

1. THE GENERAL NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL PARTS OF THE PROJECT AND SHALL BE READ IN CONJUNCTION WITH THE DRAWINGS AND SPECIFICATIONS.
2. USE ONLY THE LATEST ISSUES OF ANY GOVERNMENT CODES, STANDARDS OR REGULATIONS MENTIONED IN THE FOLLOWING NOTES, UNLESS NOTED OTHERWISE.
3. NEW STRUCTURAL ELEMENTS SHOWN ON THESE DRAWINGS ARE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF ONTARIO REGULATION 350/06 (2012 ONTARIO BUILDING CODE). ALL CONSTRUCTION, EXCEPT WHERE NOTED OTHERWISE, SHALL COMPLY WITH THAT SAME CODE.
4. VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
5. FOR DETAILS AND DIMENSIONS NOT GIVEN ON STRUCTURAL DRAWINGS REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. VERIFY LOADINGS AND DIMENSIONS OF ALL OPENINGS, PIPE SLEEVES, ETC. AS REQUIRED WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS AND FOR COORDINATION OF SUB-TRADES.
7. DO NOT SCALE THE DRAWINGS, USE FIGURE DIMENSIONS ONLY.
8. MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION STRESSES AND FOR SUFFICIENT TEMPORARY BRACING AND SHORING TO KEEP THE STRUCTURE PLUMB AND LEVEL DURING ALL PHASES OF WORK. ANY BRACING MEMBERS SHOWN ON STRUCTURAL DRAWINGS ARE THOSE REQUIRED FOR THE FINISHED STRUCTURE AND MAY NOT BE ADEQUATE FOR ERECTION PURPOSES.
9. ALL DESIGN LOADINGS INDICATED ON THESE DRAWINGS ARE SPECIFIED (I.E. UNFACTORED SERVICE) LOADINGS UNLESS NOTED OTHERWISE.
10. ALL CONNECTION FORCES AND BRACING FORCES SHOWN ON THESE DRAWINGS ARE THE CRITICAL FACTORED FORCES UNLESS NOTED OTHERWISE.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD ALL EXISTING STRUCTURES AFFECTED BY THIS CONSTRUCTION, ON ANY NEW STRUCTURE, DO NOT EXCEED THE DESIGN LOADINGS INDICATED ON THESE DRAWINGS.
12. ALL STRUCTURAL MEMBERS SHOWN ARE NEW UNLESS NOTED OTHERWISE.
13. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
14. DRAWINGS AND DETAILS ARE INTENDED TO SHOW THE END RESULT OF DESIGN. MODIFICATIONS TO THE DESIGN NECESSARY TO SUIT SITE DIMENSIONS OR CONDITIONS SHALL BE SUBMITTED TO CONSULTANT FOR APPROVAL BEFORE PROCEEDING.
15. THE SCHEDULING OF ALL WORK, INCLUDING ACCESSIBILITY, FLAGGING AND LOGISTICS SHALL BE COORDINATED AND AGREED WITH THE OWNER PRIOR TO COMMENCEMENT.
16. ANY DEVIATION FROM THE SEQUENCE OF WORK INDICATED ON THE DRAWINGS SHALL BE APPROVED BY THE CONSULTANT PRIOR TO COMMENCEMENT.
17. ALL DETAILS AND DIMENSIONS SHOWN REGARDING THE EXISTING STRUCTURE AND ITS LOCATION RELATIVE TO NEW STRUCTURE OBTAINED FROM ORIGINAL DESIGN DRAWINGS. NO SHOP DRAWINGS OF THE EXISTING STRUCTURAL STEEL OR REINFORCED CONCRETE ARE AVAILABLE. THE CONTRACTOR HAS THE RESPONSIBILITY TO VERIFY ALL DETAILS AND DIMENSIONS. REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK. COMMENCEMENT OF THE WORK IMPLIES ACCEPTANCE OF THE EXISTING CONDITIONS

1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROTECTION OF THE EXISTING STRUCTURE AND ITS OCCUPANTS DURING ALL PHASES OF CONSTRUCTION.
2. PROVIDE ALL NECESSARY HOARDING AND SECURITY MEASURES TO RESTRICT ACCESS OF THE PUBLIC TO THE WORK AREA.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF TEMPORARY SHORING AND BRACING OF THE EXISTING STRUCTURE WHERE LOAD BEARING ELEMENTS ARE TO BE REMOVED AND/OR RECONSTRUCTED. KEEP THE STRUCTURE PLUMB, LEVEL AND FREE OF CRACKS OR OTHER DISTRESS DURING ALL PHASES OF THE WORK.
4. MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION STRESSES AND FOR ADEQUATE TEMPORARY SHORING AND BRACING TO KEEP THE STRUCTURE PLUMB AND LEVEL DURING ALL PHASES OF WORK.
5. SUBMIT SHOP DRAWINGS FOR ALL SHORING AND BRACING. DRAWINGS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
6. CONTRACTOR SHALL CARRY OUT A PRE-CONSTRUCTION VISUAL SURVEY OF THE CONDITION OF THE EXISTING STRUCTURE PRIOR TO INITIATION OF SHORING AND BRACING. AFTER INSTALLATION OF SHORING AND BRACING AND DURING PROCESS OF WORK, CONTRACTOR SHALL MONITOR STRUCTURE (VISUALLY AND USING SURVEY EQUIPMENT) FOR SIGNS OF MOVEMENT, CRACKING OR DISTRESS. MONITORING TO BE TWICE WEEKLY OR MORE FREQUENTLY, IF DETERMINED BY THE ENGINEER RESPONSIBLE FOR SHORING DESIGN.
7. DO NOT DEViate FROM OR FIELD-ALTER SHORING AND BRACING INDICATED ON REVIEWED SHOP DRAWINGS WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER RESPONSIBLE FOR SHORING DESIGN. NOTIFY CONSULTANT OF ANY DEVIATIONS.
8. DO NOT COMMENCE REMOVAL OF EXISTING STRUCTURAL ELEMENTS UNTIL ALL REQUIRED SHORING AND BRACING IS IN PLACE AND HAS BEEN INSPECTED BY THE ENGINEER RESPONSIBLE FOR SHORING DESIGN.
9. DO NOT REMOVE TEMPORARY SHORING OR BRACING UNTIL APPROVED BY CONSULTANT.
10. MAKE GOOD ANY DAMAGE RESULTING FROM WORK, TO THE SATISFACTION OF THE OWNER AND THE CONSULTANT.
11. VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND SERVICES THAT MAY INTERFERE WITH THE WORK, AND COORDINATE WITH THE OWNER, CONSULTANT AND OTHER AUTHORITIES AS MAY BE REQUIRED FOR THE PROTECTION, REMOVAL OR RELOCATION OF SUCH BURIED SERVICES.
12. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
13. CONTRACTOR TO RETAIN SERVICES OF GEOTECHNICAL ENGINEER FOR THE DESIGN AND REVIEW OF ALL REQUIRED EXCAVATIONS, UNDERPINNING AND TEMPORARY SUPPORT STRUCTURE.
14. THE DETAILS SHOWN ON THESE DRAWINGS ILLUSTRATE THE GENERAL ARRANGEMENT AND PERFORMANCE REQUIREMENTS ONLY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASPECTS OF THE STRUCTURAL ADEQUACY AND SAFETY OF THE SHORING.
15. CONTRACTOR'S ENGINEER SHALL INVESTIGATE AND REVIEW THE CONDITION OF THE EXISTING FRAMING MEMBERS TO BE SHORED TO DETERMINE REQUIREMENTS FOR ADDITIONAL SHORING, BRACING OR BLOCKING WHERE LOCALIZED MEMBER DEFECTS, DISTRESS OR OTHER UNSAFE CONDITIONS EXIST WITHIN THE AREA OF WORK.

1. CONTRACTOR TO RETAIN GEOTECHNICAL ENGINEER TO VERIFY BEARING CAPACITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
2. ALL FOUNDATIONS SHALL:
  - a. BE PLACED ON UNFROZEN GROUND ONLY.
  - b. BE PROTECTED BY 1200 mm (4' ) OF EARTH OR AN EQUIVALENT INSULATING VALUE WHEN EXPOSED TO FROST ACTION DURING CONSTRUCTION.
  - c. BE STEPPED AS REQUIRED AS THE UNDERSIDE ELEVATION CHANGES.
3. SLAB ON GRADE TO BE PLACED ON 200 mm THICK LAYER OF GRANULAR 'A' SUB-BASE COMPACTED TO 100% SPMDM OVER 200mm GRANULAR 'B' SUBGRADE COMPACTED TO 98% SPMDM.
4. ALL FOOTINGS TO BE CENTERED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.
5. WHEN BACKFILL IS REQUIRED ON BOTH SIDES OF A WALL, THE BACKFILL LEVEL SHALL BE RAISED SIMULTANEOUSLY ON BOTH SIDES WITH THE DIFFERENCE IN HEIGHT BETWEEN THE TWO SIDES NOT TO EXCEED 600 mm (2')
6. NO BACKFILL SHALL BE PLACED AGAINST A CANTILEVERED RETAINING WALL UNTIL THE WALL HAS ATTAINED ITS DESIGN STRENGTH.
7. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATION SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10 UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.

1. ALL CONCRETE TO CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.1-04 AND THE CONCRETE SECTIONS OF THE SPECIFICATIONS FOR THIS CONTRACT.
2. ALL CONCRETE FORMWORK AND FALSEWORK TO CONFORM TO CSA S269.1-1975 (R2003).
3. ALL CONCRETE IS TO HAVE THE MINIMUM SPECIFIED 28 DAY COMPRESSIVE STRENGTH, WATER/CEMENTING MATERIALS RATIO, AND AIR CONTENT IN ACCORDANCE WITH THE REQUIREMENTS OF CSA STANDARD A23.1.
4. ALL CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 30 MPa, UNLESS NOTED OTHERWISE. THIS MINIMUM DOES NOT APPLY WHERE CONCRETE EXPOSURE CLASSIFICATIONS DICTATE A GREATER MINIMUM COMPRESSIVE STRENGTH REQUIREMENT.
5. ALL CONCRETE WHICH WILL BE SUBJECTED TO FREEZING AND THAWING OR SUBJECTED TO APPLICATIONS OF DE-ICING CHEMICALS IS TO HAVE THE 28 DAY COMPRESSIVE STRENGTH, WATER/CEMENTING MATERIALS RATIO, AND AIR CONTENT IN ACCORDANCE WITH THE REQUIREMENTS OF CSA STANDARD A23.1.
6. ALL CONCRETE SHALL BE NORMAL DENSITY CONCRETE AND CONFORMING TO THE FOLLOWING UNLESS NOTED OTHERWISE:

LOCATION	EXPOSURE CLASS	MINIMUM $f_c$ @ 28 DAYS	MAXIMUM AGGREGATE SIZE	REMARKS
ALL INTERIOR CONCRETE, UNO	N	30 MPa	20 mm (3/4")	
FND. WALLS	F-1	30 MPa	20 mm (3/4")	

LOCATION	SPECIFIED COVER (mm)
CONCRETE CAST AGAINST EARTH	75 (3")
CONCRETE ON SKIM SLAB	50 (2")
INTERIOR SLAB ON GRADE (*)	50 (2")
FORMED SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER	25 (1")
FORMED SLABS EXPOSED TO WEATHER	40 (1 1/2")
FORMED PIERS, BEAMS AND COLUMNS NOT EXPOSED TO EARTH OR WEATHER	40 (1 1/2")
FORMED WALLS EXPOSED TO WEATHER	50 (2")
TOP OF SLAB ON GRADE TO WELDED WIRE MESH	50 (2")

NOTE: (\*) COVER ON BOTTOM BARS MAY BE REDUCED TO 25 mm (1") IF SLAB IS PLACED ON 50 mm (2") SKIM SLAB OR RIGID INSULATION

1. BONDING NEW CONCRETE TO EXISTING CONCRETE:
  - a. UNLESS SHOWN OTHERWISE, ALL EXISTING CONCRETE SUBSTRATES TO BE BONDED TO NEW CONCRETE SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 6 mm (3/4 ") , AND SHALL BE CLEANED OF ALL DIRT, RUST AND LAITANCE.
  - b. DO NOT CUT EXISTING REINFORCING BARS WHICH INTERSECT JOINTS OF NEW-TO-EXISTING CONCRETE.
  - c. PREPARED SURFACES OF EXISTING CONCRETE SHALL BE THOROUGHLY WETTED DOWN WITH POTABLE WATER FOR NOT LESS THAN ONE (1) HOUR PRIOR TO PLACEMENT OF CONCRETE.
  - d. PUDDLES AND/OR FREE WATER SHALL BE BLOWN CLEAR OF THE REPAIR AREA IMMEDIATELY BEFORE PLACEMENT OF CONCRETE.
  - e. CONCRETE SUBSTRATE MUST BE CLEAN, SOUND, AND IN A SATURATED SURFACE DRY CONDITION AT TIME OF APPLICATION.
  - f. TEMPERATURE OF SLAB AND AIR TEMPERATURE MUST NOT BE BELOW +10 °C.
11. DO NOT PLACE FOOTINGS, WALLS AND SLABS IN ONE CONTINUOUS POUR THAT WOULD EXCEED 30 METRES IN LENGTH. CONTRACTOR TO SUBMIT PROPOSED LOCATIONS OF CONSTRUCTION JOINTS FOR APPROVAL PRIOR TO START OF WORK.
12. PROVIDE 20 mm (3/4 ") CHAMFER AT ALL EXPOSED CORNERS AND EDGES UNLESS OTHERWISE NOTED.
13. OPENINGS AND SLEEVES:
  - a. ALL OPENINGS SHALL BE FORMED OR SLEEVED PRIOR TO PLACING CONCRETE
  - b. PROVIDE ADDITIONAL REINFORCING AT OPENINGS AS SHOWN OR DIRECTED
  - c. OBTAIN CONSULTANT APPROVAL FOR ANY OPENINGS REQUIRED BUT NOT SHOWN ON STRUCTURAL DRAWINGS.
14. NO HOLES SHALL BE MADE THROUGH CONCRETE WORK OTHER THAN THOSE INDICATED ON THE STRUCTURAL DRAWINGS, WITHOUT APPROVAL FROM THE CONSULTANT.
15. PROVIDE A MINIMUM BEARING LENGTH OF 200 mm (8 ") FOR ALL REINFORCED CONCRETE BEAMS AND 100 mm (4 ") FOR ALL REINFORCED CONCRETE SLABS, UNLESS NOTED OTHERWISE.
16. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND OTHER TRADES DRAWINGS FOR SIZE AND LOCATION OF ALL CURBS AND PADS. REINFORCE AS PER TYPICAL DETAILS UNLESS NOTED OTHERWISE.
17. PROVIDE MACHINE TROWEL FINISH TO INTERIOR SLABS, BROOM FINISH TO EXTERIOR SLABS.
18. PROVIDE MINIMUM SEVEN (7) DAY WET BURLAP CURE TO ALL SLABS AND STAIRS.

