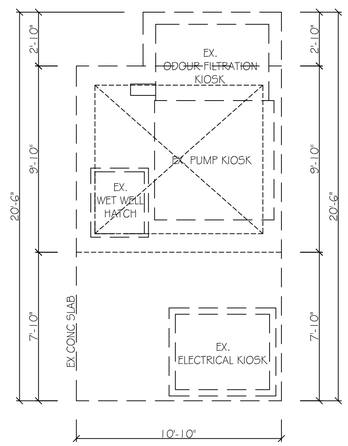
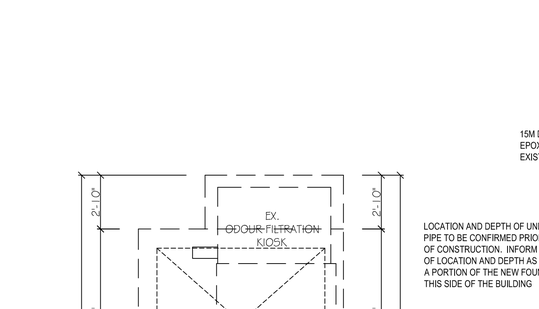


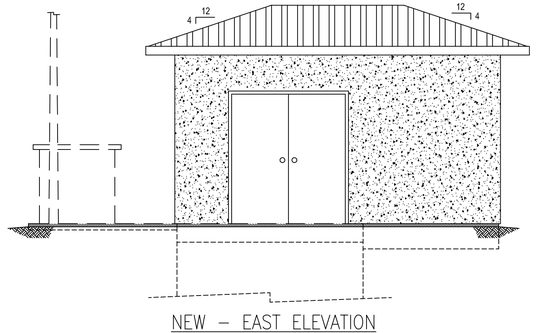
EXISTING LIFT STATION PLAN

SCALE: $\frac{1}{4}$" = 1'-0"



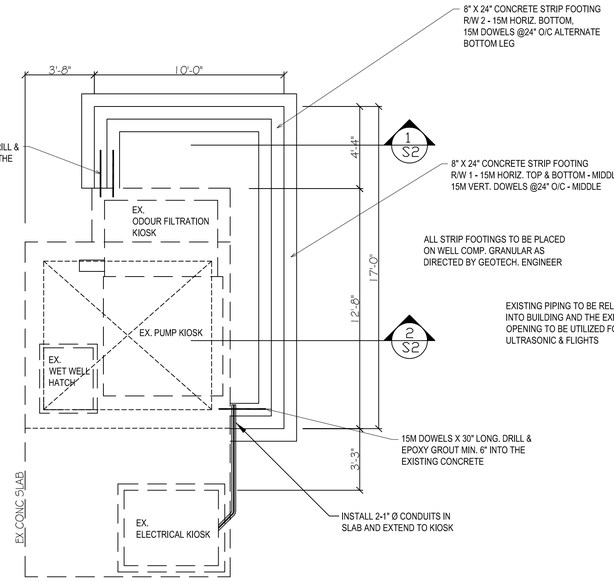
NEW – WEST ELEVATION

SCALE: $\frac{1}{4}$" = 1'-0"



NEW – EAST ELEVATION

SCALE: $\frac{1}{4}$" = 1'-0"



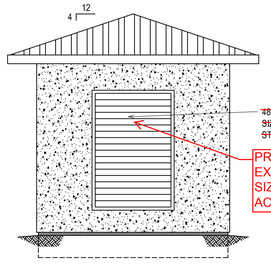
NEW – FOUNDATION PLAN

SCALE: $\frac{1}{4}$" = 1'-0"

NOTES:

1. EX. PUMP KIOSK AND EX. ODOUR KIOSK ENCLOSURES ARE TO BE REMOVED AND DISPOSED.

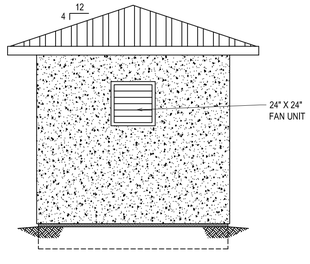
2. EXISTING ACCESS GATE IS TO BE REMOVED AND REPLACED WITH A DOUBLE-SWING GATE, 4.0m WIDE



PRICE MODEL DE 635 EXTRUDED ALUMINUM, SIZE TO BE 20" x 20" x 6" ACRYLIC ENAMEL FINISH

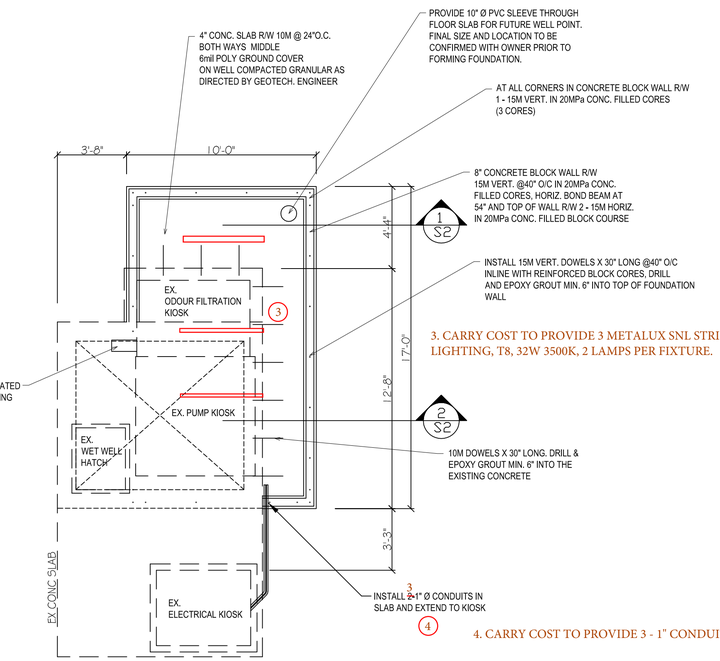
NEW – NORTH ELEVATION

SCALE: $\frac{1}{4}$" = 1'-0"



NEW – SOUTH ELEVATION

SCALE: $\frac{1}{4}$" = 1'-0"

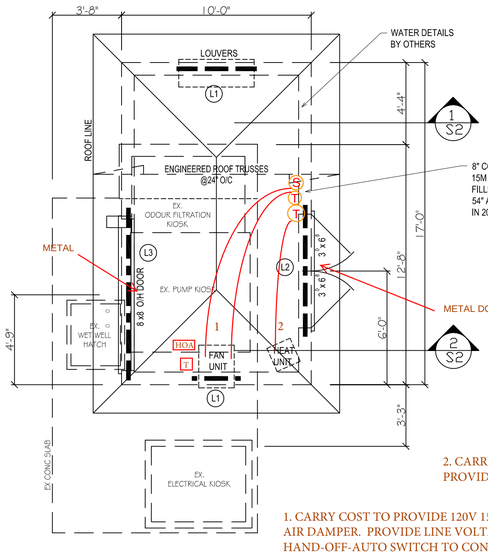


3. CARRY COST TO PROVIDE 3 METALUX SNL STRIP LIGHTING, T8, 32W 3500K, 2 LAMPS PER FIXTURE.

4. CARRY COST TO PROVIDE 3 - 1" CONDUITS

NEW – MAIN FLOOR FRAMING PLAN

SCALE: $\frac{1}{4}$" = 1'-0"



2. CARRY COST TO PROVIDE OUELLET 2000W HEATER. PROVIDE 2 POLE 208/240V 15A CIRCUIT.

1. CARRY COST TO PROVIDE 120V 15A CIRCUIT TO MOTORIZED AIR DAMPER. PROVIDE LINE VOLTAGE THERMOSTAT AND A HAND-OFF-AUTO SWITCH TO CONTROL ~~SAME.~~

NEW – ROOF FRAMING PLAN

SCALE: $\frac{1}{4}$" = 1'-0"

DESIGN LOADS & NOTES:

SPECIFIED DEAD LOAD = 12 PSF
SPECIFIED SNOW LOAD = 30 PSF
BEARING CAPACITY = 2000 PSF

General Notes:

Contractor shall verify site conditions and requirements prior to commencing work.

