
May 3, 2024
File: N:\5228-078-06\L01

To Whom it May Concern:

**Re: M.D. of Opportunity No. 17
Red Earth Creek Community Hall Servicing
Request for Quotation**

Municipal District of Opportunity No.17 (the MD) is currently seeking a Contractor to perform repairs to the existing sanitary service for the Red Earth Creek Community Hall in Red Earth Creek. Currently the sanitary service is experiencing freezing due to a shallow installation. The MD is seeking a qualified contractor to supply and install a septic holding tank with grinder pump at the Community Hall. The work will include exposing the current sanitary service outside of the Community Hall, connecting to the existing line and installing sanitary sewer PVC pipe enveloped in frost box to a 3m diameter septic holding tank, installing a grinder pump system complete with electrical service and controls, HDPE pipe from the septic holding tank to the existing sanitary manhole to the East. The Contractor shall also remove and salvage the existing sanitary manhole that is now bypassed and abandon and cap the existing sanitary PVC pipe. The MD shall retain the removed sanitary manhole and the Contractor shall utilize the frame and cover for the septic holding tank. The Contractor shall strip, salvage and replace topsoil and gravel within all disturbed areas.

For the grinder pump system, the Contractor shall include guide rails, pump base, alarms, control panel, and all electrical wires, conduits and fittings from the Community Hall electrical panel to the pump. The Contractor shall coordinate access to the electrical panel inside the Community with the MD.

Quotations for the pump and manhole have been completed for Quotation purposes. For the grinder pump quotation, the Contractor shall contact Mick Delauw with Spectrum Sales Agency at 780-486-2525 and reference quotation number MD2014-400. For the manhole quotation, the Contractor shall contact Kent Turner with Lafarge at 780-233-6349 and reference the project name. The Contractor shall confirm with the MD if they require Manhole lining on the interior. Note that shipping is not included in the Quotation for the grinder pump. The Contractor shall include all other materials necessary to complete the Work per this Quotation and Drawings.

Quantities for the Work of this project will be measured by Lump Sum and payment will be made in accordance with the attached Measurement and Payment Schedule as per conditions stated in the Request for Quotation.

Bidders must submit their Quotations by email or in person to Earl Gullion (earl.gullion@mdopportunity.ab.ca) by 2:00pm, Friday, May 10th, 2024.

The work includes:

- Supply materials, labour and equipment necessary to carry out Work as defined in the Contract.
- All Civil, Electrical, and Miscellaneous Work as shown in the Drawings and the Contract Specifications.

The conditions for the quote are as follows:

1. Proof of Insurance including:
 - a. Professional Liability of \$2,000,000.
 - b. Commercial auto policy of \$5,000,000.
2. Workers' Compensation Board with good standing is to be submitted.
3. Contractor to submit a valid Certificate of Recognition, Small Employer Certificate of Recognition or Temporary Letter of Certificate as issued by the Alberta Construction Safety Association or another certifying organization.
4. Read and review all Specifications Sections included in this Quotation Package.
5. Read and review all appended documents to the Quotation Package.
6. Coordinating with the MD on required submittals, maintenance of records on site also listing products, equipment, layout, and methods prior to the start of Work.
7. To conform to the Electrical, Plumbing and Private Septic System Codes and Standards, most recent edition.
8. Minimum 1-year warranty is required.
9. Additional Work is only to be paid as approved in writing by the Owner.
10. MPE will follow the "Builders Lien" requirements (10% hold back for 45 days).
11. The Owner requires Substantial Performance of the Work by June 10, 2024 and Total Performance of the Work by June 14, 2024.
12. Work to be invoiced to the MD.
13. Quote to be valid for 30 days.
14. Supply all design, labor, equipment and materials to complete deconstruction, salvage, site works and building erection including but not limited to:
 - a) 3m Diameter Manhole – Septic Holding Tank.
 - b) Grinder Pump with Guide Rail, Lifting Chain and Base.
 - c) Sanitary Sewer Piping and Various Fittings.
 - d) Sanitary Cleanout.
 - e) Abandonment and Cap of Existing Sanitary Sewer Piping.
 - f) Removal and Disposal of Existing Sanitary Sewer Manhole.
 - g) Connections to Existing Service and Manhole.
 - h) Electrical Service and Equipment.

