# ***TRANSMITTAL SHEET***

**TO:** All Bidders

**DATE:** May 24, 2023

**TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE):** 12

**FROM:** Dean Price, P. Eng. **TEL. #:** (506) 654-1511
*Saint John Water*

IF YOU DID NOT RECEIVE ALL PAGES, OR FURTHER INFORMATION IS REQUIRED, PLEASE CONTACT THE SENDER

***MESSAGE:***

**TENDER NO: 2023-03**

**Menzies Lake Dam and Access Road Drainage Upgrades**

Please find attached a copy of ***Addendum #2*** for the above tender.

As of March 2021, please be advised that an ***Acknowledgement Form*** (historically sent as part of the City's addendum packages) confirming receipt of an Addendum is **no longer** included in the addendum package.

However, in accordance with Section 2.5.03 of the City's General Specifications, it remains a requirement that **each Addendum** will contain a signature page(s) which each Tenderer is **required to sign and include with its Tender submission.**

**UTILITIES & INFRASTRUCTURE SERVICES**
Engineering Services
175 Rothesay Avenue
Saint John, NB, E2J 2B4
City of Saint John

# ADDENDUM

| | | |
|---|---|---|
| **PROJECT TITLE:** | **ADDENDUM NO:** | **2** |
| **Menzies Lake Dam and Access Road Drainage Upgrades** | **DATE:** | **May 24, 2023** |
| | **PAGE:** | **1 OF 11** |
| | **TENDER NO:** | **2023-03** |

MAKE THE FOLLOWING MODIFICATIONS TO THE ABOVE PROJECT. INCLUDE IN THE AMOUNT OF THE TENDER ANY ADDITIONS TO OR DEDUCTIONS FROM THE COST OF THE WORK BY REASON OF THESE INSTRUCTIONS. THE DATE FOR RECEIVING TENDERS HAS REMAINS AT**: 2:30:00 PM, TUESDAY, May 30th, 2023.**

## REVISIONS TO THE SPECIFICATIONS

### Division 2 – Submission of Tender

As a result of the COVID-19 pandemic, the City of Saint John is implementing adjustments to the tender submission procedure as follows:

**Section 2.6.01 Location of Tender Box for the Submission of Tender**

175 Rothesay Avenue, 1st Floor
Saint John, New Brunswick

The tender box will be available at the main building entrance for submission of tenders by the Tenderer between the hours of 9:30 am and 2:30 pm only on the above tender closing date. Tenderers shall maintain physical distancing from others when depositing their tender in the tender box.

There will not be a public tender opening. Registered Bidders will receive an email invitation to view the Tender Opening using Microsoft Teams software. Email invitations will be sent to the address provided on the Official Bidder's List. The Tender Opening Committee will conduct the evaluation of the tenders and Compliant tenders will be included in the summary of bids on the City's Tenders & Proposals website within 1 business day following the tender closing.

**Replace Section 2.2.10 Timetable for Completion of Work with:**

All in-water work shall be completed by September 30, 2023.

**The date for Substantial Completion of the Work is November 30, 2023.**

**Division 3 – Particular Specifications**

**Replace Section 3.1.03 Project Schedule with:**

The Contractor shall submit a proposed schedule for the Work in accordance with Section 6.13 (Schedule of Work) of the City of Saint John General Specifications.

- All in-water work shall be completed by September 30, 2023
- **Substantial completion: November 30, 2023**

**ADJUSTMENTS TO DIVISION 4 – FORM OF TENDER**

A revised Schedule of Quantities and Unit Prices has been included in this Addendum. Tenders shall be submitted using Schedule of Quantities and Unit Prices (Revision 1) Sheets 1 through 5.

**ADJUSTMENTS TO CONTRACT DRAWINGS**

**Revised Drawings:** The following previously IFT drawings dated 2023/05/02 are revised and reissued in this Addendum. The attached revised drawings noted as "Issued for Addendum 2" supersede the previously issued drawings:

| Sheet No. | Description |
|---|---|
| C000 | Cover |
| C010 | Saddle Dyke 2 Proposed Refurbishment |
| C019 | Culvert Replacement CLV013, CLV016 & CLV017 |
| C025 | Culvert Tables and Details |

BY: Michael Baker

*CHIEF CITY ENGINEER* *CONTRACTOR'S SIGNATURE*

**TO BE SIGNED AND ATTACHED TO TENDER DOCUMENTS**

**DIVISION 4**
**SCHEDULE OF QUANTITIES AND UNIT PRICES (REVISION 1)**
**(ADDENDUM 2)**

**CONTRACT NUMBER 2023-03**
**TITLE: MENZIES LAKE DAM AND ACCESS ROAD DRAINAGE UPGRADES**

**UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED IN INK IN WORDS AND PRINTED NUMERICALLY**

| ITEM NO. | DESCRIPTION | DIV. NO. | UNIT | EST. QTY. | UNIT BID PRICE | | TOTAL |
|---|---|---|---|---|---|---|---|
| | | | | | WRITTEN | NUMERICAL | $ |
| **A** | **DRAINAGE CULVERTS** | | | | | | |
| **1** | **Pipelaying & Jointing: Drainage Culverts - Supply and Install** | **3, 7, 13, 21, 22** | | | | | |
| a) | 1500mm Ø concrete, class III with gasket or approved equal and fish baffles | | m | 17.1 | | | |
| b) | 1200mm Ø concrete, class III with gasket or approved equal with fish baffles | | m | 78.4 | | | |
| c) | 600mm Ø concrete or HDPE | | m | 78.4 | | | |
| d) | 450mm Ø concrete or HDPE | | m | 66.7 | | | |
| | **AMOUNT "A" DRAINAGE CULVERTS** | | | | | | |

