



Prepared for:

Town of Blackfalds
5018 Waghorn Street
Blackfalds, AB T0M 0J0

Prepared by:

Stantec Consulting Ltd.
1100 - 4900 50 Street
Red Deer, AB T4N 1X7



BID DOCUMENTS
TOWN OF BLACKFALDS
Aspen Lakes West School Servicing

Project #: 1161109975

July 18, 2024

INVITATION TO TENDERERS

Town of Blackfalds

- 1.1 Sealed Tenders clearly marked “**Town of Blackfalds, Aspen Lakes West Phase 2**”

DELIVERED OR MAILED TO

Attention:

Alan Forman
Stantec Consulting Ltd.
1100 4900 50th Street, Red Deer

- 1.2 Tenders will be received until **2:00pm Thursday August 8th, 2024**. Tenders received and not conforming to the foregoing will be returned to the Tenderer(s) without consideration. Tender Documents or Tender Amendments received via Facsimile machine and email will not be accepted.

The Work comprises of, but is not limited to, approximately:

Summary of Quantities	Quantity	
Topsoil Stripping	10,000	Cu. M
Site Grading	32,000	Cu.m
Topsoil Placement & Seeding	40,000	Sq. m
Storm Sewer	507	Lin. M
Sanitary Sewer	300	Lin. M
Water Mains	339	Lin. M
Lot Service Connections	9	Ea
Asphalt Roadways	2,565	Sq. m
Gravel Lanes	395	Sq. m

- 1.3 Hard Copies of the Tender Documents may be obtained by General Contractors from Stantec Consulting Ltd. (4900 50 Street, Red Deer, AB) upon payment of a **\$50 non-refundable fee** (cheque only), made payable to Stantec Consulting Ltd.
- 1.4 A non-mandatory pre-tender meeting has been scheduled for **Tuesday July 30 @ 10:00am** onsite.

- 1.5 Tenders must be accompanied by:
 - a. Tender Form and Supplementary Tender Forms;
 - b. Bid Bond or Certified Cheque in the amount of 10% of the Tender Price;
 - c. Consent of Surety;
 - d. Copy of Current Safety Certificate or Temporary Letter of Certification; and
 - e. Construction Schedule in Gantt Chart Format.
- 1.6 The Owner may decide, at its sole discretion, that no bid submitted will be accepted and no Contract will be awarded pursuant to this Tender process. In that event, all Tenderers will be notified, and the Owner will have no liability to any Tenderer.
- 1.7 If the Owner decides to accept a Tender, the award date may be subject to change based on provincial approvals. The selection of the successful Tenderer will be based on a number of criteria which will include, but not limited to, price, delivery date, and qualification of the Tenderer. Receipt of an Invitation to Tender and evaluation by the Owner of a bid does not imply that the Tenderer is qualified. The Owner reserves the right to waive informalities in, reject any or all Tenders, or to accept the Tender deemed most favorable in the interest of the Owner.
- 1.8 The successful Tenderer shall be the Principal or Prime Contractor for the Project pursuant to the applicable construction safety legislation and shall have primary responsibility for the safety of all workers and equipment on the Project in accordance with such legislation.
- 1.9 Inquiries regarding this Project shall be emailed to:

Alan Forman
Stantec Consulting Ltd.
1100 – 4900 50 Street
Red Deer, AB T4N 1X7
Alan.forman@stantec.com

1. Geotechnical Report

- .1 The geotechnical report has been prepared by Parkland GEO which is provided in **Appendix A** of the contract documents.
- .2 Any information pertaining to soils and borehole logs is furnished by the OWNER as a matter of general information only and borehole descriptions or logs are not to be interpreted as descriptive of conditions at locations other than those of the boreholes themselves. Neither the OWNER nor the ENGINEER warrants or makes any representation with respect to data or interpretations of data or opinions expressed in any geotechnical report available for the perusal of the CONTRACTOR, whether or not such report is included as part of the TENDER or CONTRACT DOCUMENTS.
- .3 The TENDERER should familiarize themselves with the purpose and limitations of the geotechnical report when interpreting subsurface conditions for TENDER preparation purposes.

END OF DOCUMENT 00220

1. Existing Site Conditions

- .1 TENDERERS must visit the site and examine site conditions.
- .2 TENDERERS may make tests, inspections and measurements, but such investigations must be performed under time schedules and arrangements with the OWNER and TENDERERS must comply with the OWNER'S requirements.

END OF DOCUMENT 00230

CONTENTS OF THE CONTRACT DOCUMENTS

CONTRACT FORMS & CONDITIONS

Section 00303	Contents of the Contract Documents
Section 00304	Tender Forms
Section 00400	Supplementary Tender Forms
Section 00500	Agreement
Section 00600	Bonds and Certificates
Section 00700	General Conditions
Section 00800	Supplementary General Conditions
Section 00900	Addenda and Modifications
Section 00910	Field Orders
Section 00920	Change Orders

SPECIFICATIONS- DIVISION 1 TO 16
DIVISION 1 GENERAL REQUIREMENTS

Section 01010	Summary of the Work
Section 01015	Contractor's Use of the Premises
Section 01022	Testing Allowances
Section 01030	Special Project Procedures
Section 01040	Coordination
Section 01060	Regulatory Requirements
Section 01070	Abbreviations
Section 01150	Measurement and Payment
Section 01200	Project Meetings
Section 01300	Submittals
Section 01310	Construction Schedules
Section 01380	Construction Photographs
Section 01400	Quality Control
Section 01500	Construction Facilities
Section 01600	Material and Installation
Section 01700	Contract Closeout

APPENDICES

Appendix A	Geotechnical Investigation
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REFERENCE SPECIFICATIONS

City of Red Deer, Design Guidelines – 2020 Edition
City of Red Deer, Contract Specifications – 2020 Edition

END OF DOCUMENT 00303

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T-1 Contractor

Name _____

Address _____

T-2 Owner

Name Town of Blackfalds

Address 5018 Waghorn Street
Blackfalds, AB T0M 0J0

T-3 Project Description

Grading, Underground & Surface Improvements

T-4 Basis of the Tender

1. The CONTRACTOR has carefully examined the CONTRACT DOCUMENTS for the construction of THE WORK.
2. The CONTRACT DOCUMENTS are an integral part of this TENDER.
3. The CONTRACTOR has examined the WORKSITE and understands the conditions under which THE WORK is to be performed. The CONTRACTOR has satisfied himself that THE WORK is constructible.
4. The CONTRACTOR offers to furnish all of the MATERIAL and PRODUCT (except as otherwise specified to be supplied by others), together with all of the labour, PLANT and transportation to perform THE WORK described in the CONTRACT DOCUMENTS, in the manner prescribed therein, for the prices quoted in the Schedule of Prices, and in accordance with the other Schedules in this TENDER.
5. Where Prime Cost Sums for provision of MATERIAL or PRODUCT are included in the Schedule of Prices, only actual expenditures made upon the written authority of the OWNER, shall be paid out of these Prime Cost Sums, and if a Prime Cost Sum is not sufficient to cover that component of the work, then the CONTRACT PRICE shall be increased, and if the Prime Cost Sum is greater than required, the CONTRACT PRICE shall be decreased.

Prime Cost Sums shall include the net cost of the item, applicable taxes and duties and delivery to the Site. Prime Cost Sums shall not include handling at the site, protection, installation or overhead and profit. Allowance for handling, protection, installation, overhead and profit shall be made by the CONTRACTOR in his tendered prices for installation. The tendered prices for installation will not be adjusted if the actual cost of the Prime Cost item has increased or decreased from the Prime Cost Sum in the TENDER.

6. Where Provisional Cost Sums for portions of THE WORK are included in the Schedule of Prices, only actual expenditures made upon the written authority of the OWNER, shall be paid out of these Provisional Cost Sums, and if the Provisional Cost Sum is not sufficient to cover THE WORK, then the CONTRACT PRICE shall be increased, and if the Provisional Cost Sum is greater than required for THE WORK, the CONTRACT PRICE shall be decreased.
7. Where a Contingency Allowance is included in the Schedule of Prices, only actual expenditures for increases in the quantities and changes in THE WORK, made upon the written authority of the OWNER, will be paid out of such allowance, and the CONTRACT PRICE will be changed in the amount by which the Contingency Allowance either exceeds or is exceeded by such expenditures.
8. Any equivalent alternatives used in this TENDER shall receive a final detailed review at the time of submission of shop drawings, and if an equivalent alternative is rejected at that time, the CONTRACTOR shall provide the item as originally specified at no change in the CONTRACT PRICE.
9. The estimated quantities of work are approximate only and are subject to increase or decrease, and whether the quantities are increased or decreased, the unit prices stated in the Schedule of Prices shall apply, and the CONTRACT PRICE shall be adjusted accordingly.
10. If a discrepancy is found between a Unit Price and an Amount, the Unit Price shall be considered as representing the intention of the CONTRACTOR, and the OWNER will recalculate the Amount. The addition of the Amounts will be corrected and a corrected TENDER Amount and CONTRACT PRICE will be established.

If a discrepancy is found between the sum of the corrected Amounts and the Tender Price shown, the sum of Amounts, as corrected shall be deemed to represent the intent of the Tenderer.
11. If a discrepancy is found between a Lump Sum Price and the corresponding Breakdown Prices, the Lump Sum Price shall be considered as representing the intention of the CONTRACTOR.

T-5 Schedule of Prices

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ARTICLE A-4 CONTRACT PRICE

The *Schedule of Prices* forms the basis for determining the *Contract Price*. Quantities for *Unit Price* items in the 4.1 *Schedule of Prices* are estimated.

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
SCHEDULE 1 - SITE GRADING					
1.1 GENERAL REQUIREMENTS - SG					
1.1.1	Mobilization/Demobilization	LS	1		
1.1.2	Hydrovac Locates	CA	1	\$2,500.00	\$2,500.00
1.1.3	ECO Plan & Implementation	LS	1		
TOTAL ITEM 1.1					
1.3 EARTHWORKS					
1.3.1	Topsoil Stripping				
a)	To Stockpile	m ³	15,000		
1.3.2	Common Excavation				
a)	Onsite Cuts/Fills 100% SPD on fills >1.0m	m ³	4,500		
d)	Onsite Cuts/Fills 98% on fills <1.0m	m ³	41,000		
1.3.3	Miscellaneous Grading				
a)	Topsoil 250mm depth	m ²	40,000		
b)	Fine Grade and Seed	m ²	40,000		
c)	Site Vegetation cleanup and truck dump leveling	CA	1	\$25,000.00	\$25,000.00
TOTAL ITEM 1.3					

TENDER SUMMARY - SCHEDULE 1 SITE GRADING

1.1 GENERAL REQUIREMENTS - SG

1.3 EARTHWORKS

SUBTOTAL - SCHEDULE 1 SITE GRADING

ARTICLE A-4 CONTRACT PRICE

The *Schedule of Prices* forms the basis for determining the *Contract Price*. Quantities for *Unit Price* items in the 4.1 *Schedule of Prices* are estimated.

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
SCHEDULE 2 - UNDERGROUND UTILITIES					
2.1 GENERAL REQUIREMENTS - UG					
2.1.1	Mobilization/Demobilization	LS	1		
2.1.2	Hydrovac Locates	CA	1	\$2,500.00	\$2,500.00
2.1.3	ECO Plan & Implementation	LS	1		
TOTAL ITEM 2.1					
2.2 STORM SEWER					
2.2.1	Trench Excavation, Backfill and Compaction 98%SPD				
a)	All depths (PVC)	m	207		
b)	All depths (Concrete)	m	300		
2.2.2	Unsuitable Pipe Foundation (Provisional)	m ³	100		
2.2.3	Storm Pipe and Bedding				
a)	300mm Diameter PVC DR35	m	56		
b)	375mm Diameter PVC UR	m	18		
c)	450mm Diameter PVC UR	m	20		
d)	525mm Diameter PVC UR	m	113		
e)	675mm Diameter C76 - Class IV	m	180		
f)	750mm Diameter C76 - Class IV	m	105		
g)	1050mm Diameter C76 - Class IV	m	15		
2.2.4	Storm Manholes				
a)	1200mm dia Type 5A (5ea)	vm	17.7		
b)	1200mm dia Type 1S (2ea)	vm	8.5		
c)	1200mm dia Control Structure	LS	1		
d)	175mm Orifice Plate (provisional)	LS	1		
2.2.5	Catch Basins				
a)	Type K-1	ea	3		
b)	Type SK-7	ea	2		
c)	Type K-1 1200mm dia CB Manhole	ea	1		
2.2.6	Catch Basin Leads, Excavation, Bedding, Backfill and Compaction 98%SPD				
a)	250mm	m	40		
b)	300mm	m	5		

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
2.2.7 Tie-Ins					
a)	Tie to Existing 750 Outlet, remove & dispose pipe, outlet and rip rap as noted	ea	1	_____	_____
b)	Tie to Existing 525 Outlet, remove & dispose manhole, pipe, outlet and rip rap as noted	ea	1	_____	_____
2.2.8 Flush and Video Inspection @ CCC					
		m	507	_____	_____
2.2.9 Inlets/Outlets					
a)	Class 1M Rip Rap & geotextile for 675 & 1050 end of pipe	m ²	100	_____	_____
c)	300mm Inlet c/w Class 1M Rip Rap & geotextile	ea	1	_____	_____
d)	300mm Outfall c/w Class 1M Rip Rap & geotextile	ea	1	_____	_____
e)	5ft Page Wire Fence	m	340	_____	_____
TOTAL ITEM 2.2					_____
2.3 SANITARY SEWER					
2.3.1 Trench Excavation, Backfill and Compaction 98%SPD					
a)	All depths (PVC)	m	359	_____	_____
2.3.2 Unsuitable Pipe Foundation (Provisional)					
		m ³	100	_____	_____
2.3.3 Sanitary Pipe and Bedding					
a)	200mm Diameter PVC SDR 35	m	216	_____	_____
b)	250mm Diameter PVC SDR 35	m	130	_____	_____
c)	100mm Diameter HDPE	m	63	_____	_____
2.3.4 Sanitary Manholes					
a)	1200mm dia Type 5A (6ea)	vm	18	_____	_____
2.3.5 Tie-Ins					
a)	Tie to existing stub	ea	2	_____	_____
2.3.6 Flush and Video Inspection @ CCC					
		m	300	_____	_____
2.3.7 Insulation 50mm of HI-40					
		m ²	136	_____	_____
TOTAL ITEM 2.3					_____

SCHEDULE OF PRICES

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
2.4 WATER MAINS					
2.4.1	Trench Excavation, Backfill and Compaction 98%SPD				
a)	0.0m - 4.0m depth (PVC)	m	393	_____	_____
2.4.2	Unsuitable Pipe Foundation (Provisional)	m ³	100	_____	_____
2.4.3	Water Mains and Bedding				
a)	150mm Diameter PVC DR18 Class 150	m	17	_____	_____
b)	200mm Diameter PVC DR18 Class 150	m	183	_____	_____
c)	250mm Diameter PVC DR18 Class 150	m	193	_____	_____
2.4.4	Hydrants & Valves				
a)	Fire Hydrant	ea	3	_____	_____
b)	150mm Diameter Gate Valve	ea	3	_____	_____
c)	200mm Diameter Gate Valve	ea	4	_____	_____
d)	250mm Diameter Gate Valve	ea	3	_____	_____
e)	Temporary Flushing Point	ea	4	_____	_____
2.4.5	Tie-Ins				
a)	Tie to existing plug (Remove ex Hydrant & Reducer)	ea	2	_____	_____
2.4.6	Temporary Water Supply (if required)	LS	1	_____	_____
TOTAL ITEM 2.4					_____
2.5 SERVICE CONNECTIONS					
2.5.1	Trenching, excavation, backfill, bedding and compaction 98%SPD of SAN & WTR	m	242	_____	_____
2.5.2	Unsuitable Pipe Foundation (Provisional)	m ³	30	_____	_____
2.5.3	150mm PVC SDR28 Sanitary service includes all fittings, connection to main/manhole, plug and marker post	m	230	_____	_____
2.5.5	25mm Class 160 P.E.3406 water service	m	212	_____	_____
2.5.6	25mm corporation cock including direct tap	ea	14	_____	_____
2.5.7	25mm curb stops c/w chair, service box, and marker post	ea	14	_____	_____
TOTAL ITEM 2.5					_____

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
2.6 UTILITY DUCTS					
2.6.1	Utility Ducts				
a)	103mm Dia PVC DB2	m	200	_____	_____
b)	150mm Dia PVC DR28	m	25	_____	_____
2.6.2	Trenching, excavation, backfill and compaction 98%SPD for utility ducts.	m	50	_____	_____
TOTAL ITEM 2.6					_____

TENDER SUMMARY - SCHEDULE 2 UNDERGROUND UTILITIES

2.1	GENERAL REQUIREMENTS - UG				_____
2.2	STORM SEWER				_____
2.3	SANITARY SEWER				_____
2.4	WATER MAINS				_____
2.5	SERVICE CONNECTIONS				_____
2.6	UTILITY DUCTS				_____
SUBTOTAL - SCHEDULE 2 UNDERGROUND UTILITIES					_____

ARTICLE A-4 CONTRACT PRICE

The *Schedule of Prices* forms the basis for determining the *Contract Price*. Quantities for *Unit Price* items in the 4.1 *Schedule of Prices* are estimated.

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
SCHEDULE 3 - SURFACE IMPROVEMENTS					
3.1 GENERAL REQUIREMENTS - SF					
3.1.1	Mobilization/Demobilization	LS	1		
3.1.2	Hydrovac Locates	CA	1	\$2,500.00	\$2,500.00
3.1.3	ECO Plan & Implementation	LS	1		
TOTAL ITEM 3.1					
3.2 ROADWAY BASE					
3.2.1	Excavation				
a)	Road Coring (500m free haul and level material)	m ³	1,075		
b)	Road Coring cast and spread	m ³	1,075		
3.2.2	Subgrade Preparation				
a)	Roadway Geotextile - Nilex 2002	m ²	4,750		
3.2.3	Granular Subbase				
a)	250mm depth - 75mm Minus	m ²	1,775		
b)	300mm depth - 75mm Minus	m ²	2,965		
3.2.4	Granular Base Course				
a)	150mm depth - 20mm minus	m ²	3,835		
b)	250mm depth - 20mm minus Turn around	m ²	895		
TOTAL ITEM 3.2					
3.3 ROADWAY ASPHALT					
3.3.1	Asphalt Hot Mix - Base Course				
a)	60mm Collector	m ²	2,565		
c)	75mm Local	m ²	835		
3.3.2	Asphalt Hot Mix - Surface Course (FAC)				
a)	40mm Collector	m ²	2,565		
TOTAL ITEM 3.3					

Town of Blackfalds
 Aspen Lakes West Phase 2
 Surface Improvements

SCHEDULE OF PRICES

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
3.4 CONCRETE					
3.4.1	Curb & Gutter				
a)	250mm Standard Curb & Gutter	m	370	_____	_____
b)	Additional for winter concrete (provisional)	m	370	_____	_____
3.4.2	Monolithic Sidewalk				
a)	1.50m Rolled Monowalk	m	286	_____	_____
b)	1.50m reinforced mono lane Crossing	m	14	_____	_____
c)	Additional for winter concrete (provisional)	m	300	_____	_____
3.4.3	Separate Sidewalk				
a)	1.50m Separate Walk	m	375	_____	_____
b)	1.50m Reinforced Separate Walk	m	36	_____	_____
c)	Additional for winter concrete (provisional)	m	411	_____	_____
3.4.4	Concrete Lane Apron	m ²	135	_____	_____
	Additional for winter concrete (provisional)	m ²	135	_____	_____
*All concrete items to include crushed gravel base, and berm preparation. Sub base gravel covered under item 3.2.3					
TOTAL ITEM 3.4					_____
3.5 LANES					
3.5.1	Lanes				
a)	Lane Coring (Cast and Spread on Lots)	m ³	120	_____	_____
b)	250mm depth - 20mm minus	m ²	395	_____	_____
c)	Post & Cable Fence	m	40	_____	_____
TOTAL ITEM 3.5					_____
3.7 SIGNAGE & PAVEMENT MARKINGS					
3.7.1	Signage & Traffic Controls				
a)	Supply and Install Sign Post	ea	4	_____	_____
b)	Supply and Install Traffic Sign	ea	4	_____	_____
TOTAL ITEM 3.7					_____

SCHEDULE OF PRICES

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
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TENDER SUMMARY - SCHEDULE 3 SURFACE IMPROVEMENTS

3.1 GENERAL REQUIREMENTS - SF _____

3.2 ROADWAY BASE _____

3.3 ROADWAY ASPHALT _____

3.4 CONCRETE _____

3.5 LANES _____

3.5 SIGNAGE & PAVEMENT MARKINGS _____

SUBTOTAL - SCHEDULE 3 SURFACE IMPROVEMENTS _____

ARTICLE A-4 CONTRACT PRICE

The *Schedule of Prices* forms the basis for determining the *Contract Price*. Quantities for *Unit Price* items in the 4.1 *Schedule of Prices* are estimated.

Item No.	Description of Work	Unit of Measure	Est. Quantity (EQ)	Unit Price (UP)	Amount (EQ x UP)
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TENDER SUMMARY

TENDER SUMMARY - SCHEDULE 1 SITE GRADING _____

TENDER SUMMARY - SCHEDULE 2 UNDERGROUND UTILITIES _____

TENDER SUMMARY - SCHEDULE 3 SURFACE IMPROVEMENTS _____

SUBTOTAL

ADD CONTINGENCY 10% _____

TOTAL CONTRACT AMOUNT

ADD GST 5% _____

TOTAL CONTRACT AMOUNT (including GST)

T-6 Schedule of Completions

1. The CONTRACTOR offers to begin THE WORK within the period specified below. Completion includes all clean-up and rectification of all deficiencies.

The WORK for all schedules shall be completed by November 30, 2024; except for top lift paving to be completed in 2026.

- Once the detailed construction schedule is submitted and approved by the ENGINEER, the CONTRACTOR shall adhere to the schedule and do whatever is necessary to keep his operation(s) to the approved schedule.
 - Upon the ENGINEER'S request, the CONTRACTOR shall submit an updated construction schedule. The construction schedule shall indicate all construction activities completed and demonstrate how the project will be brought back on schedule.
 - Other conditions causing delays which cannot be reasonably controlled by the CONTRACTOR may result with a schedule extension. The request for a schedule extension should be provide to the Engineer within one week of experiencing the delay and provision of the extension will be at the sole discretion of the Engineer.
2. Time is of the Essence in this CONTRACT, and in the event that THE WORK is not completed within the period named above, the CONTRACTOR shall be responsible for all damages accruing to the OWNER due to late completion. Liquidated damages as identified in Section 00500 Item 3 shall be applied in the event of delayed completion.

