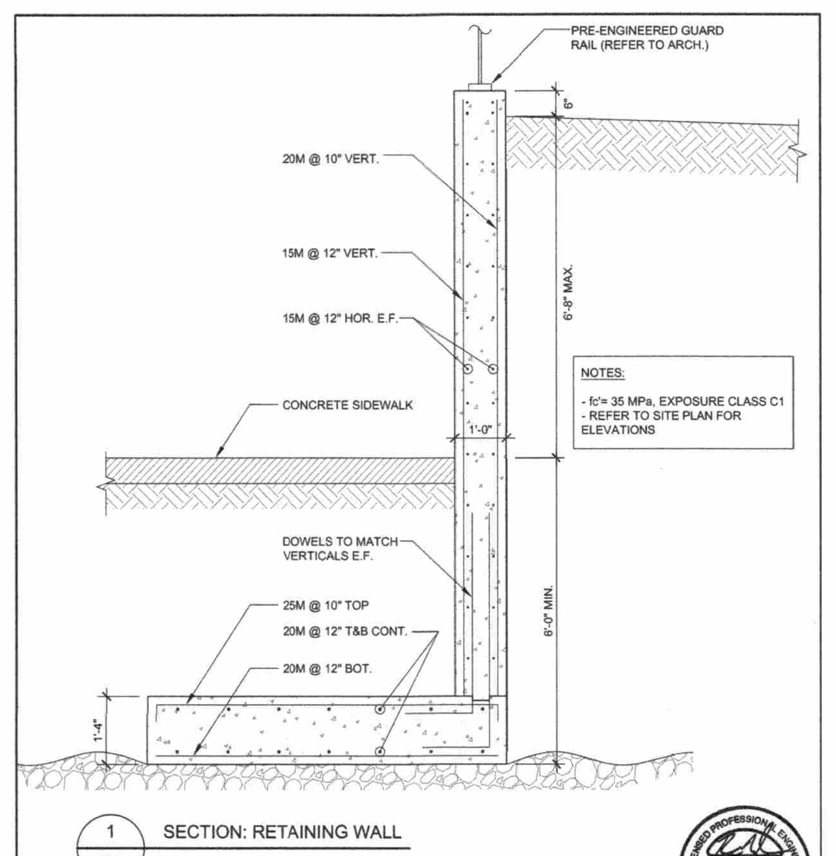
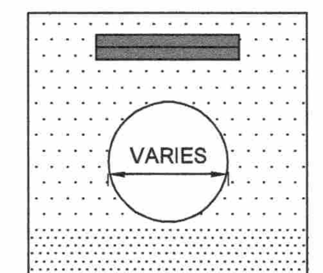


CLELAND JARDINE ENGINEERING LTD

PROJECT: DYMON SELF STORAGE FACILITY 1375 CLYDE AVE	DRAWN: J. LABBÉ	DRAWING No.	
	DESIGNED: R. MUNDEN	SK2	
	DATE: 18/05/04		
DRAWING: RETAINING WALL	SCALE: N.T.S.		
	PROJECT No: 17-0185B		



INSULATION REFERENCE TABLE	
EARTH COVER	REQUIRED INSULATION THICKNESS
2.0m - 1.8m	25mm
1.8m - 1.5m	50mm
1.5m - 1.2m	75mm
1.2m - 0.9m	100mm
0.9m - 0.6m	125mm

1. SEWER INSTALLATION (INCLUDING BEDDING AND COVER) TO BE PER CITY OF OTTAWA TRENCH DETAIL S6
2. INSULATION POINTS TO BE STAGGERED, WITH MINIMUM 0.3 OVERLAP
3. INSULATION TO BE CENTERED OVER PIPE WITH MINIMUM WIDTH OF 1.2m
4. INSULATION TO BE PROVIDED AT ALL SEWER LOCATIONS WHERE MINIMUM COVERAGE OF 2.0m IS NOT ACHIEVED.

INSULATION DETAIL

N.T.S.

