



Planning & Building Safety Department
 638 Princess Avenue, Brandon MB, R7A 0P8
 T: 204.728.2110 F: 204.728.2406
 www.brandon.ca/planning

Conditional Use

Name of Property Owner: Suncor Energy
 Name of Applicant: Rob Marshall
 Civic Address of Property: 210 Highland Avenue, Brandon
 Legal Description of Property: Lot 16, Plan 1013 BLTO and Parcel "C" Plan 1745 BLTO

References:

BAPD Development Plan By-law No. 78/01/04
 Applicable Secondary Plan By-law
 City of Brandon Zoning By-Law No. 6642

Prior to submitting a formal application, the Planning & Building Safety Department strongly recommends that all applicants meet with a Community Planner to complete a pre-application review.

Conditional Use Request:

Suncor is proposing to install a DEF distribution system to replace the manual process which involves our guests emptying jugs of the fluid into their trucks which is not a competitive nor safe method of delivering the DEF fluid. (DIESEL EXHAUST FLUID)

I undertake to observe and perform all provisions of The Planning Act, the Development Plan, the Zoning By-law, and the provisions of other relevant laws, by-laws or agreements.

Signature of Owner: [Signature] Date: December 11, 2016
 Address: 4838 RICHARD ROAD SW. CALGARY E-Mail: ROMARSHALL@SUNCOR.COM
Street Address City/Province Postal Code T3E 6L2
 Home Phone: N/A Cell Phone: 403 923-4997 Work Phone: 403 767-2635

Signature of Applicant: _____ Date: _____
 Address: _____ E-Mail: _____
Street Address City/Province Postal Code
 Home Phone: _____ Cell Phone: _____ Work Phone: _____

The personal information which you are providing is being collected under the authority of the Planning Act and will be used for the purpose of processing this application. Information is also being collected for the purpose of statistical reporting. It is protected by the Protection of Privacy provisions of The Freedom of Information and Protection of Privacy Act. If you have any questions about the collection and/or use of information, contact the Data Protection Officer, City of Brandon Planning & Building Safety Department, 638 Princess Avenue, Brandon, Manitoba, R7A 0P8. Telephone: 204-728-2110.

FOR PLANNING DEPARTMENT USE ONLY:			
Community Planner: <u>w/aleed</u>	Planning File No.: <u>C-01-16-B</u>	CityView No. <u>PLCU2016-1</u>	
Date Application Received: <u>Dec. 12/16</u>	Payment Date: <u>Jan 6/16</u>	Receipt No.: <u>2016-3483</u>	Amount: <u>\$ 555.00</u>
Conditional Use Application			REV 01/13



Planning & Building Safety Department
638 Princess Avenue. Brandon MB. R7A 0P3
T: 204.729.2110 F: 204.728.2406
www.brandon.ca/planning

Letter of Authorization

Date: December 2, 2015

To: City of Brandon
Planning & Building Safety Department
638 Princess Avenue
Brandon, MB
R7A 0P3

RE: 150/210 Highland Avenue (address or legal description of application)

I (We) hereby give authorization to:

Rob Marshall (Applicant's name)

To apply for a Development application for the above address.

Registered Owner(s) on the Current Status of Title or Certificate of Title:

Suncor Energy Inc

Dec. 1/15

Name (Print)

Name (Signed)

Date

Name (Print)

Name (Signed)

Date

Name (Print)

Name (Signed)

Date

Name (Print)

Name (Signed)

Date



SUNCOR ENERGY PRODUCTS PARTNERSHIP

Real Estate

Suite 200, Room 56.1, 4838 Richard Road S.W.

Calgary, AB T3E 6L1

Phone: 403 767 2635

E-mail: romarshall@suncor.com

January 13, 2016

Waleed Albakry
Community Planner
Planning & Building Safety
City of Brandon

Re: Proposed Upgrade at the Petro-Canada Petro-Pass @ 210 Highland Avenue, Brandon

Dear Waleed:

Thank you for the opportunity to review how matters progressed to where we are today including an explanation of Suncor's position and our objective.

Diesel Exhaust Fluid (DEF) is now a regulatory requirement so Suncor's objective is to install a DEF tank which would supply DEF dispensers at the fuel islands. The current process for our guests is a rather messy and clumsy manual system involving jugs of DEF that the trucker empties into his tank. This is a less safe process which also results in quite a number of empty plastic jugs. In order to remain competitive, we recognized that the market has moved to the automated delivery system and unless we install a similar system that our competitors use within Brandon and elsewhere, we will be at a competitive disadvantage, resulting in the loss of customers utilizing our site and ultimately rendering the site unfeasible due to volume loss.

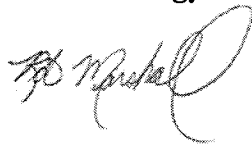
In November, 2014, Suncor applied for a permit to install the Diesel Exhaust Fluid tank and dispensers and the application process was nearly completed when Suncor was asked to sign a Development Agreement. After months of negotiations between the City and Suncor it was determined that the provision in the Development Agreement that required a specific time frame in which to fully remediate the site represented a future risk and liability that Suncor was unable to accept.

While Suncor recognizes The City of Brandon's desire to limit their exposure to abandoned, contaminated sites, Suncor is Canada's largest energy company that takes its environmental responsibilities very seriously. We responsibly manage our operations and strive to raise the bar on our environmental practices. Any suggestion that Suncor would abandon this site and fail to discharge its environmental responsibilities is unfounded. The City referenced a couple of examples where this had recently occurred but it is our belief that this is an unfair and incorrect comparison.

Essentially, Suncor's position is that the City's proposed Development Agreement severely limits our options to the point where we are unable to support the potential future liability that a specific time frame to clean the site represents. Suncor is, and always has been, a very good corporate citizen and neighbour and we look forward to being a proud corporate partner in the Brandon community for years to come.

We are now re-applying for the permit to install the automated DEF system with the intent to demonstrate to the City of Brandon that Suncor will remain a responsible corporate citizen and will manage the Petro-Pass location over its life span in an environmentally responsible manner.

Suncor Energy Products Partnership

A handwritten signature in black ink, appearing to read "Rob Marshall". The signature is written in a cursive, flowing style.

Rob Marshall
Real Estate
Suncor Energy



PETRO-PASS



PROJECT & LOCATION : 2014 DEF TANK INSTALL

**PETRO-PASS FACILITY
HIGHWAY 1 SERVICE ROAD
BRANDON, MANITOBA**

OUTLET NO.:

37975

DRAWING INDEX

DWG. NO.	DRAWING TITLE
	SITEWORK
SPO	EXISTING SITE PLAN
SP1	PROPOSED SITE PLAN
SE1	PROPOSED ELECTRICAL PLAN
	PETROLEUM
PO1	PROPOSED PRODUCT PIPING LAYOUT
DEF-1A	SKETCH DEF TANK LAYOUT AND DETAILS
DEF-2	MODIFIED STANDARD DEF TANK SUMP DETAILS
DEF-3	DEF INSULATION STANDARD DRAWING

ISSUED FOR: PERMIT JULY 25, 2014



TRANS CANADA HIGHWAY

PUBLIC ROAD PLAN NO. 23388



Notes
 1. ALL DIMENSIONS ARE IN METRIC UNITS.
 2. CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DIMENSIONS TO BE REFERRED TO THE PROJECT DESIGNER.
 3. DO NOT SCALE DIMENSIONS.

Revisions		
REV	DESCRIPTION	DATE
1	ALLOCATED OIL/WATER SEP. & ADDED ROCK PIT	05/04/21
2	REVISED VADP AREA, REMOVE FUTURE CANOPY FOUNDATION	02/02/21
3	PROPOSED NEW TANK & MANHOLE	02/02/21
4	NEW TANK FITTINGS & MANHOLE TANK SLAB, US PAVING, OVERSEERS	10 FEB. 21

Issue Table		
TO	FOR	DATE
	CONSTRUCTION	02/07/24
	PERMIT	14 JULY 25

LEGAL DESCRIPTION:	
IN part of the N.E. 1/4 SEC. 35-10-18WPM, being land contained in ST.104488 (PROVINCE OF MANITOBA) PARCEL C, PLAN 1745 ST. 178181 (COUNTY OF NECHEWA NEHA INCORPORATED & NICHOLIN ST. MEMBER) LOT 15, PLAN 1013 ALTA. DIST. ROAD PLAN 23366.	



