GENERAL

- THE INFORMATION ON THESE DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT OR WORKS. THE INFORMATION ON THESE DRAWINGS APPLIES SOLELY TO THIS PROJECT THE STRUCTURE IS TO BE BUILT IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2012 ONTARIO BUILDING CODE (OBC), AND
- ANY APPLICABLE REQUIREMENTS OR BY LAWS OF THE AUTHORITY HAVING JURISDICTION. WHERE DOCUMENTS ARE REFERENCED IN THE GENERAL AND DESIGN NOTES, THEY SHALL BE THE LATEST EDITIONS OR
- REVISION. UNLESS NOTED OTHERWISE READ STRUCTURAL DRAWINGS AND SPECIFICATIONS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS. BEFORE PROCEEDING WITH WORK, CHECK THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS AGAINST ALL OTHER
- PRAWINGS AND REPORT DISCREPANCIES TO THE CONSULTANT. DO NOT SCALE THE DRAWINGS. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SLEEVES, NAILERS, INSERTS, ETC., TO BE ENCASED IN
- SEE ARCHITECTURAL DRAWINGS FOR FLOOR AND ROOF ELEVATIONS, RECESSES, DRAINAGE SLOPES, ETC. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND LANDSCAPE DRAWINGS FOR LOCATIONS, CONFIGURATIONS,
- EXTENT, AND SIZES OF ALL CURBS, UPSTANDS, DOWNTURNS, AND FOR OPENINGS THROUGH FLOORS AND WALLS FOR DUCTS, CONDUIT AND PIPING, PROVIDE FOR SAME. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PRECISE LOCATION OF REQUIRED FIRE RESISTANCE RATINGS. ALL STRUCTURAL FLEMENTS ARE TO CONFORM TO THE REQUIREMENTS OF THE FIRE RATING ASSEMBLY
- DO NOT CUT OR DRILL ANY OPENINGS IN STRUCTURAL MEMBERS WITHOUT PERMISSION OF VEE. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR EXACT LOCATION OF PITS, DEPRESSIONS, TRENCHES AND ROOF MOUNTED OR SUSPENDED UNITS.

DO NOT IMPOSE CONSTRUCTION LOADS ON THE STRUCTURE IN EXCESS OF THE DESIGN LOAD.

PROTECT EXISTING BUILDINGS, TREES, FENCING, UTILITY POLES, CABLES, ACTIVE UNDERGROUND SERVICES AND PAVING ON THE SITE OR ANY ADJOINING PROPERTIES FROM DAMAGE. ANY DAMAGE RESULTED FROM THIS CONSTRUCTION WORK SHALL BE MADE AT NO COST TO THE OWNER

DESIGN CODES & STANDARDS

THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE 2012 (OBC). ALL REINFORCED CONCRETE ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA A23.3-04. DESIGN OF CONCRETE

ALL STRUCTURAL STEEL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA-S16-09, LIMIT STATES DESIGN OF STEEL ALL COLD FORMED STEEL STRUCTURAL MEMBERS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA-S136-07 COLD FORMED STEEL STRUCTURAL MEMBERS.

LOADS

- THE STRUCTURE HAS BEEN DESIGNED TO RESIST THE SUPERIMPOSED DEAD LOADS NOTED ON PLAN. THESE SUPERIMPOSED DEAD LOADS HAVE BEEN DETERMINED BASED ON THE MATERIALS SHOWN ON THE ARCHITECTURAL DRAWINGS AND INFORMATION PROVIDED BY THE OTHER DESIGN DISCIPLINES. IF THE CONTRACTOR PROPOSES TO SUBSTITUTE ANY SPECIFIED MATERIALS WITH MATERIALS OF HEAVIER CONSTRUCTION, THEY SHALL INFORM THE CONSULTANT WHO WILL ASSESS THE IMPACT OF THE PROPOSED SUBSTITUTION PRIOR TO PROPOSED SUBSTITUTION BEING ACCEPTED.
- CONTRACTORS CONSTRUCTION LOADS MUST NOT EXCEED THE DESIGN LOADS AS SHOWN ON THESE DRAWINGS. DESIGN LOADS MAY ONLY BE APPLIED AFTER CONCRETE REACHES ITS DESIGN STRENGTH. SUPERIMPOSED DEAD LOADS (S.D.L.) ARE NON-STRUCTURE DEAD LOADS DUE TO ARCHITECTURAL TOPPINGS, FINISHES,
- PARTITIONS, ROOFING MATERIALS, PAVERS, SOIL, ETC. STRUCTURAL DEAD LOADS (D.L.) ARE DUE TO THE WEIGHT OF THE STRUCTURE ITSELF. THEY VARY WITH THE STRUCTURAL YSTEM AND INCLUDE CONCRETE TOPPINGS ON STEEL DECK

DEFINITIONS

- **VEE** VAN EE ENGINEERING OR ITS REPRESENTATIVE
- SPECIALTY STRUCTURAL ENGINEER A STRUCTURAL ENGINEER REGISTERED AND LICENSED TO PRACTICE BY THE ESSIONAL ENGINEERING ASSOCIATION HAVING JURISDICTION IN THE AREA WHERE THE STRUCTURE IS TO BE BUILT AND WHO IS RESPONSIBLE FOR THE DESIGN AND FIELD REVIEW OF:
- STRUCTURAL ELEMENTS DESIGNED BY THE CONTRACTOR OR SUBCONTRACTORS, SUCH AS OPEN WEB STEEL JOISTS, PRECAST DOUBLE TEES, PRECAST PLANKS, STRUCTURAL STEEL CONNECTIONS, LIGHT WOOD FRAME ROOF TRUSSES, ETC. SECONDARY STRUCTURAL ELEMENTS AND NON-STRUCTURAL ELEMENTS. **CONTINUOUS** FULL TENSION SPLICE AND TENSION DEVELOPMENT LENGTH OR WELDED SPLICE TO DEVELOP THE MEMBERS FULL
- GENERAL CONTRACTOR FOR THE PURPOSES OF THESE DRAWINGS, THE USE OF THE TERM "CONTRACTOR" OR "GENERAL ONTRACTOR" SHALL REFER TO THE PRIME PERSON OR COMPANY RESPONSIBLE FOR CONSTRUCTION OF THE PROJECT AND THE COORDINATION OF TRADES AND SUBCONTRACTORS. THIS MAY BE THE GENERAL CONTRACTOR, OR A CONSTRUCTION

ESTIMATING, CONTRACTUAL ARRANGEMENTS ETC.

- VISIT THE SITE AND EXAMINE IT FOR ALL CHARACTERISTIC FEATURES AFFECTING NEW CONSTRUCTION.
- COMPARE EXISTING GRADE ELEVATIONS WITH THOSE SHOWN ON THE DRAWINGS. OBTAIN ALL DETAILS AND DIMENSIONS OF EXISTING WORK IN FIELD AND INCORPORATE SAME INTO NEW CONSTRUCTION. CHECK ALL DIMENSIONS, LEVELS AND DETAILS SHOWN ON STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL, MECHANICAL,
- LECTRICAL, LANDSCAPING AND OTHER RELEVANT DRAWINGS. REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE SUBMITTING YOUR PRICE.
- NO EXTRA CLAIMS WILL BE ALLOWED FOR DIFFICULTIES ENCOUNTERED OR EXPENSES INCURRED RESULTING FROM ONDITIONS CONSIDERED KNOWN AT THE TIME THE TENDERS ARE OPEN. READ THE SOIL REPORT BEFORE TENDER.

SUBSTITUTIONS

- NO SUBSTITUTIONS ALLOWED UNLESS THE FOLLOWING ARRANGEMENTS ARE MADE.
- WRITTEN PERMISSION OBTAINED FROM THE CONSULTANT AND THE OWNER CONTRACTOR ENSURES THAT SUBSTITUTIONS CAN BE BOTH PHYSICALLY AND DIMENSIONALLY INCORPORATED IN THE WORK WITH NO LOSS OF INTENDED FUNCTION OR CONSTRUCTION TIME AND AT NO ADDITIONAL COST TO THE OWNER.

THE CONTRACTOR REIMBURSES ALL CONSULTANTS FOR ADDITIONAL COSTS INVOLVED. SHOP DRAWINGS

- VEE WILL REVIEW SHOP DRAWINGS PERTAINING TO WORK SHOWN ON VEE'S DRAWINGS. THE EXTENT OF THIS REVIEW IS AT THE SOLE DISCRETION OF VEE'S ENGINEER AND IS FOR THE SOLE PURPOSE OF ASCERTAINING GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN CONCEPT. THE REVIEW IS NOT AN APPROVAL OF THE DESIGN, DETAILS, AND DIMENSIONS INHERENT
- SUBMITTING THEM. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OR SUBCONTRACTOR OF HIS OR HER RESPONSIBILITY FOR ERRORS AND OMISSIONS IN THE SHOP DRAWINGS OR FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL WORK AND ANY WORK AFFECTING THE STRUCTURE TO ARCHITECT. OBTAIN CONSULTANT APPROVAL BEFORE PROCEEDING WITH ABRICATION.

IN THE SHOP DRAWINGS. RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR OR SUBCONTRACTOR

- EACH OF THE FOLLOWING SHOP DRAWINGS MUST BEAR THE SIGNATURE AND STAMP OF QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF PROJECT LOCATION. DRAWINGS FOR ANY TEMPORARY WORK
 - DRAWINGS FOR ANY STRUCTURAL PARTS DESIGNED BY THE CONTRACTOR'S FORCES INCLUDING. STRUCURAL STEEL CONNECTIONS **OPEN WEB STEEL JOISTS**
 - STEEL DECK PRECAST CONCRETE PANELS LIGHT GUAGE METAL STUDS
 - **EXTERIOR SIDING** STRUTURAL GLAZING
 - RAILING GUARDS AND HANDRAILS

TEMPORARY WORK, SUPPORTS AND STRUCTURES

- PROVIDE ALL ADEQUATE SHORING FOR THE SAFE COMPLETION OF THE WORK. ASSUME RESPONSIBILITY TO DESIGN AS WELL AS TO ERECT, MAINTAIN AND EVENTUALLY REMOVE ALL THE TEMPORARY WORKS NECESSARY FOR CARRYING OUT OF THIS
- MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION STRESSES AND FOR SUFFICIENT TEMPORARY BRACING TO KEEP THE STRUCTURE PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF WORK UNTIL COMPLETION (INCLUDING MASONRY WALLS, FLOOR AND ROOF DECKS, ETC.). ANY BRACING MEMBERS SHOWN ON PLANS ARE THOSE REQUIRED FOR THE FINISHED
- STRUCTURE AND MAY NOT BE SUFFICIENT FOR ERECTION PURPOSES. TRUCKS, CRANES, HOISTS OR ANY HEAVY EQUIPMENT OR MATERIALS ARE NOT ALLOWED TO ENTER ANY STRUCTURAL FLOOR
- OR ROOF AREA UNLESS SPECIFICALLY DESIGNED AND DESIGNATED FOR THIS PURPOSE. WHERE SUCH TEMPORARY SUPPORTS, STRUCTURES, AND FACILITIES AND THEIR METHOD OF CONSTRUCTION ARE OF SUCH A NATURE THAT PROFESSIONAL ENGINEERING SKILL IS REQUIRED TO PRODUCE SAFE AND SATISFACTORY RESULTS THE CONTRACTOR SHALL ENGAGE AND PAY FOR REGISTERED PROFESSION AL ENGINEERING PERSONNEL SKILLED IN THE

APPROPRIATE DISCIPLINES TO PERFORM THOSE FUNCTIONS.

