LAYOUT POINT	NORTHING/EASTING
LP1	N 5233398.949 / E 305639.231
LP2	N 5233398.034 / E 305641.164
LP3	N 5233392.830 / E 305639.948
LP4	N 5233390.004 / E 305635.728

CONFIRM IN THE FIELD WITH DEPARTMENTAL REPRESENTATIVE

GENERAL LEGEND:

- RIVER FLOW DIRECTION
- 5.59 EXISTING SURVEY ELEVATION POINT
- 5.96 WATER LEVEL ELEVATION POINT AT TIME OF SURVEY (SEE NOTE 4)
- 6.20 NEW FINISHED ELEVATION
- DENOTES NEW REINFORCED CONCRETE FOR DIVERSION WALLS
- LP1 SURVEY LAYOUT POINT
- ATTRACTION FLOW SYSTEM WITH FOOTING BASE AND PIPE HOLD DOWNS. SEE SHEET C5 FOR PROFILE AND DETAILS.
- ATTRACTION FLOW SYSTEM WITH FULL CONCRETE ENCASEMENT. SEE SHEET C5 FOR PROFILE AND DETAILS.
- ATTRACTION FLOW SYSTEM WITH PIPE HOLD DOWNS. SEE SHEET C5 FOR PROFILE AND DETAILS.

