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## **RURAL MUNICIPALITY OF WOODLANDS LOW-PRESSURE SEWER LINE CONSTRUCTION SPECIFICATIONS**

### **1 General**

#### **1.1 Summary of Work**

A summary of the work is as follows:

Supply and installation of low-pressure sewer main, services, and appurtenances, including:

- Approximately 2000 metres of 100mm HDPE DR17 low-pressure sewer main,
- Nine (9) service pipe leads,
- Gate valves,
- Air and vacuum release assemblies,
- Cleanout assemblies,
- Service connections,
- Curb stops, and
- Other associated works.

These works shall occur along Railway Ave and Road 81N in and near the Rural Settlement Centre of Woodlands. Unless otherwise indicated on the design, the work shall include installation of the low pressure sewer main at a 2.0 m offset from the road right of way property line. Capped service leads shall include curb stops and shall extend 3.0 m into the adjacent properties.

#### **1.2 Contract Award**

The Municipality may award the contract to the bidder who provides:

- The best bid price,
- Schedules work within the allotted timeline,
- Intends to provide the materials and construct the works as specified with the contract, or intends to provide compatible materials, as approved by the Municipality, and
- Demonstrates capacity and performance through the provision of 3 references from previous similar work.

The Municipality reserves the right to NOT award the contract to any bidders.

Upon award of the contract, the contractor will be provided with two (2) complete sets of the contract package including contract, drawings, and specifications. Both copies of the contract

must be fully executed and returned to the Municipal Engineer prior to commencement of the work. Along with the executed contract, the contractor shall provide the requested details as highlighted in the following sections.

### **1.2.1 Contract Specifications**

Manitoba Regulations and Acts shall govern. The contractor shall follow the requirements of the Manitoba Water Services Board Specifications, local standards, and the drawings and details specified for this contract.

### **1.2.2 Contract Schedule**

Prior to the pre-construction meeting, the contractor shall specify the construction schedule regarding:

- . Commencement date,
- . Delivery and installation of major components,
- . Hydrostatic testing,
- . Substantial Performance,
- . Surface restoration, and
- . Final Completion.

The schedule shall be updated throughout the project to reflect actual progress. As work progresses, the cause of any deviation from schedule shall be clearly identified and a project extension must be requested by the contractor in writing. A project extension may or may not be granted, as determined by the Municipality.

### **1.2.3 Subcontractors**

Upon award of the contract, the contractor shall provide a complete list of the subcontractors, including company name, mailing address, and contact person name and email address.

### **1.2.4 The Work**

Prior to award of the contract, the contractor shall provide a list of proposed materials and itemized pricing for the works.

Upon contract award and prior to the pre-construction meeting, the contractor shall specify which portions of the works are intended to be open cut, excavations for commencing sections of trenchless installs, and any insulated or encased pipe sections that may be required due to the proposed method of install.

Where any change to methodologies or materials occurs during construction, the municipal engineer shall be notified in writing immediately. Notification shall include the location, design

item, proposed change, and any cost change. Cost changes shall only be approved in extreme scenarios for items which could not be reasonably anticipated during the pre-award phase.

### **1.3 Meetings**

A pre-construction meeting shall occur not more than two days prior to the anticipated start date. Participants shall include the Municipal Public Works, municipal engineer, general contractor project manager, and subcontractor project managers.

Progress meetings shall be held every week. The time and date of the meetings shall be agreed upon. Participants shall include Municipal Public Works, municipal engineer, and general contractor and/or subcontractor project managers who are participating in the upcoming week's progress.

### **1.4 Project Management**

Project Management shall be performed by JME World Consultants. The municipal engineer on this project shall be Jessica Manness, B.Sc., P.Eng. Any inquiries shall be directed to the municipal engineer by phone at 204-330-1773, by email to [jess@jme-consultants.com](mailto:jess@jme-consultants.com), or by mail to the above-noted address.

## **2 Construction Specifications**

Key construction specifications are included on the engineered plans. Additional specifications and details are provided below.

