



ADDENDUM

| | |
|--|------------------------------------|
| PROJECT TITLE: Spruce Lake Screen Building Bypass Valves | ADD. NO: 1 |
| TENDER NO: 2024-481001T | DATE: March 4 th , 2024 |
| PAGE 1 of 3 (Including Confirmation Sheet) | |

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.

Sign and attach this Addendum to the Tender documents and submit with your Tender. Failure to do so may result in the rejection of your Tender.

Please find below questions and attached addendum responses.

Q1. For the 1500mm Diameter Sleeve Couplings can you advise what type of pipe and actual outside diameter of that pipe these couplings will be required to fit on?

A1. For the 1500mm Diameter Sleeve Coupling, it will couple to a plain steel end compliant to Ductile Iron Pipe Sizing.

Q2. Would you consider the GA Series 800 Butterfly Valves an approved product on this job?

A2. We have reviewed the GA specification and supporting documents and feel this valve does fulfill our requirements. Each valve shall have a one-piece shaft extending completely through the valve disc or have a stub shaft arrangement as described in AWWA C504.

Q3. Section 3.1.03: Bullet #6 calls for cast-iron body, however bullet #13 states "valve shall be one piece, 304 stainless steel..." Please confirm if the intent is to supply valves with stainless steel bodies or bodies of a ferrous metal type (the GA Series 800 has Ductile Iron ASTM A536 Grade 65-45-12 body).

A3. Please read bullet 13 again as it states "valve shaft shall be one piece, 304 stainless steel..." not "valve shall be one piece, 304 stainless steel..."

Q4. Please see our submittal to have Val-Matic's "Seat on Disc" design approved as equivalent for the Butterfly Valves on the Spruce Lake Screen Building Bypass Valves Project.

A4. The following request has been denied as the valve seat needs to be on the body.

SIGN AND RETURN THIS ADDENDUM WITH YOUR PROPOSAL

BY: Monic MacVicar
Monic MacVicar, CCLP, CPPB
Procurement Specialist, Supply Chain Management

Contractor's Signature



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Q5. Are the following acceptable?

- a) Mueller Lineseal III valve body uses only Ductile Iron ASTM A536 Grade 65-45-12 vs specified Cast Iron. ***Ductile Iron or Gray Iron is acceptable.***
- b) Mueller Lineseal III valve shaft uses two-piece hub design allowing greater flow coefficient. The flow through disc has a greater free flow area than conventional lens-shaped or offset disc designs, resulting in lower pumping costs. High strength 304SS ASTM A276 shaft hubs include diameters exceeding AWWA C504 standards. ***Two-piece shaft is acceptable.***
- c) Mueller Lineseal III 150B class 24" valve uses travel nut actuator with 304SS Keyway connection to shaft hub. ***Acceptable.***

Please find below the corrections to the specification which we have also revised and attached.

1. Section 3.1.03 Butterfly Valves is changed as follows:

Bullet 6 "Valve body shall be cast iron" is replaced with "Valve body shall be of gray iron, ductile iron, or alloy-gray iron as per AWWA C504.

Bullet 13 "Valve shaft shall be one piece, 304 stainless steel, extending full size through the entire valve and operator with no neck-down, keyways of holes to weaken it. Valve disc to rotate 90 degrees" is replaced with "each valve shall have a one-piece shaft extending completely through the valve disc or have a stub-shaft arrangement, as per AWWA C504. Valve disc to rotate 90 degrees".

Bullet 14 "Valve operator shall be the traveling nut type, sealed, gasketed, and lubricated for underground buried service" is replaced with "Valve actuator shall be of the traveling-nut or worm-gear type, sealed gasketed, and lubricated for underground buried service, as described in AWWA C504."

