

#210, 5940 Macleod Trail SW Calgary, AB T2H 2G4 1-587-329-6655 www.sweet-tech.ca

March 1, 2023 File: 23.2311.001

Apex Utilities Inc. 5509 45 Street Leduc, AB T9E 6T6

Email: thirdpartyrequests@apexutilities.ca

To Whom it May Concern:

SweetTech Engineering Consultants (SweetTech), on behalf of the Town of Drumheller, is requesting a crossing agreement to support the proposed Spray Park Drainage Line Improvement Project, in Drumheller, near the Aquaplex, primarily within an existing ATCO lease. The proposed work for this project involves the installation of a shallow sanitary sewer drainage line to reroute the spray park drainage to the existing Town of Drumheller sanitary sewer system.

The proposed project is located within PLAN 8966 EJ, PART OF NE-11-29-20-W4, on the west side of 1 Street W and south of the Drumheller Aquaplex. Specifically, work at this location is anticipated to include excavation and abandonment-in-place of two existing stormwater outfall lines, as well as the excavation and installation of a shallow sanitary sewer line and manhole between two existing manholes in the Rotary Spray Park and in 1 Street W respectively. It is anticipated that the work will be carried out with a small hydraulic excavator or backhoe, while hydrovac and manual excavation would be used within close proximity to underground utilities. Proposed crossings including a crossing with an existing Apex Utilities underground utility are shown in the attached drawings.

The proposed construction is planned to commence in September 2023. It is anticipated that the work will take approximately 4-6 weeks to complete.

The SweetTech contact for this project is Campbell Cameron, available at 403-680-2860, or through email at campbell@sweet-tech.ca. The owner contact for this work is Kelcie Wilson, Capital Project Manager at the Town of Drumheller, who can be reached at 403-334-0425 or through email at kwilson@drumheller.ca.

If you have any questions or concerns, please do not hesitate to contact the undersigned.

Regards,

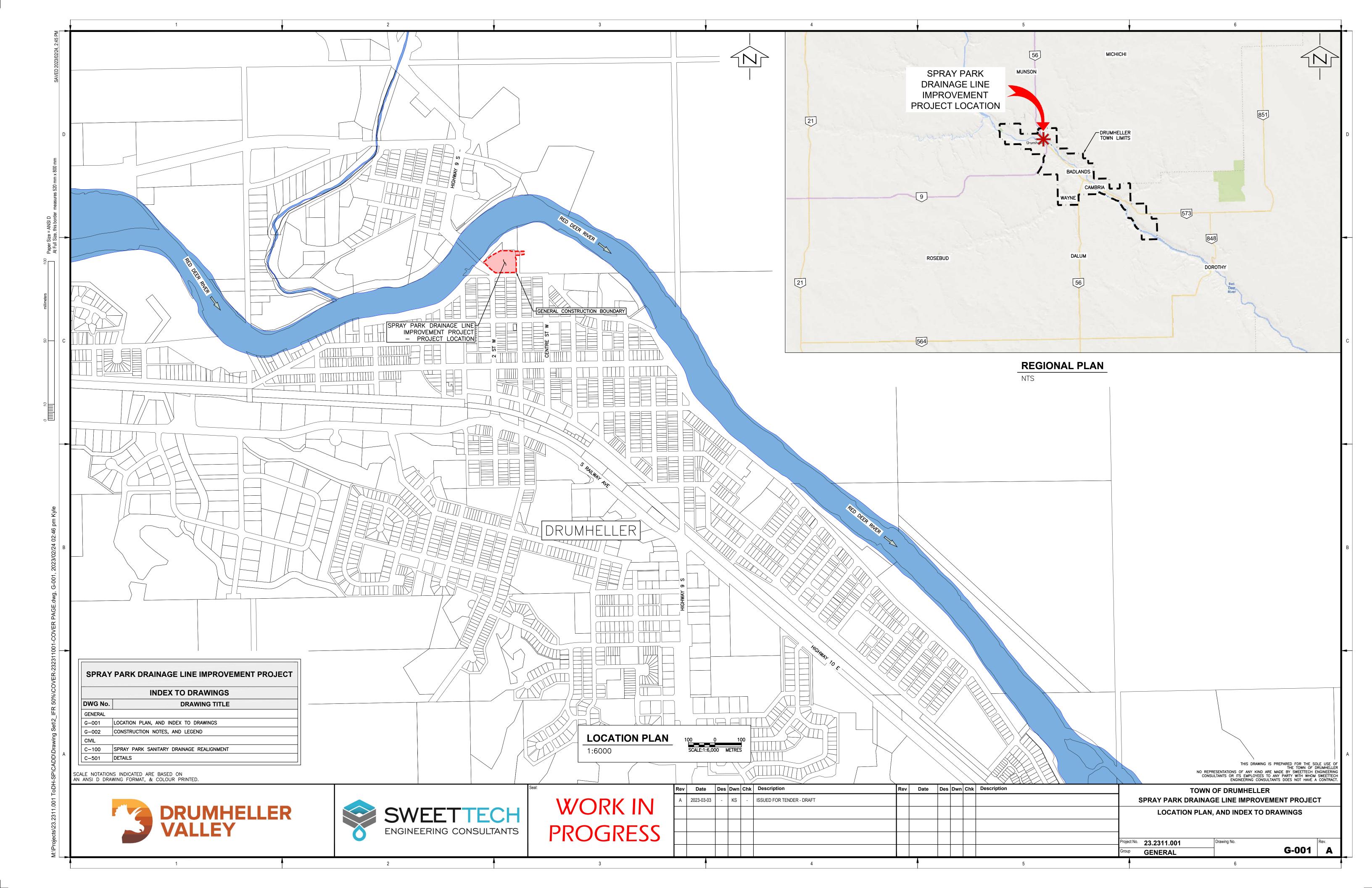
SweetTech Engineering Consultants

Austyn Schutta, P.Eng., CPESC

Project Engineer 780-297-2879

Attachments:

- ☐ Drawings of Proposed Upgrades
 - o Spray Park Cover Page
 - o Spray Park Notes and Legend
 - o Spray Park Site Plan and Profile
 - o Spray Park Details
- □ ATCO Electric Sketch Plan of PLAN 8966 EJ, PART OF NE-11-29-20-W4



CONSTRUCTION NOTES:

- 1. ROAD & UNIT ELEVATIONS ARE METRIC GEODETIC
- 2. WHERE THERE ARE DISCREPANCIES BETWEEN REFERENCED STANDARDS, PROJECT DRAWINGS GOVERN OVER PROJECT SPECIFICATIONS. DISCUSS ANY UNCERTAINTIES WITH THE ENGINEER PRIOR TO CONSTRUCTION AND/OR INSTALLATION
- 3. TOPOGRAPHIC SURVEY IS PROVIDED ON AN AS-IS BASIS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM INDEPENDENT PRE AND POST DISTURBANCE SURVEY FOR THE PURPOSES OF CONSTRUCTION LAYOUT AND QUANTITY RECONCILIATION AS APPLICABLE TO EXECUTE AND RECORD PROGRESS OF THE WORKS.
- 4. CONTRACTOR TO LAYOUT CLEARING DESIGN LIMITS FOR FIELD REVIEW. FIELD REVIEW BY ENGINEER AND OWNER IS REQUIRED PRIOR TO PERFORMING CLEARING ACTIVITY. VEGETATION DISTURBANCE AND VEGETATION DAMAGE IS TO BE MINIMIZED ON A BEST-EFFORT BASIS TO MAINTAIN A NATURAL FEEL OF THE SITE. NO VEGETATION DISTURBANCE OUTSIDE OF DESIGN LIMITS IS PERMITTED UNLESS DIRECTED BY ENGINEER.
- 5. IF ANY GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- 6. ALL EXISTING ROADS AND GROUND AREAS INCLUDING LANDSCAPING, SIDEWALKS, AND PATHS THAT ARE DISTURBED DURING CONSTRUCTION OR BY CONSTRUCTION ACTIVITIES ARE TO BE RETURNED TO PRE-CONSTRUCTION CONDITION OR BETTER AFTER CONSTRUCTION IS COMPLETE PRIOR TO DEMOBILIZATION.
- 7. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE CONVEYANCE STRUCTURES AND FEATURES DURING CONSTRUCTION AS NECESSARY TO PROTECT ROADS AND PROPERTY.
- 8. NO SILT LADEN WATER OR OTHER DELETERIOUS MATERIAL SHALL BE ALLOWED TO FLOW FROM SITE, INCLUDING INTO THE RED DEER RIVER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES INCURRED FROM SILT LADEN WATER OR OTHER DELETERIOUS MATERIAL LEAVING THE SITE. NO MUD TRACKING ON TO THE SURROUNDING ROADS IS PERMITTED. CONTRACTOR TO PROVIDE ENVIRONMENTAL PROTECTION PLAN FOR APPROVAL PRIOR TO BEGINNING WORKS.
- 9. SITE SAFETY AND SECURITY IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR. THE ENGINEER IS NOT RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE, NOR FOR CONTRACTOR COMPLIANCE.
- 10. TEMPORARY SIGNAGE AND FENCING MAINTENANCE DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE SITE MUST BE FULLY FENCED FROM PUBLIC ACCESS WHEN CONSTRUCTION ACTIVITY IS NOT TAKING PLACE.
- 11. TRAFFIC CONTROL DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO SUBMIT A TRAFFIC MANAGEMENT AND SIGNAGE PLAN TO THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- 12. REGARDING PAVEMENT INSTALLATION, CONTRACTOR TO SUBMIT ALL APPLICABLE QUALITY CONTROL DOCUMENTATION TO ENGINEER FOR REVIEW NO LESS
- THAN 7 DAYS BEFORE PAVEMENT INSTALLATION. 13. FINISHED GRADE TO MATCH SURROUNDING TYPE AND ELEVATION.
- 14. THE CONTRACTOR SHALL DISTRIBUTE TOPSOIL AND PLANT SOD WHERE EXISTING GROUND HAS BEEN DISTURBED. THE CONTRACTOR IS NOT RESPONSIBLE FOR SOD WATERING OR MAINTENANCE AFTER DEMOBILIZATION.
- 15. THE CONTRACTOR SHALL REPLACE EACH TREE CLEARED WITH FIVE NEW TREES PLANTED WITHIN THE ROTARY PARK.
- 16. THE CONTRACTOR SHALL REQUEST A PRE-DISTURBANCE WILDLIFE AND BIRD SWEEP FROM THE OWNER A MINIMUM OF 7 DAYS BEFORE DISTURBANCE OF SITE IS PLANNED TO OCCUR. THE CONTRACTOR SHALL NOT DISTURB THE SITE UNTIL THE CLEARANCE IS GIVEN BY THE OWNER. IN THE EVENT THAT MITIGATION'S OR ADDITIONAL WORK IS REQUIRED AS A RESULT OF THE WILDLIFE AND BIRD SWEEP. THESE WILL BE DISCUSSED WITH THE PROJECT TEAM AND HANDLED AS A CHANGE, AS APPLICABLE.

