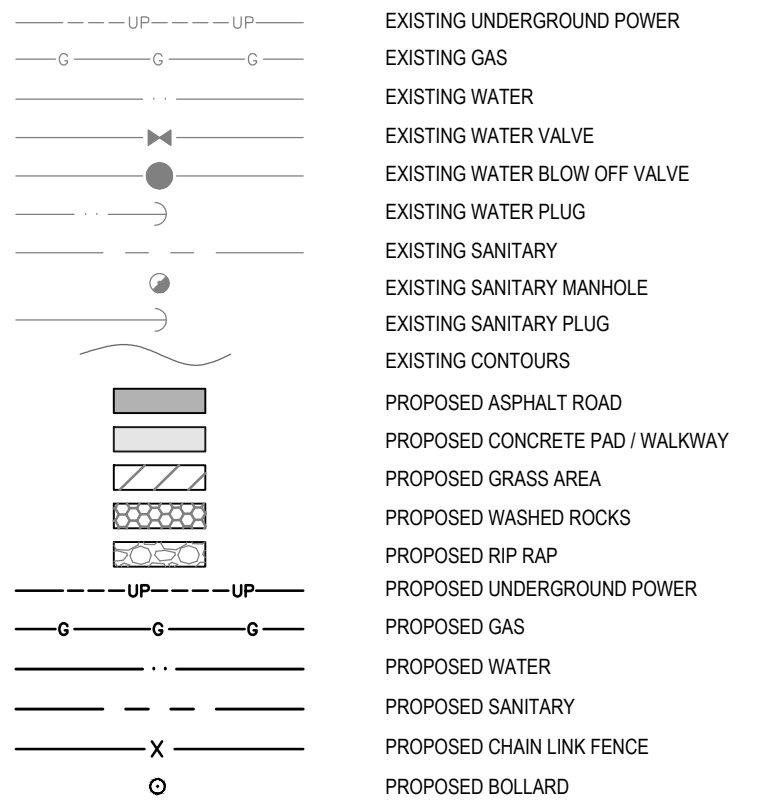
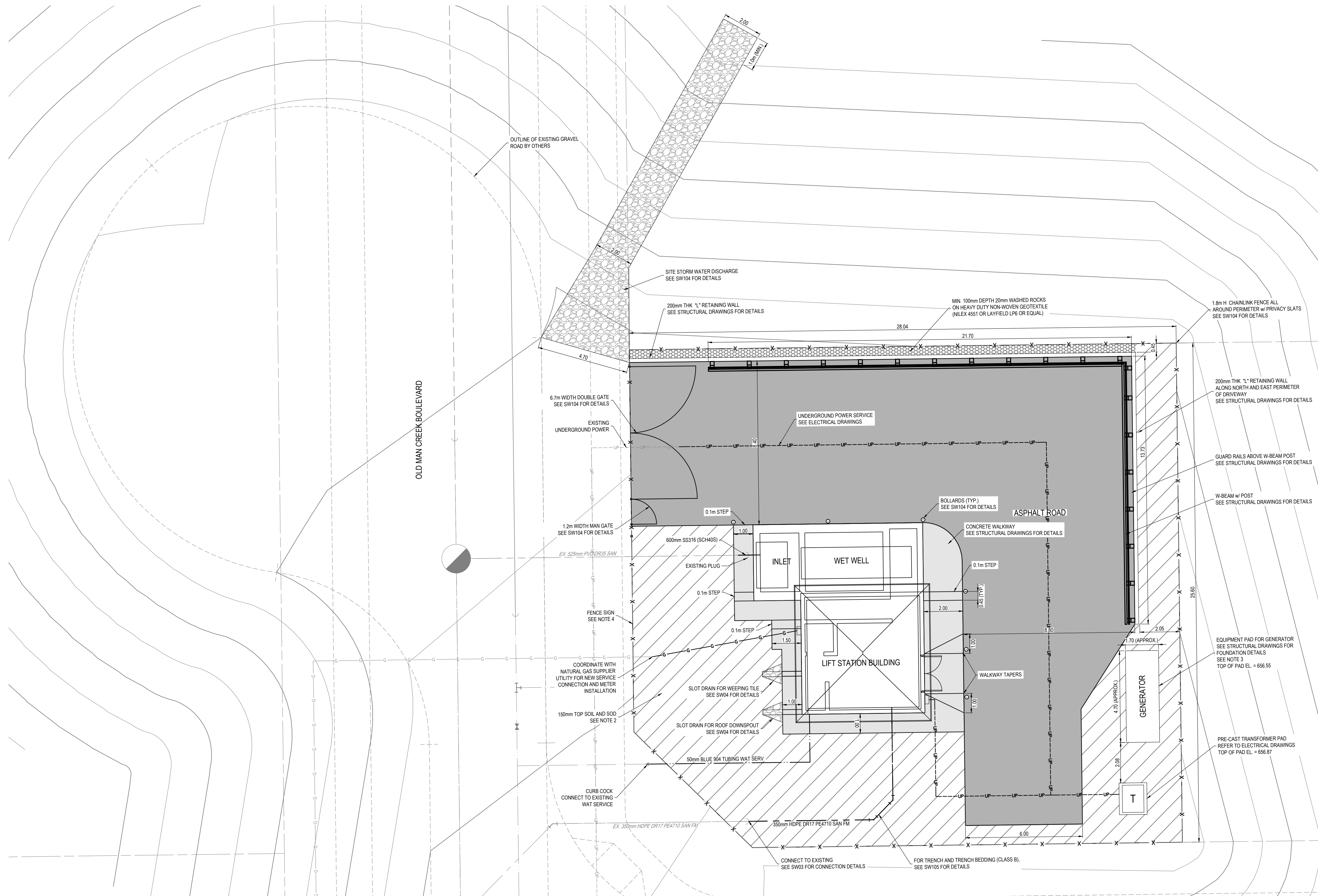


LEGEND



NOTES:

1. UTILITIES TO BE SUPPLIED AND INSTALLED IN COMPLIANCE WITH STRATHCONA COUNTY DESIGN AND CONSTRUCTION STANDARDS.
2. NURSERY GROWN, MIN. 25% PERCENTAGE, 25% CHEWING FESCUE, 25% CHEWING FESCUE, AND 25% RYEGRASS/QUINTAIN FESCUE BLENDED EQUALLY, OF CERTIFIED CANADA NO. 1 SEED IF AVAILABLE LOCALLY.
3. TRANSFORMER PAD DIMENSIONS SHOWN AS APPROXIMATE. ACTUAL DIMENSIONS TO BE CONFIRM DURING SHOP DRAWING REVIEW.
4. PROVIDE OUTDOOR PANEL SIGN ON CHAIN LINK FENCE IN ACCORDANCE WITH STRATHCONA COUNTY VISUAL IDENTITY MANUAL, SECTION 6.3 MISCELLANEOUS SIGNAGE. TEXT ON SIGN TO INCLUDE FACILITY NAME, BUILDING ADDRESS, AND "STRATHCONA COUNTY UTILITIES CONTACT NUMBER: 780-467-7785, AND "NO TRESPASSING" STATEMENT.



NOTE: THIS DRAWING IS
HALF SCALE WHEN PRINTED
TO 11" x 17" FORMAT

FOR APPROVAL

2	FOR APPROVAL	SM	Jan. 6, 2023
1	FOR APPROVAL	SM	Nov. 23, 2022
No.	DESCRIPTION	BY	DATE
REVISIONS			



PERMIT TO PRACTICE

ISL Engineering and Land Services Ltd.

RM Signature: *John McCamery*

RM APEGA ID: 94184

Date: 2023-01-06

PERMIT NUMBER: P 4741
The Association of Professional Engineers

The Association of Professional Engineers
and Geoscientists of Alberta

1:100

Scale



MATTAMY (SHERWOOD PARK) LTD

HEARTHSTONE SANITARY LIFT STATION

Drawn: AL	Design Checked: SM	Date: Nov. 23, 2022
Designed: SM	Discipline Review: JRK	Date: Nov. 23, 2022