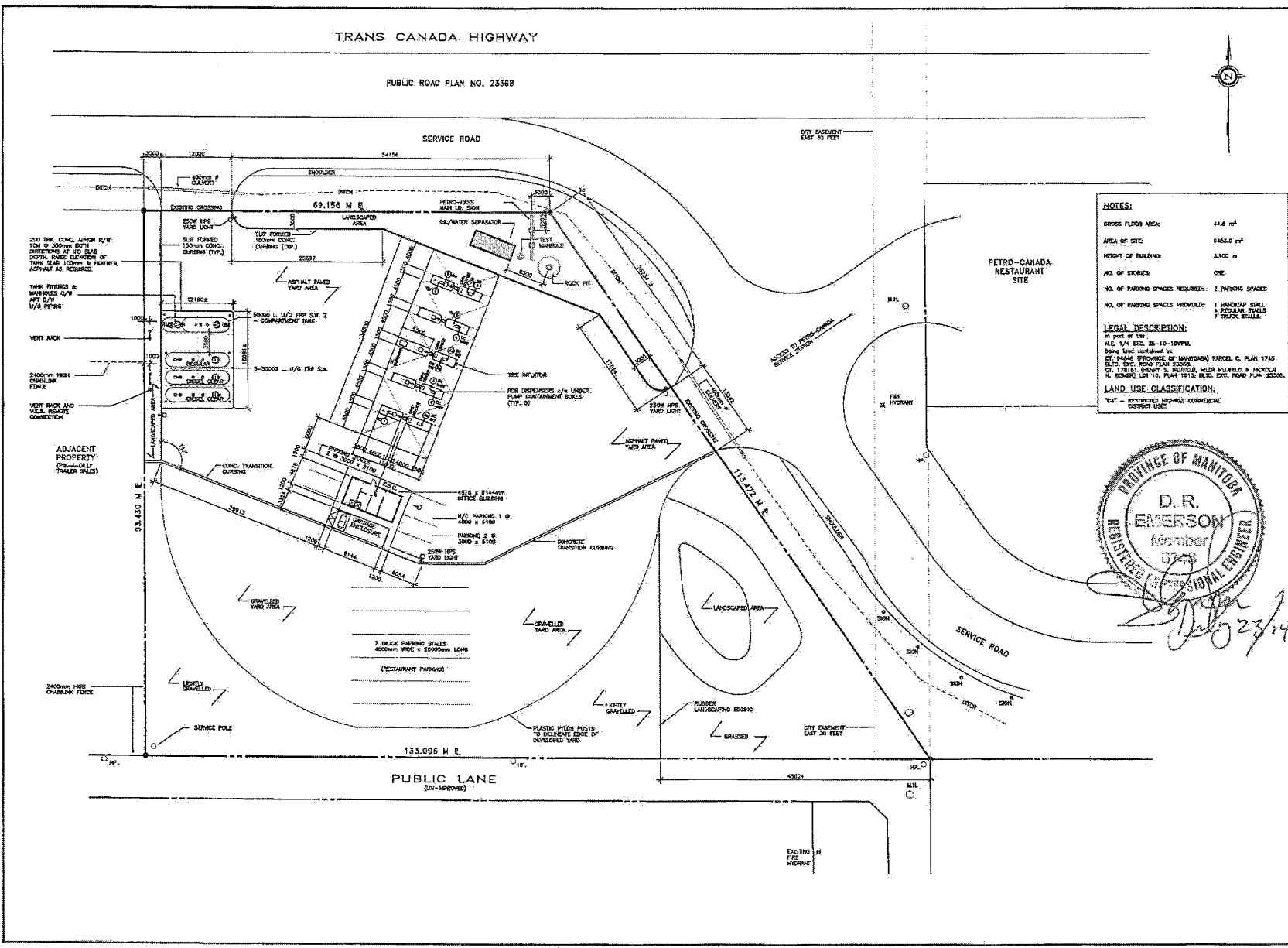
Brand Management Engineering
 EXISTING SITE PLAN

PROJECT:
**PETRO-PASS FACILITY
 HIGHWAY 1 SERVICE ROAD**
 BRANDON, MANITOBA

DRAWN BY: T.L.	SHEET NO. 01 (OF 1 & 2)
DRAWING NUMBER: 1-300	PETRO-CANADA CAD FILE NO. 37875SPD-CONSULTANT CAD FILE NO. 37875SPD
DATE DRAWN: 02/04/21	PROJECT SCALE: 1:500
CHECKED BY:	PLOT DATE:
APPROVED BY:	PLOT CONFIGURATION: MANITOBA

STD No./OUTLET No. **37975** SHEET No. **SPO**

NOTES:
 GROSS FLOOR AREA: 44.6 m²
 AREA OF SITE: 6453.0 m²
 HEIGHT OF BUILDING: 3.100 m
 NO. OF STORES: ONE
 NO. OF PARKING SPACES REQUIRED: 2 PARKING SPACES
 NO. OF PARKING SPACES PROVIDED: 1 PARKING STALL
 4 BICYCLE STALLS
 7 TRUCK STALLS
LEGAL DESCRIPTION:
 IN part of the N.E. 1/4 SEC. 35-10-18WPM, being land contained in ST.104488 (PROVINCE OF MANITOBA) PARCEL C, PLAN 1745 ST. 178181 (COUNTY OF NECHEWA NEHA INCORPORATED & NICHOLIN ST. MEMBER) LOT 15, PLAN 1013 ALTA. DIST. ROAD PLAN 23366.
LAND USE CLASSIFICATION:
 R-1 - RESIDENTIAL NEIGHBORHOOD COMMERCIAL DISTRICT USES

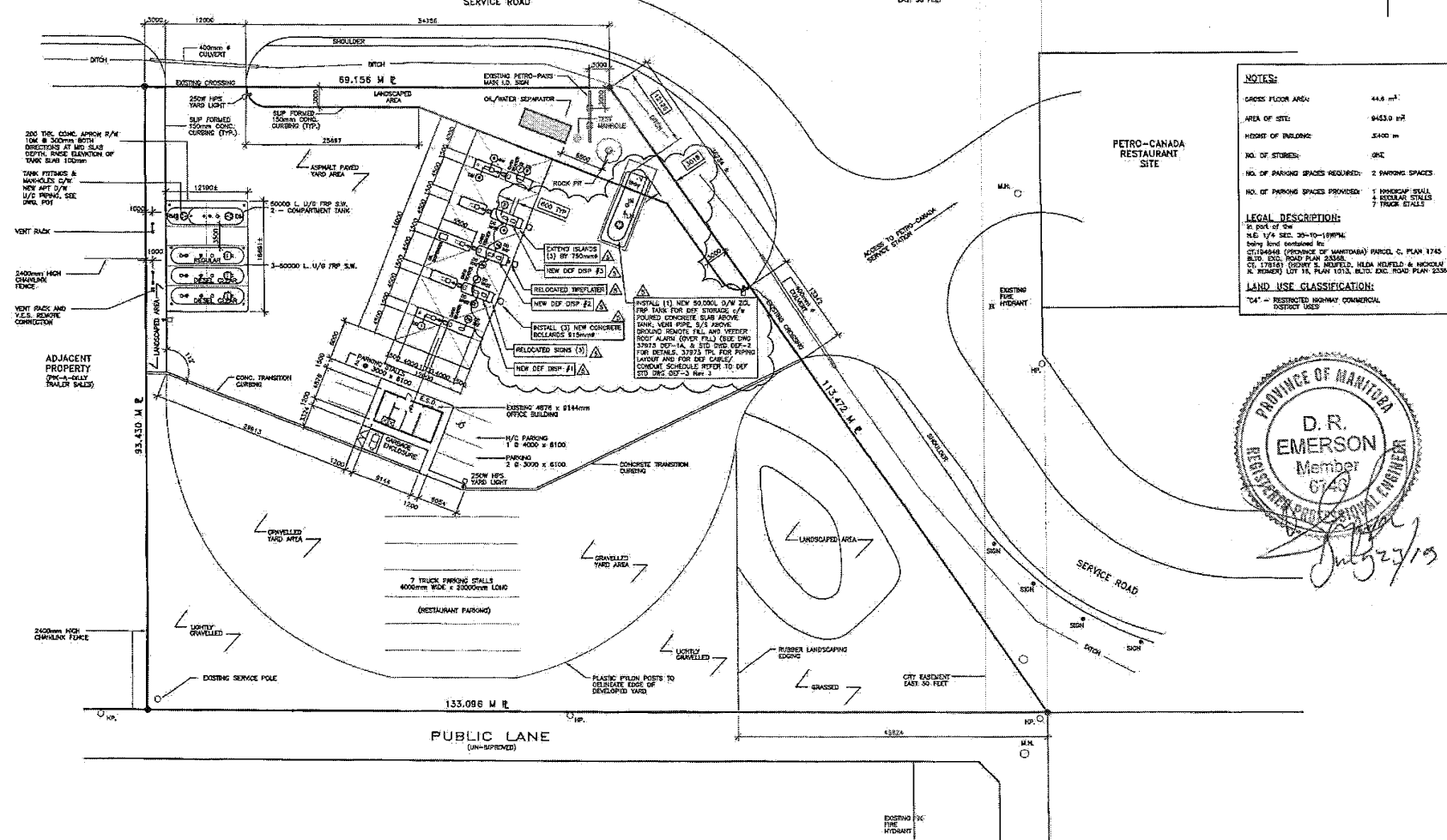


TRANS CANADA HIGHWAY

PUBLIC ROAD PLAN NO. 23368

SERVICE ROAD

CITY EASEMENT EAST 30 FEET



NOTES:

GROSS FLOOR AREA: 44.6 m²

AREA OF SITE: 9453.0 m²

HEIGHT OF BUILDING: 3.540 m

NO. OF STORES: ONE

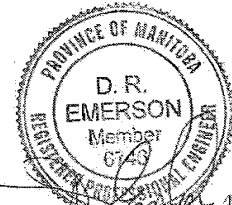
NO. OF PARKING SPACES REQUIRED: 2 PARKING SPACES

NO. OF PARKING SPACES PROVIDED: 1 INHURSTAL
4 STALLS STALLS
7 TRUCK STALLS

LEGAL DESCRIPTION:
21.00% of the TLD 1/4 SEC. 20-10-1898PM being land contained in:

QUEENSLAND (PROVINCE OF MANITOBA) PARCEL C. PLAN 1745 BLD. EXC. ROAD PLAN 23368
Q. 1745 (GOW'S, HUNDELL, HELD, HUNDELL & NICHOLS & TRONER) LOT 16, PLAN 1013, BLD. EXC. ROAD PLAN 23368.

LAND USE CLASSIFICATION:
"O4" - RESTRICTED HIGHWAY COMMERCIAL DISTRICT USES



July 27/15

Metric

• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
• COOPERATION TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF WORK. ALL DIMENSIONS TO BE PROVIDED TO THE PROJECT RECORDS.
• DO NOT SCALE DRAWINGS

Revisions

REV.	DESCRIPTION	DATE	DRAWN BY
1	FOR PROVISIONAL USE AND EXISTING PLAN & FOR THIS DRAWING	A.P.	
2	REVISED TO SHOW LAYOUT AS SHOWN ABOVE	2014-04-11	

Issue Table

NO.	FOR	DATE

CONSULTANT

WESTERN OFFICE

PROPOSED SITE PLAN

PROJECT:
TRANCANADA HWY #1
@ HWY #1A
BRANDON, MANITOBA

DRAWN BY: A. PHOEN
DRAWING SCALE: 1:750
DATE DRAWN: 2014.04.11

CHECKED BY:
APPROVED BY:

SUB. NO. 0 (859 x 864)
PETRO-CANADA CAD FILE NO. 37975_SPT
CONSULTANT CAD FILE NO.
PLOT SCALE 1:1
PLOT DATE
PLOT CONFIGURATION PARAMETERS:


SHD No./SHEET No: 37975
SHEET No: SP1

Metric
 * ALL DIMENSIONS ARE UNLESS OTHERWISE SHOWN
 CONTRACTOR TO CHECK VERIFY ALL DIMENSIONS PRIOR
 TO COMMENCEMENT OF WORK. ALL DIMENSIONS TO
 BE REPORTED TO THE PROJECT GEOMETER
 OR THE PROJECT ENGINEER
 OR THE PROJECT MANAGER

Revisions			
NO.	DESCRIPTION	DATE	BY
1	FOR REVISION BY MR. DAVE FOSTER FOR THE PROJECT ON 2014 08 16	2014 08 16	

Issue Table			
NO.	FOR	DATE	BY
1	PERMIT	14 JULY 2014	

CONSULTANT



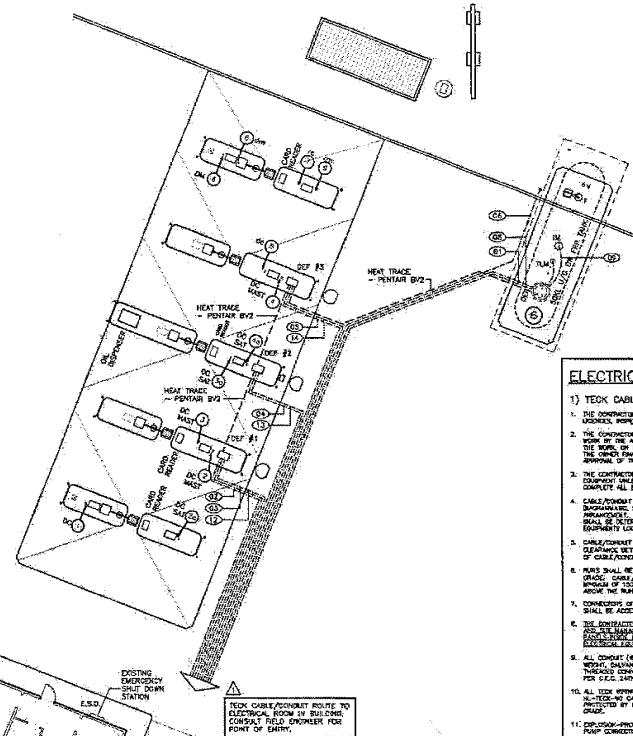
WESTERN OFFICE

DRAWING TITLE
PROPOSED ELECTRICAL PLAN

PROJECT:
TRANCANADA HWY #1 @ HWY #1A
 BRANDON, MANITOBA

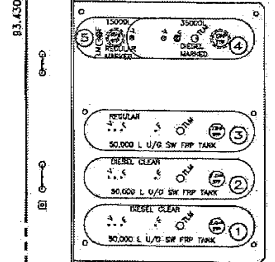
DRAWN BY:	RD.	RD. INFO: SHEET SIZE IS (ANSI & 84)
DRAWING SCALE:	1:150	PETRO-CANADA CAD FILE NO. 379795.1
DATE DRAWN:	2014 07 21	CONSULTANT CAD FILE NO. 379795.1
CHECKED BY:		PLLOT SCALE 1:1
APPROVED BY:		PLLOT CONFIGURATION PARTNERS
STD NO./SHEET NO.		SHEET NO.

37975 SE1

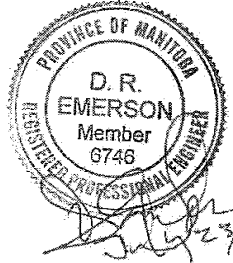


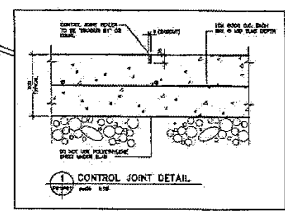
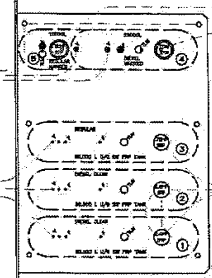
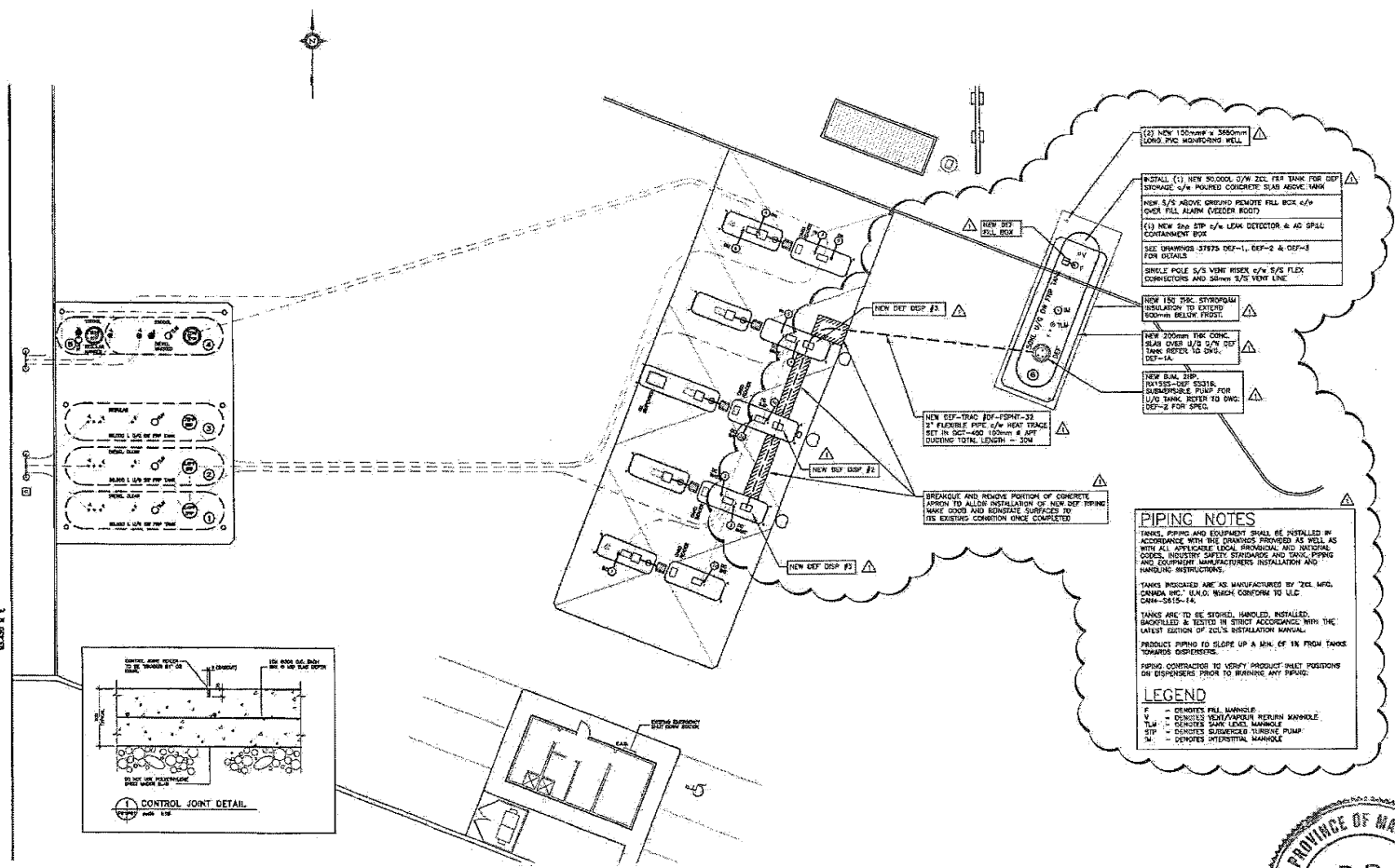
ELECTRICAL NOTES [A]