SOIL MANAGEMENT:

- 17. THE CONTRACTOR IS NOTIFIED THAT HAZARDOUS SOILS AND MATERIALS ARE PRESENT ON SITE.
- 18. CONTRACTOR TO SUBMIT A HAZARDOUS WASTE HANDLING PLAN FOR ATCO AND OWNER'S APPROVAL.
- 19. CONTRACTOR TO ASSUME ALL EXCAVATED MATERIALS FROM THE SITE ARE CONTAMINATED AND REMOVE AND DISPOSE OF THEM ACCORDING TO AN APPROVED HAZARDOUS WASTE HANDLING PLAN.
- 20. THE CONTRACTOR SHALL RECORD VOLUME OF CONTAMINATED SOIL AND DELETERIOUS MATERIAL REMOVED FROM SITE AND LOCATION OF DISPOSAL FOR SUBMITTAL TO ATCO.
- 21. THE CONTRACTOR SHALL RETAIN RECORDS OF CONTAMINATED SOIL AND DELETERIOUS MATERIAL DISPOSAL FROM DRUMHELLER AND DISTRICT REGIONAL LANDFILL. SUBMITTAL OF THESE RECORDS FOR VERIFICATION OF CONTAMINATED SOIL AND DELETERIOUS MATERIAL DISPOSAL MAY BE REQUESTED.
- 22. THE CONTRACTOR MAY ENCOUNTER DELETERIOUS MATERIAL SUCH AS BRICKS, REBAR, OR CONCRETE DURING EXCAVATION, DELETERIOUS MATERIAL ENCOUNTERED DIRECTLY IMPACTING THE WORK SHALL BE REMOVED AS NECESSARY AND DISPOSED OF ACCORDING TO APPROVED HAZARDOUS WASTE HANDLING PLAN. DELETERIOUS MATERIAL ENCOUNTERED, BUT NOT IMPACTING THE WORKS, TO BE LEFT BURIED IN PLACE.
- 23. SOIL STOCKPILES AND EQUIPMENT DISTURBANCE ONLY PERMITTED WITHIN DESIGN DISTURBANCE FOOTPRINT TO PRESERVE EXISTING VEGETATION AND ECOLOGY. ENCROACHMENT OF STOCKPILES OR DISTURBANCE LIMITS BEYOND PROJECT LIMITS WILL NOT BE TOLERATED.
- 24. CONTRACTOR SHALL SOURCE AND SUPPLY CLEAN SOIL BACKFILL, BACKFILL SOURCE IS SUBJECT TO ENVIRONMENTAL COMPLIANCE TESTING. ENVIRONMENTAL COMPLIANCE TESTING TO BE AT THE COST OF THE CONTRACTOR. BACKFILL SOURCE AND TESTING RESULTS SUBJECT TO APPROVAL PRIOR TO DELIVERY OF FILL TO SITE.
- 25. SUBMITTED BACKFILL SOURCE ENVIRONMENTAL COMPLIANCE TESTING RESULTS WILL BE COMPARED AGAINST ALBERTA TIER 1 SOIL AND GROUNDWATER REMEDIATION GUIDELINES FOR RESIDENTIAL/PARKLAND. TESTING SHALL INCLUDE RESULTS FOR BENZENE. TOLUENE. ETHYLBENZENE. XYLENES (BTEX). PETROLEUM HYDROCARBON FRACTIONS F1 TO F4, POLYCYCLIC AROMATIC HYDROCARBONS, METALS, SALINITY, AND SOIL STERILANTS.

UTILITIES:

- 26. THE CONTRACTOR IS NOTIFIED THAT HIGH VOLTAGE BURIED UTILITIES ARE PRESENT WITHIN THE SITE. ADDITIONAL BURIED UTILITIES ARE PRESENT WITHIN THE SITE.
- 27. THE CONTRACTOR IS WARNED THAT CONFLICTS WITH EXISTING UTILITY SERVICES BEYOND THOSE ALREADY IDENTIFIED MAY EXIST. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS, AND CONTRACTOR SHALL THEN LOCATE ALL UTILITIES (INCLUDING DEPTH). SWEETTECH ENGINEERING CONSULTANTS ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. ANY CONFLICTS WITH THE CONSTRUCTION. NOT IDENTIFIED ON THE DRAWINGS. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY SO THAT MITIGATION OF CONFLICTS WITH THESE EXISTING UTILITIES CAN BE CONSIDERED.
- 28. THE CONTRACTOR SHALL CONTACT ATCO A MINIMUM OF 2 WEEKS BEFORE ATCO ON-SITE REPRESENTATION IS REQUIRED. THE CONTRACTOR IS REQUIRED TO HAVE AN ATCO ON-SITE REPRESENTATIVE PRESENT FOR ALL WORK SURROUNDING ATCO LINES WITHIN 1 m OF THE LOCATE MARKINGS, INCLUDING HYDROVACING, EXPOSING LINES, INSTALLING CONCRETE UTILITY MECHANICAL SEPARATION PAD, BACKFILL OPERATIONS, AND ALL OTHER WORK OCCURRING WITHIN 1 m OF ATCO UTILITIES.
- 29. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR ENGINEER
- 30. ALL HYDROVAC WORK SHALL BE COMPLETED USING AN EQUIPOTENTIAL BONDING MAT AND USING A WATER PRESSURE OF NO MORE THAN 1500 PSI.
- 31. CONTRACTOR TO SUBMIT PROPOSED MANHOLE TIE-IN CONNECTION METHOD TO ENGINEER FOR REVIEW 7 DAYS BEFORE MANHOLE TIE-IN WORK CAN COMMENCE.
- 32. CONTRACTOR SHALL ABANDON EXISTING PIPES ACCORDING TO THE SPECIFICATIONS GIVEN IN SECTION 403.14.01 OF THE CITY OF CALGARY 2022 STANDARD SPECIFICATIONS FOR SEWER CONSTRUCTION. PIPES ARE TO BE ABANDONED IN PLACE.

SCALE NOTATIONS INDICATED ARE BASED ON AN ANSI D DRAWING FORMAT, & COLOUR PRINTED.





WORK I PROGRE

	Rev	Date	Des	Dwn	Chk	Description
INI	Α	2023-03-03	-	KS	-	ISSUED FOR TE
IIV						
:22						

ISSUED FOR TENDER - DRAFT

REFERENCE:

- EXISTING GROUND CONTOURS FROM HUNTER WALLACE SURVEYS LTD. RECEIVED ON NOVEMBER 19, 2021.
- 2. 2019 AERIAL IMAGERY PROVIDED BY DRUMHELLER RESILIENCY AND FLOOD MITIGATION OFFICE.
- 3. UTILITIES PROVIDED BY DRUMHELLER RESILIENCY AND FLOOD MITIGATION OFFICE.
- 4. APPROXIMATE ENVIRONMENTAL WATER MONITORING WELLS AND BURIED ATCO POWER PLANT FOUNDATIONS FROM ATCO ELECTRIC LTD. DRUMHELLER POWER PLANT SITE PLAN (24984-SP17) OCTOBER, 2017.
- 5. ELECTRIC AND GAS UTILITY LOCATIONS AND ELEVATIONS HAVE BEEN APPROXIMATED BASED ON INTERPOLATION OF DAYLIGHTED AND SURVEYED LINES PROVIDED BY HUNTER WALLACE SURVEYS LTD. (2022/03/30)
- RED DEER RIVER BANK LINE PROVIDED BY HUNTER WALLACE SURVEYS LTD.

TBD

7. PROJECT COORDINATE SYSTEM: NAD83-3TM114.

SURVEY CONTROL PROJECT HORIZONTAL DATUM IS GRID FOR ALBERTA NAD83. 3 DEGREE ZONE, CENTRE AT 114° WEST (CANA83-3TM114). ALL ELEVATIONS ARE SHOWN IN METRES TO CANADIAN GEODETIC VERTICAL DATUM 1928 (CGVD28) CONFIRMED BY TIES TO ALBERTA SURVEY CONTROL MARKERS (ASCM) IN THE 5704120.994 89897.383 682.345 5704070.443 90098.890 681.449

90303.534 684.371

90272.646 681.725

89475.019 686.227

ASCM

5703757.371

5703923.309

5704765.602

639732

416636

TO BE DETERMINED

TO BE CONFIRMED

DRAWING ABBREVIATIONS APPROXIMATEL' FREEBOARD AVENUE ELEVATION STATION DRAWING ISSUED FOR TENDER CENTRE LINE HEAD WALL RIVER STATION DIKE STATION STANDARD PROCTOR MAXIMUM DRY DENSITY OPTIMUM MOISTURE CONTENT POINT OF VERTICAL INFLECTION COMES WITH BEGINNING VERTICAL CURVE STATION BEGINNING VERTICAL CURVE ELEVATION POLYETHYLENE END VERTICAL CURVE STATION EVCE END VERTICAL CURVE ELEVATION STM STORM LENGTH OF VERTICAL CURVE SANITARY PROPOSED **EXISTING** MINIMUM MAXIMUM