Included in this information package are:

- 1. Cover Letter**
- 2. Drawings (MPE) (Appendix A)**

Title Page
C0.1 Legend
C0.2 Abbreviations

C1.1 Overall Plan
C2.1 Miscellaneous Details 1
C2.2 Miscellaneous Details 2
C2.3 Miscellaneous Details 3

All inquiries are to be submitted electronically to the following:

Earl Gullion
Director of Utilities
MD of Opportunity No. 17
Phone: 780-891-8230
Email: earl.gullion@mdopportunity.ab.ca

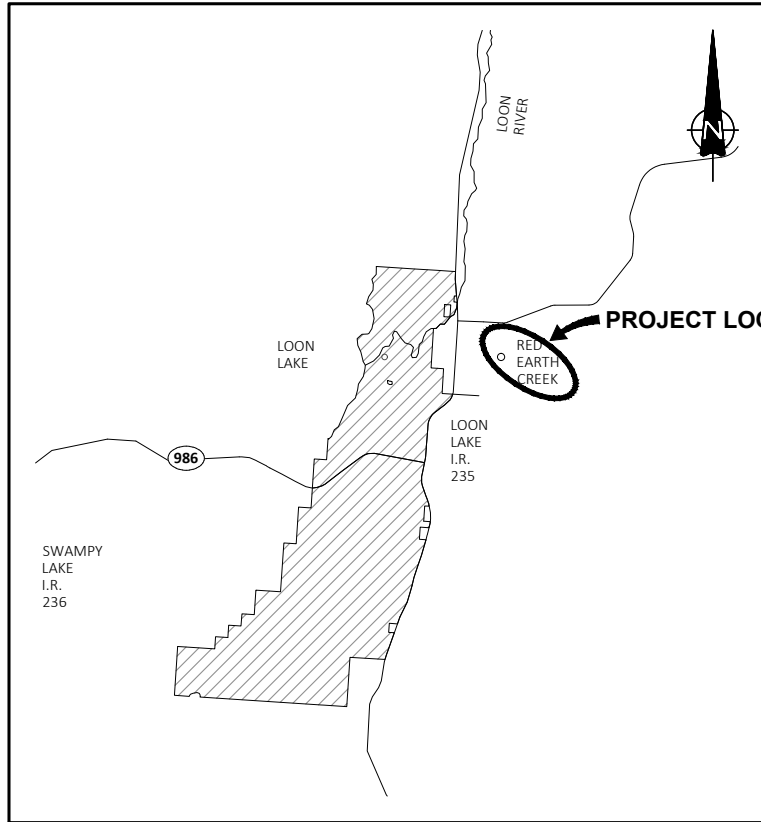
Yours truly,

Municipal District of Opportunity No. 17

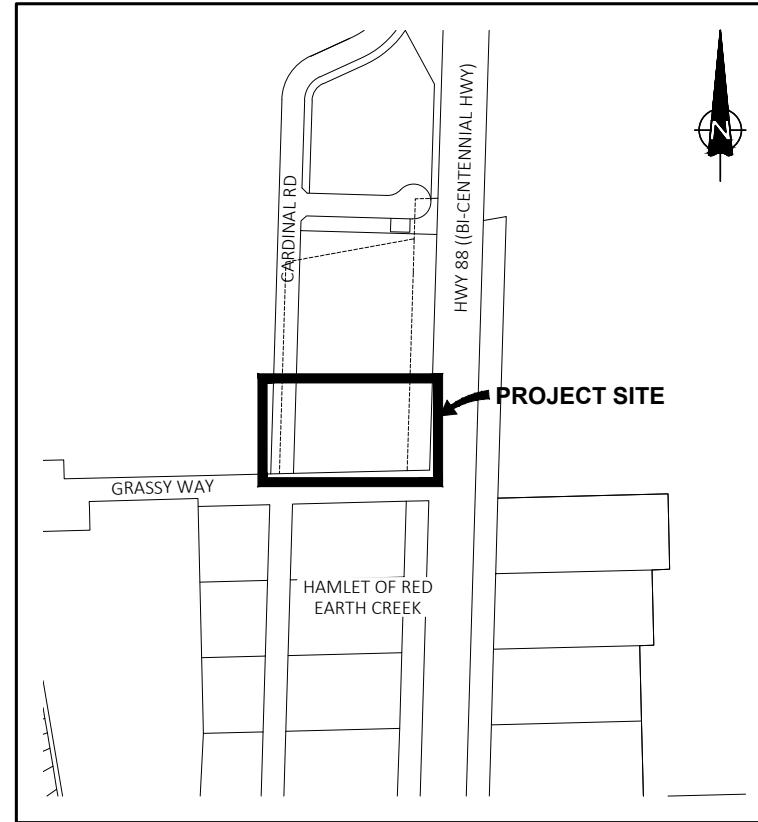
Earl Gullion
Director of Utilities

EG:eg

Enclosures



LOCATION PLAN



SITE PLAN


























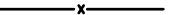









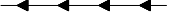












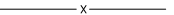



LIST OF DRAWINGS



































































--	TITLE PAGE
CIVIL	
C0.1	LEGEND
C0.2	ABBREVIATIONS
C1.1	OVERALL PLAN
C2.1	MISCELLANEOUS DETAILS 1
C2.2	MISCELLANEOUS DETAILS 2
C2.3	MISCELLANEOUS DETAILS 3































RED EARTH CREEK COMMUNITY HALL SERVICING FOR PRELIMINARY APPROVAL

5228-078-06

PROPOSED	DESCRIPTION	EXISTING
	ALBERTA SURVEY CONTROL MONUMENT CONTROL POINT IRON PIN CONSTRUCTION EASEMENT PROPERTY LINE UTILITY RIGHT OF WAY EASEMENT	    
                      	ABBREVIATION ELEVATION BOLLARD/DELINEATOR POST SIGN BOREHOLE BUSH TREE ASPHALT SWALE CONCRETE SWALE DRAINAGE DITCH DRAINAGE SWALE DRAINAGE SWALE BACKFILLED GRADE BREAK CENTRELINE EDGE OF GRAVEL EDGE OF PAVEMENT CURB AND GUTTER MONOLITHIC SIDEWALK SEPARATE SIDEWALK FENCE BARBED WIRE FENCE CHAIN LINK FENCE SILT FENCE TO BE REMOVED RAILWAY	                      