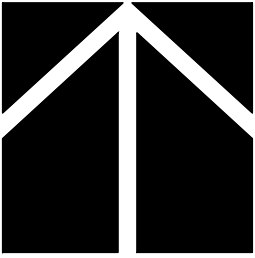
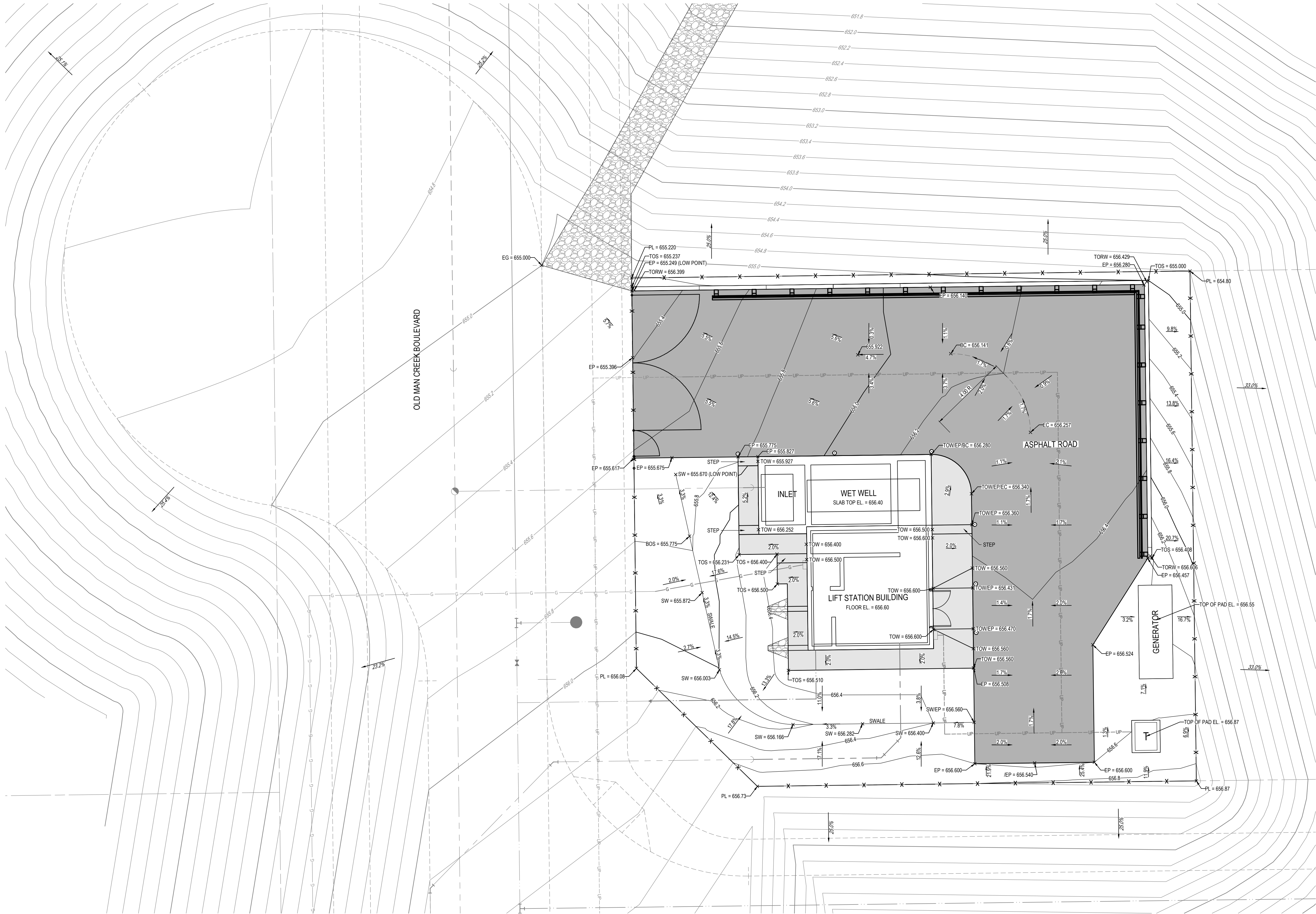
SITE WORKS PROPOSED SITE PLAN

Drawing No.

15719	SW	101
-------	----	-----

Sheet No.
101

Allen Li, Jan. 6, 23 / G:\Projects\15000\15700\15719_Cambrian_Sanitary_Lift_Station\02_CADD\20_Drafting\203_DWG\100_Siteworks\15719_Grading Plan.dwg



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED ASPHALT ROAD
- PROPOSED CONCRETE PAD / WALKWAY

ABBREVIATIONS

- PL PROPERTY LINE
- EP EDGE OF PAVEMENT
- EG EDGE OF GRAVEL ROAD
- TOW TOP OF CONCRETE WALKWAY
- TOC TOP OF CURB
- TORW TOP OF RETAINING WALL
- TOS TOP OF SLOPE
- BOS BOTTOM OF SLOPE
- SW BOTTOM OF SWALE
- BC BEGINNING OF CURVE
- EC END OF CURVE

NOTES:

- ALL CONCRETE WALKWAY STEPS TO HAVE TREAD OF 0.45m AND RISER OF 0.1m

NOTE: THIS DRAWING IS
HALF SCALE WHEN PRINTED
TO 11" x 17" FORMAT

FOR APPROVAL

No.	DESCRIPTION	BY	DATE
2	FOR APPROVAL	SM	Jan. 6, 2023
1	FOR APPROVAL	SM	Nov. 23, 2022



PERMIT TO PRACTICE
ISL Engineering and Land Services Ltd.
RM Signature: *Stephen A. McCool*
RM APEGA ID: 94184
Date: 2023-01-06
PERMIT NUMBER: P 4741
The Association of Professional Engineers and Geoscientists of Alberta

