

D01-1 GENERAL

D01-1 GENERAL INFORMATION

1. THE INFORMATION PRESENTED ON THESE DRAWINGS HAS BEEN DESIGNED AND ANALYZED IN ACCORDANCE WITH THE 2012 (R22) ONTARIO BUILDING CODE & 2015 NATIONAL BUILDING CODE OF CANADA. CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THIS AND ALL OTHER APPLICABLE CODES.

- 1.1 CONCRETE STRUCTURE DESIGNED IN ACCORDANCE WITH CSA A23.3-14
- 1.2 STEEL STRUCTURE DESIGNED IN ACCORDANCE WITH CAN/CSA-S16-14
- 1.3 WOOD STRUCTURE DESIGNED IN ACCORDANCE WITH CAN/CSA-086-14
- 1.4 MASONRY STRUCTURE DESIGNED IN ACCORDANCE WITH CAN/CSA S304-14

2. ALL WORK MUST COMPLY WITH THE PROVISIONS OF THE 2012 (R22) ONTARIO BUILDING CODE, OCCUPATIONAL HEALTH & SAFETY ACT, MUNICIPAL BYLAWS AND BEST CODE PRACTICES. THE CONTRACTOR MUST CONSIDER THAT CONSTRUCTION WORK IS DEPENDANT ON SITE CONDITIONS.

3. ALL DIMENSIONS ARE IN MILLIMETRES AND ELEVATIONS IN METRES UNLESS INDICATED OTHERWISE.

4. GUARDRAILS / HANDRAILS SHALL BE DESIGNED AND CERTIFIED BY THE FABRICATOR'S PROFESSIONAL ENGINEER LICENSED IN ONTARIO IN ACCORDANCE WITH LOADS PROVIDED IN THE 2012 (R22) ONTARIO BUILDING CODE / 2015 NATIONAL BUILDING CODE. STAMPED SHOP DRAWINGS TO BE SUBMITTED.

5. THE ROOF HAS BEEN DESIGNED FOR THE REQUIRED STORM WATER FLOW RESTRICTION IN ACCORDANCE WITH 2012 (R22) ONTARIO BUILDING CODE REQUIREMENTS.

6. CONTRACTOR IS TO VERIFY / COORDINATE ALL DIMENSIONS / PENETRATIONS WITH ARCHITECTURAL / MECHANICAL / ELECTRICAL DRAWINGS PRIOR TO CONSTRUCTION. REPORT INCONSISTENCIES BEFORE PROCEEDING WITH WORK. ANY OPENINGS NOT INDICATED ON STRUCTURAL DRAWINGS ARE TO BE APPROVED BY STRUCTURAL ENGINEER IN WRITING PRIOR TO CONSTRUCTION.

7. CAD / REVIT VERSIONS OF THE STRUCTURAL DRAWINGS SHALL BE MADE AVAILABLE TO THE CONTRACTOR UPON THE COMPLETION OF A RELEASE FORM INDEMNIFYING THE CONSULTANT FROM ANY ERRORS OR OMISSIONS ASSOCIATED WITH THE CAD / REVIT FILES.

8. LADDERS SHALL BE DESIGNED AND CERTIFIED BY THE FABRICATOR'S PROFESSIONAL ENGINEER LICENSED IN ONTARIO IN ACCORDANCE WITH LOADS PROVIDED IN PART 4 AND PART 3 OF THE 2012 (R22) ONTARIO BUILDING CODE / 2015 NATIONAL BUILDING CODE. STAMPED SHOP DRAWINGS TO BE SUBMITTED.

9. STEEL STAIRS SHALL BE DESIGNED AND CERTIFIED BY THE FABRICATOR'S PROFESSIONAL ENGINEER LICENSED IN ONTARIO IN ACCORDANCE WITH LOADS PROVIDED IN PART 4 AND PART 3 OF THE 2012 (R22) ONTARIO BUILDING CODE / 2015 NATIONAL BUILDING CODE. STAMPED SHOP DRAWINGS TO BE SUBMITTED.

10. DEMOLITION DETAILS THAT AFFECT THE STRUCTURAL ELEMENTS HAVE BEEN REVIEWED IN ACCORDANCE WITH THE 2012 (R22) ONTARIO BUILDING CODE. WHERE REQUIRED, SUPPLEMENTARY / TEMPORARY / REMEDIAL FRAMING HAS BEEN PROVIDED.

11. SEISMIC RESTRAINT OF ARCH / MECH / ELECT ELEMENTS NOT NOTED ON THE DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER. RESTRAINT DETAILS ARE TO BE DEVELOPED IN ACCORDANCE WITH THE 2012 (R22) ONTARIO BUILDING CODE. CONTRACTOR'S ENGINEER IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF SEISMIC RESTRAINTS AND ISOLATIONS AS REQUIRED BY SPECIFICATIONS INCLUDING THE VERIFICATION THAT THE EXISTING / NEW STRUCTURE IS CAPABLE OF SAFELY SUPPORTING THE IMPOSED LOADS IN ACCORDANCE WITH THE 2012 (R22) ONTARIO BUILDING CODE. NO ELEMENTS MAY BE CONSTRUCTED WITHOUT WRITTEN CONFIRMATION OF THESE CONDITIONS BY CONTRACTOR'S ENGINEER.

12. NO FOUNDATION ELEMENTS ARE TO BE CONSTRUCTED UNTIL WRITTEN APPROVAL OF THE BEARING SURFACES AND PRESSURES IS PROVIDED BY A GEOTECHNICAL ENGINEER THROUGH ON-SITE INVESTIGATION. FAILURE TO COMPLETE THIS WORK COULD RESULT IN THE REMOVAL / REINSTATEMENT OF ANY / ALL FOUNDATION ELEMENTS AT CONTRACTOR'S OWN COST.

13. NEW OPENINGS IN EXISTING / ERECTED CONCRETE / MASONRY ELEMENTS:
REFER TO MECH / ARCH / ELECT DRAWINGS FOR LAYOUTS.
SCAN T&B / E.S. OF SLABWALL PRIOR TO REMOVALS. MARK OUT OPENING POSITION/ALL REBAR/CONDUIT ON T&B OF SLAB / E.S. OF WALL MIN. OF 4 WEEKS PRIOR TO REINFORCING SHOP DRAWING SUBMISSION / CUTTING / CORING.
CONTACT ENGINEER FOR REVIEW OF SCANS/MARKS PRIOR TO COMMENCEMENT OF ANY DEMOLITION.
NO WORK TO COMMENCE UNTIL RECEIVING WRITTEN APPROVAL FROM ENGINEER.
SAWCUT/CORE OUT OPENINGS AS REQUIRED.
DO NOT OVERCUT.
ANY REQUIRED SUPPLEMENTAL STRENGTHENING/REINFORCING IS TO BE ERECTED PRIOR TO REMOVALS.

14. CONTRACTOR TO PROVIDE PRE-ENGINEERED SHORING AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S CONSTRUCTION ACTIVITIES AND TO PREVENT DAMAGE TO ANY ADJACENT PROPERTY. ALL CONSTRUCTION ACTIVITIES TO BE LIMITED TO THE LIMITS OF THE CONSTRUCTION SITE AND ALL DAMAGE TO EXISTING PROPERTIES MUST BE REINSTATED.

15. CONTRACTOR IS REQUIRED TO SUBMIT CONDUIT AND SLEEVING SHOP DRAWINGS FOR ALL FLOORS / ROOFS / WALLS / COLUMNS PRIOR TO THE ERECTION / CONSTRUCTION / FABRICATION OF ANY OF THESE ELEMENTS. THE DRAWINGS ARE TO LOCATE / DIMENSION THE CLEAR SIZES OF OPENINGS / SLEEVES / CONDUITS IN PLAN (FLOORS / ROOFS / COLUMNS) AND ELEVATION (WALLS / BEAMS). THE COORDINATION OF THE VARIOUS DISCIPLINES / SUBTRADES TO ENSURE ALL ITEMS ARE CLEARLY INDICATED IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DRAWINGS ARE TO BE SUBMITTED A MINIMUM OF 4 WEEKS PRIOR TO THE CONSTRUCTION OF THE AFFECTED ELEMENT.

16. DO NOT SCALE DIMENSIONS DIRECTLY FROM THESE DRAWINGS OR ELECTRONIC FILES.

17. SPECIFIC NOTES AND DETAILS FOUND ON THESE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

18. DO NOT LOAD HEAVY MATERIALS SUCH AS MASONRY, FILL, GRAVEL, DRYWALL, ETC. ON FLOORS, TERRACES OR ROOFS WITHOUT ADEQUATE ADDITIONAL SUPPORTS. SUBMIT DETAILS TO ENGINEER FOR REVIEW.

D01-2 DESIGN LOADS:

IMPORTANCE FACTORS:

SNOW: $I_s = 1.0$ $U_s = 1.0$ $S_s = 0.9$
WIND: $I_w = 1.0$ $U_w = 1.0$ $S_w = 0.75$
SEISMIC: $I_s = 1.0$

SNOW LOAD FACTORS:

$S = I_s [Ss(Cb/Cw/Cs/Ca) + S_r]$
 $S_s = 2.4 \text{ kPa}$
 $S_r = 0.4 \text{ kPa}$
 $Cb = 0.8$
 $Cw = 1.0$
 $Ca = 1.0$

D01-3 SEISMIC SYSTEM/LOADING DATA

SEISMIC FORCE RESISTING SYSTEM (SFRS)

SFRS: SYSTEM & CONNECTIONS: (OBC 2012 (R22) CLAUSE 4.1.8.9/4.1.8.10)
LATERAL LOAD RESISTING SYSTEM: BRACED FRAMES, CONVENTIONAL CONSTRUCTION.
 $R_d = 1.5$
CSA STANDARD: CAN/CSA S16-14
APPLICABLE CLAUSE(S): 21

SFRS: DIAPHRAGMS & CONNECTIONS: (OBC 2012 (R22) CLAUSE 4.1.8.15)
CSA STANDARD: CAN/CSA S16-14
APPLICABLE CLAUSE(S): 27.11

SFRS: SYSTEM FOUNDATIONS: (OBC 2012 (R22) CLAUSE 4.1.8.16)
CSA STANDARD: CAN/CSA A23.3-14
APPLICABLE CLAUSE(S): 12.1 FOR UNANCHORED FOOTINGS

CONFIRMATION: FOUNDATIONS HAVE BEEN DESIGNED TO RESIST THE LATERAL FORCES APPLIED TO THE SFRS IN ACCORDANCE WITH THE OBC 2012 (R22) INCLUDING ALL APPLICABLE AMPLIFICATION FACTORS.

SEISMIC IMPORTANCE FACTOR: (OBC 2012 (R22) CLAUSE 4.1.8.5)

$I_s = 1.0$

REFERENCE CITY: OTTAWA (CITY HALL)

SITE CLASS: THE NOTED SITE CLASSIFICATION FOR SEISMIC SITE RESPONSE AND SHEAR STRENGTH PARAMETERS INDICATED ARE AS REPORTED IN THE GEOTECHNICAL REPORT BY

□ A □ B ■ C □ D □ E □ F (SITE SPECIFIC SPECTRUM:)

PGA: 0.281 PGV: 0.196

PGA_{REF}: (OBC 2012 (R22) CLAUSE 4.1.8.4(4))

$Sa(0.2) = 0.439$ $PGA = 1.56 < 2.0$

PGA_{REF}: 0.8 PGA = 0.22

5% DAMPED SPECTRAL RESPONSE

ACCELERATION VALUES FOR REFERENCE CITY: (NATIONAL BUILDING CODE 2015 APPENDIX C)

$Sa(0.2) = 0.439$ $Sa(5.0) = 0.015$
 $Sa(0.5) = 0.237$ $Sa(10.0) = 0.0055$
 $Sa(1.0) = 0.118$
 $Sa(2.0) = 0.056$

DESIGN SPECTRAL RESPONSE ACCELERATION VALUES (DSRAV): (OBC 2012 (R22) CLAUSE 4.1.8.4)

$S(0.2) = 0.439$
 $S(0.5) = 0.237$
 $S(1.0) = 0.118$
 $S(2.0) = 0.056$
 $S(5.0) = 0.015$
 $S(10.0) = 0.0055$

SITE COEFFICIENTS: (OBC 2012 (R22) CLAUSE 4.1.8.4)

□ CLASS 'A': (Fa = 0.69; Fv = 0.57) □ CLASS 'B': (Fa = 0.77; Fv = 0.63) ■ CLASS 'C': (Fa = 1.0; Fv = 1.0)

$F(0.2) = 0.69$
 $F(0.5) = 0.57$
 $F(1.0) = 0.57$
 $F(2.0) = 0.58$
 $F(5.0) = 0.61$
 $F(10.0) = 0.67$

$F(0.2) = 0.77$
 $F(0.5) = 0.65$
 $F(1.0) = 0.63$
 $F(2.0) = 0.63$
 $F(5.0) = 0.64$
 $F(10.0) = 0.69$

$F(0.2) = 1.0$
 $F(0.5) = 1.0$
 $F(1.0) = 1.0$
 $F(2.0) = 1.0$
 $F(5.0) = 1.0$
 $F(10.0) = 1.0$

□ CLASS 'D': (Fa = 1.05; Fv = 1.36)

□ CLASS 'E': (Fa = 1.16; Fv = 1.93)

$F(0.2) = 1.05$
 $F(0.5) = 1.26$
 $F(1.0) = 1.36$
 $F(2.0) = 1.41$
 $F(5.0) = 1.56$
 $F(10.0) = 1.39$

$F(0.2) = 1.16$
 $F(0.5) = 1.66$
 $F(1.0) = 1.53$
 $F(2.0) = 2.10$
 $F(5.0) = 2.29$
 $F(10.0) = 2.10$

SYSTEM RESTRICTION VALUE: $I_s Fa Sa(0.2) = 0.439 \geq 0.35$ ■ YES □ NO

PERIOD DATA:

EMPIRICAL PERIOD: (OBC 2012 (R22) CLAUSE 4.1.8.11(3)) (a), (b) or (c)

$Ta(EMPIRICAL)_{NS} = 0.453 \text{ sec}$
 $Ta(EMPIRICAL)_{EW} = 0.453 \text{ sec}$

MODAL PERIOD: (OBC 2012 (R22) CLAUSE 4.1.8.11(3)(d) AND 4.1.8.3(8))

$Ta(MODAL)_{NS} = 0.385 \text{ sec}$
 $Ta(MODAL)_{EW} = 0.385 \text{ sec}$

DESIGN PERIODS/MODE & MOMENT FACTORS: (2012 (R22) OBC TABLE 4.1.8.11)

$S(0.2) = 29.3 \geq 8.0$ ■ YES □ NO

$Ta(DESIGN)_{NS} = 0.385 \text{ sec}$
 $Ta(DESIGN)_{EW} = 0.385 \text{ sec}$

$M_v = 1.0$ $J = 1.0$
 $M_v = 1.0$ $J = 1.0$

DESIGN FUNDAMENTAL PERIOD BASED DSRAV: (OBC 2012 (R22) CLAUSE 4.1.8.11(2))

$S(Ta)_{NS} = 0.207$
 $S(Ta)_{EW} = 0.207$

IRREGULARITY REVIEW: (OBC 2012 (R22) TABLE 4.1.8.6)

1. VERTICAL STIFFNESS: □ YES ■ NO
2. WEIGHT: □ YES ■ NO
3. VERTICAL GEOMETRIC: □ YES ■ NO
4. IN PLANE DISCONTINUITY: □ YES ■ NO
5. OUT OF PLANE: □ YES ■ NO
6. WEAK STOREY: □ YES ■ NO
7. TORSIONAL: $I_{eq} = N/A$ ■ NO
 $B_{eq} = N/A$

8. NON-ORTHOGONAL: □ YES ■ NO

9. GRAVITY INDUCED LATERAL DEMAND IRREGULARITY: □ YES ■ NO

CONCLUSION: BUILDING IS DYNAMIC ANALYSIS: ■ REGULAR □ IRREGULAR
REPAIR TO THE EXISTING STRUCTURE DOES NOT INCREASE THE SEISMIC RISK TO THE PUBLIC AND BUILDING OCCUPANTS. THAT THE STRUCTURAL ADEQUACY OF THE EXISTING BUILDING SYSTEM IS NOT ADVERSELY AFFECTED, AND IT COMPLIES WITH SECTION 11.3, (DIV B) OF THE OBC 2012 (R22). THE STRUCTURAL ENGINEER ALSO CONFIRMS THAT THE NEW CONSTRUCTION AND ITS CONNECTIONS TO THE EXISTING BUILDING SYSTEM COMPLY WITH PART 4 OF OBC 2012 (R22).

TORSIONAL ECCENTRICITY: ■ ≥ 0.10 Dnx (4.1.8.11(10a)) B ≤ 1.7 EQUIV. STATIC FORCE PROCEDURE)
□ ≥ 0.10 Dnx (4.1.8.12(4a)) B ≥ 1.7
□ ≥ 0.05 Dnx (4.1.8.12(4b)) B ≤ 1.7 , 3-D DYNAMIC ANALYSIS)

STRUCTURAL SEPARATION: ■ THE ADJACENT STRUCTURES HAVE BEEN SEPARATED IN ACCORDANCE WITH 4.1.8.14(1) OF THE OBC 2012 (R22)

BUILDING WEIGHT FOR SEISMIC DESIGN: W = 533 kN

BASE SHEAR/MOMENTS:

$V_{STATIC} = S(Ta)M_v J_d R_d R_o$

STATIC MAXIMUM/MINIMUM VALUES:

NORTH-SOUTH: (↑ ↓)

$V_{MIN} = \frac{S(0.2) \cdot M_v \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.029 = 15.5 \text{ kN}$

$V_{MAX} = \frac{0.66 \cdot S(0.2) \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.15 = 80 \text{ kN}$

$V_{MAX} = \frac{S(0.5) \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.122 = 65 \text{ kN}$

EAST-WEST: (← →)

$V_{MIN} = \frac{S(0.2) \cdot M_v \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.029 = 135 \text{ kN}$

$V_{MAX} = \frac{0.66 \cdot S(0.2) \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.15 = 80 \text{ kN}$

$V_{MAX} = \frac{S(0.5) \cdot J_d \cdot W}{R_d R_o} = W \cdot 0.122 = 65 \text{ kN}$

SEISMIC LOADS		
EQUIVALENT STATIC (ES) FORCE PROCEDURE OBC 2012 (R22) CLAUSE 4.1.8.11	DYNAMIC ANALYSIS (DYI) (1)(3) PROCEDURE (INITIAL SCALING FACTOR) OBC 2012 (R22) CLAUSE 4.1.8.12	DESIGN (D) LOADS (2)
NORTH-SOUTH: (↑ ↓) $V_{DENS} = W \cdot 80 \text{ kN}$ $M_{DENS} = 360 \text{ kNm}$	NORTH-SOUTH: (↑ ↓) $V_{DYNs} = N/A \text{ kN}$ $M_{DYNs} = N/A \text{ kNm}$ $M_{DYNs} = N/A$	NORTH-SOUTH: (↑ ↓) $V_{DNS} = 80 \text{ kN}$ $M_{DNS} = 360 \text{ kNm}$ NON-ORTHOGONAL EFFECTS HAVE BEEN CONSIDERED IN ACCORDANCE WITH 2012 (R22) OBC CLAUSE 4.1.8.8 (c) □ YES ■ N/A
EAST-WEST: (← →) $V_{DSEW} = W \cdot 80 \text{ kN}$ $M_{DSEW} = 360 \text{ kNm}$	EAST-WEST: (← →) $V_{DYNs} = N/A \text{ kN}$ $M_{DYNs} = N/A \text{ kNm}$ $M_{DYNs} = N/A$	EAST-WEST: (← →) $V_{DNS} = 80 \text{ kN}$ $M_{DNS} = 360 \text{ kNm}$ NON-ORTHOGONAL EFFECTS HAVE BEEN CONSIDERED IN ACCORDANCE WITH 2012 (R22) OBC CLAUSE 4.1.8.8 (c) □ YES ■ N/A

NOTES:

(1) INITIAL DYNAMIC LOAD SCALING FACTOR

$S.F. = g \cdot \frac{I_s}{R_d R_o} = g \cdot 0.5031$

DYNAMIC ANALYSIS PROCEDURE LOADS ARE BASED ON THE EVALUATION OF THE BUILDING WITH THE INITIAL SCALING FACTOR APPLIED. WHEN USED THESE ARE COMPARED TO THE STATIC FORCE VALUE IN ACCORDANCE WITH 4.1.8.12(6)(7) TO DETERMINE DESIGN LOAD VALUES.

(2) DESIGN LOAD SHEAR VALUES ARE BASED ON THE EVALUATION OF V_{DSEW} AND V_{DYN} IN ACCORDANCE WITH 4.1.8.12(5), (6) AND (7) OF THE 2012 (R22) OBC. LOADS INDICATED SHOW THE DESIGN BASE SHEAR AND CORRESPONDING OVERTURNING MOMENT.

(3) N/A = NOT USED IN THE DESIGN OF THE BUILDING.

D01-3.1 WIND LOADING:

WIND

$q^z = 0.41 \text{ kPa}$
(1 IN 50 YEARS)
 $I_w = 1.0$ (ULS)
 $I_w = 0.75$ (SLS)
 $Cp Cg = 1.3$ (1.95 AT ENDS)

NORTH-SOUTH: (↑ ↓)

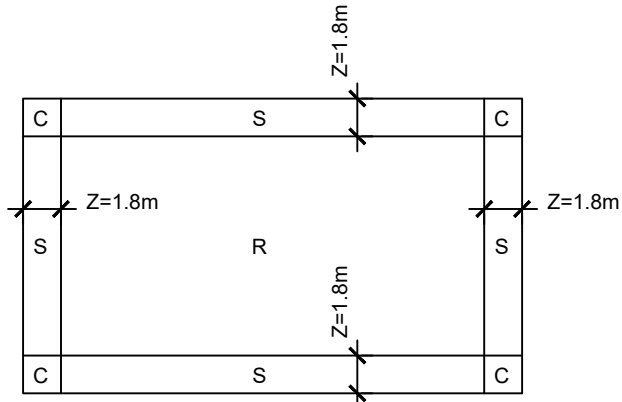
$V_{base} = 45 \text{ kN}$
 $M_{base} = 102 \text{ kNm}$

EAST-WEST: (← →)

$V_{base} = 45 \text{ kN}$
 $M_{base} = 102 \text{ kNm}$

WIND UPLIFT: (GROSS UPLIFT)

C: $p = 1.06 \text{ kPa}$ (CORNER)
S: $p = 0.60 \text{ kPa}$ (EDGES)
R: $p = 0.43 \text{ kPa}$ (FIELD)



D01-4 SEISMIC ASSESSMENT OF BUILDING MODIFICATIONS: MINOR ADDITIONS

DESCRIPTION OF WORK: MODIFICATION TO (E) SHOWROOM MEZZANINE.

EXISTING BUILDING/RENOVATIONS/ADDITION AGE: □ ≤ 5 YEARS ■ ≥ 5 YEARS

MASS OF ADDITION PLUS ANY PREVIOUS ADDITION = 100 kN
AREA OF ADDITION PLUS ANY PREVIOUS ADDITION = 28 m²
MASS OF ORIGINAL BUILDING = 1900 kN
GROSS AREA OF ORIGINAL BUILDING = 1574 m²

ANALYSIS:

1. ADDITION MASS $\geq 10\%$ ORIGINAL □ YES ■ NO

2. ADDITION AREA REVIEW

a) ADDITION AREA $\geq 10\%$ OF ORIGINAL

□ YES
■ NO
□ N/A

b) ADDITION AREA $\geq 200 \text{ m}^2$

□ YES
■ NO
□ N/A

c) ADDITION AREA $\geq 500 \text{ m}^2$ AND ADDITION MASS $> 2\%$ ORIGINAL

□ YES
■ NO
□ N/A

ADDITION MEETS REQUIREMENTS NOTED ABOVE (ALL CHECKS ARE NO): □ YES □ NO
EXISTING BUILDING IN GOOD CONDITION: □ YES □ NO

CONFIRMATION:

■ BUILDING ≥ 5 YEARS
THE STRUCTURAL ENGINEER CONFIRMS THAT IN OUR PROFESSIONAL OPINION, THE ADDITION, ALTERATION AND/OR REPAIR TO THE EXISTING STRUCTURE DOES NOT INCREASE THE SEISMIC RISK TO THE PUBLIC AND BUILDING OCCUPANTS. THAT THE STRUCTURAL ADEQUACY OF THE EXISTING BUILDING SYSTEM IS NOT ADVERSELY AFFECTED, AND IT COMPLIES WITH SECTION 11.3, (DIV B) OF THE OBC 2012 (R22). THE STRUCTURAL ENGINEER ALSO CONFIRMS THAT THE NEW CONSTRUCTION AND ITS CONNECTIONS TO THE EXISTING BUILDING SYSTEM COMPLY WITH PART 4 OF OBC 2012 (R22).

□ BUILDING < 5 YEARS
THE STRUCTURAL ENGINEER CONFIRMS THAT IN OUR PROFESSIONAL OPINION, THE ADDITION, ALTERATION AND/OR REPAIR TO THE EXISTING STRUCTURE DOES NOT INCREASE THE SEISMIC RISK TO THE PUBLIC AND BUILDING OCCUPANTS. THAT THE STRUCTURAL ADEQUACY OF THE EXISTING BUILDING SYSTEM IS NOT ADVERSELY AFFECTED, AND IT COMPLIES WITH CLAUSE 1.12.7 (DIV A) OF THE OBC 2012 (R22). THE STRUCTURAL ENGINEER ALSO CONFIRMS THAT THE NEW CONSTRUCTION AND ITS CONNECTIONS TO THE EXISTING BUILDING SYSTEM COMPLY WITH PART 4 OF OBC 2012 (R22).

D01-5 DEFINITIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED IN THESE NOTES AND DRAWINGS:

@	AT (SPACING etc)	mm	MILLIMETRES
ARCH.	ARCHITECTURAL	MAX.	MAXIMUM
B	BOTTOM	MECH.	MECHANICAL
BULL	BOTTOM LOWER LAYER	MIN.	MINIMUM
BULL	BOTTOM UPPER LAYER	N.F.	NEAR FACE
c/c	CENTRE TO CENTRE	N.T.S.	NOT TO SCALE
c	CENTRE LINE	O.C.	ON CENTRE
CONT.	CONTINUOUS	O.F.	OUTSIDE FACE
CW	CORE WALL	P.C.O.	PILE CUT-OFF
EA	EACH	PLATE	PLATE
E.E.	EACH END	SFD	STEP FOOTING DOWN
E.F.	EACH FACE	SMR	STANDARD GALVANIZED LADDER
EL	ELEVATION		MASONRY REINFORCEMENTS
E.S.	EACH SIDE	SW	SHEAR WALL
E.W.	EACH WAY	T	TOP
F.F.	FAR FACE	TLL	TOP LOWER LAYER
HOR	HORIZONTAL	TUL	TOP UPPER LAYER
HDMR	HEAVY DUTY GALVANIZED TRUSS	T.O.P.C.	TOP OF PILE CAP
	TYPE MASONRY REINFORCEMENT	TYP.	TYPICAL
IF	INSIDE FACE	UN	UNLESS OTHERWISE NOTED
LL	LOWER LAYER	UL	UPPER LAYER
m	METRES	U/S	UNDERSIDE
		VERT.	VERTICAL

D01-6 SHOP DRAWINGS

1. SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL WORK AND ANY WORK AFFECTING THE STRUCTURE TO THE CONSTRUCTION MANAGER. OBTAIN ARCHITECT'S & ENGINEER'S APPROVAL BEFORE PROCEEDING WITH THE FABRICATION.

2. EACH OF THE FOLLOWING SHOP DRAWINGS MUST BEAR THE SIGNATURE AND STAMP OF A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE (PLUS OTHER DRAWINGS AS NOTED).

a) DRAWINGS FOR ANY TEMPORARY WORK
b) DRAWINGS FOR ANY STRUCTURAL PARTS DESIGNED BY THE CONTRACTOR'S FORCES INCLUDING EXTERIOR BUILDING ENVELOPE
c) STRUCTURAL STEEL/JOISTS
d) FORMWORK

3. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED REVIEWED BY THE CONTRACTOR BEFORE ISSUING TO THE ARCHITECT/ENGINEER. SHOP DRAWINGS NOT STAMPED BY THE CONTRACTOR WILL BE REJECTED. ANY DELAYS IN THE CONSTRUCTION SCHEDULE DUE TO NONCOMPLIANCE WITH THIS REQUIREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. SUBMIT STRUCTURAL STEEL, STEEL JOIST AND STEEL DECK SHOP DRAWINGS FOR STRUCTURAL ENGINEER'S REVIEW BEFORE FABRICATION. ALL SHOP DRAWINGS SHALL BEAR THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER IN THE PROVINCE OF ONTARIO.

5. SHOP DRAWINGS ARE REVIEWED FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THIS REVIEW DOES NOT IMPLY APPROVAL OF THE DETAILED DESIGN OR QUANTITIES DESCRIBED IN THE SHOP DRAWINGS. THE RESPONSIBILITY FOR THE QUANTITIES AND DETAILED DESIGN OF THE MATERIALS AND COMPONENTS AS REQUIRED TO PROVIDE THE COMPLETE AND SATISFACTORY JOB DESCRIBED IN THE DESIGN DOCUMENTS REMAINS WITH THE CONTRACTOR.

D01-7 TYPICAL DETAILS

1. TYPICAL DETAILS NOTED IN THE FOLLOWING SECTIONS TO BE USED WHERE SPECIFIC DETAILS HAVE NOT BEEN PROVIDED ON DRAWINGS / SECTIONS.