T-7 Schedule of Addenda

1. The CONTRACTOR states that he has received the following ADDENDA which have been considered and taken into account in determining the Prices tendered in the Schedule of Prices. The ADDENDA are issued by or in behalf of the Owner.

Addendum Number	Date Issued	Number of Pages

T-8 Performance Guarantee and Insurance Certificate

1. After receipt of Notice of Acceptance, the CONTRACTOR shall provide a Performance Bond in the amount of 50% of the CONTRACT PRICE and a standard Labour and Materials Payment Bond in the amount of 50% of the CONTRACT PRICE and the Bonds shall remain in effect for the duration of construction and the Warranty Period.
2. The bonds shall be in a form that is acceptable to the OWNER and shall be supplied by an agency that is acceptable to the OWNER and that is licensed in the jurisdiction in which THE WORK is located.
3. In the event that a Security Deposit is provided in lieu of a Performance Bond, the Security Deposit shall be retained to the end of the Warranty Period.
4. After receipt of Notice of Acceptance, the CONTRACTOR shall provide the required Insurance Certificate.
5. The costs of bonds and insurance shall be borne by the CONTRACTOR.
6. No Progress Payments shall be made until the required Bonds or Security Deposit and Insurance Certificate have been delivered to the OWNER.

T-9 Agreement

1. The CONTRACTOR shall sign the AGREEMENT within seven (7) calendar days after receipt of the Notice of Acceptance.

T-10 Notice to Proceed

1. After acceptance, the OWNER will issue a "Notice to Proceed" and the date specified in this Notice shall be the date of commencement entered into the AGREEMENT.
2. The CONTRACTOR shall not enter onto the WORKSITE nor commence work before the date of commencement specified in the "Notice to Proceed."

T-11 Period of Irrevocability

This TENDER is irrevocable for 90 calendar days after the TENDER closing date.

TENDER Closing Date: **2:00pm Thursday August 8th, 2024 local time.**

T-12 Signatures

Name of CONTRACTOR

Legal Status Corporation, Partnership or Sole Ownership

Correct Mailing Address

Names and Addresses of Corporation Officers or Members of the Organization:

Name	Address	Position
------	---------	----------

Name	Address	Position
------	---------	----------

Name	Address	Position
------	---------	----------

SIGNED, SEALED AND DELIVERED BY:

Signature of Witness

Signature of CONTRACTOR

Name

Address

(Corporate
(
(
(Seal Here

END OF DOCUMENT 00304

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1. Content of Supplementary Tender Forms

.1 The Schedules in the Supplementary Tender Forms are offered for information and are subject to review by the OWNER, who may require these Schedules to be modified before the award of the CONTRACT. Modifications may be required for good cause, including but not limited to:

- unbalanced breakdown prices.
- unacceptable SUBCONTRACTORS or Suppliers and Manufacturers.
- unacceptable Force Account Rates.
- unacceptable provisional unit prices.
- unacceptable supervisory personnel.
- other causes.

The CONTRACTOR warrants that all of the information given in these Schedules is current and correct. Changes to any schedule in the supplementary Tender Forms, agreed upon by the OWNER and the CONTRACTOR, after closing of the Tender Period but before Contract Award shall not in any way affect the Validity of the Tender.

.2 Upon acceptance by the OWNER, all Schedules in the Supplementary Tender Forms shall become a part of the CONTRACT DOCUMENTS.

.3 Table of Contents:

2	SCHEDULE OF BREAKDOWN PRICES
3	SCHEDULE OF UNIT PRICES FOR PROVISIONAL WORK ITEMS
4	SCHEDULE OF FORCE ACCOUNT RATES
5	SCHEDULE OF ALTERNATIVE PROPOSALS
6	SCHEDULE OF CONTRACTOR'S QUALIFICATIONS
7	SCHEDULE OF EQUIPMENT
8	SCHEDULE OF CONTRACTOR'S SUPERVISORY PERSONNEL
9	SCHEDULE OF SUBCONTRACTORS
10	SCHEDULE OF MANUFACTURERS / SUPPLIERS OF MATERIAL AND PRODUCT

2. Schedule of Breakdown Prices

- .1 The CONTRACTOR offers the following Schedule of Breakdown Prices to be used as a basis for progress payments. The CONTRACTOR understands that the OWNER may refuse to accept any breakdown which he considers to be unbalanced and may require an adjustment to correct any such imbalance, without changing the Total Contract Price tendered.

Item Number	Description and/or Specification	Lump Sum Amount

3. Schedule of Unit Prices for Provisional Work Items

- .1 The CONTRACTOR offers the following Schedule of Unit Prices to be used as information for the specific provisional work items listed. Actual expenditures for provisional work made upon the written authority of the OWNER will be paid out of the Provisional Cost Sum changes negotiated in the Unit Prices shall not change the provisional cost sum tendered.

Item No.	Description	Unit	Unit Price

4. Schedule of Force Account Rates

- .1 The CONTRACTOR offers to do force account work for the following rates for personnel and equipment. Equipment rates include operator, fuel, maintenance, profit and overhead. Personnel rates include payroll cost of labour, all payroll burdens, room and board, if applicable, overhead and profit. The cost of superintendents, time keepers, and other administrative and supervisory personnel and their vehicles are included in overhead. The cost of Bonding and Insurance is included in overhead.
- .2 The CONTRACTOR understands that the OWNER may review these Force Account Rates and require changes for good cause.

EQUIPMENT:

Description and Make	Model and Size	Hourly Rate

PERSONNEL:

Occupation Or Trade	Hourly Rate	Overtime Rate

5. Schedule of Alternative Proposals

- .1 The CONTRACTOR offers the following alternative units of PRODUCT, MATERIAL or methods of doing THE WORK, and offers to increase or decrease the Price as stated for each unit of PRODUCT, MATERIAL or methods of doing THE WORK, and to increase or decrease the CONTRACT PRICE. The increase or decrease includes allowance for the cost of making any adjustments to THE WORK which may be required in order to make the proposed alternative fit into THE WORK as originally specified. The tendered increase or decrease in price shall be added to or subtracted from the price tendered for the work as originally specified.
- .2 If the OWNER accepts an Alternative Proposal, as offered, or after negotiation, the increase or decrease in the price tendered for the work as originally specified, shall be implemented by a CHANGE ORDER after Award of the CONTRACT and the CONTRACT price shall then be changed.
- .3 Alternative Proposals not specifically accepted by the OWNER are deemed to be rejected.

Item No.	Specifications Section No.	Original Item	Tendered Price	Alternative Item	Alternative Price	Price Difference

6. Schedule of Contractor's Qualifications

.1 The CONTRACTOR states that the following is a true account of his qualifications and experience on work similar to THE WORK.

Work	Year	Construction Cost	Owner/Engineer

7. Schedule of Equipment

.1 The CONTRACTOR states that the equipment listed or its equivalent shall be available for THE WORK on this CONTRACT.

Description of Unit	Size or Capacity	Condition	Age	Present Location

8. Schedule of Contractor's Supervisory Personnel

.1 The CONTRACTOR states that the following supervisory personnel shall be employed on this CONTRACT.

Name	Position	Experience

9. Schedule of Subcontractors

.1 The CONTRACTOR states that the following SUBCONTRACTORS shall be utilized on this CONTRACT:

.2 The CONTRACTOR agrees that if a named SUBCONTRACTOR is not acceptable to the OWNER, the CONTRACTOR shall name an alternative SUBCONTRACTOR, which is acceptable to the OWNER, before Award of the CONTRACT.

Items of Work	Subcontractor

10. Schedule of Manufacturers/Suppliers of Material and Product

.1 The CONTRACTOR states that the following MANUFACTURERS/SUPPLIERS of MATERIAL and PRODUCT shall be utilized for the major supply items on this CONTRACT.

Item	Supplier	Manufacturer

.2 The CONTRACTOR agrees that, if a named MANUFACTURER/SUPPLIER is not acceptable to the OWNER, the CONTRACTOR shall name an alternative, acceptable to the OWNER, before Award of the CONTRACT.

END OF DOCUMENT 00400

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1. The Parties to the Contract and the Date of the Agreement

THIS AGREEMENT made in triplicate on the _____ day of _____, _____
by and between:

Town of Blackfalds

Hereinafter called the "OWNER" and

Hereinafter called the "CONTRACTOR"

The OWNER and the CONTRACTOR agree as follows:

2. Scope of the Work

- .1 The CONTRACTOR agrees to furnish all of the MATERIAL and PRODUCT (except as otherwise specified to be supplied by others) together with all of the equipment, labour and transportation necessary to perform entirely THE WORK as described in the CONTRACT DOCUMENTS entitled:

Aspen Lakes West Phase 2

The CONTRACT DOCUMENTS have been prepared by Stantec Consulting Ltd. and include all documents listed in the "Contents of the Contract Documents." The CONTRACT DOCUMENTS are an integral part of this AGREEMENT.

- .2 In preparing these Contract Documents, Stantec Consulting Ltd. has relied on information or work product provided by the Owner or by Others on behalf of the Owner, and Stantec Consulting Ltd. does not warrant or guarantee the adequacy or reliability of such information or work product.

3. Completion Dates

- .1 THE WORK to be performed under this CONTRACT shall be commenced on the date specified in the "Notice to Proceed" or date of the pre-construction meeting, whichever comes first. Components shall be completed and THE WORK in its entirety shall be fully completed, including clean-up and rectification of all deficiencies, within the time allotments specified in Document 00304, Paragraph T-6.1, "Schedule of Completions", which paragraph is incorporated herein by reference.
- .2 Time is of the essence of this AGREEMENT and in the event that THE WORK is not completed as specified, the CONTRACTOR shall become liable for any added engineering expense and any other costs incurred as damages to the OWNER. The amount of such damages may be deducted from any monies due the CONTRACTOR.

4. Payment

- .1 The OWNER shall pay the CONTRACTOR in Canadian currency for the performance of the CONTRACT at the Prices named in the TENDER, and subject to the conditions set forth in the CONTRACT DOCUMENTS.

5. Contract Price

- .1 The CONTRACT PRICE shall be \$_____ (excl. GST) which shall be subject to additions or subtractions as provided in the CONTRACT DOCUMENTS.

6. Performance Guarantees

- .1 The CONTRACTOR hereby deposits with the OWNER a Performance Bond in the amount of 50% of the CONTRACT PRICE and a Labour and Materials Payment Bond in the amount of 50% of the CONTRACT PRICE.

7. Written Notice

- .1 Written notice shall be deemed to have been duly served if delivered in person to the individual, or to a member of the firm, or to an officer of the corporation for which it is intended; or sent by double registered mail to its business address.

- .2 Written Notice must be served to:

The OWNER:

Town of Blackfalds
5018 Waghorn Street
Blackfalds, AB T0M 0J0

The CONTRACTOR:

8. Signatures

.1 IN WITNESS WHEREOF the Parties hereto have executed this AGREEMENT, the day and year first above written.

SIGNED, SEALED, AND DELIVERED
in the presence of:

Witness to the Signature
of the OWNER

Town of Blackfalds

1. _____

Address:

1. _____

Title:

Address: 5018 Waghorn Street
Blackfalds, AB
T0M 0J0

(SEAL)

2. _____

Address:

2. _____

Title:

Address: 5018 Waghorn Street
Blackfalds, AB
T0M 0J0

Witness to the Signature
of the CONTRACTOR

1. _____

Address:

1. _____

Title:

Address: _____

(SEAL)

2. _____

Address:

2. _____

Title:

Address: _____

END OF DOCUMENT 00500

STANTEC CONSULTING LTD.

CERTIFICATE OF INSURANCE

This is to certify that the insurances as described herein have been arranged for the insured named herein on whose behalf this Certificate is executed, and we hereby certify that such insurances are in full force and effect.

NAME OF INSURED

ADDRESS OF INSURED

INSURANCE COVERAGE PROVIDED

1. COMPREHENSIVE GENERAL LIABILITY INSURANCE covering property damage and contractual liability.

Policy No.	_____	Insurer	_____
Date Effective	_____	Date of Expiration	_____
Limits of Liability	_____	Each Person	_____
		Each Occurrence	_____
		Aggregate Cover	_____
		Inclusive Limits	_____

2. AUTOMOBILE INSURANCE covering all vehicles owned, operated, leased or hired.

Policy No.	_____	Insurer	_____
Date Effective	_____	Date of Expiration	_____
Limits of Liability	_____	Each Person	_____
		Each Accident	_____
		Inclusive Limits	_____

3. COURSE OF CONSTRUCTION INSURANCE either All Risks Builders Risk Policy or (Specify)

Policy No.	_____	Insurer	_____
Date Effective	_____	Date of Expiration	_____
Limits of Liability	_____		

If any of the policies described herein are changed in any manner, for any reason during the period of coverage as stated herein, so as to effect this Certificate, or if any of the policies are cancelled or terminated, 15 days written notice shall be given to the Owner and to the Engineer prior to such change, cancellation or termination becoming effective.

This Certificate is executed and issued to the Owner the day and date written below.

OWNER: Town of Blackfalds

Address: 5018 Waghorn Street
Blackfalds, AB T0M 0J0

DATE:

NAME OF AGENT OR BROKER:

Address:

NAME OF AUTHORIZED OFFICIAL:

SIGNATURE OF AUTHORIZED OFFICIAL: _____

4. WRAP-UP LIABILITY INSURANCE covering all Subcontractors, Suppliers, and the OWNER, and its CONSULTANTS and SUBCONSULTANTS (if required by the CONTRACT).

END OF SECTION 00600

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1. Definitions

.1 The contents of the CONTRACT DOCUMENTS are limited to:

Contract Forms:

- the TENDER Forms
- the Supplementary TENDER Forms
- Notice of Acceptance
- the AGREEMENT
- the Performance Bond
- the Labour and Materials Payment Bond
- the Certificate of Insurance;

Conditions of the Contract:

- the General Conditions
- the Supplementary General Conditions;

Drawings;

Specifications;

Appendices;

Addenda;

Field Orders;

Change Orders.

.2 The following definitions shall apply throughout the CONTRACT DOCUMENTS:

- .1 The term ENGINEER shall mean Stantec Consulting Ltd. or such other engineering firm as may from time to time be duly authorized and appointed in writing by the OWNER to act for the purposes of this CONTRACT within the authority and responsibility defined in the CONTRACT DOCUMENTS.
- .2 The term OWNER REPRESENTATIVE shall mean an employee of the OWNER or an agent of the OWNER, specifically designated in writing by the OWNER to have special responsibilities and authorities as set out in the CONTRACT DOCUMENTS.
- .3 The term THE WORK shall mean the entirety of the work described in these contract documents, including MATERIAL, PRODUCT, labour, PLANT, transportation and other facilities and items ancillary to the foregoing required to furnish and perform the CONTRACT by the CONTRACTOR in accordance with the intent of the design as expressed in the CONTRACT DOCUMENTS.

- .4 The term THE PROJECT shall mean the total construction contemplated by the OWNER, of which THE WORK may be the whole or only a part.
- .5 The term WORKSITE shall mean the spatial limits within which THE WORK is located, during the period of performance of THE WORK from the date of Notice to Proceed to the date of the CONSTRUCTION COMPLETION CERTIFICATE.
- .6 The term CONTRACTOR'S SUPERINTENDENT shall mean an employee or representative of the CONTRACTOR who is specifically authorized to be in full charge of the CONTRACTOR's operations at the WORKSITE and is so designated in writing by the CONTRACTOR to the OWNER.
- .7 The term SUBCONTRACTOR shall mean a person neither contracting with nor employed directly by the OWNER for doing any of THE WORK, but contracting with or being employed directly by the CONTRACTOR, provided however that the term SUBCONTRACTOR shall not include one who merely supplies MATERIAL or PRODUCT for THE WORK to the CONTRACTOR.
- .8 The term OTHER CONTRACTOR shall mean any person, firm or corporation employed by the OWNER on the site of THE PROJECT other than through the CONTRACTOR.
- .9 The term CONTRACT PRICE shall mean the total amount of the CONTRACT as defined in the AGREEMENT, adjusted during the course of THE WORK as required by these CONTRACT DOCUMENTS.
- .10 Certificates
- a) The term PROGRESS PAYMENT CERTIFICATE shall mean a claim for payment for work done, prepared by the CONTRACTOR, reviewed and certified by the ENGINEER, upon which payment on account is made periodically by the OWNER.
- b) The term CONSTRUCTION COMPLETION CERTIFICATE shall mean a certificate issued by the ENGINEER upon full completion of THE WORK, including cleanup and rectification of all deficiencies.
- c) The term FINAL CERTIFICATE shall mean the certificate issued by the ENGINEER on behalf of the OWNER or by the OWNER, only at the request of the CONTRACTOR, after expiry of the WARRANTY PERIOD, provided that the conditions of the CONTRACT have been met.
- .11 The term WARRANTY PERIOD shall mean the period beginning on the date specified in the "CONSTRUCTION COMPLETION CERTIFICATE," and ending after all conditions of the CONTRACT have been met, and the specified period has expired.
- .12 The term FIELD ORDER (F.O.) shall mean a written communication from the OWNER, or from the ENGINEER on behalf of the OWNER, to the

CONTRACTOR, clarifying the CONTRACT DOCUMENTS, issuing additional instructions, requesting information, or ordering a change in THE WORK within the general scope of THE WORK.

- .13 The term CHANGE ORDER shall mean a written communication issued by the OWNER, with the agreement of the CONTRACTOR, setting forth the authorized amount and time to be added to or deducted from the CONTRACT PRICE on account of changes in THE WORK described by a NOTICE OF CONTEMPLATED CHANGE and subsequent correspondence.
 - .14 The term NOTICE OF CONTEMPLATED CHANGE (NCC) shall mean a written communication from the ENGINEER, on behalf of the OWNER, describing a change in THE WORK and requesting a quotation, complete with a narrative description of the details of the work to be done by the CONTRACTOR to achieve the intent of the contemplated change.
 - .15 The term QUOTATION FOR CONTEMPLATED CHANGE (QCC) shall mean a written proposal by the CONTRACTOR to the OWNER for doing the work required to achieve the contemplated change, including both cost and time implications for doing the work.
 - .16 The term PLANT shall mean collectively all tools, implements, machinery, vehicles, structures, equipment and other things required for the execution of THE WORK, and provided by the CONTRACTOR.
 - .17 The term MATERIAL shall mean collectively all materials and commodities required to be furnished under the CONTRACT for THE WORK except those specifically provided for otherwise in the CONTRACT DOCUMENTS.
 - .18 The term PRODUCT shall mean collectively machinery or assembled components specifically provided for THE WORK and standard PRODUCT such as motors, pumps, etc. designed and produced for a specific use.
 - .19 The term "PROVIDE" shall mean supply and install.
 - .3 Words importing the singular only shall also include the plural and vice-versa, where the context requires.
 - .4 MATERIAL, PRODUCT, PLANT or methods described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized meaning.
2. Agreement
- .1 The AGREEMENT shall be signed in triplicate by the OWNER and the CONTRACTOR.

3. Drawings and Instructions

- .1 The OWNER will furnish to the CONTRACTOR 1 working copies of the CONTRACT DOCUMENTS.
- .2 A current set of the complete CONTRACT DOCUMENTS, in good order, shall be kept at the WORKSITE and shall be available there to the ENGINEER and the OWNER.
- .3 All drawings, specifications and copies thereof furnished by the ENGINEER are his property. They shall not be used on other work and, with the exception of the signed CONTRACT DOCUMENT set, are to be returned to the ENGINEER on request, upon completion of THE WORK.
- .4 All models prepared by the ENGINEER for the OWNER's use and paid for by the OWNER, are the property of the OWNER, and not the CONTRACTOR, unless specifically agreed otherwise.

4. Reference Points and Layout

- .1 The ENGINEER will establish base lines and reference points, for the location of principal components of THE WORK, as well as bench marks in reasonable proximity to THE WORK.
- .2 The CONTRACTOR shall be responsible for protection and preservation of bench marks, reference points and stakes, and legal survey pins, and in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.
- .3 The CONTRACTOR shall provide all detailed layout of dimensions, locations, and elevations of THE WORK from the base lines, reference points, and bench marks set by the ENGINEER.
- .4 The CONTRACTOR shall not proceed with THE WORK until he has received from the ENGINEER such base lines, reference points, elevations, and other points and instructions as are required for the execution of THE WORK.
- .5 The CONTRACTOR shall, before commencing work at any point, satisfy himself as to the meaning and correctness of all stakes and instructions. No claims shall be considered for any allowance based on alleged inaccuracies, failure to read reference points correctly, or failure to interpret instructions correctly.
- .6 If the CONTRACTOR, in the course of executing THE WORK, finds any discrepancy between the drawings and the physical conditions of the locality, or any errors, omissions or discrepancies in drawings or in the layout as given by points and instructions, he shall inform the OWNER immediately in writing, and the OWNER or the ENGINEER shall promptly verify the same and issue appropriate instructions. Any work done after discovery of errors, omissions or discrepancies, before further work is authorized, will be done at the CONTRACTOR'S risk.

5. The Engineer and the Contractor

- .1 The ENGINEER shall administer the CONTRACT and shall, in the first instance, be the interpreter of the CONTRACT and shall assess the adequacy of performance by the Parties.

The ENGINEER shall provide full time resident services at the WORKSITE and general engineering services for THE WORK.

The duties, responsibilities and limitations of authority of the ENGINEER are defined in the CONTRACT DOCUMENTS and they may not be changed except with the written consent of the OWNER, the CONTRACTOR and the ENGINEER. They are delegated to the ENGINEER by the OWNER.

- .2 The efforts of the ENGINEER shall be directed to reviewing construction progress, providing interpretation of the CONTRACT DOCUMENTS, where required, and assisting in the expeditious carrying out of THE WORK.
- .3 The ENGINEER does not guarantee the CONTRACTOR's work nor undertake to check the quality and quantity of work on behalf of the CONTRACTOR. The ENGINEER is not responsible to the CONTRACTOR for discovering defects in THE WORK nor for advising the CONTRACTOR of defects in THE WORK.
- .4 The CONTRACTOR shall bring to THE WORK the expertise, skill and experience required for the execution of THE WORK.
- .5 During the course of execution of THE WORK, if the CONTRACTOR becomes aware of any error, discrepancy or omission in the drawings or the specifications, the CONTRACTOR shall immediately notify the ENGINEER in writing and request instructions. The CONTRACTOR shall not proceed any further with that portion of THE WORK until he has received such instructions in writing from the ENGINEER.

The ENGINEER may, by FIELD ORDER, put a "hold" on any portion of THE WORK while an error, discrepancy or omission, whether discovered by the CONTRACTOR or the ENGINEER, is investigated. Such a "hold" order shall not constitute a basis for a claim by the CONTRACTOR for delay, unless and until it critically affects the performance of THE WORK and the Schedule for Completion of THE WORK.