EXISTING LEGEND:					
EX. LEGAL LINES	_		EX. MONITORING WELL	_	 17−1
EX. FORMER BUILDING FOOTPRINT	_		EX. ATCO UTILITY CROSSING	_	⋈ 1
EX. EDGE OF PAVEMENT	_		EX. FIRE HYDRANT	_	
EX. GAS UTILITY	_		EX. OUTFALL	_	(
EX. WATER UTILITY	_	1//	EX. GAS METER	_	
EX. ELECTRICAL UTILITY		vv .	EX. CATCH BASIN	_	
	_	<u></u>	EX. MANHOLE	_	
EX. SANITARY UTILITY	_	S	EX. PEDESTAL	_	
EX. STORM UTILITY	_		EX. DIRECTION OF FLOW	_	
EX. TELUS UTILITY	_				
EX. MAJOR CONTOUR (INTERVAL= 5.0m)	_				
EX. MINOR CONTOUR (INTERVAL= 1.0m)	_				
PROPOSED LEGEND:					
PR. APPROX. TRENCH EXCAVATION	_		PR. SANITARY MANHOLE	_	
PR. SANITARY UTILITY	_		PR. LOW MPa CONC. PAD	_	
PR. STORM UTILITY	_		PR. APPROX. REMOVALS	_	<u> </u>

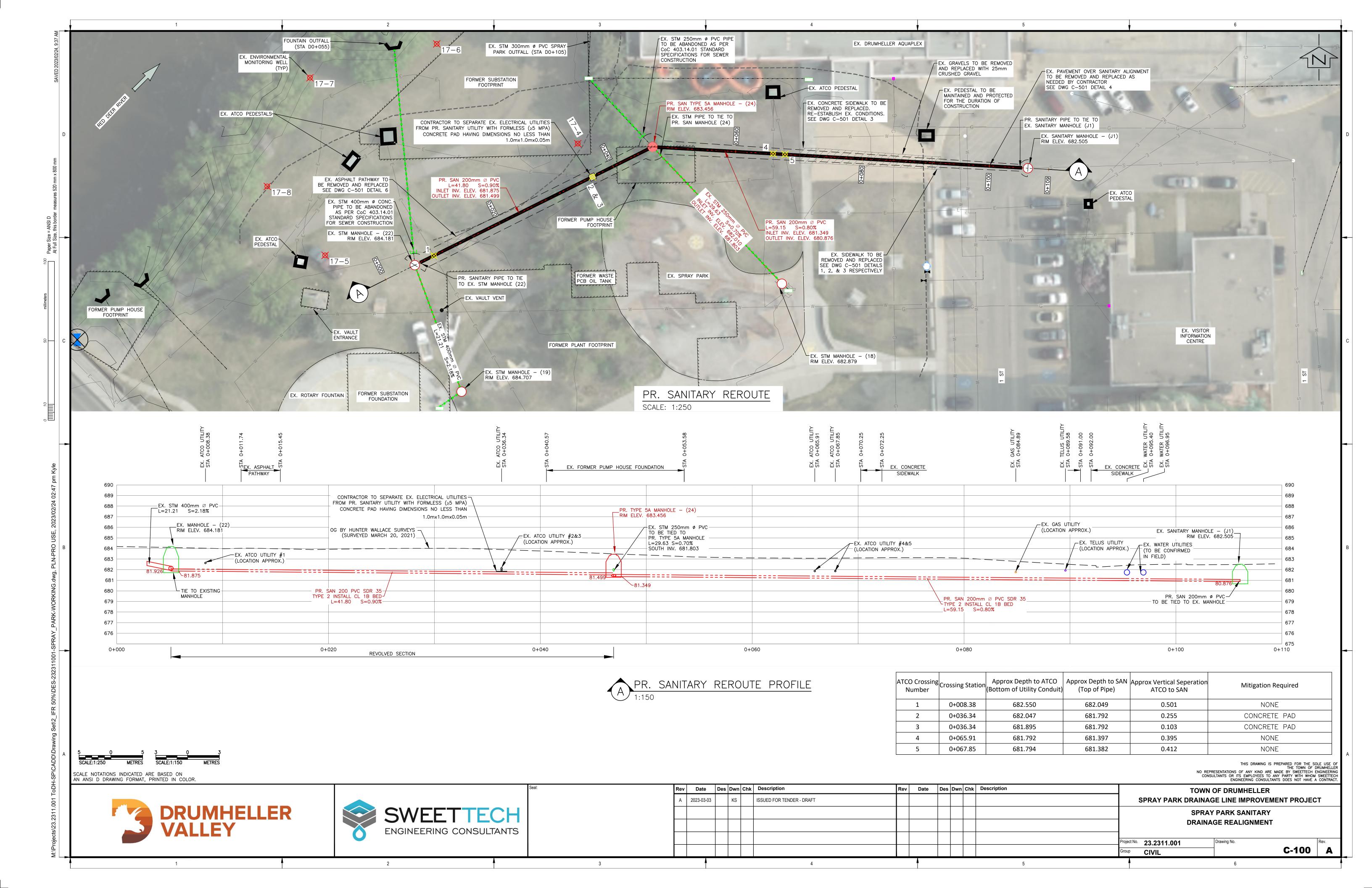
THIS DRAWING IS PREPARED FOR THE SOLE USE OF THE TOWN OF DRUMHELLE NO REPRESENTATIONS OF ANY KIND ARE MADE BY SWEETTECH ENGINEERING CONSULTANTS OR ITS EMPLOYEES TO ANY PARTY WITH WHOM SWEETTECH ENGINEERING CONSULTANTS DOES NOT HAVE A CONTRACT

