

GENERAL

- 1. THIS IS A METRIC PROJECT. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MILLIMETERS AND ALL FORCES ARE IN METRIC UNITS (PER TG-ABR-02).
2. "WSP-S" REFERS TO WSP CANADA STRUCTURAL CONSULTANT.
3. PRIOR TO CONSTRUCTION, REVIEW STRUCTURAL DRAWINGS IN CONJUNCTION WITH DRAWINGS PROVIDED BY ALL OTHER CONSULTANTS...

- 2. CONCRETE ELEMENTS ARE DESIGNED PER CSA A23.3-14 -- DESIGN OF CONCRETE STRUCTURES.
3. STEEL ELEMENTS ARE DESIGNED PER CSA S16-14 -- DESIGN OF STEEL STRUCTURES.
4. MASONRY STRUCTURAL ELEMENTS ARE DESIGNED PER CSA S304.14 -- DESIGN OF MASONRY STRUCTURES.

- 1. REFER TO SPECIFICATIONS FOR SHOP DRAWINGS WHICH NEED TO BE SUBMITTED FOR REVIEW.
2. SUBMIT SIGNED AND SEALED TOWER CRANE SHOP DRAWINGS TO BE REVIEWED FOR IMPACT ON THE BASE BUILDING STRUCTURE.
3. REVIEW OF SHOP DRAWINGS BY WSP-S IS ON A SAMPLING BASIS...

10. REFER TO TYPICAL DETAIL TC-SL-71 FOR CONCRETE SAWCUTTING PROCEDURE.

- 11. DO NOT ALTER MATERIAL PROPERTIES OF THE STRUCTURAL STEEL WHICH IS TO REMAIN BY CUTTING AND DEMOLITION PROCEDURE.
12. ASSESS CAPACITY OF THE EXISTING STRUCTURE AND CONSTRUCTION LOADS APPLIED TO IT...

FOUNDATIONS

- 1. STRUCTURAL DESIGN IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY PATERSON GROUP, REPORT NUMBER PG5951-1, DATED SEPTEMBER 10, 2021.
2. REFER TO THE GEOTECHNICAL REPORT FOR DETAILED INFORMATION ON GEOTECHNICAL CONDITIONS, FOUNDATION RECOMMENDATIONS...

CAST-IN-PLACE CONCRETE

Table with 4 columns: ELEMENT, COMPRESSIVE STRENGTH (MPa) AT 28 DAYS, EXPOSURE CLASS, SPECIAL REQUIREMENTS & REMARKS. Rows include FOOTINGS, RAFT FOUNDATIONS, PIERS & PILASTERS, GRADE BEAMS, FOUNDATION WALLS, PITS, OTHER INTERIOR WALLS, SLAB-ON-GRADE (HEATED, INTERIOR AREAS), SLAB-ON-GRADE (UNHEATED VEHICLE ACCESSIBLE AREAS), SIDEWALKS, FROST SLABS, SLABS ON STEEL DECK, NON-STRUCTURAL TOPPINGS, FLOATING SLABS, UNSHRINKABLE FILL.

NOTES:

- 1. CONCRETE IS SPECIFIED PER ALTERNATIVE 1 - PERFORMANCE SPECIFICATION, AS OUTLINED IN CSA A23.1. THE CONTRACTOR AND THE CONCRETE SUPPLIER TO MEET ALL CERTIFICATION, DOCUMENTATION, AND QUALITY CONTROL REQUIREMENTS.
2. CONTRACTOR AND CONCRETE SUPPLIER TO ENSURE THAT PLASTIC AND HARDENED MIX PROPERTIES MEET SITE REQUIREMENTS FOR PLACING, FINISHING AND THE SPECIFIED PERFORMANCE REQUIREMENTS.

NOTES:

- 1. WHERE EXPOSURE CLASS IS NOTED 'N1', 'F2', USE 'F2'. EXPOSURE CLASS FOR PERIMETER AND EXTERIOR NON-INSULATED ELEMENTS ABOVE THE FROST LINE, AND FOR ELEMENTS IN INTERIOR UNHEATED SPACES, WHICH ARE SUSCEPTIBLE TO FREEZING.
2. LIMIT NOMINAL MAXIMUM AGGREGATE SIZE TO 10 (3/8") FOR COLUMNS WITH SMALLEST DIMENSION LESS THAN 300 (12") AND FOR WALLS LESS THAN 200 (8") THICK.

- 11. SHOP DRAWINGS MARKED "REVIEWED FOR IMPACT ON BASE STRUCTURE" ONLY SHOW WORKS WHICH ARE NOT WITHIN THE SCOPE OF STRUCTURAL CONSULTING SERVICES BUT AFFECT BEHAVIOUR OF THE BASE STRUCTURE.
12. DRAWINGS MARKED "NOT REVIEWED" SHOW WORKS WHICH ARE NOT WITHIN THE SCOPE OF STRUCTURAL CONSULTING SERVICES AND DO NOT IMPACT THE BASE BUILDING STRUCTURE.
13. EXCEPT FOR TOWER CRANE AND EXCAVATION SHORING (WHICH WILL BE REVIEWED FOR IMPACT ON THE BASE STRUCTURE ONLY), WSP-S WILL NOT REVIEW DESIGN AND IMPLEMENTATION OF ANY TEMPORARY WORKS...

FIELD REVIEW

- 1. WSP-S WILL PROVIDE PERIODIC FIELD REVIEW OF A REPRESENTATIVE SAMPLE OF THE STRUCTURAL WORKS DETAILED ON THESE DRAWINGS FOR GENERAL CONFORMANCE WITH CONTRACT DOCUMENTS. THESE REVIEWS DO NOT REPLACE THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT AND MAINTAIN A QUALITY CONTROL PROGRAM, AND DO NOT MAKE WSP-S A GUARANTOR OF THE CONTRACTOR'S WORK.
2. CONSTRUCTION REVIEW REPORTS WILL OUTLINE ANY DEFICIENCIES FOUND.
3. ASSIST WSP-S DURING FIELD REVIEW, AND PROVIDE SAFE ACCESS TO WORK AREAS AS REQUIRED.

EXISTING STRUCTURES

- 1. EXISTING CONDITIONS ARE ASSUMED. SURVEY THE EXISTING STRUCTURE AFTER REMOVING FINISHES AND REPORT ANY VARIATIONS TO WSP-S BEFORE PROCEEDING WITH THE WORK.
2. DESIGN OF STRUCTURAL WORKS RELATED TO THE EXISTING BUILDING HAS BEEN CARRIED OUT AS FAR AS PRACTICAL, GIVEN LIMITED AVAILABILITY OF THE EXISTING DRAWINGS AND LIMITED RECORDS OF THE STRUCTURAL MODIFICATIONS LIKELY TO HAVE BEEN MADE THROUGH THE LIFE OF THE BUILDING. MODIFICATIONS TO THE PROPOSED STRUCTURAL FRAMING AND / OR DETAILS MAY BE REQUIRED IF EXISTING CONDITIONS ARE FOUND TO BE DIFFERENT FROM THOSE ASSUMED AND SHOWN ON DRAWINGS.

- 15. STRUCTURAL DESIGN ASSUMES NON-LOAD RESTRICTED ULC FIRE RATED ASSEMBLIES, AND APPROPRIATE MATERIALS MUST BE USED.
16. DRAWINGS SHOW COMPLETED STRUCTURE ONLY. THEY DO NOT SHOW TEMPORARY WORKS FOR WHICH THE CONTRACTOR IS RESPONSIBLE AND WHICH MAY BE REQUIRED FOR EXECUTION OF THE PROJECT, INCLUDING TEMPORARY SHORING, BRACING, GUYS AND TIE DOWNS.
17. EXTENT OF ALL TEMPORARY SHORING FOR EXCAVATION WHICH MAY BE REQUIRED IS NOT NECESSARILY SHOWN ON STRUCTURAL DRAWINGS.

- 18. DESIGN AND CONSTRUCTION REVIEW OF ALL TEMPORARY WORKS TO BE CARRIED OUT BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR, LICENSED IN THE PLACE WHERE THE PROJECT IS LOCATED.
19. ANCHOR RODS AND OTHER EMBEDDED ITEMS ARE DESIGNED FOR LOADS ACTING ON THE COMPLETED STRUCTURE ONLY AND ARE NOT TO BE USED OR RELIED UPON FOR TEMPORARY SUPPORT OR BRACING DURING ERECTION.

- 20. CONSTRUCTION LOADS ON COMPLETED STRUCTURE NOT TO EXCEED DESIGN LOADS INDICATED ON DRAWINGS. FULL DESIGN LOADS MAY ONLY BE APPLIED TO CONCRETE ELEMENTS AFTER THE CONCRETE HAS REACHED ITS DESIGN STRENGTH.

- 1. MISCELLANEOUS STEEL ELEMENTS: STAIRS, RAILINGS, GUARDRAILS.
2. PARTITIONS: MASONRY, GLASS, WOOD AND STEEL STUDS, PREFABRICATED PANELS.
3. BULKHEADS, SUSPENDED CEILINGS, INTERIOR AND EXTERIOR SIGNAGE.
4. ARCHITECTURAL PRECAST, PRECAST STAIRS.
5. EXTERIOR CLADDING: PRECAST PANELS, METAL WALL SYSTEMS, CURTAIN WALLS AND WINDOWS.

- 22. MAINTAIN A QUALITY CONTROL PLAN FOR STRUCTURAL WORK, AND MAKE IT AVAILABLE TO THE CONSULTANT UPON REQUEST. AT A MINIMUM, THE PLAN TO INCLUDE:
1. NAMES OF PERSONNEL RESPONSIBLE FOR EXECUTION OF THE PLAN.
2. MEANS AND METHODS FOR CONFIRMING MATERIAL COMPLIANCE WITH SPECIFICATIONS AND ASSOCIATED DOCUMENTATION PROCEDURES.

DESIGN DATA

- 1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2015 ONTARIO BUILDING CODE (OBC), SUPPLEMENTED BY THE USER'S GUIDE -- NBC 2015 STRUCTURAL COMMENTARIES.

SNOW:
Ss = 2.4 kPa Ss = 0.4 kPa Is (ULS) = 1.0 Is (SLS) = 0.9
MINIMUM UNFACTORED SNOW LOAD = 2.32 kPa x Is
RAIN:
24 HOUR RAINFALL = 86 mm
LATERAL LOADS IN THIS STRUCTURE ARE RESISTED BY BRACED FRAMES, AND ARE DETERMINED BASED ON THE WIND AND SEISMIC DATA BELOW.

WIND:
qto = 0.41 kPa Iw (ULS) = 1.0 Iw (SLS) = 0.75
BUILDING IS: LOW RISE TERRAIN TYPE: OPEN INTERNAL PRESSURE CATEGORY: 2
Cs = 0.9
WIND LOAD AT GRADE LEVEL FOR DESIGN OF OVERALL BUILDING LATERAL LOAD RESISTING SYSTEM: 1.0 kPa.

SEISMIC:
1. SEISMIC FORCE RESISTING SYSTEM (SFRS): SYSTEM & CONNECTIONS: OBC CLAUSE 4.1.8.9 / 4.1.8.10 LATERAL LOAD RESISTING SYSTEM: CONVENTIONAL CONSTRUCTION OF BRACED FRAMES
Rd = 1.5 Rn = 1.3 CSA STANDARD: S16-14
DIAPHRAGMS & CONNECTIONS: (OBC CLAUSE 4.1.8.15) CSA STANDARD: S16-14
FOUNDATIONS: (OBC CLAUSE 4.1.8.16) CSA STANDARD: A23.3-14 APPLICABLE CLAUSE(S): 21.10 (FOR UNANCHORED FOOTINGS)

DESIGN SPECTRAL RESPONSE ACCELERATION AT FUNDAMENTAL PERIOD
S1,T(NS) = 0.42 M(NS) = 1.0J(NS) = 1.0
S1,T(EW) = 0.42 M(EW) = 1.0 J(EW) = 1.0
IRREGULARITY REVIEW: (OBC CLAUSE 4.1.8.6)
1. VERTICAL STIFFNESS: NO
2. WEIGHT: NO
3. VERTICAL GEOMETRIC: NO
4. IN-PLANE DISCONTINUITY: NO
5. OUT-OF-PLANE: NO
6. WEAK STOREY: NO
7. TORSIONAL: NO
8. NON-ORTHOGONAL: YES

CONCLUSION: BUILDING IS: IRREGULAR DYNAMIC ANALYSIS: NOT REQUIRED
EQUVALENT STATIC FORCE PROCEDURE:
BASE SHEARS
NS DIRECTIONS: VMIN = S1(2) M, L, W( Rn, Rn ) = 0.028 W VMAX = (1/2) S1(2) L, W( Rn, Rn ) or [(0.5) S1(2) W( Rn, Rn )] = 0.15 W
EW DIRECTIONS: VMIN = S1(2) M, L, W( Rn, Rn ) = 0.028 W VMAX = (1/2) S1(2) L, W( Rn, Rn ) or [(0.5) S1(2) W( Rn, Rn )] = 0.15 W
DESIGN BASE SHEARS & OVERTURNING MOMENTS
V(NS) = 0.15 W = 0.145 x 9,900 = 1,436 kN
M(NS) = M x J = 2,500 x 1 = 2,500 kNm
V(EW) = 0.15 W = 0.145 x 9,900 = 1,436 kN
M(EW) = M x J = 2,500 x 1 = 2,500 kNm

DRAWING LIST table with columns: DRAWING No, DRAWING NAME. Rows include S100 GENERAL REQUIREMENTS, S101 GENERAL REQUIREMENTS, S110 TYPICAL DETAILS, S111 TYPICAL DETAILS, S112 TYPICAL DETAILS, S113 TYPICAL DETAILS, S200 FOUNDATION PLAN, S201 LEVEL 2 FRAMING PLAN, S202 ROOF FRAMING PLAN, S400 FOUNDATION SECTIONS, S410 LEVEL 2 SECTIONS, S415 ROOF SECTIONS, S500 ELEVATIONS, S501 BUILDING ELEVATION.

KEY PLAN

Empty table grid for key plan.

Revision table with columns: REV, DATE, DESCRIPTION, BY. Row 1: 2021.11.12, Issued for 70% Progress, SEF. Row 2: 2021.10.01, Issued for 65% Costing, SEF.

