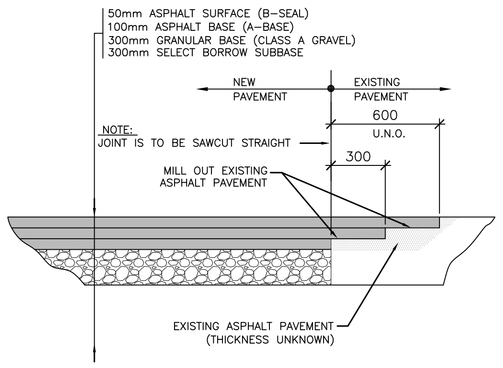
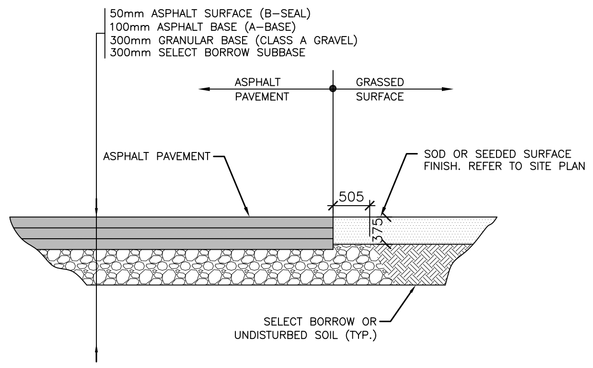


ASPHALT PAVEMENT DETAIL JOINT AT EXISTING / NEW

NTS — 1 M2|M2



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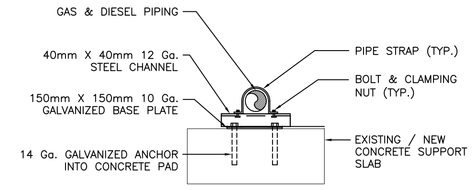
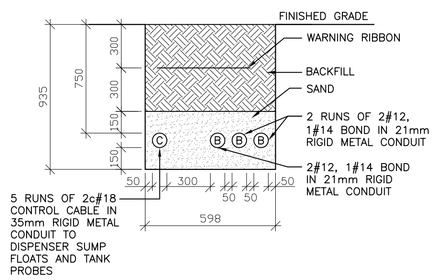


PIPE SUPPORT DETAIL

NTS — 3 M2|M2

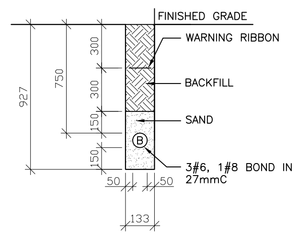


ELECTRICAL TRENCH DETAILS

NTS — 4 M2|M2

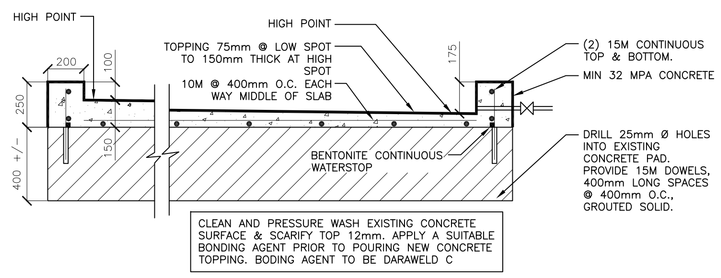
DETAIL ELECTRICAL NOTES:

1. B = SECONDARY VOLTAGE OR BRANCH CIRCUIT CONDUIT QUANTITY AND SIZE AS INDICATED.
2. C = COMMUNICATION CONDUIT QUANTITY AND SIZE AS INDICATED.
3. BACKFILLING OF TRENCH IN LAYERS NOT EXCEEDING 300mm (MECHANICALLY TAMPED).
4. USE NEW SOIL FREE FROM LARGE ROCKS OR DEBRIS FOR BACKFILL.
5. IF SITE CONDITIONS PROHIBIT TRENCH AS PER THIS DRAWING, ADVISE CONSULTANT.
6. ALL CABLES TO BE LABELED WITH WEATHER PROOF TAGS INDICATION THE DESTINATION OF THE CONDUITS.