- .6 The CONTRACTOR shall have complete control of THE WORK and shall direct and supervise THE WORK to ensure conformance with the intent of design as expressed in the CONTRACT DOCUMENTS. The CONTRACTOR shall be solely responsible for construction means, methods, techniques, sequences and procedures, and for coordinating the various aspects of THE WORK under the CONTRACT. The CONTRACTOR shall have determined that THE WORK is constructable.
- .7 The CONTRACTOR shall have the sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities, and for the design and execution of methods required in their use.

When required by law or by the CONTRACT, the CONTRACTOR shall engage and pay for registered professional engineering personnel to perform the design of temporary facilities and methods of execution to ensure safety and satisfactory performance.

When required by the Specifications or drawings, the CONTRACTOR shall submit to the ENGINEER a written description and Drawings to show its proposed methods and means for doing certain specified items of THE WORK. These submissions are to be made to allow the ENGINEER on the OWNER's behalf to:

- a) determine the general conformance of the proposed means and methods with the intent of the design;
- b) determine whether there are or could be any serious effects of a permanent nature on THE WORK, the WORKSITE, or the contiguous area outside the Worksite.

The OWNER, or the ENGINEER in the OWNER's behalf may, but they are not obligated to, comment, give approval or withhold approval of the proposed means and methods.

The OWNER may stop the CONTRACTOR from implementing the proposed means and methods by issuing a FIELD ORDER.

- .8 The CONTRACTOR shall employ a competent CONTRACTOR'S SUPERINTENDENT who shall be in attendance at the WORKSITE while THE WORK is being performed. The CONTRACTOR'S SUPERINTENDENT shall be acceptable to the OWNER and shall not be removed or changed without good reason, and then only with the approval of the OWNER.

The CONTRACTOR'S SUPERINTENDENT shall represent the CONTRACTOR at the WORKSITE and additional instructions given to him by the ENGINEER shall be deemed to have been given to the CONTRACTOR.

- .9 Nothing contained in the CONTRACT DOCUMENTS shall be construed to form any contractual obligation between the ENGINEER and the CONTRACTOR.

6. Subcontractors

- .1 The CONTRACTOR shall preserve and protect the rights of the OWNER with respect to all work performed under the Contract and shall:
- a) Require all SUBCONTRACTORS to perform work in accordance with and subject to the terms and conditions of the CONTRACT;
 - b) Be as fully responsible to the OWNER for acts and omissions of SUBCONTRACTORS and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the CONTRACTOR;
 - c) Incorporate all terms and conditions of the CONTRACT DOCUMENTS into all Subcontract Agreements he enters into with his SUBCONTRACTORS, insofar as they are applicable.

.2 The CONTRACTOR shall employ those SUBCONTRACTORS proposed in the Schedule of SUBCONTRACTORS for portions of THE WORK designated and as accepted by the OWNER prior to Acceptance of the TENDER..

.3 Nothing contained in the CONTRACT DOCUMENTS shall create any contractual obligation between any SUBCONTRACTOR and the OWNER.

7. Other Contractors

.1 The OWNER reserves the right to let other contracts on the WORKSITE related to the Project and to do work with his own forces on the Project.

.2 The OWNER shall coordinate the work, insurance coverages, and compliance of OTHER CONTRACTORS with rules and procedures for the WORKSITE insofar as these affect THE WORK of this CONTRACT.

.3 The CONTRACTOR shall coordinate his work with that of OTHER CONTRACTORS and tie into works constructed by others as specified or shown in the CONTRACT DOCUMENTS.

.4 The CONTRACTOR shall report to the OWNER or the ENGINEER any apparent deficiencies in OTHER CONTRACTORS' work which would affect THE WORK of this CONTRACT as soon as they come to his attention and shall confirm such report in writing. Failure by the CONTRACTOR to so report shall invalidate any claims against the OWNER by reason of the deficiencies of OTHER CONTRACTORS' work except as to those of which the CONTRACTOR could not reasonably be aware.

8. Assignment

.1 Neither Party to the CONTRACT shall assign the CONTRACT or any portion thereof, nor any monies due to either Party, without the written consent of the other; which consent shall not be unreasonably withheld.

9. Indemnity

.1 The CONTRACTOR shall indemnify and hold harmless the OWNER, the ENGINEER, OTHER CONTRACTORS and any and all representatives or employees of the OWNER, from and against all third party actions, claims, demands or suits, or payments, losses, judgment or expenses arising out of or in consequence of the acts, omissions or negligence of the CONTRACTOR in performing THE WORK during the period of performance of THE WORK and during the Warranty Period.

.2 In the event of such a third party action, claim, demand or suit, the OWNER shall give written notice thereof to the CONTRACTOR and the CONTRACTOR shall thereupon defend against or otherwise dispose of the same, and shall pay any losses, judgments and expenses promptly after they are determined.

.3 If the CONTRACTOR fails, refuses or neglects to defend, or otherwise dispose of such third party action, claim, demand or suit, within reasonable time and within legal time constraints, the OWNER may dispose of such action, claim, demand or suit on such

terms as the OWNER, in his sole discretion, shall deem reasonable. The CONTRACTOR shall thereupon, and forthwith, pay to the OWNER the sums paid out by the OWNER and all reasonable costs incurred by the OWNER in disposing of the matter, including the OWNER'S legal costs on the Solicitor and Client basis.

- .4 The obligation of the CONTRACTOR to indemnify the OWNER shall not apply to liability arising out of acts, omissions or negligence of the OWNER, the ENGINEER, OTHER CONTRACTORS or any other representative or employee of the OWNER.

10. Dispute Resolution

- .1 The Engineer shall, in the first instance, interpret the CONTRACT and make any determinations for which he is responsible and which he is authorized to make under the CONTRACT. Should either the CONTRACTOR or the OWNER dispute the written interpretation or determination made by the ENGINEER in the first instance, that party shall, within six (6) calendar days of receiving the determination or interpretation, submit to the ENGINEER a written notice of his dispute setting out all of the relevant details.

- .2 Upon receipt of a Notice of Dispute, the ENGINEER shall immediately notify in writing the other party to the CONTRACT and provide to the other party a copy of the Notice of Dispute.

- .3 The OWNER and the CONTRACTOR shall, within six (6) calendar days of receiving such notification, review the dispute jointly and attempt a resolution by negotiation.

- .4 If the OWNER and the CONTRACTOR are not able to resolve the dispute by negotiation, they may, by mutual agreement, engage a mediator to assist them in further negotiation towards reaching a resolution.

- .5 Alternatively, or after mediation has failed, the OWNER and the CONTRACTOR may, by mutual agreement, submit the dispute to arbitration under the laws of the jurisdiction in which THE WORK is situated. Insofar as it is compatible with the law in the jurisdiction in which THE WORK is situated, the Recommended Procedures for Arbitration of Construction Disputes of the Canadian Construction Association, the most current edition, shall be followed. The arbitrator's decision shall be binding.

- .6 Alternatively, the CONTRACTOR or the OWNER may commence an action at law with respect to the dispute if it cannot be resolved by negotiation either with or without mediation.

Neither negotiation with or without mediation, nor arbitration, shall be conditions precedent to proceeding with an action at law.

- .7 If the dispute is not resolved promptly, the ENGINEER shall give instructions in writing to the CONTRACTOR to do such work or to take such actions or refrain from taking such actions as may be required to avoid delay, mitigate damage and continue the proper performance of THE WORK pending resolution of the dispute. The CONTRACTOR shall act promptly in accordance with such instructions and by so doing shall not jeopardize any claim he may have with respect to the dispute.

11. Delays

- .1 If the CONTRACTOR is delayed in the performance of THE WORK by weather, labour disputes, strikes or lock-outs of the CONTRACTOR'S forces, or delay by common carriers, the CONTRACTOR shall not be compensated for any additional costs thereby incurred, nor shall the completion dates be changed, because it is agreed that the CONTRACTOR is more competent than the OWNER to assess the probability and impact of these events. The CONTRACTOR'S forces in this context includes SUBCONTRACTORS and Suppliers and Manufacturers supplying or providing PRODUCTS or MATERIALS.
- .2 If the CONTRACTOR is delayed in the performance of THE WORK by failure of the OWNER to make decisions respecting THE WORK, late delivery of MATERIALS or PRODUCTS furnished by the OWNER, or acts or omissions of the OWNER, or by strikes or lock-outs of the OWNER'S forces, the CONTRACTOR shall be compensated for any additional costs thereby incurred, and the completion date, subject to paragraph 11.5 shall be changed. The amount of the compensation and the extent of change in completion date shall be determined in the first instance by the ENGINEER.
- .3 If the CONTRACTOR is delayed in performance of THE WORK by a Suspension of THE WORK Notice by the OWNER and if the period of suspension is thirty (30) calendar days or less, the CONTRACT time shall be extended by the period of suspension plus six (6) calendar days, subject to the condition of paragraph 11.5.
- .4 If the CONTRACTOR is delayed in the performance of THE WORK by a Stop Work Order issued by a court or other public authority, and provided that such Order was not issued as a result of any act or fault of the CONTRACTOR, or of anyone employed by him directly or indirectly, then the CONTRACTOR shall be entitled to claim compensation for additional costs thereby incurred, and the completion date, subject to paragraph 11.5, shall be changed. The amount of compensation and the extent of change in completion date shall be determined in the first instance by the ENGINEER.
- .5 If the Completion Date is changed in accordance with paragraphs 11.2, 11.3 or 11.4, then, with respect to the new Completion Date, time is of the essence.
- .6 The CONTRACTOR shall provide to the OWNER timely written notice of all delays for which it is the CONTRACTOR'S intention to claim either an extension of completion time or costs resulting from the delay or both.

12. Owner's Right To Do Work

- .1 If the CONTRACTOR should refuse or fail to supply adequate PRODUCT, MATERIAL, PLANT or workmanship for the scheduled performance of THE WORK, or neglect to prosecute THE WORK properly, or fail to perform any of the provisions of the CONTRACT, then the OWNER may give written notice to the CONTRACTOR and his Surety that the CONTRACTOR is in default of his contractual obligations, and instruct him to correct the default within five (5) working days.

- .2 If the correction of the default cannot be completed within the five (5) working days specified, the CONTRACTOR shall be considered to be in compliance with the OWNER'S instruction if he:
- a) Commences the correction of the default within the specified time; and
 - b) Provides the OWNER with an acceptable schedule for such correction; and
 - c) Completes the correction in accordance with such schedule.
- .3 If the CONTRACTOR fails to comply with the provisions of General Conditions 12.1 and 12.2, the OWNER may, without prejudice to any other right or remedy he may have, correct such default and may deduct the cost thereof from the payment then or thereafter due the CONTRACTOR. The ENGINEER shall, in the first instance, determine that both the corrective action and the amount subsequently charged to the CONTRACTOR are reasonable.

13. Owner's Right to Terminate the Contract

- .1 If the CONTRACTOR should:
- a) Be adjudged bankrupt, or make a general assignment for the benefit of creditors, or if a receiver is appointed on account of his insolvency; or
 - b) Fail to make sufficient payments due to his creditors for labour, PLANT, PRODUCT and MATERIAL used or reasonably required for use on or in THE WORK; or
 - c) Disregard laws or ordinances, or the ENGINEER'S instructions; or
 - d) Abandon THE WORK, or fail to adhere to THE WORK Schedule to such an extent that there is danger of failing to meet Completion dates; or
 - e) Otherwise violate the fundamental conditions of the Contract;

the OWNER shall, by written notice, instruct the CONTRACTOR to correct the default within five (5) working days. If the default is not corrected within five (5) working days, then the OWNER may, without prejudice to any other right or remedy he may have, terminate the CONTRACTOR'S right to continue THE WORK or terminate the CONTRACT.

- .2 If the OWNER terminates the CONTRACTOR'S right to continue with THE WORK or terminates the CONTRACT under the conditions set out above, and if the performance Warranty is unconditional, the OWNER shall be entitled to:
- a) Take possession of the premises, PRODUCT, MATERIAL and PLANT and utilize them to finish THE WORK by whatever method he may deem expedient but without undue delay or expense; and

- b) Withhold any further payments to the CONTRACTOR until THE WORK is finished; and
- c) Upon completion of THE WORK, determine the full cost of finishing THE WORK as certified by the ENGINEER, including compensation to the ENGINEER for his additional services and a reasonable allowance as determined by the ENGINEER to cover the cost of any corrections required under the WARRANTY PERIOD, and charge the CONTRACTOR the amount by which the full cost exceeds the unpaid balance of the CONTRACT PRICE; or if such cost of finishing THE WORK is less than the unpaid balance of the CONTRACT PRICE, pay the CONTRACTOR the difference; and
- d) On expiry of the WARRANTY PERIOD, charge the CONTRACTOR the cost of corrections required under the warranty.

The CONTRACTOR'S obligation under the CONTRACT as to the quality of that portion of THE WORK and warranty of that portion of THE WORK performed by the CONTRACTOR prior to termination of the CONTRACTOR'S right to continue with THE WORK shall continue in force after the termination.

- .3 If the CONTRACTOR has provided a Performance Bond, the OWNER shall have the option of:
 - a) Terminating the CONTRACTOR'S right to continue with THE WORK; or
 - b) Terminating the CONTRACT; or
 - c) Exercising the OWNER'S rights in accordance with conditions of the Performance Bond.

14. Suspension of the Work by the Owner

- .1 The OWNER may suspend the execution of THE WORK by giving written notice to the CONTRACTOR to that effect.
- .2 The CONTRACTOR, upon receiving such written notice, shall immediately suspend all operations except those necessary for the care and preservation of the portions of THE WORK already executed, and the WORKSITE.
- .3 During the period of suspension, the CONTRACTOR shall not remove from the WORKSITE any part of THE WORK or any MATERIAL, PRODUCT or PLANT without the written approval of the OWNER.
- .4 If the period of suspension is thirty (30) calendar days or less, the CONTRACTOR shall, upon expiry of the suspension, resume the execution of THE WORK and he shall be paid additionally all of his reasonable costs incurred because of the suspension. The additional costs shall be claimed by the CONTRACTOR and shall be verified by a determination of the ENGINEER in the first instance.

- .5 After thirty (30) calendar days, of suspension of THE WORK the OWNER at its sole option shall:
- a) Negotiate terms under which the CONTRACTOR shall continue with the execution of THE WORK and the CONTRACTOR shall then resume operations in accordance with the terms of that negotiation; or
 - b) Deem the Notice of Suspension to be a Notice of Termination of the CONTRACT. In the event of Termination, the CONTRACTOR shall be paid his reasonable costs incurred due to the suspension. The additional costs shall be claimed by the CONTRACTOR and verified in the first instance by a determination of the ENGINEER. The CONTRACTOR shall not have a claim for loss of profit on that portion of THE WORK not performed.

- .6 After thirty (30) calendar days of suspension of THE WORK, the CONTRACTOR shall be allowed to remove any or all of its PLANT from the WORKSITE without further approval from the OWNER.

15. Contractor's Right to Stop Work or Terminate the Contract

- .1 If the OWNER should be adjudged bankrupt, or makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of his insolvency, the CONTRACTOR may, without prejudice to any other right or remedy he may have, by giving the OWNER five (5) days written notice, terminate the CONTRACT.
- .2 If THE WORK should be stopped or otherwise delayed for a period of thirty days or more under an order of any court, or other public authority, and provided that such order was not issued as the result of any act or fault of the CONTRACTOR or of anyone directly or indirectly employed by him, the CONTRACTOR may, without prejudice to any other right or remedy he may have, by giving the OWNER written notice, terminate the CONTRACT.
- .3 The CONTRACTOR may notify the OWNER in writing, with a copy to the ENGINEER, that the OWNER is in default of his contractual obligations if:
- a) The ENGINEER fails to certify a Progress Payment Certificate in accordance with these General Conditions; or,
 - b) The OWNER, subject to requirements of these General Conditions, fails to pay to the CONTRACTOR when due, any amount certified by the ENGINEER, or awarded by arbitrators; or,
 - c) The OWNER fails to furnish, upon written request from the CONTRACTOR, reasonable evidence of ability to fulfill the OWNER's financial obligation under the CONTRACT.

Such written notice shall advise the OWNER that if such default is not corrected within fifteen (15) calendar days from the receipt of the written notice the CONTRACTOR may, without prejudice to any other right or remedy he may have, stop THE WORK and terminate the Contract.

- .4 If the CONTRACTOR terminates the Contract under the conditions set out above, he shall be paid for all work performed and for any loss sustained upon MATERIAL, PRODUCT and PLANT, with reasonable profit.

16. Changes in the Work

- .1 The OWNER may order changes in the work through additions, deletions, modifications or variations without invalidating the CONTRACT. The value of such changes shall be taken into account in ascertaining the final amount of the CONTRACT PRICE. All such work shall be executed under the conditions of the CONTRACT. No extension of the CONTRACT Completion Time shall be made on account of changes in the work unless expressly provided for in the CHANGE ORDER.
- .2 No changes in the work shall be made unless pursuant to a FIELD ORDER or a CHANGE ORDER and no payment shall be made or credit given unless authorized by a CHANGE ORDER.
- .3 The authority of the ENGINEER to order payment without prior approval of the OWNER, through a CHANGE ORDER is limited in any one instance to 10% of the Contingency Allowance or Five Thousand Dollars (\$5,000) whichever is the lesser, and cumulatively to the amount of the Contingency Allowance. The CONTRACTOR shall not depend upon the order of the ENGINEER for claiming payments for changes in the work carried out in excess of those limits, without prior approval of the OWNER in each instance.
- .4 The CONTRACTOR may, in writing, propose changes in the work, including the amount of additional payment or credit entailed in the proposal. If the OWNER accepts the CONTRACTOR'S proposal, the OWNER and the CONTRACTOR will authorize a CHANGE ORDER to that effect.
- .5 When the OWNER desires to make a change in the work it shall issue a NOTICE OF CONTEMPLATED CHANGE (NCC) to the CONTRACTOR and the CONTRACTOR shall return to the OWNER a QUOTATION FOR CONTEMPLATED CHANGE (QCC). If the QUOTATION FOR CONTEMPLATED CHANGE is accepted the change in the work shall be authorized by a CHANGE ORDER signed by the OWNER and the CONTRACTOR.
- .6 If the CONTRACTOR claims that any instruction by drawings, or otherwise, involves a change in THE WORK under this CONTRACT, he shall give the OWNER written notice thereof immediately, and he shall then follow the OWNER'S instruction regarding doing the work in question. No such claim shall be valid unless so made. If the CONTRACTOR'S claim for a change in THE WORK is approved a CHANGE ORDER shall be issued. The ENGINEER shall, in the first instance, determine the validity of the CONTRACTOR'S claim.
- .7 Any work outside the scope of the CONTRACT for which the CONTRACTOR might be entitled to compensation, including any claim on the basis of quantum merit, shall be considered a change in THE WORK. No claim by the CONTRACTOR for additional payment on the basis of a change in THE WORK shall be valid and enforceable against

the OWNER unless it is made pursuant to the provisions of General Condition 16.1 to 16.6.

17. Valuation of Changes in the Work

- .1 The valuation of changes in THE WORK due to differences between actual measured quantities at the time of construction and the approximate estimated quantities shown in the TENDER shall be determined on the basis of the Unit Prices named in the TENDER. No CHANGE ORDER is required.
- .2 The valuation of changes in THE WORK due to deletion of work within the scope of the CONTRACT or addition of work to the scope of the CONTRACT shall be determined by Unit Prices named in the TENDER. A CHANGE ORDER is required.
- .3 When there are changes in THE WORK which are not covered by Unit Prices named in the TENDER, the valuation of such changes shall be determined by:
 - a) An agreement on a Lump Sum in each instance between the OWNER and the CONTRACTOR; or
 - b) At the rates for the provision of labour and PLANT named in the Schedule of Force Account Rates in the Supplementary TENDER Forms, plus the CONTRACTOR'S cost plus 20% for MATERIAL and PRODUCT F.O.B. the job site, as established by invoices; or
 - c) On a CONTRACTOR'S cost basis as follows:
 - i) Payroll Cost of Labour, defined as direct wages and salaries for the hours worked, plus 20% to cover Workers' Compensation, Unemployment Insurance, Holiday Pay, Paid Statutory Holidays and other valid payroll burdens; plus
 - ii) The CONTRACTOR'S cost of providing room and board for labour, if room and board is normally provided by the CONTRACTOR on THE WORK; plus
 - iii) The CONTRACTOR'S cost for MATERIAL and PRODUCT F.O.B. the job site, less trade discounts, as established by invoices; plus
 - iv) Twenty percent (20%) fee on the sum of items i), ii) and iii) to cover office and general overhead, use of small tools and profit. Overhead includes the cost of superintendence, foremen, timekeepers and other administrative and supervisory personnel and their vehicles and other job site costs, plus all office overhead costs; plus
 - v) The cost of rental of PLANT for the hours worked, at locally-accepted rates, or at provincial or territorial rates, for complete units including operator, fuel, grease, maintenance and all such other costs as are normal to an operating unit on the job site; plus

- vi) A 10% markup on item v) to the CONTRACTOR (but not to a Subcontractor) provided that the CONTRACTOR does not own the equipment; plus
- vii) Valid transportation costs for PLANT, specifically required for the change in the work, with no markup.

The choice of valuation methods a), b) or c) shall be made by the OWNER in his sole discretion.

- .4 When the change in THE WORK is being done on a cost basis, that is, options b) or c), the CONTRACTOR shall be paid for work performed by his Subcontractors on the basis of a valuation in accordance with b) or c), depending upon which was selected by the OWNER for the change in THE WORK. The CONTRACTOR shall be allowed a markup of 10% on the SUBCONTRACTOR'S charges to cover the CONTRACTOR'S coordination.
- .5 When a change in THE WORK is being done on a cost basis, either option b) or c), the CONTRACTOR shall submit to the ENGINEER or the OWNER on a daily basis an accounting in triplicate for work done on the preceding calendar day. The accounting shall include a listing of the hours of labour and PLANT and a listing of the MATERIAL and PRODUCT used. The ENGINEER shall, each day, check the CONTRACTOR'S accounting and, if it is numerically correct, he shall sign the three copies and return one signed copy to the CONTRACTOR. Only those items which are eligible in accordance with the CONTRACT shall be certified for payment by a CHANGE ORDER. The ENGINEER's signature shall not constitute an approval for payment.
- .6 If, on any day, the CONTRACTOR fails to submit an account of the change in THE WORK being done on a cost basis, either option b) or c), the ENGINEER shall prepare the accounting, and this accounting shall be used as the basis of payment for that portion of the change in THE WORK, and no payment will be made for any other amount subsequently claimed by the CONTRACTOR for that portion of the change in THE WORK.

