

STORM STRUCTURE TABLE

STRUCTURE I.D.	TOP OF GRATE ELEVATION	INVERTS	STRUCTURE SIZE	STRUCTURE TYPE	FRAME & COVER
CB 2	89.20	SW. OUT = 87.70	600mm X 600mm	OPSD 705.010	CITY STD S19
CB 4	89.32	N. OUT = 87.33	600mm X 600mm	OPSD 705.010	CITY STD S19
CB 6	89.15	SE. OUT = 87.80	600mm X 600mm	OPSD 705.010	CITY STD S19
CBMH 3	89.40	W. IN = 87.03 NE. IN = 87.41 S. IN = 87.00 E. OUT = 86.95	1200 mmØ	OPSD 701.010	COVER CITY STD S28.1 FRAME CITY STD S25
LSCB7	88.55	N. OUT = 87.10	300 mmØ	CITY STD S31	CITY STD S31
OGS 1	89.28	W. IN = 86.80 N. OUT = 86.79	1200 mmØ	STORMCEPTOR EF4 (OR EQUIVALENT)	OPSD 401.040 /A (OR MANUFACTURER EQUIVALENT)
STMH 1	89.37	W. IN = 86.84 S. IN = 86.70 E. OUT = 86.67	1200 mmØ	OPSD 701.010	COVER CITY STD S28.1 FRAME CITY STD S25
STMH 5	89.44	NW. IN = 87.51 E. OUT = 87.40	1200 mmØ	OPSD 701.010	COVER CITY STD S28.1 FRAME CITY STD S25

SANITARY STRUCTURE TABLE

STRUCTURE I.D.	TOP OF GRATE ELEVATION	INVERTS	STRUCTURE SIZE	STRUCTURE TYPE	FRAME & COVER
MHSA1	89.28	S. IN = 87.25 W. IN = 87.25 N. OUT = 87.20	1200 mmØ	OPSD 701.010	COVER CITY STD S24 FRAME CITY STD S25
MHSA2	89.35	E. OUT = 87.37 W. IN = 87.50	1200 mmØ	OPSD 701.010	COVER CITY STD S24 FRAME CITY STD S25

RIGID INSULATION RECOMMENDATIONS FOR SEWER PIPES WITH REDUCED SOIL COVER

THERMAL CONDITION	SOIL COVER PROVIDED PER D (MM)	INSULATION DIMENSIONS (MM)	
		T (THICKNESS)	L (EXTENSION)
UNHEATED	LESS THAN 1,100	NOT RECOMMENDED	
	1,100 TO 1,400	75.00	EXTEND 900 mm HORIZONTALLY BEYOND EDGE FACE OF THE SEWER
	1,400 TO 1,700	50.00	EXTEND 600 mm HORIZONTALLY BEYOND EDGE FACE OF THE SEWER
	1,700 TO 2000	25.00	EXTEND 300 mm HORIZONTALLY BEYOND EDGE FACE OF THE SEWER

NOTES: ALL DESIGNS ARE BASED ON A FREEZING INDEX OF 1000°C-DAYS

GENERAL NOTES

- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM INFORMATION SUPPLIED BY (OR SHOWN ON) JAMES O'SULLIVAN, VOLUNTARY MEASUREMENTS #2549-22 AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO ORIGINAL CONDITION OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
- TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.

WATERMAIN NOTES

- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- VALVES TO BE OPERATED BY CITY STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION, CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION.
- CONCRETE THURST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
- ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- WATER SERVICES SHALL BE TO ASTM 888 TYPE "K" SOFT. PIPES SHALL BE SEAMLESS COPPER TUBING DRAWN TO SIZE AND FURNISHED WITH PROPER BENDING TEMPER. ALL PIPING TO BE COMPLETELY DEOXYGENATED COPPER, 99.9% PURE.

SEWER NOTES:

- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
 - BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
 - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
 - BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
 - TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"XB" LONG MARKER.
- CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