- 1) **TECK CABLE / CONDUIT SYSTEM**
 1. THE CONTRACTOR SHALL APPLY FOR ALL PERMITS, LICENSES, INSPECTIONS AND FEES REQUIRED.
 2. THE CONTRACTOR SHALL PROVIDE FOR REPRESENTATION BY THE OWNER'S REGISTERED ENGINEER ON SITE AT THE POINT OF ENTRY OF THE TECK CABLE/CONDUIT SYSTEM AT THE POINT OF ENTRY.
 3. THE CONTRACTOR SHALL PROVIDE LABOR, MATERIAL AND EQUIPMENT NECESSARY TO COMPLETE ALL ELECTRICAL WORK SHOWN.
 4. CABLE/RUNWAY ROUTING AND TERMINATION ARE TO BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO SET FIELD CONDITIONS AND EQUIPMENT LOCATION.
 5. CABLE/RUNWAY SHALL BE LAD WITH AT LEAST 20mm CLEARANCE BETWEEN ANY TWO CABLES/CONDUITS. TOP OF CABLE/RUNWAY.
 6. RACE SHALL BE A MINIMUM OF 100mm ABOVE THE ROOF OR ON THE SIDE OF THE BUILDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 7. CONDUITS OF TECK CABLES IN THE LIGHTING POLE SHALL BE ACCESSIBLE FROM THE MANHOLES.
 8. THE CONTRACTOR SHALL PROVIDE WITH THE SITE ENGINEER ALL THE NECESSARY DOCUMENTATION, INCLUDING THE ELECTRICAL SINGLE LINE DIAGRAM, AND ALL THE NECESSARY DOCUMENTATION, INCLUDING THE ELECTRICAL SINGLE LINE DIAGRAM.
 9. ALL CONDUIT (WHERE REQUIRED) SHALL BE HEAVY WEIGHT GALVANIZED STEEL FOR EXTERIOR CONDUITS AND POLY CARBON FIBRE FOR POLY CONDUIT.
 10. ALL CONDUITS SHALL BE PROVIDED WITH A MINIMUM OF 100mm OF SAND FILL, AT EACH END AND ABOVE THE RACE.
 11. CONDUITS OF TECK CABLES IN THE LIGHTING POLE SHALL BE ACCESSIBLE FROM THE MANHOLES.
 12. ALL CONDUITS SHALL BE PROVIDED WITH THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 13. THE CONTRACTOR SHALL PROVIDE WITH THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
- 2) **GROUNDING**
 1. BOND TERMINAL CONNECTIONS, CABLE ANCHORS AND METAL EQUIPMENT IS TO BE PROVIDED FROM AN ANCHOR TO THE FOUNDATION AS SHOWN IN THE STRUCTURE FOUNDATION.
 2. ALL ANCHORS SHALL BE PROVIDED WITH THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 3. IF NECESSARY, THE CONTRACTOR SHALL INSTALL APPROVED EQUIPMENT IS TO BE PROVIDED FROM AN ANCHOR TO THE FOUNDATION AS SHOWN IN THE STRUCTURE FOUNDATION.
- 3) **CONDUIT/TECK CABLE ROUTING**
 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 2. REFER TO VENDOR-ROOT INSTALLATION MANUAL FOR THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 3. ALL WORK SHALL BE PROVIDED WITH THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
- 4) **VENDOR-ROOT SYSTEM**
 1. VERIFY ALL CONDUIT LOCATIONS TO INSTALL VENDOR-ROOT PANELS WITH OWNER'S FIELD ENG. PRIOR TO INSTALLING ANY CONDUIT.
 2. REFER TO VENDOR-ROOT INSTALLATION MANUAL FOR THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 3. ALL WORK SHALL BE PROVIDED WITH THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 4. FOR WORKING:
 - 1 - 1/2" A.M.C. (GREEN COLORED)
 - 2 - 1/2" A.M.C. (GREEN COLORED)
 - 3 - 1/2" A.M.C. (GREEN COLORED)
- 5) **DISPENSERS / PUMP WORKING**
 1. CONFORM EXACT TYPE & MODEL OF ALL DISPENSERS TO BE USED ON THIS PROJECT, PRIOR TO FILLING ANY CONDUITS.
- 6) **NOTE TO ALL ELECTRICAL SUBCONTRACTORS**
 1. SUBMIT CABLE INTERFERENCE:
 - 1.1. PROVIDE CABLES TO BE SAID LESS THAN 100 TO PROVIDE FOR THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 - 1.2. PROVIDE TO FOLLOW THE PROJECT WILL BE USED IN THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 - 1.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
 2. INSTALLATION
 - 1. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL ELECTRICAL AND MECHANICAL WORK IS COMPLETE BEFORE THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY WORK TO PROVIDE THE RACE AND PROVIDING CLEARANCE TO THE RACE.
- 7) **EXISTING EQUIPMENT AND MATERIAL**
 1. EXISTING ELECTRICAL EQUIPMENT, CONDUITS AND CABLES TO BE PROVIDED FROM AN ANCHOR TO THE FOUNDATION AS SHOWN IN THE STRUCTURE FOUNDATION.
 2. ELECTRICAL CONTRACTOR IS TO PROVIDE EQUIPMENT TO BE PROVIDED FROM AN ANCHOR TO THE FOUNDATION AS SHOWN IN THE STRUCTURE FOUNDATION.



BURIED CONDUIT SCHEDULE [A]			
NO.	SERVICE/OBSERVATION	CONDUCTOR SIZE	FROM TO
01	DEF STP POWER	NL TECK 80, 3/4 #10 + GRND	BUILDING - ELECTRICAL ROOM TO DEF TANK SENSOR ROOM - 2 IN STR.
02	HEAT TRACING FOR DEF PIPING	NL TECK 80, 1/2 #10 + GRND	BUILDING - ELECTRICAL ROOM TO SUNNY HEAT TRACE
03	CONDUCTOR TECK FOR POWER AND CONTROL (2 SPACES) INSTRUMENTATION TECK FOR PULSAR	NL TECK 80, 8/0 #10 + GRND INSTRUMENTATION TECK 17# 18ga	BUILDING - ELECTRICAL ROOM TO DEP DISPENSER #1
04	CONDUCTOR TECK FOR POWER AND CONTROL (2 SPACES) INSTRUMENTATION TECK FOR PULSAR	NL TECK 80, 8/0 #10 + GRND INSTRUMENTATION TECK 17# 18ga	BUILDING - ELECTRICAL ROOM TO DEP DISPENSER #2
05	CONDUCTOR TECK FOR POWER AND CONTROL (2 SPACES) INSTRUMENTATION TECK FOR PULSAR	NL TECK 80, 8/0 #10 + GRND INSTRUMENTATION TECK 17# 18ga	BUILDING - ELECTRICAL ROOM TO DEP DISPENSER #3
06	FOR FUTURE USE	40mm x 6 CONDUIT 6/4 PULL WIRE	BUILDING - ELECTRICAL ROOM TO STUB UP IN LANDSCAPE AREA
08	VENDOR ROOT SENSOR AND FLK	INSTRUMENTATION TECK 47# 18ga	BUILDING - TLE 350 CONTROL PANEL TO DEP TANK SUMP (47# 18ga) JUNCTION BOX
09	VENDOR ROOT SENSOR FOR INTERSTINAL SPACE	INSTRUMENTATION TECK 17# 18ga	DEF TANK - SUMP TO INTERSTINAL MONITOR JUNCTION BOX
10	VENDOR ROOT TANK LEVEL PROBE	INSTRUMENTATION TECK 17# 18ga	DEF TANK - SUMP TO LEVEL PROBE JUNCTION BOX
12	VENDOR ROOT SENSOR FOR DEP DISPENSER SUMP	INSTRUMENTATION TECK 17# 18ga	BUILDING - TLE 350 CONTROL PANEL TO DEP DISPENSER SUMP #1 (VENDOR ROOT SENSOR)
13	VENDOR ROOT SENSOR FOR DEP DISPENSER SUMP	INSTRUMENTATION TECK 17# 18ga	BUILDING - TLE 350 CONTROL PANEL TO DEP DISPENSER SUMP #2 (VENDOR ROOT SENSOR)
14	VENDOR ROOT SENSOR FOR DEP DISPENSER SUMP	INSTRUMENTATION TECK 17# 18ga	BUILDING - TLE 350 CONTROL PANEL TO DEP DISPENSER SUMP #3 (VENDOR ROOT SENSOR)