Equipment List

Exhaust Fan EF-1
Provide a inline exhaust fan mounted on spring isolation at high level. Greenheck Model BCF-106, 0.25 SP 410 CFM, 208/1/60. Provide a reverse acting t'stat control as well as a switch for fan operation for when temperature rises above above 25 deg C. Backdraft damper to be installed in ductwork to fan and opens when fan operates.

Wall Louvre L-1
Provide a wall louvre in outside wall. Price Model DE 635 extruded aluminum Size to be 20" x 20" x 6" Acrylic enamal finish.

Electric Unit Heater UH-1
Provide an Electric Unit Heater mounted at high level, heater to be Modine Her100, 10 kw heater to operate off t'stat set to operate when the temperature drops below 3 deg C.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
L. REDING
#21678

RIDING ENGINEERING
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No.	Date	Revision
1.	OCT 17 2016	ISSUED FOR CLIENT REVIEW
2.	NOV 13 2016	ISSUED FOR CONSTRUCTION

Project Title
DISTRICT OF SUMMERLAND
PEACH ORCHARD LIFT STATION NEW BUILDING

14877 LAKESHORE DRIVE S.
SUMMERLAND, BC.

Drawing Number

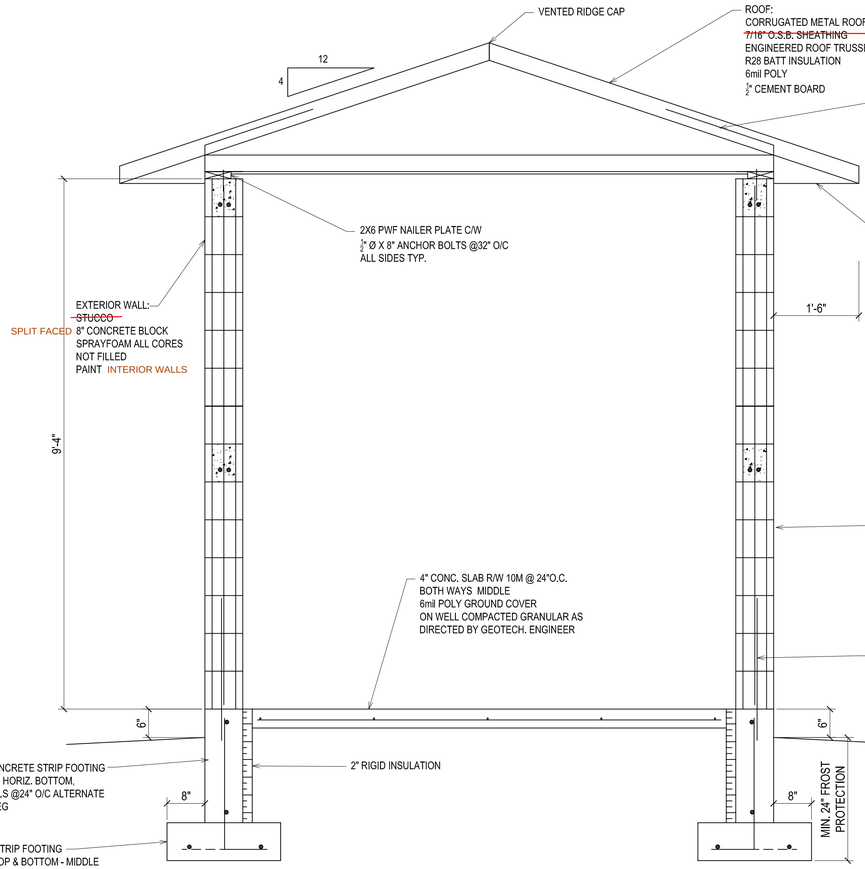
S1 OF 4

DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

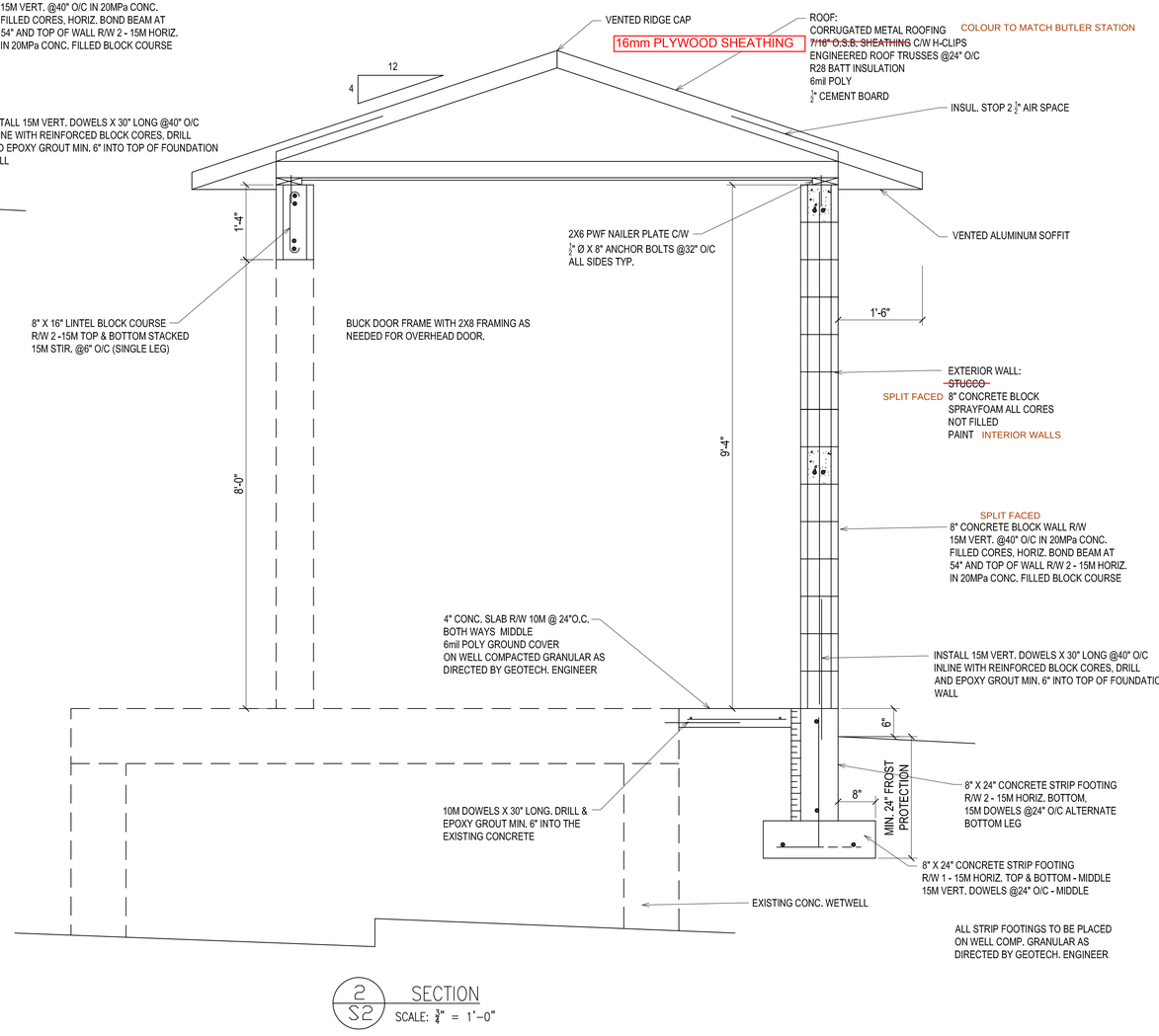
Drawing Title

EXISTING FLOOR PLAN
NEW FOUNDATION PLAN,
MAIN FLOOR FRAMING PLAN,
ROOF FRAMING PLAN
ELEVATIONS

Date	NOVEMBER 13, 2016
Job No.	16-00398
Scale	as noted
Drawn	L.R.
Checked	L.L.R.



1/S2 SECTION
SCALE: ¾" = 1'-0"



2/S2 SECTION
SCALE: ¾" = 1'-0"

NOTES
1. SPLIT FACED CONCRETE BLOCK TO MATCH COLOUR OF THE EXISTING BUTLER LIFT STATION.

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No.	Date	Revision
1.	OCT 17 2016	ISSUED FOR CLIENT REVIEW
2.	NOV 13 2016	ISSUED FOR CONSTRUCTION

Project Title
DISTRICT OF SUMMERLAND
PEACH ORCHARD LIFT
STATION NEW BUILDING

14877 LAKESHORE DRIVE S.
SUMMERLAND, BC.

Drawing Number
S2 OF 4

DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title
WALL SECTIONS

Date	NOVEMBER 13, 2016
Job No.	16-00398
Scale	as noted
Drawn	I.A.C.
Checked	L.L.R.

GENERAL

1. THIS SET OF DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL SPECIFICATIONS AND WITH THE 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 DOES NOT SHOW 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 CONSTRUCTION TEMPORARY LOADS AND TO COMPLETE THE WORK. ALL TEMPORARY WORKS AND SHORING, ETC. SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA. ADHERE STRICTLY TO ALL REQUIREMENTS OF THE WORKSAFE BRITISH COLUMBIA.

3. THESE NOTES MAKE STATEMENTS THAT IMPLY THIS SET OF DRAWINGS MAY SPECIFY OR SHOW DETAILS THAT SUPERCEDE THEM, COMMONLY REFERED TO AS "UNLESS NOTED OTHERWISE" WITHOUT NECESSARILY BEING EXPRESSLY STATED.