2. WHERE MORE THAN ONE DETAIL APPLIES MORE EXPENSIVE VERSION WILL GOVERN.

3. DETAILS ARE TO BE READ IN CONJUNCTION WITH PLANS/ SPECIFICATIONS.

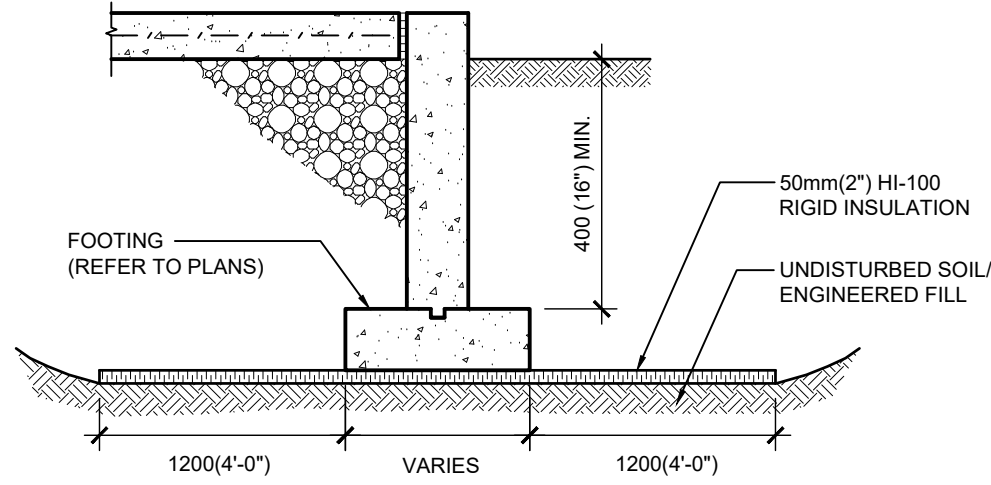
D01-8 SECONDARY COMPONENTS AND THEIR ATTACHMENTS

1. SECONDARY COMPONENTS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- a) ARCHITECTURAL COMPONENTS SUCH AS GUARD AND HAND RAILS, FLAG

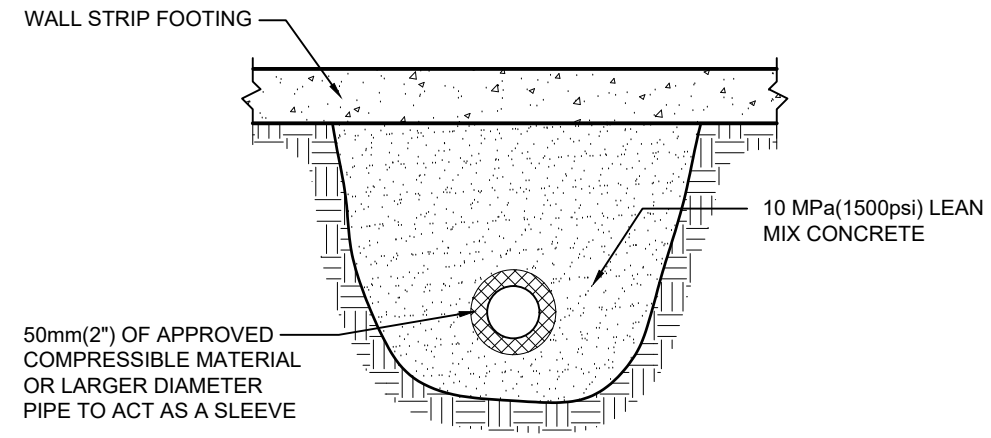
D31-6 ALTERNATE FROST COVER DETAIL

(NOTE: ONLY TO BE USED AFTER WRITTEN APPROVAL BY ENGINEER. WHERE GEOTECHNICAL REPORT REQUIRES MORE SOIL COVER/EXTENTS OF INSULATION, SOILS REPORT GOVERNS)



D31-7 PIPE CROSSING BELOW STRIP FOOTING:

(NOTE: LOCATIONS WHERE PIPES CROSS BELOW FOOTINGS ARE TO BE APPROVED BY ENGINEER IN WRITING PRIOR TO CONSTRUCTION. ENGINEER RESERVES THE RIGHT TO RELOCATE PIPES AS REQUIRED OR LOWER FOOTINGS TO SUIT.)



D03 CONCRETE

D03-1 CONCRETE COVER (CLEAR TO REINFORCING)

U/S FOOTINGS, PILE CAPS, GRADE BEAMS (AGAINST SOIL)	75mm (3")
FOOTINGS, PILE CAPS, GRADE BEAMS (SIDES & TOP)	50mm (2")
WALLS	40mm (1 1/2")
SLABS	25mm (1") U/N
BEAMS	40mm (1 1/2") (TO STIRRUPS)
COLUMNS	40mm (1 1/2") (TO TIES)
BALCONIES	40mm (1 1/2") (TO TOP STEEL)

FOR PARKING GARAGES:

COLUMNS	60mm (2 3/8")
WALLS	50mm (2")
SLABS	40mm (1 1/2") (TO TOP STEEL)
	30mm (1 3/16") (TO BOTTOM STEEL)

PROVIDE 32mm (1 1/4") COVER FOR BOTTOM STEEL FOR SLAB ABOVE 3HR. FIRE RATED AREAS. PROVIDE 50mm (2") COVER FOR COLUMN TIES IN 3HR. FIRE RATED AREAS.

D03-2 SLAB REINFORCING STEEL

- SPACING OF BARS SHALL BE APPROXIMATELY UNIFORM WITHIN THE CORRESPONDING STRIPS. DO NOT ELIMINATE OR DISPLACE REINFORCEMENT TO ACCOMMODATE HARDWARE. IF INSERTS CANNOT BE LOCATED AS SPECIFIED, OBTAIN APPROVAL OF ALL MODIFICATIONS FROM ENGINEER BEFORE THE PLACING OF CONCRETE.

- WHERE TENSION LAPS ARE SPECIFIED, LAP REINFORCING STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF CAN3-A23.3, LATEST EDITION. ALL OTHER LAPS AND EMBEDMENT OF DOWELS SHALL BE 24 BAR DIAMETERS, BUT NOT LESS THAN 600mm (24") IF NOT SPECIFIED OTHERWISE. WIRE MESH LAPS SHALL BE 150mm (6") MINIMUM.

TYPICAL REBAR REQUIREMENTS:

LAPS: AS ON DRAWINGS (TENSION LAPS)

≥ 36 BAR Ø ≥ 1.5ld FOR LATERAL SYSTEMS

≥ 600mm(24") ≥ 1.3ld FOR WALL AND SLABS

BAR DESIGNATION IN SLABS:

METRIC: 10-15M 6400/4100 T MEANS 10 BARS, SIZE 15M, TOP OF SLAB, 5- 6400 LONG / 5- 4100 LONG ALTERNATING (+ HOOK LENGTH FOR TOP BARS AT SLAB EDGES)

IMPERIAL: 10-15M 150/086 MEANS 10 BARS, SIZE 15M, TOP OF SLAB, 5- 15'-0" LONG / 5- 8'-6" LONG ALTERNATING (+HOOK LENGTH FOR TOP BARS AT SLAB EDGES)

PROVIDE HOOKS WHERE TOP BARS TERMINATE AT EDGES. PROVIDE HOOKS ON BOTTOM BARS WHERE NOTED AND AT ALL CANTILEVER ENDS.

- PLACE BARS AS NOTED, IF NOT NOTED THEN FOLLOW REINFORCING STEEL MANUAL.

D03-3 MINIMUM LENGTH OF SLAB REINFORCEMENT

- AT SLAB EDGES AND OPENINGS CARRY ALL TOP BARS TO 50mm (2") FROM SLAB EDGE AND PROVIDE STANDARD 90 OR 180 DEGREE HOOKS.
- EXTEND BOTTOM BARS TO 50mm (2") FROM SLAB EDGES/OPENINGS.
- EXTEND BOTTOM BARS MINIMUM 150mm (6") PAST ϵ OF SUPPORT AT ALL ENDS AND SINGLE SPANS SUPPORTED ON WALLS/BEAMS.
- WHERE 150mm(6") EMBEDMENT IS NOT POSSIBLE PROVIDE STANDARD 90° HOOK LAID FLAT.
- IN TWO-WAY SLABS WITHOUT BEAMS, MINIMUM LENGTH OF TOP/BOTTOM BARS IS TO BE AS PER REINFORCING STEEL MANUAL FOR STANDARD PRACTICE (CHAPTER 5 "DETAILING"), REFER ALSO TO TYPICAL CS/MS LAYOUTS.
- COLUMN STRIP WIDTH ON EACH SIDE OF COLUMN ϵ IS AS SHOWN ON PLANS. REFER ALSO TO TYPICAL STRIP DETAIL.
- PLACE STRUCTURAL INTEGRITY BARS WITHIN WIDTH OF COLUMN OR CAPITAL, IN ACCORDANCE WITH STRUCTURAL INTEGRITY STEEL TYPICAL DETAIL. PLACE OTHER BARS IN REMAINING WIDTH OF COLUMN STRIP.
- PROVIDE CHAIRS AND BAR SUPPORTS IN ACCORDANCE WITH RSIC DETAILING MANUAL.
- PLACE LONG AND SHORT BARS ALTERNATING.
- PLACE BARS UNIFORMLY DISTRIBUTED EXCEPT
A) PLACE AT LEAST 50% OF TOP BARS IN COLUMN STRIP WITHIN SUPPORT WIDTH PLUS SLAB THICKNESS EACH SIDE OF COLUMN FACE OR EDGE OF COLUMN CAPITAL.
B) WHERE NOTED OTHERWISE ON PLAN.
- BAR LENGTHS ARE AS SHOWN, UNLESS NOTED OTHERWISE ON PLAN.
- DO NOT USE PRIMARY REINFORCING BARS AS CHAIR BARS, FABRICATOR TO PROVIDE CHAIRING BARS AS REQUIRED. IF NOT, E.O.R. OR E.O.R. REP. WILL HAVE THE PLACER REMOVE AND REINSTATE REQUIRED REINFORCING BAR AS REQUIRED ON SITE.

D03-5 TYPICAL CAMBERING REQUIREMENTS

- PROVIDE UPWARD SLAB AND BEAM CAMBERS AS INDICATED ON PLANS. CAMBER BOTH THE UNDERSIDE AND TOP OF CONCRETE IN A PARABOLIC PROFILE SO AS TO MAINTAIN THE STRUCTURAL THICKNESSES SHOWN. ADJUST CAMBERS AS DIRECTED BY CONSULTANT FOR "NON-TYPICAL BAYS" BASED ON SPAN AND SUPPORT CONDITIONS.
- PRIOR TO CONCRETING VERIFY FORMWORK IN PLACE CAMBERS BY SURVEY AND REPORT THE RESULTS TO THE ARCHITECT. (REFER ALSO TO SPECIFICATIONS FOR SURVEYING REQUIREMENTS).
- PLACE, SCREED AND FINISH SLAB CONCRETE TO SPECIFIED SLAB AND BEAM THICKNESSES.
- CARRY OUT SURVEYING IN ACCORDANCE WITH THE SPECIFICATIONS. CAMBERS ON SUBSEQUENT FLOORS MAY BE ADJUSTED TO SUIT THE ACTUAL BEHAVIOUR OF FIRST TYPICAL FLOOR SLABS. REPEAT ITEMS 2 & 3 AS REQUIRED.
- WHERE NOT NOTED ABOVE OR ON PLANS, CAMBER BEAMS FOR SPAN/500 (SPAN DEFINED AS CENTRE LINE TO CENTRE LINE OF SUPPORTS).
- FOR SLAB CAMBERS ON UPPER FLOORS REFER TO PLANS.

D03-6 SLAB AND WALL OPENINGS

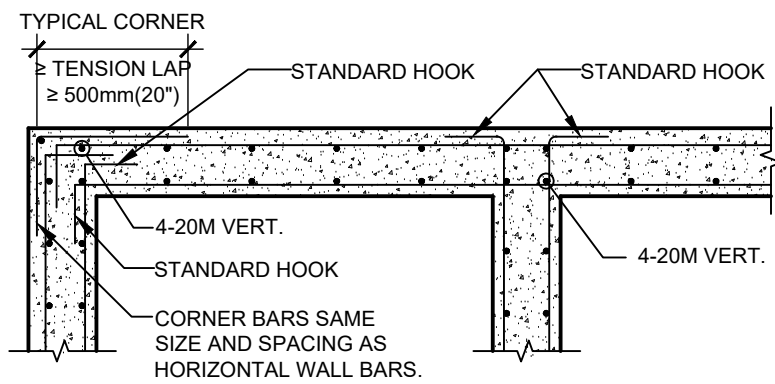
- DISPLACE BARS LATERALLY AT SLAB OPENINGS. D.O.N.O.T.C.U.T. PLACE HALF OF DISPLACED BARS EACH SIDE OF OPENING AND INFILL BETWEEN WITH BARS OF MATCHING SIZE & SPACING.
- PROVIDE 1-15M TOP AND BOTTOM MINIMUM ADDITIONAL REINFORCEMENT AROUND SLAB OPENINGS 300x300 (12"x12") OR LARGER (UNLESS NOTED). EXTEND 24 BAR DIAMETER (600mm (24") MIN.) BEYOND CORNER.
- PROVIDE THE FOLLOWING MINIMUM ADDITIONAL REINFORCEMENT AROUND WALL OPENINGS 300x300 (12"x12") OR LARGER (UNLESS NOTED). EXTEND 24 BAR DIAMETER BEYOND CORNERS EACH WAY.
200(8") WALLS: 1-20M
250(10") WALLS: 2-20M
300(12") OR THICKER WALLS: 2-20M
- SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS TO THOSE INDICATED.
- PROVIDE OPENINGS IN WALLS AND SLABS AS SHOWN ON STRUCTURAL DRAWINGS OR OTHERWISE REQUIRED BY VARIOUS TRADES. ENGINEER'S APPROVAL MUST BE OBTAINED FOR LOCATIONS AND SIZES OF OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL OPENINGS MUST BE FORMED BEFORE THE SLAB OR WALL IS POURED. DO NOT CUT ANY OPENINGS, AFTER CONCRETING, UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.
- PROVIDE SLEEVES IN SLABS OR WALLS FOR MECHANICAL PIPING AND AVOID OPENINGS WHERE POSSIBLE. ENGINEER'S APPROVAL MUST BE OBTAINED FOR ANY CONCENTRATION OF SLEEVES IN COLUMN BAND AND AROUND COLUMN. SLEEVING DRAWINGS MUST BE SUBMITTED FOR APPROVAL MINIMUM OF 4 WEEKS PRIOR TO POURING OF CONCRETE.

D03-7 MINIMUM WALL REINFORCING

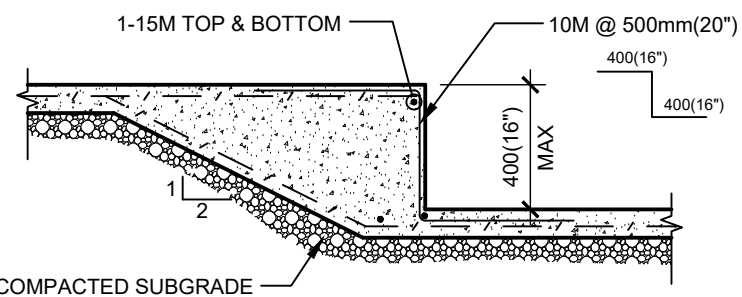
UNLESS OTHERWISE NOTED PROVIDE:

WALL THICKNESS	VERTICAL BARS (0025ag)	HORIZONTAL BARS (0025ag)	VERTICAL EACH END
150mm(6")	10M @ 250(10")	10M @ 250(10")	1-15M
200mm(8")	15M @ 400(16")	15M @ 400(16")	1-20M
250mm(10")	10M @ 300(12") E.F.	10M @ 300(12") E.F.	2-20M
300mm(12")	10M @ 250(10") E.F.	10M @ 250(10") E.F.	2-20M
350mm(14")	15M @ 450(18") E.F.	15M @ 450(18") E.F.	2-25M
400mm(16")	15M @ 400(16") E.F.	15M @ 400(16") E.F.	2-25M

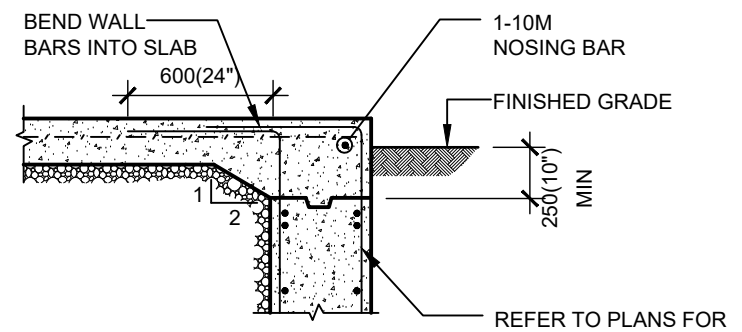
D03-8 HORIZONTAL WALL STEEL DETAIL AT CORNERS U/N: (NON-SHEAR WALL LOCATIONS)



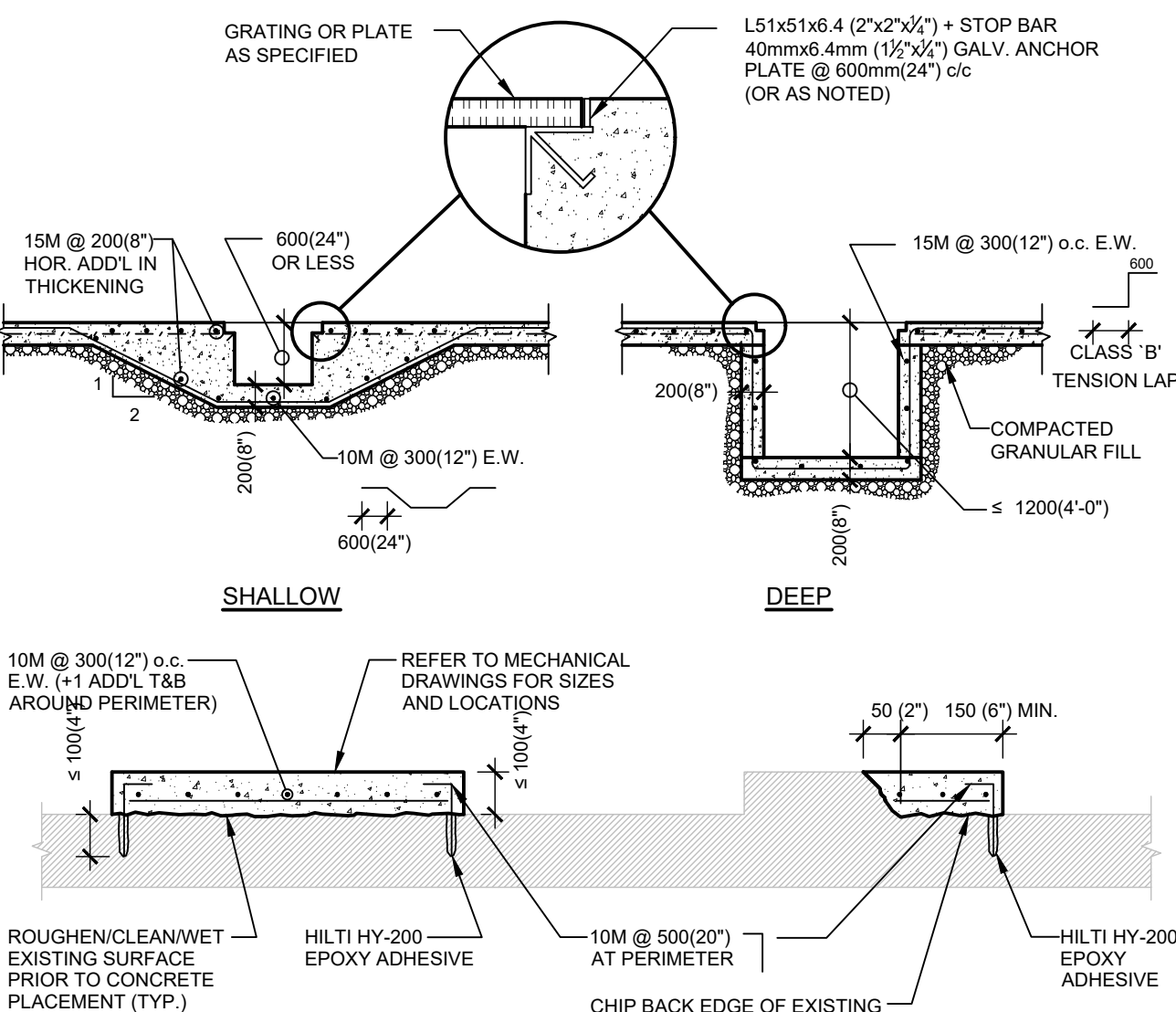
D03-9 SLAB ON GRADE ELEVATION CHANGE U/N:



D03-10 SLAB ON GRADE AT DOORS:

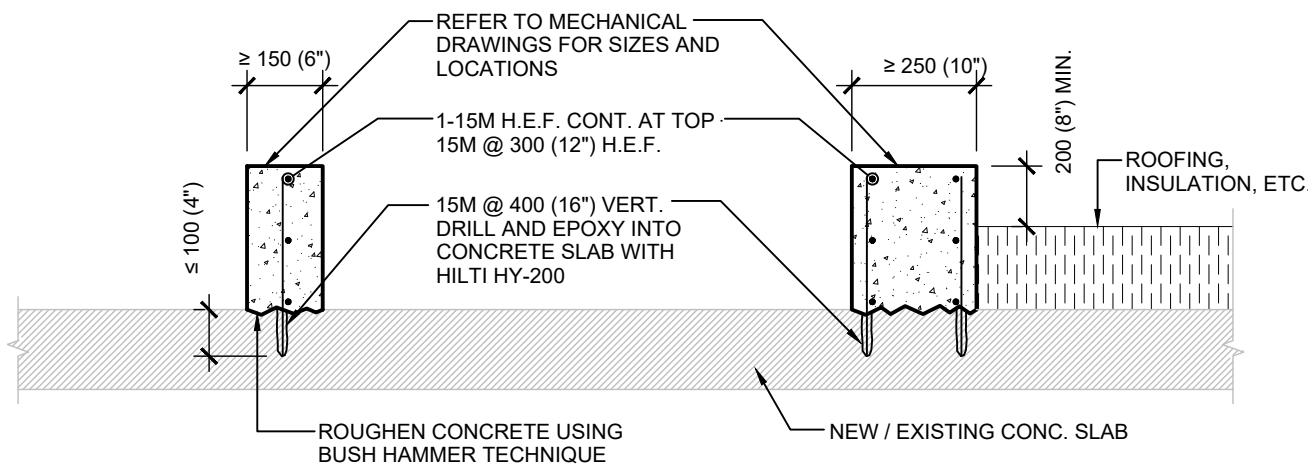


D03-11 PITS/TRENCHES, PADS AND CURBS U/N:

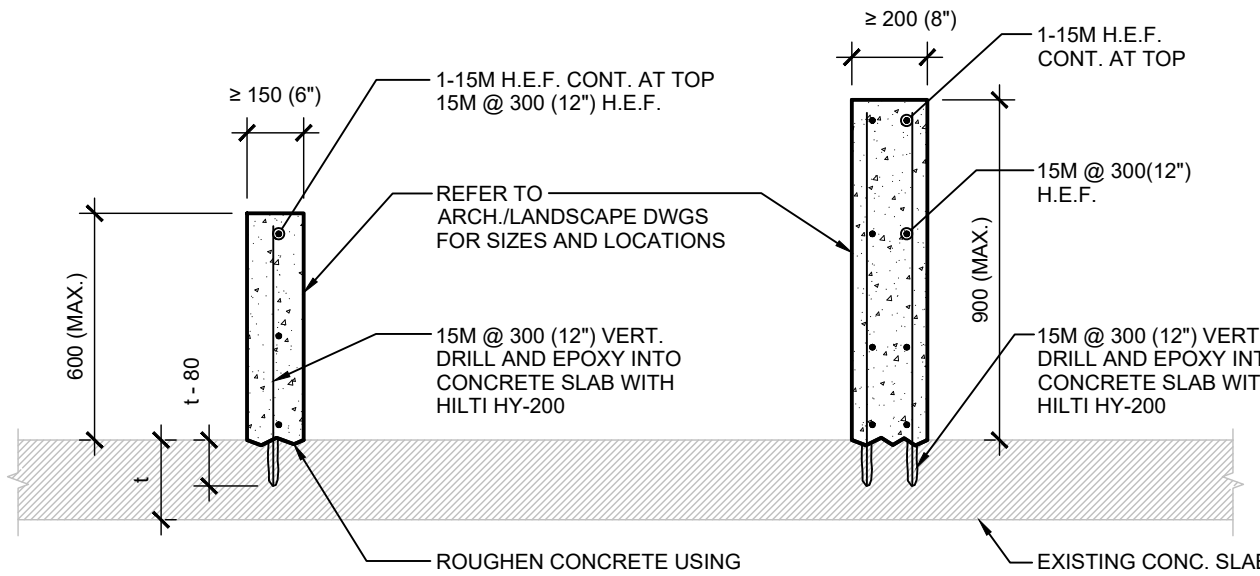


TYPICAL MECHANICAL PADS

TYPICAL MECHANICAL PAD EXTENSIONS TO EXISTING

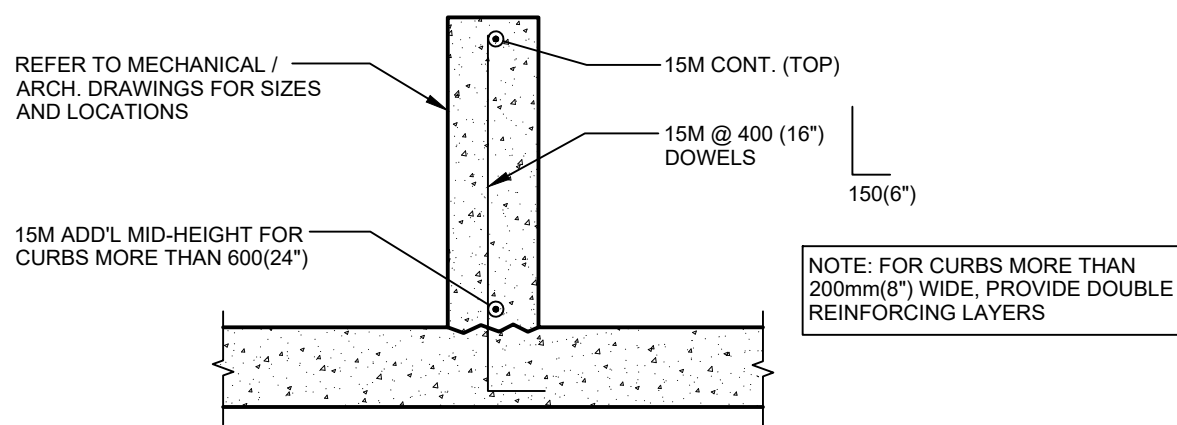


TYPICAL MECHANICAL CURBS



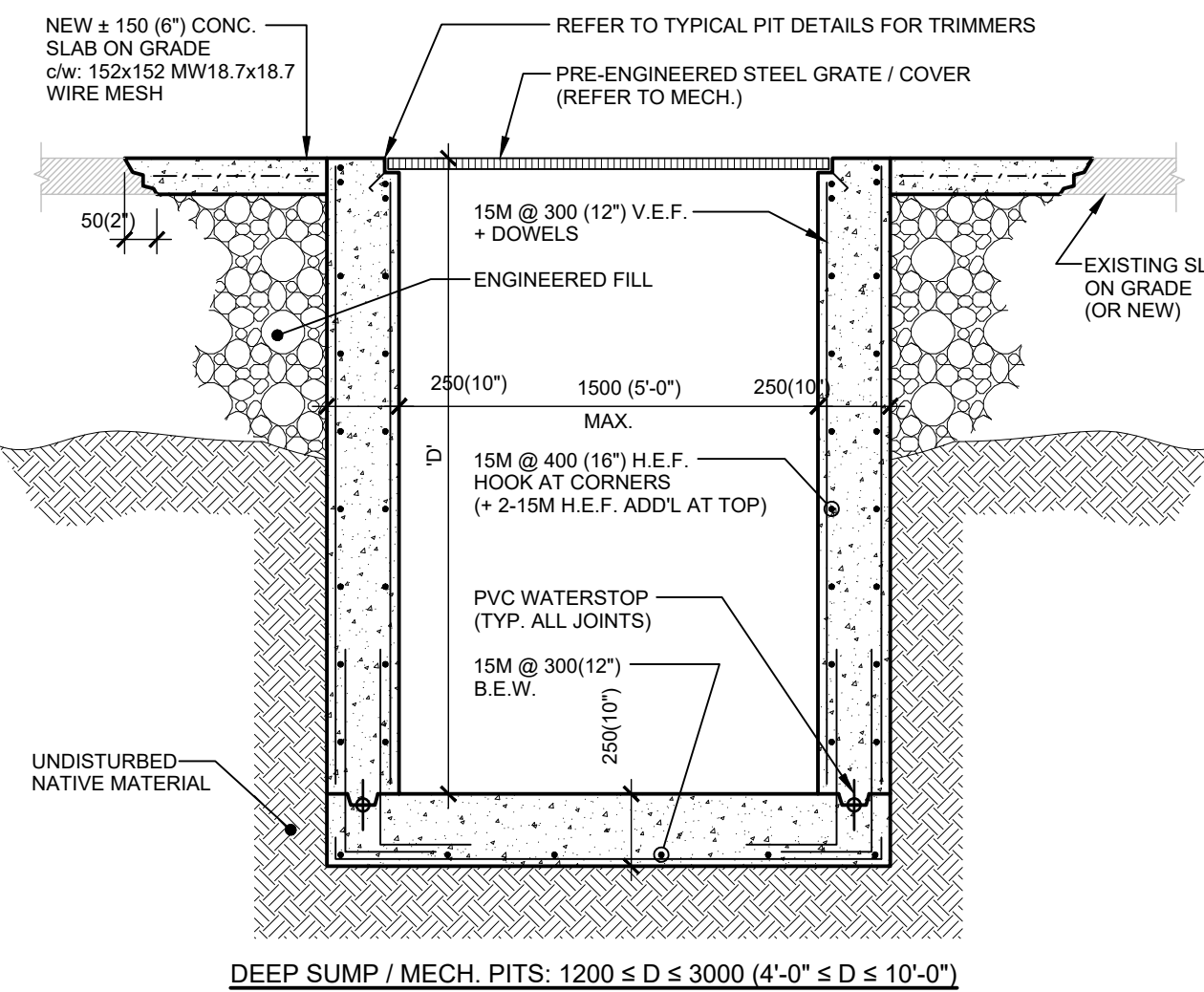
TYPICAL CONCRETE CURBS AT EXISTING

D03-11 PITS/TRENCHES, PADS AND CURBS U/N CONT'D

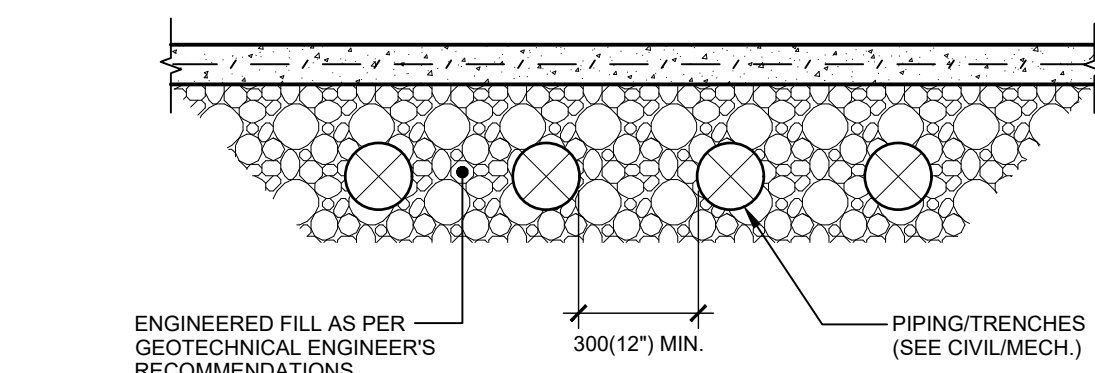


TYPICAL CONCRETE CURB (MAXIMUM 600mm(24") HIGH U/N)