VAN EE ENGINEERING (VEE) SHALL BE NOTIFIED BEFORE ANY STRUCTURAL WORK SHOWN ON THESE DRAWINGS COMENCES. FIELD REVIEW BY VEE IS PROVIDED FOR THE WORK SHOWN ON THESE STRUCTURAL DRAWINGS. THIS REVIEW IS NOT A "FULL TIME" REVIEW BUT IS CONDUCTED WITH SUCH FREQUENCY AS DEEMS APPROPRIATE TO OBSERVE VARIOUS STAGES OF THE

WORK AND TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS.

FIELD REVIEW BY VEE IS NOT CARRIED OUT FOR THE CONTRACTOR'S BENEFIT, NOR DOES IT MAKE VEE GUARANTORS OF THE

- CONTRACTOR'S WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. VEE SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT
- HE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. PROVIDE ADEQUATE ADVANCE NOTICE OF EACH REQUIRED FIELD REVIEW.
- FIELD REVIEWS SHALL BE SCHEDULED TO BE CARRIED OUT DURING NORMAL BUSINESS HOURS UNLESS SPECIAL ARRANGEMENTS ARE MADE WITH VEE THE WORK TO BE REVIEWED SHALL BE GENERALLY COMPLETE.
- THE EXTENT OF THIS REVIEW IS AT THE SOLE DISCRETION OF VEE'S ENGINEER AND IS FOR THE SOLE PURPOSE OF ASCERTAINING GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN CONCEPT ON BEHALF OF THE OWNER.
- THIRD PARTY FIELD INSPECTION AND TESTING IS TO BE COMPLETED AND REPORTS SUBMITTED TO VEE FOR REVIEW FOR THE
- SOIL BEARING CAPACITY FOR ALL FOUNDATIONS; REINFORCING STEEL PLACEMENT; CONCRETE PLACEMENT INCLUDING CONCRETE CYLINDERS FOR ALL STRUCTURAL CONCRETE;
- BACKFILL AND COMPACTION REPORTS: STRUCTURAL STEEL INCLUDING PLUMBNESS, BOLTING, AND FIELD WELDING ROOF AND FLOOR DECK FASTENING

FUTURE PROVISIONS

FIELD REVIEW

THE STRUCTURE HAS NOT BEEN DESIGNED FOR ANY FUTURE EXPANSION.

MATERIALS

- CONCRETE: CONFORM TO THE REQUIREMENTS OF CSA-A23.1 & S413, AND THE REQUIREMENTS IDENTIFIED IN ON FOUNDATION REINFORCEMENT: CONFORM TO CSA G30 SERIES, fy = 400 MPa FOR ALL REINFORCEMENT EXCEPT THAT fy = 386 MPa FOR WELDED
- ANCHOR RODS: CONFORM TO F1554-36 THREADED ROD, UNLESS NOTED OTHERWISE STRUCTURAL BOLTS SHALL CONFORM TO ASTM A325M AND A490M, NUTS SHALL CONFORM TO ASTM A563M, WASHERS SHALL
- STEEL DECK: CONFORM TO ASTM A653M GRADE A OR B. NON-SHRINK GROUT: 35 MPa (5000 PSI) MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.
- FOUNDATION INSULATION: EXTRUDED POLYSTYRENE WITH A MINIMUM COMPRESSIVE STRENGTH OF 0.24 MPa UNLESS NOTED STRUCTURAL STEEL STRUCTURAL WIDE FLANGE SHAPES TO CONFORM TO CAN/CSA-G40.20/G40.21 GRADE 350W OR ASTM A992/A992M GRADE
- SIN BEAM WELDED WIDE FLANGE SHAPES TO CONFORM TO CAN/CSA-G40.20/G40.21 GRADE 350W.

ANGLES, PLATES AND CHANNELS TO CONFORM TO CAN/CSA-G40.20/G40.21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS TO CONFORM TO ASTM A500 GRADE C

NON-STRUCTURAL ELEMENTS

- "NON-STRUCTURAL" OR "SECONDARY STRUCTURAL" ELEMENTS ARE NOT PART OF THE STRUCTURAL DESIGN SHOWN ON THESE DRAWINGS. SUCH ELEMENTS ARE DESIGNED, DETAILED AND REVIEWED IN THE FIELD BY OTHERS. THEY APPEAR ON DRAWINGS OTHER THAN THESE DRAWINGS OF VAN EE ENGINEERING, WHERE STRUCTURAL ENGINEERING RESPONSIBILITY IS REQUIRED FOR THESE ELEMENTS, THIS SHALL BE PROVIDED BY SPECIALTY STRUCTURAL ENGINEERS, WHO SHALL ALSO PROVIDE ANY
- ETTERS REQUIRED BY BUILDING PERMIT AUTHORITIES. SHOP DRAWINGS FOR NON-STRUCTURAL ELEMENTS WHICH MAY AFFECT THE PRIMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO VAN EE ENGINEERING THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT OF THE ELEMENT ON THE
- EXAMPLES OF NON-STRUCTURAL ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO: ARCHITECTURAL COMPONENTS SUCH AS GUARDRAILS, HANDRAILS, FLAG POSTS, CANOPIES, CEILINGS, MILLWORK,
 - LANDSCAPE ELEMENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC. CLADDING, GLAZING, WINDOW MULLIONS, INTERIOR STUD WALLS AND EXTERIOR STUD WALLS. ARCHITECTURAL PRECAST, PRECAST CLADDING.
- MECHANICAL AND ELECTRICAL EQUIPMENT, COMPONENTS, AND THEIR ATTACHMENT DETAILS. WINDOW WASHING EQUIPMENT AND ITS ATTACHMENTS
- ESCALATORS, ELEVATORS, AND CONVEYING SYSTEMS.
- GLASS BLOCK AND ITS ATTACHMENTS. BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS.
- NON-LOAD BEARING MASONRY.
- NON-STRUCTURAL CONCRETE TOPPINGS.

CONCRETE AND REINFORCEMENT

ALL DOWELS SHALL HAVE MINIMUM EMBEDMENT EQUIVALENT TO THE STRAIGHT TENSION EMBEDMENT LENGTH OR 600 mm (2'-0"), WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. PROVIDE DOWELS TO WALLS AND COLUMNS SIMILAR IN NUMBER, SIZE, AND SPACING TO THE VERTICAL STEEL IN THE WALL OR COLUMN ABOVE UNLESS NOTED OTHERWIS REINFORCEMENT IDENTIFIED AS 'CONTINUOUS' SHALL TERMINATE WITH STANDARD END HOOKS AND SHALL BE LAPPED WITH CLASS 'B' TENSION LAP SPLICES.

REINFORCEMENT LENGTHS NOTED IN TYPICAL DETAILS ARE MINIMUM LENGTHS UNLESS NOTED OTHERWISE.

- LAP SPLICES FOR WELDED WIRE FABRIC (WWF) SHALL BE: 152 X 152 WWF 500 mm (1'-8") ALL CONCRETE CAST AGAINST EARTH IS TO HAVE 75 mm (3") COVER, UNO.
- ALL CONCRETE EXPOSED TO EARTH IS TO HAVE 50 mm (2") COVER, UNO. SEE ALSO TABLE OF MINIMUM REINFORCEMENT COVER. COVER SHALL BE MEASURED FROM THE DEEPEST POINT OF TEXTURED CONCRETE SURFACE (OR REGLET/REVEAL) TO THE

NEAREST DEFORMATION OF THE REINFORCEMENT. REINFORCEMENT INCLUDES TIES / STIRRUPS AND MAIN REINFORCEMENT

- ALL FOUNDATION WORK IS TO COMPLY WITH THE GEOTECHNICAL INVESTIGATION REPORT. THIS INFORMATION IS AVAILABLE SOLELY AS A GUIDE. NO RESPONSIBILITY IS ACCEPTED BY THE OWNER OR THE CONSULTANT FOR ITS CORRECTNESS, NOR SHALL ITS ACCURACY AFFECT THE PROVISION OF THIS CONTRACT. FOUND ALL FOOTINGS ON SOIL CAPABLE OF SAFELY SUSTAINING THE BEARING PRESSURES AS NOTED ON PLAN. IF THESE CONDITIONS DO NOT PREVAIL AT THE FOUNDING ELEVATIONS SHOWN, ADVISE THE CONSULTANT BEFORE PROCEEDING WITH
- FOUNDING ELEVATION OF FOOTINGS ARE NOTED ON THE FOUNDATION PLAN. THESE ELEVATIONS HAVE BEEN DETERMINED BASED ON RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL REPORT. FOUNDING ELEVATIONS ARE SUBJECT TO CONFIRMATION BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION. FOUND FOOTINGS SUSCEPTIBLE TO FROST DAMAGE A MINIMUM OF 4'-0" BELOW FINISHED EXTERIOR GRADE UNLESS NOTED
- PROVIDE TEMPORARY FROST PROTECTION, DURING CONSTRUCTION AS REQURIED, FOR ALL FOUNDATIONS WHICH ARE NOT FOUNDED A MINIMUM OF 4'-0" BELOW GRADE. INSULATION IS SHOWN ON STRUCTURAL DRAWINGS WHERE REQUIRED FOR PROTECTION OF THE FOUNDATIONS FROM DAMAGE
- DUE TO FROST ACTION ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNDATION INSULATION NOT SHOWN ON THE STRUCTURAL DRAWINGS THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10 UNI ESS NOTED OTHERWIS
- WHERE THE SLAB ON GRADE IS USED TO TIE THE TOP OF A WALL RETAINING EARTH, THAT WALL SHALL BE ADEQUATELY BRACED UNTIL THE SLAB HAS BEEN CAST AND ATTAINED 100% OF ITS DESIGN STRENGTH. CARRY OUT BACKFILLING AGAINST FOUNDATION WALLS WHERE THERE IS GRADE ON BOTH SIDES IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 600 mm (2'-0") DIFFERENT FROM THE LEVEL ON THE

SOIL CONDITIONS, EXCAVATION, FOUNDATIONS AND RELATED

REFER TO TYPICAL DETAIL FOR MASONRY WALL BEARING DETAILS AT SLAB ON GRADE.

