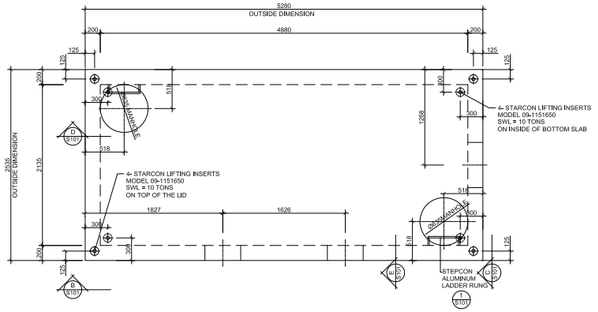
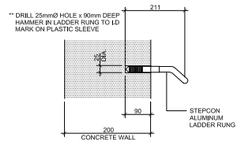
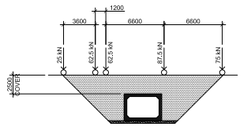


A S101 DETENTION VAULT - TOP VIEW
SCALE: 1:30



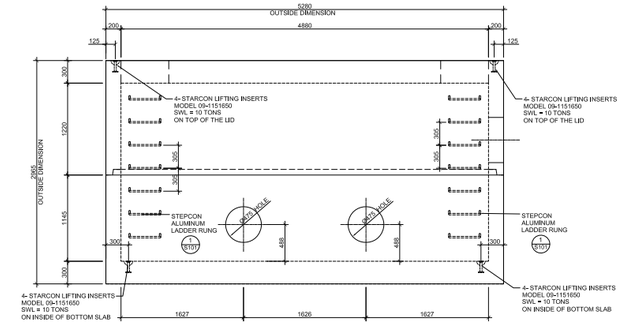
1 S101 LADDER RUNG DETAIL
SCALE: 1:8



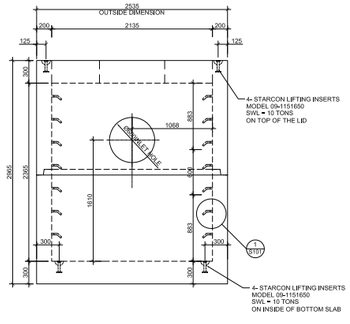
2 S101 CL625 WHEL LOADS
SCALE: NTS

DESIGN PARAMETERS

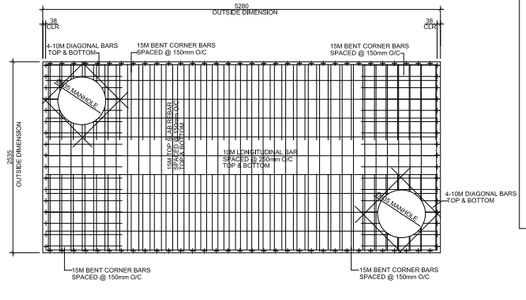
1) DESIGN METHODOLOGY - LSD
2) DESIGN ASSUMES 2500mm GRANULAR COVER
3) DESIGN ASSUMES CL625 AXLE LOADING AS PER CSA-S6
4) BOX CULVERT DESIGN MEETS CSA-S6 SPECIFICATIONS
5) BOX CULVERT DESIGN MEETS OPSS 422 SPECIFICTIONS
6) BOX CULVERT HAS BEEN DESIGNED AND MANUFACTURED TO ASTM C1433M SPECIFICATIONS
7) JOINTS MEET ASTM C990M SPECIFICATIONS



B S101 DETENTION VAULT - FRONT VIEW
SCALE: 1:30



C S101 DETENTION VAULT - SIDE VIEW
SCALE: 1:30



F S101 TOP SLAB REINFORCING STEEL
SCALE: 1:30

STRUCTURAL SPECIFICATION

GENERAL

1) ALL CONSTRUCTION SHALL CONFORM TO ASTM C1433M STANDARDS AND SUBSEQUENT REVISIONS.
2) ALL REFERENCES TO STANDARDS SHALL REFER TO THE LATEST REVISED ISSUE
3) THE STRUCTURAL ENGINEER ASSUMES NO RESPONSIBILITY FOR INSPECTION OF CONSTRUCTION OR VERIFICATION OF CONSTRUCTION UNLESS EXPRESSLY RETAINED TO DO SO.

CONCRETE

1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND CSA STANDARD CAN/CSA-A23.1-14/CAN/CSA-A23.2-14 FOR PRECAST CONCRETE WORK REFER TO CSA-A23.4-16.
2) CONCRETE PROPERTIES:

ITEM	AGG. SIZE	28 DAY STRENGTH	W/C RATIO	AIR	TYPE
ALL	20mm	45 MPa.	0.40	4%-7%	HS

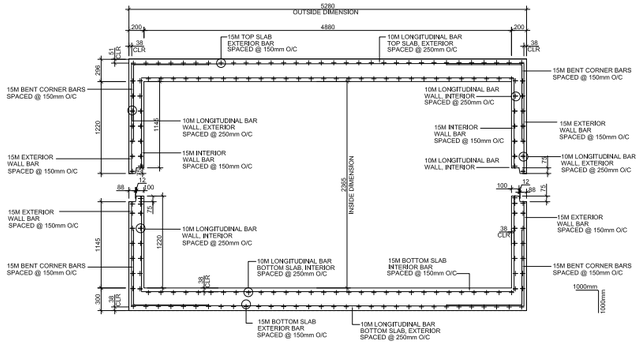
3) BEFORE PLACING CONCRETE, THE CONTRACTOR SHALL CHECK ALL APPLICABLE DRAWINGS FOR ANCHOR BOLTS, INSERTS, EMBEDS, RECESSES AND BLOCKOUTS, THEIR LOCATIONS SHALL BE CONFIRMED BY THE VARIOUS SUBTRADES.
4) CONCRETE COVER OVER REINFORCEMENT IS TO BE;
   a. FORMED SURFACE EXPOSED TO GROUND OR WEATHER = 40+/-10mm

REINFORCING STEEL

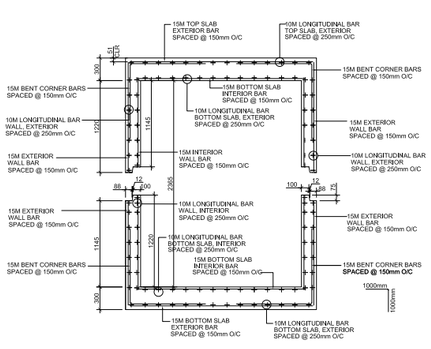
1) STEEL REINFORCEMENT SHALL BE MINIMUM GRADE 400 MPa, DEFORMED BARS CONFORMING TO CAN/CSA G30.18M92 9R2002)
2) REINFORCING STEEL TO BE WELDABLE MATERIAL TO ASTM A 1064.
3) REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1
4) LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
5) REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
6) DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.

REFERENCE DRAWINGS

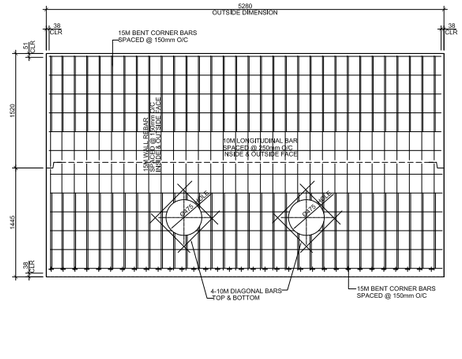
1. LAYOUT AND STRUCTURAL SIZING IS BASED ON DESIGN DRAWINGS PREPARED BY WEDLER ENGINEERING LLP, DATED 17-01-30, (STORMWATER DETENTION TYPICAL DETAILS)
2. McELHANNEY HAS RELIED ON THE PROVIDED DRAWING SET AS ACCURATE AND TRUE. McELHANNEY IS NOT RESPONSIBLE FOR ANY ERRORS/OMISSIONS ON THESE DRAWINGS AS A RESULT OF ERRORS OR SUBSEQUENT CHANGES TO THE PROVIDED DRAWING SET OR UNKNOWN SITE AND AS-BUILT CONDITIONS.
3. IF CHANGES ARE MADE TO THE LAYOUT OF THE STRUCTURE, OR SITE CONDITIONS VARY FROM ASSUMED, OR THE ASSUMED LOAD PATHS ARE ALTERED (RELOCATED ELEMENTS, ETC), THE STRUCTURAL ENGINEER SHOULD BE NOTIFIED SUCH THAT CHANGES CAN BE MADE TO THE DESIGN IF REQUIRED.



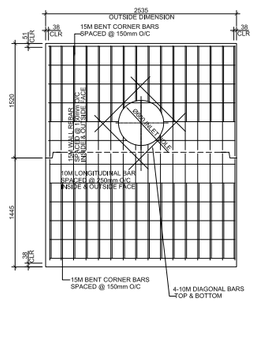
D S101 SECTION
SCALE: 1:30



E S101 SECTION
SCALE: 1:30



G S101 FRONT WALL REINFORCING STEEL
SCALE: 1:30



H S101 SIDE WALL REINFORCING STEEL
SCALE: 1:30

Rev	Date	Description	Drawn	Design	Appd
0	APRIL 23, 2017	ISSUED FOR "CONSTRUCTION"	SW	SW	BRN

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ORIGINAL DWG SIZE: ARCH D (24" x 36")

McElhanney
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Canada V1C 7H9
Tel (250) 489-3013

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
S. R. WEDLER
April 23, 2017

TRI-KON PRECAST CONCRETE PRODUCTS Ltd.
601 PATTERSON STREET WEST, CRANBROOK, BC

PARKS CANADA - ROGERS PASS
MAINTENANCE COMPOUND
TYPICAL DETENTION VAULT
VIEWS, STRUCTURAL SPECIFICATION AND WHEEL LOADS

Drawing No. S101
Project Number 2441-00548-00
Rev. 0

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TRI KON Precast Concrete Products

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250-426-8162
info@trikonprecast.com
trikonprecast.com

PRODUCT
Vault & Oil Separator

DRAWING
Parks Canada, Rogers Pass: Typical Detention Vault

WEIGHT

DRAWING NO.
S101

DATE
As per drawing

SHEET
01 of 1

UNITS / SCALE
As per drawing

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