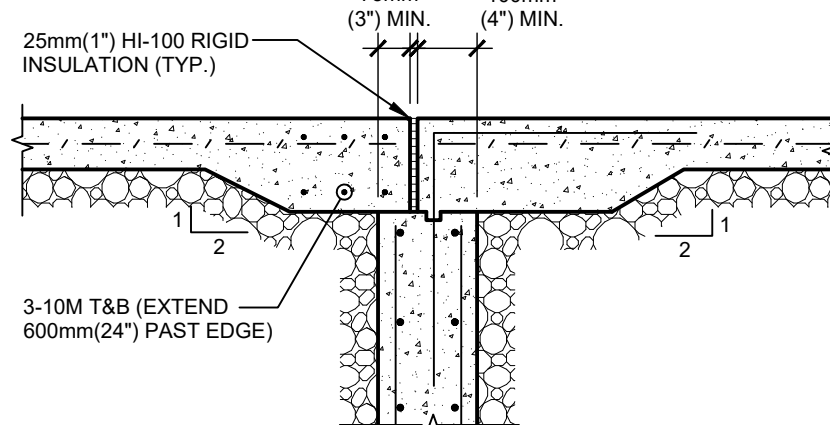
- DETAILS NOTED ARE TO BE READ IN CONJUNCTION WITH PLANS / SPECIFICATIONS
- DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN ON DRAWINGS



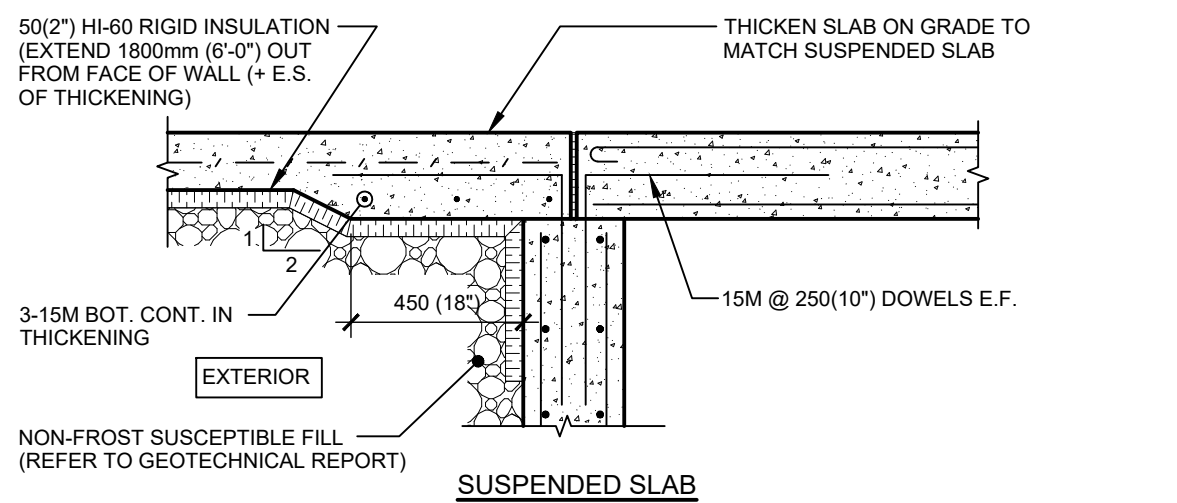
D03-13 UNDERSLAB/UNDERGROUND PIPING TRENCHES



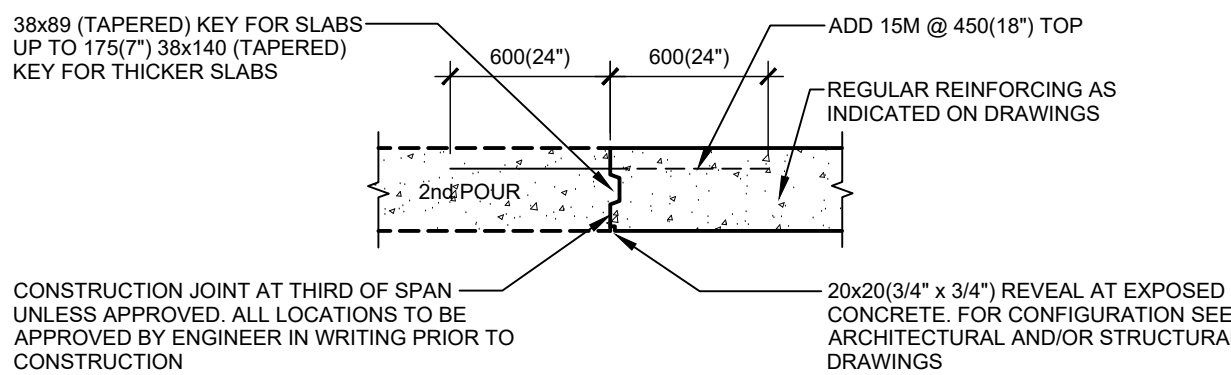
D03-14 EXTERIOR SLAB ON GRADE AT DOORS



SLAB-ON-GRADE



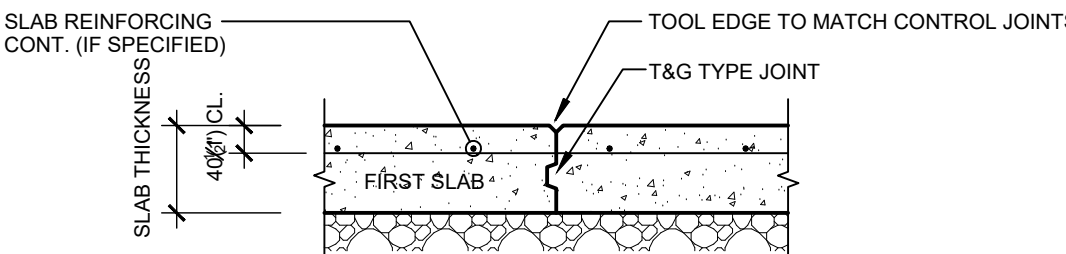
SUSPENDED SLAB



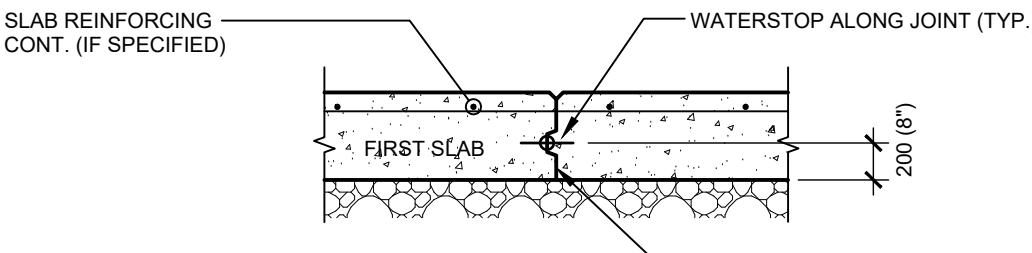
STRUCTURAL SLAB

NOTES:

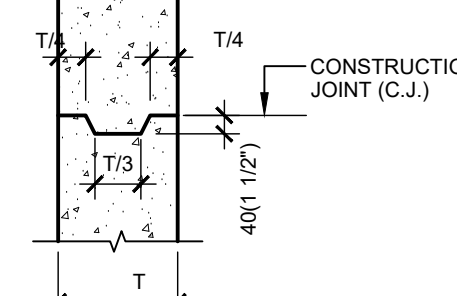
- WHERE BARS ARE EPOXY COATED INCREASE BAR LENGTHS BY 20%.
- FOR TRANSFER BEAMS OR BEAMS GREATER THAN 800(3'-0") DEEP, LOCATION AND DETAIL OF CONSTRUCTION JOINT TO BE APPROVED BY ENGINEER. IT SHALL BE ASSUMED JOINTS ARE NOT PERMITTED FOR TENDERING PURPOSES.
- CONCRETE SLABS SHALL BE CONCRETED IN SECTIONS NOT EXCEEDING 560m² (6000 ft²) IN AREA. EACH POUR SHALL BE BOUNDED BY A VERTICAL BULKHEAD OR ABUTTING CONSTRUCTION. PROVIDE ADDITIONAL REINFORCING AS PER DETAILS ON TYPICAL DETAILS DRAWING.



CONSTRUCTION JOINT IN SLAB ON GRADE TONGUE AND GROOVE JOINT

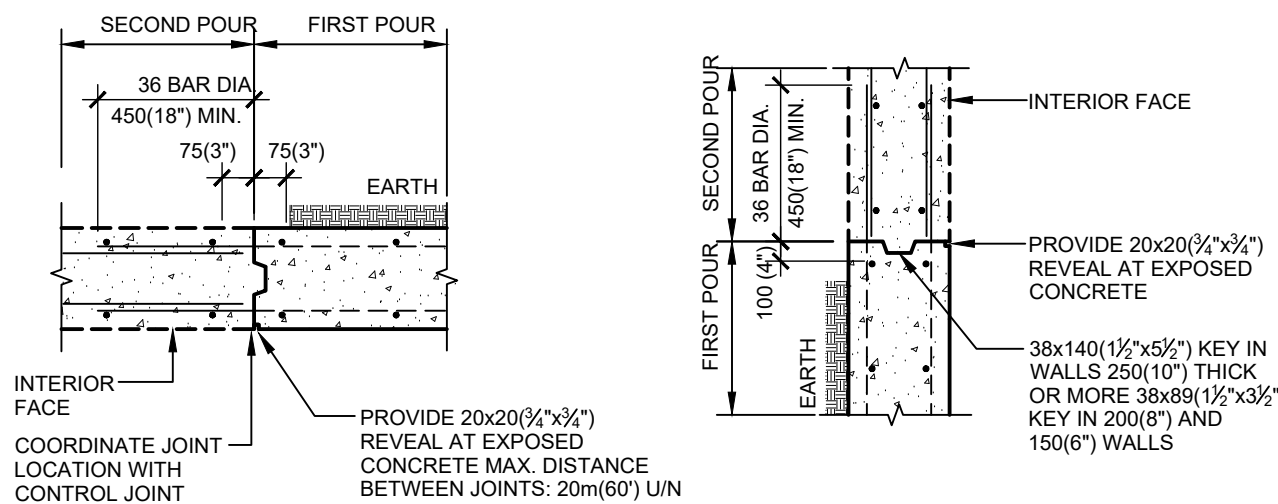


CONSTRUCTION JOINT IN RAFT SLAB



CONSTRUCTION JOINT KEY DETAIL

D03-15 CONSTRUCTION JOINTS cont'd

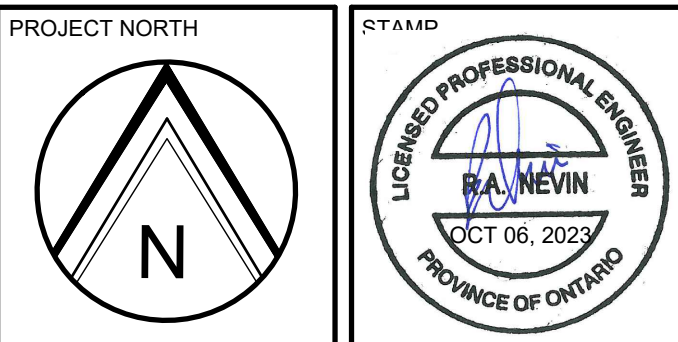


VERTICAL JOINT

HORIZONTAL POUR

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2	OCT 06, 2023	ISSUED FOR PERMIT	
1	APR 06, 2023	ISSUED FOR COORDINATION	JB



PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
**GENERAL NOTES AND
DETAILS**

DRAWN: A.N.	DRAWING No.
DESIGNED: R.N.	
DATE: MAR. 2023	
SCALE:	
PROJECT No: 23-0012	S001

D03-17 CONCRETE MIXES

PROPORTION NORMAL DENSITY CONCRETE IN ACCORDANCE WITH CAN/CSA-A23.1, TO GIVE THE FOLLOWING QUALITY FOR ALL CONCRETE AS INDICATED.

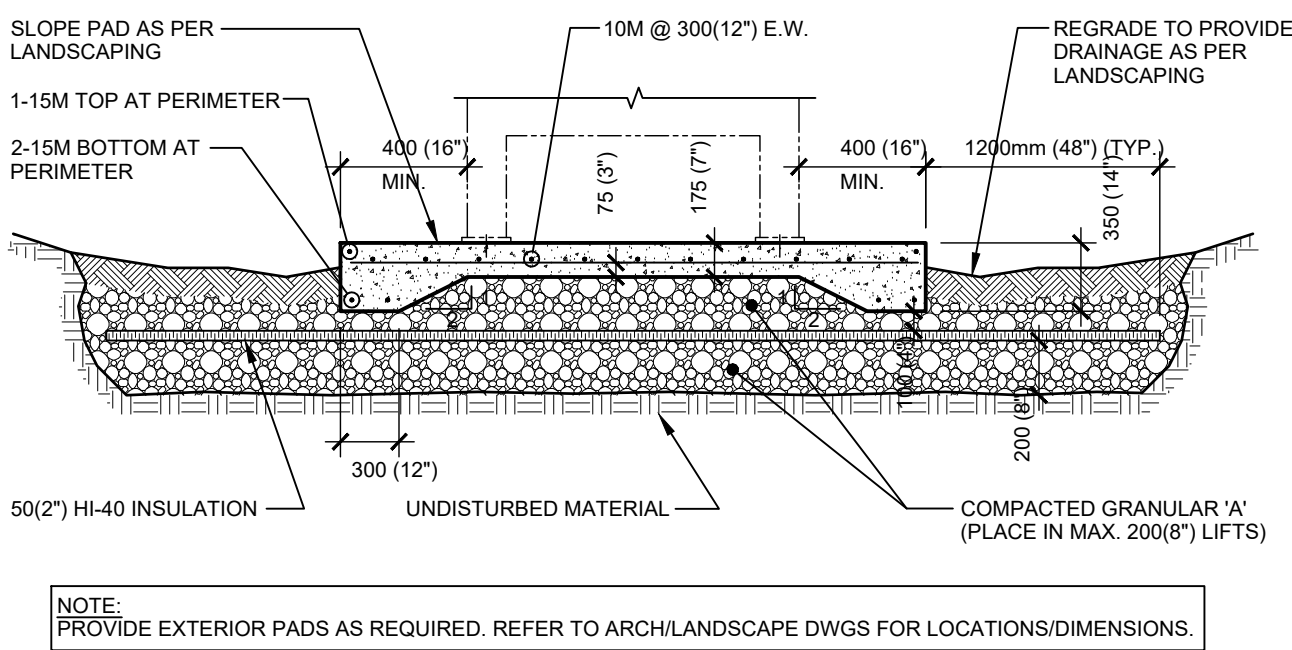
LOCATION	28 DAY STRENGTH	SLUMP (SEE NOTE 6)	CLASS OF EXPOSURE
SLAB ON GRADE (INTERIOR)	25 MPa		N
SLAB ON GRADE (EXTERIOR)	32 MPa		C-2
FOUNDATION WALLS (NOT IN SHEAR WALLS OR COLUMNS)	25 MPa		F-2
FOOTINGS	REFER TO SCHEDULES		
SHEAR WALLS	REFER TO SCHEDULES		
INTERIOR COLUMNS/PIERS	25 MPa		N
SUSPENDED SLABS	REFER TO PLANS		
PAVEMENT & WALKS	32 MPa		C-2
RETAINING WALLS	35 MPa		C-1
EXTERIOR LANDSCAPE WALL ELEMENTS	35 MPa		C-1

* OBTAIN THESE SLUMPS WITH AID OF SPECIFIED WATER REDUCING AGENT
* NOTE: ALL CONCRETE EXPOSED TO EXTERIOR CONDITIONS TO HAVE MINIMUM 6% AIR ENTRAINMENT.

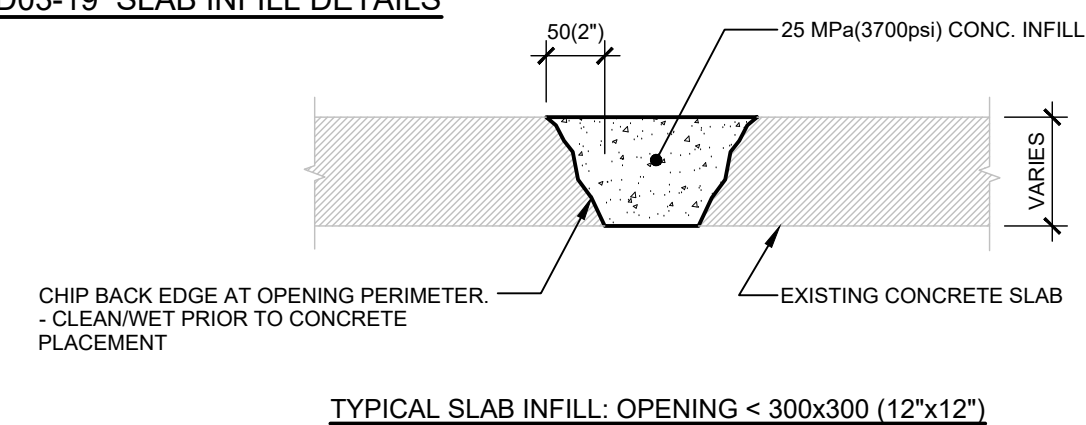
READY-MIXED CONCRETE AND CONCRETE PROPORTIONS SHALL BE IN ACCORDANCE WITH CSA A23.1, CLAUSE 12 AND AS FOLLOWS.

- MINIMUM ALLOWABLE COMPRESSIVE STRENGTH SHALL BE 30 MPa (4400psi) AT 28 DAYS OF AGE, UNLESS OTHERWISE NOTED OR SHOWN.
- IF BLENDED NORMAL PORTLAND CEMENT/CEMENTITIOUS HYDRAULIC SLAG IS USED EXCEPT FOR FLOOR MIXES, SLAG CONTENT SHALL NOT BE MORE THAN 25% OF TOTAL MASS OF CEMENT. TOTAL VOLUME OF CEMENT IN CONCRETE FLOOR MIXES SHALL BE 100% NORMAL PORTLAND CEMENT.
- PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF SPECIFIED QUALITY AND YIELD AND THAT STRENGTH WILL COMPLY WITH CAN/CSA-A23.1-M06.
- USE OF CALCIUM CHLORIDE NOT PERMITTED.
- DO NOT CHANGE CONCRETE MIX WITHOUT PRIOR APPROVAL OF CONSULTANT. SHOULD CHANGE IN MATERIAL SOURCE BE PROPOSED, NEW MIX DESIGN TO BE APPROVED BY CONSULTANT.
- UNLESS SPECIFIED, SLUMP TO BE AS REQUIRED TO FACILITATE CONSTRUCTION TECHNIQUES, PLACEMENT, AND REBAR CONGESTION.

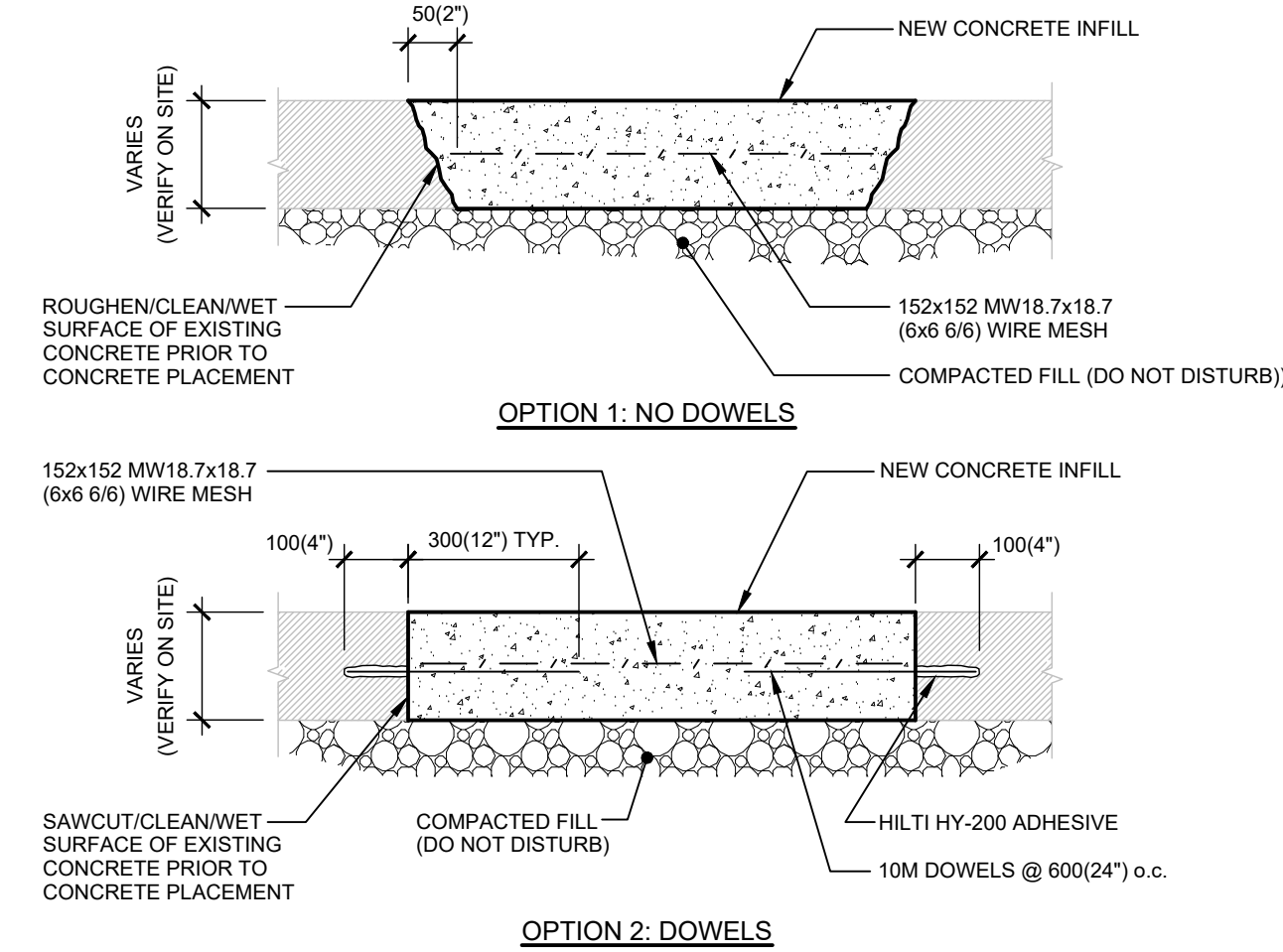
D03-18 EXTERIOR EQUIPMENT PADS



D03-19 SLAB INFILL DETAILS



D03-20 SLAB ON GRADE REMOVAL/REINSTATEMENT

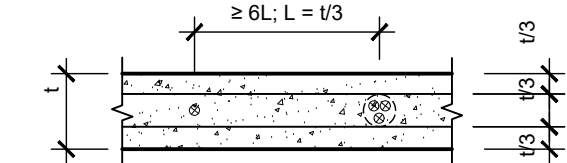


D03-22 EMBED CONDUIT AND PIPE

COLUMNS

- CONDUIT PLACEMENT TO CONFORM TO CSA A23.1
- CONDUIT AREA SHALL NOT EXCEED 1% OF THE GROSS AREA (b²)
- CONDUIT TO BE SECURED TO TIES. CONDUIT SHALL NOT BE TIED TO VERTICAL REBAR.
- CONDUIT MAY ONLY BE PLACED IN COLUMN AFTER RECEIVING WRITTEN APPROVAL BY ENGINEER.
- CONTRACTOR SHOULD ASSUME CONDUIT IS NOT PERMITTED TO BE PLACED IN COLUMN FOR PRICING PURPOSES.
- CONDUIT MAY NOT BE PLACED IN SLABS OR COLUMNS UNLESS APPROVED BY ENGINEER. CONTRACTOR TO SUBMIT CONDUIT LAYOUT DRAWINGS A MINIMUM OF 4 WEEKS PRIOR TO CONCRETING.
- CONDUIT NOT APPROVED BY ENGINEER SHALL BE REMOVED/RELOCATED AS DIRECTED BY ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

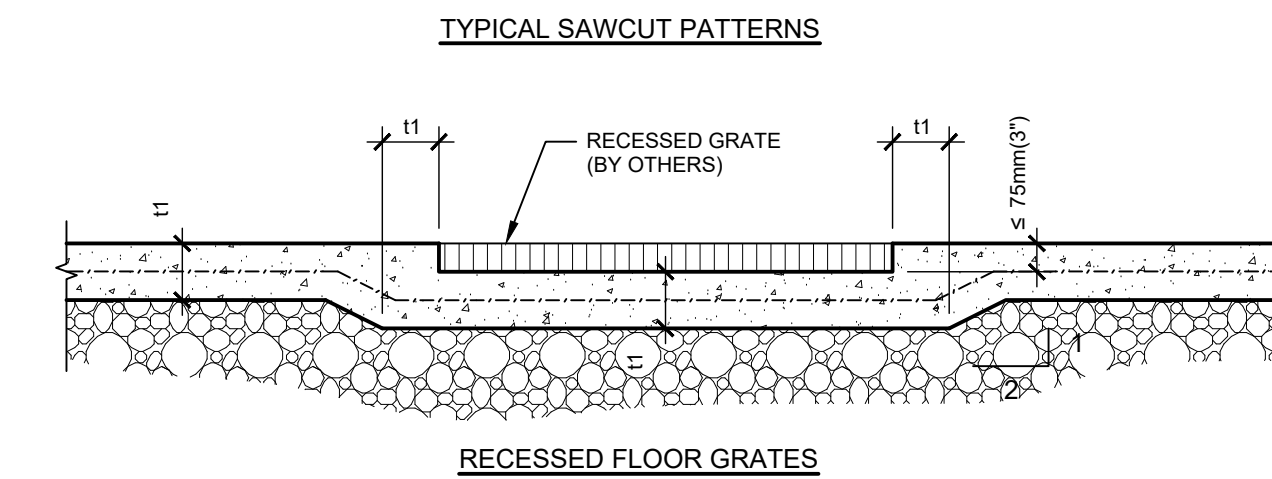
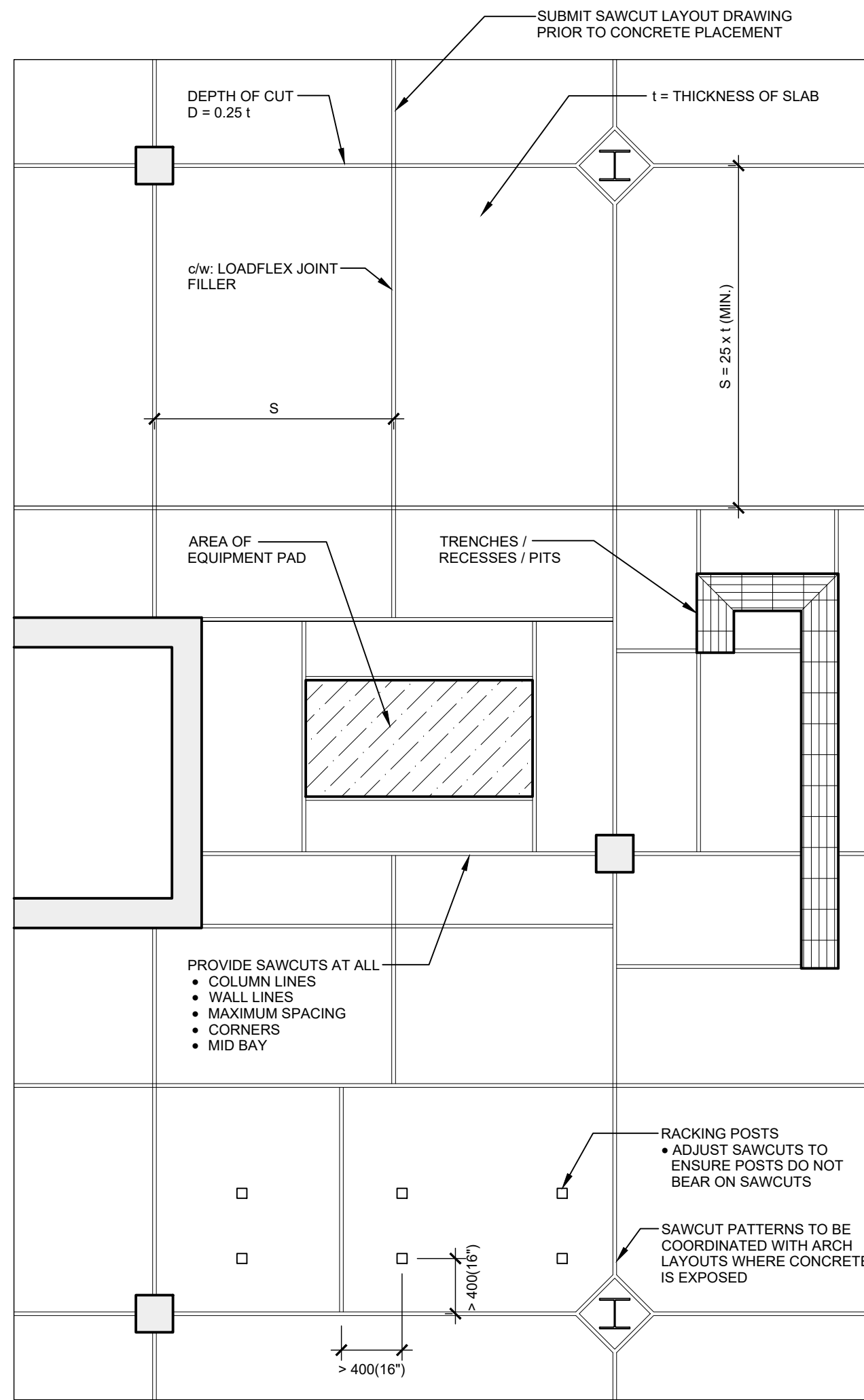
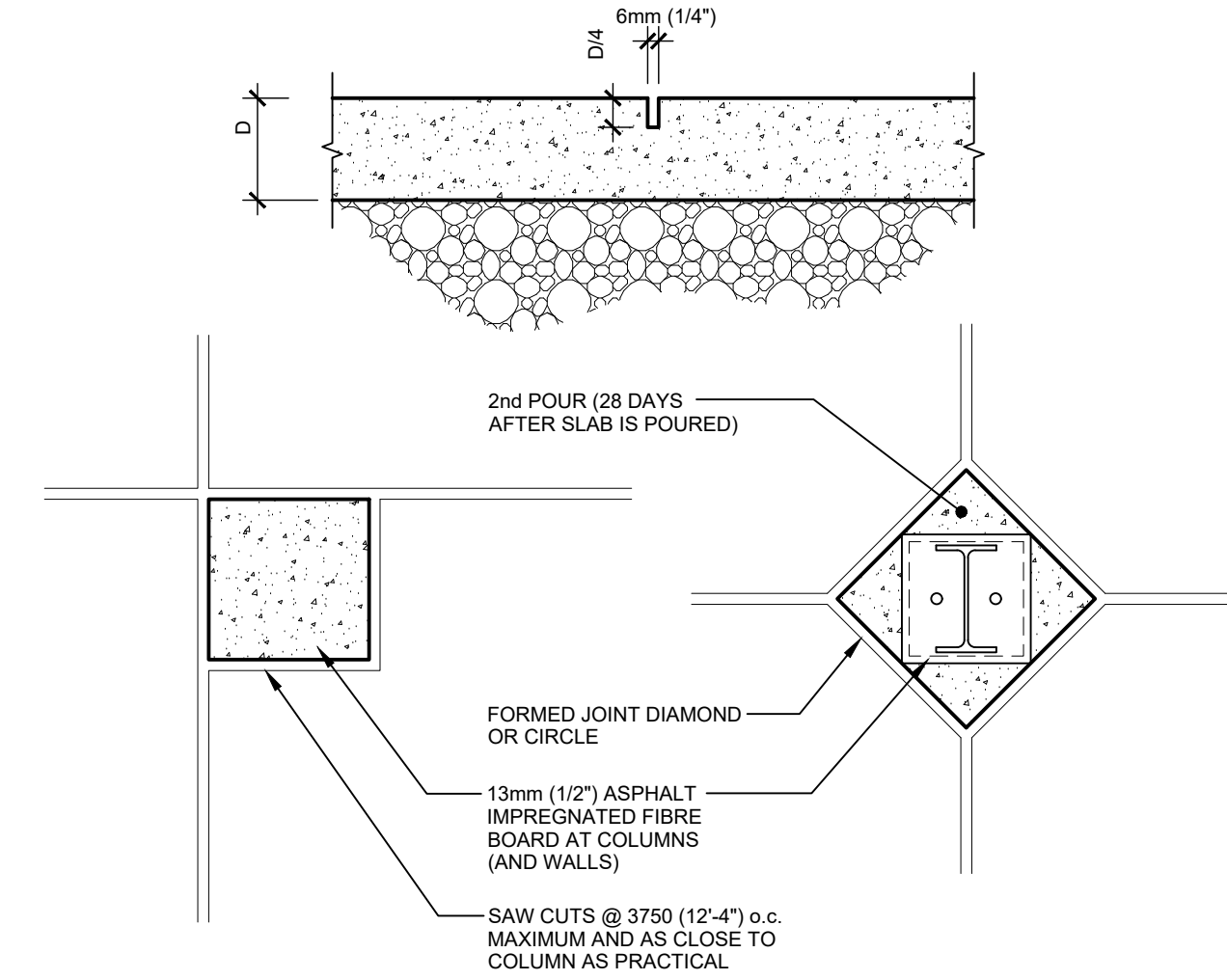
SLABS AND WALLS