- REFER ALSO TO SOIL INVESTIGATION REPORT. EARTH BOTTOMS OF EXCAVATIONS TO BE DRY UNDISTURBED SOIL, LEVEL, FREE FROM LOOSE OR ORGANIC MATTER. PROTECT BOTTOMS OF EXCAVATIONS FROM SOFTENING. SHOULD SOFTENING OCCUR, REMOVE SOFTENED SOIL AND REPLACE WITH CONCRETE.
- BACKFILL SIMULTANEOUSLY EACH SIDE OF WALLS TO EQUALIZE SOIL PRESSURES. CONSTRUCT ALL FOOTINGS ON UNDISTURBED SOIL CAPABLE OF WITHSTANDING THE PRESSURES SHOWN ON FOUNDATION EXTEND EXTERIOR WORK BELOW FROST LINE.

BETWEEN ADJACENT FOOTINGS AND/OR EXCAVATIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10 STEP FOOTING 2'-0"

PROTECT FOUNDATIONS INCLUDING ANY SLAB ON GRADE FROM FROST ACTION DURING CONSTRUCTION. BEFORE PLACING CONCRETE FOR FOOTINGS, OBTAIN APPROVAL FROM SOIL CONSULTANT. NOTIFY CONSULTANT IF ANY MODIFICATION IS REQUIRED. LOCATE ALL FOOTINGS CENTRALLY UNDER COLUMNS AND WALLS, U/N. STEP FOOTINGS DOWN OR LOWER FOOTINGS WHERE NECESSARY TO SUIT EXISTING AND/OR ADJACENT FOOTINGS. MECHANICAL & ELECTRICAL INSTALLATIONS, AND POOR SOIL CONDITIONS. THE LINE OF SLOPE ALONG STEPPED FOOTINGS AND

(600mm) MAXIMUM AT A TIME. RETAINING WALLS

RETAINING WALLS ARE DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT. RETAINING WALLS ARE DESIGNED FOR A FREE DRAINING AND WELL DRAINED BACKFILL. SEE ARCHITECTURAL AND PLUMBING SPECIFICATIONS AND DRAWINGS FOR DRAINAGE REQUIREMENTS. DO NOT BACKFILL WALL UNTIL WALL UNTIL LATERAL SUPPORTS ARE COMPLETE, OR PROVIDE TEMPORARY SHORING AS

SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DAMPROOFING OR WATERPROOFING REQUIREMENTS.

BACKFILL MATERIALS AND METHODS TO BE REVIEWED BY SOILS CONSULTANT TO BE ENSURE COMPLIANCE TO THE RECOMMENDATIONS AS NOTED IN THE GEOTECHNICAL REPORT. DESIGN AND FIELD REVIEW OF BACKFILL IS BY SOILS CONSULTANT AND NOT BY VAN EE ENGINEERING.

STRUCTURAL STEEL

CAPACITY OF THE SMALLER MEMBER JOINED.

- PROVIDE MINIMUM LENGTH OF BEARING OF 200 mm (8") FOR ALL STEEL BEAMS BEARING ON MASONRY AND CONCRETE AND A MINIMUM OF 100 mm (4") ON STRUCTURAL STEEL, UNLESS NOTED OTHERWISE. CENTER BEARING PLATES UNDER BEAMS UNLESS NOTED OTHERWISE
- BEARING PLATE DIMENSION GIVEN FIRST INDICATES SIDE PARALLEL TO BEAM WEB. ALL WELDS EXPOSED TO VIEW SHALL BE GROUND SMOOTH. REFER ALSO TO SPECIFICATIONS. REFER TO ABBREVIATIONS USED FOR THE CONNECTION FORCES SHOWN ON THE DRAWINGS. FORCES INDICATED ARE FACTORED UNLESS NOTED OTHERWISE. WHERE MOMENT CONNECTIONS ARE CALLED FOR BUT VALUES ARE NOT INDICATED, DESIGN CONNECTIONS FOR FULL MOMENT
- SPLICE. MEMBERS SHALL NOT BE SPLICED AT POINTS OF MAXIMUM STRESS. NO SPLICES SHALL BE MADE UNLESS SHOWN ON THE DRAWINGS OR REVIEWED AND APPROVED BY THE CONSULTAN PROVIDE WELDED STIFFENER PLATES ON BOTH SIDES OF THE WEB OF BEAMS AT POINTS OF CONCENTRATED LOAD INCLUDING BEAMS SUPPORTING COLUMNS OR RUNNING OVER TOP OF COLUMNS, UNLESS SHOWN BY DESIGN, THAT STIFFENERS ARE NOT
- SHAPE AND SIZE GUSSET PLATES TO CLEAR ARCHITECTURAL FINISHES, MECHANICAL AND ELECTRICAL SERVICES, ELEVATOR SHAFTS AND THE LIKE. LENGTH FOR ANCHOR RODS, STRAP ANCHORS AND SIMILAR DEVICES IS GIVEN FOR THE STRAIGHT LENGTH WITHOUT HOOK. PROVIDE A 100x100x20 PLATE WASHER FOR ALL ANCHOR RODS UNLESS NOTED OTHERWISE. PROVIDE 50mm HOOK FOR STRAP ANCHORS TYPICAL UNLESS NOTED OTHERWISE

SPLICES SHALL BE DESIGNED TO DEVELOP THE FULL CROSS SECTIONAL CAPACITY OF THE MEMBER AT THE POINT OF THE

- PROVIDE CAMBER TO BEAMS, GIRDERS AND TRUSSES AS SHOWN ON THE PLANS. CAMBERS SHOWN ARE FOR ERECTED IN-PLACE CONDITION OF MEMBERS BEFORE INSTALLATION OF STEEL DECK. PROVIDE ADEQUATE SUPPORT AND ENSURE ADEQUATE BEARING IS PROVIDED FOR STEEL DECK AT CONNECTIONS, COLUMNS
- OR OTHER IRREGULARITIES, OR AREAS WHERE DETAILING OF STRUCTURAL STEEL RESULTS IN LOSS OF SUPPORT FOR THE ALL CONNECTIONS ARE ASSUMED TO BE BEARING TYPE CONNECTIONS, UNLESS NOTED OTHERWISE. THE BOLTS SHALL BE BROUGHT TO A SNUG-TIGHT CONDITION AS DEFINED IN CSA-S16.

1. THE ROOF STRUCTURE DESIGN IS BASED ON THE FOLLOWING STEEL DECK PROFILES - 38 mm (1 ½") DECK RD-38 BY AGWAY

DIFFERENT TYPES OF STEEL DECK, WITH SIMILAR PROPERTIES TO THOSE LISTED ABOVE, MAY BE ACCEPTABLE SUBJECT TO REVIEW BY THE CONSULTANT. THE BUILDING DESIGN IS BASED ON THE ASSUMPTION THAT THE STEEL ROOF DECK BEHAVES AS A "SEMI-FLEXIBLE" DIAPHRAGM. DECK SUPPLIER TO DESIGN DECK AND CONNECTIONS TO ROOF STRUCTURE SUCH THAT THE DIAPHRAGM SATISFIES THE SHEAR DIAPHRAGM DIAGRAM SHOWN ON THE ROOF PLAN.

STANDARD FOR STEEL ROOF DECK", PUBLISHED BY CANADIAN SHEET STEEL BUILDING INSTITUTE, LATEST EDITION.

SUPPORTING THE DEAD PLUS LIVE LOADS AS SHOWN ON THE STRUCTURAL DRAWINGS AND INCLUDING CONCENTRATED LOADS IN ACCORDANCE WITH ONTARIO BUILDING CODE. ANCHORAGE TO SUPPORTING STEEL SHALL RESIST A MINIMUM GROSS UPLIFT OF 20 PSF (0.96 KPa). SEE ALSO WIND UPLIFT PROVIDE DECK IN SPAN LENGTHS TO SPAN CONTINUOUSLY OVER THREE SUPPORTS WHEREVER POSSIBLE. FTER ERECTION, CLEAN AND PAINT WELDED AREAS, RUST SPOTS AND SCRATCHED OR OTHERWISE DAMAGED AREAS OF ZINC

COATED AREAS AND ONE COAT OF PRIME PAINT TO STRUCTURAL MEMBERS.

MATERIAL.

OPENINGS OVER 18" (450mm) TO BE FRAMED WITH STRUCTURAL STEEL FRAMING.