**DIVISION 4**
**SCHEDULE OF QUANTITIES AND UNIT PRICES (REVISION 1)**
**(ADDENDUM 2)**

**CONTRACT NUMBER 2023-03**
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|---|---|---|---|---|---|---|---|
| | | | | | WRITTEN | NUMERICAL | $ |
| **B** | **ROAD WORK** | | | | | | |
| **1** | **Granular backfill & Compaction (Roads and Other Surfaces) - Supply & Place** | **3, 13, 21, 24** | | | | | |
| a) | Imported Granular Subbase - Pit Run Gravel or Crushed Rock | | $m^3$ | 400 | | | |
| b) | Imported Granular Base - Crushed Gravel or Crushed Rock | | $m^3$ | 150 | | | |
| c) | Imported R5 Riprap (for culvert end treatments) | | t | 200 | | | |
| **2** | **Excavation (Roads and Other Surfaces)** | **13** | | | | | |
| d) | Rock Excavation | | $m^3$ | 50 | | | |
| e) | Ditching (Cleaning) | | m | 1,800 | | | |
| f) | Common Excavation | | m | 75 | | | |
| | **AMOUNT "B" ROAD WORK** | | | | | | |

DIVISION 4
SCHEDULE OF QUANTITIES AND UNIT PRICES (REVISION 1)
(ADDENDUM 2)

CONTRACT NUMBER 2023-03
TITLE: MENZIES LAKE DAM AND ACCESS ROAD DRAINAGE UPGRADES

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED IN INK IN WORDS AND PRINTED NUMERICALLY

| ITEM NO. | DESCRIPTION | DIV. NO. | UNIT | EST. QTY. | UNIT BID PRICE | | TOTAL |
|---|---|---|---|---|---|---|---|
| | | | | | WRITTEN | NUMERICAL | $ |
| C | **DAM IMPROVEMENTS** | | | | | | |
| 1 | **Random Riprap - Supply & Place (for Dams and Road Work)** | 3, 20 | | | | | |
| a) | Imported R5 Riprap | | t | 1,500 | | | |
| b) | Imported R50 Riprap | | t | 2,800 | | | |
| 2 | **Clearing and Grubbing (not including Ditching along Access Road)** | 3 | | | | | |
| c) | Clearing and Grubbing | | $m^2$ | 6,500 | | | |
| 3 | **Granulars for Dam and Saddle Dyke Construction** | 3 | | | | | |
| d) | Imported Granular Base - Crushed Rock | | $m^3$ | 800 | | | |
| e) | Imported Rockfill Material | | $m^3$ | 3,600 | | | |
| f) | Imported Coarse Filter Material | | $m^3$ | 650 | | | |
| g) | Imported Fine Filter Material | | $m^3$ | 400 | | | |

**DIVISION 4**
**SCHEDULE OF QUANTITIES AND UNIT PRICES (REVISION 1)**
**(ADDENDUM 2)**

**CONTRACT NUMBER 2023-03**
**TITLE: MENZIES LAKE DAM AND ACCESS ROAD DRAINAGE UPGRADES**

**UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED IN INK IN WORDS AND PRINTED NUMERICALLY**

| ITEM NO. | DESCRIPTION | DIV. NO. | UNIT | EST. QTY. | UNIT BID PRICE | | TOTAL |
|---|---|---|---|---|---|---|---|
| | | | | | WRITTEN | NUMERICAL | $ |
| **4** | **Excavation** | **13** | | | | | |
| h) | Common Excavation (Saddle Dykes) | | $m^3$ | 3,500 | | | |
| **5** | **Geotextile** | **3, 24** | | | | | |
| i) | Geotextile (NBDTI N4) - Includes supply and installation | | $m^2$ | 2,100 | | | |
| **6** | **Control Structure Improvements** | **3, 13,** | | | | | |
| j) | Pre-cast Concrete Barriers - Includes fabrication, supply, installation, and civil work | | Each | 8 | | | |
| k) | Water Level Gauge- Includes fabrication, supply, and installation | | Each | 1 | | | |
| l) | New Timber Decking on Control Structure - Includes demolition of existing, supply, fabrication, and installation | | LS | 1 | | | |
| m) | New Metal Grating on Control Structure - Includes removal of existing, supply, fabrication, and installation | | LS | 1 | | | |
| n) | New Timber Hand Rail on Control Structure - Includes removal of existing, fabrication, supply, fabrication, and installation | | LS | 1 | | | |
| | **AMOUNT "C"<br>DAM IMPROVEMENTS** | | | | | | |

**DIVISION 4**
**SCHEDULE OF QUANTITIES AND UNIT PRICES (REVISION 1)**
**(ADDENDUM 2)**

**CONTRACT NUMBER 2023-03**
**TITLE: MENZIES LAKE DAM AND ACCESS ROAD DRAINAGE UPGRADES**

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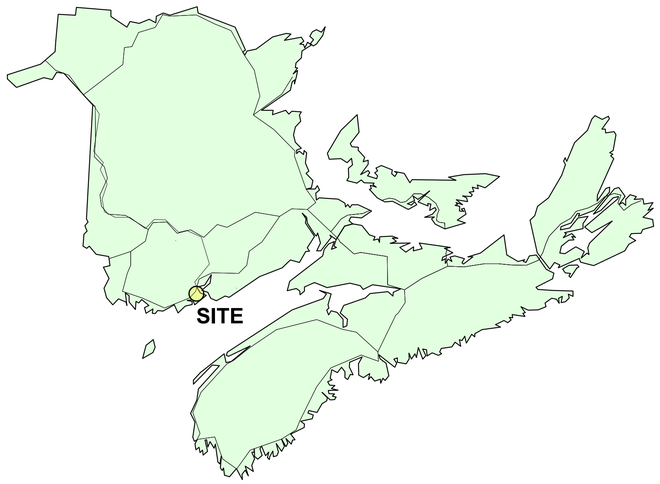
| ITEM NO. | DESCRIPTION | DIV. NO. | UNIT | EST. QTY. | UNIT BID PRICE | | TOTAL |
|---|---|---|---|---|---|---|---|
| | | | | | WRITTEN | NUMERICAL | $ |
| D | **MISCELLANEOUS** | | | | | | |
| 1 | **Signage for Culverts, Dams, and Hazards** | **3, 17** | | | | | |
| a) | Signage - Includes fabrication, supply, and installation | | LS | 1 | | | |
| 2 | **Contingency** | **2.6.03** | LS | 1 | One Hundred Thousand Dollars, Zero Cents | $100,000.00 | $100,000.00 |
| | **AMOUNT "D" MISCELLANEOUS** | | | | | | |
| | **SUBTOTAL (A + B + C + D)** | | | | | | |
| | **HARMONIZED SALES TAX (HST) 15%** | | | | | | |
| | **TOTAL INCLUDING HST** | | | | | | |