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
2. ALL ELEVATIONS IN METERS.
3. DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
4. IT SHOULD BE NOTED THAT RIVER WATER LEVEL DOES SIGNIFICANTLY CHANGE AND CAN LARGELY EXCEED THE RECORDED LEVEL INDICATED DURING THE TIME OF THE SURVEY. THE CONTRACTOR SHALL ASSUME WORST CASE CONDITIONS AND BEAR ALL COSTS NECESSARY TO COMPLETE THE WORK UNDER THE VARYING FLUCTUATIONS. ADDITIONAL INFORMATION REGARDING THE RIVER WATER LEVEL FLUCTUATIONS MAY BE AVAILABLE THROUGH THE DEPARTMENT OF ENVIRONMENT AND CONSERVATION AND THE GOVERNMENT OF CANADA WATEROFFICE.
5. CONTRACTOR TO VERIFY ALL CRITICAL DIMENSIONS IN THE FIELD PRIOR TO START OF WORK AND NOTIFY DEPARTMENTAL REPRESENTATIVE ON ANY DISCREPANCIES.
6. CONFIRM EXACT LOCATION OF NEW DIVERSION WALLS ON-SITE WITH THE DEPARTMENTAL REPRESENTATIVE AFTER DE-WATERING OF THE WORK AREAS IS COMPLETED. THE LOCATION AND/OR ELEVATION OF THE NEW CONCRETE STRUCTURES MAY REQUIRE SOME ADJUSTMENTS TO THAT SHOWN ON THESE DRAWINGS. PROVIDE ADEQUATE NOTICE TO THE DEPARTMENTAL REPRESENTATIVE TO COORDINATE A SITE VISIT.
7. SEAL GAP BETWEEN EXISTING CONCRETE WALL AND PIER WITH NEW CONCRETE. ENSURE THAT NO GAP IS REMAINING BETWEEN THE TWO (2) STRUCTURES. COORDINATE IN THE FIELD WITH THE DEPARTMENTAL REPRESENTATIVE.
8. BUST/CHIP/REMOVE ROCK OUTCROP AS REQUIRED TO FACILITATE INSTALLATION OF THE NEW ATTRACTION FLOW PIPE.
9. NEW HDPE ATTRACTION FLOW PIPE SYSTEM TO INCLUDE ALL NECESSARY FITTINGS, CONNECTIONS, VALVES, BENDS, WYES, SCREEN CAPS, PIPE HOLD DOWNS AND ALL OTHER MATERIALS REQUIRED TO INSTALL THE PIPE AS SHOWN AND AS DIRECTED IN THE FIELD BY THE DEPARTMENTAL REPRESENTATIVE. PLEASE NOTE, THE CONTRACTOR SHALL CONFIRM THE EXACT LOCATION AND DISCHARGE POINT WITH THE DEPARTMENTAL REPRESENTATIVE IN THE FIELD. PRIOR TO FINAL INSTALLATION OF THE PIPE HOLD DOWNS, CONTRACTOR SHALL TEMPORARILY SUPPORT THE PIPE(S) AND OPEN SYSTEM (I.E. ALLOW WATER TO PASS THROUGH). OPEN SYSTEM IN THE PRESENCE OF THE DEPARTMENTAL REPRESENTATIVE IN BOTH LOW AND HIGH TIDE CONDITIONS. CONTRACTOR SHALL BE EXPECTED TO MAKE ADJUSTMENTS TO ENSURE SYSTEM IS OPERATING TO THE APPROVAL OF DEPARTMENT REPRESENTATIVE. FOLLOWING APPROVAL OF THE PIPE DISCHARGE LOCATIONS, THE CONTRACTOR SHALL THEN PROCEED TO INSTALL PIPE HOLD DOWNS IN THEIR FINAL LOCATION AND REMOVE ALL TEMPORARY SUPPORTS.
10. ATTRACTION FLOW PIPE TO TURN 90 DEGREES AND EXTEND DOWN INTO THE EXISTING FISHWAY POOL. COORDINATE IN THE FIELD WITH THE DEPARTMENTAL REPRESENTATIVE FOR ACTUAL DISCHARGE POINT (ALLOW 2m OF PIPE TO EXTEND DOWN INTO THE POOL). SUPPORT THE PIPE VERTICAL ALONG THE INSIDE WITH PIPE HOLD DOWNS ANCHORED INTO THE EXISTING WALL. CUT EXISTING GRATING AS REQUIRED TO ALLOW PIPE TO ENTER THE POOL AND PROVIDE AUXILIARY SUPPORTS . MINIMIZE OPENING AND PROVIDE BANDING AROUND CUT PERIMETER TO ELIMINATE ANY SHARP EDGES. INSTALL L 76mm X 76mm X 9.5mm GALVANIZED STEEL ANGLE TO SUPPORT EXISTING CUT GRATING TO ENSURE FULL SUPPORT IS PROVIDED. ANGLE TO BE WELDED TO EXISTING STEEL SUPPORT AND CONCRETE ANCHORED INTO EXISTING CONCRETE WALL WITH 12.7mm ø GALVANIZED ANCHOR BOLTS. SHOP DRAWINGS FOR MODIFICATION TO THE GRATING SUPPORTS TO BE SUBMITTED UNDER SEAL OF PROFESSIONAL ENGINEER LICENCED IN NEWFOUNDLAND AND LABRADOR ALONG WITH THE NECESSARY FABRICATION DETAILS/DESIGN.