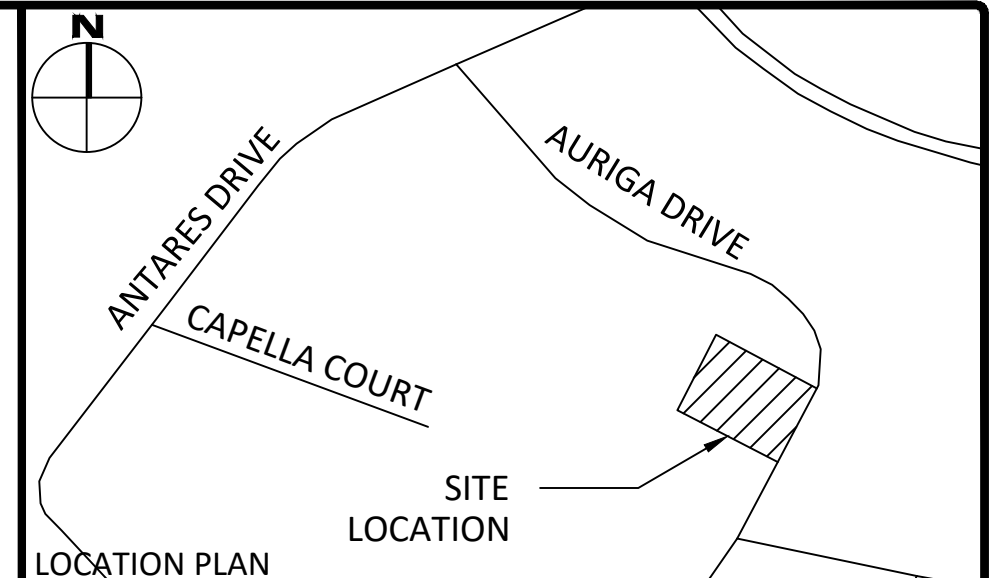
CROSSING CONFLICT TABLE

LOCATION	DESCRIPTION	SEPARATION
1	EX. 300mmØ SAN SEWER INV 87.20 - 50mmØ WATER SERVICE TOP 86.67	0.53
2	EX. 1350mmØ STM TOP 86.80 - 50mmØ WATER SERVICE INV = 87.3	0.50
3	200mmØ STM INV 87.60 - 50mmØ WATER SERVICE TOP 86.85	0.75
4	200mmØ STM TOP 87.72 - 200mmØ STM SERVICE TOP 88.09	0.37
5	200mmØ STM TOP 87.11 - 150mmØ SAN SERVICE INV 87.62	0.51
6	300mmØ STM TOP 86.92 - 150mmØ SAN SERVICE INV 88.16	1.24

WATER COVER TABLE

LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
WATERMAIN CONNECTION	0+100.00	89.25	86.85	2.40
SANITARY CROSSING	0+101.75	89.27	86.67	2.60
STORM CROSSING	0+104.77	89.25	87.35	1.90
VALVE	0+114.39	89.30	86.90	2.40
BUILDING	0+163.72	89.50	87.10	2.40

*NOTE: CONTRACTOR TO ENSURE A MINIMUM OF 0.3m OF VERTICAL SEPARATION BETWEEN EXISTING UTILITIES, SEWERS, AND PROPOSED SERVICES
 *NOTE: CONTRACTOR TO VERIFY ALL EXISTING SEWER AND UTILITY ELEVATIONS AND IMMEDIATELY ADVISE THE ENGINEER OF ANY DISCREPANCIES



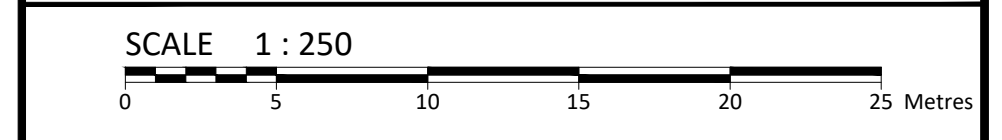
LEGEND

CONCRETE BARRIER CURB	--- --	LIMIT OF CONSTRUCTION
CONCRETE WALKWAY	--- --	DRAINAGE SWALE
PROPOSED ASPHALT	--- --	DRAINAGE DITCH
LSCB#	○	SLOPING AT 3:1 UNLESS SPECIFIED
CBMH#	○	95.50 SURFACE ELEVATION
T/G	○	95.50 SWALE ELEVATION
CBMH#	○	TOP OF WALL ELEVATION
T/G	○	BOTTOM OF WALL ELEVATION
MHHA	○	OVERLAND FLOW ROUTE
T/G	○	SILT FENCE BARRIER
HYD	○	STRAW BALE CHECK DAM
B/F	○	MUD MAT
WATER VALVE	○	
WATER METER	○	
REMOTE WATER METER	○	
SEDIMENT CONTROL DEVICE	○	
LIGHT DUTY ASPHALT	--- --	
HEAVY DUTY ASPHALT	--- --	

FOR REVIEW ONLY
 NOT FOR CONSTRUCTION

No.	Revisions	Date
3	REVISED PER CITY COMMENTS	2023-07-06
2	REVISED PER CITY COMMENTS	2023-05-17
1	ISSUED FOR SITE PLAN APPLICATION	2022-12-22

Check and verify all dimensions before proceeding with the work. Do not scale drawings.



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Client: **ROSSMANN ARCHITECTURE**
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Project: **PROPOSED WAREHOUSE**
 30 AURIGA DRIVE

Drawing Title: **SITE SERVICING PLAN**

Scale: 1:250 Project Number: CCO-23-0914

Drawn By: M.R.

Checked By: AM

Designed By: CIM

C102

FILENAME: U:\Other\01 Project - Proposed Warehouse_3D_Auriga Drive\12 - Drawing\CCO-23-0914_Presentation.dwg
 DATE PLOTTED: Thursday, July 06, 2023 1:58:54 PM
 PLOTTED BY: M.M.P.

D07-12-23-0016

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