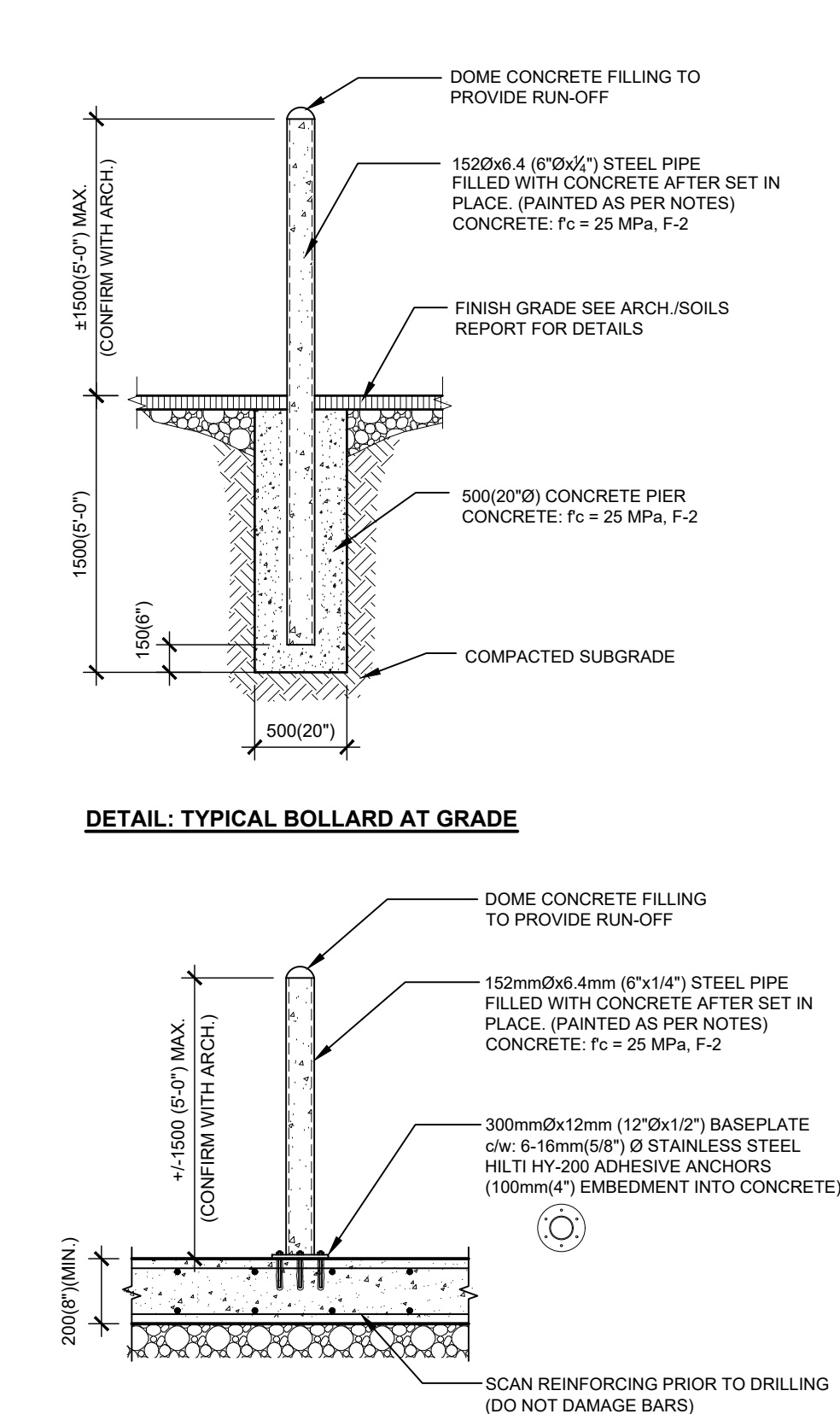
- CONDUIT SHALL BE PLACED IN THE MIDDLE THIRD OF THE SLAB OR WALL.
- CONDUIT SHALL NOT BE TIED TO REBAR.
- CONDUIT SHALL ALWAYS RUN PARALLEL OR PERPENDICULAR TO COLUMN LINES.
- CROSSING OF CONDUIT SHALL BE DONE AT 90° ANGLES.
- CONDUIT MAY NOT BE PLACED IN SLABS OR WALL UNLESS APPROVED BY ENGINEER. CONTRACTOR TO SUBMIT CONDUIT LAYOUT DRAWINGS A MINIMUM OF 4 WEEKS PRIOR TO CONCRETING.
- CONDUIT NOT APPROVED BY ENGINEER SHALL BE REMOVED/RELOCATED AS DIRECTED BY ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

D03-26 SLAB ON GRADE CONTROL JOINTS AND SAWCUTS

- SLAB ON GRADE TO BE PLACED ON COMPACTED GRANULAR MATERIAL IN STRICT ACCORDANCE WITH THE SOILS REPORT. COMPACTION TESTS ON FILL MATERIAL TO BE CARRIED OUT PRIOR TO SLAB ON GRADE PLACEMENT.
- PROVIDE APPROVED PRE-FORMED KEYED CONTROL JOINTS OR SAW CUTS (WITHIN 18 HOURS) AT MAXIMUM SPACING 3.75 m. CUT 1/3 DEPTH OF SLAB AND FILL WITH APPROVED MASTIC JOINT FILLER.
- BREAK BOND AT SURFACES OF CONTACT WITH OTHER CONCRETE (USE ASPHALT WATERPROOFING, HEAVY DUTY POLYETHYLENE OR SAND LAYER).
- PROVIDE 10mm ASPHALT IMPREGNATED FIBRE BOARD AND CAULKING AROUND ALL COLUMNS AND ALONG ALL WALLS.
- PROVIDE POLY FIBRE REINFORCING TYPICAL UNLESS OTHERWISE NOTED.
- PROVIDE CIRCULAR OR RECTANGULAR POCKETS AROUND COLUMNS. PLACE CONCRETE IN POCKET 4 WEEKS AFTER SLAB IS CONSTRUCTED.
- DO NOT PLACE SLAB ON GRADE IN ONE CONTINUOUS POUR IN LENGTHS EXCEEDING 30.0m IN EITHER DIRECTION.
- SUBMIT FOR REVIEW LAYOUT DRAWING WITH CONSTRUCTION JOINT LOCATIONS AND SAW CUT PATTERN.
- MAINTAIN MINIMUM SPECIFIED THICKNESS AT ALL DEPRESSIONS AND CHANGES IN ELEVATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT AND LOCATIONS OF ALL FINISHES AND DEPRESSIONS.

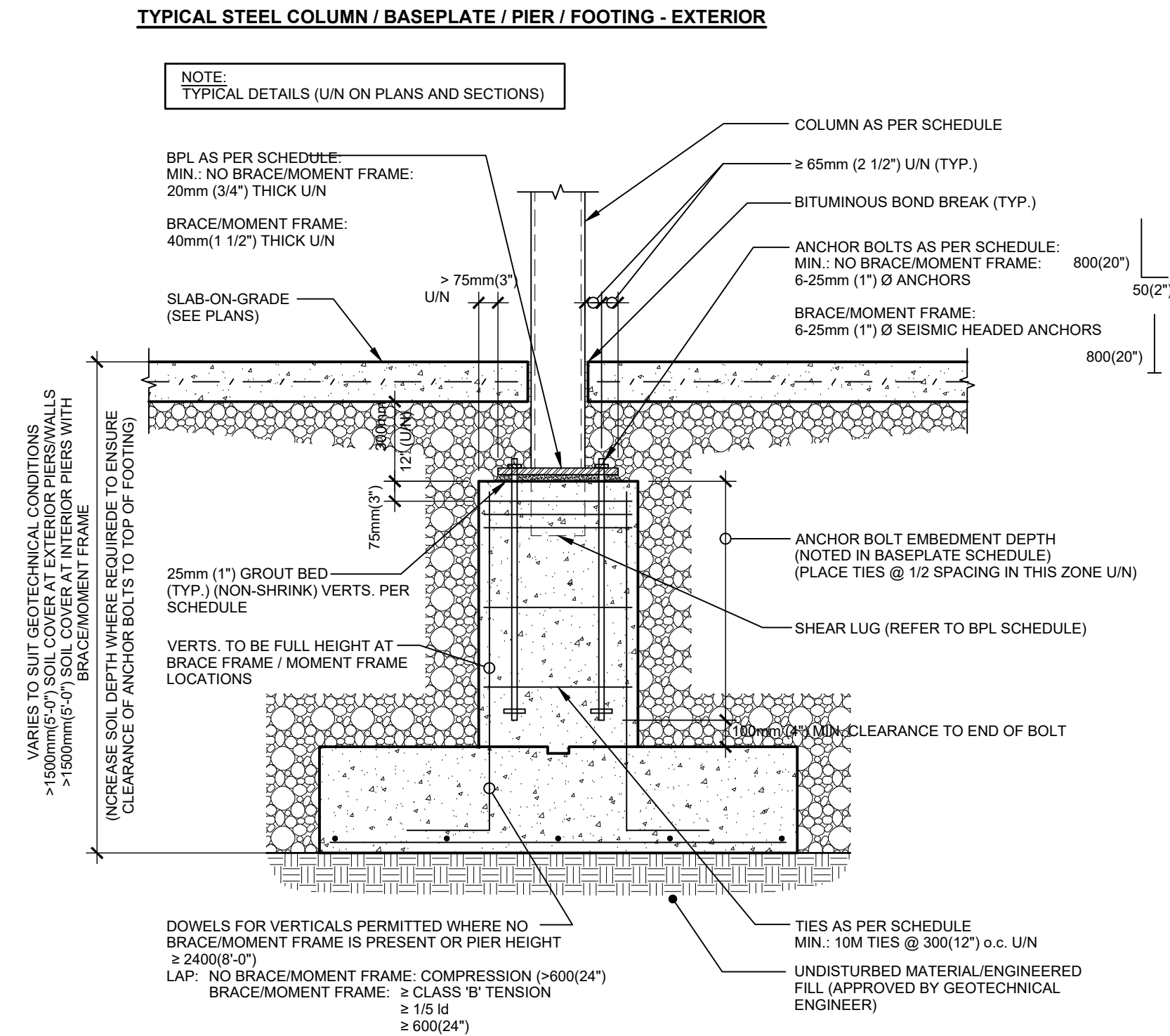
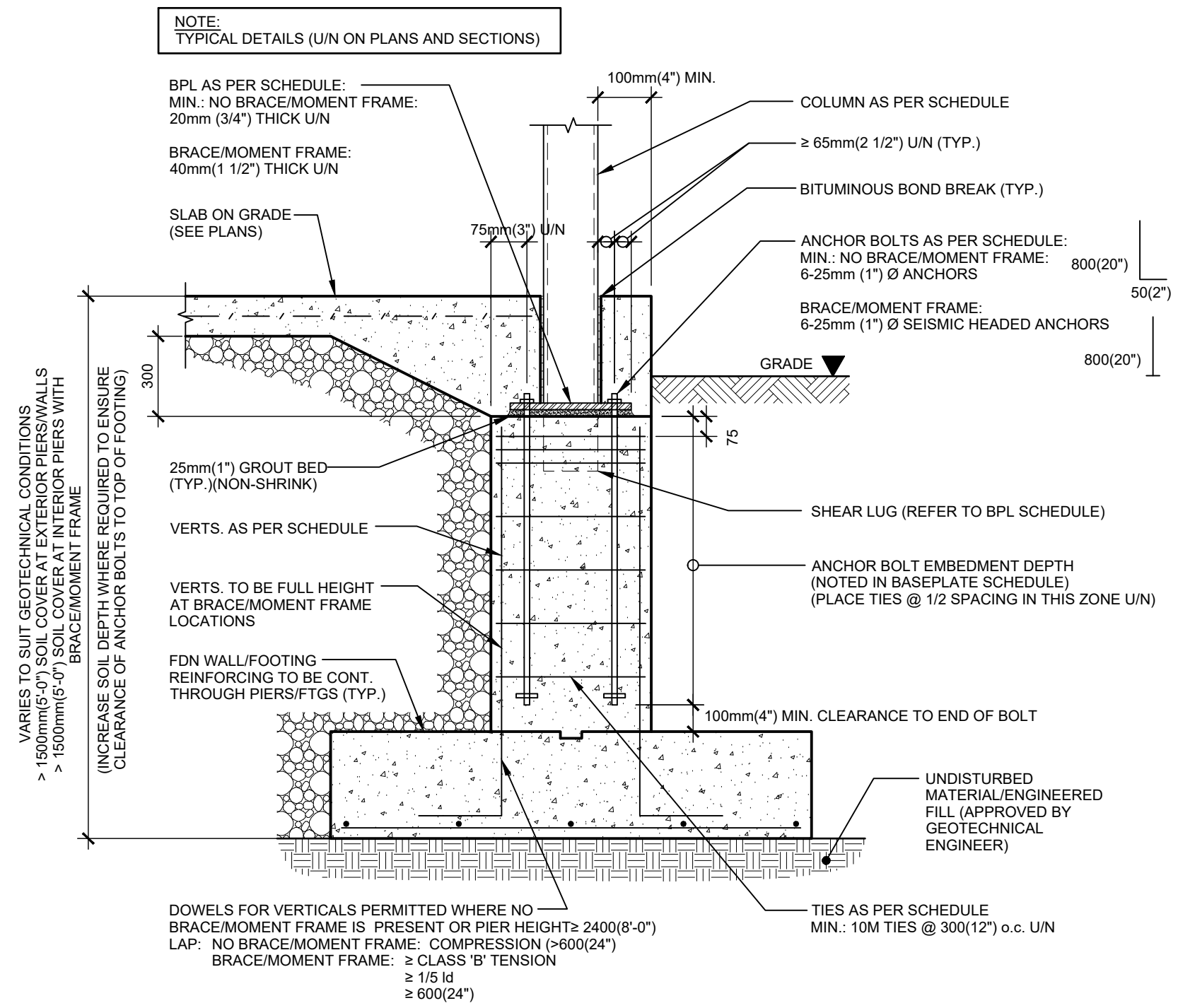


D03-29 TYPICAL BOLLARD DETAILS



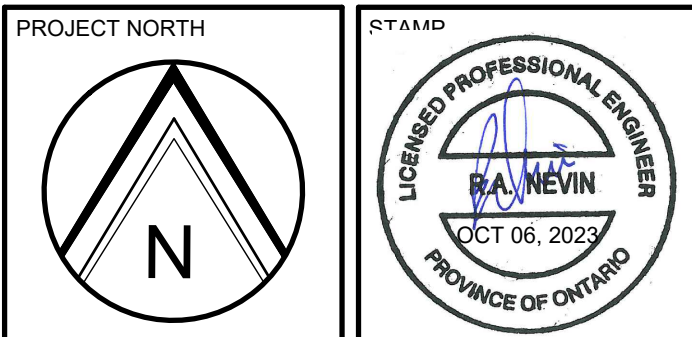
- PAINTE STEEL WITH SHERWIN WILLIAMS ZINC CLAD II ETHYL SILICATE INORGANIC ZINC-RICH COATING. (PART E B66/3 BINDER, PART F B66/11 ZINC-DUST)
- APPLY IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- BOLLARDS TO BE SAFETY YELLOW

DETAIL: TYPICAL BOLLARD ON SLAB



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No.	DATE	REVISIONS	BY



PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
**GENERAL NOTES AND
DETAILS**

DRAWN:	A.N.	DRAWING No.	
DESIGNED:	R.N.		
DATE:	MAR. 2023		
SCALE:			
PROJECT No:	23-0012		
			S002

D04 MASONRY
D04-1 GENERAL

1. ALL MASONRY SHALL COMPLY WITH CSA S304-14, CSA A370-14 (R2018), AND CSA A371-14 (R2019) UNLESS OTHERWISE NOTED.
2. MINIMUM MASONRY REINFORCEMENT (UNLESS OTHERWISE NOTED):

WALL THICKNESS	LOADBEARING	NON-LOADBEARING
140mm (6")	HORIZ. SMR @ 200 (6") OR HORIZ. @ 400 (12") VERT. 1-15M @ 800 (32")	HORIZ. SMR @ 400 (16") VERT. 1-10M @ 1200 (48")
190mm (8")	HORIZ. HDMR @ 200 (8") 8 400 (16") (ALTERNATE) VERT. 1-20M @ 1000 (40")	HORIZ. HDMR @ 600 (24") VERT. 1-15M @ 1200 (48")
240mm (10")	HORIZ. HDMR @ 200 (8") VERT. 2-15M @ 1000 (48")	HORIZ. HDMR @ 400 (16") VERT. 2-10M @ 1200 (48")
290mm (12")	HORIZ. HDMR @ 200 (8") VERT. 2-20M @ 1200 (48")	HORIZ. HDMR @ 400 (16") VERT. 2-15M @ 1200 (48")

3. VERTICAL BARS SHALL BE CONTINUOUS, LAPPED ONLY AT FLOORS, DOWELED INTO SUPPORTS AND GROUTED INTO CLEAR BARRIER BLOCK CORES SEALED ALL AROUND WITH MORTAR. PROVIDE CLEAN-OUT PORT AT BOTTOM OF EACH GROUTED CORE. DO NOT CLOSE PORT OR PLACE GROUT UNTIL CORE AND STEEL HAVE BEEN INSPECTED. PROVIDE THREE GROUTED REINFORCED (20M) CORES AT EACH CORNER AND INTERSECTION (MIN.) & 2-20M @ WALL ENDS.
4. PROVIDE 1-20M IN 2-COURSE DEEP FULLY GROUTED HORIZONTAL BOND BEAM AT THE TOP OF ALL LOAD BEARING WALLS UNITS.
5. PROVIDE APPROVED LATERAL SUPPORT TO TOP AND BOTTOM OF MASONRY PANELS AT GROUTED CORE LOCATIONS OR AT 1800mm(6') MAXIMUM SPACING WHERE NO VERTICAL REINFORCEMENT IS REQUIRED; ALSO AT SIDES OF MASONRY PANELS AT 4 TIMES THE WALL THICKNESS.
6. THE COMPRESSIVE STRENGTH OF MATERIALS USED FOR LOAD BEARING AND PANEL WALLS SHALL BE IN EXCESS OF THE FOLLOWING VALUES:

a) MASONRY UNITS	- HOLLOW CONCRETE BLOCK	15 MPa (2200 psi)
	- SOLID CONCRETE BLOCK (GROSS AREA)	15 MPa (2200 psi)
7. TYPE "S" MORTAR SHALL BE USED FOR MASONRY, MIN. STRENGTH f_m= 13 MPa (1800 psi) HOLLOW BLOCK and f_m = 10 MPa (1450 psi) SOLID/GROUTED.
8. NON-SHRINK GROUT TO BE A MINIMUM OF 15 MPa (2000 psi) MIN. SLUMP OF 225mm (9"). ALL GROUT TO BE FINE.
9. PROVIDE LINTELS FOR ALL OPENINGS AND/OR RECESSES IN MASONRY WALLS SHOWN ON THE ARCHITECTURAL/MECHANICAL OR STRUCTURAL DRAWINGS INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT. (SEE LINTEL SCHEDULE).
10. INTERSECTING OR ABUTTING WALLS SHALL BE BONDED ADEQUATELY TOGETHER. EXTENT OF HMR AS PER ABOVE NOTE 2. TOOTH TOGETHER WHERE POSSIBLE.
11. PROVIDE MINIMUM 25mm(1") GROUT UNDER ALL WALL PLATES AND BASE PLATES.
12. MASONRY UNITS WILL BE RUNNING BOND U.N.O.
13. HORIZONTAL BOND BEAMS TO BE KNOCK OUT PANEL BLOCKS.
14. DOWELS IN FOUNDATION WALL TO ALIGN & LAP WITH VERTICAL BARS. MIN LAP OF 1.3L FOR 15MPa CONCRETE. LAP ALL VERTICAL BARS 1.3Ld TENSION LAP FOR 15MPa GROUT.
15. PROVIDE MIN. 1-15M IN MIN. SINGLE COURSE FULLY GROUTED BOND BEAM AT TOP OF ALL NON-LOADBEARING WALLS.
16. PROVIDE DEFLECTION CLIPS AT TOP OF ALL NON-LOADBEARING WALLS AS PER DETAILS BELOW.

FILL VOIDS UNDER DECK

25mm (1") MIN. COMPRESSIBLE MATERIAL

STEEL DECK

STEEL JOIST OR BEAM

MASONRY WALL

L 127x76x6.4 x 150 L.G. (L.S. 25x12.5 x 6 P.G.) LLV (EA. SIDE)

25mm (1") MIN. COMPRESSIBLE MATERIAL AT ANGLE LOCATION

The image contains two technical drawings, labeled 'INTERIOR' and 'EXTERIOR', showing the connection between a wall and a concrete slab.

INTERIOR: This drawing shows a cross-section of a wall meeting a concrete slab from the interior side. The wall has a central vertical reinforcement. The slab is shown above the wall. Key components and labels include:

- CONCRETE SLAB:** The top horizontal section.
- 100(4"):** Dimension indicating the height of the slab above the wall top.
- 1-16mmØ (5/8"Ø) SELF DRILLING CONCRETE HILTI KWIK BOLT III ANCHOR (E/S):** A bolt connecting the wall to the slab.
- L 127x76x6.4 (L 5"x3"x1/4") LLV @ 150 (6") L.G. @ 1200 (48") o.c. EA. SIDE (AT GROUTED CORES):** Vertical reinforcement bars in the wall.
- GAP OR COMPRESSIVE MATERIAL BETWEEN SLAB AND TOP OF WALL. SEE MASONRY SPECIFICATIONS:** Note indicating the space between the wall and slab.

EXTERIOR: This drawing shows a cross-section of a wall meeting a concrete slab from the exterior side. The wall has a central vertical reinforcement. The slab is shown above the wall. Key components and labels include:

- CONCRETE SLAB:** The top horizontal section.
- 100(4"):** Dimension indicating the height of the slab above the wall top.
- 1-16mmØ (5/8"Ø) SELF DRILLING CONCRETE HILTI KWIK BOLT III ANCHOR (E/S):** A bolt connecting the wall to the slab.
- L 127x76x6.4 (L 5"x3"x1/4") LLV x 150 (6") L.G. @ 1200 (48") o.c. EA. SIDE (AT GROUTED CORES):** Vertical reinforcement bars in the wall.
- 6.4x150mm (1/4"x6") WIDE PLATE @ 1200 (48") o.c.:** A horizontal plate connecting the wall to the slab.
- GAP OR COMPRESSIVE MATERIAL BETWEEN SLAB AND TOP OF WALL. SEE MASONRY SPECIFICATIONS:** Note indicating the space between the wall and slab.

PRECAST CONCRETE SLAB

L 127x76x6.4 (L5"x3"x1/4") LLV
x150 (6") @ 1200 (48") o.c. EA
SIDE (AT GROUTED CORES)

GAP OR COMPRESSIVE
MATERIAL BETWEEN SLAB
AND TOP OF WALL. SEE
MASONRY SPECIFICATIONS

1-16mm Ø (5/8" Ø) CONCRETE HILTI KWIK
BOLT 3 ANCHOR (E/S)

- CONTRACTOR TO COORDINATE
LOCATIONS OF STRANDS IN PRECAST
SLABS. DO NOT CUT STRANDS
- SCAN SLAB AS REQUIRED
- ADJUST ANCHOR LOCATION AS REQUIRED.
(MAINTAIN MAX. SPACING)

MASONRY WALL

INTERIOR

PRECAST CONCRETE SLAB

150(6") LG x 8.0mm(5/16") PLATE
ASSEMBLY @ 1200mm(48") o.c.
EA SIDE (AT GROUTED CORES)
o/w: 1-16mm Ø (5/8" Ø) THROUGH
BOLT AT FULL COURSE

GAP OR COMPRESSIVE
MATERIAL BETWEEN SLAB
AND TOP OF WALL. SEE
MASONRY SPECIFICATIONS

1-16mm Ø (5/8" Ø) CONCRETE HILTI KWIK
BOLT 3 ANCHOR (E/S)

- CONTRACTOR TO COORDINATE
LOCATIONS OF STRANDS IN PRECAST
SLABS. DO NOT CUT STRANDS
- SCAN SLAB AS REQUIRED
- ADJUST ANCHOR LOCATION AS REQUIRED
(MAINTAIN MAX. SPACING)

MASONRY WALL

EXTERIOR

FOR BLOCK THICKNESS
AND LOCATIONS REFER TO
ARCH. FLOOR PLANS

ADD LAYER OF MESH
900mm(36") WIDE FOR FULL
LENGTH OF WALL

600mm(24") LONG DOWELS TO
MATCH VERT. REINFORCING
(DRILL & GROUT 100mm (4"))

250 (10")

400 (16")

3-15M BOT. LONG

NEW WALL / NEW SLAB

FOR BLOCK THICKNESS
AND LOCATIONS REFER TO
ARCH. FLOOR PLANS

600mm(24") LONG DOWELS TO
MATCH VERT. REINFORCING

25 MPa (3625 psi) CONC.

50 (2") MAX.

100(4") MIN.

2-10M DOWELS @ 600(24") o.c.
(x400 (16") LONG)

3-15M BOT. LONG

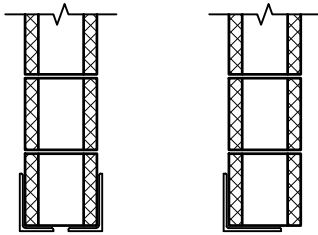
ROUGHEN / CLEAN / WET
SURFACE PRIOR TO CONC.
PLACEMENT

ENGINEERED FILL
q_{ult} ≥ 100 kPa (2100 psf)

NEW WALL / EXISTING SLAB

D04-4.1 MASONRY LINTELS FOR EXISTING NON-LOADBEARING WALLS

290mm (12") CONCRETE BLOCK:	SPANS < 2100mm (84")	2-L 152x89x7.9
240mm (10") CONCRETE BLOCK:	SPANS < 2100mm (84")	2-L 152x89x7.9
190mm (8") CONCRETE BLOCK:	SPANS < 1500mm (60")	2-L 152x89x7.9 OR 1-L 152x152x7.9
140mm (6") CONCRETE BLOCK:	SPANS < 2000mm (79")	1-L 127x127x7.9



1. INSTALL NEW LINTELS PRIOR TO BLOCK REMOVAL
2. PROVIDE 200mm(8") MIN. BEARING EACH END.

Figure 10: Typical Reinforcement Details for Slab Openings

OPENINGS < 1500(60")

20 MPa CONC.

2-10M B.

230 (8")

OPENINGS > 1500(60") < 2500(100")

20 MPa CONC.

2-15M T&B

400 (16")

OPENINGS > 2500(100") < 4000(160")

2-15M TOP

20 MPa CONC.

10M @ 200(8")

2-20M BOT.

400 (16")

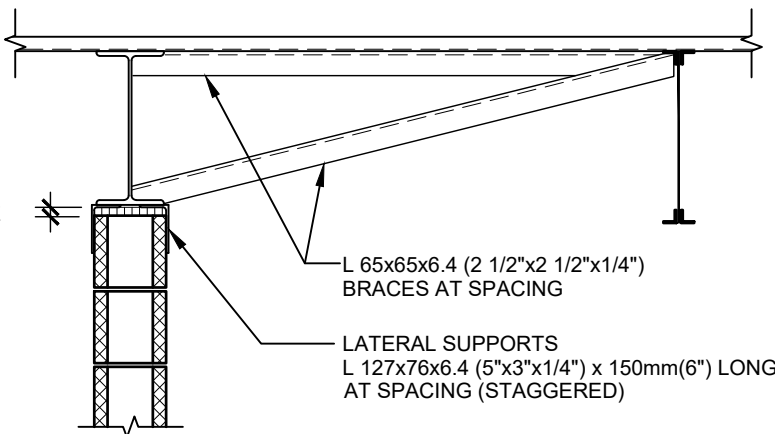
PROVIDE 200mm(8") MINIMUM BEARING AT SUPPORTS

LOOSE LINTEL SCHEDULE: 90mm (3 1/2") MASONRY

SPANS < 1200(48") L 90x90x6.4 (L 3 1/2"x3 1/2"x1/4")
 SPANS < 1800(72") L 102x90x7.9 (L 4"x3 1/2"x5/16")
 SPANS < 2400(96") L 127x90x7.9 (L 5"x3 1/2"x5/16")
 SPANS < 3000(120") L 152x102x10 (L 6"x4"x3/8")

- PROVIDE LOOSE LINTELS ABOVE ALL MASONRY CLADDING OPENINGS U/N.
ALL LOOSE LINTELS TO BE HOT DIP GALVANIZED U/N AT EXTERIOR CONDITIONS U/N. PROVIDE MIN. 150mm (6") BEARING EACH END.