18. Payments

- .1 At the end of each month during the performance of THE WORK, the CONTRACTOR shall prepare a Progress Payment Claim for that portion of THE WORK done during that month.

A holdback of 10% of the total value of that portion of THE WORK performed to the end of that month, as shown on the Progress Payment Claim, shall be retained for various purposes of the OWNER, including conformance with the lien enactment, along with any other deductions from the Progress Payment Claim which may be warranted or may be required in accordance with conditions of this CONTRACT.
- .2 The Progress Payment Claim shall be certified by the ENGINEER on the PROGRESS PAYMENT CERTIFICATE. Provided that the CONTRACTOR has submitted his Progress Payment Claim by the end of the month, the PROGRESS PAYMENT

CERTIFICATE shall be submitted to the OWNER within seven (7) calendar days after the end of the month during which that portion of THE WORK covered by the PROGRESS PAYMENT CERTIFICATE was performed.

- .3 Within 14 calendar days after receipt of the PROGRESS PAYMENT CERTIFICATE the OWNER shall make payment to the CONTRACTOR in the amount certified on the PROGRESS PAYMENT CERTIFICATE, provided there are no valid reasons for withholding payment.
- .4 The OWNER may withhold payment on any PROGRESS PAYMENT CERTIFICATE as may be necessary or prudent to protect himself from loss on account of:
 - a) Unsatisfactory progress by the CONTRACTOR;
 - b) Defective work which is not remedied;
 - c) Claims filed, or reasonable expectation that claims will be filed, against the OWNER or the CONTRACTOR;
 - d) The failure of the CONTRACTOR to make payments properly to SUBCONTRACTORS or for MATERIAL, PRODUCT, PLANT and labour, or otherwise;
 - e) Damages caused by the CONTRACTOR to an OTHER CONTRACTOR;
 - f) Any other evidence of loss or danger of loss by the OWNER, on account of the CONTRACTOR'S operations.

When the grounds are removed, payment shall be made of accounts withheld because of them.

- .5 In the event that THE WORK has been nearly completed, but minor items remain uncompleted and deficiencies have not all been rectified, the OWNER may withhold payment on PROGRESS PAYMENT CERTIFICATES in amounts sufficient, in the estimation of the ENGINEER, to ensure that the CONTRACTOR will complete such items and rectify such deficiencies in a timely manner. When the deficiencies have been rectified, the deficiency holdback applied shall be released.
- .6 The holdback in total shall be retained until FINAL PAYMENT is made and the holdback shall be released after the FINAL PAYMENT is made.
- .7 The holdback shall be released by the OWNER to the CONTRACTOR after the following conditions have been met:
 - a) The ENGINEER has issued a CONSTRUCTION COMPLETION CERTIFICATE.
 - b) The CONTRACTOR has filed with the ENGINEER a certification from the Workers' Compensation Board, stating that all assessments due to them from the CONTRACTOR have been paid.

- c) The CONTRACTOR has filed with the ENGINEER a statutory declaration that:

With exception of holdbacks retained by the OWNER, all claims for payment of MATERIAL, PRODUCT, PLANT and labour incurred by the CONTRACTOR directly or indirectly on account of THE WORK have been paid and no lien exists against the premises in respect of anything done or furnished under this CONTRACT; all claims and demands for payment in connection with this CONTRACT have been submitted and approved, thus establishing the final CONTRACT PRICE, and the amount of the FINAL PAYMENT.

This statutory declaration shall be dated no sooner than five (5) days after expiry of the latest Statutory Limitation Period for filing liens, applicable in the jurisdiction where THE WORK has been performed.

- .8 FINAL PAYMENT and holdback release do not constitute a waiver of the WARRANTY PERIOD, nor shall they or attendant acts of the ENGINEER or the OWNER prejudice their rights under any requirement of the CONTRACT, nor relieve the CONTRACTOR of any of his responsibilities thereunder.

19. Construction Completion Certificate

- .1 Upon receipt of Written Notice from the CONTRACTOR that THE WORK is complete, that all deficiencies have been rectified, and all cleanup finished, the ENGINEER shall make an inspection, and when he finds THE WORK complete under the CONTRACT, he shall issue the CONSTRUCTION COMPLETION CERTIFICATE over his signature and the date specified in this Certificate shall be the date of commencement of the WARRANTY PERIOD.

- .2 If, upon inspection, the ENGINEER determines that THE WORK is not completed, he shall instruct the CONTRACTOR, and issue a list of work items to be done, of cleanup items remaining, and of deficiencies to be rectified and when these have been done, he shall issue to the CONTRACTOR, the CONSTRUCTION COMPLETION CERTIFICATE, and the date specified in this Certificate, shall be the date of commencement of the WARRANTY PERIOD. The issuance of the CONSTRUCTION COMPLETION CERTIFICATE does not release the CONTRACTOR from his responsibilities under the CONTRACT.

20. Final Certificate

- .1 Upon the expiration of the WARRANTY PERIOD, the successful conclusion of any tests required by the CONTRACT and satisfactory performance under operating conditions meeting THE WORK performance Warranty, the OWNER shall accept THE WORK and a FINAL CERTIFICATE may be issued if required by the CONTRACTOR. It shall be the responsibility of the CONTRACTOR to apply in writing to the ENGINEER for a FINAL CERTIFICATE.

- .2 The issuance of a FINAL CERTIFICATE shall not release the CONTRACTOR from responsibility for any defects in his work, PRODUCT or MATERIAL for which the CONTRACTOR may in future be found liable in a court of law or otherwise.

21. Taxes and Duties

- .1 The CONTRACTOR shall pay all government sales taxes, customs duties and excise taxes and comply with laws, Acts, and regulations for collection and remittance of taxes with respect to the CONTRACT.
- .2 Where an exemption of government sales taxes, customs duties or excise taxes is applicable to the CONTRACT by way of the CONTRACTOR filing claims for, or cooperating fully with the OWNER and the proper authorities in seeking to obtain such refunds, the procedure shall be established in a Supplementary General Condition.
- .3 The Federal Goods and Services Tax (GST) or the Harmonized Sales Tax (HST) is included in the TENDER PRICE and in the CONTRACT PRICE.

The CONTRACTOR shall show separately on each Progress Payment Claim the amount of GST or HST required by the Act for the total amount of the Progress Payment Claim before Holdback deduction. GST or HST on the net amount of payment after Holdback deduction will be paid to the CONTRACTOR by the OWNER in addition to the Net payment of each Progress Payment Claim.

GST or HST applicable to the Holdback will be paid to the CONTRACTOR upon release of the Holdback. The CONTRACTOR shall remit the GST or HST in accordance with the Act.

22. Patent Fees

- .1 The CONTRACTOR shall pay all royalties and patent license fees required for the performance of the CONTRACT. He shall hold the OWNER harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the CONTRACTOR'S performance of the CONTRACT which are attributable to an infringement or an alleged infringement of any patent of invention, by the CONTRACTOR, or anyone for whose acts it may be liable.
- .2 In the event that the CONTRACTOR claims that, during the performance of THE WORK, he has encountered a claim for a patent license fee, for use of a MATERIAL, PRODUCT, process or method which was specified by the ENGINEER, and that he was not previously aware that use of such MATERIAL, PRODUCT, process or method was restricted under patent, or that a patent license fee was required, he shall immediately notify the OWNER, in writing, setting out the details of such claim and evidence of his previous lack of awareness of such license fee being required. The ENGINEER shall immediately investigate the claim and if it is judged valid, and the MATERIAL, PRODUCT, process or method is used, the OWNER shall pay the patent license fee.

23. Laws, Regulations, Surveys and Permits

- .1 The Laws and Regulations of the place where THE WORK is performed shall govern.
- .2 The OWNER shall provide all legal surveys except legal surveys required to replace survey pins destroyed or damaged by the CONTRACTOR.
- .3 The CONTRACTOR shall obtain all Permits, Licenses and Certificates, and pay all fees required for the performance of THE WORK.
- .4 The OWNER shall obtain all easements and rights-of-way, and the CONTRACTOR shall have free use thereof for the purposes of this CONTRACT, provided that such use shall not interfere with or impede the operation of any OTHER CONTRACTORS or workmen employed by the OWNER, nor be in conflict with conditions of easement agreement or right-of-way limits. The CONTRACTOR shall indemnify and defend the OWNER against any claims, demands, or losses due to failure to meet all conditions of an easement agreement.
- .5 The CONTRACTOR shall give all required notices, and comply with all laws, ordinances, regulations, codes and orders of all authorities having jurisdiction relating to THE WORK, to preservation of public health, and to construction safety. If the CONTRACTOR observes anything in the CONTRACT DOCUMENTS to be at variance with the foregoing, he shall promptly notify the ENGINEER in writing, and shall await the ENGINEER'S instructions. If the CONTRACTOR performs any work, knowing it to be contrary to such laws, ordinances, regulations, codes or orders, and without giving notice to and requesting instructions from the ENGINEER, he shall bear all costs arising therefrom.
- .6 The CONTRACTOR shall make all arrangements with local authorities, operating departments, railway and highway officials, utility and service companies and the like, for detours, crossings, traffic control and similar requirements relating to performance of THE WORK, and he shall at his own cost observe their requirements and regulations.

24. Compliance With Occupational Health and Safety Enactments

- .1 The CONTRACTOR shall be primarily responsible for ensuring compliance with the applicable Occupational Health and Safety enactment and Regulations thereunder on the WORKSITE.
- .2 In any case where, pursuant to the provisions of the applicable Occupational Health and Safety Act or its Regulations, an order is given to the CONTRACTOR or to one of his SUBCONTRACTORS with respect to their operations under this CONTRACT to cease operations for any reason (for examples, because of failure to install or adopt safety devices or appliances or methods as directed or required by the Act or Regulations thereunder, or because conditions of immediate danger exist that would be likely to result in injury to any person), the CONTRACTOR shall immediately obey such order and shall immediately take whatever steps are necessary to eliminate the cause of the order.

- .3 In the event that the ENGINEER discovers a dangerous condition which in the ENGINEER's opinion is likely to result in injury to any person, and there is no one in authority from the CONTRACTOR available or capable of removing the danger resultant from the CONTRACTOR'S operations, and no Officer of the Crown is available to take charge, then the ENGINEER may:
- a) issue a Field Order to the CONTRACTOR's workers to vacate the area of danger;
 - b) issue a Field Order to the CONTRACTOR requiring the immediate correction of the dangerous condition; and
 - c) notify the appropriate Officer(s) under the applicable Occupational Health and Safety Act,
- and no such action by the ENGINEER shall in any way remove the responsibility for the matter from the CONTRACTOR, and the CONTRACTOR shall bear all related costs without recourse.
- .4 In the event that the ENGINEER discovers a dangerous condition which in the ENGINEER's opinion is likely to result in damage to any property, and there is no one in authority from the CONTRACTOR available or capable of removing the danger resultant from the CONTRACTOR'S operations, and no Officer of the Crown is available to take charge, then the ENGINEER may issue Written Notice to the CONTRACTOR and may immediately arrange for the removal of this danger and the CONTRACTOR shall be liable for the costs of such arrangements, but such act by the ENGINEER shall not relieve the CONTRACTOR of responsibility for injury, loss of life, or damage which may occur in that situation. The ENGINEER may also invoke Section 27.5 of this Specification.
- .5 In the event that the CONTRACTOR refuses or fails to comply with an order under the Act or Regulations thereunder, so that the performance of THE WORK is stopped, the OWNER may, upon written notice, terminate the CONTRACT and proceed in accordance with General Conditions 13.2.
- .6 No action or lack of action by the ENGINEER or the OWNER under any of the provisions of this Section shall relieve the CONTRACTOR of his responsibilities under 24.1 above.

25. Liability Insurance

.1 Comprehensive General Liability Insurance

- a) The CONTRACTOR shall provide and maintain, either by way of a separate policy or by an endorsement to its existing policy, Comprehensive General Liability Insurance in a form and with an insurer acceptable to the OWNER and subject to limits of not less than five million dollars (\$5,000,000) inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof.
- b) The insurance shall be in the joint names of the CONTRACTOR, the OWNER and the ENGINEER, and shall also cover as Unnamed Insureds all

SUBCONTRACTORS and anyone employed directly or indirectly by the CONTRACTOR or his SUBCONTRACTORS to perform a part or parts of THE WORK and including suppliers while on the WORKSITE to deliver MATERIAL or PRODUCT.

- c) The insurance shall also include as Unnamed Insureds the consultants of the OWNER and of the ENGINEER, on THE WORK.
- d) The Comprehensive General Liability Insurance shall include coverage for:
 - 1) premises and operations liability
 - 2) products or completed operations liability
 - 3) blanket contractual liability
 - 4) cross liability
 - 5) elevator and hoist liability, as applicable
 - 6) contingent employer's liability
 - 7) personal injury liability arising of false arrest, detention or imprisonment or malicious prosecution, libel, slander or defamation of character; invasion of privacy, wrongful eviction or wrongful entry.
 - 8) shoring, blasting, excavating, underpinning, demolition, pile driving and caisson work, work below ground surface, tunnelling and grading, as applicable.
 - 9) liability with respect to non-owned licensed vehicles.
- e) Comprehensive General Liability Insurance shall remain in effect continuously until the Construction Completion Certificate has been issued and then a Completed Operation Extension for 24 months shall be provided by the CONTRACTOR.

.2 Automobile Liability Insurance

- a) The CONTRACTOR shall provide and maintain liability insurance in respect of owned, non-owned and leased or rented licensed vehicles, aircraft or water craft, subject to limits of not less than three million dollars (\$3,000,000) inclusive.
- b) Automobile liability insurance shall be maintained continuously until the end of the WARRANTY PERIOD.

.3 The CONTRACTOR shall provide the OWNER with three certified copies of the Certificate of Insurance prior to the commencement of THE WORK and shall promptly provide the OWNER with a certified true copy of each insurance policy if requested.

.4 All liability insurance policies shall contain an endorsement to provide all Named Insureds with prior notice of material changes and cancellations. Such endorsement shall be in the following form:

"It is understood and agreed that the coverage provided by this policy will not be changed or amended materially nor cancelled until 30 days after written notice of such change or cancellation shall have been given to all Named Insureds."

26. Property Insurance (Course of Construction Insurance)

- .1 The CONTRACTOR shall provide and maintain property (course of construction) insurance in a form and by an insurer acceptable to the OWNER, insuring the full value of THE WORK in the amount of the CONTRACT PRICE. The policies shall include as named insureds the CONTRACTOR, the OWNER, and the ENGINEER. The policies shall also include as unnamed insureds all SUBCONTRACTORS and the OWNER'S and the ENGINEER'S consultants on THE WORK.
- .2 Such coverage shall be provided for by a standard All Risks Builders' Risk Policy, including flood and earthquake and with only the following exclusions:
 - a) Any loss of use or occupancy howsoever caused;
 - b) Penalties for non-completion of or delay in completion of contract or non-compliance with contract conditions;
 - c) Cost of making good faulty or defective workmanship, material, construction or design, but this exclusion shall not apply to damage resulting from such faulty or defective workmanship, material, construction or design;
 - d) Wear and tear, normal upkeep, inherent vice, latent defect, vermin or normal making good, but this exclusion shall not apply to damage resulting from wear and tear, normal upkeep, inherent vice, latent defect, vermin or normal making good;
 - e) Loss or damage caused by war, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection or military power;
 - f) Loss or damage caused by contamination by radioactive materials;
 - g) Loss or damage caused by frost or freezing caused by natural forces unless resulting from a peril insured hereunder;
 - h) Mysterious disappearance of property (except property in the custody of carriers or bailees for hire) or shortage disclosed by taking inventory;
 - i) Mechanical breakdown, but this exclusion shall not be deemed to exclude loss or damage arising as a consequence of mechanical breakdown;
 - j) Infidelity of the Insured's employees.
- .3 The policies shall insure against all risks of direct loss or damage, and damage or loss due to delayed start-up, or due to delay in beneficial use in the amount of \$100,000.
- .4 Property Insurance shall cover:
 - a) All PRODUCT, MATERIAL, labour and supplies of any nature whatsoever, the property of the Insureds or of others for which the Insureds may have assumed responsibility, to be used in or pertaining to the site preparations, demolition of existing structures, erection and/or fabrication and/or reconstruction and/or repair of THE WORK while on the site or in transit;

- b) The installation, testing and any subsequent use of machinery and equipment including boilers, pressure vessels or vessels under vacuum related to THE WORK;
- c) Damage to THE WORK caused by an accident to and/or the explosion of any boiler(s) or pressure vessel(s) forming part of THE WORK.

Such coverage shall exclude construction machinery, equipment, temporary structural and other temporary facilities, tools and supplies used in the construction of THE WORK.

- .5 The CONTRACTOR shall provide the OWNER with three certified copies of the Certificate of Insurance to be incorporated, as Document 00650, into the signed copies of the CONTRACT DOCUMENT prior to commencement of THE WORK and shall promptly provide the OWNER with a certified true copy of each insurance policy if requested.

Policies provided shall contain an endorsement to provide all Named Insureds with prior notice of changes and cancellations. Such endorsement shall be in the following form:

"It is understood and agreed that the coverage provided by this policy will not be changed or amended in any way nor cancelled until 30 days after written notice of such change or cancellation shall have been given to all Named Insureds."

- .6 All such insurance shall be maintained continuously until ten (10) days after the date of the Construction Completion Certificate. All such insurance shall provide for the OWNER to take occupancy of THE WORK or any part thereof during the term of this insurance. Any increase in the cost of this insurance arising out of such occupancy shall be at the OWNER'S expense.
- .7 The policies shall provide that, in the event of a loss, payment for damage to THE WORK shall be made to the OWNER and the CONTRACTOR as their respective interests may appear. The CONTRACTOR shall act on behalf of the OWNER and himself for the purpose of adjusting the amount of such loss with the Insurers. On the determination of the extent of the loss, the CONTRACTOR shall immediately proceed to restore THE WORK and shall be entitled to receive from the OWNER (in addition to any sum due under the CONTRACT) the amount at which the OWNER'S interest in the restoration THE WORK has been appraised, such amount to be paid as the restoration proceeds and in accordance with the ENGINEER'S certificates for payment. Damage shall not affect the rights and obligations of either party under the CONTRACT except that the CONTRACTOR shall be entitled to such reasonable extension of time for Completion of THE WORK as the ENGINEER may determine in the first instance and subject to General Condition 11.5.
- .8 The CONTRACTOR and SUBCONTRACTORS as may be applicable shall be responsible for any deductible amounts under the policies and for providing such additional insurance as may be required to protect them against loss on items excluded from the policies.

27. Protection of Work and Property

- .1 The CONTRACTOR shall continuously maintain adequate protection of all of THE WORK from damage, and protect the OWNER'S property from damage or loss arising in connection with this CONTRACT. He shall make good any such damage or loss.
- .2 The CONTRACTOR shall provide and maintain all passageways, guard fences, lights and other facilities for protection required by public authority or local conditions, or laws and regulations.
- .3 The CONTRACTOR shall also protect all of the property outside of THE WORK from damage as a result of his operations. Any such damage shall be corrected by the CONTRACTOR at his expense.
- .4 In an emergency affecting the safety of life, or of THE WORK, or adjoining property, the CONTRACTOR, without special instruction or authorization from the ENGINEER, shall act at his discretion to prevent such threatened loss or injury. Liability for payment for such action and the amount thereof shall be determined in the first instance by the ENGINEER.
- .5 If the ENGINEER becomes aware of an emergency affecting the safety of life, or of THE WORK, or of adjoining property, and the CONTRACTOR, having been advised in writing of the emergency, fails or refuses to act to prevent such threatened loss, injury or damage, or if the ENGINEER is unable to advise the CONTRACTOR, the ENGINEER may order labour, material, and PLANT to be applied to prevent loss, injury or damage. The cost of labour, materials and equipment so used shall be the responsibility of the CONTRACTOR, and such action by the ENGINEER shall not relieve the CONTRACTOR of any responsibility for loss, injury, or damage which does occur.

28. Warranty Period

- .1 The WARRANTY PERIOD shall begin on the date specified in the CONSTRUCTION COMPLETION CERTIFICATE.
- .2 The duration of the WARRANTY PERIOD shall be a minimum of one year.
- .3 The CONTRACTOR shall correct, at his own expense, any defects in THE WORK due to faulty products or workmanship appearing within the WARRANTY PERIOD.
- .4 The CONTRACTOR shall correct or pay for any damage to THE WORK or other property resulting from such defects or their correction.
- .5 The OWNER shall notify the CONTRACTOR promptly of such defects. If the CONTRACTOR does not cause repairs to be made within ten (10) days after such notice, the OWNER shall have the right to purchase MATERIAL and employ men to execute said repairs, and the cost of the same shall be the responsibility of the CONTRACTOR or his Surety.
- .6 Where repairs must be made immediately by reason of an emergency existing or otherwise, the OWNER shall have the right to undertake such repairs and charge the

cost to the CONTRACTOR, except that the OWNER shall immediately notify the CONTRACTOR and shall withdraw from the work of repair if and as soon as the CONTRACTOR'S forces are ready to start work.

- .7 The CONTRACTOR shall be responsible for all costs attributable to defective work, PRODUCT or MATERIAL, including the cost of engineering required for investigation of any repair of defects in THE WORK.
- .8 At least one month prior to expiry of the WARRANTY PERIOD, the OWNER shall notify the CONTRACTOR in writing of any final tests which the CONTRACTOR may be required to carry out under the CONTRACT. The CONTRACTOR shall arrange to have such tests carried out promptly, and to provide opportunity for the OWNER to inspect or supervise such tests.
- .9 At least one month prior to expiry of the WARRANTY PERIOD, the OWNER shall advise the CONTRACTOR of defects which the CONTRACTOR is required to remedy under the CONTRACT, and the CONTRACTOR shall promptly remedy such defects. The WARRANTY PERIOD shall not expire until all such defects are remedied.

