 #4	#4 @ 5"	2	PL 10 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 3 #9 + 2 #9			
LB13		33	36	7 #9	1 #4	#5 @ 5"	2	-	-	3 #9 + 2 #9 + 2 #9			
LB14, LB15		108	18	4 #9	8 #4	#4 @ 6"	4	-	-	7 #9 + 3 #9 + 6 #9			
LB1, LB6		33	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 11 X 1.5 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS			
22-26		LB2	22	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 10 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 2 #9 + 2 #9		
		LB3	32	36	7 #9	3 #4	#5 @ 6"	6	-	-			
	LB4, LB8	33	36	20 #9	2 #4	#5 @ 6"	8	-	-	8 #9 + 8 #9 + 6 #9			
	LB5, LB9	33	36	26 #9	1 #4	#4 @ 8"	2	PL 15.5 X 1.5 + RPL 3" X 1/2" (4)	34	8 #9 + 8 #9 + 8 #9 + 2 #9			
	LB7	42	36	2 X 8 #9	4 #4	#5 @ 6"	6	-	-	UPTURNED LINK BEAM			
	LB10	26	12	2 X 2 #9	2 #4	#5 @ 5"	2	-	-				
	LB11	24	12	3 X 2 #9	1 #4	#5 @ 4"	2	-	-				
	LB12	26	12	2 X 2 #9	2 #4	#5 @ 6"	2	PL 10 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 2 #9 + 2 #9			
	LB13	33	36	7 #9	1 #4	#5 @ 5"	2	-	-	3 #9 + 2 #9 + 2 #9			
	LB14, LB15	108	18	4 #9	8 #4	#4 @ 6"	4	-	-	7 #9 + 3 #9 + 6 #9			
	LB1, LB6	33	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 11 X 1.5 + RPL 3" X 1/2" (4)	34	EL TOP OF LINK BEAM + 40" FROM TOS			
	17-21	LB2	22	36	2 X 11 #9	1 #4	#4 @ 8"	2	PL 10 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 2 #9 + 2 #9		
		LB3	32	36	10 #9	3 #4	#5 @ 6"	8	-	-	8 #9 + 8 #9 + 6 #9		
LB4, LB8		33	36	22 #9	2 #4	#5 @ 6"	8	-	-	8 #9 + 8 #9 + 6 #9			
LB5, LB9		33	36	22 #9	2 #4	#5 @ 6"	8	-	-	8 #9 + 8 #9 + 6 #9			
LB7		42	36	18 #9	4 #4	#5 @ 6"	6	-	-	UPTURNED LINK BEAM, 10 #9 + 10 #9 + 2 #9			
LB10		26	12	2 X 2 #9	1 #4	#5 @ 5"	2	-	-				
LB11		24	12	3 X 2 #9	1 #4	#5 @ 4"	2	-	-				
LB12		26	12	5 #9	2 #4	#4 @ 5"	2	PL 9.5 X 0.5 + RPL 2" X 1/2" (4)	24	3 #9 + 2 #9			
LB13		26	12	2 X 2 #9	2 #4	#4 @ 5"	2	-	-				
LB14, LB15		60	26	4 #9	8 #4	#4 @ 10"	4	-	-				
LB1, LB6		33	48	2 X 9 #9	3 #4	#5 @ 8"	8	-	-				
12-16		LB2	22	48	2 X 12 #9	1 #4	#4 @ 5"	10	-	-			
		LB3	32	48	11 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 40" FROM TOS		
	LB4, LB8	33	48	22 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS, 9 #9, 2 #9			
	LB5, LB9	33	48	2 X 10 #9	3 #4	#5 @ 6"	9	-	-	9 #9 + 9 #9 + 6 #9			
	LB7	42	48	2 X 10 #9	5 #4	#5 @ 6"	8	-	-				
	LB10	26	12	3 X 2 #8	1 #4	#5 @ 6"	2	-	-	UPTURNED LINK BEAM			
	LB11	24	12	3 X 2 #9	1 #4	#5 @ 4"	2	-	-				
	LB12	26	12	2 X 2 #9	2 #4	#5 @ 4"	2	-	-				
	LB13	26	12	2 X 2 #9	2 #4	#4 @ 6"	2	-	-				
	LB14, LB15	60	24	4 #9	8 #4	#4 @ 10"	4	-	-				
	LB1, LB6	33	50	13 #9	4 #4	#5 @ 9"	10	-	-				
	9-11	LB2	22	50	2 X 9 #9	1 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 40" FROM TOS		
		LB3	32	50	10 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS		
LB4, LB8		33	50	2 X 8 #9	3 #4	#5 @ 8"	8	-	-				
LB5, LB9		33	50	2 X 8 #9	3 #4	#5 @ 8"	8	-	-				
LB7		42	50	16 #9	4 #4	#4 @ 9"	10	-	-	UPTURNED LINK BEAM, 12 #9 + 4 #9			
LB10, LB12		26	12	3 X 2 #8	1 #4	#5 @ 4"	2	-	-				
LB11		24	12	2 X 2 #9	1 #4	#5 @ 6"	2	-	-	3 #9 + 2 #9			
LB13		26	12	3 X 2 #8	1 #4	#4 @ 9"	2	-	-				
LB14, LB15		60	24	5 #9	8 #4	#4 @ 10"	4	-	-				
LB1, LB6		33	50	13 #9	4 #4	#5 @ 9"	10	-	-				
8		LB2	22	50	2 X 9 #9	1 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 40" FROM TOS		
		LB3	32	50	10 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS		
		LB4, LB8	33	50	2 X 8 #9	3 #4	#5 @ 8"	8	-	-			
	LB5, LB9	33	50	2 X 8 #9	3 #4	#5 @ 9"	8	-	-				
	LB7	42	50	16 #9	4 #4	#4 @ 9"	10	-	-	UPTURNED LINK BEAM, 12 #9 + 4 #9			
	LB10, LB12	26	12	3 X 2 #8	1 #4	#5 @ 4"	2	-	-				
	LB11	24	12	2 X 2 #9	1 #4	#5 @ 6"	2	-	-	3 #9 + 2 #9			
	LB13	26	12	3 X 2 #8	1 #4	#4 @ 9"	2	-	-				
	LB14, LB15	60	24	5 #9	8 #4	#4 @ 10"	4	-	-				
	LB1, LB6	33	50	13 #9	4 #4	#5 @ 9"	10	-	-				
	7	LB2	22	50	2 X 9 #9	1 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 40" FROM TOS		
		LB3	32	50	10 #9	3 #4	#5 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS		
		LB4, LB8	33	54	12 #9	4 #4	#4 @ 9"	10	-	-			
LB5, LB9		33	54	14 #9	2 #4	#4 @ 10"	10	-	-	12 #9 + 2 #9			
LB10, LB12		26	12	3 X 2 #8	1 #4	#5 @ 4"	2	-	-				
LB11		24	12	2 X 2 #9	1 #4	#5 @ 6"	2	-	-	3 #9 + 2 #9			
LB13		26	12	3 X 2 #8	1 #4	#4 @ 9"	2	-	-				
LB14, LB15		60	24	5 #9	8 #4	#4 @ 10"	4	-	-				
LB1, LB6		33	54	11 #9	3 #4	#5 @ 10"	8	-	-				
6		LB2	22	54	9 #9	2 #4	#4 @ 9"	8	-	-	EL TOP OF LINK BEAM + 40" FROM TOS		
		LB3	32	54	9 #9	3 #4	#4 @ 6"	8	-	-	EL TOP OF LINK BEAM + 30" FROM TOS		
		LB4, LB8	33	54	12 #9	4 #4	#4 @ 9"	10	-	-			
		LB5, LB9	33	54	14 #9	2 #4	#4 @ 10"	10	-	-	12 #9 + 2 #9		
	LB10, LB12	26	12	3 X 2 #8	1 #4	#5 @ 4"	2	-	-				
	LB11	24	12	2 X 2 #9	1 #4	#5 @ 6"	2	-	-	3 #9 + 2 #9			
	LB13	26	12	3 X 2 #8	1 #4	#5 @ 6"	2	-	-				
	LB14, LB15	60	24	5 #9	8 #4	#5 @ 6"	6	-	-				
	LB1, LB6	62	54	2 X 10 #9	8 #4	#5 @ 5"	6	-	-				
	5	LB7	54	54	9 #9	14 #4	#5 @ 6"	2	-	-			
		LB11	62	12	3 X 2 #9	6 #9	#5 @ 5"	2	-	-			
		LB13	62	12	3 X 2 #9	6 #9	#5 @ 5"	2	-	-			
		LB2	42	54	14 #9	4 #4	#4 @ 12"	10	-	-	EL TOP OF LINK BEAM + 114" FROM TOS		
4		LB2, LB3	33	54	10 #9	4 #4	#4 @ 12"	10	-	-			
		LB6, LB8, LB9	59	54	14 #9	7 #4	#4 @ 12"	8	-	-	10 #9 + 4 #9		
		LB1, LB4	47	54	9 #9	5 #5	#5 @ 9"	5	-	-			
		LB10, LB12	47	12	3 #9	6 #5	#5 @ 6"	2	-	-			
		2	LB11	37	12	4 X 2 #9	1 #4	#5 @ 6"	2	-	-		
			1	LB2, LB4	53	54	12 #9	8 #5	#5 @ 6"	6	-	-	
				LB7	54	54	2 X 10 #9	8 #5	#5 @ 6"	6	-	-	
				LB6, LB8, LB9	62	54	2 X 10 #9	7 #5	#5 @ 6"	6	-	-	
				LB10, LB11, LB12, LB13	60	12	3 #9 + 3 #8	8 #4	#4 @ 12"	6	-	-	
	8			LB2	42	54	2 X 5 #9	5 #4	#5 @ 8"	6	-	-	EL TOP OF LINK BEAM + 48" FROM TOS
				LB11	48	12	2 #8	6 #4	#4 @ 12"	2	-	-	
				LB12	60	12	2 #8	6 #4	#4 @ 12"	2	-	-	

REINFORCED CONCRETE BEAM SCHEDULE										CONCRETE: 5000 psi, U.N.O. STEEL REINFORCEMENT: REFER TO S-004
MARK	SIZE		LONGITUDINAL REINFORCEMENT				TRANSVERSE REINFORCEMENTS - STIRRUPS			REMARKS
	W (in)	H (in)	TOP BARS		BOTTOM BARS	SIDE BARS EACH FACE	SIZE	TYPE	SPACING	
			MARK SIDE	OPPOSITE SIDE						
B1	14	24	4 - #6	4 - #6	2 x 4 - #6	-	#3	A	9	
B2	14	24	2 x 4 - #8	2 x 4 - #8	2 x 4 - #8	-	#4	A	5	
B3	12	34	2 x 4 - #6	2 x 4 - #6	4 - #6	-	#4	A	10	
B4	10	16	2 - #6	2 - #6	3 - #6	-	#3	A	6	
B5	20	36	4 - #9	4 - #9	2 x 4 - #9	3 - #4	#4	B	6	
B6	12	28	3 - #9	3 - #9	2 x 3 - #9	-	#4	A	10	
B7	14	24	2 x 3 - #7	2 x 3 - #7	2 x 3 - #7	-	#4	A	6	
B8	10	12	3 - #6	3 - #6	3 - #6	-	#3	A	5	
B9	10	12	2 - #6	2 - #6	2 - #6	-	#3	A	5	
B10	10	16	2 - #6	2 - #6	3 - #6	-	#3	A	6	
B11	SEE NOTE 1	10	5 - #4	5 - #4	5 - #7	-	#4	B	5	SEE NOTE 1
B12	16	34	4 - #8	4 - #8	2 x 4 - #8	-	#4	A	10	
B13	10	31	3 - #8	3 - #8	3 - #8	3 - #5	#4	A	8	
B14	14	20	3 - #8	3 - #8	3 - #8	1 - #5	#4	A	6	
B15	30	33	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 3, SEE S-350
B16	24	33	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 3, SEE S-350
B17	24	34	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 3, SEE S-350
B18	36	24	10 - #9	10 - #9	15 - #9	1 - #4	#5	B	6	ADDITIONAL ELEVATOR IMPACT LOAD CONSIDERED
B19	24	30	12 - #8	12 - #8	10 - #9	4 - #4	#5	B	6	ADDITIONAL ELEVATOR IMPACT LOAD CONSIDERED
B20	SEE NOTE 1	12	4 - #4	4 - #4	4 - #5	-	#4	B	5	SEE NOTE 1
B21	SEE NOTE 1	VARIES	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 1, SEE NOTE 3, SEE S-350
B22	SEE NOTE 1	VARIES	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 1, SEE NOTE 3, SEE S-350
B23	SEE NOTE 1	VARIES	4 - #8	4 - #8	4 - #8	-	#4	A	12	SEE NOTE 1, SEE NOTE 3, SEE S-350
B24	8	12	2 - #6	2 - #6	2 - #6	-	#3	A	5	
B25	28	24	6 - #8	6 - #8	6 - #8	-	#4	A	10	
B26	26	45	12 - #9	12 - #9	12 - #9	-	#5	B	6	5 + 5 + 2 TOP & BOTTOM BARS
B27	20	41-1/2	4 - #9	4 - #9	2 x 4 - #9	3 - #4	#4	B	6	
B28	12	32	3 - #9	3 - #9	8 - #9	-	#4	A	8	3 + 3 + 2 BOTTOM BARS
B29	14	30	6 - #8	6 - #8	2 x 4 - #8	2 - #4	#4	A	10	
B30	18	24	5 - #6	5 - #6	2 x 5 #7	-	#4	B	6	
SB2	14	24	6 - #8	6 - #8	6 - #8	-	#4	A	10	4 + 2 TOP & BOTTOM BARS
SB7	14	24	6 - #6	6 - #6	6 - #6	-	#3	A	8	3 + 2 BOTTOM BARS, 4 + 2 TOP BARS
TB1	39	24	4 - #11	4 - #11	4 - #11	2 - #11	#4	A	8	TIE BEAM GRID D & E WALL
TB2	SEE NOTE 4	36	5 - #11	5 - #11	5 - #11	3 - #11	#4	A	6	TIE BEAM GRID F WALL
TB3	SEE NOTE 4	30	6 - #11	6 - #11	6 - #11	3 - #11	#4	A	7	TIE BEAM GRID G WALL
TB4	SEE NOTE 4	36	2 x 2 - #11	2 x 2 - #11	2 x 2 - #11	3 - #11	#4	A	6	TIE BEAM GRID 4 WALL

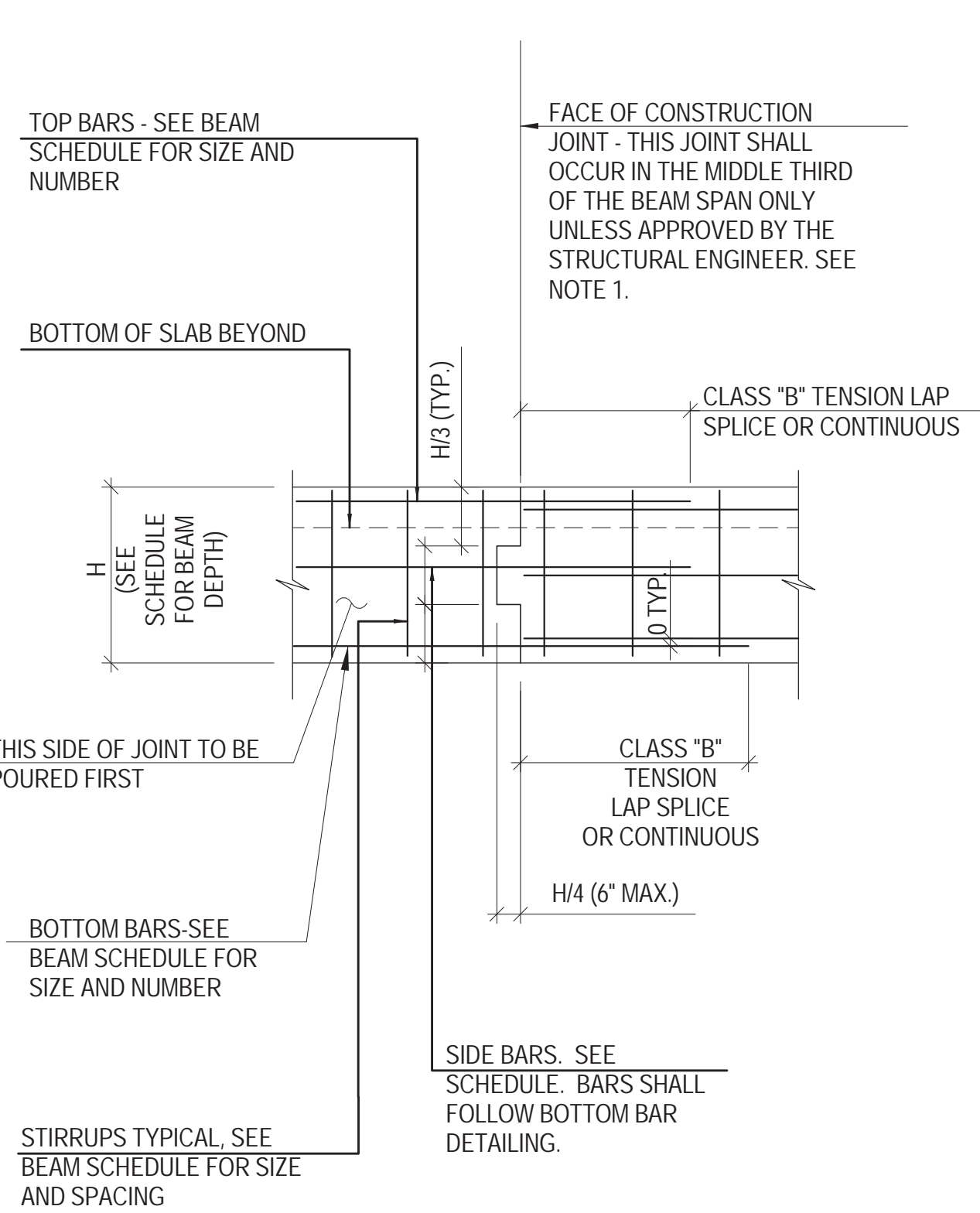
- NOTES:
- WIDTH OF EDGE BEAMS DEFINED BY WALL THICKNESS AT EACH LEVEL.
 - SEE DETAILS 1 THROUGH 3 FOR TYPICAL REINFORCED CONCRETE BEAM DETAILS.
 - BEAM TO BE CAST WITH WALL. CONCRETE STRENGTH TO MATCH THAT OF CORE WALL.
 - WIDTH OF TIE BEAM DEFINED BY WALL THICKNESS AT EACH LOCATION.



NOTE: SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.

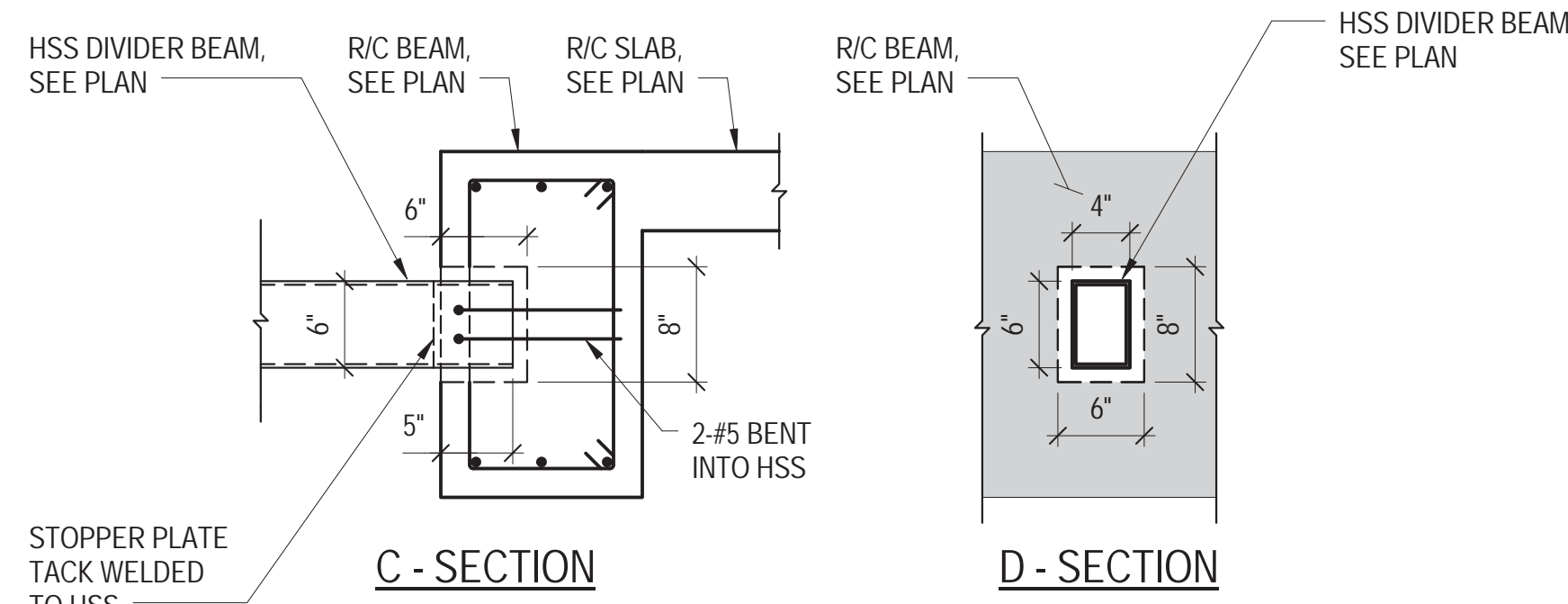
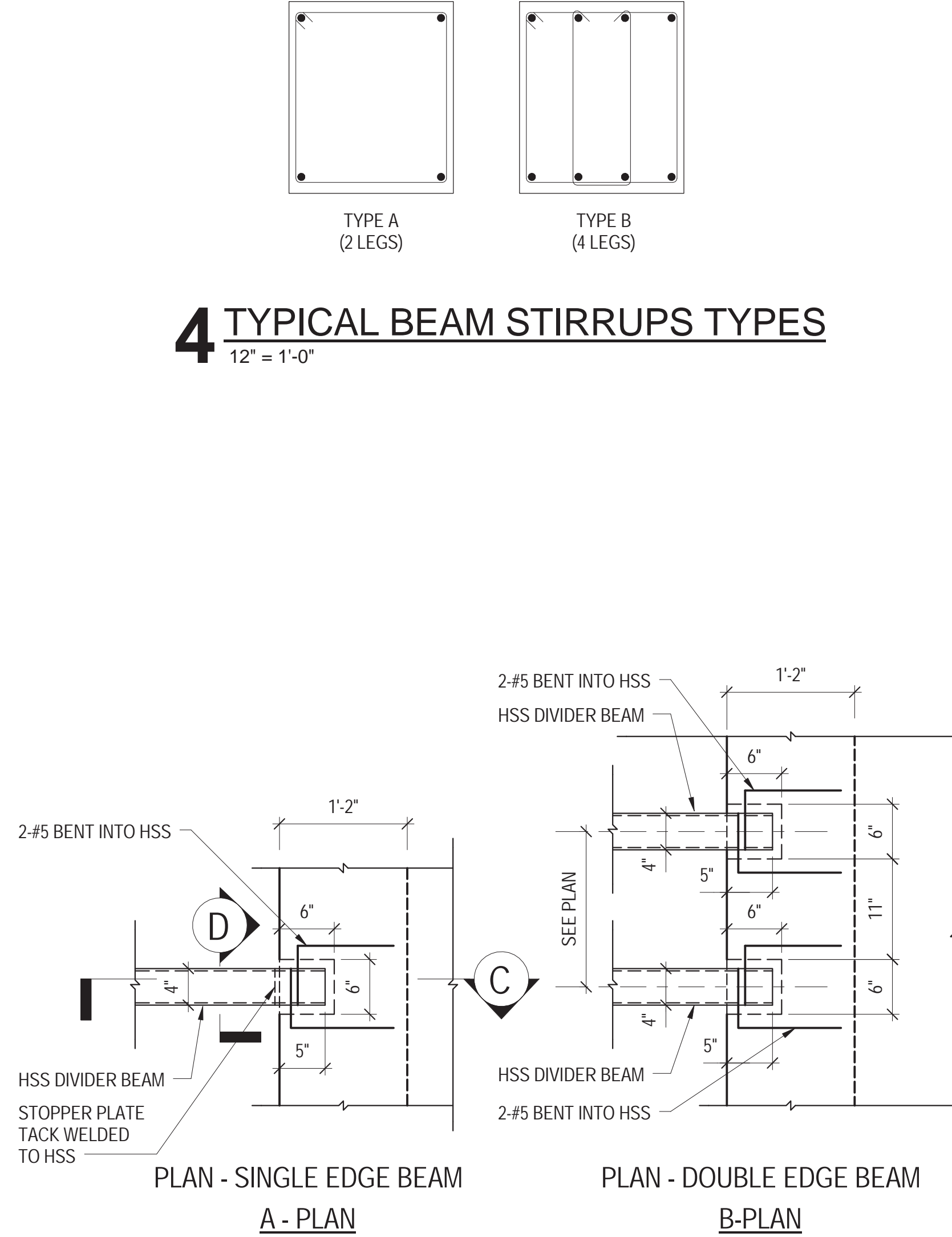
2 TYPICAL REINFORCED CONCRETE BEAM SECTION

12" = 1'-0"



3 TYPICAL BEAM CONSTRUCTION JOINT

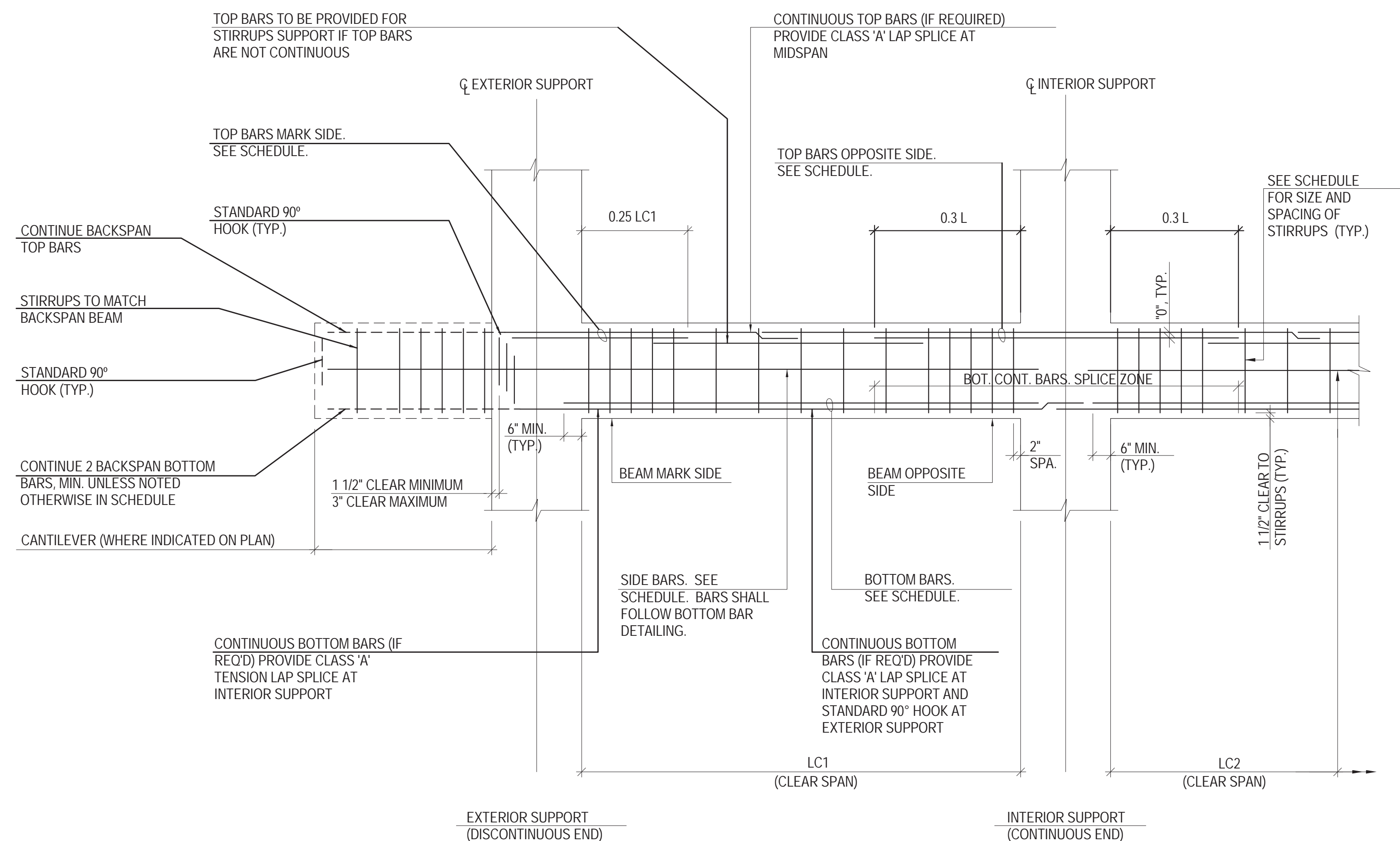
12" = 1'-0"



- NOTE 1: SEE 10 ON S-332 FOR ELEVATOR DIVIDER BEAM DETAIL AT SHEAR WALL.
NOTE 2: SEE S-371 FOR R/C SLAB DETAILS.

5 ELEVATOR DIVIDER BEAM DETAIL

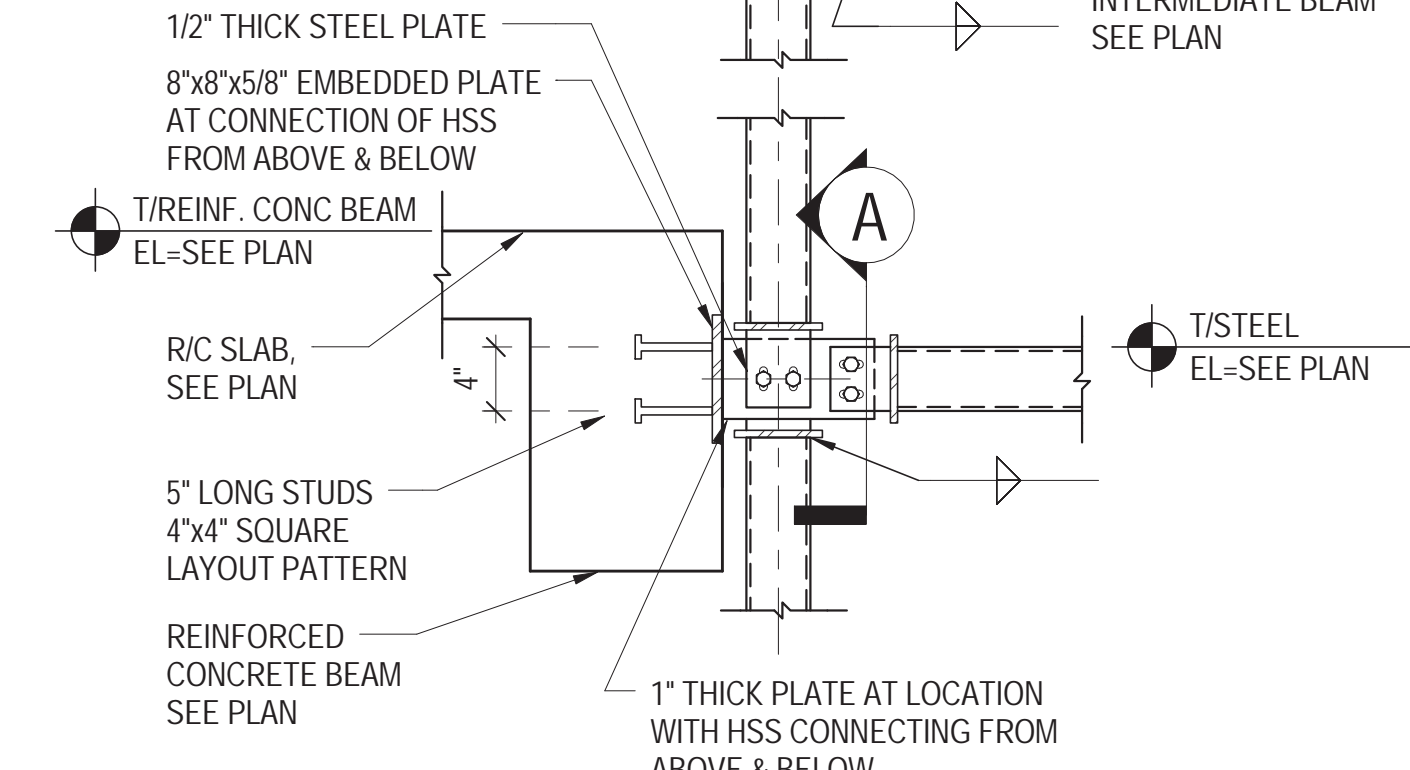
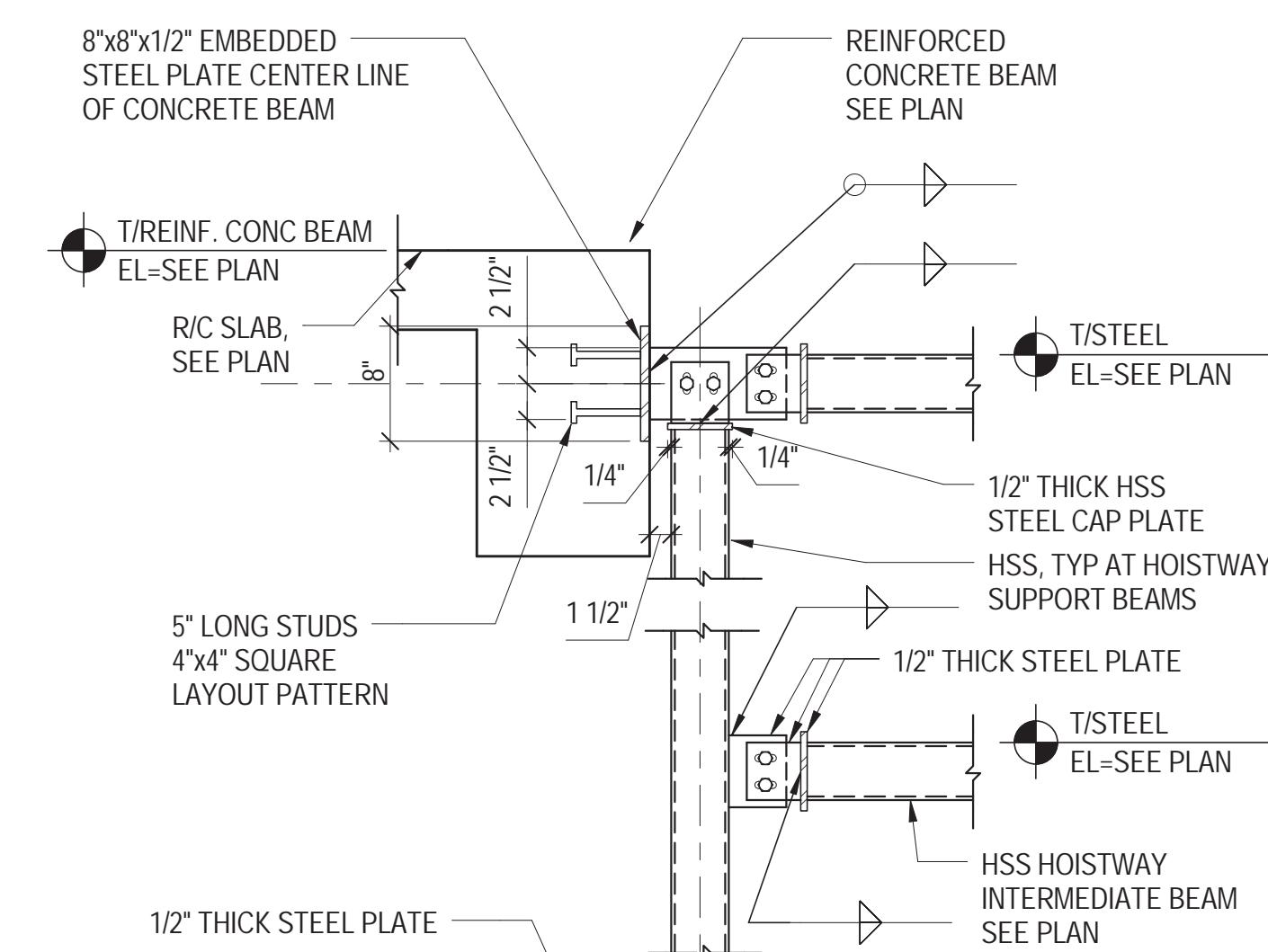
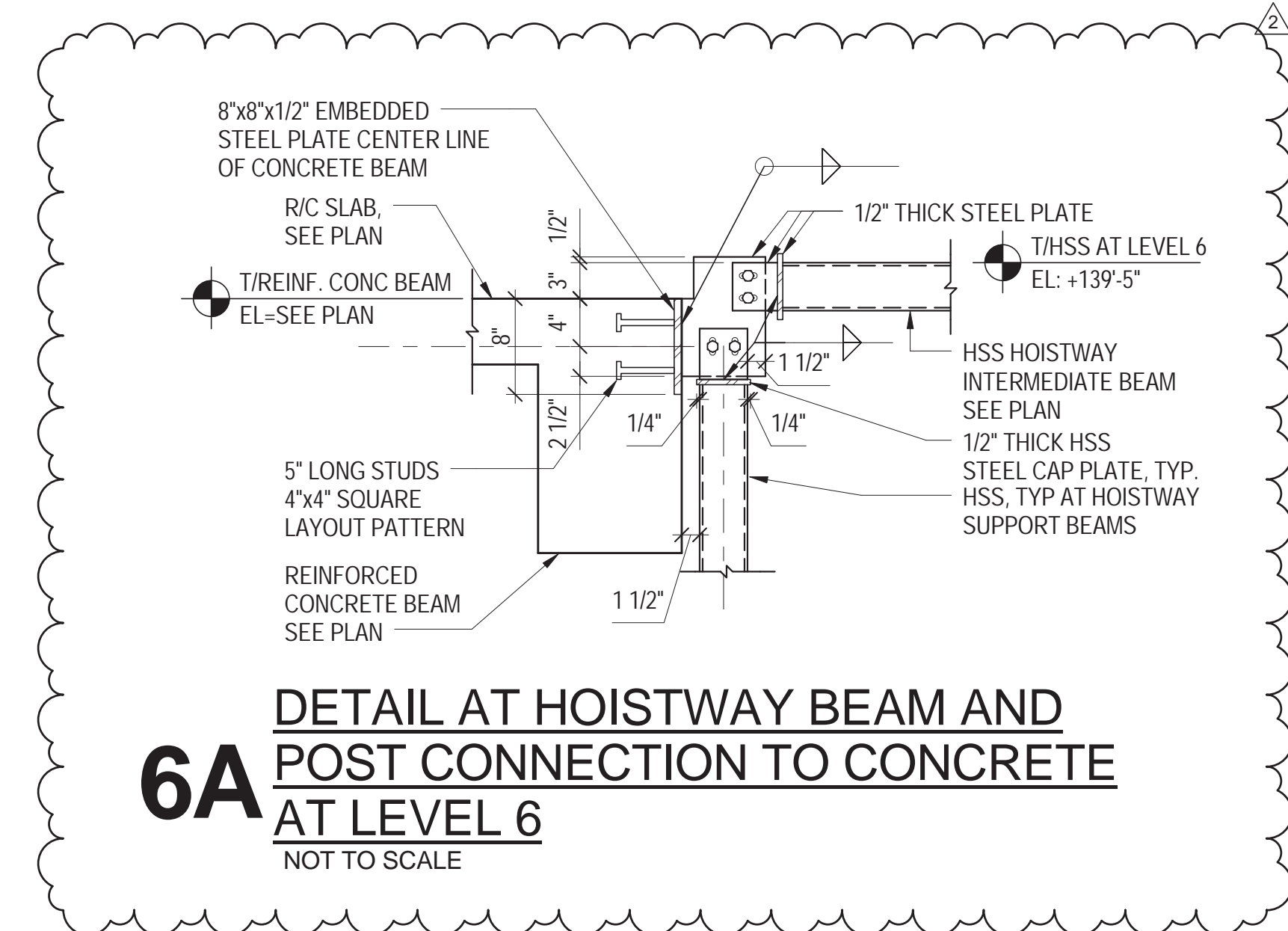
1" = 1'-0"



- NOTES:
- LC1, LC2 = LENGTH OF CLEAR SPANS 1, 2 (FACE OF SUPPORT TO FACE OF SUPPORT).
 - L = THE GREATER LENGTH OF CLEAR SPAN LC1 OR LC2.
 - AT INTERIOR SUPPORT (CONTINUOUS END) PROVIDE LARGER SIZE AND NUMBER OF TOP BARS FROM ADJACENT SPANS.
 - EXTERIOR AND INTERIOR SUPPORT REINFORCEMENT NOT SHOWN FOR CLARITY.

1 TYPICAL REINFORCED CONCRETE GRAVITY BEAM ELEVATION

12" = 1'-0"



6 DETAIL AT HOISTWAY BEAM AND POST CONNECTION TO CONCRETE

NOT TO SCALE

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

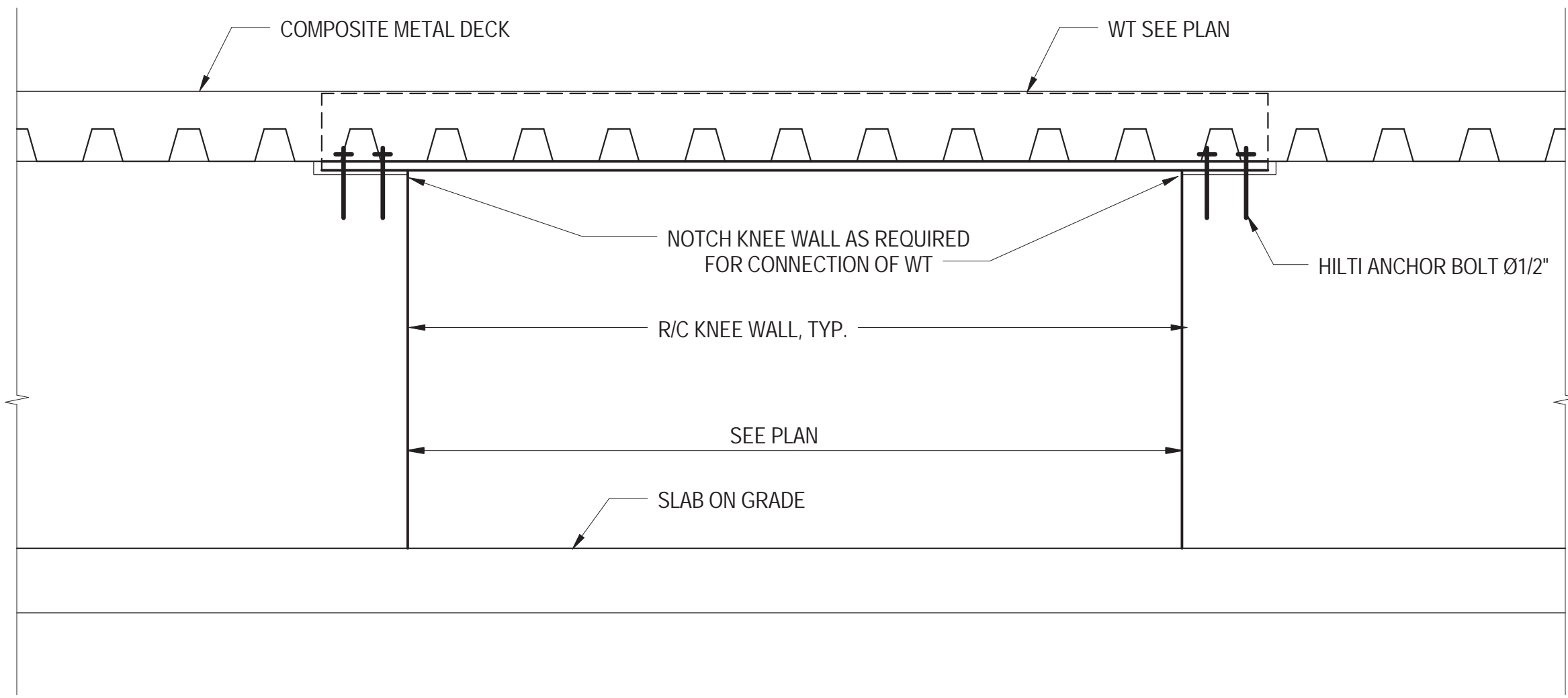
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

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

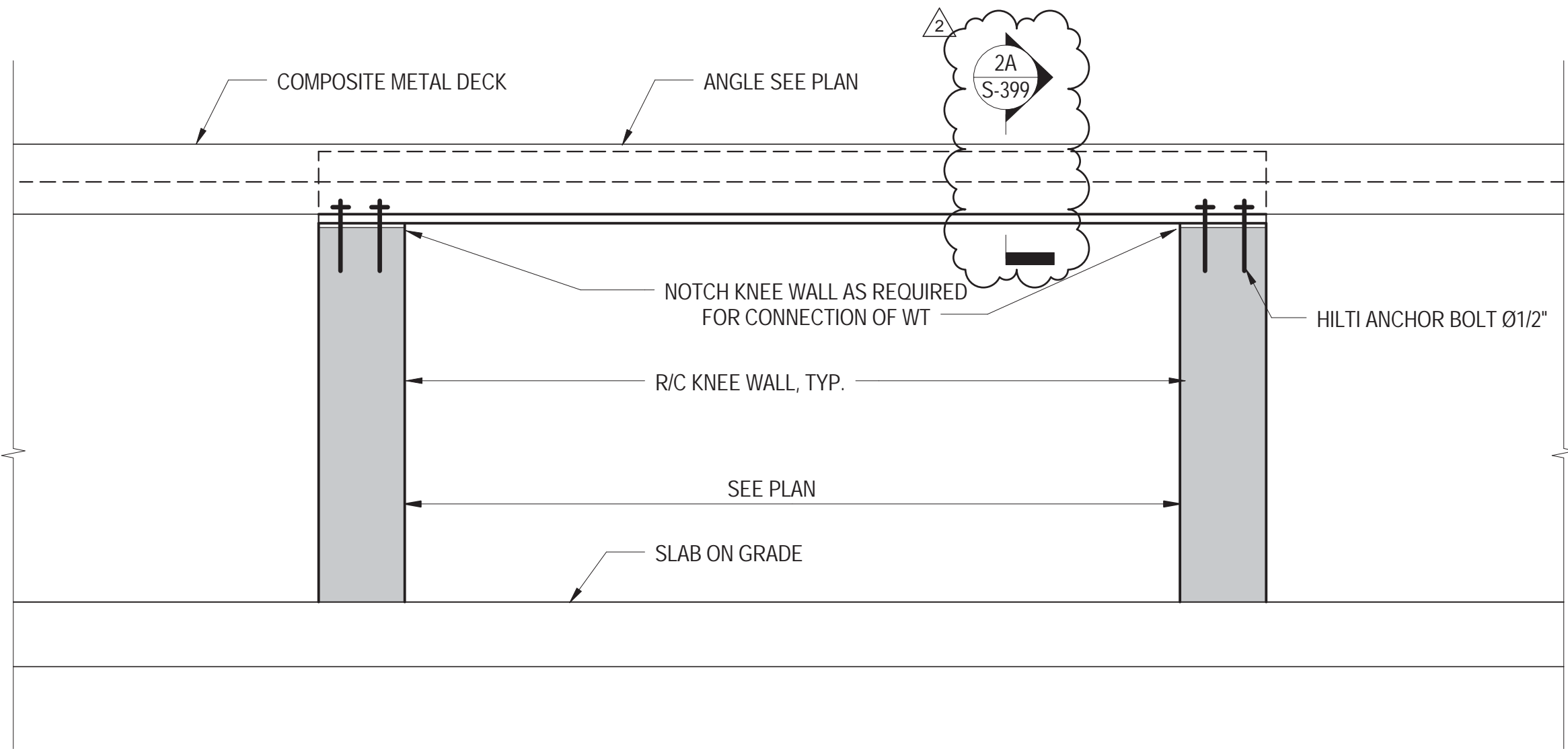
Facade Maintenance Consultant
Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