PIPING NOTES
 TANKS, PIPING AND EQUIPMENT SHALL BE INSTALLED BY
 ACCORDANCE WITH THE DRAWINGS PROVIDED AS WELL AS
 WITH ALL APPLICABLE LOCAL, NATIONAL AND INDUSTRIAL
 CODES, INDUSTRY SAFETY STANDARDS AND TANK, PIPING
 AND EQUIPMENT MANUFACTURERS' INSTALLATION AND
 HANDLING INSTRUCTIONS.
 TANKS INDICATED ARE AS MANUFACTURED BY ZEL MFG.
 CANADA INC. U.K.A.D. WHICH CONFORM TO U.L.C.
 CAN-5815-14.
 TANKS ARE TO BE STORED, HANDLED, INSTALLED,
 BACKFILLED & TESTED IN STRICT ACCORDANCE WITH THE
 LATEST EDITION OF ZEL'S INSTALLATION MANUAL.
 PRODUCT PIPING TO SLOPE UP A MIN. OF 1% FROM TANKS
 TOWARDS DISPENSERS.
 PURVEYOR CONTRACTOR TO VERIFY PRODUCT INLET POSITIONS
 ON DISPENSERS PRIOR TO PURING ANY PIPING.

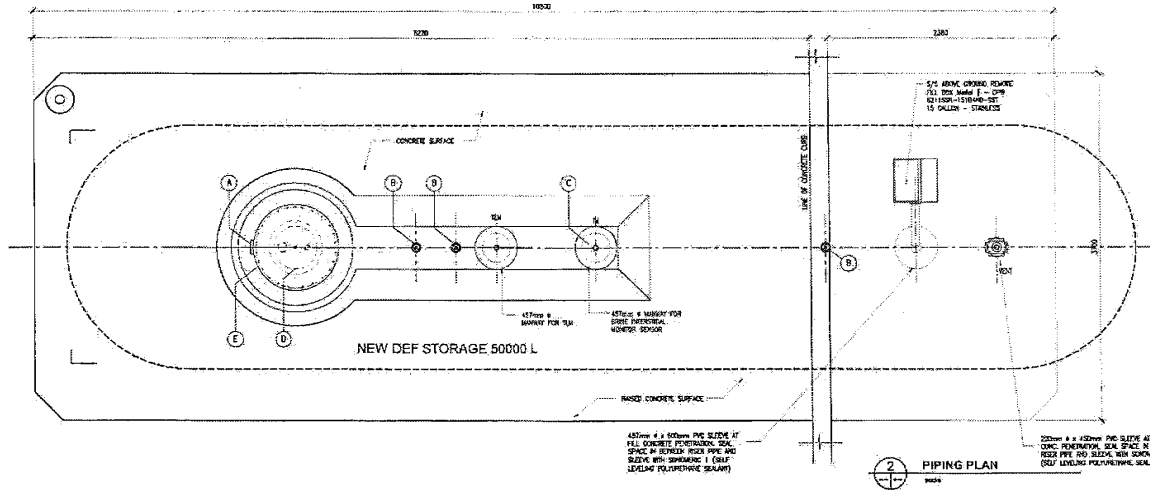
LEGEND
 F - DENOTES FILL MANHOLE
 V - DENOTES VENT/PAUPER RETURN MANHOLE
 TLE - DENOTES TANK LEVEL MANHOLE
 STP - DENOTES SUBSIDIABLE TURBINE PUMP
 M - DENOTES INDUSTRIAL MANHOLE

Metric:
 1 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 2 CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE REPORTED TO THE PROJECT DESIGNER.
 3 DO NOT SCALE DRAWINGS

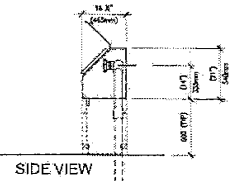
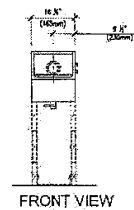
Revisions			
REV.	DESCRIPTION	ISSUED	DATE
1	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
2	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
3	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
4	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
5	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
6	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
7	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
8	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
9	FOR PRELIMINARY REVIEW	A.P.	2014 04 16
10	FOR PRELIMINARY REVIEW	A.P.	2014 04 16

Issue Table			
TO	FOR	DATE	
OFF	PROJECT	14 JULY 2014	

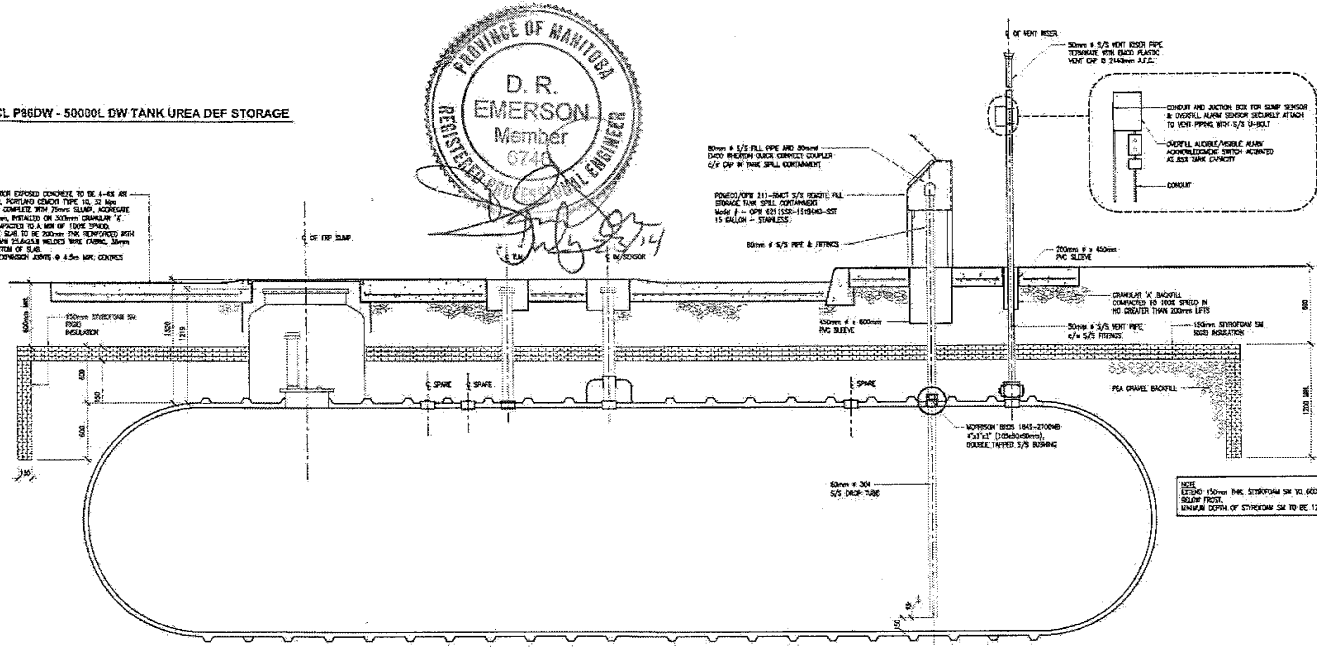
CONSULTANT
 WESTERN OFFICE
PROPOSED PRODUCT PIPING LAYOUT
 PROJECT:
 TRANSCANADA HWY #1
 @ HWY #1A
 BRANDON, MANITOBA
 DRAWN BY: A. PILON
 D.R. EMERSON
 Member
 6746
 REGISTERED PROFESSIONAL ENGINEER
 DATE DRAWN: 2014 04 16
 CHECKED BY: 1:1
 PROJECT DATE
 APPROVED BY: SLDT CONFIGURATION PARAMETERS
 SHEET No. / OUTLET No. 37975 / P01