PROPOSED	DESCRIPTION	EXISTING
            	ELECTRICAL TRANSFORMER GUY WIRE LIGHT STANDARD PEDESTAL POWER POLE TRAFFIC SIGNAL CABLE FIBRE OPTIC GAS LINE (NON-AER) GAS ABANDONED OVERHEAD POWER TELECOMMUNICATION UNDERGROUND POWER	            
     	BUTTERFLY VALVE GATE VALVE HYDRANT CURB STOP WATER MAIN WATER MAIN ABANDONED	     
             	CLEANOUT LANDSCAPE CATCH BASIN MANHOLE PLUG VALVE VAULT CATCH BASIN CULVERT INLET STRUCTURE OUTFALL STRUCTURE SANITARY SANITARY ABANDONED STORM STORM ABANDONED TILE DRAIN	             


PROPOSED	DESCRIPTION	EXISTING
             	AIR RELEASE BELLxBELL ADAPTER BELLxFLANGE ADAPTER COUPLER CROSS ELBOW 90° ELBOW 45° FLUSH POINT HOT TAP LOT SERVICE PLUG REDUCER TEE REDUCER TEE	             

NOTES:
1. ALL ELEVATIONS AND STATIONS IN METRES. PIPE LENGTHS, PIPE SIZES AND DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

UTM Z11 NAD 83
COORDINATES

THE EXISTENCE, LOCATION AND ELEVATION OF ALL UTILITIES AS SHOWN ON ANY PLANS MAY BE BASED ON INFORMATION RECEIVED FROM THE RESPECTIVE AUTHORITIES AND ARE NOT GUARANTEED BY THE ENGINEER. NO RESPONSIBILITY IS IMPLIED OR ASSUMED BY THE ENGINEER AS TO THE LOCATION AND ELEVATION OR ANY OMISSIONS. THE CONTRACTOR OR ANY THIRD-PARTY IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND MUST CONTACT THE VARIOUS UTILITY COMPANIES FOR ON SITE INFORMATION PRIOR TO COMMENCEMENT OF ANY OPERATIONS.