ALTERNATES FOR ANY ITEMS SHOWN MAY BE PRESENTED TO RIDING ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO ACCEPTANCE. ANY COSTS INCURRED BY RIDING ENGINEERING FOR THESE ALTERNATES MAY BE CHARGED TO THE CONTRACTOR.

4. ALL CODE REFERENCES ARE TO LATEST EDITIONS REFERENCED IN THE NATIONAL BUILDING CODE OF CANADA 2010/BC BUILDING CODE 2012

FIELD REVIEW:

1. RIDING ENGINEERING PROVIDES FIELD REVIEW FOR THE WORK SHOWN ON THE STRUCTURAL DRAWINGS PREPARED BY RIDING ENGINEERING. THIS REVIEW IS PERIODIC AT THE PROFESSIONAL JUDGEMENT OF RIDING ENGINEERING. THE PURPOSE IS TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS PREPARED BY RIDING ENGINEERING, 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 RIDING ENGINEERING 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 RIDING ENGINEERING FOR A FIELD REVIEW

4. A MINIMUM 24 HOURS NOTICE SHALL BE GIVEN BY THE CONTRACTOR FOR ANY FIELD REVIEW TO BE CARRIED OUT BY RIDING ENGINEERING.

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 ARCHITECTS AND RIDING ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO FABRICATION, ACCOMPANIED BY A SIGNED SCHEDULE S—B SUBMITTED TO RIDING ENGINEERING ONLY.

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 RIDING ENGINEERING. 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 SIGNED SCHEDULE S—C FOR DESIGN AND FIELD REVIEW SHALL BE SUBMITTED TO RIDING ENGINEERING.

2. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CONFIRM AND CO—ORDINATE 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 RIDING ENGINEERING. 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 RIDING ENGINEERING 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, ETC.
— ARCHITECTURAL PRECAST CONCRETE AND ITS ATTACHMENTS.
— ARCHITECTURAL GLASS BLOCKS AND THEIR ATTACHMENTS.
— BRICK AND BLOCK VENEERS, THEIR REINFORCING IF ANY AND TIES.
— LANDSCAPING COMPONENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC.
— CURTAIN WALL SYSTEMS, CLADDING, SKYLIGHT, WINDOW MULLIONS, ETC.
— INTERIOR AND EXTERIOR NON—LOAD BEARING STEEL STUD WALLS.
— SUPPORT AND BRACING OF MECHANICAL AND ELECTRICAL SYSTEMS AND EQUIPMENTS FOR NON—GRAVITY AND SEISMIC LOADS.
— WINDOW WASHING EQUIPMENTS AND ITS ATTACHMENT.
— ELEVATORS, ESCALATORS AND OTHER CONVEYING SYSTEMS, INCLUDING PROPRIETARY SUPPORT BEAMS AND THEIR ATTACHMENTS.
— NON—STRUCTURAL MASONRY

DESIGN LOADS:

1. THIS STRUCTURE HAS BEEN DESIGNED FOR SHOW, WIND AND SEISMIC FORCES IN SUBSTANTIAL COMPLIANCE WITH THE PROVISIONS SET FORTH IN THE NATIONAL BUILDING CODE OF CANADA 2010/BC BUILDING CODE 2012.