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PROJECT LOCATION: WOODVALE PENTECOSTAL CHURCH ADDITION, 205 Greenbank Rd., Nepean, ON K2H 8K9

GENERAL REQUIREMENTS

DRAWN BY: DATE: SCALE: AS NOTED

PROJECT: 211-03025-00

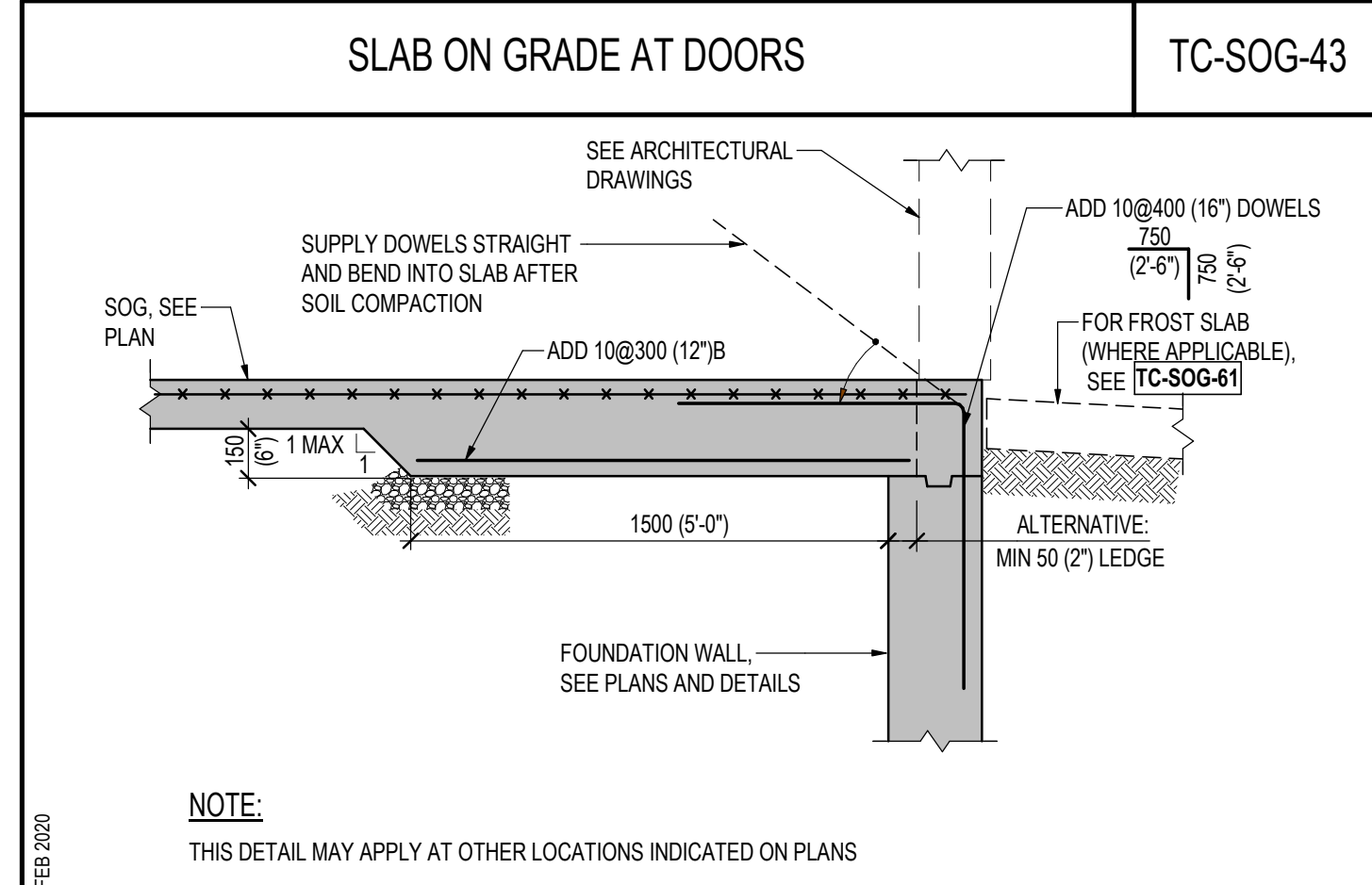
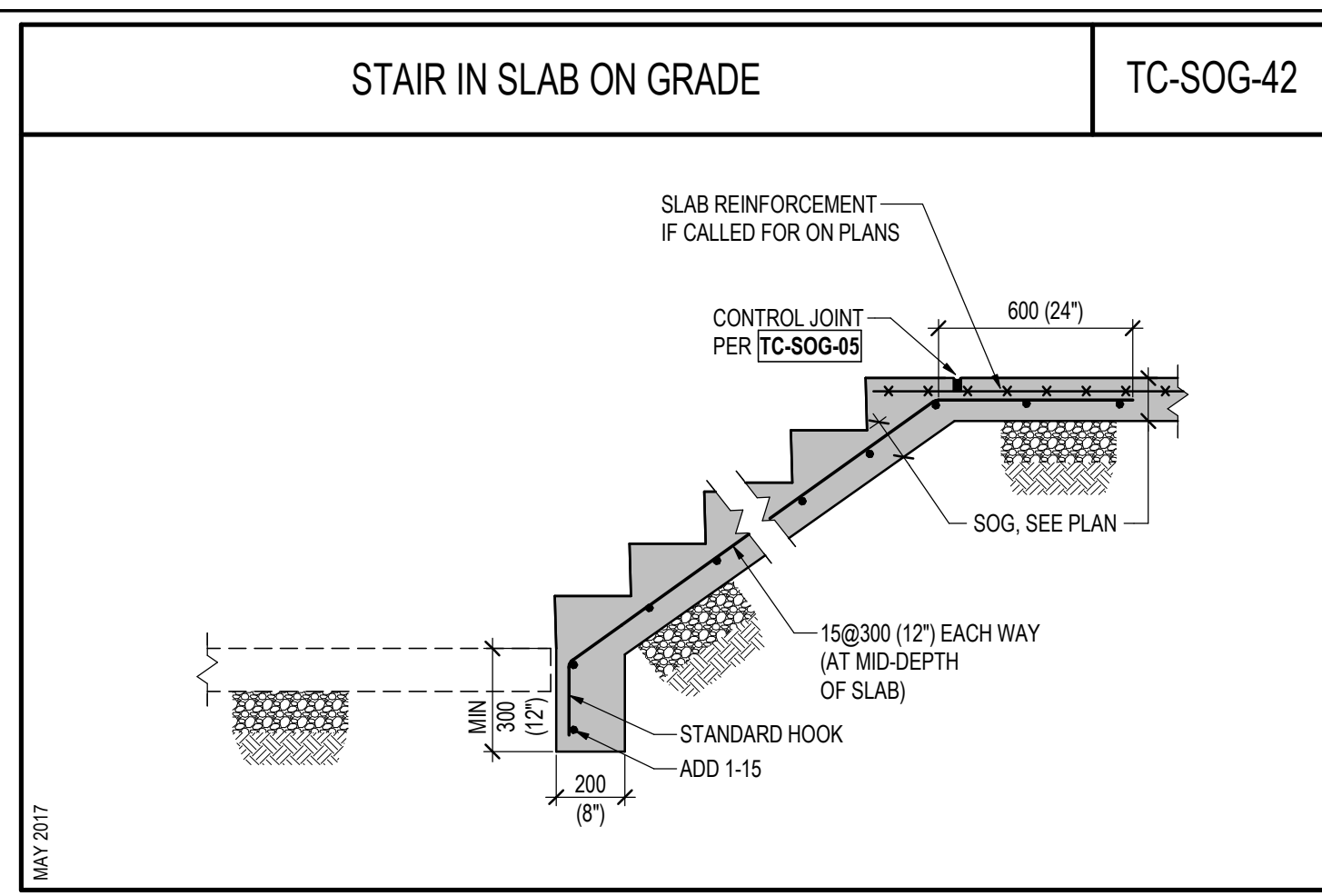
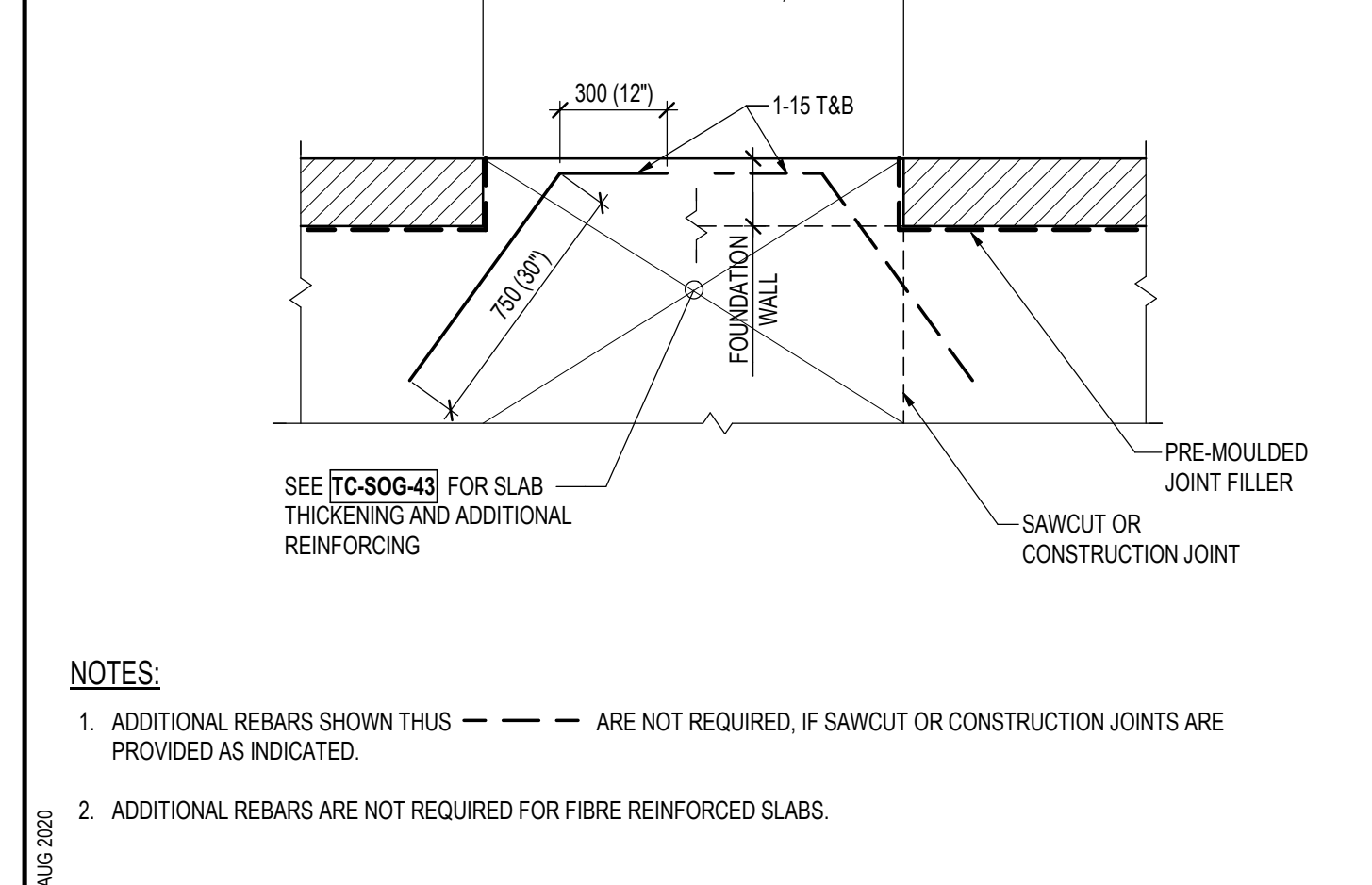
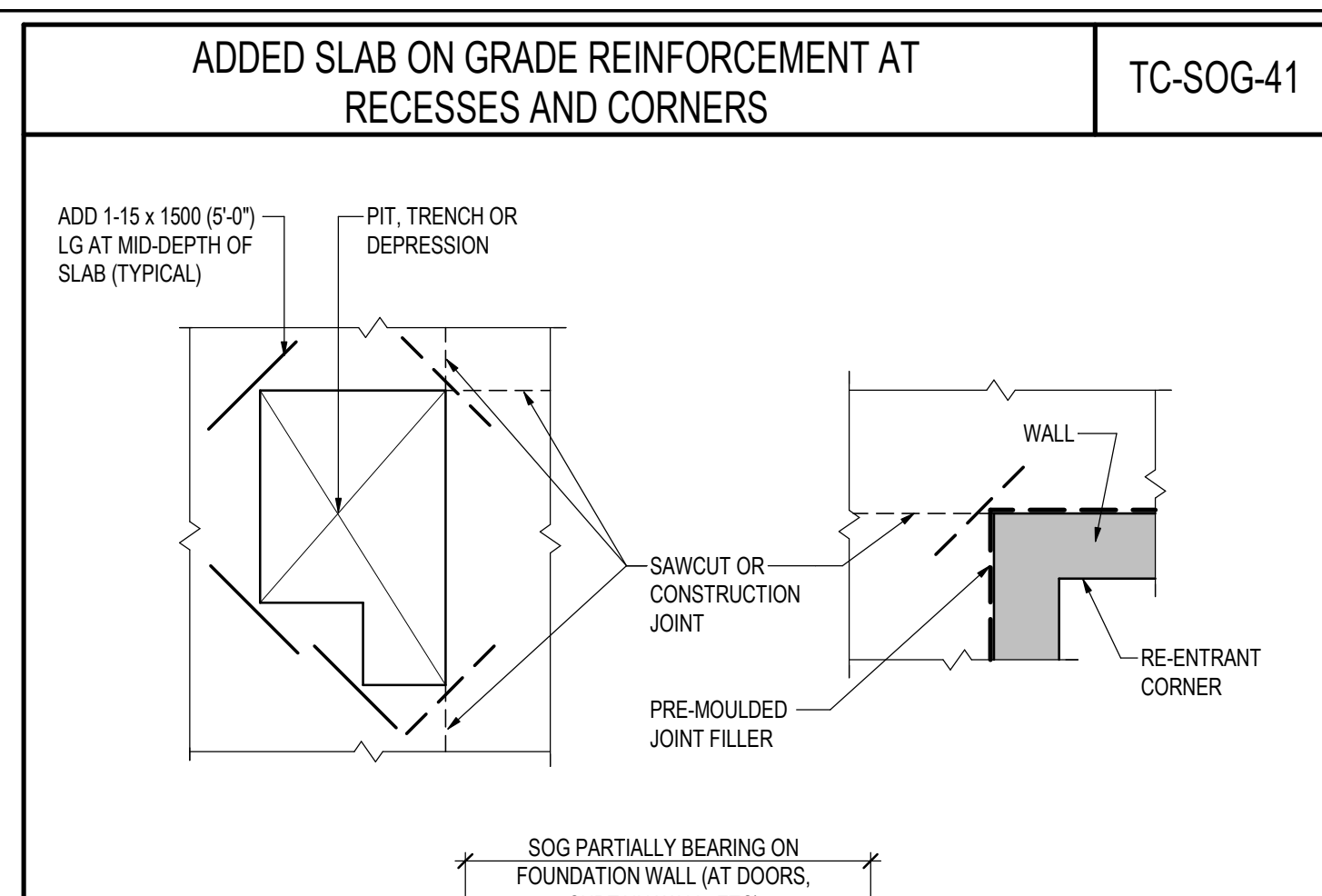
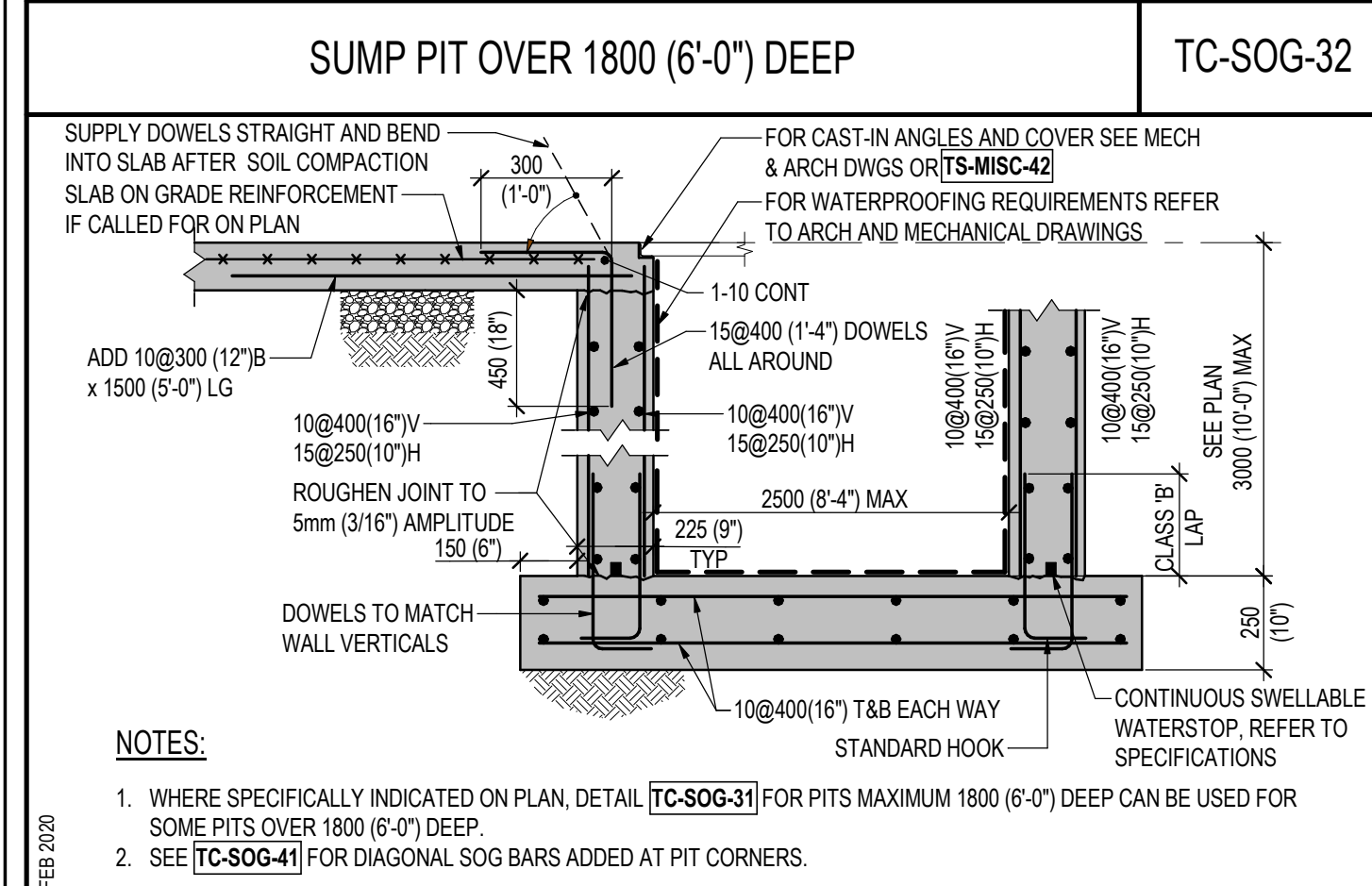
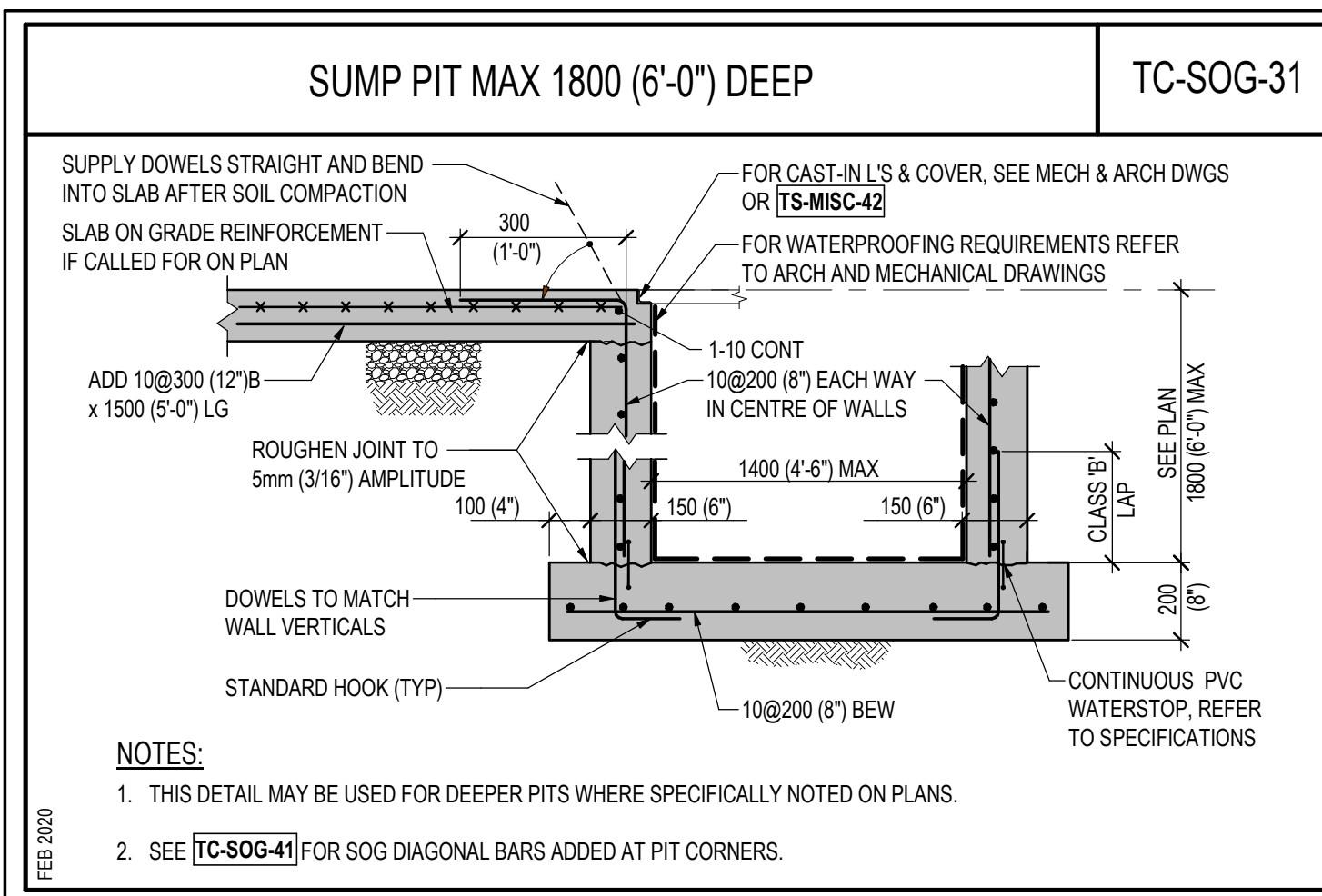
DRAWING NO.: S100

