GENERAL

1. THIS SET OF DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL SPECIFICATIONS AND WITH DRAWINGS AND SPECIFICATIONS FROM ALL OTHER CONSULTANTS. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY FOR CLARIFICATION.

2. THIS SET OF DRAWINGS SHOWS THE COMPLETED STRUCTURE, AND NOT WORK WHICH MAY BE REQUIRED FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR GENERAL SAFETY ON AND ABOUT THE JOB SITE DURING THE CONSTRUCTION PERIOD, AND FOR DESIGN AND ERECTION OF ALL FALSEWORK, SHORING, BRACING, ETC. TO ENSURE THE SAFETY OF ALL TEMPORARY CONSTRUCTION LOADS TO COMPLETE THE WORK. STRICTLY ADHERE TO ALL REQUIREMENTS OF WORKSAFE B.C.. ALL TEMPORARY WORKS, SHORING, ETC. SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA.

3. ALTERNATES FOR ANY ITEMS SHOWN MAY BE PRESENTED TO 'CWMM CONSULTING ENGINEERS LTD.' ('CWMM') FOR REVIEW AND APPROVAL PRIOR TO ACCEPTANCE. ANY COSTS INCURRED BY 'CWMM' FOR THESE ALTERNATES MAY BE CHARGED TO THE CONTRACTOR.

4. ALL MEMBER SIZES AND SPACING CAN BE SOFT CONVERTED BETWEEN METRIC AND IMPERIAL EQUIVALENTS PROVIDED THEY DO NOT AFFECT THE ARCHITECTURAL AND OTHER TRADES/DISCIPLINES.
   ie: L100x100x6 = 102x102x6.4
   @ 600 O/C = @ 610 O/C

5. ALL CODE REFERENCES ARE TO THE LATEST EDITIONS AS REFERENCED IN THE 2012 BRITISH COLUMBIA BUILDING CODE.

FIELD REVIEW:

1. 'CWMM' PROVIDES FIELD REVIEW FOR THE STRUCTURAL COMPONENTS SHOWN ON THESE DRAWINGS. THIS REVIEW IS PERIODIC AT THE PROFESSIONAL JUDGEMENT OF 'CWMM'. THE PURPOSE IS TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS PREPARED BY 'CWMM', AND TO FULFILL THE REQUIREMENTS FOR THE COMPLETION OF THE LETTERS OF ASSURANCE REQUIRED BY THE BUILDING CODE AND APPLICABLE BYLAW.

2. ALL NON-CONFORMING WORKS THAT REQUIRE REMEDIAL ACTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY EXTRA TIME OR COST INCURRED TO 'CWMM' TO ASSIST OR ADVISE THE CONTRACTOR IN RECTIFYING THE WORK SHALL BE BORNE BY THE CONTRACTOR.

3. ENSURE THAT WORK TO BE INSPECTED IS COMPLETE AT THE TIME OF INSPECTION AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL AND THEREFORE MUST PERFORM THOROUGH INSPECTIONS AND ENSURE ALL DEFICIENCIES ARE REPAIRED PRIOR TO CALLING 'CWMM' FOR A FIELD REVIEW. ADDITIONAL FIELD REVIEWS REQUIRED DUE TO INCOMPLETE WORK OR POORLY EXECUTED WORK, AS JUDGED BY 'CWMM', AS WELL AS ADDITIONAL DESIGN OR REMEDIAL WORK CAUSED BY DEVIATIONS FROM THESE DRAWINGS, MAY BE CHARGED TO THE GENERAL CONTRACTOR AT THE DISCRETION OF 'CWMM'.

4. A MINIMUM 48 HOURS NOTICE SHALL BE GIVEN BY THE CONTRACTOR FOR ANY FIELD REVIEW TO BE CARRIED OUT BY 'CWMM'.

SHOP DRAWINGS:

1. DESIGNERS & MANUFACTURERS OF ALL STRUCTURAL ELEMENTS/COMPONENTS/CONNECTIONS SHALL SUBMIT COMPLETE SHOP DRAWINGS, SEALED BY A B.C. P.ENG., TO THE ARCHITECT AND 'CWMM' FOR REVIEW AND APPROVAL PRIOR TO FABRICATION, ACCOMPANIED WITH A SCHEDULE S-B.

   SEALING OF THE SHOP DRAWINGS SHALL ENSURE THAT ALL INPUT PARAMETERS AND OUTPUT RESULTS ARE CORRECT, REGARDLESS OF THE LIMITATIONS OF RESPONSIBILITY THAT ENGINEER IS ACCUSTOMED TO FROM THEIR OWN JURISDICTIONS OR PAST PROJECTS. SHOP DRAWINGS REQUIRE EACH PLAN LAYOUT TO BE SEALED TO ENSURE CORRECT LOADS AND CERTIFY COMPONENTS NOT COVERED BY THE INDIVIDUAL SHOP DRAWINGS.

   SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS AND ALLOW MINIMUM TWO WEEKS FOR REVIEW BY 'CWMM'. THIS SUBMISSION OR ITS REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR PROVIDING PROPER ENGINEERING DESIGN, METHODS, EQUIPMENT, WORKMANSHIP, SAFETY PRECAUTIONS, AND PRIOR REVIEW OF THESE ELEMENTS.

   THE PROFESSIONAL ENGINEER SEALING THE SHOP DRAWINGS SHALL BE RESPONSIBLE FOR INSPECTION OF HIS DESIGN COMPONENTS FOR CONFORMANCE TO HIS DESIGN AND SHOP DRAWINGS. UPON COMPLETION OF THIS INSPECTION, A SCHEDULE S-C SHALL BE SUBMITTED TO 'CWMM' FOR ASSURANCE OF "DESIGN AND FIELD REVIEW"

2. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CONFIRM AND COORDINATE DIMENSIONS, LOCATIONS, AND NUMBER OF THE STRUCTURAL ELEMENTS FOR WHICH SHOP DRAWINGS ARE TO BE PRODUCED.

NON-STRUCTURAL COMPONENTS:

1. NON-STRUCTURAL COMPONENTS ARE NOT THE RESPONSIBILITY OF 'CWMM'. SUCH COMPONENTS OF THE PROJECT ARE DESIGNED, DETAILED, SPECIFIED, AND REVIEWED IN THE FIELD BY OTHERS. LETTERS OF CERTIFICATION OF ADEQUACY, INSTALLATION, ETC. OF SUCH COMPONENTS ARE BY OTHERS.

2. MANUFACTURERS OF NON-STRUCTURAL COMPONENTS WHICH AFFECT THE STRUCTURAL FRAMING SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT AND 'CWMM' FOR REVIEW. THE SHOP DRAWINGS SHALL CLEARLY INDICATE LOADS IMPOSED ON THE STRUCTURE. REVIEW WILL BE LIMITED TO THE EFFECT OF THE COMPONENTS ON THE STRUCTURAL FRAMING.

3. EXAMPLES OF NON-STRUCTURAL COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO:
   - ARCHITECTURAL COMPONENTS SUCH AS HANDRAILS, GUARDRAILS, RAILINGS, FLAG POST, REMOVABLE CANOPIES, CEILINGS, VEHICLE PROTECTION SYSTEMS, ORNAMENTAL COMPONENTS, TRELLISES, ETC.
   - ARCHITECTURAL PRECAST CONCRETE AND ITS ATTACHMENT
   - ARCHITECTURAL GLASS BLOCK AND ITS ATTACHMENT
   - BRICK AND BLOCK VENEER, ITS ATTACHMENT, AND REINFORCING IF REQUIRED
   - LANDSCAPING COMPONENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC.
   - CURTAIN WALL SYSTEMS, CLADDING, SKYLIGHT, WINDOW MULLIONS, ETC.
   - INTERIOR AND EXTERIOR NON-LOADBEARING STEEL STUD WALLS
   - SUPPORT AND BRACING OF MECHANICAL AND ELECTRICAL SYSTEMS AND EQUIPMENT FOR NON-GRAVITY AND SEISMIC LOADS
   - WINDOW WASHING EQUIPMENT AND ITS ATTACHMENT
   - ELEVATORS, ESCALATORS, AND OTHER CONVEYING SYSTEMS, INCLUDING PROPRIETARY SUPPORT BEAMS, AND THEIR ATTACHMENT
   - NON-STRUCTURAL MASONRY
   - MECHANICAL/ELECTRICAL UNITS, PIPING, ETC. OF SIGNIFICANT WEIGHT NOT SHOWN ON THE STRUCTURAL DRAWINGS

EXISTING STRUCTURES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL RELEVANT DIMENSIONS TO AND OF EXISTING STRUCTURES. NOTIFY 'CWMM' IMMEDIATELY IF DISCREPANCIES ARE NOTED.

2. THE CONTRACTOR SHALL AT HIS OWN EXPENSE REPAIR AND MAKE GOOD ANY DAMAGE TO THE EXISTING STRUCTURE, EQUIPMENT, AND FINISHES CAUSED BY THE CONSTRUCTION ACTIVITIES. REPAIRS SHALL BE TO THE SATISFACTION OF THE ARCHITECT.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY SUPPORT OF ANY ADJACENT EXISTING STRUCTURES DURING CONSTRUCTION. UNDERPINNING OR BRACING SHALL BE DESIGNED BY A B.C. P.ENG. SUBMIT 4 COPIES OF SEALED DESIGN DRAWINGS TO THE ARCHITECT AND 'CWMM' FOR REVIEW OF CONFORMANCE WITH GENERAL DESIGN CRITERIA.

DESIGN LOADS:

1. THIS STRUCTURE HAS BEEN DESIGNED FOR LOADS IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PART 4 OF THE 2012 BRITISH COLUMBIA BUILDING CODE FOR 'HIGH' IMPORTANCE CATEGORY.