GROUND SNOW: Sa = 44 psf
RAIN LOAD: Sr = 3 psf

IMPORTANCE FACTORS FOR SNOW
Is = 1.0 FOR STRENGTH
Is = 0.9 FOR SERVICEABILITY

WIND LOAD:
PROBABILITY 1/10 = 7.4 psf
PROBABILITY 1/50 = 9.4 psf

IMPORTANT FACTORS FOR WIND
Iw = 1.0 FOR STRENGTH
Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)
0.28	0.18	0.11	0.065

EARTHQUAKE FACTORS:

1E = 1.0 FOR STRENGTH
Rd = 1.5 Ro = 1.3

SITE CLASS D (ASSUMED)

2. SPECIFIED UNIFORM SUPERIMPOSED DEAD LOADS ON ROOF AND FLOORS:

ROOF 12psf
MAIN FLOOR 75psf
EXTERIOR WALLS ACTUAL WEIGHT

— ALL FLOORS WHERE LIVE LOADS ARE LESS THAN 100 psf INCLUDE A GENERAL PARTITION LOAD OF 20 psf. USE ACTUAL WEIGHTS FOR MASONRY PARTITIONS.
— 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 GARAGE 50psf

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

ROOF 0lbs

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 FLOOR AT THE TIME OF THE LOADING UNLESS IT IS PROPERLY SHORED TO SUPPORT THE INTENDED LOAD. MOVING OF HEAVY EQUIPMENT AND PILING UP OF MATERIAL SHALL NOT BE PERMITTED UNLESS DESIGNED SHORING IS IN PLACE.

FOUNDATION AND SITE WORK

1. REFER TO GEOTECHNICAL REPORT PREPARED BY INTERIOR TESTING SERVICES LTD 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. ALLOWABLE SOIL BEARING CAPACITY (AS PER GEOTECHNICAL REPORT): 2000psf

3. 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 AND ELECTRICAL SERVICES. FOLLOW TYPICAL DETAILS SHOWN ON THESE DRAWINGS FOR FOOTING PLACEMENT RELATIVE TO ADJACENT FOOTINGS, SUMP AND OTHER EXCAVATED STRUCTURES AND LOCATE AS DIRECTED BY GEOTECHNICAL ENGINEER.

4. THE BASES OF FOUNDATIONS SHALL BE PROTECTED FROM RAIN, SNOW AND ANY WATER INFILTRATION

5. THE BASES OF ALL FOOTINGS SUSCEPTIBLE TO FROST IS TO BE LOCATED AT A MINIMUM OF 2'—0" BELOW EXTERIOR GRADE.

6. NO FOUNDATIONS MAY BE POURED BEFORE THE BEARING MATERIAL HAS BEEN INSPECTED BY THE GEOTECHNICAL ENGINEER. NOTIFY THE GEOTECHNICAL ENGINEER MINIMUM 24 HOURS BEFORE INSTALLATION OF FOOTING REINBIRCEMENT.

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

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

9. CENTRE ALL FOOTINGS UNDER COLUMNS OR WALLS UNLESS NOTED OTHERWISE.

10. DO NOT BACKFILL RETAINING WALLS INCLUDING PERIMETER BASEMENT WALLS BEFORE THEY ARE ADEQUATELY SUPPORTED BY THE SUPPORTING FLOOR(S). ALL CONCRETE SUPPORTING FLOORS MUST HAVE CURED FOR MINIMUM 7 DAYS OR ATTAINED MINIMUM 75% OF THEIR 28—DAYS STRENGTH. ALL BACKFILLING TO COMPLY WITH THE REQUIREMENTS PROVIDED BY THE GEOTECHNICAL ENGINEER.

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

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY SUPPORT OF THE ADJACENT STRUCTURE DURING CONSTRUCTION. UNDERPINNING OR BRACING SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED IN BRITISH COLUMBIA. SUBMIT 4 COPIES OF DESIGN DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER, TO THE ARCHITECT FOR REVIEW OF CONFORMANCE WITH GENERAL DESIGN CRITERIA.

REINFORCED CONCRETE
CONCRETE:

1. CODE CONFORMANCE:

— CEMENT:	TYPE GU OR GUb — NORMAL USE	CSA—A3001
TYPE HE OR HEb	— HIGH EARLY STRENGTH	CSA—A3001
TYPE MS OR MSb	— MODERATE SULPHATE RESISTANCE	CSA—A3001
TYPE HS	— HIGH 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—CHLORINE BASED)		ASTM C494
— CURING COMPOUNDS		ASTM C309
— CONCRETE FOR PARKING SLAB		CSA—S413
— PRECAST CONCRETE		CSA—A23.4

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 (SP) ARE USED, THE SLUMP MAY BE INCREASED BUT SHALL BE 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—DAYS STRENGTH (MPa)	MAXIMUM AGGREGATE SIZE (in)	EXPOSURE CLASS	AIR CONTENT CATEGORY	SLUMP
FOOTINGS	25	1	N	—	3" ± 1"
FOUNDATION WALLS	25	¾	F—2	1	4" ± 1"
INTERIOR SLAB ON GRADE	32	3/4	C—2	1	4" ± 1"
CONCRETE BLOCK GROUT	20	⅜"	N	—	3" ± 1"

3. ADHERE STRICTLY TO CSA—A23.1 FOR PROPER PREPARATION FOR COLD WEATHER CONCRETE WORK.

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

5. CONCRETE AND MATERIALS TESTING AGENCY MUST BE CSA CERTIFIED. SUBMIT ALL CONCRETE TEST RESULTS TO RIDING ENGINEERING.

FORMING:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL FORMWORK AND SHORING AND FOR COMPLYING WITH ALL WORKERS' COMPENSATION BOARD REGULATIONS PERTAINING TO FORMWORK CONSTRUCTION, DESIGN AND INSPECTION. FORMWORK AND SHORING SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA.

2. LOCATIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO RIDING ENGINEERING FOR REVIEW IN ADVANCE AND PRIOR TO COMMENCEMENT OF CONSTRUCTION.

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

4. TOLERANCES CLOSER THAN THOSE SPECIFIED IN CSA—23.1 MAY BE REQUIRED AT CERTAIN LOCATIONS FOR STRUCTURAL, ARCHITECTURAL AND CONSTRUCTION REQUIREMENTS.

5. CHAMFER EXPOSED EDGES OF COLUMNS, SLAB UNDERSIDE AND BEAM SOFFITS 3/4", UNLESS NOTED OTHERWISE.

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

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

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

9. SLAB ON GRADE JOINTS SHALL HAVE 1.5" DEEP SAWCUTS SPACED MAXIMUM 15'—0" APART, LAYOUT OF JOINTS SHALL BE APPROVED BY THE ARCHITECT, SEAL WITH FLEXIBLE JOINT SEALER TO PREVENT INGRESS OF WATER.