ROOF DRAIN TABLE

BUILDING	ROOF DRAIN	WEIR OPENING	MAX PONDING DEPTH (mm)	ROOF DRAIN TYPE	RELEASE RATE (L/S)
BUILDING 1B	RD1	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD2	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD3	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD4	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
				TOTAL FLOW RATE =	5.048
BUILDING 2	RD1	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD2	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD3	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD4	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
				TOTAL FLOW RATE =	5.048
BUILDING 3	RD1	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
	RD2	1/2	152	WATTS ADJUSTABLE ACCUTROL WEIR	1.262
				TOTAL FLOW RATE =	2.524

ICD TABLE

ICD#	OUTLET PIPE DIA. (mm)	Qr (L/s)	OUTLET INVERT (m)	TOP OF GRATE (m)	MAX PONDING (m)	DESIGN HEAD (m)	HYDROVEX MODEL #
ICD 1 - CB 3	200	20.00	94.88	96.87	96.93	2.05	125 VHV-2
ICD 2 - CB 5	200	20.00	94.00	95.80	96.00	2.00	125 VHV-2
ICD 3 - CB 6	200	8.00	94.00	95.50	95.70	1.70	100 VHV-1
ICD 4 - CB 10	200	6.00	93.50	95.40	95.65	2.15	75 VHV-1
ICD 5 - CB 11	200	6.00	93.60	95.40	95.55	1.95	75 VHV-1
ICD 6 - CB 14	200	6.00	93.36	95.25	95.30	1.94	75 VHV-1
ICD 7 - ST MH 2A	250	12.00	93.93	95.57	--	1.01	CUSTOM 75mm ø ORIFICE

WATERMAIN TABLE-Sta. 1+000.00 TO 1+158.00

PVC DR-18 CL.150

SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
203mmØ	1+000	203 x 203 TEE CONNECTION TO EXISTING	95.89	93.49
	1+001.39	WM CROSSING OVER SAN	95.86	94.16
	1+003.84	WM CROSSING UNDER ST	95.82	93.42
	1+010.00		95.82	93.42
	1+020.00		95.85	93.45
	1+030.00		95.80	93.40
	1+039.33	203 x 203 TEE	95.83	93.43
	1+040.66	45° BEND	95.83	93.43
	1+043.02	WM CROSSING UNDER SAN	95.79	93.29
	1+044.69	WM CROSSING UNDER ST	95.80	93.40
	1+053.18	203 x 152 TEE	95.61	93.21
	1+060.65	WM CROSSING UNDER ST	95.69	93.19
	1+061.78	45° BEND	95.73	93.33
	1+070.00		95.90	93.50
	1+084.71	WM CROSSING UNDER ST	95.90	93.48
	1+092.58	203 x 203 TEE	96.09	93.69
	1+100.00		96.34	93.94
	1+110.00		96.72	94.32
	1+120.00		97.19	94.79
	1+130.00		97.67	94.27
	1+140.00		98.15	95.75
	1+145.08	45° BEND	98.40	96.00
	1+146.90	45° BEND	98.45	96.05
	1+147.90	203 x 152 TEE	98.44	96.04
	1+151.09	WM CROSSING OVER ST	98.41	96.51
	1+158.00	CONNECTION @ BUILDING	98.30	95.90

NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.

WATERMAIN TABLE-Sta. 2+000.00 TO 2+029.00

PVC DR-18 CL.150

SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
152mmØ	2+000	152 x 152 TEE	95.81	93.41
	2+010.00		95.71	93.31
	2+022.21	WM CROSSING OVER ST	95.63	94.10
	2+027.40	VALVE & VB	95.73	93.33
	2+029.00	HYDRANT	96.00	93.60

NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.

WATERMAIN TABLE-Sta. 3+000.00 TO 3+006.00

PVC DR-18 CL.150

SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
152mmØ	3+000	152 x 203 TEE	95.61	93.21
	3+002.87	VALVE & VB	95.69	93.29
	3+006.00	HYDRANT	95.93	93.53