REVISION NO.:

SHOP DRAWINGS







### TENSION DEVELOPMENT LENGTHS AND LAP SPLICES FOR BARS GRADE 400 MPa

TC-REINF-01

TENSION DEVELOPMENT LENGTHS  $l_d$  FOR GRADE 400 INDIVIDUAL BLACK BAR IN NORMAL DENSITY CONCRETE

BAR SIZE	f <sub>c</sub> = 25		f <sub>c</sub> = 30		f <sub>c</sub> = 35		f <sub>c</sub> = 40		f <sub>c</sub> = 50		f <sub>c</sub> = 60	
	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
10	300 (12")	380 (15")	300 (12")	350 (14")	300 (12")	320 (13")	300 (12")	300 (12")	300 (12")	300 (12")	300 (12")	300 (12")
15	440 (17")	570 (23")	440 (17")	520 (21")	440 (17")	480 (19")	440 (17")	440 (17")	440 (17")	440 (17")	440 (17")	440 (17")
20	580 (23")	750 (30")	580 (23")	680 (27")	580 (23")	640 (25")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")
25	700 (28")	910 (36")	700 (28")	820 (33")	700 (28")	770 (31")	700 (28")	700 (28")	700 (28")	700 (28")	700 (28")	700 (28")
30	840 (33")	1090 (43")	840 (33")	960 (38")	840 (33")	920 (37")	840 (33")	840 (33")	840 (33")	840 (33")	840 (33")	840 (33")
35	980 (39")	1280 (51")	980 (39")	1110 (44")	980 (39")	1070 (42")	980 (39")	980 (39")	980 (39")	980 (39")	980 (39")	980 (39")
40	1120 (44")	1470 (58")	1120 (44")	1260 (50")	1120 (44")	1230 (49")	1120 (44")	1120 (44")	1120 (44")	1120 (44")	1120 (44")	1120 (44")
45	1260 (50")	1660 (65")	1260 (50")	1450 (57")	1260 (50")	1350 (53")	1260 (50")	1260 (50")	1260 (50")	1260 (50")	1260 (50")	1260 (50")
50	1400 (56")	1850 (73")	1400 (56")	1640 (65")	1400 (56")	1530 (60")	1400 (56")	1400 (56")	1400 (56")	1400 (56")	1400 (56")	1400 (56")
55	1540 (61")	2040 (80")	1540 (61")	1830 (72")	1540 (61")	1670 (66")	1540 (61")	1540 (61")	1540 (61")	1540 (61")	1540 (61")	1540 (61")

CLASS B TENSION LAP SPlice LENGTHS FOR GRADE 400 INDIVIDUAL BLACK BAR IN NORMAL DENSITY CONCRETE

BAR SIZE	f <sub>c</sub> = 25		f <sub>c</sub> = 30		f <sub>c</sub> = 35		f <sub>c</sub> = 40		f <sub>c</sub> = 50		f <sub>c</sub> = 60	
	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
10	390 (16")	490 (19")	390 (16")	450 (18")	390 (16")	420 (17")	390 (16")	390 (16")	390 (16")	390 (16")	390 (16")	390 (16")
15	570 (23")	740 (29")	570 (23")	670 (27")	570 (23")	620 (25")	570 (23")	570 (23")	570 (23")	570 (23")	570 (23")	570 (23")
20	750 (30")	980 (39")	750 (30")	890 (35")	750 (30")	830 (33")	750 (30")	750 (30")	750 (30")	750 (30")	750 (30")	750 (30")
25	930 (37")	1220 (48")	930 (37")	1080 (43")	930 (37")	1010 (40")	930 (37")	930 (37")	930 (37")	930 (37")	930 (37")	930 (37")
30	1110 (44")	1460 (58")	1110 (44")	1280 (51")	1110 (44")	1210 (48")	1110 (44")	1110 (44")	1110 (44")	1110 (44")	1110 (44")	1110 (44")
35	1290 (51")	1700 (67")	1290 (51")	1540 (61")	1290 (51")	1380 (54")	1290 (51")	1290 (51")	1290 (51")	1290 (51")	1290 (51")	1290 (51")
40	1470 (58")	1940 (77")	1470 (58")	1700 (67")	1470 (58")	1560 (62")	1470 (58")	1470 (58")	1470 (58")	1470 (58")	1470 (58")	1470 (58")
45	1650 (65")	2180 (86")	1650 (65")	1900 (75")	1650 (65")	1750 (69")	1650 (65")	1650 (65")	1650 (65")	1650 (65")	1650 (65")	1650 (65")
50	1830 (72")	2420 (95")	1830 (72")	2100 (83")	1830 (72")	1910 (76")	1830 (72")	1830 (72")	1830 (72")	1830 (72")	1830 (72")	1830 (72")
55	2010 (79")	2660 (104")	2010 (79")	2300 (91")	2010 (79")	2090 (82")	2010 (79")	2010 (79")	2010 (79")	2010 (79")	2010 (79")	2010 (79")