1. CONFORM TO THE REQUIREMENTS OF CSA STANDARDS A23.1-04 & A23.3-04.
2. REINFORCING STEEL SHALL BE DEFORMED BAR CONFORMING TO CSA STANDARD G30.18-M92, GRADE 400R, UNO.
3. REINFORCING STEEL SPECIFIED TO BE WELDED SHALL CONFORM TO CSA STANDARD G30.18-M92, GRADE 400W, UNO.
4. BAR MARKS WITH PREFIX "S" DENOTES STAINLESS STEEL BARS.
5. BAR MARKS WITH PREFIX "C" DENOTED EPOXY-COATED STEEL BARS.
6. WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF 450 MPa AND SHALL CONFORM TO ASTM A185. SUPPLY IN FLAT SHEETS ONLY.
7. REINFORCING STEEL IS TO BE DETAILED AND BENT AS OUTLINED IN THE REINFORCING STEEL MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA.
8. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT AND DETAILS OF ALL REINFORCING STEEL. DRAW ALL WALLS IN FULL ELEVATION, AND SLABS WITH TOP AND BOTTOM BARS ON SEPARATE PLANS.
9. DO NOT FIELD-CUT OR FIELD-BEND BARS WITHOUT CONSULTANT'S APPROVAL.
10. PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING IN ACCORDANCE WITH A23.1 AND A23.3. ALL WIRE, CHAIRS AND BAR SUPPORTS FOR FOUNDATIONS AND FOR EXPOSED CONCRETE SHALL BE NON-METALLIC OR COATED.
11. PROVIDE CLASS "B" TENSION LAP SPICES UNLESS NOTED OTHERWISE. ALL SPICE LOCATIONS SHALL BE TO THE APPROVAL OF THE CONSULTANT.
12. LAP SPICES IN WELDED WIRE MESH SHALL NOT BE LESS THAN 200 mm (8     "), AS MEASURED BETWEEN THE OUTERMOST CROSS-WIRES OF EACH FABRIC SHEET.
13. BAR LAPS IN REINFORCING MASONRY TO BE NOT LESS THAN 40 BAR DIAMETERS, AND SHALL BE LOCATED AT FLOOR LEVELS ONLY.
14. DOWELS TO EXISTING CONCRETE SHALL USE HILTI HIT HY200 EPOXY ADHESIVE. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
15. PROVIDE ONE 15M NOSING BAR FOR ALL SILLS, LEDGES, AND STEPS, UNLESS NOTED OTHERWISE.
16. PROVIDE ONE CONTINUOUS 15M TOP AND BOTTOM REINFORCING BARS AT ALL EDGES OF SLABS. THIS REINFORCING MAY BE PROVIDED BY MODIFYING THE BARS SHOWN ON PLAN OR SCHEDULE, OR BY PROVIDING ADDITIONAL REINFORCING.
17. PROVIDE MINIMUM 2-20M VERTICAL AT EACH END, TEE AND CORNER OF ALL REINFORCED CONCRETE WALLS UNO.
18. REINFORCING STEEL IN MASONRY BOND BEAMS AND TELES SHALL BE MIN. 15M BARS CONTINUOUS (WITHOUT SPLICES). PROVIDE STANDARD HOOKS AT BOTH ENDS TO BARS IN MASONRY TILES. PROVIDE 90 DEGREE "L-BARS" AT CORNERS IN MASONRY BOND BEAMS, WITH LAPS OF 40 BAR DIAMETERS.

1. DESIGN, FABRICATION AND ERECTION SHALL CONFORM TO CAN/CSA-S16-09 (INCL. S1651-05 SUPPLEMENT #1), CISC CODE OF STANDARD PRACTICE, AND THE STRUCTURAL STEEL SECTION OF THE SPECIFICATIONS FOR THIS CONTRACT.
2. ALL STRUCTURAL STEEL TO CONFORM TO CAN/CSA- G40-20-04/G40-21-04, WITH THE FOLLOWING GRADES:
  - a. 350W CLASS H, FOR HSS COLUMNS
  - b. 350W CLASS C, FOR ALL OTHER HSS
  - c. 350W, FOR WELDED OR ROLLED W-SECTIONS
  - d. 300W, FOR CHANNELS, ANGLES AND PLATES
  - e. 350W, FOR ALL OTHER SECTIONS, UNLESS NOTED OTHERWISE.

3. ALL BOLTS ARE TO BE HIGH TENSILE STEEL CONFORMING TO ASTM A325 REQUIREMENTS. USE BEARING TYPE CONNECTIONS (MINIMUM 2- 1/2" DIA. BOLTS PER CONNECTION) UNLESS NOTED OTHERWISE. BOLT THREADS MUST BE EXCLUDED FROM SHEAR PLANES.
4. ANCHOR BOLTS: TO ASTM A307 UNLESS NOTED OTHERWISE.
5. HILTI CONCRETE ANCHOR BOLTS SHALL BE STAINLESS STEEL, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS. NO PRODUCT SUBSTITUTIONS WILL BE ACCEPTED.
6. WELDING:
  - a. WELDING WORK TO BE IN ACCORDANCE WITH CSA STANDARDS W55.3-1965(R2003) AND W59-03.
  - b. FUSION WELDING ONLY TO BE UNDERTAKEN BY A FABRICATOR CERTIFIED TO CSA-W47-1.03 FOR DIVISION 1 OR 2.
  - c. RESISTANCE WELDING TO COMPLY WITH CSA-W53.
  - d. EXPOSED WELDS SHALL BE CONTINUOUS AND GROUND SMOOTH
7. CONTRACTOR HAS THE RESPONSIBILITY TO VERIFY THE WELDABILITY OF EXISTING STRUCTURAL STEEL. NO SAMPLE ANALYSIS HAS BEEN CONDUCTED. SELECT APPROPRIATE ELECTRODES AND PRE-HEATING TO SUIT SITE CONDITIONS.
8. FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES SHOWN.
9. UNLESS NOTED, ALL BEAM END CONNECTIONS SHALL BE TWO-SIDED DOUBLE ANGLE CONNECTIONS AND SHALL BE DESIGNED FOR MIN 0.75 TIMES THE FACTORED SHEAR RESISTANCE OF THE SECTION.
10. PROVIDE ALL REQUIRED GUSSETS, SPACERS, FILERS, SHIMS AND BATTEN PLATES.
11. DETAILS SHOWN FOR CONNECTION OF NEW STRUCTURAL STEEL TO EXISTING STRUCTURE ARE FOR CONTRACTOR'S GUIDANCE ONLY. CONTRACTOR HAS THE RESPONSIBILITY TO VERIFY ALL SITE CONDITIONS AND TO MODIFY THESE DETAILS AS NECESSARY TO ALLOW CONNECTION TO THE EXISTING STRUCTURE FOR THE LOADINGS INDICATED ON THE DRAWINGS.
12. PROVIDE BUTTER COAT OR NON-SHRINK GROUT BETWEEN SURFACES WHERE CONNECTING STEEL PLATE TO STRUCTURAL CONCRETE OR MASONRY, UNLESS NOTED OTHERWISE.
13. CENTRE BEARING PLATES UNDER BEAMS EXCEPT WHERE NOTED OTHERWISE.
14. CONNECT ALL BEAMS TO END BEARING PLATES WITH A MIN. OF 50 mm ( $2 \frac{1}{8}$ " ) LENGTH OF 6 mm (1/4 ") FILLET WELD EACH SIDE OF FLANGE.
15. PROVIDE 4.8 mm (3/16 ") THICK CAP PLATES WITH ALL-AROUND SEAL WELD ON OPEN ENDS OF HSS MEMBERS UNLESS NOTED OTHERWISE.
16. DO NOT MAKE HOLES IN ANY STRUCTURAL STEEL MEMBER OTHER THAN THOSE SHOWN ON REVIEWED SHOP DRAWINGS WITHOUT THE PRIOR APPROVAL OF THE CONSULTANT.
17. FOR LIMITS NOT SPECIFICALLY SIZED ON STRUCTURAL PLANS, REFER TO THE LIMIT SCHEDULE ON THESE DRAWINGS.
18. ALL EXTERIOR STRUCTURAL STEEL TO BE HOT DIPPED GALVANIZED TO CAN/CSA-G164-M950(R2003), WITH A MINIMUM ZINC COATING OF 600 g/sq.m. ALL OTHER STEEL TO BE PRIME PAINTED UNLESS NOTED OTHERWISE.
19. REPAIR DAMAGED AREAS OF GALVANIZED SURFACES WITH TWO COATS OF ZINC-RICH PAINT.

1. DESIGN, FABRICATOR AND ERECTION SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA-5136-07, CSSBI 10M-06 (FOR ROOF DECK), CSSBI 12M-06 (FOR COMPOSITE STEEL DECK), CSSBI 813-06 (FOR DIAPHRAGMS).
2. ALL STEEL JOINTS SHALL BE STANDARD GALVANIZED DECK OF THE PROFILE DEPTH AND CORE THICKNESS INDICATED ON THE DRAWINGS (U/N), GALVANIZED TO ASTM A653 WITH Z275 ZINC COATING. MINIMUM DECK PROFILE THICKNESS SHALL BE 38 mm x 0.76 mm (12 " x 2) G40 STEEL DECK. SEE DRAWINGS FOR SPECIFIC LOCATIONS HAVING HEAVY GAUGE DECK.
3. ALL STEEL DECK HAVING COMPOSITE TOPPING SHALL BE COMPOSITE DECK. PROVIDE MIN. ONE LAYER OF 152x152-MW18-7x18.7 (4x4-6x6) WELDED WIRE MESH PLACING IN FLAT SHEET'S 25mm (1 " ) FROM TOP OF CONCRETE TOPPING.
4. ELECTRICAL RACEWAY UNITS OF CELLULAR COMPOSITE DECK SHALL ALSO CONFORM TO CSA STANDARD C22.2-No. 79-1978 (R1999).
5. THE DECK FABRICATOR SHALL DESIGN THE DECK TO RESIST THE SPECIFIED DESIGN LOADS. SUBMIT SHOP DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER. DRAWINGS TO INCLUDE: PROFILE, LAYOUT, OPENINGS (AND REINFORCING), CONNECTIONS, CLOSURES, AND ALL DETAILS OF DECK INSTALLATION.
6. THE DECK CORE THICKNESS SHALL BE AS REQUIRED FOR DESIGN STRENGTH, BUT NOT BE LESS THAN 0.76 mm (22 ga).
7. STEEL DECK TO BE CONTINUOUS OVER A MINIMUM OF THREE SPANS UN. PROVIDE FOR AN INCREASE IN CORE THICKNESS, AS REQUIRED, TO SUPPORT SPECIFIED LOADS, WHERE FEWER THAN 3 SPANS OCCUR OR WHERE SPANS ARE UNEQUAL.
8. STEEL ROOF DECK TO BE USED AS A DIAPHRAGM.
9. MINIMUM BEARING OF DECK UNIT IS TO BE 50 mm (2 " ).
10. PROVIDE SUPPORT FOR THE UNSUPPORTED DECK PANEL TO THE FLUTES WITH A CONTINUOUS L64x64x6.4 (L2 " x 2 1/2 " x 1/2 " ) UNLESS NOTED OTHERWISE.
11. MINIMUM WELDING AND FASTENING OF DECK TO STEEL SUPPORTING MEMBERS TO BE (SEE DECK FASTENING DIAPHRAGMS ON PLAN:  
a. TRANSVERSE (BEARING) SUPPORTS: 20 mm (3/4 " ) DIA. PUDDLE WELDS AT 300 mm (12 " ) C/C or at ALTERNATE FLUTES (WHICHEVER IS LESS), WITH A MINIMUM OF 3 WELDS PER DECK PANEL  
b. LONGITUDINAL (SIDE PANEL) SUPPORTS: 20 mm (3/4 " ) DIA. PUDDLE WELDS AT 600 mm (2 " ) C/C  
c. SIDE LAPS: MECHANICALLY CLINCH (BUTTON PUNCH) AT 600 mm (2 " ) C/C.
12. WELDING SHALL BE TO CSA W59-03 BY A FABRICATOR CERTIFIED UNDER DIVISION 1 OR 2 OF CSA W47-1-03 FOR FUSION WELDING AND W55.3-1965 (R2003) FOR RESISTANCE WELDING.
13. REPAIRS REQUIRED: (PRACTICE) WELDS SHALL BE MADE PRIOR TO ACTUAL JOG WELDING. TO DEMONSTRATE THE ADEQUACY OF THE VARIOUS WELDING METHODS, BOTH THE PRACTICE WELDS AND THE ACTUAL JOG WELDS SHALL BE INSPECTED FOR SIZE AND SPACING AND TESTED BY PRY TEST TO DEMONSTRATE METAL-TO-METAL FUSION.
14. TOUCH-UP ALL WELDS WITH TWO COATS OF ZINC-RICH PRIMER.
15. DO NOT MAKE OPENINGS IN STEEL DECK UNLESS SHOWN ON THE STRUCTURAL DRAWINGS. THE DECK FABRICATOR IS RESPONSIBLE FOR REINFORCING ALL ROOF DECK OPENINGS 300 mm x 300 mm (12 " x 12" ) OR SMALLER, IN ACCORDANCE WITH CSSBI 10M-06 INDICATE ALL DECK OPENINGS ON SHOP DRAWINGS.
16. DO NOT SUSPEND CEILINGS, DUCTS, LIGHTING OR PIPES FROM STEEL ROOF DECK. SUPPORT FROM STRUCTURAL BEAMS OR JOISTS ONLY.

1. ALL MASONRY WORK TO BE IN ACCORDANCE WITH ONTARIO BUILDING CODE, CSA-A179-04 AND CSA-A371-04.
2. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF ALL MASONRY WALLS.
3. PROVIDE TYPE H/15/A/M UNITS CONFORMING TO CSA STANDARDS A165 SERIES FOR ALL CONCRETE BLOCK MASONRY.
4. USE TYPE 'S' MORTAR CONFORMING TO CSA-A179 (PROPORTION SPECIFICATION) FOR ALL MASONRY WALLS.
5. MASONRY GROUP TO CONFORM TO CSA-A179, WITH A MINIMUM COMPRESSIVE STRENGTH OF 12.5 MPa AT 28 DAYS.
6. PROVIDE CONTINUOUS 8-gal LADDER-TYPE MESH GALVANIZED HEAVY DUTY HORIZONTAL JOINT REINFORCEMENT CONT. ASTM-A82 AT:
  - a. EVERY SECOND COURSE (IE. AT 400mm (16" )) VERTICAL SPACING)
  - b. ADDITIONAL AT FIRST COURSE AT TOP AND BOTTOM OF WALL.
7. PROVIDE PREFABRICATED CORNERS AND TEES FOR HORIZONTAL JOINT REINFORCING.
8. PROVIDE VERTICAL WALL REINFORCING IN ALL NEW CONCRETE BLOCK WALLS IN ACCORDANCE WITH TYPICAL WALL REIN DETAILS UNLESS NOTED OTHERWISE.
9. VERTICAL WALL REINFORCING TO BE CONTINUOUS BETWEEN FLOORS AND ROOF. PROVIDE FULL CLASS B TENSION LAP. INDICATE LOCATION OF ALL PROPOSED LAP SPLICES ON SHOP DRAWINGS FOR APPROVAL.
10. USE LAY MORTAR BEDDING FOR ALL WALLS.
11. CONSTRUCT WALLS IN RUNNING BOND ONLY.
12. PROVIDE BULLNOSE BLOCKS AT EXPOSED CORNERS.
13. NEW MASONRY WALLS TO BE TOOTHED INTO EXISTING MASONRY WALLS WHERE SHOWN.
14. BOND BEAMS ARE TO BE CONTINUOUS WHERE INDICATED ON PLANS AND OR SPECIFICATIONS.

1. TOP AND BOTTOM COURSE OF WALLS,
2. TWO COURSES DEEP AND TWO BLOCKS WIDE UNDER ALL BEAMS OR LINTEL BEARINGS,
3. GROUTED CELLS CONTAINING VERTICAL REINFORCING,
4. BOND BEAMS,
5. ALL PIERS BETWEEN ADJACENT OPENINGS LESS THAN 800 mm WIDE, FOR FULL HEIGHT OF PIER
6. ALL BELOW GRADE MASONRY,
7. KEYS AT EACH SIDE OF CONTROL JOINTS, AND
8. CELLS CONTAINING DOWELS, ANCHOR BOLTS OR OTHER EMBEDDED HARDWARE.