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

11. CONDUITS, PIPES AND SLEEVES:

— NO SLEEVES, DUCTS, PIPES OR OTHER OPENINGS SHALL PASS THROUGH SLAB BANDS, BEAMS, COLUMNS OR WALLS, EXCEPT WHERE EXPRESSLY DETAILED ON STRUCTURAL DRAWINGS OR WHERE APPROVED IN ADVANCE BY RIDING ENGINEERING.
— FOR CONDUITS, PIPES AND SLEEVES THROUGHT THE THICKNESS OF THE SLAB, SLEEVES AND OPENINGS GREATER THAN 4" IN ANY DIRECTION NOT INDICATED ON DRAWINGS MUST BE APPROVED BY RIDING ENGINEERING.
— FOR ELECTRICAL CONDUITS WITHIN THE PLACE OF THE SLAB, COORDINATE LAYOUT WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS AND THE FOLLOWING REQUIREMENTS SHALL BE MET:
— MAXIMUM CONDUIT OUTSIDE DIAMETER SHALL BE 0.25 x THE SLAB THICKNESS.
— MINIMUM 4" CLEAR BETWEEN CONDUITS.
— ONLY TWO LAYERS OF CONDUITS ARE ACCEPTED AT CROSSINGS.
— DO NOT PLACE CONDUITS WITHIN 4'—0" OF ANY COLUMN.
— RIDING ENGINEERING WILL HAVE THE AUTHORITY TO ORDER CONDUITS MOVED WHERE THE CONDUITS AFFECT THE STRUCTURAL INTEGRITY OF THE MEMBERS.
— ALL EMBEDED CONDUITS AND PIPES SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF CLAUSE 6.7.5 OF CSA—A23.1.

STRIPPING 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 COLUMNS, WALLS, FOOTINGS AND BEAM SIDES
28 DAYS BEAM SOFFITS, SLABS AND OTHER STRUCTURAL MEMBERS

— FORMWORK FOR SLABS AND BEAMS MAY BE REMOVED EARLIER THAN 28 DAYS PROVIDED:

A) PROPER RESHORING IS CARRIED OUT. RESHORING SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA AT THE CONTRACTOR'S EXPENSE. SIGNED SEALED RESHORING SHOP DRAWINGS SHALL BE FORWARDED TO RIDING ENGINEERING FOR GENERAL CONCEPT REVIEW PRIOR TO ANY RESHORING WORK, RESHORING MUST BE CARRIED OUT IMMEDIATELY AFTER REMOVAL OF FORMS.
AND
B) THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH AS JUDGED BY RIDING ENGINEERING. STRENGTH SHALL BE DETERMINED BY ADDITIONAL TESTING OF FIELD—CURED CYLINDERS AT THE CONTRACTOR'S EXPENSE.

— 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 RIDING ENGINEERING, 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 HILTI HY—150 SYSTEM FOR FASTENING INTO CONCRETE. ALTHOUGH HAS RODS ARE STANDARD, TZ RODS ARE PREFERRED DUE TO THEIR EFFICIENT INSTALLATION WITH REDUCED DRILLING AND EASIER HOLE PREPARATION REQUIREMENTS.

CONCRETE REINFORCING:

1. CODE CONFORMANCE:
— ALL REBAR CSA—G30.18 GRADE 400R

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

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

CAST AGAINST SOIL 3"
EXPOSED TO SOIL 2"
SLAB—ON—GRADE CENTERED

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

5. DO NOT CUT REINFORCING BARS OR PULL BACK TOP BARS AT MINOR OPENINGS OR INSERTS WITHOUT PRIOR APPROVAL FROM RIDING ENGINEERING. SPLAY BARS AROUND OPENING OR INSERT.

6. USE ONLY NON—CORRODING CHAIRS FOR REINFORCING IN ALL EXPOSED CONCRETE WORK AND FOR ALL CONCRETE SLABS.

7. WHERE NEW CONCRETE POUR ABUTS EXISTING OR PREVIOUSLY POURED CONCRETE, DRILL AND GOURT ALL ABUTTING REBAR MINIMUM 6", U.N.O. DRILLING AND GROUTING OF REBAR SHALL BE WITH 'HILTI' HY—200 SYSTEM, OR APPROVED EQUAL.

8. PROVIDE CORNER BARS FOR ALL HORIZONTAL WALL REINFORCING.

WOOD PRODUCTS

1. PREFABRICATED TRUSSES, JOISTS, AND OTHER PROPRIETARY LUMBER PRODUCTS SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH CSA—086.1—94 FOR LOADS SHOWN ON THE DRAWINGS. MAXIMUM LIVE LOAD DEFLECTION L/360 FOR FLOORS AND L/240 FOR ROOFS. PRE—CAMBER FOR DEAD LOAD PLUS 25% LIVE LOAD. BRACING, BRIDGING AND ADDITIONAL HARDWARE (STIFFENERS, WOOD FRAME CONNECTORS, ETC.) SHALL BE DESIGNED AND SUPPLIED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH GENERAL NOTES.

2. ALL LUMBER MATERIAL TO CONFORM TO N.L.G.A. GRADING RULES, AND CSA—086.1. PLYWOOD SHALL CONFORM TO CSA 0121.

3. DIMENSION LUMBER SHALL BE AS SPECIFIED BELOW:

STUDS (<9' TALL)	SPF #3
STUDS (>9' TALL)	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 OR OSB FOR SLOPES > 3:12, AND MINIMUM 5/8" TONGUE—AND—GROOVE JOINTED (T&G) PLYWOOD OR OSB 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.

4. ROOF, FLOOR, AND WALL SHEATHING SHALL BE FASTENED AT PANEL EDGES WITH NAILS @ MINIMUM 6" O/C, AND AT INTERMEDIATE FRAMING MEMBERS WITH NAILS @ MINIMUM 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 @ MINIMUM 6" O/C.

5. ALL PLATES AND SILLS BEARING ON MASONRY OR CONCRETE SHALL BE PRESSURE—TREATED SPF #2 OR BETTER.

6. ALL STUD WALLS SUPPORTING PROPRIETARY WOOD TRUSSES SHALL BE PROVIDED WITH STUDS AT SPECIFIED SPACING WITH TRIPLE TOP PLATES. ALTERNATIVELY, PROVIDE DOUBLE TOP PLATE WHERE STUDS ARE ALIGNED WITH ROOF TRUSSES. IN NO CASE SHALL THE SPACING OF THE STUDS EXCEED THE SPECIFIED SPACING.

7. CONNECTIONS:
— ALL BOLTS AND ANCHOR BOLTS 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 CSAB111. IF P—NAILS (POWER DRIVEN NAILS) ARE INTENDED AS SUBSTITUTION, SUBMIT P—NAILS INFORMATION FOR RIDING ENGINEERING'S REVIEW PRIOR TO USE. ADJUSTMENT OF NAILS SPACING OR REQUIREMENTS MAY BE REQUIRED.
— BOLT HOLES SHALL BE 1/16 INCH LARGER THAN THE BOLT DIAMETER.
— BOLTS IN WOOD SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE UNLESS OTHERWISE DETAILED.
— LAG SCREWS SHALL BE PREDRILLED 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.

8. STUD WALLS ABUTTING A CONCRETE OR MASONRY WALL SHALL BE BOLTED TO THE WALL WITH 1/2" DIAMETER ANCHOR BOLTS AT 2'—0" O/C THROUGH A DOUBLE STUD.

9. PROVIDE 2x BLOCKING AT MIDHEIGHT OF STUDS OVER 8'—0" IN HEIGHT.

10. 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 I—JOISTS BLOCKING OR 1.25" ENGINEERED—WOOD RIMBOARD SHALL BE PLACED BETWEEN ALL FLOOR JOISTS AT MIDSPAN FOR SPANS OVER 8'—0", AND @ 8'—0" O/C FOR SPANS OVER 16'—0".