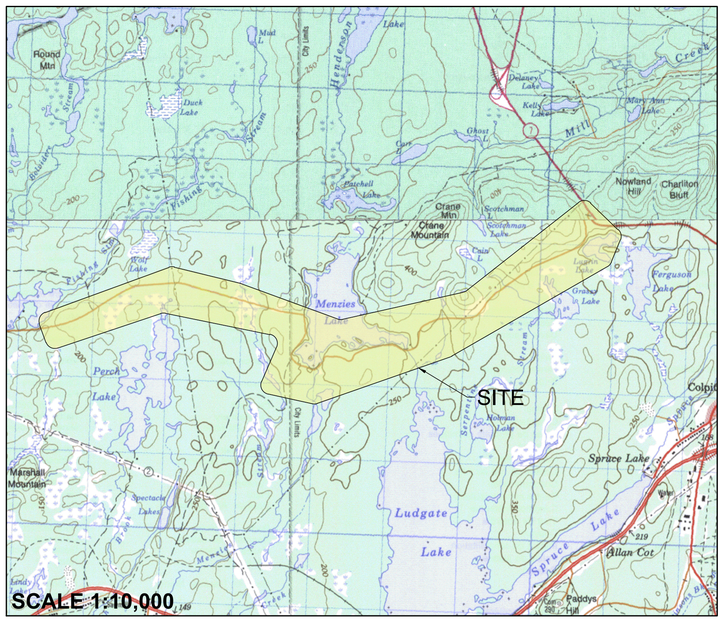
# CITY OF SAINT JOHN

## MENZIES LAKE DAMS AND ACCESS ROAD DRAINAGE UPGRADES

## SAINT JOHN, NB

CONTRACT: 2023-3



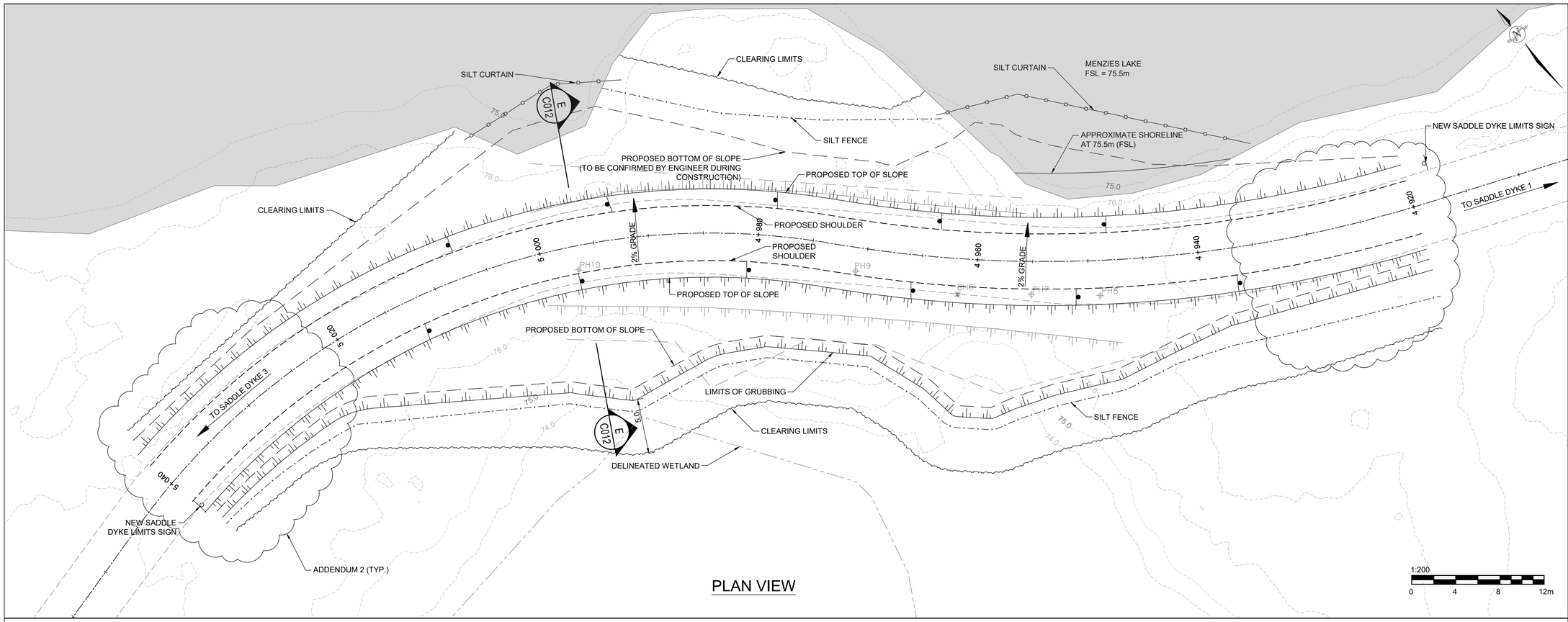




GEMTEC
CONSULTING ENGINEERS AND SCIENTISTS

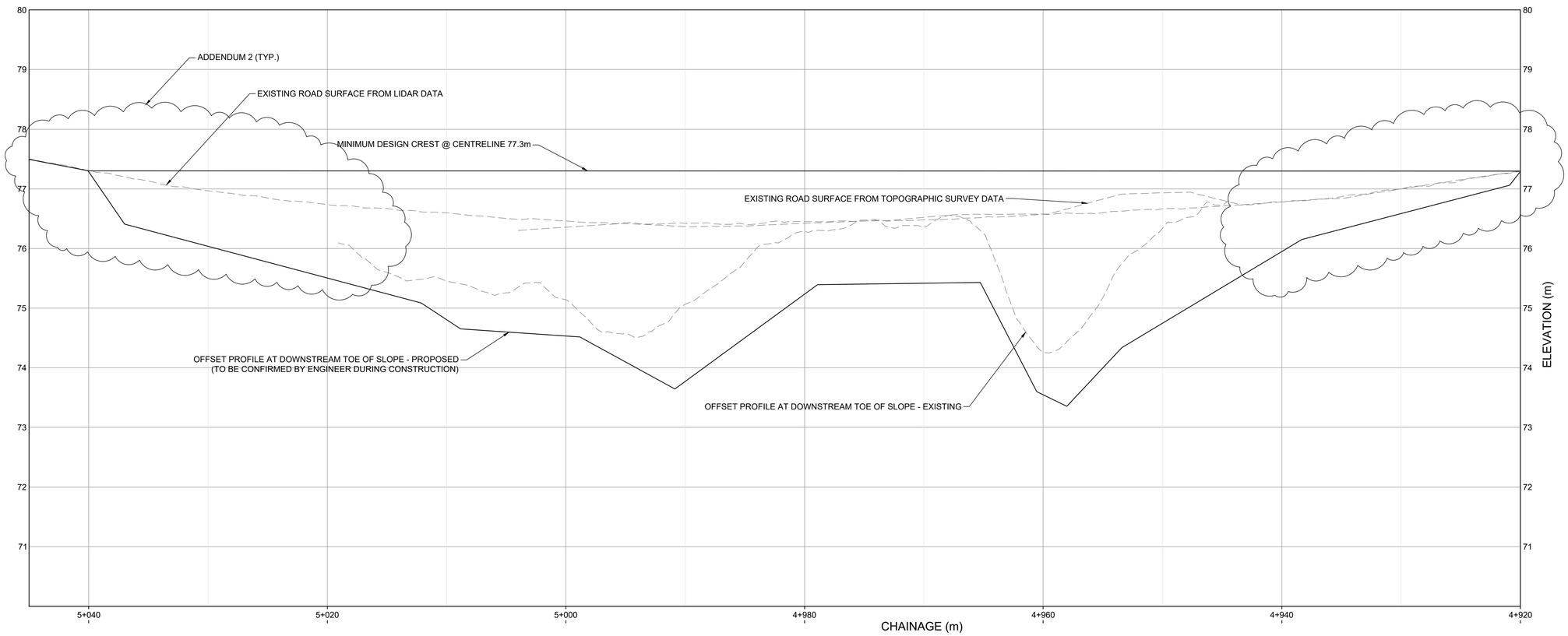
City of Saint John

| DRAWINGS INDEX | |
|---|---|
| C001 | OVERALL SITE PLAN STA. 0+000 TO STA. 6+350 |
| C002 | OVERALL SITE PLAN STA. 6+350 TO STA. 10+255 |
| C003 | MENZIES LAKE SADDLE DYKE EXISTING CONDITION |
| C004 | SADDLE DYKE 1 EXISTING CONDITIONS |
| C005 | SADDLE DYKE 2 EXISTING CONDITIONS |
| C006 | SADDLE DYKE 3 EXISTING CONDITIONS |
| C007 | CONTROL STRUCTURE EXISTING CONDITIONS |
| C008 | EXISTING TYPICAL SECTIONS AT SADDLE DYKES |
| C009 | SADDLE DYKE 1 PROPOSED REFURBISHMENT |
| C010 | SADDLE DYKE 2 PROPOSED REFURBISHMENT |
| C011 | SADDLE DYKE 3 PROPOSED REFURBISHMENT |
| C012 | TYPICAL DESIGN SECTION |
| C013 | CONTROL STRUCTURE ABUTMENTS PROPOSED REHABILITATION |
| C014 | NOTES RELATED TO DAM REFURBISHMENTS |
| C015 | CULVERT REPLACEMENT CLV004 & CLV005 |
| C016 | CULVERT REPLACEMENT CLV006 & CLV007 |
| C017 | CULVERT REPLACEMENT CLV008 & CLV010 |
| C018 | CULVERT REPLACEMENT CLV011 & CLV012 |
| C019 | CULVERT REPLACEMENT CLV013, CLV016, & CLV017 |
| C020 | CULVERT REPLACEMENT CLV019 & CLV020 |
| C021 | CULVERT REPLACEMENT CLV021 & CLV022 |