S = SPACING OF BRACING NOTED BELOW



S ≤ 1200mm (4'-0")	90(4") BLOCK
S ≤ 1200mm (4'-0")	140(6") BLOCK
S ≤ 1500mm (5'-0")	190(8") BLOCK OR LARGER

CONTROL JOINT

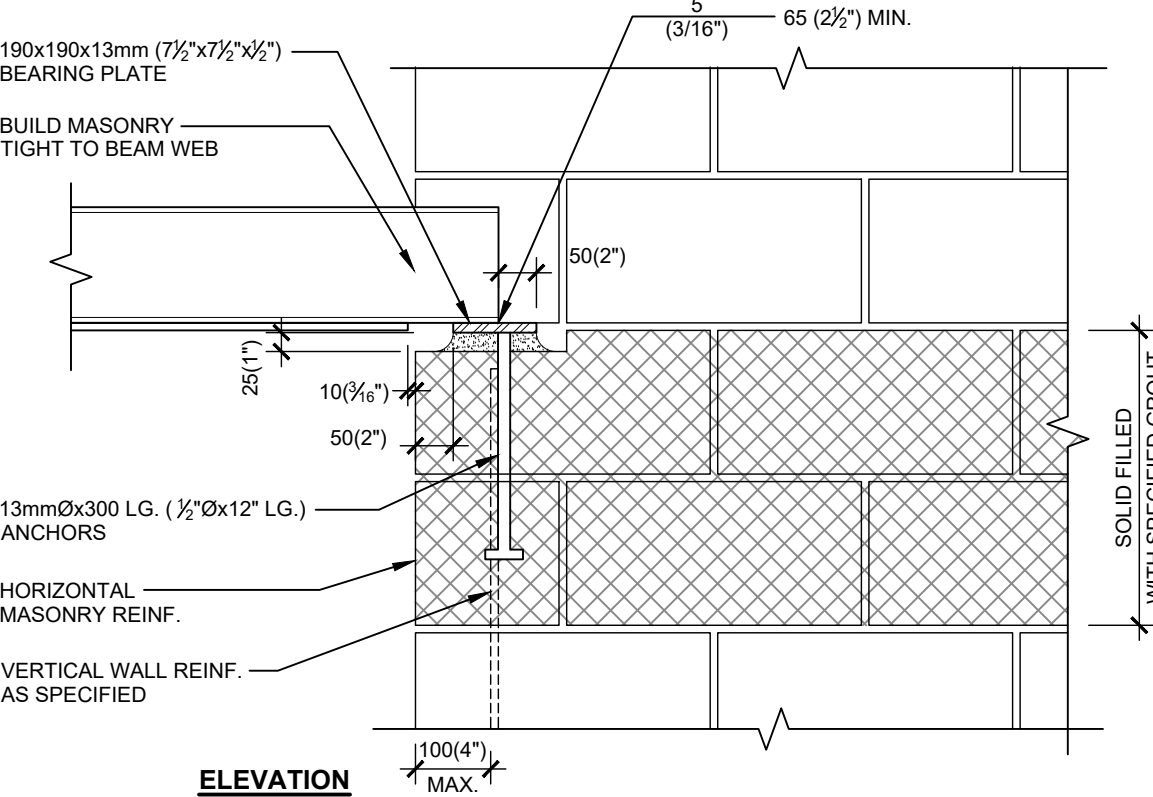
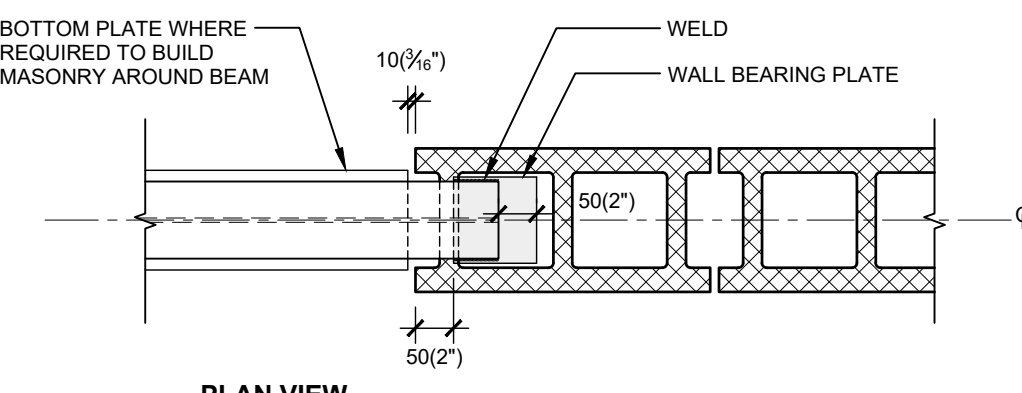
- KEEP JOINT FREE OF MORTAR AND JOINT REINFORCEMENT

GROUT & FILL CORES EACH SIDE OF JOINT (TYP.)

BACKER ROD AND SEALANT (REFER TO ARCH.)

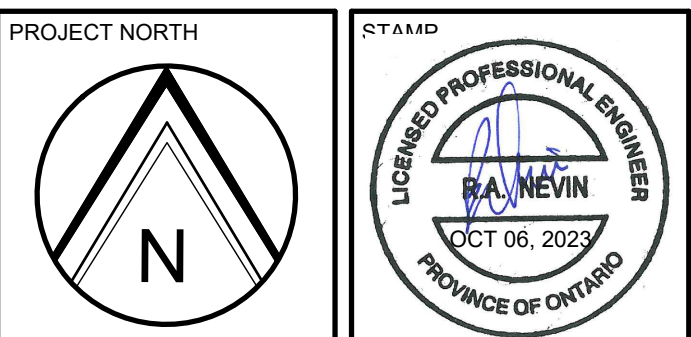
MAX. SPACING OF 9000mm (30'-0") U.N.O. (SEE PLANS AND SPECS.)

D04-7 STEEL BEAM TO MASONRY



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3	OCT 24, 2024	ISSUED FOR ...	WL
2	OCT 06, 2023	ISSUED FOR PERMIT	
1	APR 06, 2023	ISSUED FOR COORDINATION	JB
No.	DATE	REVISIONS	BY



PROJECT

BYTEK VW
ADDITION/RENOVATION

1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING

GENERAL NOTES AND
DETAILS - MASONRY

DRAWN:	A.N.
DESIGNED:	R.N.
DATE:	MAR. 2023
SCALE:	
PROJECT No:	23-0012

DRAWING No. S003

D05 STEEL**D05-1 STRUCTURAL STEEL**

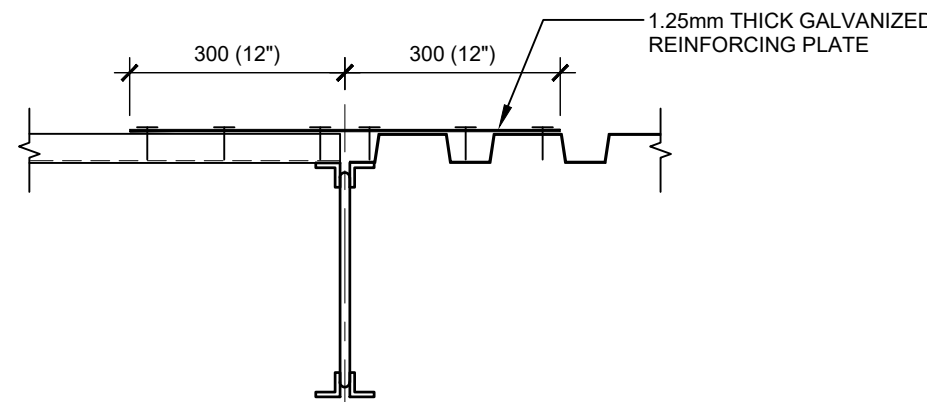
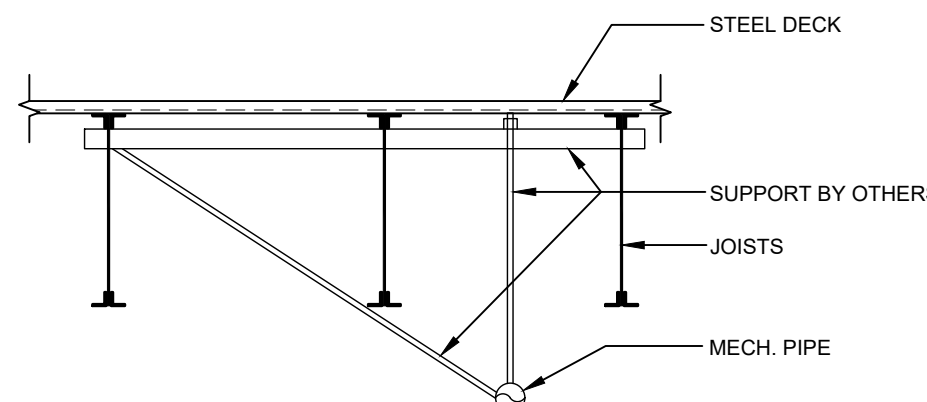
STRUCTURAL STEEL SHALL COMPLY WITH CAN3-S16: 1-14 UNLESS OTHERWISE NOTED.

ITEM	APPLICABLE SPECIFICATIONS (UNLESS OTHERWISE NOTED)
ROLLED SECTIONS	G40 21M - 350W
ROLLED C & L SHAPES	G40 21M - 300W
HSS (TUBE) SECTIONS	G40 21M - 350W (CLASS C)
CONNECTION BOLTS	A325 (BEARING TYPE)
ANCHOR BOLTS	A307 (UNLESS OTHERWISE NOTED IN BASEPLATE SCHEDULE)
BRACE FRAME-BEARING PLATES	G40 21M - 300W

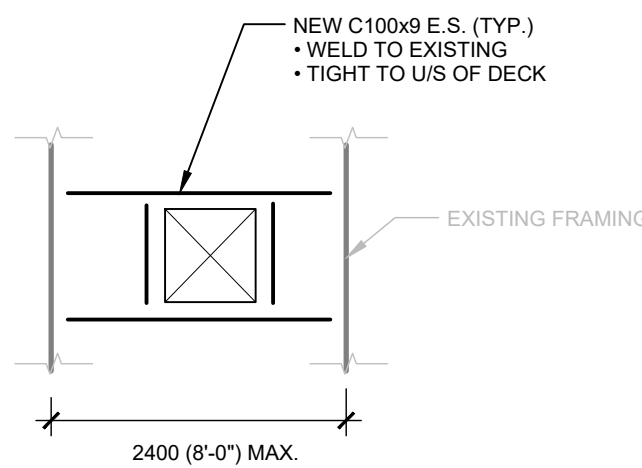
- ALL STEEL WORK SHALL BE GIVEN ONE COAT OF APPROVED PRIMER.
- FIELD AND SHOP CONNECTIONS SHALL BE WELDED OR HIGH TENSILE BOLTED (ASTM STANDARD A325).
- WELDING SHALL CONFORM TO LATEST CSA SPECIFICATIONS W59 AND BE UNDERTAKEN BY A FABRICATOR APPROVED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA SPECIFICATION W47.1.
- ALL EXPOSED WELDS SHALL BE CONTINUOUS AND BE GROUND SMOOTH.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE GALVANIZED OR PAINTED WITH APPROVED RUST INHIBITIVE PAINT. (PAINT ONLY IF APPROVED BY STRUCTURAL ENGINEER IN WRITING).
- STRUCTURAL STEEL MEMBERS SHALL NOT BE SPLICED UNLESS APPROVED BY THE STRUCTURAL ENGINEER IN WRITING.
- WHERE STRUCTURAL STEEL MEMBERS SPECIFIED ON THE STRUCTURAL DRAWINGS ARE UNAVAILABLE TO THE CONTRACTOR, THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE MEMBERS HAVING ALL SECTION PROPERTIES EQUAL TO OR BETTER THAN THAT OF THE SPECIFIED MEMBERS AT NO ADDITIONAL COST. CONTACT ENGINEER FOR ACCEPTANCE OF ANY AND ALL SUBSTITUTIONS.

D05-2 STEEL DECK

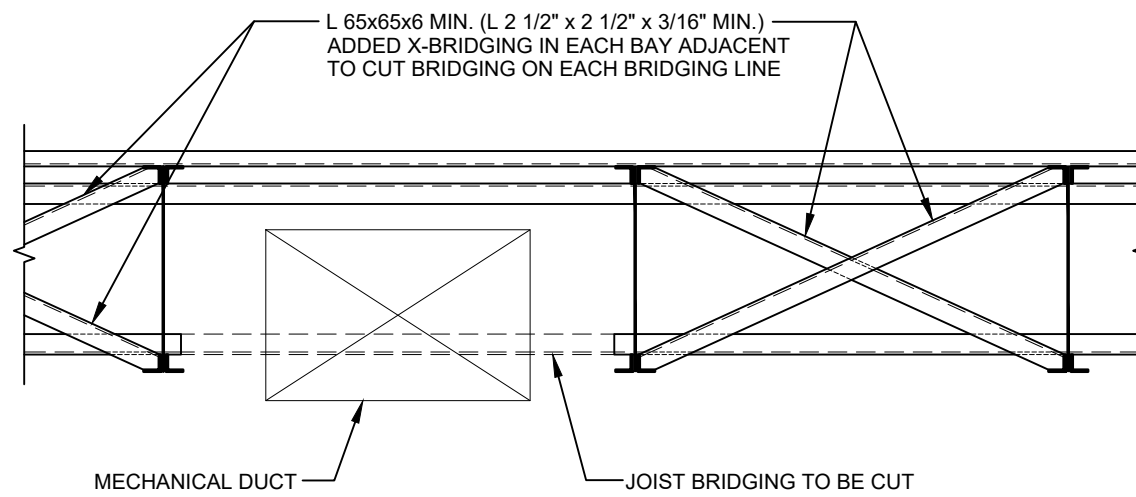
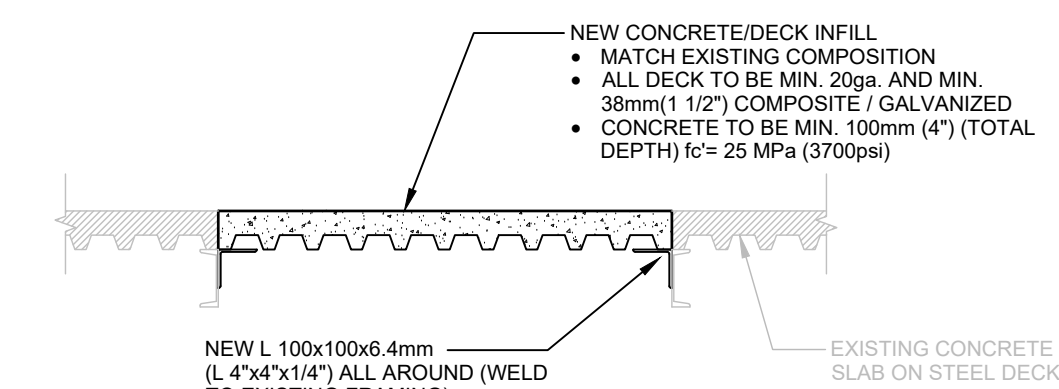
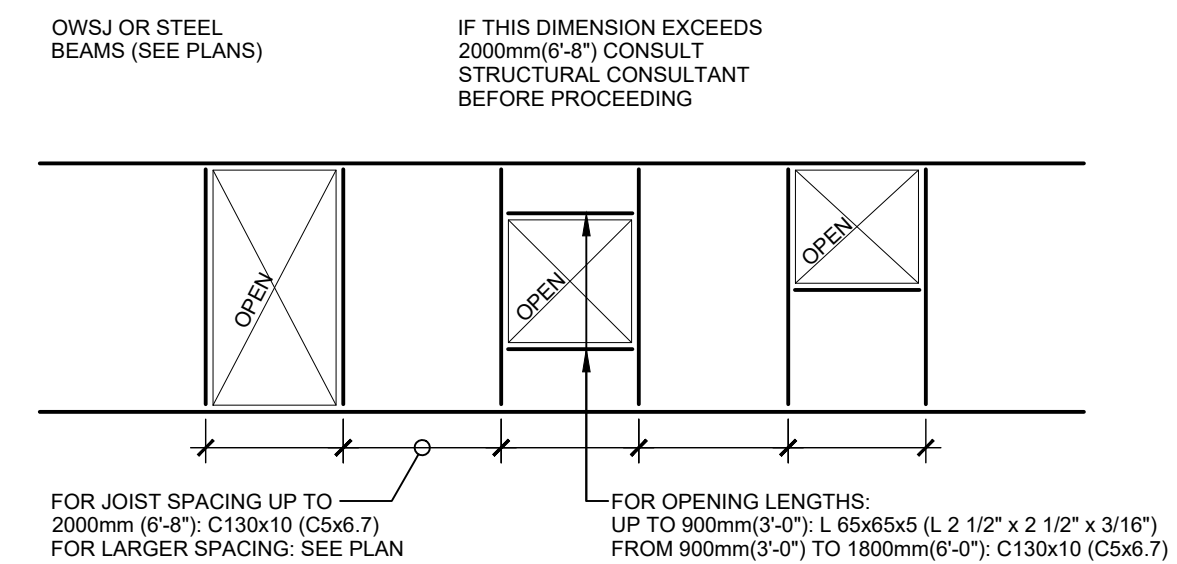
- ALL METAL DECK SHALL BE A MINIMUM OF 38mm(1 1/2") DEEP, WITH DECK FLUTES AT 150mm(6") CENTERS, CONTINUOUS OVER AT LEAST THREE SPANS, AND SHALL BE FORMED FROM SHEET STEEL CONFORMING TO CSSBI 10M12/M20M, MINIMUM GRADE 'A', WITH A BASE STEEL NOMINAL THICKNESS SPECIFIED ON PLANS, AND A MINIMUM ZINC COATING DESIGNATION OF "WIPE COAT".
MINIMUM SIZES AS FOLLOWS (U/N ON PLANS):
ROOFS: 38x1.22 (1 1/2"x18ga.)
FLOORS: 38x1.22 (1 1/2"x18ga.) COMPOSITE
- DECK CONNECTIONS TO SUPPORTING STRUCTURE TO BE AS FOLLOWS (U/N ON PLANS):
20mm(3/4") FUSION WELDS @ 914/7
20mm(3/4") FUSION WELDS @ 300mm(12") TRANS.
20mm(3/4") FUSION WELDS @ 300mm(12") PERIMETER
SIDE LAP: BUTT JUNCTION @ 300mm(12") o.c.
- ALL WELDS SHALL BE PRIME PAINTED BY DECK CONTRACTOR.
- STEEL DECK CONTRACTOR TO REINFORCE ALL OPENINGS IN DECK 18" IN SIZE OR SMALLER.
- ALL DECK CLOSURES SHALL BE SUPPLIED AND INSTALLED BY THE DECK CONTRACTOR. (PROVIDE DECK CLOSURES AT ALL AREAS WHERE DECK EDGES ARE WEAK).
- WEDGE THE FLUTES OF THE STEEL ROOF DECK UNDER WOOD SLEEPERS CARRYING ROOF TOP UNITS (THIS SHALL ALSO APPLY TO ROOF TOP UNITS WITH METAL CURBS).
- NO MECHANICAL OR ELECTRICAL EQUIPMENT/ACCESSORIES SHALL BE HUNG FROM THE STEEL DECK.
- HANGERS FOR SUSPENSION OF CEILING ARE TO BE ATTACHED TO THE STEEL JOISTS. THESE MAY HOWEVER BE ATTACHED IN BETWEEN STEEL JOISTS TO THE SIDE OF THE DECK FLUTES AND BY LOOPING AND TYING AROUND, BUT ON NO ACCOUNT SHOULD THESE HANGERS BE PUNCHED THROUGH THE BOTTOM FLUTES.

**DETAIL AT DECK DIRECTION CHANGE**

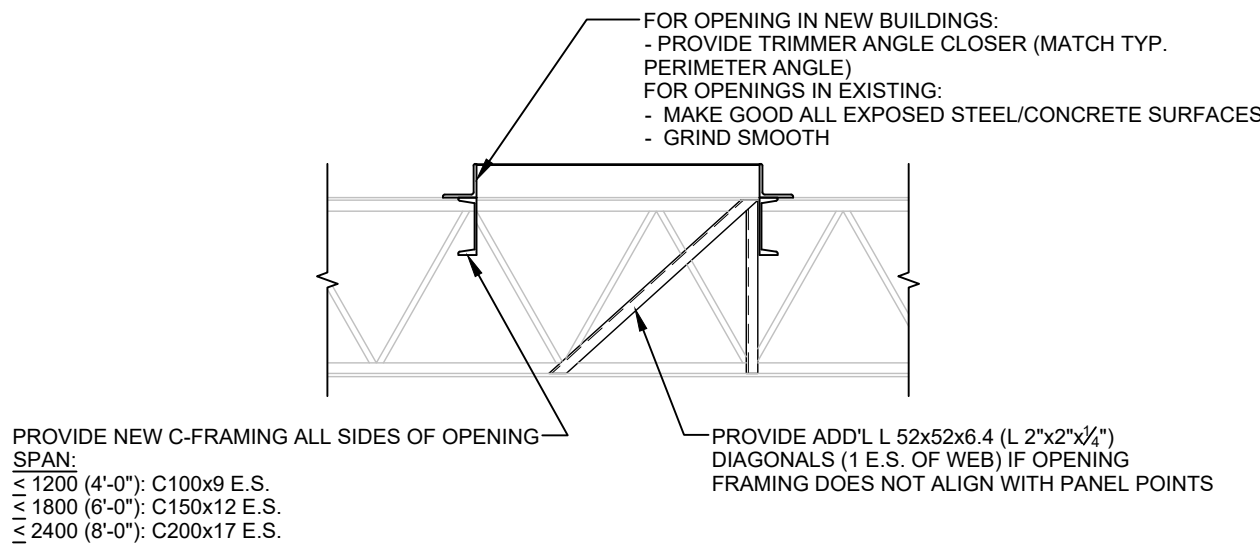
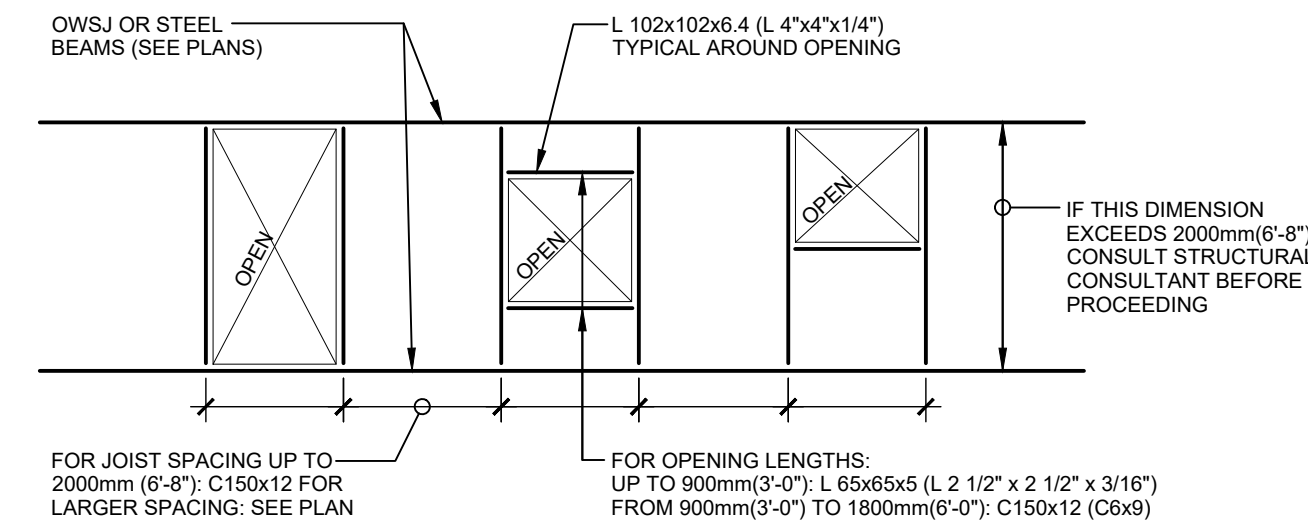
- ALL EQUIPMENT SUPPORTS ARE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED ON STRUCTURAL DRAWINGS
- SUPPORTS ARE TO BE PROVIDED AT THE TIME OF STEEL SHOP DRAWINGS SUBMISSION AND COORDINATED WITH STEEL ENGINEER'S DRAWING/DETAILS
- SUPPORT LAYOUTS THAT AFFECT BASE BUILDING ELEMENTS AND RESULT IN CHANGES WILL BE DONE AT NO COST TO THE CONTRACT

EQUIPMENT SUPPORTS**ROOF PENETRATIONS IN EXISTING (4'-0"x4'-0" MAX.)****D05-3 STEEL JOISTS AND BRIDGING: S16.1-14 AND S136-M94**