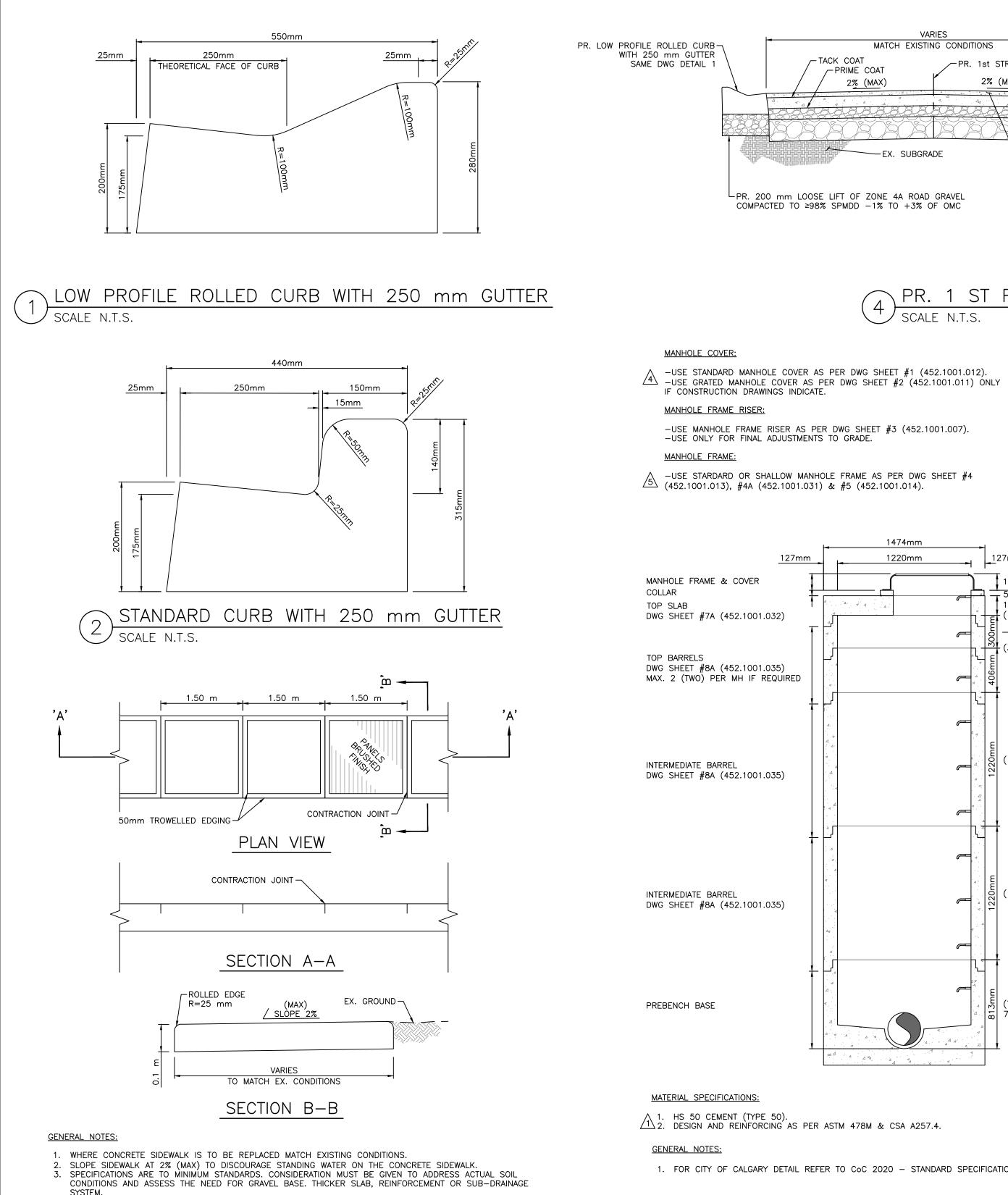
TOWN OF DRUMHELLER SPRAY PARK DRAINAGE LINE IMPROVEMENT PROJECT CONSTRUCTION NOTES, AND LEGEND

G-002

^{Dject No.} 23.2311.001 **GENERAL**

Rev Date Des Dwn Chk Description





CONCRETE SIDEWALK

ENGINEERING CONSULTANTS

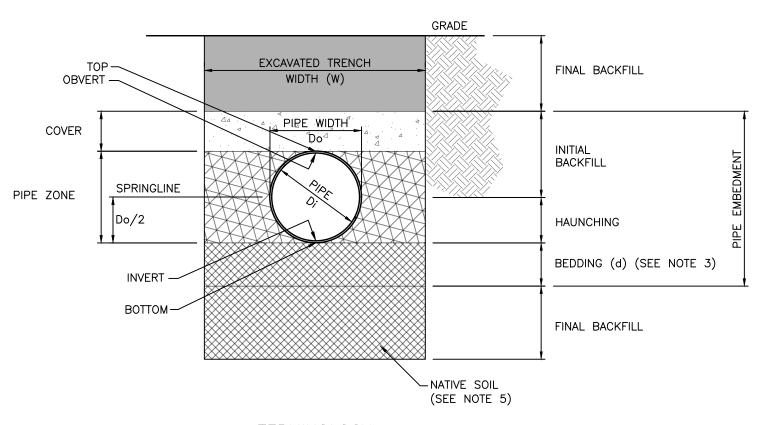
WORK IN PROGRESS

EX. GROUND PR. 75 mm THICK MIX 'B' ASPHALT PAVEMENT SLOPE 2% PR. 150 mm LOOSE LIFT OF ZONE 4A ROAD GRAVEL.-COMPACTED TO ≥98% SPMDD -1% TO +3% OF OMC