| C022 | CULVERT REPLACEMENT CLV024 |
| C023 | CULVERT REPLACEMENTCLV026 |
| C024 | DITCHING STA. 6+225 TO STA. 6+327 |
| C025 | CULVERT TABLES AND DETAILS |
| S001 | SPILLWAY PEDWAY REPLACEMENT - PARTIAL DEMOLITION PLAN PARTIAL NEW PLAN |
| S002 | SPILLWAY DETAILS |
| S003 | CONSTRUCTION NOTES |
| S004 | SIGNAGE DETAILS |

ADDENDUM 2




PLAN VIEW




PROFILE

## NOTES

1. THE HORIZONTAL AND VERTICAL DATUM UTILIZED ARE NAD83 (CSRS) NEW BRUNSWICK DOUBLE STEREOGRAPHIC PROJECTION AND THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28).
2. CONTRACTOR TO ENSURE THAT ALL MUNICIPAL INFRASTRUCTURE, PUBLIC UTILITIES, NATURAL GAS AND OTHER INFRASTRUCTURE ARE LOCATED IN THE FIELD PRIOR TO THE START OF EXCAVATION.
3. FOR DETAILS ABOUT SIGNAGE SEE DWG S004.
4. BOREHOLES/TEST PITS/PROBE HOLES PREFORMED BY SGE ACRES IN 2002.
5. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.

## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | WATERBODY | |
| | WATERCOURSE | |
| | WETLAND | |
| 75.0 | MAJOR CONTOUR | |
| 73.0 | MINOR CONTOUR | |
| | PROPERTY LINE | |
| | TOP OF SLOPE | |
| | BOTTOM OF SLOPE | |
| | SHOULDER | |
| | SILT CURTAIN | |
| | SILT FENCE | |
| | CLEARING LIMITS | |
| | BOREHOLE (BH) | |
| | TEST PIT (TP) | |
| | PROBE HOLE (PH) | |
| | SADDLE DYKE LIMITS SIGN | |
| | SHOULDER MARKER SIGN | |