1	24-05-01	FOR PRELIMINARY APPROVAL
ISSUE	YY-MM-DD	REVISION


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MD OF OPPOTUNITY NO 17

RED EARTH CREEK COMMUNITY HALL
SERVICING
CONTRACT 2 - LIFT STATION
CIVIL
LEGEND

DESIGNED	M.J.A.	JOB	5228-078-06
DRAWN	J.A.P.	SCALE	
DATE	MAY 2024	DRAWING	C0.1

PVC AND HDPE PIPE HAZEN WILLIAMS ROUGHNESS COEFFICIENT	
100Ø - 450Ø	C=140
500Ø - 1500Ø	C=145

DEPTH OF FLOW IN 1 IN 5 YEAR STORM EVENT	D _{1:5}
DEPTH OF FLOW IN 1 IN 100 YEAR STORM EVENT	D _{1:100}

FLOW RATE FOR A 1 IN 5 YEAR STORM EVENT $Q_{1:5}$
FLOW RATE FOR A 1 IN 100 YEAR STORM EVENT $Q_{1:100}$

VELOCITY FOR A 1 IN 5 YEAR STORM EVENT	$V_{1:5}$
VELOCITY FOR A 1 IN 100 YEAR STORM EVENT	$V_{1:100}$

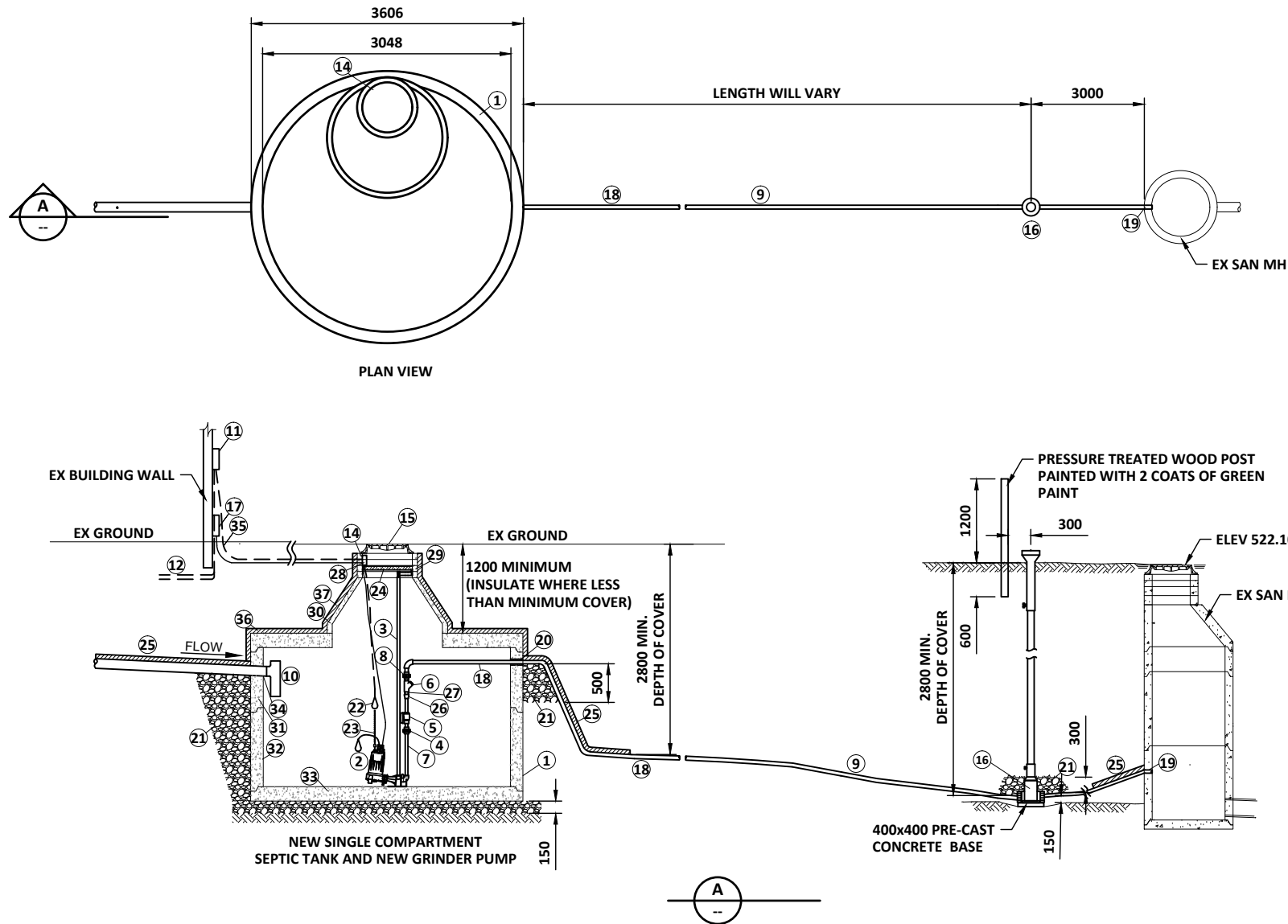
WATER	W
WATER VALVE	WV
WEST	W
WEeping TILE DRAIN	WTD
WHEEL CHAIR RAMP	WCR
WIDTH	W