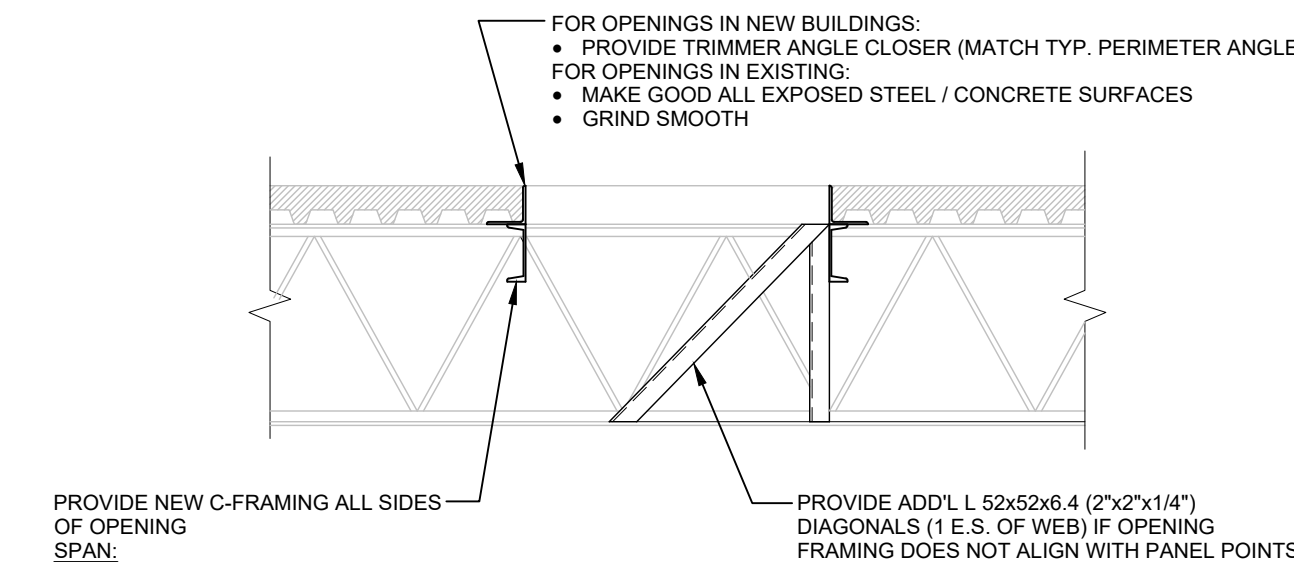
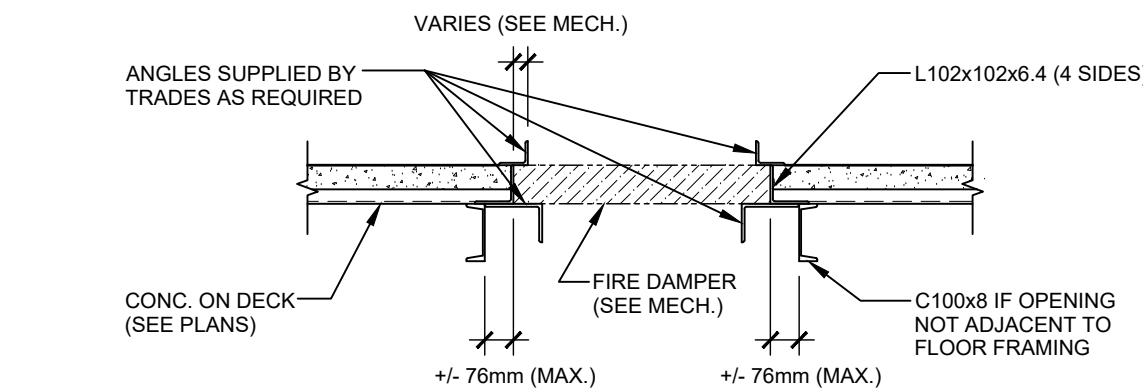
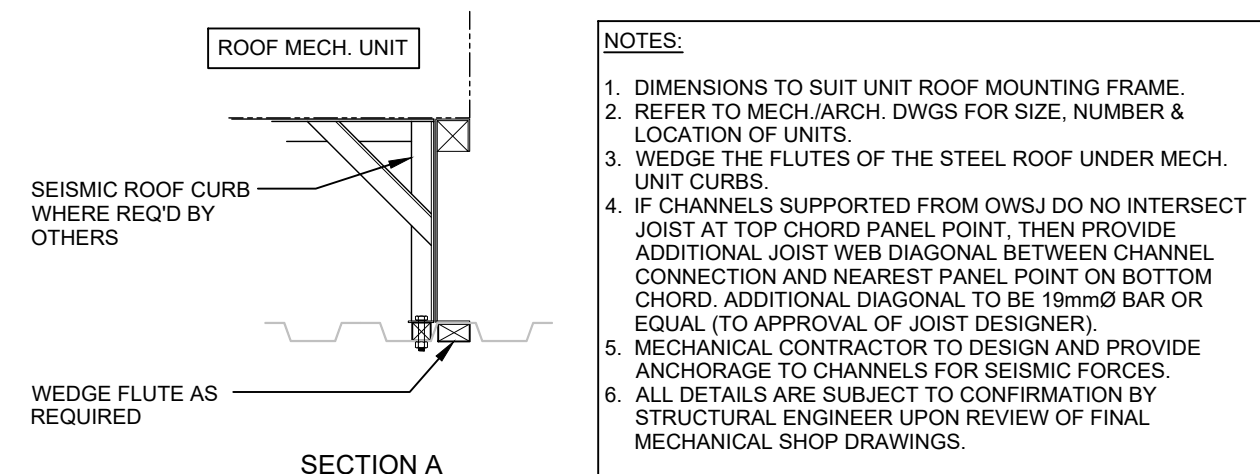
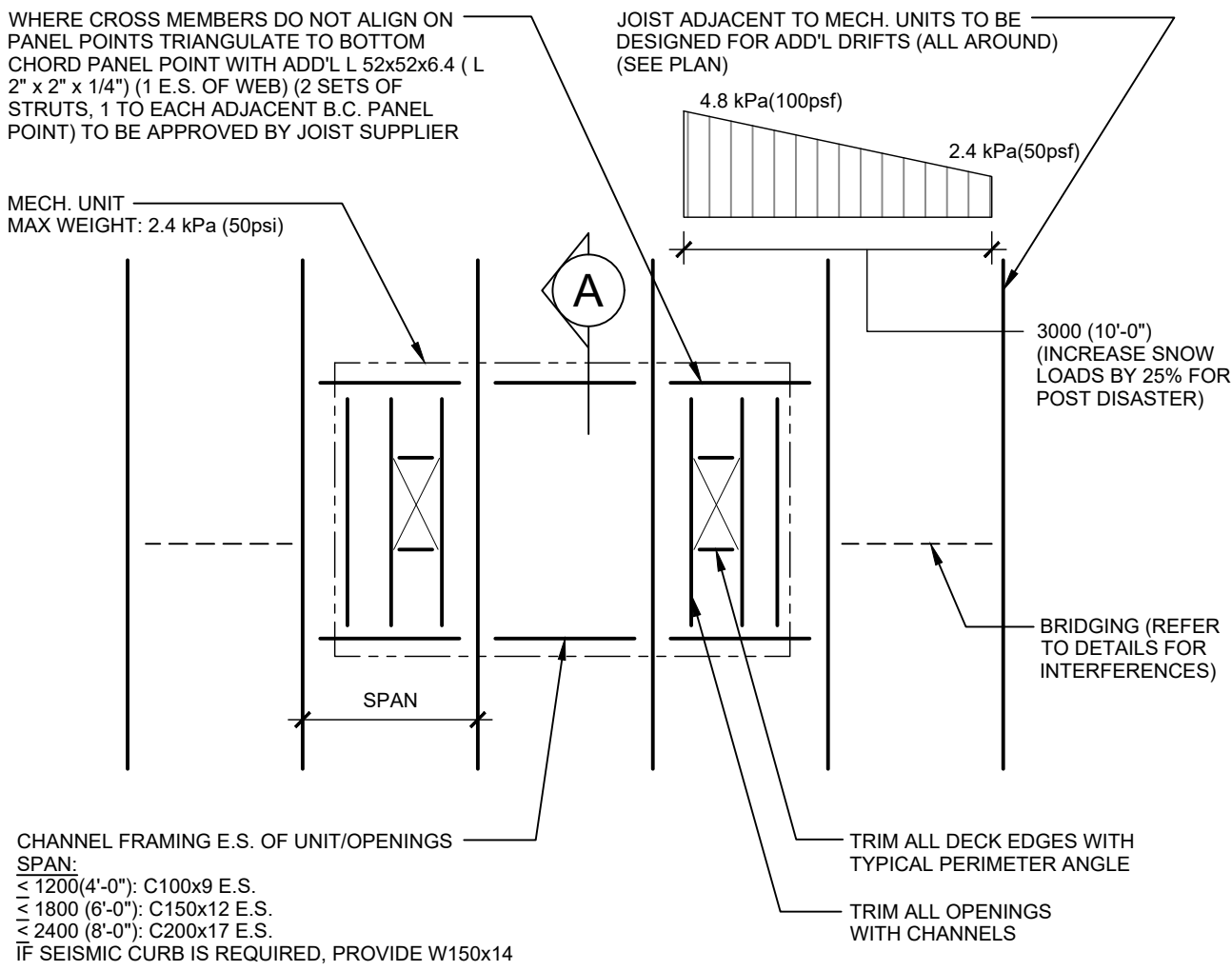
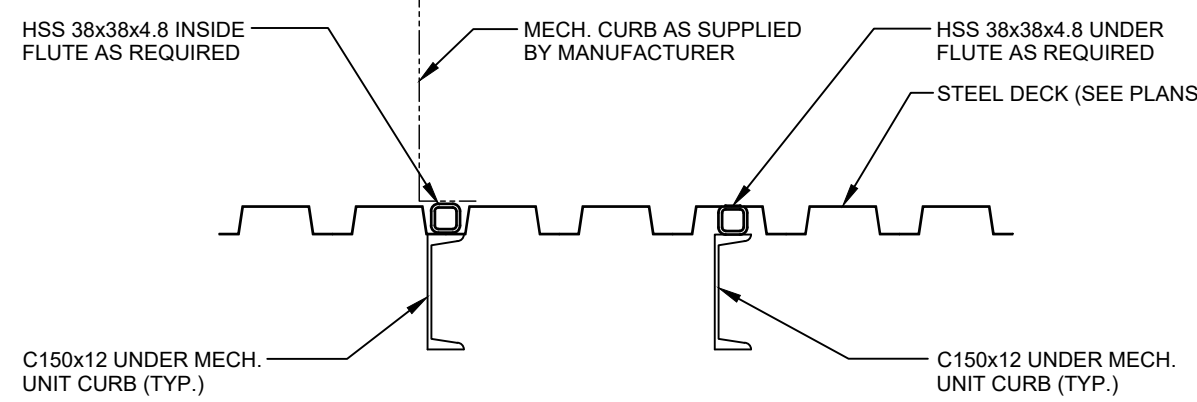
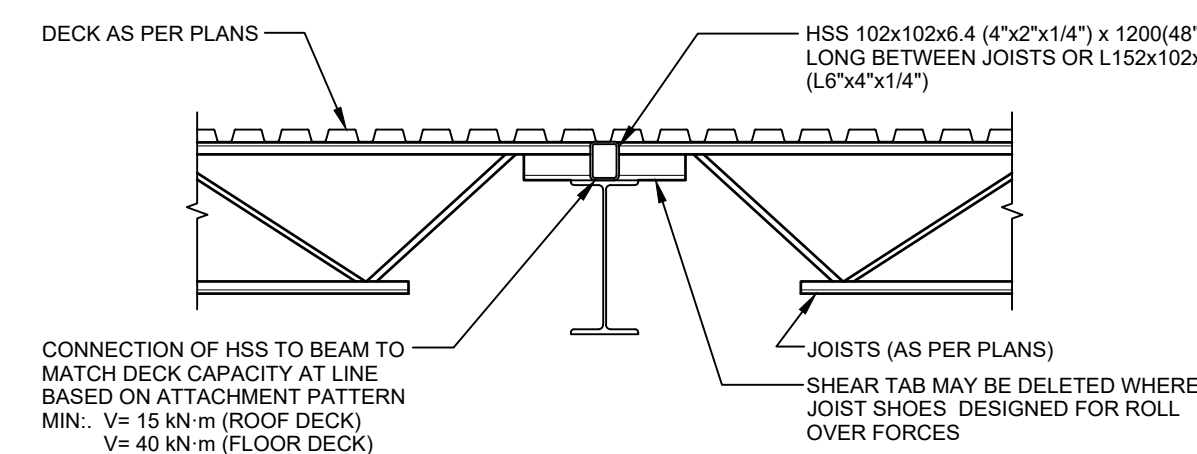
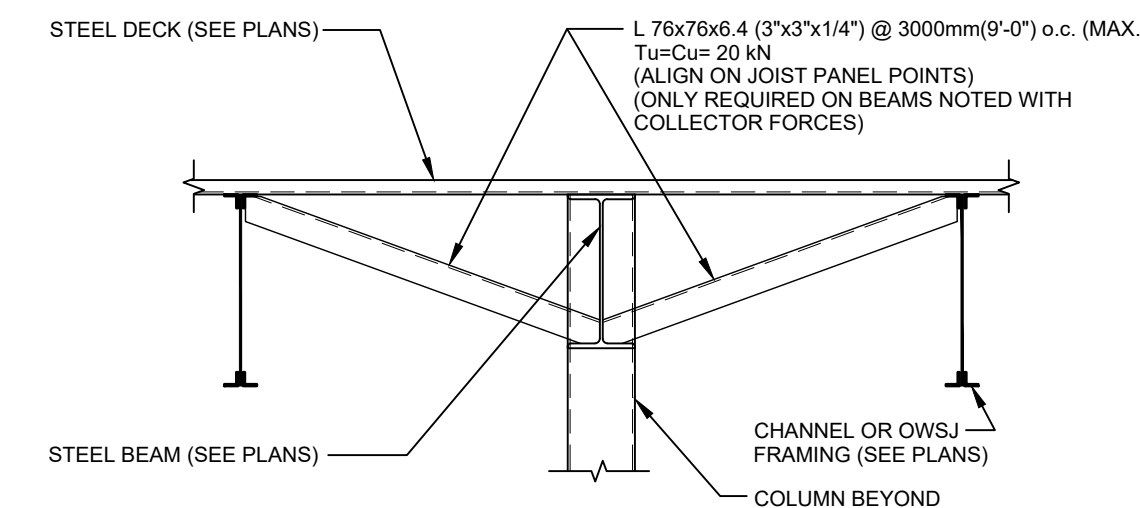
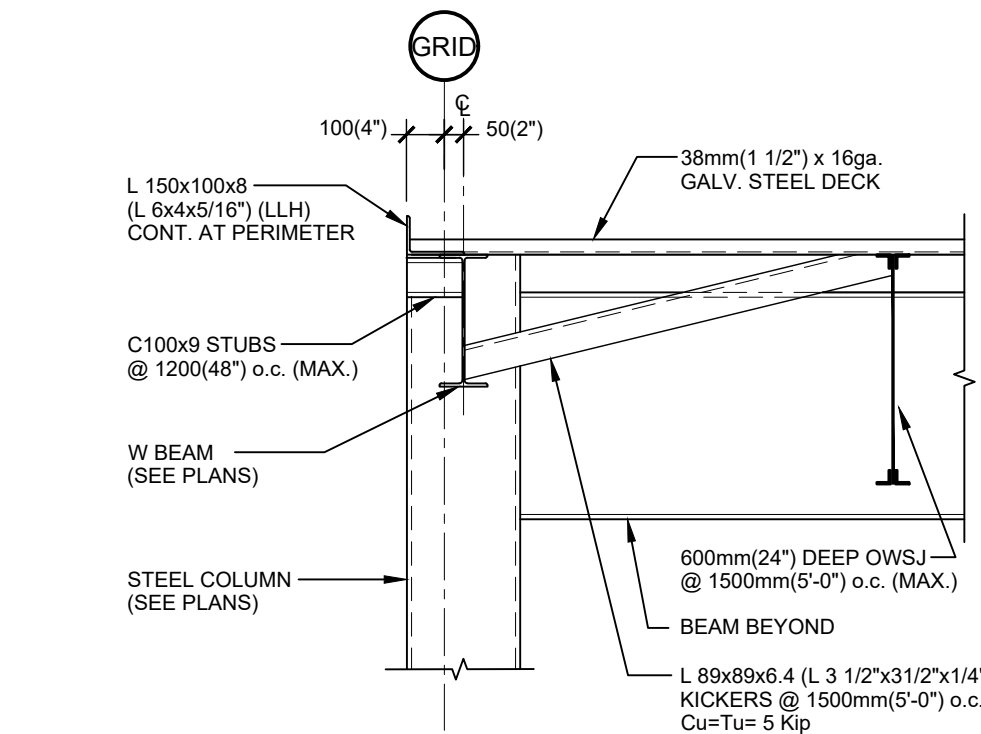
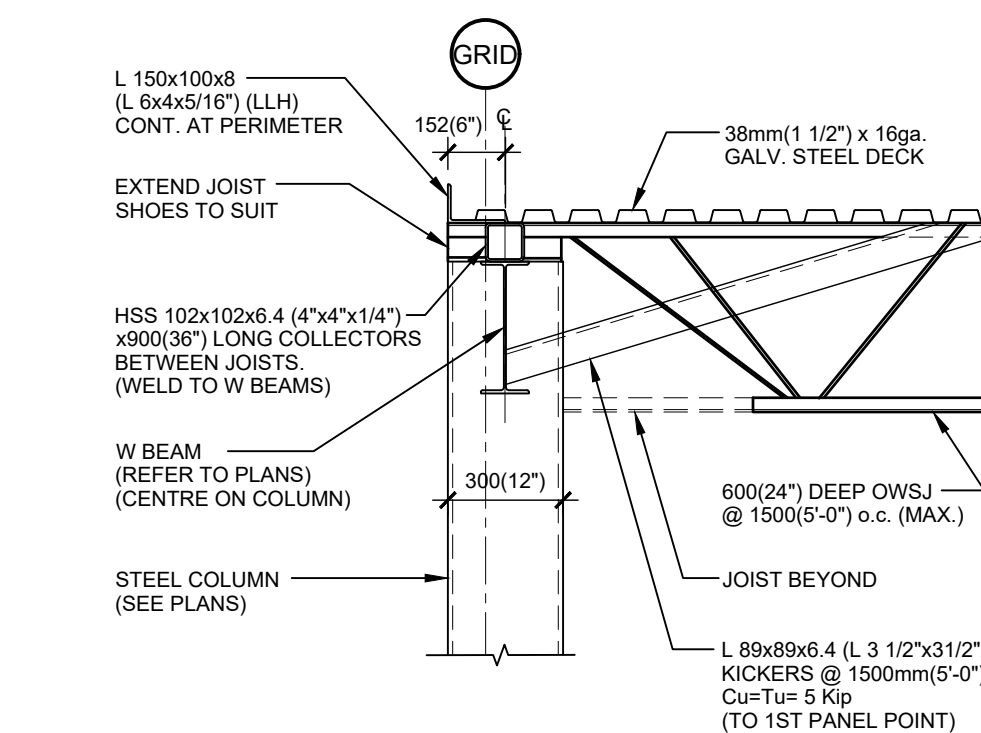
- ALL JOISTS ARE TO BE EQUALLY SPACED BETWEEN THE JOIST/BEAMS.
- ALL JOISTS ARE TO BE CAMBERED FOR FULL DEAD LOAD DEFLECTION, LIMIT LIVE LOAD DEFLECTIONS TO NOT MORE THAN L/360 FOR ROOF AREAS AND NOT MORE THAN L/480 FOR FLOOR AREAS. TOTAL LOAD DEFLECTION FOR FLOOR JOISTS NOT TO EXCEED L/240. FLOOR JOISTS TO ALSO MEET VIBRATION CRITERIA OUTLINED IN 2012(R22) OBC CLAUSE 4.1.3.6.
- IN ORDER TO FACILITATE THE PASSAGE OF MECHANICAL DUCTS AND PIPES THROUGH THE ROOF JOISTS, THE JOIST SUPPLIER SHALL LOCATE THE DIAGONALS SO THAT THEY LINE UP FROM JOIST TO JOIST.
- SPECIFIED POINT LOADS ARE SHOWN ON PLANS/SECTIONS.
- ALL PIPES MUST BE HUNG FROM TOP CHORD OF JOISTS. IF A LOAD (APPROVED BY THE STRUCTURAL ENGINEER) IS HUNG FROM A JOIST AT A LOCATION OTHER THAN THE PANEL POINT, THEN A WEB DIAGONAL SHALL BE WELDED FROM THE HANGER LOCATION TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD.
- LOADING DIAGRAMS:
AREAS SHADED ON ROOF PLAN INDICATES EXTENT OF ADDITIONAL SNOW PILING WITH PEAK (SPECIFIED) LOADS NOTED. ROOF DECK AND JOISTS SHALL BE DESIGNED, MANUFACTURED AND ERECTED TO SUPPORT BASIC SPECIFIED AS WELL AS ADDITIONAL SNOW LOADING.
- a) PROVIDE 1 ROW OF HORIZONTAL BRIDGING AT FIRST BOTTOM CHORD PANEL POINT AT EACH END OF JOIST. PROVIDE ADDITIONAL CROSS BRIDGING AS INDICATED ON PLAN.
b) STEEL CONTRACTOR SHALL DESIGN, SUPPLY AND ERECT REMAINDER OF HORIZONTAL JOIST BRIDGING OF SUFFICIENT SIZE AND SPACING IN ACCORDANCE WITH CSA S16:1 LATEST EDITION.
- DESIGN JOISTS FOR ALL LOADING CONDITIONS SPECIFIED IN THE NATIONAL BUILDING CODE IN ADDITION TO THE SNOW LOADS SPECIFIED ON PLANS.
- PROVIDE ADDITIONAL X-BRIDGING BETWEEN THE OUTSIDE PERIMETER BEAMS AND THE FIRST ROW OF JOIST RUNNING PARALLEL. ADDITIONAL BRIDGING IS SHOWN AS $x = x$ ON PLAN. MINIMUM SIZE TO BE L 38x38x4 (L 1 1/2"x1 1/2"x1/8") SPACED AT 1800(6'-0") o.c. (MAX.) UNLESS OTHERWISE NOTED.
- DESIGN ALL JOIST SHOES FOR MINIMUM ROLLOVER FORCE +/- 15 kN (U/N ON PLANS) APPLIED PERPENDICULAR TO JOISTS AT U/S OF DECK ALONG BRACE FRAME / MOMENT FRAME LINES. WHERE ROLLOVER FORCES NOTED (AND ON PLANS) CANNOT BE ACCOMMODATED BY JOIST DESIGN, PROVIDE SHEAR TABS AS PER TYPICAL DETAILS BETWEEN JOISTS.

**TYPICAL DETAIL WHERE BOTTOM CHORD JOIST BRIDGING AND / OR BRACING IS REQUIRED TO BE CUT DUE TO INTERFERENCE BY MECHANICAL DUCTWORK****D05-4 EXISTING FLOOR / ROOF INFILLS****TYPICAL SLAB INFILL: OPENING < 1200x1200 (4'-0" x 4'-0")****D05-5 TYPICAL DETAILS FOR TRIMMING TO OPENINGS THROUGH STEEL DECK (NO TOPPING)****NOTES:**

- TOP OF ALL TRIMMING STEEL AT UNDERSIDE OF STEEL DECK UNLESS OTHERWISE NOTED.
- LOCATION OF ALL MECHANICAL UNITS AND OPENINGS THROUGH ROOF IS BASED ON INFORMATION SHOWN ON MECHANICAL DRAWINGS. THE STRUCTURAL STEEL SUB-CONTRACTOR MUST CONFIRM ALL THESE DIMENSIONS AND SIZES WITH THE MECHANICAL CONTRACTOR.
- OWSJ MUST BE DESIGNED FOR ADDITIONAL LOADS FROM MECHANICAL UNITS.
- IF ACTUAL LOCATIONS OR DETAILS VARY FROM THOSE SHOWN, THE STRUCTURAL CONSULTANT MUST BE INFORMED AND INSTRUCTIONS RECEIVED BEFORE PROCEEDING WITH THE WORK.
- THE STRUCTURAL STEEL SUB-CONTRACTOR IS TO SUBMIT ERECTION DRAWINGS TO THE MECHANICAL ENGINEER AND/OR CONTRACTOR FOR APPROVAL OF SIZE AND LOCATION OF OPENINGS FOR MECHANICAL UNITS.

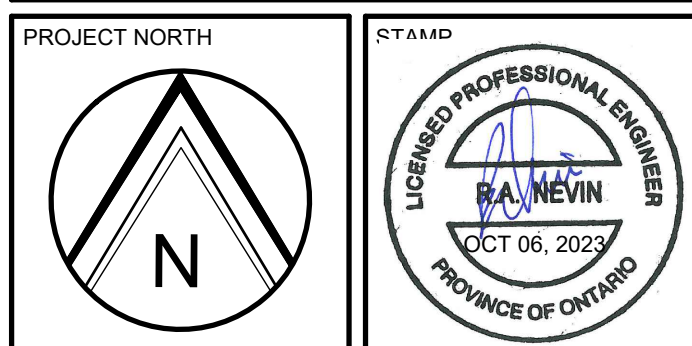
PLAN: ROOF DECK OPENINGS (NEW/EXISTING)**SECTION: ROOF DECK OPENINGS (NEW/EXISTING)****D05-5a TYPICAL DETAILS FOR TRIMMING TO OPENINGS THROUGH CONCRETE ON DECK****NOTES:**

- TOP OF ALL TRIMMING STEEL AT UNDERSIDE OF STEEL DECK UNLESS OTHERWISE NOTED.
- LOCATION OF ALL MECHANICAL UNITS AND OPENINGS THROUGH FLOOR IS BASED ON INFORMATION SHOWN ON MECHANICAL DRAWINGS. THE STRUCTURAL STEEL SUB-CONTRACTOR MUST CONFIRM ALL THESE DIMENSIONS AND SIZES WITH THE MECHANICAL CONTRACTOR.
- OWSJ MUST BE DESIGNED FOR ADDITIONAL LOADS FROM MECHANICAL UNITS.
- IF ACTUAL LOCATIONS OR DETAILS VARY FROM THOSE SHOWN, THE STRUCTURAL CONSULTANT MUST BE INFORMED AND INSTRUCTIONS RECEIVED BEFORE PROCEEDING WITH THE WORK.
- THE STRUCTURAL STEEL SUB-CONTRACTOR IS TO SUBMIT ERECTION DRAWINGS TO THE MECHANICAL ENGINEER AND/OR CONTRACTOR FOR APPROVAL OF SIZE AND LOCATION OF OPENINGS FOR MECHANICAL UNITS.

PLAN: FLOOR OPENINGS (NEW/EXISTING)**SECTION: FLOOR OPENINGS (NEW/EXISTING)****OPENINGS THROUGH FLOOR SLAB DETAIL****D05-6 TYPICAL DETAILS FOR TRIMMING TO FRAMING OF ROOF TOP UNITS****SECTION A****DETAIL: TYPICAL SHIM AT MECHANICAL UNITS****TYPICAL SHEAR TAB
PROVIDE ON ALL BRACE FRAME / MOMENT FRAME LINES U/N****ROOF COLLECTOR BEAM STABILIZERS****SECTION: ROOF EDGE PARALLEL TO JOISTS****SECTION: ROOF EDGE PERPENDICULAR TO JOISTS**

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No.	DATE	REVISIONS	BY
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1	APR 06, 2023	ISSUED FOR COORDINATION	JB



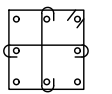
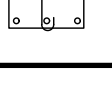
PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

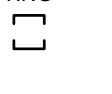
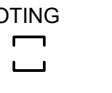
DRAWING
**GENERAL NOTES AND
DETAILS - STEEL**

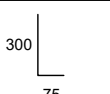

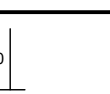
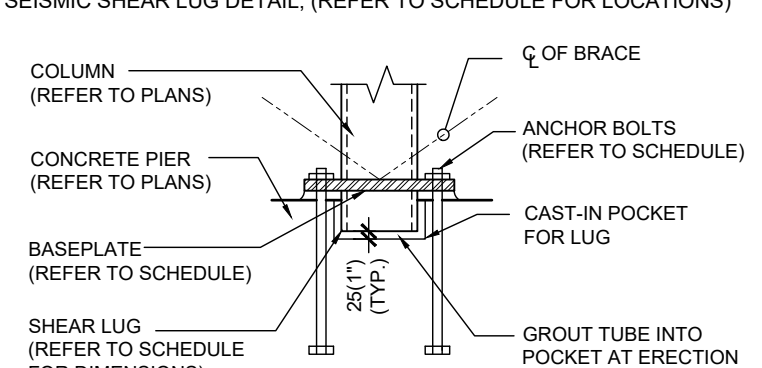
DRAWN:	A.N.	DRAWING No.
DESIGNED:	R.N.	
DATE:	MAR. 2023	
SCALE:		
PROJECT No:	23-0012	

S004

FOUNDATION WALL SCHEDULE				
MARK	DESCRIPTION	FLOOR	SIZE (W)	NOTES
FW1	TYPICAL EXTERIOR FOUNDATION WALL	FOOTING TO GROUND	300	10M @ 250 V.E.F. 10M @ 250 H.E.F. f _c = 25 MPa, F-2
NOTES: 1. CONCRETE STRENGTHS: U/N (MIN.) PARKING AREAS: 35 MPa, C-1 FROST WALLS (NO BASEMENT): 25 MPa, F-2 AREAWELLS: 35 MPa, C-1 RETAINING WALLS: 35 MPa, C-1 2. SEE SECTIONS / TYPICAL DETAILS FOR ADDITIONAL INFORMATION. 3. ALL WALLS TO BE CONTINUOUS IN VERTICAL / HORIZONTAL BARS BASEMENT WALLS: HORIZONTAL BARS: CLASS 'B' TENSION LAP (BOT. BARS) VERTICAL BARS: CLASS 'B' TENSION LAP (TOP BARS) AREAWELL WALLS: HORIZONTAL BARS: CLASS 'B' TENSION LAP (TOP BARS) VERTICAL BARS: CLASS 'B' TENSION LAP (TOP BARS) RETAINING WALLS: HORIZONTAL BARS: CLASS 'B' TENSION LAP (TOP BARS) VERTICAL BARS: V.I.F. (HIGH SIDE); CLASS 'B' TENSION LAP (TOP BARS) V.O.F. (LOW SIDE); CLASS 'B' TENSION LAP (BOT. BARS) OTHER WALLS (NOT SHEAR WALLS / BASEMENT / AREAWELL): HOR. / VERT. BARS: CLASS 'B' TENSION LAP (BOT. BARS) ALL WALLS: HOOK ALL VERTICALS 90° INTO TOP OF SLAB AT TERMINATION V.I.F.: BEND IN 24 BAR Ø MIN. 450mm V.O.F.: BEND IN 48 BAR Ø MIN. 700mm PROVIDE STANDARD 90° HOOKS TO HORIZONTALS AT ALL CORNERS / INTERSECTIONS 4. PROVIDE SHEAR KEY AT TOP / BOTTOM OF ALL LIFTS. 5. PROVIDE DOWELS TO MATCH VERTICALS IN ALL FOOTINGS. 6. LAYERING OF BARS: <div><div>TYPICAL WALL</div><div>AREAWELL WALL</div></div> 7. REFER TO ARCH. FOR STEPS IN FOUNDATION WALLS.				

PIER SCHEDULE		
MARK	SIZE	REINFORCING
P1	450x450	8-20M VERT. + DOWELS 3-10M TIES @ 300 o.c. 
P2	450x450	BRACE FRAMES 8-20M VERT. FULL HEIGHT 3-10M TIES @ 300 o.c. 
NOTES: 1. TOPS OF PIERS TO BE -300mm (-12") BELOW TOP OF SLAB ON GRADE (U.N.O.). 2. TOPS OF EXTERIOR PIERS TO BE AT +/- 150mm ABOVE FINISHED GRADE (REFER TO ARCH.) 3. PIERS DIMENSIONS ARE TO BE CENTRED ON SUPPORTED COLUMNS (U.N.O.). INCREASE CONCRETE SIZE TO SUIT FOUNDATION WALL OFFSETS. 4. VERTICAL BARS IN PIERS MAY BE LAPPED WITH COMPRESSION LAPS WHERE NO BRACE/MOMENT FRAMES ARE PRESENT. WHERE BRACE/MOMENT FRAMES ARE PRESENT VERTICAL BARS ARE TO BE EXTEND TO FULL HEIGHT ABOVE FOOTING TO TOP OF PIERS (NO LAPS ARE PERMITTED UNLESS APPROVED BY ENGINEER IN WRITING). CLASS 'B' TENSION LAPS (MIN. 1.5h) MAY BE USED WHERE HEIGHT OF PIER EXCEEDS 2400 (8'-0"). 5. CONCRETE STRENGTH: f _c = 25 MPa EXTERIOR OR EXTERIOR WALL: CLASS F-2 INTERIOR: CLASS N 6. PROVIDE ADDITIONAL GROUP OF TIES AT TOP 150mm(6") SPACING		

FOOTING SCHEDULE		
MARK	SIZE (LxWxT)	NOTES
F1	1700x1700x300	TYPICAL INTERIOR FOOTING 15M @ 300 T. & B.E.W. Q _{ult} ≥ 190 kPa Q _{ult} ≥ 250 kPa 
F2	1250x1250x300	TYPICAL EXTERIOR FOOTING 15M @ 250 T. & B.E.W. Q _{ult} ≥ 190 kPa Q _{ult} ≥ 250 kPa 
F3	600x300 DEEP	TYPICAL STRIP FOOTINGS M @ T.E.W. M @ B.E.W. Q _{ult} ≥ 190 kPa Q _{ult} ≥ 250 kPa
NOTES: 1. ALL FOOTINGS TO BEAR ON SUITABLE BEARING STRATA AS APPROVED BY GEOTECHNICAL ENGINEER IN ACCORDANCE WITH GEOTECHNICAL REPORT WITH MINIMUM BEARING PRESSURES NOTED IN TABLE. 2. PROVIDE MINIMUM 1500(5'-0") FROST COVER TO ALL FOOTINGS EXPOSED TO EXTERIOR CONDITIONS U/N ON DRAWINGS/GEOTECHNICAL REPORT. 3. CONCRETE STRENGTH: f _c = 25 MPa(3600psi) U/N 4. TOPS OF INTERIOR FOOTINGS/WALL/PIERS TO BE A MINIMUM OF 300(12") BELOW THE TOP OF THE SLAB ON GRADE. STEP DOWN INTERIOR FOOTINGS TO EXTERIOR FOOTINGS AS REQUIRED. FINAL BEARING ELEVATIONS TO BE BASED ON GEOTECHNICAL REPORT DATA U/N. 5. FOOTING AND BOTTOM OF WALL ELEVATIONS TO BE ESTABLISHED FROM PLANS AND GEOTECHNICAL REPORT. WALLS/COLUMNS ARE TO BE TERMINATED SUCH THAT THEY ARE FOUNDED ON SUITABLE BEARING STRATA (WITH APPROPRIATE FROST COVER) APPROVED BY GEOTECHNICAL ENGINEER ON SITE. REFER ALSO TO GEOTECHNICAL REPORT. 6. FOOTINGS ARE TO BE LOWERED AS REQUIRED IN THE AREAS OF PITS/SHAFTS AT FOUNDATION LEVEL SUCH THAT THE U/S OF THE PIT/SHAFT IS AT THE TOP OF THE FOOTING. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ELEVATIONS/STEPS IN FOOTINGS. CONTRACTOR IS REQUIRED TO PREPARE FOOTING ELEVATION DRAWINGS PRIOR TO EXCAVATION.		