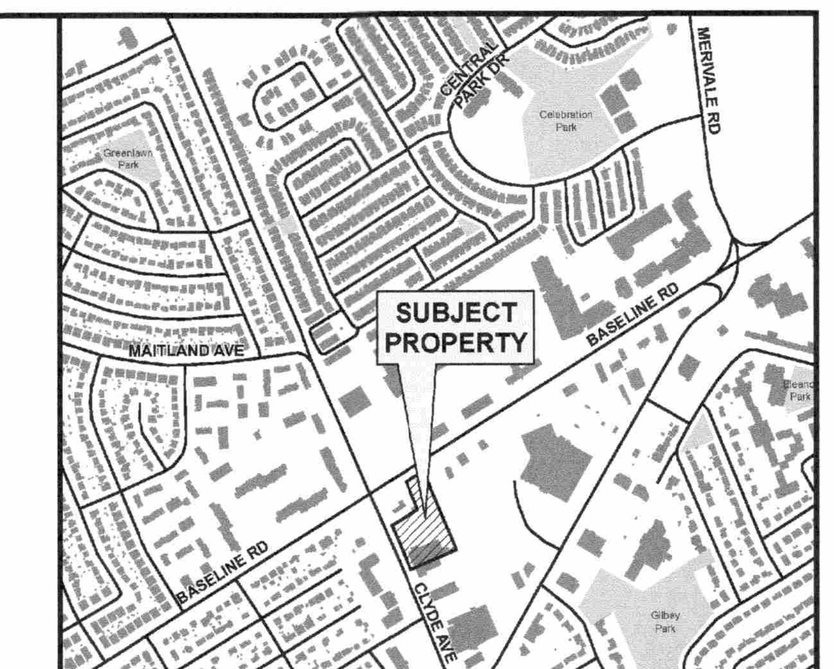
NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.

WATERMAIN TABLE-Sta. 4+000.00 TO 4+017.05

PVC DR-18 CL.150

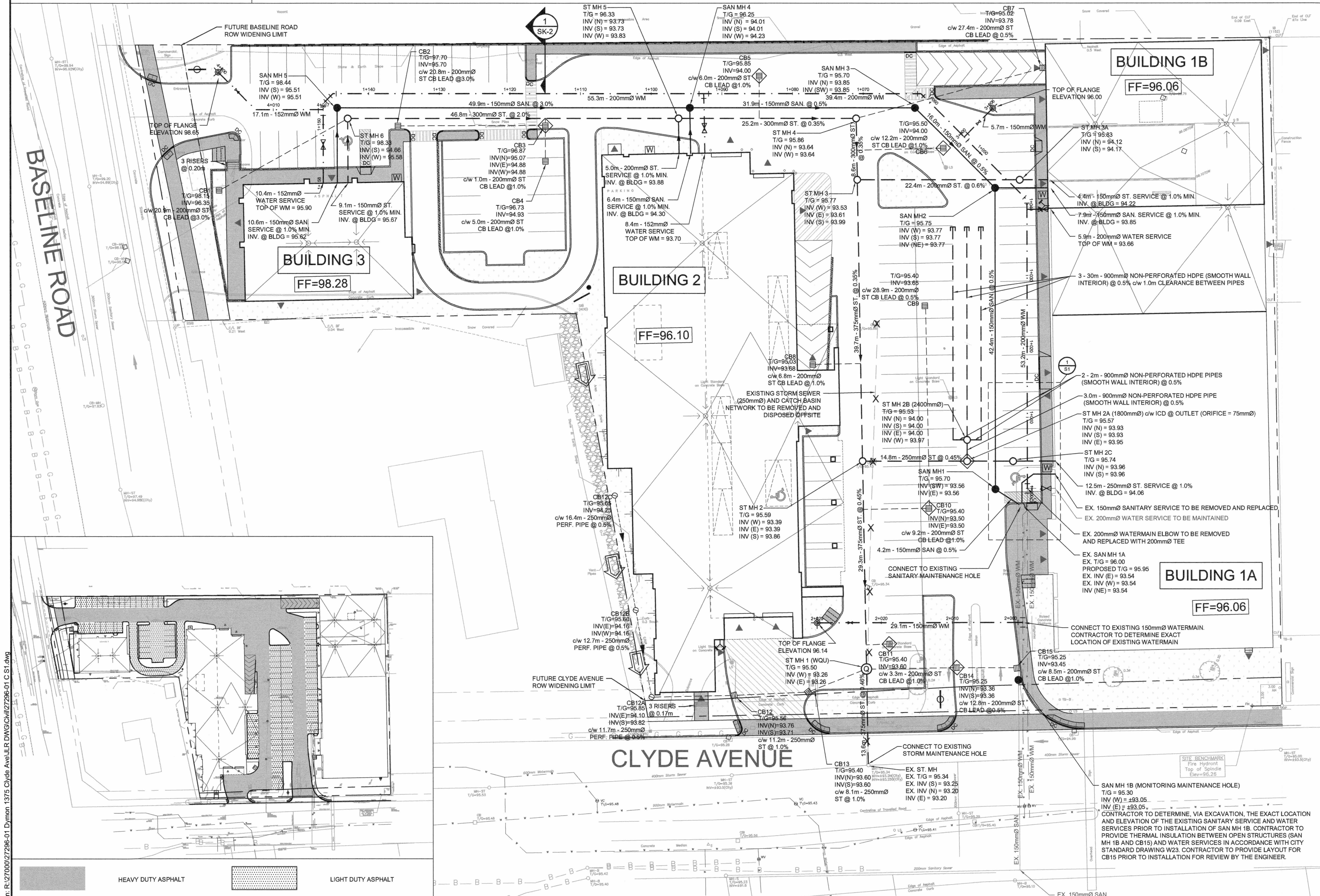
SIZE	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
152mmØ	4+000.00	HYDRANT	99.48	97.08
	4+003.74	VALVE & VB	99.04	96.64
	4+007.47	45° HORIZONTAL BEND	98.83	96.43
	4+017.05	152 x 203 TEE	98.44	96.04