SIGN AND RETURN THIS ADDENDUM WITH YOUR PROPOSAL

BY: Monic MacVicar
Monic MacVicar, CCLP, CPPB
Procurement Specialist, Supply Chain Management

Contractor's Signature



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CONFIRMATION - RECEIPT OF ADDENDUM

**Upon receipt of this document, fax this page to
(506) 658-4742 to confirm receipt of this addendum.**

CONTRACTOR'S NAME: _____

ADDRESS: _____

PHONE: _____ FAX: _____

RECEIVER NAME (PRINT) _____

RECEIVER SIGNATURE: _____



City of Saint John

APPENDIX A - SPECIFICATIONS

**TENDER NO. 2024-481001T
SPRUCE LAKE SCREEN BUILDING BYPASS VALVES**



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PARTICULAR SPECIFICATIONS

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PARTICULAR SPECIFICATIONS

This division shall be read in conjunction with and take precedence where they may prove at variance with the City of Saint John, General Specifications.

3.1 ADDITIONAL SPECIFICATIONS FOR THIS PROJECT

3.1.01 Work Description

The work consists of the supply of materials for purchase and delivery to Saint John, NB.

More specifically, the project includes the supply of approximately:

- 4-1500mm diameter Flanged Butterfly Valves.
- 600mm diameter Flanged Butterfly Valve.
- 1500mm diameter Blind Flange.
- 3-1500mm diameter Sleeve Couplings.
- 1500x600 diameter Concentric Reducer.
- Supply of petrolatum paste, mastic and wrap for 4-1500mm diameter butterfly valves, 1500mm diameter blind flange, 600mm diameter flanged butterfly valve, 1500x600 concentric reducer and 3-1500mm diameter couplings.
- 11-1500mm diameter gaskets and bolt packs.
- 600mm diameter gasket and bolt pack.
- Other related work all as described in these specifications.

All CPP Tees, 1800 x 1500 CPP Concentric Reducers, 1500mm dia. CPP adaptors, 1500mm dia. Split Sleeve Couplings, spacers and restraints supplied by others.

3.1.02 Project Schedule

The supplier shall submit a proposed schedule for the following:

- Provision of shop drawings to Saint John Operations staff for review. Reviewed shop drawings will be returned within 1 week.
- Schedule of production and manufacturing of items required.
- Schedule of delivery to Saint John, NB.

The project requires that the schedule will have a hard deadline of delivery of materials to Saint John by August 1st, 2024. The supplier shall coordinate delivery of the items with Saint John Water Operations.

3.1.03 Butterfly Valves

The supplier shall ensure that the 1500mm dia. butterfly valves meet City of Saint John General Specifications – Division 10 Water Systems as well as the following:

The butterfly valves are to be flanged joint.

Flanged Valve Requirements

- Valves to be short bodied, Class 150B, of the rubber-seated tight-closing type, designed, manufactured, tested, and conforming to the latest AWWA C504 Standard.
- Each valve ends to be 125 flanged ends to ANSI V16.1 and as per AWWA C111.
- Flanges are to be drilled and faced in accordance with ANSI B16.1 Class 125.

This is changed to "Each valve shall have a one-piece shaft extending completely through the valve disc or have a stub-shaft arrangement, as described in AWWA C504."



Body of Valve shall be of Gray-Iron, Ductile Iron, or Alloy-Gray Iron, as per AWWA C504.

This is changed to "Valve actuator shall be of the traveling-nut or worm-gear type, sealed, gasketed, and lubricated for underground buried service, as described in AWWA C504"