BASEPLATE SCHEDULE: SINGLE STOREY BUILDINGS														
MARK	SIZE (LxWxT)	NOTES												
Bt1	300x300x20	TYPICAL COLUMN 4-16mmØ ANCHOR BOLTS 												
Bt2	350x350x20	BRACE FRAMES 4-16mmØ SEISMIC HEADED ANCHORS 												
Bt2A	350x350x20	c/w 4-16mmØ SEISMIC HEADED ANCHORS. SHAER LUG 50mm (h) x12.7mm (t) x 350 (Lg) 												
NOTES: 1. LENGTH OF ANCHORS IS EMBEDMENT LENGTH. FABRICATOR TO PROVIDE ADDITIONAL LENGTH AS REQUIRED FOR THREADS/TOLERANCES, ETC. 2. ALL ANCHORS TO BE CAST-IN (CONCRETE) OR GROUTED INTO PLACE (MASONRY). 3. PROVIDE MIN. 25(1") THICK GROUT BED BELOW BASE PLATE U/N. 4. SEISMIC SHEAR LUG DETAIL: (REFER TO SCHEDULE FOR LOCATIONS) <div></div> 5. SEISMIC HEADED ANCHORS: FOLLOWING OUTLINES MINIMUM WASHER PLATE (c/w: NUT ABOVE/BELOW PLATE-TACK WELD NUT TO PLATE) SIZES FOR BOLT ENDS: <table><tr><td>16mmØ: 52x52x16mm</td><td>(5/8"Ø: 2"x2"x5/8")</td></tr><tr><td>19mmØ: 63x63x16mm</td><td>(3/4"Ø: 2 1/2"x2 1/2"x5/8")</td></tr><tr><td>25mmØ: 76x76x20mm</td><td>(1"Ø: 3"x3"x3/4")</td></tr><tr><td>28mmØ: 82x82x20mm</td><td>(1 1/8"Ø: 3 1/4"x3 1/4"x3/4")</td></tr><tr><td>32mmØ: 89x89x20mm</td><td>(1 1/4"Ø: 3 1/2"x3 1/2"x3/4")</td></tr><tr><td>38mmØ: 102x102x20mm</td><td>(1 1/2"Ø: 4"x4"x3/4")</td></tr></table> 6. ANCHOR BOLT EMBEDMENT LENGTHS HAVE BEEN DEVELOPED IN ACCORDANCE WITH CAN/CSA A23.3-04 CLAUSES 7.1.4, ANNEX D, 12.2, AND 21.2.7. DEPTHS ARE BASED ON MINIMUM EMBEDMENT AND THE DEVELOPMENT OF THE PIER REINFORCING STEEL IN TENSION ABOVE THE CONE OF FAILURE CREATED BY THE BOLT HEAD.			16mmØ: 52x52x16mm	(5/8"Ø: 2"x2"x5/8")	19mmØ: 63x63x16mm	(3/4"Ø: 2 1/2"x2 1/2"x5/8")	25mmØ: 76x76x20mm	(1"Ø: 3"x3"x3/4")	28mmØ: 82x82x20mm	(1 1/8"Ø: 3 1/4"x3 1/4"x3/4")	32mmØ: 89x89x20mm	(1 1/4"Ø: 3 1/2"x3 1/2"x3/4")	38mmØ: 102x102x20mm	(1 1/2"Ø: 4"x4"x3/4")
16mmØ: 52x52x16mm	(5/8"Ø: 2"x2"x5/8")													
19mmØ: 63x63x16mm	(3/4"Ø: 2 1/2"x2 1/2"x5/8")													
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38mmØ: 102x102x20mm	(1 1/2"Ø: 4"x4"x3/4")													

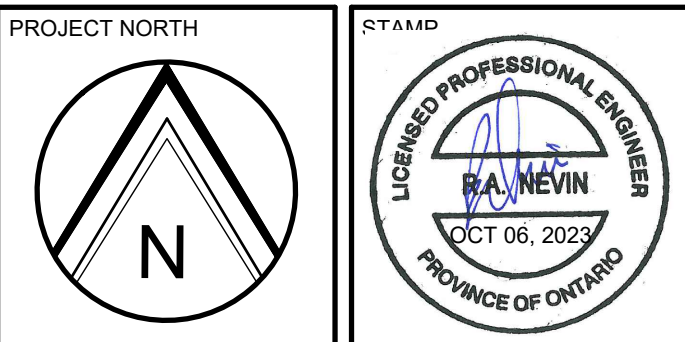
STEEL COLUMN SCHEDULE		
MARK	SIZE	NOTES
SC1	HSS 152x152x6.4	TYPICAL INTERIOR COLUMN HSS CLASS 'C' A500
NOTES: 1. REFER TO PLANS FOR ELEVATIONS AND ORIENTATIONS. 2. ALL HSS COLUMNS TO BE CLASS 'C' A500. 3. CONTRACTOR TO COORDINATE LENGTHS OF COLUMNS BEARING AT PIERS AND INTERIOR FOOTINGS.		

REQUIRED SUBMITTALS			
THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.			
ITEM	REQ'D SUBMITTAL	ENGINEER'S STAMP REQ'D	NOTES
REBAR SHOP DRAWINGS	YES	NO	
CONCRETE MIX DESIGNS	YES	NO	
MASONRY GROUT MIX DESIGN	NO	NO	
BLOCK MILL REPORT	NO	NO	
STRUCTURAL STEEL SHOP DRAWINGS	YES	YES	FOR CONNECTIONS OWSJ ONLY
I-SPAN JOIST SHOP DRAWINGS	NO	YES	
ENGINEERED LUMBER / WOOD TRUSSES	NO	YES	
MISCELLANEOUS STEEL SHOP DRAWINGS	YES	YES	STAMP FOR STAIRS, LADDERS AND GUARDS
STEEL DECK SHOP DRAWINGS	YES	YES	
FALL ARREST ANCHORS	NO	YES	
SEISMIC RESTRAINT OF NON-STRUCTURAL ITEMS	YES	YES	
STEEL STUDS	YES	YES	
PRECAST CONCRETE	NO	YES	

TESTING AND INSPECTION		
THE FOLLOWING ITEMS REQUIRE TESTING OR INSPECTION BY A CERTIFIED INDEPENDENT TESTING OR INSPECTION AGENCY UNLESS NOTED OTHERWISE. THE AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS TO THE ENGINEER FOR REVIEW.		
ITEM	REQ'D	COMMENTS
SOIL BEARING CAPACITY	YES	BY SOILS ENGINEER
REINFORCING STEEL PLACEMENT	YES	INSPECT FINAL PLACEMENT
CONCRETE COMPRESSIVE TESTS	YES	MIN. 2 SETS PER 100 CUBIC METRES
CONCRETE SLUMP	YES	
STRUCTURAL STEEL BOLTING	YES	
STRUCTURAL STEEL WELDING	YES	INSPECT ALL FIELD WELDS
MORTAR CUBES	NO	

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1	APR 06, 2023	ISSUED FOR COORDINATION	JB
No.	DATE	REVISIONS	BY



PROJECT

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ADDITION/RENOVATION**

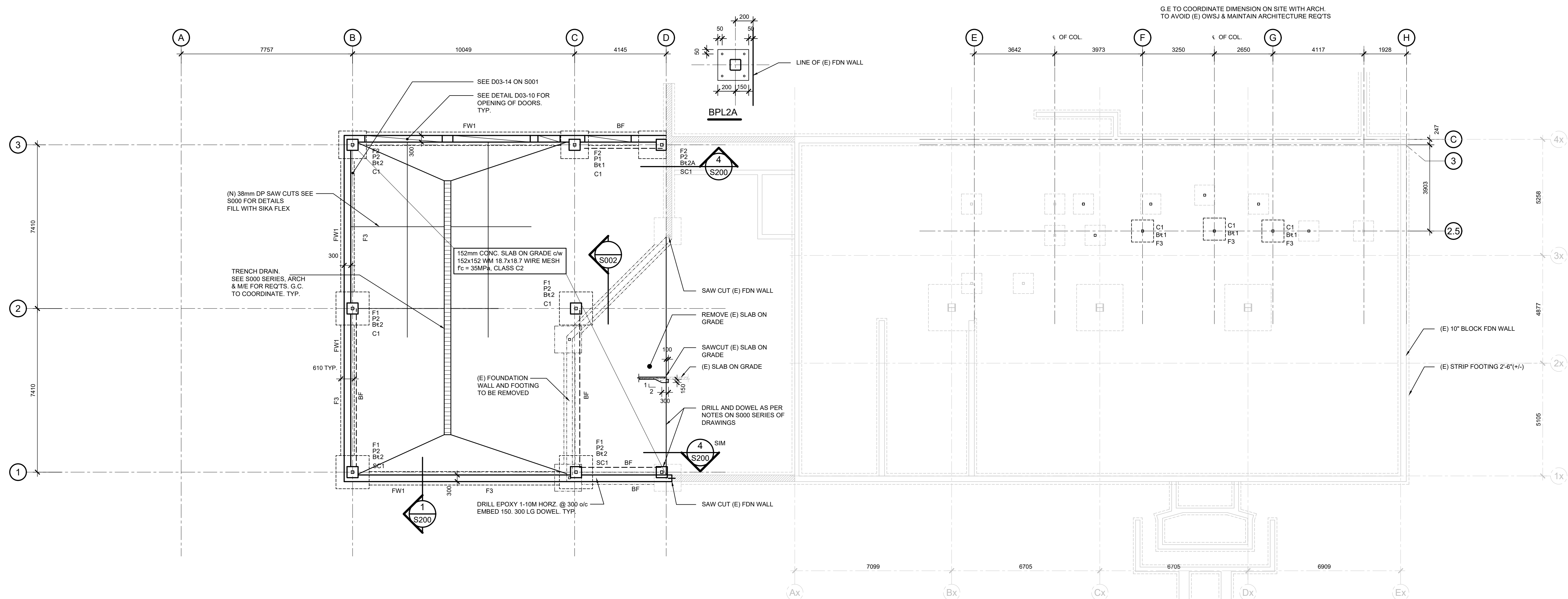
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING

SCHEDULES

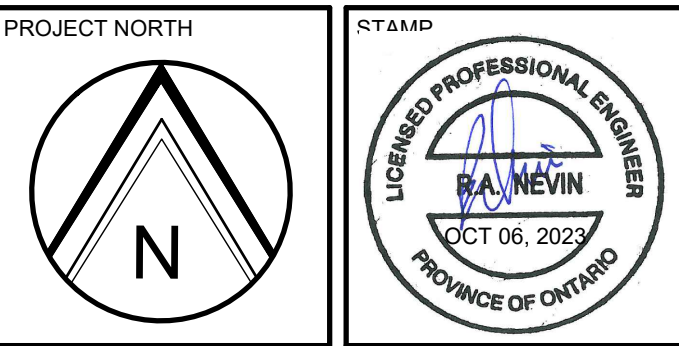
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DESIGNED:	R.N.	S005
DATE:	MAR. 2023	
SCALE:		
PROJECT No:	23-0012	

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FOUNDATION/BASEMENT FLOOR PLAN
SCALE: 1:100

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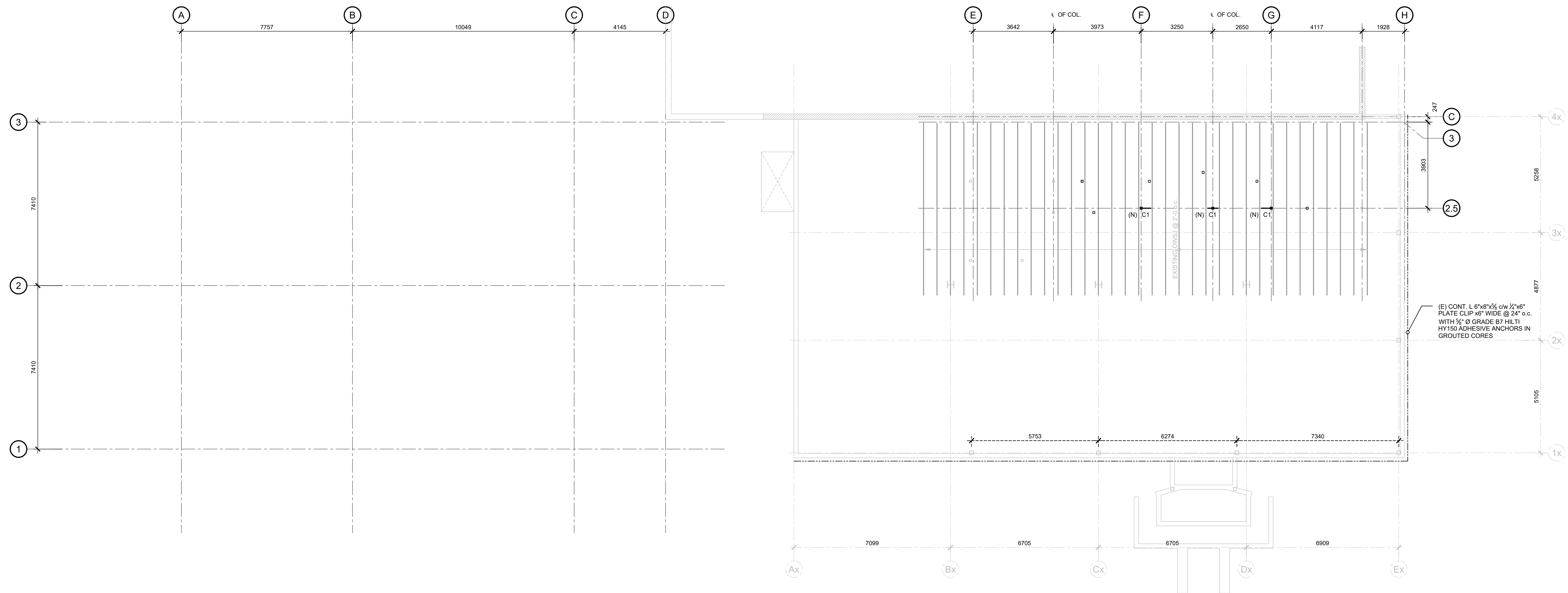
PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
**FOUNDATION/BASEMENT
FLOOR PLAN**

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DESIGNED:	R.N.	
DATE:	MAR. 2023	
SCALE:	NTS	
PROJECT No:	23-0012	

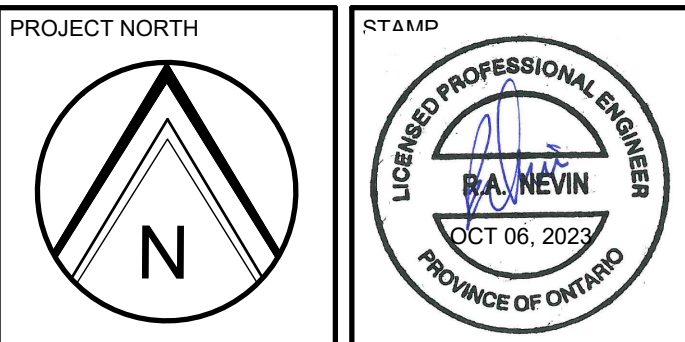
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GROUND FLOOR PLAN
SCALE: 1:100

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PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
ROOF PLAN

DRAWN: A.N.	DRAWING No.
DESIGNED: R.N.	S101
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SCALE: NTS	
PROJECT No: 23-0012	

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LOADING

ROOF:

DEAD LOADS:
ROOFING: = 0.5 kPa
STEEL DECK: = 0.1 kPa
STEEL: = 0.25 kPa
MECH./ELEC.: = 0.25 kPa
CEILING: = 0.15 kPa
= 1.25 kPa

LIVE LOADS:

SNOW: = 2.32 kPa + SNOW DRIFT
LIVE: = 1.0 kPa

MEZZANINE:

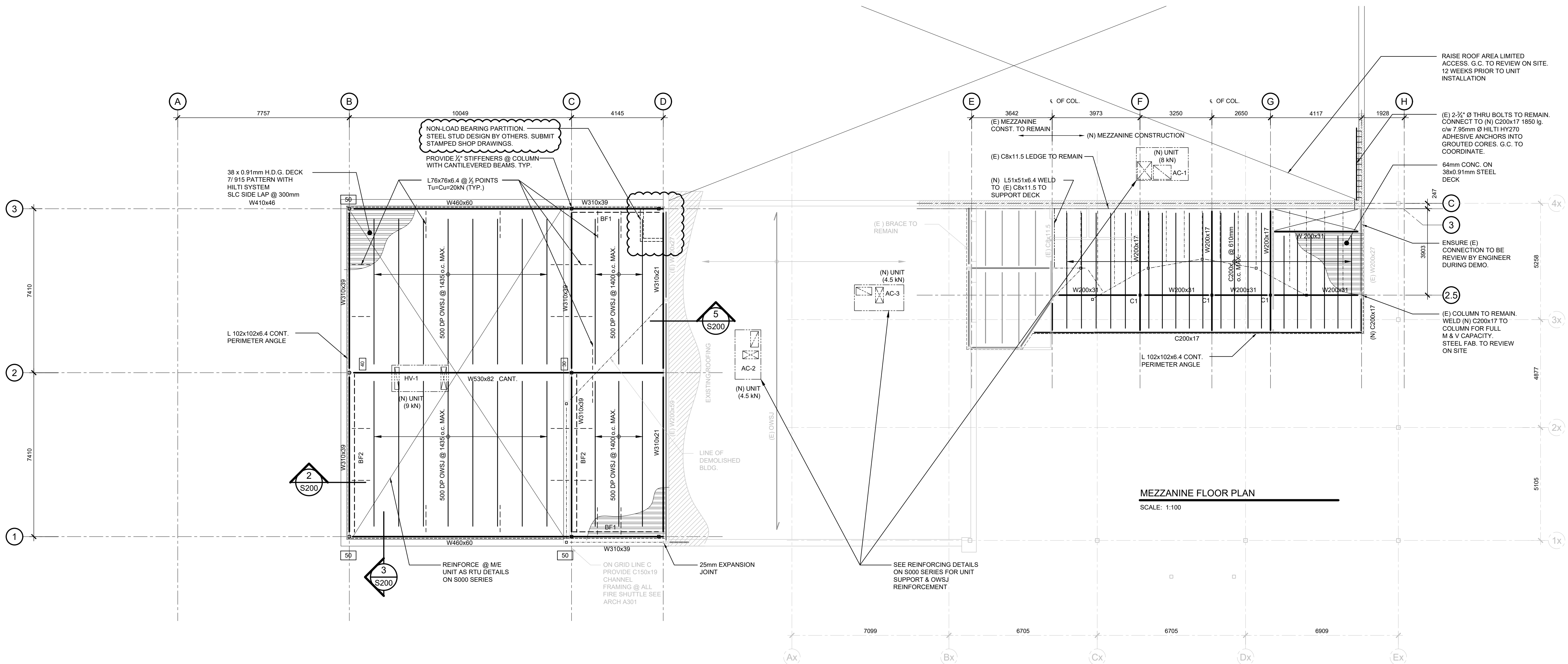
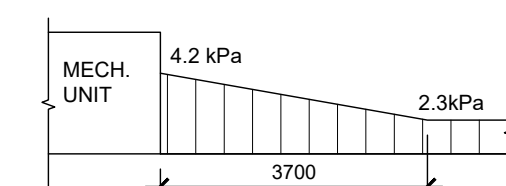
DEAD LOADS:
CONC. ON DECK: = 1.36 kPa
STEEL: = 0.25 kPa
PARTITION: = 1.0 kPa
MECH./ELEC.: = 0.25 kPa
FLOORING: = 0.125 kPa
CEILING: = 0.125 kPa
= 3.61 kPa

LIVE LOADS:

LIVE: = 4.8 kPa

SNOW DRIFT AT MECHANICAL UNITS; HV-1

- CONTRACTOR TO CONFIRM UNIT/CURB HEIGHT PRIOR TO FABRICATING JOISTS



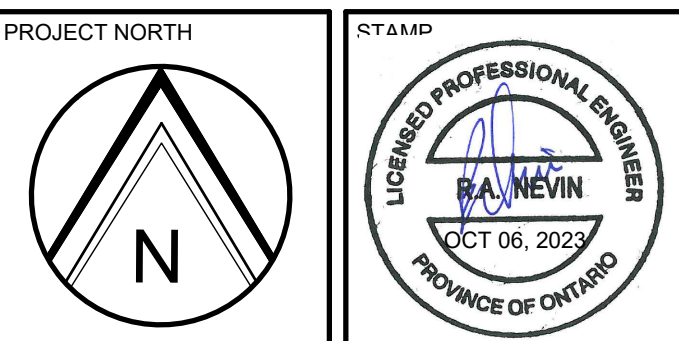
MEZZANINE FLOOR PLAN

SCALE: 1:100

MEZZANINE /LOW ROOF PLAN

SCALE: 1:100

No.	DATE	REVISIONS	BY
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PROJECT
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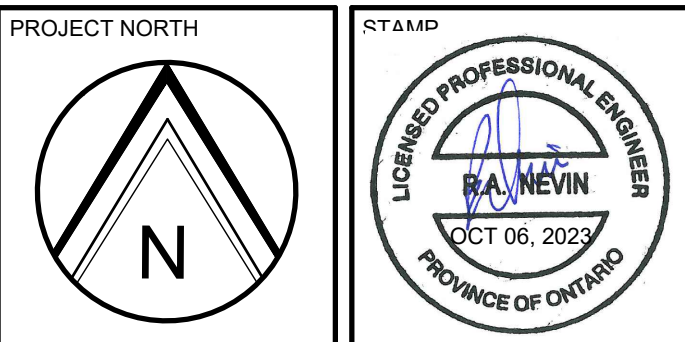
DRAWING
ROOF PLAN

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PROJECT No:	23-0012	

S102

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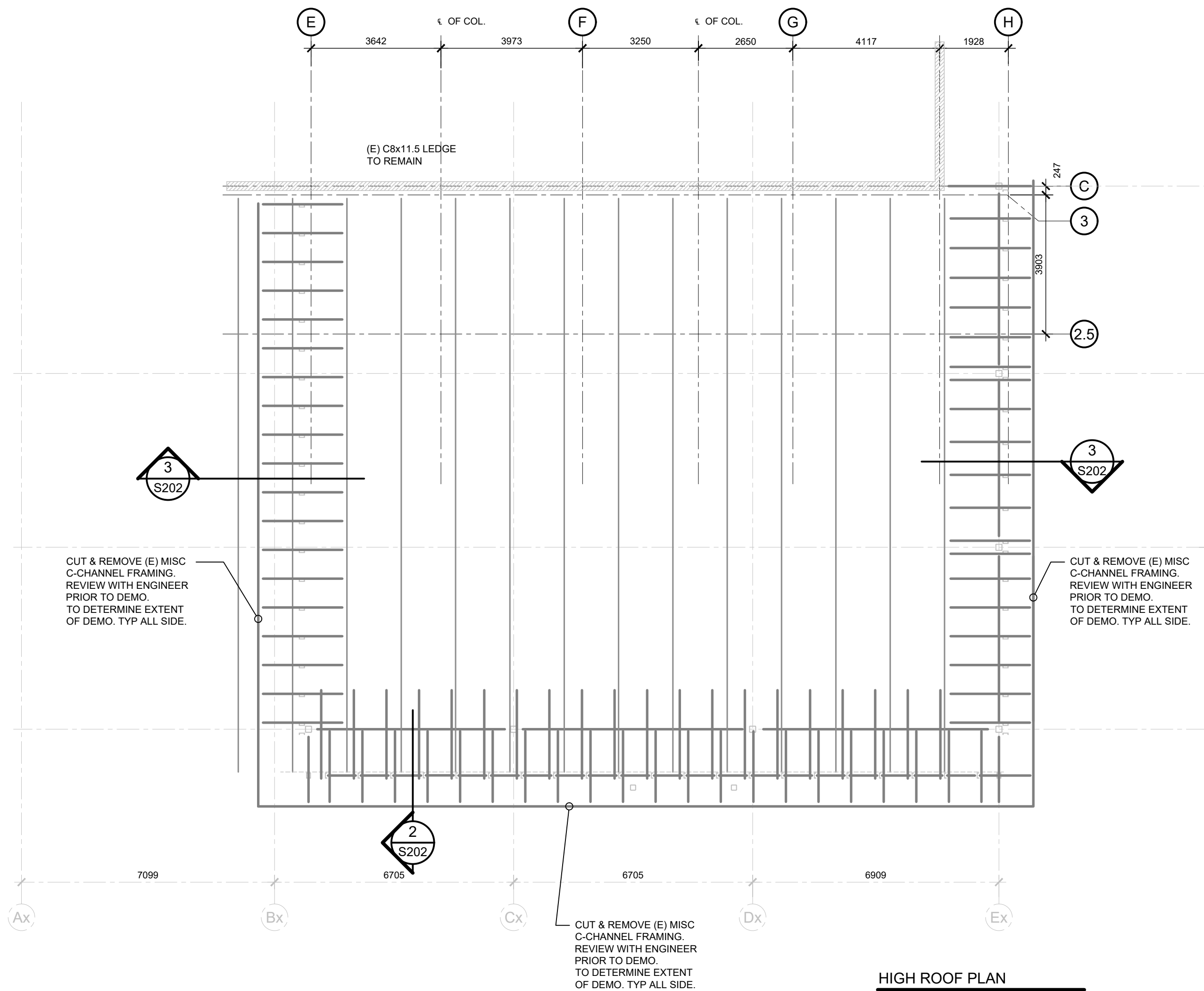
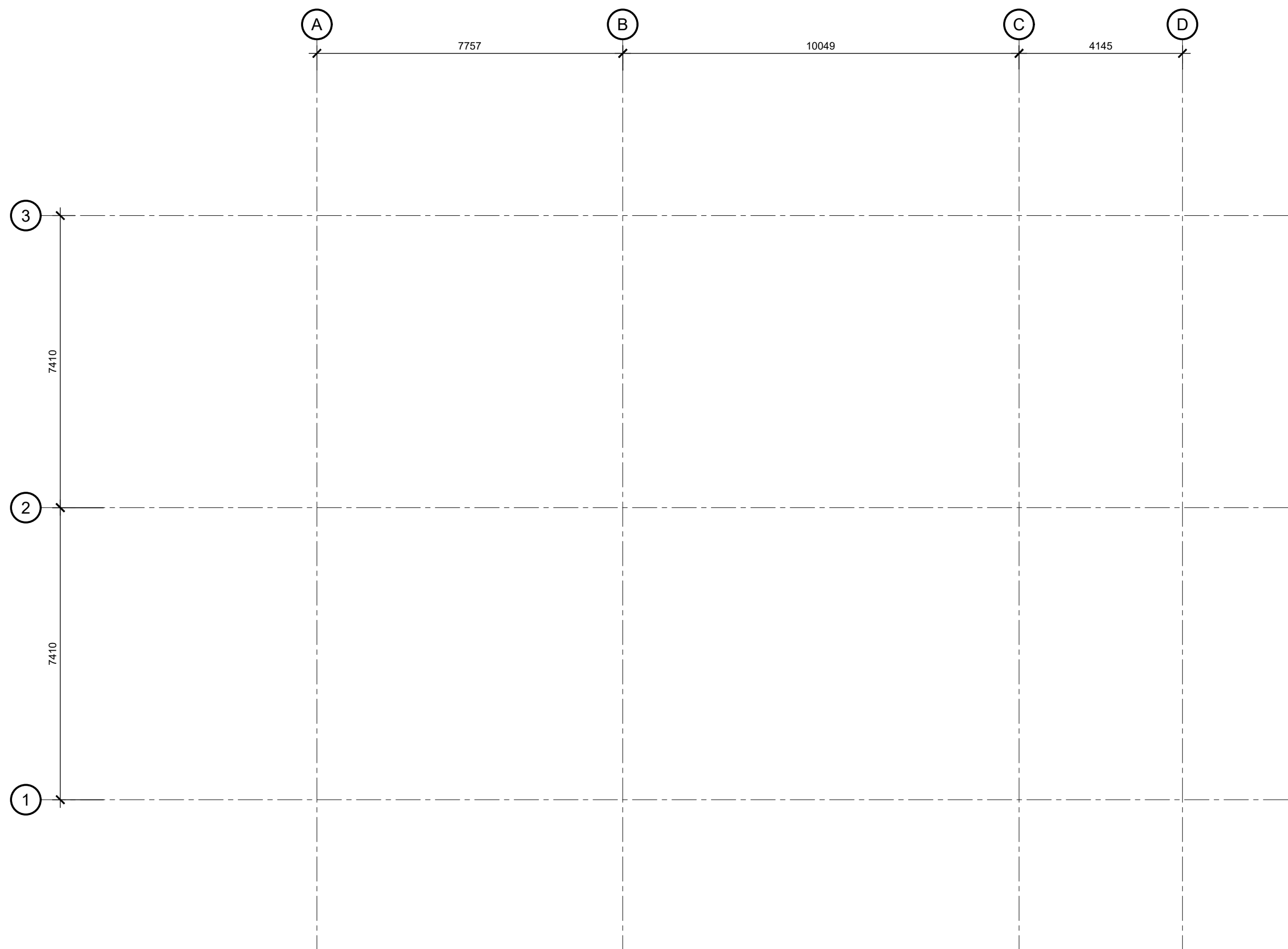


PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
ROOF PLAN

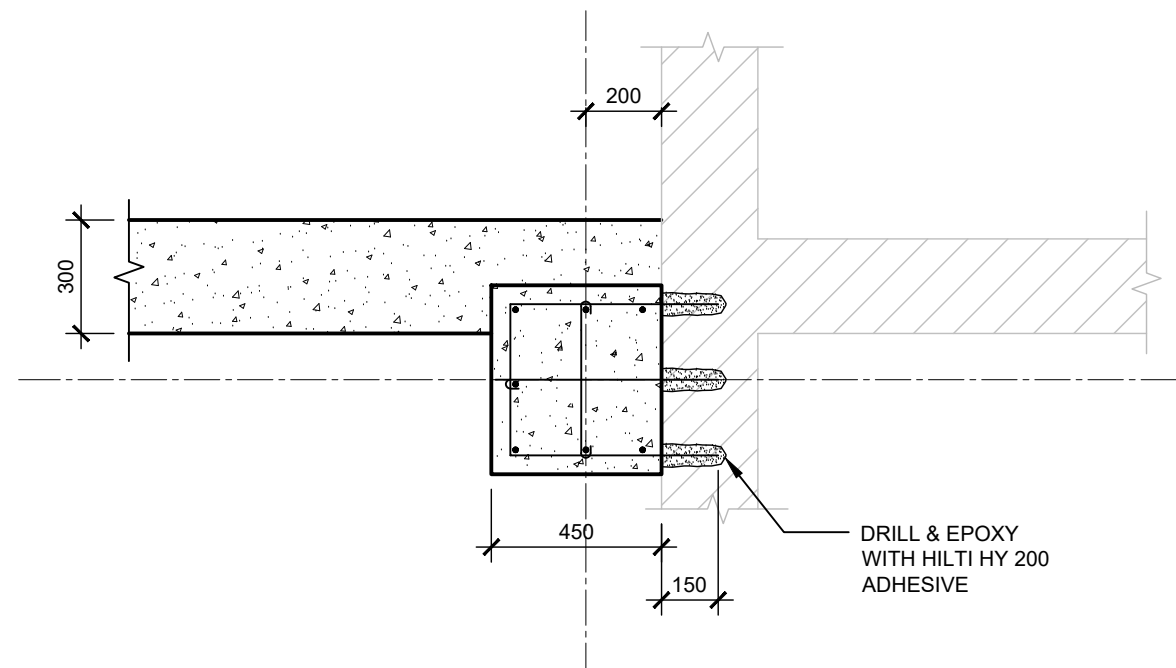
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DESIGNED:	R.N.	
DATE:	MAR. 2023	
SCALE:	NTS	
PROJECT No:	23-0012	