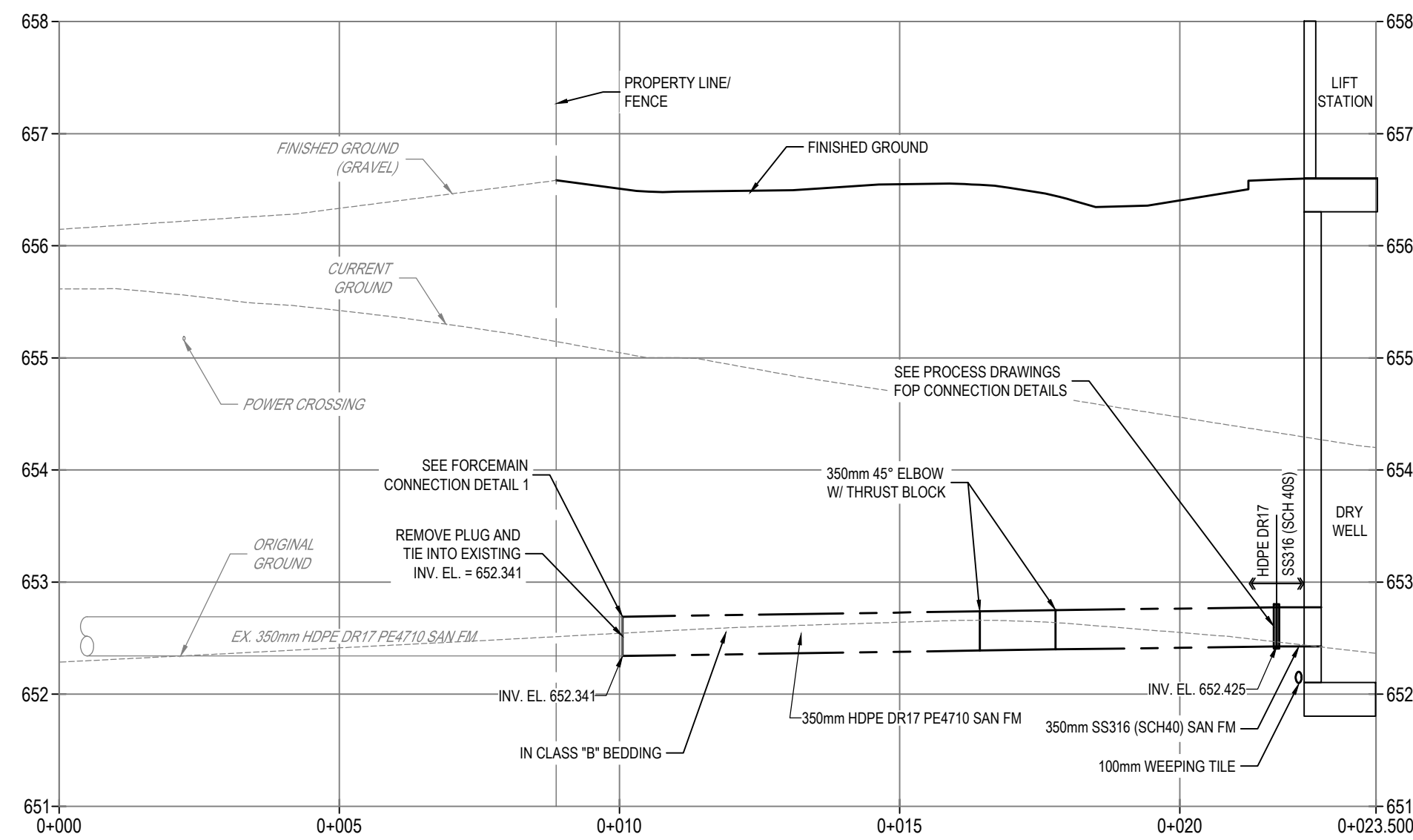
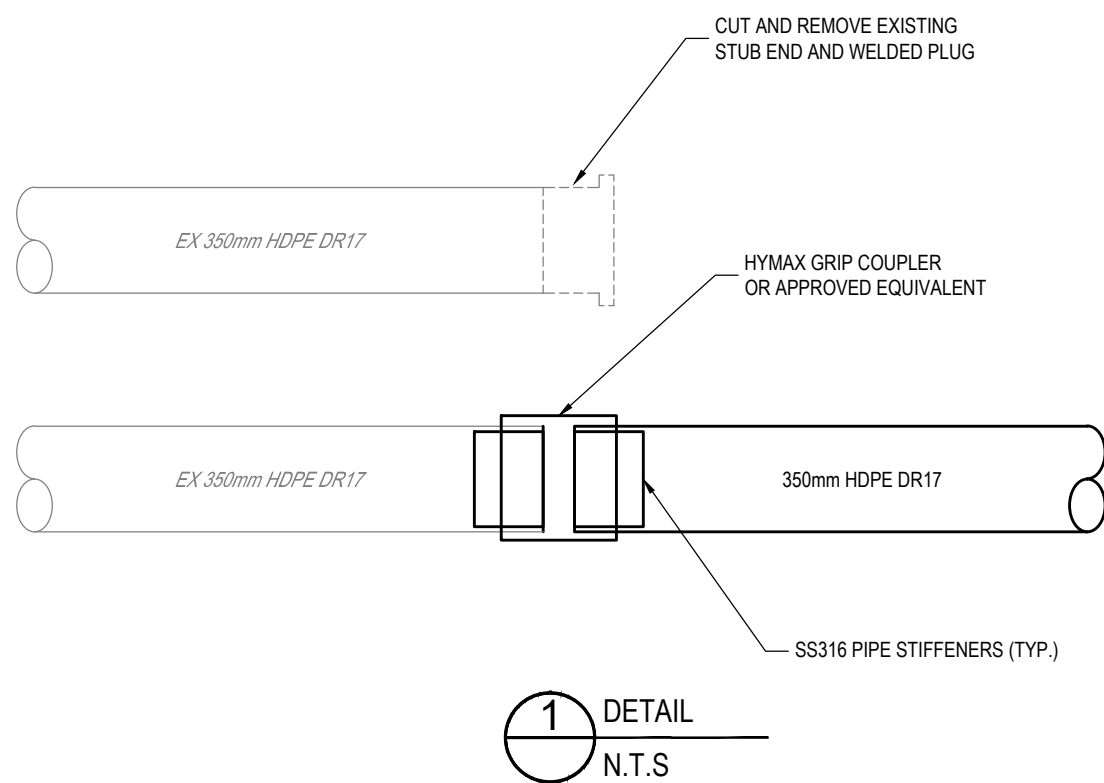
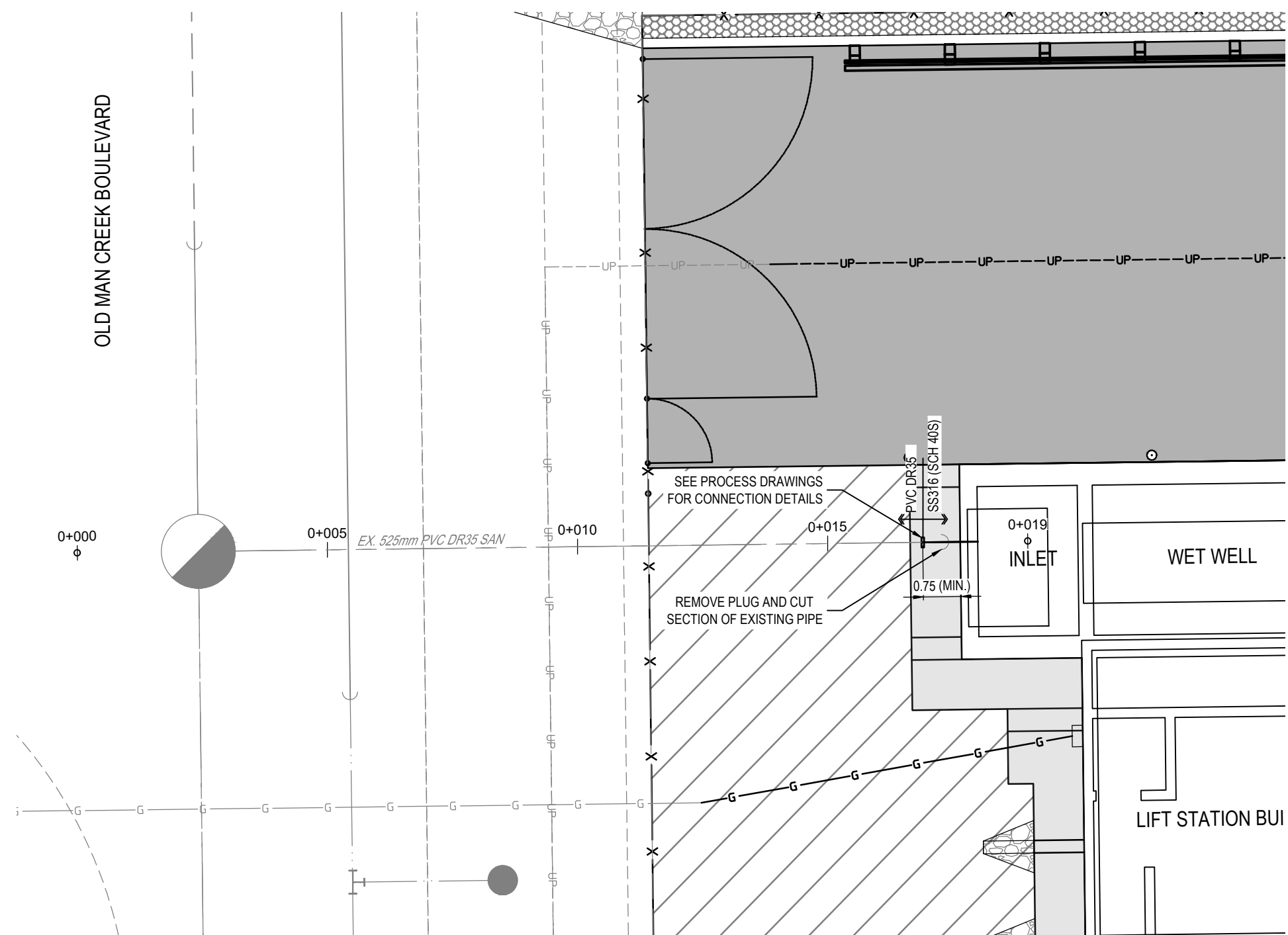
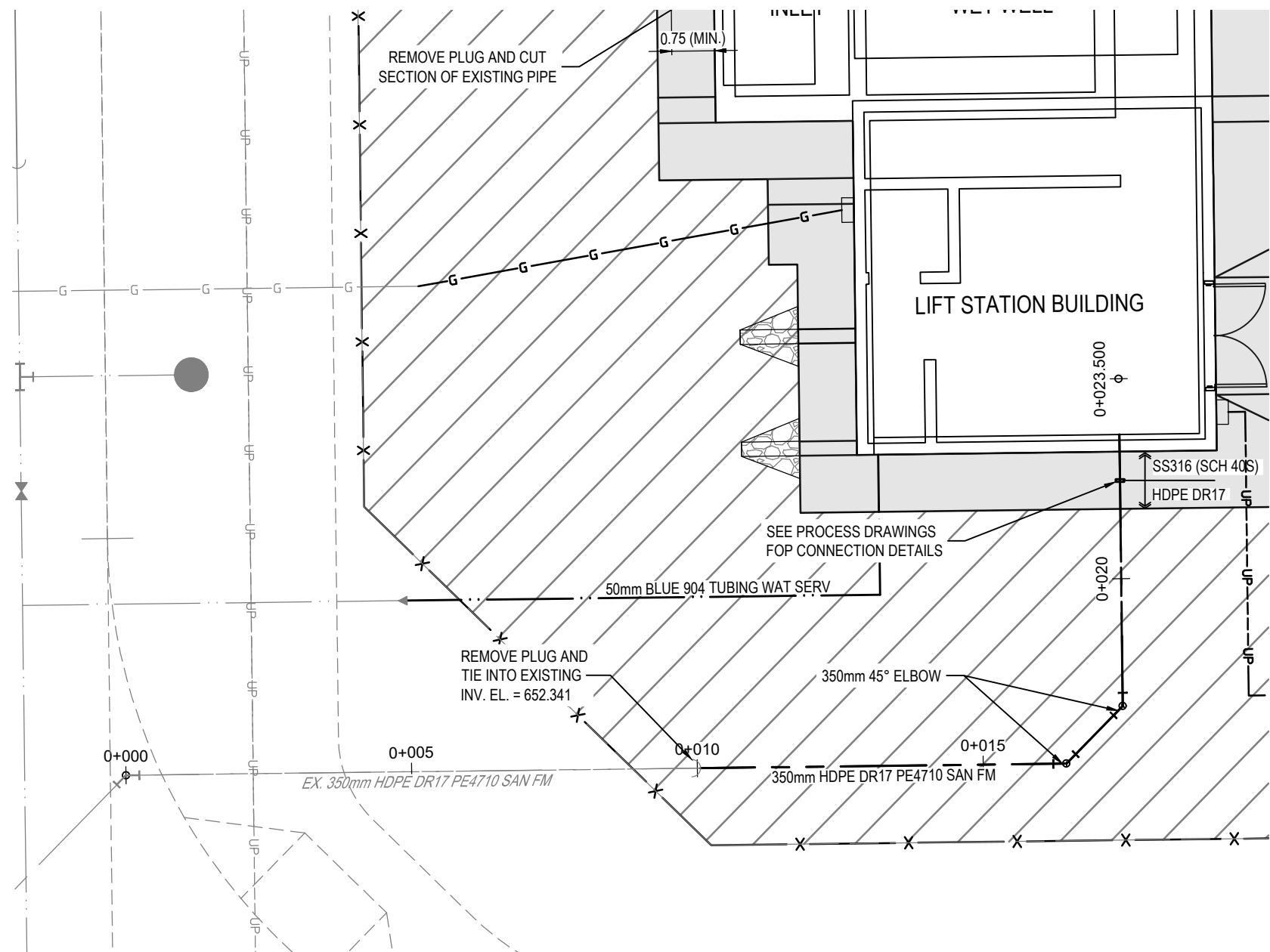
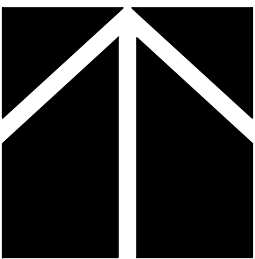
Scale 1:100
0 1 2 3 4m
ISL

MATTAMY (SHERWOOD PARK) LTD
HEARTHSTONE SANITARY LIFT STATION
Drawn: AL Design Checked: SM Date: Nov. 23, 2022
Discipline Review: JRK