- Flanged valve accessories include bolts, nuts, studs, glands, and gaskets are to be included.
- Valves to be full AWWA C504 Class 150-B valve shaft diameter and full Class 150-B underground service-operator torque rating throughout entire travel to provide capability for operation in emergency service.
- ~~Valve body shall be cast iron.~~
- Mechanism shall be cast-iron or ductile-iron disc.
- Shafts to be stainless steel 304 to ASTM A276, rubber seated for positive shut-off at minimum 1 MPA differential pressure in either direction.
- Valve body interior and exterior to be epoxy coated with minimum of 150 microns coating.
- Valves to be NSF61 approved.
- Valve rubber seat shall be full circle, 360 degrees and not penetrated by the valve shaft.
- Valve rubber seat shall be inside of the valve body and not on the disc.
- ~~Valve shaft shall be one-piece, 304 stainless steel, extending full size through the entire valve and operator with no neck-down, keyways or holes to weaken it. Valve disc to rotate 90 degrees.~~
- ~~Valve operator shall be the traveling nut type, sealed, gasketed, and lubricated for underground buried service.~~
- Valve operator shall be capable of withstanding an overload torque of 610 N-m at full-open or closed position without damage to the valve or operator.
- Valve operator shall be capable of withstanding submergence in water to 7.5m of head.
- Valve to have a minimum of 120 turns to close.
- Valves shall be capable of easy closure by one person using standard valve key even under emergency leak-break conditions as severe as those that would cause a valve maximum opening torque requirement of as much as two times AWWA Class 150-B standard.
- **Valves to open clockwise (Right).**
- Valves to be equipped with 50mm AWWA operating nut.
- Valve operator shall have easily adjusted stops in both open and closed positions.
- All valves shall be tested for leakage at rated working pressure of 1034 kPa by the manufacturer.
- Hydrostatic test with vane partially open shall be given to the assembled valve at a working pressure of 2060 kPa.
- Factory testing certificates, stamped by an engineer, detailing the leakage test must be supplied to the City prior to delivery. Each valve must be marked with a unique identifier that can be matched to the certificate and verified by the owner at the time of receiving.
- Valves will be pressure tested in the closed position in conjunction with the pipeline pressure test once installed.

Add approved equal:
GA Series 800
butterfly valves

Acceptable Products:

Clow
Mueller
Val-Matic

3.1.04 Couplings

Couplings shall be epoxy or nylon coated, ductile iron or steel, complete with T304 or T316 stainless steel bolts and nuts and suitable for a minimum working pressure of 1034 kPa. Bolts are to be to latest AWWA C111 Standard.

Couplings are to be suitable for the type of pipe being connected. The connected pipe will consist of plain steel ends to the OD of 1500mm dia. ductile iron pipe.

Gaskets shall be provided by the supplier to suit the 1500mm dia. and 600mm dia. pipe size for specific application.

The minimum coupling sleeve length shall be 250 mm (10 in.).

Acceptable Products:

Dresser Inc.
Krausz Industries Ltd.
Robar Industries Ltd.
Romac Industries Ltd.
Smith-Blair

3.1.05 Protective Coatings

Anti-corrosion petrolatum paste, tape and mastic is required for all valves, blinds flanges, reducers, and couplings. The supplier shall calculate the required product needed to fully protect the items including the flange for the valve and connecting flange, as well as the restraints and the couplings.

Acceptable Products:

PetroWrap
STAC
Trenton
Winn & Coales (Denso) Ltd.
PetroGuard

3.1.06 Shop Drawings & Submittals

Shop drawing submissions will be required as a minimum for the following for review by the Engineer:

- Butterfly Valves.
- Couplings.
- Reducers.
- Blind Flanges.
- Bolt pack and flange gaskets.
- Petrolatum paste, mastic, and wrap.
- Any additional items where specified in these Specifications.
- Any other materials for which the Engineer requests shop drawings.

Shop drawings shall be in accordance with Division 7.3 of the City of Saint John General Specifications.

In addition to the shop drawings requirements of Division 7.3 of the City of Saint John General Specifications, the Contractor shall also submit an electronic copy of the shop drawings bearing a digital signature to show proof of review of the Contractor.

Prior to manufacturing of any material, and sufficiently in advance of requirements to allow Saint John Water Operations time for review, submit for review detailed, dimensioned drawings or cuts, showing construction, size, arrangement, operating clearances, performance characteristics and capacity. Each piece of material proposed shall be a

standard catalogue product of an established manufacturer and of quality, finish, and durability to that specified.

Samples, drawings, specifications, catalogues, submitted for review, shall be properly labeled indicating specified service for which material or equipment is to be used, section and article number of specifications governing, Contractor's name and name of job.

Catalogues, pamphlets, or other documents submitted to describe items on which review is being requested, shall be specific and identification in catalogue, pamphlet, etc. of item submitted shall be clearly made in ink. Data of a general nature will not be accepted. Shop drawings with engineering content must bear the stamp and signature of the engineer responsible for their preparation. This engineer must be licensed or registered in New Brunswick.