   GROUND SNOW: Ss = 69 psf
   RAIN LOAD: Sr = 5 psf

   IMPORTANCE FACTORS FOR SNOW: Is = 1.15 FOR STRENGTH (ULS)
   Is = 0.9 FOR SERVICEABILITY (SLS)

   SNOW BUILDUP: TO DESIGN CODE

   WIND LOAD: PROBABILITY 1/10 = 6.05 psf
   PROBABILITY 1/50 = 8.35 psf

   IMPORTANCE FACTORS FOR WIND: Iw = 1.15 FOR STRENGTH (ULS)
   Iw = 0.75 FOR SERVICEABILITY (SLS)

   WIND UPLIFT: TO DESIGN CODE

   EARTHQUAKE FACTORS:

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)
0.275	0.17	0.086	0.051

   Ie = 1.3 FOR STRENGTH (ULS)

   Rd = 3.0 (WOOD FRAME)
   Ro = 1.7 (WOOD FRAME)

   SITE CLASS D

2. SPECIFIED UNIFORM SUPERIMPOSED DEAD LOADS ON ROOF AND FLOORS:
   ROOF 10 psf
   MAIN FLOOR (INCLUDES 10psf PARTITION ALLOWANCE) 20 psf
   - THESE LOADS DO NOT INCLUDE SELFWEIGHT OF THE PRIMARY STRUCTURAL COMPONENT OF THE ASSEMBLY (SHEATHING, TRUSSES, JOISTS, SUSPENDED SLAB, ETC.), WEIGHT OF MASONRY PARTITIONS, WEIGHTS OF MECHANICAL EQUIPMENT, AND CONCRETE EQUIPMENT PADS.

3. SPECIFIED UNIFORM LIVE LOADS ON FLOORS:
   MAIN FLOOR 100 psf
   BASEMENT 100 psf
   LOBBY, STAIRWAYS, ASSEMBLY AREAS 100 psf
   STORAGE AREAS 100 psf
   MECHANICAL ROOM 100 psf

4. DESIGN SPECIFIED CONCENTRATED LIVE LOADS ON ROOF AND FLOORS:
   ROOF 0.3 kips
   FLOORS 2.0 kips

5. WORST CASE OF UNIFORM OR CONCENTRATED LIVE LOADS WILL BE USED FOR DESIGN OF STRUCTURAL MEMBERS.

CONSTRUCTION LOADS:

1. CONSTRUCTION LOADS ON COMPLETED FLOORS MUST NOT EXCEED THE LOAD CARRYING CAPACITY OF THE FLOOR UNLESS IT IS PROPERLY SHORED TO SUPPORT THE INTENDED LOAD.

2. SHORING DESIGN IS BY CONTRACTOR. INFORM 'CWMM' PRIOR TO LOAD APPLICATION.

FOUNDATION AND SITE WORK

1. REFER TO GEOTECHNICAL REPORT DATED 17-05-18 PREPARED BY DEVERNEY ENGINEERING SERVICES LGD. AND ALL ITS SUPPLEMENTS AND AMENDMENTS FOR EXCAVATION, BACKFILLING, FILL MATERIALS, COMPACTION, FROST PROTECTION, AND OTHER SITE PREPARATION REQUIREMENTS NOT SHOWN ON THESE DRAWINGS.

2. DESIGN SOIL BEARING CAPACITIES:
   PAD AND STRIP FOOTINGS (SLS - SERVICEABILITY LIMIT STATES) 2500 psf
   PAD AND STRIP FOOTINGS (ULS - ULTIMATE LIMIT STATES) 4000 psf

3. THE BASE OF ALL FOOTINGS SUSCEPTIBLE TO FROST IS TO BE LOCATED AT A MINIMUM OF 2'-6" BELOW EXTERIOR GRADE.

4. ANY FOOTING ELEVATIONS INDICATED ON THE DRAWINGS ARE GENERAL AND SHALL BE USED FOR ESTIMATING AND BIDDING PURPOSES. FOOTINGS MAY HAVE TO BE PLACED AT DIFFERENT ELEVATIONS AS A RESULT OF LOCAL SOILS CONDITIONS, UNDERGROUND SERVICES, AND TO ACCOMMODATE OTHER MECHANICAL/ELECTRICAL SERVICES. FOLLOW TYPICAL DETAILS SHOWN ON THESE DRAWINGS FOR FOOTING PLACEMENT RELATIVE TO ADJACENT FOOTINGS AND OTHER EXCAVATED STRUCTURES. LOCATE AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

5. FOUNDATION BASES SHALL BE PROTECTED FROM RAIN, SNOW, AND ANY WATER INFILTRATION.

6. NO FOUNDATIONS MAY BE POURED BEFORE THE BEARING MATERIAL HAS BEEN INSPECTED BY THE GEOTECHNICAL ENGINEER. NOTIFY THE GEOTECHNICAL ENGINEER A MINIMUM OF 48 HOURS BEFORE INSTALLATION OF FOOTING REINFORCEMENT.

7. COORDINATE CONSTRUCTION WITH UNDERSLAB SERVICES AS SHOWN ON MECHANICAL, ELECTRICAL, ARCHITECTURAL, CIVIL, AND LANDSCAPING DRAWINGS.

8. REFER TO ARCHITECTURAL, CIVIL, AND MECHANICAL DRAWINGS FOR SITE DRAINAGE, GROUND ELEVATIONS, AND DRAINAGE SLOPES.

9. CENTRE FOOTINGS UNDER COLUMNS OR WALLS.

10. CENTRE PILES AND PILE CAPS UNDER COLUMNS OR WALLS.

11. DO NOT BACKFILL RETAINING WALLS AND/OR PERIMETER BASEMENT WALLS BEFORE THEY ARE ADEQUATELY SUPPORTED BY THE SUPPORTING FLOOR(S). ALL CONCRETE MUST HAVE CURED FOR MINIMUM 7 DAYS AND ATTAINED A MINIMUM 75% OF THE 28-DAY STRENGTH. ALL BACKFILLING TO COMPLY WITH THE GEOTECHNICAL ENGINEER'S REQUIREMENTS.

12. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING AND SEALING REQUIREMENTS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY SUPPORT OF ANY ADJACENT STRUCTURE DURING CONSTRUCTION. UNDERPINNING OR BRACING SHALL BE DESIGNED BY A B.C. P.ENG.. SUBMIT 4 COPIES OF SEALED DRAWINGS TO THE ARCHITECT FOR REVIEW.

REINFORCED CONCRETE

CONCRETE:

1. CODE CONFORMANCE:
   - CEMENT: TYPE GU - NORMAL CSA-A3001
     TYPE MH - MODERATE CSA-A3001
     TYPE HE - HIGH EARLY STRENGTH CSA-A3001
     TYPE LH - LOW HEAT OF HYDRATION CSA-A3001
     TYPE MS, HS - SULPHATE RESISTANCE CSA-A3001
   - CONCRETE PROPORTIONING AND WORK CSA-A23.1/CSA-A23.2
   - TESTING OF CONCRETE AND MATERIALS CSA-A23.2
   - AIR ENTRAINING ADMIXTURE ASTM C260
   - CHEMICAL ADMIXTURE (NON-CHLORIDE BASED) ASTM C494
   - CURING COMPOUNDS ASTM C309
   - CONCRETE FOR PARKING SLAB CSA-S413

2. CONCRETE PROPERTIES:
   - SPECIFYING METHOD AS PER ALTERNATE 1 IN TABLE 5 IN CSA-A23.1
   - NORMAL DENSITY CONCRETE
   - AIR CONTENT TO CSA-A23.1 TABLES 2 & 4 TO SUIT APPROPRIATE EXPOSURE CLASS
   - SLUMP TO CSA-A23.1 CLAUSE 4.3.2.3.. WHEN SUPERPLASTICIZERS ARE USED, THE SLUMP MAY BE INCREASED BUT KEPT BELOW THE POINT WHERE SEGREGATION WILL OCCUR. THE COST OF SUPERPLASTICIZERS SHALL BE INCLUDED IN THE COST OF THE CONCRETE. SMALLER AGGREGATE SIZE MAY BE USED WHERE NECESSARY TO INCREASE SLUMP.

MEMBER	MINIMUM 28-DAY STRENGTH (MPa)	MAXIMUM AGGREGATE SIZE (in.)	EXPOSURE CLASS	AIR CONTENT (%)
FOOTINGS, BASEMENT WALLS	25	0.75	F-2	4 - 7
GRADE BEAM	25	0.75	F-2	4 - 7
INTERIOR FOOTINGS	25	0.75	N	0 - 3
PEDESTAL - EXTERIOR	35	0.75	C-1	4 - 7
INTERIOR SLAB-ON-GRADE	25	0.75	N	0 - 3
EXTERIOR SLAB-ON-GRADE	32	0.75	C-2	5 - 8

3. ADHERE STRICTLY TO CSA-A23.1 FOR PROPER PREPARATION FOR HOT OR COLD WEATHER CONCRETE WORK.

4. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO A MATERIALS CONSULTANT FOR APPROVAL AND TO 'CWMM' FOR REVIEW PRIOR TO ANY CONCRETE WORK.

5. CONCRETE AND MATERIALS TESTING AGENCY MUST BE CCIL CERTIFIED. SUBMIT ALL CONCRETE TEST RESULTS TO 'CWMM'.

FORMING:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL FORMWORK AND SHORING AND FOR COMPLYING WITH ALL WORKSAFE B.C. REGULATIONS PERTAINING TO FORMWORK CONSTRUCTION, DESIGN, AND INSPECTION. FORMWORK AND SHORING SHALL BE DESIGNED BY A B.C. P.ENG..

2. LOCATIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO 'CWMM' FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION.

3. COLUMNS AND WALLS SHALL NOT BE POURED HIGHER THAN THE UNDERSIDE OF THE MEMBER SUPPORTED. EXTRA HEIGHT SHALL BE REMOVED BEFORE POURING MEMBER ABOVE.

4. TOLERANCES CLOSER THAN THOSE SPECIFIED IN CSA-A23.1 MAY BE REQUIRED AT CERTAIN LOCATIONS FOR STRUCTURAL, ARCHITECTURAL, AND CONSTRUCTION REQUIREMENTS.

5. REFER TO ARCHITECTURAL DRAWINGS FOR REVEALS, RECESSES, CHAMFERS, FINISHES, AND OTHER ARCHITECTURAL REQUIREMENTS NOT INDICATED ON THESE DRAWINGS.

6. SUPPLY AND SET ANCHOR RODS, SLEEVES, PIPE HANGERS, EXPANSION JOINTS, AND OTHER INSERTS AND OPENINGS AS INDICATED IN THESE DRAWINGS, SPECIFICATIONS, OR DOCUMENTS BY OTHER CONSULTANTS.

7. ALL DOWELS, ANCHOR RODS, EMBEDDED PLATES, AND OTHER INSERTS SHALL BE PLACED BEFORE THE CONCRETE IS POURED.

8. SLAB-ON-GRADE JOINTS SHALL BE 1" DEEP SAWCUTS SPACED MAXIMUM 15'-0" APART WITH ALTERNATE REBAR CUT 2" BACK FROM SAWCUT LINE. LAYOUT OF JOINTS SHALL BE APPROVED BY THE ARCHITECT. SEAL JOINTS WITH A FLEXIBLE JOINT SEALER PER THE ARCHITECT TO PREVENT INGRESS OF WATER.

9. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF CURBS AND EQUIPMENT PADS.

10. STRIPPING AND RESHORING NOTES:
   - DO NOT REMOVE FORMS AND SHORING BEFORE THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH TO ENSURE THE SAFETY OF THE STRUCTURE AND NOT BEFORE THE FOLLOWING MINIMUM AND LONG-TERM PERFORMANCE PERIODS OF TIME AFTER PLACING CONCRETE:
     - 24 HOURS: COLUMN, WALLS, FOOTINGS, AND BEAM SIDES
     - 28 DAYS: BEAM SOFFITS, SLABS, AND OTHER STRUCTURAL MEMBERS
   - FORMWORK FOR SLABS AND BEAMS MAY BE REMOVED PRIOR TO 28 DAYS PROVIDED:
     A) PROPER RESHORING IS CARRIED OUT. RESHORING SHALL BE DESIGNED BY A B.C. P.ENG. AT THE CONTRACTOR'S EXPENSE. SEALED RESHORING SHOP DRAWINGS SHALL BE FORWARDED TO 'CWMM' FOR GENERAL CONCEPT REVIEW PRIOR TO ANY RESHORING WORK. RESHORING MUST BE CARRIED OUT IMMEDIATELY AFTER REMOVAL OF FORMS.
     B) THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH, AS JUDGED BY 'CWMM'. STRENGTH SHALL BE DETERMINED BY ADDITIONAL TESTING OF FIELD-CURED CYLINDERS AT THE CONTRACTOR'S EXPENSE.
     C) THE CONCRETE HAS ATTAINED SUFFICIENT CURING TIME, AS JUDGED BY 'CWMM'.
   - MORE STRINGENT STRIPPING AND RESHORING REQUIREMENTS MAY BE REQUIRED AND MAY BE NOTED ELSEWHERE ON THE DRAWINGS

DRILL-IN ANCHORS:

1. UNLESS AN APPROVED ALTERNATE IS PERMITTED BY 'CWMM', USE 'HILTI' PRODUCTS.

2. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SITE PERSONELL USING 'HILTI' PRODUCTS ARE QUALIFIED TO DO SO. PRIOR TO CONSTRUCTION, A 'HILTI' REPRESENTATIVE IS REQUIRED FOR ON-SITE TRAINING.

3. NO REBAR IS ALLOWED TO BE CUT DURING THE INSTALLATION OF ANCHORS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE REBAR IS LOCATED TO AVOID ANCHORS THAT HAVE LIMITED FLEXIBILITY IN BEING REPOSITIONED.

4. USE HY-200 SYSTEM FOR FASTENING INTO CONCRETE. ALTHOUGH HAS RODS ARE STANDARD, Z RODS ARE PREFERRED DUE TO THEIR EFFICIENT INSTALLATION WITH REDUCED DRILLING AND EASIER HOLE PREPARATION REQUIREMENTS.

CONCRETE REINFORCING:

1. CODE CONFORMANCE:
   - ALL REBAR EXCEPT AS NOTED BELOW CSA-G30.18 GRADE 400R
   - REBAR TO BE WELDED CSA-G30.18 GRADE 400W
   - REBAR IN DESIGNATED SEISMIC MEMBERS CSA-G30.18 GRADE 400W
   - WELDED WIRE MESH CSA-G30.5

   ALL STANDARD HOOK LENGTHS TO FOLLOW CSA-A23.1 AND 12 TIMES THE BAR DIAMETER BEYOND THE BEND RADIUS

2. MINIMUM SPLICE LENGTH SHALL BE 18" FOR 10M AND 24" FOR 15M

3. MINIMUM CLEAR COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:

	EXPOSURE CONDITION			FIRE RATING	
	N	EARTH OR WEATHER F1, F2	CHLORIDE C-1, C-2 C-3, C-4	UP TO 2 HRS	UP TO 4 HRS
CAST AGAINST EARTH	-	3"	3"	3"	3"
S.O.G. - TOP & BOTTOM REINF.	0.75"	2"	2.5"	1"	1.5"
WALLS AND FOUNDATIONS	1.25"	1.5"	2.5"	1.5"	2"
COLUMNS - TRANSVERSE REINF.	1.5"	1.5"	2.5"	1.5"	2"
COLUMNS - PRINCIPLE REINF.	2"	2"	3"	2"	2.5"

   - TOLERANCE IS ± 0.25"
   - TRANSVERSE REINFORCEMENT INCLUDES TIES, STIRRUPS, AND SPIRALS
   - THE RATIO OF CONCRETE COVER TO BOTH THE MAXIMUM AGGREGATE SIZE AND NOMINAL BAR DIAMETER SHALL BE AT LEAST 1.0 FOR N CLASS EXPOSURE, 1.5 FOR F-TYPE CLASS EXPOSURE, AND 2.0 FOR C-TYPE CLASS EXPOSURE
   - THE COVER FOR BUNDLED BARS SHALL BE THE SAME AS THAT FOR A SINGLE BAR WITH EQUIVALENT AREA
   - CONFIRM WITH ARCHITECT FOR FIRE RATING REQUIREMENT

4. PROVIDE CORNER BARS FOR ALL HORIZONTAL WALL REINFORCING.

5. WHERE NEW CONCRETE POUR ABUTS EXISTING CONCRETE, ROUGHEN EXISTING CONCRETE TO A MINIMUM 1/4" AMPLITUDE BEFORE DRILLING AND GROUTING ALL ABUTTING REBAR MINIMUM 8". DRILLING AND GROUTING OF REBAR SHALL BE WITH 'HILTI' HY-200 SYSTEM, OR APPROVED EQUAL, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

6. ALL HORIZONTAL WALL REINFORCING STARTS APPROXIMATELY 2" ABOVE THE FOOTING, CONTINUES AT THE WALL SPACING SPECIFIED, AND ENDS 2" FROM THE TOP OF THE WALL POUR.

7. DO NOT CUT REINFORCING BARS OR PULL BACK TOP BARS AT MINOR OPENINGS OR INSERTS WITHOUT PRIOR APPROVAL FROM 'CWMM'. SPLAY BARS AROUND OPENING OR INSERT.

8. USE ONLY NON-CORRODING BAR SUPPORTS WHERE CONCRETE SURFACES ARE TO BE EXPOSED TO WEATHER, EARTH, SEA WATER, DE-ICING SALTS, OR CORROSIVE CHEMICALS AND FOR ALL CONCRETE SLABS AND BEAMS IN THE PARKING AREA.

9. NO WELDING OF REBAR SHALL BE PERMITTED UNLESS APPROVED BY 'CWMM'. THE WELDING PROCEDURE SHALL CONFORM TO CSA W186.

10. REINFORCE SLAB-ON-GRADE OPENINGS LARGER THAN 18" WITH 2-15M AT EACH SIDE AND EXTEND 2'-0" PAST EDGE OF OPENING. ADD ADDITIONAL REINFORCING OF 1-15M 4'-0" LONG DIAGONAL AT EACH CORNER.

STRUCTURAL STEEL

1. CODE CONFORMANCE:
   GENERAL STEELWORK AND DESIGN CAN/CSA-S16
   GENERAL REQUIREMENTS CSA-G40.20
   STEEL QUALITY CSA-G40.21
   SHOP PRIMER CISC/CPMA 1-73A
   WELDING CSA-W59
   GROUT FOR BASEPLATES SEE SPECIFICATION

2. GRADES OF MATERIALS:
   W SHAPES 350W (ASTM A992, A572 GRADE 50)
   C SHAPES AND ANGLES 300W
   HOLLOW STRUCTURAL STEEL (HSS) 350W (CLASS C-G40.21)
   OTHER STRUCTURAL STEEL AND MISC. METAL 300W
   BOLTS, NUTS AND WASHERS ASTM A325
   ANCHOR ROD ASTM A307

3. DRAWINGS FROM ALL CONSULTANTS SHALL BE EXAMINED FOR EXACT LOCATIONS, DIMENSIONS, AND ELEVATIONS, WITH SITE MEASUREMENT CONFIRMATION PRIOR TO FABRICATION.

CONNECTIONS:

1. ALL STRUCTURAL STEEL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR FOR FORCES, MOMENTS, AND SHEARS RESULTING FROM THE SPECIFIED LOAD AND SELF-WEIGHT OF THE SUPPORTING ELEMENTS AND ALL FORCES SHOWN ON THE DRAWINGS. ALL MAIN CONNECTION BOLTS SHALL BE MINIMUM 3/4". USE MINIMUM TWO BOLTS PER CONNECTION. ALL WELDS SHALL BE MINIMUM 1/4".

2. WHERE BEAM SHEARS ARE NOT INDICATED ON THE DRAWINGS, DESIGN CONNECTIONS TO SUPPORT THE REACTION FROM 120% MAXIMUM UNIFORMLY DISTRIBUTED FACTORED LOAD THAT THE BEAM CAN SAFELY SUPPORT IN BENDING (60% EACH END), PROVIDED NO POINT LOADS ACT ON THE BEAM. FOR BEAMS SUPPORTING POINT LOADS, DESIGN CONNECTION TO SUPPORT 50% OF THE FACTORED SHEAR RESISTANCE OF THE BEAM.

3. ALL BEAMS < 12.5" DEEP SHALL HAVE MINIMUM PL3/8" STIFFENERS EACH SIDE OF WEB AT ALL STEEL BEAM BEARING LOCATIONS. USE MINIMUM PL1/2" WEB STIFFENERS FOR BEAMS < 16.5" DEEP. USE MINIMUM PL5/8" WEB STIFFENERS FOR BEAMS > 16.5" DEEP, OR MATCH FLANGE THICKNESS FOR FLANGES > 5/8" THICK. SHOP DRAWINGS APPROVED BY 'CWMM' MAY SUPERCEDE THESE LIMITS WHERE IT IS SHOWN BY THE FABRICATOR'S ENGINEER TO MEET CODE.

SHOP DRAWINGS:

1. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE GENERAL NOTES ON THESE DRAWINGS AND WITH ANY SPECIFICATIONS. SHOP DRAWINGS SHALL INCLUDE ANCHOR ROD AND EMBEDDED PLATE LAYOUT.