11. UNLESS NOTED OTHERWISE, ALL EXTERIOR WALL & LOAD BEARING WALL SILL PLATES SHALL BE ANCHORED TO THE CONCRETE FOUNDATION OR SLAB WITH MIN. 5/8 INCH DIAMETER ANCHOR BOLTS @ 4'—0" O/C. ANCHOR INTERIOR NON—STRUCTURAL BOLTS @ 8'—0" O/C. ANCHOR SHEAR WALL SILL PLATES AS SHOWN ON SHEAR WALL SCHEDULES.

12. ALL METAL HARDWARE (NAILS, BOLTS, HANGERS, ETC.) IN CONTACT WITH PRESSURE—TREATED PRODUCTS 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.

13. UNLESS NOTED OTHERWISE, ALL LIGHT FRAMING CONSTRUCTION SHALL CONFORM WITH PART 9 OF BCBC.

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

RIDING ENGINEERING
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No.	Date	Revision
1.	OCT 17 2016	ISSUED FOR CLIENT REVIEW
2.	NOV 13 2016	ISSUED FOR CONSTRUCTION

Project Title
DISTRICT OF SUMMERLAND
PEACH ORCHARD LIFT STATION NEW BUILDING

14877 LAKESHORE DRIVE S.
SUMMERLAND, BC.

Drawing Number
S3 OF 4

DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title
GENERAL NOTES

Date	NOVEMBER 13, 2016
Job No.	16-00398
Scale	as noted
Drawn	I.A.C.
Checked	L.L.R.

SHOP DRAWINGS:

1. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH GENERAL NOTES ON THESE DRAWINGS AND WITH SPECIFICATIONS. SHOP DRAWINGS FOR ANCHOR BOLT LAYOUT AND EMBEDDED PLATE LAYOUT SHALL ALSO BE SUBMITTED FOR REVIEW.

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. 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 (DIVISION 1 OR 2). CERTIFICATIONS SHALL BE SUPPLIED TO THE ENGINEER UPON REQUEST.

2. UNLESS NOTED OTHERWSIE, CAMBER ALL BEAMS WITH SPAN OVER 20'—0" AS SPECIFIED ON THE DRAWINGS. INSTALL ALL OTHER ROLLED STEEL SECTIONS WITH MILL CAMBER UPWARDS.

3. IMPERIAL SIZE BOLTS AND PLATE PRODUCTS ARE ACCEPTABLE ON AN EQUAL SIZE — STRENGTH BASIS.

4. PROVIDE WEEP HOLES FOR ALL EXPOSED HSS MEMBERS.

5. GALVANIZING OF STRUCTURAL MEMBERS AND PLATE MEMBERS, IF REQUIRED, SHALL BE IN ACCORDANCE WITH CSA—G164 AND RELATED STANDARDS. G210 MINIMUM COATING (2oz /sq. ft.). ALL AREAS OF GALVANIZED PARTS SHALL BE GROUNDED OFF PRIOR TO WELDING. PAINT 2 COATS MINIMUM OF ZINC RICH PRIMER READY MIX TO CAN/CGSB—1.181 AFTER WELDING.

6. UNLESS NOTED OTHEWISE, ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED ACCORDING TO THE SPECIFICATION REQUIREMENT.

ERECTION:

1. GROUT FOR COLUMN BASE PLATES SHALL BE STERNSON'S M—BED STANDARD, MASTERBUILDER'S MASTERFLOW 713 OR APPROVED EQUAL AND SHALL HAVE MINIMUM STRENGTH OF 50MPa AT 28 DAYS MIX TO FLUID CONSISTENCY.

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

3. ANY MISFIT OR MISALIGNMENT MUST BE REPORTED TO RIDING ENGINEERING. THE CONTRACTOR SHALL PROVIDE PROPOSED REMEDIAL MEASURES TO RIDING ENGINEERING FOR REVIEW AND APPROVAL. ANY REMEDIAL WORK ON CONNECTIONS MUST BE REVIEWED AND/OR REDESIGNED BY THE CONNECTION ENGINEER. 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 WITHOUR PRIOR APPROVAL FROM RIDING ENGINEERING.

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

OPEN WEB STEEL JOISTS:

1. OPEN WEB STEEL JOISTS, THEIR CONNECTIONS, BRACING, BRIDGING AND OTHER ASSOCIATED COMPONENTS SHALL BE DESIGNED BY THE FABRICATOR FOR THE SPECIFIED DESIGN LOADS AND IMPORTANCE FACTORS SHOWN ON DRAWINGS. U.N.O., THE FABRICATOR'S DESIGN SHALL INCLUDE SNOW BUILD—UP AND WIND UPLIFT AS PER THE CODE REQUIREMENTS.

2. MAXIMUM LIVE LOAD DEFLECTION LIMIT SHALL BE SPAN/360 FOR FLOORS AND SPAN/240 FOR ROOFS, UNLESS NOTED OTHERWISE.

3. CAMBER ALL OPEN WEB STEEL JOISTS FOR FULL DEAD LOAD AND 25% LIVE LOAD, UNLESS NOTED OTHERWISE.

4. NO DRILLING OR CUTTING FOR HANGER OR SUPPORT DEVICES IS PERMITTED UNLESS APPROVED BY THE DESIGN ENGINEER OF THE OWSJ SUPPLIER.

5. DIAGONAL BRACING SHALL BE USED.

6. JOIST FABRICATOR SHALL COORDINATE DUCT RUNS WITH MECHANICAL ENGINEER AND ARCHITECT. OPENING IN JOISTS MUST LINE UP TO ALLOW PASSAGE OF MECHANICAL DUCTING AND OTHER EQUIPMENT.

7. JOISTS SHALL BEAR ON CENTRE LINES OF SUPPORTING MEMBERS, UNLESS NOTED OTHERWISE ON DRAWINGS OR APPROVED BY RIDING EINGINEERING.

STEEL DECK:

1. STEEL DECKING SHALL BE DESIGNED BY THE MANUFACTURER FOR VERTICAL LOAD DUE TO WIND AND GRAVITY LOADS INDICATED IN THE GENERAL NOTES OF THESE DRAWINGS. MINIMUM DECK THICKNESS SHALL BE 22ga.

2. PROVIDE ZF75 COATING FOR ROOF DECK AND FLOOR DECK IN CONCEALED AREAS NOT EXPOSED TO WEATHER. PROVIDE Z275 COATING FOR EXTERIOR SURFACES EXPOSED TO WEATHER.

3. WHERE POSSIBLE, SUPPLY AND INSTALL DECKING IN LENGTH THAT WILL PERMIT CONTINUITY OVER A MINIMUM OF THREE SPANS.

4. DECK FASTENING:

USE 'HILTI' POWDER ACTUATED FASTENING SYSTEM OF X—EDNK 22 INTO STRUCTURAL STEEL COMPONENTS LESS THAN 1/4" THICK, X—EDN 19 INTO STEEL LESS THAN 3/8" THICK, AND X—ENP 19 OR ENPH2 INTO STEEL MORE THAN 3/8" THICK. THE

SPECIFIC FASTENER WILL BE DETERMINED BY A 'HILTI' REPRESENTATIVE BASED ON FASTENER PERFORMANCE. FASTENERS SHALL BE LOCATED AT THE BOTTOM OF EACH DECKING FLUTE ALONG INTERMEDIATE STRUCTURAL COMPONENTS, AND AT 6"O/C ALONG ALL PERIMETER EDGE ANGLE SUPPORTS. FASTEN SIDE LAPS WITH 'HILTI' #12 SELF—DRILLING SCREWS (OR 'HILTI' ALTERNATE) AT 6"O/C.