29. Inspection of the Work

- .1 The ENGINEER and his representatives shall at all times have access to THE WORK whenever it is in preparation or progress and the CONTRACTOR shall provide proper facilities for such access and for inspection. The ENGINEER shall have authority to reject work which does not conform to the requirements of the CONTRACT.
- .2 If the specifications, the ENGINEER'S instructions, laws, ordinances, or any public authority require any part of THE WORK to be specially tested or approved, the CONTRACTOR shall give the ENGINEER timely notice of his readiness for inspection, and if the inspection is by an authority other than the ENGINEER, of the date fixed for such inspection.
- .3 Inspections by the ENGINEER shall be made promptly. If any part of THE WORK should be covered up without approval or consent of the ENGINEER, it must, if required by the ENGINEER, be uncovered for examination at the CONTRACTOR'S expense.
- .4 Re-examination of questioned parts of THE WORK may be ordered by the ENGINEER and if so ordered those parts of THE WORK shall be uncovered by the CONTRACTOR. If such parts of THE WORK are found not in accordance with the CONTRACT DOCUMENTS through the fault of the CONTRACTOR, the CONTRACTOR shall pay the cost of examination and replacement of THE WORK. If such parts of THE WORK are found in accordance with the CONTRACT DOCUMENTS, the OWNER shall pay these costs.
- .5 MATERIAL and PRODUCT to be used in THE WORK are subject to inspection and approval of the ENGINEER at his discretion. MATERIAL and PRODUCT condemned as being unsuitable and not in conformity with the specifications, shall be removed from THE WORK and its vicinity without delay, and if the CONTRACTOR fails to do so within forty-eight (48) hours after having been so directed by the ENGINEER, the rejected

MATERIAL and PRODUCT may be destroyed or removed by the OWNER and the cost shall be charged to the CONTRACTOR.

- .6 The ENGINEER shall inspect THE WORK in the OWNER'S interest for the purpose of promoting effective completion of THE WORK until the CONSTRUCTION COMPLETION CERTIFICATE is issued, and such inspection or lack of it shall not relieve the CONTRACTOR of his responsibility to perform THE WORK in accordance with the CONTRACT.

30. Rejected Work

- .1 Defective Work which has been rejected by the ENGINEER as failing to conform to the intent of design as expressed in the CONTRACT DOCUMENTS whether the result of poor workmanship, use of defective MATERIAL or PRODUCT, or damage through carelessness or other act or omission of the CONTRACTOR, and whether incorporated in THE WORK or not, shall be removed promptly from the premises by the CONTRACTOR and replaced or re-executed promptly at the CONTRACTOR'S expense.

Work that has not been rejected specifically by the ENGINEER shall not therefore be deemed accepted or approved by the Engineer.

- .2 OTHER CONTRACTORS' work destroyed or damaged by such removals or replacements shall be made good promptly at the CONTRACTOR'S expense.
- .3 If in the opinion of the ENGINEER it is not expedient to correct defective Work or Work not done in accordance with the intent of design as expressed in the CONTRACT DOCUMENTS, the OWNER may deduct from the CONTRACT PRICE the difference in value between THE WORK as done and that called for by the CONTRACT. The difference shall be determined in the first instance by the ENGINEER.

31. Labour

- .1 The CONTRACTOR shall employ Canadian Labour to the fullest practical extent and shall ensure that no person will be discriminated against because of race, colour, gender, age, religion, or origin.
- .2 Wages and hours of labour shall be in compliance with Federal, Provincial or Territorial enactment, whichever governs.
- .3 The CONTRACTOR shall at all times enforce discipline and good order among his employees, and shall not employ on THE WORK any unfit person or anyone not skilled to do THE WORK assigned to him. Any person employed on THE WORK who becomes intoxicated, intemperate, disorderly, incompetent or willfully negligent, shall be removed from THE WORK.

32. Material and Product Supplied by the Contractor

- .1 The CONTRACTOR shall use MATERIAL and PRODUCT of Canadian manufacture to the fullest extent practicable.

- .2 Unless otherwise specified, all MATERIAL and PRODUCT shall be new and of good quality. The CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of MATERIAL and PRODUCT. The CONTRACTOR shall be responsible for replacement at his own cost of all MATERIAL and PRODUCT that are found to be defective in manufacture or that have become damaged in handling.
- .3 The CONTRACTOR shall be responsible for the safe storage of MATERIAL and PRODUCT furnished by or to him, and accepted by him, and intended for THE WORK, until it has been incorporated into THE WORK.
- .4 Where, in the specifications or on the drawings, any MATERIAL, PRODUCT or method is specified, the CONTRACTOR may not use another MATERIAL, PRODUCT, equipment or method unless the ENGINEER has issued to the CONTRACTOR a written authorization for the use. The CONTRACTOR shall submit in writing an application for review to the ENGINEER. All submissions shall be accompanied by sufficient data including the following:
- a) Delivery
 - b) Manufacture
 - c) Technical Data and Specifications in accordance with the International System of Units (S.I.) - metric units
 - d) Specified MATERIAL, PRODUCT or method for which the alternative is submitted
 - e) Prices in relation to the MATERIAL; method or PRODUCT specified originally.

Where required by the ENGINEER, samples shall be submitted.

- .5 Whenever alternatives of MATERIAL, PRODUCT or methods are accepted for THE WORK, whether as a result of an alternative Proposal by the CONTRACTOR or an equivalent alternative submitted by the CONTRACTOR, the CONTRACTOR shall guarantee that the performance of the alternative MATERIAL, PRODUCT, or method shall be equivalent to what was originally specified.
- .6 Whenever alternatives of MATERIAL, PRODUCT or methods are accepted for use on THE WORK, whether as a result of an alternative proposal by the CONTRACTOR or an equivalent alternative submitted by the CONTRACTOR, the CONTRACTOR shall be responsible for making all consequent adjustments, at his own expense, to make the alternative fit into THE WORK as specified.

33. Material and Product Supplied by the Owner

- .1 The OWNER undertakes to supply only such MATERIAL or PRODUCT as are specifically shown in the CONTRACT DOCUMENTS as being provided by the OWNER.
- .2 It shall be the responsibility of the CONTRACTOR to arrange for and schedule delivery and storage of MATERIAL and PRODUCT supplied by the OWNER.
- .3 The CONTRACTOR'S responsibility for MATERIAL and PRODUCT furnished by the OWNER shall begin at the time and place of delivery thereof to the CONTRACTOR. MATERIAL and PRODUCT already on the site shall become the CONTRACTOR'S

responsibility on the date specified in the Notice to Proceed. The CONTRACTOR shall be responsible for unloading all OWNER-supplied MATERIAL and PRODUCT and the CONTRACTOR and the ENGINEER shall jointly examine them at the time and place of delivery to the CONTRACTOR, and shall prepare a statement of acceptance, specifically noting any defects and rejecting any defective MATERIAL or PRODUCT. The CONTRACTOR shall sign a Statement of Acceptance of MATERIAL and PRODUCT when accepting them into his charge. Any MATERIAL and PRODUCT furnished by the OWNER and installed by the CONTRACTOR shall, if found defective, be replaced by the CONTRACTOR. The CONTRACTOR, shall, at his own expense, furnish supplies, labour and facilities necessary to remove the defective MATERIAL and PRODUCT and install the sound MATERIAL and PRODUCT in a satisfactory manner.

34. Storage Facilities and Use of Premises

- .1 The CONTRACTOR may use such facilities and areas as the OWNER may be willing and able to designate for the storage of MATERIAL and PRODUCT for THE WORK, without charge to the CONTRACTOR.
- .2 Should the CONTRACTOR require additional facilities or areas he shall make all the necessary arrangements with the owners or occupants of such other facilities or areas and shall pay all rentals and all damages caused by such occupancy.
- .3 The CONTRACTOR shall confine his apparatus, the storage of MATERIAL and PRODUCT and the operations of his workmen to limits indicated by law, ordinances, permits or directions of the ENGINEER and shall not unreasonably encumber the premises with his MATERIAL, PRODUCT or PLANT.
- .4 The CONTRACTOR shall enforce all regulations and rules for the WORKSITE regarding signs, advertisements, fires, smoking, and storage of inflammable MATERIAL or PRODUCT, and disposal of wastes.
- .5 The CONTRACTOR shall not load or permit any part of THE WORK or of the OWNER'S structures to be loaded in any way that will endanger their safety.

35. Use of Completed Portions of the Work

- .1 The OWNER shall have the right to take possession of and use any completed or partially completed portions of THE WORK, notwithstanding that the time for completing THE WORK or such portions of THE WORK may not have expired; but such taking possession of and use shall not be deemed an acceptance of THE WORK.
- .2 If such prior use increases the cost of THE WORK, the CONTRACTOR shall be entitled to such compensation as the ENGINEER in the first instance may determine.
- .3 If a planned taking possession of and use of portions of THE WORK has been stipulated in the CONTRACT DOCUMENTS, then the CONTRACTOR shall have no claim for extra compensation on that account.

36. Cleanup and Final Cleaning of the Work

- .1 The CONTRACTOR shall maintain THE WORK in a tidy condition, free from accumulation of waste products and debris caused by his own operations.
- .2 When THE WORK is fully completed, the CONTRACTOR shall remove all surplus MATERIAL and PRODUCT, tools and PLANT. He shall also remove any waste products and debris, other than those caused by the OWNER, OTHER CONTRACTORS or their employees. He shall generally leave the WORKSITE in a neat and orderly condition.

37. Remedies

- .1 The specific remedies to which the CONTRACTOR and the OWNER may resort under the terms of the CONTRACT DOCUMENTS are cumulative and are not intended to be exclusive of any other remedies to which the CONTRACTOR and the OWNER may be lawfully entitled in a case of breach or threatened breach of any covenant, term or provision of the CONTRACT.
- .2 The waiver by the OWNER or ENGINEER of any breach of any covenant or warrant in the CONTRACT shall not be construed as a waiver of any future breach of the same terms of the Contract, and the approval by the OWNER or ENGINEER of any act by the CONTRACTOR or SUBCONTRACTOR shall not be construed as an approval to any subsequent similar acts by the CONTRACTOR or SUBCONTRACTOR.

END OF DOCUMENT 00700

1. General

- .1 These Supplementary General Conditions modify, delete or add to the General Conditions.
- .2 In the event of a conflict between the General Conditions and the Supplementary General Conditions, the Supplementary General Conditions take precedence.
- .3 Clauses of the General Conditions which have not been specifically modified shall remain in effect.

2. General Condition 1 – Definitions

ADD to Clause 1.2.6

"The term CONTRACTOR'S PROJECT MANAGER shall mean a representative of the CONTRACTOR, superior to the CONTRACTOR's SUPERINTENDENT, who has authority to issue QUOTATIONS for CONTEMPLATED CHANGE, to sign CHANGE ORDERS and to act on behalf of the CONTRACTOR both at and away from the WORKSITE with respect to the CONTRACT."

3. General Condition 4 – Reference Points and Layout

ADD the following clauses:

4.8 Detailed Survey Layout

.1 General

The ENGINEER will provide detailed layout of the WORK in addition to the provisions of General Condition 4.1, limited as follows:

- .1 The CONTRACTOR shall be responsible for the correctness of the elevations and dimensions from the references provided by the ENGINEER.
- .2 The layout of the WORK shall be in accordance with the Work Schedule which is prepared by the CONTRACTOR, submitted to the ENGINEER for review and is updated monthly.
- .3 If the CONTRACTOR requests a change in layout procedure or sequence, the CONTRACTOR shall submit the request to the ENGINEER, giving a minimum of 48 hours notice of new or revised activities.
- .4 The notice requesting a change shall be extended to 96 hours whenever a long weekend is involved.

.2 Grading of Streets, Lanes, and Concrete Work

The ENGINEER will provide a layout survey including offset grade stakes and grade sheets. In the event that the provided survey layout is later destroyed or damaged by the CONTRACTOR before work is complete, the CONTRACTOR will be responsible to cover the cost of the additional survey layout request.

4. General Condition 7 – Other Contractors

ADD the following:

“.5 The Contractor is responsible for coordination and scheduling the work of others including, but not limited to, the following: Shaw Cable, Telus, Fortis, ATCO Gas, The Town of Blackfalds, and surrounding landowners. All coordination and management aspects of the project are considered incidental to the Contract.”

5. General Condition 10 – Dispute Resolution

Add to clause 10.1

“The OWNER shall make the final decisions on interpretations regarding time extension, extra payments and liquidated damages.”

6. General Condition 17 – Valuation of Changes in the Work

Revise GC 17.3 b) to 10% markup for materials and products supplied.

Revise GC 17.3 c) i) to 10% markup of direct wages and salaries to cover payroll costs.

Revise GC 17.3 c) iv) to 10% markup to cover overhead, use of small tools and profit.

7. General Condition 18 – Other Contractors

Refer to Clause 18.1 and add the following:

“Where the ENGINEER is responsible for the measurement and calculation of tender items, the Progress Payment Claim will be prepared by the ENGINEER.”

Refer to Clause 18.3 and replace “Within 14 calendar days” with “Within 28 Calendar days.”

DELETE Clause 18.6 and substitute the following:

“The CONTRACTOR may claim the Holdback, either in total, or in increments, in accordance with applicable Lien Act.

The OWNER shall pay the CONTRACTOR'S claim for Holdback release after the following conditions have been satisfied:

- i) The CONTRACTOR, or the OWNER, or the ENGINEER on behalf of the OWNER, has issued a Certificate of Completion, or a Certificate of Substantial Completion, in accordance with requirements of the Lien Act.
- ii) The CONTRACTOR has submitted to the OWNER, a Certification from the Worker's Compensation Board stating that all assessments due to them from the CONTRACTOR are currently paid up.
- iii) The CONTRACTOR has filed with the OWNER, a Statutory Declaration that, with the exception of Holdbacks retained by the OWNER, all payments have been made to eligible Lien claimants and that there are no liens existing against the premises of the WORK.”

DELETE Clause 18.7

8. General Condition 21 - Taxes And Duties

DELETE Clause 21.2 and replace with

- “.2 a) The CONTRACTOR shall pay all Federal Sales Tax.
- b) For those items of PRODUCT and MATERIAL for which the OWNER has an exemption from Federal Sales Tax, the OWNER will provide an Exemption Number and Certification that the PRODUCT and MATERIAL was used in a manner consistent with the requirements for Federal Sales Tax Exemption.
- c) The CONTRACTOR may then recover the Federal Sales Tax paid on exempt PRODUCT and MATERIAL under this CONTRACT.”

ADD the following Clause 21.3

- “.3 The Goods and Services Tax (GST) is NOT to be considered a tax payable by the CONTRACTOR and is NOT included in the TENDER PRICE or the CONTRACT PRICE.

The CONTRACTOR shall show separately on each Progress Payment Claim the applicable amount of Goods and Services Tax as required by the Act for the Total Amount of the Progress Payment including the Holdback. The GST on the Net Amount of Payment less Holdback will be paid to the CONTRACTOR by the OWNER in addition to the Payment certified on the Progress Payment Certificate and the payment of the Goods and Services Tax will not affect the Holdback or the CONTRACT PRICE.

GST on the Holdback will be paid to the CONTRACTOR upon release of Holdback in addition to payment of the Holdback.

The CONTRACTOR will remit the Goods and Services Tax in accordance with procedure established by the GST Act.”

9. General Condition 24 - Compliance With Occupational Health And Safety Act

ADD the following:

“24.4 Designation of Prime Contractor

The successful Tenderer shall be the Principal or Prime Contractor/Constructor for the Project pursuant to the applicable construction safety legislation and shall have primary responsibility for the safety of all workers and equipment on the Project in accordance with such legislation.

- 24.5 The CONTRACTOR shall provide the ENGINEER with copies of the Contractor's Corporate Safety Policy and Safety Procedures manual applicable to the work on this contract. The CONTRACTOR shall ensure that all his employees and subcontractors are aware of these policies and procedures and that safe working conditions are maintained on the site.”

10. General Condition 25 - Liability Insurance

Refer to Clause 25.1, paragraph b) and add the following:

"The insurance shall also include as Named Insured the Town of Blackfalds and Stantec Consulting Ltd."

11. General Condition 26 - Property Insurance (Course Of Construction Insurance)

Refer to Clause 26.1 and add the following:

"The insurance shall also include as Named Insured the Town of Blackfalds and Stantec Consulting Ltd. "

12. General Condition 28 - Warranty Period

DELETE Clause 28.2 and substitute the following:

“.2 The duration of the WARRANTY PERIOD shall be two years.”

END OF DOCUMENT 00800

1. Work Under this Contract

- .1 THE WORK under this CONTRACT consists of construction of Aspen Lakes West Phase 2 for Town of Blackfalds, hereinafter called the OWNER.

2. Summary of Work

- .1 THE WORK includes the following components:
Grading, Underground & Surface Improvements

3. Work Included

- .1 THE WORK, unless specifically stated otherwise, shall include the furnishing of all MATERIAL, PRODUCT, PLANT, labour and transportation necessary to complete THE WORK. The intent is that the CONTRACTOR provides a complete job.
- .2 THE WORK shall not be deemed complete until all components are placed in operation by the CONTRACTOR, and are operating satisfactorily.
- .3 Any minor item of THE WORK not called for in the specifications or shown on the drawings but clearly required to meet the intent of design and normally provided for the proper operation of THE WORK shall be provided as if specifically called for in the CONTRACT DOCUMENTS.

4. Work Not Included

- .1 The following components of the project are not included in THE WORK under this CONTRACT:
- a) The work extends to the limits of construction detailed in the Drawings.

5. Documents Required

- .1 Maintain at the job site at least one copy of each of the following:
- Contract Drawings
 - Specifications
 - Addenda
 - Change Orders, Field Orders, Notices
 - Reviewed Shop Drawings
 - Modifications to the Contract
 - Field Test Reports
 - Construction Schedule
 - Manufacturer's Installation and Application Instructions

- Occupational Health and Safety Regulations and Workers' Compensation Board Regulations;

and have readily available any referenced or specified Standards.

6. Specifications

- .1 Sentence structure in parts of the specifications is abbreviated, and phrases such as "shall be," and "the Contractor shall" are deliberately omitted. Such sentences shall be read as though they are complete.
- .2 The use of the word "PROVIDE" means "supply and install"; or "supply labour and materials for the installation of". It does not mean supply only.
- .3 The word "concealed" in connection with piping, electrical work, controls and wherever used in other sections shall mean "hidden from sight" as in ceiling spaces or furred out spaces, and not normally visible to persons in the construction area.
- .4 The word "exposed" in connection with piping, electrical work, controls and whenever used in other sections shall mean visible to persons within a building, in normal working areas.

7. Standards

- .1 Wherever standards (e.g., CSA, ASTM and others), are referred to in these CONTRACT DOCUMENTS the current edition at the date of closing of TENDERS shall apply.
- .2 Where there is a clear conflict between the referenced Standard and the CONTRACT DOCUMENTS, the CONTRACT DOCUMENTS shall apply.
- .3 Where there is an ambiguity between a Standard and any term of these CONTRACT DOCUMENTS, the ENGINEER shall, in the first instance, give an interpretation of the intent of the CONTRACT.

END OF SECTION 01010

1. The Worksite

- .1 The OWNER will provide the lands as delimited on the Drawings upon which THE WORK is to be constructed.

2. Contractor's Use of the Worksite

- .1 The CONTRACTOR shall have exclusive use and control of the WORKSITE, provided that the CONTRACTOR shall permit access to the OWNER, the ENGINEER and OTHER CONTRACTORS on the WORKSITE for purposes of inspections, reviews, tests and carrying out work related to THE WORK.
- .2 CONTRACTOR'S use of the WORKSITE for storage is limited to the following areas, as detailed on the Drawing.
- .3 The OWNER shall have unfettered use of thoroughfares, streets, lanes and other areas within the WORKSITE until the CONTRACTOR requires those areas for execution of THE WORK, and after the CONTRACTOR has finished the portions of THE WORK in those areas.
- .4 Unless otherwise agreed with the OWNER, the CONTRACTOR shall give 48 hours notice to the OWNER before entering a particular Area of the WORKSITE to execute THE WORK.
- .5 Up to the end of the period of Notice and after the CONTRACTOR has fully completed its operations in a particular Area, the OWNER shall have use of the Area and shall be responsible for Health and Safety Requirements and security in that Area.

During the CONTRACTOR'S use of a particular Area of the WORKSITE to execute THE WORK, the CONTRACTOR shall be responsible primarily for security and for ensuring compliance with Health and Safety Regulations.

- .6 The CONTRACTOR shall be responsible for access to the WORKSITE by means of temporary roads, tote roads, or agreements with the appropriate authorities to use existing means of access.

END OF SECTION 01015

1. Testing Allowance

- .1 The OWNER will retain the services of one or more testing agencies for the purpose of quality assurance. This testing will be shared with the contract as the tests are completed. Should unreasonable amounts of retesting be required (in the opinion of the ENGINEER), the CONTRACTOR will be responsible for paying for the testing. This does not relieve the CONTRACTOR of their sole responsibility for quality control.
- .2 Although not planned as part of the project, the OWNER retains the right to consider additional services of one or more testing agencies for the purpose of quality assurance. This does not relieve the CONTRACTOR of his sole responsibility for quality control and testing.

END OF SECTION 01022

List of Special Provisions Contained Within This Section

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1. Standard Specifications, City of Red Deer Specifications & Special Provisions

The clauses in this section have been written specifically for this Contract. Accordingly, subsequent information / specifications provided in this Section (01030) will take precedence over all other standard specifications provided.

The primary specification for all work will be the City of Red Deer specification unless otherwise noted in this contract.

The City of Red Deer specifications are:

City of Red Deer, Design Guidelines – latest edition

as available online at the following address for reference only:

<https://www.reddeer.ca/media/reddeerca/city-services/engineering/publications/2020-Design-Guidelines.pdf>

City of Red Deer, Contract Specifications – latest edition

as available online at the following address for reference only:

<https://www.reddeer.ca/media/reddeerca/city-services/engineering/publications/Contract-Specifications.pdf>

2. Award

Awarding of this Contract, in whole or in part, is subject to budget approval from the Town of Blackfalds Council.

No bids will be accepted from a CONTRACTOR with which the Town is currently involved in either legal proceedings or arbitration.

3. Contractor Communication

The CONTRACTOR will be required to identify the personnel responsible for direct communication in the field on a daily basis. Any CONTRACTOR personnel who will be coordinating with the ENGINEER and/or OWNER on a regular basis is required to be proficient with and have full time access to a smart phone and/or computer equipment on site (at all times) which will allow for regular ongoing communication via cell phone, email and/or text message.

4. Existing Utilities in or Near Excavations

The CONTRACTOR shall be responsible for contacting all utility companies including but not limited to ATCO, Fortis, Telus Communications Ltd., and Shaw Cable Systems Ltd.. The CONTRACTOR shall assume sole responsibility for ensuring that all power poles adjacent to proposed excavations are properly braced, and that all utilities are properly located, exposed prior to any ground disturbances, and supported while completing construction under the lines. The CONTRACTOR shall bear the full cost of any repairs required to existing utilities due to damage caused by improper or unsafe excavating techniques, improper or incomplete locates and utility exposures, and improperly braced power poles or exposed gas lines.

5. School Site

Coordination

The CONTRACTOR is advised that the site on the west side of Vista Trail is proposed site for a future school. Construction of the school site is anticipated to begin in January 2025. The successful CONTRACTOR shall coordinate with the school site's contractor as indicated in Section 01040.