17. SOLID MASONRY MEANS GROUT FILL IN HOLLOW MASONRY, OR 100% SOLID UNITS.
18. CONTRACTOR TO BE RESPONSIBLE FOR THE DESIGN AND PROVISION OF ADEQUATE TEMPORARY BRACING IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, AND APPENDIX H OF CSA-A37.1.
19. MASONRY SHOP DRAWINGS TO INCLUDE, BUT NOT LIMITED TO, FULL WALL ELEVATIONS DETAILING VERTICAL REINFORCING, LAP SPLICES, BONDING BEAMS, OPENINGS AND CONTROL JOINT LOCATIONS.
20. WHERE THE ARCHITECTURAL DRAWINGS SPECIFY THE CELLS OF THE CONCRETE BLOCK TO BE FILLED WITH PERLITE INSULATION THIS DOES NOT INCLUDE CELLS TO BE REINFORCED AND GROUTED.
21. WHERE THE ARCHITECTURAL DRAWINGS SPECIFY A FREE CAVITY SPACE (AIR GAP) BETWEEN MASONRY WYTHES, CONTRACTOR TO EMPLOY CONSTRUCTION METHODS TO ENSURE CAVITY IS KEPT CLEAR OF ALL MORTAR DROPPINGS.
22. IF MASONRY CRACKING OCCURS AS A RESULT OF [UNDERPINNING OR SOIL REMEDIATION WORK], REPORT JOINTS AND OR REPLACE UNITS AS DIRECTED BY CONSULTANT.

1. **SHOP DRAWINGS:**  
BEFORE PROCEEDING WITH DEMOLITION OPERATIONS, SUBMIT DRAWINGS PREPARED BY A PROFESSIONAL ENGINEER LICENCED IN THE PROVINCE OF ONTARIO, SHOWING THE PROPOSED METHOD OF DEMOLITION AND THE MEANS OF PROTECTING THE EXISTING CONSTRUCTION TO REMAIN.
2. **CONSTRUCT NEW STRUCTURAL STRENGTHENING AS SHOWN ON DETAIL DRAWINGS PRIOR TO CUTTING OF EXISTING STRUCTURE.**
3. **WHERE STRUCTURAL STRENGTHENING INCLUDES CONCRETE WORK, IN SITU STRENGTH OF CONCRETE SHALL REACH 100% OF SPECIFIED STRENGTH PRIOR TO CUTTING OF EXISTING STRUCTURE.**
4. **PROVIDE BRACING AND SHORING AS REQUIRED.**
5. **LOCATE PIPES, CONDUITS AND OTHER SERVICES EMBEDDED, OR SURFACE MOUNTED, IN WORK AREA TO BE CUT. COORDINATE WITH OWNER AND ENGINEER/CONSULTANT FOR RELOCATION OF SERVICES.**
6. **PROTECT THE AREA BELOW FROM THE FREE FALL OF DEBRIS DURING THE MAKING OF NEW OPENINGS. CONTROL THE FLOW AND DIRECTION OF ANY SAW CUTTING FLUID OR DUST EXHAUST. ENSURE THAT ALL EXISTING CONCRETE AND STEEL ELEMENTS TO BE CUT AND REMOVED ARE SHORED AND SUPPORTED PRIOR TO AND DURING CUTTING OPERATIONS.**
7. **PROVIDE TEMPORARY DUST SCREENS, COVERS, GUARDS AND RAILINGS, SUPPORTS AND OTHER PROTECTION AS REQUIRED TO PROTECT THE PUBLIC AND THE ENVIRONMENT.**
8. **REMOVE CONCRETE NEATLY BY SAW CUTTING, CORE DRILLING AND HAND TOOLS TO ACHIEVE CLEAN NEAT SURFACES.**
9. **CORE DRILL 100 mm (4 ") DIA. HOLES AT CORNERS OF OPENINGS PRIOR TO SAW CUTTING.**
10. **NO DRILLING OR WRECKING CRANES SHALL BE PERMITTED.**
11. **EXERCISE CARE NOT TO DAMAGE CONCRETE TO REMAIN.**
12. **TAKE ALL NECESSARY PRECAUTIONS TO AVOID OVER BREAKING OF THE EDGES OF THE OPENING.**
13. **BLAST CLEAN ALL EXISTING REINFORCING STEEL SHOWN TO REMAIN.**
14. **EXISTING REINFORCING STEEL THAT IS SHOWN TO BE CUT SHALL BE CUT BACK 6 mm BEHIND THE EDGE OF THE NEW OPENING AND THE CONCRETE IS TO BE PATCHED WITH EPOXY MORTAR.**

THE CONTRACTOR SHALL ARRANGE AND OWNER WILL PAY FOR THE FOLLOWING ITEMS TO BE INSPECTED OR TESTED BY AN INDEPENDENT THIRD PARTY STRUCTURAL ENGINEERING FIRM. THE CONTRACTOR SHALL PROVIDE THE OWNER AND CONSULTANT, COPIES OF ALL TEST REPORTS SHALL BE FORWARDED TO THE OWNER AND CONSULTANT ON THE SAME DAY TESTS ARE MADE. THE ITEMS TO BE TESTED SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING.

- a. **GEOTECHNICAL:**  
PERFORM ALL TESTING AND INSPECTION (COMPACTION, BEARING CAPACITY, SOIL PREPARATION ETC.) AS PER THE REQUIREMENTS OF THE DRAWINGS AND THE GEOTECHNICAL ENGINEERING REPORT.
- b. **CONCRETE:**  
CONCRETE TO BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.1 AND A23.2, INCLUDING THE REQUIREMENTS FOR AIR, SLUMP AND AGE PRIOR TO BEING USED. CONTRACTOR TO MAINTAIN RECORDS OF POUR DATES, TESTING PERFORMED, CLASS OF CONCRETE USED AND TEST RESULTS FOR ALL ITEMS PLACED. RESULTS OF CYLINDER SAMPLES TESTING TO BE SENT TO OWNER AND CONSULTANT. ALL MIX DESIGNS TO BE REVIEWED AND APPROVED BY TESTING AGENCY.
- c. **MASONRY:**  
MORTAR, GROUT AND CONCRETE MASONRY UNITS:  
SAMPLE AND TEST JOB-MIXED MORTARS IN ACCORDANCE WITH CSA A179 AND CSA A304.1. TEST FREQUENCY TO BE IN ACCORDANCE WITH 3304.1, BUT NOT LESS THAN ONE TEST FOR EACH DAY OF WORK. CONTRACTOR TO SUBMIT LABORATORY TEST REPORTS OF MANUFACTURER FOR CONCRETE MASONRY UNITS.
- d. **STRUCTURAL:**  
PERFORM VISUAL INSPECTION OF ALL WELDS, TORQUE TESTING OF BOLTED CONNECTIONS AND CHECK ON BEARING, PILING, ALIGNMENT AND PAINTING. BASIS OF INSPECTION SHALL BE FINAL REVISION SHOP DRAWINGS. PERFORM NON-DESTRUCTIVE TESTING AT LEAST WHERE RESULTS OF VISUAL INSPECTION ARE NOT ACCEPTABLE OR INCONCLUSIVE.
- e. **REINFORCING STEEL:**  
CONTRACTOR SHALL ADVISE CONSULTANT OF PLACEMENT OF ALL REINFORCING STEEL FOR REINFORCED MASONRY AND PRECAST CONCRETE AT LEAST 24 HOURS PRIOR TO PLANNED TIME OF MASONRY GROUT OR CONCRETE PLACEMENT. DO NOT PLACE GROUT OR CONCRETE UNTIL BAR PLACEMENT HAS BEEN APPROVED BY CONSULTANT.

Key Plan:	

Consultant:	
 <b>MORRISON HERSHFIELD</b> Suite 300, 125 Commerce Valley Drive Marham, ON L3T 7W4 Tel: (416)499-3110 Fax: (416)499-9658	
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**Client:**



Project:

700 GORDON ST. W, WHITBY, ON L1N 5S9

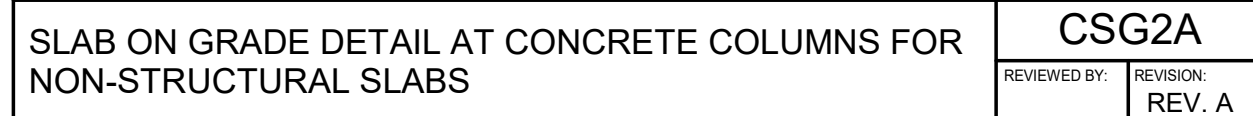
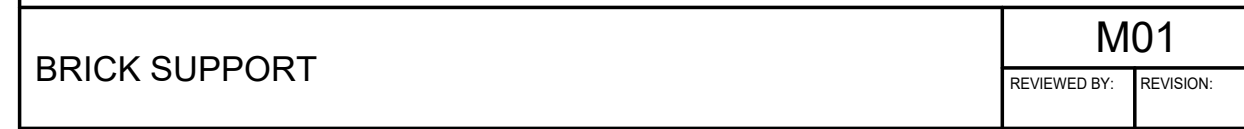
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Project No:	1802218		Drawing No:
			S001



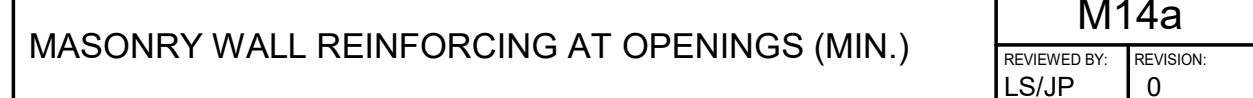






S003

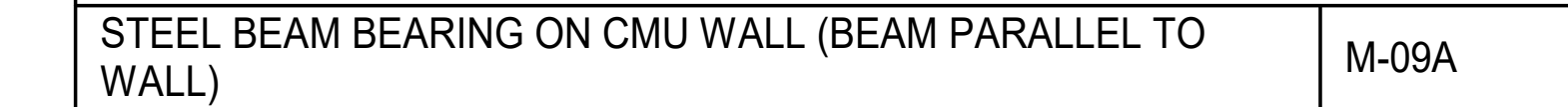
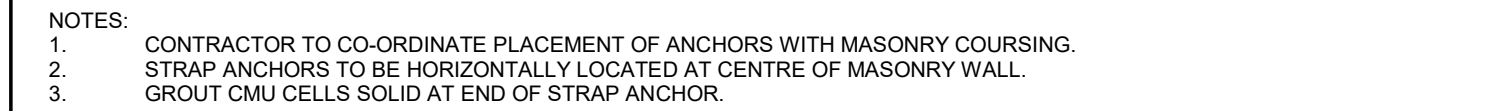
# STEEL LINTELS FOR NON-LOAD BEARING MASONRY WALLS



CMU WALL - NON LOAD BEARING MASONRY LINTELS & REINFORCEMNT	M27	
	REVIEWED BY: LS/JP	REVISION: 0

BIM 300-1064 - Ontario Shores Powerhouse/1802218-Ontario Shores Powerhouse-RVT2015-STRUC.rvt





Key Plan:

Consultant:



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Client:



Project:

NEW POWERHOUSE

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

## TYPICAL DETAILS

Drawn By:	G N	Date:	05/06/19
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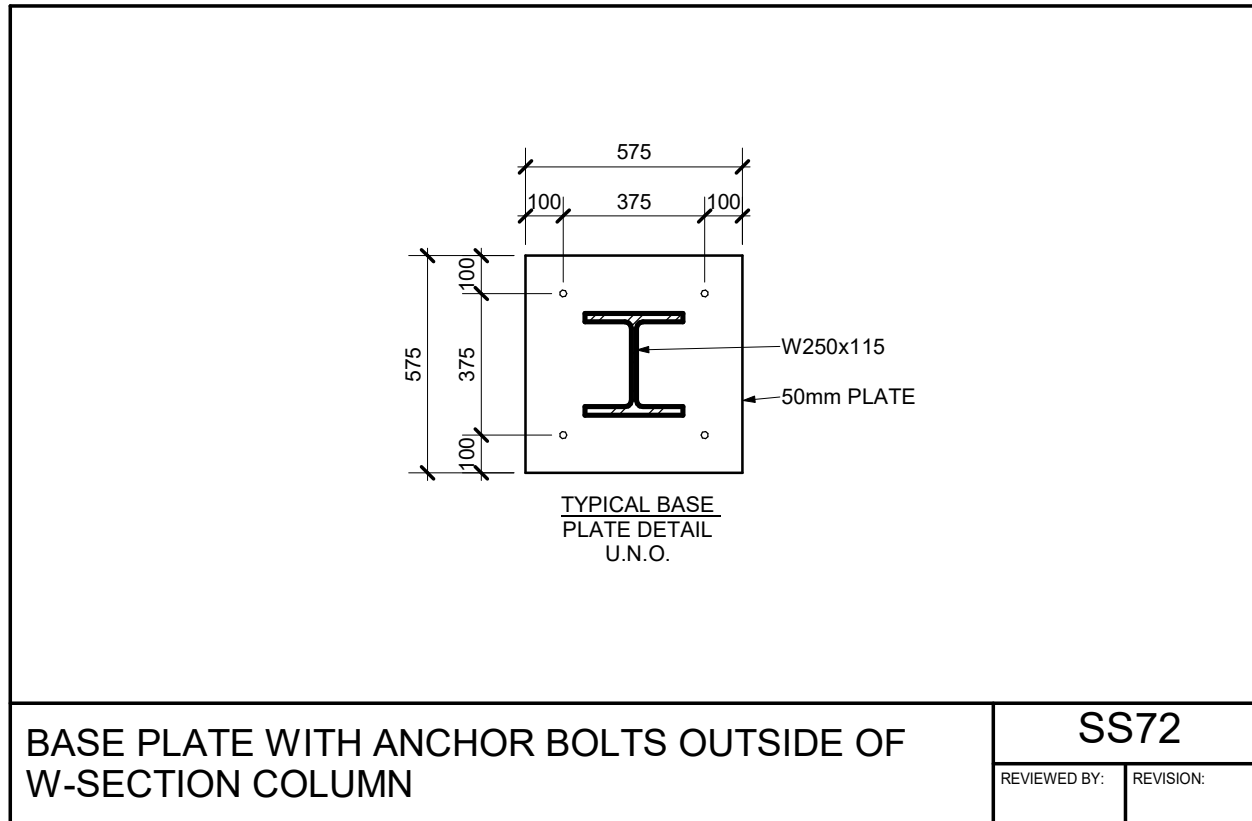
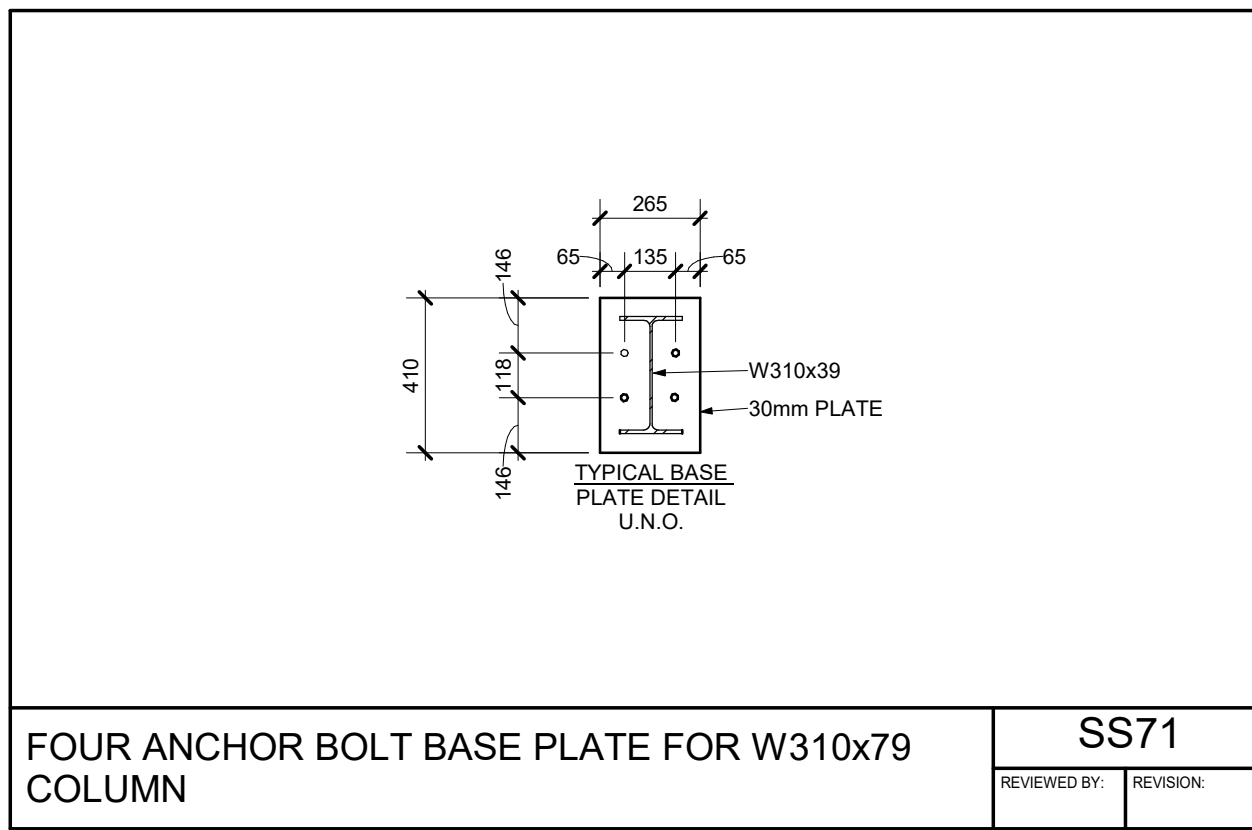
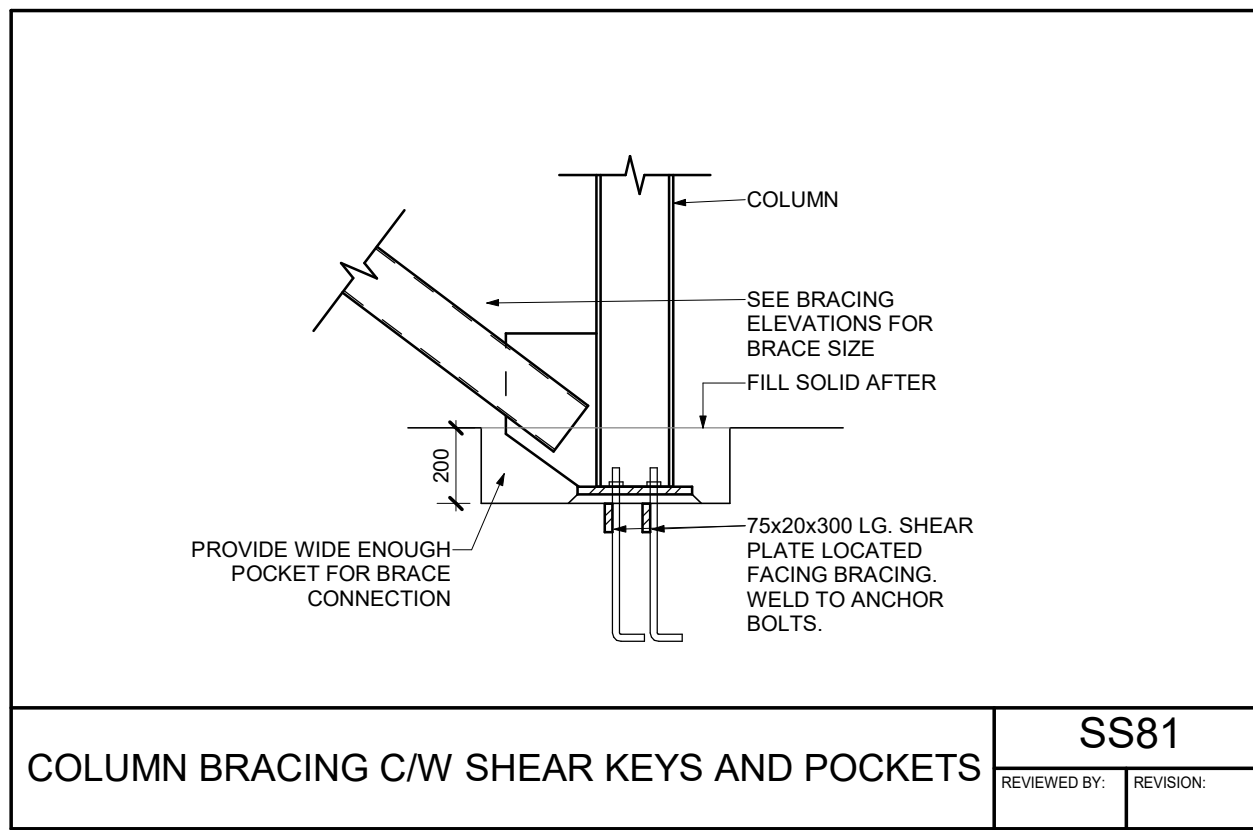
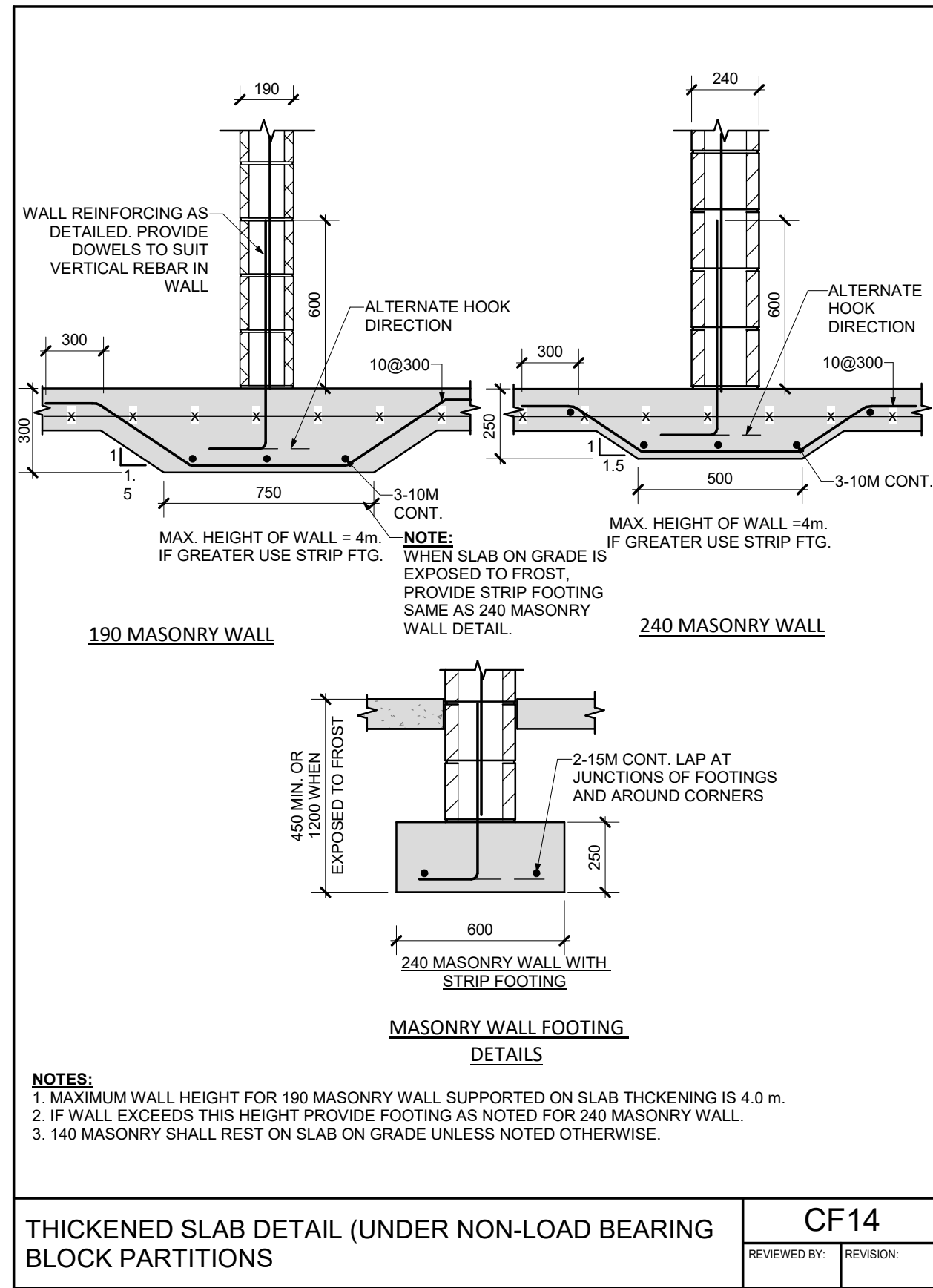
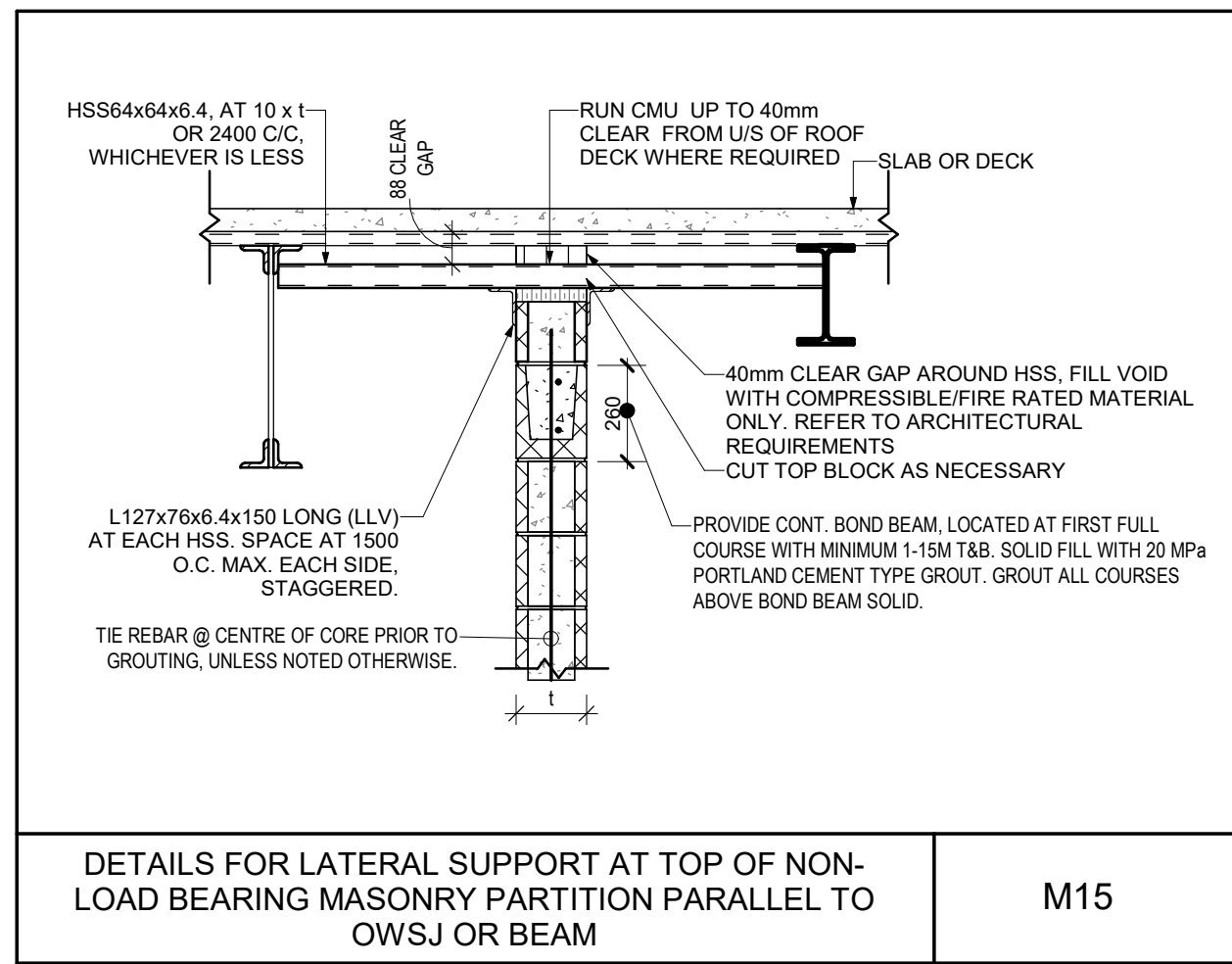