CONFORM WITH C.S.A. STANDARDS S136, - "COLD FORMED STEEL STRUCTURAL MEMBERS", AND CSSBI ARTICLES CONTAINED IN

DESIGN ROOF AND FLOOR DECK IN CONFORMANCE WITH CSSBI ARTICLE, TO ENSURE THAT THE ROOF DECK ARE CAPABLE OF

COATING ON DECK AND SHOP-APPLIED PRIME PAINT ON STRUCTURAL MEMBERS USING TWO COATS OF ZINC RICH PAINT TO ZINC

- SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION, PER SPECIFICATIONS. HOLES IN STEEL DECK DO NOT REINFORCE OPENINGS OF LESS THAN 6" (150mm). REINFORCE OPENINGS FROM 6" (150mm) TO 12" (300mm): ACROSS FLUTES WITH COLD FORMED CHANNEL MEMBERS. REINFORCE OPENINGS FROM 12" (300mm) TO 18" (450mm) ACROSS FLUTES WITH 2"x2"x12 Ga (55x55x3mm) COLD FORMED STEEL ANGLES, EXTENDING 1'-6" (450mm) EACH SIDE. SCREW ANGLE TO DECK AT EVERY FLUTE.
- THE MINIMUM METALLIC COATING DESIGNATIONS FOR STEEL ROOF DECK NOT EXPOSED IN SERVICE TO WEATHER ARE ZF75 (ZINC-IRON ALLOY COAT) FOR CSSBI 101M MATERIAL, AZ150 (ALUMINUM-ZINC ALLOY COAT) FOR CSSBI 201M MATERIAL, AND ZINCGUARD 102-C (MINIMUM 31.1 g/m2 ZINC COATING, TOTAL BOTH SIDES, CHROMATE TREATED) FOR CSSBI 301M MATERIAL THE MINIMUM METALLIC COATING DESIGNATIONS FOR STEEL ROOF DECK EXPOSED IN SERVICE TO THE WEATHER ARE Z275 (ZINC COATING) FOR CSSBI 101M MATERIAL AND AZ150 (ALUMINUM-ZINC ALLOY COATING) FOR CSSBI 201M

OPEN WEB STEEL JOISTS

- FOR ROOF JOISTS: O.W.S.J. SHALL BE DESIGNED FOR LOADING AS SHOWN ON DRAWINGS WITH MAX. LIVE / SNOW LOAD DEFLECTION NOT TO EXCEED 1/320 OF SPAN FOR OFFICE AREAS OR 1/240 OF SPAN FOR WAREHOUSE. JOISTS ARE TO BE CAMBERED FOR A MINIMUM OF 0.002 OF THE SPAN AND NOT LESS THAN 75% OF THE DEAD LOAD DEFLECTION, OR DESIGNED FOR A MAXIMUM TOTAL LOAD DEFLECTION OF LESS THAN 1/240 OF THE SPAN. FOP DRAWINGS OF O.W.S.J. SHALL BEAR THE SEAL OF A P.ENG. REGISTERED IN THE PROVINCE OF PROJECT LOCATION. SHOW THE LOCATION OF JOISTS, BRIDGING AND ANCHORAGE DETAILS. ANCHOR JOISTS TO SUPPORTS IN ACCORDANCE WITH C.S.A. STANDARDS CAN/CSA - S16.1, LATEST EDITION ALL JOISTS TO BE DESIGNED A MINIMUM GROSS UPLIFT OF 20 PSF. (0.96 KPa) WELD EACH JOIST AT BEARINGS ON STRUCTURAL STEEL MEMBERS AND BEARING PLATES, OR AS INDICATED ON DRAWINGS. FOR JOISTS OF SPAN OF 60'-0" AND OVER, BEARING ON STRUCTURAL STEEL, PROVIDE BOLTED ANCHORAGE, TWO 16mm DIAMETER BOLT AT EACH END BEARING. PROVIDE 4" (100mm) BEARING FOR JOISTS SUPPORTED ON MASONRY, AND 2 1/2" (63mm) BEARING FOR JOISTS SUPPORTED ON
- STEEL BEAMS. LIMIT THE BEARING PRESSURE ON MASONRY TO 175 P.S.I. (1.2 MPa) MAXIMUM. CARRY THE JOISTS TO THE CENTRELINE OF BEAMS WITH A TOLERANCE OF (+0" OR -1") (+0mm OR -25mm) FOR JOISTS BEARING FROM BOTH SIDES, AND (+1" OR -0") (+0mm OR +25mm) FOR JOISTS BEARING FROM ONE SIDE ONLY. INSTALL SHIMS, PACKING OR SPECIAL SHOES TO SUPPORT JOISTS AT PROPER ELEVATION. DESIGN STEEL JOIST SHOE SUCH THAT JOIST REACTION IS TRANSFERRED AT CENTRELINE OF BEAM WEB, MAX. ECCENTRICITY IS
- PROVIDE HORIZONTAL TOP AND BOTTOM CHORD BRIDGING FOR JOIST SPANS UP TO 40 FEET, (12 METRES), AND PROVIDE "X" TYPE BRIDGING FOR SPANS OVER 40 FEET, (12 METRES), UNLESS NOTED OTHERWISE. PROVIDE BRIDGING AT PANEL POINTS. SPACING AND DESIGN OF BRIDGING TO BE IN ACCORDANCE WITH C.S.A. STANDARDS CAN/CSA -S16.1-94 AND TO THE REQUIREMENTS OF THE SPECIFIED FIRE RATED ASSEMBLY WHERE APPLICABLE. MODIFY BRIDGING IF IT INTERFERES WITH MECHANICAL SERVICES. ANCHOR END BRIDGING TO MASONRY WALLS. LOCATE AND DESIGN
- PROVIDE DIAGONAL AND HORIZONTAL BRIDGING IN COMBINATION NEAR THE ENDS OF BRIDGING LINES. TIE JOISTS: WHERE TIE JOISTS ARE USED, JOIST MANUFACTURER MUST TAKE INTO CONSIDERATION THE EFFECT ON THE TIES DESIGN SPECIAL JOIST COMPONENTS TO ALLOW THE PASSAGE OF MECHANICAL AND ELECTRICAL SERVICES THROUGH WEBS
- OF JOISTS, WHERE SO INDICATED ON THE STRUCTURAL DRAWINGS PROVIDE DOUBLE JOIST UNDER PARTITIONS PARALLEL TO JOIST. EXTEND BOTTOM CHORDS OF JOISTS TO SUPPORT THE CEILING WHERE REQUIRED.
- ENSURE THAT THE LOCATIONS OF JOISTS DOES NOT INTERFERE WITH PLUMBING, DUCTS, AND LIGHTING FIXTURES.

BRIDGING TO ADEQUATELY BRACE JOIST TO PREVENT BUCKLING.

SIN BEAM NOTES

NOTED OTHERWISE.

- THE SIN BEAM IS A MANUFACTURED WELDED WIDE FLANGE SECTION MANUFACTURED BY STEELCON FABRICATION
- SIN BEAM MEMBERS AND THEIR CONNECTIONS SHALL BE DESIGNED ACCORDING TO CSA STANDARD S16 AND S136 ALL WELDING OF SIN BEAM MEMBERS AND THEIR CONNECTIONS SHALL CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A WELDED CERTIFIED TO CSA W47.1 SIN BEAM CONNECTIONS SHALL BE DESIGNED FOR THE FULL SHEAR CAPACITY OF THE SIN BEAM MEMBER UNLESS
- FOR MORE INFORMATION ON THE SIN BEAM SEE THE SIN BEAM TECHNICAL GUIDE PREPARED BY STEELCON PRODUCTS SIN BEAM MATERIAL IS TO BE STRUCTURAL STEEL CONFORMING TO CSA G40.20/G40.21 -
- WEB AND FLANGE TO BE GRADE 350W CONNECTION HARDWARE (ANGLES AND PLATES) - GRADE 300W BOLTS FOR CONNECTIONS SHALL BE ASTM A325 UNLESS NOTED OTHERWISE ANCHOR RODS CAST INTO CONCRETE OR BLOCK SHALL BE ASTM A1554-36 UNLESS NOTED
- PRIMER PAINT TO CONFORM TO CAN/CGSB- 1.40 OR CISC/CPMA 1 OR CISC/CPMA 2. HOT DIP GALVANIZING WITH A MINIMUM ZINC COATING OF 600g/sq.m UNLESS OTHERWISE SPECIFIED. FABRICATION AND ERECTION SHALL CONFORM TO CSA STANDARD S16. CLEAN, PREPARE SURFACES AND SHOP PRIME ALL SIN BEAM MEMBERS WITH ONE COAT OF SPECIFIED PRIMER PAINT IN CCORDANCE WITH CAN/CSA - S16. EXCEPT WHERE MEMBERS ARE TO BE ENCASED IN CONCRETE. OR TO RECEIVE SPRAY PPLIED FIRE PROOFING. FIELD "TOUCH-UP" BOLTS, WELDS, BURNED OR SCRAPED SURFACES AFTER ERECTION AS
- NO HOLES OTHER THAN THOSE SHOWN ON THE REVIEWED SHOP DRAWINGS SHALL BE MADE IN ANY SIN BEAM MEMBER ITHOUT AN APPROVED SKETCH REVIEWED BY THE SIN BEAM DESIGNER. QUALITY CONTROL ALL SIN BEAM MEMBER SHALL BE REVIEWED ON SITE AND INSPECTED WITH THE SAME CRITERIA USED FOR

