

1. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER PERTINENT CONTRACT DOCUMENTS.
2. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS NOTED. THE CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE CONSTRUCTION AND REPORT DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.
3. THE DESIGN AND CONSTRUCTION AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA (NBC) 2015 AND RETENUEDES STANDARDS THEREIN. ALL REFERENCED STANDARDS SHALL BE THE LATEST EDITION.
4. CONTRACTOR TO CONFER WITH DEPARTMENT REPRESENTATIVE DIMENSIONS AND ALL OTHER CRITICAL DIMENSIONS AND REPORT DISCREPANCIES AND OBTAIN APPROVAL PRIOR TO PROCEEDING WITH CONSTRUCTION.
5. NOTIFY THE DEPARTMENTAL REPRESENTATIVE 48 HOURS IN ADVANCE OF CONCRETE POURS FOR SITE REVIEW.
6. DRAWINGS SHALL INDICATE TOLERANCES AND PROVIDE TOLERANCE BRACING FOR CONSTRUCTION. CONSTRUCTION TOLERANCES AND QUALITY OF THE STRUCTURE DURING CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LOADS.
7. CONSTRUCTION METHODS REGARDING TOWERING, SHORING OR BRACING, SHALL BE SUBMITTED TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER, REGISTERED IN THE PROVINCE OF ALBERTA, TO PERFORM A DESIGN RESPONSIBILITY FOR ANY SHORING OR OTHER DEVICES REQUIRED TO COMPLETE THE CONSTRUCTION. CONTRACTOR TO VERIFY LOADS UNDER CONSTRUCTION SERVICES AND BE RESPONSIBLE FOR

1. DEAD LOADS:

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|----|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 2. | LIVE LOADS: | | |
| 1. | SNOW LOADS: | | |
| | | DEAD LOADS: | |
| | | PRECAST PRTY GLAB | 4.8 IPq |
| | | Sl = 3.6 IPq | |
| | | SF = 0.1 IPq | |
| | | It = 1 (0.5) | |
| | | MODIFY FOR EXPOSURE AND DMFT AS PER NBC 2015 | |
| 4. | WIND LOADS: | $\frac{d}{V} \left(\frac{V}{V_0} \right) = 0.32 \text{ IPq}$ $\frac{d}{V} \left(\frac{V}{V_0} \right) = 0.32 \text{ IPq}$ $It = 1 \text{ (0.5)}$ | |
| 5. | SEISMIC LOADS: | MODIFY FOR EXPOSURE AS PER NBC 2015

SITE CLASS D (ASSUMED)
$S_d(0.2) = 0.24$
$S_d(0.3) = 0.14$
$S_d(1.0) = 0.066$
$S_d(2.0) = 0.037$
$PCA = 0.12$
$It = 1 \text{ (0.5)}$ | |
| 6. | CONCRETE SELF-WEIGHT BASED ON $\gamma = 24 \text{ kN/m}^3$ | | |

1. EXCAVATE TO LINES AND LEVELS NECESSARY TO COMPLETE THE WORK. MINIMUM SIDE SLOPES OF TEMPORARY EXCAVATIONS SHALL NOT EXCEED 1:0.1 (V:H). CONTROL EXCAVATION TO ENSURE BOTTOM OF EXCAVATION DOES NOT SETTLE DUE TO EXCESS MOISTURE.
2. DO NOT PLACE BACKFILL ON FROZEN GROUND, NOR USE FROZEN MATERIAL.
3. MAINTAIN OPTIMUM MOISTURE CONTENT TO PERMIT COMPACTION TO ACHIEVE SPECIFIED DENSITIES. PROTECT BACKFILLED GRADES, DURING AND AFTER COMPLETION OF BACKFILL OPERATION, FROM SETTLING DUE TO EXCESS MOISTURE.

4. ALL BACKFILL SHALL BE COMPACTED USING MECHANICAL EQUIPMENT. DO NOT COMPACT BACKFILL WITHIN 0.3 m OF PRECAST TANK. FROM 0.3 m TO 1.5 m AWAY FROM PRECAST TANK, COMPACT WITH A WALK-BEHIND VIBRATORY ROLLER WITH A MAXIMUM WEIGHT OF 1000 kg.

1. PROVIDE CONCRETE AND PERFORM WORK IN ACCORDANCE WITH CSA-A23. THE CONTRACTOR SHALL HAVE A COPY OF THIS STANDARD ON SITE AT ALL TIMES.

