WATER COVER TABLE

LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
300 X 150 TEE	1+000.00	88.25	85.85	2.40
VALVE	1+010.00	88.44	86.04	2.40
VERTICAL BEND	1+002.13	88.22	85.82	2.40
VERTICAL BEND	1+002.79	88.22	85.16	3.06
VERTICAL BEND	1+005.84	88.31	85.16	3.15
VERTICAL BEND	1+006.59	88.31	85.91	2.40
PIPE CROSSING #7	1+025.56	88.51	86.00	2.51
45° BEND	1+050.82	88.51	86.11	2.40
45° BEND	1+053.82	88.55	86.15	2.40
BUILDING	1+063.44	88.93	86.53	2.40
EXISTING HYDRANT	2+000.00	88.33	85.93	2.40
PROPOSED HYDRANT	2+002.00	88.36	85.96	2.40

CROSSING CONFLICT TABLE

LOCATION	DESCRIPTION	SEPARATION
1	300mmØ WATERMAIN INV 85.53 150mmØ SAN SERVICE OBV 85.03	0.50
2	1050mmØ STM SEWER INV 85.65 150mmØ SAN SERVICE OBV 85.12	0.53
3	250mmØ STM SERVICE INV 87.09 150mmØ WATER SERVICE OBV 86.14	0.95
4	250mmØ STM SEWER INV 86.50 150mmØ SAN SERVICE OBV 86.20	0.30
5	1050mmØ STM SEWER INV 85.66 150mmØ WATER SERVICE OBV 85.16	0.50
6	250mmØ STM SERVICE INV 87.10 150mmØ WATER SERVICE OBV 86.11	0.99
7	250mmØ STM SEWER INV 86.50 150mmØ WATER SERVICE OBV 86.00	0.50
8	250mmØ STM SERVICE INV 87.15 250mmØ STM SEWER OBV 86.87	0.28

SANITARY STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1A	88.48	SE85.67	NW85.11	COVER CITY S24 FRAME CITY S25 STRUC OPSD 701.010
MH2A	88.45	SW86.57	NW86.51	COVER CITY S24 (WATER TIGHT) FRAME CITY S25 STRUC OPSD 701.010

STORM STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CB1	88.65		NW87.26	COVER CITY STD S19 FRAME CITY STD S19 STRUC OPSD 705.010
MH1	88.40	SE86.29 SW86.49	NW86.21	COVER CITY S28.1 FRAME CITY S25 STRUC OPSD 701.010 c/w ICD ON OUTLET
MH2	88.40	SE86.35	NW86.34	COVER CITY S28.1 FRAME CITY S25 STRUC OPSD 701.010
MH3	88.40	S86.41	NW86.38	COVER CITY S28.1 FRAME CITY S25 STRUC OPSD 701.010
MH4	88.40		N86.48	COVER CITY S28.1 FRAME CITY S25 STRUC OPSD 701.010
MH5	88.40	SE86.71	NE86.66	COVER CITY S28.1 FRAME CITY S25 STRUC OPSD 701.010
OGS	88.53	SE86.18	NW86.18	HYDRO INTERTNATIONAL FD-4HC UNIT

GENERAL NOTES

1. 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.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY (OR SHOWN ON) ANNIS, O'SULLIVAN, VOLLEBEKK LTD. PLAN #20395-20 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.
3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
5. 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.
6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY OF OTTAWA.
7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY OF OTTAWA.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE CITY OF OTTAWA.
12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY OF OTTAWA DETAILS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
13. CONTACT THE CITY OF OTTAWA FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY OF OTTAWA'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
    - ELECTRICAL SERVICE - HYDRO OTTAWA
    - GAS SERVICE - ENBRIDGE
    - TELEPHONE SERVICE - BELL CANADA
    - TELEVISION SERVICE - ROGERS
16. INSTALLATION OF UTILITIES TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF INDIVIDUAL UTILITY APPROVAL AGENCIES AND THE CITY OF OTTAWA.
17. REFER TO LANDSCAPE PLANS FOR CURB AND SIDEWALK DETAILS.
18. THIS PLAN MUST BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT BY PATERSON GROUP INC. REPORT #PG5424-1 AND THE SERVICING & STORMWATER MANAGEMENT REPORT BY McINTOSH PERRY REPORT #CCO-21-0675.
19. THE FOLLOWING PAVEMENT STRUCTURE HAS BEEN RECOMMENDED BY THE GEOTECHNICAL CONSULTANT;

HEAVY DUTY:	CAR PARK:
40mm SUPERPAVE 12.5	50mm SUPERPAVE 12.5
50mm SUPERPAVE 19.0	150mm GRANULAR 'A'
150mm GRANULAR 'A'	300mm GRANULAR 'B' TYPE II
450mm GRANULAR 'B' TYPE II	