2. NO FABRICATION OR WORK SHALL BE COMMENCED UNTIL THE REVIEW AND APPROVAL OF THE SHOP DRAWINGS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY FABRICATION AND WORK DONE PRIOR TO REVIEW AND APPROVAL OF THE SHOP DRAWINGS.

3. THE STEEL FABRICATOR AND THE CONTRACTOR SHALL CO-ORDINATE AND VERIFY ALL DIMENSIONS AND LOCATIONS PRIOR TO PRODUCTION OF THE DRAWINGS.

FABRICATION:

1. WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS. FABRICATION SHOPS SHALL BE APPROVED BY THE CANADIAN WELDING BUREAU TO CSA-W47.1. CERTIFICATIONS SHALL BE SUPPLIED TO 'CWMM' UPON REQUEST.

2. IMPERIAL SIZE BOLTS AND PLATE PRODUCTS ARE ACCEPTABLE ON AN EQUAL SIZE/STRENGTH BASIS.

3. ALL HSS ELEMENTS SHALL BE PROVIDED WITH PL3/16" ENCLOSURE PLATES.

4. GALVANIZING OF STRUCTURAL MEMBERS AND PLATE MEMBERS SHALL BE MINIMUM G210 IN ACCORDANCE WITH CSA-G164 AND RELATED STANDARDS. ALL AREAS OF GALVANIZED PARTS SHALL BE GROUNDED OFF PRIOR TO WELDING. PAINT MINIMUM 2 COATS OF ZINC-RICH PRIMER READY MIX TO CAN/CGSB-1.181 AFTER WELDING.

5. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED ACCORDING TO THE REQUIRED SPECIFICATION.

ERECTION:

1. GROUT FOR COLUMN BASE PLATES SHALL BE 'SIKA M-BED STANDARD', 'MASTERBUILDER'S MASTERFLOW 713', OR APPROVED EQUAL, AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 50 MPa AT 28 DAYS.

2. INSTALL AND TORQUE ALL BOLTS AND DRILLED ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.

3. ANY MISFIT OR MISALIGNMENT MUST BE REPORTED TO 'CWMM'. THE CONTRACTOR SHALL PROVIDE PROPOSED REMEDIAL MEASURES TO 'CWMM' FOR REVIEW AND APPROVAL. ANY REMEDIAL WORK ON CONNECTIONS MUST BE REVIEWED AND/OR REDESIGNED BY THE CONNECTION ENGINEER. ALL COSTS OF REMEDIAL WORK ARE AT THE EXPENSE OF THE CONTRACTOR.

4. BOLTS, WELDS, AND BURNED OR SCRATCHED SURFACES SHALL BE TOUCHED UP WITH SHOP PRIMER AT COMPLETION OF ERECTION.

5. DO NOT NOTCH OR CUT OPENINGS IN ANY OF THE FRAMING MEMBERS AND CONNECTIONS WITHOUT PRIOR APPROVAL FROM 'CWMM'.

6. PROVIDE TEMPORARY BRACING TO STRUCTURE FOR STABILITY AND SAFETY UNTIL ALL LATERAL RESISTING ELEMENTS AND DIAPHRAGMS ARE INSTALLED.

cover Architectural Collaborative Inc

ARCHITECTURE

#1 96 Baker Street
Nelson BC
V1L 4G9
250 354 4445
coverac.ca

CONSULTANTS

CWMM CONSULTING ENGINEERS LTD.
200-1854 Kirschner Road
Kelowna, B. C.
Canada, V1Y 4N6
Tel: (250) 868-2308
Fax: (250) 868-2374
kelowna@cwmm.ca
EGBC Permit to Practice #1000918

CLIENT

The Village of Midway

REVISIONS

Revision Schedule		
Number	Date (yy/mm/dd)	Description
1	2022-04-12	50% DD
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MIDWAY COMMUNITY CENTRE

ADDRESS
692 SEVENTH AVENUE, MIDWAY BC

PROJECT #
21163

DATE 2022-10-05

REV. -

DESIGNED BY MW
CHECKED BY DB
DRAWN BY JS

SHEET
GENERAL NOTES

S101

WOOD PRODUCTS

1. ALL TIMBER FRAMING PROCEDURES AND PRACTICES SHALL BE IN ACCORDANCE WITH PART 9 OF THE 2012 BRITISH COLUMBIA BUILDING CODE, UNLESS NOTED OTHERWISE ON THESE DRAWINGS OR PART 4 SPECIFICS.

2. PREFABRICATED TRUSSES, JOISTS, AND OTHER PROPRIETARY LUMBER PRODUCTS SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH CSA–086.1 FOR LOADS SHOWN ON THE DRAWINGS. MAXIMUM LIVE LOAD DEFLECTION L/360 FOR FLOORS AND L/360 FOR ROOFS. CAMBER FOR FULL DEAD LOAD. BRACING, BRIDGING, AND ADDITIONAL HARDWARE (STIFFENERS, WOOD–FRAME CONNECTORS, ETC.) SHALL BE DESIGNED AND SUPPLIED BY THE MANUFACTURER. SEALED DRAWINGS MUST BE SUBMITTED AS PER THE SHOP DRAWING SUBMISSION PROCEDURE. NO MODIFICATIONS OR SUBSTITUTIONS ARE PERMITTED WITHOUT APPROVAL FROM 'CWMM'.

   INSTALLATION OF ALL ENGINEERED WOOD PRODUCTS AND STRUCTURAL CONNECTIONS/HARDWARE SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

3. ALL LUMBER MATERIAL TO CONFORM TO N.L.G.A. GRADING RULES, AND CSA–086.1. OSB SHALL CONFORM TO CSA/CAN3–0437.0 OR 0325. PLYWOOD SHALL CONFORM TO CSA 0121.

4. DIMENSION LUMBER SHALL BE AS FOLLOWS:

FLOOR AND ROOF JOISTS	SPF #2
STUDS	SPF #2
POSTS AND BEAMS (HEAVY TIMBER)	D.FIR #1
PLIES IN BUILT–UP BEAMS	SPF #2
SILLS/LEDGERS TO CONCRETE/MASONRY WALLS	PRESSURE–TREATED SPF #2

   PLYWOOD SHALL BE DOUGLAS FIR PLYWOOD, SHEATHING GRADE.

   ROOF SHEATHING SHALL BE MINIMUM 1/2" PLYWOOD FOR SLOPES > 3:12, AND MINIMUM 5/8" TONGUE–AND–GROOVE JOINTED (T&G) PLYWOOD FOR SLOPES < 3:12.

   FLOOR SHEATHING SHALL BE MINIMUM 5/8" T&G PLYWOOD OR OSB FOR JOISTS TO 19.2" O/C, AND MINIMUM 3/4" T&G PLYWOOD OR OSB FOR JOISTS TO 24" O/C.

   EXTERIOR WALL SHEATHING SHALL BE MINIMUM 3/8" PLYWOOD OR OSB.

5. ROOF, FLOOR, AND WALL SHEATHING SHALL BE FASTENED AT PANEL EDGES WITH NAILS @ MAXIMUM 6" O/C, AND AT INTERMEDIATE FRAMING MEMBERS WITH NAILS @ MAXIMUM 12" O/C. 2.5" LONG 8d NAILS SHALL BE USED FOR SHEATHING TO 1/2" THICK, AND 3" LONG 10d NAILS TO 3/4" THICK.

   UNBLOCKED ROOF OR FLOOR SHEATHING SHALL BE FASTENED TO ALL EXTERIOR WALLS AND SHEARWALLS WITH NAILS @ MAXIMUM 6" O/C, EXCEPT AS NOTED PER SHEARWALL SCHEDULE.

6. ALL STUD WALLS SUPPORTING PROPRIETARY WOOD TRUSSES SHALL BE PROVIDED WITH STUDS AT SPECIFIED SPACING WITH TRIPLE TOP PLATES. ALTERNATIVELY, PROVIDE DOUBLE TOP PLATES WHERE STUDS ARE ALIGNED WITH ROOF TRUSSES.

7. CONNECTIONS:
   - ALL BOLTS AND ANCHOR RODS SHALL CONFORM TO ASTM A307
   - ALL BOLTS AND NUTS MUST BE FITTED WITH CUT STEEL WASHERS
   - ALL STEEL PLATE USED IN CONNECTION DETAILS SHALL BE GRADE 300W
   - ALL NAILING SHALL BE WITH COMMON WIRE NAILS TO CSA B111. IF PNEUMATIC NAILS ARE INTENDED AS SUBSTITUTION, SUBMIT INFORMATION TO 'CWMM' FOR REVIEW AND APPROVAL PRIOR TO USE.
   - BOLT HOLES SHALL NOT BE MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER BOLTS IN WOOD SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END, AND 4 DIAMETERS FROM THE EDGE
   - LAG SCREWS SHALL BE PRE–DRILLED WITH A BIT SIZE OF 65% OF THE SHANK DIAMETER FOR THE THREADED PORTION. LEAD HOLES SHALL BE THE SAME LENGTH AS THE UNTHREADED PORTION, AND THE SAME DIAMETER AS THE SHANK. SCREW ALL LAGS INTO PLACE. CUT WASHERS SHALL BE PROVIDED UNDER HEADS WHICH BEAR ON WOOD.
   - NO CHECKS OR SPLITS ALLOWED AT AREAS TO BE BOLTED OR LAGGED
   - ALL EXPOSED BOLTS AND WASHERS SHALL BE GALVANIZED, OR PER THE ARCHITECT
   - ALL FRAMING CONNECTION HARDWARE INCLUDING HOLD–DOWN CONNECTORS, JOIST/BEAM HANGERS, STRAPS, ANGLES, ETC. SHALL BE 'SIMPSON', OR APPROVED EQUAL
   - NAILS SHALL BE PLACED NOT LESS THAN 3/8" FROM THE PANEL EDGE AND SHALL NOT BE OVER–DRIVEN MORE THAN 15% OF THE PANEL THICKNESS

8. STUD WALLS ABUTTING A CONCRETE OR MASONRY WALL SHALL BE BOLTED TO THE WALL WITH 1/2" DIAMETER ANCHOR RODS @ 24" O/C THROUGH A DOUBLE STUD.

9. FULL–HEIGHT BLOCKING OR EQUIVALENT BRACING SHALL BE PLACED BETWEEN ALL TRUSSES AT BEARING SUPPORTS. FULL–HEIGHT I–JOIST BLOCKING OR 1.25" ENGINEERED–WOOD RIMBOARD SHALL BE PLACED BETWEEN ALL JOISTS AT BEARING SUPPORTS.

