## GENERAL NOTES AND SPECIFICATIONS

- ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH OPS AND CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS AND OPSD SUPPLEMENT. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS
   REQUIRED AND BEAR COST OF SAME INCLUDING WATER PERMIT AND
   ASSOCIATED COSTS.
- 3. SERVICE AND UTILITY LOCATIONS ARE APPROXIMATE, CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REINSTATEMENT.
- 4. ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER
  CONDITION TO THE SATISFACTION OF THE ENGINEER & THE CITY.
  PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN
  ACCORDANCE WITH OPSD 509,010 AND OPSS 310.
- 5. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE
  "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR
  CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE
  DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- 6. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN THAT WILL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION FOR RECEIVING STORM SEWERS OR DRAINAGE DURING CONSTRUCTION ACTIVITIES. THIS PLAN SHALL INCLUDE BUT NOT BE LIMITED TO CATCH BASINS INSERTS, STRAW BALE CHECK DAMS AND SEDIMENT CONTROLS AROUND ALL DISTURBED AREAS. DEWATERING SHALL BE PUMPED INTO SEDIMENT TRAPS.
- 7. SITE PLAN PREPARED BY ROSALINE J. HILL ARCHITECT INC. DATED DECEMBER 18 2019. DRAWING TITLED SITE PLAN
- 8. TOPOGRAPHIC SURVEY SUPPLIED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. PROJECT No.18260-17. PART OF LOT 6, CONCESSION 4 (OTTAWA FRONT), GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA.
- 9. REFER TO LANDSCAPE ARCHITECTURE PLAN FOR ALL LANDSCAPING FEATURES (ie. TREES, WALKWAYS, PARK DETAILS, NOISE BARRIERS,
- 10. GEOTECHNICAL INVESTIGATION 2597237 ONTARIO LTD, GEOTECHNICAL INVESTIGATION, PREPARED BY EXP. DATED MAY 18, 2018. REPORT No OTT-00246046-A0. GEOTECHNICAL INFORMATION PRESENTED ON THESE DRAWINGS MAY BE INTERPOLATED FROM THE ORIGINAL REPORT. REFER TO ORIGINAL GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS AND TO
- 11. STREET LIGHTING TO CITY OF OTTAWA STANDARDS.

VERIFY ASSUMPTIONS MADE HEREIN.

- 12. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
  DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE
  CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY
  DISCREPANCIES TO BE REPORTED IMMEDIATELY TO ENGINEER.
- 13. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CONTRACT ADMINISTRATOR AND DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
- 14. HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE TO BE NOTIFIED IF DEEPLY BURRIED ARCHEOLOGICAL REMAINS ARE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

## WATER SUPPLY SERVICING

- 1. THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION, SWABBING, CHLORINATION, CONTINUITY TESTING TO VERIFY PROPER INSTALLATION OF TRACER WIRE & DISINFECTION BY CITY PERSONNEL.
- 2. WATERMAIN PIPE MATERIAL SHALL BE PVC CL.150 DR18. DEFLECTION OF WATERMAIN PIPE IS NOT TO EXCEED 1/2 OF THAT SPECIFIED BY THE MANUFACTURER. PVC WATERMAINS TO BE INSTALLED WITH TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W36.
- 3. WATER SERVICES ARE TO BE TYPE K SOFT COPPER AS PER CITY OF OTTAWA STANDARD W26 (UNLESS OTHERWISE NOTED). WATER SERVICE TO EXTEND 1.0M BEYOND PROPERTY LINE. STAND POST TO BE INSTALLED AT PROPERTY LINE.
- 4. FIRE HYDRANTS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W18 AND W19.
- 5. WATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W24.6. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY

OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND

- COVER MATERIAL TO BE SPECIFIED BY PROJECT GEOTECHNICAL CONSULTANT.