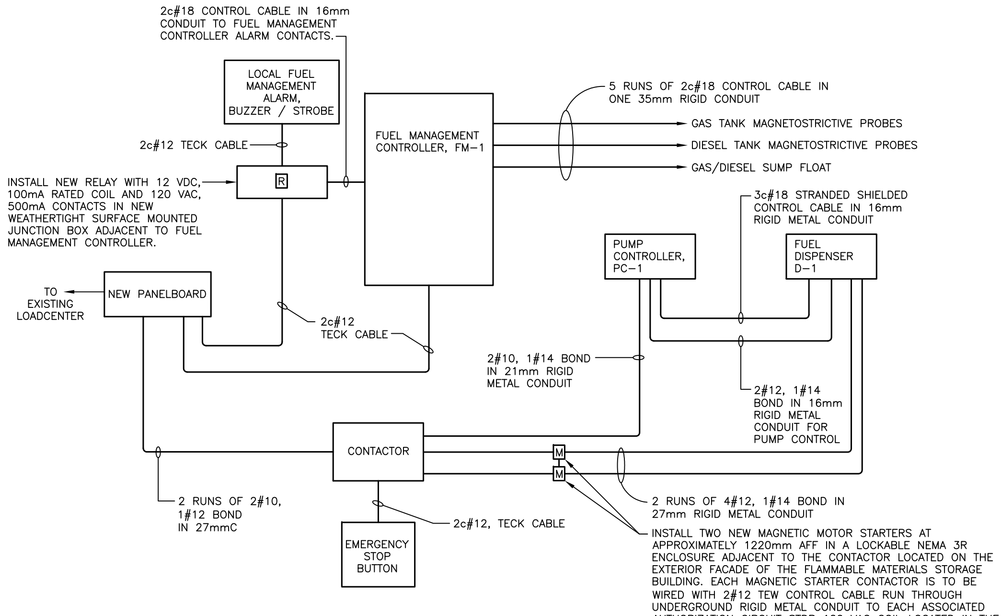
ELECTRICAL TRENCH DETAILS

NTS — 5 M2|M2



CONCRETE PAD OVERPOUR DETAIL

NTS — 6 M2|M2



FUEL CONTROL SYSTEM WIRING SCHEMATIC

NTS — 7 M2|M2

TANK SCHEDULE

TAG	MANUF.	MODEL	DIAMETER (mm)	LENGTH (mm)	CAPACITY (LITRES)	COMMENTS
T-1	–	–	1,296 +/–	3,658 +/–	4,500 +/– 5%	ABOVEGROUND DIESEL STORAGE TANK.
T-2	–	–	1,296 +/–	3,658 +/–	4,500 +/– 5%	ABOVEGROUND GAS (REGULAR UNLEADED) STORAGE TANK.

PUMP CONTROL UNIT SCHEDULE

TAG	MANUF.	MODEL	ELECT	COMMENTS
PC-1	–	–	120/1/60	CONTROL UNIT C/W 100 MAGNETIC STRIPE KEYCARDS.

DIGITAL FUEL TANK MANAGEMENT & LEAK DETECTION SYSTEM SCHEDULE

TAG	MANUF.	MODEL	ELECT	COMMENTS
FM-1	–	–	120/1/60	DIGITAL FUEL MANAGEMENT SYSTEM, ABILITY TO MONITOR SUMP SENSORS / LEAK DETECTION AS OUTLINED ON DRAWINGS, 1 SUMP SENSOR, 2 MAG PROBES. SYSTEM ALARMS FOR LOW & LOW-LOW LEVEL FUEL, HIGH & HIGH-HIGH LEVEL FUEL, HIGH & HIGH-HIGH WATER. FUEL MANAGEMENT SYSTEM TO C/W OPTIONAL WIRELESS MODEM, BUZZER AND STROBE LIGHT FOR ALARMING INSTALLED AS PER MANUFACTURERS REQUIREMENTS AND SUPPLY AND INSTALLATION OF FUEL MANAGEMENT SOFTWARE.