The Contractor is advised that there will be a sod turning event on October 17th, 2024. There is to be no construction activity on the site after 12:00PM that day. Contractor shall ensure site is cleaned up, safe and tidy.

6. CONTRACTOR'S Work Space and Laydown Area

The CONTRACTOR may utilize space within the project limits for work space and laydown areas such that access to buildings is not affected, further approval by the Town of Blackfalds may be required.

The CONTRACTOR will be responsible for any damage to existing concrete, fences, trees or asphalt. All such repairs are to be done at the expense of the CONTRACTOR. All damage is to be repaired in accordance with the current City of Red Deer Specifications.

The CONTRACTOR is directly responsible to determine where private property lines are relative to the work site and shall not encroach on, or impact, any private property without written consent from the property owner. The CONTRACTOR is directly responsible for remediation of impacted areas and resolution of any disputes as a result of his workforce trespassing on or impacting private property.

7. Safety Green Crosswalk Signage

The CONTRACTOR is advised that the Town of Blackfalds utilizes Safety Green coloured pedestrian crosswalk signs which shall be implemented on this project.

8. Reporting Procedures for Spills of Deleterious or Hazardous Materials

During the constructions, any releases of silt or other deleterious substances into a body of water or watercourse shall be immediately reported to the ENGINEER and Alberta Environment (1-800-222-6514) and the Federal Department of Fisheries and Oceans (1-800-265-0237).

In the event of the release of silt or other deleterious substance into a body of water or watercourse, the CONTRACTOR shall take all reasonable measures to contain the release and repair any damage at his expense.

Spills or releases of hazardous materials shall also be immediately reported to the ENGINEER and Alberta Environment (1-800-222-6514), and if a body of water is involved, the ENGINEER and Federal Department of Fisheries and Oceans (1-800-265-0237). The CONTRACTOR shall take all reasonable measures to contain the spill and cleanup; any such work shall be performed in accordance with the applicable legislation and regulations at the CONTRACTOR's expense.

9. Certificate of Recognition

The CONTRACTOR's attention is drawn to the Certificate of Recognition (COR) requirements outlined in Section 00800 SUPPLEMENTARY GENERAL CONDITIONS, Item 9. "General Condition 24 - Compliance with Occupational Health and Safety Act".

10. Site Maintenance

The CONTRACTOR shall adhere to the following maintenance procedures:

1. Maintain the working area in a clean and orderly manner as THE WORK progresses, and upon completion of construction, remove all waste materials, and all temporary facilities from the site.
2. Remove surplus or salvaged materials belonging to the CONTRACTOR from the site.
3. Clean haul routes.
4. Broom clean paved surfaces, rake clean other surfaces of ground.

11. Environmental Management

The CONTRACTOR shall provide an Environmental Construction Operations (ECO) Plan in accordance with the ECO framework. The ECO plan must be approved by the Owner and Engineer before construction commences and provision of the ECO plan is considered incidental to the project. This work is incidental to the contract.

The Environmental Construction Operations (ECO) Plan Framework is available online at the following address for reference only:

<https://open.alberta.ca/publications/environmental-construction-operations-eco-plan-framework>

12. Drainage Control

The CONTRACTOR is responsible for all drainage control. All costs associated with ditching and pumping to control drainage shall be incidental to the Contract.

13. Overhaul

Overhaul will not be paid as part of this contract.

14. Survey, Reference Points & Layout

The ENGINEER will establish reference points and/or benchmarks, of principal components of the work.

The CONTRACTOR shall be responsible for protection and preservation of benchmarks, reference points and legal survey pins. In case of willful or careless destruction, the CONTRACTOR shall bear the resulting expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.

The CONTRACTOR shall, before commencing work at any point, satisfy themselves as to the meaning and correctness of all stakes and instructions. No claims shall be considered for any allowance based on alleged inaccuracies, failure to read reference points correctly, or failure to interpret instructions correctly. When a benchmark or reference point is lost or destroyed or requires relocation, the CONTRACTOR shall advise the ENGINEER and will be responsible for the cost of replacement .

If the CONTRACTOR, in the course of executing THE WORK, finds any discrepancy between the drawings and the physical conditions of the locality or any errors, omissions or discrepancies in drawings or in the layout as given by points and instructions, he/she shall inform the ENGINEER immediately in writing, and the OWNER or the ENGINEER shall promptly verify the same and issue appropriate instructions. Any work done after discovery of errors, omissions or discrepancies, before further work is authorized, will be done at the CONTRACTOR'S risk.

The CONTRACTOR will be required to provide two business days' notice prior to all activities which require survey to ensure the ENGINEER can provide adequate layout pickup as needed. The CONTRACTOR will also be responsible to ensure construction staging and methodology is prepared in conjunction with the ENGINEER, prior to construction, to ensure all aspects of construction can be adequately measured.

15. Quantity Submissions for Payment

Stantec shall provide the successful bidder with a digital copy of the Progress Claim Form. All submissions for payment are to be submitted by the CONTRACTOR using this form in order to facilitate Stantec's review for payment. A copy of the Progress Payment Certificate shall be submitted to the CONTRACTOR within ten (10) days of submission of quantities to the ENGINEER. The CONTRACTOR shall indicate acceptance of the quantities by signing the summary page of the Progress Payment Certificate and returning same to the ENGINEER via email. Once acceptance of the quantities is received from the CONTRACTOR, the ENGINEER shall forward the Progress Payment Certificate to the OWNER for payment.

16. Force Accounts & Additional Work Requests

Force Accounts will be utilized to completed work which may not be included in the contract unit rates or incidental efforts due to the unknown nature of the specific repair or work needed.

Under typical conditions force account work should be submitted by the CONTRACTOR for approval and signoff by Stantec's construction manager on a daily basis and include summary of work, equipment, personal, materials, hours of work, etc. Approved Force Accounts will then be submitted for payment at progress time with costs covered by drawing from project contingency.

Force Accounts or any other claim for additional payment beyond unit rate items shall not be submitted for payment without signoff from Stantec's construction manager.

In the event that the OWNER makes a direct request for additional work to the CONTRACTOR for which there is an expectation of additional payment, it is the CONTRACTOR's responsibility to circulate an email confirming of the scope, schedule and (approximate) additional budget that will be required. This additional work request email must then be confirmed by the OWNER (in writing via email) and acknowledged Stantec's construction inspector (in writing via email) before the work proceeds. Stantec's construction manager must then provide daily signoff for extra efforts in alignment with the typical force account procedure noted above.

In the event there is a disagreement between the OWNER and CONTRACTOR regarding the additional costs for work requested, the CONTRACTOR can provide notice (in writing via email) that they will "Proceed Under Protest" to ensure the overall project schedule is not compromised and that additional negotiations for potential extra payment will be required after the fact.

In all cases, Force Account or any claims for additional not submitted within one month (i.e. 30 Calendar Days) from the date the Force Account work is completed will not be reviewed or considered for payment.

END OF SECTION 01030

1. General

- .1 Although the specifications set forth the work of various trades under separate Divisions, it is not intended that the work of that trade is limited to or includes all work set forth in that particular Division. The CONTRACTOR shall delegate the extent of THE WORK to be done by the various trades and shall coordinate execution of THE WORK by all trades.
- .2 Although the specifications are separated into titled Divisions, neither the ENGINEER nor the OWNER will be an arbitrator to establish limits of any agreements between the CONTRACTOR and their SUBCONTRACTORS.

2. Coordination with High School Developer and Contractor

- .1 Start-up of construction of the High School Site will be occurring in correlation with this project. Although a contractor has not yet been selected to complete the school construction work, the CONTRACTOR will be required to coordinate with the school's contractor in order to coordinate any overlapping work that may arise (ex. access to the school site, etc.).
- .2 All coordination requirement shall be considered incidental to the contract.

3. Cutting and Patching

- .1 The CONTRACTOR shall do all cutting, fitting, or patching of THE WORK that may be required to make its several parts come together properly and fit it to receive or be received by work of OTHER CONTRACTORS shown in, or reasonably implied by, the CONTRACT DOCUMENTS.
- .2 Any cost caused by cutting and patching due to ill-timed work shall be borne by the CONTRACTOR.
- .3 The CONTRACTOR shall not endanger any adjacent property or portion of THE WORK by cutting, digging or any other method, and shall be responsible for any damages caused by him.
- .4 Where new work connects with existing work, and where existing work is altered, cut and patch as required.
- .5 Coordinate THE WORK to minimize the amount of cutting and patching required.
- .6 Do no cutting that may impair the strength of structures. Obtain the ENGINEER'S approval before cutting, boring or sleeving load-bearing members.
- .7 Make cuts clean and smooth and make patches equivalent to new work.

4. High Pressure Gas and Fibre Optic Cable Crossings

- .1 The CONTRACTOR shall adhere to the terms of any Crossing Agreements. The costs of any delays in work due to work stoppages or fines incurred because of not adhering to the Crossing Agreements shall be borne by the CONTRACTOR. High Pressure Gas line crossings were not found during the design of the WORK. Fibre Optic crossings were found during the design of the WORK.

5. Co-ordination of Subcontractors

- .1 The CONTRACTOR shall ensure that he is in direct control of the subcontractors to co-ordinate their activities and ensure their activities meet the overall schedule and objective of the design. Updated schedules to be provided as required to ensure construction schedule is met.

6. Contact Information for Utilities, Landowners and Contractors

The known utility companies, owners and operators and their representatives are as follows:

TOWN OF BLACKFALDS

Attention: Preston Weran Telephone: (403) 885-6242
Director of Infrastructure and Property Services

Or: Laura Thevenaz Telephone: (403) 885-6256
Infrastructure Services Manager

Or: Emergency – Blackfalds On Call Telephone: (403) 340-9593

FORTIS ALBERTA

Emergency Telephone: (403) 310-WIRE
(403) 310-9473

ATCO

Emergency Telephone: (800) 511-3447

TELUS

Emergency Telephone: (855) 255-8828

Shaw

Emergency Telephone: (866) Dig-Shaw
(403) 344-7429

Bell/Axia

Emergency

Telephone: (866) 310-BELL
(403) 310-2355

END OF SECTION 01040

1. General

- .1 The Laws and Regulations of the province of Alberta shall govern.
- .2 If the National Building Code of Canada applies to the WORK, the standards of the WORK shall conform to or exceed the minimum standards of the National Building Code of Canada.
- .3 In the event of a dispute resolution by arbitration, the arbitration shall be governed by the Alberta Arbitration Act.
- .4 The CONTRACTOR shall ensure compliance on his part and on the part of all of his SUBCONTRACTORS with the Alberta Occupational Health and Safety Act and Regulations thereunder.

For purposes of this CONTRACT, the CONTRACTOR shall be the PRIME CONTRACTOR within the context of the Alberta Occupational Health and Safety Act and the Regulations thereunder.

- .5 The attention of the CONTRACTOR is drawn to the requirements of the Alberta Builders' Lien Act and Regulations thereunder.
- .6 In the case of a CONTRACT which falls under the requirements of the Alberta Public Works Act, the Alberta Public Works Act shall apply.
- .7 With respect to requirements for preserving historic resources, the Alberta Historical Resources Act and Regulations thereunder shall be complied with.

Any item of suspected paleontological, historical or archaeological significance shall remain the property of the OWNER, shall be preserved and recovered within the requirements of the Alberta Historical Resources Act. Notify the ENGINEER whenever any item of paleontological, archaeological or historical value is discovered and suspend operations on the WORK immediately until the ENGINEER issues instructions and authorizes that the WORK may proceed.

The OWNER may instruct the ENGINEER to issue a CHANGE ORDER if, in the opinion of the ENGINEER, the CONTRACTOR is unduly delayed or is required to perform extra work by reason of the discovery and preservation of any paleontological, archaeological or historical resource. The ENGINEER will, in the first instance, make a determination of the validity of a claim for delay and an estimate of the time of delay, and of the validity of the CONTRACTOR'S claim for additional payment and an estimate of the amount of the additional payment.

- .8 All other Alberta Laws and Regulations shall apply as appropriate and the CONTRACTOR shall comply with the requirements thereof as though they had been specifically named in these specifications.

2. Burning

- .1 Restrictions of federal, provincial and municipal authorities shall be complied with, and permits shall be obtained by the CONTRACTOR.

3. Regulations, Standards and Codes

- .1 Codes, Standards and Regulations are specified in other sections of the specifications and the WORK shall be done in accordance with those Codes, Standards and Regulations where applicable.

END OF SECTION 01060

1. Abbreviations - Specifications, Methods, Standards

.1 General

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ARCA	Alberta Roofing Contractors Association
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Associations
AWS	American Welding Society
BCLMA	B.C. Lumber Manufacturer's Association
CAN	National Standard of Canada
CCA	Canadian Construction Association
CISC	Canadian Institute of Steel Construction
CITC	Canadian Institute of Timber Construction
CPCI	Canadian Prestressed Concrete Institute
CRCA	Canadian Roofing Contractors Association
CSA	Canadian Standards Association
CWB	Canadian Welding Bureau
ISO	International Organization for Standardization
NBC	National Building Code
PCI	Prestressed Concrete Institute
PMBC	Plywood Manufacturer's Association
SJI	Steel Joist Institute
SSPC	Steel Structures Painting Council
WCB	Worker's Compensation Board

.2 Utilities

API	American Petroleum Institute
AWWA	American Water Works Association
CGA	Canadian Gas Association
CGSB	Canadian General Standards Board
CSPI	Corrugated Steel Pipe Institute
IAO	Insurer's Advisory Organization
RTAC	Roads and Transportation Association of Canada
ULC	Underwriters Laboratories of Canada
USA	United States of America Standards (ASA)

.3 Mechanical

AFBMA	Anti Friction Bearing Manufacturer's Association
AGMA	American Gear Manufacturer's Association
AMCA	Air Moving and Conditioning Association

ANSI	American National Standards Institute
ACR	Air Conditioning and Refrigeration Institute
ASHRAE	American Society of Heating Refrigerating and Air Conditioning Engineers
NFPA	National Fire Protection Association
SAE	Society of Automotive Engineers

.4 Electrical

AIEE	American Institute of Electrical Engineers
CEC	Canadian Electrical Code
EEMAC	Electrical and Electronic Manufacturers Association of Canada
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineers Society
IPCEA	Insulated Power Cable Engineer's Association
LEMA	Lighting Equipment Manufacturer's Association
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code

.5 Use of Abbreviations

These abbreviations refer to Specifications, Methods and Standards issued by the respective Association, and the abbreviations are used in the specifications.

Alphanumeric designations following the abbreviations denote the specification, method, or standard.

2. Abbreviations - Metric

.1 General

The specifications are metric and metric usage is based upon SI units in accordance with CSA Standard CAN/CSA-Z234.1 Canadian Metric Practice Guide. In this specification SI units are abbreviated in accordance with the Metric Units and Abbreviations below.

.2 Linear Measure

Metre	m
Millimetre	mm
Kilometre	km
micrometre	micro-m

.3	<u>Area</u>	
	Square metre	m ²
	Square millimetre	mm ²
	Hectare	ha
.4	<u>Volume</u>	
	Cubic metre	m ³
	Litre	L
.5	<u>Mass and Density</u>	
	Kilogram	kg
	Gram	g
	Tonne	t
	Kilogram per metre	kg/m
	Gram per metre	g/m
	Kilogram per square metre	kg/m ²
	Gram per square metre	g/m ²
	Kilogram per cubic metre	kg/m ³
.6	<u>Temperature</u>	
	Degree Celcius	°C
.7	<u>Force, Pressure, Stress</u>	
	Newton	N
	Kilonewton	kN
	Pascal	Pa
	Kilopascal	kPa
	Megapascal	MPa
.8	<u>Velocity, Rate of Flow</u>	
	Metre per second	m/s
	Metre per hour	m/h
	Kilometre per hour	km/h
	Litre per second	L/s
	Cubic metre per second	m ³ /s
.9	<u>Power, Energy, Heat, Work</u>	
	Watt	W
	Kilowatt	kW
	Kilowatt hour	kWh
	Joule	J

.10 Electricity

Ampere
Volt

A
V

END OF SECTION 01070

1. General

- .1 Payments will be made on the basis of the lump sum prices bid and the unit prices bid in the Tender, and in accordance with Article 18 of the General Conditions.
- .2 The prices bid for various items of work, unless specifically noted otherwise, shall include the supply of all labour, PLANT, MATERIAL and PRODUCT equipment necessary to construct THE WORK in accordance with the specifications.
- .3 The prices bid for supply and installation shall be full compensation for supplying, hauling, installing, cleaning, testing, and placing in service together with all other work subsidiary and incidental thereto for which separate payment is not provided elsewhere.
- .4 The method of measurement of the quantities for payment and the basis for payment will be in accordance with the following items of this section. All measurement will be done by the ENGINEER using generally accepted field survey methods and confirmed with the CONTRACTOR. Stationing interval for volume calculations shall not exceed 20m.
- .5 Where the Tender shows separate items for supply and installation, the unit prices or lump sum prices bid for supply shall include supplying, delivering, loading, unloading and all allowances for handling, storage, breakage and waste. Payment will be made only for MATERIAL actually installed in THE WORK.

Progress Payment for supply-only items shall be made only for MATERIAL and PRODUCT on the WORKSITE and in the CONTRACTOR'S care, and shall then become the Property of the OWNER.
- .6 Other materials on site, whether existing structures, vegetation, topsoil, gravel, sand or other excavated or piled materials, are the property of the OWNER or of the owner of the land on which THE WORK is located. Only those materials specifically noted in the specification or on drawings as belonging to the CONTRACTOR shall become the CONTRACTOR'S property.
- .7 Where there are excess excavated materials, unsuitable materials excavated or materials of any kind that are excavated but not used in THE WORK, such materials are not the property of the CONTRACTOR unless authorized in writing by the ENGINEER or specified to be disposed of by the CONTRACTOR.
- .8 With each progress payment claim, the CONTRACTOR and any Pre-selected Supplier shall jointly certify a claim for payment for preordered

MATERIAL used or incorporated into THE WORK or delivered to the site of THE WORK during that claim period.

- .9 Upon Total Completion of THE WORK, the CONTRACTOR shall credit the OWNER for MATERIAL paid for as supplied on the WORKSITE, but not incorporated in THE WORK, and remove the surplus MATERIAL from the WORKSITE.
- .10 The WORK shall be carried out in accordance with the corresponding City of Red Deer specifications indicated below:
 - a) City of Red Deer, Design Guidelines – Latest Edition
 - b) City of Red Deer, Contract Specification – Latest Edition

2. Incidental Work

- .1 The following will be considered incidental to the work but not limited to and separate payment will not be made.
 - a) All costs associated with dewatering due to precipitation, however separate payment will be made for groundwater dewatering required.
 - b) Water used for dust control.
 - c) Locating and temporarily removing, relocating or protecting existing utilities, and supporting power poles, structures, underground ducts, etc.
 - d) Temporary removal and replacement of existing fences, traffic signs and structures not specified in the tender to the original condition.
 - e) Maintaining existing services in operation and access to all businesses affected.
 - f) Notify all affected parties of water or sanitary services interruptions and provide temporary services as required.
 - g) All quality control tests of any / all products supplied to complete the work including but not limited to geotechnical materials testing of granular supply, earthwork/granular densities, concrete, asphalt, and pressure testing waterlines.
 - h) Preparation, updating, and submission(s) of water flushing plan(s);
 - i) Replacement of any lost or damaged OWNER-supplied materials under the CONTRACTOR'S care.
 - j) Restoration of any existing facilities damaged or disturbed during construction.
 - k) Coordination with utility authorities and the OWNERS as required.
 - l) Coordination with Town of Blackfalds and other CONTRACTORS working in the area.
 - m) CONTRACTOR will be responsible for all re-tests required for the project.
 - n) CONTRACTOR is responsible for coordinating with the Town of Blackfalds for the moving and reinstallation of existing signs. CONTRACTOR is responsible for all temporary signage.

- o) Adjustment of catch basin, valve, manhole and other fixture elevations as required.
- p) Prime and tack coats required for associated paving
- q) Testing of water valves and curb stops prior to construction.
- r) Maintenance of road sections disturbed by construction throughout construction and the maintenance period.
- s) Cleaning of tracked mud, dirt, debris, trash, etc. from roadways and other surfaces which is a result of the CONTRACTORS activities.
- t) Bypass pumping during work on storm water and sanitary infrastructure.
- u) Any other incidental work related to the performance of the Contract for which separate payment is not specified.

3. Lump Sum Contracts

- .1 Payments will be made on the basis of the following:
 - a) Lump Sum items in the Schedule of Breakdown Prices in the Supplementary Tender Forms.
 - b) Unit prices bid in the Schedule of Unit Prices for Provisional Work Items in the Supplementary Tender Forms.
 - c) Changes in THE WORK for items not covered by unit prices, in accordance with Article 16 - CHANGES IN THE WORK of the General Conditions.
- .2 For each Lump Sum item in the Schedule of Breakdown Prices, the ENGINEER will, in cooperation with the CONTRACTOR, estimate the percentage of the item completed at the end of the payment period.

4. Prime Cost Sum Contracts

The CONTRACTOR shall be paid the net invoice (supplier/vendor quotation price) plus 10% markup to cover the CONTRACTOR's costs for coordination of the work. If the Prime Cost Sum is not sufficient to cover the invoices, the Contract Price will be increased, or funds will be transferred from the Contingency Allowance as required. Alternatively, if the Prime Cost Sum is greater than that required for the work, the value of the Contract shall be decreased accordingly.

5. Unit Price Contracts

Should the information in this section conflict with the City of Red Deer Design Guidelines or Contract Specifications or other sections in this document, this section shall govern.

1.0 SITE GRADING

1.1. General Requirements – SG

1.1.1. Mobilization/Demobilization

- i. Include the *Contractor's* costs of mobilization at the beginning of the scope of the project, and the costs of demobilization at the end of the scope of the project.
- ii. Included in mobilization are such items as bonding, insurance, permits, moving and accommodating personnel, materials, and equipment to the site, setting up temporary facilities and all preparation for performing the *Work*.
- iii. Unless otherwise stipulated elsewhere, shall include temporary erosion and sediment control implementation, maintenance and removals that may be required such as a gravel access pad/tire cleaning station, cleaning of existing roads such as sweeping and removing tracked material, and dust control.
- iv. Included in demobilization are preparation and submission of operation and maintenance manuals (if required), removal of all personnel, materials and equipment, and cleanup of the *Work*, site, and site access.
- v. The lump sum price bid for this work shall be relative to the costs involved but shall not exceed ten percent of the Tender Price.
- vi. Payment will be made as follows, as approved by the *Consultant*:

60% of the lump sum bid will be included in the first progress payment certificate.