City of Saint John

GEMTEC
CONSULTING ENGINEERS AND SCIENTISTS

| NUMBER | ISSUE | YYYY/MM/DD |
|---|---|---|
| 1 | ISSUED FOR ADDENDUM 2 | 2023/05/23 |
| 0 | ISSUED FOR TENDER | 2023/05/02 |

| DRAWN BY | CHECKED BY |
|---|---|
| SJH | BLM |

PROJECT
CONTRACT 2023-03
MENZIES LAKE DAMS AND ACCESS ROAD DRAINAGE UPGRADES

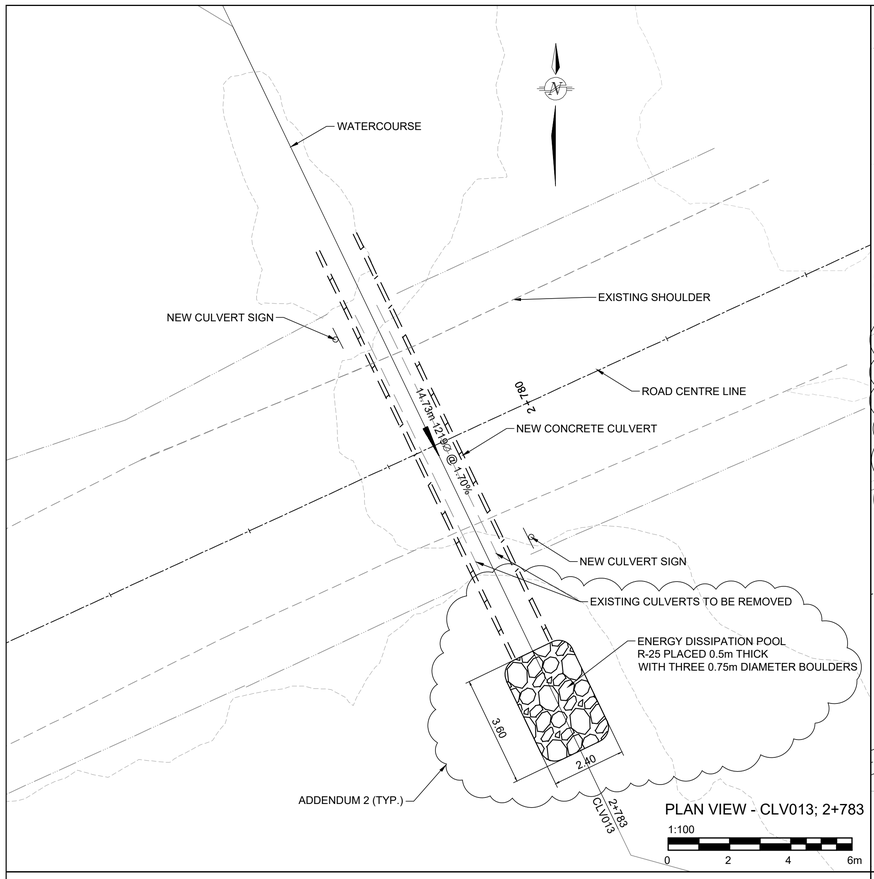
SHEET
SADDLE DYKE 2 PROPOSED REFURBISHMENT

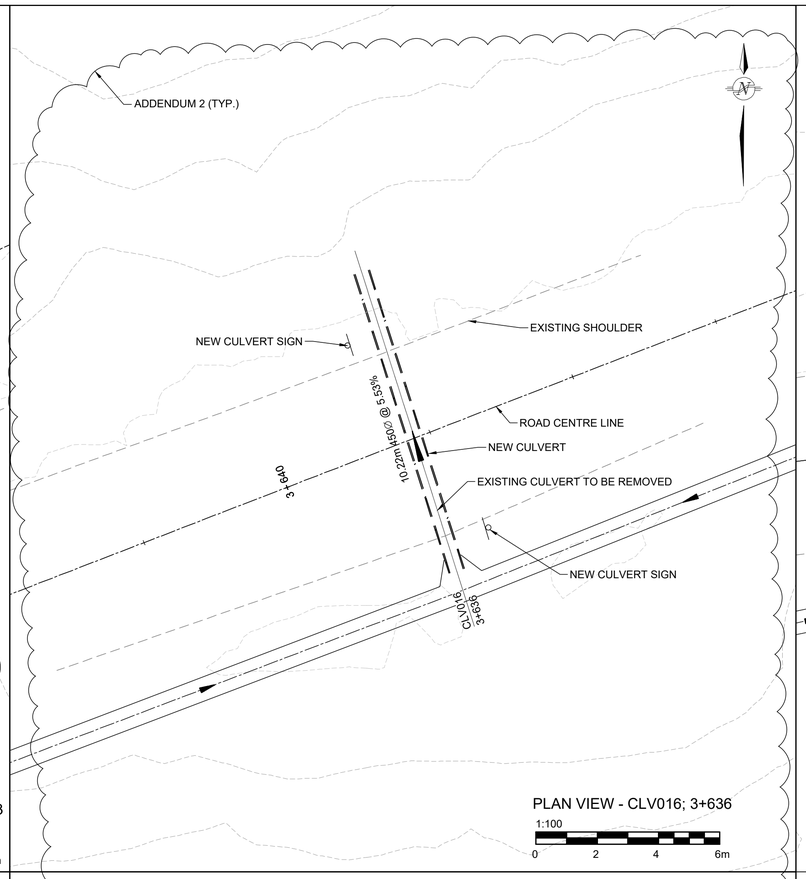
| SCALE | ENGINEER'S STAMP |
|---|---|
| AS NOTED | M7233 Benjamin L. McColgan, Province of New Brunswick, Registered Professional Engineer, Signature 24 May 2023 Date, Province du Nouveau-Brunswick, INGÉNIEUR IMMATRICULÉ |
| SAINT JOHN FILE NO. M074-004 | |
| GEMTEC PROJECT NO. 100006.021 | SHEET NO. C010 |