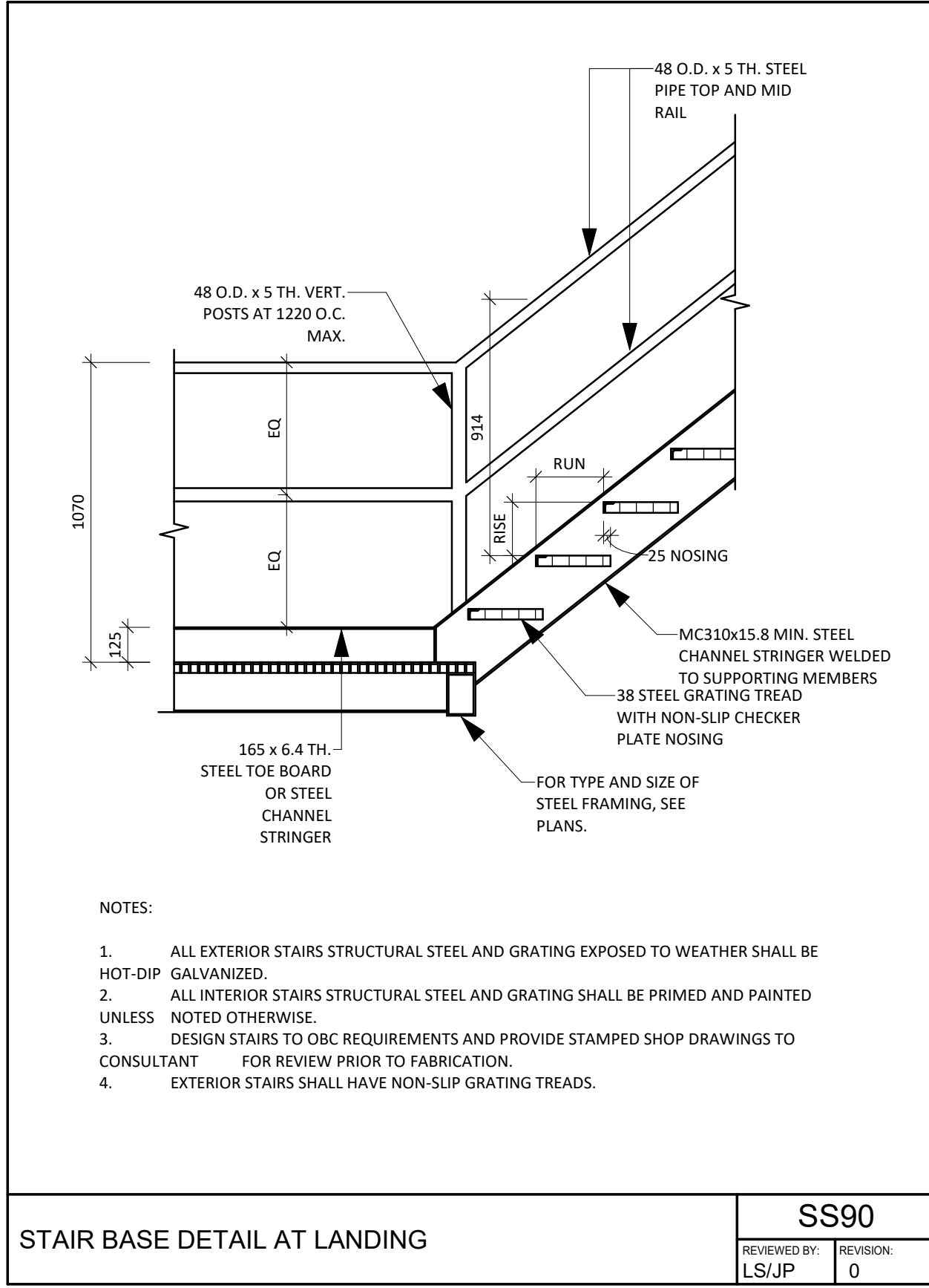
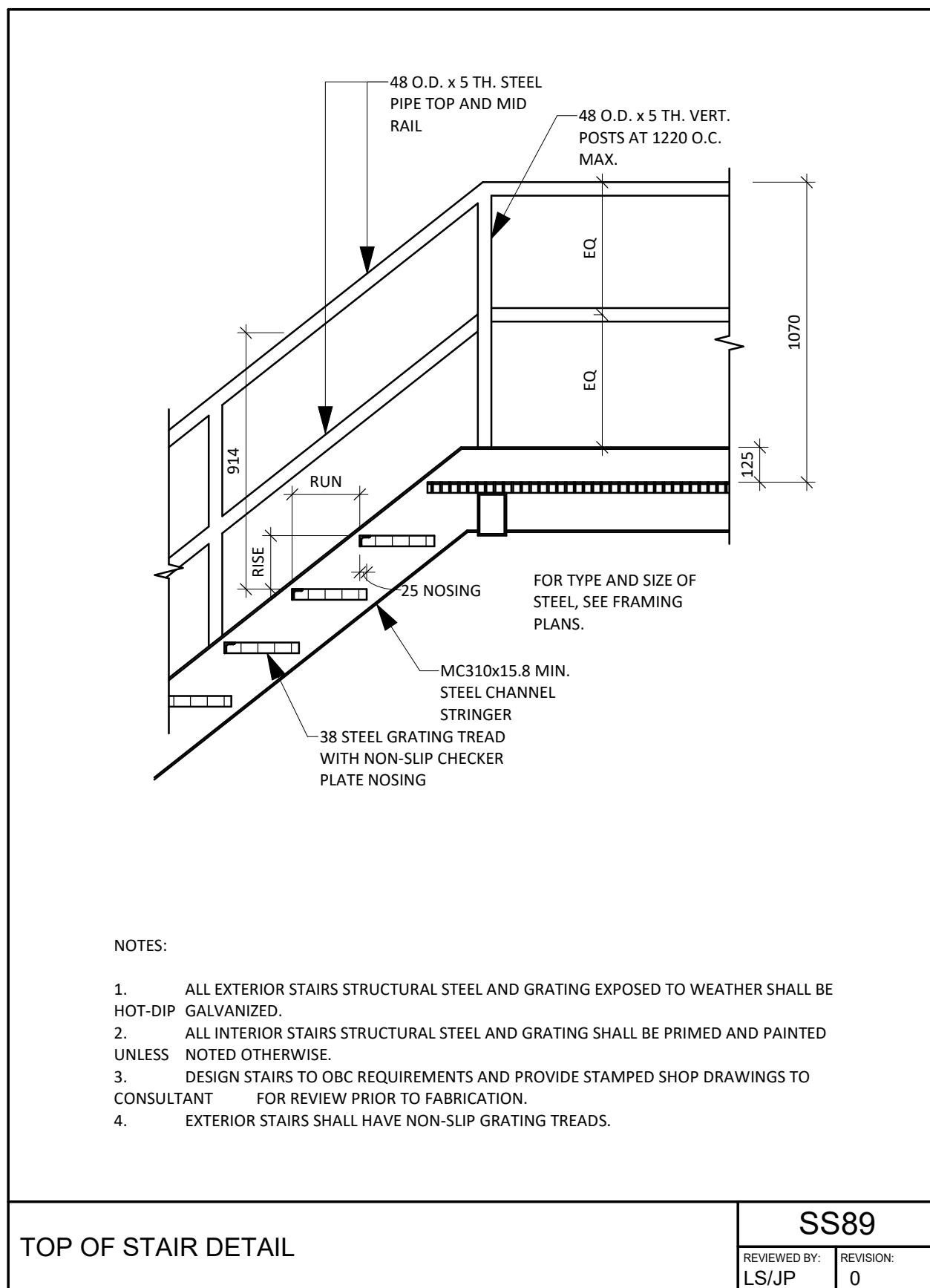
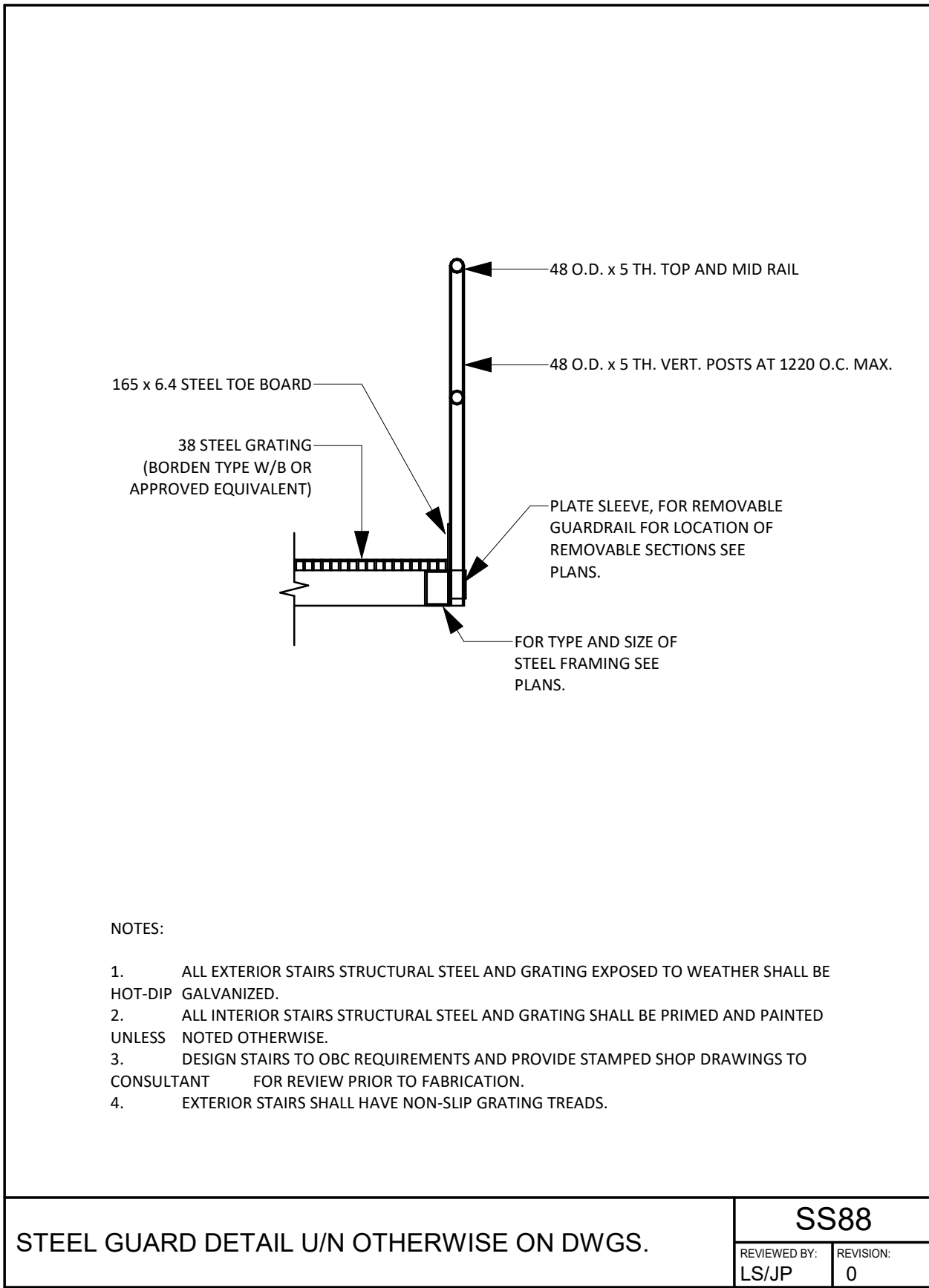
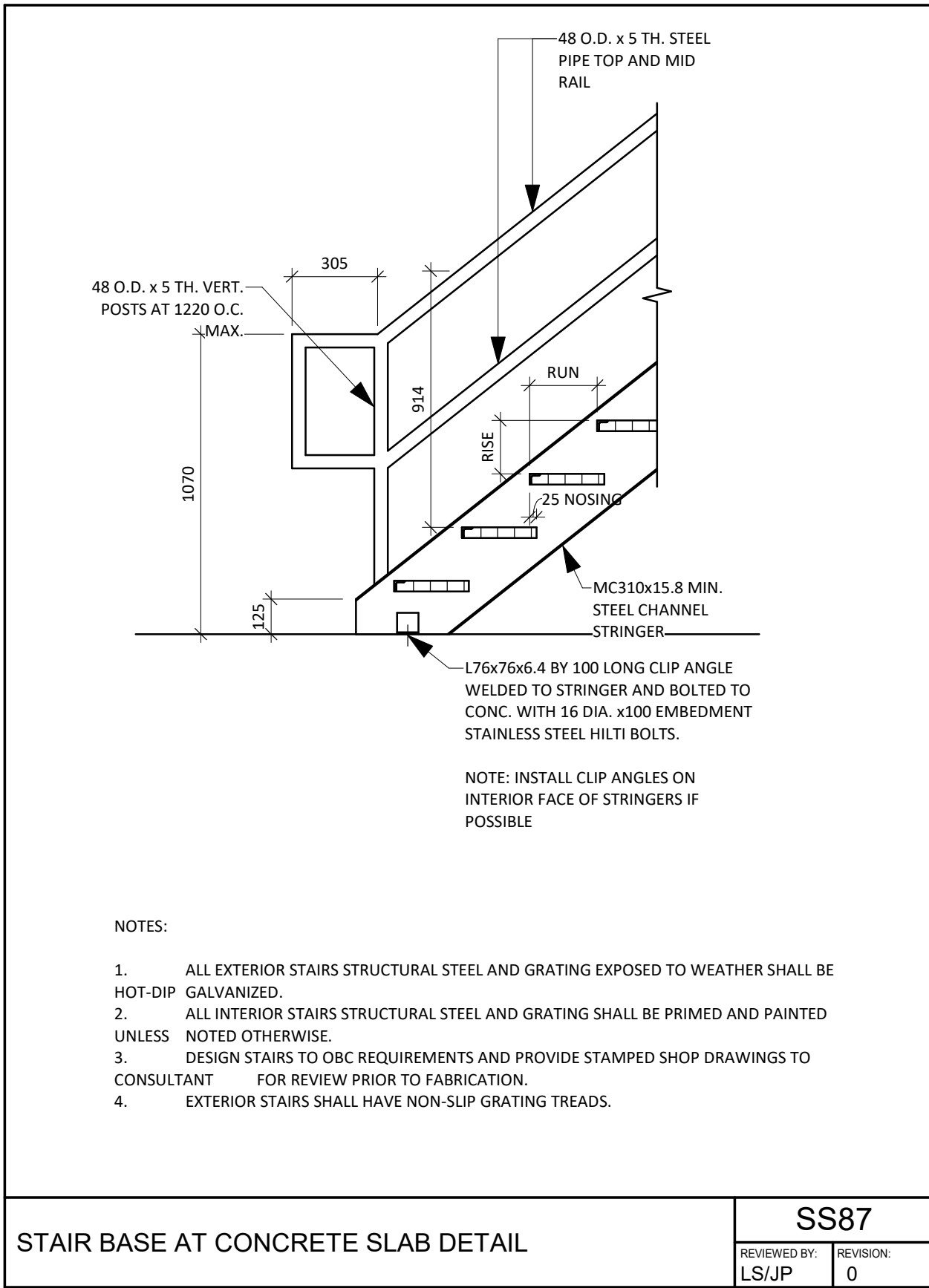
Designed By:	OPG	Checked By:	ZB
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As indicated	BIM 360://MH - 1802218 - Ontario Shores Powerhouse/1802218-Ontario Shores BIM 360://MH - 1802218 - Ontario Shores