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**RED EARTH CREEK COMMUNITY HALL
SERVICING
CONTRACT 2 - LIFT STATION
CIVIL
ABBREVIATIONS**

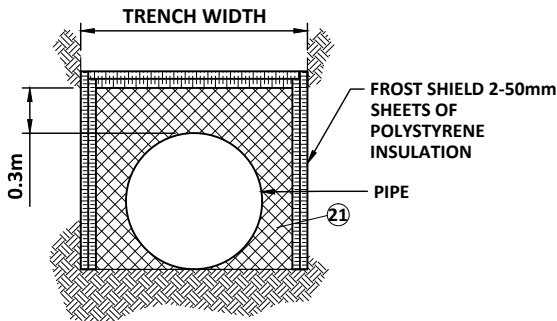
DESIGNED	M.J.A.	JOB	5228-078-06
DRAWN	J.A.P.	SCALE	
DATE	MAY 2024	DRAWING	C0.2



- GENERAL NOTES:**
1. ALL BOLD ITEMS INDICATE PROPOSED WORK TO BE DONE AND ALL LIGHT ITEMS INDICATE EXISTING CONDITIONS
 2. CONTRACTOR TO FOLLOW ALL APPLICABLE MUNICIPAL BYLAWS AND REGULATORY CODES AND REQUIREMENTS
 3. CONTRACTOR TO CONFIRM INSULATION REQUIREMENTS FOR EXISTING AND NEW TANKS
 4. CONTRACTOR TO VERIFY ANTI-FLOATATION REQUIREMENTS FOR NEW TANKS
 5. DISCHARGE PIPING AND VALVES INSTALLED ABOVE HIGH ALARM FLOAT LEVEL
 6. REQUIRED HEIGHT SETTINGS;

	HEIGHT ABOVE TANK (mm)	
PUMP CHAMBER MIN. LEVEL	330	TO PUMP OFF
PUMPING VOLUME	3172	TO PUMP ON
INVERT	3222	TO INVERT
PEAK FLOW	3322	TO HIGH ALARM LEVEL

7. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
8. UTILIZE CONSEAL 202 AND 212 ON ALL MANHOLE JOINTS.