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

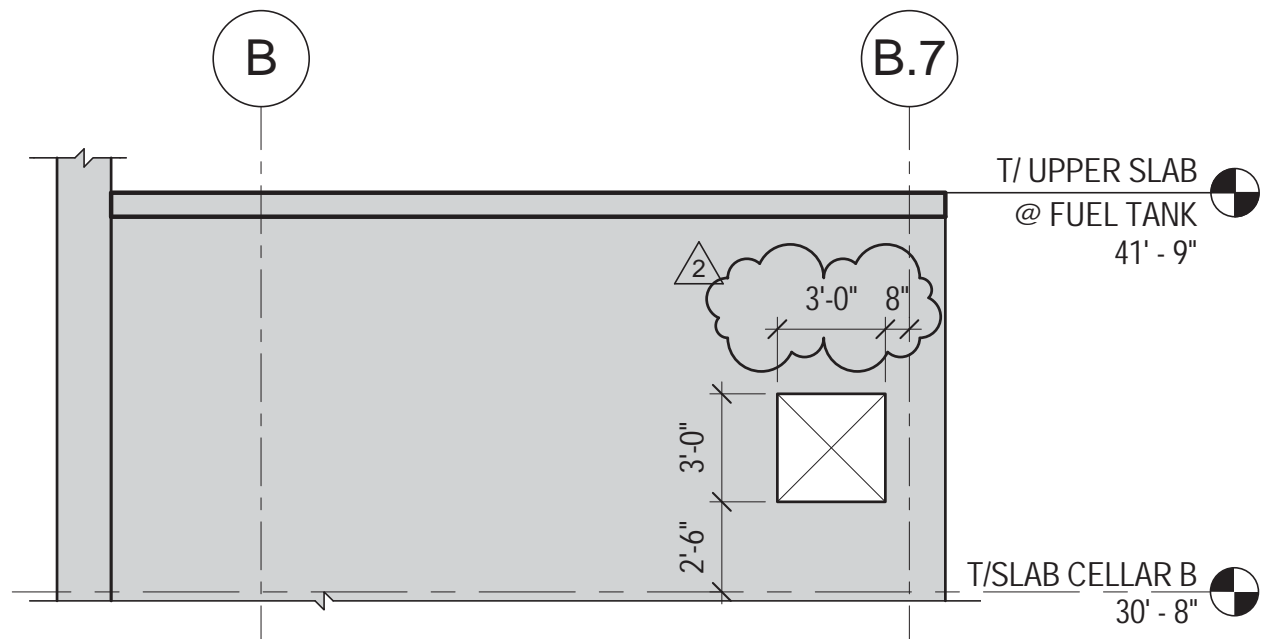
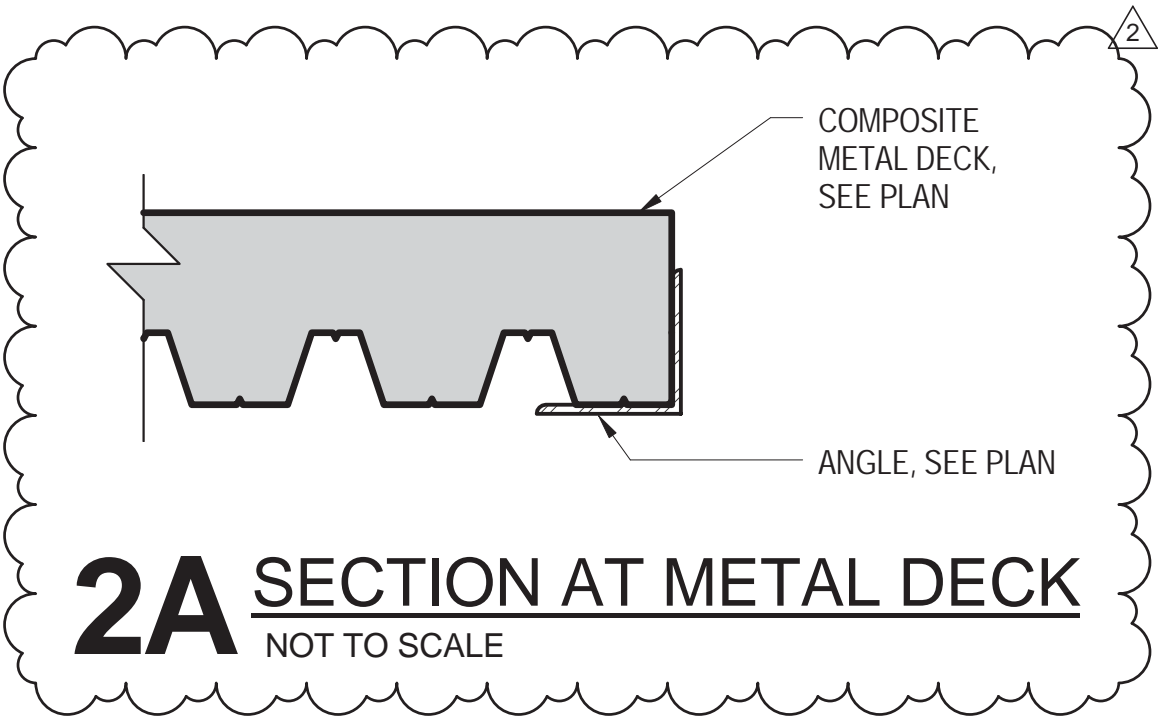
Key Plan:



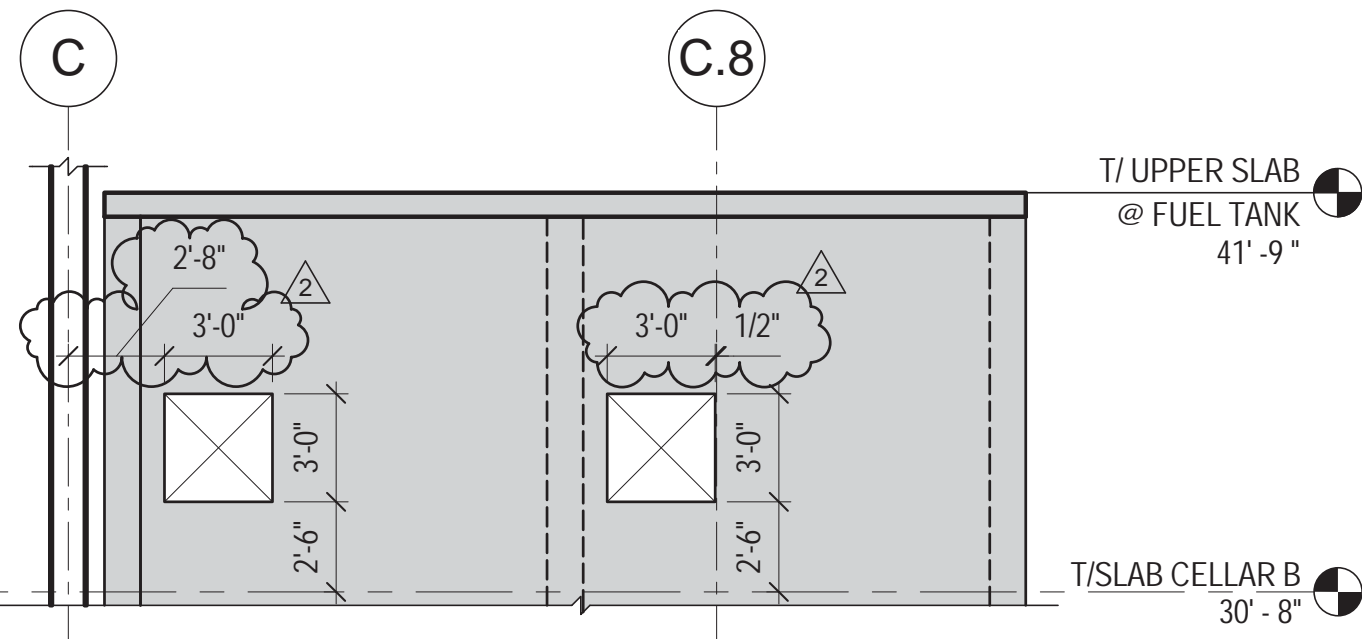
1 DETAIL AT WT SECTION
1" = 1'-0"



2 DETAIL AT ANGLE SECTION
1" = 1'-0"



3 FUEL OIL TANK WALL ALONG GRIDLINE 1 - LOOKING NORTH
3/16" = 1'-0"



4 FUEL OIL TANK WALL ALONG GRIDLINE 2 - LOOKING NORTH
3/16" = 1'-0"



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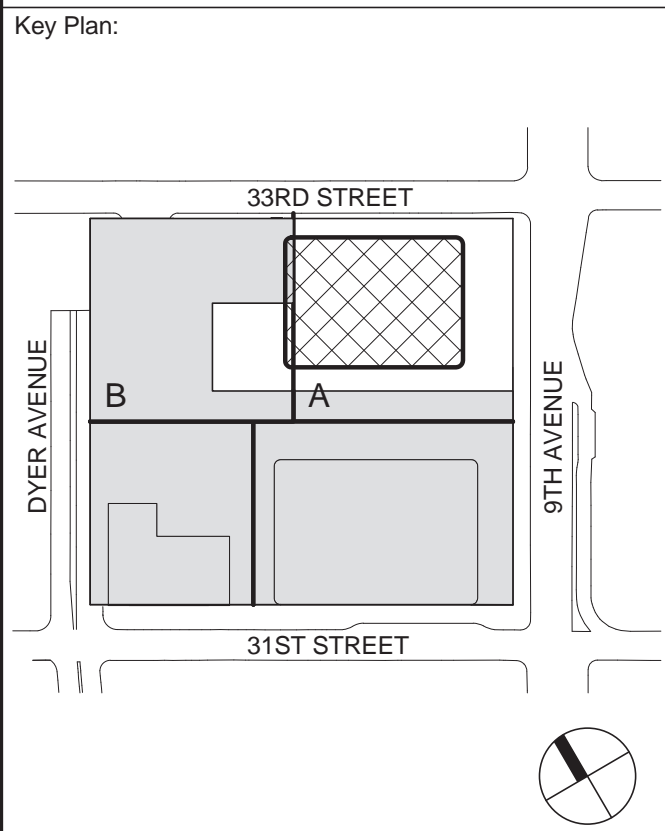
Acoustical Consultant
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404 Fifth Avenue #8, New York, NY 10016

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2	22 APR 2016	ISSUED FOR PAA
1	16 DEC 2015	ISSUED FOR PERMIT
No.	Date	Description
Sheet Name:		

**REINFORCED
CONCRETE
DETAILS AT KNEE
WALLS**

Project No.: 211157	B-SCAN Sheet No.: S-399.01
Date: 22 APR 2016	Sheet No.: S-399
Scale: As indicated	Page No.:
File No.: S-399	



STRUCTURAL STEEL COLUMN SCHEDULE BELOW LEVEL 68												W14 COLUMNS: ASTM A913-GRADE 70 PLATE MATERIAL: ASTM A572 GR 50, TYP. U.N.O.			
FLOOR LEVEL	A-4	A-3/A-5	B-1/B-7	C-1/C-7	D-1/D-7, E-1/E-7	F-1/F-7	TC-1, TC-7	G-1/G-7	TC-1, TC-7	TC-3, TC-5	TC-4	C.1 - 4	C.1 - 3, C.1-5	F.5-4	F.5-3, F.5-5
EL: SEE PLAN LEVEL 68	SEE NOTE 1														
EL: SEE PLAN LEVEL 67	W14X159	W14X257	W14X605	W14X283	W14X159	W14X283	W14X159	-	-	W14X159	W14X159	W14X132	W14X132	-	-
EL: SEE PLAN LEVEL 66	W14X159	W14X257	W14X605	W14X283	W14X159	W14X283	W14X159	-	-	W14X159	W14X159	W14X132	W14X132	-	-
EL: SEE PLAN LEVEL 65	W14X159	W14X257	W14X605	W14X283	W14X159	W14X283	W14X159	-	-	W14X159	W14X159	W14X132	W14X132	-	-
EL: SEE PLAN LEVEL 64	W14X159	W14X257	W14X605	W14X283	W14X159	W14X283	W14X159	-	-	W14X159	W14X159	W14X132	W14X132	-	-
EL: SEE PLAN LEVEL 63	W14X159	W14X257	W14X605	W14X311	W14X159	W14X311	W14X176	-	-	W14X159	W14X159	W14X176	W14X176	-	-
EL: SEE PLAN LEVEL 62	W14X159	W14X257	W14X605	W14X311	W14X159	W14X311	W14X176	-	-	W14X159	W14X159	W14X176	W14X176	-	-
EL: SEE PLAN LEVEL 61	W14X159	W14X283	W14X605	W14X311	W14X159	W14X311	W14X193	-	-	W14X159	W14X159	W14X193	W14X193	-	-
EL: SEE PLAN LEVEL 60	W14X159	W14X283	W14X605	W14X311	W14X159	W14X311	W14X193	-	-	W14X159	W14X159	W14X193	W14X193	-	-
EL: SEE PLAN LEVEL 59	W14X176	W14X283	W14X605	W14X342	W14X159	W14X342	W14X233	-	-	W14X159	W14X159	W14X283	W14X283	-	-
EL: SEE PLAN LEVEL 58	W14X176	W14X283	W14X605	W14X342	W14X159	W14X342	W14X233	-	-	W14X159	W14X159	W14X283	W14X283	-	-
EL: SEE PLAN LEVEL 57	W14X176	W14X311	W14X605	W14X342	W14X159	W14X342	W14X233	-	-	W14X159	W14X159	W14X283	W14X283	-	-
EL: SEE PLAN LEVEL 56	W14X176	W14X311	W14X605	W14X342	W14X159	W14X342	W14X233	-	-	W14X159	W14X159	W14X283	W14X283	-	-
EL: SEE PLAN LEVEL 55	W14X211	W14X311	W14X605	W14X370	W14X159	W14X370	W14X257	-	-	W14X176	W14X159	W14X311	W14X311	-	-
EL: SEE PLAN LEVEL 54	W14X211	W14X311	W14X605	W14X370	W14X159	W14X370	W14X257	-	-	W14X176	W14X159	W14X311	W14X311	-	-
EL: SEE PLAN LEVEL 53	W14X211	W14X342	W14X550	W14X370	W14X176	W14X370	W14X283	-	-	W14X176	W14X159	W14X370	W14X342	-	-
EL: SEE PLAN LEVEL 52	W14X211	W14X342	W14X550	W14X370	W14X176	W14X370	W14X283	-	-	W14X176	W14X159	W14X283	W14X283	W14X90	W14X90
EL: SEE PLAN LEVEL 51	W14X211	W14X342	W14X550	W14X398	W14X193	W14X398	-	W14X283	-	W14X193	W14X176	-	W14X283	W14X90	W14X90
EL: SEE PLAN LEVEL 50	W14X211	W14X342	W14X550	W14X398	W14X193	W14X398	-	W14X283	-	W14X193	W14X176	-	-	W14X90	W14X90
EL: SEE PLAN LEVEL 49	W14X233	W14X398	W14X550	W14X398	W14X211	W14X398	-	W14X342	-	W14X233	W14X176	-	-	W14X109	W14X109
EL: SEE PLAN LEVEL 48	W14X233	W14X398	W14X550	W14X398	W14X211	W14X398	-	W14X342	W14X193	W14X233	W14X176	-	-	W14X109	W14X109
EL: SEE PLAN LEVEL 47	W14X257	W14X398	W14X550	W14X500	W14X233	W14X500	-	W14X342	W14X193	W14X233	W14X211	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 46	W14X257	W14X398	W14X550	W14X500	W14X233	W14X500	-	W14X342	W14X193	W14X233	W14X211	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 45	W14X283	W14X398	W14X550	W14X500	W14X233	W14X500	-	W14X342	W14X193	W14X257	W14X211	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 44	W14X283	W14X398	W14X550	W14X500	W14X233	W14X500	-	W14X342	W14X193	W14X257	W14X211	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 43	W14X311	W14X426	W14X550	W14X550	W14X257	W14X550	-	W14X398	W14X211	W14X283	W14X233	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 42	W14X311	W14X426	W14X550	W14X550	W14X257	W14X550	-	W14X398	W14X211	W14X283	W14X233	-	-	W14X132	W14X132
EL: SEE PLAN LEVEL 41	W14X311	W14X426	W14X550	W14X550	W14X283	W14X550	-	W14X398	W14X233	W14X283	W14X257	-	-	W14X176	W14X176
EL: SEE PLAN LEVEL 40	W14X311	W14X426	W14X550	W14X550	W14X283	W14X550	-	W14X398	W14X233	W14X283	W14X257	-	-	W14X176	W14X176
EL: SEE PLAN LEVEL 39	W14X342	W14X455	W14X550	W14X605	W14X311	W14X605	-	W14X398	W14X233	W14X342	W14X283	-	-	W14X176	W14X176
EL: SEE PLAN LEVEL 38	W14X342	W14X455	W14X550	W14X605	W14X311	W14X605	-	W14X398	W14X233	W14X342	W14X283	-	-	W14X176	W14X176
EL: SEE PLAN LEVEL 37	W14X398	W14X455	W14X500	W14X605	W14X311	W14X605	-	W14X398	W14X257	W14X342	W14X311	-	-	W14X211	W14X211
EL: SEE PLAN LEVEL 36	W14X398	W14X455	W14X500	W14X605	W14X311	W14X605	-	W14X398	W14X257	W14X342	W14X311	-	-	W14X211	W14X211
EL: SEE PLAN LEVEL 35	W14X398	W14X455	W14X500	W14X665	W14X342	W14X665	-	W14X398	W14X257	W14X370	W14X311	-	-	W14X233	W14X233
EL: SEE PLAN LEVEL 34	W14X398	W14X455	W14X500	W14X665	W14X342	W14X665	-	W14X398	W14X257	W14X370	W14X311	-	-	W14X233	W14X233
EL: SEE PLAN LEVEL 33	W14X426	W14X500	W14X500	W14X665	W14X370	W14X665	-	W14X455	W14X283	W14X370	W14X342	-	-	W14X283	W14X257
EL: SEE PLAN LEVEL 32	W14X426	W14X500	W14X500	W14X665	W14X370	W14X665	-	W14X455	W14X283	W14X370	W14X342	-	-	W14X283	W14X257
EL: SEE PLAN LEVEL 31	W14X455	W14X500	W14X500	W14X665	W14X398	W14X665	-	W14X455	W14X283	W14X426	W14X398	-	-	W14X283	W14X426
EL: SEE PLAN LEVEL 30	W14X455	W14X500	W14X500	W14X665	W14X398	W14X665	-	W14X455	W14X283	W14X426	W14X398	-	-	W14X211	W14X370
EL: SEE PLAN LEVEL 29	W14X500	W14X550	W14X500	W14X605	W14X455	W14X605	-	W14X550	W14X311	W14X455	W14X398	-	-	-	W14X370
EL: SEE PLAN LEVEL 28	W14X500	W14X550	W14X500	W14X605	W14X455	W14X605	-	W14X550	W14X311	W14X455	W14X398	-	-	-	-
EL: SEE PLAN LEVEL 27	W14X500	W14X550	W14X500	W14X605	W14X455	W14X605	-	W14X550	W14X311	W14X455	W14X426	-	-	-	-
EL: SEE PLAN LEVEL 26	W14X500	W14X550	W14X500	W14X605	W14X455	W14X605	-	W14X550	W14X311	W14X455	W14X426	-	-	-	-
EL: SEE PLAN LEVEL 25	W14X550	W14X550	W14X500	W14X605	W14X500	W14X605	-	W14X550	W14X311	W14X500	W14X455	-	-	-	-
EL: SEE PLAN LEVEL 24	W14X550	W14X550	W14X500	W14X605	W14X500	W14X605	-	W14X550	W14X311	W14X500	W14X455	-	-	-	-
EL: SEE PLAN LEVEL 23	W14X550	W14X550	W14X500	W14X665	W14X500	W14X665	-	W14X605	W14X342	W14X550	W14X500	-	-	-	-
EL: SEE PLAN LEVEL 22	W14X550	W14X550	W14X500	W14X665	W14X500	W14X665	-	W14X605	W14X342	W14X550	W14X500	-	-	-	-
EL: SEE PLAN LEVEL 21	W14X605	W14X605	W14X550	W14X665	W14X550	W14X665	-	W14X605	W14X342	W14X550	W14X500	-	-	-	-
EL: SEE PLAN LEVEL 20	W14X605	W14X605	W14X550	W14X665	W14X550	W14X665	-	W14X605	W14X342	W14X550	W14X500	-	-	-	-
EL: SEE PLAN LEVEL 19	W14X605	W14X605	W14X550	W14X730	W14X550	W14X730	-	W14X665	W14X370	W14X605	W14X550	-	-	-	-
EL: SEE PLAN LEVEL 18	W14X605	W14X605	W14X550	W14X730	W14X550	W14X730	-	W14X665	W14X370	W14X605	W14X550	-	-	-	-
EL: SEE PLAN LEVEL 17	W14X605	W14X665	W14X605	W14X730	W14X605	W14X730	-	W14X665	W14X398	W14X605	W14X550	-	-	-	-
EL: SEE PLAN LEVEL 16	W14X605	W14X665	W14X605	W14X730	W14X605	W14X730	-	W14X665	W14X398	W14X605	W14X550	-	-	-	-
EL: SEE PLAN LEVEL 15	W14X665	W14X665	W14X605	W14X730	W14X605	W14X730	-	W14X665	W14X426	W14X605	W14X605	-	-	-	-
EL: SEE PLAN LEVEL 14	W14X665	W14X665	W14X605	W14X730	W14X605	W14X730	-	W14X665	W14X426	W14X605	W14X605	-	-	-	-
EL: SEE PLAN LEVEL 13	W14X665	W14X665	W14X605	W14X808	W14X665	W14X808	-	W14X665	W14X455	W14X665	W14X605	-	-	-	-
EL: SEE PLAN LEVEL 12	W14X665	W14X665	W14X605	W14X808	W14X665	W14X808	-	W14X665	W14X455	W14X665	W14X605	-	-	-	-
EL: SEE PLAN LEVEL 11	W14X665	W14X730	W14X605	W14X808	W14X730	W14X808	-	W14X730	W14X500	W14X665	W14X665	-	-	-	-
EL: SEE PLAN LEVEL 10	W14X665	W14X730	W14X605	W14X808	W14X730	W14X808	-	W14X730	W14X500	W14X665	W14X665	-	-	-	-
EL: SEE PLAN LEVEL 9	W14X730	W													

NOTES:

- REFER TO S-402 FOR COLUMN SCHEDULE ABOVE LEVEL 68
- REFER TO S-412 FOR COLUMN SCHEDULE ALONG GRID A BELOW LEVEL 6.
- REFER TO S-411 FOR COLUMNS EMBEDDED IN CORE BELOW LEVEL 6.
- REFER TO S-402 FOR COLUMNS BELOW LEVEL 4.
- REFER TO S-415 FOR COLUMN SCHEDULE AT BELT TRUSS BETWEEN LEVELS 68 AND 69.
- REFER TO S-402 FOR COLUMN SPLICE SCHEDULE & DETAILS

NOTES:

- TYPICAL BOLTED SPLICE CONNECTION - SEE DETAILS 1 AND 2 ON S-402.
- CORNER COLUMN FIELD WELD CONNECTION - SEE DETAIL 11S-402.
- SEE PLANS FOR BEAM SIZES.
- CANTILEVER BEAMS NOT SHOWN FOR CLARITY.

3 COLUMN TRANSITION AT EAST CORNERS

NOT TO SCALE

STRUCTURAL STEEL COLUMN SCHEDULE AT RETAIL

GRID LOCATION		W14 COLUMNS: ASTM A913-GRADE 50 PLATE MATERIAL: ASTM A572 GR 50, TYP. U.N.O.																																				
FLOOR LEVEL	B-7 - 6	C-8 - 6	D-6 - 6	E-2 - 6	B-7 - 8	C-8 - 8	D-6 - 8	E-2 - 8	A5 - 5.5	A4 - 5.5	A3 - 5.5	A2 - 5.2	A1 - 5.2	A5 - 4.5	A4 - 4.5	A3 - 4.5	A2 - 4.5	A1 - 4.5	A3 - 6	A3 - 7.1	A3 - 8	A3 - 9	A2 - 6	A2 - 8	A2 - 9	A1 - 6	A1 - 8	A2 - 10	A1.5 - 9.5	A1.5 - 10, B.7 - 10	E-5 - 6, E.5 - 6.8	A1 - 5.7, A2 - 5.7	A1 - 4.8, A2 - 4.8	E-2-6.8				
LEVEL 05 EL: SEE PLAN	-	-	-	-	-	-	-	-				-	-				-	-				-	-	-	-	-	-	-	-	-	-	-	-	-				
LEVEL 04 EL: SEE PLAN	-	-	-	-	-	-	-	-				-	-	W14X132	W14X132	W14X132	W14X109	W14X109				-	-	-	-	-	-	-	-	-	-	-		W14X120	-			
LEVEL 03 EL: SEE PLAN	-	-	-	-	-	-	-	-	W14X132	W14X132	W14X159	W14X109	W14X109	W14X132	W14X132	W14X109	W14X109					-	-	-	-	-	-	-	-	-	-	-	W14X120	-	-			
LEVEL 02 EL: SEE PLAN	W14X159	W14X109	W14X109	W14X109	W14X159	W14X109	W14X109	W14X109	W14X132	W14X132	W14X159	W14X109	W14X109	W14X132	W14X132	W14X109	W14X109	W14X132	W14X132			-	W14X159	W14X193	-	W14X132	W14X132	-	-	-	-	W10X60	-	-	W14X61			
LEVEL 01 EL: SEE PLAN	W14X159	W14X109	W14X109	W14X109	W14X159	W14X109	W14X109	W14X109	W14X132	W14X159	W14X176	W14X109	W14X109	W14X145	W14X159	W14X211	W14X109	W14X109	W14X132	W14X132		-	W14X159	W14X193	-	W14X132	W14X132	-	-	-	-	W10X60	-	-	W14X61			
CELLAR B EL: SEE PLAN	W14X398	W14X233	W14X233	W14X257	W14X398	W14X257	W14X311	W14X257	W14X132	W14X159	W14X176	W14X311	W14X398	W14X145	W14X159	W14X211	W14X257	W14X257	W14X176	W14X132	W14X159	W14X132		W14X211	W14X311	W14X550	-	-	W14X398	W14X398	W14X500	-	-	-	-			
1. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD WEST OF GL C SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 1110 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2.34in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in.																																						
2. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL C AND WEST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2.34in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in.																																						
3. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 1.12in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in.																																						

1. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD WEST OF GL C SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 1110 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

2. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL C AND WEST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

3. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 1-1/2" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

STRUCTURAL STEEL COLUMN SCHEDULE OUTSIDE OF TOWER

GRID LOCATION		W14 COLUMNS: ASTM A913-GRADE 50 PLATE MATERIAL: ASTM A572 GR 50, TYP. U.N.O.																																																			
FLOOR LEVEL	B-7-9, C-8-9, E-2-10 G-8-10	D-6-9, D-6-10, F-2-9	E-2-9	K-9	K-7-9	F-2-6.8	G-5-6.8	K-7-1	K-7-7.1	F-2-6	G-5-6	K-6	K-7-6	G-8-6.8	H-5	K-4-8	K-7-4.8	H-4	K-4	H-3	K-3	B-1	B-7-1	C-1	D-1	E-1	F-1	G-1	H-1	K-1	K-2.2	A0-5-1	A0-5-2.5	B-2.5	C-2	B-8-1	G-8-9	B-7-7, G-5-9	K-7-8	G-8-8, K-8	A2-7, C-8-7, F-2-8, G-5-8	G-8-6	D-6-6.8, G-5-6	C-8-10, F-2-10, G-5-10, K-10, K-7-10	E-2-6.8								
LEVEL 03 EL: SEE PLAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
LEVEL 02 EL: SEE PLAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
LEVEL 01 EL: SEE PLAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
CELLAR B EL: SEE PLAN	W14X398	W14X426	W14X311	W14X398	W14X426	W14X257	W14X233	W14X193	W14X159	W14X257	W14X176	W14X145	W14X211	W14X145	W14X211	W14X257	W14X132	W14X257	W14X233	W14X283	W14X211	W14X132	W14X132	W14X132	W14X132	W14X145	W14X145	W14X145	W14X176	W14X145	W14X311	-	-	W14X145	W12X65	-	W14X426	W14X311	W14X159	W14X193	W14X211	W14X145	W14X176	W14X500	W14X176								
1. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD WEST OF GL C SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 1110 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in. 2. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL C AND WEST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in. 3. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 1-1/2in AND IN THE NORTH-SOUTH DIRECTION OF +/- 4in.																																																					

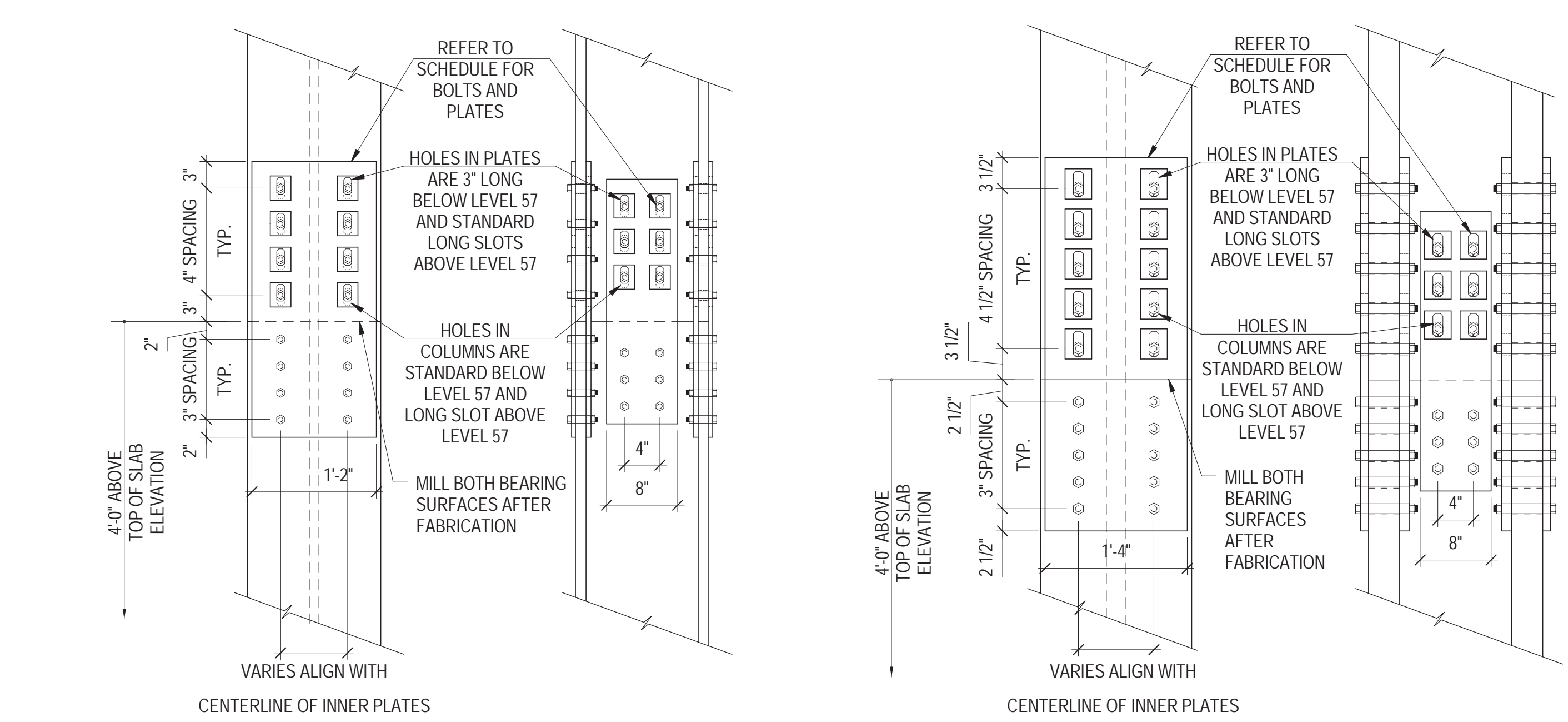
1. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD WEST OF GL C SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 1110 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

2. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL C AND WEST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 2-3/4" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

3. ALL COLUMNS SUPPORTED ON A SLIDING BEARING PAD EAST OF GL H SHALL BE DESIGNED FOR AN AXIAL LOAD (LRFD) OF 500 KIPS AND ACCOMMODATE MOVEMENTS IN THE EAST-WEST DIRECTION OF +/- 1-1/2" AND IN THE NORTH-SOUTH DIRECTION OF +/- 4".

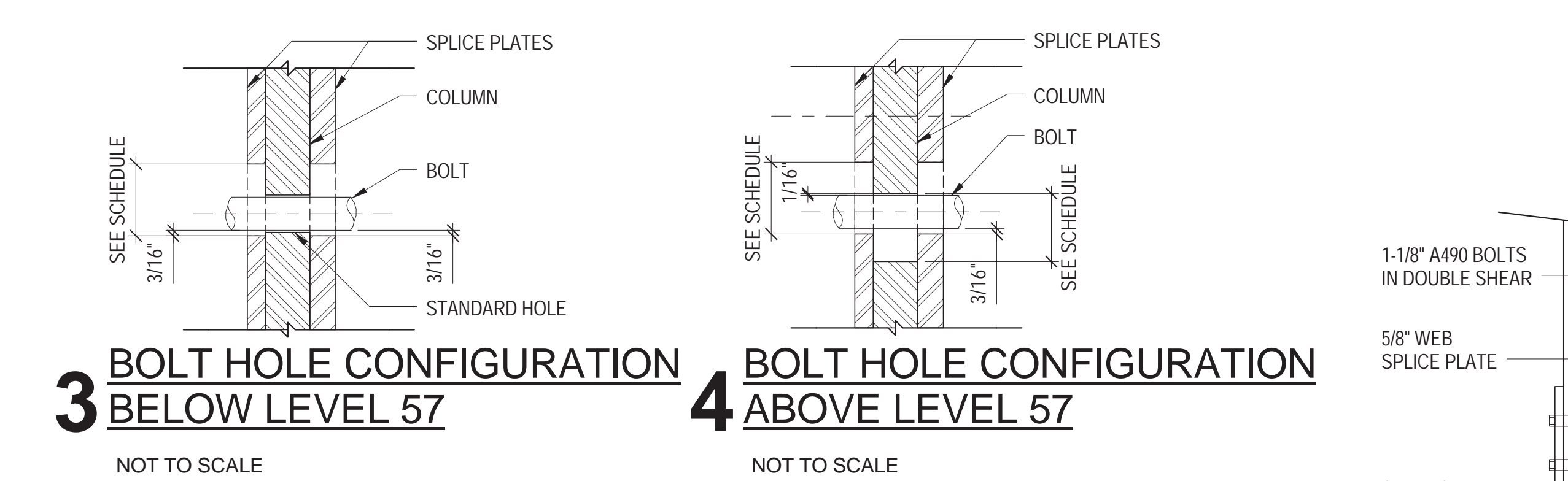
STRUCTURAL STEEL COLUMN SCHEDULE ABOVE LEVEL 68										W14 COLUMNS: ASTM A913-GRADE 70 PLATE MATERIAL: ASTM A572 GR 50, TYP. U.N.O.									
FLOOR LEVEL	A-3.5/A-4.5	A-2.5/A-5.5	B-1/B-7	C-5.1/C-5.7	D-5.1/D-5.7 E-5.1/E-5.7	F-5.1/F-5.7	TC-1, TC-7	TC-2.5, TC-5.5	TC-3.5, TC-4.5										
LEVEL 71 EL: SEE PLAN	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120										
LEVEL 70 EL: SEE PLAN	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120										
LEVEL 69 EL: SEE PLAN	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120										
LEVEL 68 EL: SEE PLAN	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120	W14X120										

- NOTES:
- REFER TO S-401 FOR COLUMN SCHEDULE BELOW LEVEL 68.
 - REFER TO S-415 FOR COLUMN SCHEDULE AT BELT TRUSS BETWEEN LEVELS 68 AND 69.



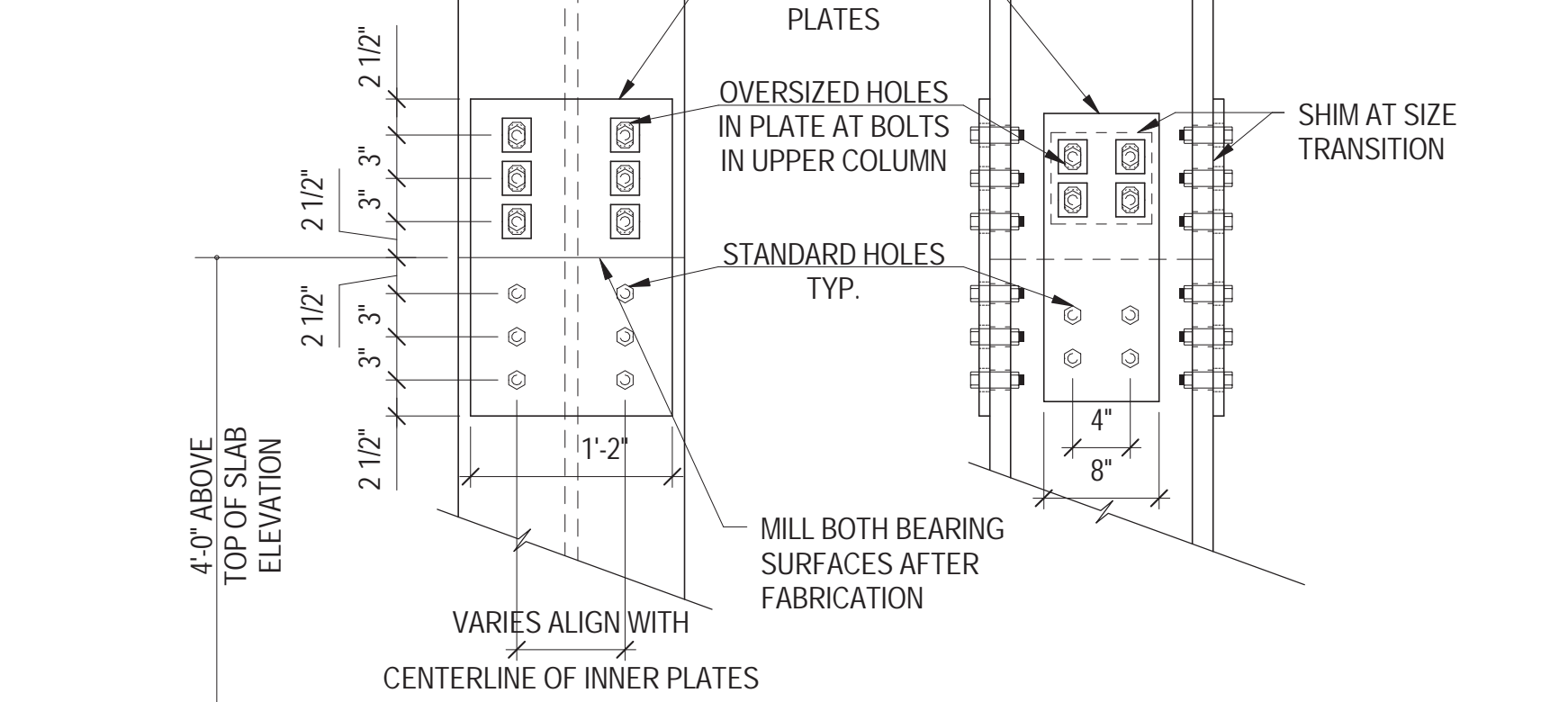
1 COLUMN SPLICE - 7/8" BOLTS
1" = 1'-0"

NOTE: SEE DETAILS 3 AND 4 FOR BOLT HOLE CONFIGURATION DETAILS



3 BOLT HOLE CONFIGURATION BELOW LEVEL 57
NOT TO SCALE

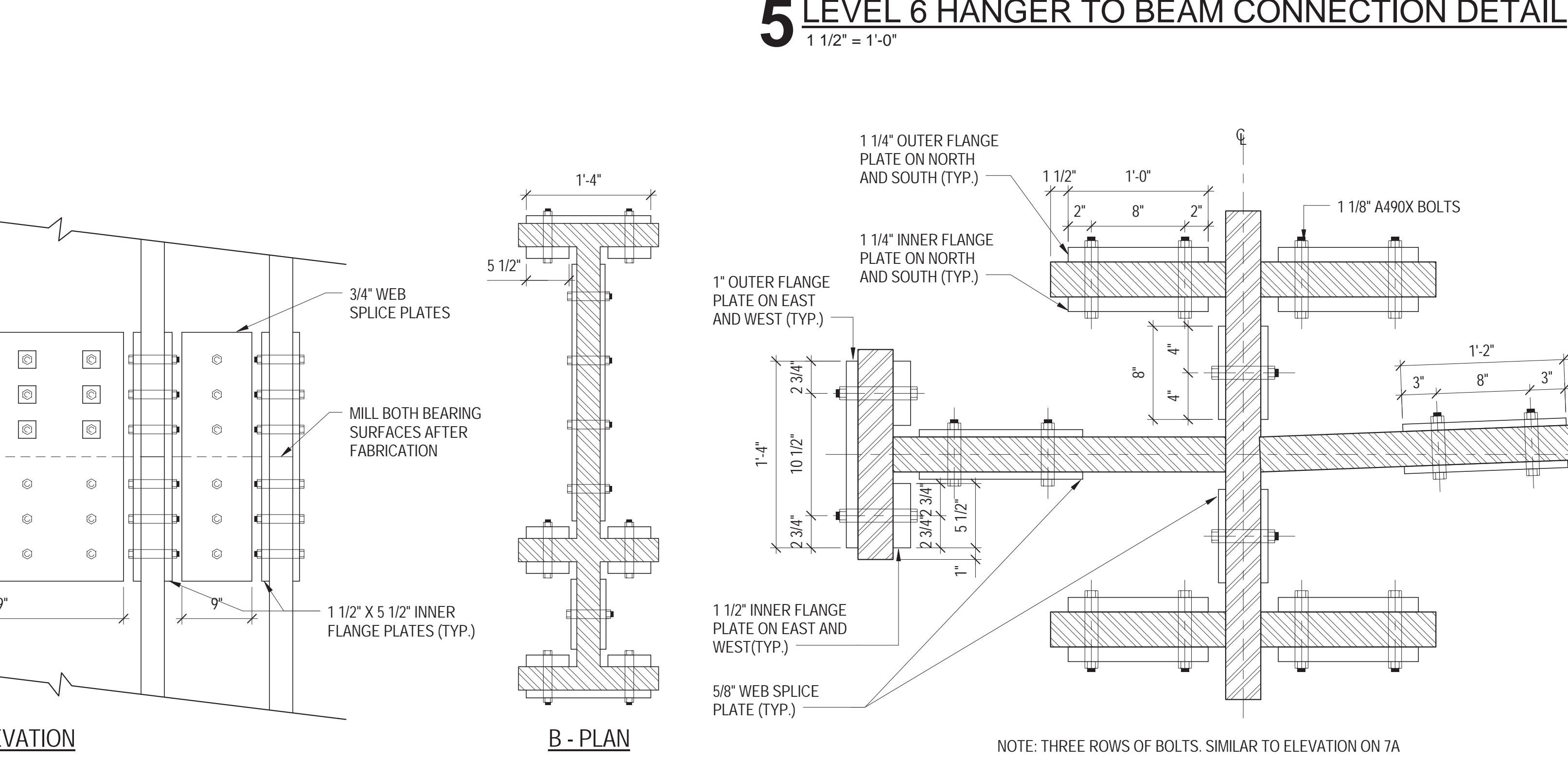
4 BOLT HOLE CONFIGURATION ABOVE LEVEL 57
NOT TO SCALE



6 TYPICAL INTERIOR COLUMN SPLICE
1" = 1'-0"

STEEL INTERIOR COLUMN SPLICE SCHEDULE					
COLUMN SIZE	BOLT	WEB (ONE SIDE)	FLANGE	# OF BOLTS - WEB	# OF BOLTS - FLANGE
W14X61	7/8 A325-X	3/4 X 8	5/8 X 10	6	12
W14X90					
W14X109	1-1/8 A490-X	5/8 X 8	6/8 X 14	2	12
W14X132					
W14X176	1-1/8 A490-X	1 X 9	6/8 X 14	4	12
W14X193					
W14X211					
W14X233					
W14X257	1-1/8 A490-X	1 X 9	1 X 15	4	16
W14X283					
W14X311					
W14X370	1-1/8 A490-X	1-3/8 X 9	1 X 15	6	16
W14X426					

5 LEVEL 6 HANGER TO BEAM CONNECTION DETAIL
1 1/2" = 1'-0"



7 TYPICAL EMBEDDED COLUMN SPLICE
1" = 1'-0"

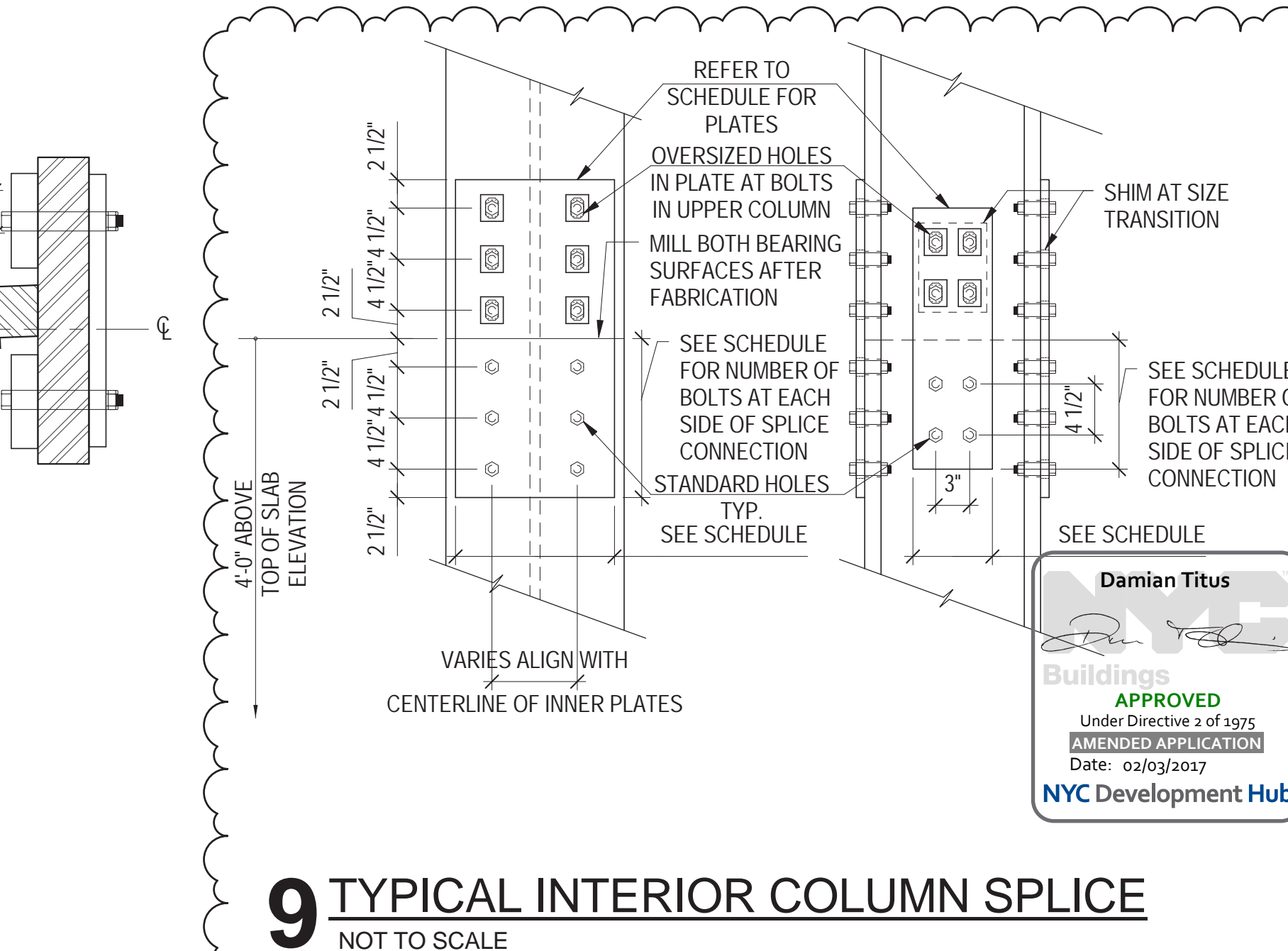
8 EMBEDDED COLUMN SPLICE AT GRIDLINE G
1 1/2" = 1'-0"

NOTE: THREE ROWS OF BOLTS. SIMILAR TO ELEVATION ON 7A

STEEL RETAIL COLUMN SPLICE SCHEDULE						
COLUMN SIZE	BOLTS	WEB (BOTH SIDES)	INNER PLATE	OUTER PLATE	# OF BOLTS - WEB	# OF BOLTS - FLANGE
W14X61	1-1/8 A490-X	5/8 X 6	5/8 X 4	1/2 X 10	2 X 3 = 6	2 X 2 = 4
W14X109	1-1/8 A490-X	1-1/4 X 6	7/8 X 6	7/8 X 12	2 X 4 = 8	3 X 2 = 6
W14X132						
W14X159	1-1/8 A490-X	1-1/2 X 6	1-1/4 X 6	7/8 X 15	2 X 4 = 8	5 X 2 = 10
W14X193						

STEEL PERIMETER COLUMN SPLICE SCHEDULE					
COLUMN SIZE	BOLT	WEB (BOTH SIDES)	FLANGE (INNER PLATE / OUTER PLATE)	# OF BOLTS - WEB	# OF BOLTS - FLANGE
W14X159	7/8 A325-X	9/16 X 8	9/16 X 5 / 7/16 X 14	6	16
W14X176					
W14X193	7/8 A325-X	9/16 X 8	9/16 X 5 / 7/16 X 14	6	20
W14X211					
W14X233	7/8 A325-X	9/16 X 8	7/8 X 5 / 9/16 X 14	6	24
W14X257					
W14X283	1-1/8 A490-X	7/8 X 8	7/8 X 5.5 / 9/16 X 16	4	12
W14X311					
W14X342	1-1/8 A490-X	1.25 X 8	7/8 X 5.5 / 9/16 X 16	6	12
W14X370					
W14X398	1-1/8 A490-X	7/8 X 8	1-1/8 X 5.5 / 7/8 X 16	4	16
W14X426					
W14X455	1-1/8 A490-X	1.25 X 8	1-1/8 X 5.5 / 7/8 X 16	6	16
W14X500					
W14X550	1-1/8 A490-X	7/8 X 8	1-3/8 X 5.5 / 7/8 X 16	4	20
W14X605					
W14X665					
W14X730	1-1/8 A490-X	1.25 X 8	1-3/8 X 5.5 / 7/8 X 16	6	20
W14X808					
W14X873	1-1/8 A490-X	7/8 X 8	1-5/8 X 5.5 / 1-1/4 X 16	4	24
W14X120	1-1/8 A490-X	1 X 9	1-3/4 X 6 / 1-1/8 X 14	4	16

- NOTES:
- HANGING COLUMNS BETWEEN LEVELS 4 AND 6, ALL STANDARD HOLES.