   FULL–HEIGHT BLOCKING OR EQUIVALENT BRACING SHALL BE PLACED BETWEEN ALL ROOF JOISTS AT MIDSPAN FOR SPANS OVER 10'–0", AND @ 10'–0" O/C FOR SPANS OVER 20'–0". FULL–HEIGHT BLOCKING OR EQUIVALENT BRACING SHALL BE PLACED BETWEEN ALL DIMENSION LUMBER BALCONY JOISTS AT MIDSPAN FOR SPANS OVER 8'–0", AND @ 8'–0" O/C FOR SPANS OVER 16'–0".

10. FASTEN ALL LOAD BEARING WALL SILL PLATES TO THE CONCRETE FOUNDATION OR SLAB WITH MINIMUM ⅝"ø ANCHOR RODS @ 4'–0" O/C (MIN. 6" EMBEDMENT UNLESS NOTED OTHERWISE BY MANUFACTURER'S SPECS) FOR EXTERIOR WALLS, DRIVE PINS @ 16" O/C WITH MINIMUM 0.145"ø SHANK x 2.75" LONG FOR INTERIOR WALLS, AND ANCHOR RODS PER SHEARWALL SCHEDULE FOR ALL SHEARWALLS.

11. ALL METAL HARDWARE (NAILS, BOLTS, HANGERS, ETC.) IN CONTACT WITH PRESSURE–TREATED PRODUCT REQUIRES BOTH TO BE COMPATIBLE, WHETHER A PARTICULAR HARDWARE METAL OR GALVANIZING PRODUCT IS CHOSEN, OR A PARTICULAR WOOD TREATMENT PROCESS IS USED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING PRODUCT COMPATIBILITY.

12. ENSURE ALL JAMBS, CRIPPLES, AND POSTS ARE SUPPORTED CONTINUOUSLY WITH MINIMUM EQUAL MEMBERS AT LEVELS BELOW, INCLUDING WITHIN FLOOR DEPTHS AND HEADER/BEAM LOCATIONS.

13. ENGINEERED WOOD PRODUCTS INDICATED ON THESE STRUCTURAL DRAWINGS ARE 'TRUS–JOIST' PRODUCTS. 'LSL' REFERS TO 'TIMBERSTRAND'. 'PSL' REFERS TO 'PARALLAM'. 'LVL' REFERS TO 'MICROLAM'. NO SUBSTITUTIONS ARE PERMITTED WITHOUT APPROVAL FROM 'CWMM'. ANY COSTS INCURRED BY 'CWMM' FOR THESE ALTERNATES MAY BE CHARGED TO THE CONTRACTOR.

14. ALL TOP AND BOTTOM PLATES ARE TO BE FASTENED TO EACH 2x6 WALL, JAMB, OR CRIPPLE STUD WITH MINIMUM 3 – 3" LONG 10d NAILS THROUGH END GRAIN. USE 2 NAILS FOR 2x4 STUDS, 4 NAILS FOR 2x8 STUDS, 5 NAILS FOR 2x10 STUDS, AND 6 NAILS FOR 2x12 STUDS.

    ALL SILL MEMBERS ARE TO BE FASTENED TO THE ADJACENT 2x6 CRIPPLE OR JAMB STUD WITH MINIMUM 3 – 3" LONG 10d NAILS THROUGH END GRAIN. USE 2 NAILS FOR 2x4 SILLS, 4 NAILS FOR 2x8 SILLS, 5 NAILS FOR 2x10 SILLS, AND 6 NAILS FOR 2x12 SILLS. ALL 10" NOMINAL DEPTH HEADERS ARE TO BE FASTENED TO THE ADJACENT JAMB STUD WITH MINIMUM 4 – 3" LONG 10d NAILS THROUGH END GRAIN PER 1.5" WIDTH OF HEADER, WITH THE SAME NAILING PATTERN TO FASTEN EACH ADDITIONAL JAMB STUD. USE 3 NAILS FOR HEADERS < 8" NOMINAL DEPTH, 5 NAILS FOR HEADERS < 12" NOMINAL DEPTH, 6 NAILS FOR HEADERS < 16" NOMINAL DEPTH, AND 7 NAILS FOR HEADERS < 20" NOMINAL DEPTH.

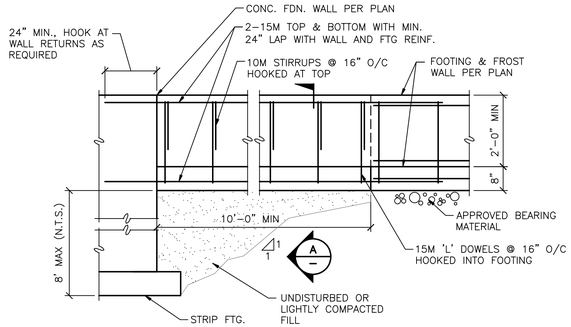
15. ALL LOAD–BEARING WALL TOP PLATES TO BE SPLICED DIRECTLY OVER WALL STUD LOCATIONS AND SHALL OVERLAP MINIMUM 48" TO ADJACENT TOP PLATE WITH PAIRS OF NAILS @ 6" O/C.

16. FOR UPLIFT, USE MINIMUM ONE 'SIMPSON' H1 FRAMING ANCHOR FASTENING ALL ROOF MEMBERS TO EACH BEARING WALL, UNLESS NOTED OTHERWISE ON THE APPROVED TRUSS OR JOIST MANUFACTURER'S SHOP DRAWINGS. THESE UPLIFT CONNECTORS CAN BE ELIMINATED AT THE DISCRETION OF 'CWMM' FOR LOCATIONS WHERE CONTINUOUS WALL SHEATHING IS FASTENED DIRECTLY TO THE TRUSS.

17. ALL EXPOSED EXTERIOR WOOD POSTS ARE TO BE MADE OF PRODUCT THAT CAN ADEQUATELY RESIST DETERIORATION FROM SUCH EXPOSURE. DIMENSION LUMBER IS TO BE PRESSURE TREATED. TREAT ALL CUT ENDS, HOLES, ETC.. USE ELEVATED POST BASES.

ABBREVIATIONS

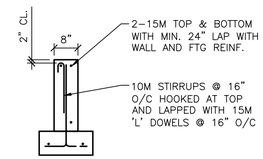
TYP.	TYPICAL	H1E	HOOK ONE END
CONT.	CONTINUOUS	H2E	HOOK TWO ENDS
SIM.	SIMILAR	BOT.	BOTTOM
OPP.	OPPOSITE HAND	T&B	TOP AND BOTTOM
THK	THICK	W/	WITH
DP	DEEP	UNO	UNLESS NOTED OTHERWISE
CL.	CLEAR	MIN.	MINIMUM
COL.	COLUMN	MAX.	MAXIMUM
PL	PLATE	R/W	REINFORCED WITH
G/L	GRID LINE	O/C	ON CENTRE
E/W	EACH WAY	U/S	UNDERSIDE
E/F	EACH FACE	C/W	COMPLETE WITH
F/S	FAR SIDE	NTS	NOT TO SCALE
N/S	NEAR SIDE	SOG	SLAB–ON–GRADE
LG	LONG	CIP	CAST IN PLACE
STAG.	STAGGERED	ALT.	ALTERNATE



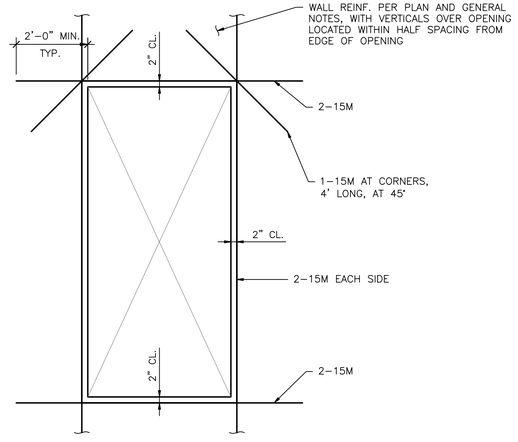
ENSURE FROST DEPTH REQUIREMENTS FOR MIDWAY ARE MET

TYP. GRADE BEAM DETAIL

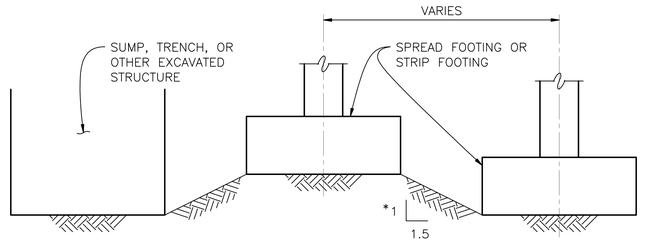
1/2" = 1'–0"



SECTION A / 1/2" = 1'–0"