11. ALL HDPE PIPE ENCASED IN CONCRETE TO BE JOINED BY THE METHOD OF THERMAL BUTT FUSION. ENCASE HDPE PIPE IN CONCRETE AS PER MANUFACTURER'S RECOMMENDATIONS. SUPPLY AND INSTALL ANY ADDITIONAL FITTINGS, JOINTS AND/OR COMPRESSIBLE WRAP AS REQUIRED.
12. EXPOSED PIPE SECTIONS LOCATED UPSTREAM AND DOWNSTREAM OF THE CONCRETE ENCASEMENT SHALL BE JOINED BY BOTH THERMAL BUTT FUSION AND COUPLINGS. PIPE SECTIONS TO BE JOINED SUCH THAT IT CAN EASILY BE DISASSEMBLED AND BE REMOVED FROM SITE DURING OFF SEASON WITH MANPOWER ONLY. CONTRACTOR TO SUBMIT PIPE LAYOUT PLAN WITH LOCATION OF COUPLINGS FOR APPROVAL PRIOR TO INSTALLATION.
13. PIPE TO EXTEND PASS CONCRETE WITH SUFFICIENT LENGTH TO FACILITATE INSTALLATION OF THE COUPLING CONNECTIONS. CONTRACTOR SHALL PROVIDE END CAP AND GALVANIZED PROTECTION BOXES TO BE INSTALLED OVER THE STUB ENDS ONCE THE PIPE IS REMOVED DURING THE OFFSEASON. PROTECTION BOXES TO BE A MINIMUM 9.53mm THICK, SIZED AS REQUIRED TO COVER THE STUB END COMPLETELY AND ATTACHED TO THE CONCRETE WITH 12.7mm ø GALVANIZED ANCHORS. CONTRACTOR TO SUBMIT FABRICATION SHOP DRAWING FOR APPROVAL.
14. BUTTERFLY VALVES TO BE INSTALLED TO HDPE PIPE WITH FLANGE CONNECTIONS. FLANGE BACKUP RING AND BOLT HARDWARE TO BE STAINLESS STEEL. REFER TO SPECIFICATION. COORDINATE EXACT LOCATION IN THE FIELD.
15. CONTRACTOR SHALL INSTALL END CAP AND GALVANIZED PROTECTION BOX OVER THE STUB END AT CLEANOUT LOCATIONS. PROTECTION BOXES TO BE A MINIMUM 9.53mm THICK, SIZED AS REQUIRED TO COVER THE STUB END COMPLETELY AND ATTACHED TO THE CONCRETE WITH 12.7mm ø GALVANIZED ANCHORS. CONTRACTOR TO SUBMIT FABRICATION SHOP DRAWING FOR APPROVAL.
16. ALL NEW PLACED CONCRETE TO BE TINTED TO MATCH THE EXISTING TERRAIN AND TO LOOK AS NATURAL AS POSSIBLE. CONTRACTOR SHALL PROVIDE SAMPLES AND COORDINATE IN THE FIELD WITH THE DEPARTMENTAL REPRESENTATIVE PRIOR TO POURING.
17. CONSTRUCT FORMWORK SUCH THAT THE NEWLY PLACED CONCRETE MATCHES THE EXISTING TERRAIN AND LOOKS AS NATURAL AS POSSIBLE. COORDINATE IN THE FIELD WITH DEPARTMENTAL REPRESENTATIVE.
18. LAYOUT AND INSTALL HDPE PIPE SUCH THAT IT DOES NOT INTERFERE WITH EXISTING HANDRAIL UPRIGHTS AND POCKET INSET. COORDINATE IN THE FIELD WITH DEPARTMENTAL REPRESENTATIVE.
19. CONTRACTOR TO PROVIDE ONE (1) ADDITIONAL BUTTERFLY VALVE AND THREE (3) ADDITIONAL PIPE COUPLINGS TO STORE ON-SITE FOR FUTURE USE.
20. CONTRACTOR SHALL SUPPLY AND INSTALL FOUR (4) EYE BOLTS, DRILLED AND EMBEDDED INTO THE NEW REINFORCED CONCRETE DIVERSION WALL #2. EYE BOLTS AND EMBEDMENT DEPTH TO BE RATED FOR FALL ARREST. CONTRACTOR TO CONFIRM EXACT LOCATIONS IN THE FIELD WITH DEPARTMENTAL REPRESENTATIVE AND SUBMIT SHOP DRAWINGS FOR APPROVAL.
21. CONTRACTOR TO CONFIRM TIE IN LOCATION OF DIVERSION WALL #2 INTO THE EXISTING FISHWAY WALL WITH THE DEPARTMENTAL REPRESENTATIVE. CONTRACTOR SHALL CONFIRM ALL EXISTING ELEVATIONS SHOWN ON THE DRAWINGS INCLUDING THE EXISTING FISHWAY STRUCTURE AND SURROUNDING ROCK IN THE AREA OF NEW WORK. FOLLOWING SURVEY CONFIRMATION, CONTRACTOR SHALL COORDINATE EXACT LOCATION OF THE WALL AND LOCATION AND ELEVATION OF THE PIPE INVERT TO ENSURE THE PIPE IS SLOPED TOWARDS THE FISHWAY POOL AND THE UPSTREAM TOPOGRAPHY/FEATURES WILL ALLOW FREE FLOW OF WATER TO THE PIPE WITHOUT ANY OBSTRUCTIONS. COORDINATE WITH THE DEPARTMENTAL REPRESENTATIVE AND OBTAIN APPROVAL IF FIELD ADJUSTMENTS ARE REQUIRED.