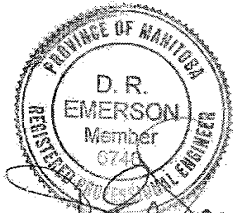
1 PLAN - ZCL P86DW - 50000L DW TANK UREA DEF STORAGE



5 ELEVATION OF POMECO/OPW 211-RMOT
Model J - OPW 6211SSR-15184ND-2ST 15 GALLON - STAINLESS

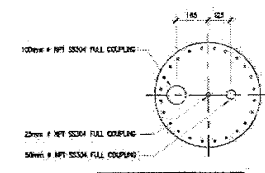


4 SECTION - ZCL P86DW - 50000L DW TANK UREA DEF STORAGE



ITEM	QUANTITY	DESCRIPTION
A	1	BLC PLATE
B	3	100mm NPT SS304 HALF COUPLING
C	3	100mm NPT SS304 FULL COUPLING
D	1	22\"/>

- NOTE:
- TANK USUAL UREA DEF STORAGE
 - ALL FITTINGS EXCEPT FLANGES, MANWAY COVER AND MANWAY HANDPIPE MUST BE SS304
 - POST CARE THE COMPLETE TANK BEFORE TESTING AND FILLING (4) BOWNS WITH MAX
 - CAUTION FOR MANWAY COVER TO BE OPENED, PROTECTIVE COVER
 - TANK IS SHIPPED WITH AN INTERNAL VENTURATOR
 - TANK IS SHIPPED WITH A PRESSURE RELIEF VALVE ON THE PRIMARY TANK SIDE TO 2 PSI TO
 - KEEP TANK CLEAN DURING SHIPPING AND INSTALLATION USE PVC PIPE FLANGES TO USE AND TEST
 - THE TANK. ALL REQUIRED WORK SHOULD BE DONE WITH FRESH-WATER PUMP.
 - BRONZE TITANIUM AND WOODEN GEARING ARE NOT STAINLESS STEEL
 - ALL COUPLERS SHOULD BE IN ONE DIRECTION OF FLOW
 - TANK INTERIOR IS BORE FILLER
 - ESTIMATED WEIGHT (EMPTY) - 2250kg (INCLUDING SKID)



3 DETAIL OF 22" SS304 MANWAY COVER

Metric

- ALL DIMENSIONS ARE IN MILLIMETRES (M.M.)
- CONTRACTOR TO CHECK/VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE REPORTED TO THE PROJECT OFFICER.
- DO NOT SCALE DRAWINGS

Revisions		
REV.	DESCRIPTION	DATE
1	FILE PAPER REVISION TO 'D' (REVISED) #	NOV 1 2014
2	GENERAL UPDATE	JAN 13 2014
3	WORKING FOR SITE SPECIFIC	APR 29 2014

Issue Table		
NO.	FOR	DATE
CITY	PERMIT	14 JUL 23

A-Roscoe Energy Systems

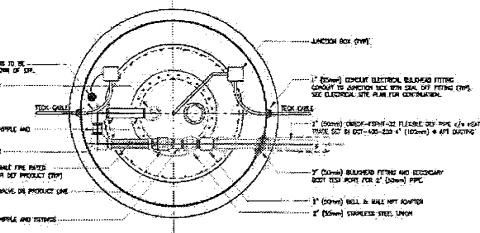
CENTRAL OFFICE

SITE SPECIFIC
50000L DEF TANK
LAYOUT and DETAILS

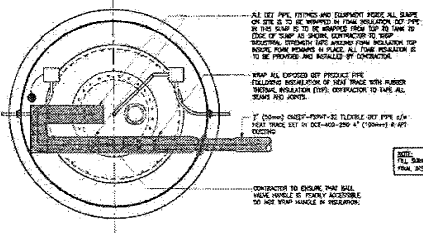
TRANSCANADA HWY #1
@ HWY #1A
BRANDON, MANITOBA

DRAWN BY: A. PILON	CAD FILE NO. PETRO-CANADA CAD FILE NO. 37975 DEF-1A
DRAWING SCALE: NTS	CONSULTANT CAD FILE NO.
DATE DRAWN: 2014.04.23	PLOT SCALE: 1:1
CHECKED BY:	PLOT DATE:
APPROVED BY:	PLOT CONFIGURATION PARAMETERS:
STD. NO./OUTLET NO.	SHEET NO.

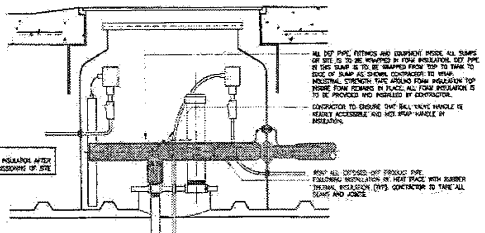
37975 DEF-1A



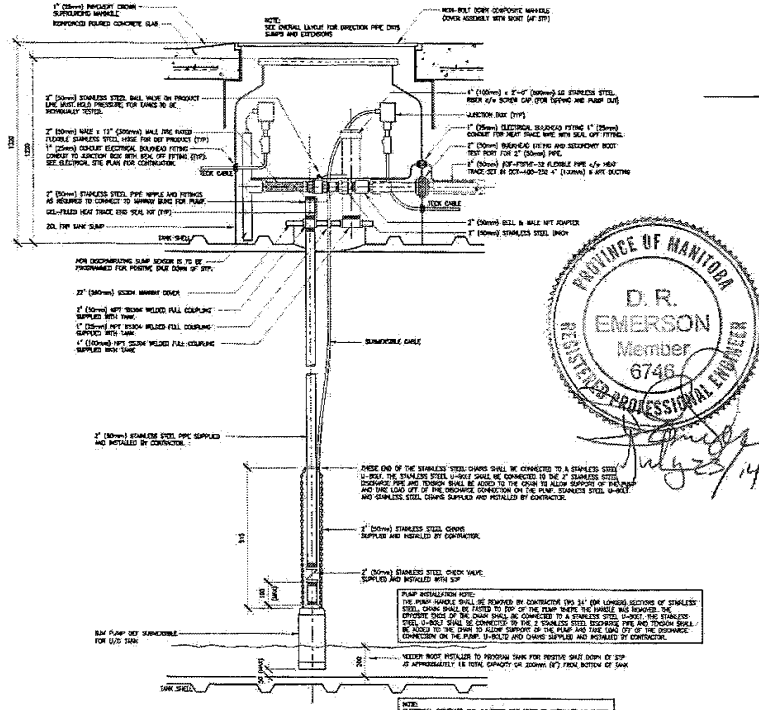
PLAN
SCALE: 1:10



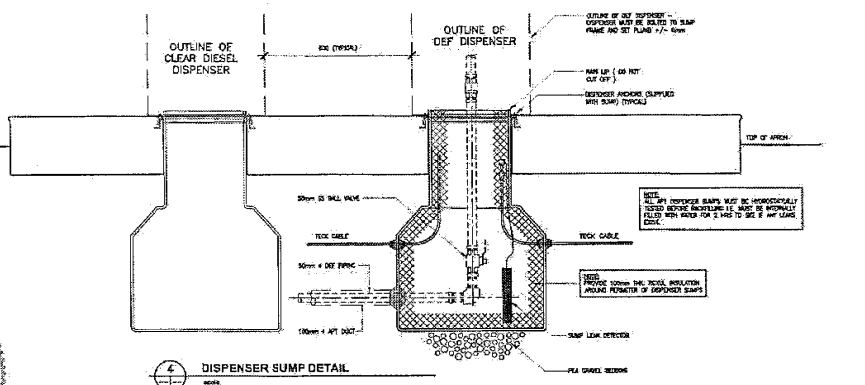
PLAN - DEF PIPE INSULATION DETAIL
SCALE: 1:10



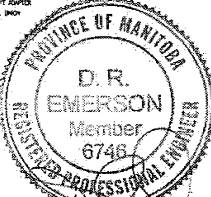
SECTION - DEF PIPE INSULATION DETAIL
SCALE: 1:10



SECTION - SUBMERSIBLE DEF PUMP
SCALE: 1:10



DISPENSER SUMP DETAIL
SCALE: 1:10



QUANTITY	DESCRIPTION	COMMENTS	QUANTITY	DESCRIPTION	COMMENTS
1	OMEGA FLEX STAINLESS STEEL DEF PIPING & FITTINGS		1	DISPENSER/DEF DISPENSER SUMP	
ONE (1) OF 20mm x 30mm	20mm x 30mm x 4 DEF PIPING WITH HEAT TRACES	MANUFACTURED	1	DEF DISPENSER - 500 LITRE SINGLE PHASE DEF DISPENSER	
ONE (1) OF 1/2\"/>					

NOTE: ALL MISCELLANEOUS FITTINGS NOT QUOTED TO BE STAINLESS STEEL.