40% of the lump sum bid will be included in the final progress payment certificate.
- vii. The *Consultant* may at his discretion recommend partial payment if mobilization or demobilization is not complete.

1.1.2. Hydrovac Locates

This item shall include all labour and materials required to located existing utilities, including work as deemed necessary by the appropriate utility owner.

Payment: Cash Allowance as per GC4.1.

Measurement: *Contractor* to provide copies of the subcontractor total invoice amount. No markup on the invoice shall be included. No *Contractor* costs shall be included.

1.1.3. ECO Plan & Implementation

- i. Contractor to prepare ECO Plan for review by Owner and Consultant.
- ii. Shall include installation, maintenance and removal of ESC measures.
- iii. Erosion and Sediment items shall include supply, installation and any site preparation work specific to these items.
- iv. Examples: Silt fencing, catch basin sediment controls, rolled erosion control matting, wattles, check dams, topsoil supply and install along with various types of seeding along with amount of seed or thickness of topsoil.
- v. All ESC reporting as per the ECO plan or as specified on the drawings.
- vi. Payment will be made as follows, as approved by the *Consultant*:

60% of the lump sum bid will be included in the first progress payment certificate.

40% of the lump sum bid will be included in the final progress payment certificate.
- vii. The *Consultant* may at his discretion recommend partial payment if mobilization or demobilization is not complete.

1.2. Site Preparation

Not Applicable

1.3. Earthworks

1.3.1. Topsoil Stripping

Stripping shall include stripping topsoil and organic material from designated areas and to depths designated by the *Consultant*, loading, transporting, and stockpiling on the site or hauling to disposal; clean-up and all incidental work for which payment is not specified elsewhere.

Payment: Unit price bid per cubic metre of excavation. Overhaul will not be paid for stripping.

Measurement: Field survey of area stripped multiplied by the average thickness at sample holes or measure by field survey pre and post stripping as determined by the *Consultant*.

1.3.2. Common Excavation

Grading shall include excavation, loading, transporting within project area, filling of embankments, moisture conditioning, and compacting to the specified densities, and/or stockpiling, and levelling as noted. Grading shall also include clean-up, finishing, removal of debris, trimming and all incidental work for which payment is not specified elsewhere.

a) Onsite Cuts/Fills 100% SPD on fills >1.0m

b) Onsite Cuts/Fills 98% SPD on fills <1.0m

Payment: Unit price bid per cubic metre excavated. Overhaul will not be paid unless there is a bid item in the schedule of quantities and has been approved previously by the *Consultant* and *Owner*.

Measurement: Field survey of area before and after grading (less topsoil stripping quantity).

1.3.3. Miscellaneous Grading

1.3.3.a. Topsoil Replacement

Topsoil replacement shall include loading, hauling, placing, spreading previously stockpiled topsoil, and all clean-up and related work. Replacement shall be to designated thickness and shall include rock removal, plowing, harrowing and supplying replacement topsoil to make up deficiencies in thickness, and all incidental work for which payment is not specified elsewhere.

Payment: Unit price bid per square metre of compacted topsoil for the depth specified (does not include seeding). Overhaul will not be paid unless there is a bid item in the schedule of quantities and has been approved previously by the *Consultant* and *Owner*.

Measurement: Field survey of area replaced.

1.3.3.b. Fine Grade & Seeding

Fine Grade Topsoil, Seed shall include preparation of areas to be seeded, supply and sowing of seed, fertilizing, watering as required, mowing two times, cleanup and related work, and maintenance of grass until acceptance by the Town.

Payment: Unit price bid per square metre of topsoil fine graded and seeded.

Measurement: Field survey seeded area.

1.3.3.c. Site Vegetation Cleanup and Truck Dump Leveling

Cash allowance to complete site cleanup. Contractor to meet with Consultant prior to work and obtain clear direction on work to be completed by force account.

Payment: Cash Allowance, contractor to submit force accounts for work completed each day for review and approval by Consultant.

Measurement: Force Account

2.0 UNDERGROUND UTILITIES

2.1. General Requirements – UG

2.1.1. Mobilization/Demobilization

See Item 1.1.1 Above

2.1.2. Hydrovac Locates

See Item 1.1.2 Above

2.1.3. ECO Plan & Implementation

See Item 1.1.3 Above

2.2. Storm Sewer

2.2.1. Trench Excavation, Backfill & Compaction

Trench excavation backfill and compaction for underground utilities shall include trenching, shoring, water control, crossing existing utilities, backfilling, trench compaction of native soil as specified, disposal of excess material, surface restoration, trench maintenance, and all incidental work for which separate payment is not specified elsewhere.

Payment: Unit price bid per linear metre of pipe installed at depth ranges as shown in the Tender Form, where depth ranges are not shown in the Tender Form the unit price will be for all depths.

Measurement:

Length - along the horizontal centerline of the pipe installed in the trench from centre to centre of manholes and fittings or from the centre of the main to which branches, or services are connected, to the end of pipe in the trench.

Depth - from the invert of the pipe installed in the trench to the ground surface as measured at the time that stakes are set and as recorded on the Surveyed Grade Sheets. The length of each depth range will be determined from an average depth from Manhole to Manhole (or fitting to fitting). Measurements taken a minimum

every 20 metres along the line and an average depth for payment will be taken for each manhole to manhole section. Surveyed grade sheets will govern.

2.2.2. Unsuitable Pipe Foundation (Provisional)

Screened Gravel (or rock) shall be used to replace unsuitable material should it be encountered. The *Contractor* shall notify and review with the *Consultant* the unsuitable material encountered. Item shall include excavation of unsuitable material, loading, hauling and disposal; and supply of replacement material, placing and compaction.

Payment: Unit price bid per cubic metre of material required to replace the unsuitable material based on truck box measure as delivered to the site.

Measurement: *Contractor* to provide truck haul tickets to the *Consultant* for review and approval daily.

2.2.3. Storm Pipe and Bedding

Sewer Pipe PVC, Ultra-Rib or Concrete and Bedding shall include purchase, loading, transporting, unloading and installing of pipe, pipe fittings, bedding, and including laying, jointing, backfilling in the pipe zone, and all incidental work for which payment is not specified elsewhere.

Payment: Unit price bid per linear metre of pipe supplied and installed. Unless specifically noted in the schedule there will be no additional payment for bends, tees, plugs or special fittings.

Measurement: Actual length of pipe installed, as measured from centre to centre of manholes along the centerline and grade of the pipe or from outside wall of vaults, from ends of tee manhole sections or from outside walls of structures

2.2.4. Storm Manholes

Structures shall include supply, installation, and adjustment to final grade of manholes, vaults, tee manholes, frames, grates, catch basin manholes, and all other sewer structures. Also included are grouting, benching, replacement of steps if required, and all incidental work for which separate payment is not specified elsewhere.

Manholes shall include the supply and placing of precast bases, barrel sections, slab or conical type tops, internal drops if required, frames, grates, complete with all jointing compounds and waterproofing as required.

Payment: Unit price bid per vertical meter supplied and installed.

Measurement: Field measure taken from lowest invert to rim.

Control Structure & Orifice Plate

Payment: Lump sum unit price bid.

Measurement: Percentage of work completed.

2.2.5. Catch Basins

Catch basins shall include supply and installation of base, top, barrel, frames, grates, side inlets, backfilling, compaction, and adjustment to final grade.

Payment: Unit price bid for each complete catch basin supplied and installed.

Measurement: Field count of each item installed.

2.2.6. Catch Basin Leads

Catch Basin Leads shall include trenching, supply and compacting of bedding materials, compacted backfilling, supply, laying, jointing pipes and breaking into catch basins, manholes and mains as required.

Payment: Unit price bid per linear metre of pipe supplied and installed.

Measurement: Survey from the centre of catch basins to the centerline of the manhole or to the outside wall of the vault or tee section

2.2.7. Tie-Ins

Tie-in to existing stub/manhole may include concrete/asphalt removal offsite, excavation, backfill, compaction, removal & disposal offsite of existing plug/pipe, coring into the manhole, re-benching and any further work required to provide a proper connection to the main and all incidental work for which payment is not specified elsewhere. Tie-in may include repairs to existing surface conditions, such as concrete, gravel and asphalt replacement.

Tie-ins include removal and disposal of existing infrastructure as noted on the drawings.

Payment: Unit price bid for each tie-in

Measurement: Field count of each tie-in.

2.2.8. Flush & Video Inspection

- i. Shall include all costs associated to image-based inspection of gravity sewers and in compliance with the Pipeline Assessment & Certification Program (PACP) codes.
- ii. Operator shall ensure pipe has been flushed clean and the image is clear.
- iii. Sewer condition report shall consist of a electronic data file on SharePoint site or similar.
- iv. Report in log form shall be maintained during the inspection and note exact location of each defect discovered (open joints, broken/cracked pipe, collapsed pipe, presence of grease, roots, debris, accumulation, obstructions, infiltration, water depth variations and other points of significance). The reference shall include distance from starting manhole (in metres), position of the defect as reference to the crown of the pipe using clock face notation and estimated percent of water depth and/or oval pipe.
- v. Operator shall pan to look up each service connection.
- vi. A still photo shall be included of each service connection and each defect. A minimum of one photograph per sewer segment shall be included in the report.
- vii. Item shall include flushing, cleaning to thoroughly remove dirt, grease, sand and other foreign debris from inside the pipe and manholes so that cracks and faults may be observed.
- viii. Item shall include traffic control and accommodation as required.
- ix. May require flow control to ensure a minimum of 80% of the height of the sewer is visible for the entire inspection on live sewers. All fog shall be evacuated from the sewer. The Camera lens shall be kept clean.

Payment: Unit price bid per lineal meter of pipe inspected.

Measurement: Actual length of pipe inspected, as measured from centre to centre of manholes along the centerline and grade of the pipe or from outside wall of vaults, from ends of tee manhole sections or from outside walls of structures. The *Consultant* may adjust payment accordingly if the video or report is incomplete.

2.2.9. Inlet, Outlet & Outfall Structures

Inlet/Outlet/Outfalls shall include the supply and installation of item specified including, bedding, clay plug, backfill in the pipe zone, riprap, filter fabric, and all other incidental work for which payment is not specified elsewhere as per the drawing details.

Note; flared end and bar screens NOT required.

Payment: Unit price bid for each inlet/outlet/outfall.

Measurement: Field count of items installed

2.2.9e) Page Wire Fence

Fencing installed as per Lacombe County Specification D-1.

Fencing shall include materials and installation of fencing.

Payment: Unit price bid per linear meter of fence installed.

Measurement: Field measure of fence length.

2.2.10. Insulation

Insulation shall include supply and install of insulation as per the *Municipalities* construction specifications, or design drawings details.

Payment: Unit price bid per linear metre of insulation installed.

Measurement: Field measure from the start of insulation to the end of insulation

2.3. Sanitary Mains

2.3.1. Trench Excavation, Backfill & Compaction

See 2.2.1 Above

2.3.2. Unsuitable Pipe Foundation (Provisional)

See 2.2.2 Above

2.3.3. Sanitary Pipe and Bedding

See 2.2.3 Above

2.3.4. Sanitary Manholes

See 2.2.4 Above

2.3.5. Tie-Ins

See 2.2.7 Above

2.3.6. Flush and Video Inspection

See 2.2.8 Above

2.3.7. Insulation

See 2.2.10 Above

2.4. Water Mains

2.4.1. Trench Excavation, Backfill and Compaction

See 2.2.1 Above

2.4.2. Unsuitable Pipe Foundation (Provisional)

See 2.2.2 Above

2.4.3. Water Mains and Bedding

The supply and installation of pressure pipe shall include the purchase, loading, transporting, unloading, and installing of pipe, fittings, cathodic protection including supply and placing of pipe bedding, laying, jointing, backfilling in the pipe zone, thrust blocks, cleaning, testing and all incidental work for which payment is not specified elsewhere.

Payment: Unit price bid per linear metre of pipe supplied and installed. Unless specifically noted in the schedule there will be no additional payment for bends, tees, crosses, reducers, plugs cathodic protection or special fittings.

Measurement: Actual length of pipe installed as measured along the horizontal centerline and grade of the pipe from centre to centre of fittings or from outside walls of vaults, valve chambers or structures.

2.4.4. Hydrants & Valves

Hydrants & Valves shall include supply of materials, excavation, installation, including cathodic protection, thrust blocks, temporary supports, hydrant/valve block seat, testing, disinfecting and backfilling, and all incidental work for which separate payment is not specified elsewhere. Cathodic protection shall include supply and placing of all anodes including connections to all fittings, valves, hydrants and accessories and includes all necessary work for which payment is not specified elsewhere.

Payment: Unit price bid per item supplied and installed. Hydrant leads are paid for as water main and valves on hydrant leads are included under valves. Hydrant to be installed at designed grade. No additional payment will be made to raise/lower hydrant flange to finished grade unless there was a change in design.

Measurement: Field count of each item installed to designed finished grade

2.4.5. Tie-Ins

2.4.5.a. Tie-in to existing plug

Tie-in to existing stub may include concrete/asphalt removal offsite, excavation, backfill, compaction, removal & disposal offsite of existing plug/pipe/reducer, and any further work required to provide a proper connection to the main and all incidental work for which payment is not specified elsewhere. Tie-in may include repairs to existing surface, such as concrete, gravel and asphalt replacement.

2.4.6. Temporary Water Supply

Temporary water shall include supply and installation of hoses, tees, valves, fittings, bacteriological tests, connection to existing residents and buildings, any interior plumbing, road crossings etc. Prior to disconnecting any property from the Town Water supply in preparation for water main replacement.

Payment:

90% of the lump sum bid will be included in the first progress payment certificate after installation is complete.

10% of the lump sum bid will be included in the final progress payment certificate.

Measurement: Field inspection to the satisfaction of the engineer.

2.5. Service Connections

2.5.1. Trench Excavation, Backfill and Compaction

See 2.2.1 Above

2.5.2. Unsuitable Pipe Foundation (Provisional)

See 2.2.2 Above

2.5.3. Sanitary Service Pipe

Service pipe shall include the supply and installation of sanitary sewer service pipe, storm sewer service pipe and water service pipe. Included are supply and placing of bedding materials, all fittings including bends and marker posts laying, jointing, cleaning, testing and disinfecting where applicable and connection to the mains.

Payment: Unit price bid per linear metre of pipe supplied and installed.

Measurement: Survey along the centre of the service trench from the centre of the main or riser to the end of the pipe for sewer pipe and along the centre of the service trench from the centre of the main to the end of the pipe for water service.

2.5.4. Storm Service Pipe

Not applicable

2.5.5. Water Service Pipe

See 2.5.3 Above

2.5.6. Water Service Main Stop

Water Service Fittings shall include the supply and installation of corporation stops, curb stops, curb boxes, couplings, markers, tapping of water mains and all incidental work for which separate payment is not specified elsewhere.

Payment: Unit price bid per item supplied and installed.

Measurement: Field count of each item installed

2.5.7. Water Service Curb Stop

See 2.5.6 Above

2.6. Utility Ducts Crossings

2.6.1. Utility Ducts

Utility ducts to include supply and installation of specified pipe type size and length. Included shall be laying, jointing, fittings, end caps, bedding and initial backfill, and any further work required by the utility company for which the duct is being installed for and all incidental work for which separate payment is not specified elsewhere.

Note: As the 4-party shallow utilities design is by others and not yet complete, the Contractor shall delay ordering materials for the duct crossings until provided direction from the Consultant. Therefore, the quantities noted are provisional and subject to change.

Payment: Unit price bid per lineal meter of installed materials.

Measurement: Field measurement horizontally from the designed start to end of the duct.

2.6.2. Trenching, Excavation, Backfill and Compaction

See 2.2.1 Above

3.0 SURFACE IMPROVEMENTS

3.1. General Requirements – SF

3.1.1. Mobilization/Demobilization

See Item 1.1.1 Above

3.1.2. Hydrovac Locates

See Item 1.1.2 Above

3.1.3. Erosion and Sediment Controls

See Item 1.1.3 Above

3.1.4. Breakout & Dispose Offsite

Removal of existing pavement and/or concrete as indicated shall include saw cuts, removing, and disposal where new work abuts existing work, or as required.

Payment: Unit price bid per square metre of pavement cut and removed. Unit price per linear metre of curb and gutter and sidewalk removed.

Measurement: Field measurement of actual item removed.

3.2. Roadway Base

3.2.1. Excavation

Excavation shall include excavating, loading, transporting within site limits, placing for fill, stockpiling, and levelling. Grading also includes excavation of material that is suitable for fill for roadways; fill for lots, or for stockpiling, or excavating of unsuitable and unstable materials from roadway subgrade, disposal, offsite and temporary drainage. Overhaul will not be paid for excavation.

Payment: Unit price bid per cubic metre excavated.

Measurement: Survey cross sections before and after excavation.

3.2.2. Subgrade Preparation

3.2.2.a. Roadway Geotextile shall include supply and installation of woven geotextile to manufacturers' specifications, including overlap.

	ASTM	Roadway Classification	
	TEST	Collector or Local	Arterial
Grab Tensile Strength (N)	D4632	800	1100
Grab Elongation (%)	D4632	<50min	<50min
CBR Puncture Strength (N)	D6241	3100	3300
Trapezoidal Tear Strength (N)	D4533	250	400

Payment: Unit price bid per square metre of subgrade prepared.

Measurement: Field survey of compacted and approved subgrade.

3.2.3. Granular Subbase

Granular sub-base and base course shall include the supply of granular material, hauling, placing, spreading, levelling, moistening, and compacting as specified to the required thickness. This item shall also include the adjustment and cleaning of all utility structures unless measure and paid for separately.

Payment: Unit price bid per square metre of specified material, thickness, and density.

Measurement: Field survey of completed and approved sub-base and base course.

Subbase – Shall be constructed, measured, and paid to 0.3m beyond back of concrete structure, or finished subbase surface where there is curb and gutter.

Base Course – Shall be measured and paid from Lip of Gutter to Lip of Gutter, or finished base course surface, where there is no curb and gutter. Base course underneath concrete structure shall be included in the concrete unit rates, unless measured and paid for as a separate item.

3.2.4. Granular Base Course

See 3.2.3 Above

3.3. Roadway Asphalt

3.3.1. Asphalt Hot Mix – Base Course

Asphaltic hot mix base course shall include preparation of mix design, and job mix, supply of aggregates and asphalt, supply and placing of prime coat, mixing, laying, compacting, supplying, and placing tack coat and for all incidental work for which separate payment is not specified elsewhere. This item shall also include the adjustment and cleaning of all utility structures unless measure and paid for separately.

Payment: Unit price bid per square metre of base course in place, to the specified thickness.

Measurement: Field survey of completed and approved base course.

3.3.2. Asphalt Hot Mix – Surface Course

Asphaltic hot mix surface course shall include the preparation of the job mix design and job mix formula, the supply and placing of a prime coat or tack coat as required, supply of aggregates and asphalt, mixing, transporting, laying and compacting the surface course to the specified grade, thickness and density. This item shall also include the adjustment of all utility structures, unless measured and paid for separately, and clean-up.

Payment: Unit price bid per square metre of surface course in place, to the specified thickness.

Measurement: Field survey of completed and approved surface course.

3.3.2.a. Payment Reductions for Sub-Standard Asphalt

i. Asphalt Mix

The asphalt mix must conform to the mix design as per specifications.

ii. Pavement Thickness

Pavement structure shall be constructed to the minimum thickness as specified. Any area suspected of deficient thickness shall be cored by the *Geotechnical Consultant*. Unit price reduction for pavement thickness deficiency shall be as follows:

iii. Density

The mixture shall be compacted immediately after spreading to a minimum density specified and as per the local *Municipality* specifications.

iv. If the *Owner*, in its sole discretion decides to accept the deficient density in an area, then a reduced payment may be substituted. Any reduced payment shall be as per the local *Municipality* specifications or the City of Red Deer Specification if the local Municipality does not have their own.

Payment reductions will be applied against Progress Payments.

Measurement: Field survey of defective Area in m2.

3.4. Concrete

3.4.1. Curb & Gutter

Curb & Gutters, Sidewalk, walkways, and swales shall include excavation or fill to prepare subgrade, preparation of base or cushion, formwork, supply and placing of concrete, jointing, reinforcing, finishing, curing, sealing and backfilling. Also included is special finishing required to build pedestrian ramps or other features for which separate payment is not specified elsewhere.

Payment: Unit price bid per linear metre of curb and gutter, sidewalk, crossings and walkways.

Measurement:

Survey curb and gutter - along the curb face. Survey sidewalk - along the centerline.

Survey monolithic sidewalk, curb and gutter - along the curb face.

3.4.2. Monolithic Sidewalk

See 3.4.1 Above

3.4.3. Separate Sidewalk

See 3.4.1 Above

3.4.4. Concrete Lane Apron

Concrete lane apron shall include excavation or fill to prepare subgrade, preparation of base or cushion, formwork, supply and placing of concrete, jointing, reinforcing, finishing, curing, sealing and backfilling. Also included is special finishing required or other features for which separate payment is not specified elsewhere.

Payment: Unit price bid per square metre of concrete placed

Measurement: Field measure from Back of Curb to front of Separate Walk

3.4.5. Pedestrian Ramps (All Types)

Concrete pedestrian ramps shall include excavation or fill to prepare subgrade, preparation of base or cushion, formwork, supply and placing of concrete, jointing, reinforcing, finishing, curing, sealing and backfilling. Also included is special finishing required to build pedestrian ramps or other features for which separate payment is not specified elsewhere.

Payment: Unit price bid per pedestrian ramps installed.

Measurement: Field count of each pedestrian ramp installed.

3.5. Lanes

3.5.1. Lanes

3.5.1.a. Lane Coring

See 3.2.1 Above

3.5.1.b. Granular Base Course

See 3.2.4 Above

3.5.1.c. Post & Cable Fence

Fencing shall include post installation, concrete/gravel backfill as specified, materials and installation of fencing. Fencing to meet landscape drawing, local *Municipality* and/or manufacturer specifications. Unless otherwise noted in the *Schedule of Prices*.

Payment: Unit price bid per linear meter of fence installed.

Measurement: Field measure of fence length.

3.6. Pathways

Not Required

3.7. Signage & Pavement Markings

3.7.1. Signage & Traffic Controls

Signage and traffic controls to include supply and installation of appropriate traffic signage as per the detailed drawings, local municipality standards and Alberta Transportation specifications. To include posts, brackets, excavating, backfill, compaction, utility locates and all incidental work for which payment is not specified elsewhere.

Payment: Unit price bid per item installed.

