

ISSUED FOR DISCUSSION

REVISION

APR 26/24

DATE

LOCATION OF ALL SUCH UTILITIES AND

DAMAGE TO THEM.

STRUCTURES AND ASSUME ALL LIABILITY FOR

SERVICE LATERALS (TO BUILDING FACE) STORM SERVICE WATER SERVICE LENGTH (m) INVERT _ENGTH (m) | TOP W/M 63.05 63.45 8.2 63.45 6.4 63.05 63.85 4.7 1.4 63.45 5.6 63.45 63.70 2.3 63.30 6.6 63.30 3.5 63.60 2.7 64.00 5.8 63.60 2.7 63.45 63.85 7.6 63.45 4.5 63.70 1.2 63.30 63.30 4.6 6.0 63.30 63.70 5.4 63.30

PROPOSED CURB

SITE BOUNDARY

PROPOSED SANITARY MANHOLE & SEWER

NORTH

PROPOSED STORM MANHOLE & SEWER

PROPOSED WATERMAIN PROPOSED CATCHBASIN AND LEAD

PROPOSED CATCHBASIN MANHOLE

PROPOSED VALVE & VALVE BOX LOCATION

PROPOSED DIRECTION OF FLOW

WATER - 19mmØ PEX

PROPOSED STAND POST LOCATION

PROPOSED SERVICE LOCATION SAN - 135mmØ PVC DR28 @ 2.0% (1.0% MIN) STM - 100mmØ PVC DR28 @ 2.0% (1.0% MIN)

PROPOSED SERVICE LOCATION

• SAN - 135mmØ PVC DR28 @ 2.0% (1.0% MIN) WATER - 19mmØ PEX

PROPOSED SERVICE LOCATION C/W SLEEVE SAN - 135mmØ PVC DR28 @ 2.0% (1.0% MIN) STM - 100mmØ PVC DR28 @ 2.0% (1.0% MIN)

WATER - 19mmØ PEX

PROPOSED SERVICE LOCATION C/W SLEEVE SAN - 135mmØ PVC DR28 @ 2.0% (1.0% MIN) WATER - 19mmØ PEX

EXISTING SANITARY MANHOLE & SEWER

EXISTING STORM MANHOLE AND SEWER

EXISTING WATERMAIN EXISTING VALVE AND VALE BOX

EXISTING FIRE HYDRANT C/W LEAD

EXISTING CATCHBASIN

PROPOSED ROAD CUT LIMITS

PROPOSED INSULATION FOR SHALLOW SEWERS AS PER S35

SAN MANHOLE TABLE					
MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)		
401	1200mmØ	65.26	NW=63.1		
403	1200mmØ	64.96	SE=62.89 N=62.84		
405	1200mmØ	65.49	NW=62.7		
407 1.	1200mmØ	65.21	SE=62.4 W=61.73		
409	1200mmØ	65.41	W=62.70		
411 ^{1.}	1200mmØ	65.23	E=62.27 W=61.55		

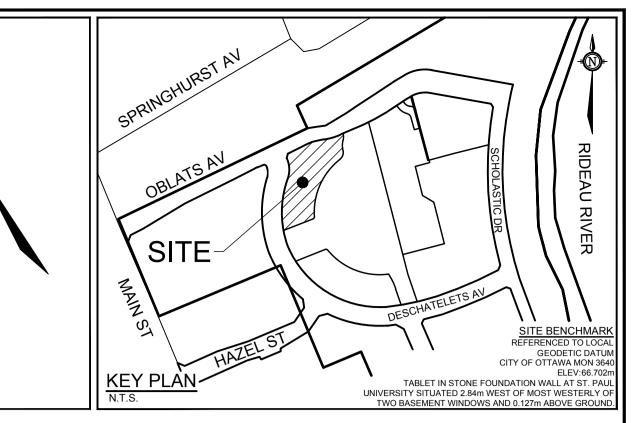
I. MAINTENANCE HOLE TO HAVE EXTERNAL DROP STRUCTURE AS PER OPSD 1003.010

STM MANHOLE TABLE					
MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)		
400	1200mmØ	65.24	NW=63.0		
402	1200mmØ	64.88	SE=62.86 N=62.86 SE=63.66		
404	1200mmØ	65.53	W=63.26		
406	1200mmØ	65.21	E=62.82 W=62.79 S=63.88		

T. J. MCKAY

100195434

	CATCHBASIN TABLE							
CB ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD DIA (mm)	100yr CAPTURE RATE (L/s)			
CB-1	610 x 610 CB	64.92	SW=63.72	LMF 60	3.7			
CB-3	610 x 610 CB	64.84	NW=63.64	83mmØ	15.9			
CB-5	610 x 610 CB	65.13	N=63.93	83mmØ	16.2			
CBMH-4	1,200 mm dia CBMH	65.15	W=63.95	83mmØ	15.5			



SOURCE REFERENCE PLAN OF SURVEY OF PART OF LOT "H" CONCESSION "D" (RIDEAU FRONT), PARED BY ANNIS, O-SULLIVAN, VOLLEBEKK LTD. ON DECEMBER 15, 2017. TOPOGRAPHIC INFORMATION: HORIZONTAL DATUM: NAD 83 (ORIGINAL) MTM - ZONF 9

ANNIS, O-SULLIVAN, VOLLEBEKK LTD'S TOPOGRAPHIC PLAN OF SURVEY

NOVATECH TOPOGRAPHIC SURVEY, APRIL 2024

GENERAL NOTES:

OF MUNICIPAL AUTHORITIES.

1. DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO START OF CONSTRUCTION.

2. THE ORIGINAL TOPOGRAPHY AND GROUND FLEVATIONS. SERVICING AND SURVEY INFORMATION SHOWN ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN. PRIOR TO COMMENCING ANY ON SITE SERVICING THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF THE EXISTING SEWERS, WATERMAINS AND UTILITIES IN THE OBLATS AVENUE AND DESCHÂTELETS AVENUE RIGHT OF WAY.

3. CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.

VERTICAL DATUM: CGVD28:78

4. BEFORE COMMENCING CONSTRUCTION, PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE. INSURANCE POLICY TO NAME THE OWNER, ENGINEER AND THE CITY AS CO-INSURED.

5. CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER.

6. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.

7. OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING CONSTRUCTION. 8. RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION

9. REMOVE FROM SITE ALL DEBRIS AND EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.

10. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.

11. REFER TO STRUCTURAL PLANS FOR UNDERSIDE OF FOOTING AND TOP OF FOUNDATION INFORMATION.

12. REFER TO GEOTECHNICAL INVESTIGATION PG6948-1 (DATED FEBRUARY 1, 2024), PREPARED BY PATERSON GROUP 13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A MARKED UP COPY OF THE GENERAL PLAN OF SERVICES

INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

14. ALL WORK TO BE CONSTRUCTED TO CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS.

SEWER NOTES

CATCHBASIN (600x600mm) STORM / SANITARY MAINTENANCE HOLE (1200Ø) STORM / SANITARY MH FRAME & COVER S24.1 / S24 & S25 CITY OF OTTAWA STORM SEWER PVC SDR 35 SANITARY SEWER PVC SDR 35 CITY OF OTTAWA PVC SDR28 (S11.3) SANITARY AND STORM SERVICES CBMH FRAME & COVER CITY OF OTTAWA S25 & S28.1 CITY OF OTTAWA CB FRAME & COVER

2. ALL CATCHBASIN AND CATCHBASIN MAINTENANCE LEADS ARE TO BE 200mm DIA. PVC SDR 35 AT 2% SLOPE UNLESS OTHERWISE SPECIFIED ON THE DRAWING.

3. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER AS PER THE INSULATION DETAIL FOR SHALLOW SEWERS AS PER DETAIL S35.

4. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM BUILDING FACE AT 2.0% SLOPE (1.0% MINIMUM). SERVICES TO BE CONNECTED TO MAINLINE SEWER AS PER CITY OF OTTAWA S11.1.

5. PIPE BEDDING AND COVER ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE COVER MATERIAL SHALL CONSIST OF OPSS GRANULAR 'A' AND SHOULD EXTEND FROM THE SPRING LINE OF THE PIPE TO AT LEAST 300mm ABOVE THE OBVERT OF THE PIPE

6. SANITARY PIPE TO BE IPEX SDR 35 OR EQUIVALENT WITH JOINT PRESSURE RATING OF 345kPA MINIMUM. WHERE PRIVATE SANITARY SEWER DOES NOT HAVE 2.5m CLEARANCE TO THE WATERMAIN. THE CONTRACTOR SHALL COMPLETE PRESSURE TESTING OF THE SANITARY SEWER TO CONFIRM THE 345kPa (min.) PRESSURE RATING OF THE SANITARY PIPE. TESTING TO BE COMPLETED PRIOR TO SANITARY LATERAL INSTALLATIONS

THE SITE SERVICING CONTRACTOR SHALL PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY AND STORM SERVICES TO CONFIRM PROPER CONNECTION TO THE SEWER MAINS. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.

8. STORM MAINTENANCE HOLES SHALL HAVE 300mm SUMPS AND CATCHBASIN MAINTENANCE HOLES SHALL HAVE 600mm SUMPS UNLESS OTHERWISE INDICATED.

9. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

10. CONTRACTOR SHALL OBTAIN A VIDEO INSPECTION OF THE CITY SEWER SYSTEM WITHIN OBLATS AVENUE AND DESCHÂTELETS AVENUE RIGHT OF WAY UPON COMPLETION OF CONSTRUCTION TO DETERMINE IF THE CITY SEWER SYSTEM SUSTAINED ANY DAMAGES AS A RESULT OF CONSTRUCTION ON THE LANDS.

WATERMAIN NOTES:

WATERMAIN TRENCHING THERMAL INSULATION IN SHALLOW TRENCHES CITY OF OTTAWA WATERMAIN CROSSING BELOW SEWER / OVER SEWER W25 / W25.2 WATER SERVICE: 19mm PEX SDR9CTS WATERMAIN: 50mm PEX SDR9CTS CITY OF OTTAWA

SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN SHALL BE

3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. CONTRACTOR TO SUPPLY AND INSTALL INSULATION AS PER W22 FOR ALL WATERMAIN LESS THAN 2.4m

4. PROVIDE MINIMUM CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS PER W25 (0.50m) AND

5. WATER SERVICES ARE TO BE INSTALLED 1.0m FROM THE BUILDING FACE, WITH 15m OF PIPE LEFT COILED

6. CURB STOPS ARE TO BE LOCATED 2.0m FROM THE FOUNDATION WALL WHEREVER POSSIBLE

7. WATERMAINS LOCATED WITHIN 2.4m FROM OPEN STRUCTURES ARE TO BE INSULATED AS PER CITY OF OTTAWA STANDARD DETAIL W23

CITY of OTTAWA GREYSTONE VILLAGE

(613) 254-9643

(613) 254-5867

www.novatech-eng.com

Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6

Facsimile

Website

DRAWING NAME

BLOCK 29 **GENERAL PLAN OF SERVICES**

REV # 4 14025-FT-GP1

114025