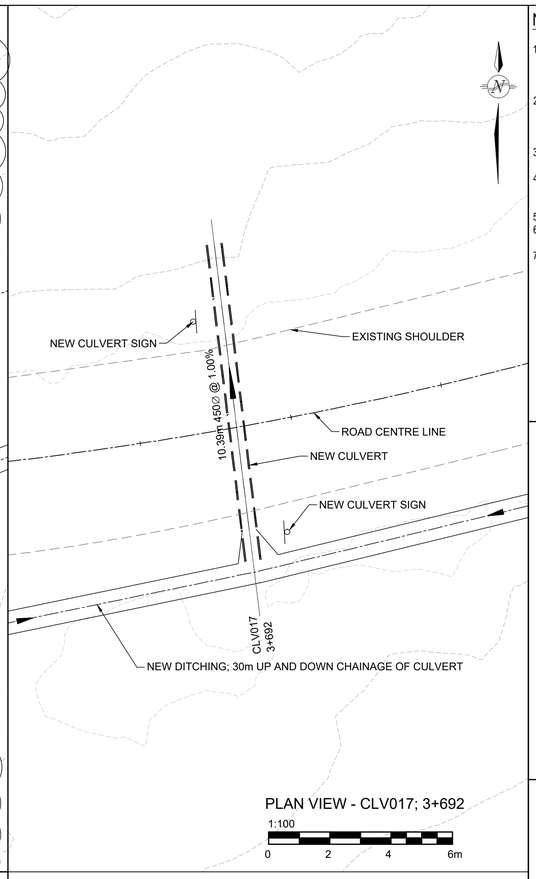
NOTE: SIGNATURES BY THE PROJECT ENGINEER AND CHIEF CITY ENGINEER ONLY INDICATE THAT THIS IS THE FINAL SET OF DRAWINGS SUBMITTED BY THE CONSULTANT FOR THIS TENDER

PROJECT ENGINEER

CHIEF CITY ENGINEER



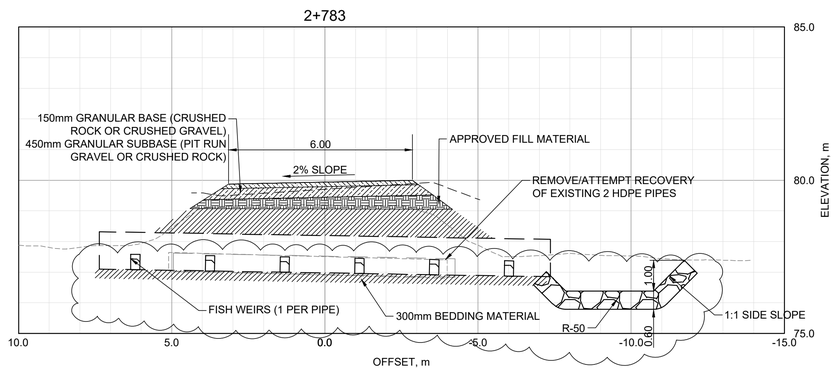




## NOTES

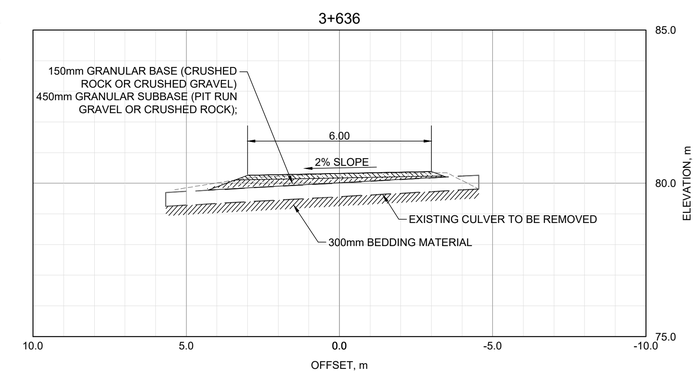
1. THE HORIZONTAL AND VERTICAL DATUM UTILIZED ARE NAD83 (CSRS) NEW BRUNSWICK DOUBLE STEREOGRAPHIC PROJECTION AND THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28).
2. CONTRACTOR TO ENSURE THAT ALL MUNICIPAL INFRASTRUCTURE, PUBLIC UTILITIES, NATURAL GAS AND OTHER INFRASTRUCTURE ARE LOCATED IN THE FIELD PRIOR TO THE START OF EXCAVATION.
3. FOR EACH GAS CROSSING OCCURRING IN THE FIELD, GAS UTILITY SHOULD BE NOTIFIED 24 HOURS IN ADVANCE.
4. GAS, ELECTRICAL AND TELECOMMUNICATIONS SHOWN ARE APPROXIMATE ONLY. CONTRACTOR TO CONFIRM IN THE FIELD PRIOR TO EXCAVATION.
5. FOR DETAILS ABOUT SIGNAGE SEE DWG S004.
6. FOR CULVERT MATERIAL, INLET AND OUTLET COORDINATES, AND INVERT ELEVATIONS SEE DWG C025.
7. PLACE 0.5m THICK LATER OF R-25 ON TOP OF EXPOSED CULVERT BETWEEN ROAD EMBANKMENT AND RIP-RAP HEADWALLS.

## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | WATERBODY | |
| | WATERCOURSE | |
| | WETLAND | |
| 75.0 | MAJOR CONTOUR | |
| 73.0 | MINOR CONTOUR | |
| | PROPERTY LINE | |
| | TOP OF SLOPE | |
| | BOTTOM OF SLOPE | |
| | SHOULDER | |
| | SILT CURTAIN | |
| | SILT FENCE | |
| | CLEARING LIMITS | |
| | BOREHOLE (BH) | |
| | TEST PIT (TP) | |
| | PROBE HOLE (PH) | |
| | SADDLE DYKE LIMITS SIGN | |
| | SHOULDER MARKER SIGN | |
| | DITCH | |
| | CULVERT | |




CULVERT PROFILE - CLV013; 2+783
1:100
0 2 4 6m




CULVERT PROFILE - CLV016; 3+636
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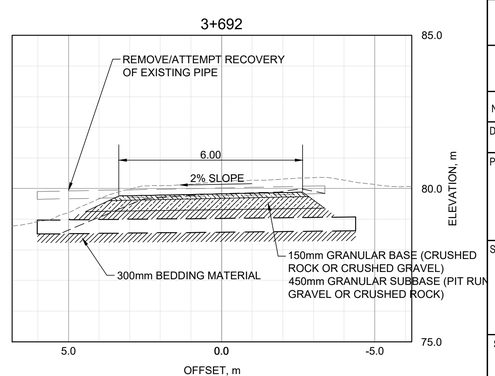


CULVERT PROFILE - CLV017; 3+692
1:100
0 2 4 6m

City of Saint John

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DRAWN BY: SJH | CHECKED BY: BLM