Measurement: Field count of each item installed

END OF SECTION 01150

1. Preconstruction Meeting

- .1 Preconstruction meetings will be arranged by the ENGINEER after the Acceptance of the TENDER.
- .2 Meetings will be held at the ENGINEER'S office or at an alternate location at or near the site.
- .3 The agenda for the Preconstruction Meeting shall include, but is not limited to, the following:
 - a) Confirm the SUPERINTENDENT, CONTRACTOR'S PROJECT MANAGER, and the ENGINEER'S Resident personnel on the WORKSITE.
 - b) Establish WORKSITE protocols for communication, reporting, inspection, etc.
 - c) Clear up any ambiguities or questions of interpretation known at that time.
 - d) CONTRACTOR shall present its detailed WORK SCHEDULE.
 - e) Occupational Health and Safety relationships and responsibilities.
 - f) Discuss other responsibilities of the OWNER, the CONTRACTOR, and the ENGINEER. Review General Conditions 5 to 11, inclusive.

2. Progress Meetings

- .1 Progress meetings will be held on a regular monthly basis or more frequently if requested by the ENGINEER.
- .2 Accommodation for progress meetings shall be provided by the CONTRACTOR at or near the site.
- .3 The ENGINEER will give to all parties advance notice of meeting dates, times and locations.
- .4 The CONTRACTOR shall have in attendance the SUPERINTENDENT, the CONTRACTOR'S Project Manager and representatives of the SUBCONTRACTORS if requested by the ENGINEER.
- .5 The ENGINEER will have the ENGINEER'S Project Manager or the Resident Engineer, or both, in attendance.
- .6 The OWNER may have a representative in attendance.

- .7 Occupational Health and Safety incidents, records and procedures shall be part of the agenda for every progress meeting.
- .8 Minutes will be taken by the ENGINEER and copies will be distributed to all attendees.

3. Weekly Worksite Meetings

- .1 Prior to starting any work, the CONTRACTOR shall have an on-site safety meeting. The CONTRACTOR shall give the ENGINEER 48 hours notice of the meeting so that the RESIDENT ENGINEER or the PROJECT MANAGER, or both, may attend the meeting. The CONTRACTOR shall keep minutes of the safety meeting, which shall be signed by all present. A copy of the minutes shall be provided to the ENGINEER.
- .2 The CONTRACTOR and all SUBCONTRACTORS shall have regularly scheduled weekly safety meetings. The CONTRACTOR shall keep minutes of these meetings, and the minutes shall be signed by all present. A copy of all safety meeting minutes shall be given to the ENGINEER.

END OF SECTION 01200

1. General

- .1 Submittals are required in accordance with the provisions of this section, to determine whether the specified MATERIAL and PRODUCT are furnished and installed in accordance with design intent as expressed in the CONTRACT DOCUMENTS.
- .2 Individual submittals as required are detailed in other sections of the specifications.
- .3 Until submissions are reviewed, work involving relevant PRODUCT or MATERIAL may not proceed.
- .4 Where the phrase "or approved equivalent alternative" occurs in the CONTRACT DOCUMENTS, do not assume that MATERIAL, PRODUCT or methods will be accepted as equal by the ENGINEER unless the item has been specifically accepted for THE WORK by the ENGINEER in writing.

2. Identification of Submittals

- .1 Identify each submittal and resubmittal by showing at least the following information:
 - a) Name, address and telephone number of the submitter, and a name of an individual for contact.
 - b) Drawing number and specification number to which the submittal applies.
 - c) Whether an original submittal or resubmittal.
 - d) Confirmation of prior review by the CONTRACTOR.
 - e) Date of submittal or resubmittal.
 - f) Authorized signature of the Submitter.

3. Coordination of Submittals

- .1 Prior to submittal for the ENGINEER'S review, coordinate all material:
 - a) Determine and verify field dimensions and conditions and conformance with specifications, including MATERIAL, catalogue numbers, type numbers and similar data.
 - b) Coordinate requirements between trades.
 - c) Coordinate with requirements under laws, regulations, etc.

- d) Secure required approvals of public agencies, inspection agencies and standards agencies and show proof of approvals acquisition.
- e) Indicate any deviations from the intent of design as expressed in the CONTRACT DOCUMENTS and request specific review of these deviations.

4. Timing of Submittals

- .1 Make submittals far enough in advance to allow adequate time for coordination, ENGINEER'S review, revisions and resubmittals, and for supply and delivery in time for the scheduled installation in THE WORK.
- .2 Allow at least ten calendar days for the ENGINEER'S review after receipt of submittals. The Engineer will make every effort to review the submittals in a timely and expedient manner.
- .3 Costs due to delays in making submittals shall be borne solely by the CONTRACTOR.

END OF SECTION 01300

1. Construction Schedule

- .1 Upon award of the CONTRACT and prior to commencement of THE WORK, the CONTRACTOR shall submit for approval to the ENGINEER a construction schedule in critical path method format showing all the principal phases of the work. No Progress Payment Claim shall be certified until an acceptable Construction Schedule has been received by the ENGINEER.
- .2 The Construction Schedule shall be updated monthly against actual progress of THE WORK by the CONTRACTOR.
- .3 If, in the opinion of the ENGINEER, any Construction Schedule is inadequate as a control tool or if it does not show THE WORK being fully completed by the CONTRACT Completion Date, the ENGINEER may reject it and the CONTRACTOR shall provide a Construction Schedule and work program that is acceptable to the ENGINEER.
- .4 Where the phrase "or approved equivalent alternative" occurs in the CONTRACT DOCUMENTS, do not assume that MATERIAL, PRODUCT or methods will be accepted as equal by the ENGINEER unless the item has been specifically accepted for THE WORK by the ENGINEER in writing.

END OF SECTION 01310

1. Requirements for Construction Photographs

- .1 The CONTRACTOR shall have progress of THE WORK. Sufficient views of THE WORK shall be taken to show all parts of THE WORK being undertaken during all components of construction.
- .2 On completion of THE WORK, the CONTRACTOR shall submit a digital series of photographs of THE WORK entirely, upon request by the OWNER or ENGINEER.
- .3 The OWNER reserves the right to take additional photographs of any part of THE WORK at any time.

END OF SECTION 01380

1. General

- .1 The CONTRACTOR is totally responsible for the quality of MATERIAL and PRODUCT which he provides and for THE WORK.
- .2 The CONTRACTOR is responsible for quality control and shall perform such inspections and tests as are necessary to ensure that THE WORK conforms to the requirements of the CONTRACT DOCUMENTS.
- .3 During the progress of THE WORK, a sufficient number of tests shall be performed by the CONTRACTOR to determine that MATERIAL, PRODUCT and installation meet the specified requirements.
- .4 The CONTRACTOR shall perform as many inspections and tests as are necessary to ensure that THE WORK conforms to the requirements of the CONTRACT DOCUMENTS.
- .5 Testing shall be in accordance with pertinent codes and regulations, and with selected standards of the American Society for Testing and Materials (ASTM) and Canadian Standards Association (CSA).

2. Quality Control Testing by the Contractor

- .1 The CONTRACTOR shall retain the services of an independent testing agency under supervision of a registered professional engineer, and pay the cost of testing services for quality control including, but not limited to, the following:
 - a) Sieve analysis of sands and aggregates to be supplied to THE WORK.
 - b) Aggregates and mix designs for soil cement base course.
 - c) Aggregates and mix designs for asphaltic concrete.
 - d) Aggregates and mix design for Portland Cement concrete.
 - e) Standard Proctor Density curves for backfill materials.
 - f) Standard Proctor Density curves for approved borrow materials.
 - g) Compaction control tests for backfill and embankment material.
 - h) Any product testing that is required and is specified under various sections of the specifications.
- .2 The CONTRACTOR shall promptly process and distribute all required copies of test reports and test information and related instructions to all of his SUBCONTRACTORS and Suppliers to ensure that all necessary retesting and replacement of construction can proceed without delay.

- .3 The CONTRACTOR shall promptly provide the ENGINEER with copies of all test results.

3. Quality Assurance Testing by the Owner

- .1 The OWNER may retain and pay for the services of an independent testing agency for testing for quality assurance, for the OWNER'S purposes.
- .2 The OWNER'S testing agency and the ENGINEER may inspect and test MATERIAL, PRODUCT and THE WORK for conformance with the requirements of the CONTRACT DOCUMENTS; however, they do not undertake to check the quality of THE WORK on behalf of the CONTRACTOR nor to provide quality control.
- .3 Inspections and tests by the OWNER'S testing agency and by the ENGINEER do not relieve the CONTRACTOR of his responsibility to supply MATERIAL and PRODUCT and to perform THE WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- .4 The ENGINEER, at his discretion, may order or perform any additional inspections and tests for purposes of his own or for purposes of the OWNER.
- .5 The CONTRACTOR shall coordinate with the ENGINEER the scheduling of testing and inspection by the OWNER'S testing agencies or by the ENGINEER, to enable testing to be done as necessary, without delay, and the CONTRACTOR shall notify the ENGINEER sufficiently in advance of operations to allow for such inspection and tests by the ENGINEER'S or the OWNER'S testing agency.

4. Code Compliance Testing

- .1 Inspections and tests required by codes or ordinances, or by a plan approval authority, shall be the responsibility of and shall be paid for by the CONTRACTOR.
- .2 Copies of reports resulting from such inspections shall be submitted in a timely manner by the CONTRACTOR to the OWNER.

5. Retesting

- .1 When tests on PRODUCT, MATERIAL or completed portions of THE WORK carried out by the CONTRACTOR or the CONTRACTOR'S testing agency or by the OWNER'S testing agency yield results not meeting the requirements of the CONTRACT DOCUMENTS, the CONTRACTOR, in addition to carrying out remedial work or replacement of the PRODUCT or MATERIAL shall provide for retesting of the remedied work and the replacement PRODUCT and MATERIAL. Retesting, including retesting by the OWNER'S testing agency, shall be at the CONTRACTOR'S expense.

- .2 In every case where the CONTRACTOR has submitted test results which fail to meet the requirements of the CONTRACT DOCUMENTS, the CONTRACTOR shall submit within a practical and reasonable time results of a retest showing that the results are in accordance with the requirements of the CONTRACT DOCUMENTS.
- .3 If the CONTRACTOR fails or refuses to do remedial work or replace unacceptable MATERIAL or PRODUCT, the ENGINEER may refuse to certify payment and the OWNER may refuse to make payment, in addition to any other remedies the OWNER may have.

END OF SECTION 01400

1. Temporary Utilities

1.1 Natural Gas, Gasoline and Other Fuels

- .1 Provide and pay all costs for natural gas, gasoline and other fuels required for the performance of THE WORK, in accordance with governing regulations and ordinances, and the CONTRACT DOCUMENTS.
- .2 Furnish and install all necessary temporary piping and upon completion of THE WORK remove all such temporary piping.

1.2 Water

- .1 Provide and pay all costs for all water required for the performance of THE WORK, in accordance with governing regulations and ordinances, and the CONTRACT DOCUMENTS.
- .2 Furnish and install all necessary temporary piping and upon completion of THE WORK remove all such temporary piping.

1.3 Electricity And Lighting

- .1 Provide and pay all costs for electricity and artificial lighting required for the performance of THE WORK, in accordance with governing regulations and ordinances, and the CONTRACT DOCUMENTS.
- .2 Furnish and install all necessary temporary wiring, distribution boxes, panels, etc., and upon completion of THE WORK, remove all such temporary installations.

1.4 Telephone

- .1 Provide, maintain and pay all costs for a telephone for the CONTRACTOR'S use.
- .2 A telephone is not required for the ENGINEER'S use on this project.

1.5 Sanitary Facilities

- .1 Furnish and install all required temporary toilet buildings with sanitary toilets for use of all workmen; comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

1.6 Fire Protection

- .1 Provide and pay all costs for adequate fire protection of THE WORK and adjacent property.
- .2 Furnish and install temporary extinguishers, hydrants and other equipment, and upon completion of THE WORK remove all such temporary equipment.

2. Construction Aids

2.1 Temporary Excavation

- .1 The CONTRACTOR is responsible for the means and methods of making temporary excavations in order to install components of THE WORK.

2.2 Access Roads

- .1 Construct temporary access roads as necessary to perform THE WORK, and maintain temporary access roads until construction is over or until permanent access is established.
- .2 Locations and drainage facilities for temporary access roads are subject to the approval of the ENGINEER.
- .3 No direct payment will be made to the CONTRACTOR for construction of temporary access roads.

3. Protection

- .1 Remove trees, fences and other structures from the site of THE WORK, as necessary to perform THE WORK.
- .2 Remove only those items that must be removed, or are clearly shown on the drawings to be removed.
- .3 Protect all remaining trees, plants, fences and other items from damage during construction.

4. Existing Utilities and Structures

- .1 Existing utilities and structures include pipes, culverts, ditches or other items which are a part of an existing sewerage, drainage or water system; or which are a part of a gas, electrical, telephone, television, telecommunications or other utility system. Also included are sidewalks, curbs, gutters, swales, poles, fences or any other structures encountered during construction.

- .2 The CONTRACTOR shall be responsible for location, protection, removal or replacement of existing utilities and structures, or for repair of any damage which may occur during construction.
- .3 Existing utilities and structures may be shown on the drawings, or described in the specifications. Such information is shown for design purposes and the existence, location and detail given is information that is obtained during the design period and is not necessarily complete, correct or current.
- .4 Unless specifically detailed elsewhere in these documents, the CONTRACTOR shall pay all costs and be responsible for establishing locations and state of use of all existing utilities that may affect THE WORK. The CONTRACTOR shall make satisfactory arrangements with the utilities companies involved for the location, protection and inspection of existing utilities.
- .5 Notice in writing shall be given by the CONTRACTOR to the utilities companies at least 48 hours before work commences in the vicinity of existing utilities.
- .6 The CONTRACTOR shall pay all the costs involved in protection of utilities, inspection of utilities, and all costs due to delays because of existing utilities and structures.
- .7 The CONTRACTOR shall provide for the uninterrupted flow of all water courses, sewers and drains encountered during THE WORK.
- .8 Access shall be maintained to all existing structures such as valves, hydrants, meter chambers and control structures at all times during construction.
- .9 If interruption of service provided by an existing utility is necessary, the planned shut-down shall be approved by the owners of the utilities. Requests for shut-down shall be made by the CONTRACTOR in writing at least 48 hours in advance.
- .10 The CONTRACTOR shall notify all customers or make arrangements with the utility company to notify all customers 24 hours in advance of a shut-down.
- .11 Unless otherwise specified the CONTRACTOR shall make arrangements for relocation of existing utilities that the ENGINEER requests to be relocated; and the actual relocation shall be constructed by the OWNER of the utility. The CONTRACTOR will be reimbursed the invoiced cost of the relocation. No extra payment is permitted for delays, or standby time.

5. Temporary Controls

5.1 Noise Controls

- .1 Perform THE WORK in conformity with all municipal by-laws with respect to noise, hours of work, night work and holiday work. Night work or holiday work requires the written permission of the ENGINEER.

5.2 Dust Control

- .1 Perform THE WORK in a manner that will not produce an objectionable amount of dust. Dust control measures shall be paid for by the CONTRACTOR.

5.3 Pollution Control

- .1 Perform THE WORK in conformance with the applicable sections of the Provincial Regulations with respect to air and water pollution control requirements.

5.4 Disposal Of Wastes

- .1 Burying of rubbish and waste on site is not permitted.
- .2 Disposal of waste or volatile materials into waterways, storm or sanitary sewers is not permitted.
- .3 Pumping or draining water containing silt in suspension into waterways, sewers or drainage systems is prohibited.
- .4 Abide by requirements of Statute, Bylaw and Regulations respecting disposal of wastes.
- .5 Obtain required Permits for waste disposal.

6. Traffic Control

It is the intent of the Town of Blackfalds to have construction proceed quickly with due consideration to the Town's overall traffic flows and patterns. The successful bidder will be required to prepare Traffic Accommodation Strategies which will allow traffic to flow safely through the project.

The CONTRACTOR is responsible for all costs associated with detouring traffic and pedestrians, including providing flag people, signage, and maintaining signage during

the duration of the construction or in stoppages due to weather. Unless otherwise noted, these costs shall be incidental to the contract and no separate or additional payment shall be made.

Traffic Accommodation includes the following requirements:

- The CONTRACTOR shall submit a Traffic Accommodation Strategy to the ENGINEER and the Town of Blackfalds for all roads for approval. The CONTRACTOR shall be solely responsible for maintaining construction signage and barricades on the roads under construction for the duration of construction.
- Pedestrian Accommodation.
- No work may begin on the WORK until the Traffic Accommodation Strategy has been approved by the ENGINEER.
- The cost of preparing and submitting the Traffic Accommodation Strategy shall be paid in Section 00304 T-12 Schedule of Prices.
- The CONTRACTOR shall obtain approval to block traffic temporarily if it is necessary to do so to perform THE WORK. Obtain the written approval of applicable municipal departments, the Owner and the ENGINEER at least 48 hours prior to actually blocking traffic.
- Haul routes shall be maintained by the CONTRACTOR. They shall be kept open to traffic and shall be clean at all times.
- Obtain permits as required to use public roads or streets for haul routes.

The typical plans and drawings for this Contract are published in the following documents:

Drawings indicating typical minimum requirements for traffic accommodation and construction zone temporary signing are included in the following Alberta Transportation Department manuals:

- Traffic Accommodation in Work Zones, 2008

It may be necessary for the CONTRACTOR to modify these drawings and/or develop new drawings to address non-typical situations when using the Traffic Accommodation Strategy in accordance specification 7.1, Temporary Construction Signing of the Alberta Transportation Standard Specifications for Highway Construction, Edition 14, 2010.

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- Typical drawings indicating requirements for pavement markings are included in the Department manual entitled, Alberta Highway Pavement Marking Guide, 2nd Edition, issued March 2003.
 - Typical drawings indicating requirements for permanent highway signage are included in the Department manual entitled "Typical Signage Drawings"
 - Typical drawings indicating requirements for barriers are included in the Department manual entitled "Typical Barrier Drawings"
 - All other typical plans and drawings are included in the Department manual entitled "CB6 Standard Highway Construction Drawings"

Any typical drawings not found in these manuals including any updates issued prior to the publishing of the new editions of the manuals will be included in the contract documents.

No road may be closed to traffic without written notice and approval by the Town of Blackfalds.

7. CONTRACTOR's Field Office

- .1 Although not required, the CONTRACTOR may furnish and install a field office building adequate in size and accommodation for all CONTRACTOR'S offices, superintendent's office, supply and tool room throughout the entire construction period.
- .2 Field office must include a meeting room for use of site meetings.

8. ENGINEER's Field Office

- .1 No field office for the sole use of the ENGINEER is required for this project.

END OF SECTION 01500

1. Quality

- .1 MATERIAL and PRODUCT supplied and installed shall be new.
- .2 MATERIAL and PRODUCT supplied shall conform to these specifications and to specified standards.
- .3 Workmanship shall be the best quality, executed by workmen experienced and skilled in their respective trades.
- .4 Ensure full cooperation among all trades and coordination of THE WORK with continuous supervision.
- .5 Use PRODUCT for which replacement parts and service are readily available.
- .6 Use PRODUCT of one manufacturer for PRODUCT of the same type or classification. Do not mix different manufacturer's PRODUCT in THE WORK or in parts of THE WORK.

2. Manufacturer's Instructions

- .1 Unless otherwise specified, comply with the MANUFACTURER'S/SUPPLIER'S instructions for MATERIAL or PRODUCT and installation methods.
- .2 Notify the ENGINEER in writing of any conflict between these CONTRACT specifications and the instructions of the MANUFACTURER/SUPPLIER.

3. Fastenings

- .1 Provide metal fastenings and accessories in the same texture, colour and finish as the base metal in which they occur. Prevent electrolytic action between dissimilar metals. Use non-corrosive fasteners, anchors and spacers for securing exterior work, or work that may be located in a corrosive atmosphere.
- .2 Space anchors within limits of load bearing or shear capacity and ensure that they provide positive permanent anchorage.
- .3 Space fastening evenly and lay out neatly.

4. Delivery and Storage

- .1 Deliver, store and maintain packaged MATERIAL and PRODUCT with manufacturer's seals and labels intact.
- .2 Prevent damage and soiling of MATERIAL and PRODUCT.
- .3 Store MATERIAL and PRODUCT in accordance with instructions of the MANUFACTURER/SUPPLIER.

- .4 Provide suitable areas or buildings where storage is weatherproof, if dry areas are recommended by the MANUFACTURER/SUPPLIER.
- .5 PRODUCT shall have name plates displaying PRODUCT data and serial numbers.
- .6 Comply with Work Place Hazardous Materials Information Systems requirements.

END OF SECTION 01600

1. Cleanup

- .1 Maintain the working area in a clean and orderly manner as THE WORK progresses, and upon completion of construction, remove all waste materials, and all temporary facilities from the site.
- .2 Haul surplus or salvage materials that are the property of the OWNER to the OWNER'S storage site.
- .3 Remove surplus or salvaged materials belonging to the CONTRACTOR from the site.
- .4 Clean haul routes.
- .5 Broom clean paved surfaces, rake clean other surfaces of ground.

2. Record Documents

- .1 As specified in other sections of the specifications, the CONTRACTOR is required to prepare and record drawings, to provide survey notes, to supply test results or other documents. Such information shall be turned over to the ENGINEER; as soon as start-up is complete, and before the Construction Completion Certificate is issued.
- .2 Record documents shall be neat, legible and accurate for all components of THE WORK.
- .3 On the job site set of Contract Drawings, the Contractor shall record any changes that are made during the actual construction of the Work. The purpose of recording these changes is to provide as-built drawings at the end of the Work. The Contractor shall be responsible for the adequacy and the reliability of the information recorded on the drawings of record, including but not limited to:
 - a) All sewer and water main stub/plug locations and elevations.
 - b) All storm sewer inlet/outlet/outfall structures.
 - c) All sewer manhole and catch basin rim and pipe invert elevations.
 - d) All hydrant flange and invert elevations.
 - e) All water main valves invert and rim elevations.
 - f) All lot service invert elevations at the stub/plug, connection to the main, and service box top and invert elevations.
 - g) Any insulation installed, type, location, thickness, width, and length.
 - h) Any geotextiles installed, type, location, width, and length.
 - i) Any road/lane subbase undercut locations, width, length, and depth.
- .4 Contractor shall ensure all information is accurately recorded prior to backfill and is within tolerance as noted in the contract specifications. Should any item get missed or is outside of the tolerance, it will be the Contractors responsibility to correct.

- .5 At the completion of the construction period, the Contractor shall turn over the set of construction drawings which have been marked up with the changes during the course of the Work to the Consultant to permit the Consultant to prepare Drawings of Record for the Work
- .6 The Consultant reserves the right to withhold a deficiency holdback on the final payment should the as-built drawings be incomplete or unsatisfactory until the Contractor remediates the issues.

END OF SECTION 01700