PRIOR TO CONSTRUCTION, A 'HILTI' REPRESENTATIVE IS REQUIRED FOR ON—SITE TRAINING TO ENSURE ONLY QUALIFIED INDIVIDUALS ARE PERMITTED TO FASTEN DECKING.

5. DECK EDGE AND CHORD MEMBERS:

ALL EDGES OF STEEL DECKING SHALL BE SUPPORTED BY EDGE ANGLES FASTENED TO MAIN STRUCTURAL MEMBERS, UNLESS NOTED OTHERWISE, USE L4x4x1/4 AT FLOORS AND L3x3x1/4 AT ROOFS.

UNLESS NOTED OTHERWISE, ALL MEMBERS DESIGNATED AS DIAPHRAGM CHORD MEMBERS AND ALL PERMITER EDGE ANGLES SHALL BE CONNECTED BY FULL STRENGTH GROOVE WELDS OR BY FULL STRENGTH SPLICE PLATES ON EACH LEG TO FORM CONTINUOUS COMPRESSION AND TENSION MEMBERS. WELD EDGE ANGLES AND CHORS TO BEAMS, JOISTS AND SHEAR CONNECTORS AND WELD DECK TO ANGLE CHORDS AND STRUCTURAL MEMBERS AS SHOWN ON DRAWINGS OR AS DETAILED BY DECKING CONTRACTOR.

6. OPENING IN STEEL DECKS;

DRAWINGS FROM OTHER CONSULTANTS SHALL BE EXAMINED IN CONJUNCTION WITH THESE DRAWINGS FOR SIZES AND LOCATIONS OF OPENING IN STEEL DECK.

UNLESS NOTED OTHERWISE, REINFORCE OPENINGS IN STEEL DECKS WITH STEEL ANGLES AS FOLLOWS:

LOCATION	OPENING SIZE (IN ANY DIRECTION)	REINFORCING
ROOF	>6" BUT <20"	L2x2x1/4 RUNNING PERPENDICULAR TO FLUTES AND WELDED TO MINIMUM TWO FLUTES EACH SIDE OF OPENING.
ROOF	>20"	L3x3x1/4 ALL AROUND AND EXTENDING TO STRUCTURAL MEMBERS.
FLOOR	<12"	L2x2x1/4 RUNNING PERPENDICULAR TO FLUTES AND WELDED TO MINIMUM TWO FLUTES EACH SIDE OF OPENING.
FLOOR	>12"	L4x4x1/4 ALL AROUND AND EXTENDING TO STRUCTURAL MEMBERS

UNLESS NOTED OTHERWISE, PROVIDE 1.2mm (16ga) CLOSURE ANGLES AROUND ALL FLOOR OPENINGS WHICH ARE NOT FRAMED WITH L4x4x1/4.

WOOD PRODUCTS

1. PREFABRICATED TRUSSES, JOISTS, AND OTHER PROPRIETARY LUMBER PRODUCTS SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH CSA—086.1—94 FOR LOADS SHOWN ON THE DRAWINGS. MAXIMUM LIVE LOAD DEFLECTION L/360 FOR FLOORS AND L/240 FOR ROOFS. PRE—CAMBER FOR DEAD LOAD PLUS 25% LIVE LOAD. BRACING, BRIDGING AND ADDITIONAL HARDWARE (STIFFENERS, WOOD FRAME CONNECTORS, ETC.) SHALL BE DESIGNED AND SUPPLIED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH GENERAL NOTES.

2. ALL LUMBER MATERIAL TO CONFORM TO N.L.G.A. GRADING RULES, AND CSA—086.1. PLYWOOD SHALL CONFORM TO CSA 0121.

3. DIMENSION LUMBER SHALL BE AS SPECIFIED BELOW:

STUDS (<9' TALL)	SPF #3
STUDS (>9' TALL)	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 OR OSB FOR SLOPES > 3:12, AND MINIMUM 5/8" TONGUE—AND—GROOVE JOINTED (T&G) PLYWOOD OR OSB 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.

4. ROOF, FLOOR, AND WALL SHEATHING SHALL BE FASTENED AT PANEL EDGES WITH NAILS @ MINIMUM 6"O/C, AND AT INTERMEDIATE FRAMING MEMBERS WITH NAILS @ MINIMUM 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 @ MINIMUM 6"O/C.

5. ALL PLATES AND SILLS BEARING ON MASONRY OR CONCRETE SHALL BE PRESSURE—TREATED SPF #2 OR BETTER.

6. ALL STUD WALLS SUPPORTING PROPRIETARY WOOD TRUSSES SHALL BE PROVIDED WITH STUDS AT SPECIFIED SPACING WITH TRIPLE TOP PLATES. ALTERNATIVELY, PROVIDE DOUBLE TOP PLATE WHERE STUDS ARE ALIGNED WITH ROOF TRUSSES. IN NO CASE SHALL THE SPACING OF THE STUDS EXCEED THE SPECIFIED SPACING.

7. CONNECTIONS:
— ALL BOLTS AND ANCHOR BOLTS 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 CSAB111. IF P—NAILS (POWER DRIVEN NAILS) ARE INTENDED AS SUBSTITUTION, SUBMIT P—NAILS INFORMATION FOR RIDING ENGINEERING'S REVIEW PRIOR TO USE. ADJUSTMENT OF NAILS SPACING OR REQUIREMENTS MAY BE REQUIRED.
— BOLT HOLES SHALL BE 1/16 INCH LARGER THAN THE BOLT DIAMETER.
— BOLTS IN WOOD SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE UNLESS OTHERWISE DETAILED.
— LAG SCREWS SHALL BE PREDRILLED 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.

8. STUD WALLS ABUTTING A CONCRETE OR MASONRY WALL SHALL BE BOLTED TO THE WALL WITH 1/2" DIAMETER ANCHOR BOLTS AT 2'—0"O/C THROUGH A DOUBLE STUD.

9. PROVIDE 2x BLOCKING AT MIDHEIGHT OF STUDS OVER 8'—0" IN HEIGHT.

10. 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 I—JOISTS BLOCKING OR 1.25" ENGINEERED—WOOD RIMBOARD SHALL BE PLACED BETWEEN ALL FLOOR JOISTS AT MIDSPAN FOR SPANS OVER 8'—0", AND @ 8'—0"O/C FOR SPANS OVER 16'—0".

11. UNLESS NOTED OTHERWISE, ALL EXTERIOR WALL & LOAD BEARING WALL SILL PLATES SHALL BE ANCHORED TO THE CONCRETE FOUNDATION OR SLAB WITH MIN. 5/8 INCH DIAMETER ANCHOR BOLTS @ 4'—0"O/C. ANCHOR INTERIOR NON—STRUCTURAL BOLTS @ 8'—0"O/C. ANCHOR SHEAR WALL SILL PLATES AS SHOWN ON SHEAR WALL SCHEDULES.