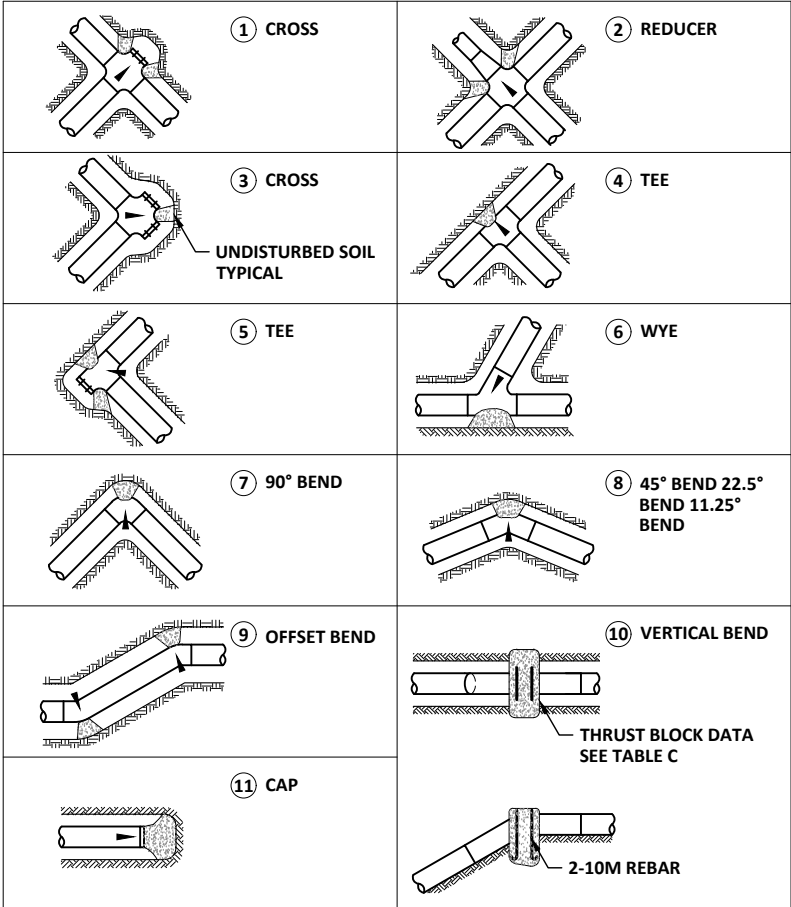
- NOTES:**
1. STAGGER JOINTS OF INSULATION BETWEEN UPPER AND LOWER SHEETS.