ABBREVEATIONS

LONG LIVE LOAD

LLBB LONG LEGS BACK TO BACK

LLH LONG LEG HORIZONTAL

LSH LONG SIDE HORIZONTAL

LSV LONG SIDE VERTICAL

LLV LONG LEG VERTICAL

AΒ	ANCHOR BOLT	MAX	MAXIMUM
AIFB	ASPHALT IMPREGNATED	MECH	
	FIBRE BOARD	MIN	MINIMUM
ALT	ALTERNATE	MISC	MISCELLANEOUS
ARCH	ARCHITECTURAL	MPa	MEGAPASCALS
B (BOT)	BOTTOM	NIC	NOT IN CONTRACT
BLL	BOTTOM LOWER LAYER	NTS	NOT TO SCALE
BM_	BEAM	0/0	OUT TO OUT
ВОТ	BOTTOM	OF	OUTSIDE FACE
BP	BEARING PLATE /	OPNG	OPENING
BSMT	BASE PLATE BASEMENT	OPP OWSJ	
BUL	BOTTOM UPPER LAYER	PL.	PLATE
BW	BOTH WAYS	P/C	PRECAST
0	CHANNEL	PJP	PARTIAL PENETRATION
C/C	CENTER TO CENTRE	PLF	POUNDS PER LINEAR FOOT
CANT	CANTILEVER	PLF PSF	POUNDS PER SQUARE FOOT
CIP	CAST IN PLACE	R/W	REINFORCED WITH
CJ	CONTROL JOINT	RD	ROOF DRAIN
CJP	COMPLETE PENETRATION	REINF	
CL	CENTRE LINE	REQ'D	
CLR COL	CLEAR COLUMN	RO SDF	ROUGH OPENING STEP DOWN FOOTING
COMP	COMPOSITE	SDI	SUPERIMPOSED DEAD LOAD
CONC	CONCRETE	SDL SECT	SECTION
CONN	CONNECTION	SIM	SIMILAR
CONT	CONTINUOUS	SL	SNOW LOAD
DET	DETAIL	SL	SLAB
DIA	DIAMETER	SLS	SERVICEABILITY LIMIT
DIM	DIMENSION	STATE	
DL	DEAD LOAD	SOG	SLAB ON GRADE
DO	DO OVER - (DITTO)	SP	SPANDREL
DWG DWL	DRAWING DOWEL	SPEC ST	SPECIFICATIONS STRAIGHT
EA	EACH	STAG	STAGGER
EE	EACH END	STD	STANDARD
EF	EACH FACE	STIR	STIRRUP
ELEC	ELECTRICAL	STR	STRUCTURAL/STRUCTURE
ELEV	ELEVATION	SYM	SYMMETRICAL
EQ	EQUAL	T & B	TOP AND BOTTOM
EW	EACH WAY	T & C	TENSION AND
EX	EXISTING	T 0 0	COMPRESSION
	EXPANSION JOINT	T & G	TONGUE AND GROOVE
EXT FD	EXTERIOR FLOOR DRAIN	THK THRU	THICK THROUGH
FDN	FOUNDATION	TJ	TIE JOIST
FIN	FINISHED	TLL	
FL	FLOOR	TO	TOP OF
FMC	FULL MOMENT	TOC	TOP OF CONCRETE
	CONNECTION	TOF	TOP OF FOUNDATION
FTG	FOOTING	TOS	TOP OF SLAB/STEEL
GA	GAUGE	TOW	TOP OF WALL
GALV	HOT DIP GALVANIZED	TR	TRANSFER
GL CD DM	GRID LINE	TUL	TOP UPPER LAYER
GR BM H & V	GRADE BEAM HORIZONTAL AND VERTICAL	TYP U/N	TYPICAL UNLESS NOTED
HOR	HORIZONTAL AND VERTICAL HORIZONTAL	U/S	UNDERSIDE
HSS	HOLLOW STRUCTURAL	ULS	ULTIMATE LIMIT STATE
.00	SECTION	UPT	UPTURNED
HT	HEIGHT	VBF	VERTICAL BRACED FRAME
F	INSIDE FACE	VERT	VERTICAL
NT	INTERIOR	VSC	VERTICAL SLOTTED
NV	INVERT		CONNECTION
κN	KILONEWTONS	W (WF)	WIDE FLANGE BEAM
_	SINGLE ANGLE	W/P	WATERPROOFING
2L	DOUBLE ANGLES	WD WB	WOOD WOOK BOINT

WORK POINT

WWF WELDED WIDE FLANGE

WWM WELDED STEEL WIRE MESH

WEIGHT

CONVENTIONAL IDE FLANGE STEEL BEAMS.

	STRUCTURAL DRAWING LIST		
DWG	DRAWING	DATE	
S100	GENERAL NOTES	2023-11-23	
S150	LOADING DIAGRAMS	2023-11-23	
S101	TYPICAL DETAILS	2023-11-23	
S200	FOUNDATION AND ROOF PLAN	2023-11-23	
S300	ELEVATIONS	2023-11-23	
S400	S400 WALL SECTIONS 20		
S401	WALL SECTIONS	2023-11-23	

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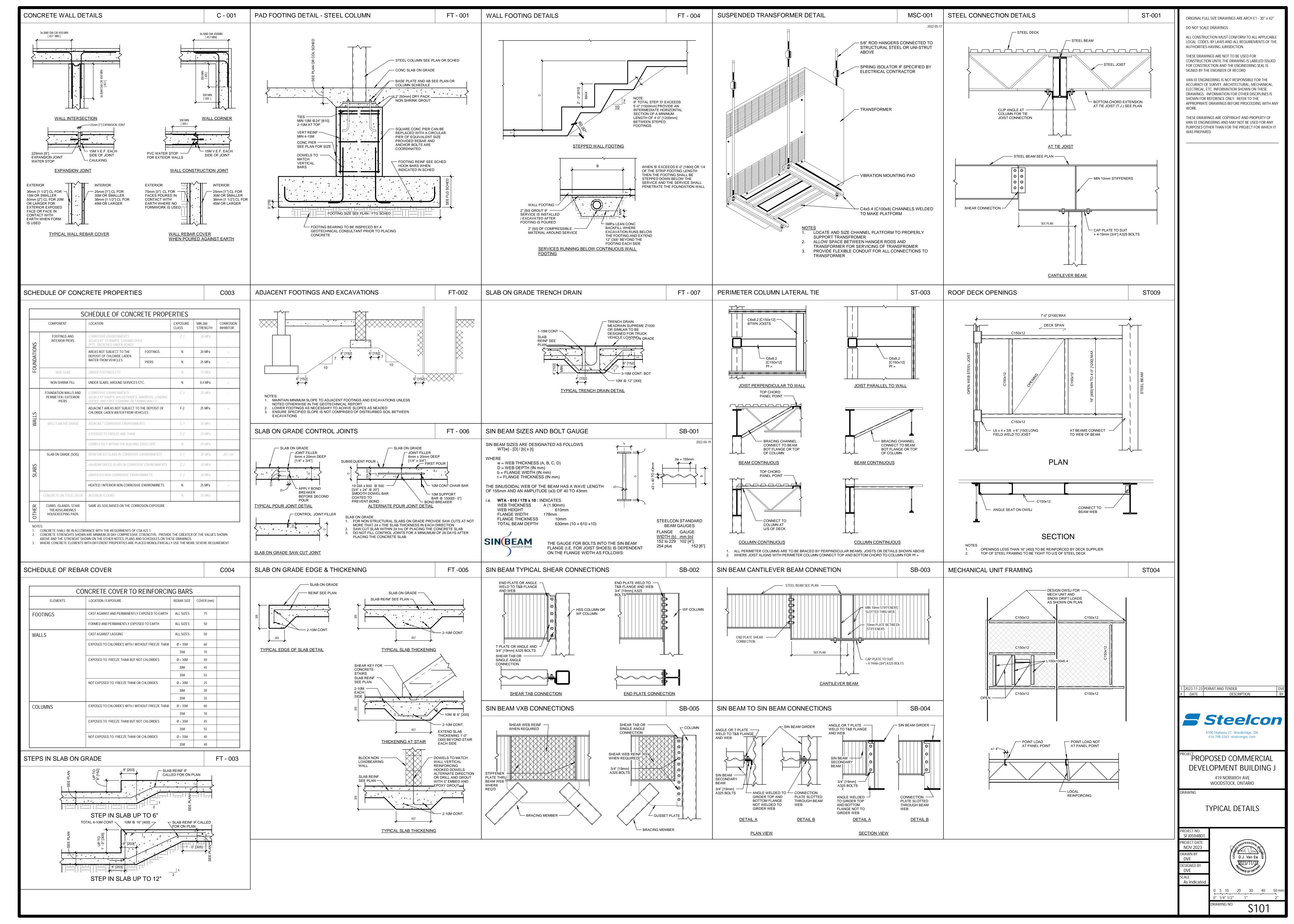
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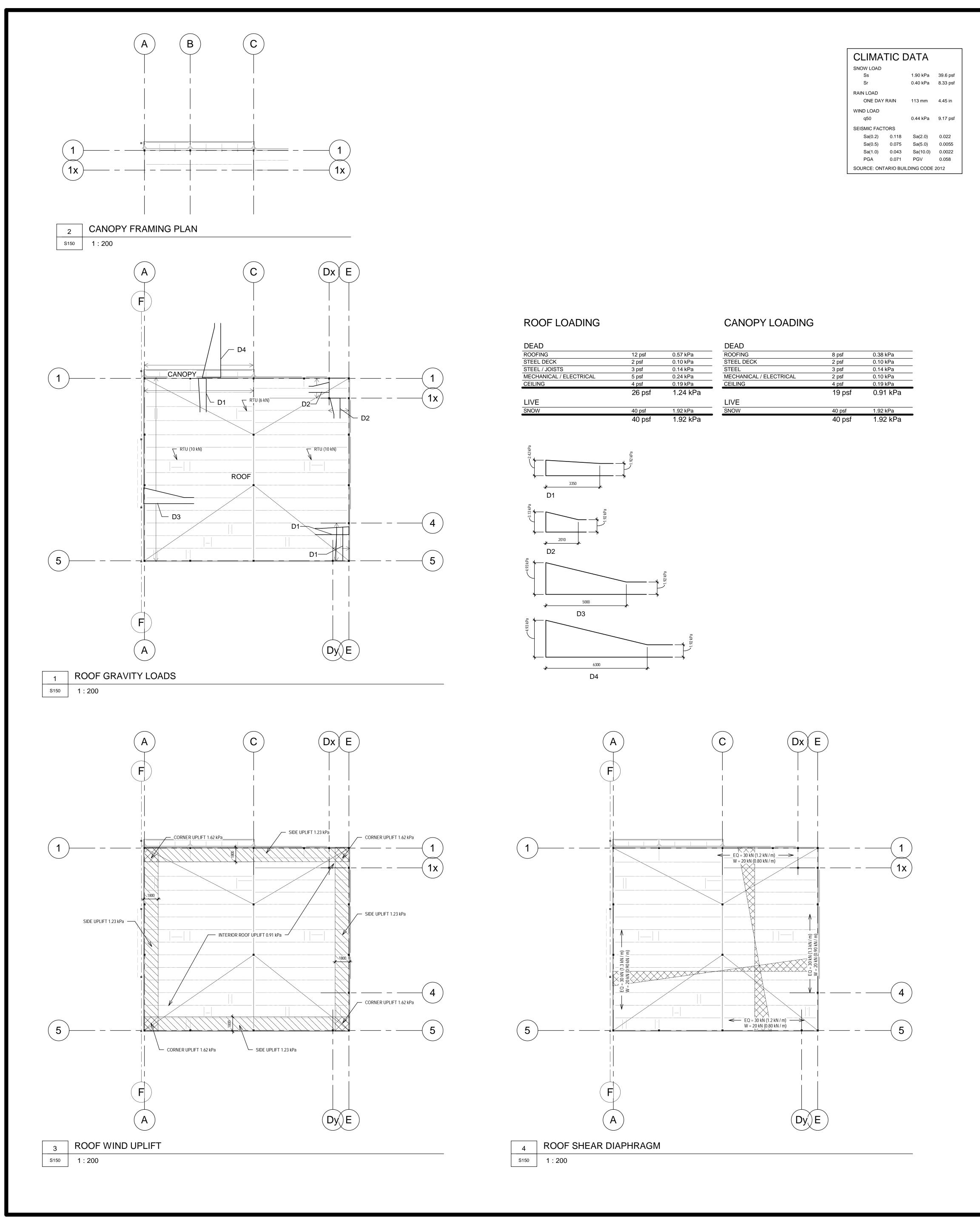
GENERAL NOTES