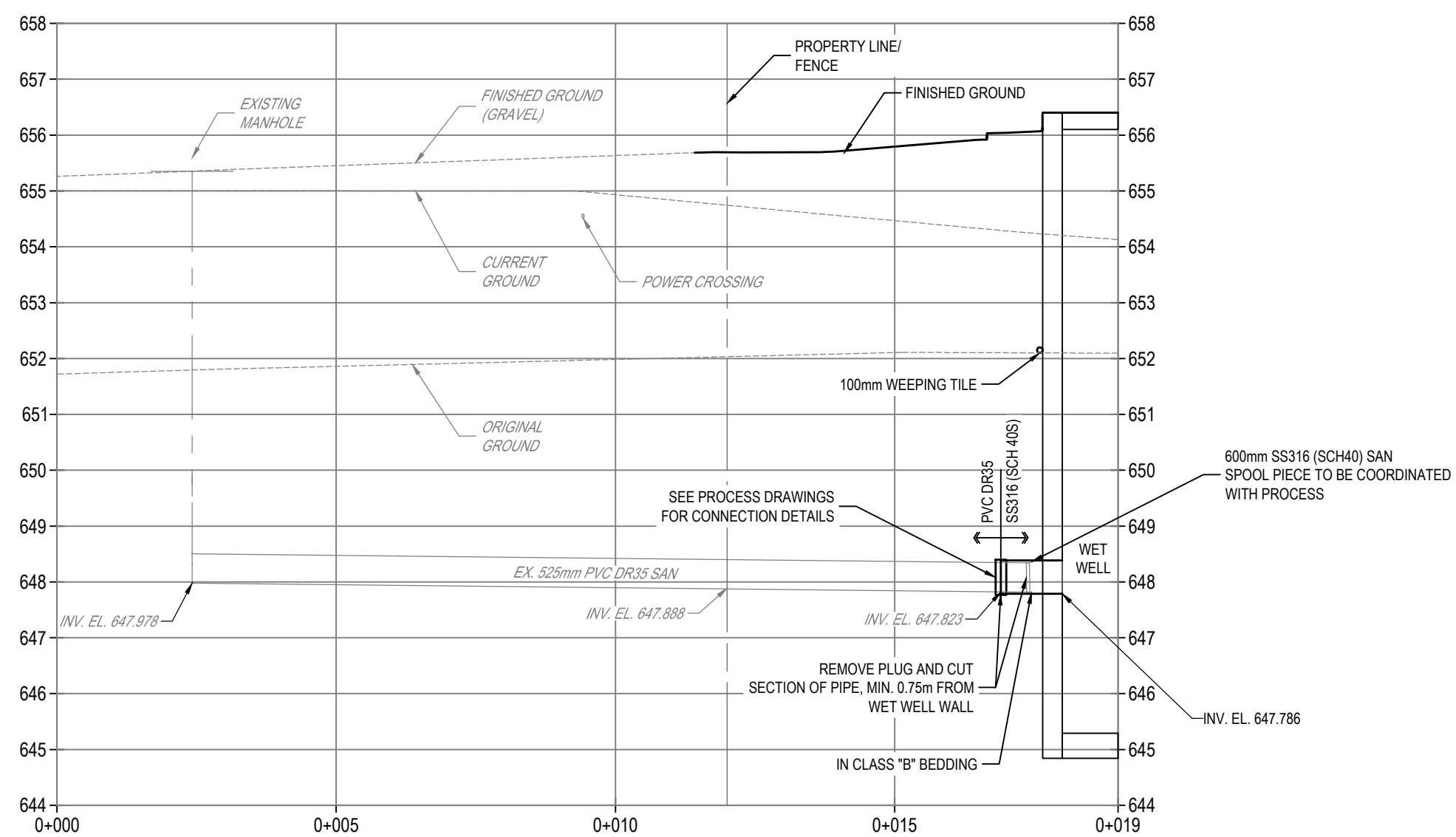
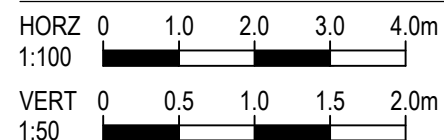
SITEWORKS
PROPOSED GRADING PLAN

Drawing No.
15719
SW
102
Sheet No.
102

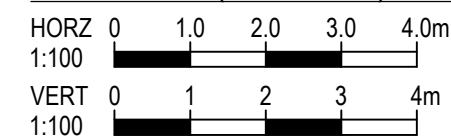
Alan Li, Jan. 4, 23 / G:\Projects\15000\15700\15719_Cambrian_Sanitary_Lift_Station\02_Drafting\2023_DWG\100_Stewarts\15719_PlanProfile.dwg



FORCEMAIN STA. 0+000 TO 0+023.500



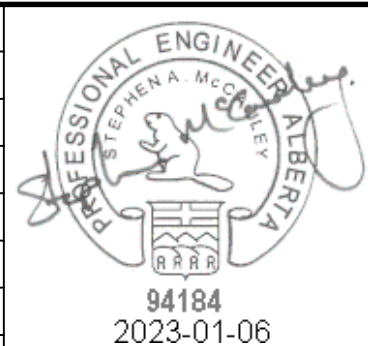
SANITARY (GRAVITY) STA. 0+000 TO 0+019



NOTE: THIS DRAWING IS
HALF SCALE WHEN PRINTED
TO 11" x 17" FORMAT

FOR APPROVAL

No.	DESCRIPTION	BY	DATE
2	FOR APPROVAL	SM	Jan. 6, 2023
1	FOR APPROVAL	SM	Nov. 23, 2022



PERMIT TO PRACTICE
ISL Engineering and Land Services Ltd.
RM Signature: *Stephen A. McCreedy*
RM APEGA ID: 94184
Date: 2023-01-06
PERMIT NUMBER: P 4741
The Association of Professional Engineers
and Geoscientists of Alberta

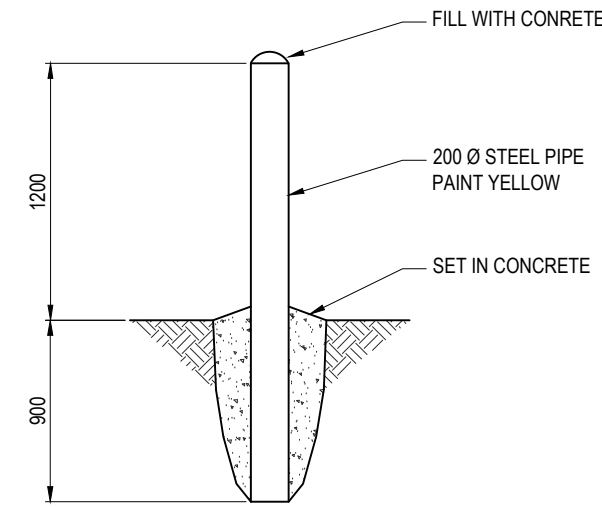
Scale



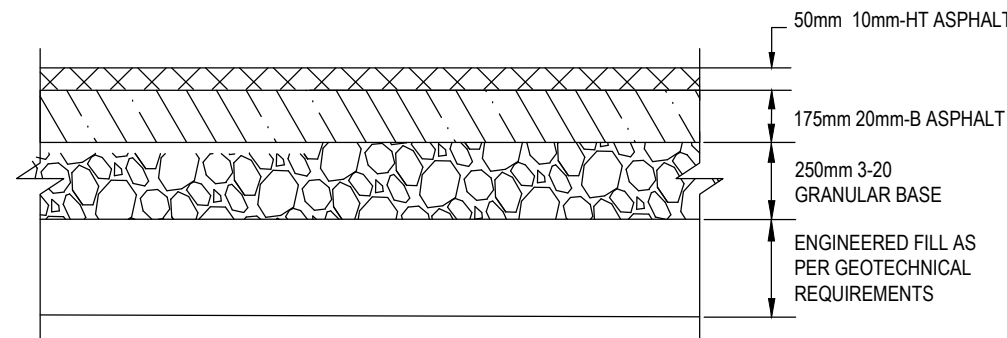
MATTAMY (SHERWOOD PARK) LTD		
HEARTHSTONE SANITARY LIFT STATION		
Drawn: AL	Design Checked: SM	Date: Nov. 23, 2022
Designed: SM	Discipline Review: JRK	Date: Nov. 23, 2022