Project No:	Drawing No:
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1802218	S004
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Key Plan:

Consultant:

**MORRISON HERSHFIELD**

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Seal:

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Client:

**Ontario Shores**  
Centre for Mental Health Sciences

Project:

**NEW POWERHOUSE**

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

**TYPICAL DETAILS**

Drawn By: G.N. Date: 05/06/19

Designed By: O.P.G. Checked By: Z.B.

Scale: 1 : 20 File Path: B:\360\3641 - 1802218 - Ontario Shores Powerhouse\1802218 Ontario Shores Powerhouse\1802218-STRUC-01

Project No: 1802218 Drawing No: S005



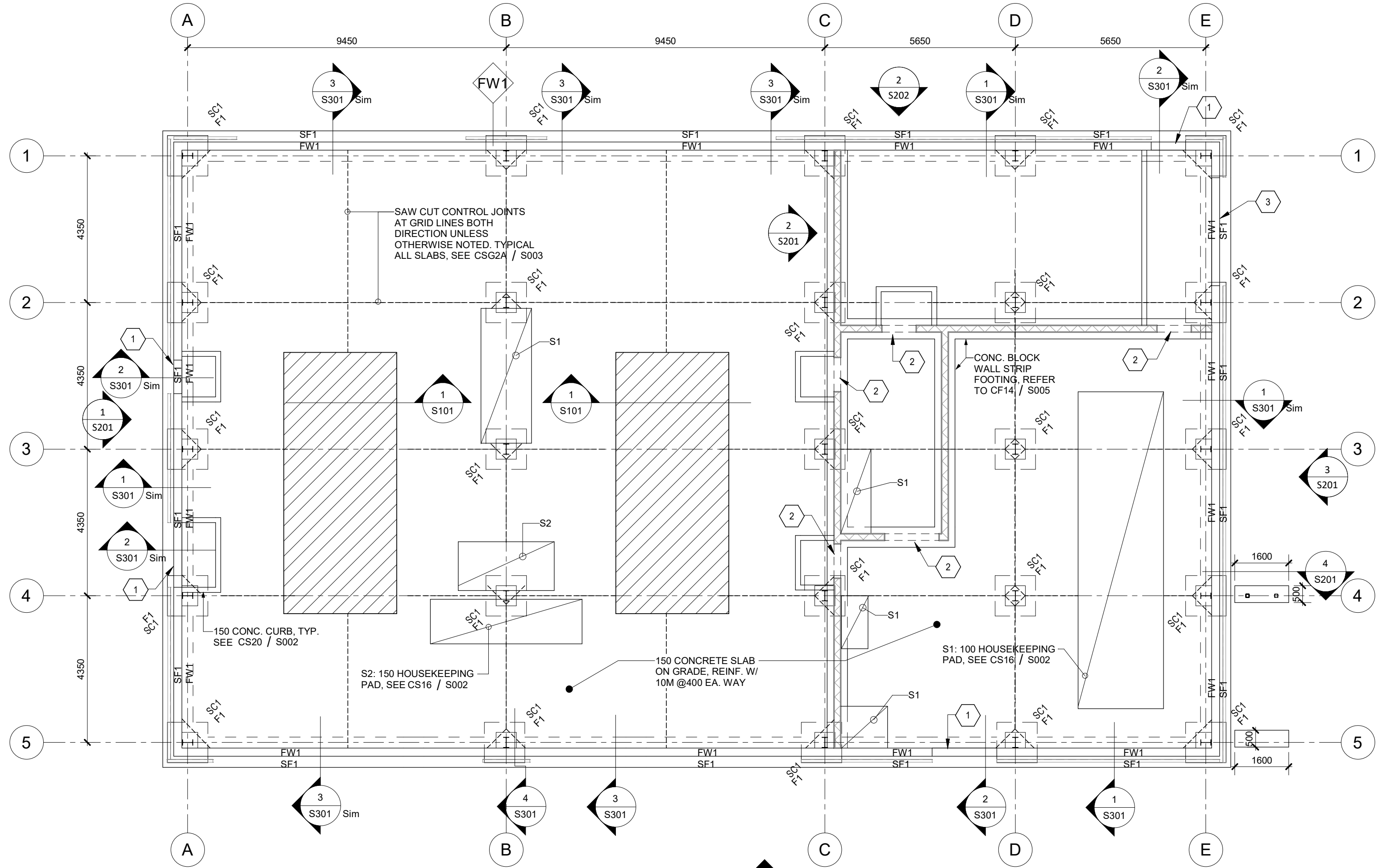
NOTES  
THE FOUNDATION WAS DESIGNED FOR A FACTORED GEOTECHNICAL RESISTANCE AT ULTIMATE LIMIT STATE (ULS) OF 450 KPA AND A GEOTECHNICAL REACTION AT SERVICEABILITY LIMIT STATE (SLS) OF 300 KPA. INFORMATION WAS OBTAINED FROM THE FOLLOWING REPORTS:

- PRELIMINARY GEOTECHNICAL INVESTIGATION 700 GORDON STREET, WHITBY, ONTARIO BY GHD ON SEPTEMBER 30, 2016
- GEOTECHNICAL INVESTIGATION PROPOSED WHITBY PSYCHIATRIC HOSPITAL REDEVELOPMENT BY GOLDER ASSOCIATES LTD. DATED MARCH 3, 1992

CONTRACTOR TO RETAIN GEOTECHNICAL ENGINEER TO VERIFY BEARING PRESSURE INFORMATION FROM THE ABOVE REPORTS, PRIOR TO PROCEEDING WITH CONSTRUCTION.

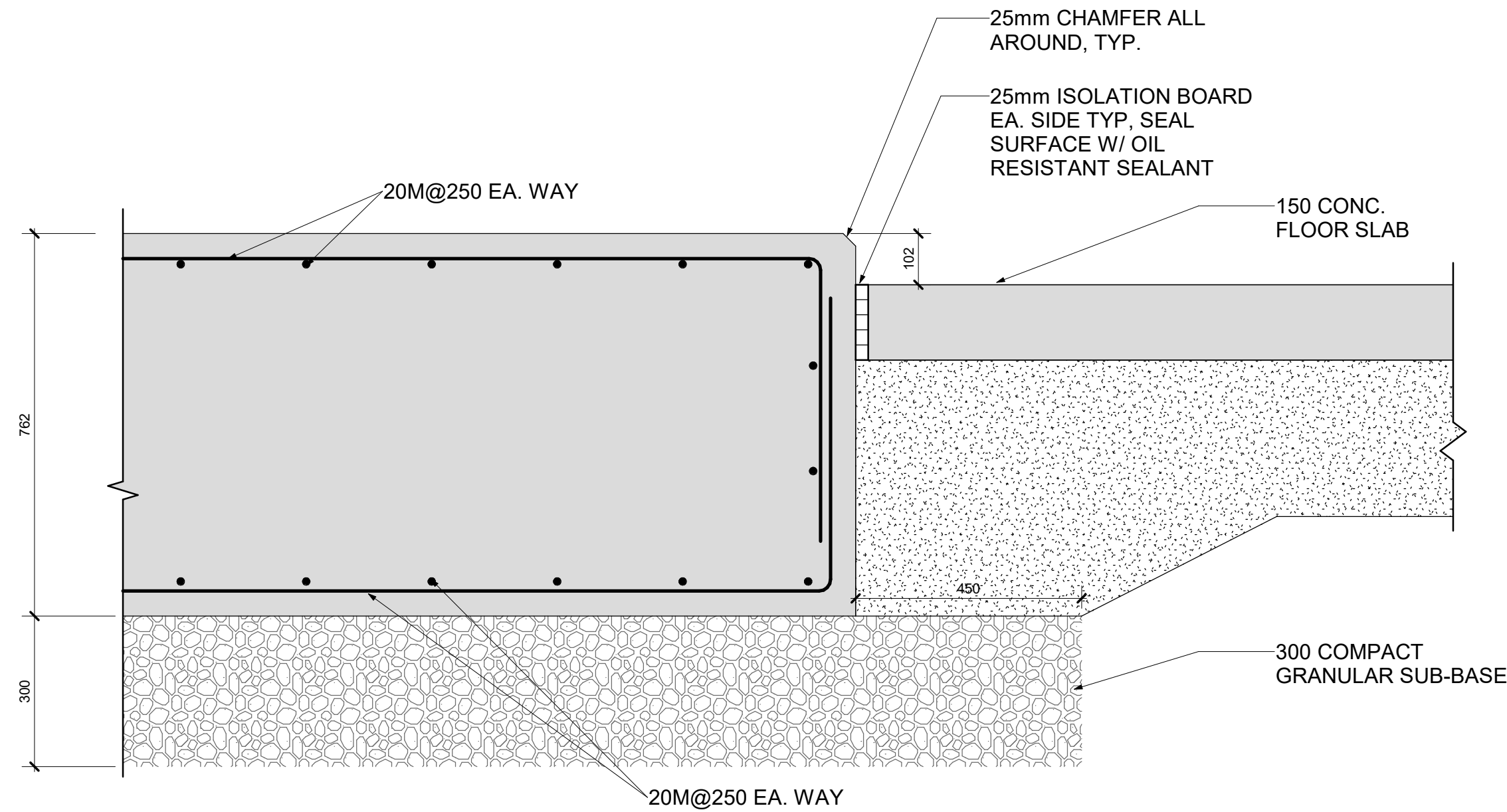
DESIGN LOADS (OBC 2012)

- ROOF DEAD LOAD (UNFACTORED):  
ROOFING SYSTEM.....=0.33 kPa  
STEEL DECK .....=0.10 kPa  
OWSJ AND STEEL BEAM SELF-WEIGHT.....=0.15 kPa  
MECH & ELEC. ....=1.00 kPa
- RAIN & SNOW LOAD (UNFACTORED):  
GROUND SNOW  $S_s$ .....=1.20 kPa  
ASSOCIATED RAIN  $S_r$ .....=0.40 kPa  
IMPORTANCE FACTOR.....=1.25 (POST-DISASTER)  
DESIGN SNOW  $S = I_s \times [(S_s \times C_b \times C_w \times C_s \times C_a) + S_r]$   
 $= 1.25 \times [(1.2 \text{ kPa} \times 0.80 \times 1.0 \times 1.0 \times 1.0) + 0.40 \text{ kPa}]$   
 $= 1.70 \text{ kPa}$
- WIND LOAD (UNFACTORED):  
HOURLY WIND PRESSURE (WHITBY):  
 $q(1/50)=0.48 \text{ kPa}$   
 $q(1/10)=0.37 \text{ kPa}$   
PRIMARY ACTION  $I W = I_w \times q(\text{WHITBY}) \times C_e \times C_p C_g$   
- FOR DESIGN OF BUILDING LATERAL FORCE RESISTING SYSTEMS:  
MAIN ZONE  $= 1.25 \times 0.48 \text{ kPa} \times 0.92 \times (0.75 + 0.55) = 0.72 \text{ kPa}$   
EDGE ZONE  $= 1.25 \times 0.48 \text{ kPa} \times 0.92 \times (1.15 + 0.8) = 1.08 \text{ kPa}$   
(EDGE ZONE WITHIN 1.7m OF BUILDING EDGE)
- SEISMIC LOAD:  
HORIZONTAL SPECTRAL ACCELERATION VALUES:  
 $S_a(0.2) = 0.19$ ,  $S_a(0.5)=0.12$ ,  $S_a(1.0)=0.071$ ,  $S_a(2.0)=0.022$   
ACCELERATION-BASED SITE COEFFICIENT,  $F_a = 1.00$   
VELOCITY-BASED SITE COEFFICIENT,  $F_v = 1.00$   
SEISMIC IMPORTANCE FACTOR,  $I_E = 1.5$  (POST-DISASTER)  
SEISMIC SITE CLASSIFICATION 'C'  
 $I_E F_a S_a(0.2) = 0.29$
- REFER TO MECHANICAL & ELECTRICAL DRAWINGS FOR EQUIPMENT LOCATIONS AND WEIGHTS.



2 FOUNDATION AND GROUND FLOOR PLAN

S101 1:100



1 SECTION

S101 1:10

NOTES:

FOUNDATION DESIGN BASED ON CUMMINS DQLE GENERATOR HAVING A GROSS OPERATING WEIGHT OF 24,152 kg.  
FOUNDATION TO BE REVISED, IF REQUIRED, FOR GENERATOR TO BE INSTALLED.  
DO NOT PROCEED WITH CONSTRUCTION UNTIL FOUNDATION IS CONFIRMED.

STRIP FOOTING SCHEDULE		
Mark	FOOTING SIZE	REINFORCEMENT
SF1	900X300	3-15M HORIZ.

FOUNDATION WALL SCHEDULE		
Mark	Size	Reinforcement
FW1	1200X250	15M HORIZ. @ 250 C/C, 15M VERT. @ 600 C/C

FOOTING SCHEDULE		
MARK	FOOTING SIZE	REINFORCEMENT
F1	1200x1200x350	4-15M EA. WAY

CONCRETE PIER SCHEDULE			
MARK	SIZE (mm)		REINFORCEMENT
	L	W	
P1	600	600	8-20M VERT. 10M@200 TIES
			EXTRA 10M TIE @ 100 FROM TOP OF PIER

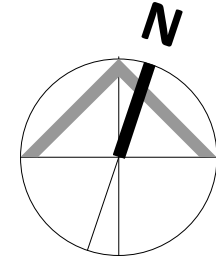
COLUMN SCHEDULE		
MARK NO.	COLUMN SIZE	BASE PLATE SIZE AND ANCHOR BOLTS
SC1	W310x39	30mm THICK BASE PLATE W/ 4 3/4" A307 BOLTS

Key Plan:

Consultant:



Suite 300, 125 Commerce Valley Drive  
Markham, ON L3T 7W4  
Tel: (416)499-3110 Fax: (416)499-9658



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Client:



Project:

NEW POWERHOUSE

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

FOUNDATION PLAN

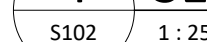
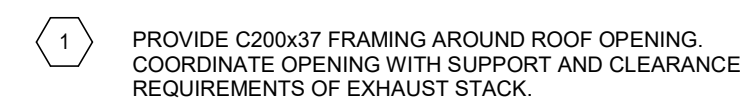
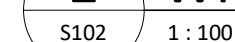
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Designed By: OPG Checked By: ZB

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Project No: 1802218 Drawing No: S101