NOTE: ALL WM TO BE CONSTRUCTED AT 2.4m BELOW FINISHED GRADE.

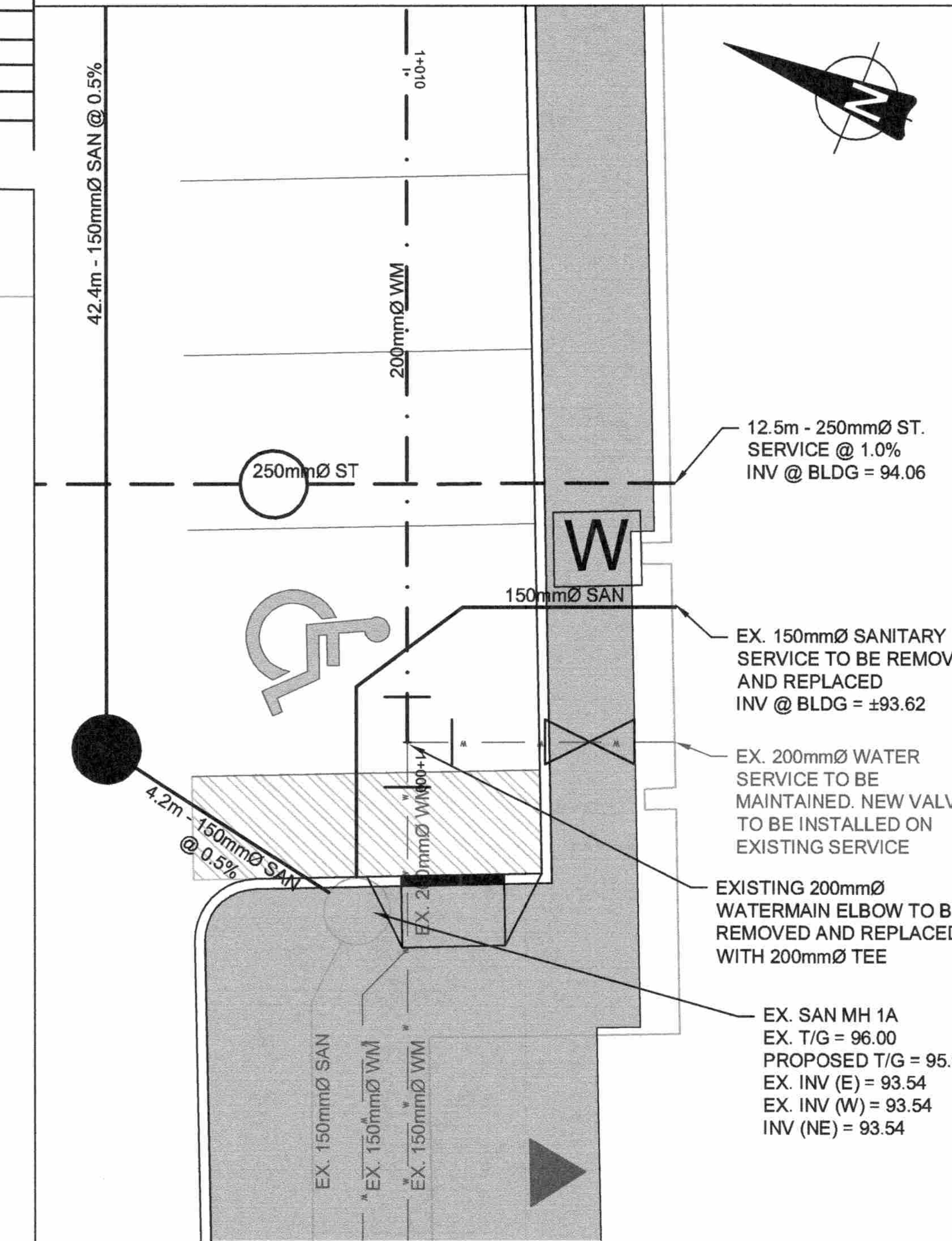


LEGEND

- EXISTING CATCH BASIN
- CATCH BASIN c/w ICD
- PROPOSED CATCH BASIN & LEAD
- PROPOSED PERFORATED PIPE AND LANDSCAPE CATCH BASIN
- PROPOSED WATERMAIN, HYDRANT, VALVE & VALVE BOX AND REDUCER
- PROPOSED VALVE BOX
- EXISTING WATERMAIN, VALVE & HYDRANT
- PROPOSED STORM SEWER & MANHOLE
- WATER QUALITY UNIT (WQU) (OIL AND GRIT SEPARATOR)
- EXISTING STORM SEWER & MANHOLE
- PROPOSED SANITARY SEWER & MANHOLE
- EXISTING SANITARY SEWER & MANHOLE
- CONCRETE SURFACE
- DEPRESSED CURB
- RETAINING WALL c/w WOOD PRIVACY SCREEN
- RETAINING WALL c/w DECORATIVE METAL FENCE
- SIAMESE CONNECTION
- WATER METER AND REMOTE METER



NOTE: LIGHT DUTY AND HEAVY DUTY PAVEMENT STRUCTURE TO BE IN ACCORDANCE WITH THE PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT (NOVEMBER 18, 2016) PREPARED BY FISHER ENVIRONMENTAL LTD. (REPORT No. FE-P16-7971 GEO).



1 S1 BUILDING 1A SERVICE LATERALS

SCALE: 1:100

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE FOLLOWING FOR REVIEW BY THE ENGINEER:

- EXISTING SANITARY SERVICE LATERAL TO BUILDING 1A.
- EXISTING INVERTS AND OUTLET PIPE DIAMETER AT SANITARY MAINTENANCE HOLE 1A.
- EXISTING WATERMAIN LAYOUT AND WATER SERVICE TO BUILDING 1A

GENERAL CONSTRUCTION NOTES :