Failure of the supplier to submit shop drawings in ample time for review shall not entitle them to any extension of contract time, and no claim for extension by reason of such default will be allowed.

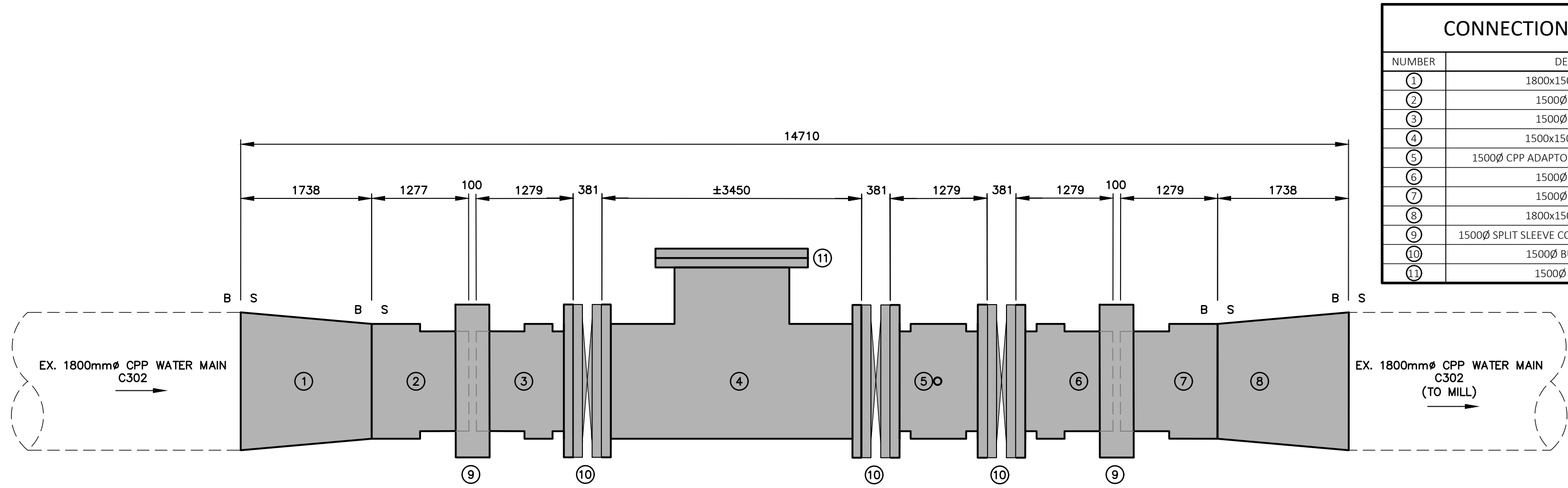
Saint John Water Operations staff will review and return the shop drawings within one week of receiving the digital package.

The costs associated with shop drawing preparation will not be paid for separately and will be considered incidental to the supply of the materials.

Method of Measurement:

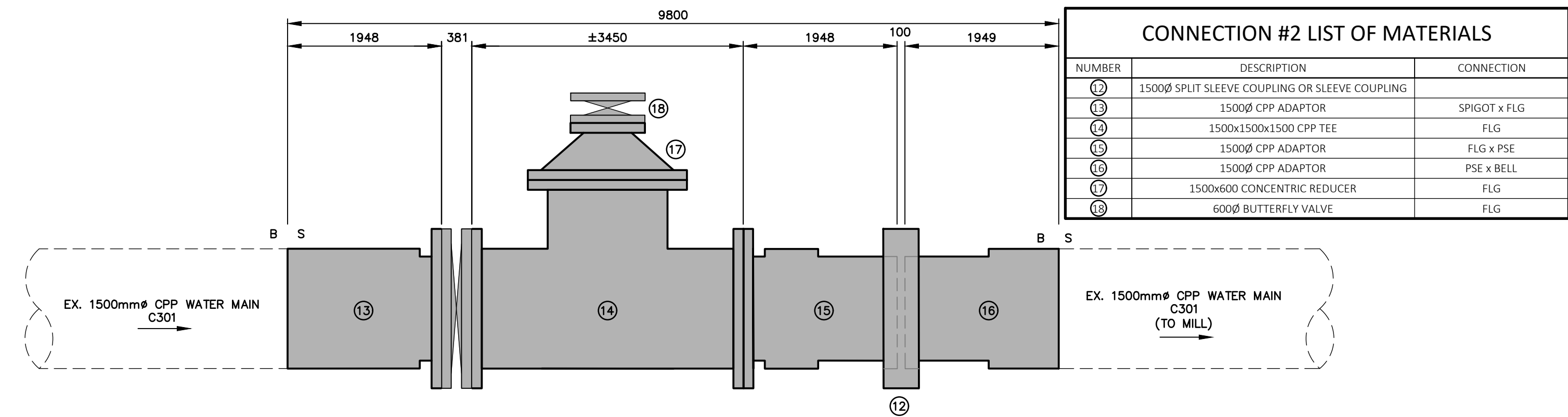
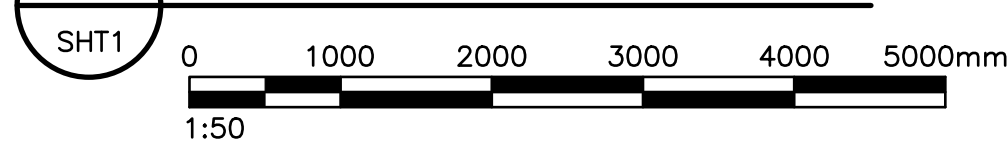
Method of payment of butterfly valves, couplings, reducers, blind flanges, bolt packs, studs, flange gaskets, petrolatum paste, mastic, wrap is lump sum. The price is to include delivery to Saint John, NB at the Spruce Lake site. The supplier is to communicate date of delivery to allow the City to provide on site equipment to off load materials.

3.2 REVISIONS TO THE GENERAL SPECIFICATIONS



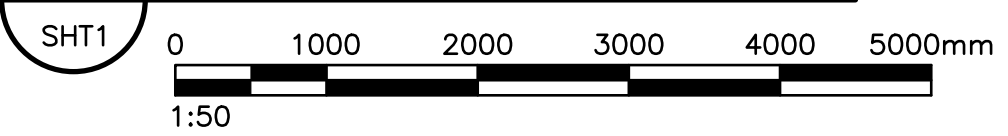
| CONNECTION #1 LIST OF MATERIALS | | |
|---------------------------------|---|---------------|
| NUMBER | DESCRIPTION | CONNECTION |
| 1 | 1800x1500 CPP REDUCER | SPIGOT x BELL |
| 2 | 1500 CPP ADAPTOR | SPIGOT x PSE |
| 3 | 1500 CPP ADAPTOR | PSE x FLG |
| 4 | 1500x1500x1500 CPP TEE | FLG |
| 5 | 1500 CPP ADAPTOR PEICE c/w 100 IPT PORT | FLG x FLG |
| 6 | 1500 CPP ADAPTOR | FLG x PSE |
| 7 | 1500 CPP ADAPTOR | PSE x BELL |
| 8 | 1800x1500 CPP REDUCER | BELL x SPIGOT |
| 9 | 1500 SPLIT SLEEVE COUPLING OR SLEEVE COUPLING | FLG |
| 10 | 1500 BUTTERFLY VALVE | FLG |
| 11 | 1500 BLIND FLANGE | FLG |

1 DETAIL— PIPE CONNECTION #1



| CONNECTION #2 LIST OF MATERIALS | | |
|---------------------------------|---|--------------|
| NUMBER | DESCRIPTION | CONNECTION |
| 12 | 1500 SPLIT SLEEVE COUPLING OR SLEEVE COUPLING | |
| 13 | 1500 CPP ADAPTOR | SPIGOT x FLG |
| 14 | 1500x1500x1500 CPP TEE | FLG |
| 15 | 1500 CPP ADAPTOR | FLG x PSE |
| 16 | 1500 CPP ADAPTOR | PSE x BELL |
| 17 | 1500x600 CONCENTRIC REDUCER | FLG |
| 18 | 600 BUTTERFLY VALVE | FLG |
| 19 | | |