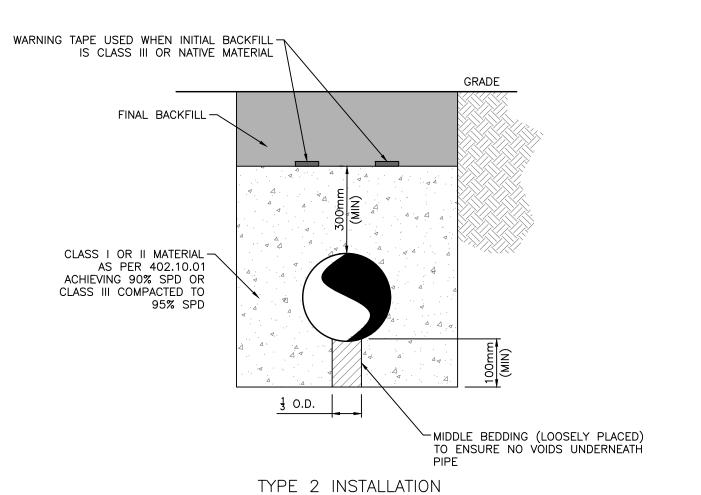
GENERAL NOTES:

WHERE ASPHALT PATHWAY IS TO BE REPLACED MATCH EXISTING CONDITIONS. 2. SLOPE PATH AT 2% TO DISCOURAGE STANDING WATER ON THE ASPHALT PATH.





TERMINOLOGY



NOTES:

- 1. BEDDING UNDER THE MIDDLE THIRD OF THE PIPE SHALL BE LOOSE, UNCOMPACTED MATERIAL.
- 2. IF ON A ROCK FOUNDATION, THEN MINIMUM BEDDING THICKNESS IS Do/12 (NOT LESS THAN 150mm). 3. IF Do IS GREATER THAN 2400mm THEN MINIMUM BEDDING THICKNESS IS Do/24.
- 4. SEE ALSO SECTION 403.04.04 FOUNDATION AND EMBEDMENT INSTALLATION. 5. ADVISE ENGINEER IF LOWER SIDE NATIVE SOILS ARE SOFTER OR LOOSER THAN PIPE EMBEDMENT SOILS AS PER SECTION 403.04.05
- (CHANGE IN NATIVE SOIL CONDITIONS). 6. TYPE 4 INSTALLATION NOT ALLOWED FOR FLEXIBLE PIPE.

GENERAL NOTES:

- 1. IF NOT EXPLICITLY STATED WITHIN AN APPROVED CROSSING AGREEMENT OR DIRECTED BY UTILITY OWNER AT EX. UTILITY CROSSINGS, WHERE PR. SANITARY PIPE CROSSES EXISTING BURIED UTILITIES, EXISTING BURIED UTILITIES ARE TO BE BACKFILLED WITH CLEAN, GRADED, WASHED BEDDING SAND. BEDDING SAND TO BE INSTALLED TO A WIDTH OF 3x EXITING UTILITY PIPE DIAMETERS OR 300 mm, WHICHEVER IS GREATER. BEDDING SAND TO BE PLACED IN LIFTS OF 150 mm AND COMPACTED BY TAMP TO 90% SPMDD WITH CARE TAKEN NOT TO DAMAGE THE EXISTING UTILITY. THE TOP 300 mm UNDER STRUCTURES AND PAVEMENT SHALL BE COMPACTED TO 95% SPMDD.
- 2. FOR CITY OF CALGARY DETAIL REFER TO CoC 2020 STANDARD SPECIFICATIONS FOR SEWER CONSTRUCTION: SHEET 33B, FILE NUMBER 452.1005.005.

BEDDING AND BACKFILL DETAILS FOR FLEXIBLE PIPE

THIS DRAWING IS PREPARED FOR THE SOLE USE OF THE TOWN OF DRUMHELLER

oject No. **23.2311.001**

CIVIL

TOWN OF DRUMHELLER SPRAY PARK DRAINAGE LINE IMPROVEMENT PROJECT **DETAILS**

Rev Date Des Dwn Chk Description

ISSUED FOR TENDER - DRAFT

SCALE NOTATIONS INDICATED ARE BASED ON AN ANSI D DRAWING FORMAT, & COLOUR PRINTED.

SCALE N.T.S.

Rev Date Des Dwn Chk Description

C-501

NO REPRESENTATIONS OF ANY KIND ARE MADE BY SWEETTECH ENGINEERING
CONSULTANTS OR ITS EMPLOYEES TO ANY PARTY WITH WHOM SWEETTECH
ENGINEERING CONSULTANTS DOES NOT HAVE A CONTRACT.

(452.1001.021). 2. STEP - USE MANHOLE STEP AS PER DWG SHEET #9 (452.1001.021).

3. MORTAR — SEE DETAILED SPECIFICATIONS.

SECTION 402.03.02 MORTAR.