9 TYPICAL INTERIOR COLUMN SPLICE
NOT TO SCALE

MANHATTAN WEST: NORTH TOWER
401 Ninth Avenue, New York, NY 10011
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 Habb & 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 Bluffside Ave, Suite 1, Mill Valley, California 94941

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

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

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

Security Consultant
Ducibella, Vantor & Santoro
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 10018

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

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

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

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

Key Plan:

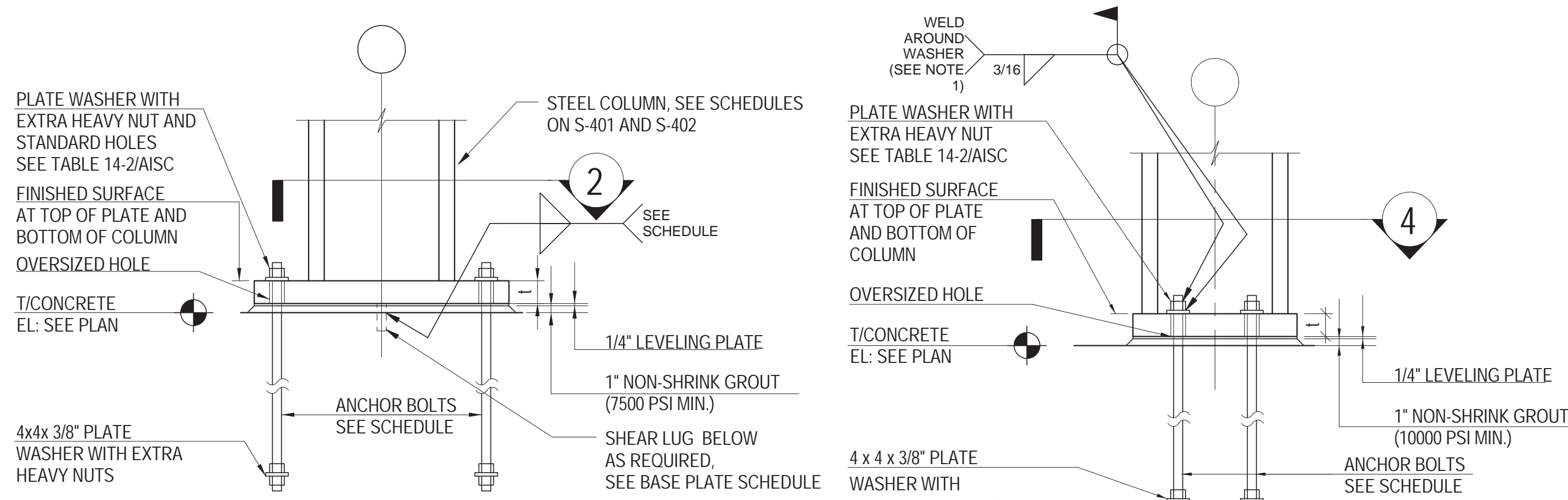
Seal & Signature:

3 - 22 APR 2016 ISSUED FOR P&A
2 - 18 DEC 2015 ISSUED FOR PERMIT
1 - 20 JUN 2014 ISSUED FOR FOUNDATION PERMIT
No. Date Description
Sheet Name:

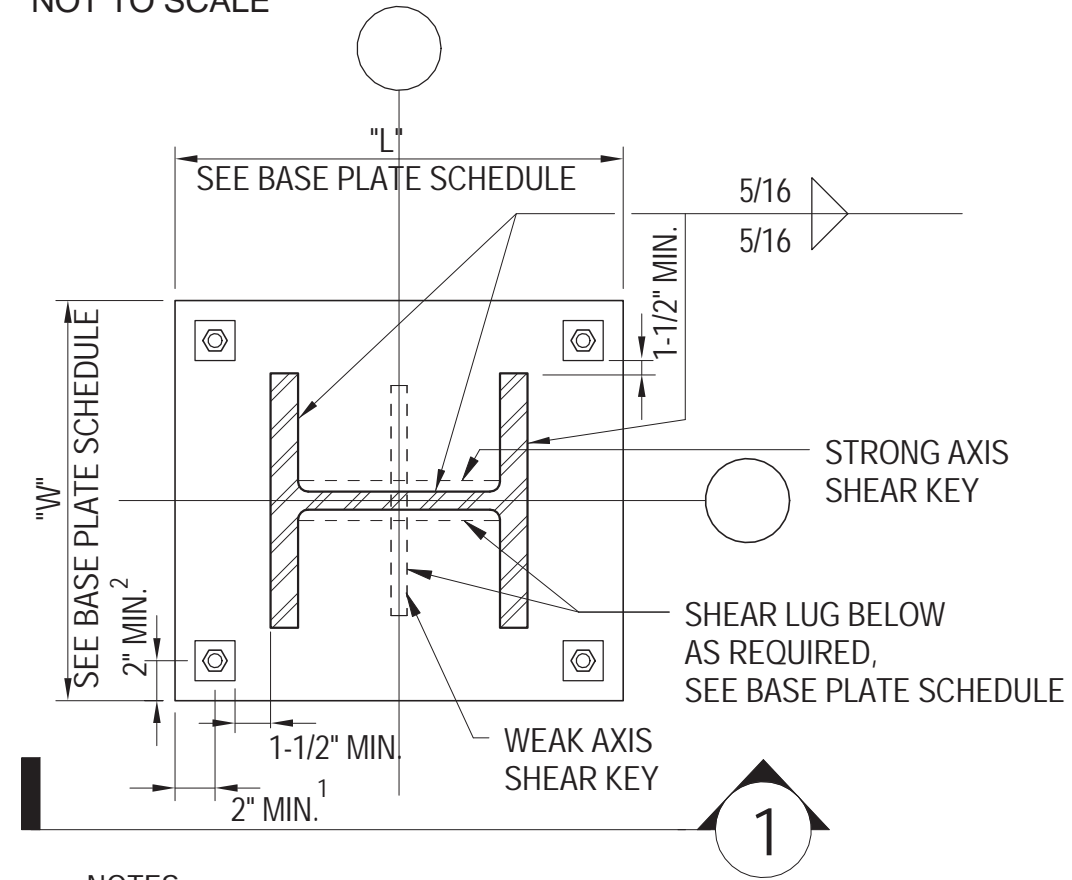
STRUCTURAL STEEL COLUMN SCHEDULE, SECTIONS & DETAILS

Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-402

B-SCAN Sheet No.:
S-402.02
Sheet No.:
S-402
Page No.:

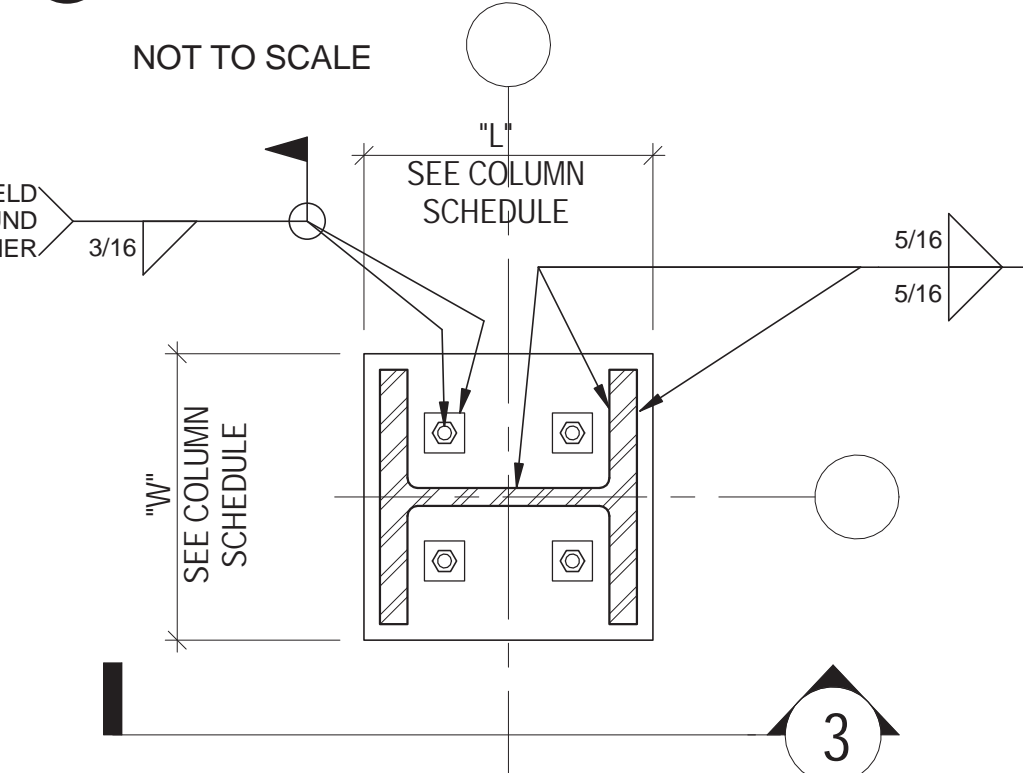


1 TYPICAL BASE PLATE ELEVATION
NOT TO SCALE

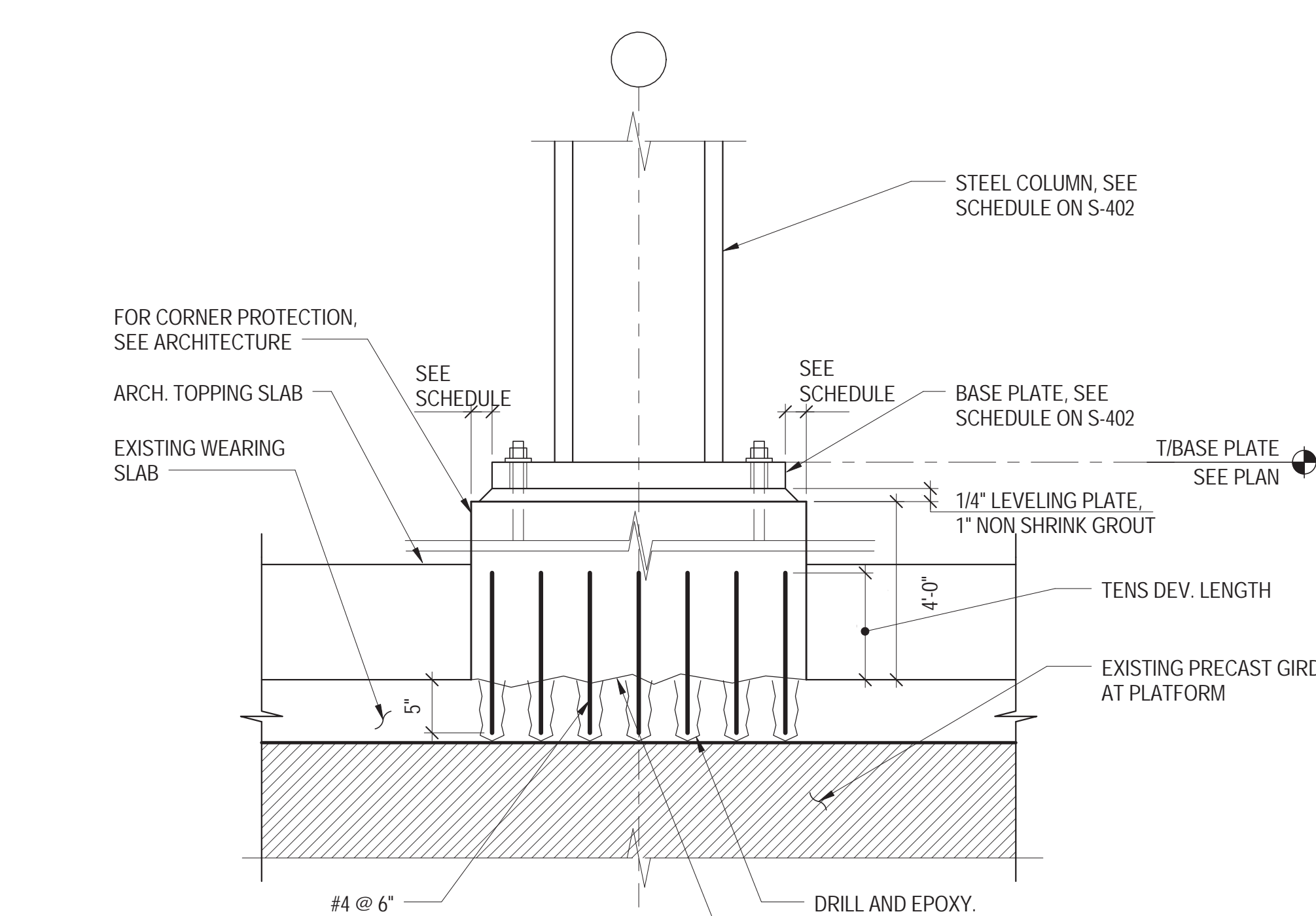


2 TYPICAL BASE PLATE PLAN
NOT TO SCALE

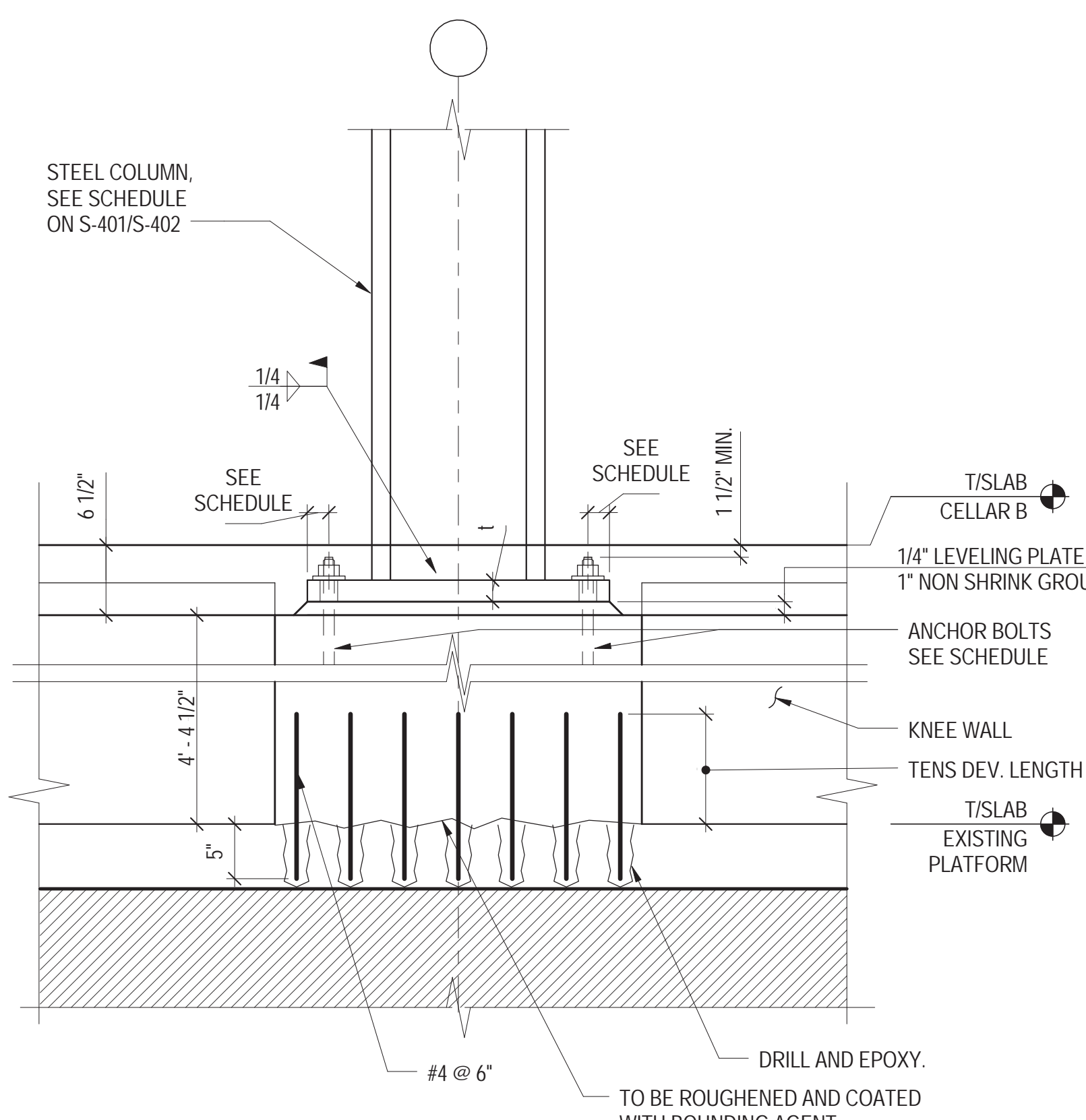
3 BASE PLATE WITH INTERIOR ANCHOR RODS ELEVATION
NOT TO SCALE



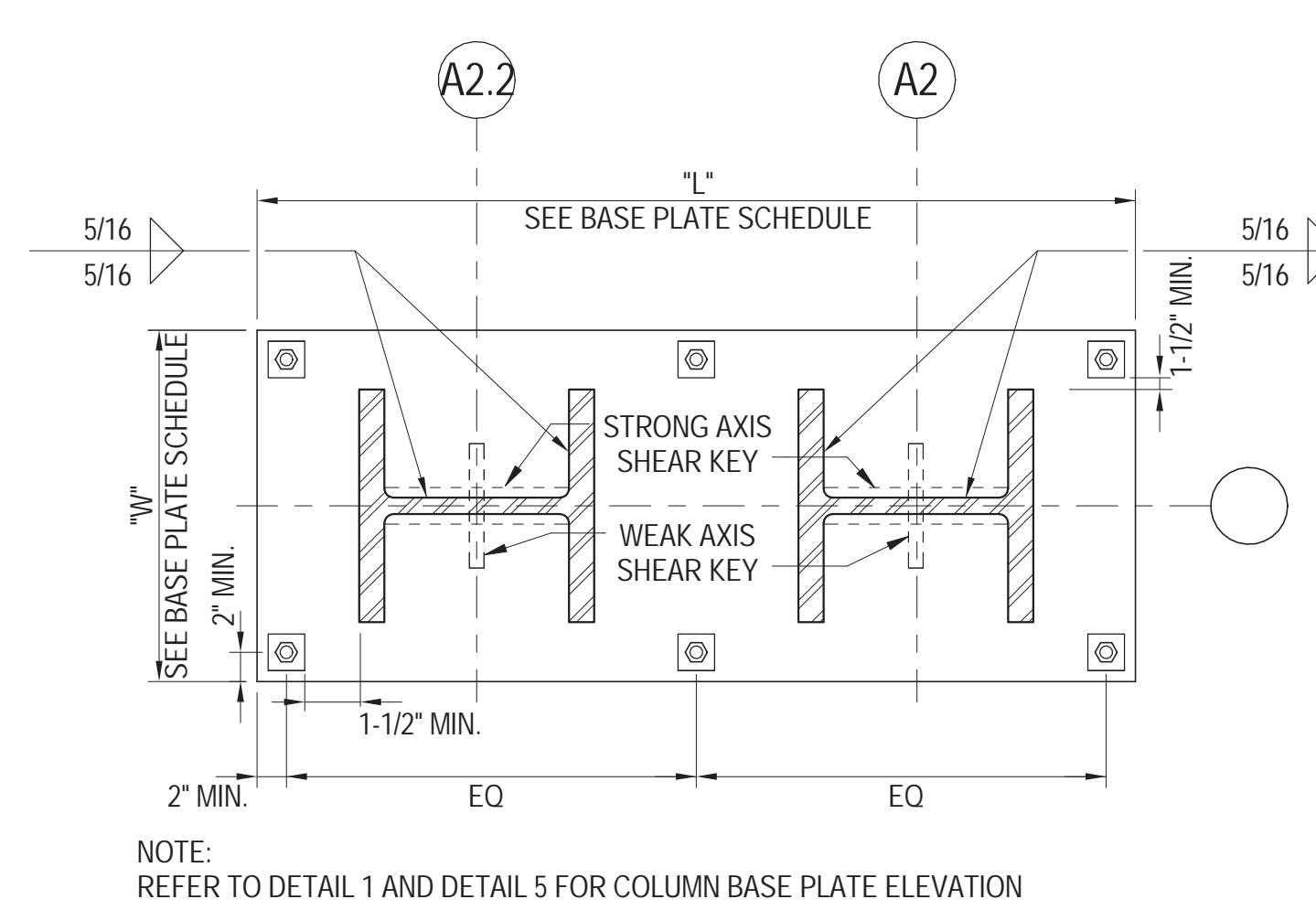
4 BASE PLATE WITH INTERIOR ANCHOR RODS PLAN
NOT TO SCALE



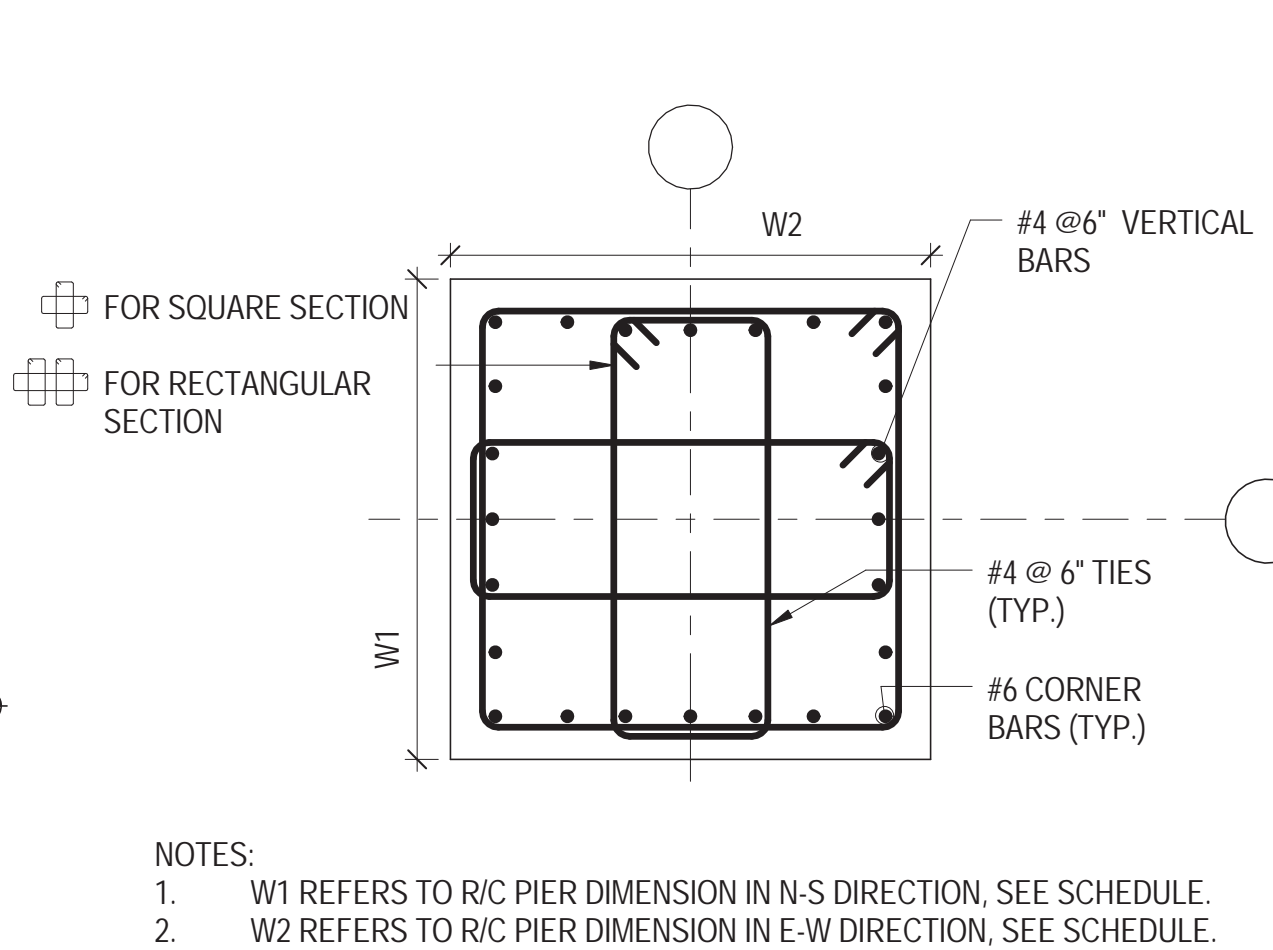
5 COLUMN BASE DETAIL OUTSIDE OF RAISED PLATFORM
NOT TO SCALE



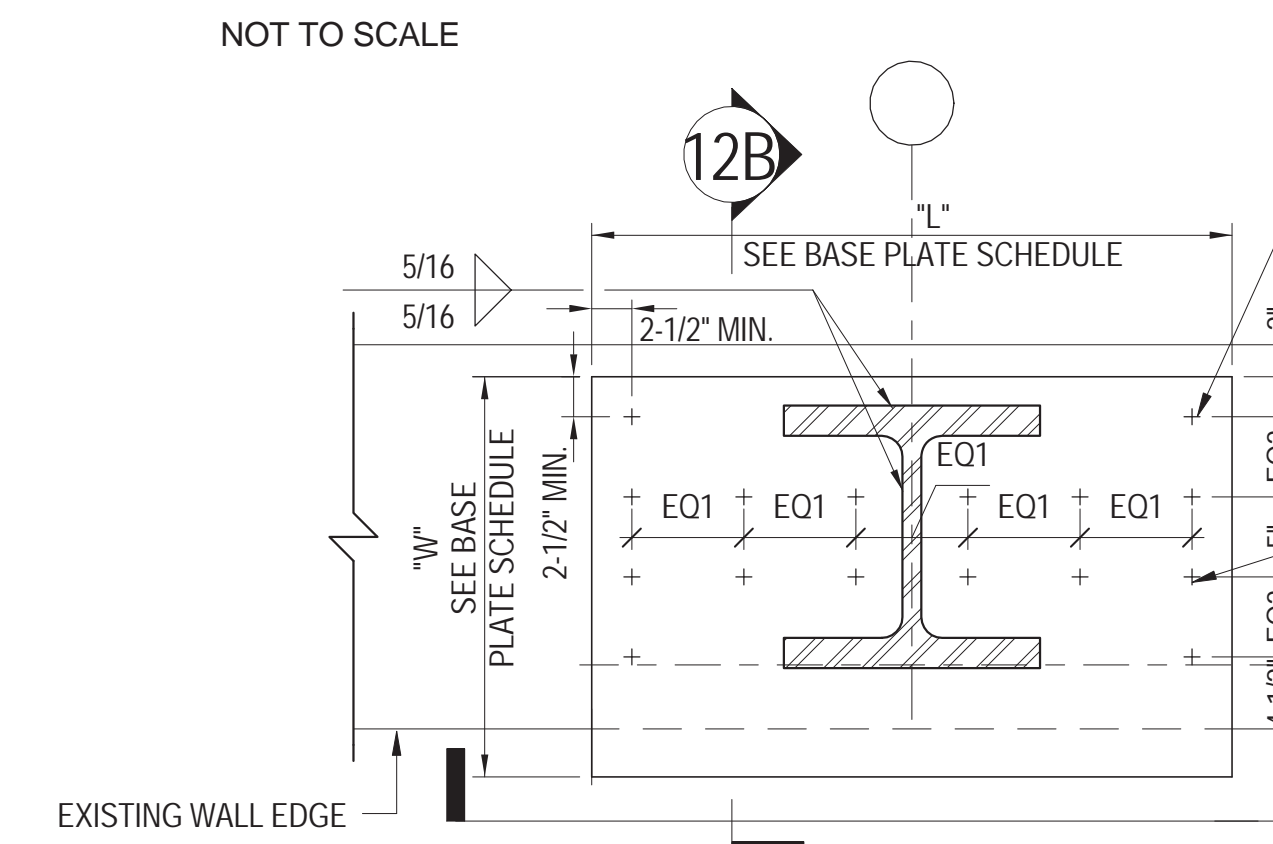
8 COLUMN BASE PLATE DETAIL AT RAISED PLATFORM
NOT TO SCALE



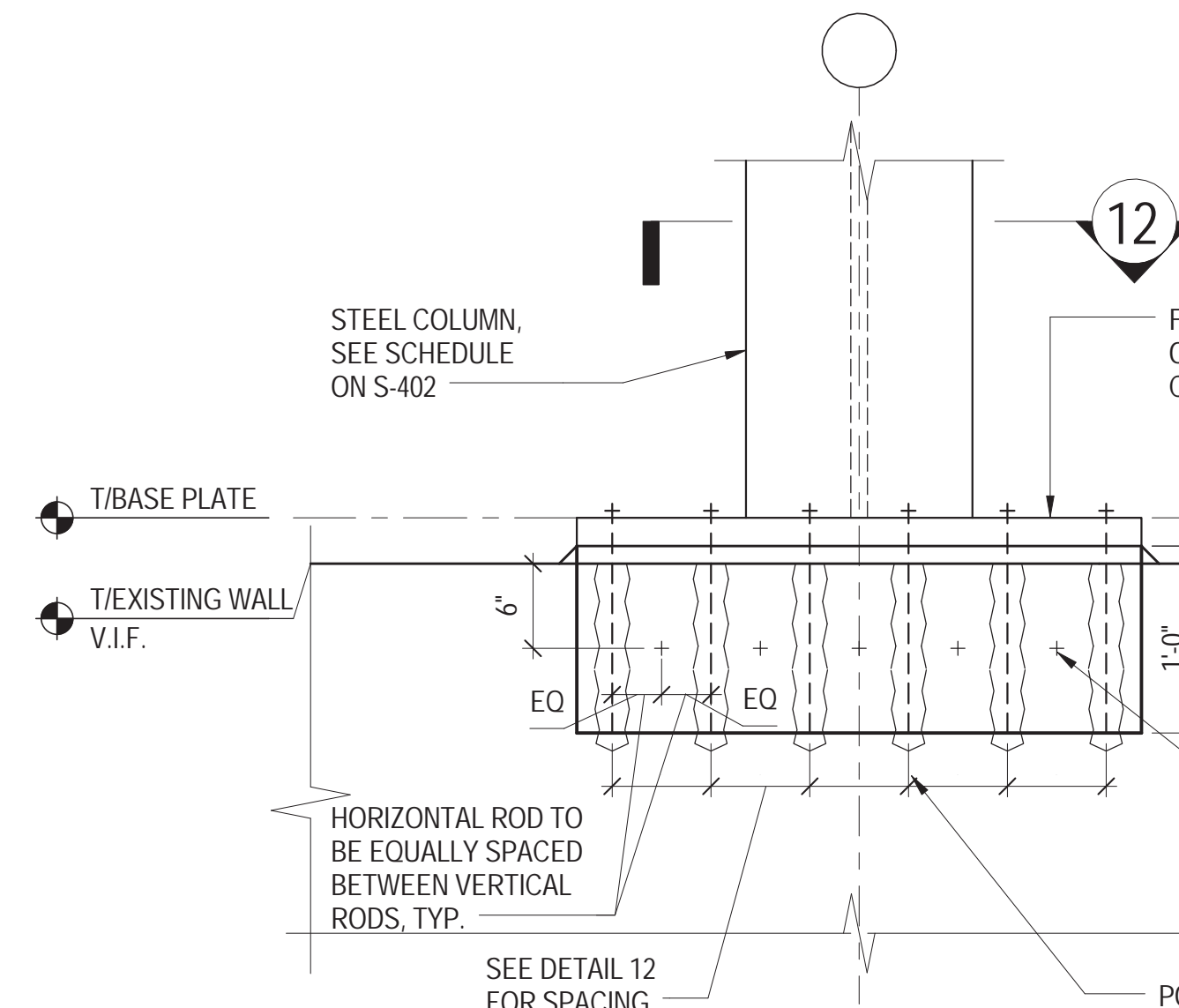
13 TYPICAL BASE PLATE PLAN AT A.2.2 / A2
NOT TO SCALE



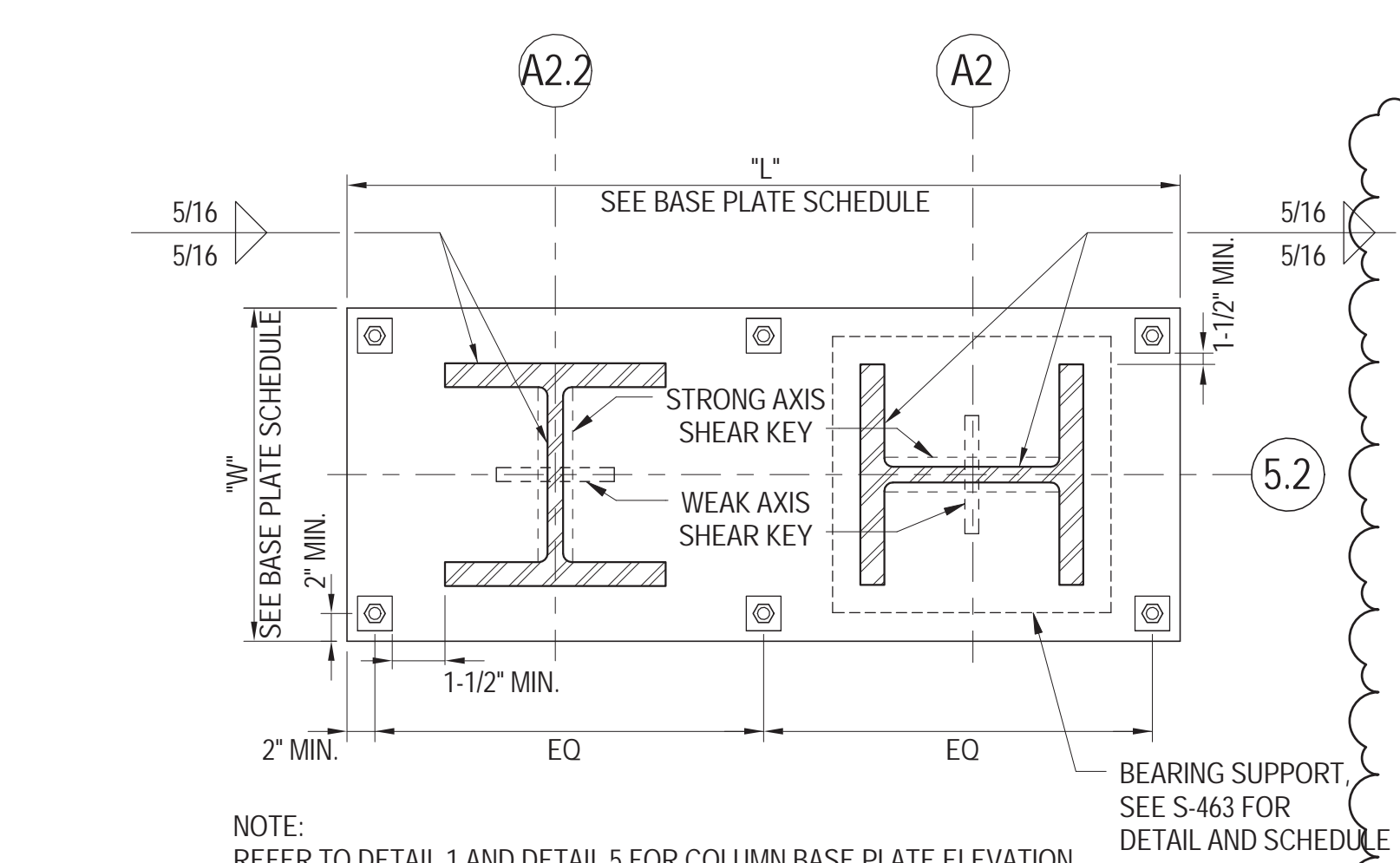
9 COLUMN CONCRETE BASE REINFORCEMENT DETAIL
NOT TO SCALE



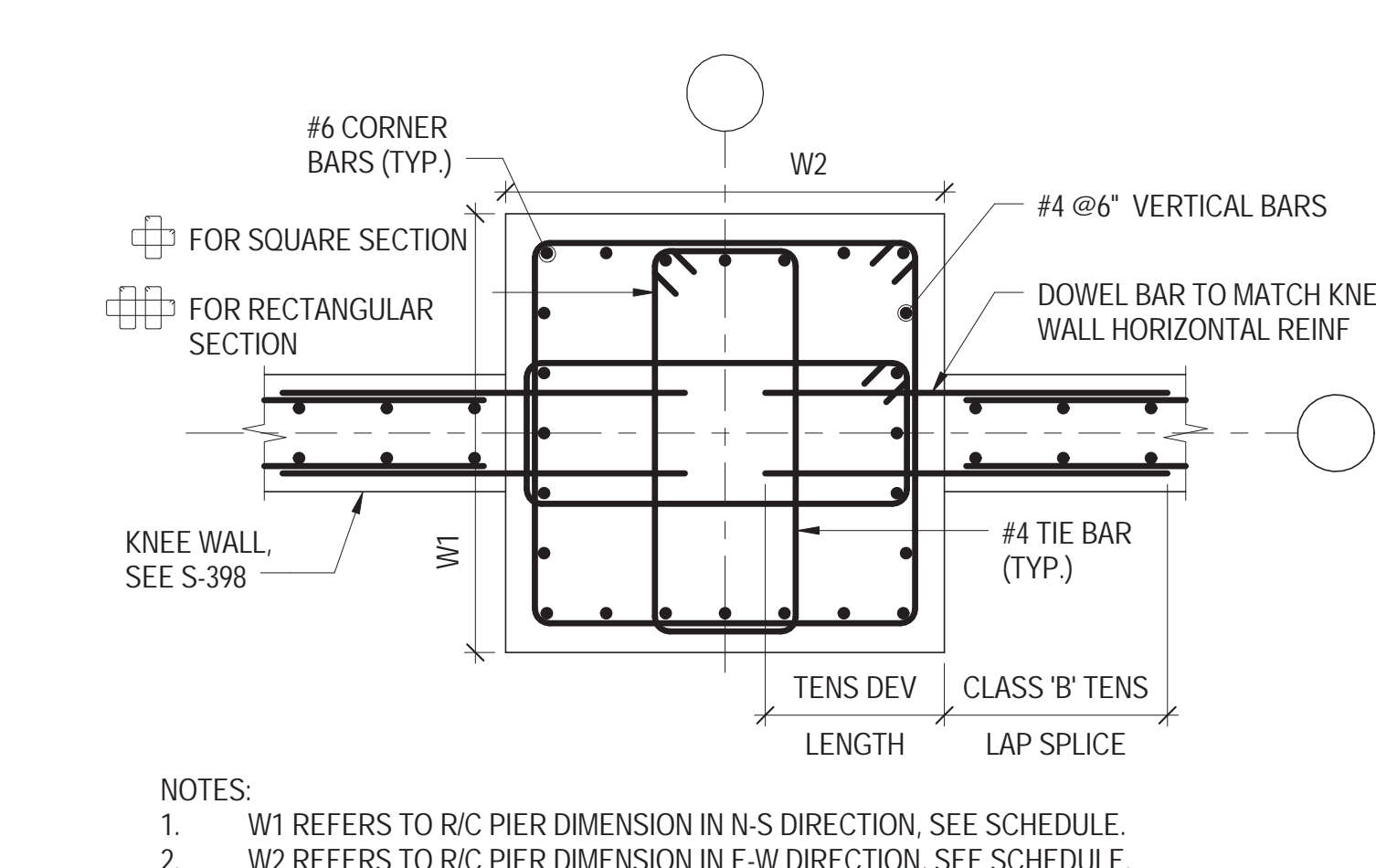
12 BASE PLATE PLAN AT EXISTING WALL
NOT TO SCALE



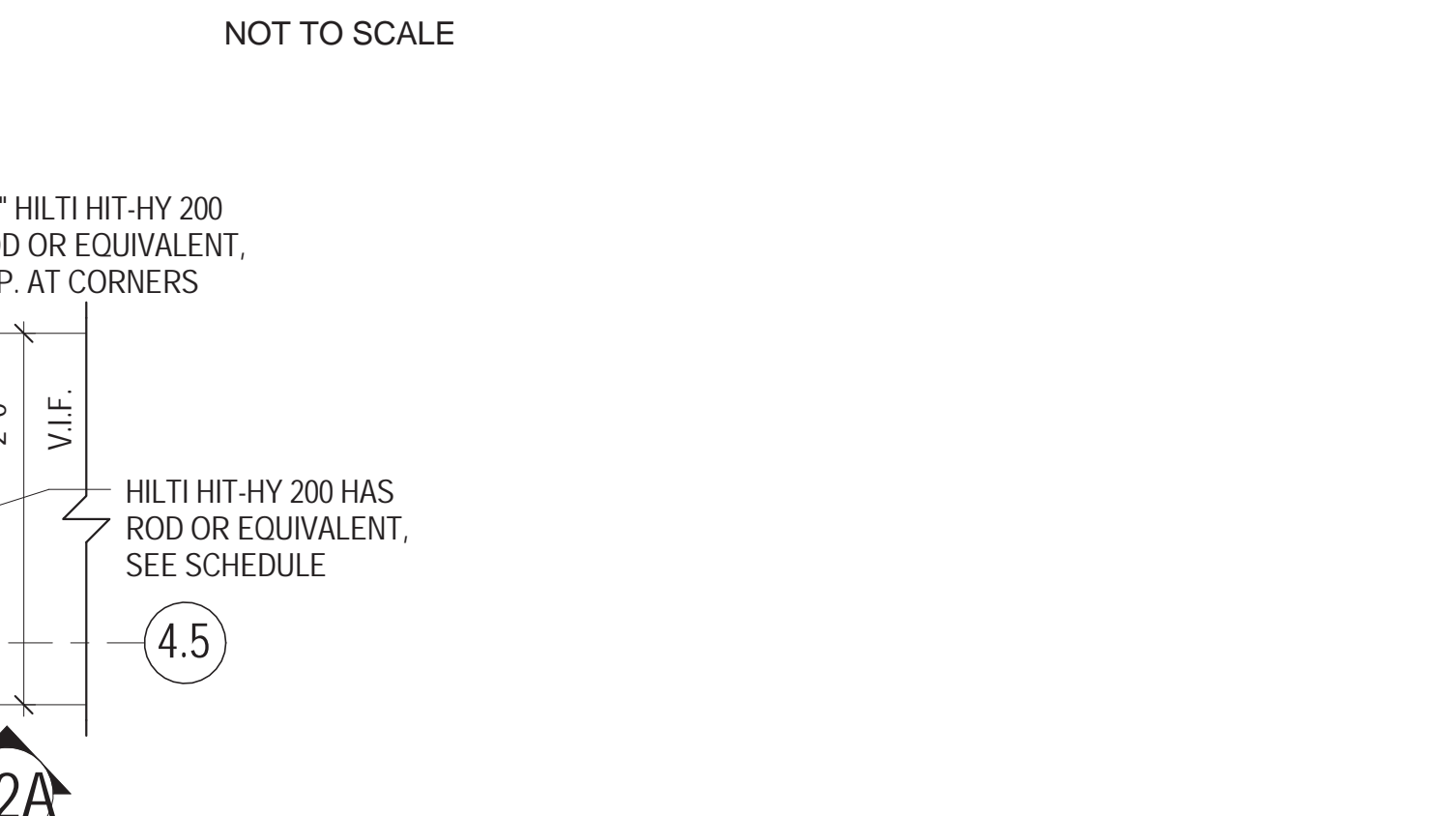
12A BASE PLATE SECTION AT EXISTING WALL
NOT TO SCALE



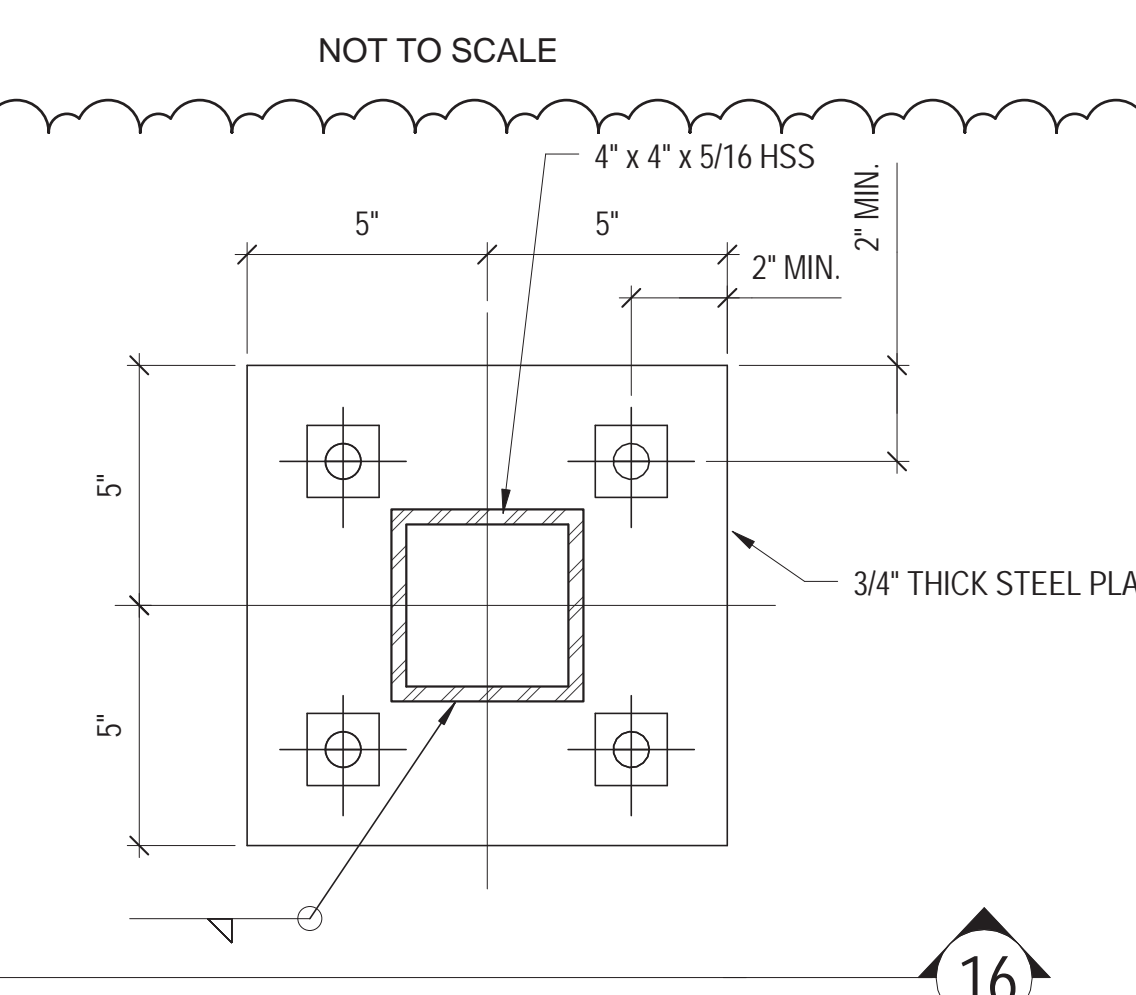
14 BASE PLATE PLAN AT A2.2 / A2 AND 5.2
NOT TO SCALE