### COMPRESSION DEVELOPMENT LENGTHS AND LAP SPLICES FOR BARS GRADE 400 MPa

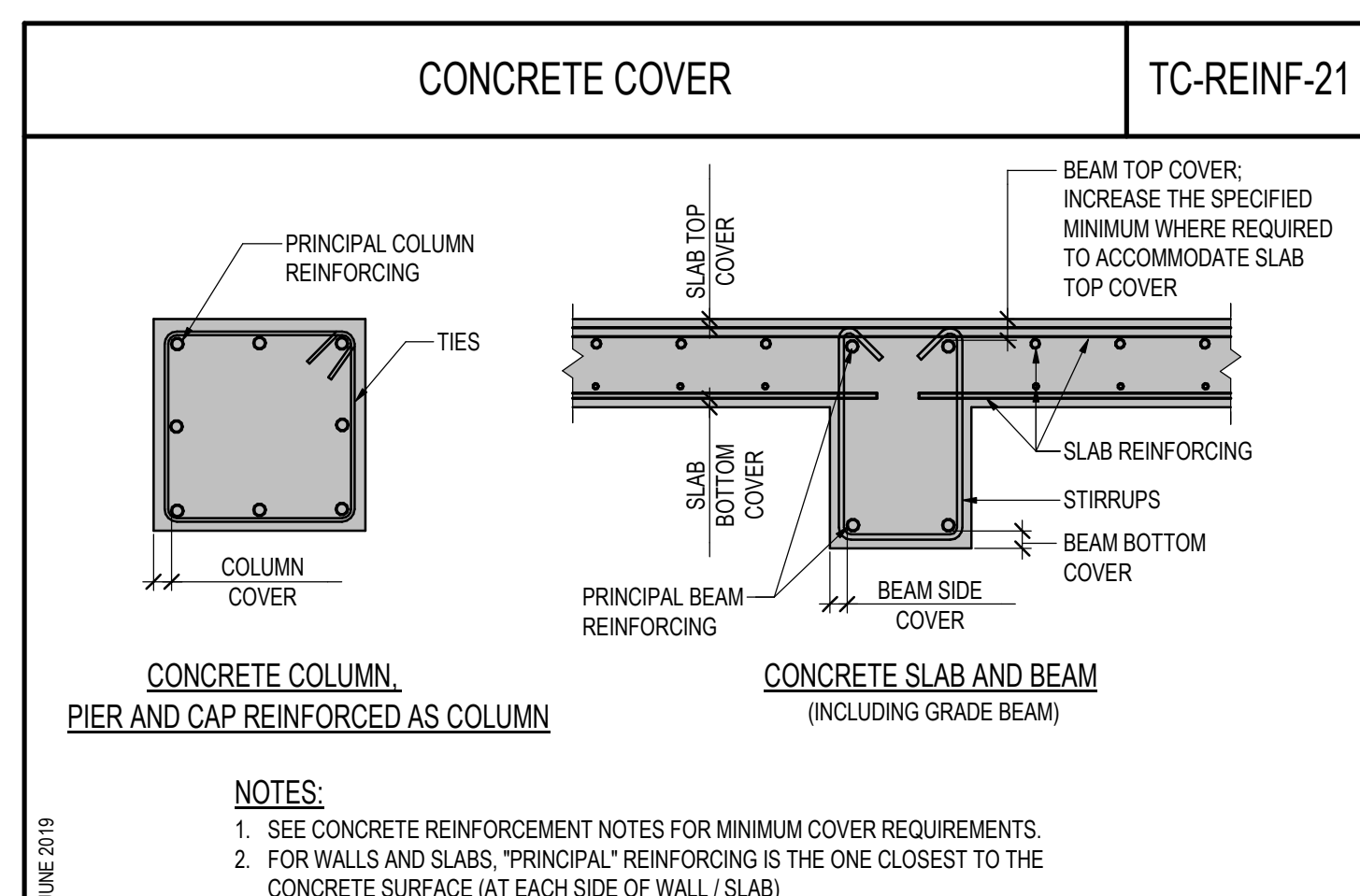
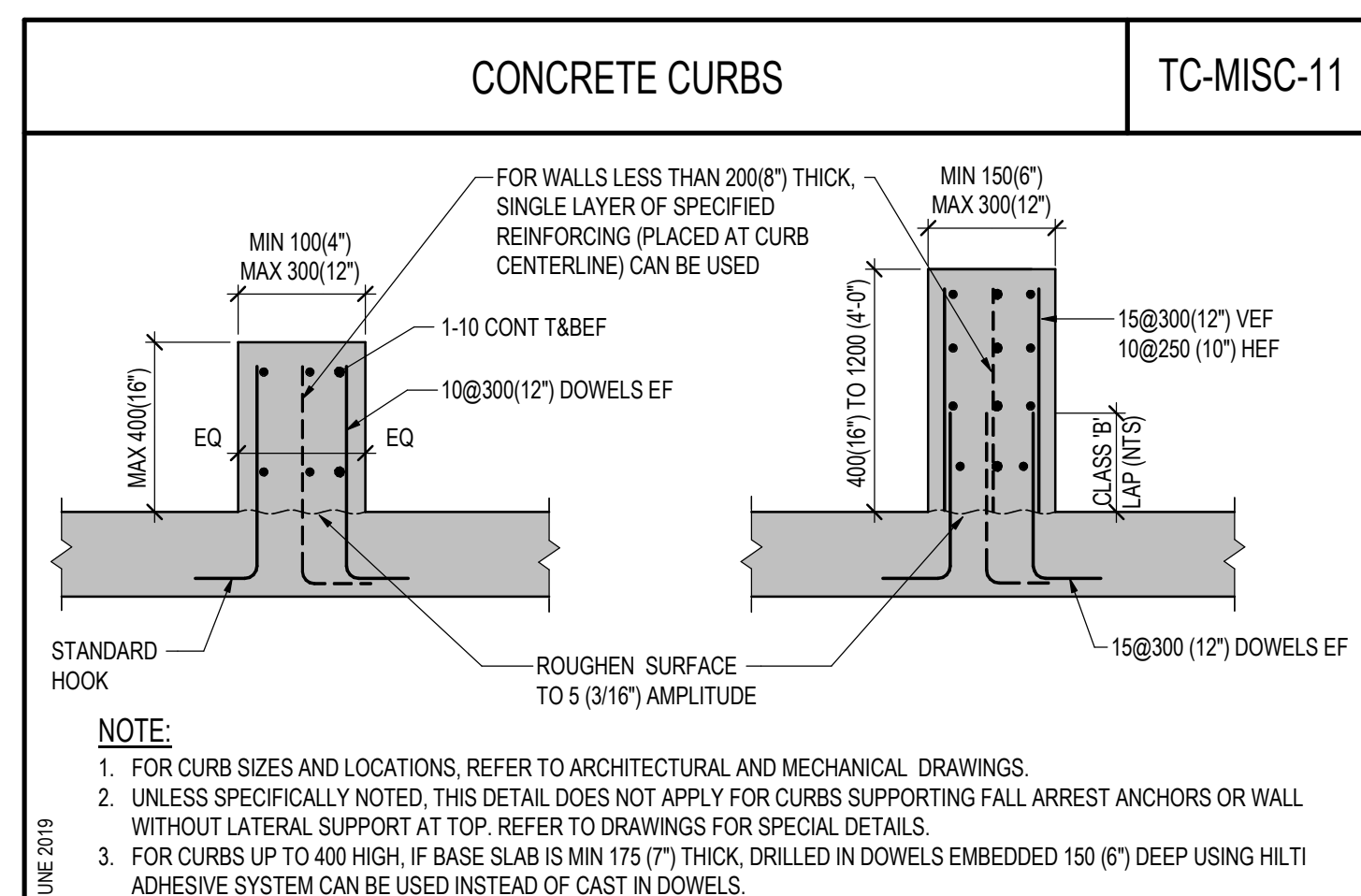
TC-REINF-02

COMPRESSION DEVELOPMENT LENGTH  $l_{dc}$  FOR GRADE 400 INDIVIDUAL BARS

BAR SIZE	f <sub>c</sub> = 25		f <sub>c</sub> = 30		f <sub>c</sub> = 35		f <sub>c</sub> = 40		f <sub>c</sub> = 50		f <sub>c</sub> = 60	
	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
10	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")	220 (9")
15	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")	310 (12")
20	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")	400 (16")
25	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")	490 (19")
30	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")	580 (23")
35	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")	670 (27")
40	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")	760 (30")
45	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")	850 (34")
50	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")	940 (38")
55	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")	1030 (41")

COMPRESSION LAP SPlice FOR BAR 400 INDIVIDUAL BARS

BAR SIZE	STANDARD LAP
10	300 (12")
15	440 (17")
20	580 (23")
25	730 (29")
30	880 (35")
35	1030 (41")



### MINIMUM TENSION EMBEDMENT LENGTHS WITH STANDARD END HOOKS $l_{eh}$ FOR GRADE 400 BAR IN NORMAL WEIGHT CONCRETE

BAR SIZE	f <sub>c</sub> = 25		f <sub>c</sub> = 30		f <sub>c</sub> = 35		f <sub>c</sub> = 40		f <sub>c</sub> = 50		f <sub>c</sub> = 60	
	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
10	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")	150 (6")
15	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")	210 (8")
20	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")	280 (11")
25	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")	350 (14")
30	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")	420 (17")
35	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")	490 (20")

FOR VALUES NOT PROVIDED IN TABLES INTERPOLATE BETWEEN THE NEAREST VALUES PROVIDED.

KEY PLAN

2 2021.11.12 Issued for 70% Progress SEF  
 1 2021.10.01 Issued for 66% Costing SEF

REV DATE DESCRIPTION BY

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 F: 613-235-2005  
 E: mail@hobinarc.com  
 hobinarc.com

**HOBIN ARCHITECTURE**

PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
 205 Greenbank Rd., Nepean, ON K2H 8K9

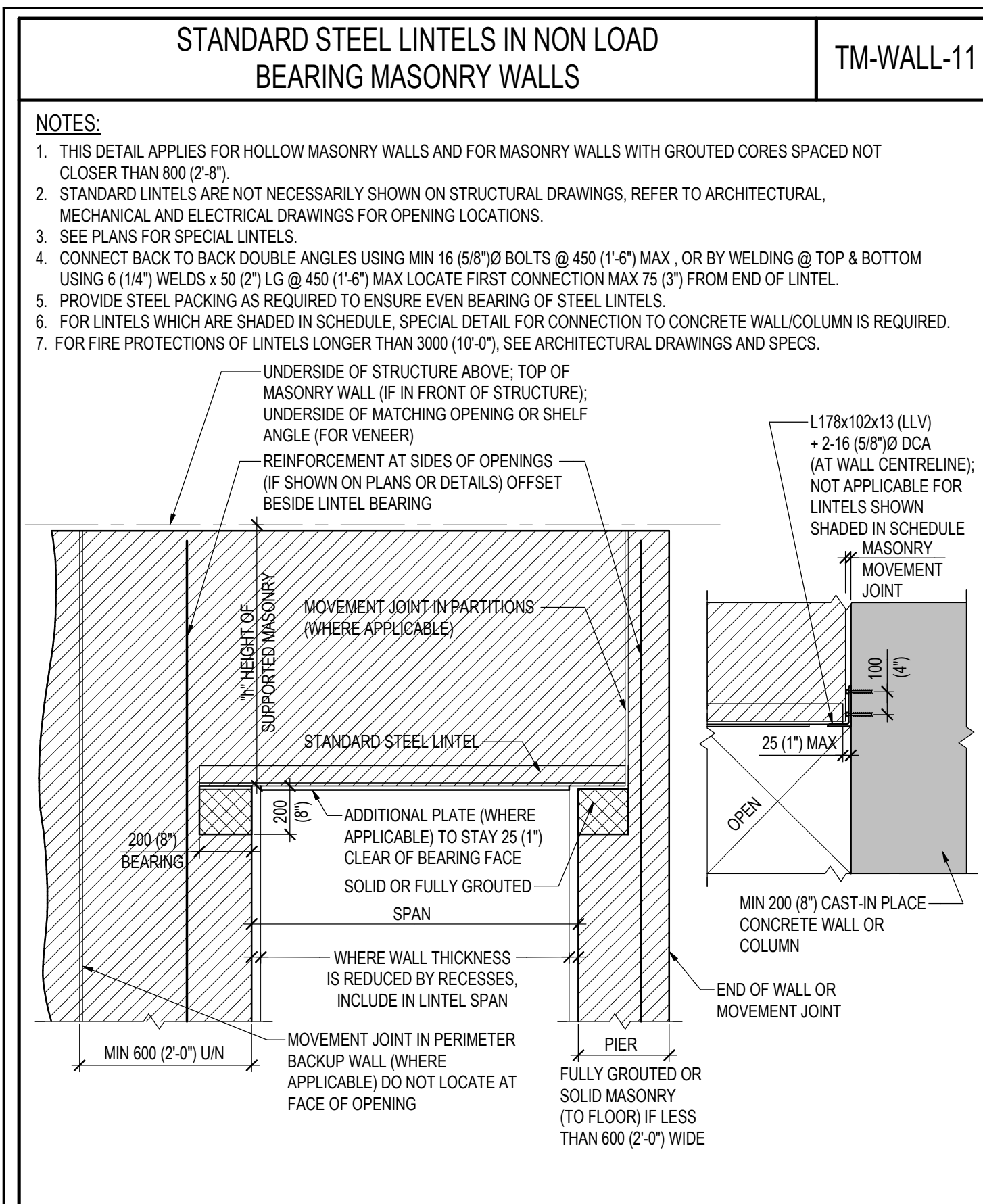
DRAWING TITLE:  
**TYPICAL DETAILS**

DRAWN BY: DATE: SCALE:  
 P.MOKEE AUG 2021 AS NOTED

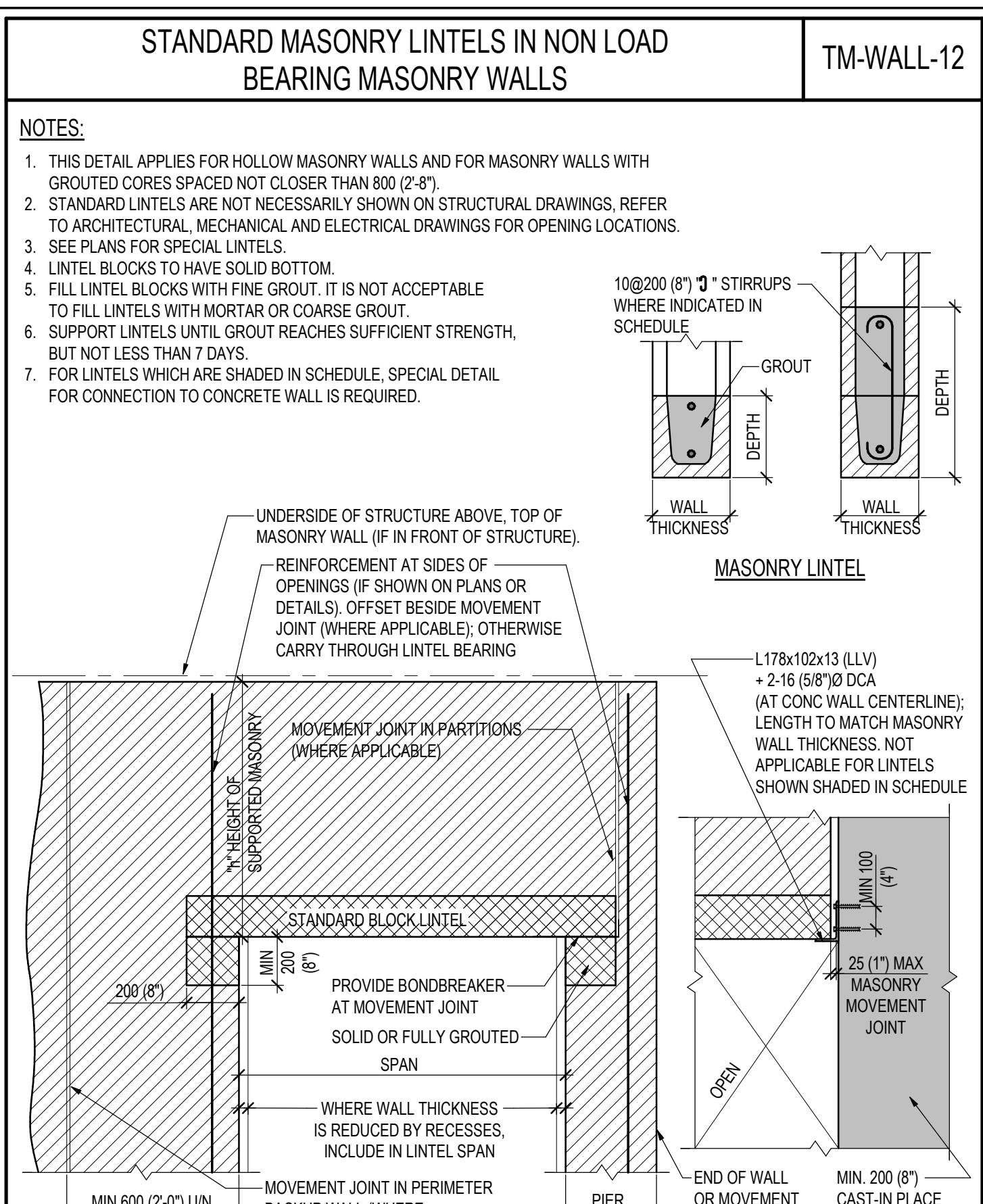
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**S111**