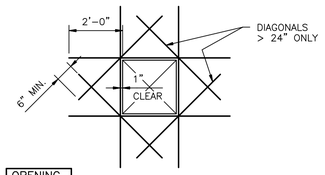


TYPICAL MIN. REINF. AT DOOR OPENINGS



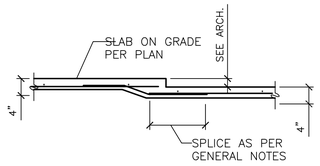
*AS APPROVED OR OTHERWISE DIRECTED BY GEOTECHNICAL ENGINEER

RELATIVE ELEVATIONS OF ADJACENT FOOTING

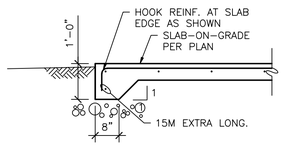


OPENING SIZE	
12" TO 18"	1–15M EACH SIDE
18" TO 24"	1–15M T & B EACH SIDE
> 24"	1–20M T & B EACH SIDE, 1–15M DIAGONALS

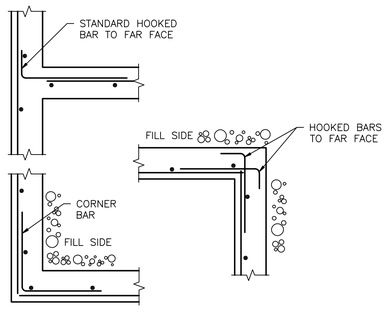
CONCRETE WALL AND SLAB OPENINGS



TYPICAL DEPRESSED SLAB DETAIL

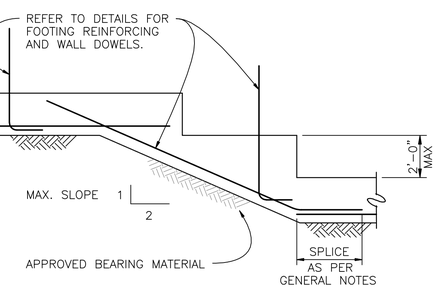


TYP. SLAB–ON–GRADE EDGE DETAIL

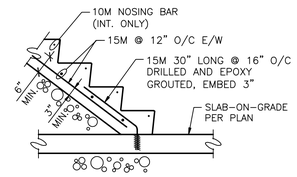


TYP. WALL INTERSECTION PLAN DETAILS

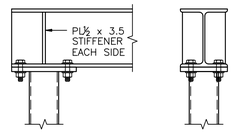
DETAILS FOR SINGLE AND DOUBLE REINFORCING MATS ARE SIMILAR



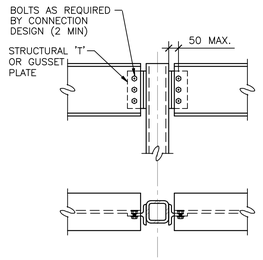
STEPPED STRIP FOOTING



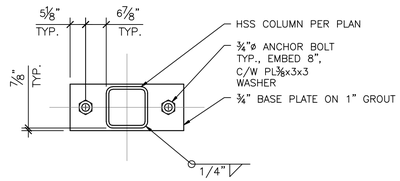
TYPICAL STAIR ON GRADE



TYP. W–STEEL BEAM TO HSS COLUMN CONNECTION



STEAL BEAM/HSS COLUMN DETAIL



TYPCIAL BASEPLATE

cover Architectural Collaborative Inc

ARCHITECTURE

#1 96 Baker Street
Nelson BC
V1L 4G9
250 354 4445
coverarc.ca

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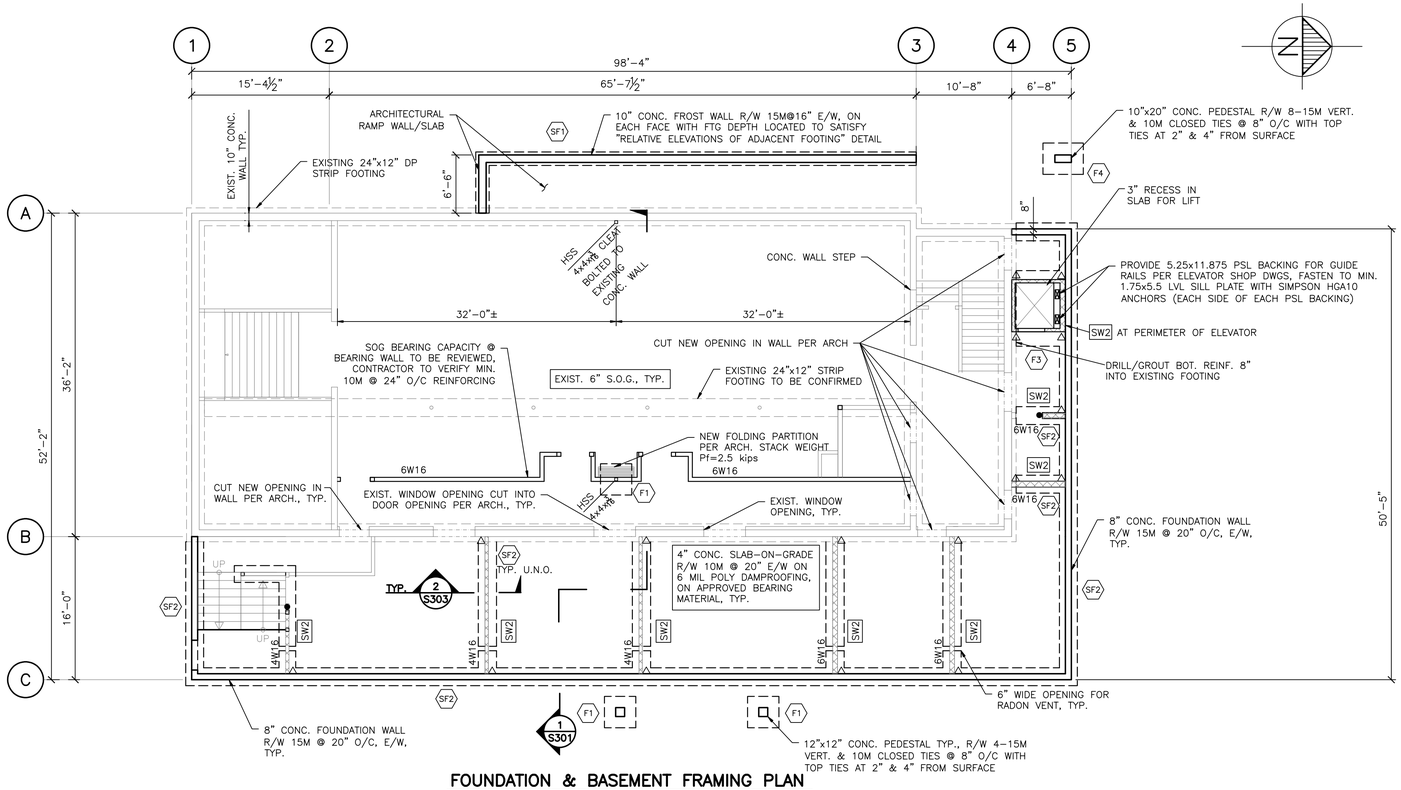
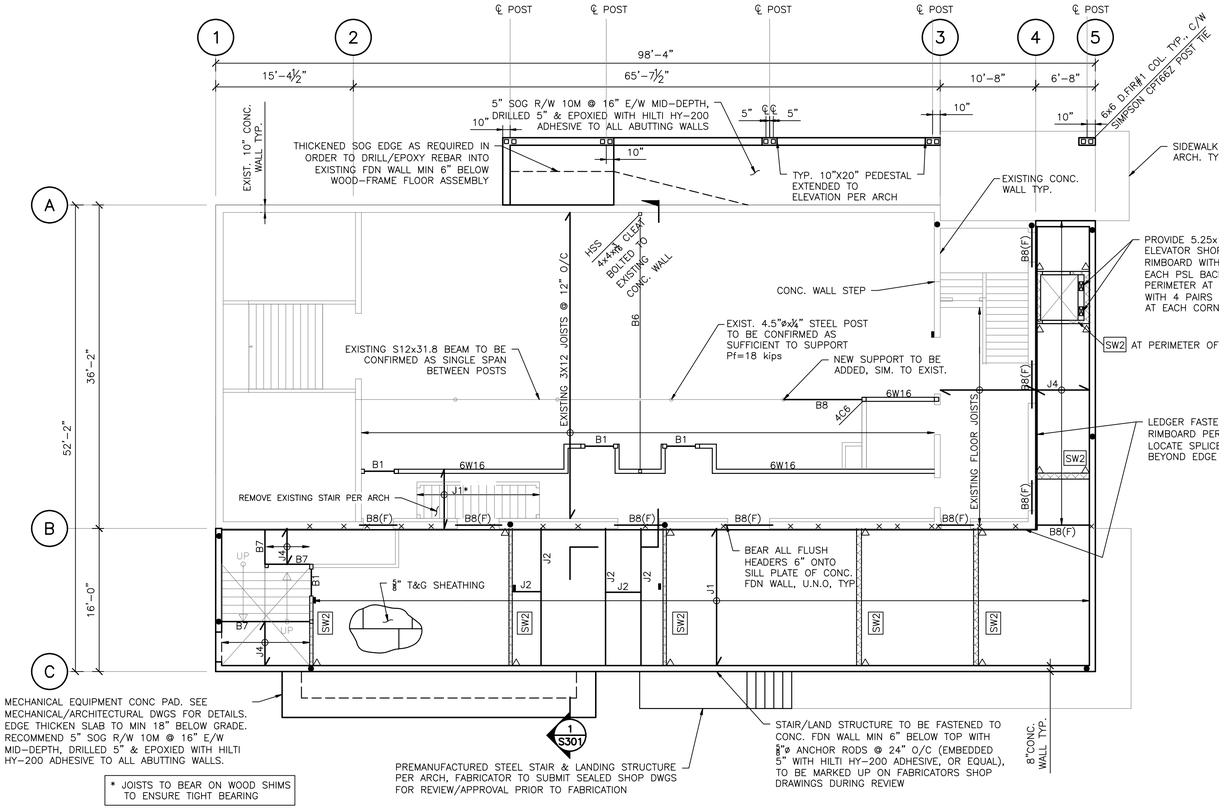
SHEET
GENERAL NOTES AND TYPICAL DETAILS

S102



FOUNDATION & BASEMENT FRAMING PLAN

1/8" = 1'-0"



* JOISTS TO BEAR ON WOOD SHIMS TO ENSURE TIGHT BEARING

MAIN FLOOR FRAMING PLAN

1/8" = 1'-0"

FOOTING SCHEDULE (2.0 ksf BEARING)

FTG. TYPE	FOOTING SIZE	REINFORCING
SF1	18" WIDE x 8" DEEP	2-15M LONG. BOT. AND 15M TRANS. @ 16"
SF2	24" WIDE x 8" DEEP	3-15M LONG. BOT. AND 15M TRANS. @ 16"
F1	10"DP x 3'-6" x 3'-6" PAD FOOTING	15M@12" BOT. E/W
F2	12"DP x 4'-0" x 5'-0" PAD FOOTING	15M@12" TOP & BOT. E/W,
F3	12"DP x 5'-6" x 8'-6" PAD FOOTING	15M@12" BOT. E/W
F4	10"DP x 3'-6" x 4'-6" PAD FOOTING	15M@12" BOT. E/W

LEGEND

═══	ENGINEERED CONCRETE WALLS
═══	NON-LOAD BEARING WALLS
═══	LOAD BEARING WALLS 2x STUD SIZE ← #W# → STUD SPACING
═══	FLOOR JOISTS (BY OTHERS)
GT(C#)	PREMANUFACTURED TRUSSES PER PLAN GT DENOTES GIRDER TRUSS (C#) DENOTES # PLIES CRIPPLE STUDS EACH END, 2 - 2x U.N.O.
×	POINT LOAD FROM FLOOR ABOVE
∿∿∿	LINE LOAD FROM FLOOR ABOVE
B(C#)(J#) (F)	HEADER/BEAM PER PLAN AND SCHEDULE (C#) DENOTES # PLIES CRIPPLE STUDS EACH END, (J#) DENOTES # PLIES JAMB STUDS EACH END, 1 - 2x U.N.O. (F) DENOTES FLUSH BEAM
#C#	BUILT UP CRIPPLES PER PLAN NUMBER OF PLIES REQUIRED —— #C# —— 2x STUD SIZE
#J#	BUILT UP JAMBS PER PLAN NUMBER OF PLIES REQUIRED —— #J# —— 2x STUD SIZE
△	SW CHORD TO CONC. WALL CONNECTION W/ 1/2"ø ANCHOR RODS @ 24" O/C
●/▮	HOLD-DOWN ANCHOR HDU-5 / STRAP TIE MSTC40