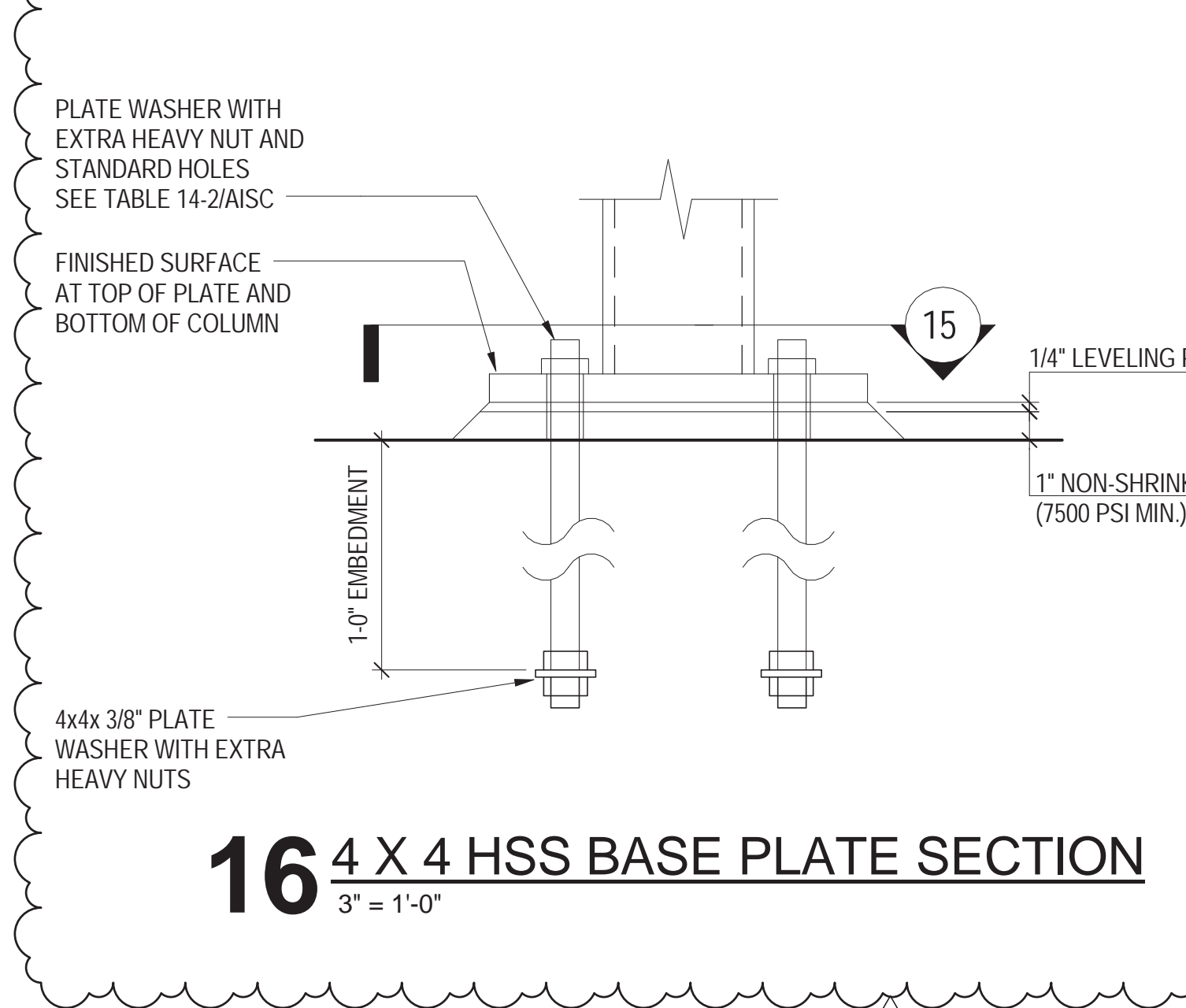
10 CONCRETE PIER REINFORCEMENT DETAIL AT KNEE WALL LOCATIONS
NOT TO SCALE



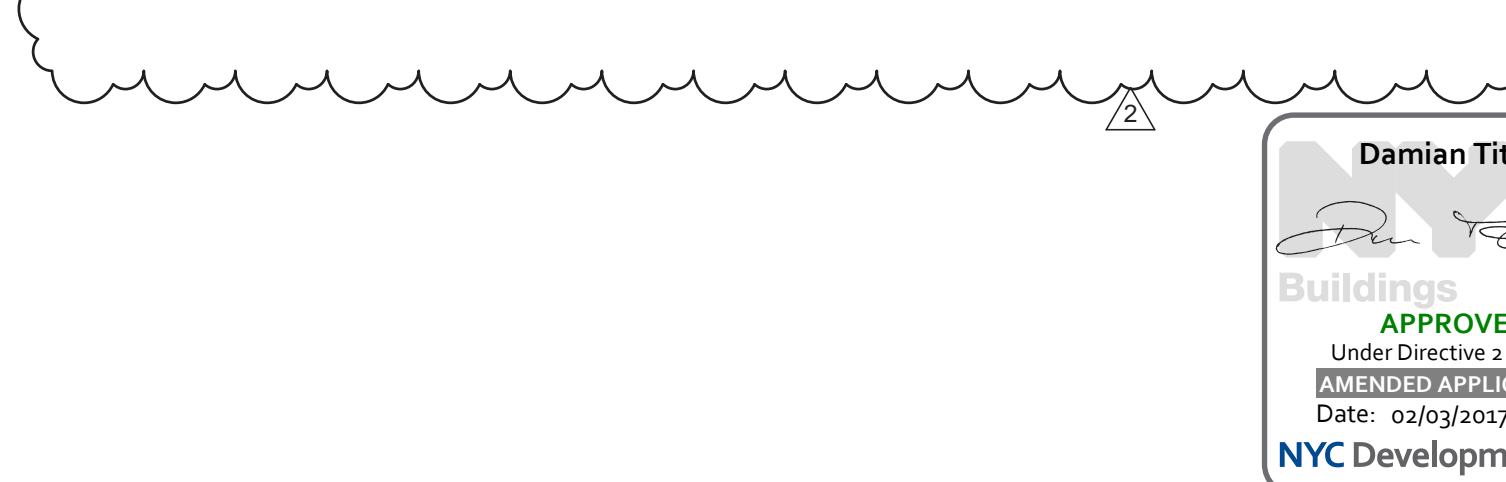
12B BASE PLATE SECTION AT EXISTING WALL
NOT TO SCALE



15 4 X 4 HSS BASE PLATE PLAN
3' = 1'-0"



16 4 X 4 HSS BASE PLATE SECTION
3' = 1'-0"



STEEL COLUMN OUTSIDE OF TOWER BASE PLATE SCHEDULE - NORTH OF GRIDLINE 4								
COLUMN GRID LOCATION	B-1, B-7-1, C-1, D-1, H-4	E-1, F-1, G-1, H-1, H-3, K-1, K-4	K-3	K-2-2	DUNNAGE POSTS CELLAR B	BASE PLATES: ANCHOR BOLTS: A0-5-1, A0-5-2-5	ASTM A572 GR 50, U.N.O. ASTM F1554, GRADE 55 U.N.O.	
BASE PLATE (IN)								
W	24	24	24	24	10	18	24	20
L	24	24	24	24	10	18	24	20
I	1 1/2	1 3/4	2	2	3/4	1 1/2	1 1/2	1 1/4
DETAIL	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 5/10	DETAIL 1	DETAIL 3	DETAIL 1	DETAIL 1
ANCHOR BOLTS DIAMETER	4 X 3/4"	4 X 3/4"	4 X 1"	4 X 1"	4 X 3/4" POST INSTALLED ANCHORS	4 X 3/4"	4 X 3/4"	4 X 3/4"
ANCHOR BOLTS EMBEDMENT LENGTH	1'-3"	1'-3"	1'-3"	1'-3"	4.75'	1'-3"	1'-3"	1'-3"
CONCRETE STRENGTH (psi)	8000	8000	8000	5000	5000	8000	8000	8000

STEEL COLUMN OUTSIDE OF TOWER BASE PLATE SCHEDULE - SOUTH OF GRIDLINE 4																															
COLUMN GRID LOCATION	BASE PLATES: ANCHOR BOLTS:																										ASTM A572 GR 50, U.N.O.				
	ASTM F1554, GRADE 55 U.N.O.																														
BASE PLATE (IN)	A2-4-5 ¹	A1-4-5 ¹	A2/A2.2-5.2	A2/A2.2-6	A2/A2.2-7.1	A2/A2.2-8	A2/A2.2-9	A2-10	A1-5-9.5	A1-5-10	A1-5.2	B7-6	B7-7.1, B7-8	B7-9	B7-10	F2-9, F2-10	F2-6, G5-6, G5-6.8	F2-6.8	F2-8, G5-9	G5-10	H-5, G8-9	G8-6, G8-6.8	G5-8, G8-10	G8-8	K7-10, K7-9, K-9, K-10	K7-4.8	K7-6, K7-7.1	K7-8	K-4.8, K-7.1	K-6	K-8
W	24 3/4	25	38	20	20	20	20	20	20	20	42	20	20	20	20	26	24	24	24	28	28	26	26	26	20	20	20	24	20	20	24
L	30	35	68	62	62	62	62	30	27	25	42	28	28	28	29	26	24	24	24	28	20	20	20	20	28	24	26	20	26	24	20
t	1 3/4	2	2 1/4	2 1/2	1 1/2	2 1/4	2	2	1 3/4	1 3/4	2 3/4	2	2	1 1/2	1 1/2	2	1 3/4	1 1/2	1 3/4	1 3/4	2 1/2	1 1/2	1 3/4	1 1/4	1 3/4	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
DETAIL	DETAIL 12	DETAIL 12	DETAIL 14	DETAIL 13	DETAIL 13	DETAIL 13	DETAIL 13	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 5/5-463	DETAIL 3	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1	DETAIL 1
ANCHOR BOLTS DIAMETER	6 X 2 X 1"	6 X 2 X 1"	6 X 1"	6 X 1"	6 X 1"	6 X 1"	6 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1 1/4"	4 X 1"	4 X 1 1/4"	4 X 1"	4 X 1"	4 X 1"	4 X 1 1/4"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"	4 X 1"
ANCHOR BOLTS EMBEDMENT LENGTH	1'	1'	1'	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"
SHEAR KEY (IN WEAK AXIS) (LENGTH X DEPTH X THK)	-	-	10 X 6 X 2	5 X 4 X 1 1/2	5 X 4 X 1 1/2	6 X 4 X 1 3/4	11 X 7 X 2 1/2	10 X 5 X 1 3/4	5 X 4 X 1 1/2	8 X 4 3/4 X 1 3/4	8 X 5 X 1 3/4	-	-	7 X 4 X 1 1/2	7 X 4 X 1 1/2	16 X 5 X 1 3/4	-	-	7 X 4 1/2 X 1 1/2	12 X 4 X 1 1/2	7 X 4 X 1 1/2	4 X 3 X 1	8 X 4 X 1 1/4	5 X 4 X 1 1/2	12 X 4 1/4 X 1 3/4	-	6 X 2 1/2 X 1	8 X 2 3/4 X 1	8 X 4 X 1 1/2	6 X 3 X 1	5 X 4 X 1 1/2
SHEAR KEY (IN STRONG AXIS) (LENGTH X DEPTH X THK)	-	-	8 X 4 1/2 X 1 3/4	10 X 8 X 2	6 X 3 1/2 X 1 1/4	11 X 6 1/2 X 1 3/4	7 X 5 X 1 3/4	6 X 3 3/4 X 1 3/4	-	7 X 4 X 1 1/2	8 X 5 X 1 3/4	-	6 X 4 X 1 1/2	7 X 4 X 1 1/2	7 X 4 X 1 1/2	-	-	-	5 X 4 X 1 1/2	10 X 4 X 1 1/2	6 X 4 X 1 1/2	-	-	8 X 4 X 1 1/4	-	6 X 2 1/2 X 1	-	4 X 4 X 1 1/4	-	4 X 3 1/2 X 1 1/4	
SHEAR KEY WELD	-	-	5/8	5/8	3/8	5/8	3/4	1/2	1/2	1/2	1/2	-	3/8	3/8	3/8	1/2	-	-	1/2	3/8	3/8	3/8	3/8	3/8	1/2	-	3/8	3/8	3/8	3/8	3/8
CONCRETE STRENGTH (psi)	V.I.F.	V.I.F.	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
R/C PIER DIMENSIONS (W1 X W2)	V.I.F.	V.I.F.	42 X 72	24 X 66	24 X 70	24 X 66	24 X 100	24 X 40	24 X 31	24 X 33	46 X 46	24 X 32	24 X 32	24 X 32	24 X 33	38 X 48	38 X 38	52 X 52	28 X 28	32 X 32	24 X 32	24 X 36	24 X 30	24 X 30	24 X 40	24 X 36	24 X 40	24 X 36	24 X 30	24 X 28	24 X 28

NOTES:
1. REFER TO DETAIL 12 FOR SIDE PLATE ANCHORS AND DIMENSIONS.



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

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

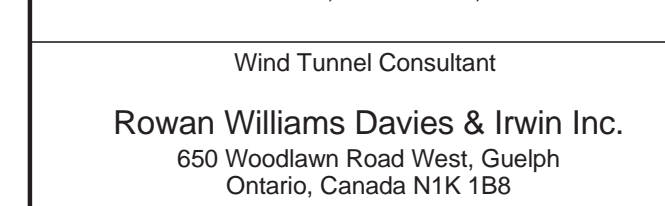
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

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

Facade Maintenance Consultant
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Wind Tunnel Consultant
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Key Plan:



Seal & Signature:



Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-403

B-SCAN Sheet No.:
S-403.01

Sheet No.:
S-403

Page No.:
S-403

STRUCTURAL STEEL COLUMN BASE PLATE DETAILS

22 APR 2016 ISSUED FOR P&A
16 DEC 2015 ISSUED FOR PERMIT
Date: 02/03/2017
NYC Development Hub

Damian Titus
Buildings
APPROVED
Under Directive of § 235
AMENDED APPLICATION
Date: 02/03/2017
NYC Development Hub

Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-403

B-SCAN Sheet No.:
S-403.01

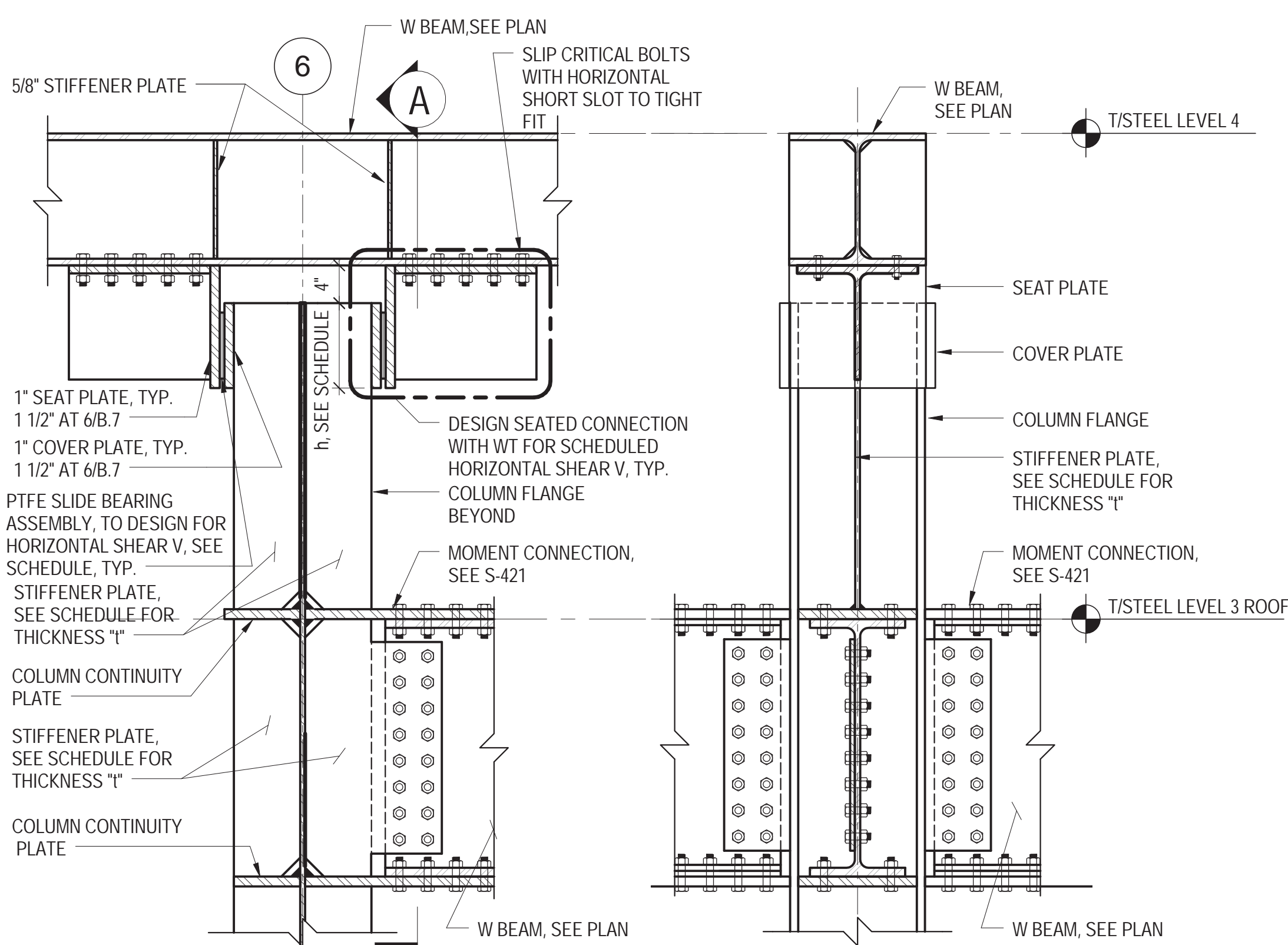
Sheet No.:
S-403

Page No.:
S-403

STRUCTURAL STEEL COLUMN BASE PLATE DETAILS

22 APR 2016 ISSUED FOR P&A
16 DEC 2015 ISSUED FOR PERMIT
Date: 02/03/2017
NYC Development Hub

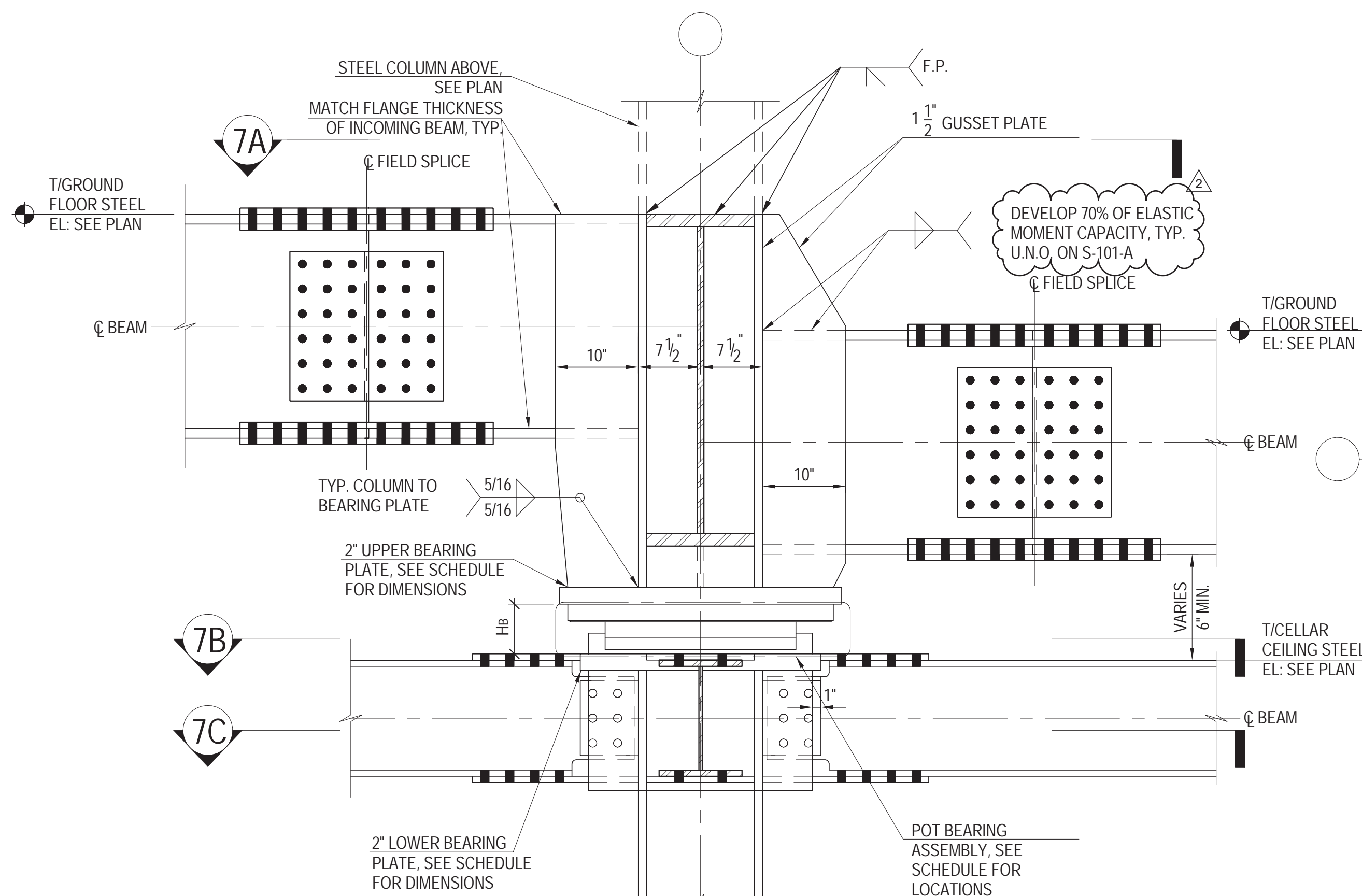
Project No.: 211157
Date: 22 APR 2016
Scale: As indicated
File No.: S-403



GRID	6/B.7	6/C.8, 6/D.6, 6/E.2
V (KIPS)	350	170
1 (IN)	1	5/8
h (IN)	18	9

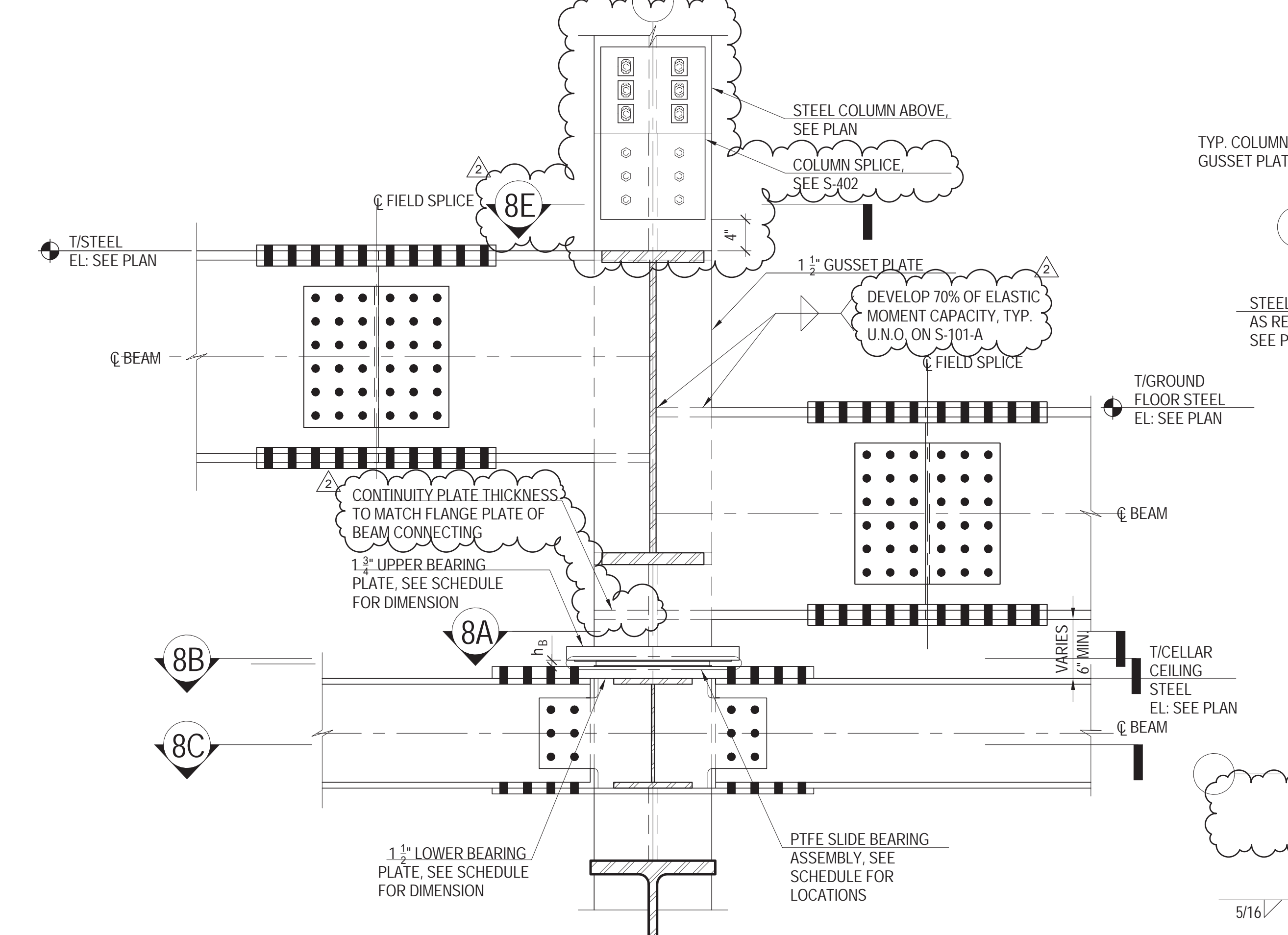
1 DETAIL AT RETAIL BUILDING ROOF CONNECTION TO UNDERSIDE OF LEVEL 4

NOT TO SCALE



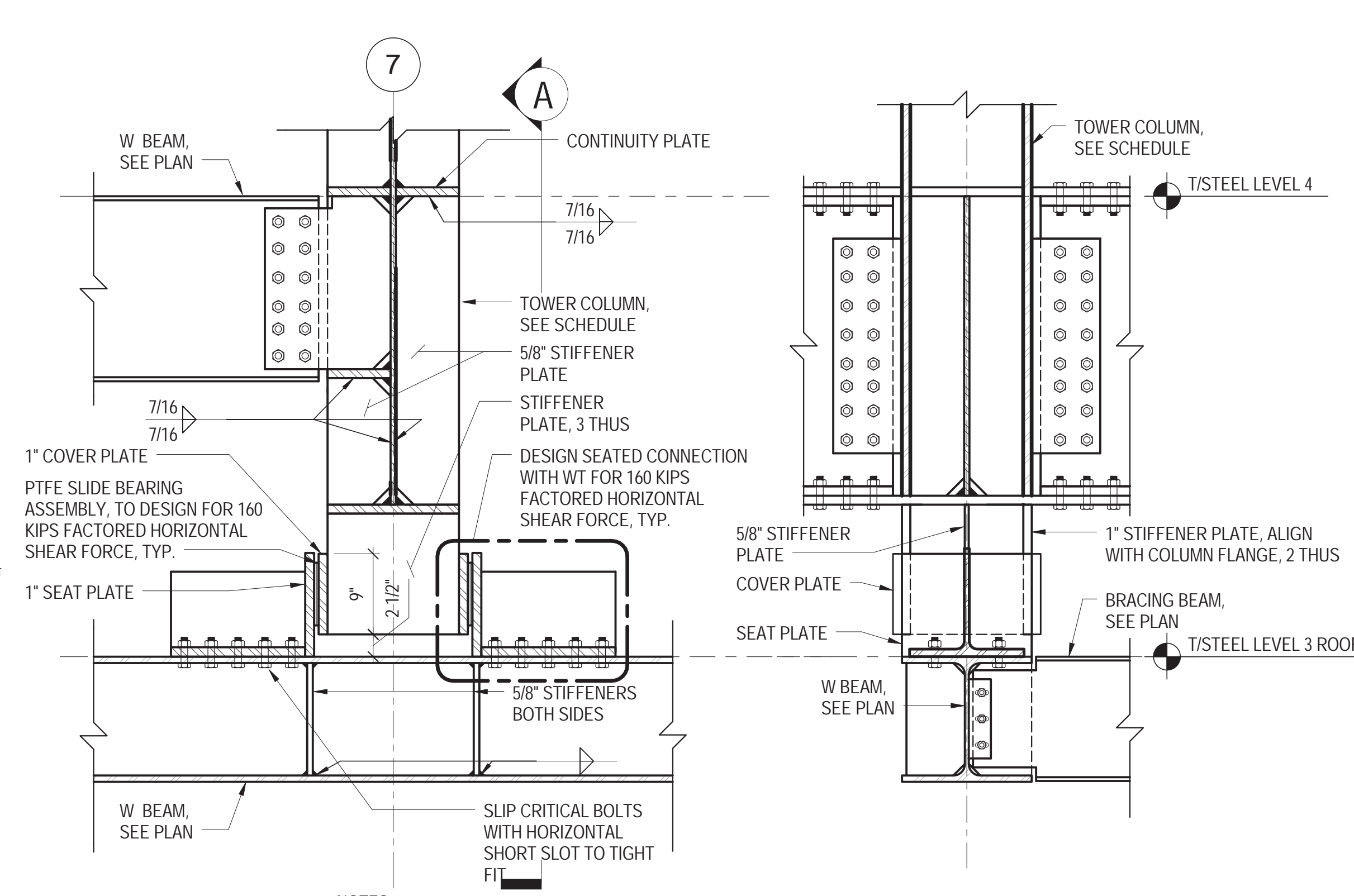
1. REFER TO S-100 AND S-101 PLANS FOR ELEVATION AND SIZES OF THE BEAMS SHOWN IN THE CONNECTION DETAIL.
2. REFER TO SLIDE FRAMING SCHEDULE ON S-463 FOR h_b .

7 COLUMN TOP DETAIL AT SLIDING SUPPORT - FOR UPPER BEARING PLATE > 28\"/>



1. REFER TO S-100 AND S-101 PLANS FOR ELEVATION AND SIZES OF THE BEAMS SHOWN IN THE CONNECTION DETAIL.
2. REFER TO SLIDE FRAMING SCHEDULE ON S-463 FOR h_b .

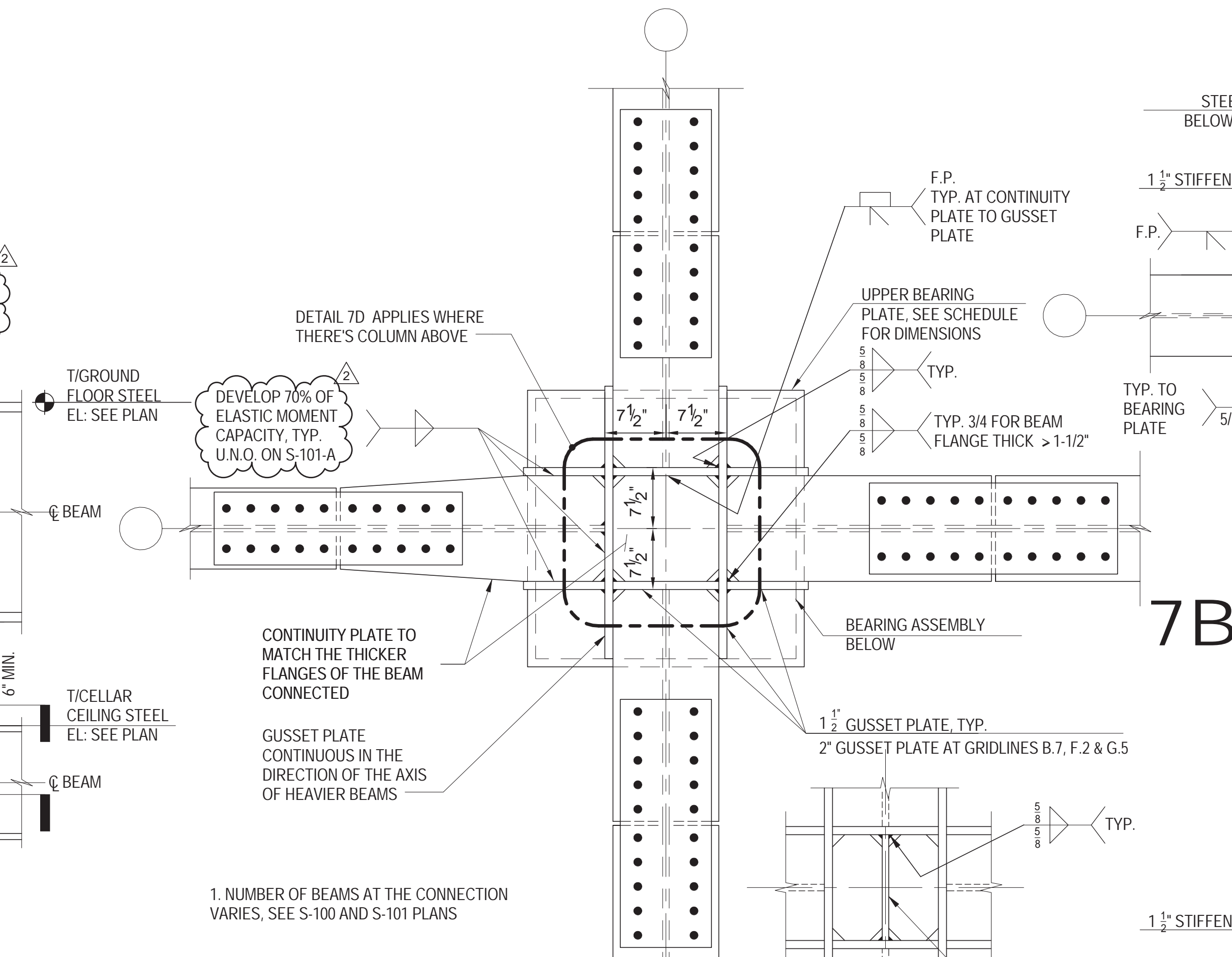
8 COLUMN TOP DETAIL AT PLAZA- FOR UPPER BEARING PLATE <= 23\"/>



- NOTES:
1. SEAT PLATE AND COVER PLATE DIMENSION TO BE VERIFIED WITH SLIDE BEARING MANUFACTURER'S REQUIREMENT.

2 DETAIL AT RETAIL BUILDING ROOF CONNECTION TO UNDERSIDE OF LEVEL 4

NOT TO SCALE

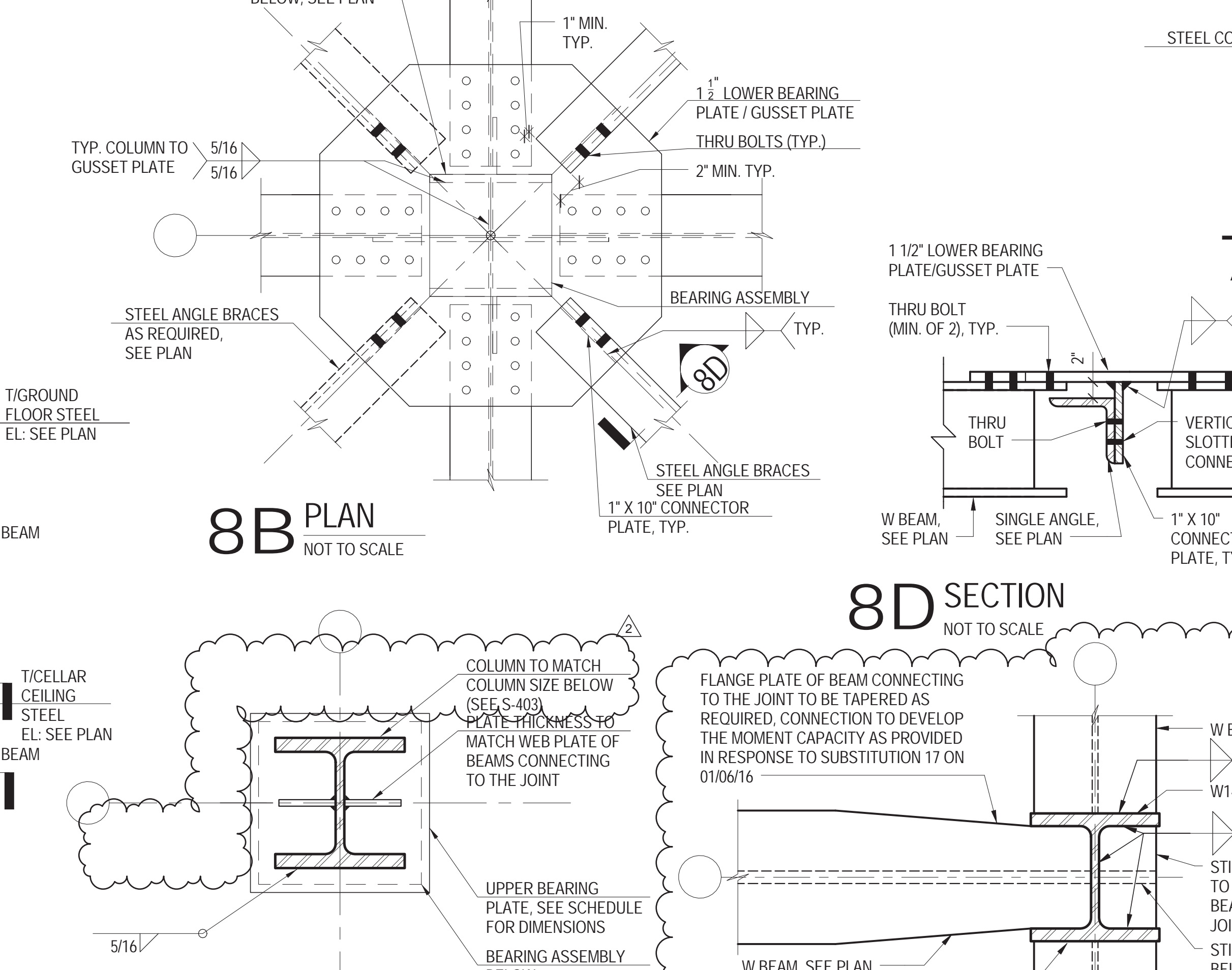


7A PLAN

NOT TO SCALE

7D PLAN

NOT TO SCALE



8A PLAN

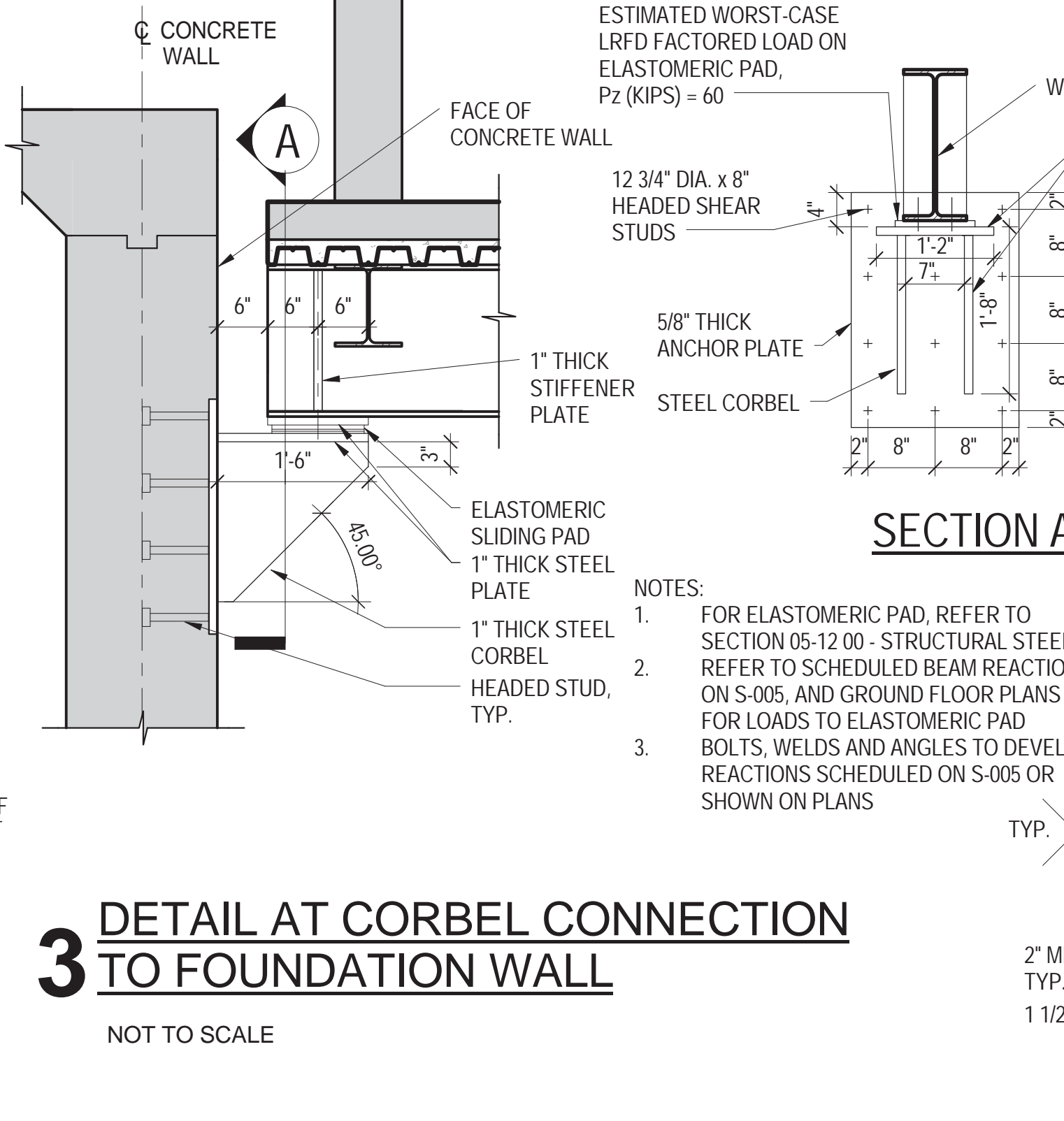
NOT TO SCALE

8D SECTION

NOT TO SCALE

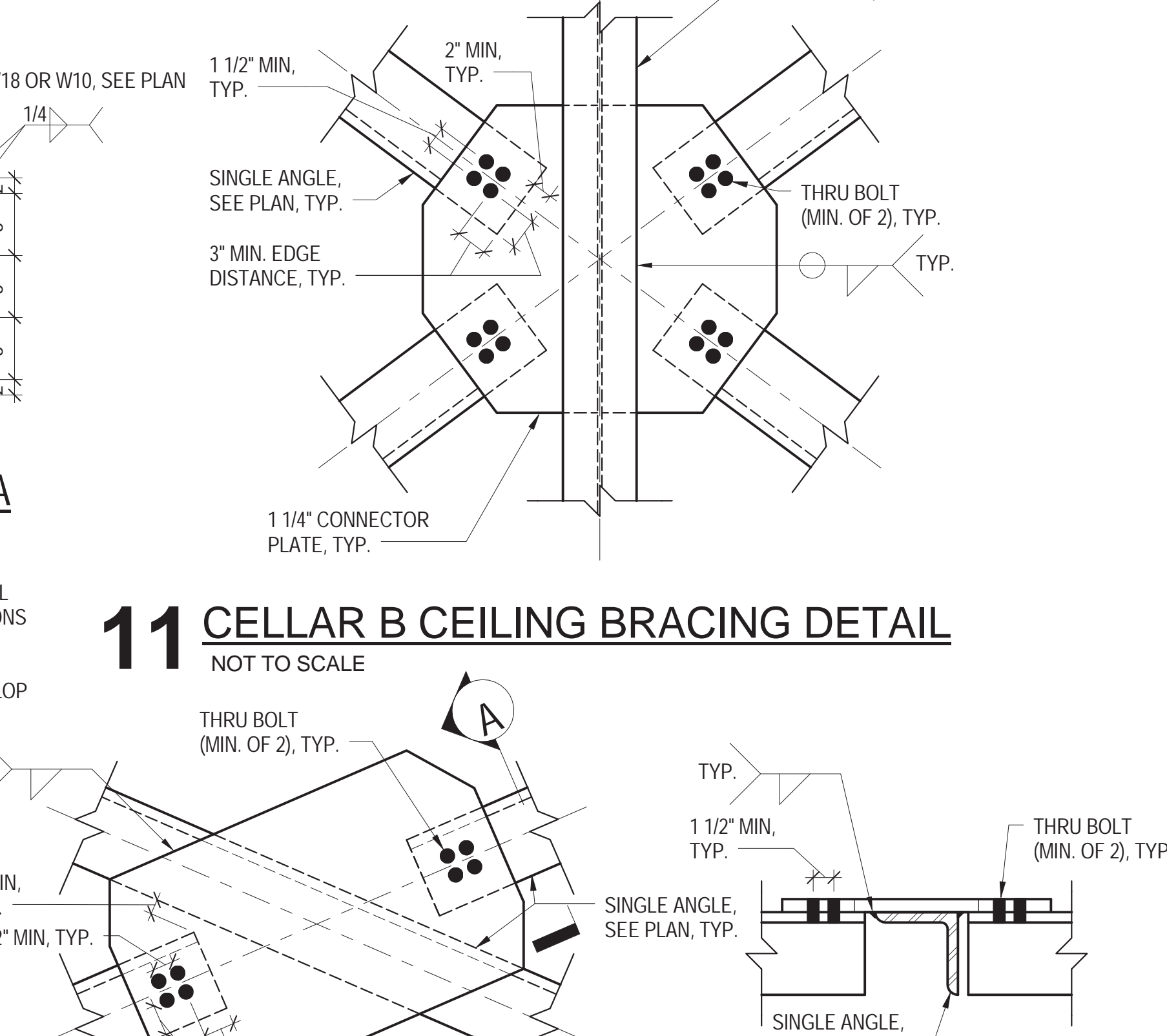
8A PLAN

NOT TO SCALE



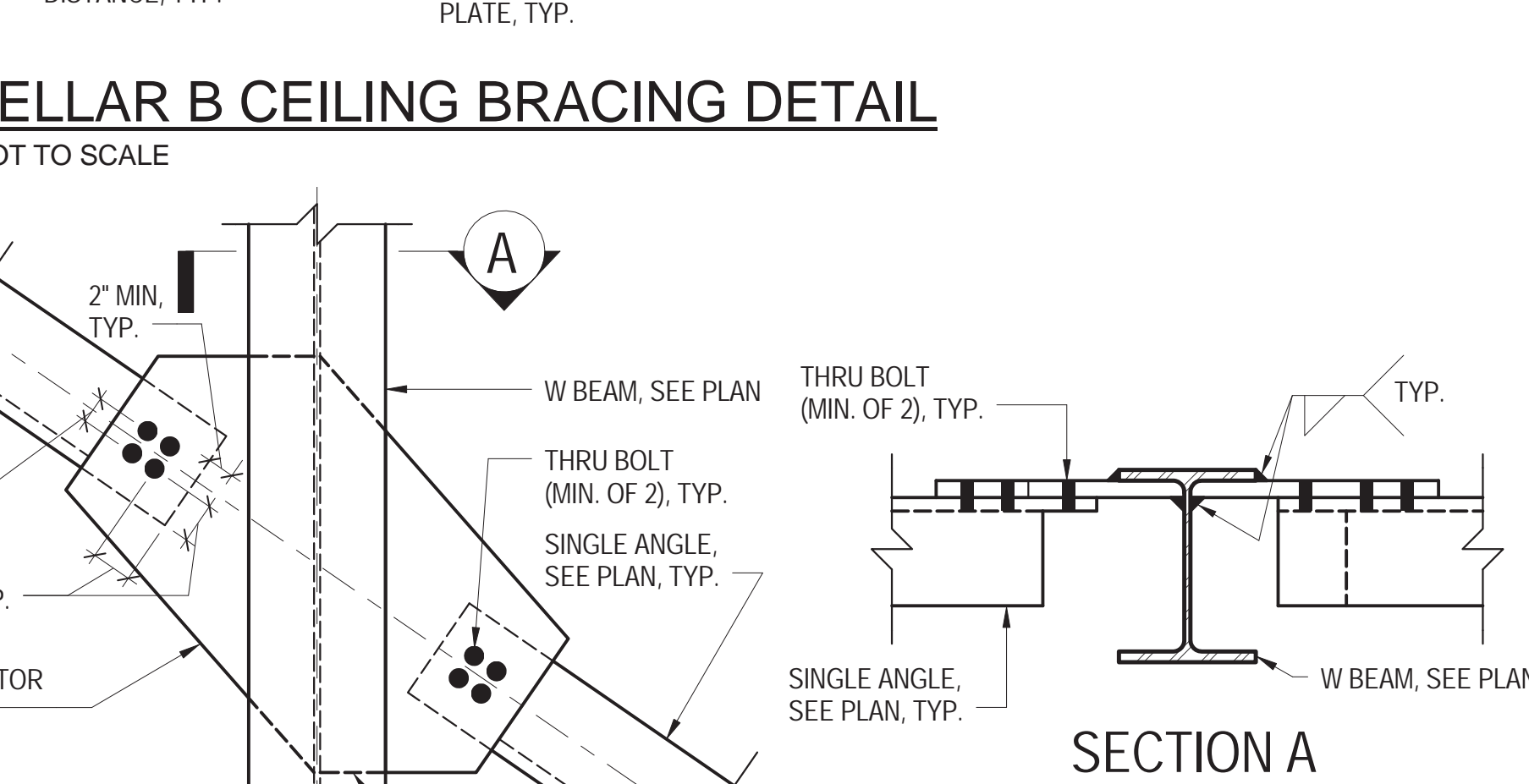
3 DETAIL AT CORBEL CONNECTION TO FOUNDATION WALL