2 DETAIL— PIPE CONNECTION #2



PRELIMINARY
NOT FOR CONSTRUCTION

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES.
 - THE HORIZONTAL DATUM UTILIZED IS NAD83 (CSRS) NEW BRUNSWICK DOUBLE STEREOGRAPHIC PROJECTION.
 - ALL ELEVATIONS ARE IN GEODETIC METRES AND REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928 (CGVD28)
 - ALL CHAINAGES ARE IN METRES.
 - LOCATION OF EXISTING SERVICES, STRUCTURES AND BUILDINGS APPROXIMATE ONLY. CONTRACTOR TO CONFIRM IN FIELD PRIOR TO EXCAVATION.
 - ALL FIELD SURVEY INFORMATION PROVIDED BY CITY OF SAINT JOHN AND CBCL LIMITED.
 - TYPICAL TRENCH DETAIL, PIPE INSTALLATION, FITTINGS & STRUCTURES, CONCRETE CURB AND SIDEWALK AS PER THE CITY OF SAINT JOHN MUNICIPAL OPERATIONS GENERAL SPECIFICATIONS.
 - CATCH BASINS TO BE 750# AND MANHOLES TO BE 1050# UNLESS OTHERWISE NOTED.
 - ALL WATER LINES LESS THAN 1.8m COVER TO BE INSULATED WITH 50mm THICK RIGID "STYROFOAM SM" BOARD.
 - ALL WATER, SANITARY AND STORM STUBS TO BE PLUGGED/CAPPED & WATER MAIN FITTINGS TO BE RESTRAINED. LOCATION TO BE MARKED WITH A 38x89 STUD FROM INVERT OF PIPE TO 1000mm BELOW FINISH GRADE.
 - CONTRACTOR TO ENSURE THAT ALL MUNICIPAL INFRASTRUCTURE ARE LOCATED IN THE FIELD PRIOR TO START OF EXCAVATION.



PROJECT No. 232907.01

| LEGEND | |
|----------------------------------|----------|
| PROPOSED | EXISTING |
| SANITARY MANHOLE (SMH) | SAN |
| CATCH BASIN (CB) | CB |
| STORM MANHOLE (STMH) | STMH |
| SANITARY SEWER | SAN |
| SANITARY FORCE MAIN | SFM |
| STORM SEWER | ST |
| WATER MAIN | WM |
| COMBINED SEWER | CS |
| ISOLATION VALVE (BUTTERFLY/GATE) | IV |
| CURB STOP | CS |
| VALVE IN CHAMBER | VIC |
| FIRE HYDRANT | FH |
| PROPERTY LINE | P/L |
| EASEMENT | E |
| EDGE OF PAVEMENT | E/P |
| SIDEWALK | S/W |
| CURB | CURB |
| CURB & GUTTER | C/G |
| FENCE | F |
| OVERHEAD UTILITIES | O/H |
| UNDERGROUND UTILITIES | U/G |
| UNDERGROUND ELECTRICAL | E |
| ELECTRICAL / TELEPHONE MANHOLE | E/TM |
| POWER, UTILITY, GUY POLES | P/U/GP |
| LIGHT STANDARD | LS |

| A | KDT | 2024-02-27 | ISSUED FOR REVIEW |
|-----|-----|------------|-------------------|
| NO. | BY | DATE | REVISION |



CITY OF SAINT JOHN

PROJECT TITLE
SPRUCE LAKE
WATER TRANSMISSION MAIN

DRAWING TITLE
SCREEN BUILDING
BY-PASS
PIPE CONNECTION DETAILS

| | |
|-----------------------|---------------------------|
| SEAL | CONTRACT NO. YYYY - PP |
| SCALE AS NOTED | |
| DRAWN BY THM | |
| DATE JAN. 11, 2024 | |
| CHECKED BY KDT/BMM | |

| | |
|--|------------------|
| PROJECT ENGINEER | |
| CHIEF CITY ENGINEER | |
| 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. | |
| SHEET OF | 02 02 XXXX |