  7. SERVICE CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 2400mm FROM ANY CATCHBASIN, MANHOLE, OR OBJECT THAT MAY CONTRIBUTE
- FROM ANY CATCHBASIN, MANHOLE, OR OBJECT THAT MAY CONTRIBUTE TO FREEZING. THERMAL INSULATION SHALL BE INSTALLED ON ALL PROPOSED CB'S ON THE W/M STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED.(AS PER CITY OF OTTAWA W22 & W23)
- 8. CATHODIC PROTECTION TO BE SUPPLIED ON METALLIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.
- 9. THRUST BLOCKS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25,3 AND W25,4.
- 10. WATERMAIN TO HAVE MIN. 2.4m COVER. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN ACCORDANCE WITH CITY STANDARD W22.
- 11. WATERMAIN CROSSINGS ABOVE AND BELOW SEWERS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W25 AND W25.2.
- 12. PRESSURE REDUCING VALVES (PRV'S) IF REQUIRED, TO BE INSTALLED AS PER ONTARIO PLUMBING CODE.

## STORM AND SANITARY SEWERS

- SANITARY SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35.
   SANITARY SEWERS LARGER THAN 375mm SHALL BE CONCRETE CSA A 257.2 CLASS 100D AS PER OPSD 807.010.
- STORM SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35. STORM SEWERS LARGER THAN 375mm DIA. SHALL BE CONCRETE CSA A 257.2 CLASS 100-D AS PER OPSD 807.010
- 3. ALL STORM AND SANITARY SEWER BEDDING SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S6 AND S7, CLASS "B" BEDDING, UNLESS OTHERWISE NOTED. SUITABLE BEDDING AND COVER MATERIAL TO BE SPECIFIED BY GEOTECHNICAL CONSULT
- 4. STORM AND SANITARY MANHOLES SHALL BE 1200mm DIAMETER IN ACCORDANCE WITH OPSD-701.01 (UNLESS OTHERWISE NOTED) c/w FRAME

- AND COVER AS PER CITY OF OTTAWA S24, S24.1, AND S25 WHERE APPLICABLE. CATCH BASIN MANHOLE FRAME AND COVERS PER S19, S28, AND S28.1 WHERE APPLICABLE. ALL STORM MANHOLES WITH SEWERS 900mm DIA SEWERS AND OVER IN SIZE SHALL BE BENCHED. ALL OTHER STORM MANHOLES SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS. SANITARY MANHOLES SHALL NOT HAVE SUMPS.
- 5. ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, TO BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
- TO BACKFILLING.

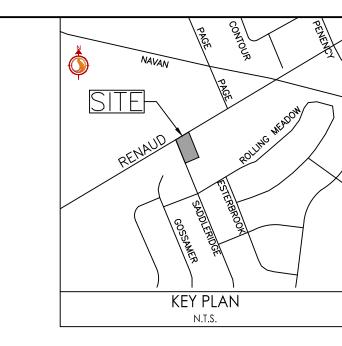
  6. FOR STORM SEWER INSTALLATION (EXCLUDING CB LEADS) THE MINIMUM DEPTH OF COVER OVER THE CROWN OF THE SEWER IS 2.0m. FOR SANITARY SEWERS THE MINIMUM DEPTH OF COVER IS 2.5m OVER PIPE
- ALL STORM AND SANITARY SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
- 8. STORM AND SANITARY SERVICE LATERALS TO BE SDR 28 INSTALLED AT MIN. 1.0% SLOPE.
- 9. CATCH BASINS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARDS S1, S2, S3 c/w FRAME AND GRATE AS PER S19.1. CURB INLET FRAME AND GRATE PER S22 AND S23. CATCH BASIN MANHOLES FRAME AND GRATE AS PER S19. PROVIDE 150mm ADJUSTED SPACERS. ALL CATCH BASINS SHALL HAVE SUMPS (600mm DEEP). STREET CATCH BASIN LEADS SHALL BE 200mm DIA.(MIN) PVC DR 35 AT 1.0% GRADE WHERE NOT OTHERWISE SHOWN ON PLAN. CATCH BASINS WILL BE INSTALLED WITH INLET CONTROL DEVICES (ICD) AS PER ICD SCHEDULE ON STORM DRAINAGE PLAN.
- 10. STREET CATCH BASINS TO BE INSTALLED c/w SUBDRAINS 3m LONG IN FOUR ORTHOGONAL DIRECTIONS OR LONGITUDINALLY WHEN PLACED ALONG A CURB, AND AT AN ELEVATION OF 300mm BELOW SUBGRADE
- 11. REAR LOT PERFORATED PIPE TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S29. REAR LOT STRUCTURES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W30 AND W31.
- 12. CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FROST LINE AND FULLY PENETRATE THE BEDDING, SUBBEDDING AND COVER MATERIAL. THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm THICK LOOSE LAYERS COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60m INTERVALS IN THE SERVICE TRENCHES. FOR DETAILS REFER TO GEOTECHNICAL INVESTIGATION.
- 13. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300 mm
  AROUND ALL STRUCTURES WITHIN PAVEMENT AREA AND COMPACTED TO
  A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
- 14. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO THE CONSULTANT FOR
- 15. ANY SEWER ABANDONMENT TO BE CONDUCTED ACCORDING TO CITY OF OTTAWA STANDARD S11.4
- 16. SEWERS WITH LESS THAN 1.8m COVER TO BE INSULATED IN ACCORDANCE WITH CITY STANDARD W22.