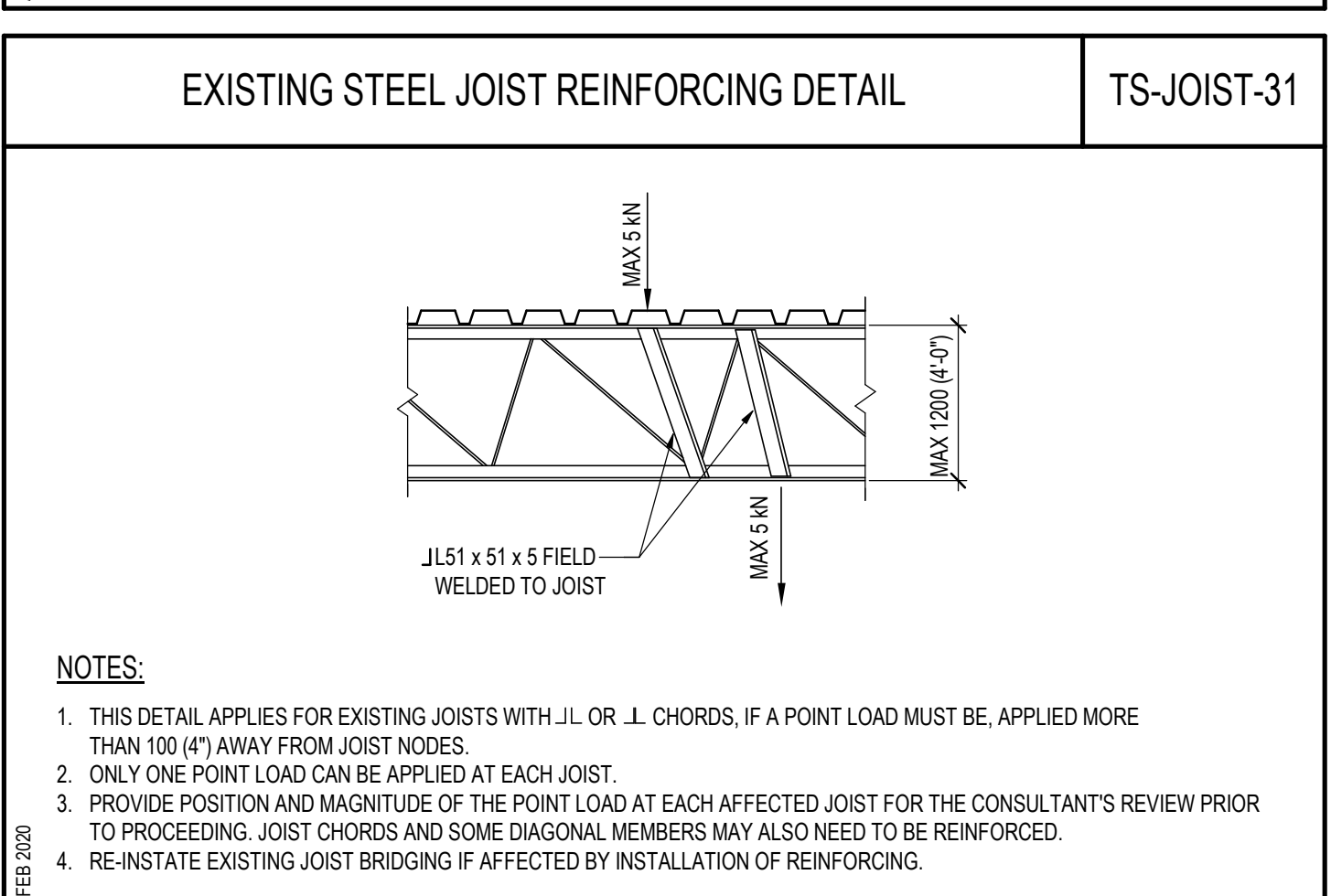
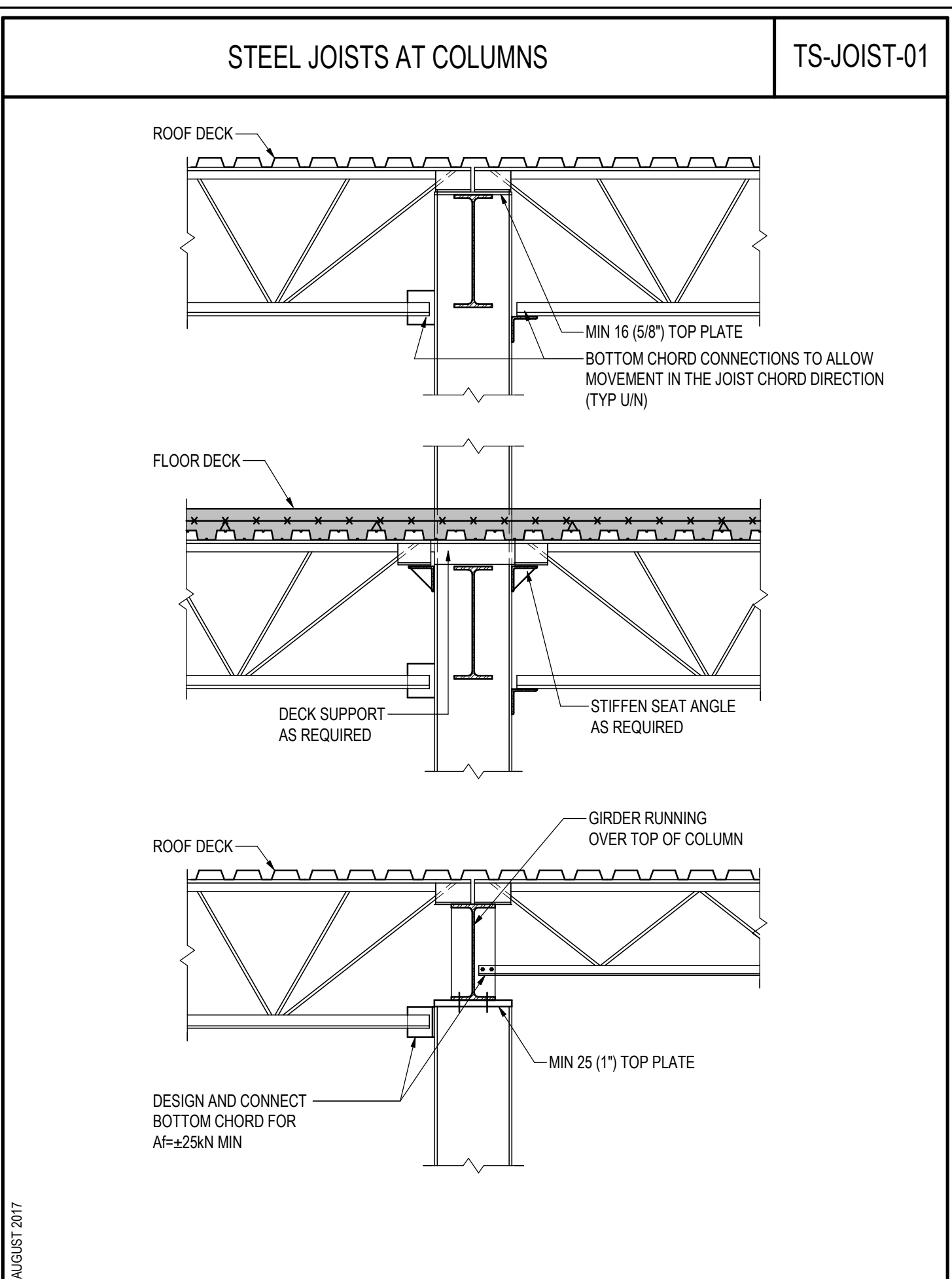
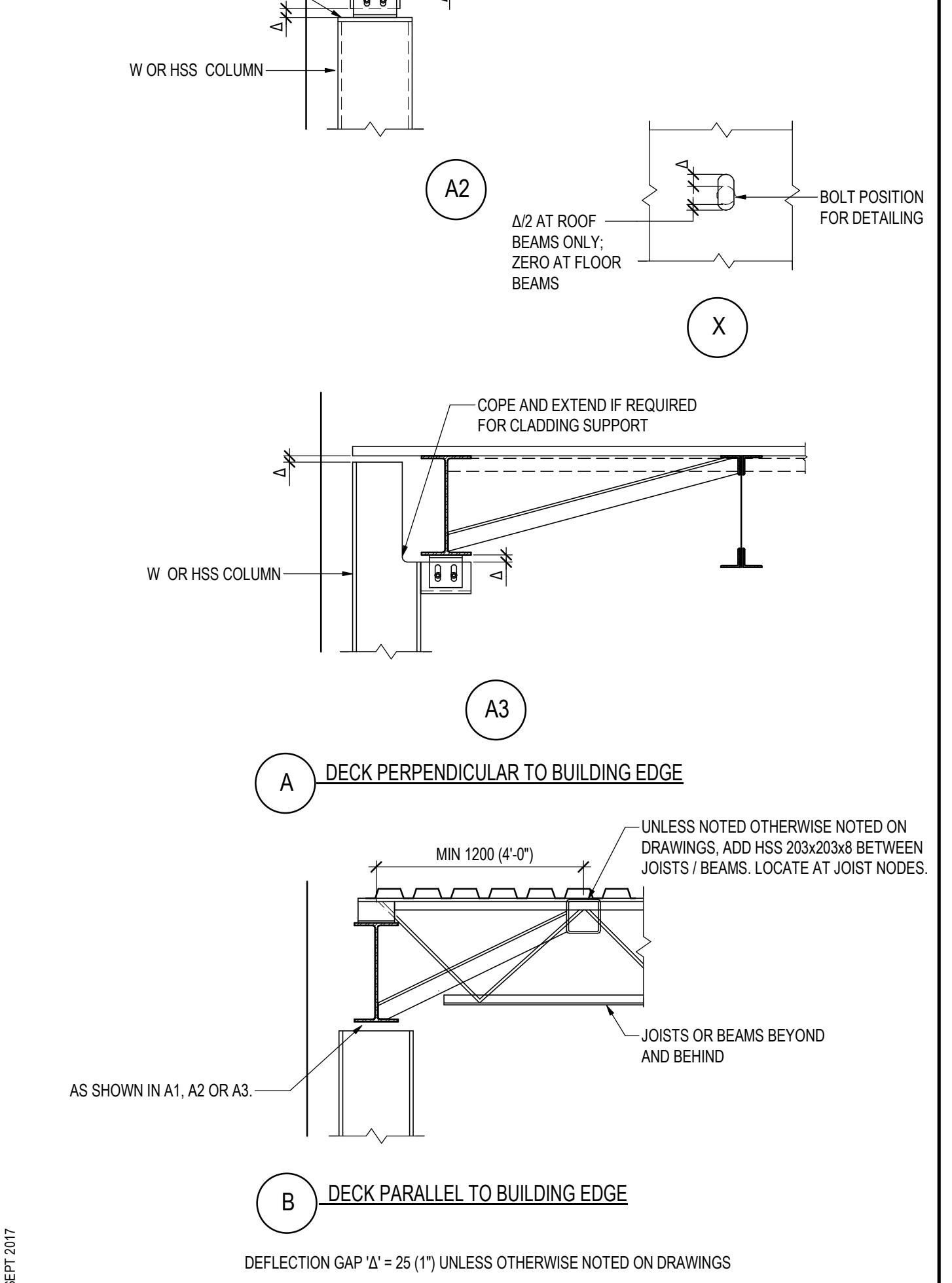
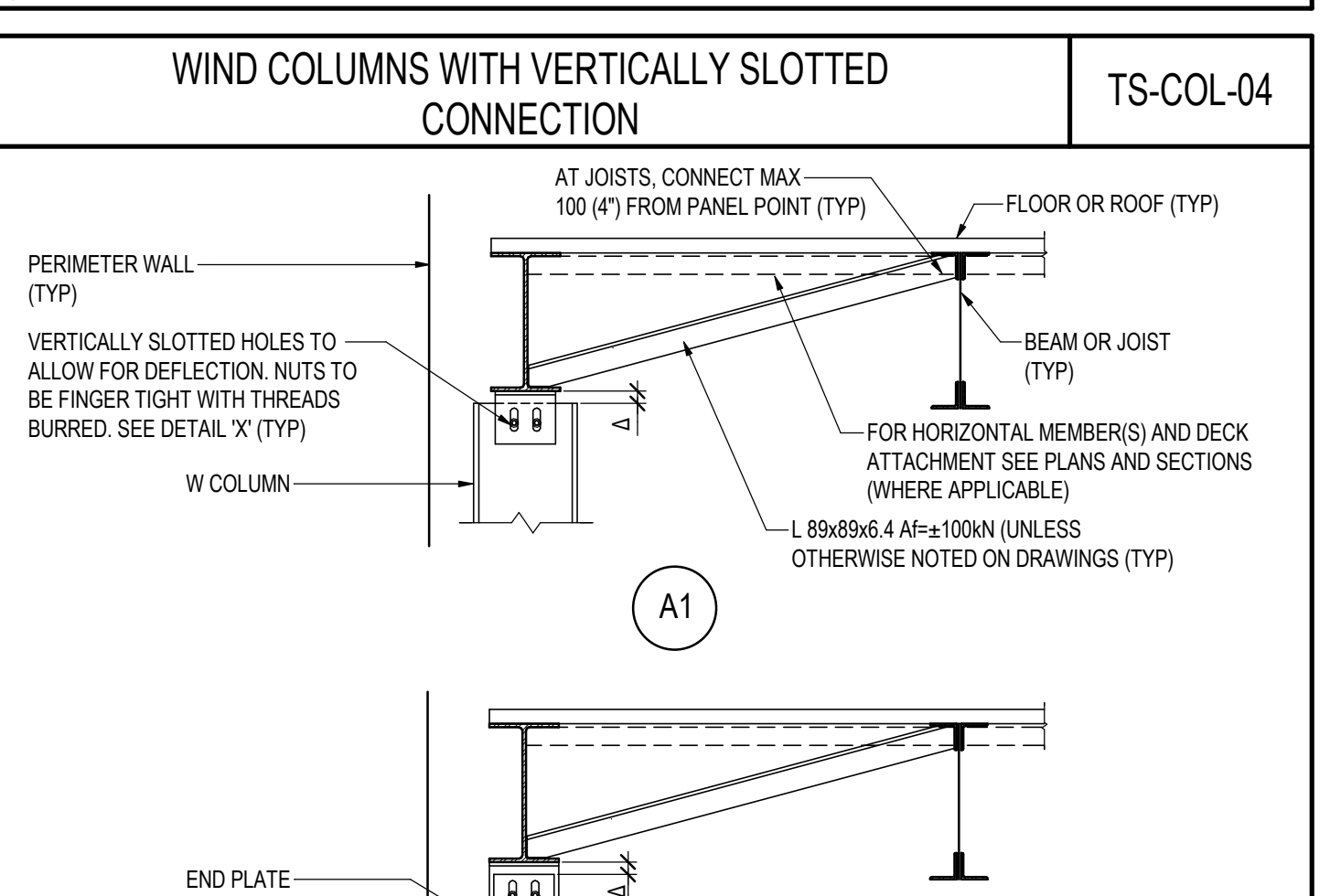
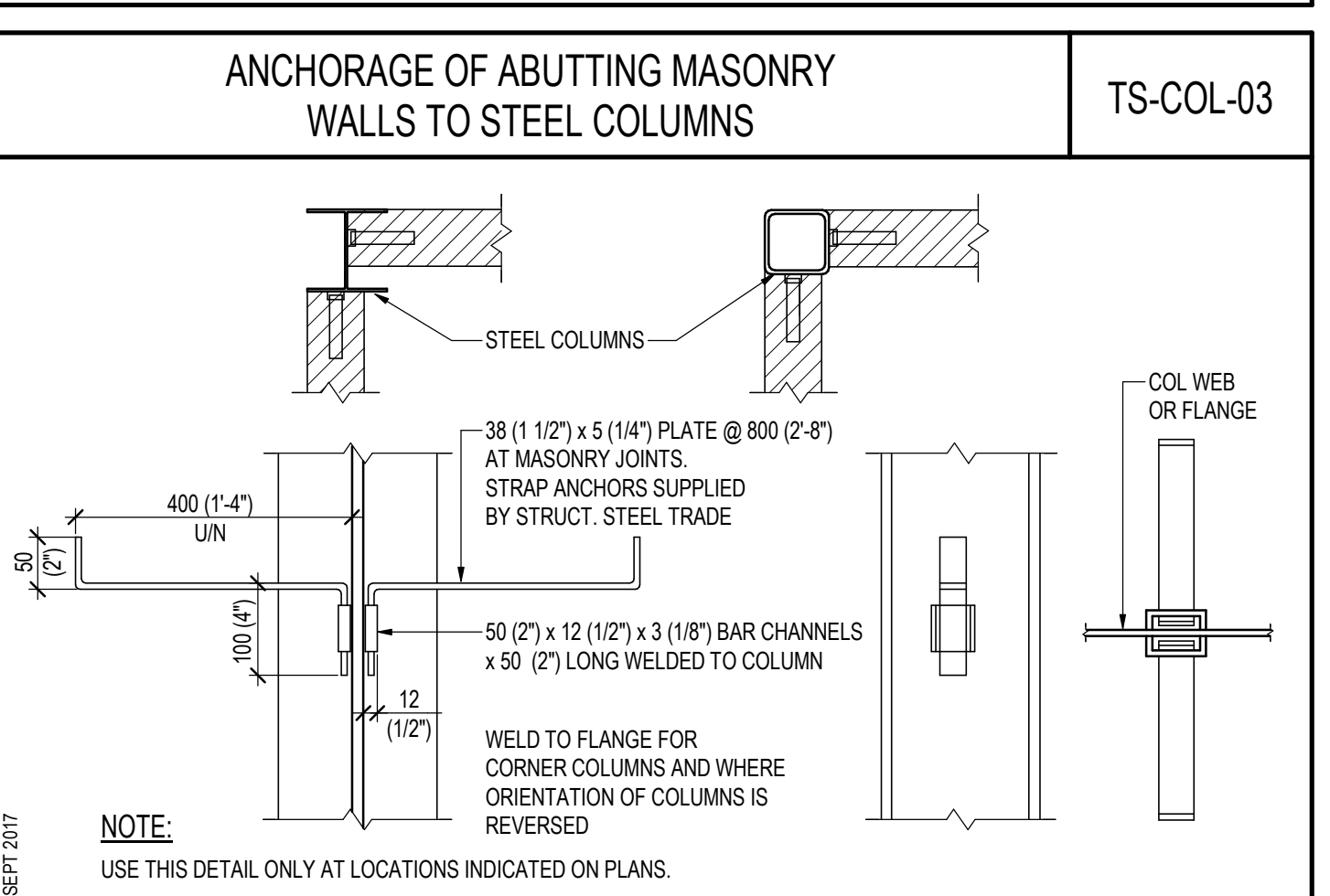
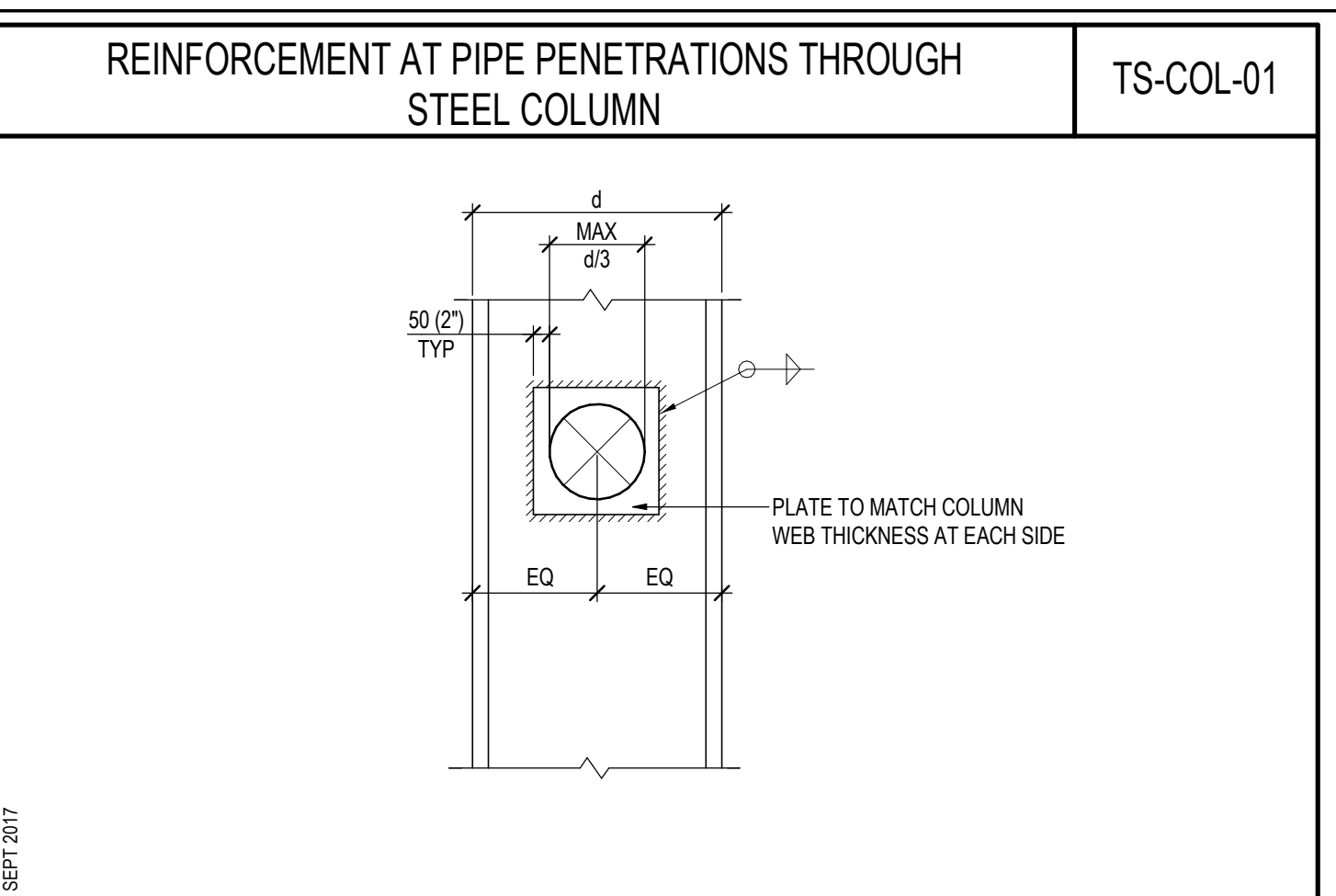
REVISION NO.:



WALL THICKNESS	SPAN	HEIGHT OF SUPPORTED MASONRY "h"			DETAIL
		h ≤ 1200 (4'-0")	1200 (4'-0") < h ≤ 2600 (8'-4")	2600 (8'-4") < h ≤ 4800 (16'-0")	
90 (4") VENEER	UP TO 1200 (4'-0")	L89x89x6.4	L89x89x6.4	L89x89x7.9	70x13 (2-3/4"x1/2") STEEL PLATE, WHERE SHOWN IN SCHEDULE
	1200 (4'-0") TO 1800 (6'-0")	L89x89x6.4	L89x89x6.4	L102x89x7.9	
	1800 (6'-0") TO 2400 (8'-0")	L89x89x6.4	L102x89x7.9	L152x89x7.9	
	2400 (8'-0") TO 3000 (10'-0")	L102x89x7.9	L152x89x7.9	L152x89x9.5 + PLATE	
	3000 (10'-0") TO 3600 (12'-0")	L127x89x7.9	L152x89x9.5 + PLATE	N/A	
140 (6")	UP TO 1200 (4'-0")	2-16x64x6.4	2-16x64x6.4	2-16x64x6.4	120x13 (4-3/4"x1/2") STEEL PLATE, WHERE SHOWN IN SCHEDULE
	1200 (4'-0") TO 1800 (6'-0")	2-16x64x6.4	2-16x64x7.9	2-16x64x7.9	
	1800 (6'-0") TO 2400 (8'-0")	2-16x64x7.9	2-16x64x9.5 + PLATE	N/A	
	2400 (8'-0") TO 3000 (10'-0")	2-16x64x9.5	N/A	N/A	
	3000 (10'-0") TO 3600 (12'-0")	2-16x64x9.5 + PLATE	N/A	N/A	
190 (8")	UP TO 1200 (4'-0")	2-16x89x6.4	2-16x89x6.4	2-16x89x6.4	220x13 (8-1/2"x1/2") STEEL PLATE, WHERE SHOWN IN SCHEDULE
	1200 (4'-0") TO 1800 (6'-0")	2-16x89x6.4	2-16x89x7.9	2-16x89x7.9	
	1800 (6'-0") TO 2400 (8'-0")	2-16x89x7.9	2-16x89x9.5	2-16x89x9.5	
	2400 (8'-0") TO 3000 (10'-0")	2-16x89x9.5	N/A	N/A	
	3000 (10'-0") TO 3600 (12'-0")	2-16x89x9.5	N/A	N/A	
240 (10")	UP TO 1200 (4'-0")	2-16x102x6.4	2-16x102x6.4	2-16x102x6.4	220x13 (8-1/2"x1/2") STEEL PLATE, WHERE SHOWN IN SCHEDULE
	1200 (4'-0") TO 1800 (6'-0")	2-16x102x6.4	2-16x102x7.9	2-16x102x7.9	
	1800 (6'-0") TO 2400 (8'-0")	2-16x102x7.9	2-16x102x9.5	2-16x102x9.5	
	2400 (8'-0") TO 3000 (10'-0")	2-16x102x9.5	2-16x102x9.5	2-16x102x9.5	
	3000 (10'-0") TO 3600 (12'-0")	2-16x102x9.5	2-16x102x9.5 + PLATE	N/A	
290 (12")	UP TO 1200 (4'-0")	3-16x89x6.4	3-16x89x6.4	3-16x89x6.4	220x13 (8-1/2"x1/2") STEEL PLATE, WHERE SHOWN IN SCHEDULE
	1200 (4'-0") TO 1800 (6'-0")	3-16x89x6.4	3-16x89x7.9	3-16x89x7.9	
	1800 (6'-0") TO 2400 (8'-0")	3-16x89x7.9	3-16x89x9.5	3-16x89x9.5	
	2400 (8'-0") TO 3000 (10'-0")	3-16x89x9.5	3-16x89x9.5	3-16x89x9.5	
	3000 (10'-0") TO 3600 (12'-0")	3-16x89x9.5	N/A	N/A	



WALL THICKNESS	SPAN	HEIGHT OF SUPPORTED MASONRY "h"			DETAIL
		h ≤ 1200 (4'-0")	1200 (4'-0") < h ≤ 2600 (8'-4")	2600 (8'-4") < h ≤ 4800 (16'-0")	
140 (6")	UP TO 1200 (4'-0")	190 (7 1/2")	1-10	190 (7 1/2")	1-10-STIRRUPS
	1200 (4'-0") TO 1800 (6'-0")	190 (7 1/2")	1-10	390 (15 1/2")	
	1800 (6'-0") TO 2400 (8'-0")	390 (15 1/2")	1-10	390 (15 1/2")	
	2400 (8'-0") TO 3000 (10'-0")	390 (15 1/2")	1-10	590 (23 1/2")	
	3000 (10'-0") TO 3600 (12'-0")	390 (15 1/2")	1-10	590 (23 1/2")	
190 (8")	UP TO 1200 (4'-0")	190 (7 1/2")	1-10	190 (7 1/2")	1-15-STIRRUPS
	1200 (4'-0") TO 1800 (6'-0")	190 (7 1/2")	1-10	390 (15 1/2")	
	1800 (6'-0") TO 2400 (8'-0")	390 (15 1/2")	1-15-STIRRUPS	390 (15 1/2")	
	2400 (8'-0") TO 3000 (10'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	
	3000 (10'-0") TO 3600 (12'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	
240 (10")	UP TO 1200 (4'-0")	190 (7 1/2")	1-10	190 (7 1/2")	1-15-STIRRUPS
	1200 (4'-0") TO 1800 (6'-0")	190 (7 1/2")	1-10	390 (15 1/2")	
	1800 (6'-0") TO 2400 (8'-0")	390 (15 1/2")	1-15-STIRRUPS	390 (15 1/2")	
	2400 (8'-0") TO 3000 (10'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	
	3000 (10'-0") TO 3600 (12'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	
290 (12")	UP TO 1200 (4'-0")	190 (7 1/2")	1-15	190 (7 1/2")	1-15-STIRRUPS
	1200 (4'-0") TO 1800 (6'-0")	190 (7 1/2")	1-15	390 (15 1/2")	
	1800 (6'-0") TO 2400 (8'-0")	390 (15 1/2")	1-15-STIRRUPS	390 (15 1/2")	
	2400 (8'-0") TO 3000 (10'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	
	3000 (10'-0") TO 3600 (12'-0")	390 (15 1/2")	1-15-STIRRUPS	590 (23 1/2")	