SHEARWALL SCHEDULE

SHEARWALL TYPE	SHEATHING	# SIDES	NAIL SPACING	CHORD	HOLD-DOWN	ANCHOR BOLT SPACING
SW1	3/8"	1	6"	2-2x	N/A	32"
SW2	3/8"	1	3"	2-2x	PER PLAN	16"

NOTES:

1) PROVIDE SOLID BLOCKING AT ALL WOOD-SHEATHED PANEL EDGES.
2) NAILS FOR WOOD-SHEATHED PANELS SHALL BE 2.5" LONG COMMON NAILS WITH DIAMETER = 0.128".
3) CHORD MEMBERS REQUIRED ARE IN ADDITION TO THE WALL STUDS, JAMB STUDS, OR CRIPPLE STUDS AT THAT SAME LOCATION TYPICAL U.N.O.
4) HOLD DOWNS AS MANUFACTURED BY 'SIMPSON'. PROVIDE ANCHOR BOLTS AND NAILING AS PER MANUFACTURER'S SPECIFICATIONS, U.N.O. USE 'HILTI' HY-200 SYSTEM FOR DRILL-IN ANCHORS.
5) ANCHOR BOLTS TO BE ⅝"ø HILTI HY-200 EMBEDDED 5".
6) ALL CHORDS WITH HOLD-DOWN CONNECTORS TO CONTINUE TO FOUNDATION, U.N.O.
7) AT LOCATIONS WHERE APPROPRIATE, 2-2X STUDS CAN BE ANCHORED TO ADJACENT CONCRETE FOUNDATION WALLS AS INDICATED.

WOOD BEAM SCHEDULE

BEAM TYPE	DESCRIPTION
B1	3 - 2x10
B2	5.25"x14" PSL 2.2E
B3	6x14 NO 1/2 D.FIR
B4	6x16 S.S. D.FIR
B5	6x12 NO 1/2 D.FIR
B6	W10x15
B7	3.5"x11.875" LSL 1.55E
B8	5.25"x11.875" PSL 2.2E
B9	6x6 No 1 D. FIR

JOIST SCHEDULE

JOIST TYPE	DESCRIPTION
J1	11.875 TJI 230 @ 16" O/C
J2	1.75 x 11.875 LVL 2.0E PER PLAN
J3	1.75 x 11.25 LVL 2.0E @ 24"O/C
J4	11.875" TJI 230 @ 19.2" O/C
J5	SPF #2 2x10 @ 24" O/C
J6	SPF #2 2x6, SP. PER PLAN

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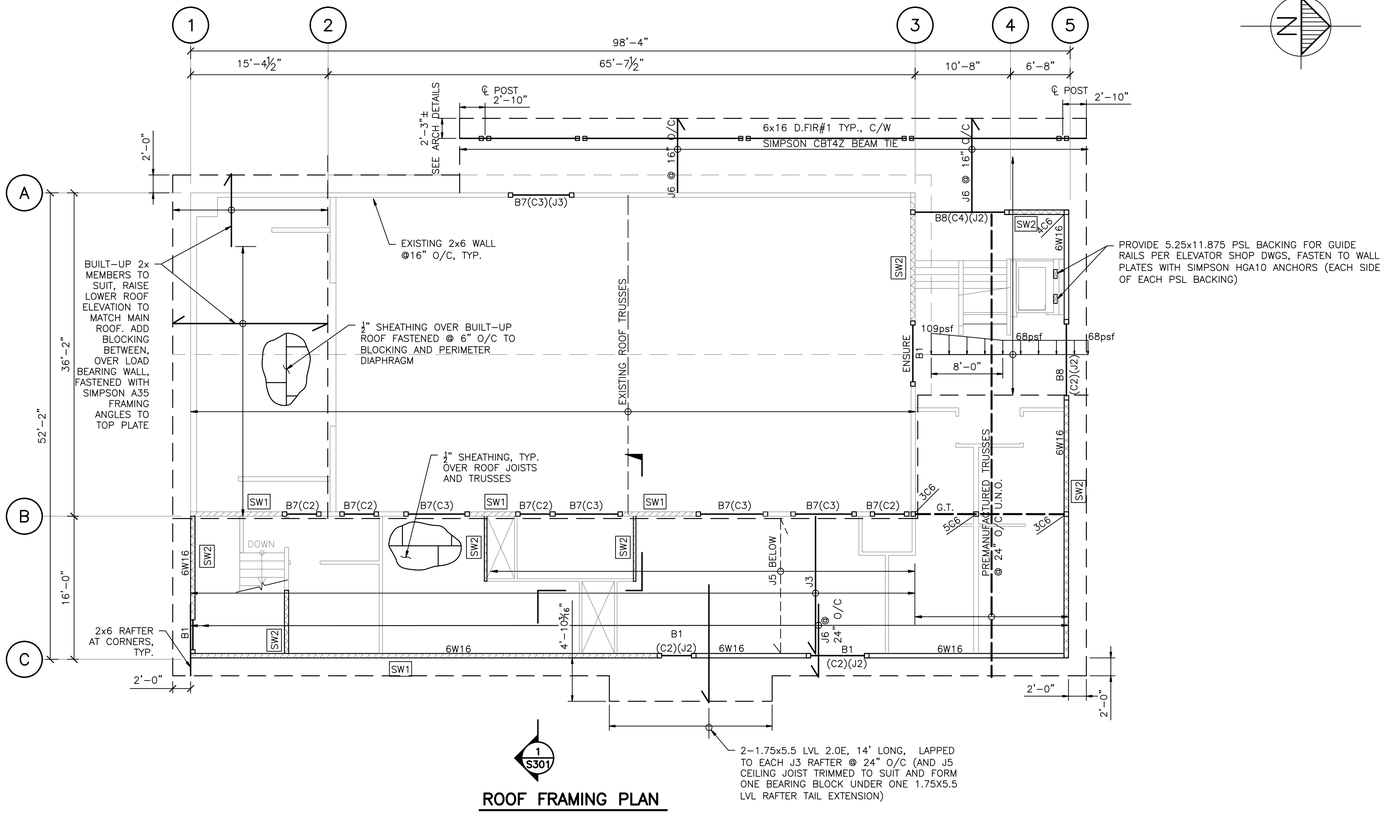
SHEET
FOUNDATION AND MAIN FLOOR PLANS

S201



1/S301

ROOF FRAMING PLAN

1/8" = 1'–0"

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V1L 4G9

250 354 4445
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CONSULTANTS

CWMM CONSULTING ENGINEERS LTD.
200-1854 Kirschner Road
Kelowna, B. C.
Canada, V1Y 4N8
Tel: (250) 868-2308
Fax: (250) 868-2374
kelowna@cwmm.ca
EGBC Permit to Practice #1000918

CLIENT

The Village of Midway

REVISIONS

Revision Schedule		
Number	Date (yy/mm/dd)	Description
1	2022-04-12	50% DD
2	2022-10-05	TENDER

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M.W. WEILMEIER
24799
2022-10-05