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5 10 20 30 40 50 " 1/4" 1/2" 1"





LATERAL LOAD RESISTING SYSTEM

- LATERAL WIND AND SEISMIC LOADS APPLIED TO THE STRUCTURE ARE RESISTED BY THE FOLLOWING:

 1. VERTICAL BRACED FRAMES ON THE 4 EXTERIOR WALLS OF THE BUILDING AS IDENTIFED ON THE ELEVATION DRAWINGS
- WIND LOAD DESIGN PARAMETERS:
- WIND LOAD DESIGN PARAMETERS:
 DESIGN PROCEDURE STATIC PROCEDURE
 HOURLY WIND PRESSURE q50 = SEE CLIMATIC DATA
 WIND IMPORTANCE FACTOR NORMAL; Iw = 1.0 (ULS); Iw = 0.75 (SLS)
 WIND EXPOSURE FACTOR OPEN TERRAIN; Ce = 0.9
 WIND PRESSURE COEFFICIENTS FOR PRIMARY STRUCTURAL ACTIONS: BASED ON TABLE I-7; FOR DESIGN OF CLADDING MEMBERS: BASED ON TABLE I-8; FOR ROOF UPLIFT COEFFICIENTS: BASED ON TABLE I-9; FOR INTERIOR PRESSURE: BASED ON
- CATEGORY 2
 WIND GUST COEFFICIENTS Cg = 2.0; Cgi = 2.0
 WIND BASE SHEAR: Vw = 50 kN (N/S); Vw = 50 kN (E/W)
- SEISMIC DESIGN PARAMETERS:

 1. DESIGN PROCEDURE EQUIVALENT STATC FORCE PROCEDURE

 2. EARTHQUAKE IMPORTANCE FACTOR NORMAL IE = 1.0 (ULS)
- SEISMIC HAZARD PARAMETERS SEE CLIMATIC DATA
- SITE CLASSIFICATION CLASS = D TYPE OF SEISMIC FORCE RESISTING SYSTEM (SFRS): CONVENTIONAL STEEL BRACED FRAME; Rd = 1.5; Ro = 1.3
- FUNDAMENTAL PERIOD: Ta = 0.12 s SEISMIC BASE SHEAR: Ve = 60 kN (N/S & E/W)

LOADING PLAN NOTES

- GRAVITY LOADS

 1. ANY MEHCANICAL OR OTHER EQUIPMENT LOADS INDICATED ON PLAN ARE IN ADDITION TO THE UNIFORM MECHANICAL LOAD ALLOWANCE FOR EACH FLOOR / ROOF AREA

 2. SNOW DRIFT LOADS ARE SHOWN ON PLANS AND ARE TO BE INCLUDED AROUND ALL MECHANICAL EQUIPMENT AS INDICATED THE ROOF DESIGN LOAD IS TO INLUDE
 - LIVE LOAD OR SNOW LOAD (INCLUDING DRIFTS WHERE SHOWN ON PLAN) OR RAIN LOADS (INCLUDING PONDING AS SHOWN ON PLAN) (THESE THREE LOADS DO NOT NEED TO BE CONSIDERED SIMULTANEOUSLY)
- WIND UPLIFT WIND UPLIFT LOADS ARE GROSS UNFACTORED WIND UPLIFT VALUES
- DECK SHEAR DIAPHRAGM

 1. DECK SHEAR DIAPHRAGM LOADS ARE FACTORED SHEAR DIAPHRAGM DESIGN VALUES

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LOCAL CODES, BY LAWS AND ALL REQUIREMENTS OF THE

CONSTRUCTION UNTIL THE DRAWING IS LABELED ISSUED

FOR CONSTRUCTION AND THE ENGINEERING SEAL IS

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ELECTRICAL, ETC. INFORMATION SHOWN ON THESE

SHOWN FOR REFERENCE ONLY. REFER TO THE

ACCURACY OF SURVEY, ARCHITECTURAL, MECHANICAL,

DRAWINGS. INFORMATION FOR OTHER DISCIPLINES IS

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SIGNED BY THE ENGINEER OF RECORD

WORK.

WAS PREPARED.

THESE DRAWINGS ARE NOT TO BE USED FOR

0 5 10 20 30 40 50 m 0" 1/4" 1/2" 1" 2"

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LOADING DIAGRAMS

GROUND FLOOR AND FOUNDATION NOTES

- FINISHED FLOOR LEVEL IS AT ELEVATION AS NOTED ON ARCH. DWGS.
- SEE ALSO ARCHITECTURAL DRAWINGS FOR OPENINGS AND DEPRESSIONS ALL FOUNDATION WORKS INCLUDING EXCAVATION, BACKFILL & COMPACTION SHALL CONFORM TO RECOMMENDATIONS PROVIDED IN THE SOIL REPORT PREPARED BY ATKINSON DAVIES INC, REPORT 1-4692 DATED FEB 2, 2011.
- ALL FOOTINGS SHALL BE CARRIED DOWN TO SOIL CAPABLE OF SUSTAINING 143 KPa MIN (SLS) AND 215 KPa (ULS) UNLESS NOTED ON PLAN.

 SLAB ON EARTH SHALL BE PLACED ON SOIL CAPABLE OF SUSTAINING 1.5 ksf [75 kPa] AND OF SUFFICIENT COMPACTION THAT NO DIFFERENTIAL SETTLEMENT SHALL TAKE PLACE BETWEEN THE SLAB ON EARTH AND BUILDING FOOTINGS. INFORMATION RELATING TO THE BEARING ELEVATIONS FOR THE FOOTINGS AND SLAB ON GRADE IS BASED ON

INFORMATION RELATING TO THE BEAKING ELEVATIONS FOR THE POOTINGS AND SLAB ON GRADE IS BASED ON INFORMATION AVAILABLE AT THE TIME WHEN DWGS. WERE ISSUED. THE CONTRACTOR SHALL PLACE FOOTINGS AND FLOORS ON GRADE ON SOIL CAPABLE OF SUPPORTING THE PRESSURES GIVEN ON THE DRAWINGS AND SHALL BE VERIFIED BY A GEOTEHNICAL ENGINEER. ANY ADJUSTMENTS CONSIDERED NECESSARY SHALL BE REPORTED BEFORE

- PROCEEDING WITH WORK. SEE ALSO GENERAL NOTES AND TYPICAL DETAILS ON \$100 SERIES DRAWINGS.
 LOWER FOOTING/WALL WHERE NECESSARY TO SUIT SITE CONDITIONS AND TO MAINTAIN 1200mm MINIMUM FROST PROTECTION FOR EXTERIOR FOOTING.
- CONCRETE STRENGTH: 20 MPa FOR FOOTINGS.
- 25 MPa FOR PIERS AND FOUNDATION WALLS 25 MPa FOR INTERIOR SLABS
- 32 MPa CLASS C2 CONCRETE FOR ALL EXTERIOR CONCRETE SLABS, CURBS, SIDE WALK ETC. ALL SLAB ON GRADE TO BE FOUNDED ON MINIMUM 150mm THICK OF COMPACTED GRANULAR SUBGRADE (19mm STONE OR GRANULAR A), AS SPECIFIED IN THE SOIL REPORT. ALL FOOTINGS AND SUBGRADE MUST BE INSPECTED BY A QUALIFIED SOIL ENGINEER PRIOR TO PLACING CONCRETE.
- CENTRELINE OF ALL FOOTINGS TO BE AT CENTRELINE OF COLUMN GRIDLINES, EXCEPT AS NOTED.

 UNLESS NOTED OTHERWISE, PROVIDE 5" THICK CONCRETE SLAB ON GRADE.

 PROVIDE DOWELS FROM TOP OF FOOTINGS TO WALLS/COLUMNS, SAME SIZE AND NUMBER AS COLUMN/WALL VERTICAL REINFORCING, TYPICAL UNLESS NOTED.

 PROVIDE ALL NECESSARY AND ADEQUATE TEMPORARY DEWATERING, AS SPECIFIED IN THE SOIL REPORT.
- CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND OFFSETS WITH THOSE SHOWN ON THE LATEST ARCHITECTURAL DRAWING ISSUED FOR CONSTRUCTION PRIOR TO PROCEED ANY STRUCTURAL WORKS. SHOULD ANY DISCREPANCY EXIST, DIMENSIONAL INFORMATION SHOWN ON ARCHITECTURAL DRAWING SHALL GOVERN.