SITeworks
SANITARY INLET AND FORCEMAIN
PLAN / PROFILE

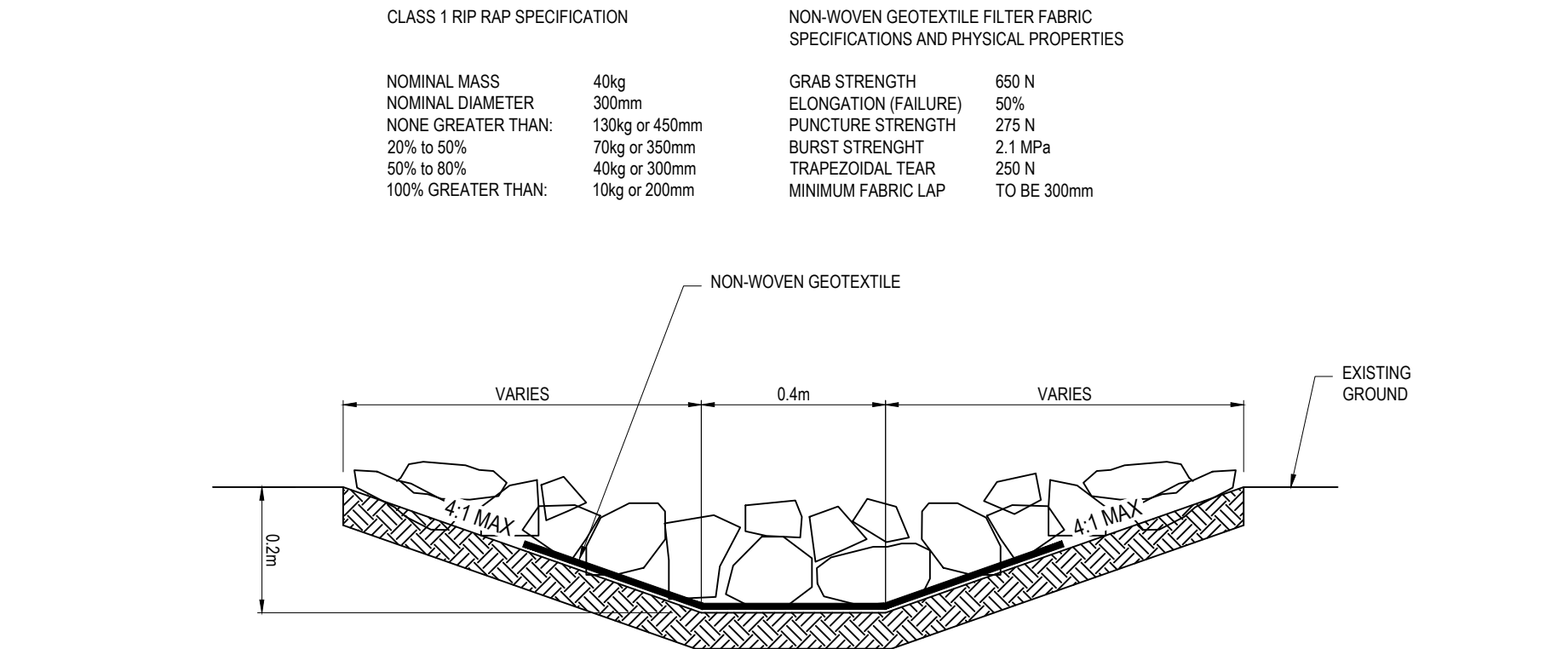
Drawing No.
15719
SW
103
Sheet No.
103



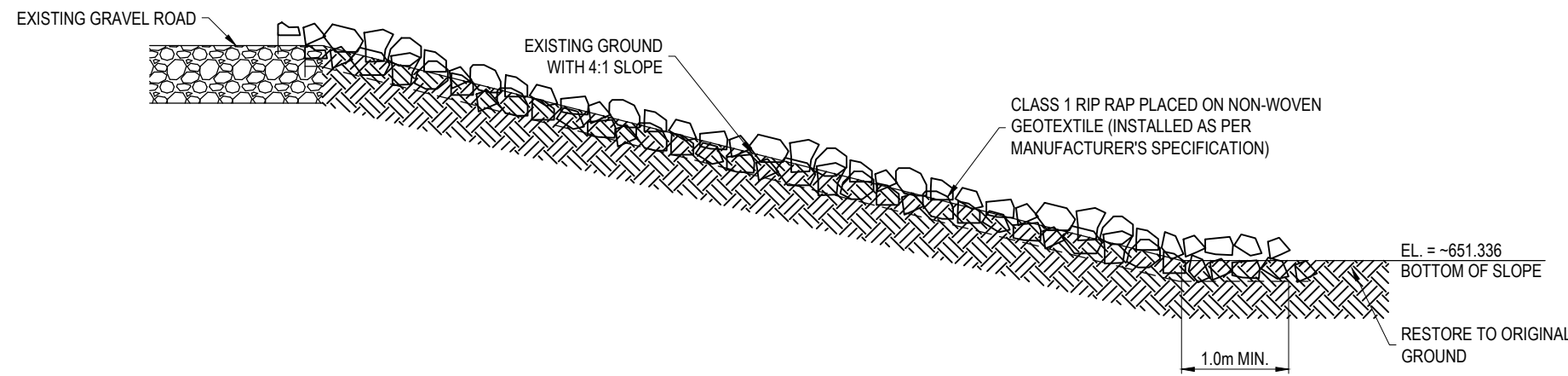
STEEL BOLLARD DETAIL
N.T.S.



ROAD SITE STRUCTURE
N.T.S.

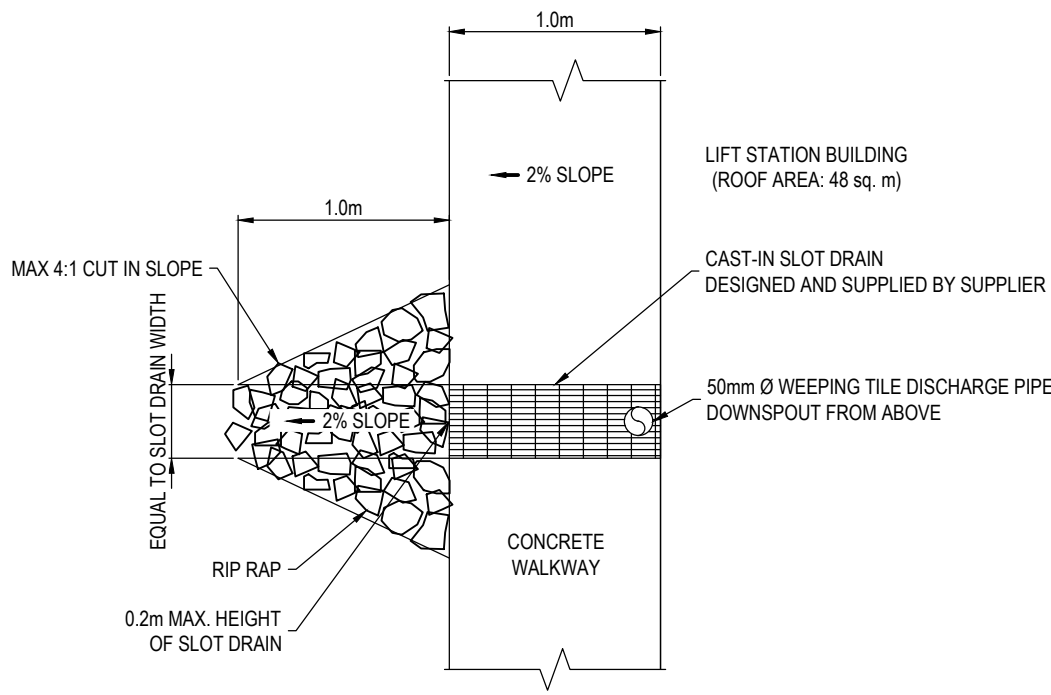


SECTION

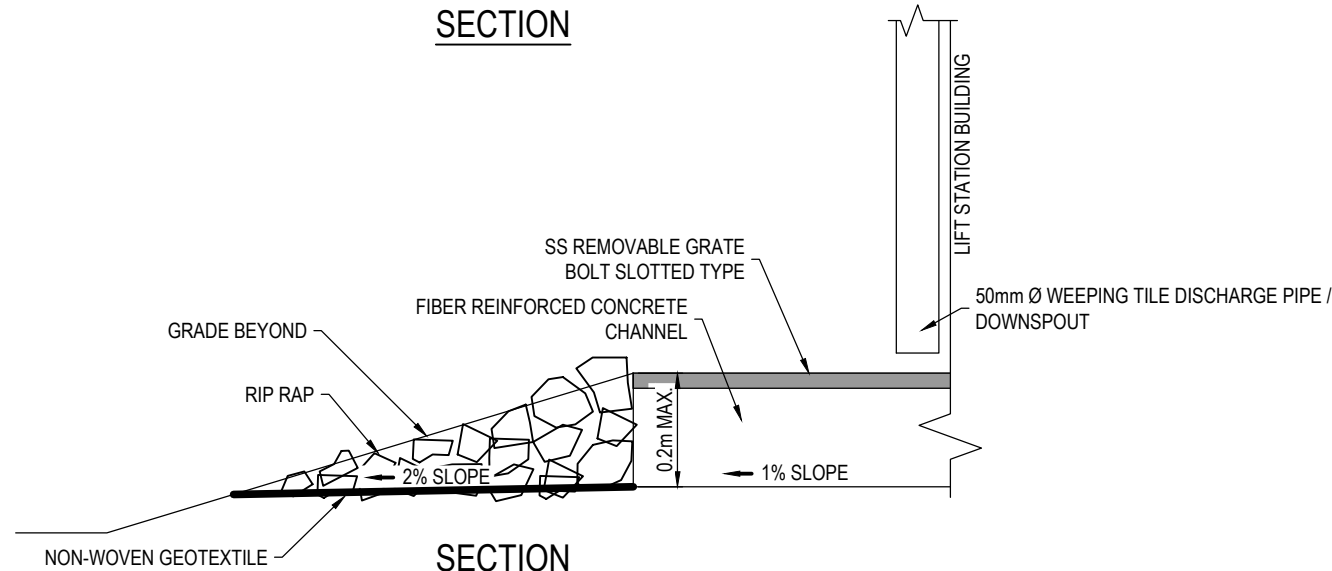


STORM DISCHARGE DETAIL
N.T.S.

- NOTES
- ROCKS AND BOULDERS SHALL BE SELECTED AS NEARLY CUBICAL IN FORM AS PRACTICABLE AND OF A SIZE GREATER THAN 100mm AS SPECIFIED.
 - THE STONES SHALL BE PLACED WITH THEIR LONGEST DIMENSION PARALLEL TO THE SLOPE. LARGER STONES TO BE USED ON THE BOTTOM COURSES WITH SMALLER STONES AT THE TOP.
 - STONES SHALL BE LAID IN CLOSE CONTACT WITH STAGGERED JOINTS AND IN SUCH A MANNER THAT THE WEIGHT OF THE STONES IS CARRIED BY THE UNDERLYING EARTH AND NOT BY ADJACENT STONES.