DISPENSER SCHEDULE

TAG	MANUF.	MODEL	MOTORS (HP)	TYPE	FUEL TYPE	ELECT	COMMENTS
D-1	–	–	2 X 1HP	TWIN	DIESEL & REGULAR UNLEADED	120/1/60	GAS (REGULAR UNLEADED) & DIESEL DISPENSER C/W ABOVEGROUND DISPENSER SUMP. DISPENSER TO C/W OPTIONAL REGISTER FACE LIGHT – BOTH SIDES OF REGISTER FACE.

GENERAL NOTES:

1. THE WORK SHALL BE IN ACCORDANCE WITH NATIONAL BUILDING CODE OF CANADA AND APPLICABLE STANDARDS (LATEST REV) AND THE NATIONAL FIRE CODE (LATEST REV) TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE UNLESS NOTED OTHERWISE ON THE DRAWINGS AND THE SPECIFICATIONS AS WELL AS WITH "CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999", "STORAGE TANK SYSTEMS FOR PETROLEUM PRODUCTS AND ALLIED PETROLEUM PRODUCTS REGULATIONS – SOR/2008-107 AMENDED MAY 4 2012", "NOVA SCOTIA STANDARDS FOR CONSTRUCTION AND INSTALLATION OF PETROLEUM STORAGE TANK SYSTEMS", "ENVIRONMENTAL CODE OF PRACTICE FOR ABOVEGROUND AND UNDERGROUND STORAGE TANK SYSTEMS CONTAINING PETROLEUM AND ALLIED PETROLEUM PRODUCTS (CCME)".
2. INSTALL TANK IN ACCORDANCE WITH FEDERAL / PROVINCIAL ENVIRONMENTAL PROTECTION ACT, NFCC 2010, CSA-B139, ALL CODES AS STATED IN SPECIFICATIONS AND ALL AUTHORITIES HAVING JURISDICTION.
3. COMPLY WITH ALL LOCAL, MUNICIPAL AND PROVINCIAL BY-LAWS AND REGULATIONS.
4. VERIFY ALL DIMENSIONS ON THE JOB SITE AND REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.
5. THE SITE OF WORK DESCRIBED IN THESE CONTRACT DOCUMENTS IS LOCATED AT THE INGONISH PARKS CANADA COMPOUND, 37486 CABOT TRAIL, INGONISH, NS.
6. REPORT ANY DOUBTFUL CONDITIONS REQUIRING DECISIONS AND SECURE DIRECTIONS FROM THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.
7. NO CLAIM WILL BE ENTERTAINED OR ALLOWED FOR ANY LABOR, MATERIALS OR OTHER EXTRAS REQUIRED FOR PROPER EXECUTION AND COMPLETION OF THE CONTRACT, WHICH COULD HAVE BEEN DETERMINED BY SITE EXAMINATION.
8. ALL DIMENSIONS AND ELEVATIONS ARE IN METRIC UNITS.
9. UNDERGROUND SERVICES MAY EXIST BENEATH THE SITE. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AND SERVICES (SHOWN OR NOT SHOWN ON DRAWINGS) IN THE FIELD WITHIN THE CONTRACT LIMIT. INFORMATION SHOWN ON PLANS IS APPROXIMATE ONLY.
10. EXERCISE CAUTION DURING EXCAVATION & PROTECT FACILITIES FROM DAMAGE. CONTRACTOR TO REPAIR DAMAGES AT NO COST TO THE OWNER. CONTACT UTILITIES BEFORE EXCAVATING. WORK SHALL BE CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT, DEPARTMENTAL REPRESENTATIVE, OWNER AND AUTHORITIES.
11. PROVIDE TEMPORARY SUPPORT TO ADJACENT STRUCTURES AND SITE SERVICES AS REQUIRED AND WHERE NECESSARY.
12. REPAIR & REINSTATE DISTURBED ASPHALT PAVEMENT, GRASSED & LANDSCAPED AREAS DAMAGED BY WORK OF CONTRACT INCLUDING ALL AREAS IMPACTED BEYOND LIMIT OF CONTRACT. DISTURBED AREAS ARE TO BE LEFT WITH 500mm OF TOPSOIL AND FINE GRADED AND SODDED TO THE SURROUNDING CONTOURS
13. COMPLY WITH ALL ENVIRONMENTAL REGULATIONS & PROVIDE ALL NECESSARY ENVIRONMENTAL PROTECTION INCLUDING SILT FENCES, DUST CONTROL, ETC.