SEWER NOTES

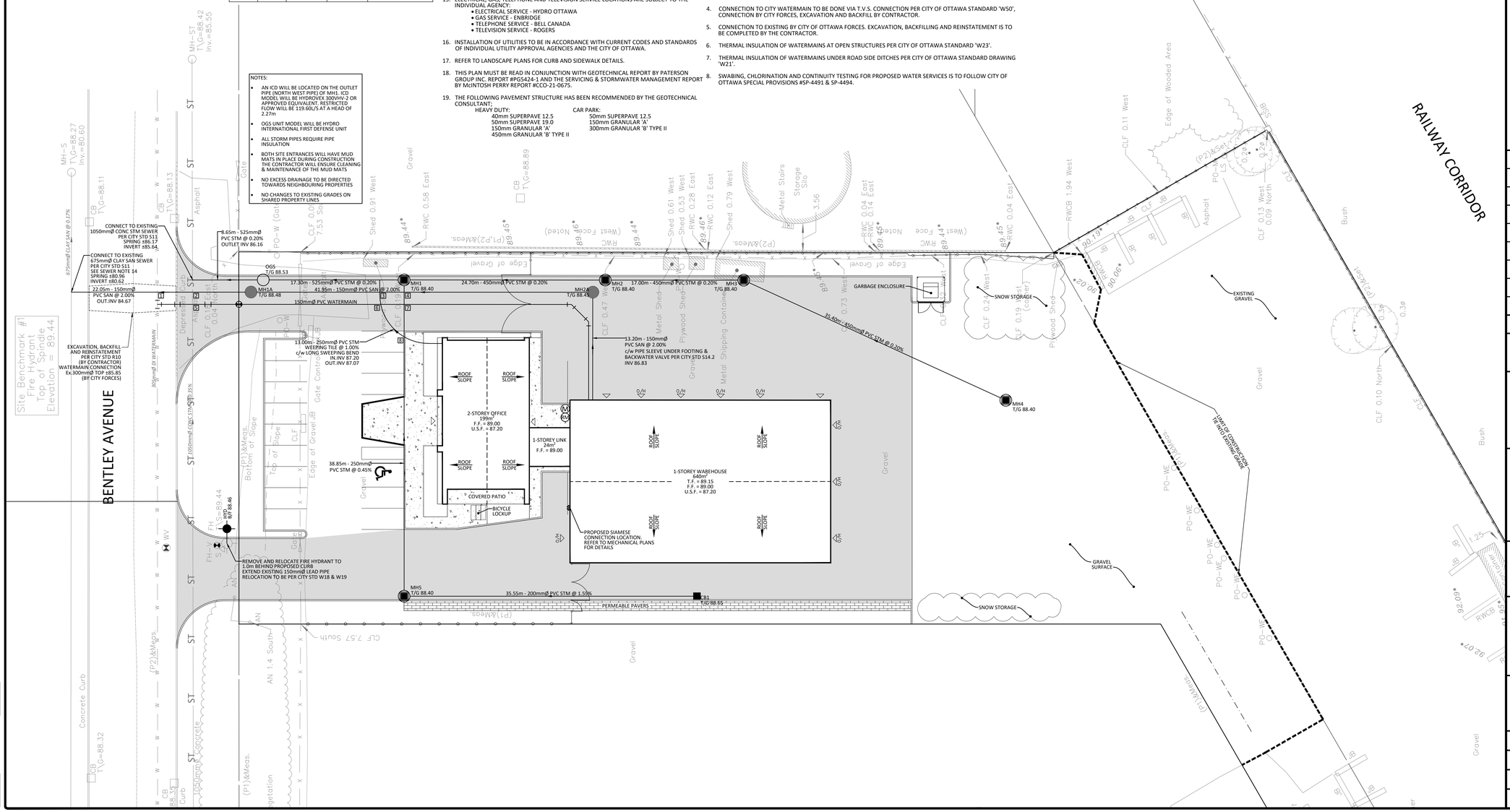
1. CONSTRUCT ALL SEWERS AND APPURTENANCES TO CITY OF OTTAWA STANDARDS (IF AVAILABLE) OR PER OPSD STANDARDS.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
3. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
4. SUB-BEDDING, IF REQUIRED SHALL BE AS PER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
5. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR SAND.
6. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0m BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
7. SEWERS AND CONNECTIONS 150mm DIAMETER AND SMALLER TO BE PVC SDR 28 OR APPROVED EQUIVALENT. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC SDR 35 OR APPROVED EQUIVALENT.
8. INSULATE ALL SEWERS AND/OR SERVICES THAT HAVE LESS THAN 1.8m OF COVER WITH THERMAL INSULATION PER CITY OF OTTAWA STANDARD W22.
9. 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"x8' LONG MARKER.
10. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ONSITE, 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.
11. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
12. ALL CATCHBASIN AND CATHCBASIN MANHOLE LEADS ARE TO BE MINIMUM 200mmØ WITH MINIMUM 1.0% SLOPE UNLESS OTHERWISE NOTED.
13. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS ARE TO HAVE 150 mmØ PERFORATED PIPE FOR 3.0m ON ALL AVAILABLE SIDES PER CITY OF OTTAWA STANDARD DRAWING R1.
14. CONNECTION FOR SANITARY AT MAIN MUST BE CUT, TWO SHORT SECTIONS OF THE CLOSEST NOMINAL DIAMETER PVC PIPE MUST BE PLACED ON EACH END OF THE CLAY PIPE WITH RUBBER COUPLERS. A T-SECTION IS THEN TO BE ATTACHED TO THE NEW PVC ENDS