PROJECT
CONTRACT 2023-03
MENZIES LAKE DAMS AND ACCESS ROAD DRAINAGE UPGRADES

SHEET
CULVERT REPLACEMENT
CLV013, CLV016, & CLV017

SCALE: AS NOTED

ENGINEER'S STAMP
PROFESSIONAL ENGINEER
M7657
Stephen J. Hallett
Signature
2023-05-24
Date
Province of New Brunswick
PERMIS D'EXERCICE IMMATRICULÉ

SAINT JOHN FILE NO.: M074-004

GEMTEC PROJECT NO.: 100006.021

SHEET NO.: C019

NOTE: SIGNATURES BY THE PROJECT ENGINEER AND CHIEF CITY ENGINEER ONLY INDICATE THAT THIS IS THE FINAL SET OF DRAWINGS SUBMITTED BY THE CONSULTANT FOR THIS TENDER

PROJECT ENGINEER

CHIEF CITY ENGINEER

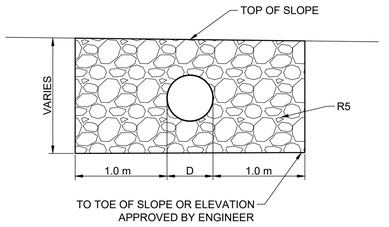
# CULVERT IMPROVEMENT TABLE

| NAME | EXISTING | | | PROPOSED | | |
|---|---|---|---|---|---|---|
| | CHAINAGE | NOMINAL Ø (mm) | MATERIAL | NOMINAL Ø (mm) | MATERIAL | WORK TO BE DONE |
| CLV001 | 0+375 | 450 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV002 | 0+435 | 375 | HDPE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV003 | 0+725 | 600 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV004 | 0+825 | 600 | CONCRETE | 1200 | CONCRETE | CULVERT REPLACEMENT & END TREATMENTS |
| CLV005 | 0+950 | 375 | HDPE | 450 | HDPE OR CONCRETE | CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV006 | 1+065 | 375 | HDPE | 450 | HDPE OR CONCRETE | CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV007 | 1+225 | 600 | CONCRETE | 1200 | CONCRETE | CULVERT REPLACEMENT & END TREATMENTS |
| CLV008 | 1+550 | 600 | CONCRETE | 1500 | CONCRETE | CULVERT REPLACEMENT & END TREATMENTS |
| | 1+555 | 600 | HDPE | | | |
| CLV009 | 1+910 | 600 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV010 | 2+315 | --- | --- | 600 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV011 | 2+610 | 600 | CONCRETE | 1200 | CONCRETE | CULVERT REPLACEMENT & END TREATMENTS |
| CLV012 | 2+685 | --- | --- | 450 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV013 | 2+783 | 2-600 | HDPE | 1200 | CONCRETE | NEW CULVERT REPLACEMENT & END TREATMENTS |
| CLV014 | 3+410 | 400 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV015 | 3+475 | 300 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV016 | 3+636 | 400 | CONCRETE | 450 | HDPE OR CONCRETE | CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV017 | 3+680 | 250 | IRON | 450 | HDPE OR CONCRETE | CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV018 | 3+805 | 400 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV019 | 3+850 | 675 | HDPE | 1200 | CONCRETE | CULVERT REPLACEMENT & END TREATMENTS |
| CLV020 | 3+960 | --- | --- | 600 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV021 | 4+250 | --- | --- | 600 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV022 | 4+660 | 400 | CONCRETE | 450 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV023 | 5+225 | 375 | HDPE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV024 | 5+450 | 375 | CONCRETE | 600 | HDPE OR CONCRETE | CULVERT REPLACEMENT, END TREATMENTS & DITCHING |
| CLV025 | 5+555 | 375 | HDPE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |
| 6+225 to 6+325 | | --- | --- | N/A | N/A | DITCHING IMPROVEMENTS |
| CLV026 | 7+550 | --- | --- | 600 | HDPE OR CONCRETE | NEW CULVERT REPLACEMENT, END TREATMENTS & DITCHING IMPROVEMENTS |
| CLV027 | 9+355 | 375 | CONCRETE | N/A | N/A | CULVERT END TREATMENTS & DITCHING IMPROVEMENTS |

# CULVERT COORDINATE TABLE

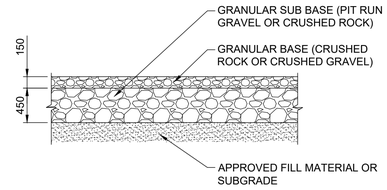
| | | | INLET | | OUTLET | | | |
|---|---|---|---|---|---|---|---|---|
| NAME | NOMINAL Ø (mm) | STATION | NORTHING | EASTING | ELEV | NORTHING | EASTING | ELEV |
| CLV004 | 1200 | 0+825 | 7360600.3 | 2524041.5 | 80.52 | 7360585.7 | 2524040.9 | 79.8 |
| CLV005 | 450 | 0+950 | 7360540.1 | 2523915.5 | 84.0 | 7360527.1 | 2523919.4 | 83.3 |
| CLV006 | 450 | 1+065 | 7360502.9 | 2523818.3 | 85.2 | 7360489.0 | 2523823.8 | 84.5 |
| CLV007 | 1200 | 1+225 | 7360410.2 | 2523669.7 | 87.13 | 7360398.4 | 2523682.1 | 86.69 |
| CLV008 | 1500 | 1+550 | 7360229.6 | 2523420.5 | 82.84 | 7360217.8 | 2523432.8 | 82.46 |
| CLV010 | 600 | 2+315 | 7359797.8 | 2522835.6 | 89.9 | 7359781.4 | 2522830.3 | 89.7 |
| CLV011 | 1200 | 2+610 | 7359792.5 | 2522533.7 | 74.50 | 7359780.3 | 2522533.7 | 74.26 |
| CLV012 | 600 | 2+685 | 7359785.6 | 2522461.7 | 75.5 | 7359772.7 | 2522462.4 | 74.9 |
| CLV013 | 1200 | 2+783 | 7359758.9 | 2522370.5 | 77.1 | 7359745.6 | 2522376.8 | 76.9 |
| CLV016 | 450 | 3+636 | 7359430.2 | 2521821.5 | 79.8 | 7359439.9 | 2521818.4 | 79.2 |
| CLV017 | 450 | 3+680 | 7359412.1 | 2521767.5 | 78.6 | 7359422.4 | 2521766.2 | 78.5 |
| CLV019 | 1200 | 3+805 | 7359388.8 | 2521600.5 | 78.05 | 7359400.9 | 2521602.2 | 77.55 |
| CLV020 | 600 | 3+960 | 7359380.1 | 2521493.2 | 79.7 | 7359390.0 | 2521491.4 | 79.6 |
| CLV021 | 600 | 4+250 | 7359201.7 | 2521297.7 | 84.8 | 7359214.8 | 2521298.0 | 84.6 |
| CLV022 | 450 | 4+660 | 7359217.2 | 2520955.8 | 75.7 | 7359220.0 | 2520946.0 | 75.6 |
| CLV024 | 600 | 5+450 | 7359463.2 | 2520653.8 | 76.9 | 7359457.6 | 2520663.0 | 76.6 |
| CLV026 | 600 | 7+550 | 7360220.5 | 2519005.7 | 57.4 | 7360219.9 | 2519011.9 | 56.9 |