12. ALL METAL HARDWARE (NAILS, BOLTS, HANGERS, ETC.) IN CONTACT WITH PRESSURE—TREATED PRODUCTS 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.

13. UNLESS NOTED OTHERWISE, ALL LIGHT FRAMING CONSTRUCTION SHALL CONFORM WITH PART 9 OF BCBC.

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

15. 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 RIDING ENGINEERING. ANY COSTS INCURRED BY RIDING ENGINEERING FOR THESE ALTERNATES MAY BE CHARGED TO THE CONTRACTOR.

16. 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.

17. 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.

18. 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.

19. ALL WOOD—FRAME COMPONENTS ABUTTING STRUCTURAL STEEL SHALL BE FASTENED WITH DRIVE PINS @ 12"O/C UNLESS DETAILED OTHERWISE.

TILTUP CONCRETE WALL PANELS

1. ALL CONCRETE TO COMPLY WITH CONCRETE NOTES ON SHEET S9.

2. CONCRETE TESTING SHALL BE IN ACCORDANCE WITH CSA—23.2 LATEST EDITION AND CARRIED OUT BY AN INDEPENDENT TESTING AGENCY. A MINIMUM OF 4 TEST CYLINDERS SHALL BE CST FOR EACH 50 CU. METERS OR EACH DAY'S POUR, WHICHEVER IS LESS. TEST ONE AT 36 HOURS, ONE AT 7 DAYS, ONE AT 21 DAYS AND TWO AT 28 DAYS AND SUBMIT WRITTEN REPORTS TO RIDING ENGINEERING.

3. ARCHITECTURE CONCRETE PANEL CONCRETE STRENGTH MUST BE A MINIMUM OF 25% OF THE 28 DAY COMPRESSIVE STRENGTH BEFORE WORK ON THE PANELS CAN CONTINUE. VERIFY WITH TESTING.

4. RIGID INSULATION FOR SANDWICH PANELS CAN BE PLACED OVER POURED CONCRETE OF ARCHITECTURAL PANEL AS SOON AS CONCRETE SUFFICIENT TO SUPPORT WEIGHT OF WALKING. ENSURE CONCRETE IS NOT DISPLACED AT EDGES OR NEAR OPENINGS. INSTALL FIBER COMPOSITE CONNECTORS AT SPACING SHOWN AND AS PER MANUFACTURER'S RECOMMENDATIONS.

5. CARE SHALL BE TAKEN WHEN INSTALLING REINFORCING FOR STRUCTURAL PANEL TO ENSURE ALL CONNECTORS ARE NOT DISTURBED. THE ENGINEER SHALL BE NOTIFIED IF ANY CONNECTORS ARE LOOSE OR HAVE BEEN DAMAGED FOR ADDITIONAL REQUIREMENTS.

6. COMPLETED SITE CAST CONCRETE WALL PANELS SHALL HAVE A MINIMUM STRENGTH OF 90% OR THE 28 DAY COMPRESSIVE STRENGTH BEFORE LIFTING CAN OCCUR. VERIFY WITH TESTING.

7. PANELS SHALL BE LIFTED INTO PLACE BY A CONTRACTOR FAMILIAR WITH THE WORK AND ENSURE ALL EQUIPMENT AND PERSONNEL COMPLY WITH THE LATEST WORKER'S COMPENSATION BOARD GUIDELINES.

8. RIDING ENGINEERING SHALL BE CALLED FOR SITE VISITS PRIOR TO ALL CONCRETE POURS TO ENSURE CONFORMANCE WITH THE DESIGN HAS BEEN MET.

9. CONTRACTOR SHALL PROTECT ALL CONCRETE DURING PLACEMENT FOLLOWING ALL COLD AND HOT WEATHER REQUIREMENTS.

10. ALL COMPLETED WALL PANELS SHALL BE LIFTED INTO PLACE, SET ON SHIMS AND LEVELLING GROUT AND SUPPORTED WITH BRACES. WELD BASE OF ALL PANELS IN PLACE BEFORE CONTINUING TO NEXT PANEL.

11. ALL ROOF TRUSSES SHALL BE INSTALLED ALONG WITH ALL BLOCKING AND ROOF DECKING AND ALL CONCRETE WALL PANELS SHALL HAVE ALL WELD PLATES INSTALLED BEFORE BRACING CAN BE REMOVED.

ABBREVIATIONS

A.BOLT	ANCHOR BOLT
ALT.	ALTERNATE
ARCH.	ARCHITECTURAL
BLDG.	BUILDING
BOT.	BOTTOM
BTW.	BETWEEN
C/C	CENTER TO CENTER
C/W	COMPLETE WITH
C.I.P.	CAST IN PLACE
CANT.	CANTILEVER
CL.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
DL	DEAD LOAD
DN	DOWN
DO.	DITTO
DP.	DEEP
DWG.	DRAWING
E.W.	EACH WAY
E.F.	EACH FACE
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EXIST.	EXISTING
EXT.	EXTERIOR
FL	FLOOR
F.S.	FAR SIDE
FDN	FOUNDATION
FTG.	FOOTING
G.L.	GRID LINE
GALV.	GALVANIZED
H1E	HOOK ONE END
H2E	HOOK TWO ENDS
HL	HIGH LEVEL
HORIZ.	HORIZONTAL
INT.	INTERIOR
L.V.	LENGTH VARIES
LG.	LONG
LL.	LOW LEVEL
LLV	LONG LEG VERTICAL
LLH	LONG LEG HORIZONTAL
LONG.	LONGITUDINAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MIMIMUM
N/A	NOT AVAILABLE
N.S.	NEAR SIDE
S. STUD	NELSON STUD
N.T.S.	NOT SO SCALE
O/C	ON CENTRES
OPP.	OPPOSITE HAND
OWSJ	OPEN WEB STEEL JOIST
P.C.	PRECAST CONCRETE
PL	PLATE
PLY.	PLYWOOD
PROJ.	PROJECTION
R/W	REINFORCED WITH
R/C	REINFORCED CONCRETE
S.O.G.	SLAB ON GRADE
SIM.	SIMILAR
STAGG.	STAGGERED
T&B	TOP AND BOTTOM
T&G	TONGUED & GROOVED
T.O.C/S	TOP OF CONCRETE/STEEL
THK.	THICK
TJ	TIE JOIST
TRAN.	TRANSVERSE
TYP.	TYPICAL
U/S	UNDERSIDE
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL

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No.	Date	Revision
1.	OCT 17 2016	ISSUED FOR CLIENT REVIEW
2.	NOV 13 2016	ISSUED FOR CONSTRUCTION

Project Title
DISTRICT OF SUMMERLAND
PEACH ORCHARD LIFT
STATION NEW BUILDING

14877 LAKESHORE DRIVE S.
SUMMERLAND, BC.

Drawing Number
S4 OF 4

DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title
GENERAL NOTES

Date	NOVEMBER 13, 2016
Job No.	16-00398
Scale	as noted
Drawn	I.A.C.
Checked	L.L.R.