SURVEY LEGEND:

SYMBOLS

- ACQUACULTURE
- ANCHOR BLOCK
- BOLLARD
- BOREHOLE
- BOUNDARY MARKER
- CAIRD POSITION BUOY
- CATCH BASIN
- CLEAT
- CULVERT
- DERRICK
- DISPOSAL
- DREDGE CONTROL
- ELECTRICAL OUTLET
- FIRE HYDRANT
- FIRST AID
- FISH HANDLING EQUIP.
- FOG HORN
- FUEL PUMP
- H. P. PILE
- HORIZONTAL CONTROL
- ICE PLANT
- INVERT PIPE
- JIB CRANE
- LADDER
- LIFE RING
- LIGHT STANDARD
- MANHOLE
- MARSH
- MAST/TOWER
- NAVIGATION LIGHT
- OBSERVED BUOY
- OBSERVED SPAR BUOY
- PIPE PILE
- RANGE LIGHT
- SAFETY POST
- SEWER OUTFLOW PIPE
- SIGN
- TELEPHONE
- TELEPHONE POLE
- TIDE GUAGE/STAFF
- TREE
- UTILITY POLE
- VERTICAL CONTROL
- WATER TAP/OUTLET
- WATER VALVE
- WATER WELL
- WOOD PILE

LINETYPE

- ARMOUR STONE
- CL RAILROAD
- DRAIN PIPE
- EDGE ROAD / SHOULDER
- FENCE LINE
- FLOATING BREAKWATER
- GUARD RAIL
- HIGH WATER MARK
- LOW WATER MARK
- MARSH OUTLINE
- PROPERTY BOUNDARY
- RANGE LIGHT EXTENSION
- RETAINING WALL
- RIPRAP
- TOE OF BANK
- TREE LINE
- UNDERGROUND CABLE

SURVEY NOTES:

SURVEY PARTY CHIEF RICHARD HEALEY
SURVEY DATE(S) SEPT. 27,2016

LAND SURVEY POSITION BY TRIMBLE GNSS R7 & LIECA T1600
DATA TAPE/DISC(S) USED
CAD DRAWING FILE(S):
TIDAL REDUCTION SCHEME

OFFICE PROCESSOR R.HEALEY
DATE OF PROCESSING SEPTEMBER 2016

CONTROL POINTS:

PL NAME	EASTING	NORTHING	ELEV	DESCRIPTION
MON. 81101	305870.304	5233519.632	+19.154 m	PROVINCAL BRASS PLAQUE SET IN CONCRETE
BM #45	305583.516	5233559.539	+10.509 m	WATER SURVEY OF CANADA
F.I.P #1	305546.05	5233485.85	+11.505 m	FOUND IRON PIN SET IN BEDROCK
PWC 4-2013	305600.764	5233344.372	+16.408 m	SURVEY NAIL IN EDGE OF PAVED PARKING LOT
PWC 5-2016	305632.969	5233397.511	+6.805 m	BOLT IN BASE OF RAIL @ TOP OF FISHWAY
PWC 6-2016	305574.755	5233470.290	+7.580 m	SURVEY NAIL IN EXPOSED BEDROCK -WEST OF FISHWAY
PWC 7-2016	305625.461	5233398.412	+13.708 m	BOLT IN CONC DECK OF OLD BRIDGE

ALL ELEVATIONS REFERRED TO ANY OF THE CONTROL POINTS LISTED ABOVE IN THE CONTROL POINTS TABLE BUT WAS ESTABLISHED FROM CL MON 81101 USING A GEODETIC DATUM ELEVATION OF +19.154 m.

ALL SOUNDINGS REFERRED TO ANY OF THE CONTROL POINTS LISTED ABOVE IN THE CONTROL POINTS TABLE BUT WAS ESTABLISHED FROM CL MON 81101 USING A CHART DATUM ELEVATION OF +20.454 m.

COORDINATES FOR HORIZONTAL CONTROL ARE REFFERENCED TO C.L.mon 81101 AND ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 22, USING THE NORTH AMERICAN DATUM OF 1983(NAD83).

ALL FIELD NOTES ARE IN FIELD BOOK #310

1:1

1/2 NEW SITE PLAN
SCALE : 1:100

0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

0 10 20mm 40 60 80 100 120 140 160 180 200mm

Fisheries and Oceans Canada / Pêches et Océans Canada

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGL Newfoundland and Labrador
PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
Member No. 04378
To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEG 10453
which is valid for the year 2017.

REGISTERED PROFESSIONAL ENGINEER
PEGL Newfoundland and Labrador
CHAD M. FISHER
REGISTERED
17/02/22
NEWFOUNDLAND & LABRADOR

revisions		date
C	ISSUED FOR TENDER	17/02/22
B	ISSUED FOR 99% REVIEW	16/12/02
A	ISSUED FOR 33% REVIEW	16/11/09

project / projet

FISHWAY ENHANCEMENT ROCKY RIVER 2017 COLINET, NL

drawing / dessin

NEW SITE PLAN

designed C. FISHER / concu
date OCTOBER, 2016
drawn R. SNOW / dessine
date OCTOBER, 2016
approved / approuve
date
Tender / Soumission
DFO Project Manager / Administrateur de projets MPO
project number / no. du projet
F6879- 171001
drawing no. / no. du dessin
C2 OF 5

DFO DRAWING No. 01N0403A005S2