ADDENDUM 2 (TYP.)



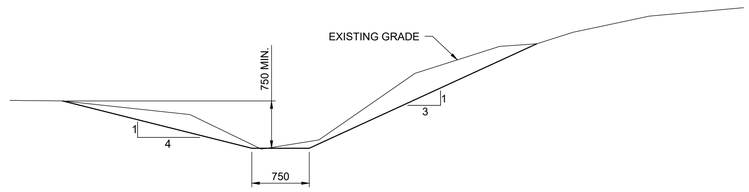

## TYPICAL RIPRAP HEADWALL FOR PIPES OF VARYING DIAMETER

SCALE: NTS



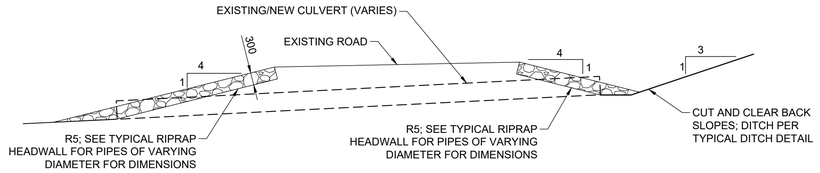

## STANDARD ROAD STRUCTURE

SCALE: NTS



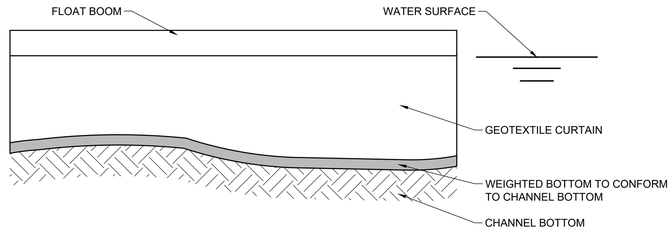

## TYPICAL DITCH DETAIL

SCALE: NTS




## TYPICAL CULVERT IMPROVEMENTS DETAIL

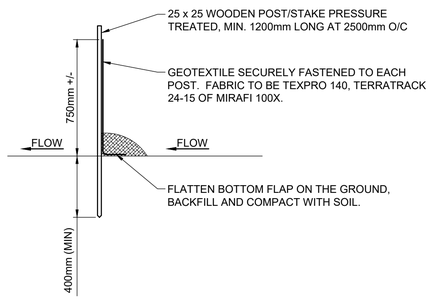
SCALE: NTS




NOTE:
SILT CURTAIN TO EXTEND TO AND ANCHOR TO THE BED OF THE WATERCOURSE, WITH A SUBSTANTIAL FLEXIBLE MEDIUM THAT READILY CONFORMS TO THE PROFILE OF THE SUBSTRATE.

## SILT CURTAIN

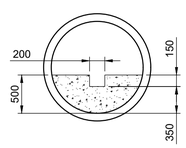
SCALE: NTS




NOTE:
FENCE TO BE INSTALLED PRIOR TO COMMENCING WORK IN AREA.

## SEDIMENTATION FENCE

SCALE: NTS




## TYPICAL FISH WEIR

SCALE: NTS

NOTES

1. THE HORIZONTAL AND VERTICAL DATUM UTILIZED ARE NAD83 (CSRS) NEW BRUNSWICK DOUBLE STEREOGRAPHIC PROJECTION AND THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28).
2. WATERCOURSE AND WETLAND MAPPING FROM SNB DATA CATALOG, SUPPLEMENTED WITH FIELD DELINEATED RESULTS.
3. PROPERTY LINES AND LIDAR FROM SNB DATA CATALOG.
4. DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

City of Saint John

GEMTEC
CONSULTING ENGINEERS AND SCIENTISTS

| NUMBER | ISSUE | YYYY/MM/DD |
|---|---|---|
| 1 | ISSUED FOR ADDENDUM 2 | 2023/05/23 |
| 0 | ISSUED FOR TENDER | 2023/05/02 |

DRAWN BY: SJH | CHECKED BY: MLS

PROJECT
CONTRACT 2023-03
MENZIES LAKE DAMS AND ACCESS ROAD DRAINAGE UPGRADES

SHEET
CULVERT TABLES AND DETAILS

SCALE: AS NOTED

ENGINEER'S STAMP:
REGISTERED PROFESSIONAL ENGINEER
M7657
Stephen J. Hallett
2023-05-24
Province du Nouveau-Brunswick
NOUVEAU-BRUNSWICK

SAINT JOHN FILE NO.: M074-004

GEMTEC PROJECT NO.: 100006.021

SHEET NO.: C025

NOTE: SIGNATURES BY THE PROJECT ENGINEER AND CHIEF CITY ENGINEER ONLY INDICATE THAT THIS IS THE FINAL SET OF DRAWINGS SUBMITTED BY THE CONSULTANT FOR THIS TENDER

PROJECT ENGINEER

CHIEF CITY ENGINEER

# Addendum #2-2023-03 Menzies - STAMPED

Final Audit Report 2023-05-24

| | |
|---|---|
| Created: | 2023-05-24 |
| By: | Dean Price (dean.price@saintjohn.ca) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAAeIE4isci_whpj5N58vobD46_oWZ0vLVc |

## "Addendum #2-2023-03 Menzies - STAMPED" History

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