STATION	FINISHED GRADE	TOP OF W/M	DEPTH OF COVER	ITEM
0+000	77.70	75.30±	2.400±	200mm TEE CONNECTION TO EX.200mm@ WATERMAIN
0+010.3	77.80	75.400	2.400	200mmØ VALVE AND VALVE BOX
0+015.1	77.83	75.430	2.400	11 ½° HORIZONTAL BEND
0+020	77.91	75.510	2.400	TOP OF PIPE
0+040	78.22	75.820	2.400	TOP OF PIPE
0+048.6	78.37	75.970	2.400	45 ° HORIZONTAL BEND
0+051.6	78.45	76.050	2.400	45 ° HORIZONTAL BEND
0+060	78.46	76.060	2.400	TOP OF PIPE
0+076.8	77.31	74.910	2.400	CROSSING STORM AND SAN SEWERS
0+081.1	77.25	74.850	2.400	200mmØ x 100mmØ TEE
0+087.1	77.21	74.810	2.400	200mmØ VALVE AND VALVE BOX
0+096.2	77.15	74.750	2.400	11 ½ ° HORIZONTAL BEND
0+102.2	77.07	74.670	2.400	45 ° HORIZONTAL BEND
0+107.6	77.06	74.660	2.400	11 $\frac{1}{4}$ ° HORIZONTAL BEND
0+110.6	77.03	74.630	2.400	$22rac{1}{2}$ ° HORIZONTAL BEND
0+120	76.97	74.570	2.400	TOP OF PIPE
0+140	76.82	74.140	2.680	CROSSING CB LEAD
0+143.7	76.87	74.470	2.400	200mmØ VALVE AND VALVE BOX
0+145.2	76.86	74.460	2.400	11 ½° HORIZONTAL BEND
0+154	76.86	74.46±	2.400±	200mm TEE CONNECTION TO EX.200mmØ WATERMAIN

200mm@WATERMAIN'A'

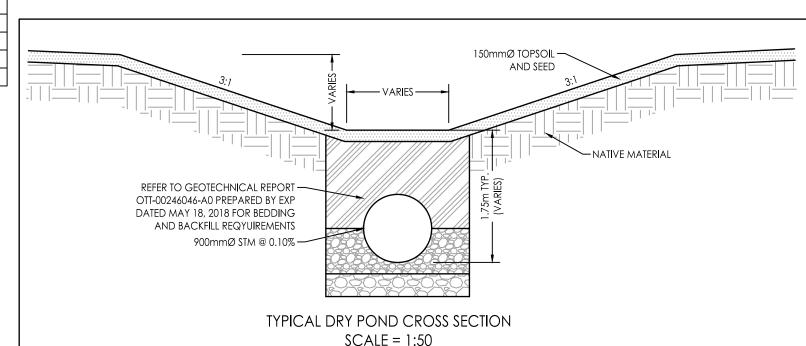
STATION	FINISHED GRADE	TOP OF W/M	DEPTH OF COVER	ITEM
0+000	77.25	74.850	2.400	200mmØ x 100mmØ TEE
0+006	77.33	74.930	2.400	100mmØ VALVE AND VALVE BOX
0+010.9	77.35	74.950	2.400	11 ½ ° HORIZONTAL BEND
0+020	77.29	74.890	2.400	TOP OF PIPE
0+032	77.21	74.810	2.400	100mmØ CAP AND THRUST BLOCK