NOT TO SCALE



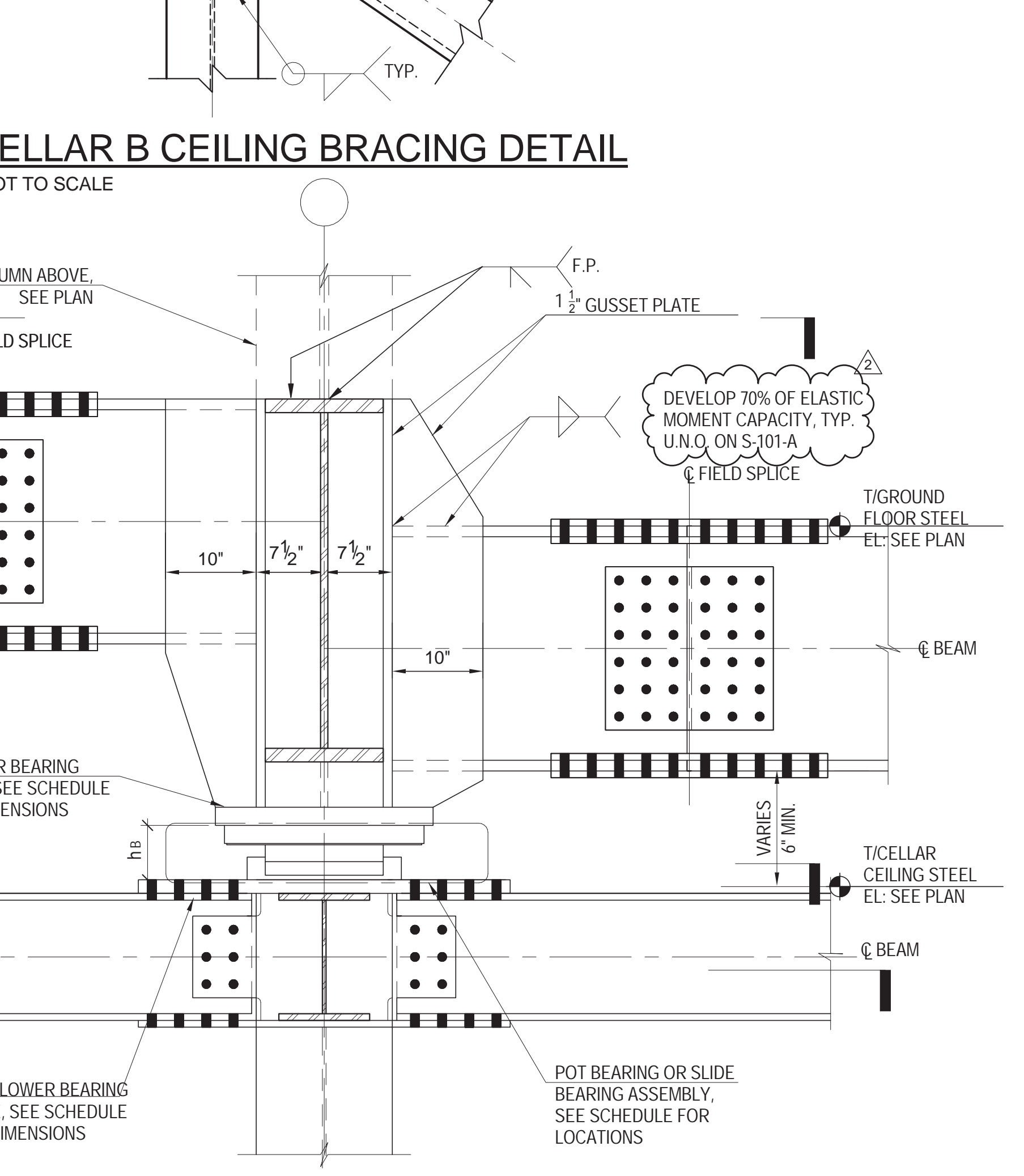
11 CELLAR B CEILING BRACING DETAIL

NOT TO SCALE



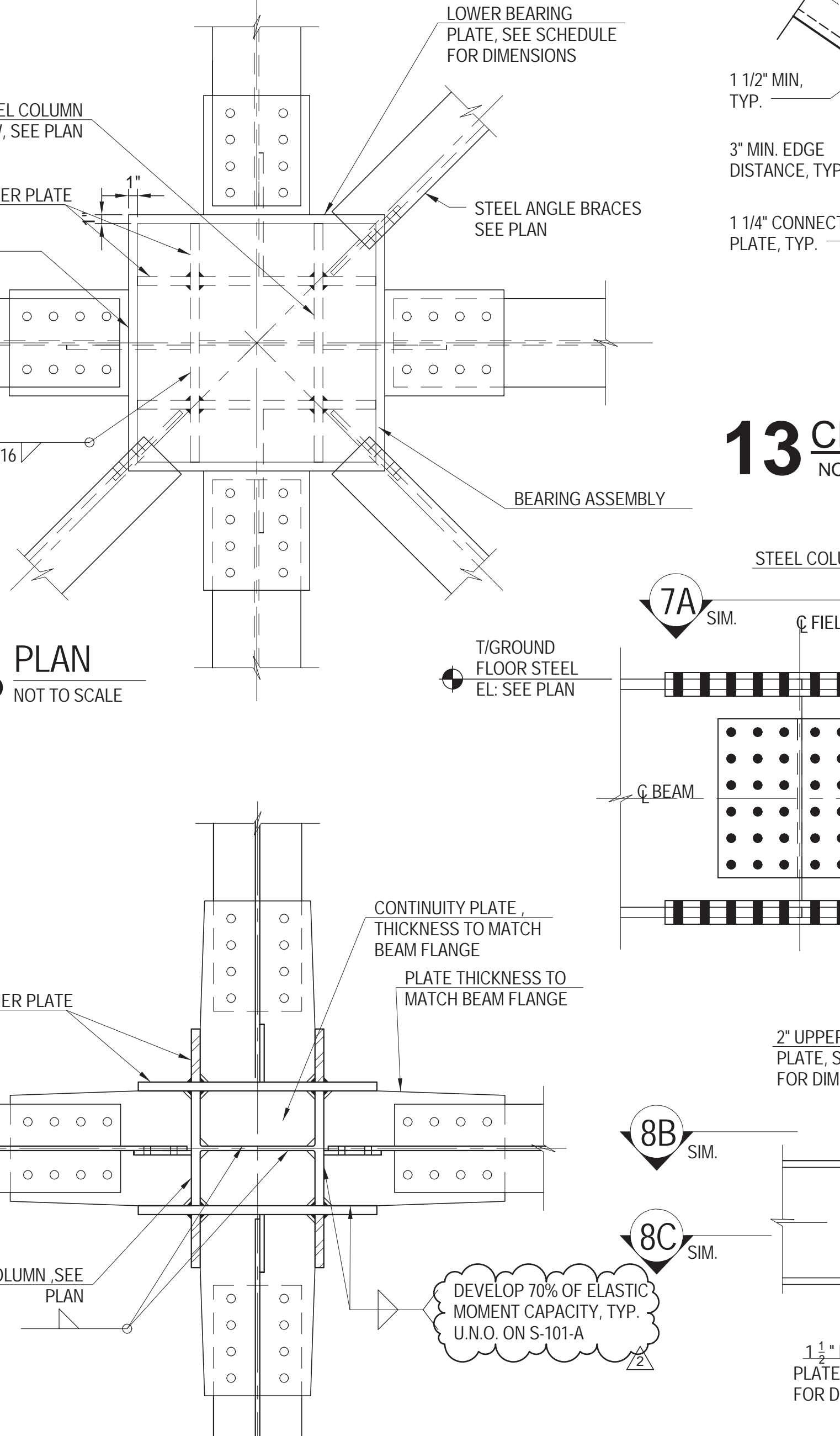
12 CELLAR B CEILING BRACING DETAIL

NOT TO SCALE



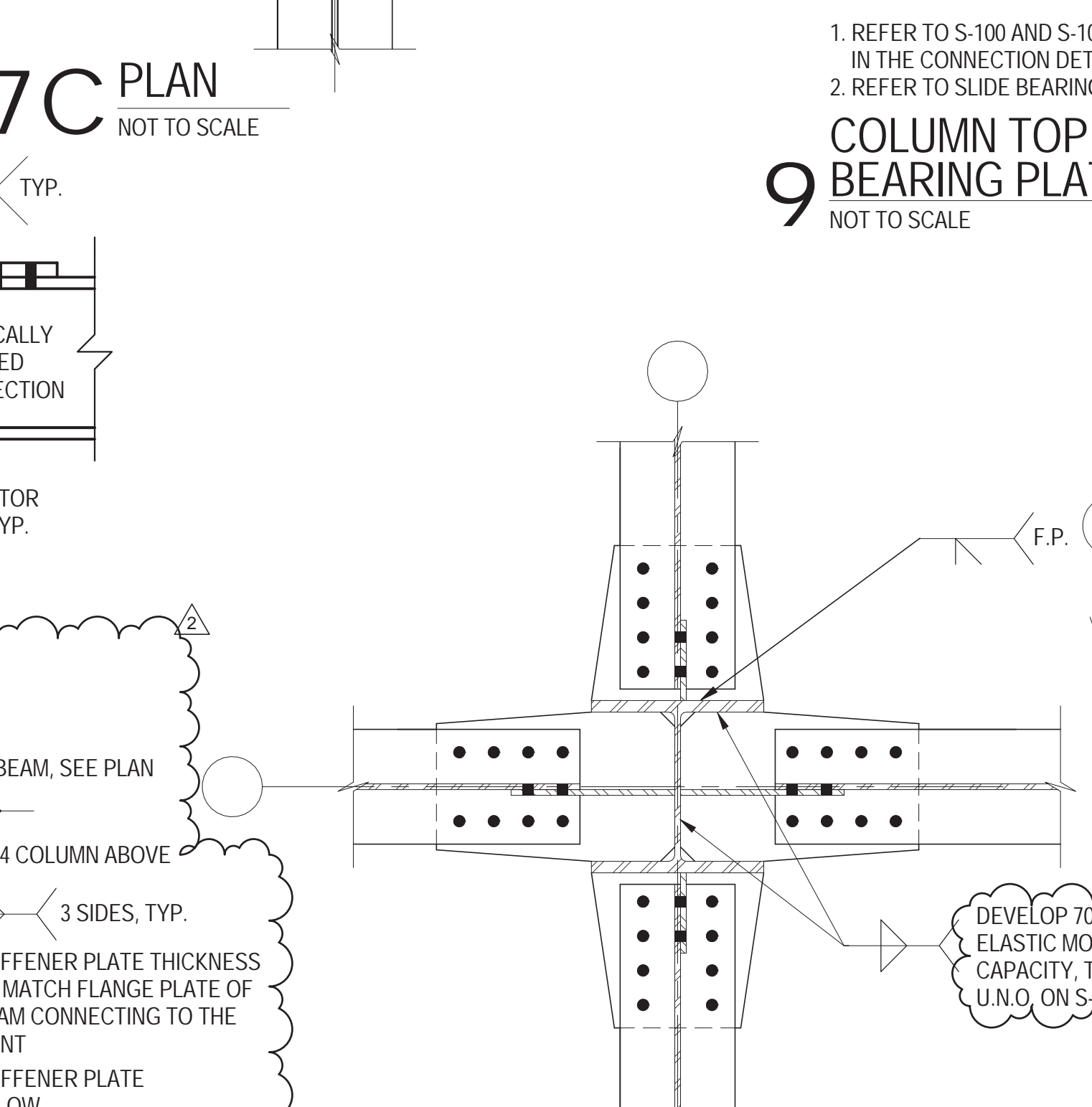
13 CELLAR B CEILING BRACING DETAIL

NOT TO SCALE



7B PLAN

NOT TO SCALE



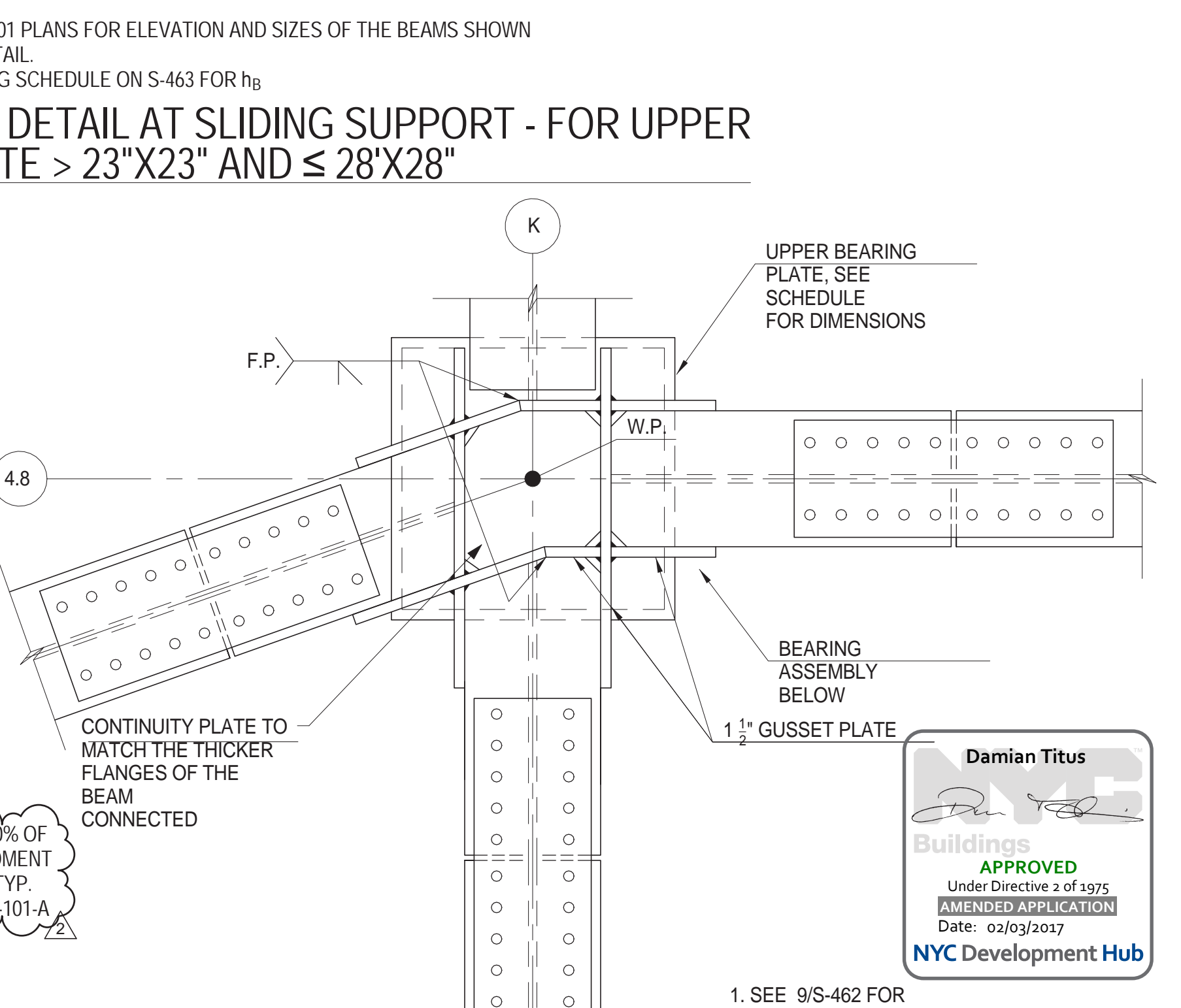
7C PLAN

NOT TO SCALE



8B PLAN

NOT TO SCALE



9 COLUMN TOP DETAIL AT SLIDING SUPPORT - FOR UPPER BEARING PLATE > 23\"/>

NOT TO SCALE



10 COLUMN TOP DETAIL AT PLAZA

SCALE: 1/4\"/>



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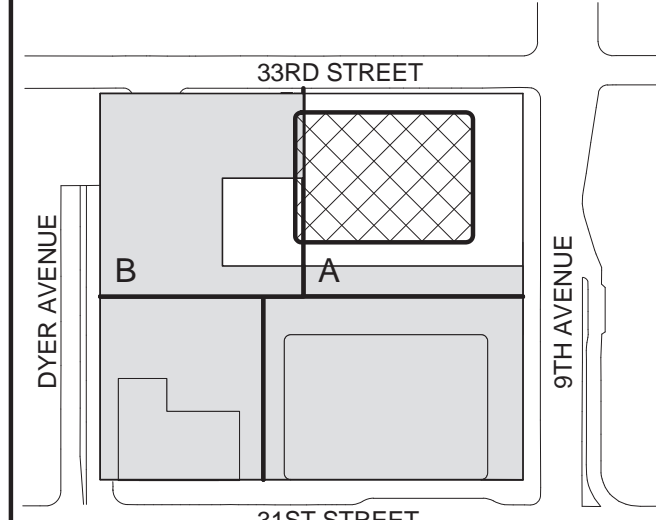
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

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

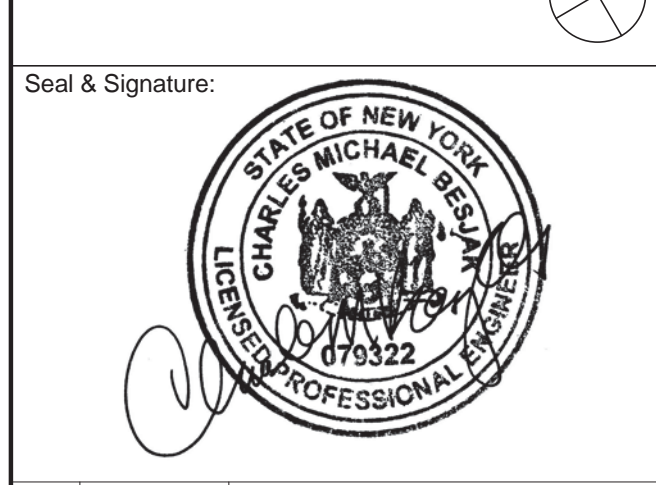
Facade Maintenance Consultant
Entek Engineering LLC
166 Ames Street, Hackensack, NJ 07601

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

Key Plan:



Seal & Signature:



2	22 APR 2016	ISSUED FOR PERM
1	16 DEC 2015	ISSUED FOR PERM
No.	Date	Description
Sheet Name:		

RETAIL SECTIONS & DETAILS

Project No.: 211157
B-SCAN Sheet No.: S-462.01
Date: 22 APR 2016
Scale: As indicated
File No.: S-462

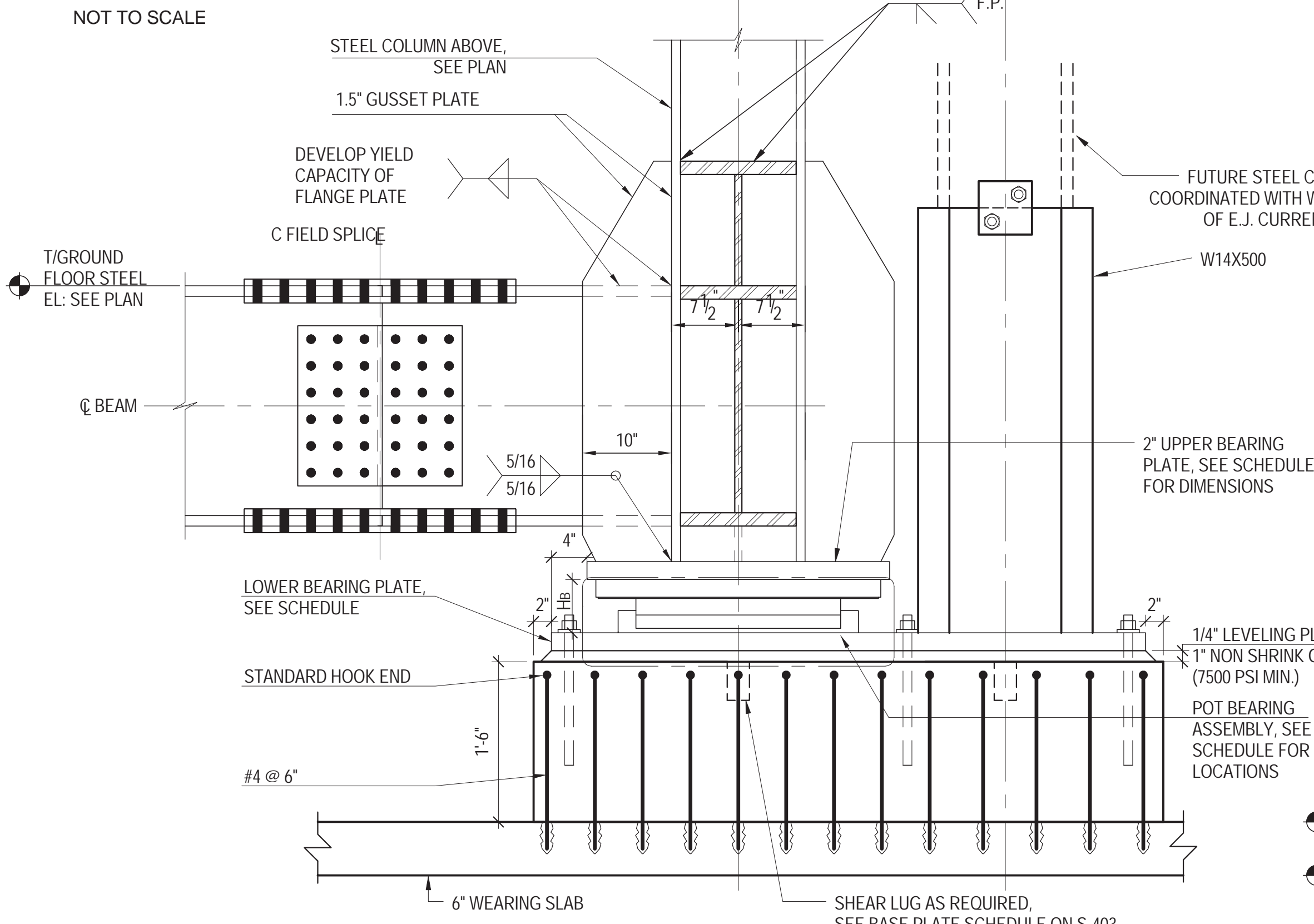
Sheet No.: S-462
Page No.: 1

BEARING SUPPORT ASSEMBLY SCHEDULE												
	A2	A1	B.7	C.8	D.6	E.2	F.2	G.5	G.8	H	K	K.7
4.8	-	-	-	-	-	-	-	-	-	-	38'-6 1/2" (700) (P) 26'X26'	38'-6 1/2" (750) (P) 26'X26'
5	-	-	-	-	-	-	-	-	-	38'-6 1/2" (750) (P) 26'X26'	-	-
5.2	27'-5" (1000) (P) 30'X30'	27'-5" (1600) (P) 34'X34'	-	-	-	-	-	-	-	-	-	-
6	42'-9 1/2" (600) (P) 25'X25'	-	42'-5" (1300) (P) 32 1/2'X32 1/2'	42'-5 1/2" (650) (P) 25'X25'	42'-5 1/2" (800) (P) 26 1/2'X26 1/2'	40'-10 1/2" (650) (P) 25'X25'	40'-10 1/2" (750) (P) 26'X26'	40'-10 1/2" (600) (P) 25'X25'	38'-6 1/2" (250) (S) 20 1/2'X20 1/2'	-	38'-6 1/2" (750) (P) 26'X26'	38'-6 1/2" (350) (S) 23'X23'
6.8	-	-	-	-	42'-5 1/2" (350) (S) 23'X23'	40'-10 1/2" (300) (S) 23'X23'	40'-10 1/2" (550) (S) 27'X27'	40'-10 1/2" (450) (S) 25'X25'	38'-6 1/2" (150) (S) 20 1/2'X20 1/2'	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-
7.1	42'-9 1/2" (350) (S) 23'X23'	-	42'-5 1/2" (800) (P) 26 1/2'X26 1/2'	42'-5 1/2" (300) (S) 23'X23'	-	-	-	-	-	-	38'-6 1/2" (450) (S) 25'X25'	38'-6 1/2" (350) (S) 23'X23'
8	42'-9 1/2" (550) (S) 27'X27'	-	42'-5 1/2" (1050) (P) 30 1/2'X30 1/2'	42'-5 1/2" (550) (S) 27'X27'	42'-5 1/2" (700) (P) 26'X26'	40'-10 1/2" (650) (S) 27'X27'	40'-10 1/2" (750) (P) 26'X26'	40'-10 1/2" (500) (S) 27'X27'	38'-6 1/2" (350) (S) 23'X23'	-	38'-6 1/2" (550) (S) 27'X27'	38'-6 1/2" (500) (S) 27'X27'
9	-	-	-	-	-	-	-	-	-	-	-	-

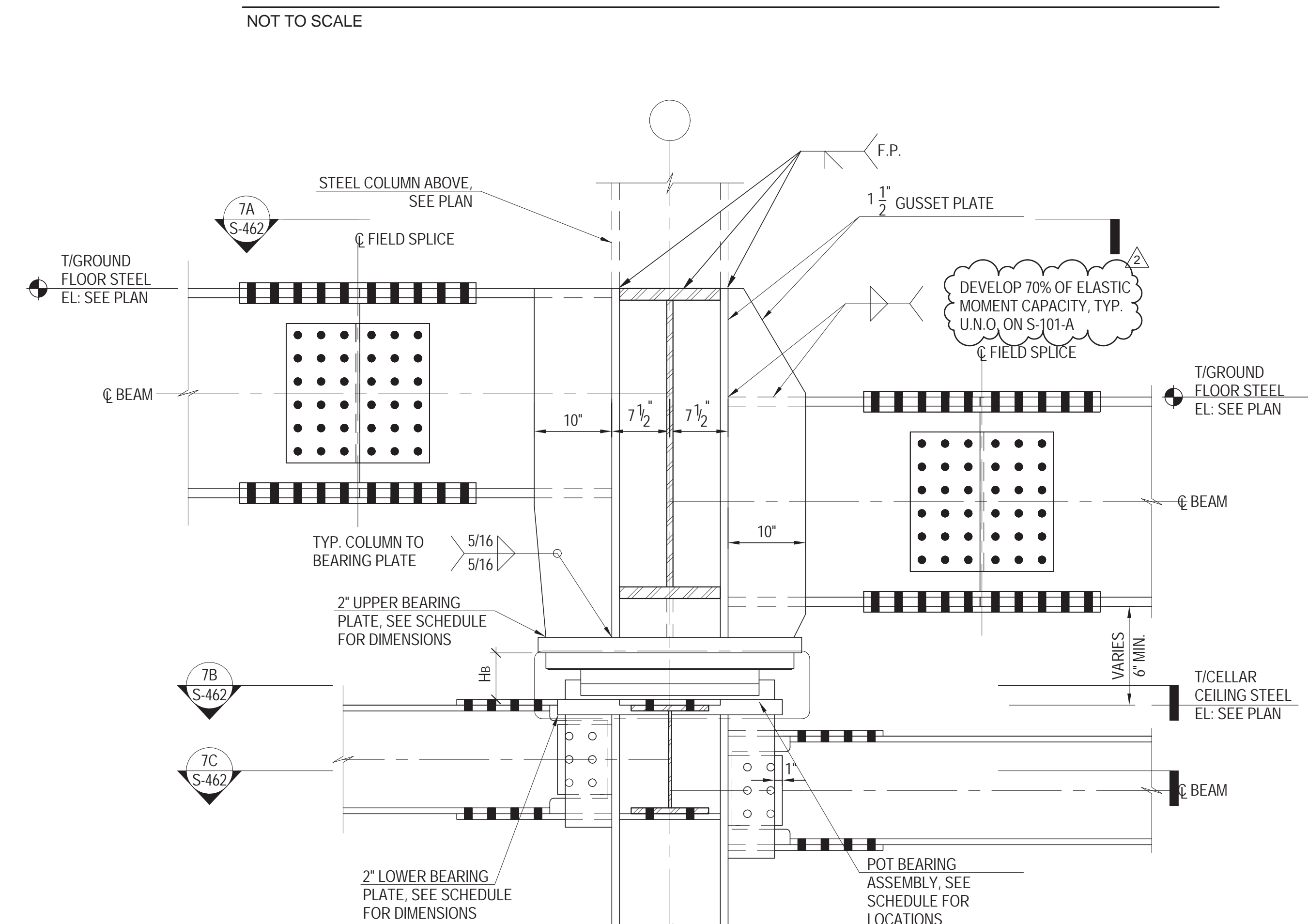
NOTE:
* COLUMN AND SLIDING BEARING PAD LOCATED OFF GRIDLINE. SEE S-100C FOR LOCATION.

1. X'-X'XXX (1650)
(P) 34'X34'
TOP OF LOWER BEARING PLATE ELEVATION
REQUIRED SERVICE BEARING LOAD
UPPER BEARING PLATE DIMENSION
(P) POT BEARING ASSEMBLY
(S) SLIDE BEARING ASSEMBLY
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 MANUFACTURER'S 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. REFER TO DETAIL 7 THROUGH 9 ON S-462 FOR DEFINITION OF h_b. h_b NEEDS TO BE COORDINATED AND VERIFIED WITH POT BEARING /SLIDE BEARING MANUFACTURER'S REQUIREMENTS.
h_b = 4" FOR POT BEARING ASSEMBLY, TYP. U.N.O.
h_b = 2 1/2" FOR SLIDE BEARING ASSEMBLY, TYP. U.N.O.

1 SLIDING/POT BEARING SUPPORT AND ASSEMBLY LOCATION



5 COLUMN BOTTOM DETAIL AT POT BEARING SUPPORT AND ASSEMBLY LOCATION AT GRIDLINE 5.2/A2 AND 5.2/A1



1. REFER TO S-100 AND S-101 PLANS FOR ELEVATION AND SIZES OF THE BEAMS SHOWN IN THE CONNECTION DETAIL.
2. REFER TO SLIDE BEARING SCHEDULE ON S-463 FOR h_b.

6 COLUMN TOP DETAIL AT POT BEARING SUPPORT AND ASSEMBLY LOCATION AT GRIDLINE 8/B.7

NOT TO SCALE

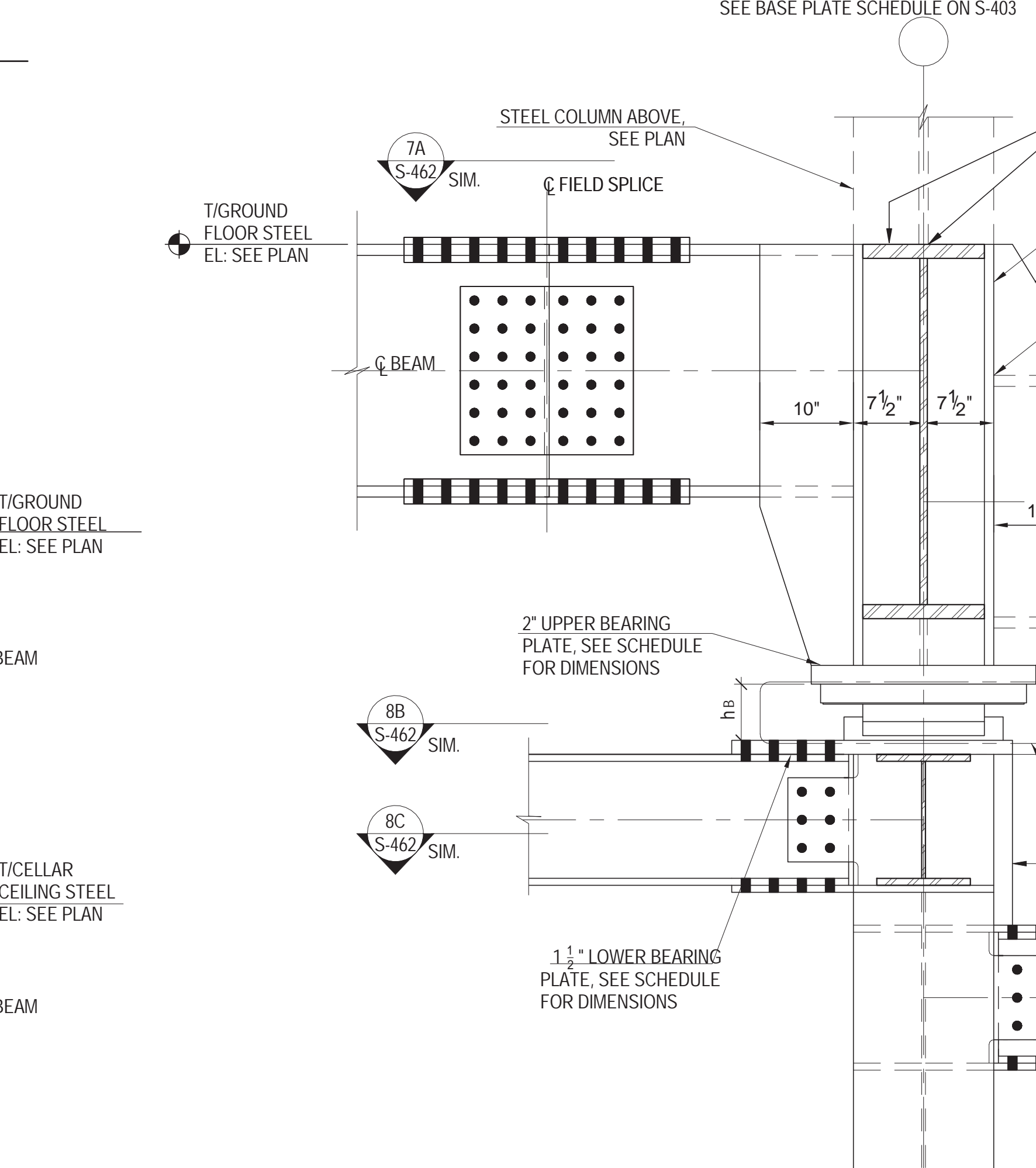
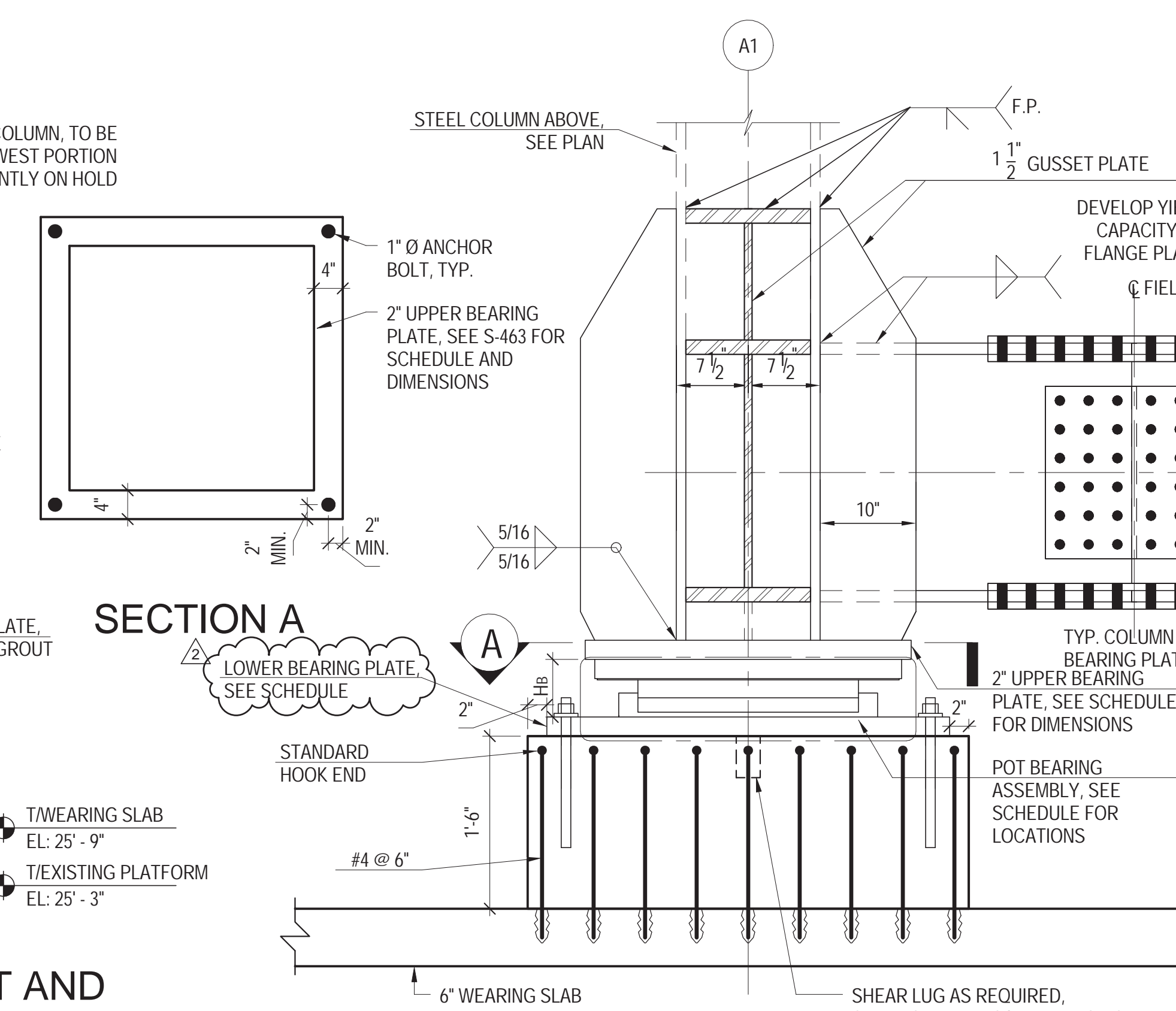
2 DETAIL AT SLIDING CONNECTION BETWEEN GIRDER AND STEEL COLUMN AT EXPANSION JOINTS

3 BEAM COPING DETAIL AT PLAZA LEVEL

NOT TO SCALE

4 BEAM STEPPING DETAIL AT CELLAR B CEILING WEST OF G/L "K"

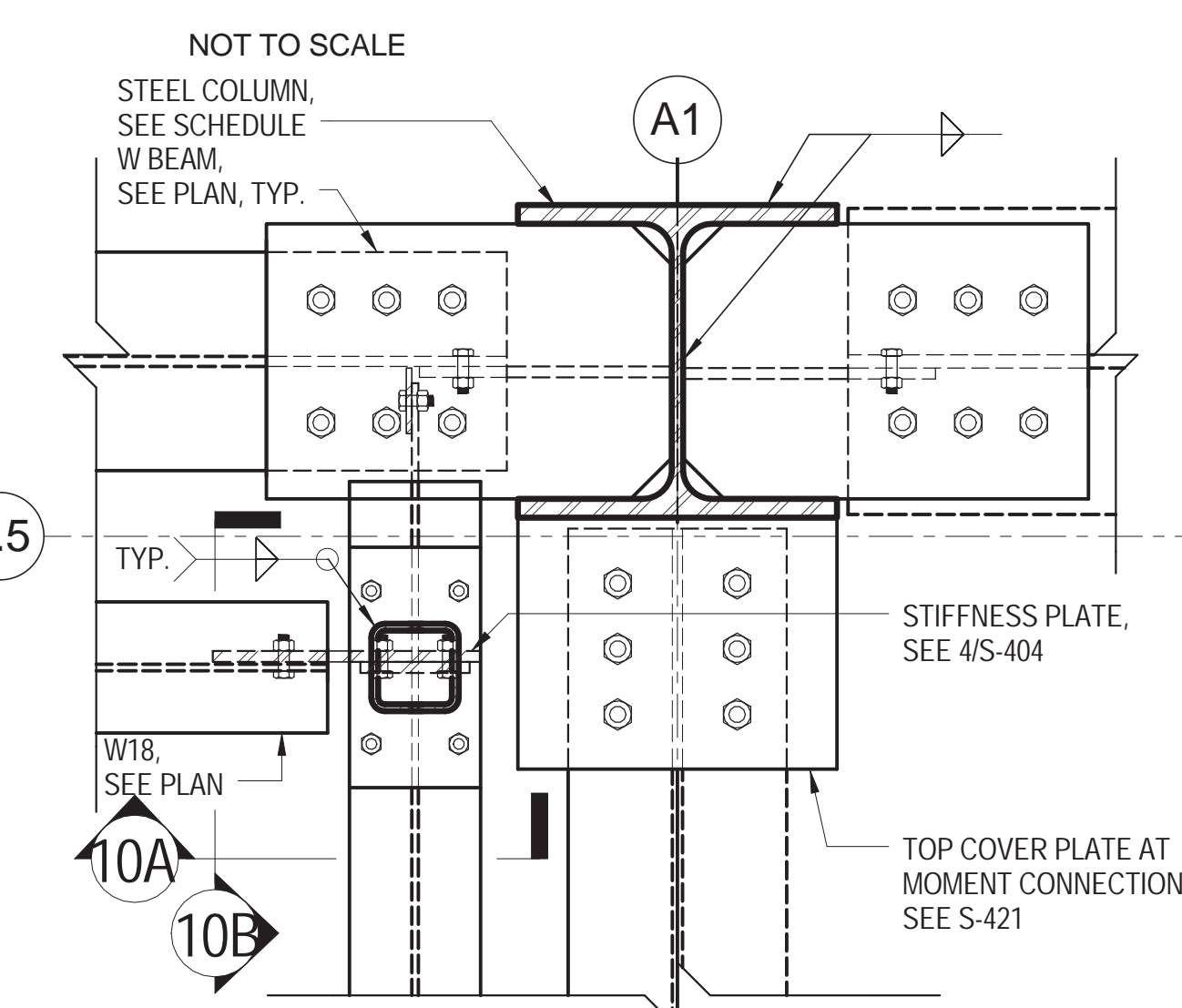
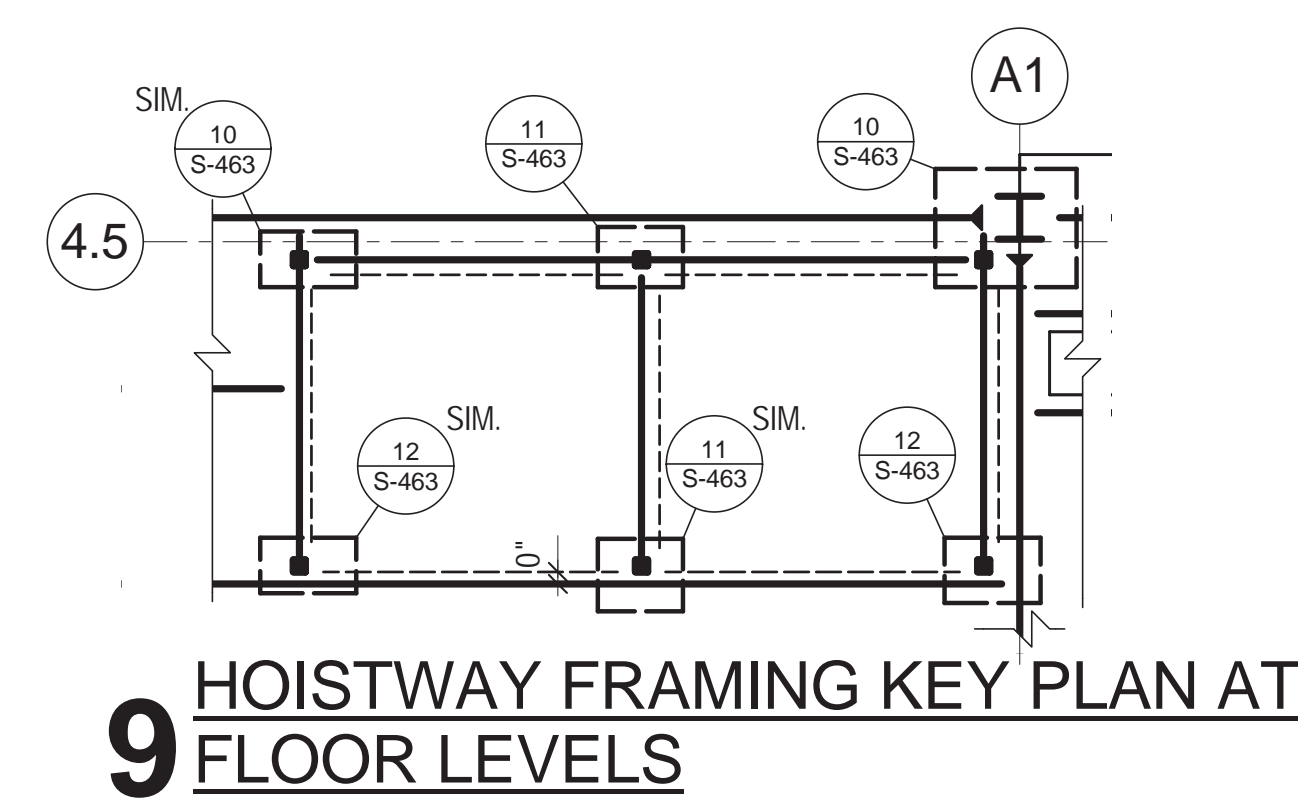
NOT TO SCALE



1. REFER TO S-100 AND S-101 PLANS FOR ELEVATION AND SIZES OF THE BEAMS SHOWN IN THE CONNECTION DETAIL.
2. REFER TO SLIDE BEARING SCHEDULE ON S-463 FOR h_b.