### **2.1 Traffic Control**

The contractor shall bear all costs of temporary traffic control until the end of construction including but not limited to pylons, barricades, information signs, and sign personnel. The contractor shall be responsible for redirecting and maintaining traffic control with appropriate signing in accordance with Manitoba Infrastructure 'Work Zone Traffic Control Manual' (latest edition).

The Contractor shall meet with property owners and coordinate any required driveway closures with property owners a minimum of 48 hours in advance. All driveways must be open at the end of each work day.

### **2.2 Survey Assistance and Survey Supplies**

The Contractor is to provide the municipal engineer with a part-time survey assistant for layout and measuring purposes as required. The cost for this service is incidental to the work and shall be borne by the Contractor.

The Contractor is to provide any required survey stakes, marking ribbons, markers and marking paint.

### **2.3 Storage and Handling of Materials**

All materials for the work shall be transported, stored, and handled in accordance with the manufacturer's recommendations. Damaged or defective material shall not be used.

### **2.4 Existing Utilities**

The contractor shall be responsible for determining the location of all existing utilities and infrastructure. The contractor will be held responsible for damage to, and for maintenance and protection of, existing utilities and infrastructure.

The contractor shall contact all affected utilities and acquire utility locates. The utility infrastructure shown on the design plans is approximate only. The contractor is responsible for assuring safe utility crossings.

### **2.5 Low-Pressure Sewer and Service Pipe**

Low pressure sewer and service pipe shall be HDPE DR17 in accordance with MWSB 027060.

#### **2.5.1 Services**

The location of low-pressure sewer service lines servicing existing structures shall be discussed and planned in conjunction with property owners. This contract includes the installation of the service tee, curb stop, and 3.0m stub with above-ground markings. Restoration of the ground surface to pre-construction condition or better shall be included in the contract. Any costs for installs beyond this point shall not be included in this contract.

Where curb stops would be installed near the bottom of the ditch, a mound of material shall be placed around the curb stop location to the grade of the nearby lot elevation. The mound shall connect the backslope of the ditch to the lot elevation.

### **2.6 Encasement Pipe**

Encasement pipe is not anticipated to be required for this work. However, should the need for encasement pipes be found during construction, acceptable materials are HDPE DR17 and PVC Series 160.

### **2.7 Bedding and Backfill**

All pipe installed by open trench methods or within an excavation shall be bedded with Class B sand according to the MSWB, and then backfilled with common fill. Where an excavation is

located within 2 metres of a road, driveway or path, backfill shall include Class B sand bedding and compacted select granular backfill to grade.

## **2.8 Driveway and Road Restoration**

All roads and driveways shall be restored to their pre-construction condition or better.

## **2.9 Hydrostatic Testing**

Hydrostatic testing of the pipelines shall be as outlined in the MSWB Section 027060. The Contractor shall be responsible for all testing operations and costs.

## **3 Payment**

Payments will be made on the basis of the contract lump sum prices and the contract unit prices bid in the tender.

The prices bid for various items of work, unless specifically noted otherwise, shall include the supply of all labor, plant, material, tools, services, transportation and incidentals necessary to construct the work in accordance with the contract documents. Any work not specifically listed under contract unit or lump sum prices shall be considered incidental to the work.

Payment shall be made at the end of the contract, upon successful testing of the low pressure sewer main.

## **4 Insurance and Bonding**

The contractor shall provide evidence of \$2.0 million general liability insurance payable to the Rural Municipality of Woodlands, and \$2.0 million vehicular insurance for all vehicles operating on roads. This insurance must remain in effect for the duration of the project until at least 24 hours after the completion of the works.

The contractor shall demonstrate registration and good standing with the Manitoba Workers Compensation Board.

The contractor shall provide a performance bond for 50% of the value of the works, this bond shall be provided upon notification of contract award.

## **5 Warrantee**

The contractor shall warrantee the works against workmanship and defects for a period of two years following the completion date of the works.