REV	DATE	DESCRIPTION	BY
2	2021.11.12	Issued for 70% Progress	SEF
1	2021.10.01	Issued for 66% Costing	SEF

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PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
205 Greenbank Rd., Nepean, ON K2H 8K9

DRAWING TITLE:  
**TYPICAL DETAILS**

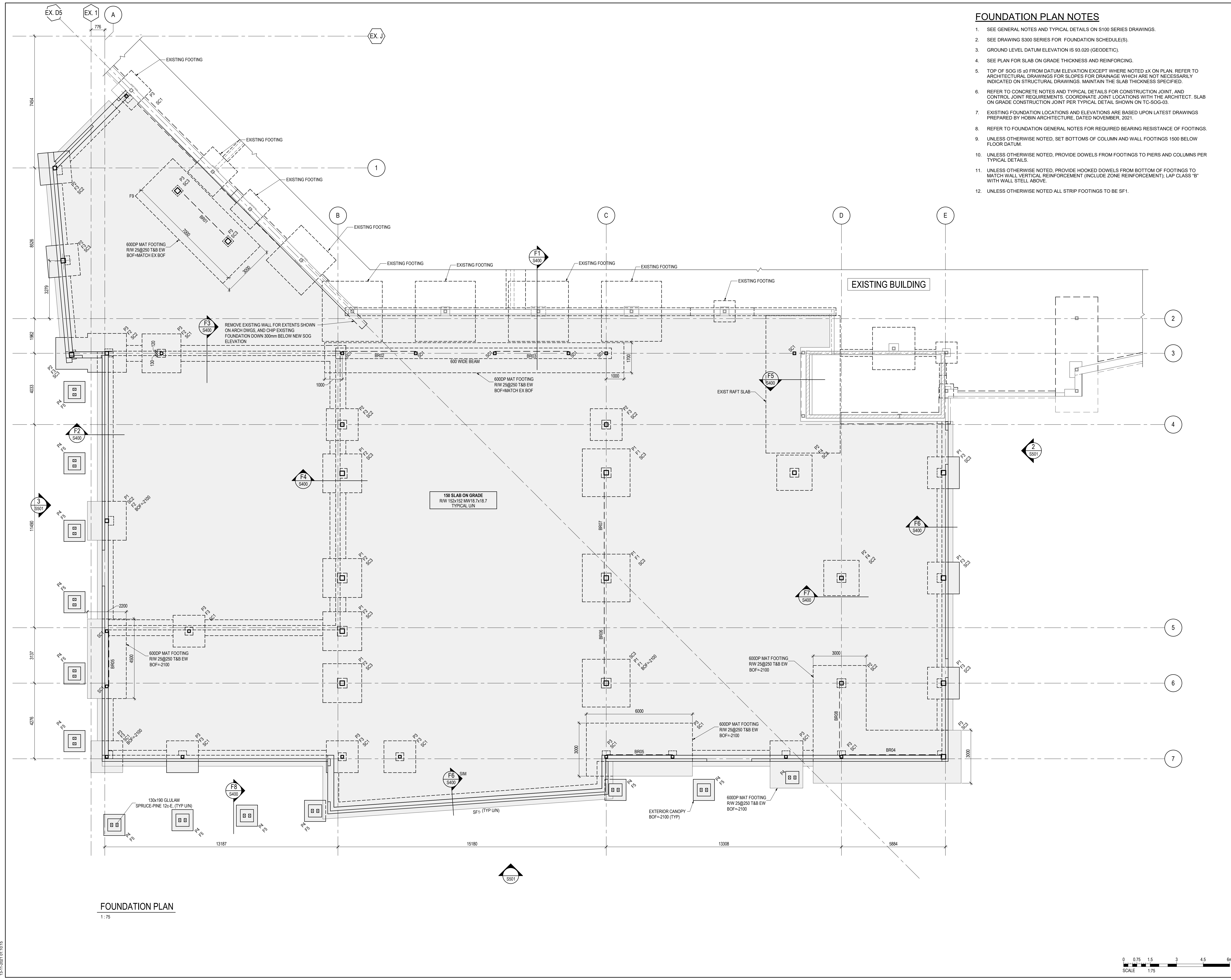
DRAWN BY: DATE: SCALE:  
P.MCKEE AUG 2021 AS NOTED

PROJECT:  
211-03025-00

DRAWING NO.:  
**S112**

REVISION NO.:





**FOUNDATION PLAN NOTES**

1. SEE GENERAL NOTES AND TYPICAL DETAILS ON S100 SERIES DRAWINGS.
2. SEE DRAWING S300 SERIES FOR FOUNDATION SCHEDULE(S).
3. GROUND LEVEL DATUM ELEVATION IS 93.020 (GEODETTIC).
4. SEE PLAN FOR SLAB ON GRADE THICKNESS AND REINFORCING.
5. TOP OF SOG IS ±0 FROM DATUM ELEVATION EXCEPT WHERE NOTED ±X ON PLAN. REFER TO ARCHITECTURAL DRAWINGS FOR SLOPES FOR DRAINAGE WHICH ARE NOT NECESSARILY INDICATED ON STRUCTURAL DRAWINGS. MAINTAIN THE SLAB THICKNESS SPECIFIED.
6. REFER TO CONCRETE NOTES AND TYPICAL DETAILS FOR CONSTRUCTION JOINT, AND CONTROL JOINT REQUIREMENTS. COORDINATE JOINT LOCATIONS WITH THE ARCHITECT. SLAB ON GRADE CONSTRUCTION JOINT PER TYPICAL DETAIL SHOWN ON TC-SOG-03.
7. EXISTING FOUNDATION LOCATIONS AND ELEVATIONS ARE BASED UPON LATEST DRAWINGS PREPARED BY HOBIN ARCHITECTURE, DATED NOVEMBER, 2021.
8. REFER TO FOUNDATION GENERAL NOTES FOR REQUIRED BEARING RESISTANCE OF FOOTINGS.
9. UNLESS OTHERWISE NOTED, SET BOTTOMS OF COLUMN AND WALL FOOTINGS 1500 BELOW FLOOR DATUM.
10. UNLESS OTHERWISE NOTED, PROVIDE DOWELS FROM FOOTINGS TO PIERS AND COLUMNS PER TYPICAL DETAILS.
11. UNLESS OTHERWISE NOTED, PROVIDE HOOKED DOWELS FROM BOTTOM OF FOOTINGS TO MATCH WALL VERTICAL REINFORCEMENT (INCLUDE ZONE REINFORCEMENT), LAP CLASS 'B' WITH WALL STEEL ABOVE.
12. UNLESS OTHERWISE NOTED ALL STRIP FOOTINGS TO BE SF1.

**FOUNDATION PLAN**  
1:75

KEY PLAN

REV	DATE	DESCRIPTION	BY
2	2021.11.12	Issued for 70% Progress	SEF
1	2021.10.01	Issued for 66% Costing	SEF

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**HOBIN ARCHITECTURE**

PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
205 Greenbank Rd., Nepean, ON K2H 8K9

DRAWING TITLE:  
**FOUNDATION PLAN**

DRAWN BY: P.MCKEE DATE: AUG 2021 SCALE: AS NOTED

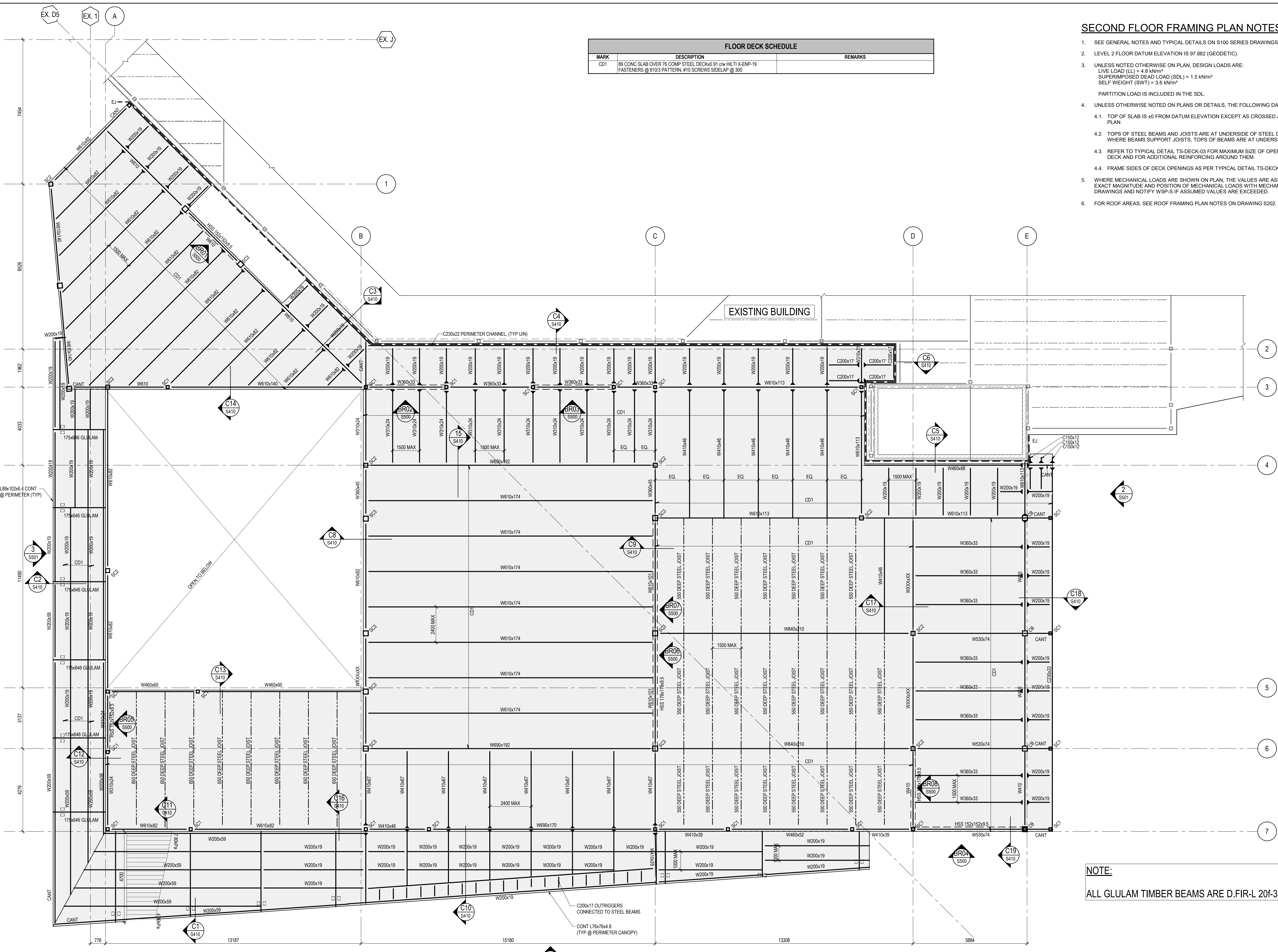
PROJECT: 211-03025-00 DRAWING NO.: S200

REVISION NO.:  
0

SCALE: 1:75

0 0.75 1.5 3 4.5 6m

BAA 2021/01/03/025 - Woodvale Church - R21211-03025-00 - Woodvale Church\_ADD\_S21.rvt  
 15-11-2021 09:18:15



FLOOR DECK SCHEDULE		
MARK	DESCRIPTION	REMARKS
CD1	89 CONG SLAB OVER 76 COMP STEEL DECK w/ 91 c/w HILTI X-ENP-19 FASTENERS @ 610/3 PATTERN, #10 SCREWS SIDELAP @ 300	

**SECOND FLOOR FRAMING PLAN NOTES**

- SEE GENERAL NOTES AND TYPICAL DETAILS ON S100 SERIES DRAWINGS.
- LEVEL 2 FLOOR DATUM ELEVATION IS 97.882 (GEODETIK).
- UNLESS NOTED OTHERWISE ON PLAN, DESIGN LOADS ARE:  
LIVE LOAD (LL) = 4.8 kN/m<sup>2</sup>  
SUPERIMPOSED DEAD LOAD (SDL) = 1.5 kN/m<sup>2</sup>  
SELF WEIGHT (SWT) = 3.6 kN/m<sup>2</sup>  
PARTITION LOAD IS INCLUDED IN THE SDL.
- UNLESS OTHERWISE NOTED ON PLANS OR DETAILS, THE FOLLOWING DATA APPLY:
  - TOP OF SLAB IS ±0 FROM DATUM ELEVATION EXCEPT AS CROSSED AND NOTED ±x ON PLAN.
  - TOPS OF STEEL BEAMS AND JOISTS ARE AT UNDERSIDE OF STEEL DECK, EXCEPT THAT WHERE BEAMS SUPPORT JOISTS, TOPS OF BEAMS ARE AT UNDERSIDE OF JOIST SHOES.
  - REFER TO TYPICAL DETAIL TS-DECK-03 FOR MAXIMUM SIZE OF OPENINGS IN SLAB ON DECK AND FOR ADDITIONAL REINFORCING AROUND THEM.
  - FRAME SIDES OF DECK OPENINGS AS PER TYPICAL DETAIL TS-DECK-04.
- WHERE MECHANICAL LOADS ARE SHOWN ON PLAN, THE VALUES ARE ASSUMED. CONFIRM EXACT MAGNITUDE AND POSITION OF MECHANICAL LOADS WITH MECHANICAL SHOP DRAWINGS AND NOTIFY WSP-S IF ASSUMED VALUES ARE EXCEEDED.
- FOR ROOF AREAS, SEE ROOF FRAMING PLAN NOTES ON DRAWING S202.