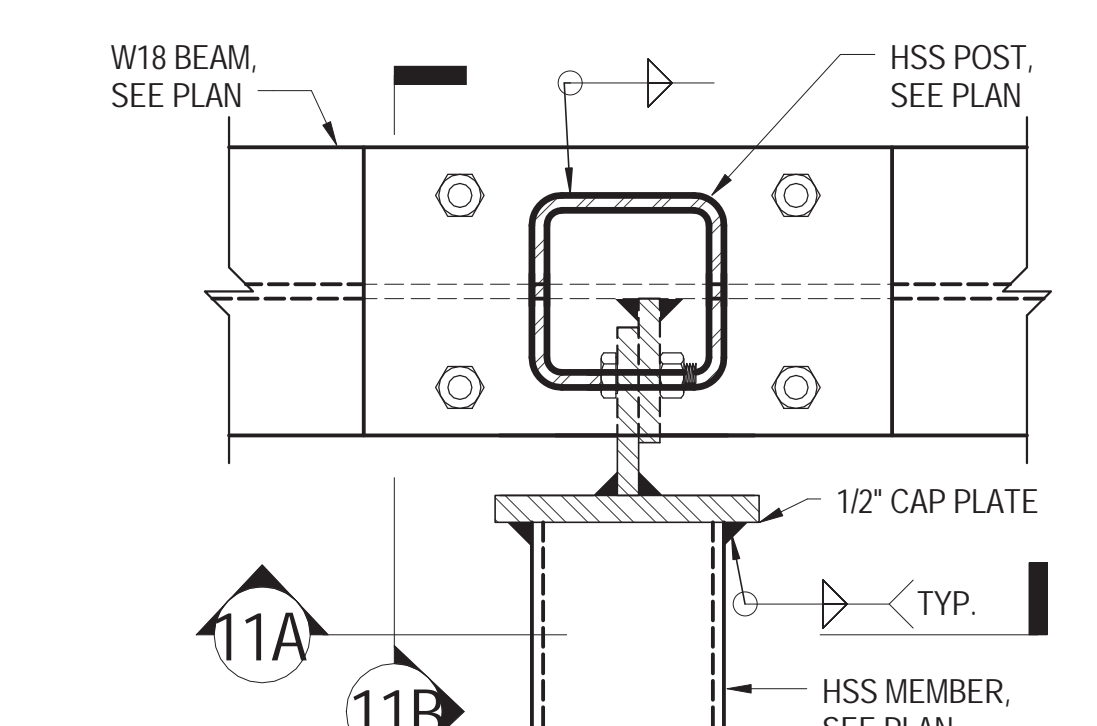
7 COLUMN TOP DETAIL AT POT BEARING SUPPORT AND ASSEMBLY LOCATION AT GRIDLINE 6/D.6 AND 8/D.6

NOT TO SCALE



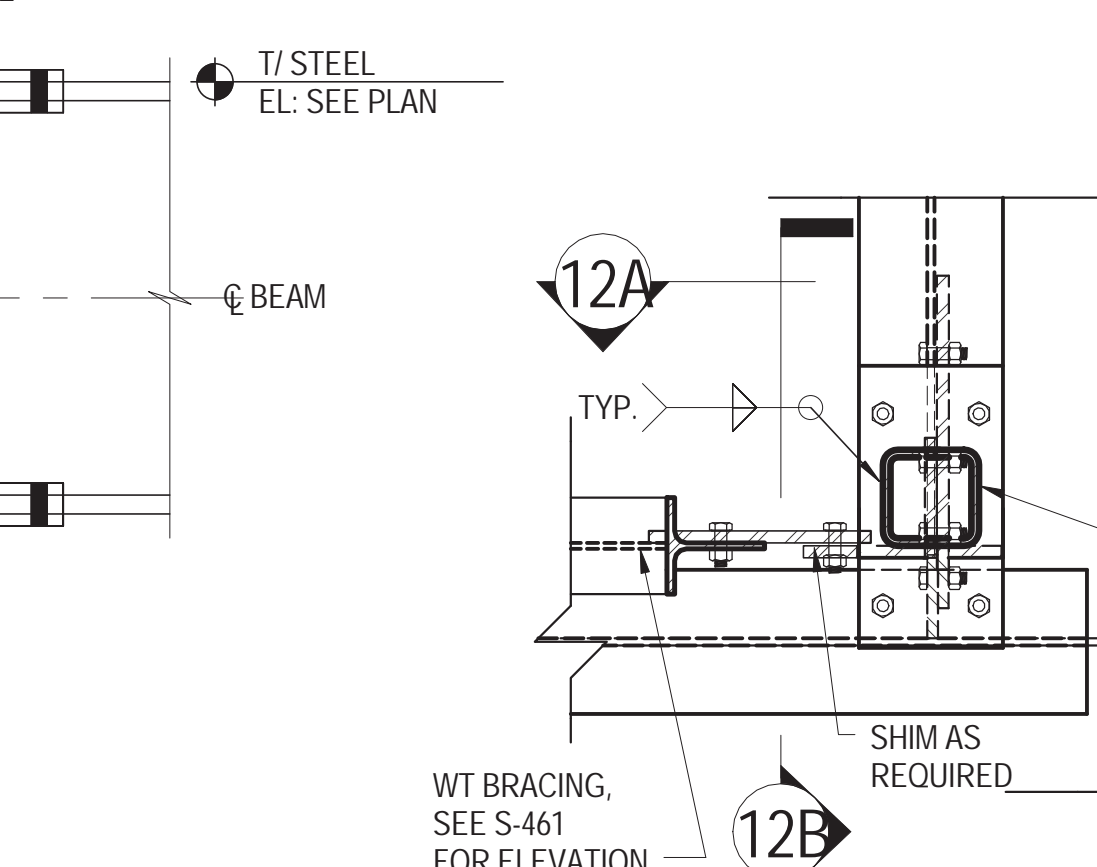
10 HOISTWAY BRACING DETAIL

NOT TO SCALE



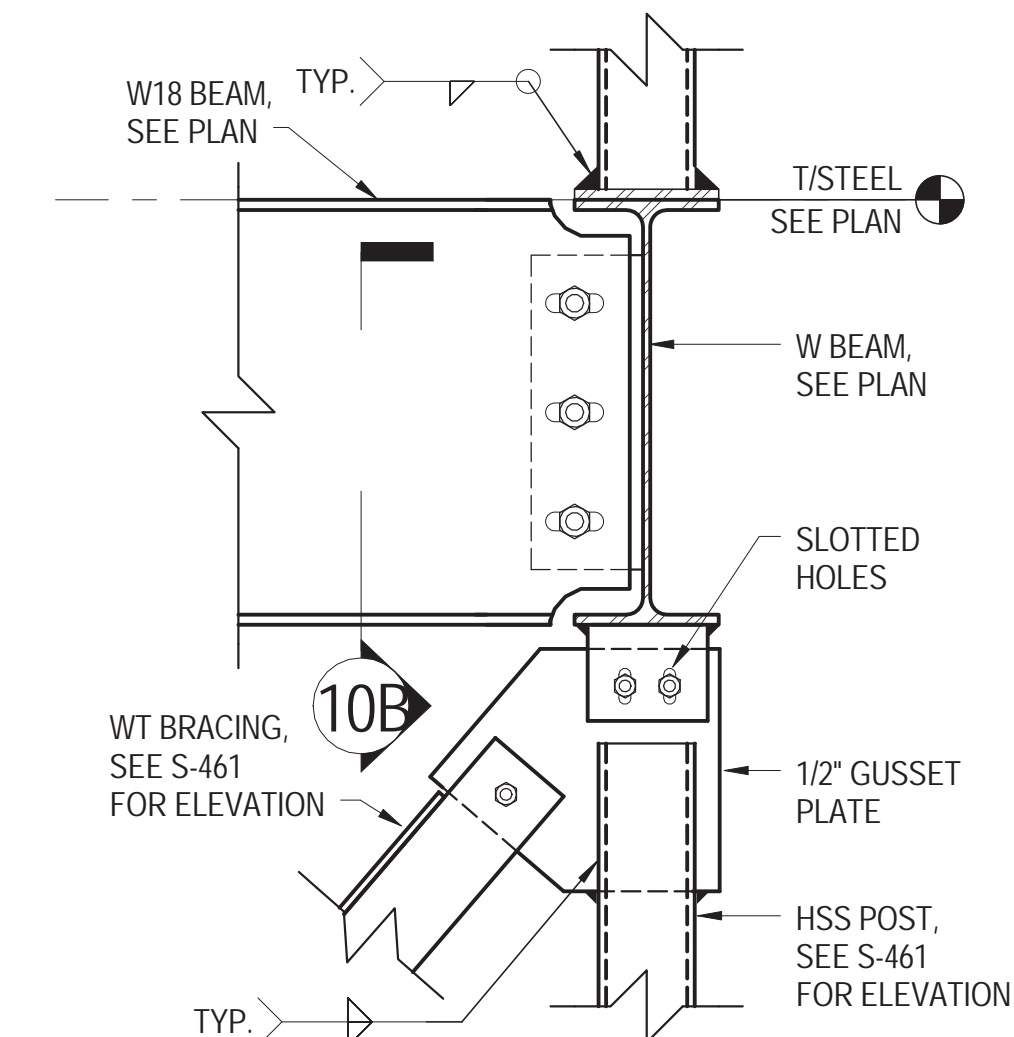
11 HOISTWAY BRACING DETAIL

NOT TO SCALE



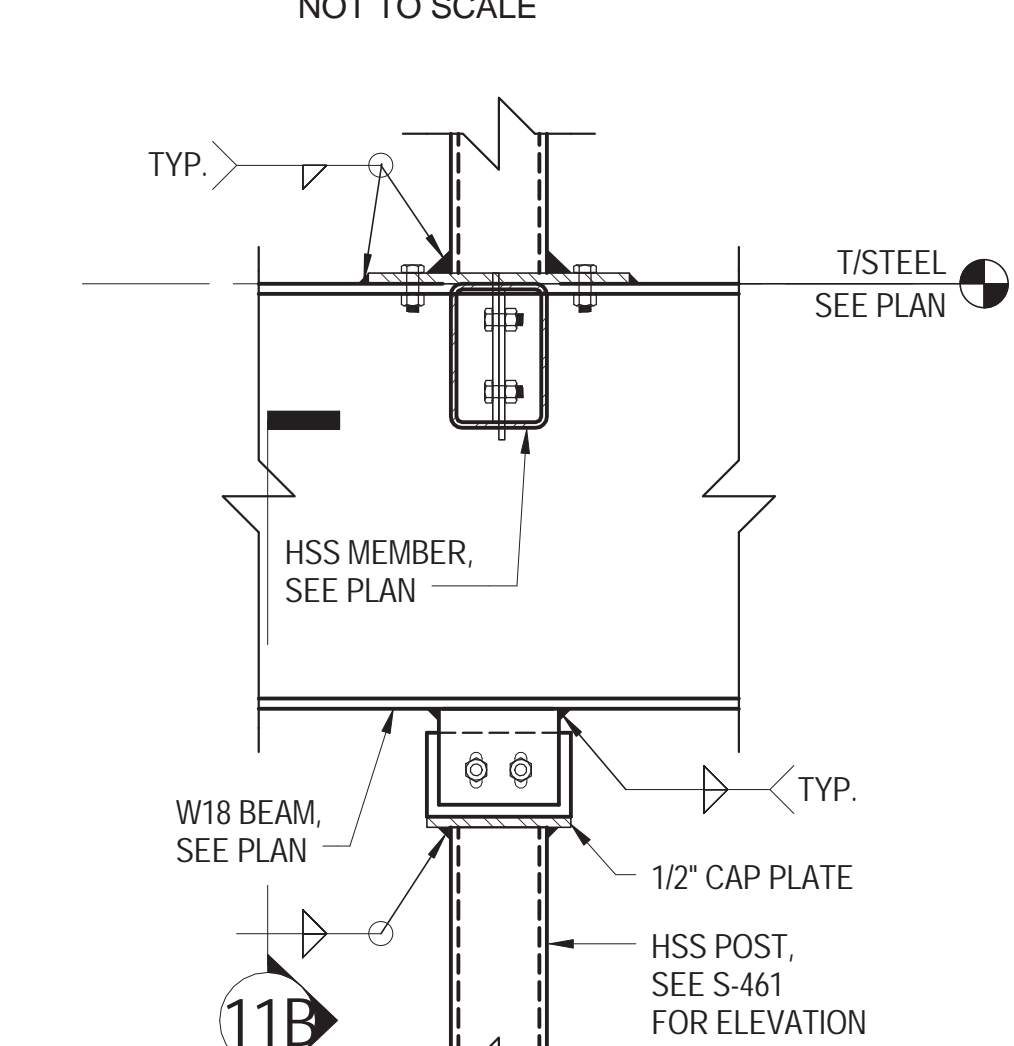
12 HOISTWAY BRACING DETAIL

NOT TO SCALE



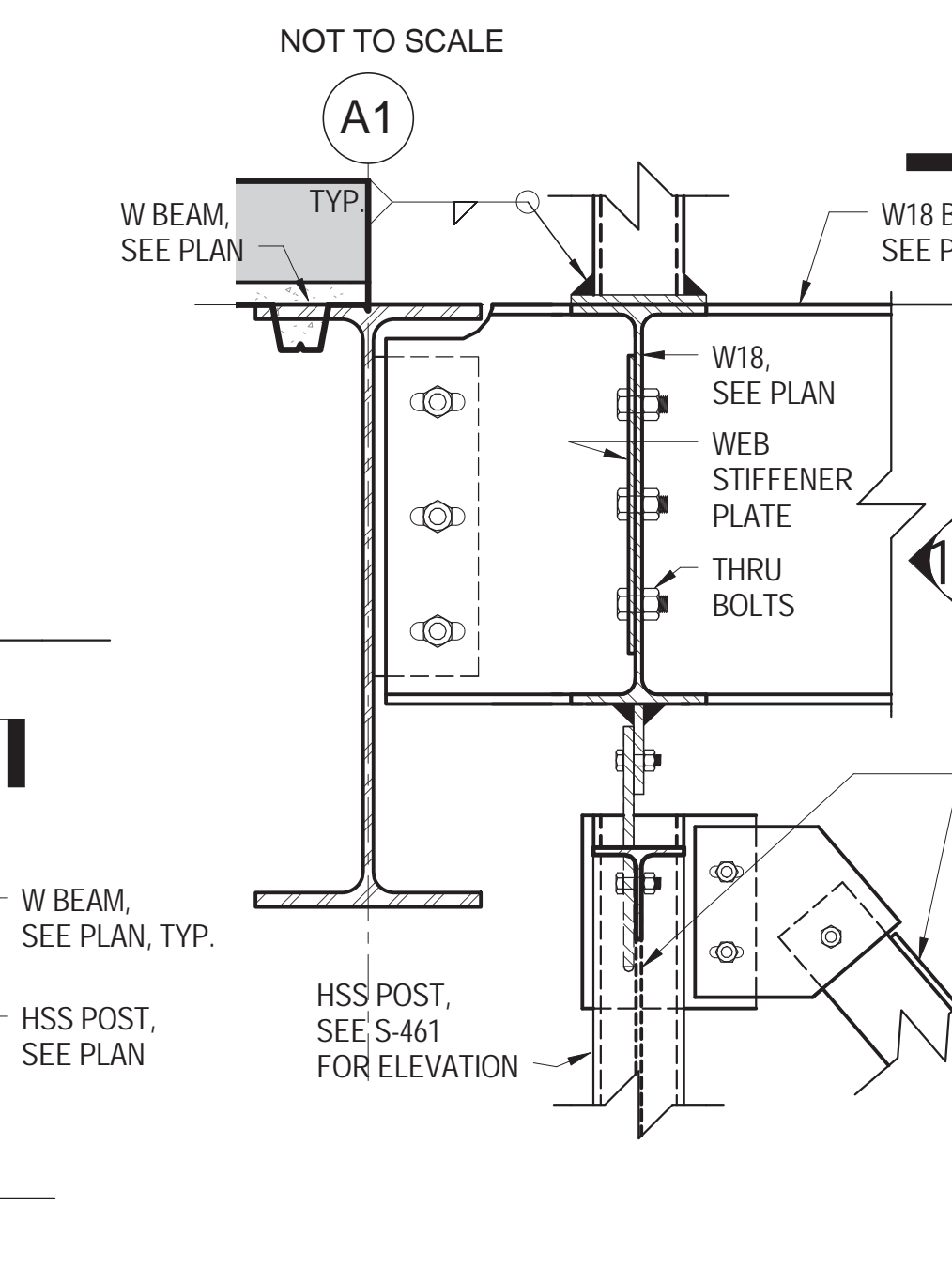
10A HOISTWAY FRAMING - SECTION A

NOT TO SCALE



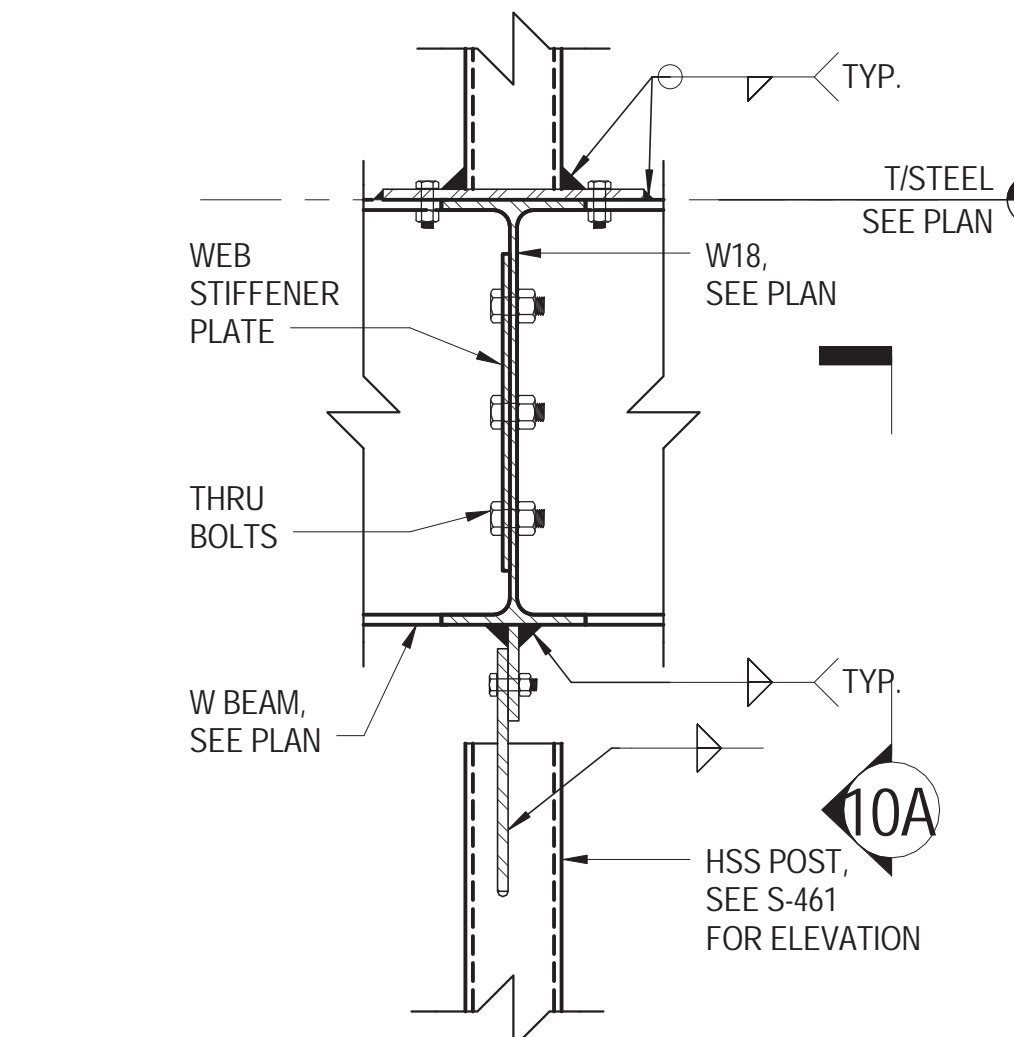
11A HOISTWAY FRAMING - SECTION A

NOT TO SCALE



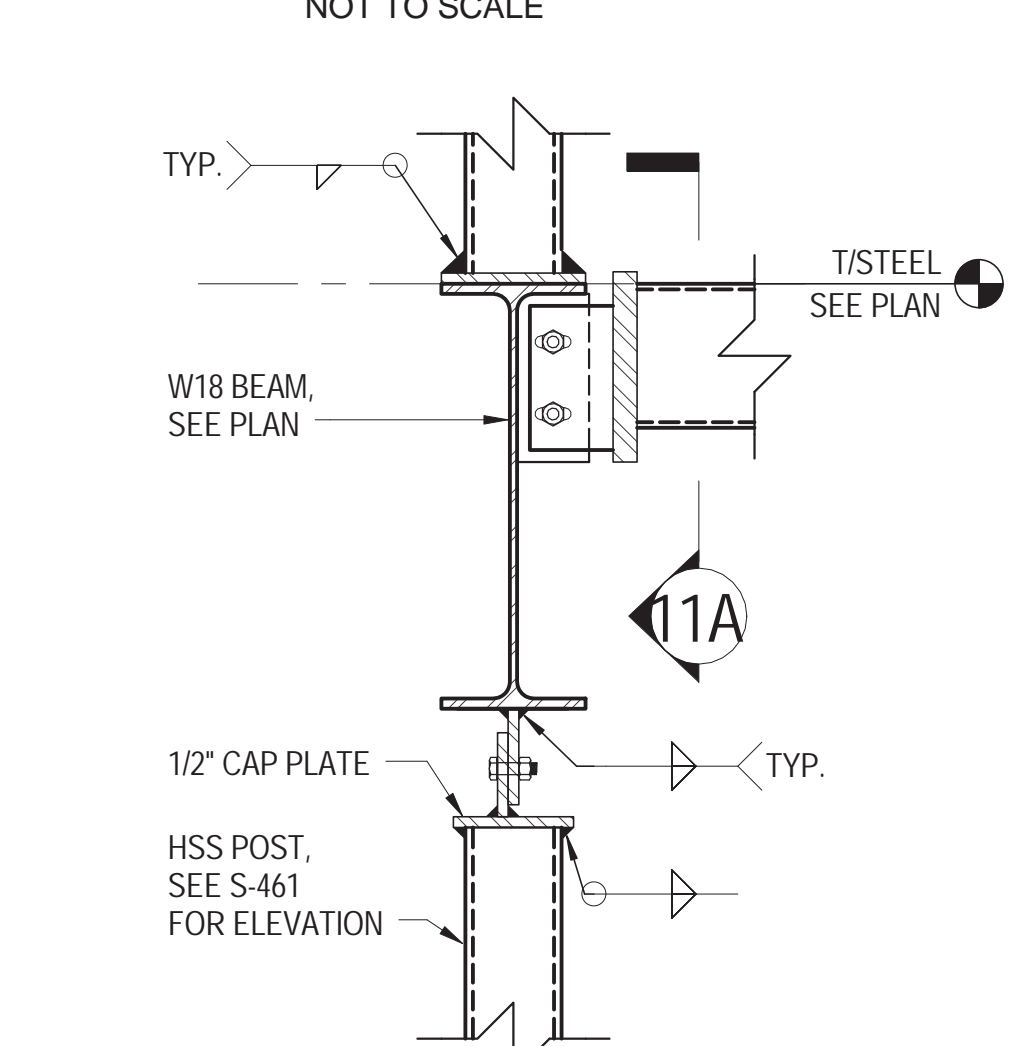
12A HOISTWAY FRAMING - SECTION A

NOT TO SCALE



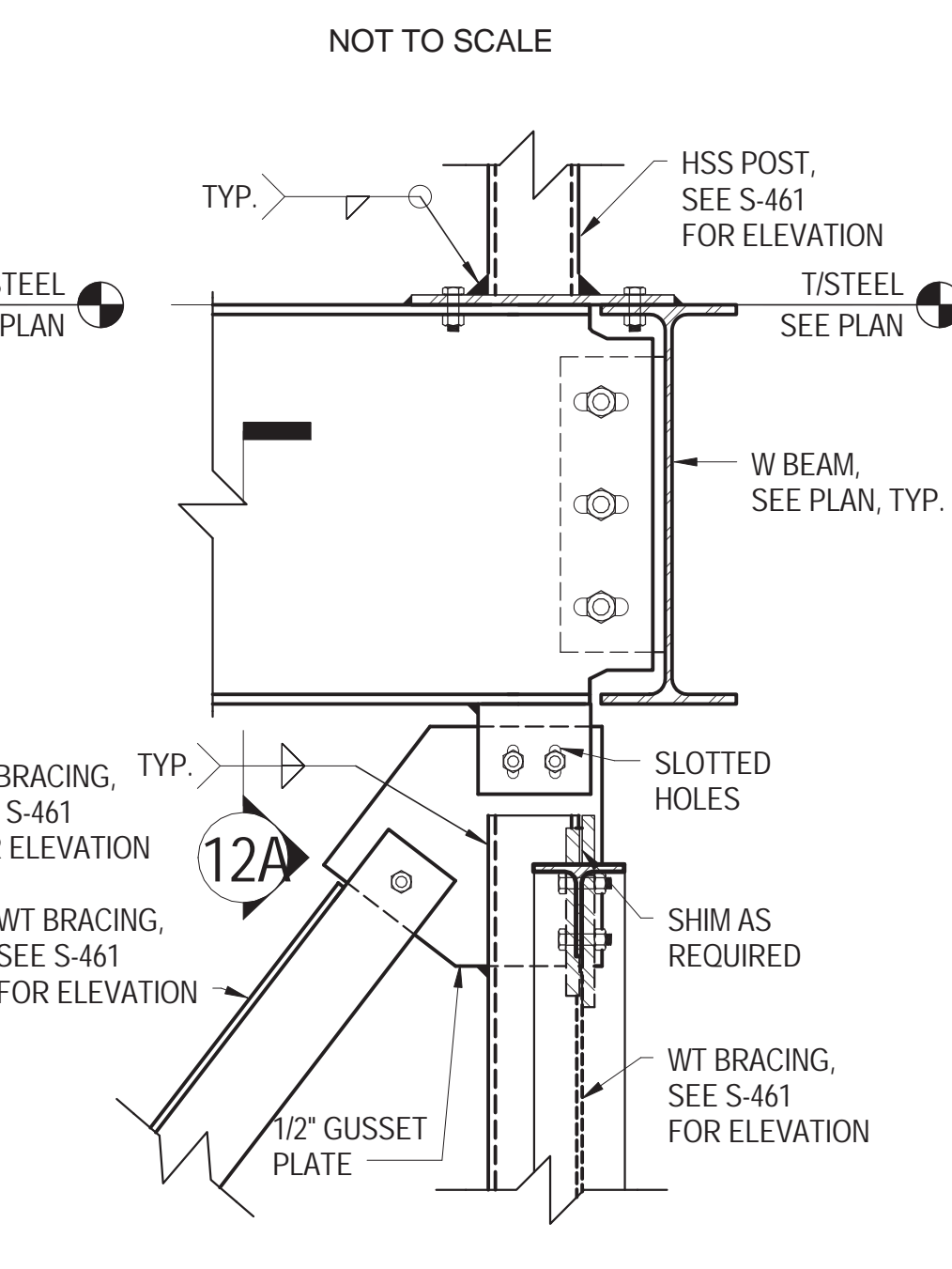
10B HOISTWAY FRAMING - SECTION B

NOT TO SCALE



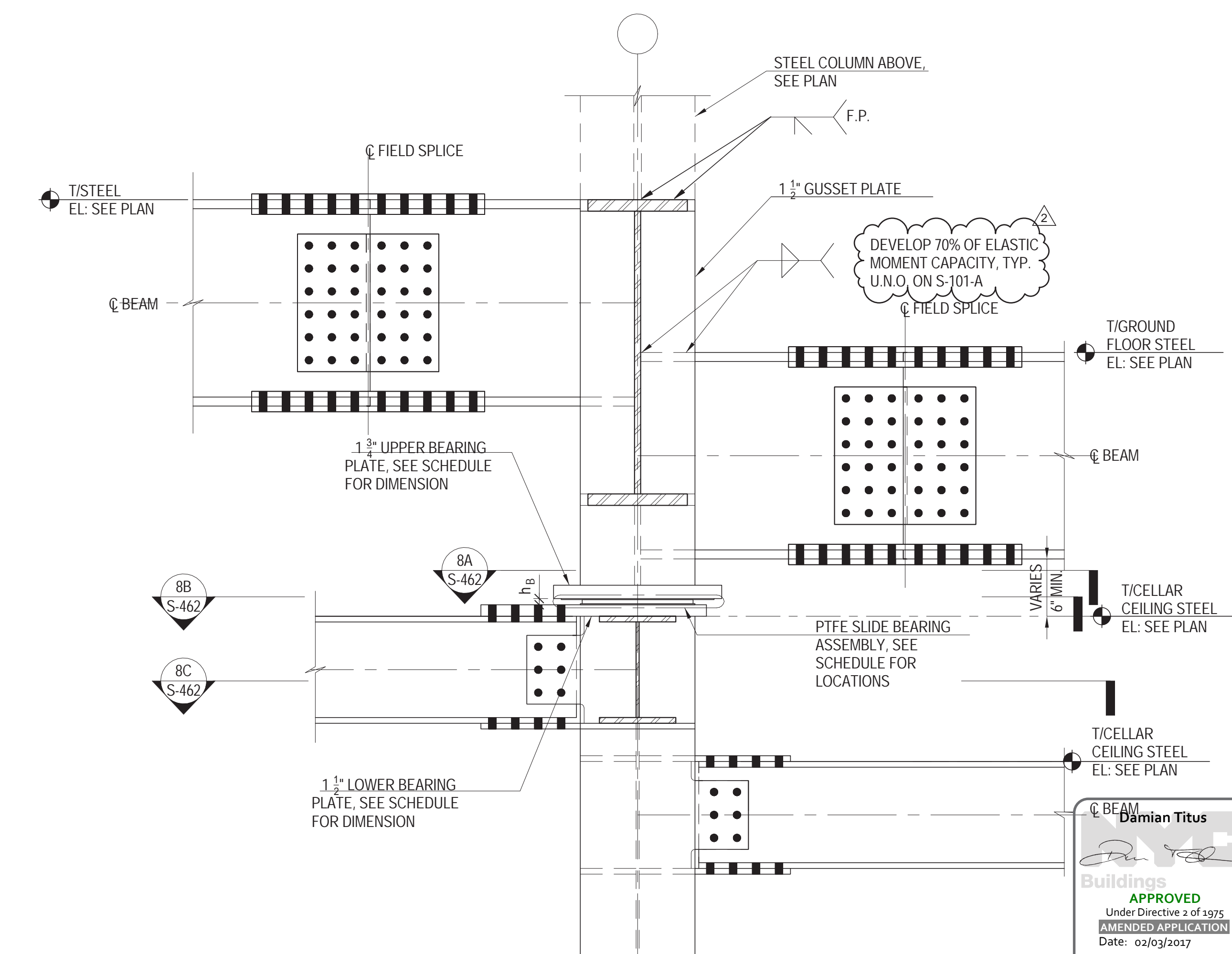
11B HOISTWAY FRAMING - SECTION B

NOT TO SCALE



12B HOISTWAY FRAMING - SECTION B

NOT TO SCALE



1. REFER TO S-100 AND S-101 PLANS FOR ELEVATION AND SIZES OF THE BEAMS SHOWN IN THE CONNECTION DETAIL.
2. REFER TO SLIDE BEARING SCHEDULE ON S-463 FOR h_b.

8 COLUMN TOP DETAIL AT SLIDE BEARING SUPPORT AND ASSEMBLY LOCATION AT GRIDLINE 6.8/D.6

NOT TO SCALE

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50 Washington Street, Newark, NJ 07102

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 & Santoro
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 10018

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:

Seal & Signature:

Project No.: 211157
Date: 22 APR 2016
Scale: As Indicated
File No.: S-463

B-SCAN Sheet No.: S-463.01
Sheet No.: S-463
Page No.:

RETAIL SECTIONS & DETAILS

APPROVED
Under Directive of § 207
AMENDED APPLICATION
Date: 02/03/2017
NYC Development Hub



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 Bluffside Ave., 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
Fields Operations
475 10th Avenue, New York, NY 10018

Security Consultant
Ducibella, Ventor & Santoro
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40 Wall Street, New York, NY 10005

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Cerami & Associates
404 Fifth Avenue #8, New York, NY 10018

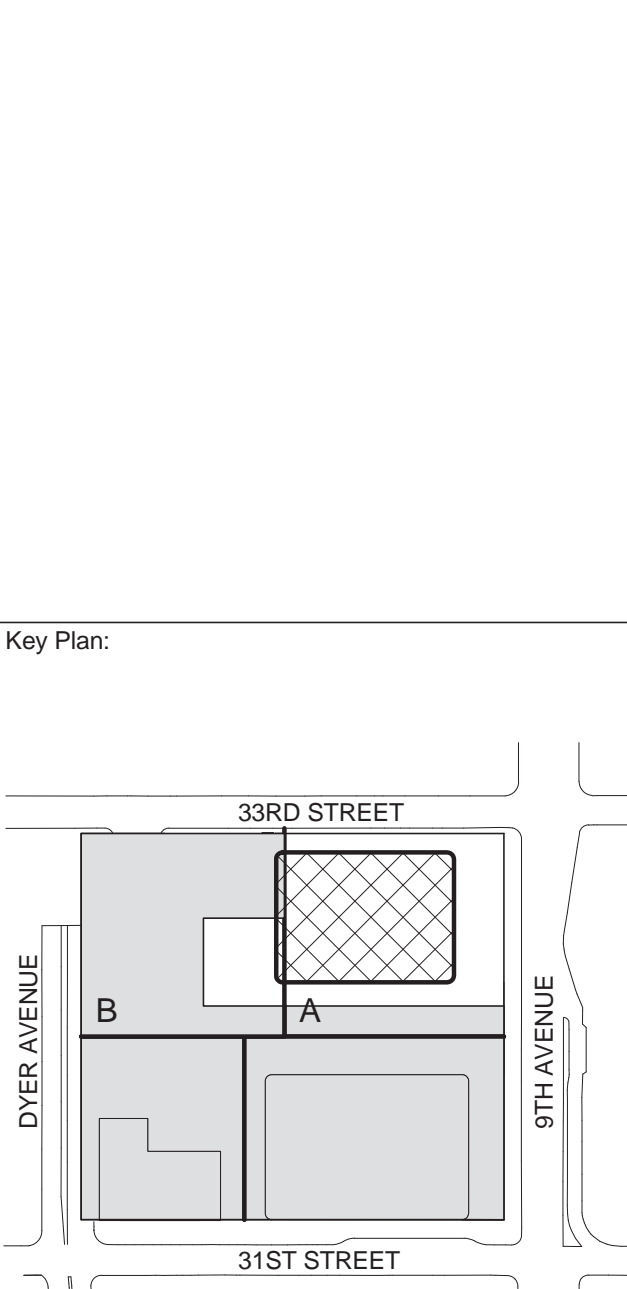
Vibration Consultant
Wilson, Uhrig & Associates, Inc.
65 Broadway, Suite 401, New York, NY 10006

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:



No.	Date	Description
1	16 DEC 2015	ISSUED FOR PERMIT
2	22 APR 2016	ISSUED FOR PAA

Sheet Name:

RETAIL SECTIONS & DETAILS

APPROVED
NYC Development Hub

Project No.: 211157
B-SCAN Sheet No.: S-464.01

Date: 22 APR 2016
Scale: NTS
File No: S-464

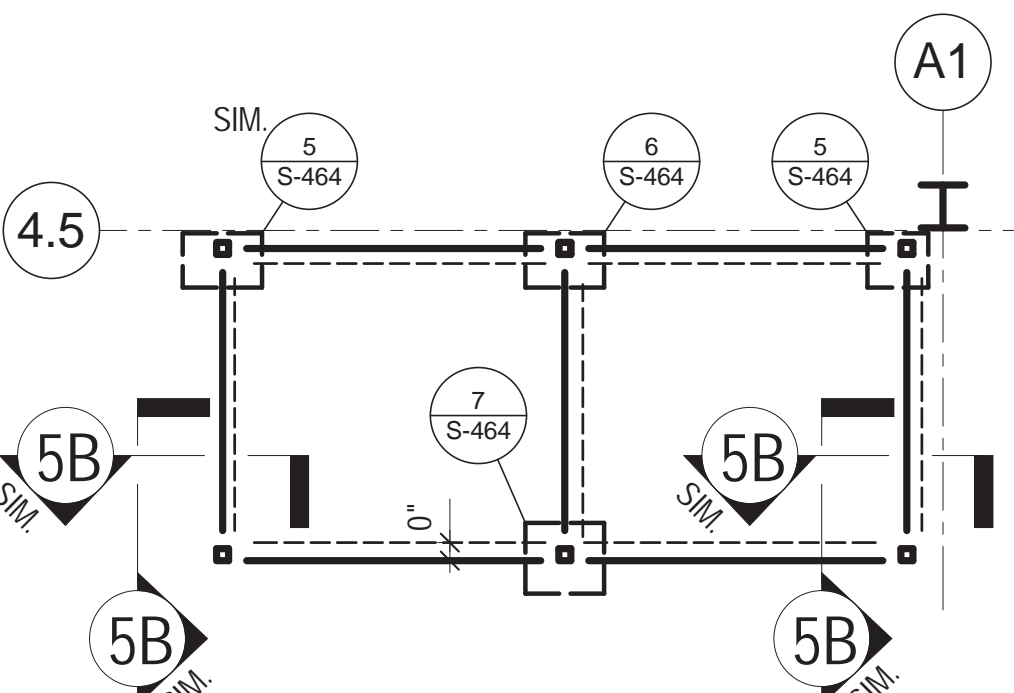
Page No.: S-464

AXIAL FORCE		
COLUMN GRID	ULTIMATE AXIAL FORCE (KIP)	DETAIL
6/A2	+/-270	1
7/A2	+/-270	1
8/A2	+/-310	1
9/A2	+/-310	3
10/A2	+/-310	3
10A/15	+/-330	3 SECTION B

NOTE: VALUES ARE GIVEN FOR THE WORST CONDITION OF TENSILE AND COMPRESSIVE FORCE

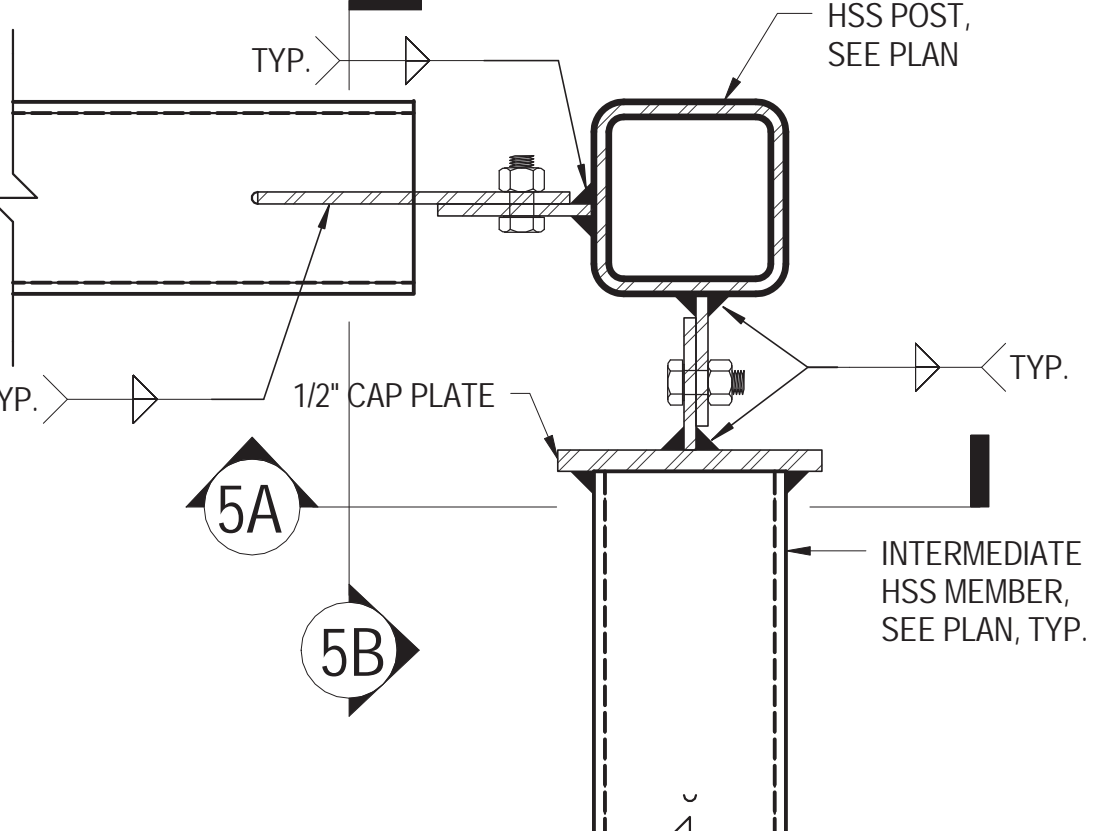
TEMP. BRACING AXIAL LOAD SCHEDULE

N.T.S.



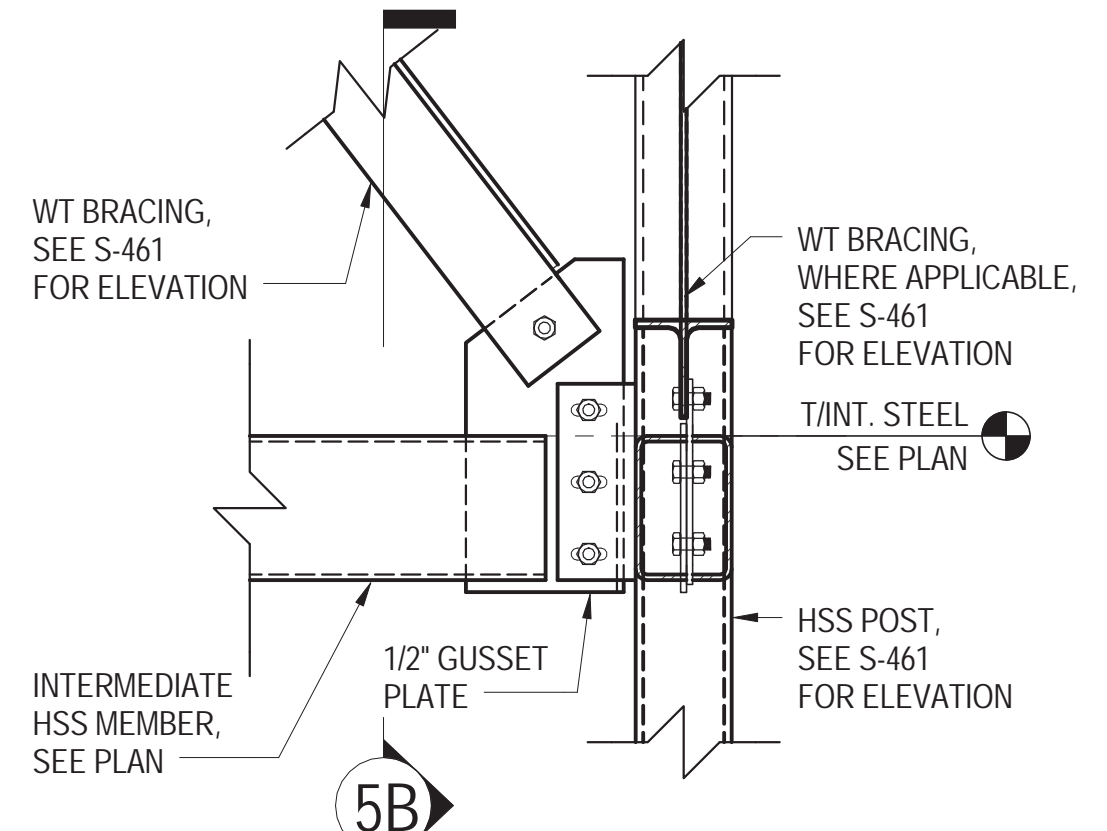
4 HOISTWAY FRAMING KEY PLAN AT INTERMEDIATE FLOOR LEVELS

NOT TO SCALE



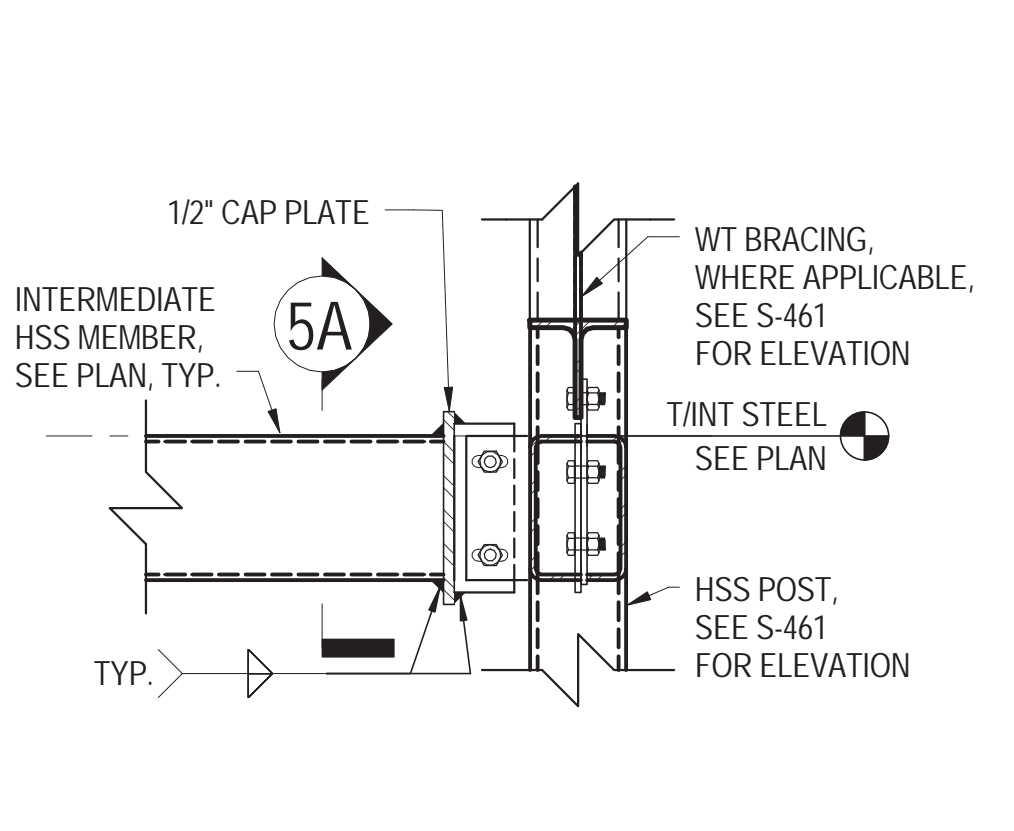
5 INTERMEDIATE HOISTWAY BRACING DETAIL

NOT TO SCALE



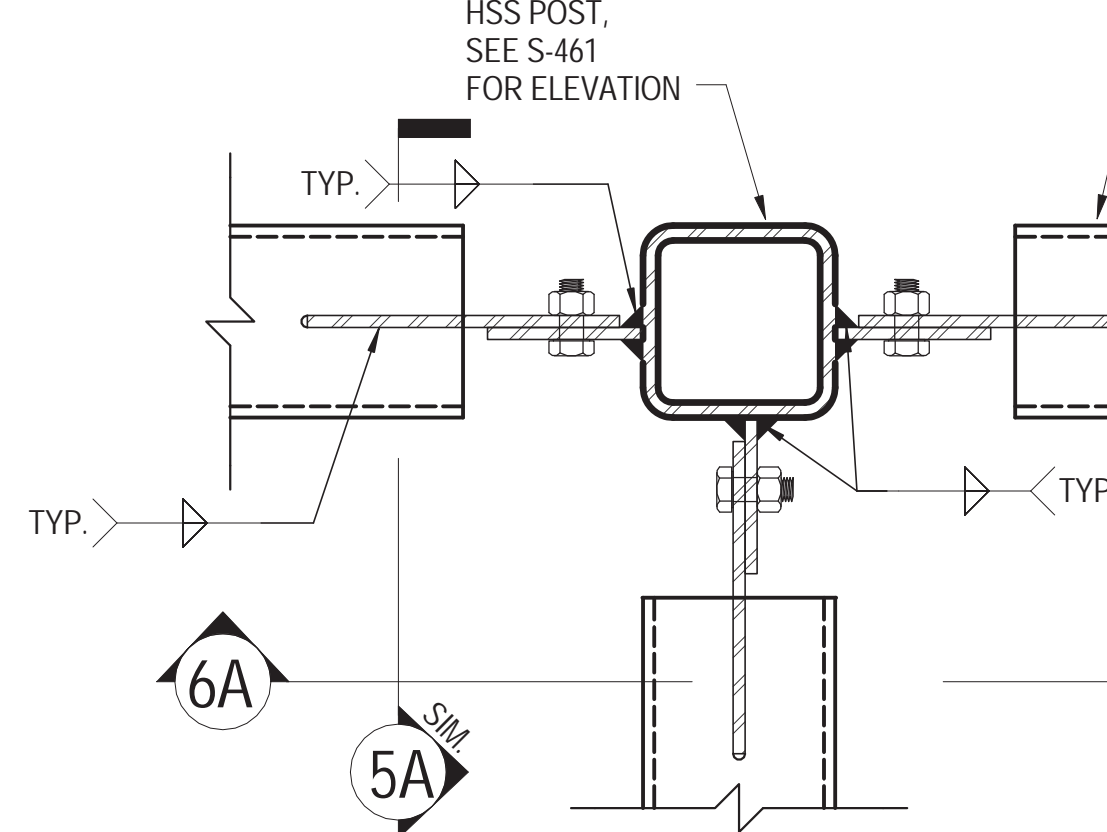
5A HOISTWAY FRAMING - SECTION A

NOT TO SCALE



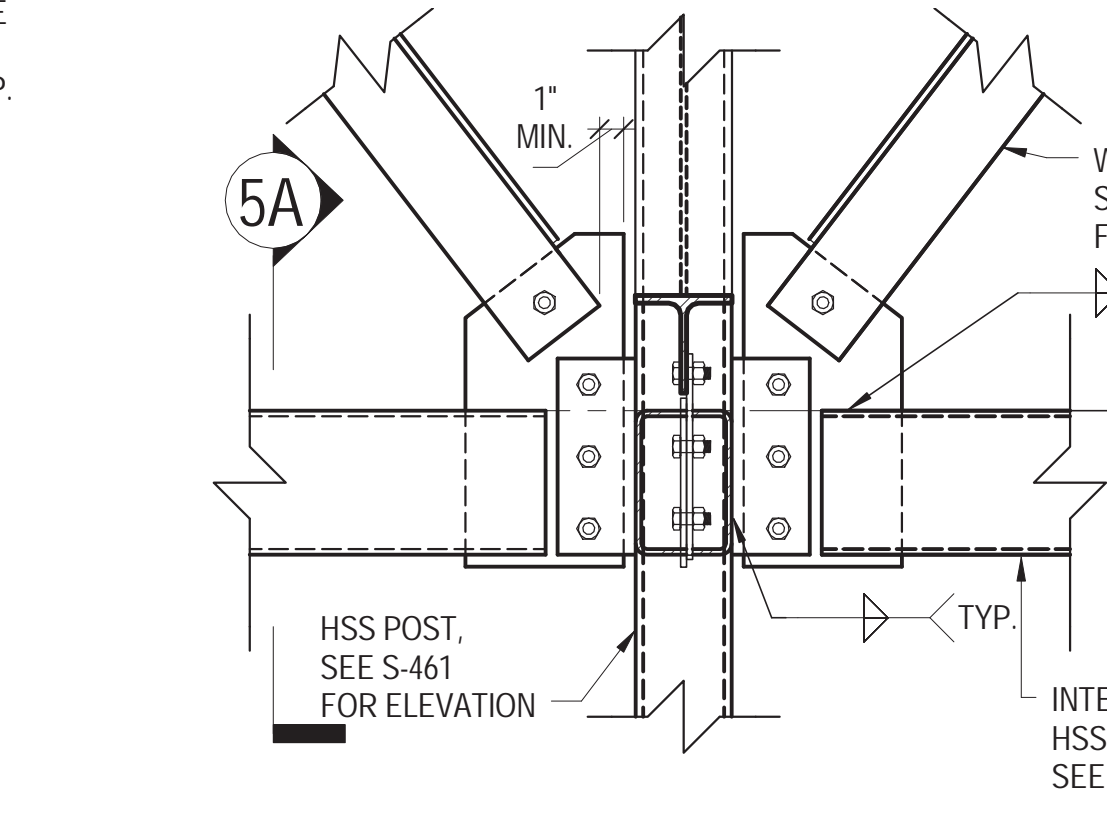
5B HOISTWAY FRAMING - SECTION B

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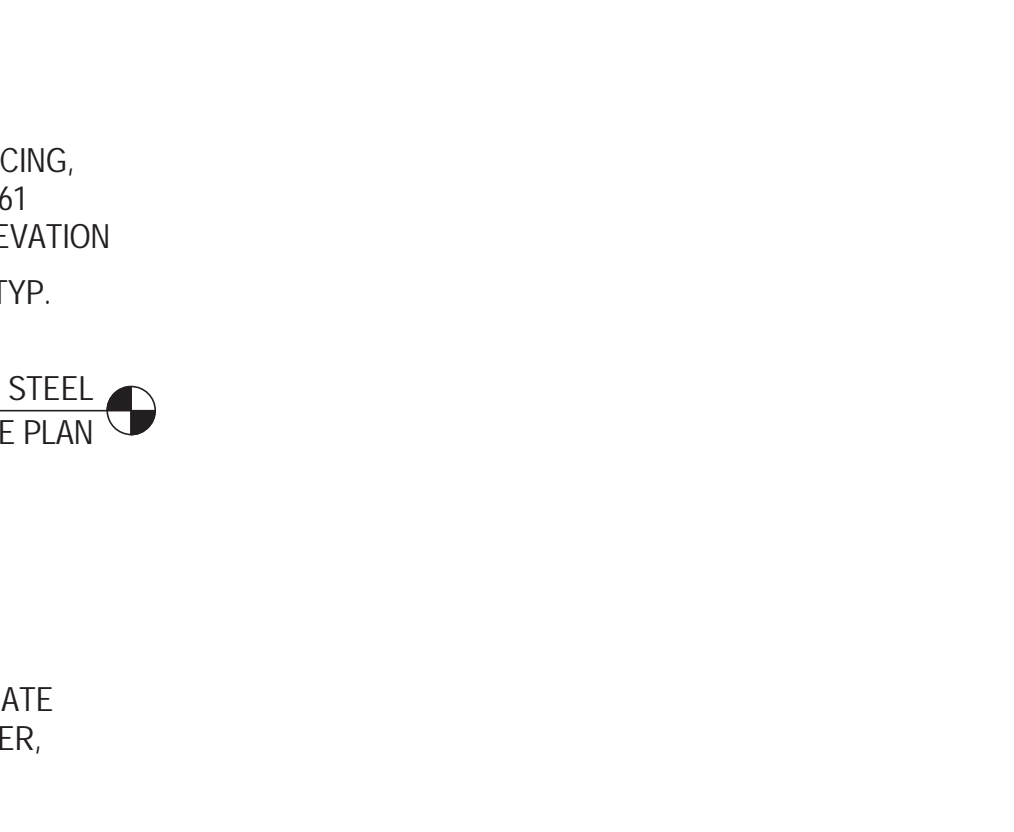
6 INTERMEDIATE HOISTWAY BRACING DETAIL