COLLAR DETAIL

1. COLLAR - USE PRE-CAST CONCRETE

COLLAR(S) AS PER DWG SHEET #6

-PR. STANDARD CURB WITH 250 mm GUTTER

-PR. 200 mm LOOSE LIFT OF ZONE 4A ROAD GRAVEL COMPACTED TO ≥98% SPMDD -1% TO +3% OF OMC

-COVER - FRAME RISER

FRAME

-TOP SLAB

SEE DWG C-501 DETAIL 2

PR. 200 mm LOOSE LIFT OF ZONE 4C GRAVEL FILL COMPACTED TO ≥98% SPMDD -1% TO +3% OF OMC

 ackslash PR. 100 mm LOOSE LIFT OF ZONE 4A ROAD GRAVEL COMPACTED TO ≥98% SPMDD -1% TO +3% OF OMC

COLLAR DETAIL

1. AN ADDITIONAL STEP IS REQUIRED TO BE INSTALLED IF

THE DISTANCE BETWEEN THE TOP STEP AND THE

 $\frac{1}{3}$ 2. MAXIMUM OF THREE COLLARS TO BE USED.

UNDERSIDE OF THE MANHOLE FRAME EXCEEDS 584mm.

SPACING BETWEEN STEPS SHALL NOTE BE LESS THAN

PR. 100 mm MIX 'A' ASPHALT CONCRETE

PR. 40 mm MIX 'B' ASPHALT CONCRETE

NOTES:

(735mm, 745mm, 755mm, 760mm, 770mm, 813mm, OR 840mm)

(1200mm - 2440mm)

VARIES

MATCH EXISTING CONDITIONS

---EX. SUBGRADE

1474mm

1220mm

-PR. 1st STREET. (

PR. 1 ST ROAD STRUCTURE

152mm OR 258mm

(178mm - 200mm)

(300 mm - 813 mm)

(1200mm - 2440mm)

50mm MIN. 305mm MAX. 178mm TOP SLAB

MORTAR/BUTYL SEALANT-AŚ PER 403.09.06

NOTES:

-TACK COAT

-PRIME COAT

LPR. 200 mm LOOSE LIFT OF ZONE 4A ROAD GRAVEL COMPACTED TO ≥98% SPMDD -1% TO +3% OF OMC

-USE MANHOLE FRAME RISER AS PER DWG SHEET #3 (452.1001.007).

△ -USE STARDARD OR SHALLOW MANHOLE FRAME AS PER DWG SHEET #4

2% (MAX)

PREBENCH BASE

MATERIAL SPECIFICATIONS:

I. HS 50 CEMENT (TYPE 50).

 $\frac{1}{2}$ 2. DESIGN AND REINFORCING AS PER ASTM 478M & CSA A257.4.

MANHOLE COVER:

MANHOLE FRAME:

MANHOLE FRAME RISER:

IF CONSTRUCTION DRAWINGS INDICATE.

-USE ONLY FOR FINAL ADJUSTMENTS TO GRADE.

GENERAL NOTES: 1. FOR CITY OF CALGARY DETAIL REFER TO CoC 2020 - STANDARD SPECIFICATIONS FOR SEWER CONSTRUCTION: SHEET 38B, FILE NUMBER 452.1001.036.

5A MANHOLE ASSEMBLY FOR SPIGOT-UP INSTALLATIONS

SCALE N.T.S.

Rev. 0 SKETCH PLAN SHOWING SURVEYED BOUNDARY OF PLAN 8966 EJ PART OF N.E.1/4 SEC. 11, TWP. 29, RGE. 20, W.4th M. TOWN OF DRUMHELLER Canadian Utilities Limited Transmission R/W Plan RW528 Canadian Utilities Limited Transmission R/W Plan 2663 GT ATCO Electric Powerline R/W Parcel Caveat 101 275 112 Plan 6383 DL C. of T. 34Y39 Owners: Town Of Drumheller Lot 1 Block 34 Plan 3147 HR Canadian Utilities Limited 5.03 Powerline R/W-Plan 493 FR Canadian Utilities Limited ATCO Electric Transmission R/W 6.00 Powerline R/W-Plan 2663 GT Caveat 101 275 113 ATCO Electric 15.00 Powerline R/W Caveat 931 022 427 Canadian Utilities Limited Water Coolings Intake R/W Plan 4033 GI Plan 8966 EJ N.E.1/4 Sec.11-29-20-4 Road Plan Plan 809 IX C. of T. 169C7 Owners: Atco Electric
Atco Electric Ltd. 15.00 Powerline R/W-Plan 901 1595 Road Plan ATCO Electric Plan 5136 BM Powerline R/W Caveat 101 275 112 Road Plan Surveyed Boundary Plan 731695 The Parcels Plan 53/126 1 Ave. W. LEGEND: Right of Ways: - Powerline Maintenance Powerline: Overhead Underground Powerpole Anchor

Colours: Existing, Proposed, Salvage. - Distances are in metres and decimals thereof.

File No.: 42002911NE	Design:			
Project No.: D05010-0451	Drawn: AW			
Date: Feb 17, 2021	Checked: AW			
Scale: 1:1000				
Dwg No.: D05010-0451-21-0 IOP1				

CUSTOMER: - ATCO Electric