14. THE CONTRACTOR SHALL SCHEDULE THE WORK OF THE CONTRACT IN A MANNER THAT WILL MINIMIZE THE DISRUPTION TO THE OWNER AND VEHICULAR TRAFFIC USING THE SITE. THE WORK MAY BE DONE DURING NORMAL BUSINESS HOURS IF THE WORK DOES NOT CREATE DISRUPTION TO CLIENT OPERATIONS AND COMFORT. COORDINATE WITH THE DEPARTMENTAL REPRESENTATIVE 24 HOURS BEFORE STARTING WORK. PROVIDE FLAGGERS, SAFETY SIGNAGE, BARRICADES, ETC. AS REQUIRED.
15. "REMOVE" AND "ABANDON" MEANS ABANDON, REMOVE AND DISPOSE OF FROM SITE ACCORDING TO APPLICABLE REGULATIONS. ALL REMOVED MATERIALS BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE REMOVED FROM THE SITE IN ACCORDANCE WITH ALL LOCAL, PROVINCIAL AND FEDERAL ENVIRONMENTAL LEGISLATION REQUIREMENTS. CONTRACTOR TO PROVIDE DOCUMENTATION INDICATING MATERIALS HAVE BEEN DISPOSED OF IN ACCORDANCE WITH THE REGULATIONS.
16. FUEL TANK TO BE LOCKABLE.
17. REMOVE AND DISPOSE OF ALL EXISTING ABOVEGROUND PIPING AND ELECTRICAL WIRING AS NOTED ON DRAWINGS.
18. PROVIDE UNIONS AND ISOLATION BALL VALVES TO ALLOW FOR EASY ISOLATION, MAINTENANCE AND DISASSEMBLY.
19. PROVIDE A PRODUCT TRANSFER AREA AROUND FUEL TANKS AS PER DRAWINGS.
20. PROVIDE TRENCHING AND PIPE STANDS AS REQUIRED TO SUPPORT NEW FUEL LINES, CONDUITS AND ANCILLARIES.
21. PROVIDE OVERFLOW PREVENTION DEVICE WITH CAMLOC FILL CONNECTION AT 90% FILL LEVEL. PROVIDE ELECTRONIC MONITORING SYSTEM FOR TANK LEVEL, VACUUM AND LEAK DETECTION.
22. PROVIDE ANTI-SIPHON VALVES AND A MAIN FUEL SHUT-OFF VALVES FOR THE NEW FUEL TANKS. PROVIDE PLASTIC TAGS FOR VALVES INDICATING THAT THE VALVES ARE THE MAIN FUEL SHUT-OFF.
23. ALL ABOVEGROUND PIPING TO BE STEEL TO ASTM A53/A53M, SCHEDULE 80. INSTALLATION SHALL MEET LATEST EDITION OF CSA B139, NFPA 31, NATIONAL FIRE CODE OF CANADA, 2010 (NFC) AND AUTHORITY HAVING JURISDICTION (AHJ). STEEL PIPING SHALL BE PAINTED WITH CORROSION RESISTANT WHITE PAINT. ALL GALVANIZED PIPE CUT ENDS SHALL BE TREATED WITH CORROSION RESISTANT ZINC PASTE.
24. ALL PIPING TO BE PROTECTED IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND LOCAL REGULATION AND CODE.
25. PROVIDE CLEAR IDENTIFICATION ON ALL NEW FUEL PIPING. PROVIDE IDENTIFICATION ON NEW FUEL TANKS, INCLUDING LAMACOID SIGNAGE WITH FILL INSTRUCTIONS & PROCEDURES, TAGGING, ENVIRONMENT CANADA REGISTRATION/IDENTIFICATION NUMBER, NO SMOKING, CAPACITIES, FILL AND PRESSURE RATES, FUEL TYPE, WHMIS LABELS, OPERATING SIGNAGE, EMERGENCY CONTACT NUMBER IN CASE OF SPILL, AND LABELS REQUIRED BY REGULATIONS AND AHJ AS WELL AS IN ACCORDANCE WITH CAN 4-S602.
26. LABEL FUEL PIPING EVERY 10 FEET.
27. THIS CONTRACTOR RESPONSIBLE FOR FIRST FILL OF TWO (2) NEW 4,500 LITRE TANKS. PARKS CANADA TO BE RESPONSIBLE FOR COST OF FUEL. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH REGULATIONS AND AHJ. NO FILLING OF FUEL TO TAKE PLACE IN NEW TANKS UNTIL AS BUILT DRAWINGS HAVE BEEN STAMPED AND EC REGISTRATION NUMBER HAS BEEN RECEIVED AND MARKED ON THE TANKS.
28. DRAIN ALL TANKS AND PIPING PRIOR TO START OF WORK. ALL TANKS, PIPING, OIL SLUDGE AND RESIDUE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY ACCEPTABLE MANNER MEETING ALL LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.
29. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING, COLLECTING, AND PRESENTING ALL DATA AND INFORMATION REQUIRED FOR APPROVAL AND REGISTRATION OF NEW TANKS AND ABOVEGROUND LINES WITH THE AHJ, ENVIRONMENT CANADA AND THE DEPARTMENT OF ENVIRONMENT. NEW TANKS TO BE INSTALLED AND TAGGED BY CERTIFIED INSTALLER. CONTRACTOR TO APPLY FOR AND PAY FOR ALL PERMITS.
30. CONTRACTOR IS RESPONSIBLE FOR CLEANING, PAINTING AND LABELING ALL EXPOSED AND ACCESSIBLE NEW FUEL PIPING IN ACCORDANCE WITH CODES & STANDARDS.
31. PROVIDE TRAINING ON THE OPERATION, MAINTENANCE AND TROUBLESHOOTING OF THE NEW FUEL SYSTEM AND CONTROLS PROVIDED TO PARKS CANADA STAFF.
32. THE DRAWINGS PROVIDED ARE INTENDED TO CONVEY THE LOCATION OF PIPING AND EQUIPMENT ONLY. THEY SHOULD NOT BE CONSTRUED AS OR OTHERWISE UNDERSTOOD TO BE FABRICATION DRAWINGS. CONTRACTOR TO CONFIRM ALL SITE CONDITIONS PRIOR TO ORDERING AND/OR FABRICATION OF ANY EQUIPMENT.
33. CONTRACTOR TO WORK WITH THE DEPARTMENTAL REPRESENTATIVE, AND TESTING AGENCIES TO ASSIST WITH THE COMPLETION OF ANY SOIL TESTING, MATERIAL TESTING OR ADDITIONAL INDEPENDENT THIRD PARTY TESTING BEING COMPLETED BY THE OWNER.
34. CONTRACTOR AND ALL WORKERS TO BE AVAILABLE FOR SAFETY TRAINING SESSIONS REQUIRED BY PARKS CANADA.
35. WARRANTY: ALL WORK AND EQUIPMENT IN THIS CONTRACT SHALL CARRY A MINIMUM WARRANTY OF ONE (1) YEAR.
36. SUPPLY ALL LABOUR, MATERIALS, EQUIPMENT, TRANSPORTATION AND SUPERVISION TO COMPLETE ALL WORK ASSOCIATES WITH THE ATTACHED DRAWINGS AND SPECIFICATION.
37. WORKERS TO HAVE AND WEAR PERSONAL PROTECTION EQUIPMENT (PPE).
38. CONTRACTOR TO SUBMIT A HEALTH AND SAFETY PLAN.
39. BECAUSE THIS PROJECT IS IN A NATIONAL PARK, IT IS ESSENTIAL ALL EXISTING FEATURES REMAIN AS FOUND. CONSEQUENTLY, STANDARDS FOR ENVIRONMENTAL PROTECTION AND FOR VISUAL AESTHETICS OF FINAL PRODUCT SHALL BE OF A QUALITY STANDARD. CONTRACT LIMITS SHALL BE STRICTLY ADHERED TO AND CONTRACTOR IS TO TAKE SPECIAL CARE TO MINIMIZE DAMAGE AND DISRUPTION AND PROTECT EXISTING FEATURES. THE DEPARTMENTAL REPRESENTATIVE IS TO BE NOTIFIED IMMEDIATELY IN ANY HISTORIC OR NATURAL RESOURCES ARE LOCATED DURING CONSTRUCTION.
40. CONTRACTOR RESPONSIBLE TO ARRANGE OPERATIONS, SITE STORAGE, TEMPORARY WASHROOMS AND FACILITIES DURING THE CONSTRUCTION OF WORK AS REQUIRED FOR THE SAFE STORAGE OF ALL MATERIALS FURNISHED TO OR BY HIM UNTIL IT HAS BEEN INCORPORATED IN THE COMPLETED PROJECT AND ACCEPTED BY THE DEPARTMENTAL REPRESENTATIVE. ANY MATERIAL LOST OR STOLEN OR THAT OTHERWISE DISAPPEARS FROM THE SITE SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
41. PARKING FOR CONTRACTORS IS AVAILABLE ON SITE. MAINTAIN ACCESS TO ROADS AT ALL TIMES DURING DURATION OF PROJECT.
42. CONTRACTOR RESPONSIBLE FOR TEMPORARY POWER WHILE ON SITE.
43. UNLESS SPECIFICALLY STATED OTHERWISE, THE TERMS DEPARTMENTAL REPRESENTATIVE AND ENGINEER WHEN USED IN THE SPECIFICATIONS AND ON THE DRAWINGS SHALL MEAN THE DEPARTMENTAL REPRESENTATIVE (DR) AS DEFINED IN THE GENERAL CONDITIONS OF THE CONTRACT.
44. THIS DRAWING IS INTENDED TO SHOW EXISTING AND NEW CONDITIONS. ITEMS IN LIGHTER LINEWEIGHT ARE EXISTING. ITEMS IN HEAVIER LINEWEIGHT ARE NEW.