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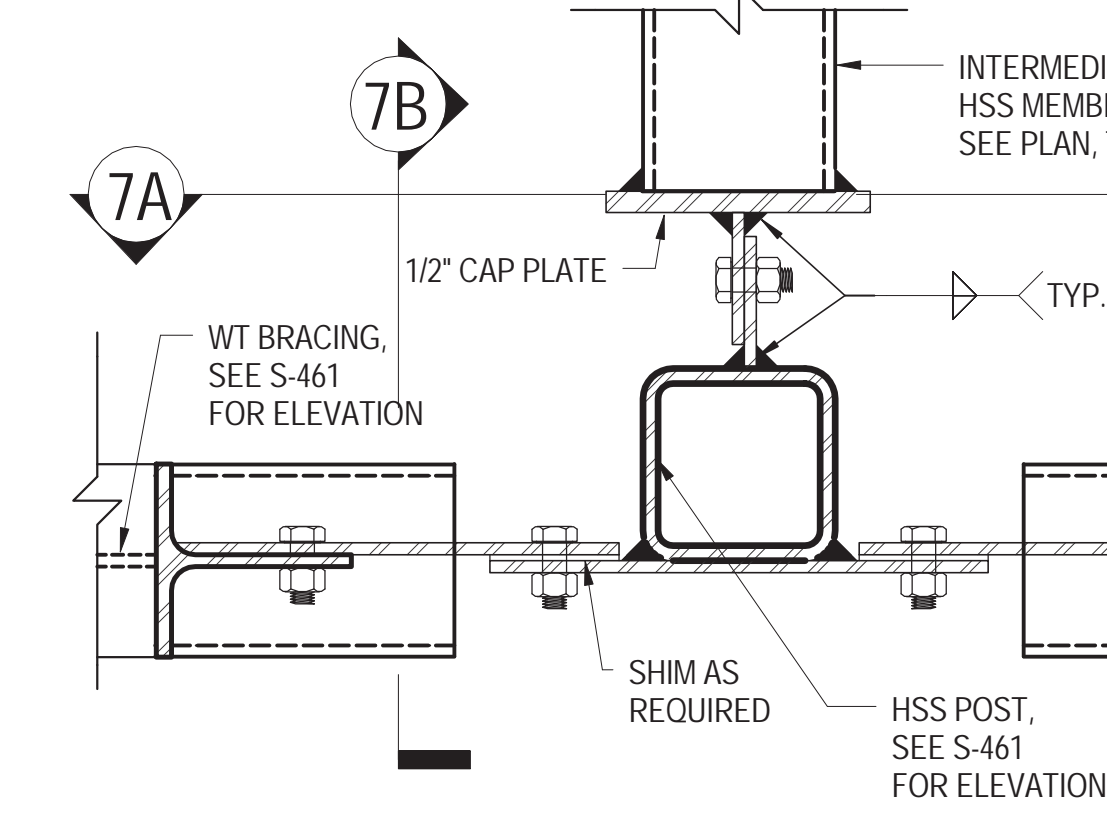
6A HOISTWAY FRAMING - SECTION A

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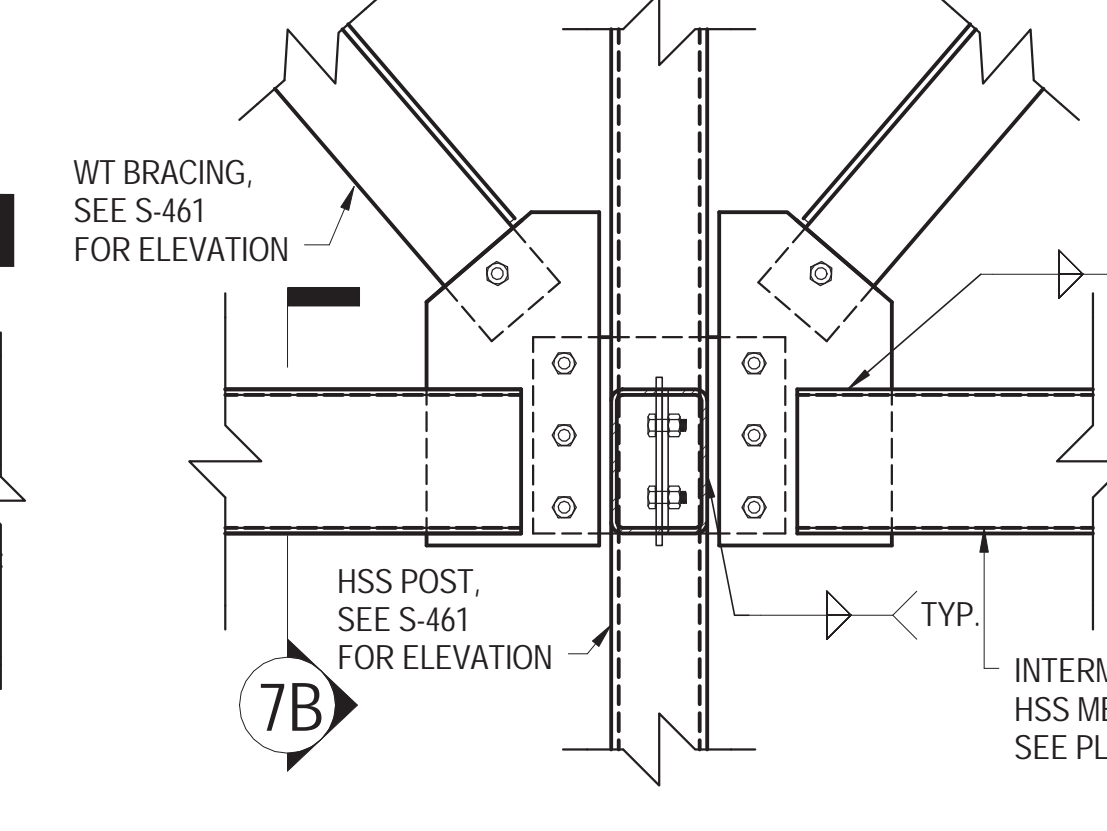
6B HOISTWAY FRAMING - SECTION B

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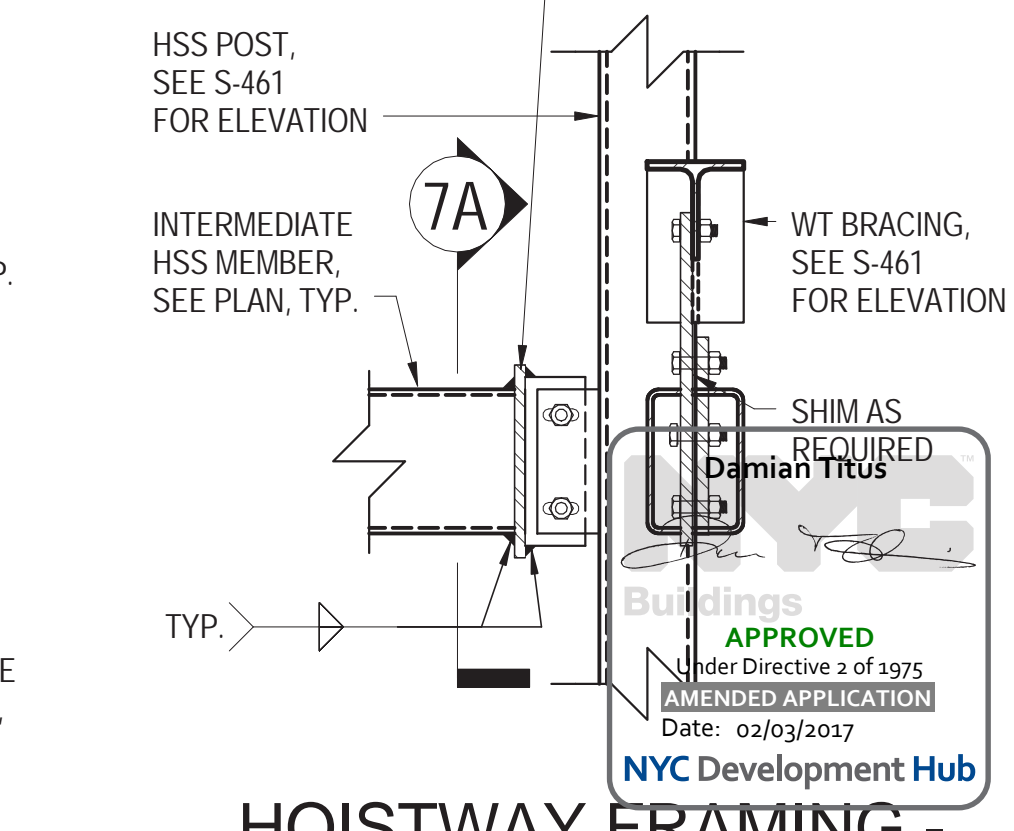
7 INTERMEDIATE HOISTWAY BRACING DETAIL

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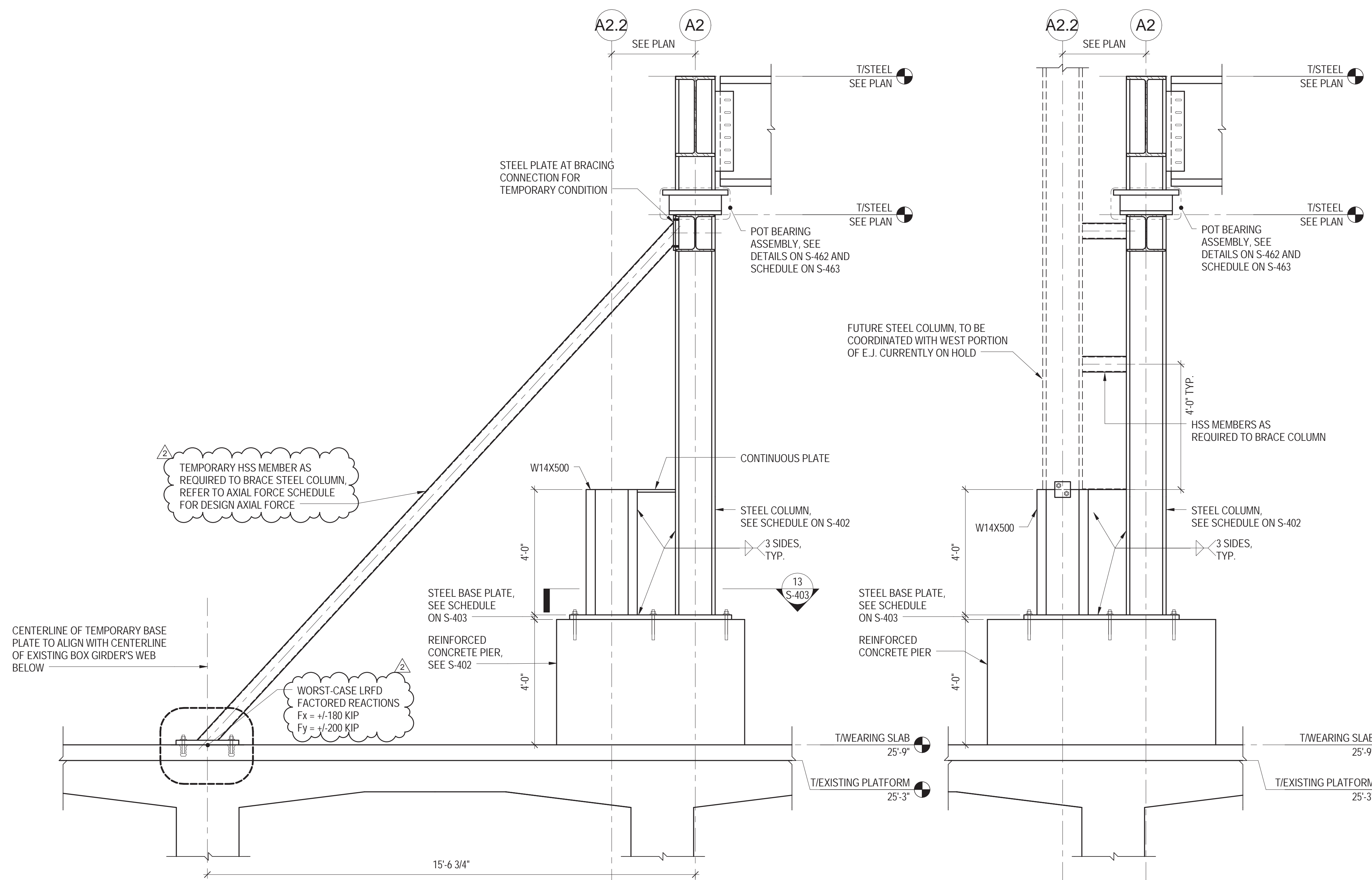
7A HOISTWAY FRAMING - SECTION A

NOT TO SCALE



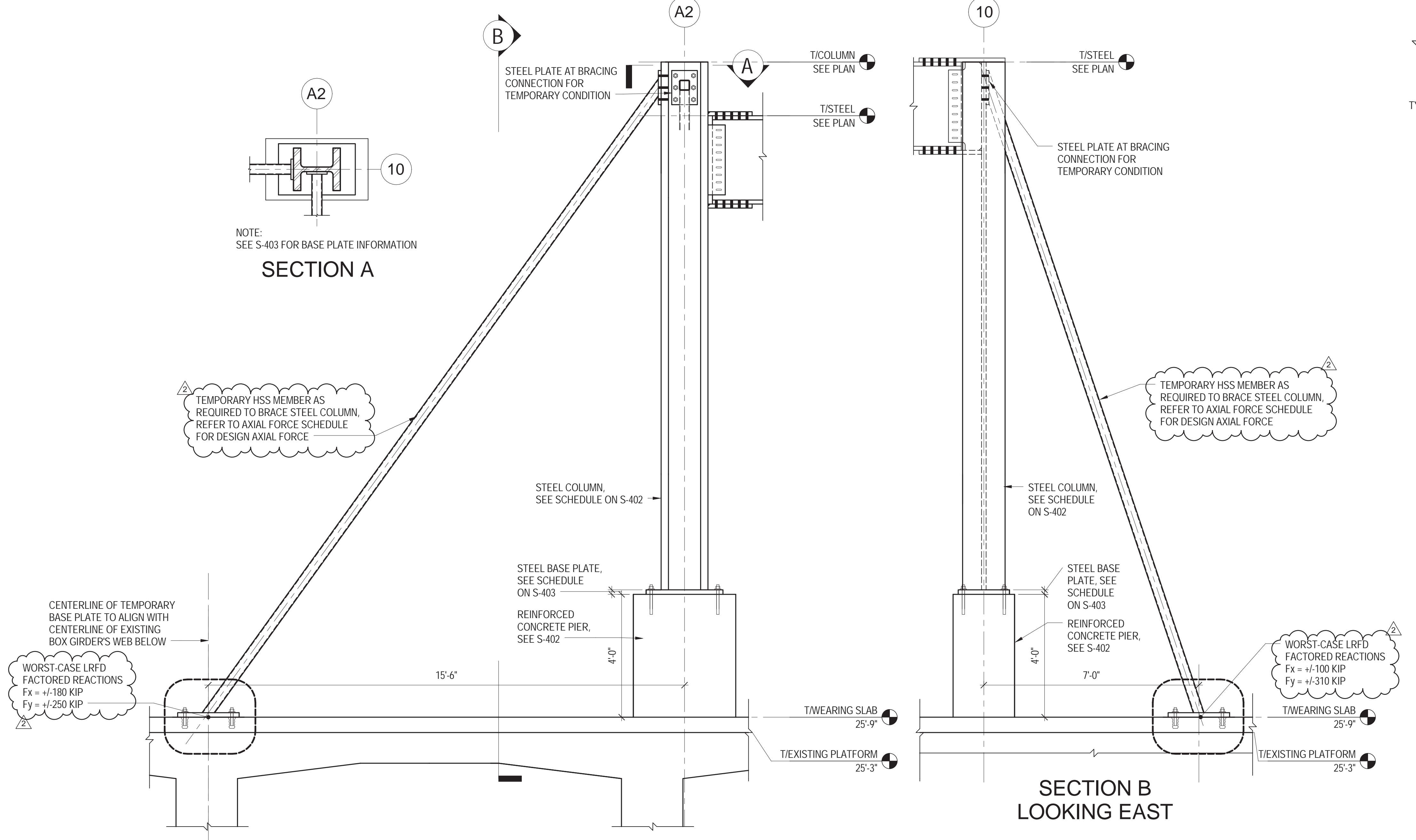
7B HOISTWAY FRAMING - SECTION B

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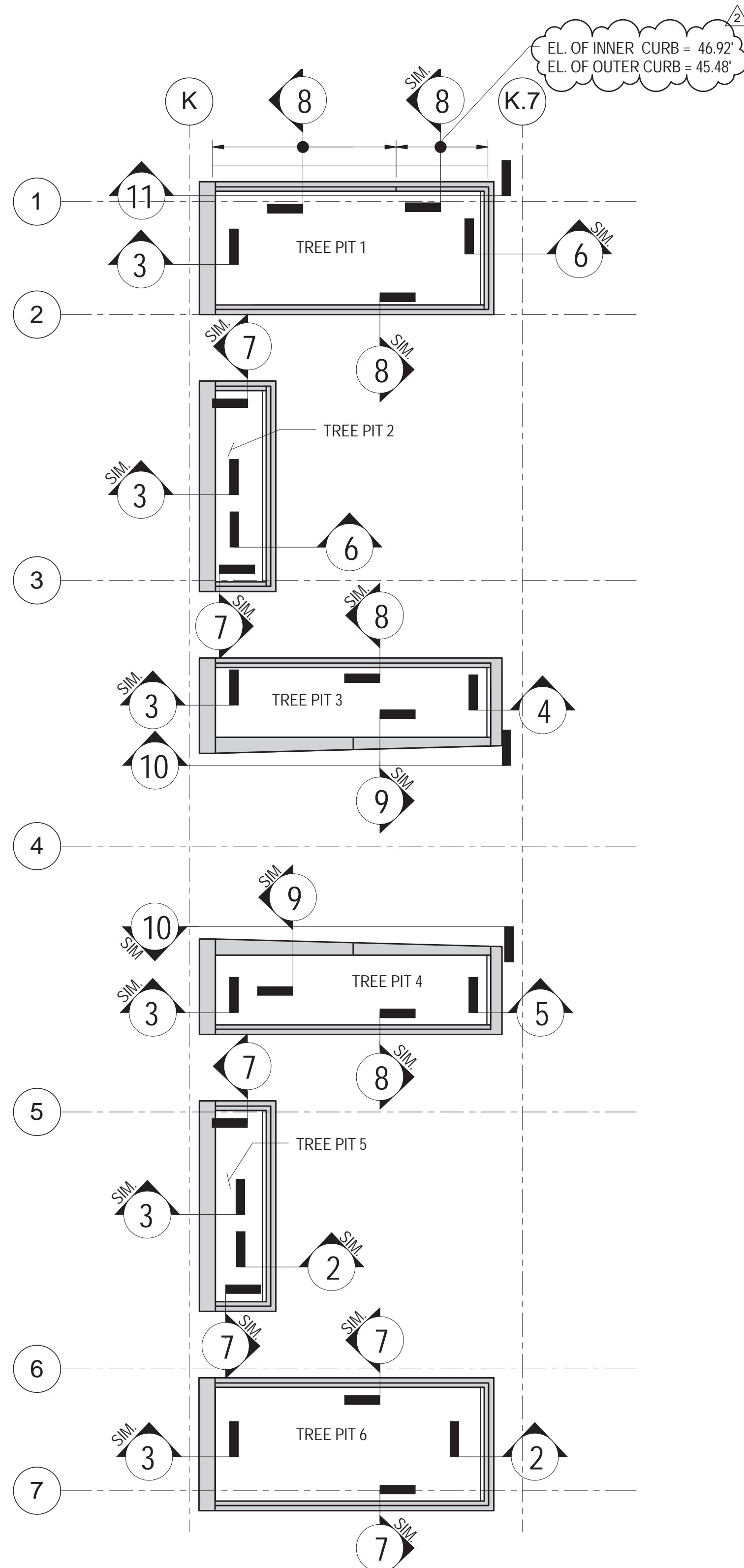
1 TEMPORARY BRACING DETAIL FOR TWO ADJACENT COLUMNS ALONG GRIDLINE A2 - LOOKING NORTH

NOT TO SCALE

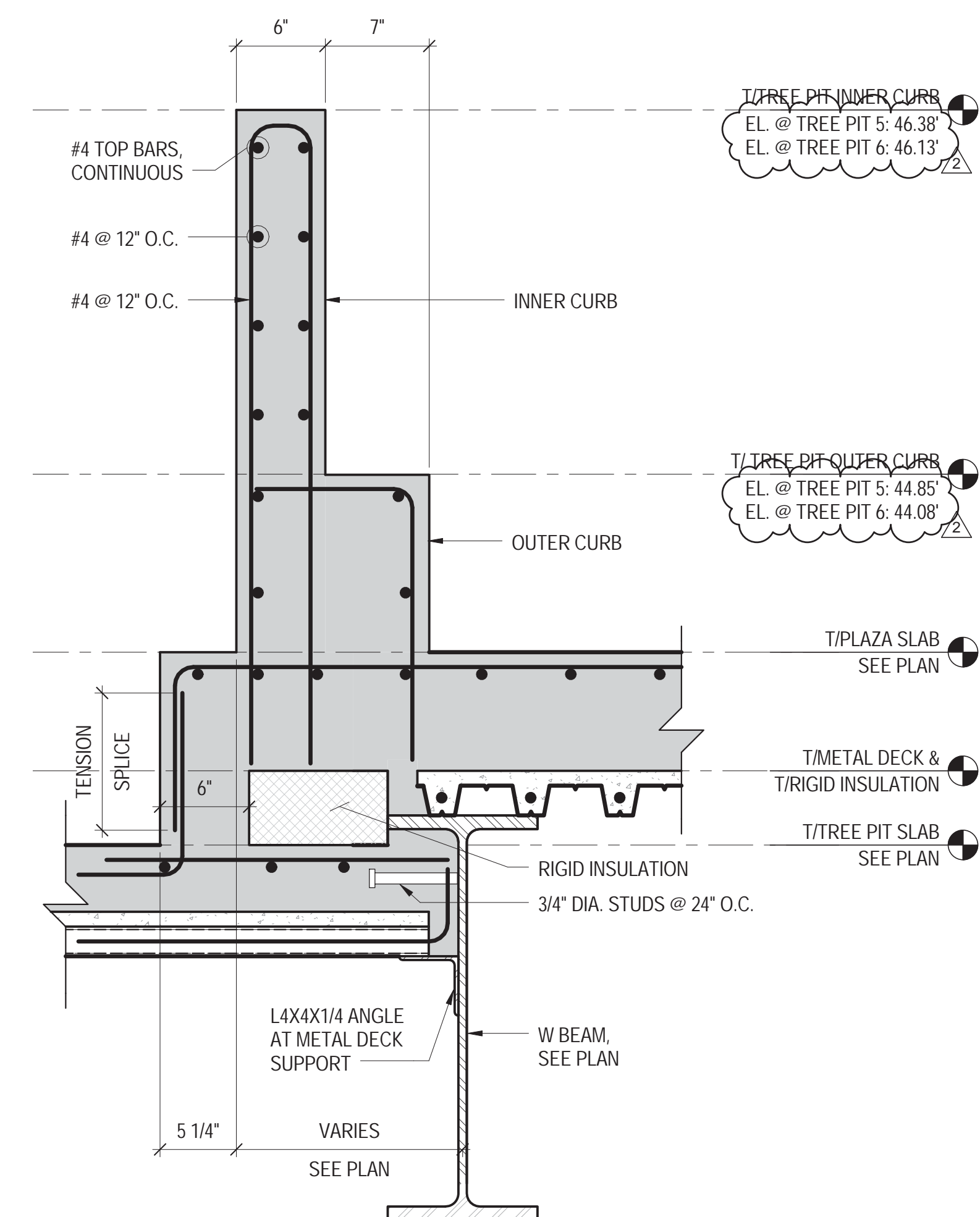


3 TEMPORARY BRACING DETAIL FOR COLUMN LOCATED AT GRIDLINE A2 - 10 - LOOKING NORTH

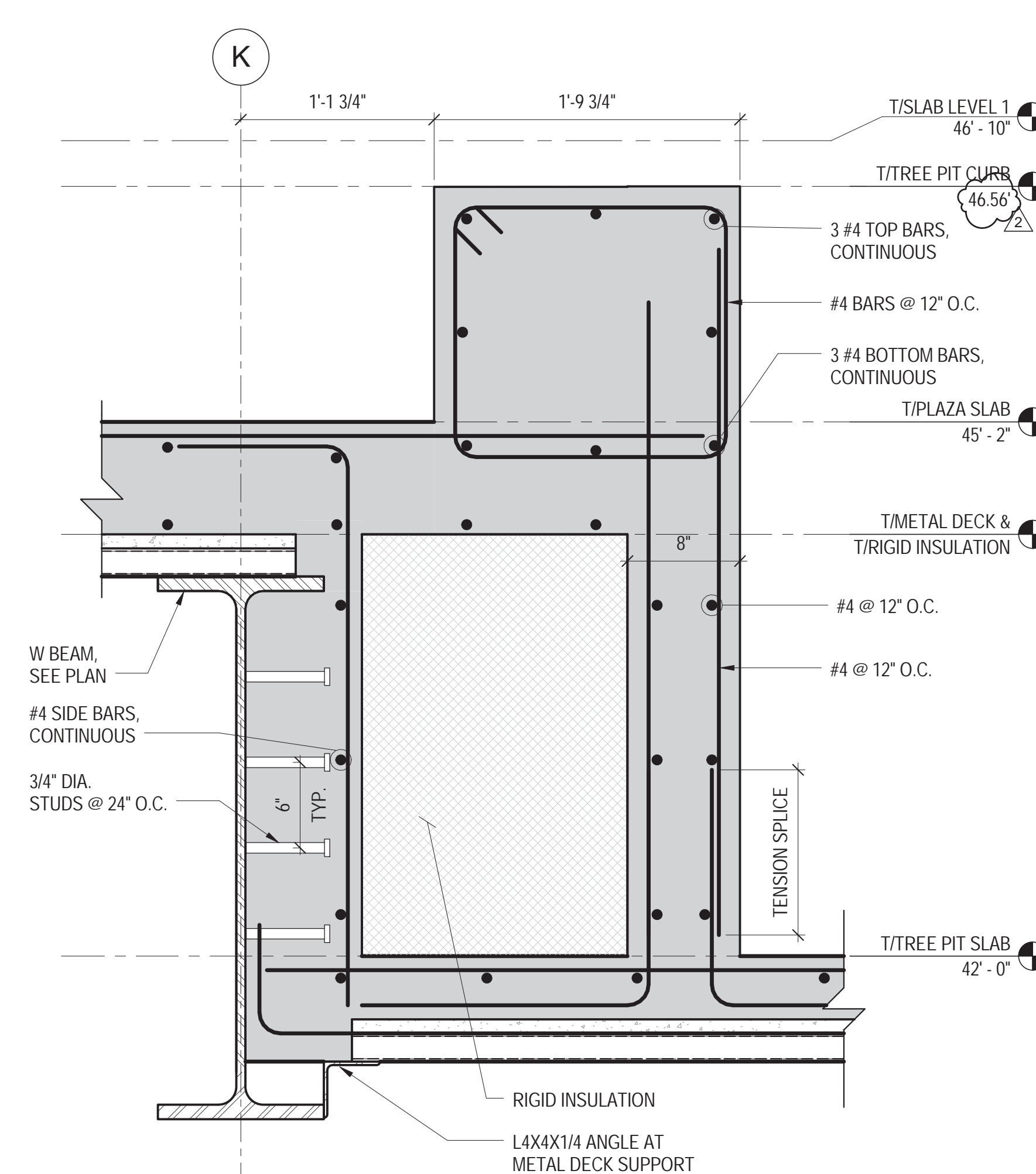
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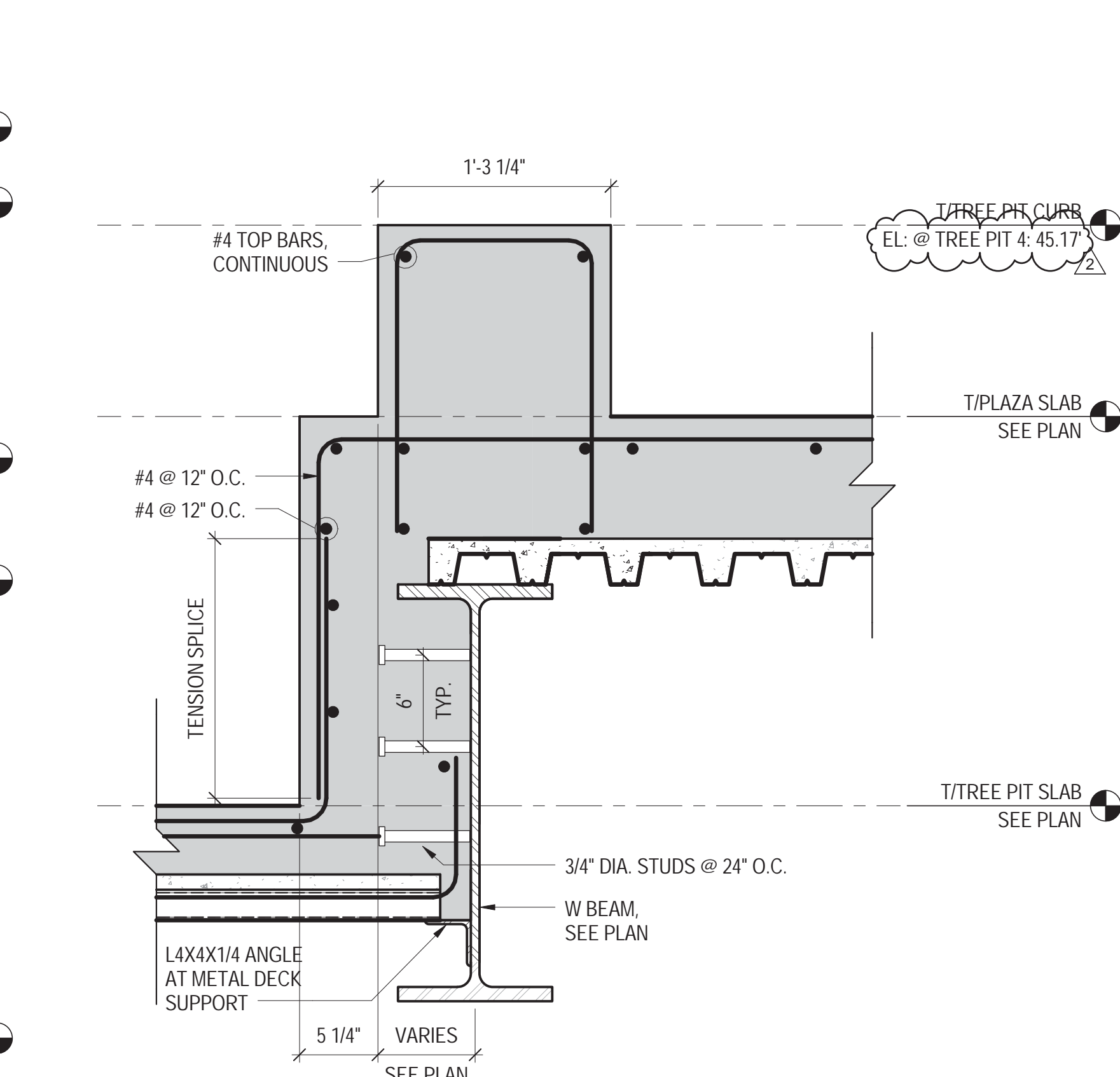
1 EAST PLAZA TREE PIT KEY PLAN
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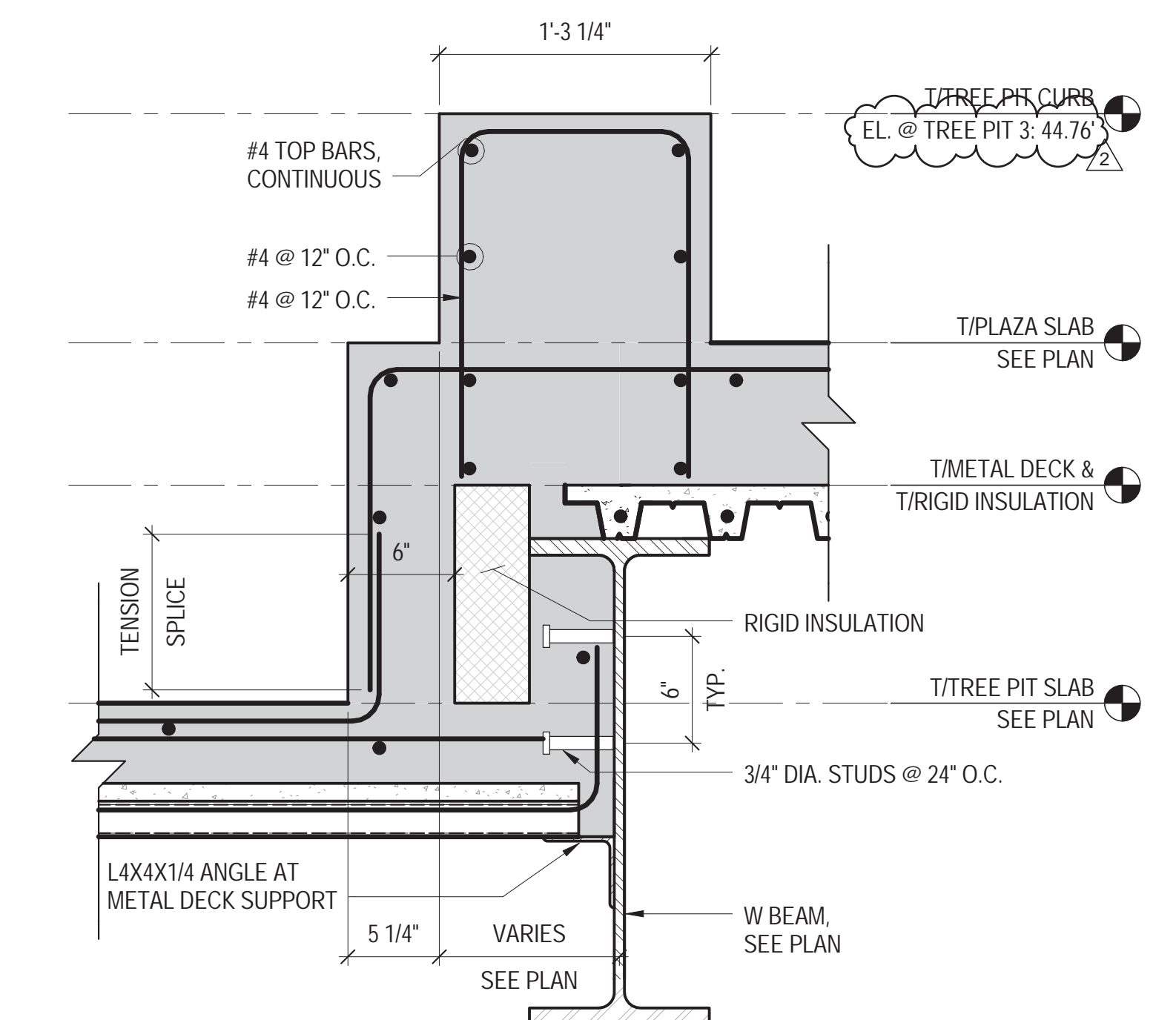
2 TREE PIT CURB SECTION
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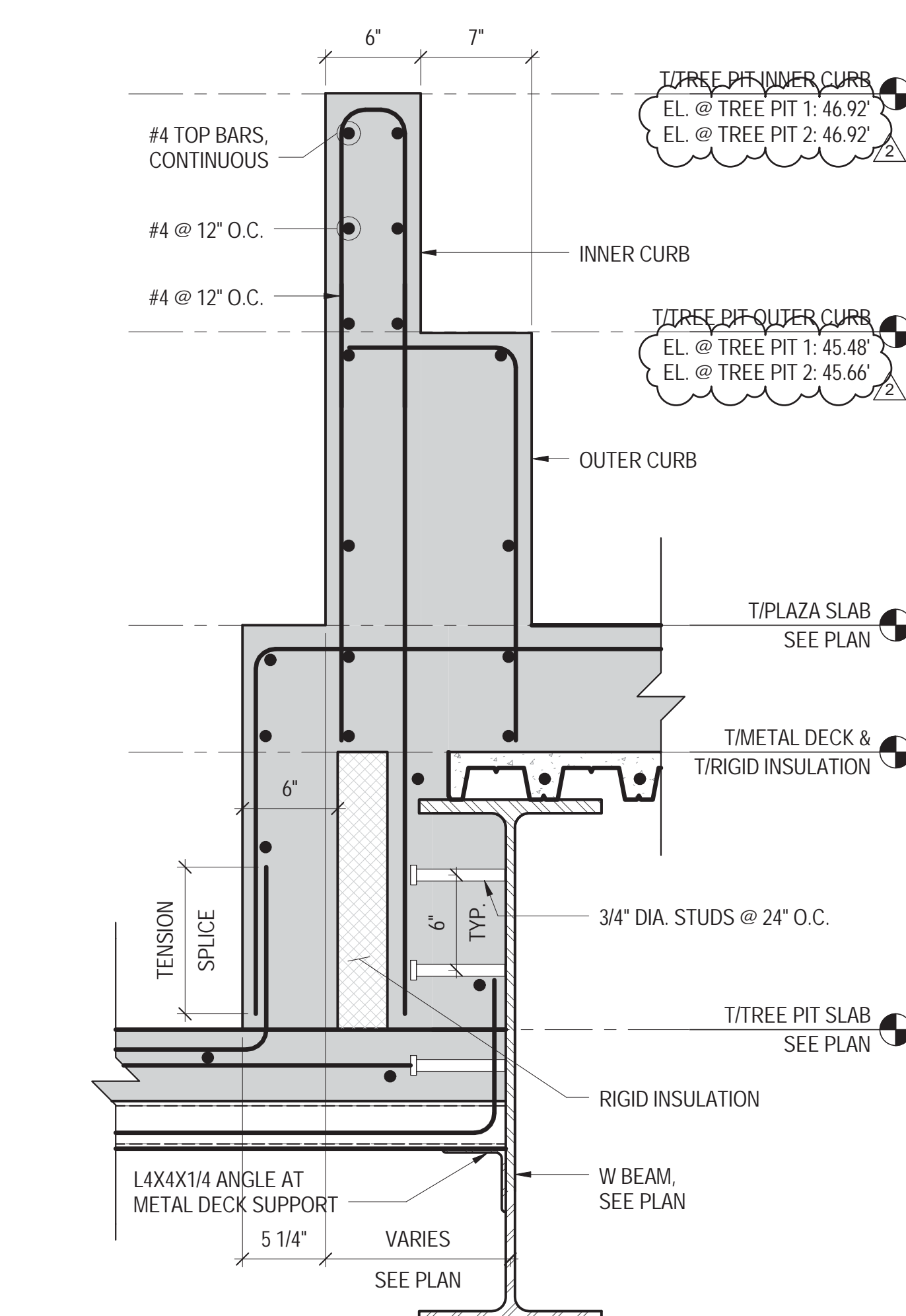
3 TREE PIT CURB DETAIL
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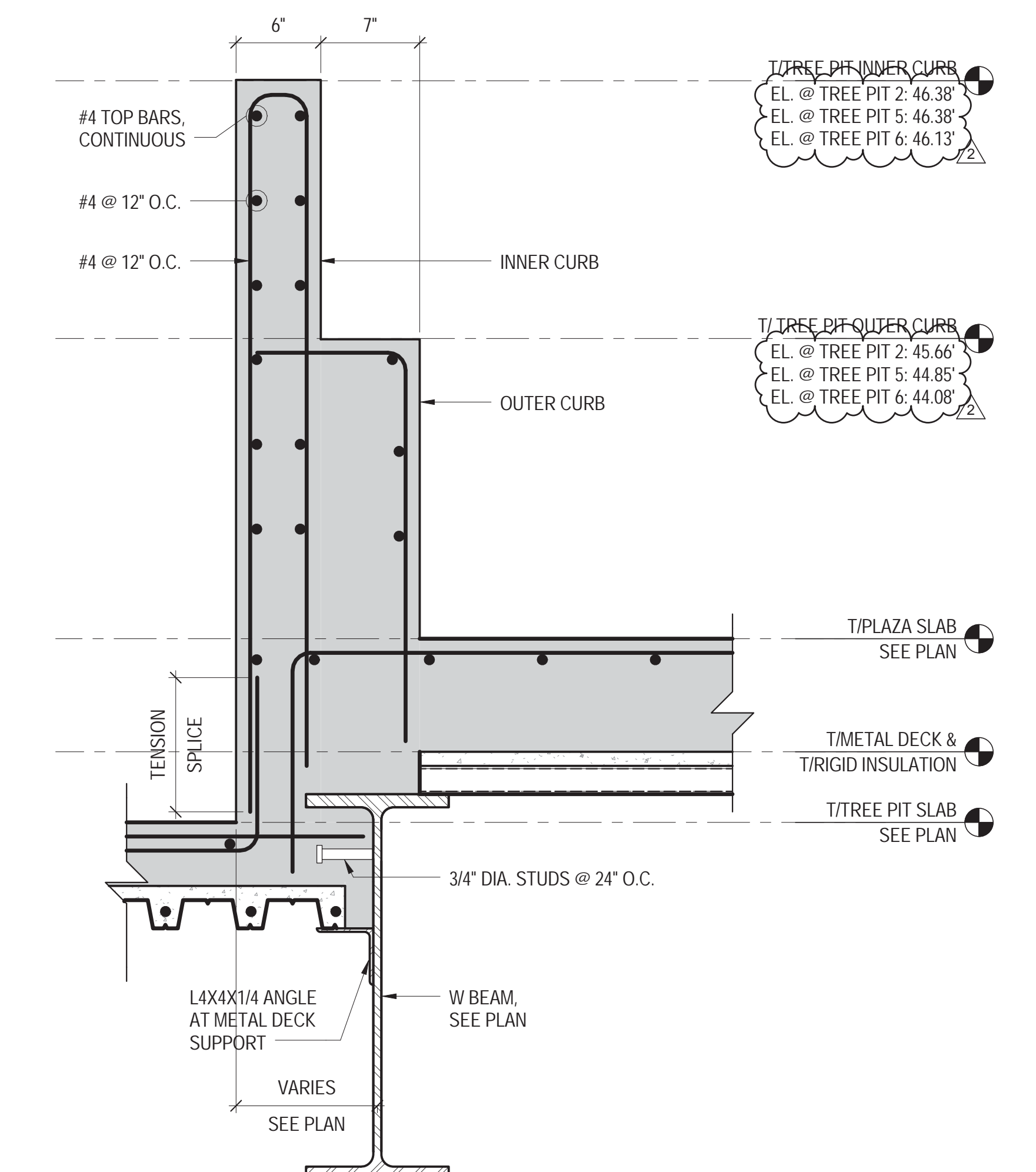
4 TREE PIT 3 SECTION - LOOKING NORTH
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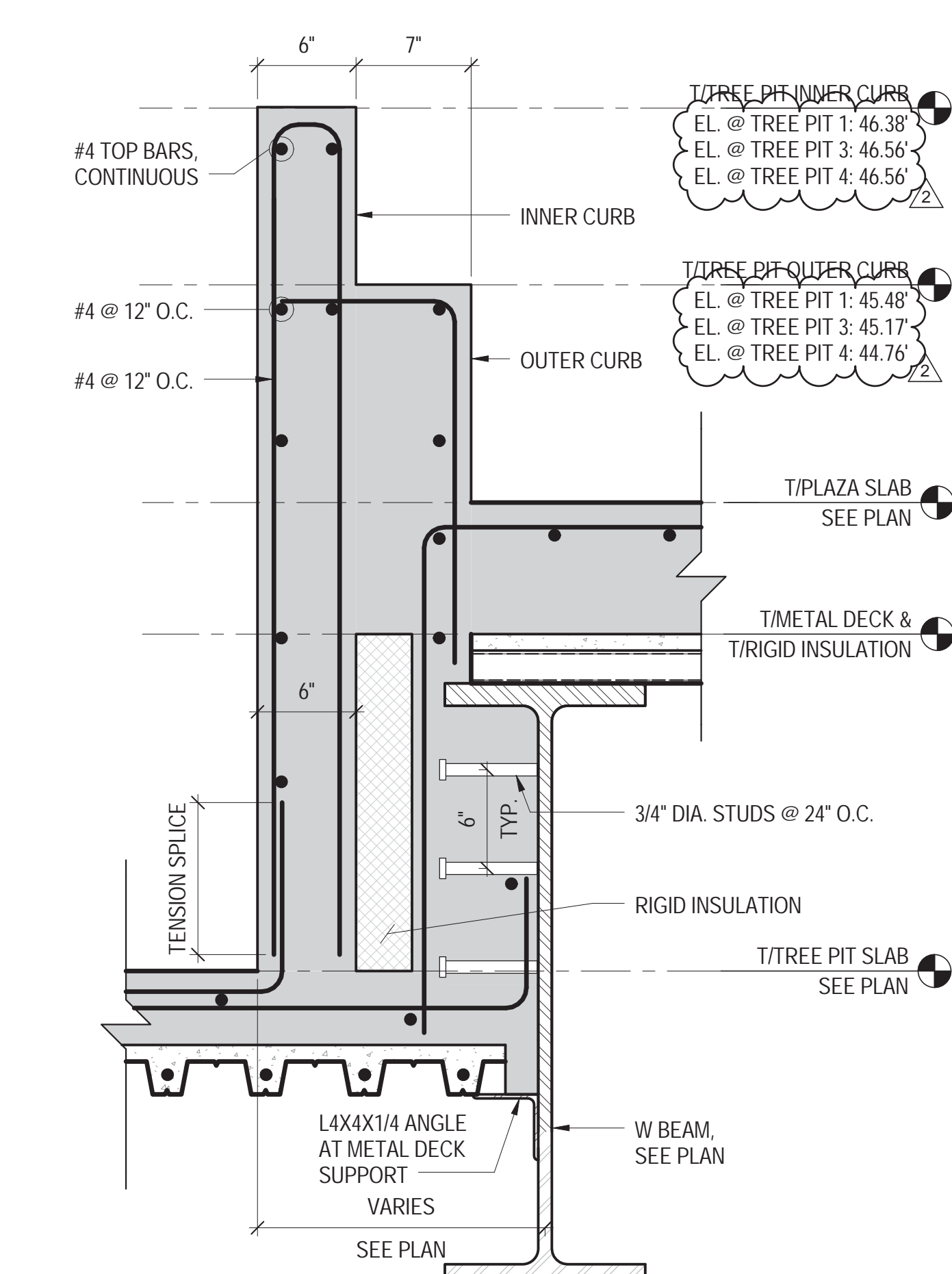
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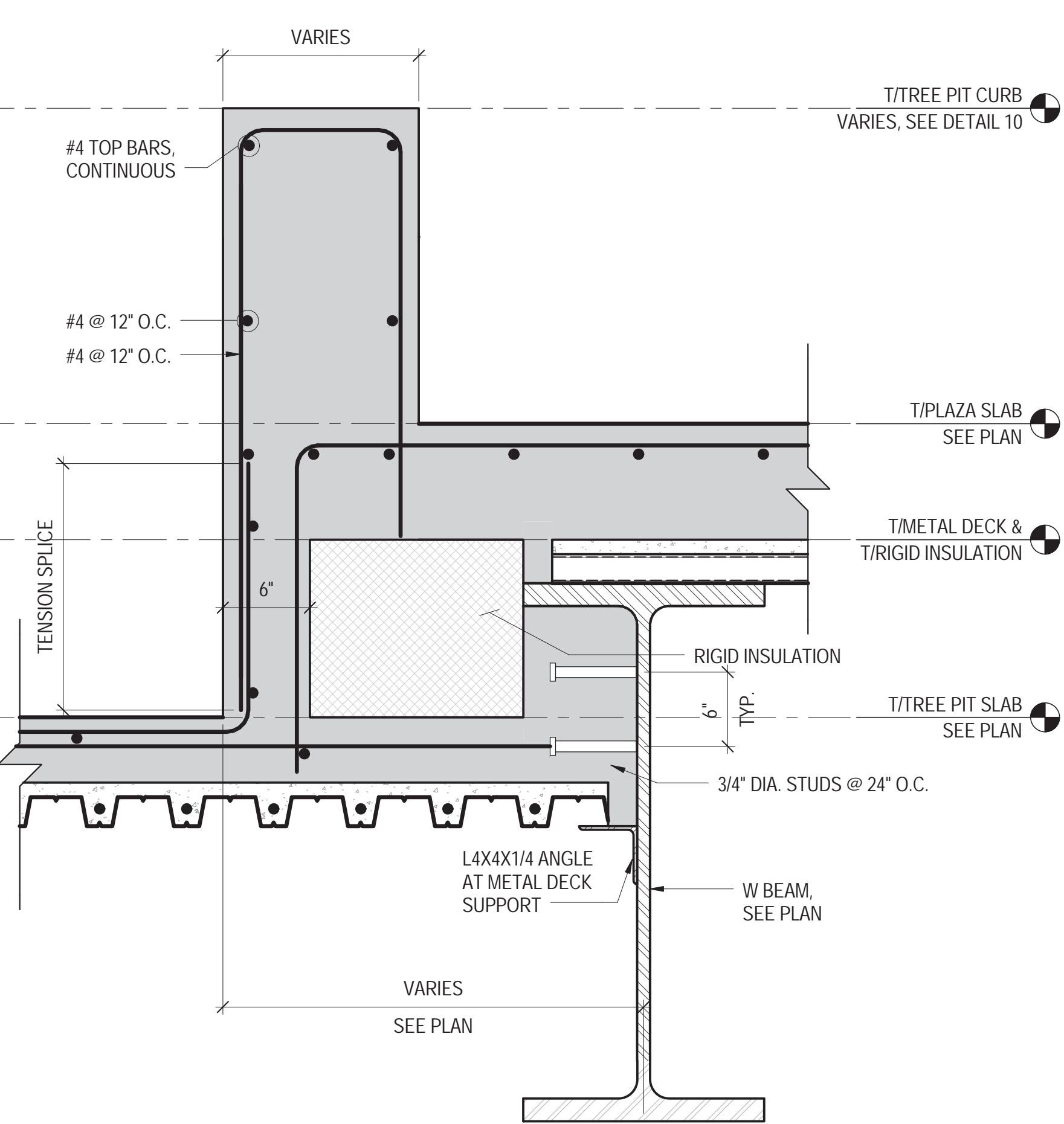
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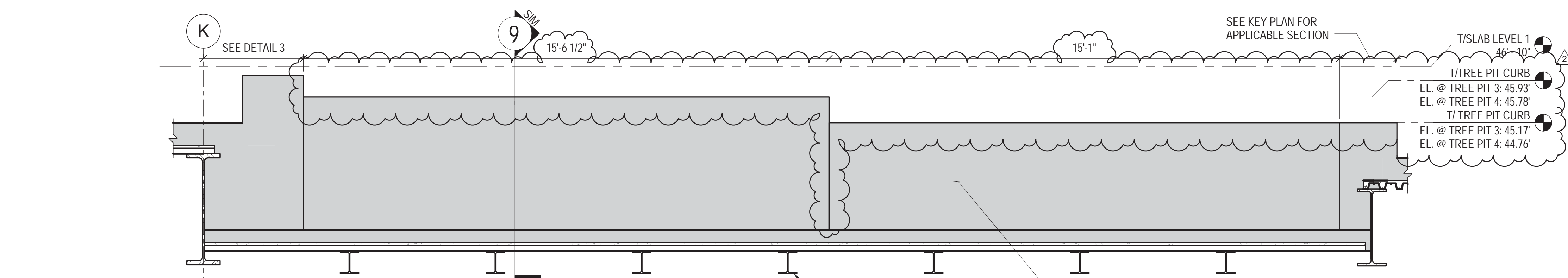
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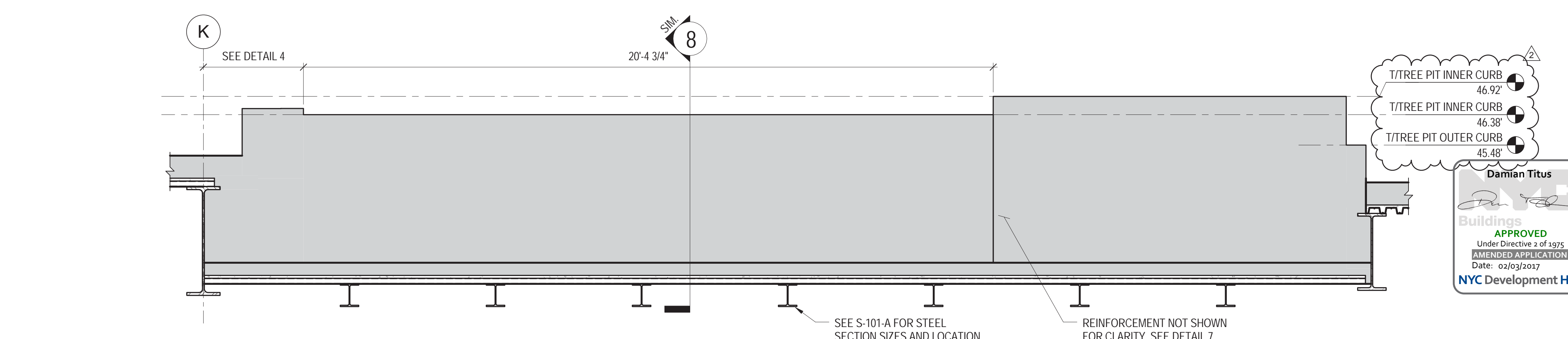
8 TREE PIT CURB SECTION
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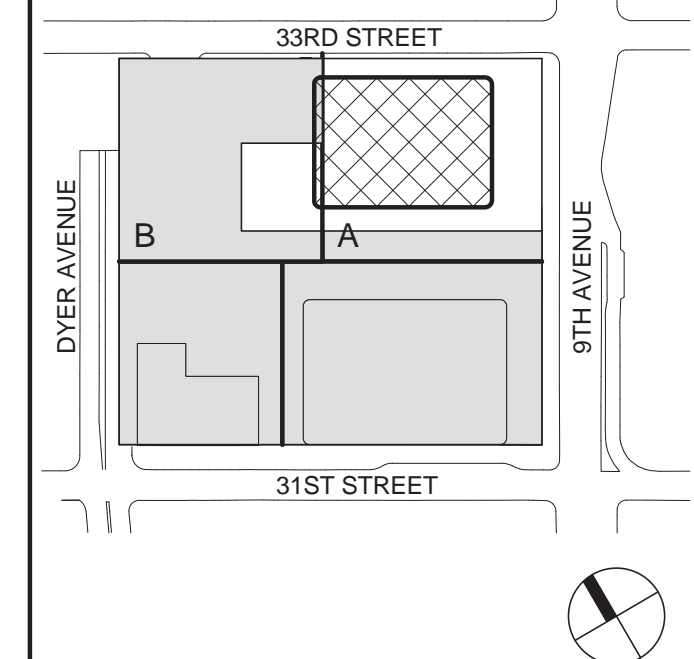
9 TREE PIT CURB SECTION
NOT TO SCALE