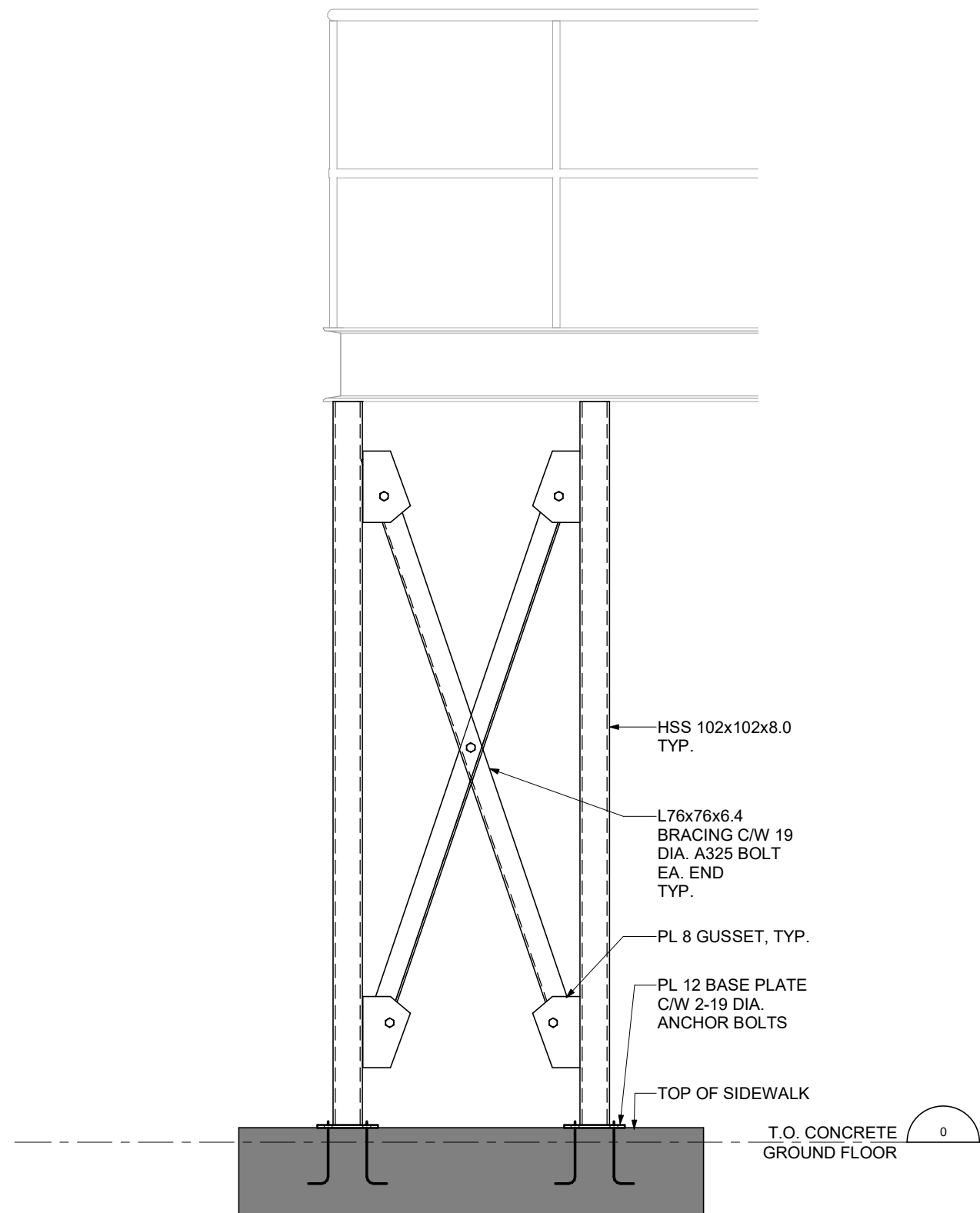


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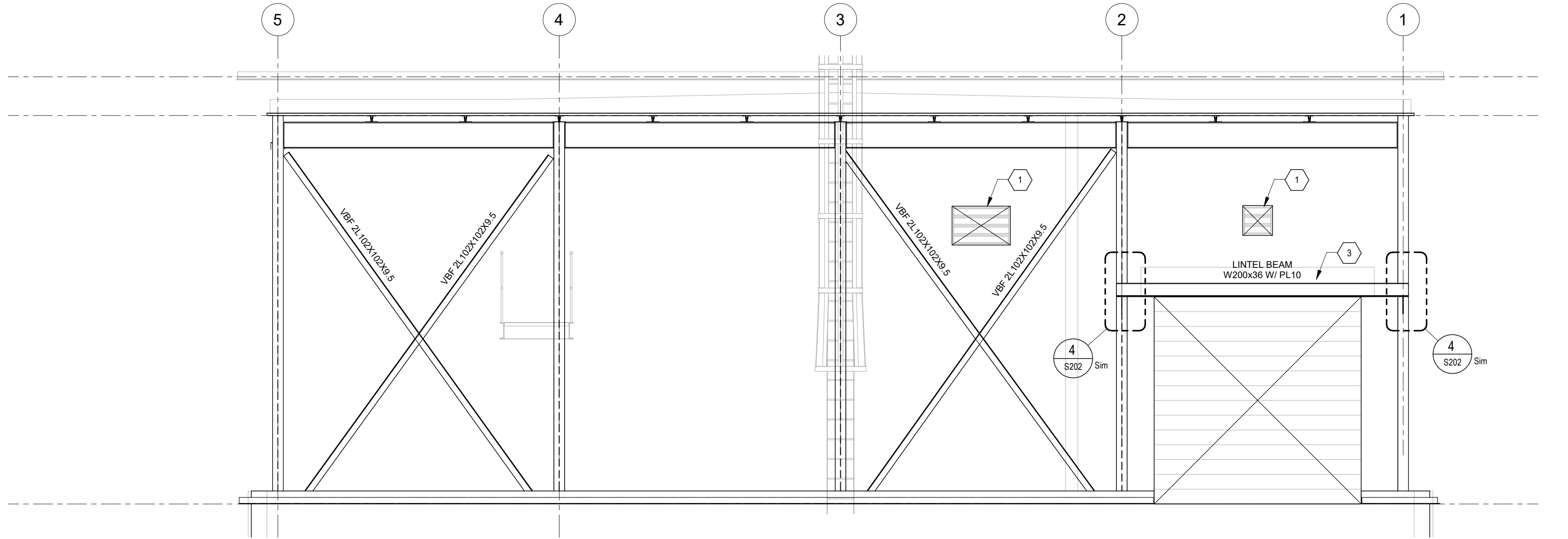
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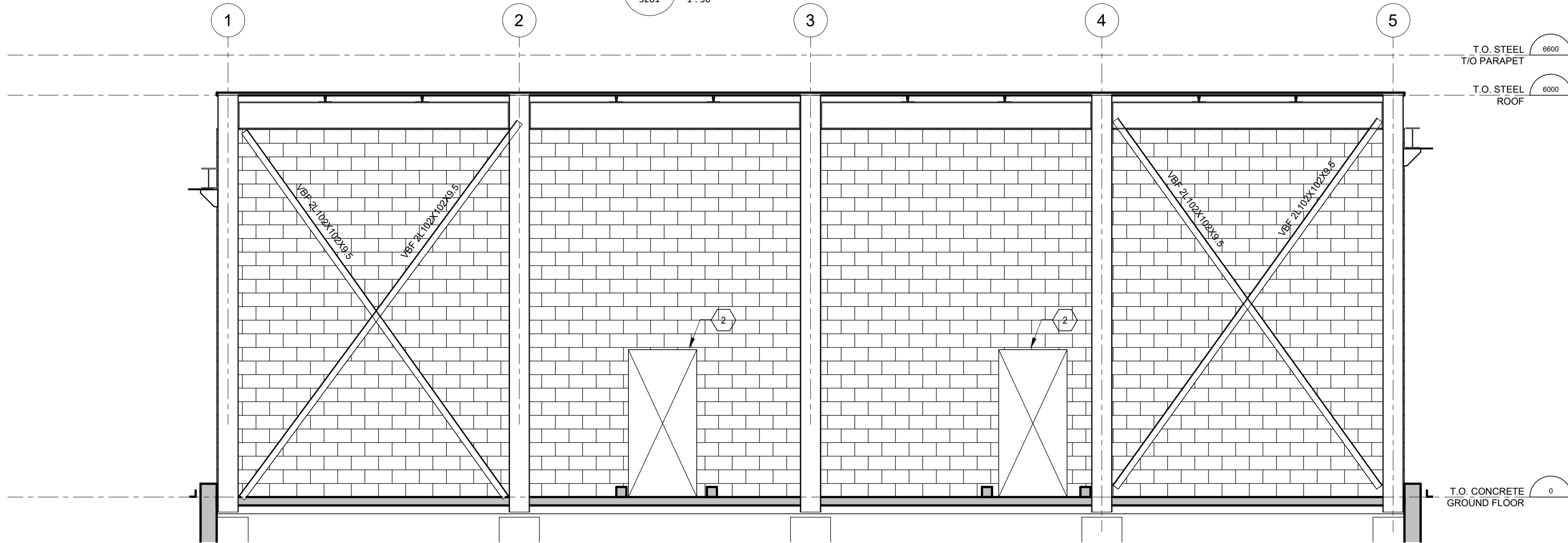
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1802218 5/11/2018



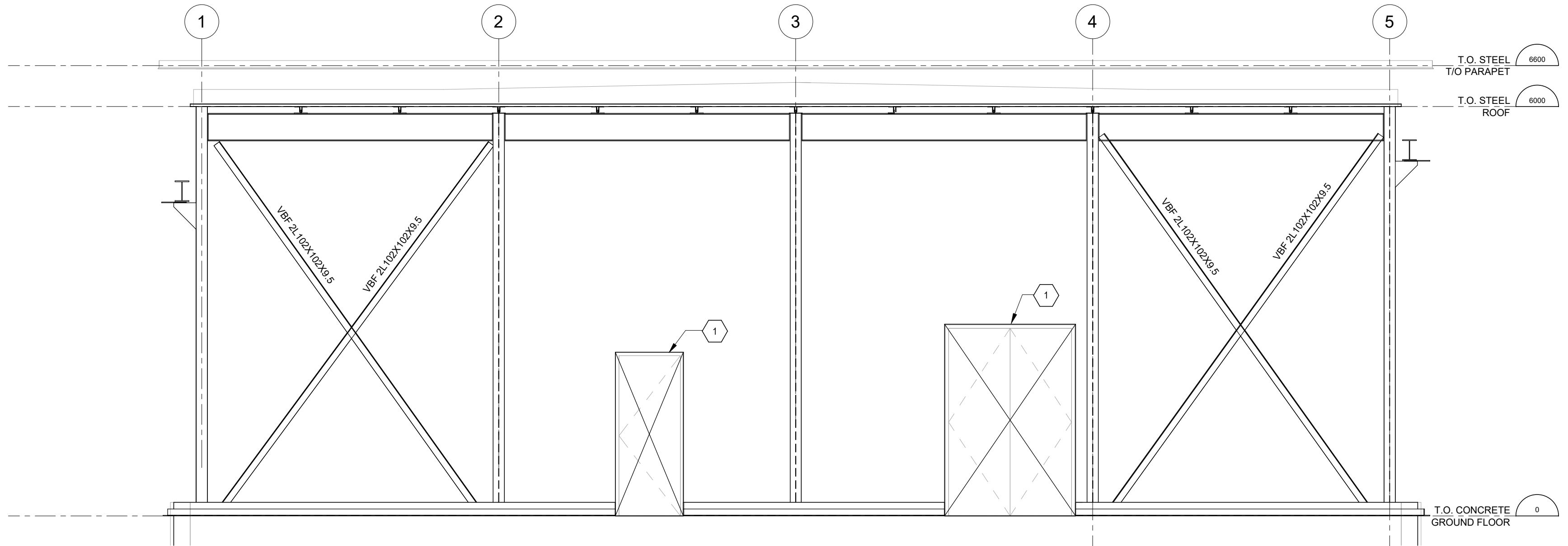
**4 PLATFORM BRACING ELEVATION**  
S201 1:20



**3 PART ELEVATION ON LINE E**  
S201 1:50



**2 PART ELEVATION ON LINE C**  
S201 1:50



**1 ELEVATION ON LINE A**  
S201 1:50

- 1 PROVIDE MASONRY LINTEL AND LOOSE STEEL LINTEL. REFER TO DETAILS M27 AND M31.  
3 PROVIDE W200x36 W/ PL10, REFER TO DETAIL 3, DWG. S202.

- 2 PROVIDE MASONRY LINTEL. REFER TO DETAIL M27.

- 1 PROVIDE MASONRY LINTEL AND LOOSE STEEL LINTEL. REFER TO DETAILS M27 AND M31.

Key Plan:

Consultant:

**MORRISON HERSHFIELD**  
Suite 300, 125 Commerce Valley Drive  
Markham, ON L3T 7W4  
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Client:

**Ontario Shores**  
Centre for Mental Health Sciences

Project:

**NEW POWERHOUSE**

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

**STRUCTURAL FRAMING  
ELEVATIONS**

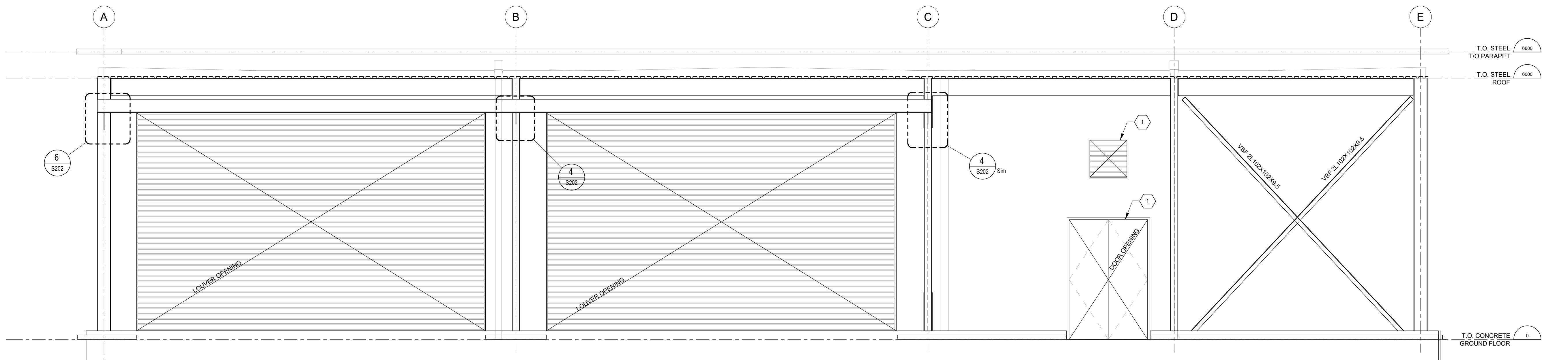
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Designed By: O.P.G. Checked By: Z.B.

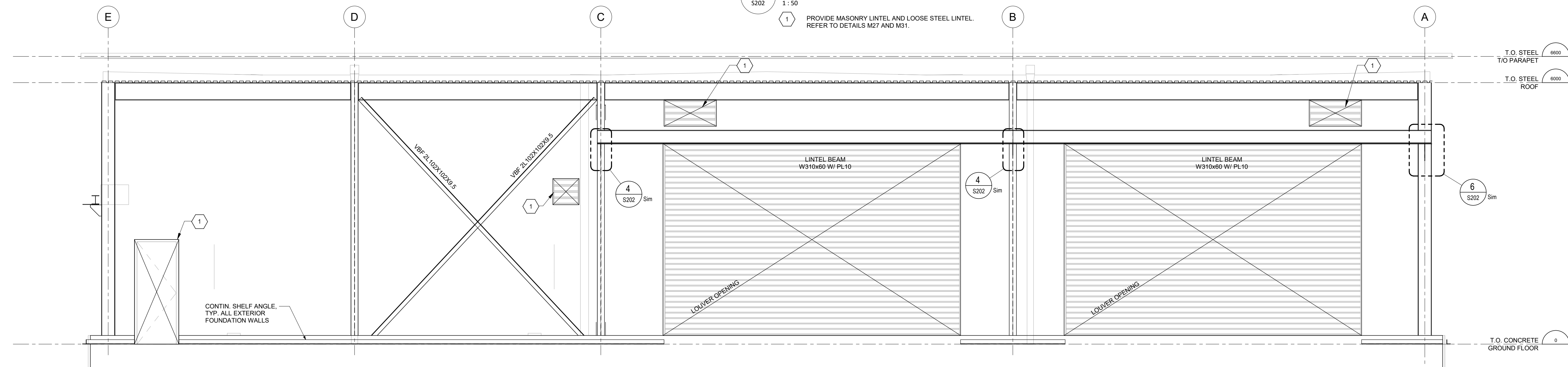
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Project No: 1802218 Drawing No: S201