SCHEDULE OF INLET CONTROL DEVICES							
DRAINAGE AREA ID STRUCTURE ID ICD TYPE 100YR RELEASE RATE (L/s) 100YR HEAD (m) 100YR HGL (m)							
L104B	CBMH 500	IPEX TEMPEST LMF 60	4.7	2.1	76.8		
L104A	CBMH 501	IPEX TEMPEST LMF 105	14.7	2.3	76.4		
L107A	CBMH 503	94mm ORIFICE	25.4	2.1	77.3		
L109A	CB 504	IPEX TEMPEST LMF 65	4.0	1.2	78.2		



CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM	CROSSING CLEARNACE
$\triangle$			73.52	73.72	74.42	74.22	0.70
<u> </u>	74.61	74.81	73.59	73.79			0.82
<u> </u>	74.64	74.84			74.14	73.94	0.50
4	73.61	73.91	74.51	74.71			0.60
<u>\$</u>	73.62	73.92	74.01	74.21	74.91	74.71	0.50
<u> </u>	74.55	74.85	76.09	76.29			1.24
* BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS							

SEWER AND WATERMAIN CROSSING TABLE





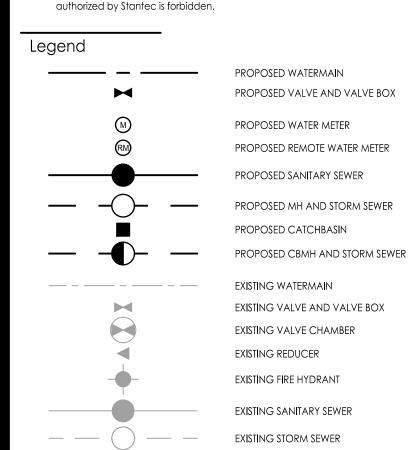
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PROPOSED DEPRESSED CURB LOCATIONS
THERMAL INSULATION AS PER CITY STD W22

PROPOSED TRANSFORMER LOCATION

100mm STORM SERVICE PVC SDR 28 @ 1% MIN
135mm SANITARY SERVICE PVC SDR 28 @ 1% MIN
19mm PEX TUBING WATER SERVICE C/W CURB STOP
AND SERVICE POST

BACK TO BACK STACKED HOME SERVICES
200mm STORM SERVICE PVC SDR 28 @ 1% MIN
150mm SANITARY SERVICE PVC SDR 28 @ 1% MIN
19mm PEX TUBING WATER SERVICE C/W CURB STOP
AND SERVICE POST

EXISTING CATCHBASIN MANHOLE

PROPOSED COMMUNITY MAILBOX LOCATIONS

Dwn. Chkd. Dsgn. YY.MM.DD

EXISTING CATCHBASIN

СМВ

2	REVISED AS PER CITY COMMENTS		WAJ	KJK	20.01.27
1	ISSUED TO CITY FOR REVIEW			KJK	19.08.01
Re	evision		Ву	Appd.	YY.MM.DD
File	Name: 160401467-DB	MJS	DT	MJS	19.01.15

Client/Project

Permit-Seal

1702599 ONTARIO INC 308 Rue De La Melodie

CHAPEL HILL HOUSING 6102 RENAUD ROAD OTTAWA, ONTARIO

SITE SERVICING PLAN

Project No. 160401467	Scale <sub>0 2.5</sub>	7.5	12.5n
Drawing No.	Sheet	Rev	ision
SSP-1	2 of 6		2