10 TREE PIT CURB ELEVATION - TREE PITS 3 & 4
NOT TO SCALE

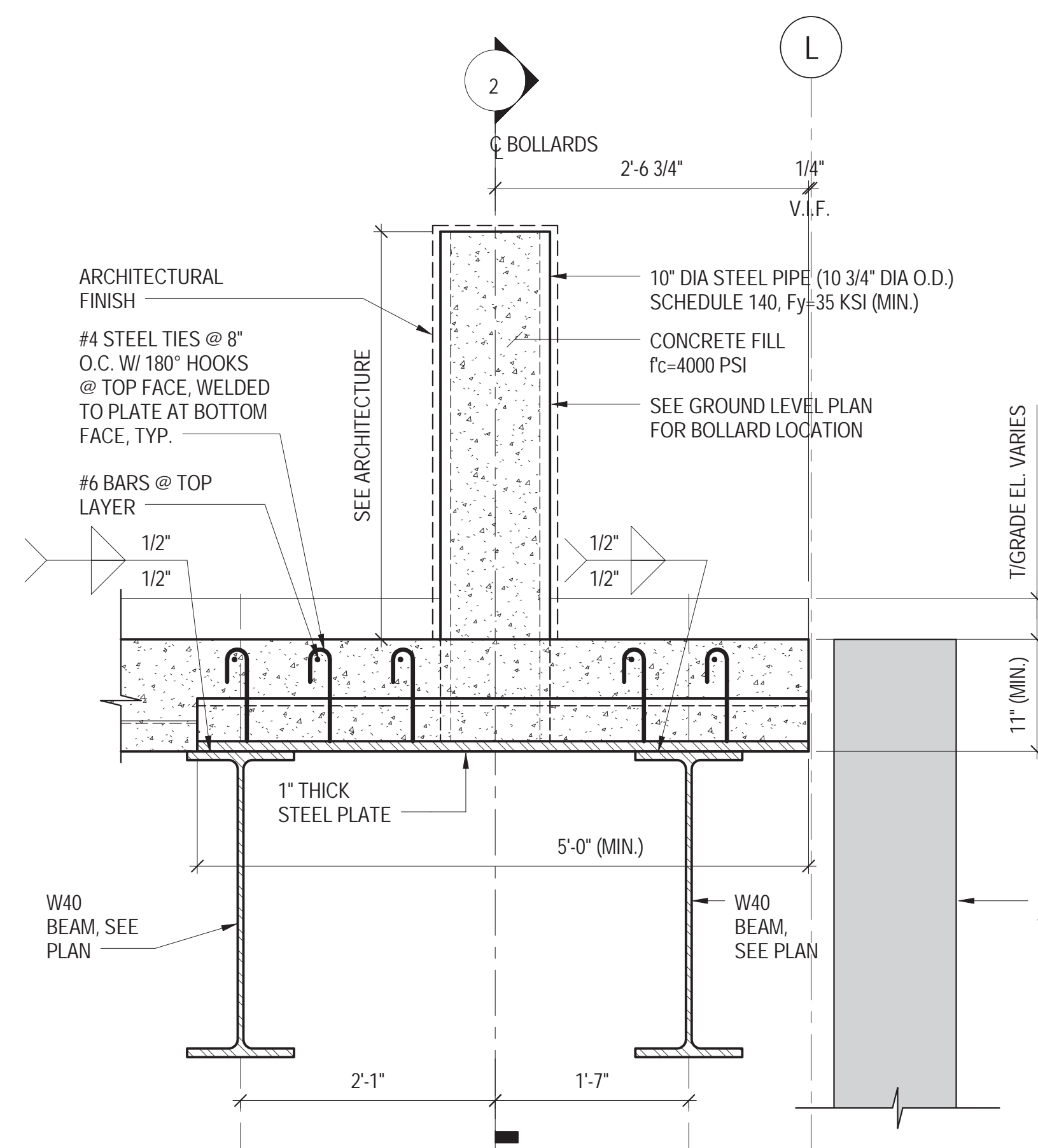


11 TREE PIT CURB ELEVATION - TREE PIT 1
NOT TO SCALE



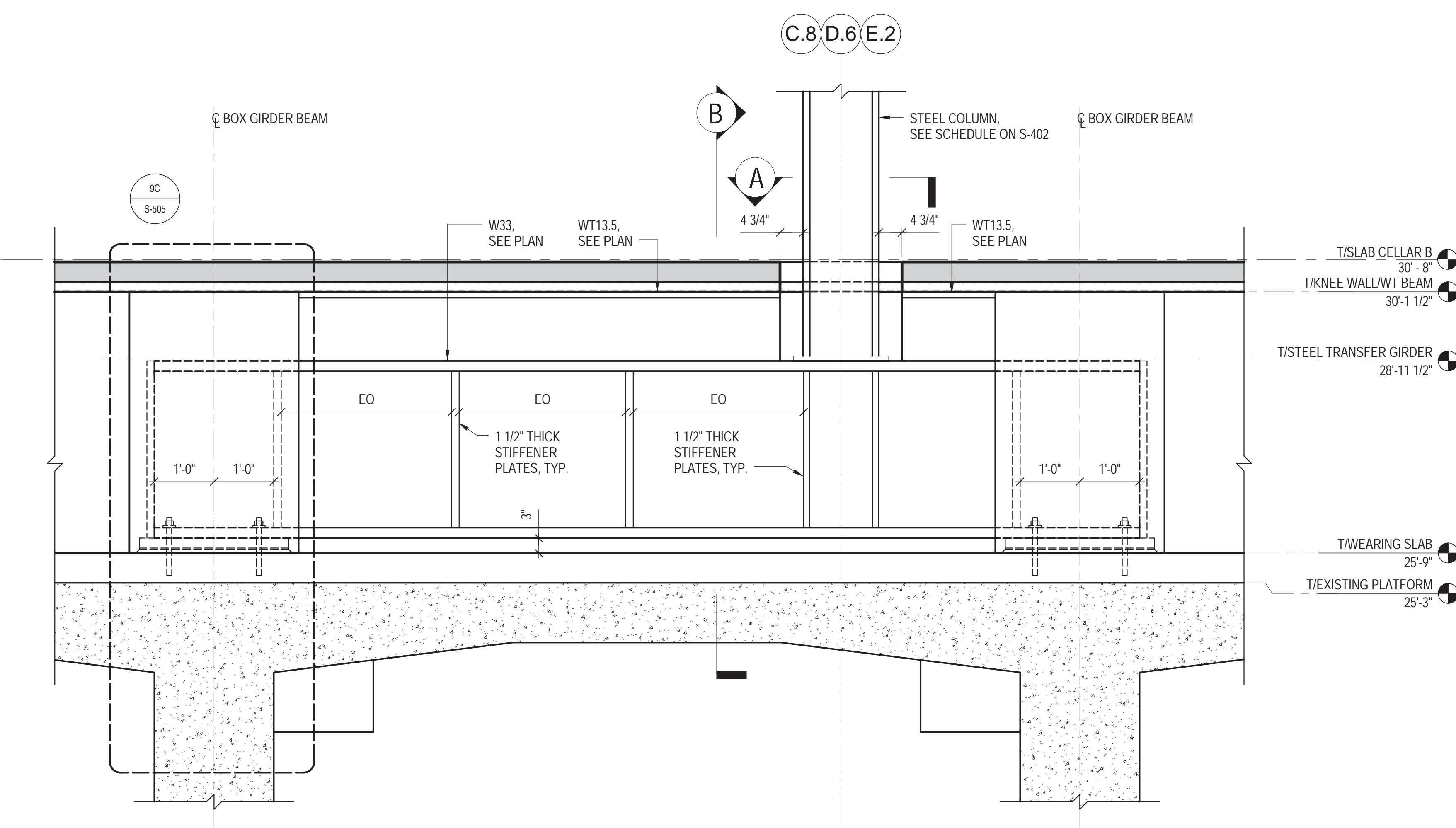
No.	Date	Description
2	22 APR 2016	ISSUED FOR P&A
1	16 DEC 2015	ISSUED FOR PERMIT

1 SHALLOW FOUNDATION BOLLARD SECTION
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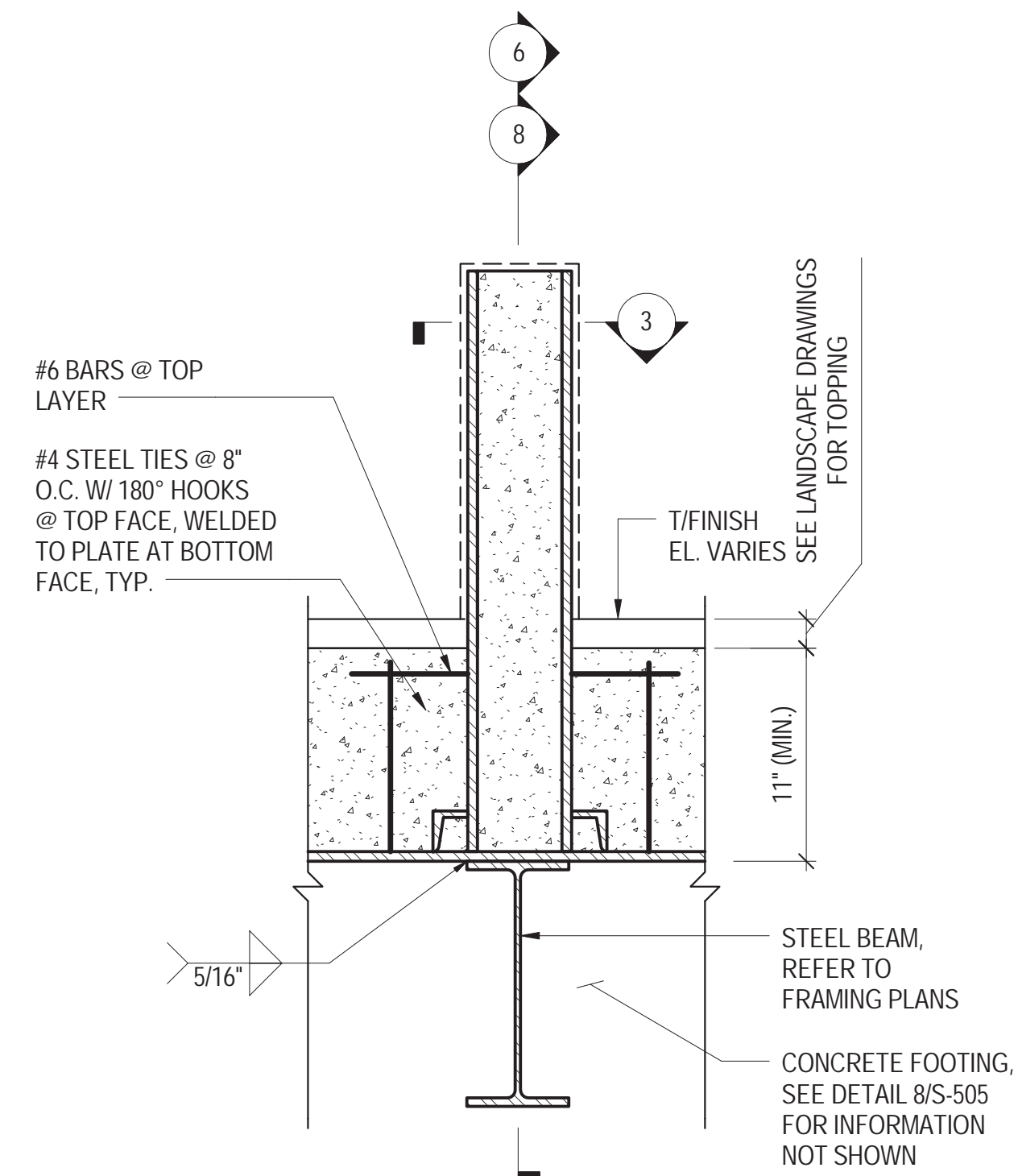
- NOTES:
- SEE SECTION 4 FOR STEEL ASSEMBLY.
 - ALL BOLLARD PIPES SHALL BE CONCRETE FILLED.
 - SEE ARCHITECTURAL DRAWINGS FOR FINISH DIMENSIONS.
 - ON EACH SIDE OF PIPE TIES MAY BE STAGGERED TO FIT.
 - PLACE HOOKS OF ALTERNATE BARS IN DIFFERENT CORNERS USING ALL FOUR CORNERS.
 - DETAIL AS PER WEIDINGER ASSOCIATES, INC. IN THE SIGNED AND SEALED CALCULATIONS FOR THE BOLLARD ANALYSIS ADJACENT TO CONED VAULT SUBMITTED ON OCTOBER 14TH, 2015.

6 BOLLARD SUPPORT DETAIL AT STEEL BEAM
NOT TO SCALE



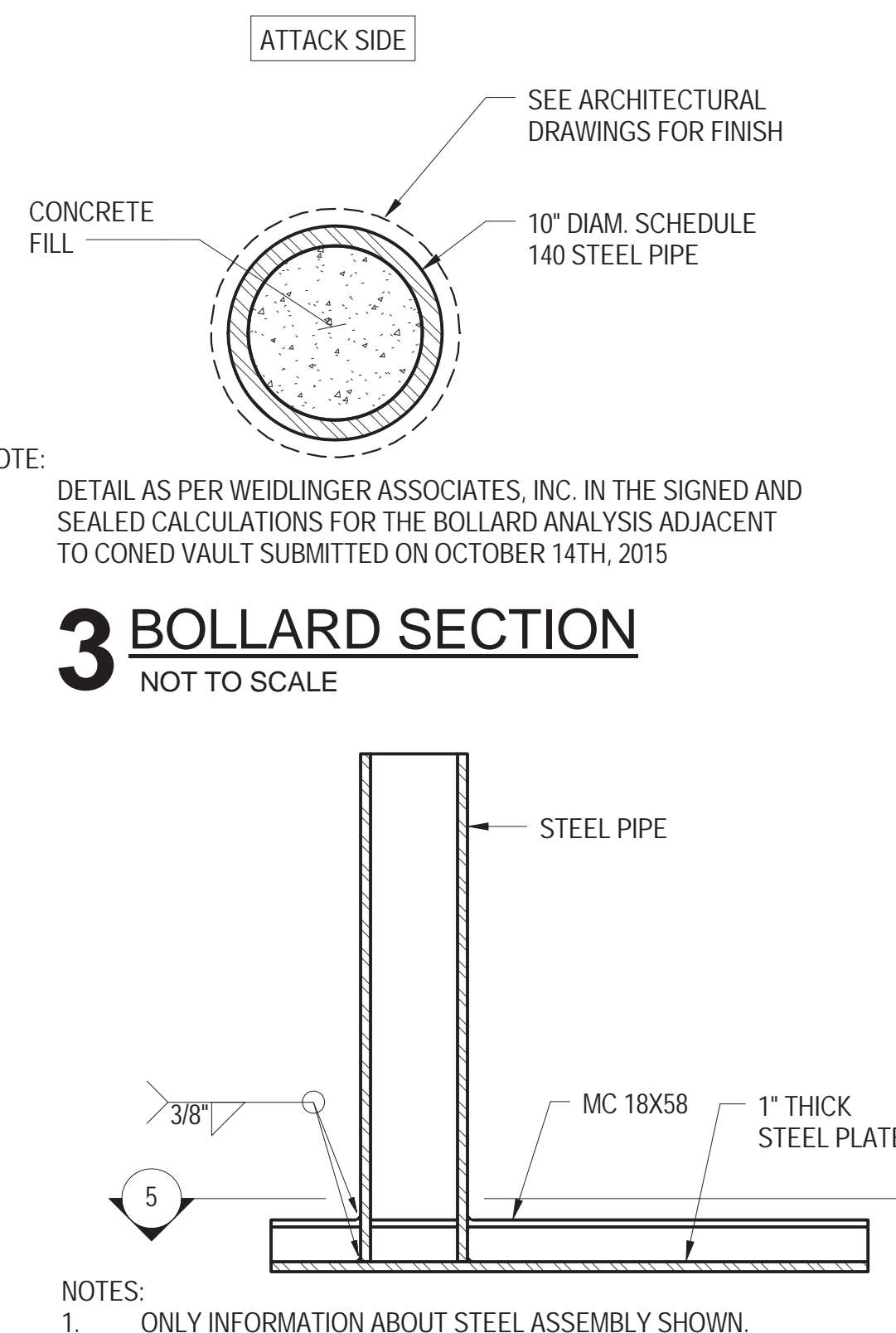
9 TYPICAL TRANSFER COLUMN AT PRECAST BOX GIRDERS
NOT TO SCALE

2 SHALLOW FOUNDATION BOLLARD ELEVATION
NOT TO SCALE



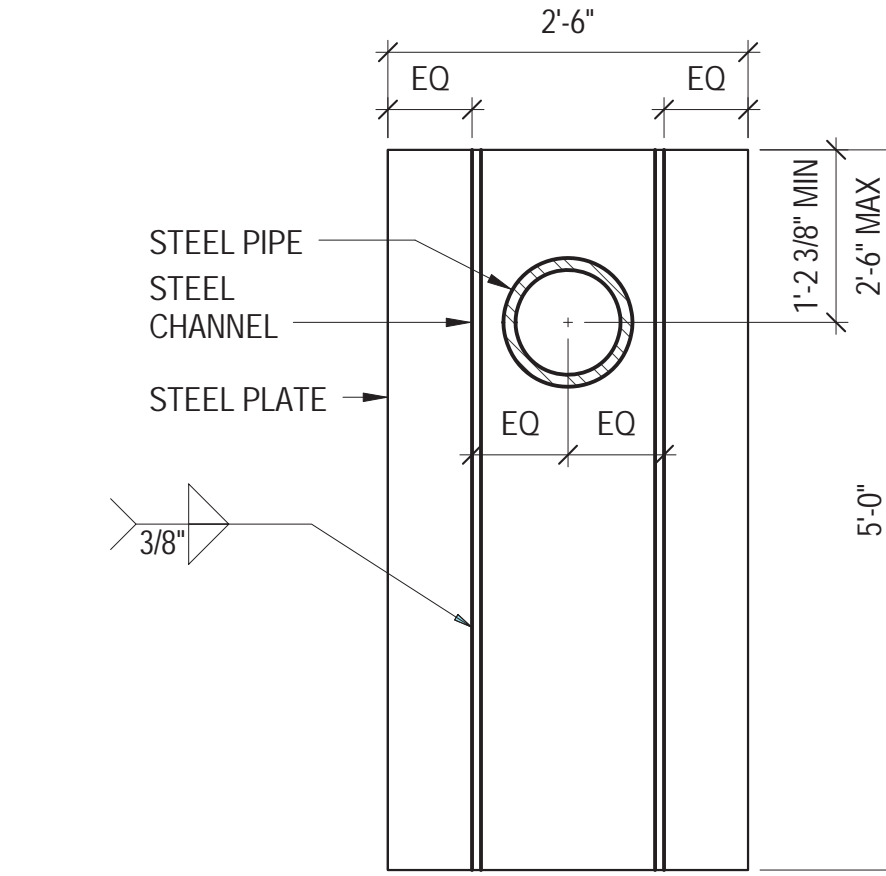
- NOTES:
- SEE SECTION 1 FOR INFORMATION NOT SHOWN.
 - DETAIL AS PER WEIDINGER ASSOCIATES, INC. IN THE SIGNED AND SEALED CALCULATIONS FOR THE BOLLARD ANALYSIS ADJACENT TO CONED VAULT SUBMITTED ON OCTOBER 14TH, 2015.

3 BOLLARD SECTION
NOT TO SCALE



- NOTES:
- ONLY INFORMATION ABOUT STEEL ASSEMBLY SHOWN.
 - STEEL ASSEMBLY SHALL BE FULLY GROUTED.
 - DETAIL AS PER WEIDINGER ASSOCIATES, INC. IN THE SIGNED AND SEALED CALCULATIONS FOR THE BOLLARD ANALYSIS ADJACENT TO CONED VAULT SUBMITTED ON OCTOBER 14TH, 2015.

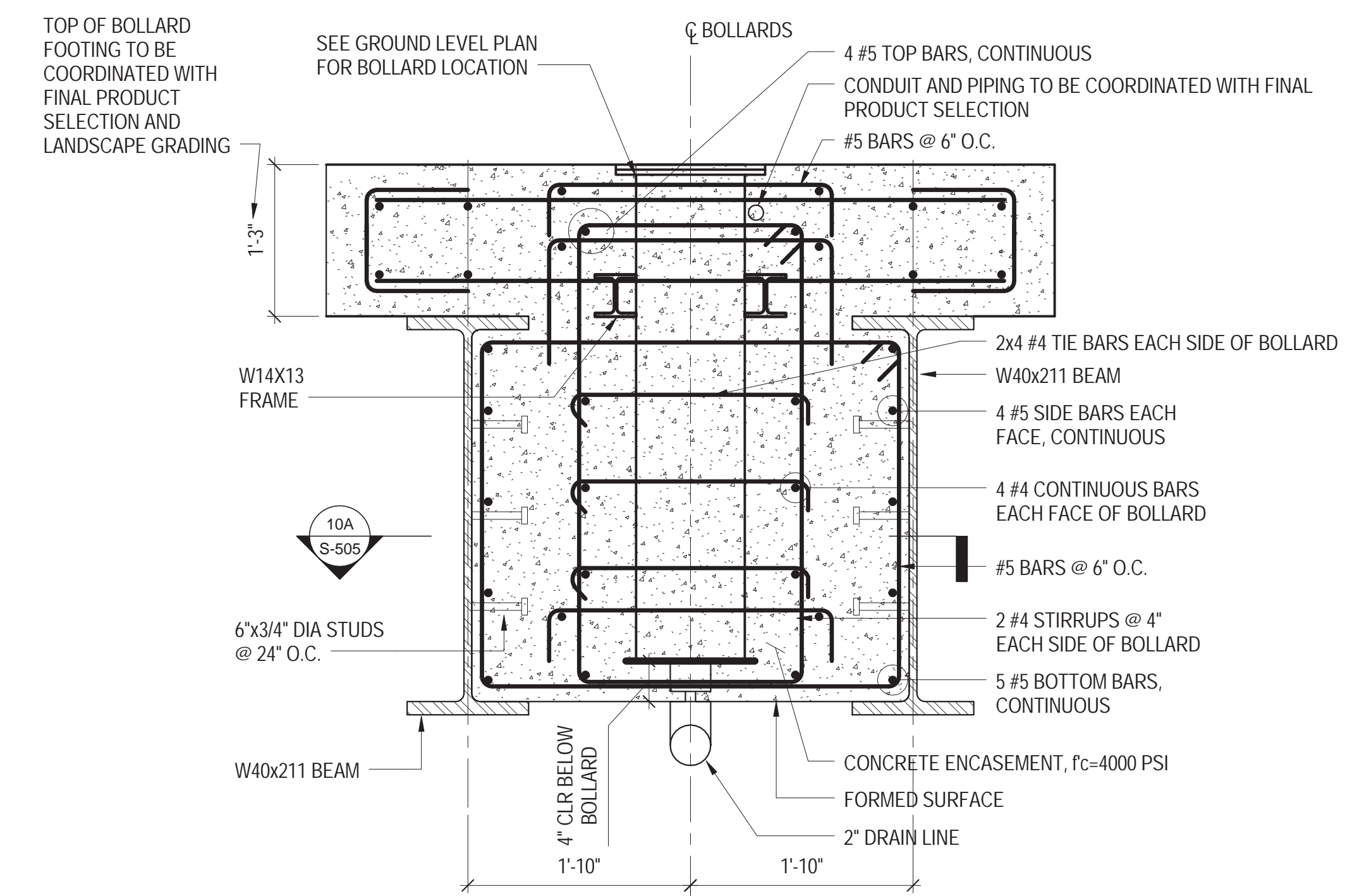
4 STEEL ASSEMBLY SECTION
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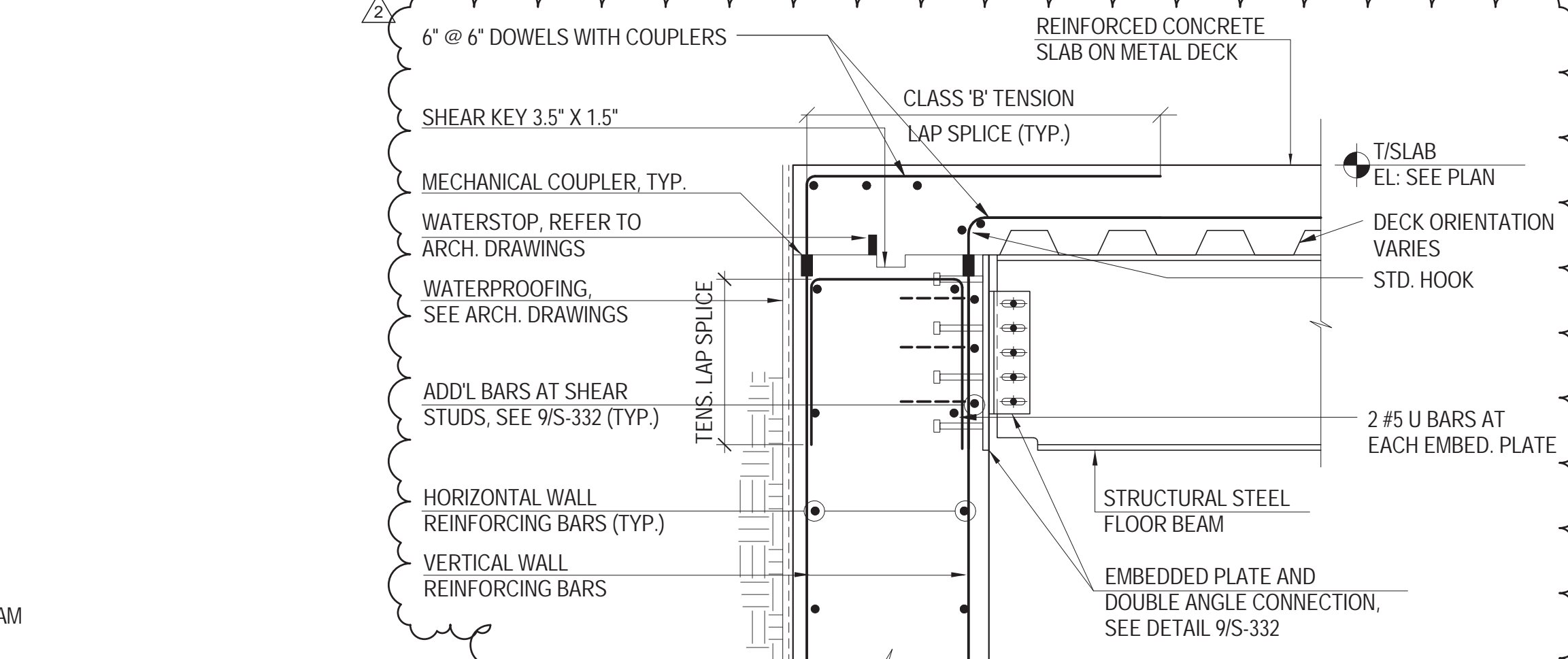
- NOTES:
- ONLY INFORMATION ABOUT STEEL ASSEMBLY SHOWN.
 - STEEL ASSEMBLY SHALL BE FULLY GROUTED.
 - SEE SECTION 4 FOR INFORMATION NOT SHOWN.
 - DETAIL AS PER WEIDINGER ASSOCIATES, INC. IN THE SIGNED AND SEALED CALCULATIONS FOR THE BOLLARD ANALYSIS ADJACENT TO CONED VAULT SUBMITTED ON OCTOBER 14TH, 2015.

5 STEEL ASSEMBLY PLAN
NOT TO SCALE

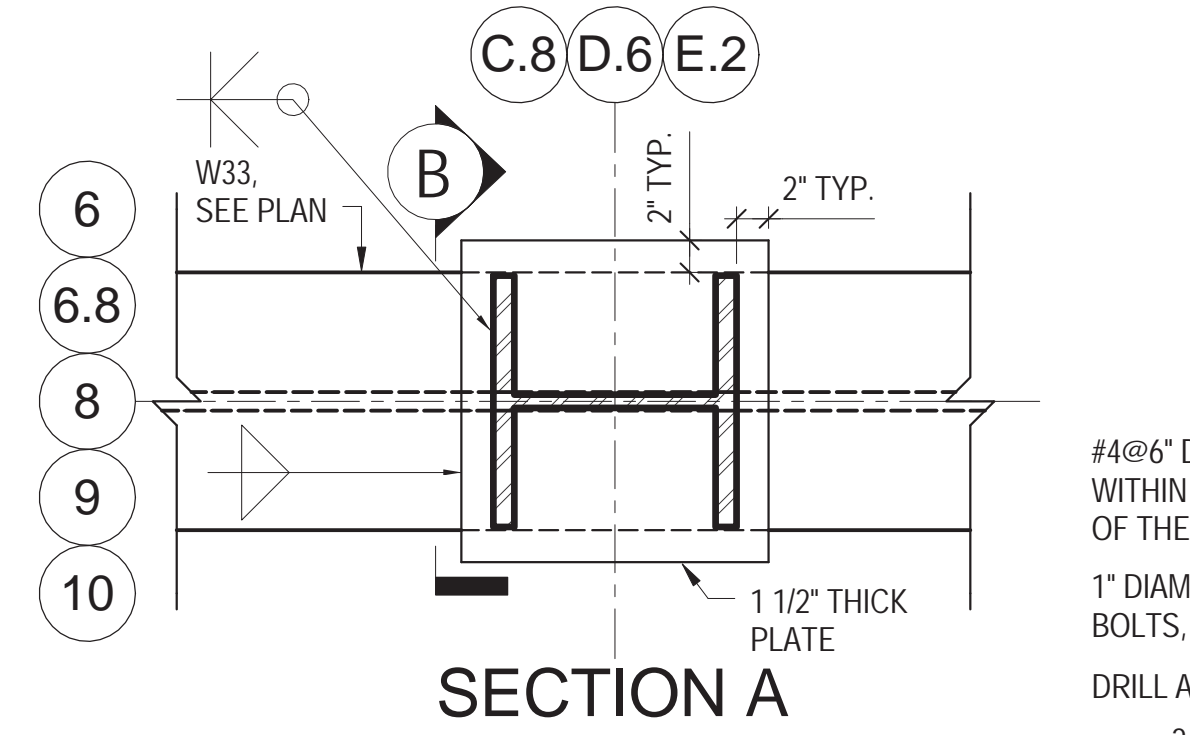
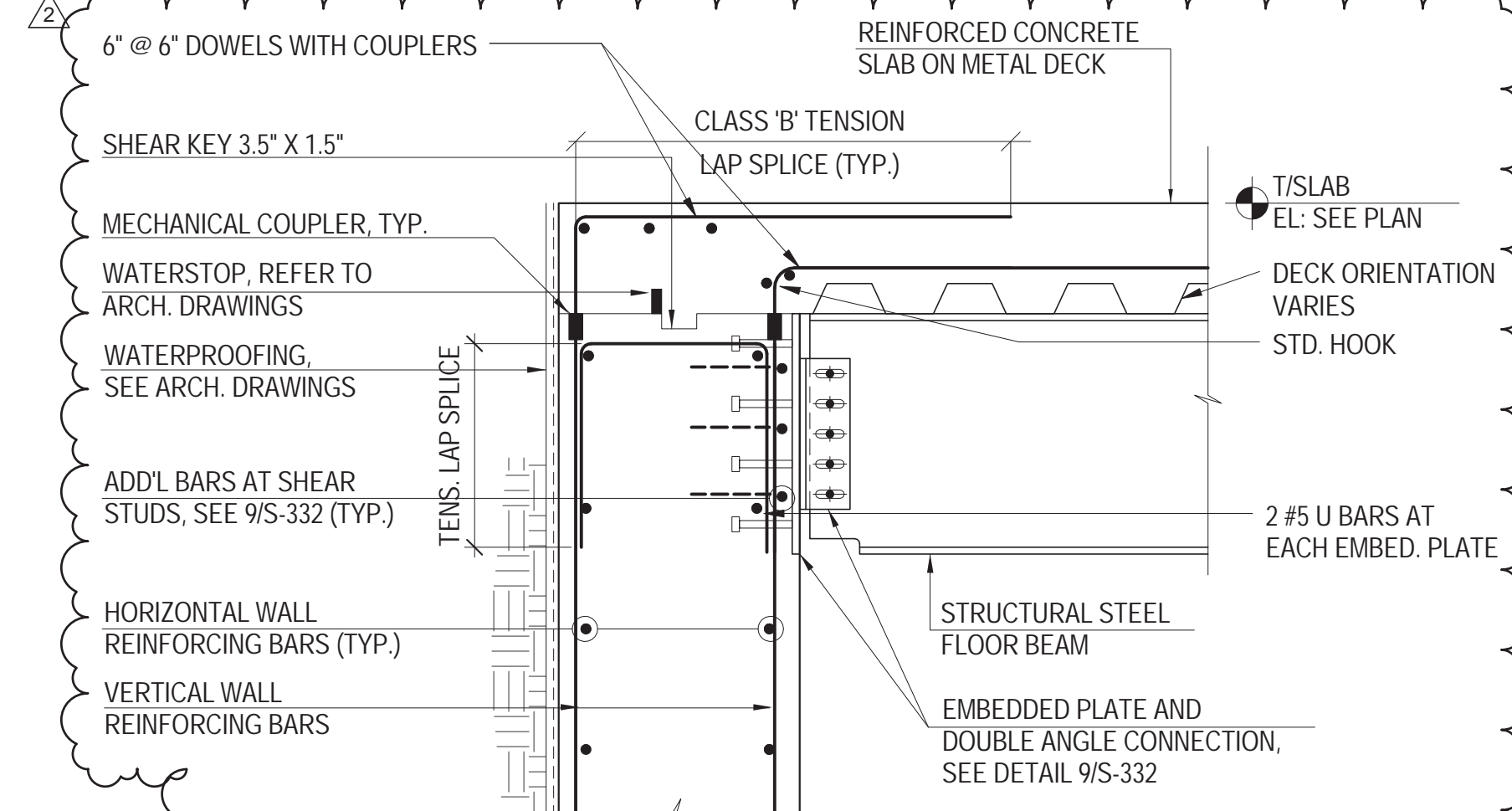
10 FOUNDATION SUPPORT DETAIL AT RETRACTABLE BOLLARD
NOT TO SCALE



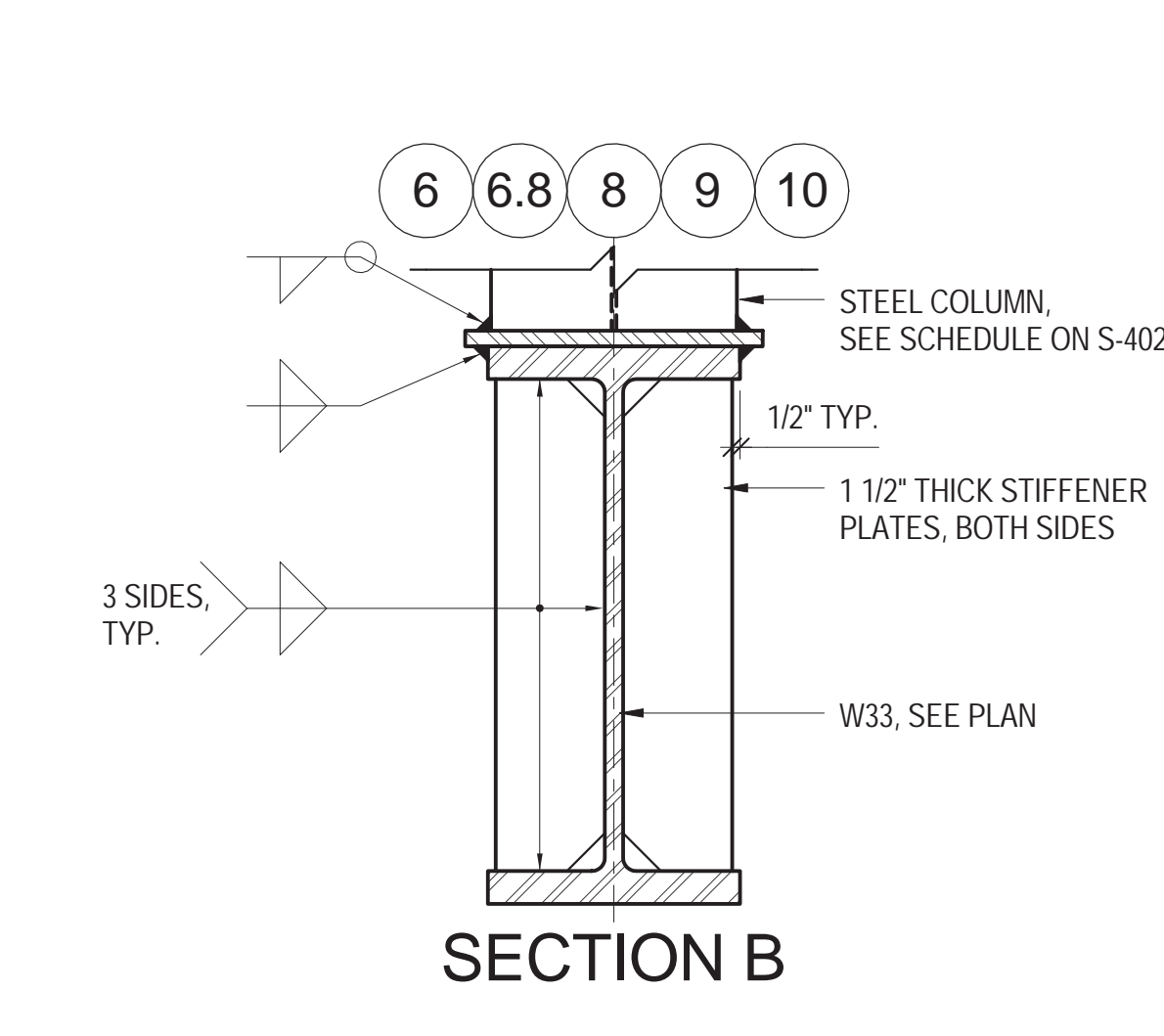
10A FOUNDATION SUPPORT DETAIL AT RETRACTABLE BOLLARD - PLAN
NOT TO SCALE



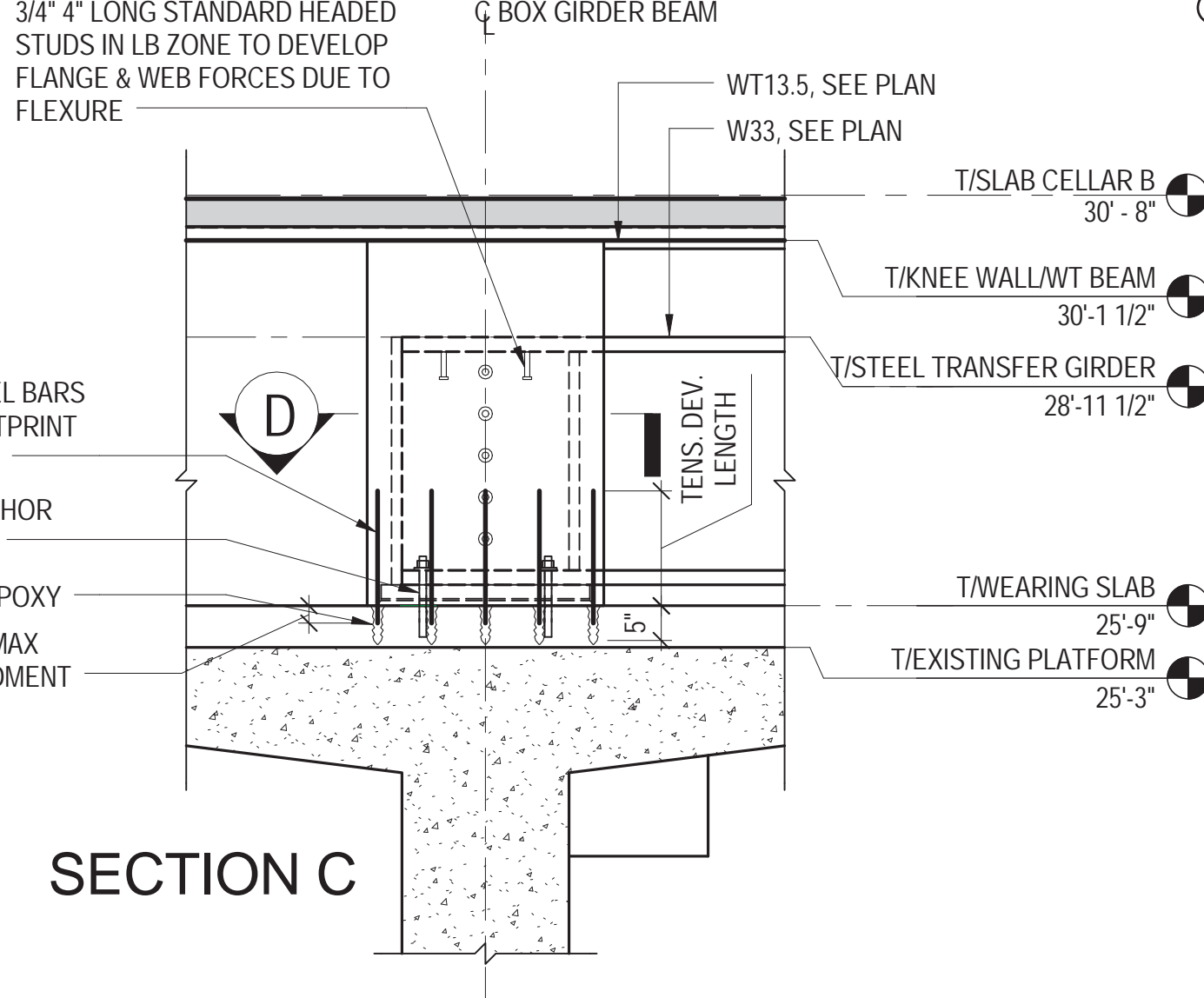
11 TYPICAL SECTION BETWEEN BOLLARD PLATES
NOT TO SCALE



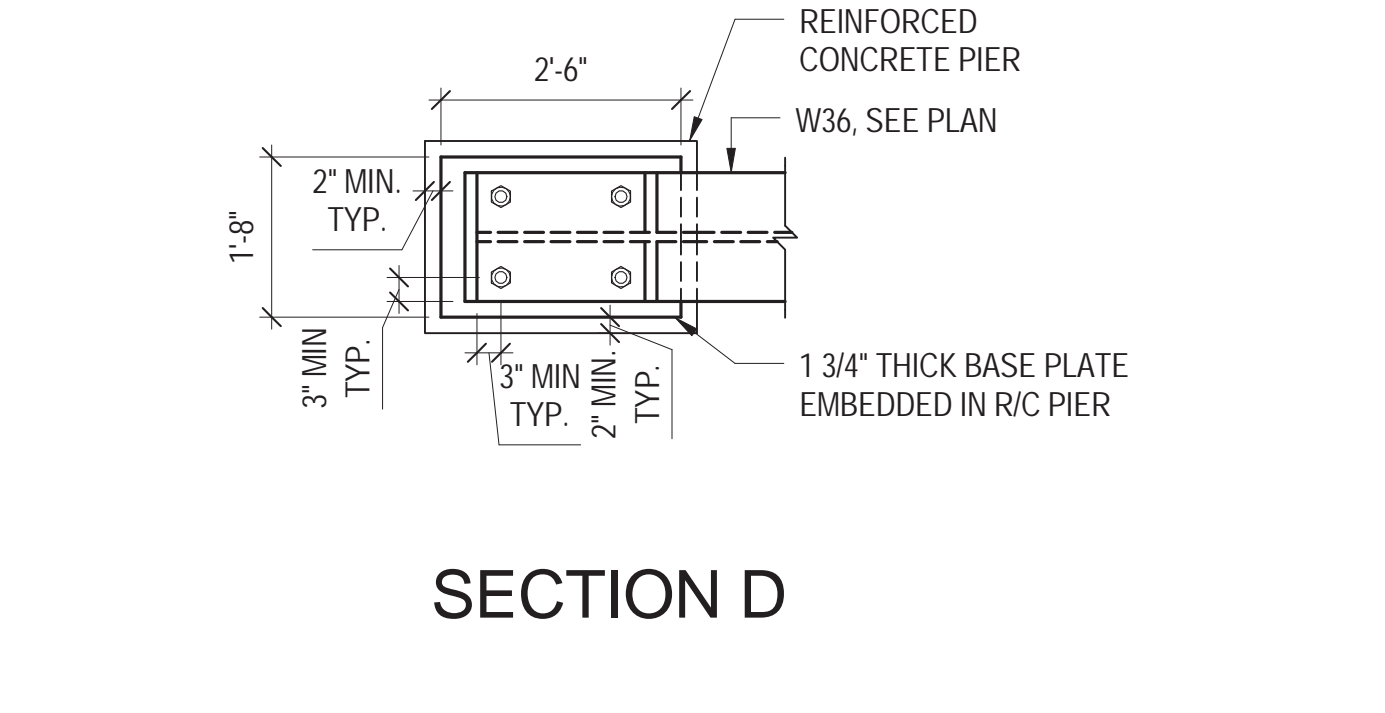
SECTION A



SECTION B



SECTION C



SECTION D



**Manhattan West:
North Tower**
401 Ninth Avenue, New York, NY 10001

Client
Brookfield

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

Architecture/Structural Engineering
SOM

Skidmore, Owings & Merrill LLP
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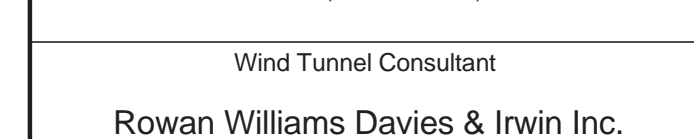
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650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8

Key Plan:



Seal & Signature:



Project No.: 211157
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22 APR 2016
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**PLAZA LEVEL
SECTIONS &
DETAILS**

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