E POSITION OF ALL POLE LINES,

ONDUITS, WATERMAINS, SEWERS AND OTHER

UNDERGROUND AND OVERGROUND UTILITIES

SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND

RUCTURES IS NOT GUARANTEED. BEFORE

TARTING WORK, DETERMINE THE EXACT

OCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR

AMAGE TO THEM.

AND STRUCTURES IS NOT NECESSARILY

## MISCELLANEOUS

REMOVED RELOCATED ADJUSTED

PAVEMENT OVER PARKING GARAGE REFER TO NOTES FOR COMPOSITION PAVEMENT OVER EARTH REFER TO NOTES FOR COMPOSITION ROAD REINSTATEMENT AS PER CITY

RIP-RAP AS PER OPSD 810.010

LANDSCAPE REINSTATEMENT

STANDARD R10

■ CB1

O CBE

O CBT

■ CICB 1

■ DICB 1

⊗ V&VB

ØV&VC

√45°

~ 22°

H 11°

CS

X 100.00

T/G=100.00

FF=100.00

TF=100.00

BF = 100.00

P1 = 100.00

USF=100.00

0G=100.00

— 5 YR —

<del>-ф</del>-сн ⊕ PIZ

-⊞ MW

X X X

## PAVEMENT STRUCTURE:

HEAVY DUTY PAVEMENT STRUCTURE AREAS OVER PARKING STRUCTURES: 40mm HL-3 OR SUPERPAVE (PG) 58-34 12.5 ASPHALTIC CONCRETE 50mm HL-8 OR SUPERPAVE (PG) 58-34 19.0 ASPHALTIC CONCRETE 150mm BASE - OPSS GRANULAR A CRUSHED STONE 100mm SUBBASE - OPSS GRANULAR B TYPE II BELOW GRANULAR B REFER TO ARCHITECTURAL PLANS

HEAVY DUTY PAVEMENT STRUCTURE AREAS OVER EARTH: 40mm HL-3 OR SUPERPAVE (PG) 58-34 12.5 ASPHALTIC CONCRETE

50mm HL-8 OR SUPERPAVE (PG) 58-34 19.0 ASPHALTIC CONCRETE 150mm BASE - OPSS GRANULAR A CRUSHED STONE 450mm SUBBASE - OPSS GRANULAR B TYPE II SUBGRADE - EITHER FILL, IN SITU SOIL OR OPSS GRANUALR B TYPE I OR II **GENERAL NOTES** 

ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), WHERE APPLICABLE.

- 2. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LOCATION AND STATUS OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION OF PLANT AND EQUIPMENT FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
- 3. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING SERVICES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICES AND STRUCTURES TO BE CONNECTED TO AND EXISTING SERVICES THAT MAY BE DAMAGED OR CAUSE CONFLICTS PRIOR TO CONSTRUCTION OF ANY NEW SEWER, WATER AND/OR STORM WATER WORKS. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION WORKS. DO NOT CONTINUE CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED.
- 4. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED. ALL DRAWINGS SHOULD NOT BE SCALED BY THE CONTRACTOR. ANY MISSING OR QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED WITH THE ENGINEER IN WRITING.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF THE SAME.
- 6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER, THE CITY OF OTTAWA AND THE AUTHORITY HAVING JURSIDICTION.
- 8. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
- 9. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING ON CITY STREETS. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
- 10. THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- 11. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS WRITTEN APPROVAL BY THE ENGINEER HAS BEEN OBTAINED.
- 12. EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
- 13. THE SITE LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR. AS-BUILT SITE SERVICING & GRADING DRAWINGS SHALL BE MAINTAINED ON SITE BY THE CONTRACTOR.
- 14. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.
- 15. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY EXP SERVICES INC DATED JUNE 14, 2021 PROJECT NO. OTT-00252625-A0
- 16. THE CONTRACTOR SHALL APPRAISE HIS/HER SELF OF ALL SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED AND SHALL CARRY OUT THEIR OWN TEST PITS AS REQUIRED TO MAKE THEIR OWN INDEPENDENT ASSESSMENT OF GROUND CONDITIONS. THE CONTRACTOR SHALL NOT MAKE ANY CLAIM FOR ANY EXTRA COST DUE TO ANY SUCH GROUND CONDITIONS VARYING FROM THOSE ANTICIPATED BY THE CONTRACTOR.
- 17. DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
- O'SULLIVAN, VOLLEBEKK SURVEYING LTD. DATED MAY 1, 2019.
- 19. CIVIL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, STRUCTURAL, LANDSCAPE AND LEGAL DRAWINGS.