Metric

- ALL DIMENSIONS ARE IN METRIC UNITS.
- CONTRACTOR IS TO CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DIMENSIONS TO BE REFERENCED TO THE PROJECT DESIGN.
- DO NOT SCALE DRAWINGS.

Revisions		
REV.	DESCRIPTION	ISSUED DATE
1	ISSUE	14 JULY 20

Issue Table		
TO	FOR	DATE
CITY	PROJECT	14 JULY 20

Central Office

MODIFIED STANDARD DEF TANK SUMP DETAILS

DEF INSTALLATION STANDARD DRAWING

DRAWN BY:	DO	CAD DRG/NO.	0359 + 884
DRAWING SCALE:	M.E.	PETRO-CANADA CAD FILE NO.	
DATE DRAWN:	2013-04-17	CONSULTANT CAD FILE NO.	
CHECKED BY:		PLOT SCALE	1:1
APPROVED BY:		PLOT DATE	
STD No./OUTLET No.		PLOT CONTINUATION PARAMETERS	
		SHEET No.	DEF-2

GENERAL NOTES

DEF IS AN EXTREMELY CORROSIVE SUBSTANCE AND ALL MISCELLANEOUS FITTINGS AND CONNECTIONS WITH THE DEF HANDLING SYSTEM MUST BE 304 STAINLESS STEEL.
 ENCASE THE DEF-TRAC PIPE IN A SUITABLE FLEXIBLE CORRUGATED CHASE PIPE (BLACK COATED), TO FACILITATE INSTALLATION AND IF NECESSARY REMOVAL OF PIPE AT A LATER DATE.
 WHEREVER POSSIBLE PRODUCT LINES SHOULD BE RUN IN A SINGLE TRENCH BETWEEN THE TANK AREA AND PUMP OPERATOR ISLAND AREA. VENT LINES BETWEEN THE TANK AND THE STRUCTURE TO WHICH THE ABOVEGROUND VENT LINES ARE ATTACHED SHOULD ALSO BE INSTALLED IN A SINGLE TRENCH. WHERE MORE THAN ONE TRENCH IS REQUIRED, PIPING SHOULD BE CROSSED OVER EACH OTHER BY CROSS OVER UNDERGROUND TRENCH.
 THE TRENCH BOTTOM MUST BE GRADED UNIFORMLY FROM THE DISPENSER BACK TO THE TANKS OR SHAFTS AT A MIN. SLOPE AND BE FREE OF ANY SHARP OR PROTRUDING HARD OBJECTS. THE TRENCH BOTTOM MUST BE GRADED WITH A MINIMUM 150mm OF BACKFILL SUCH AS IMPROVED SAND OR PEA GRAVEL.

MATERIALS COMPATIBLE WITH DEF

ROCKY ALLOWED ALLOYING 0-1% STEELS AND 0-10% STEELS: STAINLESS STEEL 304 (150000), 304L (153045), 316 (153000) AND 316L (153100) IN ACCORDANCE WITH ASTM A240; ASTM A276 AND ASTM A312.

TRENCH
 95-10-03-14-00-03-14 ALLOY, 1.8, HASTELLOY C276-03
 POLYETHYLENE, FREE OF ADDITIVES
 POLYPROPYLENE, FREE OF ADDITIVES
 POLYISOBUTYLENE, FREE OF ADDITIVES
 POLYETHYLENE TEREPHTHALATE (PET), FREE OF ADDITIVES
 POLYETHYLENE TEREPHTHALATE (PET), FREE OF ADDITIVES
 POLYVINYLIDENE FLUORIDE (PVDF), FREE OF ADDITIVES
 POLYETHYLENE TEREPHTHALATE (PET), FREE OF ADDITIVES
 COPOLYMERS OF VINYLIDENE FLUORIDE AND HEXAFLUOROPROPYLENE, FREE OF ADDITIVES

SPECIAL NOTES

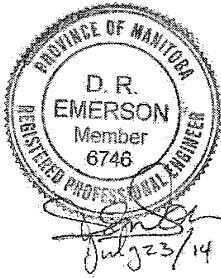
USE DEF COMPATIBLE APPROVED SEALANT ONLY.
 LOCATE 607 THESE SEALANT RECOMMENDED OTHER OPTIONS INCLUDED HOWEVER STOP STOP 848, CASOLA FOR DET.
 DO NOT USE STANDARD PETROLEUM INDUSTRY PIPE SEALANT (EPOXYURE)
 HANDING HARDWARE IS DEF SPECIFIC. ATTEMPT TO USE STANDARD PETROLEUM HOSE OR NOZZLE WILL LEAD TO DAMAGES TO HARDWARE AND/OR POTENTIAL CONTAMINATION OF PRODUCT.
 REPLACEMENT O-RINGS AND SEALS TO BE PERFORMED QUOTE FROM ONE OF THE NON-REGISTERED TRADE NAME THAT ARE ACCEPTABLE.

TIGHTNESS TESTING

BEFORE THE PUMP SYSTEM IS BACKFILLED, IT SHOULD BE ISOLATED FROM THE TANKS AND SUBJECTED TO A PIPE TIGHTNESS TEST. FOR TIGHTNESS TESTING OF DEF-TRAC, THE PIPING IS PRESSURIZED WITH AIR TO 1.8 TIMES THE OPERATING PRESSURE OF THE SYSTEM OR TO A MAXIMUM OF 150psi, MAINTAIN THIS PRESSURE FOR A MINIMUM OF 1 HOUR, MAKING SURE THERE IS NOT A DROOP IN PRESSURE.

START-UP AND COMMISSIONING

CHECK ALL ELECTRICAL AND MECHANICAL CONNECTIONS PRIOR TO ENERGIZING POWER TO DISPENSER.
 WHEN TESTING ON SITE WITH DEF CARE SHOULD BE TAKEN TO KEEP PRODUCT PURE AND MAINTAIN CONTAMINATION. DEF APPROVED TEST MEASURES ONLY (NOTE NOT ALL STAINLESS TUBING IS COMPATIBLE). A CLEAN CONTAINER VIAL OF ANY OTHER PRODUCT OR PRODUCT RESIDUE MUST BE USED. CLEAN FLAME APPROVED FOR USE ON ALL STAINLESS TUBING COMPONENTS. MOST PLASTIC TUBINGS OR BE SURE TO USE ONLY PLASTIC TUBING MADE OF OTHER POLYETHYLENE OR POLYPROPYLENE, 500µM WALL THICKNESS.
 WHEN TESTING PRODUCT FLOW DURING PROPER RELEASE OF AIR IN SYSTEM PUMPING AND DISPENSER BY USING THE AIR RELEASE VALVE ON EITHER ON A SLOW FLOW OF PRODUCT THROUGH NOZZLE.