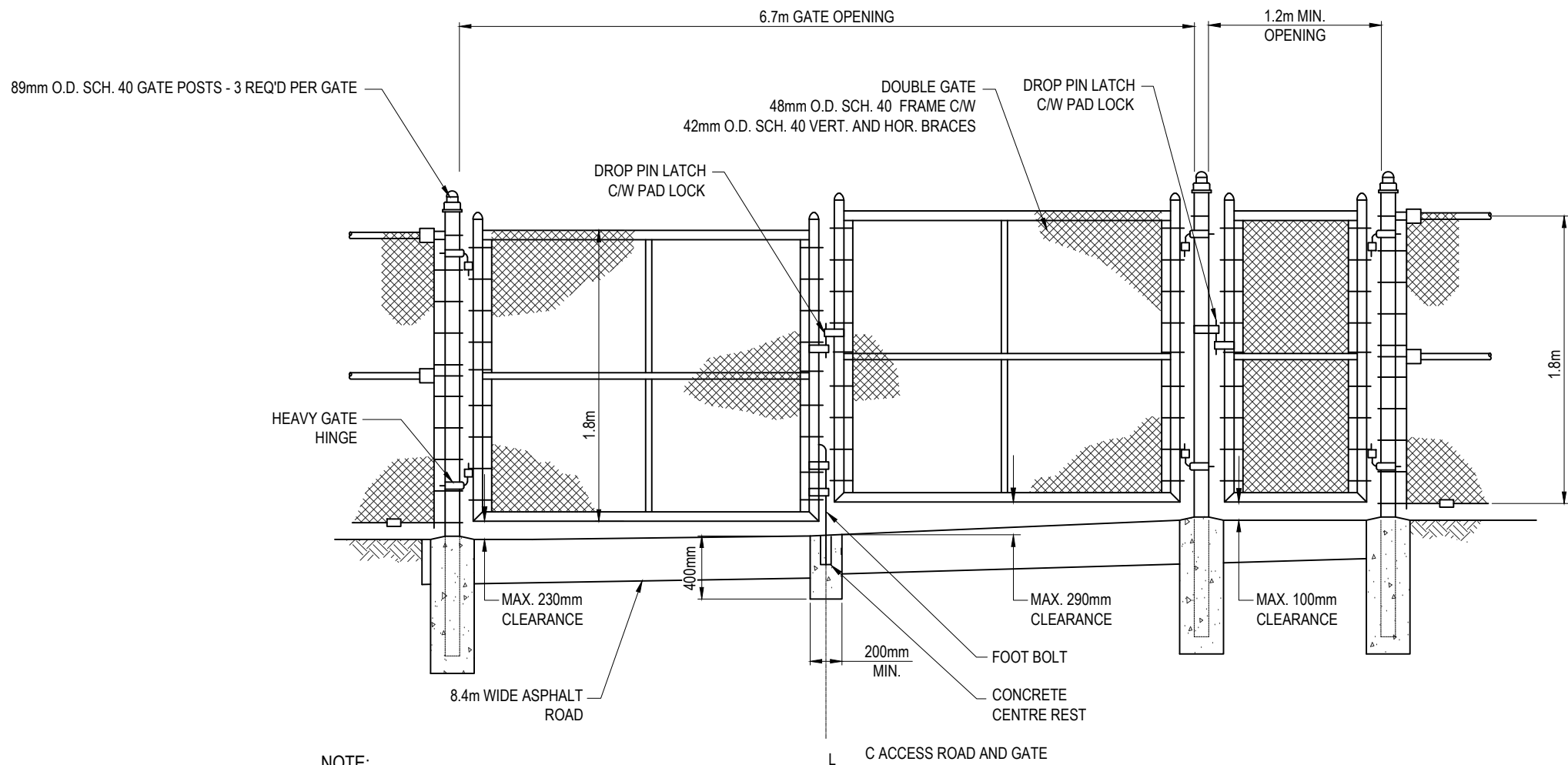


SECTION



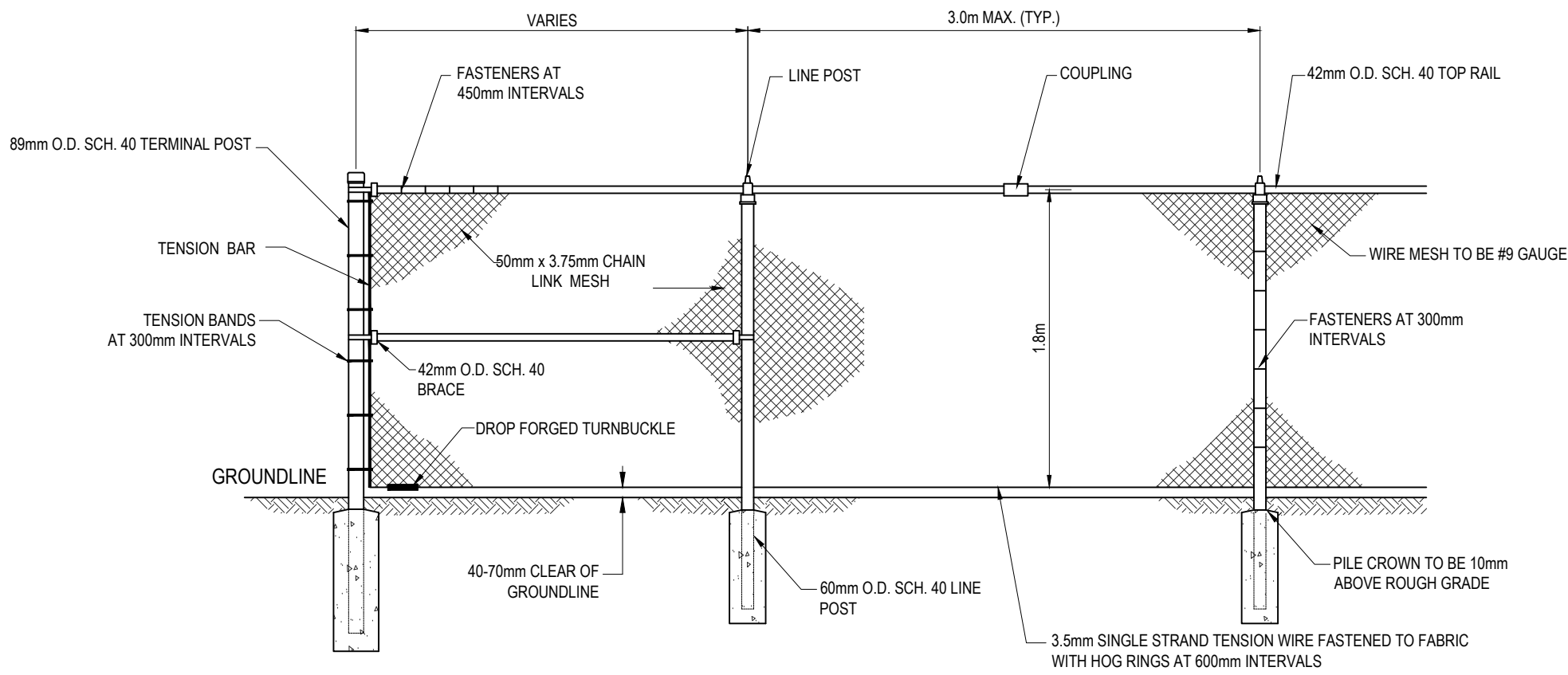
SECTION

SLOT DRAIN DETAIL
N.T.S.



- NOTE:
- GATE TO BE SUPPLIED WITH HEAVY DUTY LOCKING MECHANISM AND PAD LOCK KEYED TO THE COUNTY STANDARD.
 - WIRE MESH TO BE #9 GAUGE BEFORE COATING
 - PRIVACY SLAT PRIVACY FACTOR AND WIND LOADING TO BE 90%. PROVIDE WITH SLAT LOCK, EITHER TOP OR BOTTOM. COLOR AND FINISH (GALVANIZED OR COLOR FINISH WITH VINYL) TO BE REVIEWED DURING SHOP DRAWING REVIEW.
 - PRIOR TO FABRICATION OF DOUBLE GATE, CONTRACTOR TO CONFIRM FIELD DIMENSIONS ALONG THE GATE SWING PATH TO STAY WITHIN THE MAX. CLEARANCES AS SHOWN BETWEEN THE GROUND AND BOTTOM OF GATES.