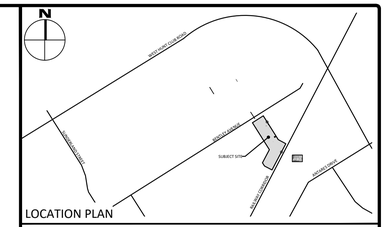
WATERMAIN NOTES

1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY OF OTTAWA STANDARDS.
2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED PER CITY OF OTTAWA STANDARD 'W22'.
3. 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.
4. CONNECTION TO CITY WATERMAIN TO BE DONE VIA T.V.S. CONNECTION PER CITY OF OTTAWA STANDARD 'W50', CONNECTION BY CITY FORCES, EXCAVATION AND BACKFILL BY CONTRACTOR.
5. CONNECTION TO EXISTING BY CITY OF OTTAWA FORCES. EXCAVATION, BACKFILLING AND REINSTATEMENT IS TO BE COMPLETED BY THE CONTRACTOR.
6. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES PER CITY OF OTTAWA STANDARD 'W23'.
7. THERMAL INSULATION OF WATERMAINS UNDER ROAD SIDE DITCHES PER CITY OF OTTAWA STANDARD DRAWING 'W21'.
8. SWABING, CHLORINATION AND CONTINUITY TESTING FOR PROPOSED WATER SERVICES IS TO FOLLOW CITY OF OTTAWA SPECIAL PROVISIONS #SP-4491 & SP-4494.

NOTES:

- AN ICD WILL BE LOCATED ON THE OUTLET PIPE (NORTH WEST PIPE) OF MH1. ICD MODEL WILL BE HYDROVEX 300VHV-2 OR APPROVED EQUIVALENT. RESTRICTED FLOW WILL BE 119.6ØL/S AT A HEAD OF 2.27m
- OGS UNIT MODEL WILL BE HYDRO INTERNATIONAL FIRST DEFENSE UNIT
- ALL STORM PIPES REQUIRE PIPE INSULATION
- BOTH SITE ENTRANCES WILL HAVE MUD MATS IN PLACE DURING CONSTRUCTION THE CONTRACTOR WILL ENSURE CLEANING & MAINTENANCE OF THE MUD MATS
- NO EXCESS DRAINAGE TO BE DIRECTED TOWARDS NEIGHBOURING PROPERTIES
- NO CHANGES TO EXISTING GRADES ON SHARED PROPERTY LINES





LOCATION PLAN

LEGEND

- CONCRETE BARRIER CURB
- CONCRETE WALKWAY
- HEAVY DUTY ASPHALT
- MH# T/G — STORM SEWER MANHOLE
- CBMH# T/G — CATCHBASIN MANHOLE
- CB# T/G — CATCHBASIN
- MH#A T/G — SANITARY SEWER MANHOLE
- HYD B/F — FIRE HYDRANT
- WATER VALVE
- WATER METER
- REMOTE WATER METER
- DEPRESSED CURB
- DRAINAGE SWALE
- DRAINAGE DITCH
- SLOPING AT 3:1 UNLESS SPECIFIED
- 95.50 — SURFACE ELEVATION
- 95.50 (S) — SWALE ELEVATION
- T/W 95.50 B/W 94.25 — TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION
- OVERLAND FLOW ROUTE
- SILT FENCE BARRIER
- STRAW BALE CHECK DAM

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

No.	Revisions	Date
6	ISSUED FOR TENDER	JAN. 15, 2021
5	ISSUED FOR FINAL APPROVAL	JAN. 12, 2021
4	REVISED PER CITY COMMENTS	DEC. 10, 2020
3	REVISED PER CITY COMMENTS	NOV. 6, 2020
2	REVISED SITE PLAN	OCT. 30, 2020
1	ISSUED FOR SITE PLAN CONTROL	AUG. 12, 2020

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

SCALE 1 : 250 (0, 5, 10, 15, 20, 25 Metres)

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CITYSCAPE DIV A. GROUP INC.
P.O. BOX 6937, STATION J
OTTAWA, ON K2A 3Z5

Project:
CITYSCAPE COMMERCIAL WAREHOUSE
144 BENTLEY AVENUE
OTTAWA, ON

Drawing Title:
SITE SERVICING PLAN

Scale: 1:250	Project Number: CCO-21-0675
Drawn By: P.G.K.	
Checked By: R.P.K.	Drawing Number: C102
Designed By: C.J.M.	

D07-12-20-0113

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FILENAME: I:\Ottawa\01 Project - Proposals\2021 Jobs\CCO\CCO-21-0675 CityScape_SPC_144 Bentley Road\Civil\12 - Drawings\CCO-21-0675_Presentation.dwg
LAST SAVED: Thursday, January 14, 2021 LAST SAVED BY: B.Sluyt
LAST PLOTTED: Friday, January 15, 2021 CTB FILE USED: ----