**RIGID FROST SHIELD
DETAIL B**

LEGEND AND SPECIFICATIONS	
①	NEW SINGLE COMPARTMENT HOLDING TANK
②	GRINDER PUMP (2HP, 50GPM, 208/230V) LIBERTY LSG202M - SINGLE STAGE WITH FLOAT, PIGGY-BACK PLUG, AND MIN 25 FOOT CORD.
③	GR20CV GUIDE RAIL BASE ASSEMBLY C/W INTEGRAL CHECK VALVE AND STAINLESS STEEL GUIDE BAR INSTALLED AND SECURED AS PER MANUFACTURERS RECOMMENDATIONS. INSTALL GUARDRAILS 90 DEGREES TO LADDER RUNGS.
④	TRUE UNION
⑤	32mmØ, SCHD 80 PVC BALL VALVE
⑥	40mm PVC SINKING BALL CHECK VALVE (MINIMUM 150psi RATING).
⑦	32mm SCHD 80 PVC DISCHARGE PIPING, ELBOWS AND CONNECTIONS AS REQUIRED.
⑧	COMPRESSION FITTING WITH TRUE UNION
⑨	50mm HDPE SERIES 200 MUNICIPAL TUBING
⑩	100mm PVC TEE AND DROP PIPE
⑪	RHOMBUS HIGH LEVEL ALARM IN NEMA4X ENCLOSURE WITH FLOAT AND INCLUDES AUDIBLE AND VISIBLE BEACON.
⑫	SINGLE PHASE, 230V POWER SUPPLY FOR PUMP AND SINGLE PHASE, 115V POWER SUPPLY FOR HIGH LEVEL ALARM FROM EXISTING BUILDING. WIRE SIZE TO MEET REQUIREMENTS OF LATEST ELECTRICAL CODE. CONTRACTOR TO CONFIRM SPACE FOR EXTRA BREAKERS AND ADVISE COUNTY IF NOT.
⑬	WALL MOUNTED ELECTRICAL OUTLET AND HIGH LEVEL ALARM.
⑭	ACCESS MANHOLE (MIN 600mm)
⑮	UTILIZE SALVAGED MANHOLE FRAME AND COVER
⑯	40mm CAMBRIDGE BRASS 202 CURB STOP
⑰	SIMPLEX 6-20R WEATHERPROOF RECEPTACLE FOR PUMP, SUITABLE FOR OUTDOOR USE.
⑱	CONTRACTOR TO INSTALL 40mm HDPE DR11 SERIES 200 PIPE (ITEM 9) INTO TANK TO UNION/CHECK VALVE (ITEM 8 AND 6) AS SHOWN.
⑲	CONNECT TO EXISTING MANHOLE WITH WATERTIGHT CONNECTION
⑳	LINK SEAL CONNECTION TO BE WATER TIGHT GROUT (SULFATE RESISTANT) INSIDE AND OUTSIDE.
㉑	40mm SCREENED ROCK
㉒	HIGH ALARM FLOAT
㉓	STAINLESS STEEL LIFTING CHAIN SECURED WITHIN 300mm OF ACCESS LID
㉔	100mm RIGID STYROFOAM INSULATION CUT TO FIT AND INSTALLED IN RISER C/W BRACKETS AS REQUIRED.
㉕	INSULATE ANY PIPE <2.5m BELOW GROUND WITH STYROFOAM BOARD INSULATION AS PER DETAIL B.
㉖	PVC SCHD 80 32mm x 40mm INCREASER
㉗	40mm SCHD 80 PVC PIPE
㉘	ELECTRICAL ENCLOSURE (CLASS I DIVISION 2) THAT CAN ACCOMMODATE 25 FT PUMP CORD. CORE CONDUIT THROUGH WALL, SEAL WITH GROUT AND UTILIZE WATERPROOF CONNECTORS.
㉙	SUPPLY AND INSTALL 600mm DIA GRADE RINGS AS REQUIRED TO MATCH EXISTING GROUND
㉚	1220mm x 600mm DIA CONICAL TOP, 1000mm HIGH
㉛	3048mm DIA BARREL, 1220mm HIGH COMPLETE WITH LADDER RUNGS
㉜	3048mm DIA BARREL, 2440mm HIGH COMPLETE WITH LADDER RUNGS
㉝	MANHOLE BASE
㉞	INVERT = 519.404
㉟	CONDUIT TO CONTROL PANEL COMPLETE WITH WIRES AND CONDUIT WATERTIGHT CONNECTOR
㊱	FROST SHIELD TRANSITION TOP TO TOP OF PIPE WITH 2-50mm LAYERS OF RIGID STYROFOAM INSULATION
㊲	SPRAY FOAM INSULATE CONICAL TOP

- NOTES:**
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

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MD OF OPPOTUNITY NO 17		
RED EARTH CREEK COMMUNITY HALL SERVICING CIVIL MISCELLANEOUS DETAILS 1		
DESIGNED	M.J.A.	JOB 5228-078-06
DRAWN	J.A.P.	SCALE NTS
DATE	MAY 2024	DRAWING C2.1



THRUST BLOCK LOCATIONS

TABLE 'A'						
THRUST BLOCK FACE AREA IN SQ METRES AT FITTING FOR CL 150 PIPE @ 1000 kPa AND SOIL BEARING CAPACITY OF 100 kPa						
PIPE SIZE IMPERIAL	PIPE SIZE METRIC	DEAD ENDS OR TEE	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	100	0.12	0.17	0.10	0.10	0.10
6"	150	0.25	0.35	0.19	0.10	0.10
8"	200	0.43	0.60	0.33	0.17	0.10
10"	250	0.70	0.99	0.54	0.27	0.14
12"	300	1.00	1.40	0.75	0.39	0.19
14"	350	1.35	1.90	1.03	0.52	0.26
16"	400	1.75	2.47	1.34	0.68	0.34
18"	450	2.24	3.15	1.72	0.87	0.44
20"	500	2.77	3.90	2.12	1.07	0.54
24"	600	4.00	5.64	3.07	1.55	0.78
30"	750	6.26	8.83	4.81	2.44	1.22
36"	900	9.03	12.70	7.58	3.51	1.76

TABLE 'B'	
SOIL TYPE	SAFE BEARING LOAD kPa
SOFT CLAY, LOOSE SAND	50
MEDIUM SOFT CLAY, DENSE SAND	100
DENSE CLAY TILL AND GRAVEL	150
HARD SHALE	500