GENERAL ELECTRICAL NOTES:

1. POTTED JUNCTION BOXES AND FITTINGS ARE NOT TO BE SEALED UNTIL WIRING IS APPROVED BY FUEL CONTROL SYSTEM INSTALLER.
2. UNLESS OTHERWISE INDICATED ALL WIRING TO FUEL CONTROL SYSTEM ARE TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND TERMINATED BY THE THE FUEL CONTROL SYSTEM INSTALLER.
3. ELECTRICAL WORK LOCATED AROUND THE FUEL DISPENSING AND STORAGE TANKS IS TO BE COMPLETED IN ACCORDANCE WITH CSA 22.1-12 SECTIONS 18 & 20 FOR THE APPROPRIATE CLASSIFICATION AND ZONE.
4. THIS DRAWING IS INTENDED TO SHOW EXISTING AND NEW CONDITIONS. ITEMS IN LIGHTER LINEWEIGHT ARE EXISTING. ITEMS IN HEAVIER LINEWEIGHT ARE NEW.
5. ALL NEW CONDUIT LOCATED IN HAZARDOUS LOCATIONS TO BE GALVANIZED RIGID STEEL SIZED AS INDICATED. PROTECT EXPOSED CONDUITS FROM MECHANICAL DAMAGE AND PROVIDE MARKERS FOR UNDERGROUND CONDUITS SO THEY ARE EASILY LOCATED.

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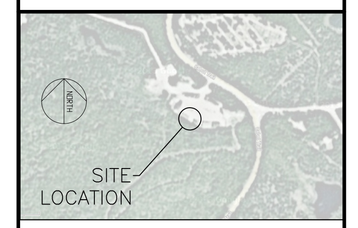

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B location drawing no. sur dessin no.
C drawing no. dessin no.

revisions		date
2.	ISSUED FOR TENDER	2015/05/11
1.	ISSUED FOR 95% REVIEW	2015/3/25

project / projet

PARKS CANADA FUEL SYSTEM REPLACEMENT INGONISH, NS

drawing / dessin

MECHANICAL & ELECTRICAL NOTES AND DETAILS

designed	AAP, EIT
date	2015-03-25
drawn	AAP, EIT
date	2015-03-25
approved	**SWW, P. ENG.**
date	**2015-03-25**
Tender / Soumission	
Parks Canada Departmental Representative	
project number / no. du projet	153001
drawing no. / no. du dessin	M2

1:1

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