CABLE / CONDUIT SCHEDULE

NO.	FROM	TO	TYPE	PURPOSE	NOTES
01	BUILDING - ELECTRICAL ROOM	DEF TANK	40 TECH 90 3/4" 410 + 3000	DEF TANK POWER	UNIT IS 3 PHASE 208V 50/60 HZ
02	BUILDING - ELECTRICAL ROOM	DEF TANK TRAC	40 TECH 90 3/4" 410 + 3000	DEF TANK TRAC	DEF TANK TRAC FOR DEF TANK
03	BUILDING - ELECTRICAL ROOM	DEF DISPENSER #1	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #1	DEF DISPENSER #1 FOR DEF TANK AND CONTROL. DEF DISPENSER #1 IS 500 WATT. HEATERS BEING PARALLEL ON TWO 200V SERVICE.
04	BUILDING - ELECTRICAL ROOM	DEF DISPENSER #2	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #2	DEF DISPENSER #2 IS 500 WATT. HEATERS BEING PARALLEL ON TWO 200V SERVICE.
05	BUILDING - ELECTRICAL ROOM	DEF DISPENSER #3	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #3	DEF DISPENSER #3 IS 500 WATT. HEATERS BEING PARALLEL ON TWO 200V SERVICE.
06	BUILDING - ELECTRICAL ROOM	DEF TANK 1/2" 200 CONTROL PANEL	40 TECH 90 3/4" 410 + 3000	DEF TANK 1/2" 200 CONTROL PANEL	DEF TANK 1/2" 200 CONTROL PANEL
07	BUILDING - 1/2" 200 CONTROL PANEL	DEF TANK 1/2" 200 CONTROL PANEL	40 TECH 90 3/4" 410 + 3000	DEF TANK 1/2" 200 CONTROL PANEL	DEF TANK 1/2" 200 CONTROL PANEL
08	DEF TANK - TANK	DEF TANK 1/2" 200 CONTROL PANEL	40 TECH 90 3/4" 410 + 3000	DEF TANK 1/2" 200 CONTROL PANEL	DEF TANK 1/2" 200 CONTROL PANEL
09	DEF TANK - TANK	DEF TANK 1/2" 200 CONTROL PANEL	40 TECH 90 3/4" 410 + 3000	DEF TANK 1/2" 200 CONTROL PANEL	DEF TANK 1/2" 200 CONTROL PANEL
10	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #1 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #1 TANK WELDER ROOF SENSOR	DEF DISPENSER #1 TANK WELDER ROOF SENSOR
11	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #2 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #2 TANK WELDER ROOF SENSOR	DEF DISPENSER #2 TANK WELDER ROOF SENSOR
12	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #3 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #3 TANK WELDER ROOF SENSOR	DEF DISPENSER #3 TANK WELDER ROOF SENSOR
13	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #1 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #1 TANK WELDER ROOF SENSOR	DEF DISPENSER #1 TANK WELDER ROOF SENSOR
14	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #2 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #2 TANK WELDER ROOF SENSOR	DEF DISPENSER #2 TANK WELDER ROOF SENSOR
15	BUILDING - 1/2" 200 CONTROL PANEL	DEF DISPENSER #3 TANK WELDER ROOF SENSOR	40 TECH 90 3/4" 410 + 3000	DEF DISPENSER #3 TANK WELDER ROOF SENSOR	DEF DISPENSER #3 TANK WELDER ROOF SENSOR

NOTE: WIRE SIZE CALCULATIONS BASED ON RETURN RUN OF 120m (400 FEET) TO TANK EXTRA 20.3m (100 FEET) FROM TANK TO DEF DISPENSER.

CABLE / CONDUIT SYSTEM NOTES:

- THE CONTRACTOR SHALL APPLY FOR PERMIT AND PAY FOR ALL PERMITS, LICENSES, INSPECTIONS, EXAMINATIONS AND FEE REQUIRED.
- THE CONTRACTOR SHALL ARRANGE FOR PROTECTION OF WORK BY THE AUTHORIZED HAVING JURISDICTION OVER THE WORK.
- ON THE COMPLETION OF THE WORK PRESENT TO THE OWNER FINAL, INDIVIDUAL, SEPARATE OR APPROVAL OF THE INSPECTOR AUTHORITY.
- THE CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIAL AND EQUIPMENT UNLESS OTHERWISE INDICATED NECESSARY TO COMPLETE ALL ELECTRICAL WORK AS SHOWN.
- CABLE/CONDUIT ROUTING AND TERMINATIONS ARE DIAGNOSTIC, SHOWING THE APPROPRIATE ARRANGEMENT, ACTUAL CABLE/CONDUIT POSITIONS SHALL BE DETERMINED TO SUIT FIELD CONDITIONS AND EQUIPMENT LOCATION.
- CABLE/CONDUIT SHALL BE Laid WITH AT LEAST 30mm CLEARANCE BETWEEN ANY TWO CABLES/CONDUITS. TOP OF CABLE/CONDUIT SHALL BE A MINIMUM OF 30mm BELOW DRAIN. CABLE/CONDUIT SHALL BE ARRANGED WITH A MINIMUM OF 150mm OF SAND BELOW AT THE TRENCH AND ABOVE THE TRENCH.
- THE CONTRACTOR SHALL LABEL AND SIGN THE MANAGER LOCATION OF ALL NEW ELECTRICAL PANELS INSIDE BUILDING. THE LOCATION OF ALL TRENCH ELECTRICAL EQUIPMENT.
- ALL CONDUIT SHALL BE HEAVY WEIGHT, GALVANIZED, RIGID STEEL.

GROUNDING SYSTEM NOTES:

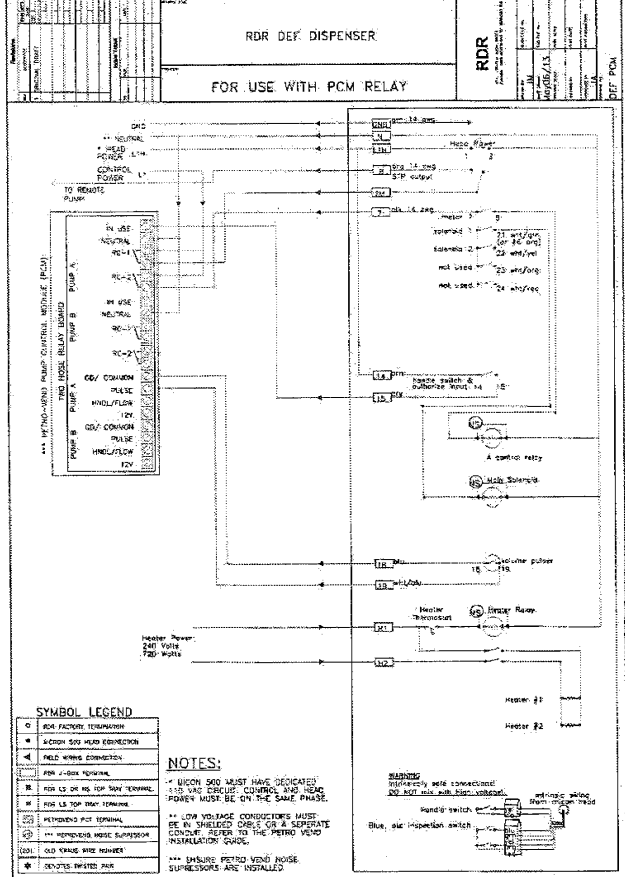
- ONE TRENCH CONDUIT SHALL BE PROVIDED AND METAL CONDUIT IN NEIGHBOURHOOD ROOM AND CONNECT TO THE GROUNDING BLOCK IN THE SPLITTER HOUSE.
- ALL GROUNDING SHALL BE IN ACCORDANCE WITH CSA STANDARD C22.1-1989 AND ALL ELECTRICAL EQUIPMENT BEING RECOMMENDED.
- IF NECESSARY, THE CONTRACTOR SHALL INSTALL ADDITIONAL GROUNDING ELECTRODES IN ACCORDANCE WITH CSA STANDARD C22.1-1989.

NOTICE TO ALL ELECTRICAL SUBCONTRACTORS:

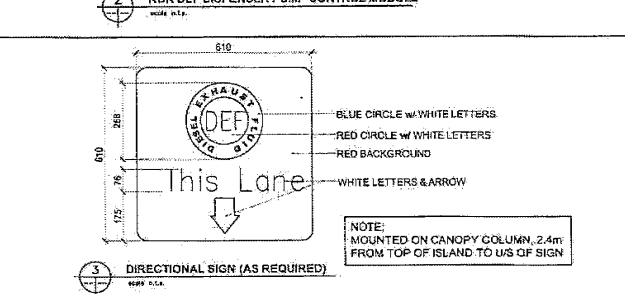
UNLESS CABLE REQUIREMENTS SPECIFIED CABLE MUST BE RATED LESS THAN 100 ampere per foot and BE MANUFACTURED WITH A NATURAL SUTURE FOR THE EQUIPMENT SUCH AS "LARD, CASH" OR "TOLLEN 8050 OR 8100".

HEAT TRACE NOTE:

CONTRACTOR TO SUPPLY AND INSTALL 30 AMP EPDM BREAKERS FOR HEAT TRACING SUPPLY.



RDR DEF DISPENSER PUMP CONTROL MODULE



Metric

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR TO CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ALL DIMENSIONS TO BE REFERENCED TO THE PROJECT BENCHMARK.
- USE MET SCALE DRAWINGS.

Revisions

REV.	DESCRIPTION	DATE
1	ISSUED	MAY 19 2014
2	GENERAL UPDATE	JUN 19 2014
3	GENERAL UPDATE	MAY 19 2014

Issue Table

TO	FOR	DATE
REV	FORMAT	14 MAY 23



CENTRAL OFFICE

NOTES, CABLE/CONDUIT SCHEDULE & MISC. DETAILS

DEF INSTALLATION STANDARD DRAWING

DRAWN BY:	OG	CAD DRAWN:	OG
DRAWING SCALE:	N/S	CONSULTANT:	S/40 F/86 No.
DATE DRAWN:	2012-08-08	PLOT SCALE:	1:1
CHECKED BY:		PLOT DATE:	
APPROVED BY:		PLOT CONFIGURATION:	PARAMETERED
SID No./OUTLET No.:		SHEET No.:	DEF-3