TABLE 'C'							
DEAD WEIGHT REQUIREMENTS FOR VERTICAL BENDS CUBIC METRES OF CONCRETE (m³)							
TYPE OF BEND	SIZE (mm)						
	100	150	200	250	300	350	400
90° BEND	0.75	1.50	2.75	4.25	6.00	8.50	11.00
45° BEND	0.50	1.00	1.50	2.25	3.50	4.75	6.00
22.5° BEND	0.25	0.50	0.75	1.25	1.50	2.25	3.00
11.25° BEND	0.25	0.25	0.50	0.75	1.00	1.25	1.50

THRUST BLOCK DATA

NOTES:
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

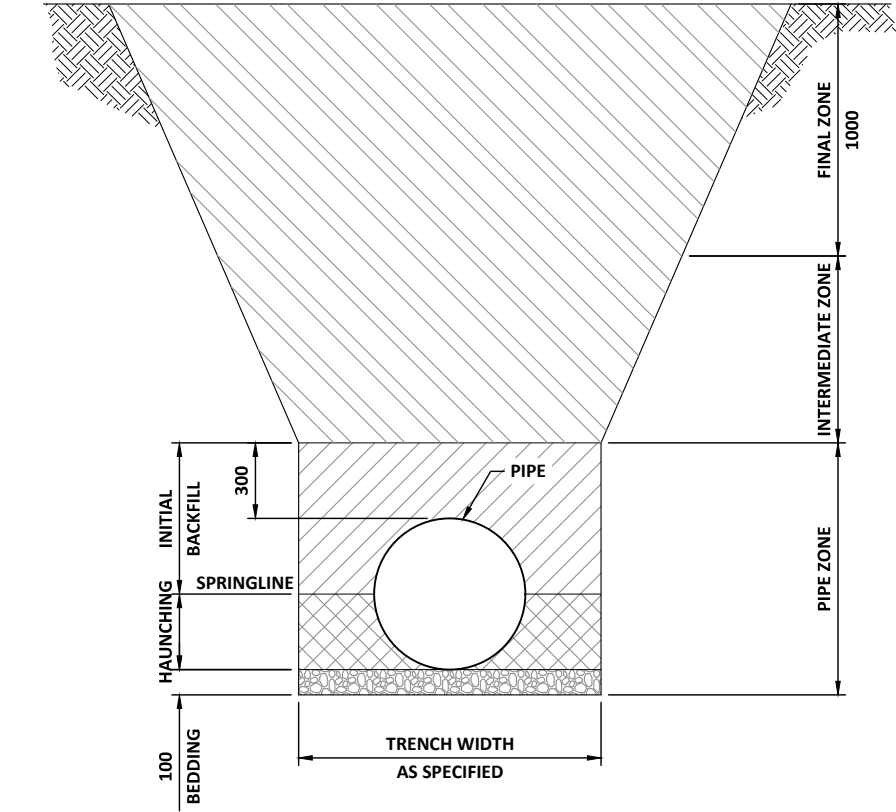
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MD OF OPPOTUNITY NO 17


RED EARTH CREEK COMMUNITY HALL
SERVICING
CIVIL
MISCELLANEOUS DETAILS 2

DESIGNED	M.J.A.	JOB	5228-078-06
DRAWN	J.A.P.	SCALE	NTS
DATE	MAY 2024	DRAWING	C2.2



- NOTES:
- REFER TO SECTION 02319 - BACKFILLING SCHEDULE FOR: FILL MATERIAL, MAXIMUM LIFT THICKNESS, MINIMUM COMPACTION AND MOISTURE CONTENT REQUIREMENTS.
- TYPICAL TRENCH BEDDING AND BACKFILL REQUIREMENTS**

- NOTES:
- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

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MD OF OPPOTUNITY NO 17		
RED EARTH CREEK COMMUNITY HALL SERVICING CIVIL MISCELLANEOUS DETAILS 3		
DESIGNED	M.J.A.	JOB 5228-078-06
DRAWN	J.A.P.	SCALE NTS
DATE	MAY 2024	DRAWING C2.3