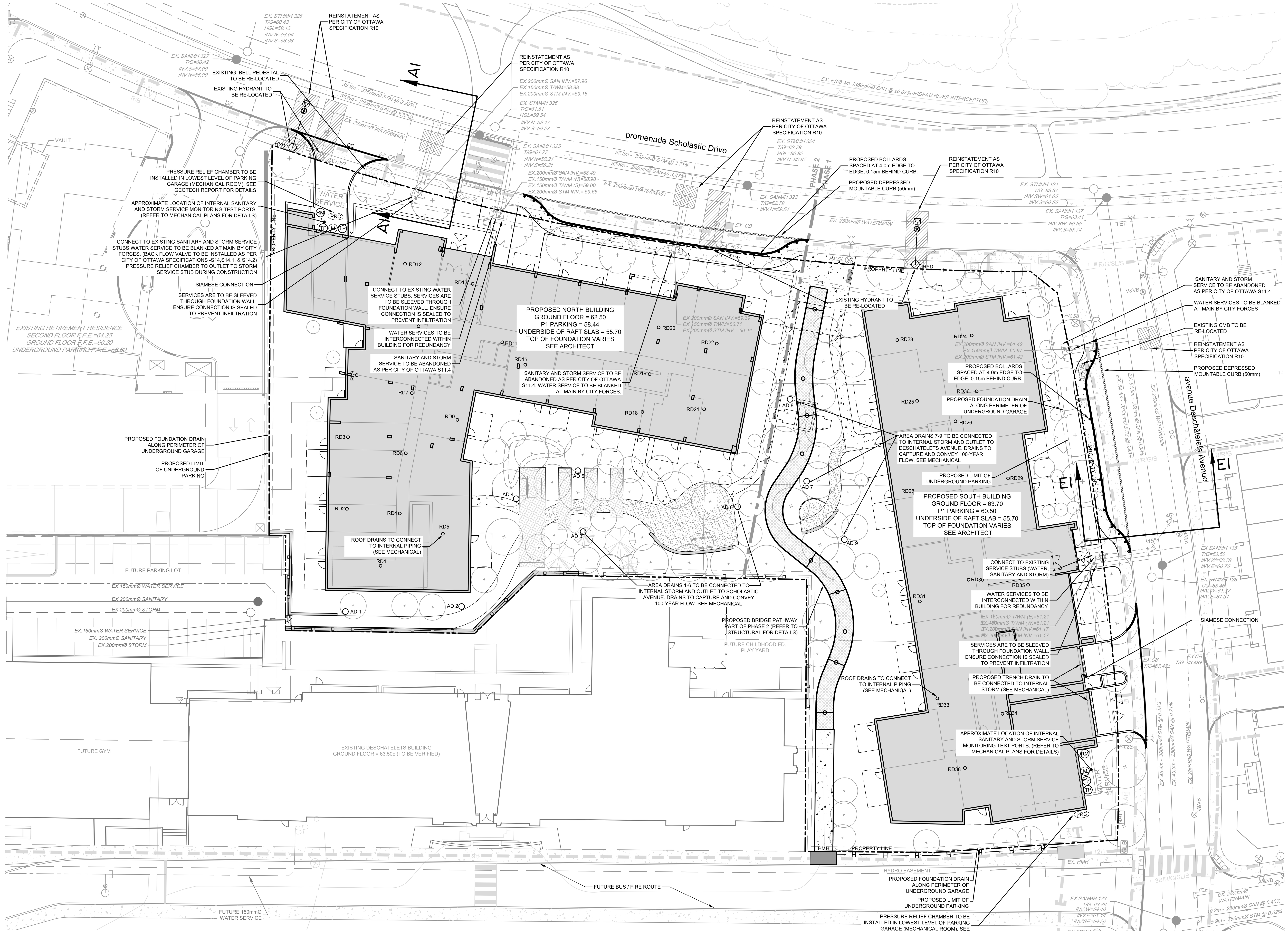
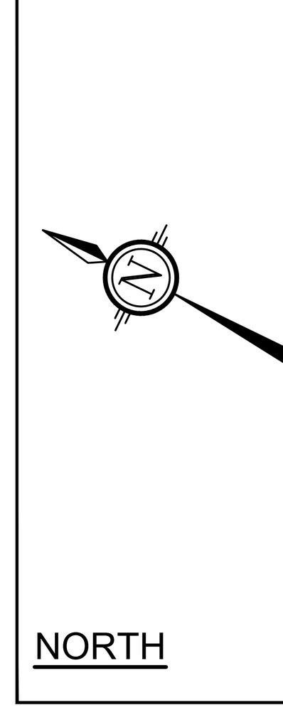