1. ALL MATERIAL (SANITARY, STORM & WATERMAIN) AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CURRENT OPSD, OPSS AND CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
2. UNLESS OTHERWISE NOTED, DIMENSIONS FROM STREET LINE ARE TO THE CENTRELINE OF SEWER OR MAINTENANCE HOLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL, REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
5. SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT (MAY 2018) PREPARED BY J.L. RICHARDS & ASSOCIATES (JLR 27296-01) AS WELL AS THE PRELIMINARY GEOTECHNICAL INVESTIGATION (NOVEMBER 18, 2016) REPORT PREPARED BY FISHER ENVIRONMENTAL LTD. (REPORT No. FE-P16-7971 GEO)
6. ALL WATERMAINS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
7. WATERMAINS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
8. PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMAINS AND WATER SERVICES. OTHERWISE PROVIDE THERMAL INSULATION AS PER CITY STANDARD DRAWING W22 (IN SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
9. AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER.
   -ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10.
   -THICKNESS OF GRANULARS AND ASPHALT LAYERS SHALL MATCH EXISTING
   -BOULEVARDS SHALL BE REINSTATED WITH 100mm TOPSOIL AND SOD.
10. SANITARY SEWERS TO BE 150mmØ PVC DR 35 AND STORM SEWERS TO BE PVC SDR 35. INSULATION TO BE PROVIDED WHERE MINIMUM COVERAGE OF 1.8m IS NOT ACHIEVED ON SEWERS (REFER TO INSULATION DETAIL). WATERMAINS TO BE PVC DR 18.
11. ALL STORM & SANITARY MANHOLES TO BE 1200Ø UNLESS OTHERWISE NOTED AS PER OPSD 701.010 c/w FRAME AND COVERS AS PER CITY STANDARD DRAWINGS 24 AND 24.1. STMH1, STMH2, STMH2A AND STMH2B TO BE c/w WATERTIGHT FRAME AND COVERS AS PER OPSD 401.030. STMH2C TO BE c/w CATCH BASIN MAINTENANCE HOLE COVER AS PER CITY STANDARD DRAWING S28.1.
12. ALL CATCH BASINS TO BE 600x600mm PRECAST CONCRETE PER OPSD 705.010 c/w FRAME AND COVER AS PER CITY STANDARD DRAWING S19.
13. DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SITE PLAN.
14. SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL).
15. CONCRETE CURB TO BE BARRIER TYPE AS PER CITY STANDARD DRAWING SC1.1.
16. SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4.
17. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN. THE SITE BENCHMARK IS LOCATED ON AN EXISTING FIRE HYDRANT AT THE SOUTHWEST CORNER OF THE SITE, ALONG CLYDE AVENUE, HAVING AN ELEVATION OF 96.26 m.
18. EXCAVATION FOR THE INSTALLATION OF SERVICES ALONG OR IN PROXIMITY OF A BUILDING OR A STRUCTURE IS TO BE CONTAINED WITHIN A TRENCH BOX WIDTH AND IS TO ENSURE NO CONFLICT WITH ANY FUTURE FOOTINGS. SELECT SUBGRADE MATERIAL, COMPACTED TO 100% SPD TO 1.0m BELOW EXISTING GRADE FOR FULL TRENCH WIDTH OF DISTURBED AREA SHALL BE USED FOR BACKFILL, INCLUDING ALONG ANY SEWERS AND WATERMAINS ADJACENT TO A BUILDING OR OTHER STRUCTURE.
19. HYDRANT SHALL BE INSTALLED AS PER CITY STANDARD DRAWING W19.
20. PERIMETER WEEPING TILE SYSTEM TO BE INSTALLED IN ACCORDANCE WITH THE PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT (NOVEMBER 18, 2016) PREPARED BY FISHER ENVIRONMENTAL LTD. (REPORT No. FE-P16-7971 GEO). WEEPING TILE TO BE GRAVITY FED TO MAIN STORM LATERAL c/w BACKWATER VALVE LOCATED 1.0m DOWNSTREAM OF WEEPING TILE CONNECTION. REFER TO ARCHITECTURAL DRAWINGS FOR WEEPING TILE DETAIL.
21. ALL BUILDINGS TO HAVE PRESSURE REDUCING VALVES ON WATER SERVICE.

No.	ISSUE / REVISION	DD/MM/YY
2	RE-ISSUED FOR SITE PLAN SUBMISSION	24/05/18
1	ISSUED FOR SITE PLAN SUBMISSION	25/09/17

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VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. 0 25mm

SCALE: 1:300

CLIENT: DYMON SELF STORAGE

CONSULTANT: www.jlrichards.ca
J.L.Richards ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP: LICENSED PROFESSIONAL ENGINEER M. N. L. DALRYMPLE May 24/18 PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT: SELF STORAGE FACILITY

1375 CLYDE AVE.

DRAWING: SITE SERVICING PLAN

DESIGN: JW		
DRAWN: CJM	DRAWING #:	
CHECKED: LD	S1	
JLR #: 27296-01		

PLOT DATE: May 24, 2018 3:29:19 PM

File Location: R:\27000\27296-01 Dymon 1375 Clyde Ave\JLR DWG\Civil\27296-01 C S1.dwg