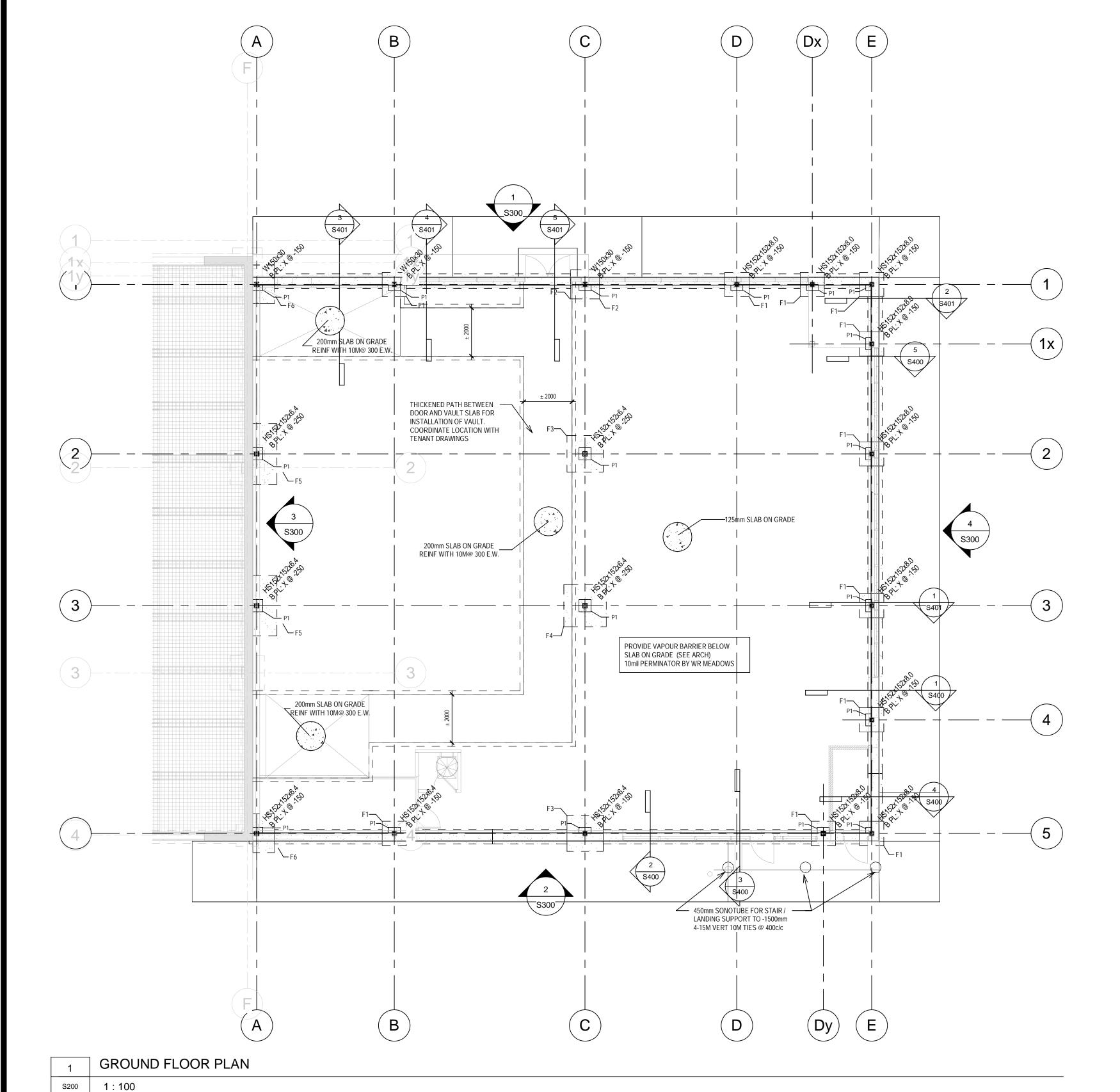
PROVIDE ALL PERIMETER DRAINAGE SYSTEMS AS SPECIFIED ON THE ARCH. / MECH DWG. AND AS SPECIFICATION IN THE

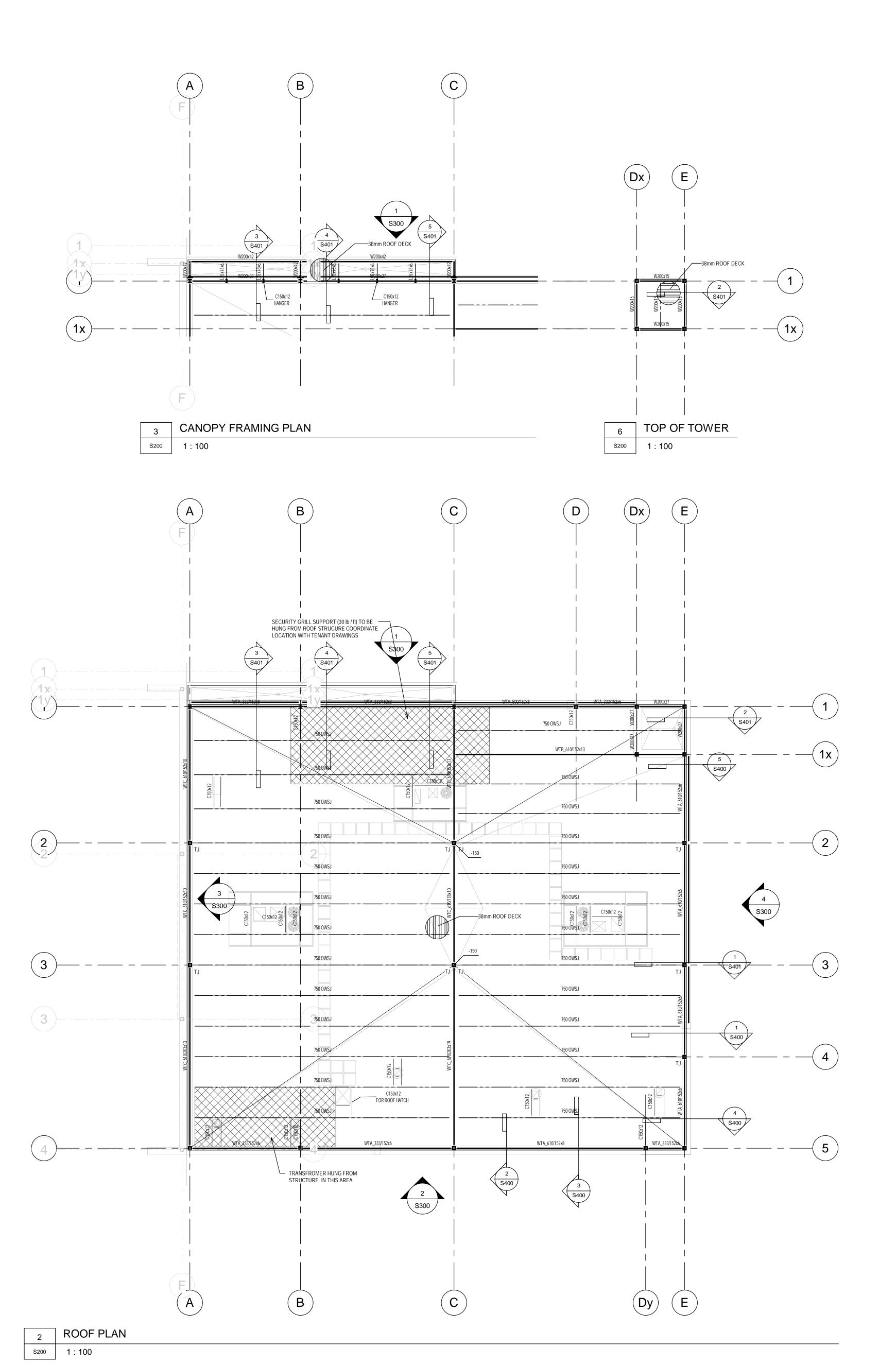
PAD FOOTING SCHEDULE						
TYPE	LENGTH	WIDTH	THICKNESS	TOP REINF	BOT REINF	
- 1	1000	1000	300		6-10M B.E.W.	
-2	1200	1200	300		8-10M B.E.W.	
-3	1500	1500	300		9-10M B.E.W.	
-4	1750	1750	350		7-15M B.E.W.	
- 5	1000	2500	400		8-10M x 2350; 10-15M x 850	
- 6	900	1600	400		8-10M x 1450; 13-10M x 750	

PIER SCHEDULE					
PIER	SIZE	SIZE	REINFORCING		
P1	500	500	4-15M VERT; 10M@400 TIES		

ROOF FRAMING NOTES

- U/S OF STEEL DECK ELEVATION XXX, VERIFY ARCHITECTURAL DRAWINGS SEE ALSO PLAN FOR STRUCTURAL ROOF SLOPE. ALL JOIST SHOES TO BE 4" DEEP UNLESS NOTED.
- DESIGN LOADS SEE DRAWING S150 SEE ALSO GENERAL NOTES ON S100 SERIES DRAWINGS.
- PROVIDE POSITIVE UPWARD CAMBER FOR OWSJ IN ACCORDANCE WITH CSA-S16.
 PROVIDE POSITIVE UPWARD CAMBER FOR OWSJ IN ACCORDANCE WITH CSA-S16.
 PROVIDE CAMBER FOR OWSJ IN ACCORDANCE WITH CSA-S16.
 PROVIDE CAMBER FOR SIZE AND LOCATION OF OPENING, SEE MECHANICAL DRAWING.