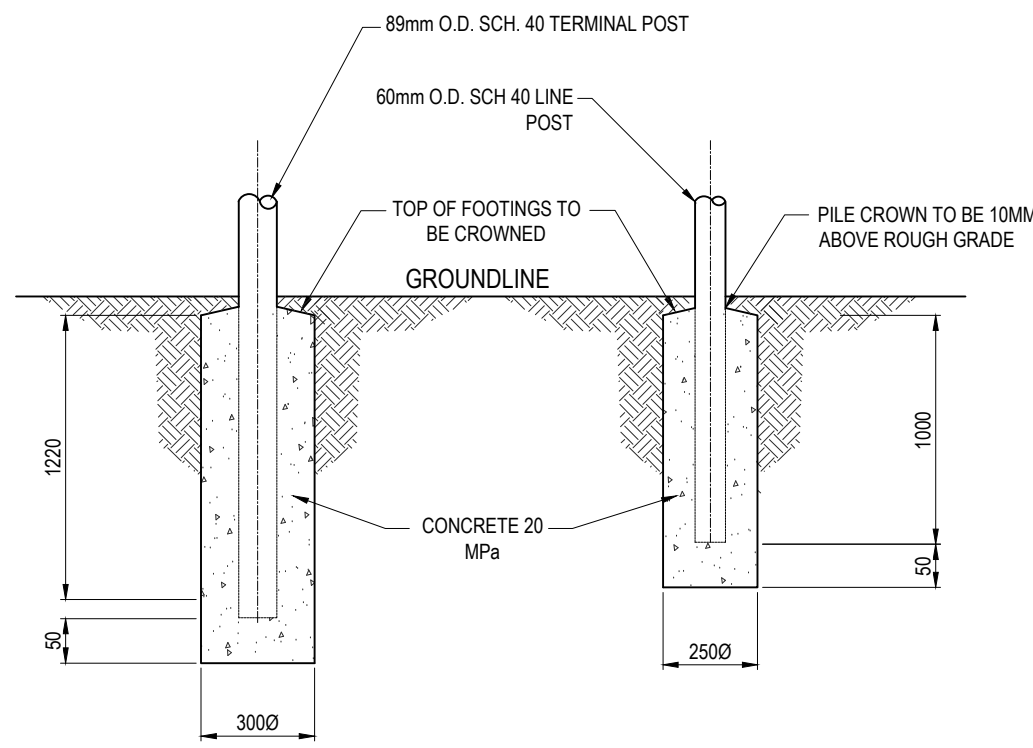
DOUBLE GATE AND MAN GATE



- NOTE:
- WIRE MESH TO BE #9 GAUGE BEFORE COATING
 - PRIVACY SLAT PRIVACY FACTOR AND WIND LOADING TO BE 90%. PROVIDE WITH SLAT LOCK, EITHER TOP OR BOTTOM. COLOR AND FINISH TO BE REVIEWED DURING SHOP DRAWING REVIEW.

CHAIN LINK FENCE

N.T.S.



TERMINAL POST

LINE POST

FENCE POST FOOTING DETAILS

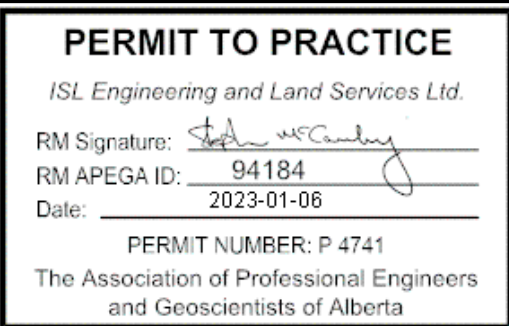
N.T.S.

NOTE: THIS DRAWING IS
HALF SCALE WHEN PRINTED
TO 11" x 17" FORMAT

FOR APPROVAL

No.	DESCRIPTION	BY	DATE
2	FOR APPROVAL	SM	Jan. 6, 2023
1	FOR APPROVAL	SM	Nov. 23, 2022

REVISIONS



Scale

N.T.S.

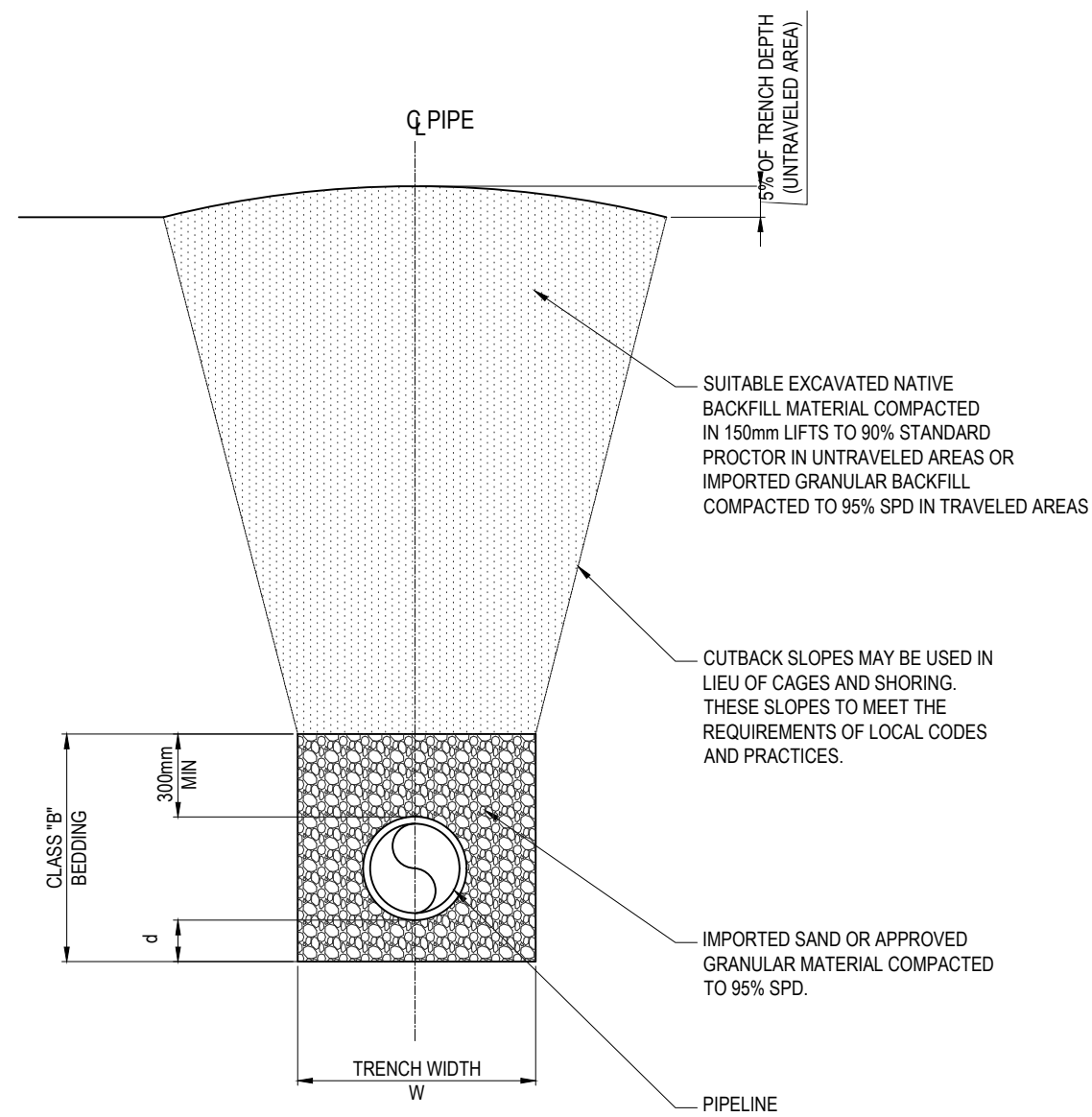


MATTAMY (SHERWOOD PARK) LTD		
HEARTHSTONE SANITARY LIFT STATION		
Drawn: AL	Design Checked: SM	Date: Nov. 23, 2022
Designed: SM	Discipline Review: JRK	Date: Nov. 23, 2022

SITEWORKS
STANDARD DETAILS I

Drawing No.
15719
SW
104
Sheet No.
104

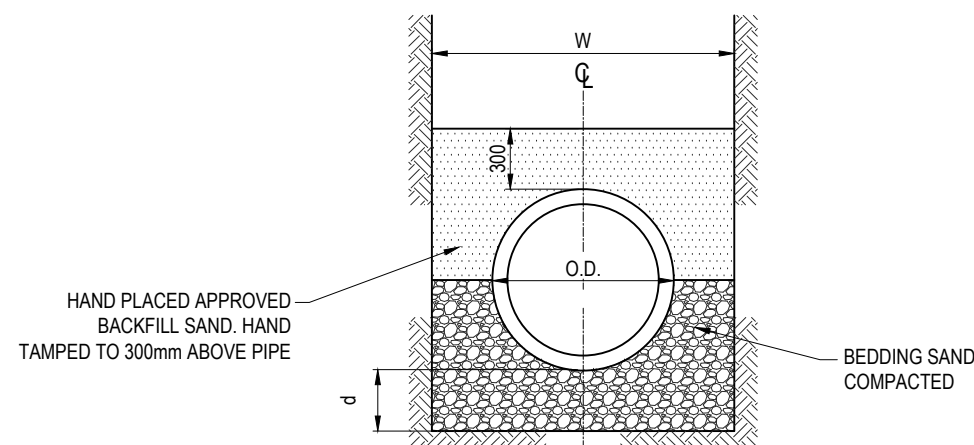
Alan Li | Jan. 4, 23 | G:\Projects\15000\15700\15719_Cambrian_Sanitary_Lift_Station\02_CADD\20_Drafting\203_DWG\100_Siteworks\15719_Standard Details.dwg



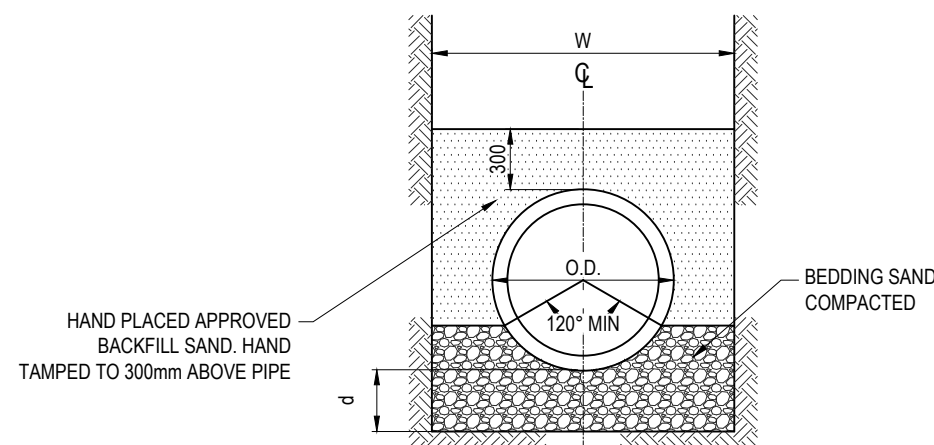
W = TRENCH WIDTH = O.D. + 450mm (MIN) d = DEPTH OF BEDDING BELOW PIPE
O.D. = OUTSIDE PIPE DIAMETER
I.D. = INSIDE PIPE DIAMETER
I.D. <= 675mm : d MINIMUM = 75mm
I.D. 750mm to 1500mm: d MINIMUM = 100mm
I.D. >= 1650mm : d MINIMUM = 150mm

TRENCH & CLASS "B" BEDDING DETAIL

N.T.S.