**LEVEL 2 FRAMING PLAN**

1:75

**NOTE:**  
ALL GLULAM TIMBER BEAMS ARE D.FIR-L 20F-3 U/N

KEY PLAN

REV	DATE	DESCRIPTION	BY
2	2021.11.12	Issued for 70% Progress	SEF
1	2021.10.01	Issued for 65% Costing	SEF

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PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
 205 Greenbank Rd., Nepean, ON K2H 8K9

DRAWING TITLE:  
**LEVEL 2 FRAMING PLAN**

DRAWN BY: DATE: SCALE:  
 P.MCKEE AUG 2021 AS NOTED

PROJECT: 211-03025-00  
 DRAWING NO.: S201

REVISION NO.:



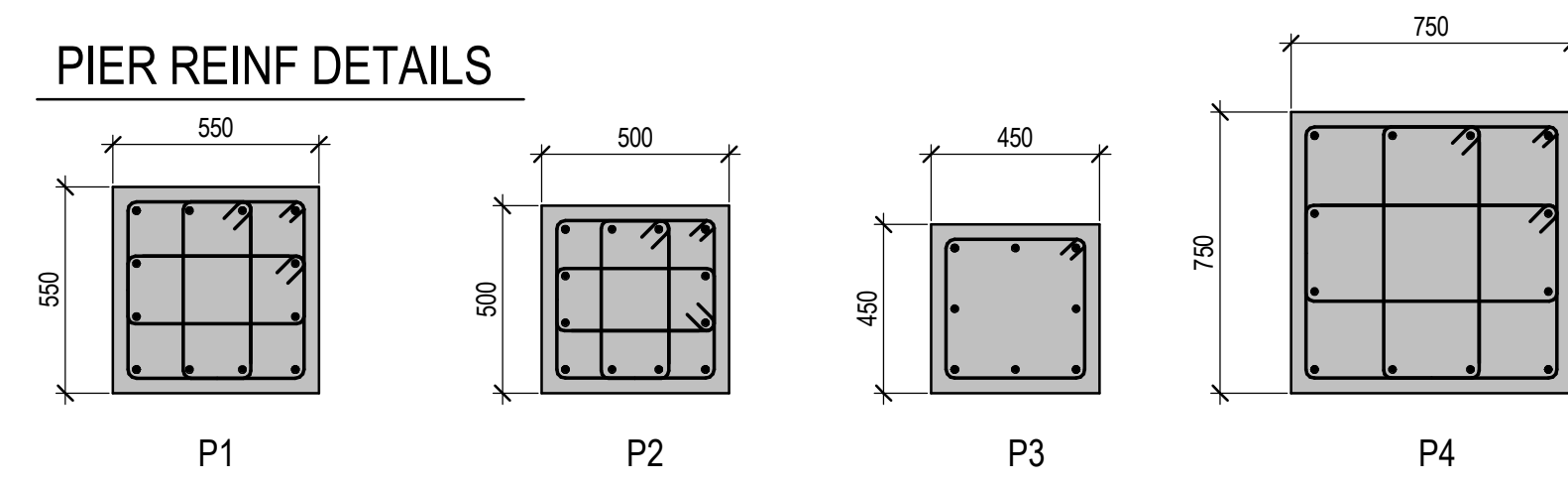
STEEL COLUMN SCHEDULE				
MARK	SIZE	BASE PLATE	ANCHORAGE	REMARKS
SC1	HSS 152x152x9.5	300x300x13	4-250 ANCHOR BOLTS x 200 EMBD + 50 HOOK	PROVIDE SEISMIC HEADED ANCHOR BOLTS @ BRACE FRAME LOCATIONS 400L
SC2	HSS 203x203x9.5	350x350x13	4-250 ANCHOR BOLTS x 200 EMBD + 50 HOOK	PROVIDE SEISMIC HEADED ANCHOR BOLTS @ BRACE FRAME LOCATIONS 400L
SC3	HSS 254x254x13		4-250 ANCHOR BOLTS x 200 EMBD + 50 HOOK	PROVIDE SEISMIC HEADED ANCHOR BOLTS @ BRACE FRAME LOCATIONS 400L

FOOTING SCHEDULE					
MARK	WIDTH	LENGTH	DEPTH	REINFORCEMENT	REMARKS
F1	2700	2700	600	25@250 T&B EW	
F2	2200	2200	600	20@250 BEW	
F3	1800	1800	600	20@250 BEW	
F4	2000	2000	600	20@250 BEW	
F5	1200	1200	600	20@250 BEW	

STRIP FOOTING SCHEDULE				
MARK	WIDTH	DEPTH	REINFORCEMENT	REMARKS
SF1	900	300	4-15B CONT.	

PIER SCHEDULE				
MARK	WIDTH	LENGTH	REINFORCEMENT	REMARKS
P1	550	550	12-20V + 10@300 TIES MAX	
P2	500	500	12-20V + 10@300 TIES MAX	
P3	450	450	8-20V + 10@300 TIES MAX	
P4	700	750	12-25V + 10@300 TIES MAX	

PIER REINF DETAILS



KEY PLAN

REV	DATE	DESCRIPTION	BY
1	2021.11.12	Issued for 70% Progress	SEF

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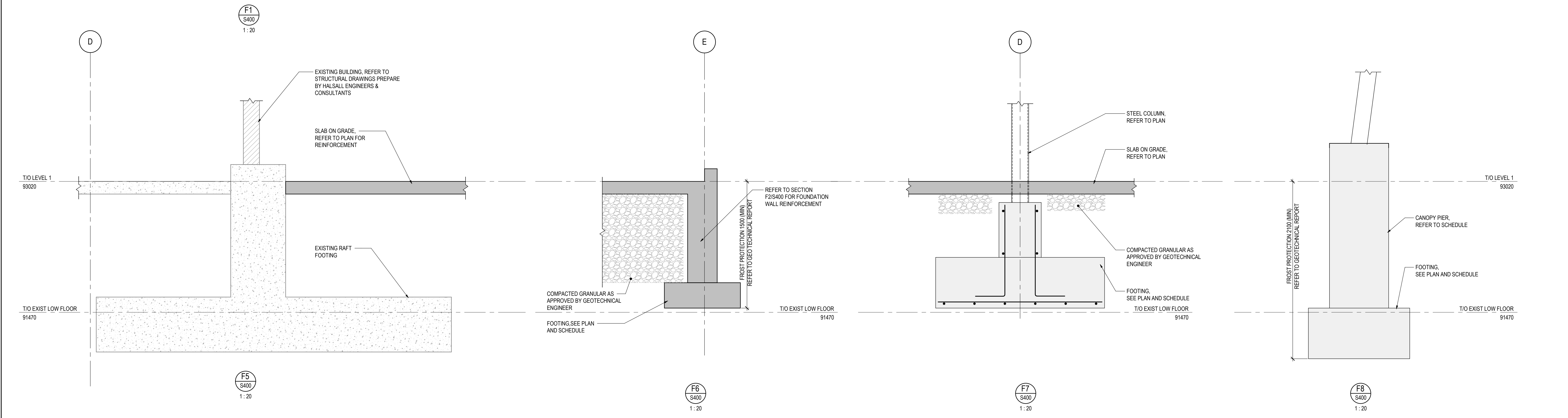
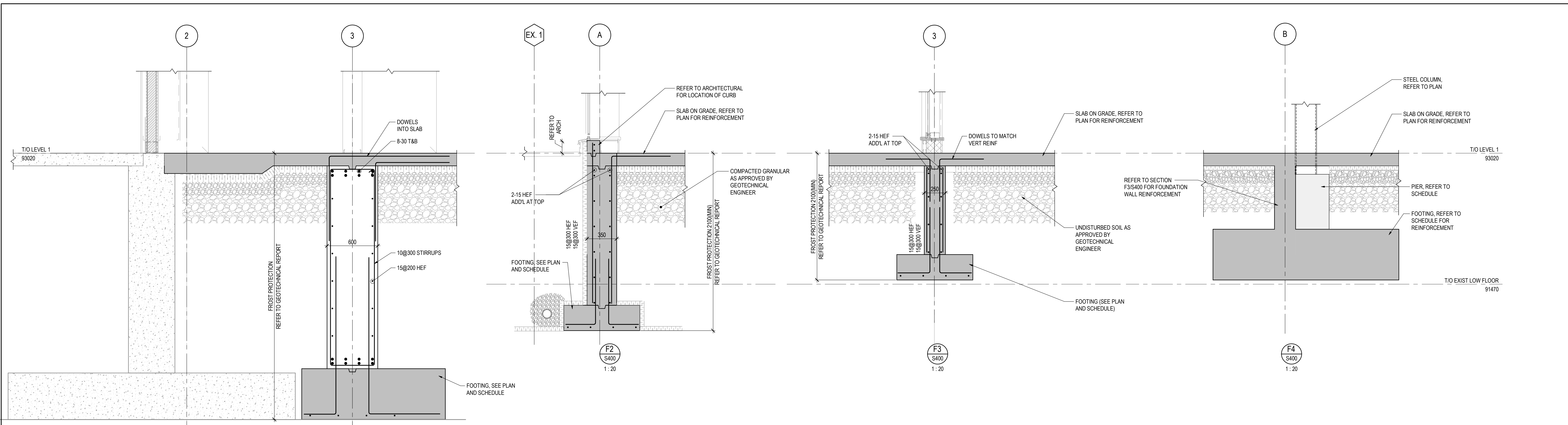
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PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
205 Greenbank Rd, Nepean, ON K2H 8K9

DRAWING TITLE:  
**SCHEDULE**

DRAWN BY: P.MCKEE      DATE: AUG 2021      SCALE: AS NOTED

PROJECT: 211-03025-00  
DRAWING NO.: **S300**  
REVISION NO.:



KEY PLAN

REV	DATE	DESCRIPTION	BY
2	2021.11.12	Issued for 70% Progress	SEF
1	2021.10.01	Issued for 65% Costing	SEF

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PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
 205 Greenbank Rd, Nepean, ON K2H 8K9

DRAWING TITLE:  
**FOUNDATION SECTIONS**

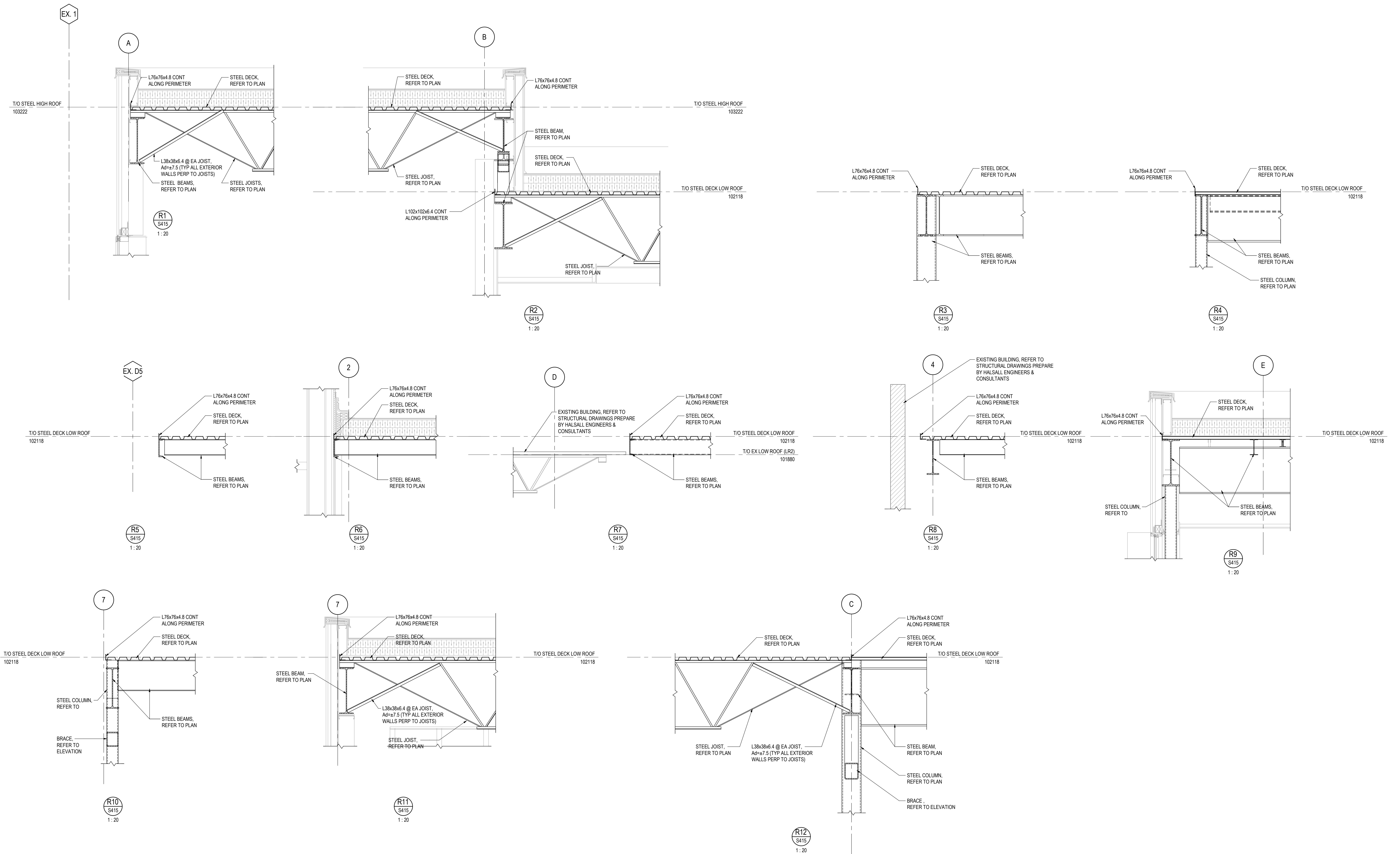
DRAWN BY: P.MCKEE DATE: AUG 2021 SCALE: AS NOTED

PROJECT: 211-03025-00

DRAWING NO.: S400

REVISION NO.:





KEY PLAN

REV	DATE	DESCRIPTION	BY
1	2021.11.12	Issued for 70% Progress	SEF

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PROJECT LOCATION:  
**WOODVALE PENTECOSTAL CHURCH ADDITION**  
 205 Greenbank Rd., Nepean, ON K2H 8K9

DRAWING TITLE:  
**ROOF SECTIONS**

DRAWN BY: P.J.MCKEE DATE: AUG 2021 SCALE: AS NOTED

PROJECT: 211-03025-00 DRAWING NO.: S415 REVISION NO.:

BAA 2021/11/03/05 - Woodvale Church - R210211-03025-00 - Woodvale Church\_ADD\_R21.14  
 13-11-2021 01:10:25