LEGEND

- SITE BOUNDARY
- PROPOSED STORM SEWER AND DIRECTION OF FLOW
- PROPOSED SANITARY SEWER AND DIRECTION OF FLOW
- PROPOSED WATERMAIN
- V&VB — PROPOSED VALVE AND VALVE BOX
- PROPOSED WATER METER LOCATION
- PROPOSED REMOTE METER LOCATION
- PROPOSED SANITARY / STORM MONITORING TEST PORT
- PROPOSED TRENCH DRAIN
- PROPOSED SIAMESE CONNECTION
- AD 1 — PROPOSED AREA DRAIN
- PROPOSED LIMITS OF UNDERGROUND PARKING
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- PROPOSED DEPRESSED MOUNTABLE CURB (50mm)
- H — PROPOSED UNDERGROUND HYDRO
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL AND ACOUSTIC FENCE
- PROPOSED ACOUSTIC FENCE
- PROPOSED LIMITS OF CONCRETE
- PROPOSED LIMITS OF STONEDUST PAVING
- PROPOSED METAL GRATE / FOOTBRIDGE
- EXISTING ADJACENT PROPERTY LINE
- STM MH — EXISTING STORM MANHOLE AND SEWER
- SAN MH — EXISTING SANITARY MANHOLE AND SEWER
- EXISTING WATERMAIN
- VVB — EXISTING VALVE AND VALE BOX
- EXISTING FIRE HYDRANT
- EX.CB — EXISTING CATCHBASIN
- T/G — EXISTING TOP OF GRATE
- EX UP — EXISTING UTILITY POLE C/W GUY WIRES
- EXISTING STREET LIGHT
- NAP — EXISTING ROGERS NETWORK ACCESS POINT
- GLB — EXISTING BELL GRADE LEVEL BOX
- EXISTING UNDERGROUND CABLE (BELL, ROGERS,GAS, STREETLIGHT)
- EXISTING UNDERGROUND HYDRO
- CMB — EXISTING COMMUNITY MAILBOX
- EX.HMH — EXISTING HYDRO MANHOLE
- HMH — PROPOSED HYDRO MANHOLE
- EXISTING LIMITS OF CONCRETE
- PROPOSED TREES / SHRUBS

GENERAL NOTES:

1) COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.

2) 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 THIS DRAWING.

3) OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.

4) BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.

5) RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.

6) REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.

7) ALL ELEVATIONS ARE GEODETIC.

8) REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.

9) REFER TO SERVICING DESIGN BRIEF PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.

10) SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

11) PROVIDE LINE/PARKING PAINTING.

12) CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

13) REFER TO GEOTECHNICAL REPORT (PG5383-1, DATED AUGUST 11, 2020) PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.

14) ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.

15) ALL PRIVATE APPROACHES MUST BE CONSTRUCTED AS PER CITY SPECIFICATION SC13.

SEWER NOTES:

1) SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
SEWER SERVICE CONNECTION - RIGID PIPE	S11, S11.1	CITY OF OTTAWA
SEWER SERVICE ABANDONMENT	S11.4	CITY OF OTTAWA
SEWER TRENCH - BEDDING (GRANULAR A)	S6, S7, W17	CITY OF OTTAWA / OPSD
COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)	S6, S7, W17	CITY OF OTTAWA / OPSD
STORM SEWER — PVC DR 35		
SANITARY SEWER — PVC DR 35		
WASTEWATER SAMPLING/INSPECTION CHAMBER	S18.1	CITY OF OTTAWA

2) INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER FROM STORM AND 2.5m FOR SANITARY SEWER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.

3) SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.

4) PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.

5) FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.

6) THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.

7) FULL PORT BACKWATER VALVES ARE REQUIRED ON THE SANITARY SERVICES. INSTALLED AS PER THE MANUFACTURERS RECOMMENDATIONS AND A BACKWATER VALVE IS REQUIRED ON THE STORM SERVICES / FOUNDATION DRAINS FOR EACH BUILDING; INSTALLED AS PER STD. DWG S14.

8) CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS/LATERALS.

9) REINSTATE ALL EXISTING PAVEMENT, CURB AND BOULEVARDS AS PER CITY OF OTTAWA R10.

10) ALL EXISTING SANITARY AND STORM SERVICES ARE TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER OPERATION.

11) MONITORING TEST PORTS FOR BUILDING SERVICES TO BE INSTALLED IN PARKING GARAGE.

12) ANY SERVICES THAT REQUIRE ENTRY TO THE BUILDING THROUGH A FOUNDATION WALL ARE TO BE SLEEVED AND SEALED TO PREVENT INFILTRATION

WATERMAIN NOTES:

1) SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
CONNECTION DETAIL FROM EXISTING TO NEW WM	W25.1	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
WATERMAIN (150mmØ)	PVC DR 18	
WATERMAIN (50mmØ)	TYPE 'K' COPPER	
THERMAL INSULATED AT OPEN STRUCTURE	W23	CITY OF OTTAWA
WATER SERVICE INSTALATION AT SEWER CROSSING.	W38	CITY OF OTTAWA

2) SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.

3) WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD. DWG W21,W22, AND W23.

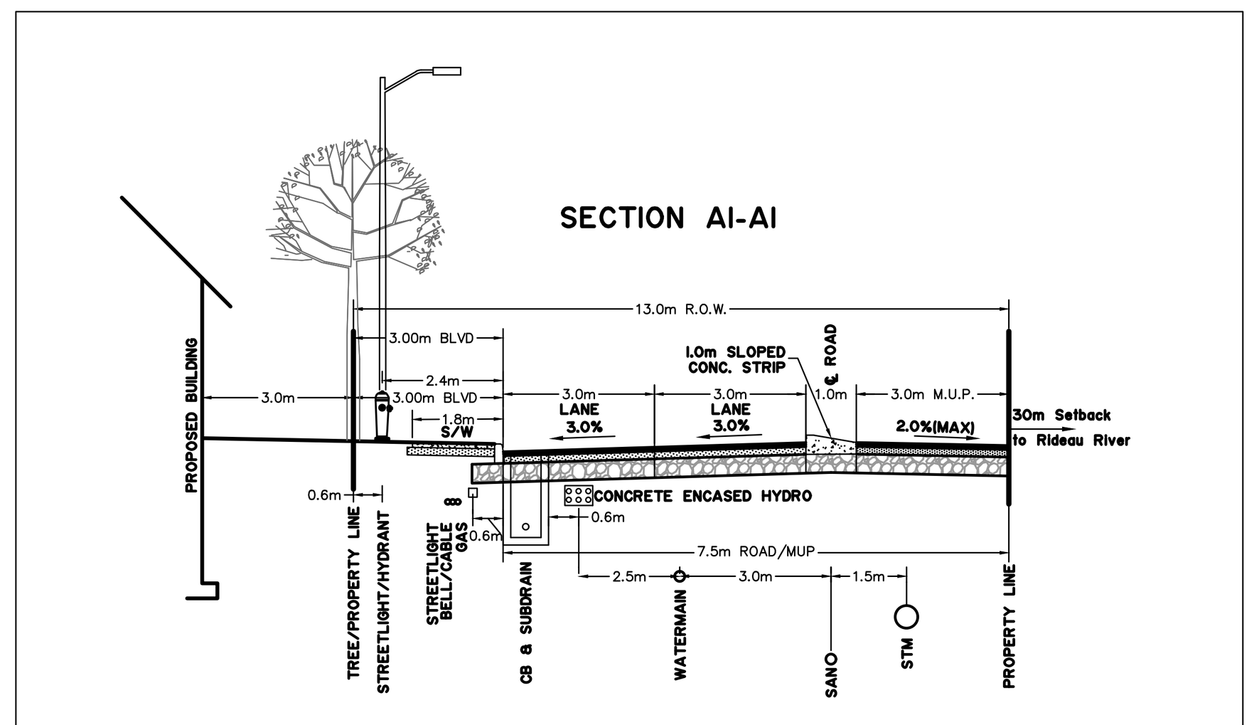
4) PROVIDE MINIMUM 0.50m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS WHEN WATERMAIN IS BELOW AND MINIMUM 0.25m CLEARANCE WHEN WATERMAIN IS ABOVE.

5) WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

6) ALL EXISTING WATER SERVICES TO BE BLANKED AT MAIN BY CITY FORCES. EXCAVATION AND REINSTATEMENT BY CONTRACTOR.

7) VALVES TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA (CoO). CoA FORCES TO COMPLETE WATERMAIN CONNECTIONS. EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR

8) WATERMAINS TO BE INTERCONNECTED FOR REDUNDANCY.