CLASS B BEDDING

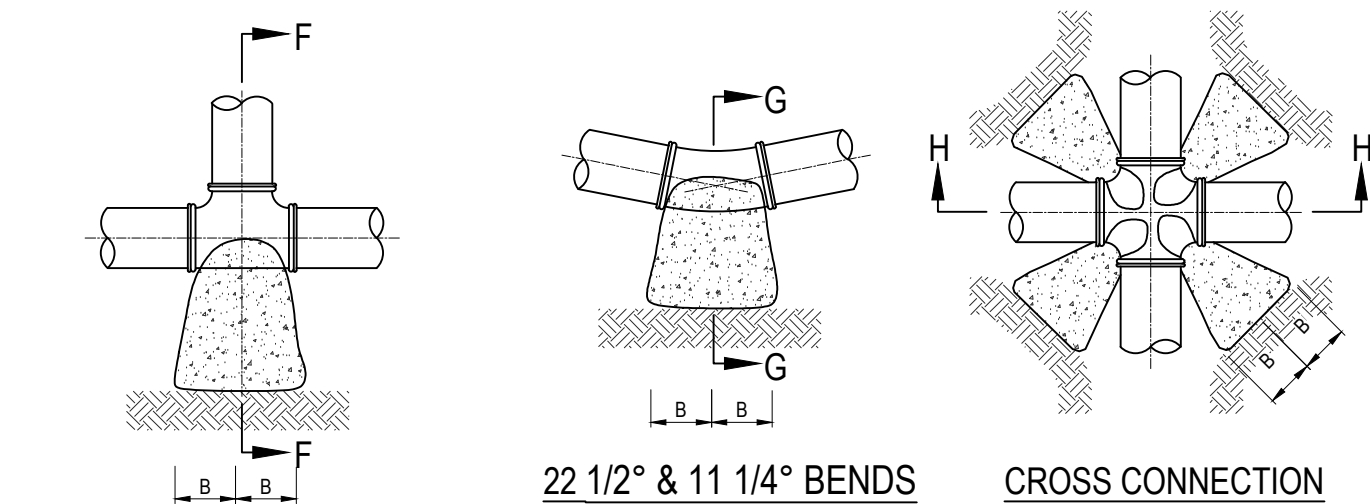


CLASS C BEDDING

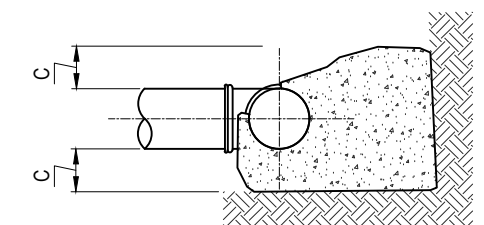
W = TRENCH WIDTH = O.D. + 450mm (MIN) d = DEPTH OF BEDDING BELOW PIPE
O.D. = OUTSIDE PIPE DIAMETER
I.D. = INSIDE PIPE DIAMETER
I.D. <= 675mm : d MINIMUM = 75mm
I.D. 750mm to 1500mm: d MINIMUM = 100mm
I.D. >= 1650mm : d MINIMUM = 150mm

TRENCH BEDDING TYPES

N.T.S.

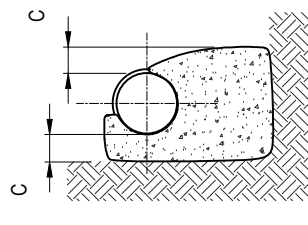


TEE & DEAD END CONNECTION



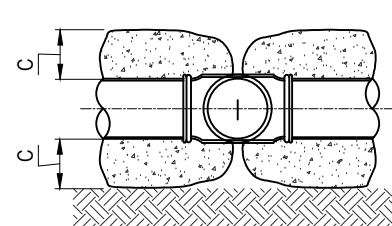
SECTION F-F

NOTE: - CONCRETE TO BE 25 Mpa @ 28 DAYS
- CONCRETE TO BE TYPE 50 SULFATE RESISTANT
- CONCRETE TO BE CLEAR OF BELLS & PIPE
- MINIMUM 75mm CONCRETE UNDER ALL FITTINGS.

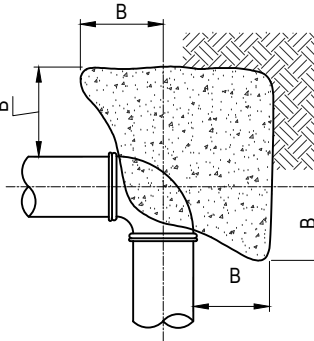


SECTION G-G

NOTE: THRUST BLOCK DESIGNED ON
- 100 Kpa ALLOWABLE SOIL BEARING PRESSURE
- 1.5 FACTOR OF SAFETY
- 1035 Kpa PIPE WATER PRESSURE.



SECTION H-H



90° BEND

MINIMUM CONCRETE THRUST BLOCK DIMENSIONS

1035 KPa WATER PRESSURE & 95.76 KPa ALLOWABLE SOIL PRESSURE								
FITTINGS	11 1/4° BEND	22 1/2° BEND	45° BEND	60° BEND	67 1/2° BEND	75° BEND	90° BEND	CROSS-TEE & PLUG
RAR	0.198 A	0.390 A	0.765 A	A	1.112 A	1.218 A	1.414 A	A
RAR = REATION AREA REQUIRED A = AREA CONSTANT								

DIA. = 150 A = 0.197	RAR	0.039	0.77	0.151	0.197	0.219	0.240	0.279	0.197
	B	100	150	220	250	250	275	310	250
	C	50 (MIN.)	50 (MIN.)	100	125	150	150	150	125

DIA. = 200 A = 350	RAR	0.069	0.137	0.268	0.350	0.389	0.426	0.495	0.350
	B	125	175	275	300	325	360	360	300
	C	75	100	150	200	200	200	250	200

DIA. = 250 A = 0.547	RAR	0.108	0.213	0.418	0.547	0.608	0.666	0.773	0.547
	B	150	250	380	420	420	450	460	420
	C	75	100	150	200	250	250	300	200

DIA. = 300 A = 0.788	RAR	0.156	0.307	0.603	0.788	0.876	0.960	1.114	0.788
	B	200	310	430	440	440	440	500	440
	C	75	100	200	300	350	400	400	300

DIA. = 350 A = 1.073	RAR	0.212	0.418	0.821	1.073	1.193	1.307	1.517	1.073
	B	200	380	430	510	520	570	570	510
	C	100	100	300	350	400	400	500	350

DIA. = 400 A = 1.401	RAR	0.277	0.545	1.072	1.401	1.558	1.706	1.981	1.401
	B	230	455	540	580	600	610	710	580
	C	100	100	300	400	450	500	500	400

DIA. = 450 A = 1.773	RAR	0.351	0.692	1.356	1.773	1.972	2.160	2.507	1.773
	B	260	510	610	650	675	700	800	650
	C	100	100	400	450	500	600	600	450

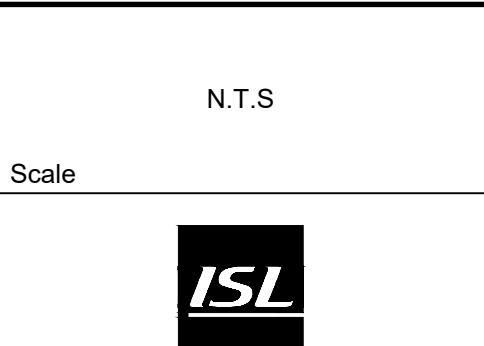
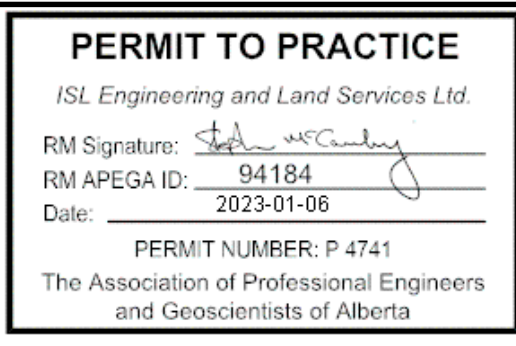
THRUST BLOCK DETAIL

N.T.S.

NOTE: THIS DRAWING IS
HALF SCALE WHEN PRINTED
TO 11" x 17" FORMAT

FOR APPROVAL

No.	DESCRIPTION	BY	DATE
2	FOR APPROVAL	SM	Jan. 6, 2023
1	FOR APPROVAL	SM	Nov. 23, 2022
REVISIONS			



MATTAMY (SHERWOOD PARK) LTD		
HEARTHSTONE SANITARY LIFT STATION		
Drawn: AL	Design Checked: SM	Date: Nov. 23, 2022
Designed: SM	Discipline Review: JRK	Date: Nov. 23, 2022

SITEWORKS STANDARD DETAILS II

Drawing No.
15719
SW
105
Sheet No.
105