LOCATION	CSA EXPOSURE CLASS	CEMENT TYPE	MINIMUM COMPRESSIVE STRENGTH (MPa)	MAX W/C RATIO	MAX. AGGREGATE (mm)	AIR CONTENT (%)
BRIVY TANK AND SLAB-ON-GRADE	C-2	HS	32 @ 56 DAYS	0.45	20	4-7

- [illegible]

1. DESIGN AND BUILD PRECAST: REINFORCED 40 MPA CONCRETE VAULT AND SLABS TO EXTERIOR DIMENSIONS AND OPENINGS AS INDICATED. VAULT IS TO CONTAIN HUMAN WASTES AND WILL BE SET ON A VARIETY OF SOIL TYPES AND CONDITIONS. PRODUCT SHALL BE MANUFACTURED & FINISHED TO MEET CAN/CSA A23.4/A23.1.

- DESIGN AND BUILD FLOOR SLAB: DESIGN FOR 4.8 KPa live load. DESIGN REINFORCED AS REQUIRED PER AREA 333.3 A333.4/ AREA. PROVIDE CAST-IN REINFORCING, SCHEDULES & ANCHORS AS REQUIRED.
- DESIGN AND BUILD THE EXTERIOR SLAB REPRESENT OF VAULT AND VAULT SLAB.
- FLOOR AND EXTERIOR SLAB TO BE DARK GREY COLOURED CONCRETE AND HAVE LIGHT BROWN FINISH.
- CONTRACTOR MAY PROVIDE A DIFFERENT DIMENSION OF THE VAULT AND SLAB FLOOR. VAULT SIZE MAY BE 1.8M X 1.8M. EXTERIOR SLAB MAY BE 1.8M X 1.8M. THE EXTERIOR SLAB SIZE MAY BE 2.1M X 2.1M TO SUIT THE VAULT AND SLAB DIMENSIONS. THE SIZE OF THE BUILDING DOES NOT CHANGE.
- SUBMIT SHOP DRAWINGS OF THE PRECAST VAULT AND SLAB FOR REVIEW AFTER CONTRACT AWARDED.
- SUBMIT SHOP DRAWINGS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN ALBERTA.
- THE BOTTOM OF THE VAULT SHALL BE GRADED AT LEAST 5% IN ONE POIR WITH THE VAULT'S WALLS.
- CONCRETE POUR INTO THE FLAT BOTTOM VAULT TO ACHIEVE / BUILD UP THE DESIRED SLOPE IS NOT ACCEPTABLE.
- CAST IN PLACE ALL REQUIRED ANCHORS AND CONNECTIONS. ELEVATION AT TOP OF FLOOR SLAB TO BE 1.8M. PROVIDE ANCHORS AND CONNECTIONS TO EXISTING FOUNDATION SURFACE AND TO EXISTING POLE DRAINAGE TO BE IN PLACE FROM THE NEW POLE UNIT.

1. INTERIOR DIMENSIONS AS SHOWN ON DRAWINGS ARE MINIMUM.

2. PROVIDE PRECAST, REINFORCED 40 MPa CONCRETE WALL PANELS.
3. DIMENSIONS AND OPENINGS AS INDICATED.
4. PRODUCT SHALL BE MANUFACTURED & FINISHED TO MEET CAN/CSA A23.3/A43.1.
5. PRECAST WALL PANELS TO BE DESIGNED AS LOAD-BEARING WALLS FOR ALL APPLICABLE GRAVITY AND LATERAL LOADS.
6. SUBMIT SHOP DRAWINGS OF THE PRECAST WALL PANELS FOR REVIEW AFTER CONTRACT AWARD. SHOP DRAWINGS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN ALBERTA.

EXPANSION ANCHORS; OF DIAMETER SHOWN AND STANDARD EMBEDMENT UNLO. SHEAR AND TENSION CAPACITIES ARE BASED ON HILTI KWIK BOLT 3 (KBS) EXPANSION ANCHORS. SUBMIT ANCHOR LOAD RESISTANCE DATA FOR ALTERNATE PRODUCTS FOR REVIEW BY DEPARTMENTAL REPRESENTATIVE A MINIMUM OF 2 WEEKS PRIOR TO INTENDED USE. ANCHORS TO BE GALVANIZED.

2. EPOXY ANCHORS: OF DIAMETER SHOWN AND STANDARD EMBEDMENT UNO. SHEAR AND TENSION CAPACITIES ARE BASED ON HILTI HYDROX + HIT-Z SUPER HARDWARE. SUBMIT ANCHOR LOAD RESISTANCE DATA FOR ALTERNATE PRODUCTS FOR REVIEW BY DEPARTMENTAL REPRESENTATIVE A MINIMUM OF 2 WEEKS PRIOR TO INTENDED USE.
3. SLAB-ON-GRADE SEALANT: ONE-COMPONENT, SELF-LEVELING, POLYURETHANE SEALANT. USE SEALANT TO FILL SLAB-ON-GRADE SAWCUTS.