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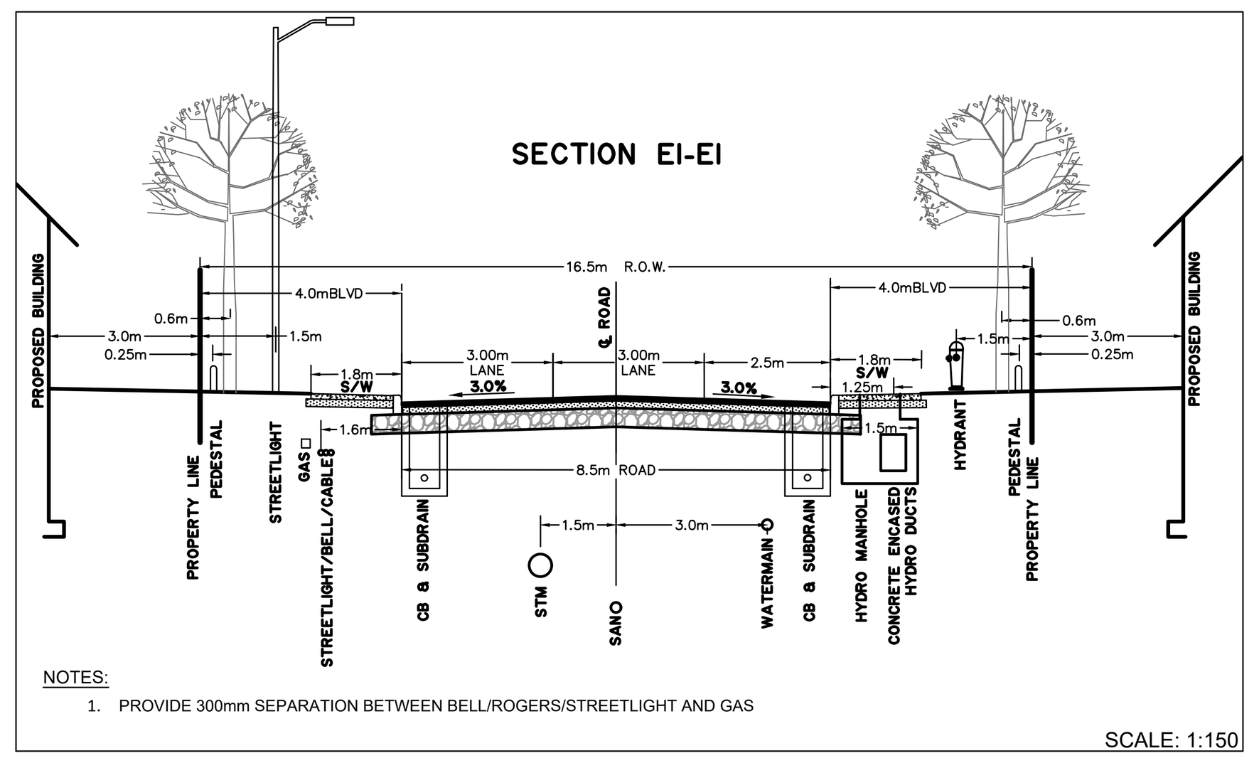

NOTES:
1. PROVIDE 300mm SEPARATION BETWEEN BELL/ROGERS/STREETLIGHT AND GAS

SCALE: 1:150

PAVEMENT STRUCTURE DETAILS:

LOCAL ROADWAYS

- 40mm Superpave 12.5mm PG 58-34
- 50mm Superpave 19.0mm PG 58-34
- 150mm GRANULAR 'A' BASE
- 375mm GRANULAR 'B' TYPE II SUBBASE
- OPSS SELECT SUBGRADE MATERIAL (SSM)

COLLECTOR ROADWAYS / BUS LOOP

- 50mm Superpave 12.5mm PG58-34
- 60mm Superpave 19.0mm PG 58-34
- 150mm GRANULAR 'A' BASE
- 450mm GRANULAR 'B' TYPE II SUBBASE
- OPSS SELECT SUBGRADE MATERIAL (SSM)

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PRELIMINARY NOT FOR CONSTRUCTION

No.	REVISION	DATE	BY
10.	REVISED AS PER CITY OF OTTAWA COMMENTS	AUG 19/22	SAZ
9.	ISSUED FOR COORDINATION	AUG 10/22	SAZ
8.	REVISED AS PER CITY OF OTTAWA COMMENTS	JUN 3/22	SAZ
7.	ISSUED FOR COORDINATION	MAY 24/22	SAZ
6.	ISSUED FOR COORDINATION	MAR 4/22	SAZ
5.	ISSUED WITH SITE PLAN APPLICATION	JUL 22/21	JAG
4.	ISSUED FOR INFORMATION	MAR 19/21	JAG
3.	RE-ISSUED FOR COORDINATION	FEB 17/21	JAG
2.	ISSUED FOR COORDINATION	DEC 4/20	JAG
1.	ISSUED FOR DISCUSSION PURPOSES	DEC 2/20	JAG

SCALE 1:250

DESIGN	SAZ
CHECKED	MSP
DRAWN	MTM
CHECKED	SAZ
APPROVED	MSP

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
S.A.N. ZORGEL
100191487
Aug. 19/22
PROVINCE OF ONTARIO

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Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
GREYSTONE VILLAGE PHASE 3

DRAWING NAME
GENERAL PLAN OF SERVICING

PROJECT No. 114025-PH3
REV: REV # 10
DRAWING No. 114025-GP(PH3)

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