S103

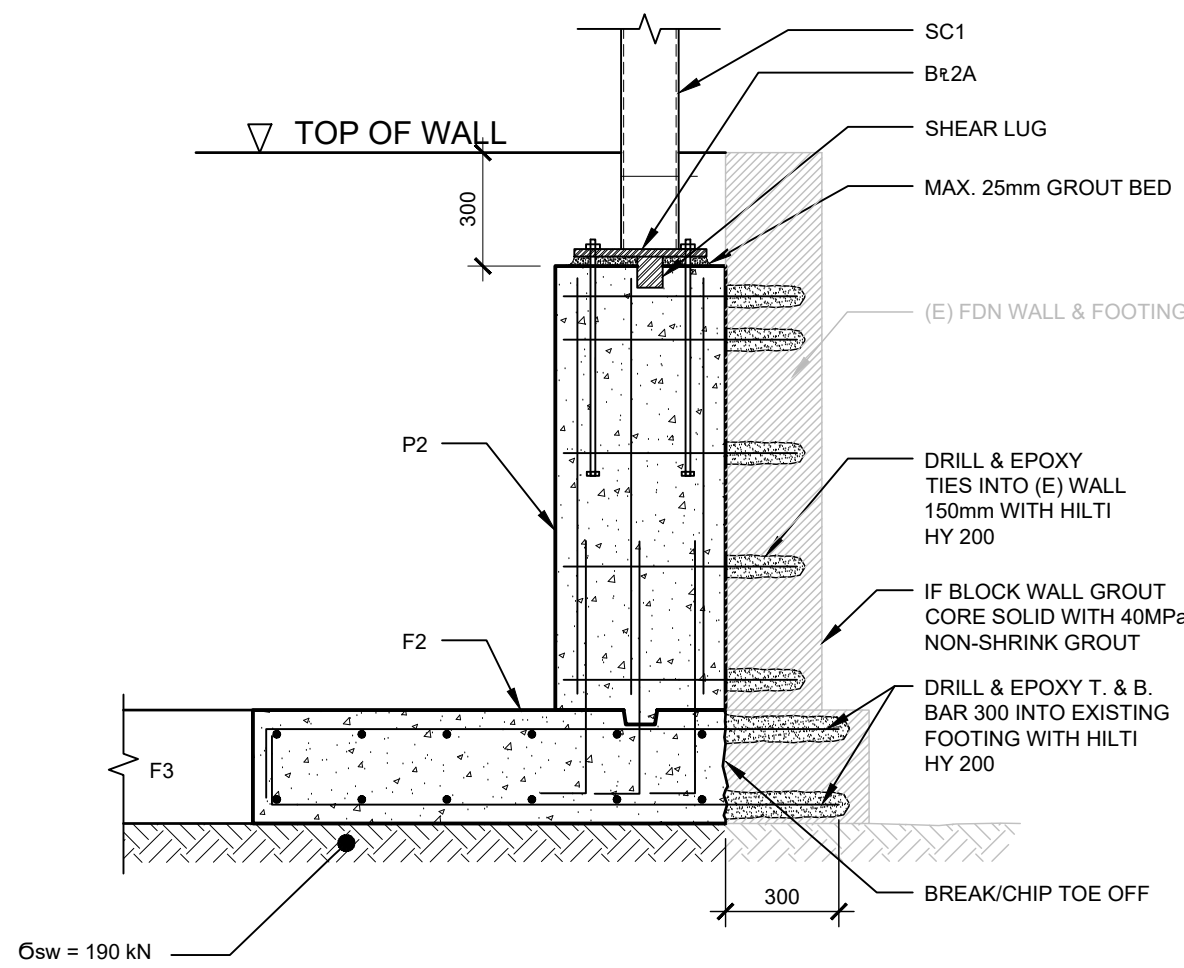


HIGH ROOF PLAN
SCALE: 1:100

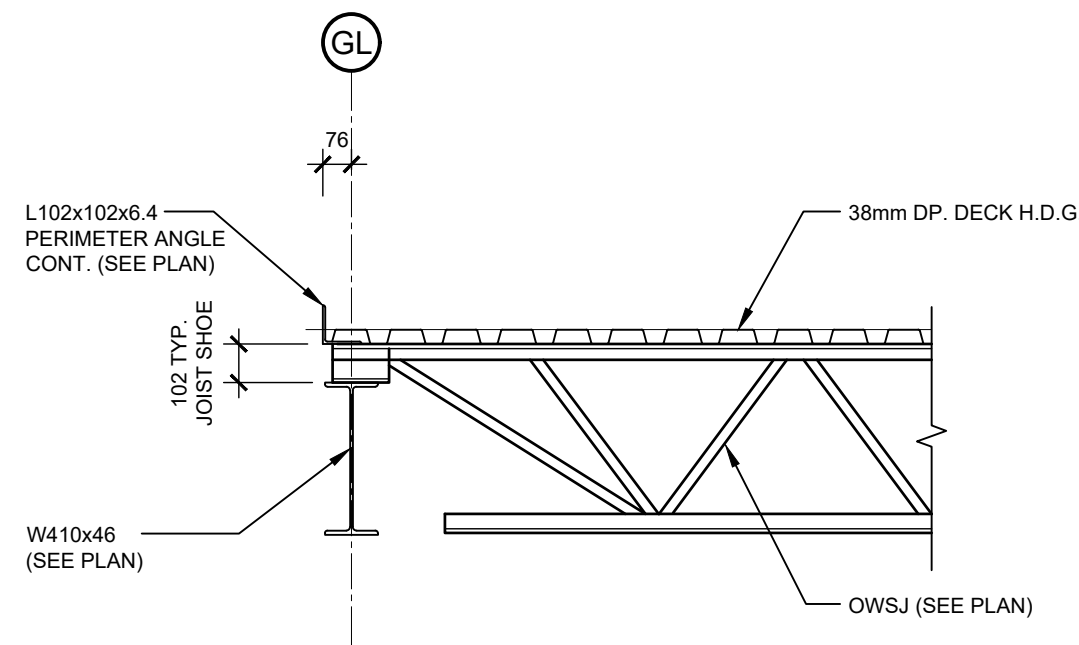
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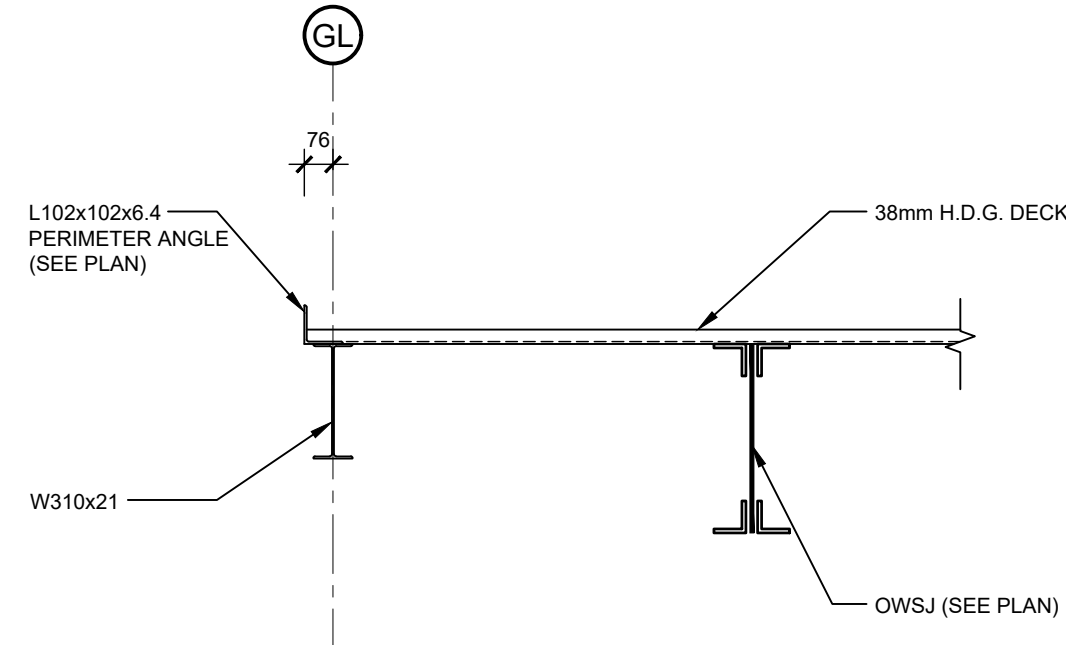
P2 AT (E) WALL PLAN VIEW
SCALE: 1:20



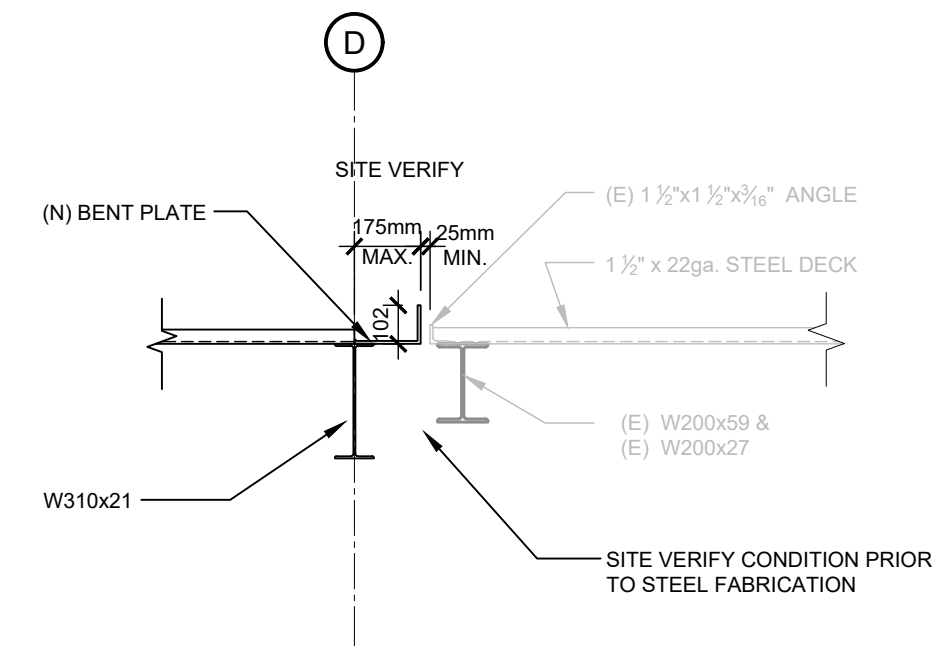
4 SECTION: AT EXIST FOUNDATION WALL
S200 SCALE 1:20



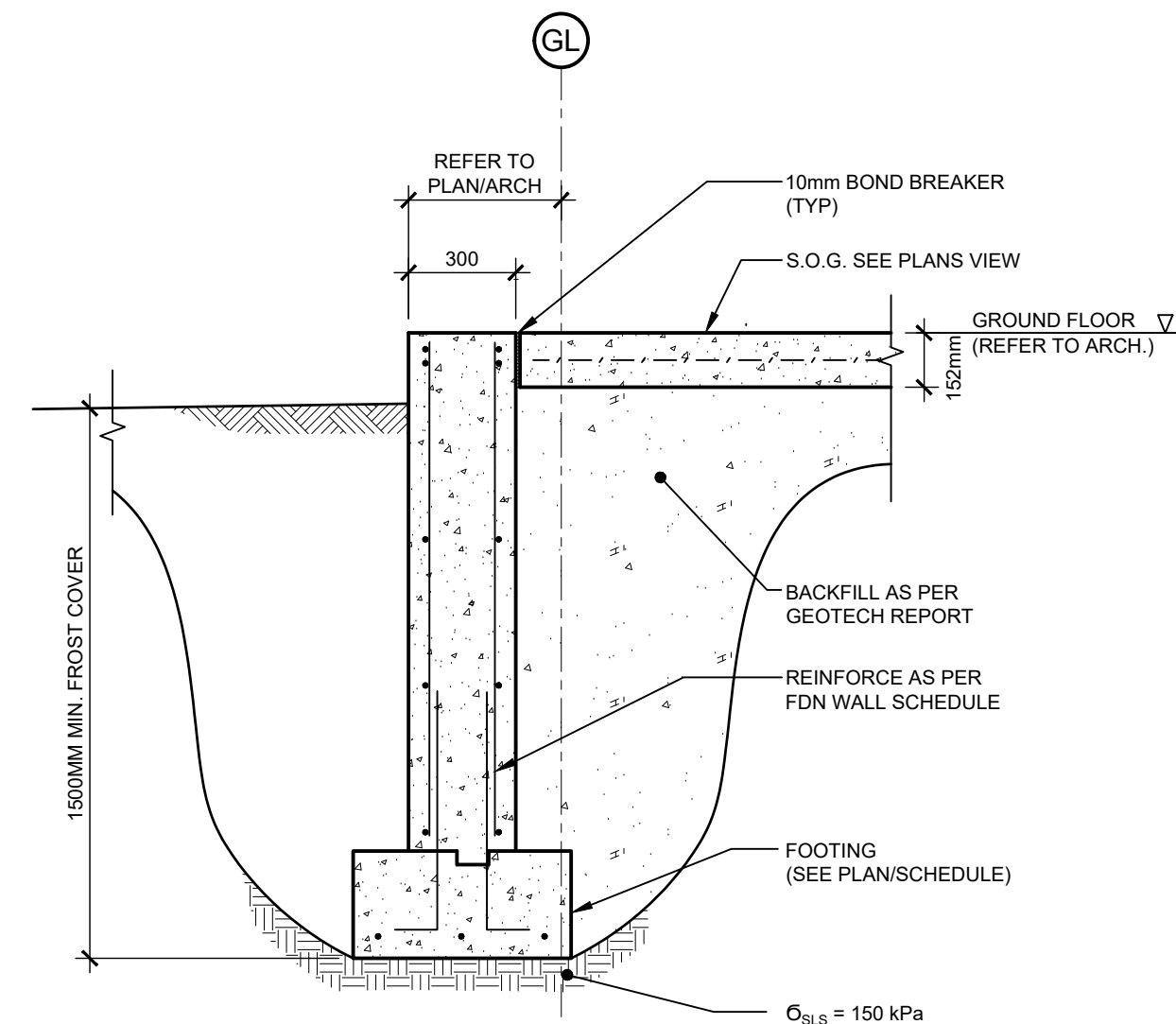
3 SECTION: TYPICAL ROOF EDGE
S200 SCALE: 1:20 (JOISTS PERPENDICULAR)



2 SECTION: TYPICAL ROOF EDGE
S200 SCALE: 1:20 (JOISTS PARALLEL)

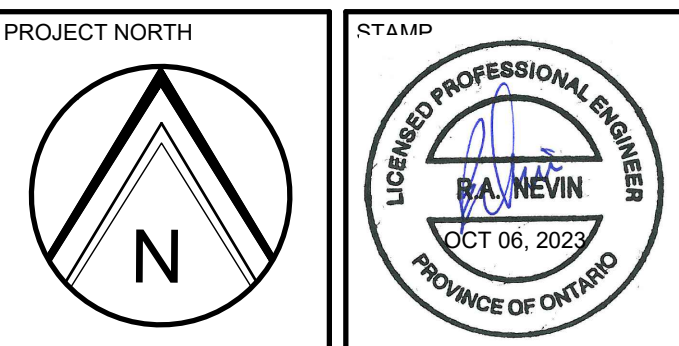


5 SECTION: SECTION (N) & (E)
S200 SCALE: 1:20



1 SECTION: TYP. EXTERIOR FOUNDATION WALL
S200 SCALE 1:20

No.	DATE	REVISIONS	BY
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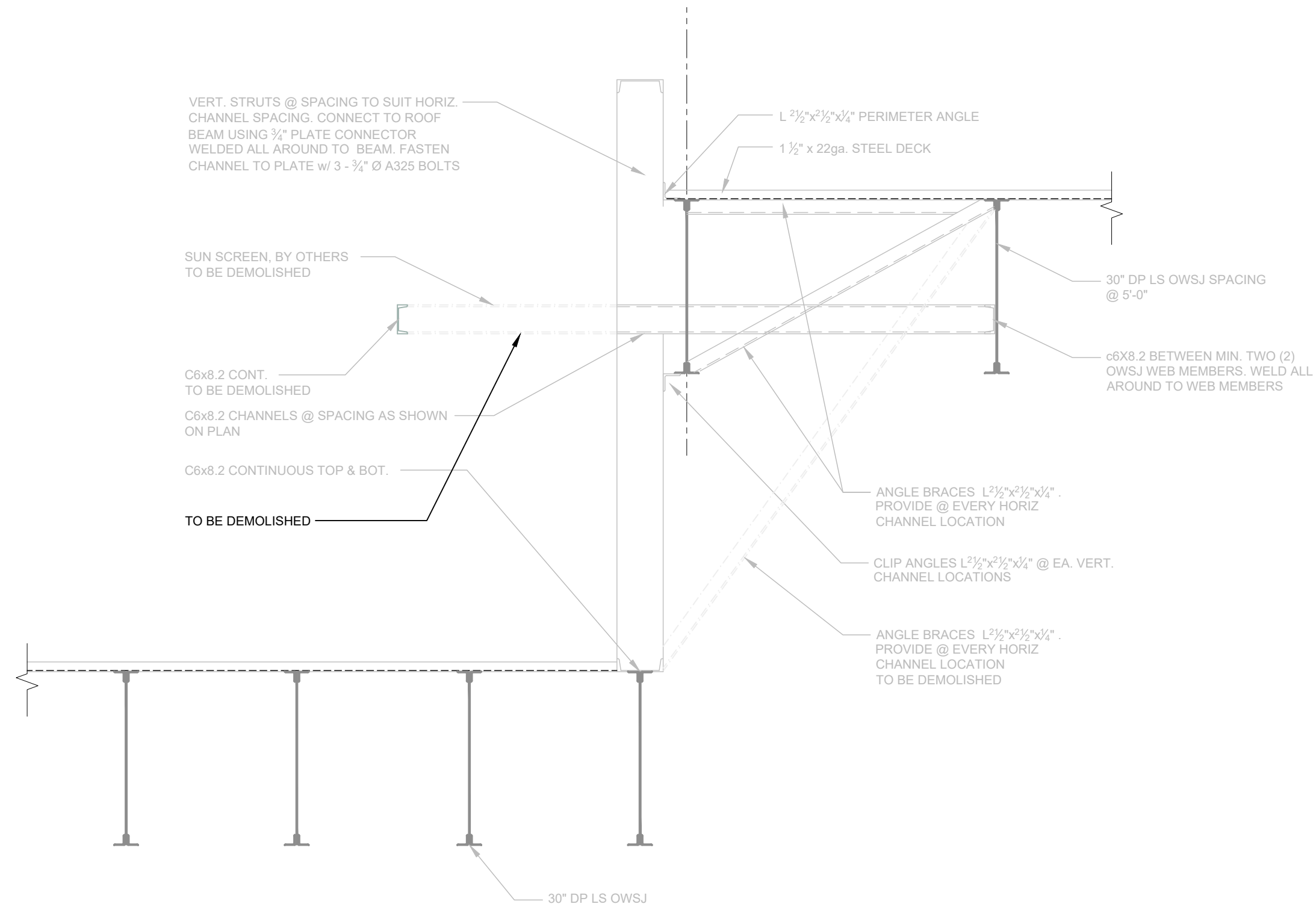


PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

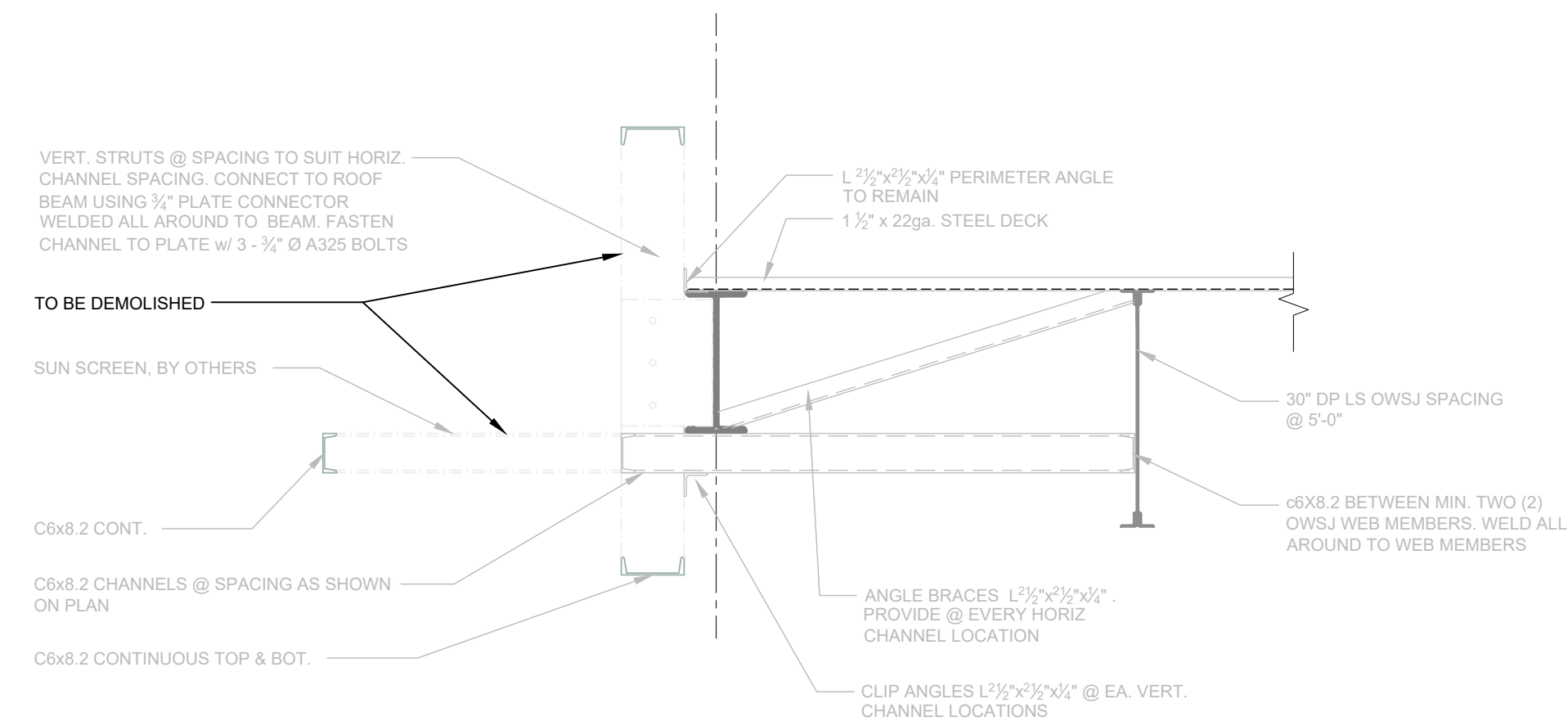
DRAWING
**SECTIONS -
FOUNDATION**

DRAWN:	A.N.	DRAWING No.
DESIGNED:	R.N.	
DATE:	MAR. 2023	
SCALE:	1:20	
PROJECT No:	23-0012	

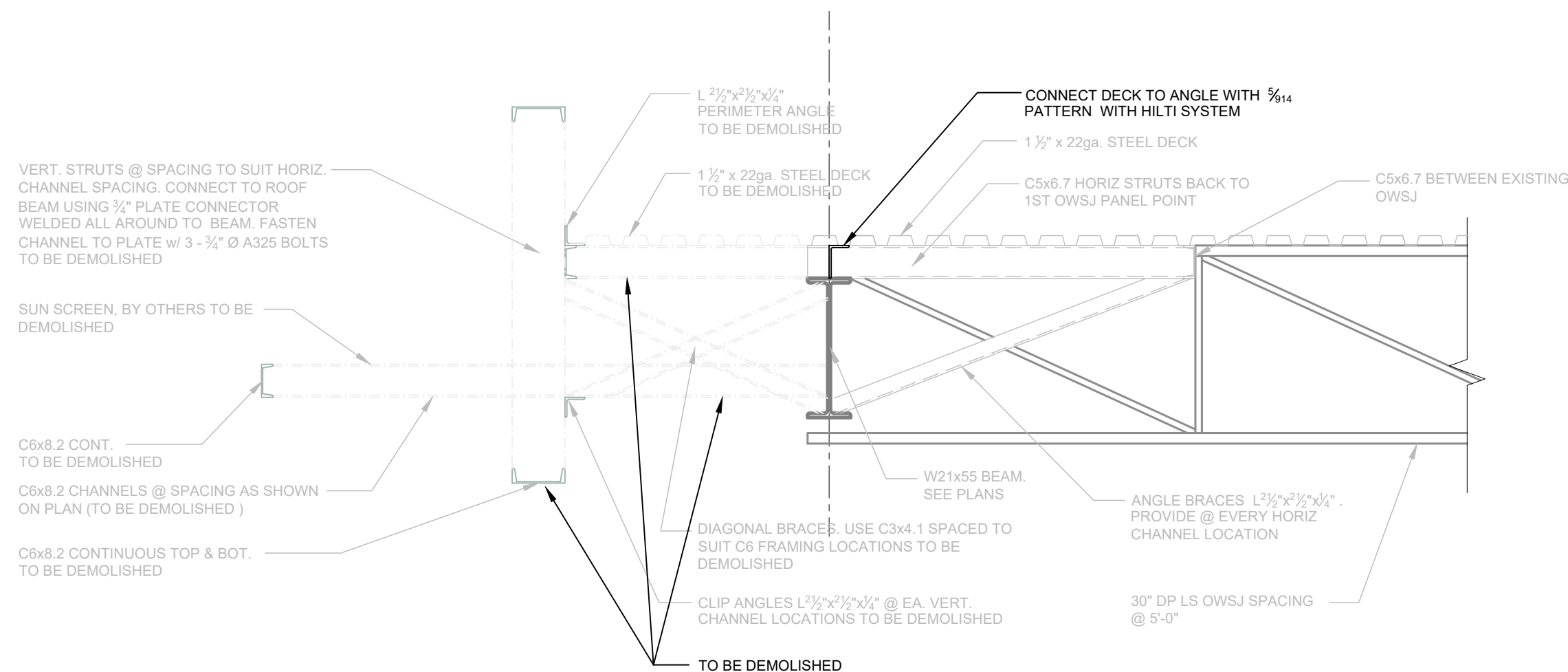
S200



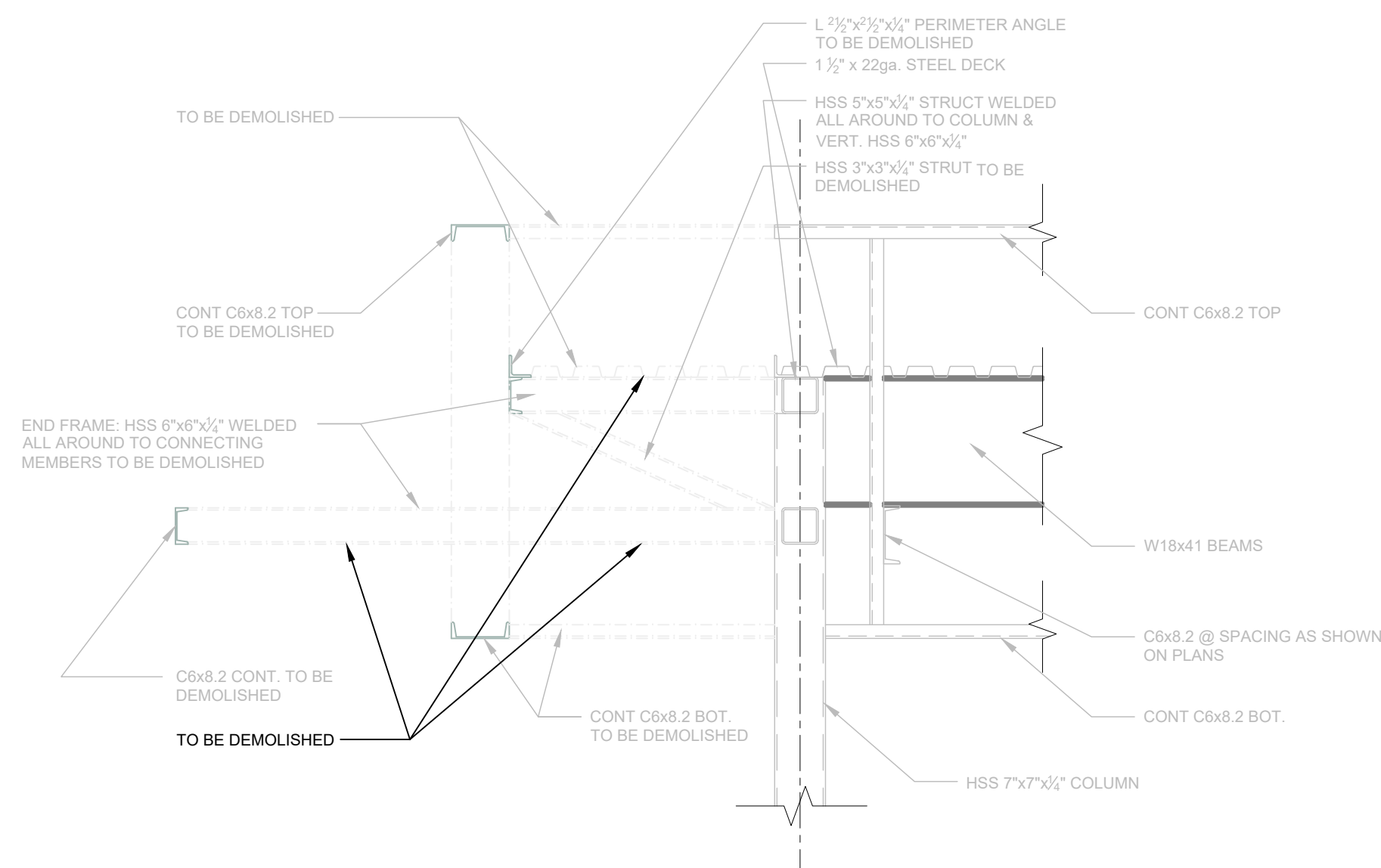
3 SECTION: EXISTING ROOF EDGE @ EAST WALL
S201 SCALE: 1:20



3 SECTION: EXISTING ROOF EDGE @ WEST WALL
S201 SCALE: 1:20

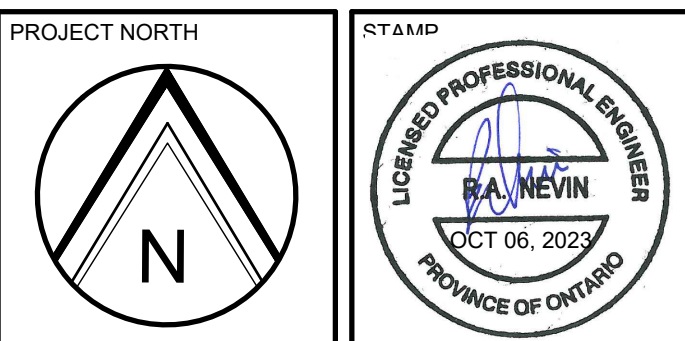


2 SECTION: EXISTING ROOF EDGE @ NORTH WALL
S201 SCALE: 1:20



1 SECTION: EXISTING ROOF EDGE @ BEAM/COLUMN JOINT
S201 SCALE: 1:20

No.	DATE	REVISIONS	BY
3	OCT 24, 2024	ISSUED FOR ...	WL
2	OCT 06, 2023	ISSUED FOR PERMIT	
1	APR 06, 2023	ISSUED FOR COORDINATION	JB



PROJECT
**BYTEK VW
ADDITION/RENOVATION**
1325 ST. LAURENT BLVD
OTTAWA, ON

DRAWING
SECTIONS - ROOF

DRAWN:	A.N.	DRAWING No.
DESIGNED:	R.N.	
DATE:	MAR. 2023	
SCALE:	NTS	
PROJECT No:	23-0012	

S201



PLOTTED DATE: 23/10/2024 16:43