MIDWAY COMMUNITY CENTRE

ADDRESS
692 SEVENTH AVENUE, MIDWAY BC

PROJECT #
21163

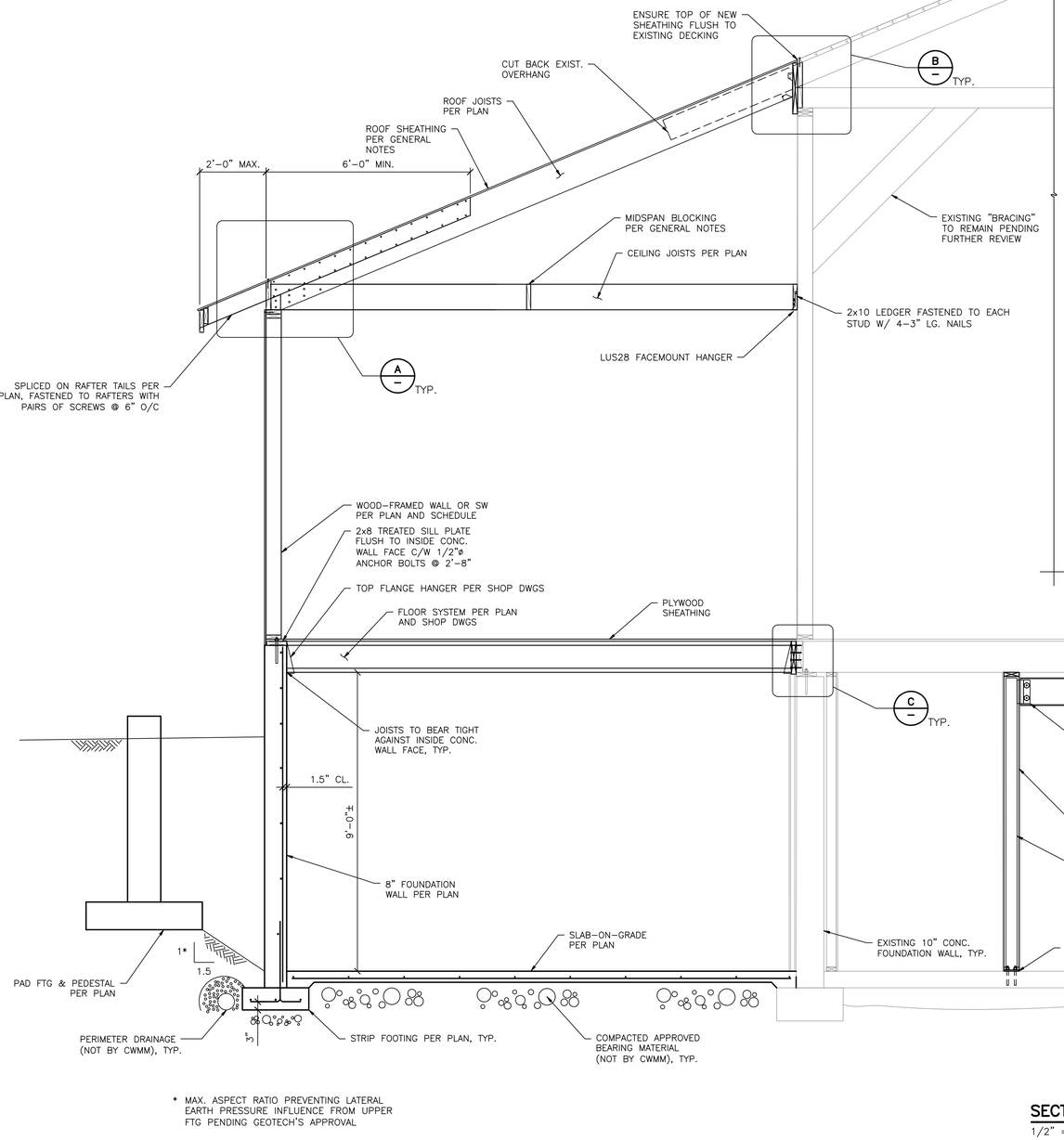
DATE
2022-10-05

REV.
-

DESIGNED BY MW
CHECKED BY DB
DRAWN BY JS

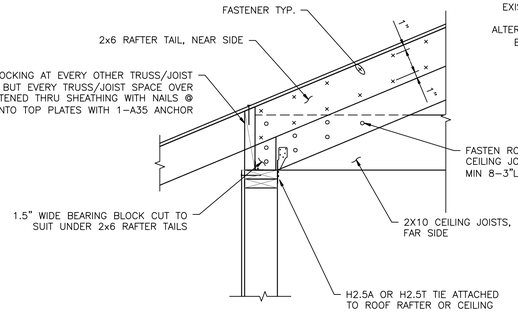
SHEET
ROOF FRAMING PLAN

S202

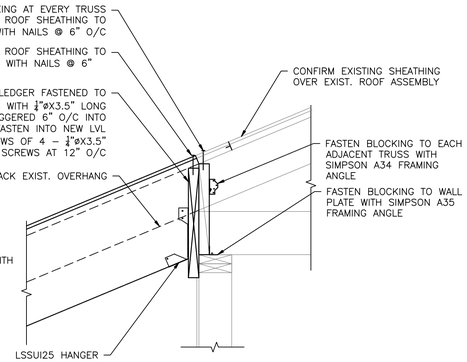


* MAX. ASPECT RATIO PREVENTING LATERAL EARTH PRESSURE INFLUENCE FROM UPPER FTG PENDING GEOTECH'S APPROVAL

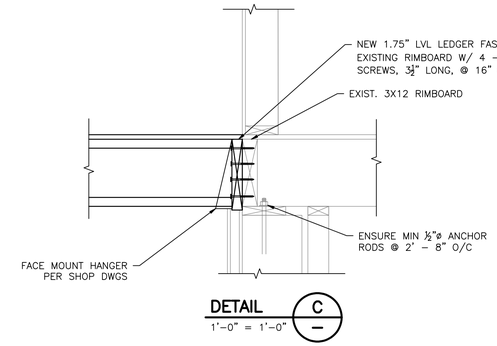
SECTION 1 / S201
1/2" = 1'-0"



DETAIL A / 1'-0" = 1'-0"



DETAIL B / 1'-0" = 1'-0"



DETAIL C / 1'-0" = 1'-0"

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ARCHITECTURE

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V1L 4G9

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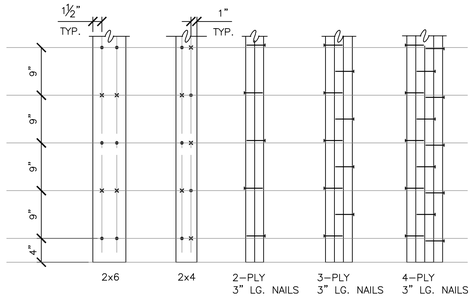
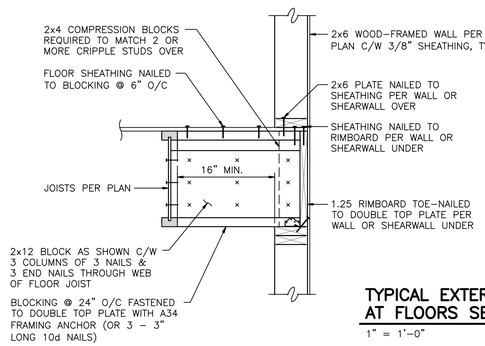
SHEET
SECTIONS

S301



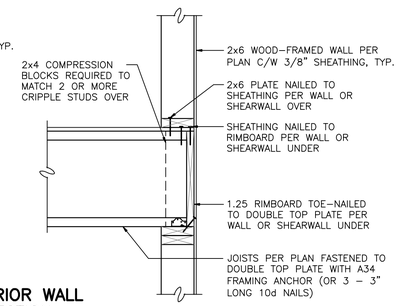
TYPICAL NAILING DETAIL FOR BUILT–UP COLUMNS, JAMBS, AND CRIPPLES

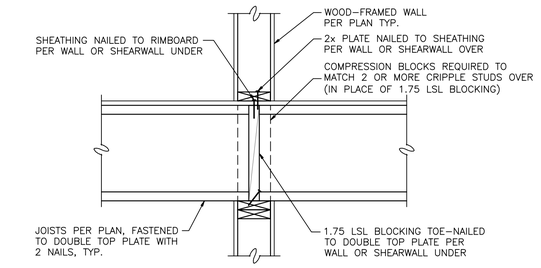
SCHEMATIC



TYPICAL EXTERIOR WALL AT FLOORS SECTION

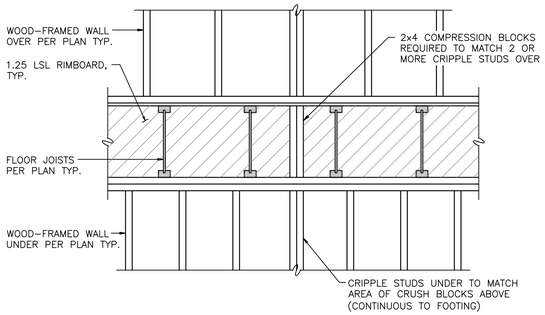
1" = 1'–0"





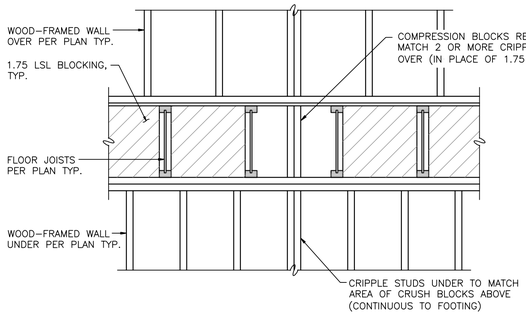
TYPICAL INTERIOR BEARING WALL SECTION

1" = 1'–0"



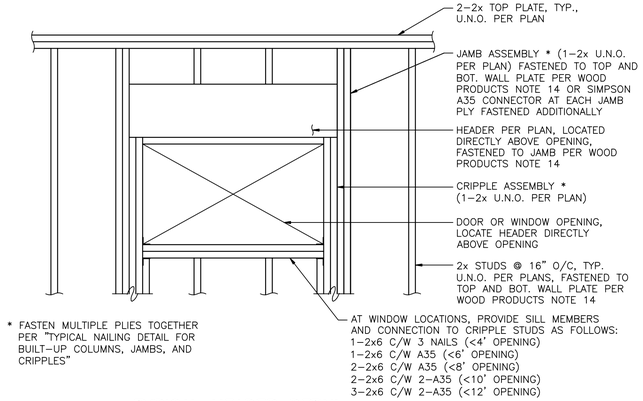
TYPICAL EXTERIOR WALL ELEVATION

SCHEMATIC



TYPICAL INTERIOR BEARING WALL ELEVATION

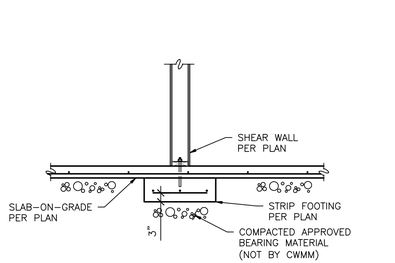
SCHEMATIC



* FASTEN MULTIPLE PLIES TOGETHER PER "TYPICAL NAILING DETAIL FOR BUILT–UP COLUMNS, JAMBS, AND CRIPPLES"

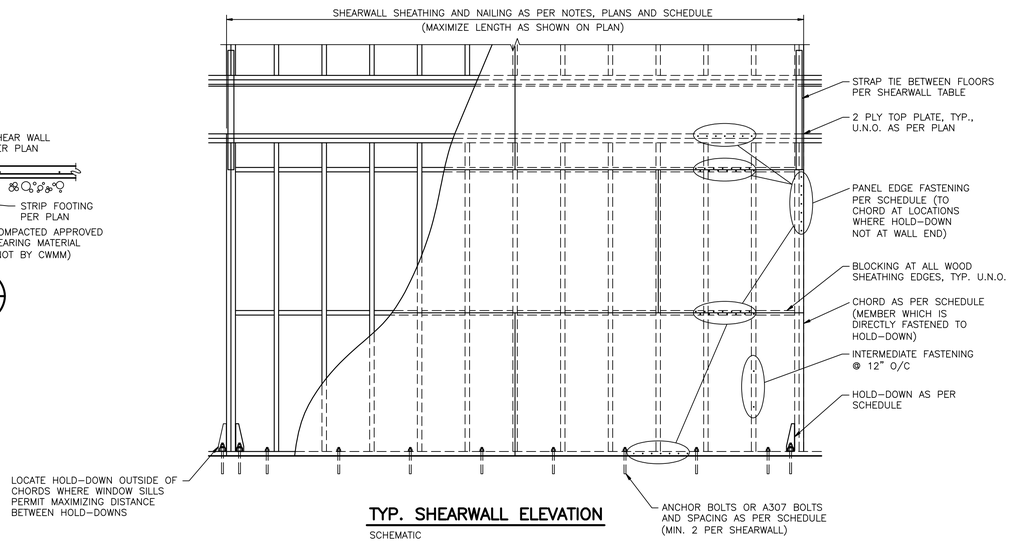
TYPICAL HEADER DETAIL

SCHEMATIC



SECTION 2 / S201

1/2" = 1'–0"



TYP. SHEARWALL ELEVATION

SCHEMATIC

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SHEET
SECTIONS

S302