1. REINFORCING STEEL SHALL BE BILLET STEEL CONFORMING TO CSA-G30.18 GRADE 400.

2. REINFORCING BARS SHALL CONFORM TO CSA-C30.18 GRADE 400W. YIELDING OF REINFORCING STEEL SHALL CONFORM TO CSA-W408.
3. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL, OR THE REINFORCING STEEL INSTITUTE OF CANADA DETAILING MANUAL.
4. 90° HOOKS AND 180° HOOKS WHERE SHOWN SHALL BE DETAILED AS STANDARD HOOKS UNLESS NOTED OTHERWISE.
5. CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO THE MOST STRINGENT REQUIREMENT LISTED BELOW UNLESS NOTED OTHERWISE.

CONCRETE CAST AGAINST EARTH	75 mm
EXTERIOR APRONS AND CONCRETE PADS	60 mm
TOP BARS	75 mm
BOTTOM BARS	75 mm

1. WOOD CONSTRUCTION SHALL CONFORM TO CSA-086 AND PART 9 OF THE NATIONAL BUILDING CODE OF CANADA 2015.

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9.	A.I.F.B.	AT	ASPHALT IMPREGNATED FIBRE BOARD
B.L.		BOTTOM	LOWER LAYER
B.U.L.		BOTTOM	UPPER LAYER
BOT.			BOTTOM
CANT.		CANTILEVER	
C.I.P.		CAST-IN-PLACE	
CL.		CENTER LINE	
CLR.		CLEAR	CLEARANCE
COLS.		COLUMNS	
CONC.		CONCRETE	

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|--------|----------|---------------|---------------------------------|
| 9. | A.I.F.B. | AT | ASPHALT IMPREGNATED FIBRE BOARD |
| B.L. | | BOTTOM | LOWER LAYER |
| B.U.L. | | BOTTOM | UPPER LAYER |
| BOT. | | | BOTTOM |
| CANT. | | CANTILEVER | |
| C.I.P. | | CAST-IN-PLACE | |
| CL. | | CENTER LINE | |
| CLR. | | CLEAR | CLEARANCE |
| COLS. | | COLUMNS | |
| CONC. | | CONCRETE | |

METAL: TO MASTER PAINTERS INSTITUTE (MPI) FORMULA EXT.5.1D ALKYD SEMI-GLOSS

LEVEL 5, NOC ET.

WOOD: TO MPI EXT. 6.5A ACRYLIC LATEX LEVEL 4, VOC E3.

TIMBER: TO MPI EXT. 6.4D SEMI-TRANSPARENT STAIN

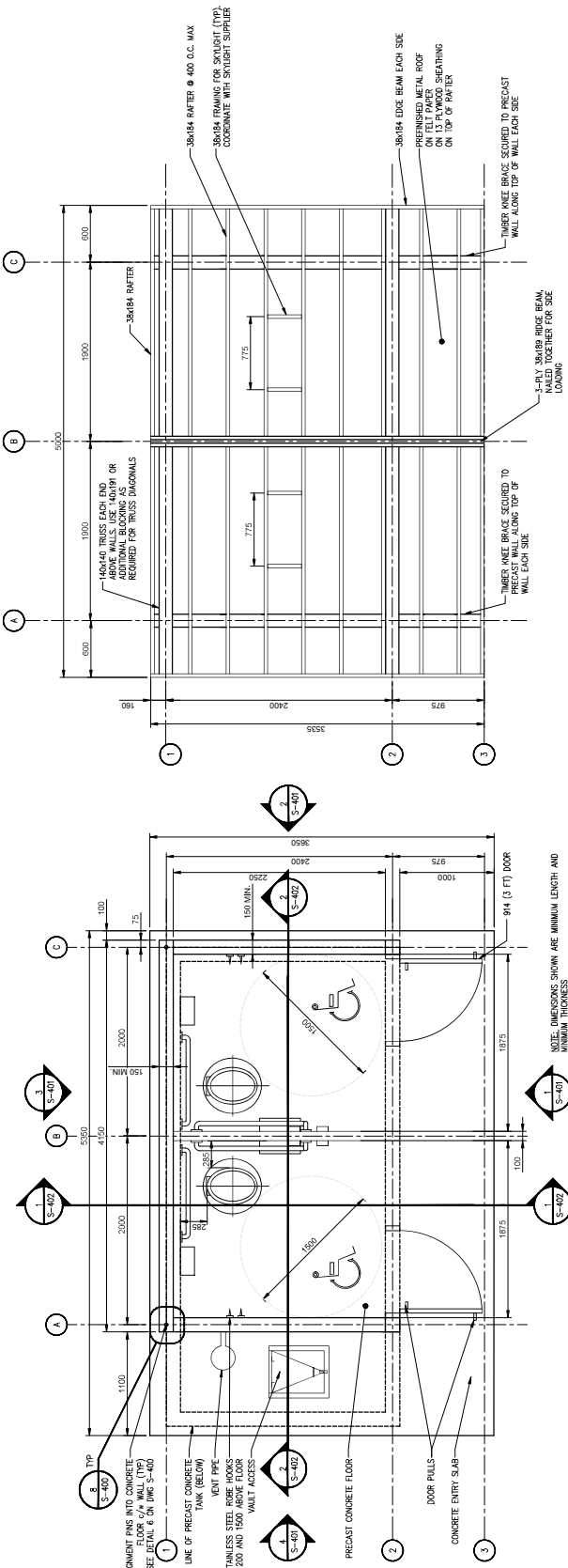
1. INTERIOR WALLS:

2. EXTERIOR WALLS:
G.P. ENVIROGUARD SEMIGLOSS - LITTLE BIGHORN
3. DOORS / FRAMES:
G.P. ENVIROGUARD SEMIGLOSS - WINTER MEADOW
4. STONE:
OWENS CORNING - OLD COUNTRY FIELDSTONE

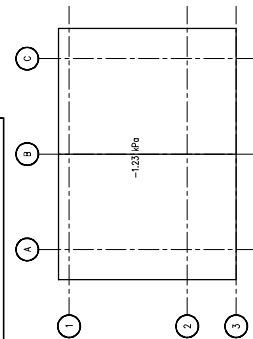
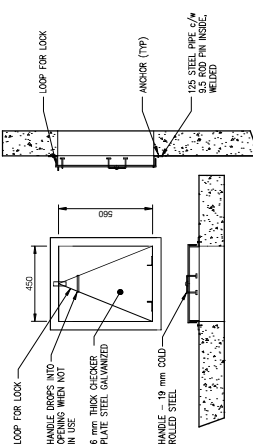
NATURAL REDWOOD

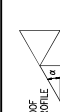
Figure 1 illustrates four examples of section detail symbols used in architectural drawings. Each example includes a plan or detail title, a building section number, a wall section number, an arrow and tail indicating the direction of the section, a sheet number on which the section is drawn, a wall section reference, a detail section number, a sheet on which the section is drawn, and a detail callout reference. The symbols are variations of a diamond shape with a central circle containing the section number and a tail indicating the direction of the section.

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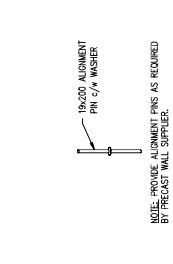
THE VALUES ARE UNFACTORED (U.S. ULTIMATE LIMIT STATES) WIND UPLIFT PRESSURES AND DO NOT INCLUDE SUPERIMPOSED DEAD LOADS (SDU) OR SELF-WEIGHT OF THE ROOF STRUCTURE.



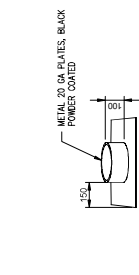
CASE	TYPE	SNOW LOADS OR SNOW DRIFT VALUES	NOTES
A		CASE I: $S_{max}=2.26 \text{ kPa (U.S.)}$ $S_{min}=2.08 \text{ kPa (S.S.)}$	TYPICAL ON THE NEW PROVY
		CASE II: $S_{max}=2.83 \text{ kPa (U.S.)}$ $S_{min}=2.54 \text{ kPa (S.S.)}$	

NOTE: ALL SNOW LOAD VALUES SHOWN ARE UNFACTORED VALUES.

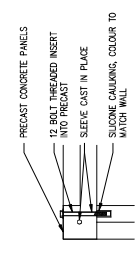
3 ROOF SNOW LOADS



NOTE: PROVIDE ALIGNMENT PINS AS REQUIRED BY PRECAST WALL SUPPLIER.



NOTE: REFER TO BUILDING SECTIONS FOR LOCATION.



NOTE: PROVIDE ALIGNMENT PINS AS REQUIRED BY PRECAST WALL SUPPLIER.