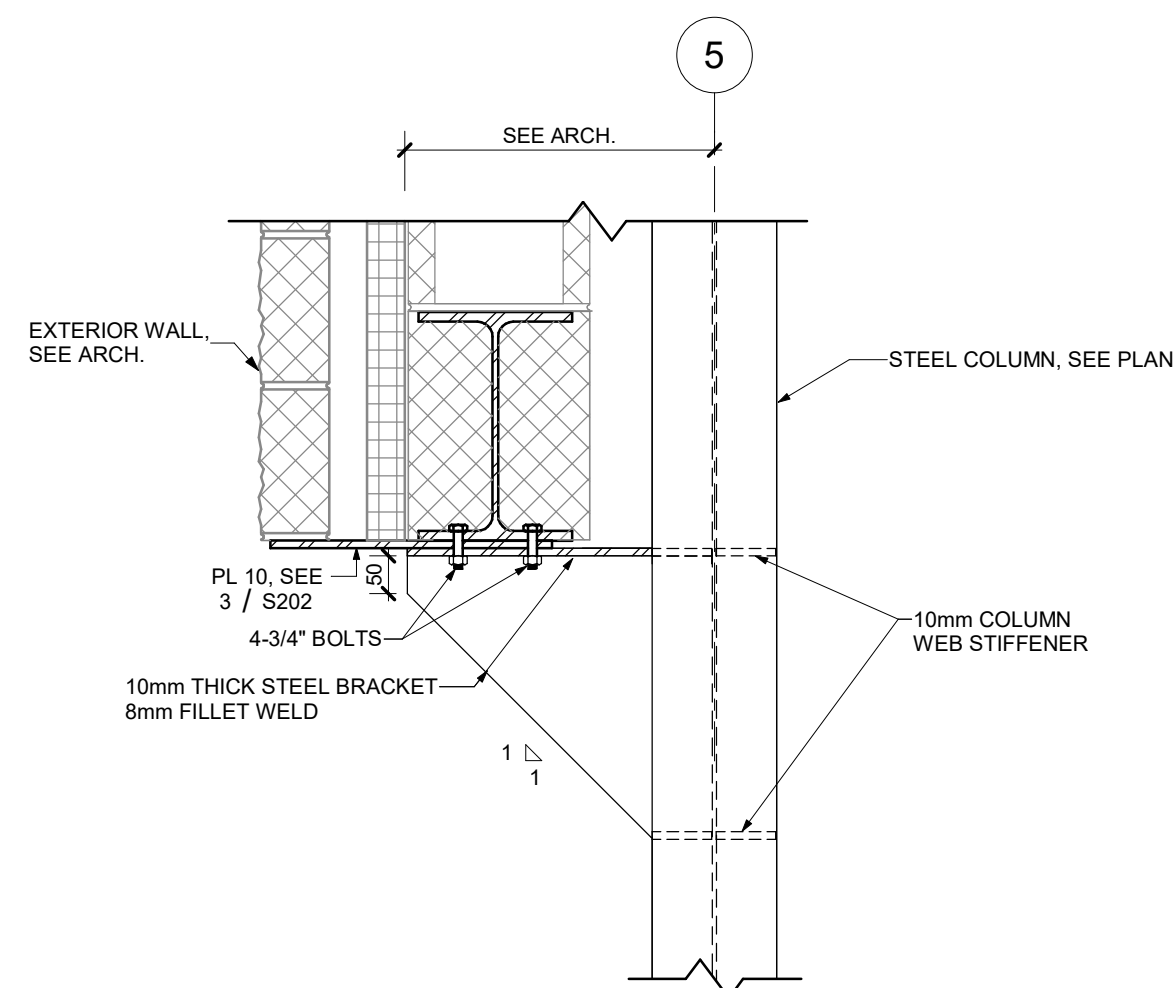




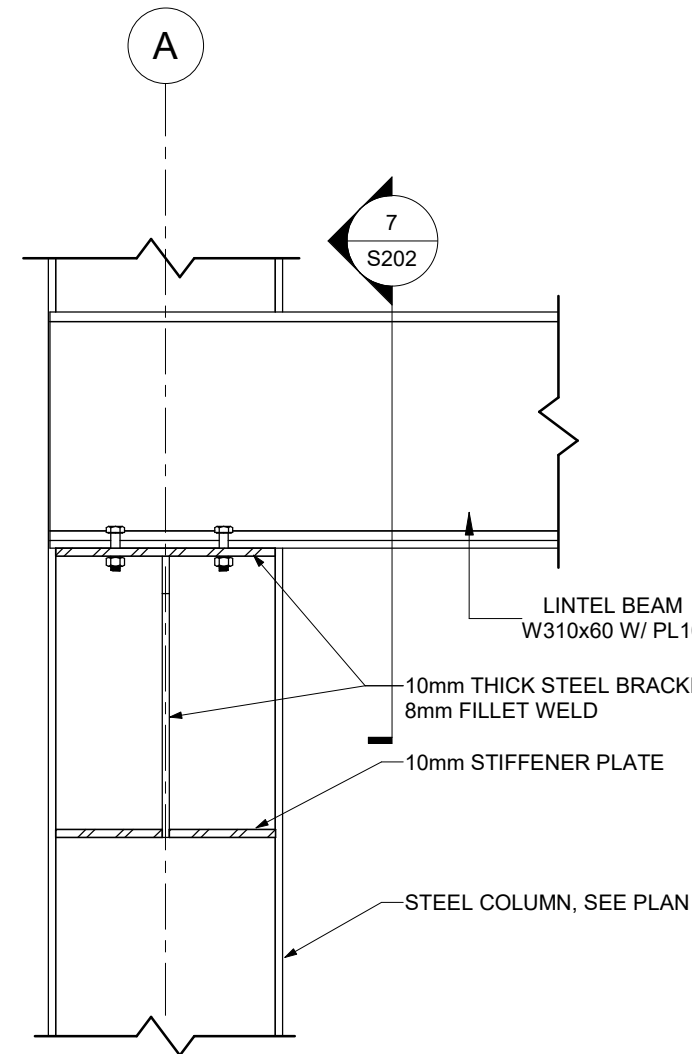
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S202 1:50  
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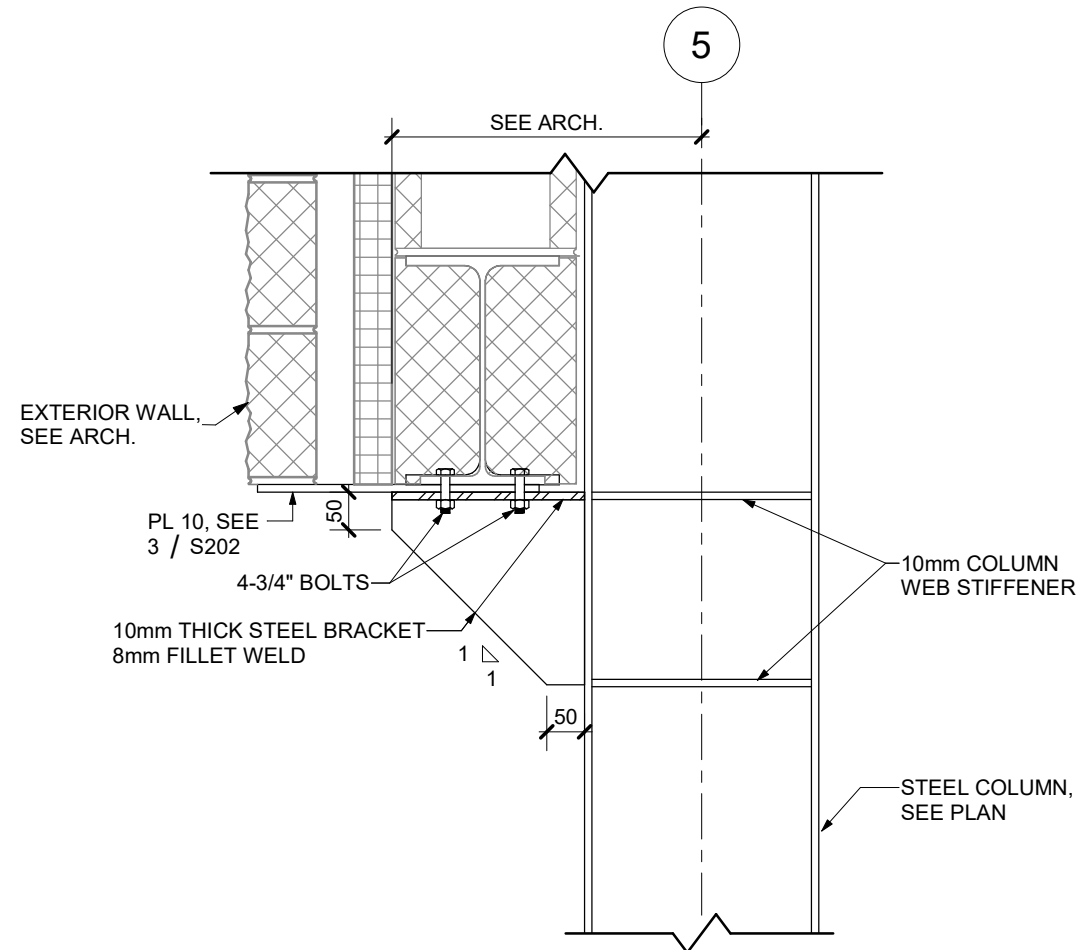
**2 PART ELEVATION ON LINE 1**  
S202 1:50  
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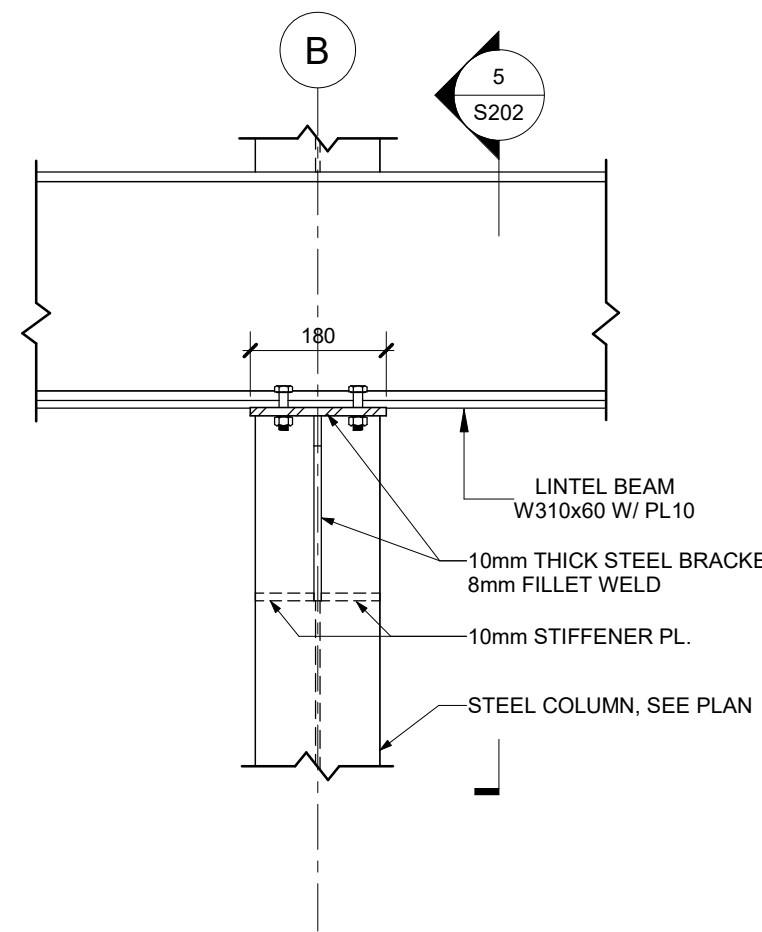
**7 SECTION**  
S202 1:10



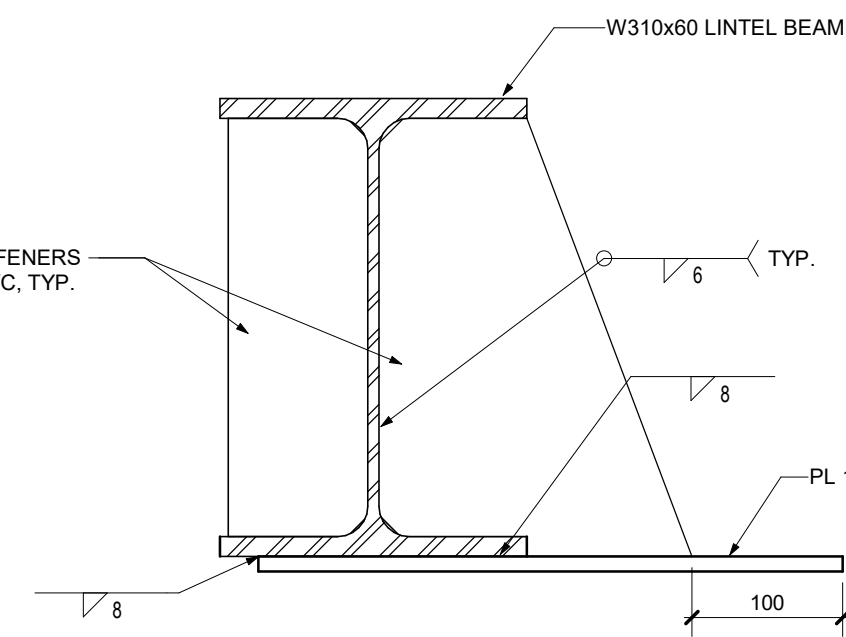
**6 ELEVATION - LINTEL SUPPORT AT END COLUMN**  
S202 1:10



**5 SECTION**  
S202 1:10



**4 ELEVATION - LINTEL SUPPORT**  
S202 1:10



**3 LINTEL BEAM**  
S202 1:5

Key Plan:

Consultant:

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Client:

**Ontario Shores**  
Centre for Mental Health Sciences

Project:

**NEW POWERHOUSE**

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

**STRUCTURAL FRAMING ELEVATIONS**

Drawn By: G.N. Date: 05/06/19

Designed By: O.P.G. Checked By: Z.B.

Scale: As indicated File Path: B:\1802218 - Ontario Shores Powerhouse\1802218 Ontario Shores Powerhouse\1802218 ST-1802218.dwg

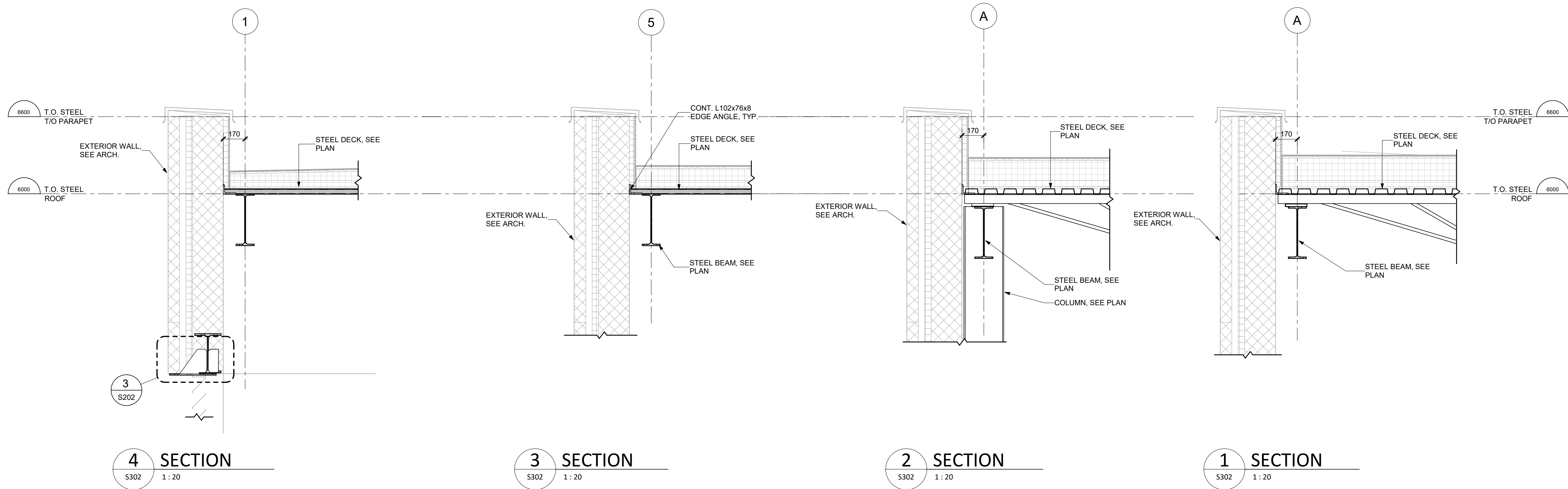
Project No: 1802218 Drawing No: S202







BM 300 (M4) - 1802218 - Ontario Shores Powerhouse 1802218 - Ontario Shores Powerhouse 1802218 - S302.dwg  
10/22/2019 3:55:53 PM



Key Plan:

Consultant:

**MORRISON HERSHFIELD**  
Suite 300, 125 Commerce Valley Drive  
Markham, ON L3T 7W4  
Tel: (416)499-3110 Fax: (416)499-9658

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Project:

**NEW POWERHOUSE**

700 GORDON ST. W, WHITBY, ON L1N 5S9

Sheet Title:

**ROOF SECTIONS**

Drawn By: G.N. Date: 10/02/19

Designed By: O.P.G. Checked By: Z.B.

Scale: 1 : 20 File Path: BM 300 (M4) - 1802218 - Ontario Shores Powerhouse 1802218 Ontario Shores Powerhouse 1802218 S302.dwg

Project No: 1802218 Drawing No: S302