# <u>SANITARY SEWER NOTES:</u>

- ALL SANITARY SEWER MATERIALS AND INSTALLATION SHALL CONFORM O THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- 2. ALL SANITARY SEWERS SHALL BE PVC SDR 35. IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED.
- 3. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B BEDDING UNLESS OTHERWISE
- 4. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.

- 5. THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE SANITARY SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD.
- 6. ALL ABANDONED EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER
- 7. ALL SANITARY BUILDING CONNECTIONS TO BE EQUIPPED WITH A SANITARY BACKWATER VALVE. REFER TO MECHANICAL DRAWINGS.
- 8. BENCHING IN SANITARY MANHOLES TO BE INSTALLED IN SANITARY MANHOLES AS PER OPSD 701.021
- 9. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
- 10. ALL UNDERGROUND PARKING FLOOR DRAINAGE IS TO BE DIRECTED TO THE SANITARY SEWER AS PER THE CITY OF OTTAWA SEWER DESIGN

### STORM SEWER NOTES:

GUIDE LINES, CLAUSE 6.1.10.

OPERATIONS.

- 1. ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- 2. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
- 3. THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE STORM SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. DURING CONSTRUCTION THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD.
- 4. SEWER BEDDING AS PER CITY STANDARD S6 & S7.
- 5. ALL ABANDONED EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER
- 6. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE AND INSULATION IS REQUIRED WHERE COVER IS LESS THAN 2.0m.
- 7. ALL STORM SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES. REFER TO MECHANICAL DRAWINGS.
- 8. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY

#### INSTALLED STORM SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.

<u>WATERMAIN NOTES:</u> 1. ALL PVC WATERMAIN SHALL BE PVC DR18 IN ACCORDANCE WITH AWWA. C-900 CLASS 150 OR PVCO IN ACCORDANCE WITH AWWA C-909,

2. ALL WATERMAIN MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVICIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).

WITH AWWA/CSA PRESSURE RATING OF 235 PSI (1620 kPa).

- 3. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
- 4. WATERMAINS TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
- CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40. ALL ANODES SHALL BE A Z-24-48 AS PER CITY OF OTTAWA STD. W44.
- 6. ALL WATERMAINS TO BE INSTALLED AT MINIMUM COVER OF 2.4m.
- 7. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- 18. FOR TOPOGRAPHICAL INFORMATION REFER TO PLAN PREPARED BY ANIS, 8. DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
  - 9. WATER METER TO BE INSTALLED AS PER W32.
  - 10. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY, WHERE WATERMAN COVER IS LESS THAN 2.4m.
  - 11. WATERMAIN TO BE BLANKED AT MAIN, NOT AT PROPERTY LINE.
  - 12. ALL FIRE HYDRANTS TO BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W18.

# ROAD NOTES:

- 1. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10 AND OPSD 509.010,
- 2. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF
- 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA. 3. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF

95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

4. FOR PAVEMENT STRUCTURE DETAILS REFER TO LEGEND

					7	REVISED PER CITY COMMENTS	09/12/22	SAB	ВМТ	SCALE
					6	REVISED PER CITY COMMENTS	17/11/22	AC	вмт	
					5	REVISED PER CITY COMMENTS	15/09/22	AC	вмт	
11	REVISED PER CITY COMMENTS	19/12/23	AC	ВМТ	4	REVISED PER CITY COMMENTS	10/12/21		JD	
10	RESUBMITTED TO CITY	30/10/23	AC	ВМТ	3	REVISED PER CITY COMMENTS	27/05/21	AC	вмт	NORTH
9	REVISED PER ARCH PLAN	11/08/23	AC	ВМТ	2	ISSUED FOR REZONING APPLICATION	27/01/20	MZG	вмт	
8	REVISED PER CITY COMMENTS	06/06/23	AC	ВМТ	1	ISSUED FOR REVIEW	12/09/19	SAB	вмт	
REV	REVISION DESCRIPTION	DATE	BY	APPD	REV	REVISION DESCRIPTION	DATE	BY	APPD	

2023-12-19

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BMT BMT SAB BMT • BUILDINGS • EARTH & ENVIRONMENT • ENERGY •

SAB

11061917 CANADA INC RESIDENTIAL DEVELOPMENT 365 FOREST STREET OTTAWA, ONTARIO.

JAN 2020 NOTES AND LEGEND SHEET

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