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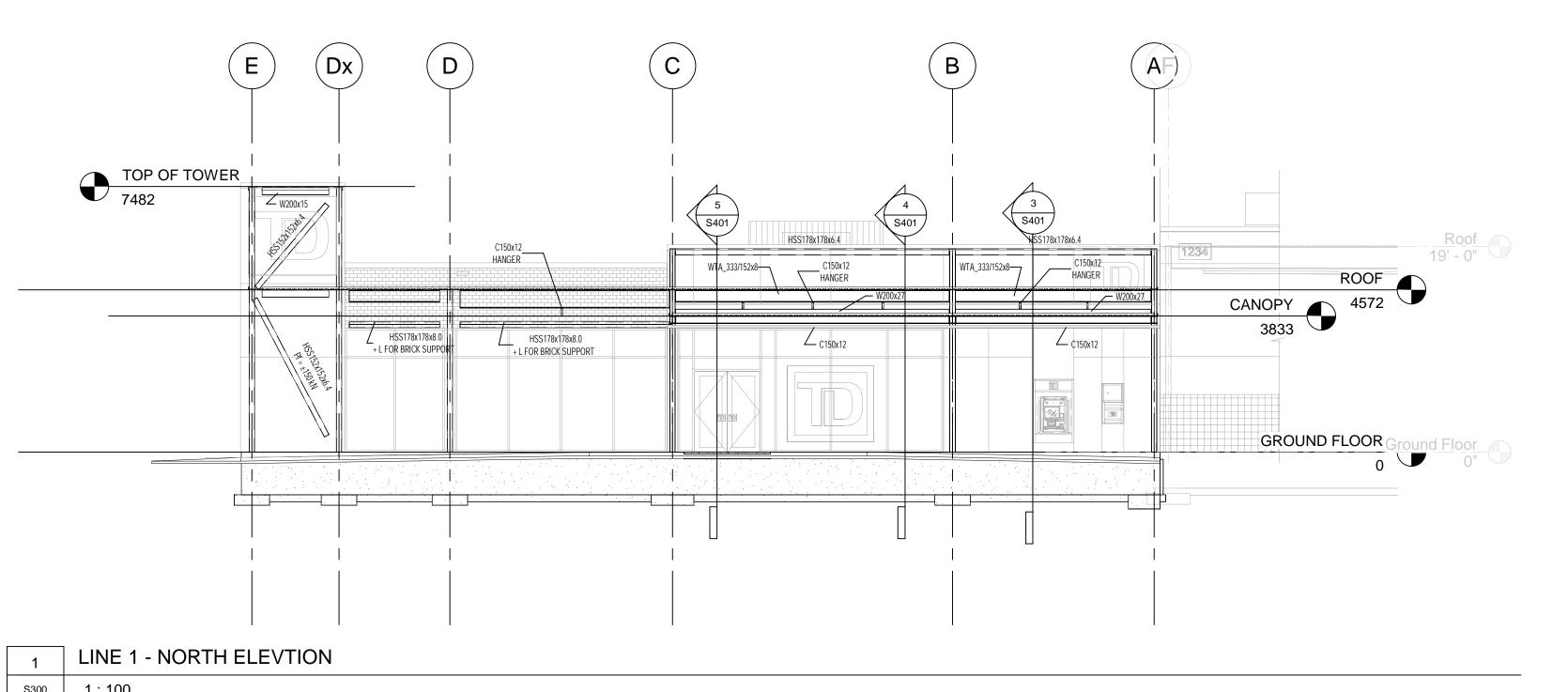
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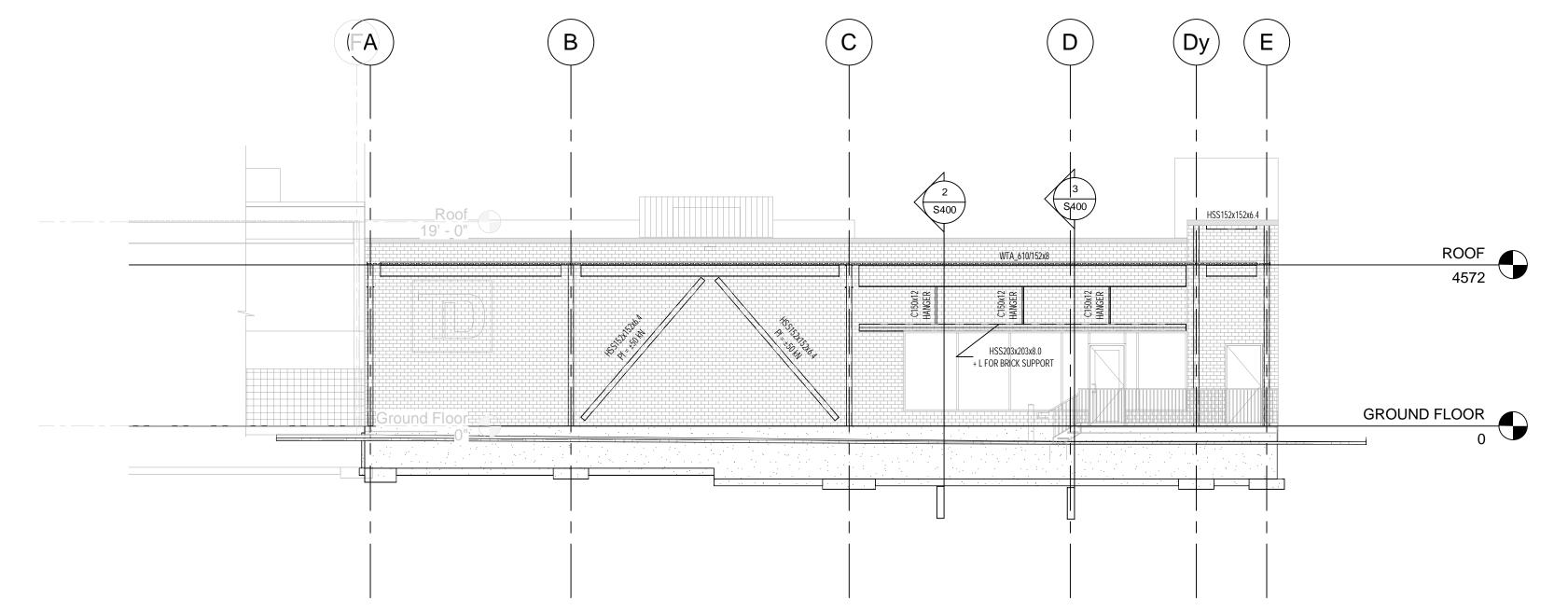
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FOUNDATION AND ROOF PLAN

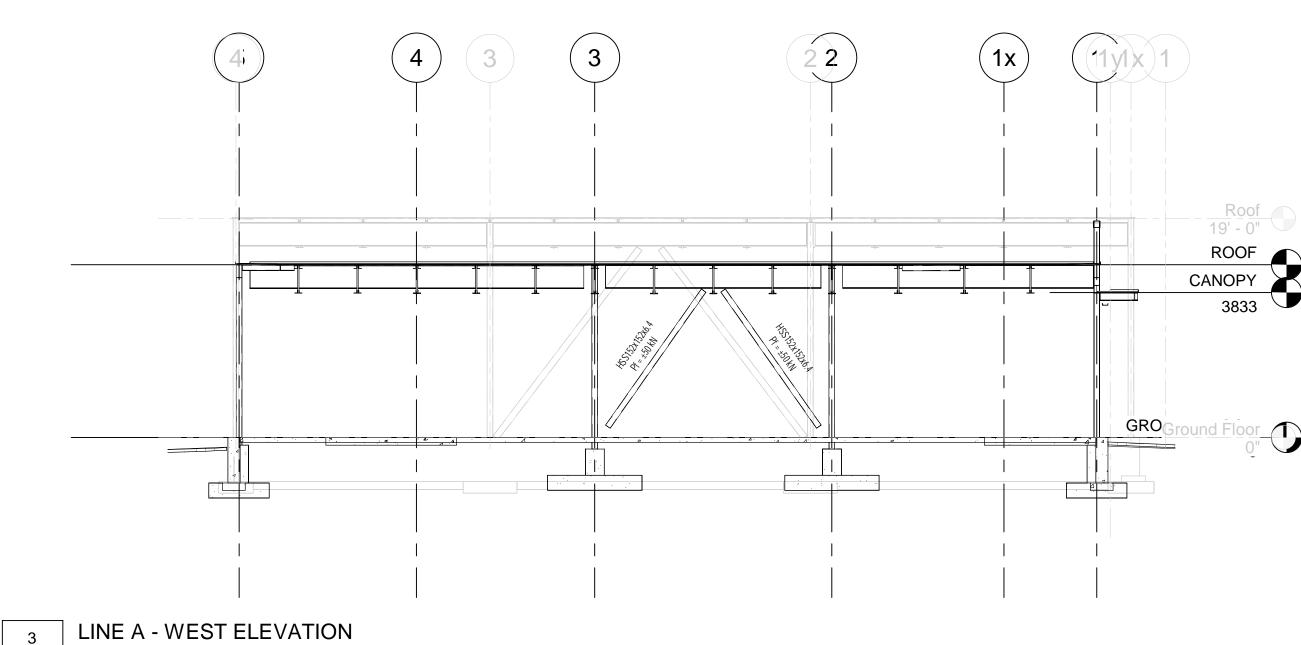
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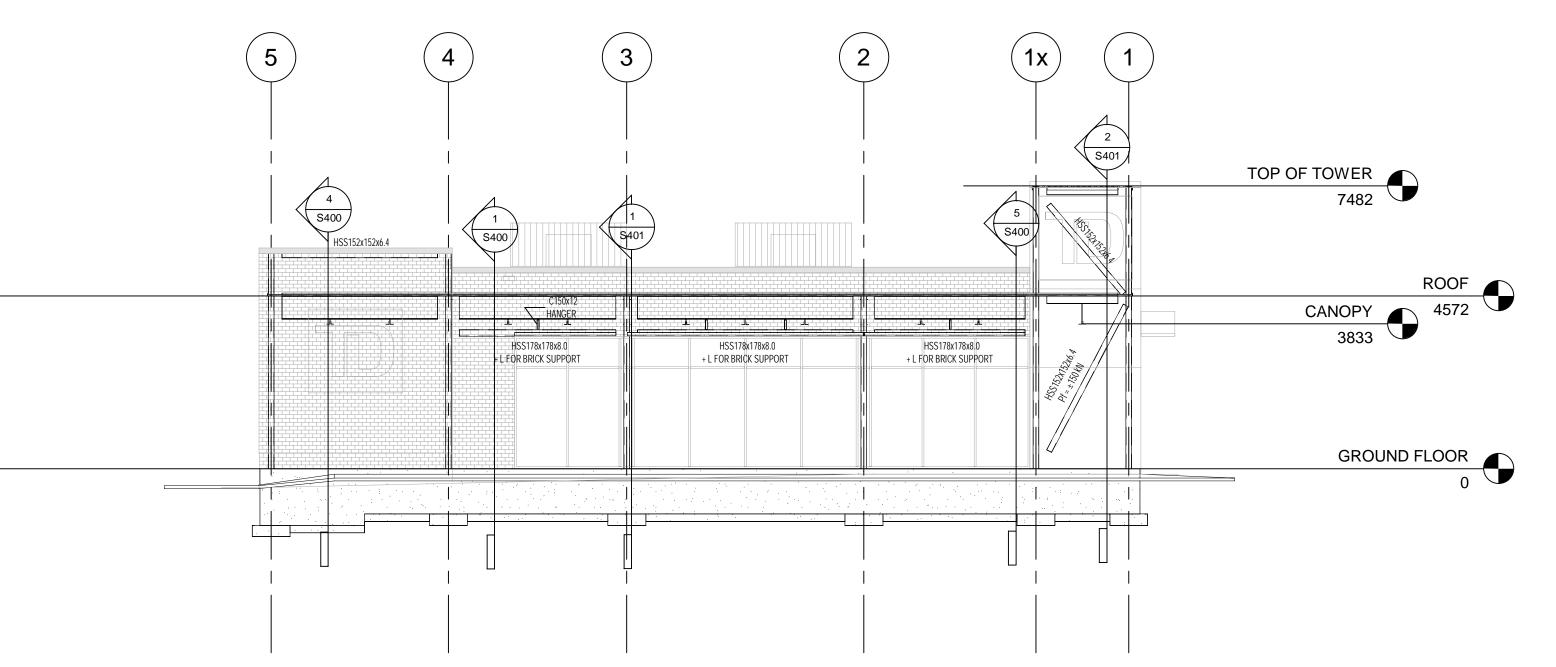




LINE 5 - SOUTH ELEVATION

s300 1 : 100





4 LINE E - EAST ELEVATION

S300 1 : 100

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ELEVATIONS

0 5 10 20 30 40 50 mm 0" 1/4" 1/2" 1" 2' DRAWING NO.

