

NOTES: SANITARY SEWER AND MANHOLES

- 1. ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW SANITARY PIPING.
- SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2,3,4. 4. PIPE BEDDING AND BACKFILL PER GEOTECHNICAL INVESTIGATION REPORT COMPLETED BY PATERSON
- GROUP, DATED FEBRUARY 16, 2023. 5. ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.010. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
- 6. MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER THE OPSD 701.021
- 7. ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- 8. PROVIDE BACKWATER VALVE PER S14.1

- NOTES: STORM SEWERS AND STRUCTURES
- 1. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW STORM SEWERS, SERVICES AND CB LEADS.
- 2. STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-257.3.
- 3. STORM SEWER LARGER THAN 450mm SHALL BE REINFORCED CONCRETE CLASS 100.
- 4. PIPE BEDDING AND BACKFILL PER GEOTECHNICAL INVESTIGATION REPORT COMPLETED BY PATERSON GROUP, DATED FEBRUARY 16, 2023.
- 5. ALL STORM MANHOLES AND CATCH BASIN MAINTENANCE HOLES TO BE AS PER OPSD 701.010 UNLESS OTHERWISE SPECIFIED. FRAME AND COVER PER CITY OF OTTAWA STANDARD S25 AND S24.1 FOR MAINTENANCE HOLES AND S28.1 FOR CATCH BASIN MAINTENANCE HOLES. ADJUSTMENT SECTIONS PER OPSD 704.010.
- 6. ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- 7. ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.
- 8. STORM CATCHBASINS AS PER OPSD 705.010 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19.
- 9. INSTALLATION OF FLOW CONTROL ICD'S TO BE VERIFIED BY QUALITY VERIFICATION ENGINEER RETAINED BY CONTRACTOR.
- 10. PROVIDE BACKWATER VALVE ON FOUNDATION DRAIN, STORM DISCHARGE, AND OVERFLOW DISCHARGE PER S14
- 11. CB IN LANDSCAPE AREAS SHALL BE AS PER CITY OF OTTAWA STANDARD S30 AND S31.

NOTES: <u>WATERMAIN</u>

- 1. ALL WATERMAIN AND WATERMAIN APPURTENANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
- 2. ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 MEETING AWWA SPECIFICATION C900. 3. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMAINS CROSS OVER OTHER UTILITIES,
- A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED; WHERE WATERMAINS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
- 4. PIPE BEDDING AND BACKFILL PER GEOTECHNICAL INVESTIGATION REPORT COMPLETED BY PATERSON GROUP, DATED FEBRUARY 16, 2023.
- 5. CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 & W25.4.
- 6. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W40 & W42. 7. ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARD
- 8. FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARD W18 & W19. CONTRACTOR TO PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
- 9. IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

| EXISTING | LEGEND | | | | | | |
|--|---|--|--|--|--|--|--|
| +64.99 | EXISTING ELE∨ATION | | | | | | |
| MH-STO | EXISTING STORM MANHOLE | | | | | | |
| СВ | EXISTING CATCHBASIN | | | | | | |
| MH-S O | EXISTING SANITARY MANHOLE | | | | | | |
| NV WV | EXISTING WATER VALVE | | | | | | |
| o ^B | EXISTING BOLLARD | | | | | | |
| □ TB | EXISTING UTILITY PEDESTAL | | | | | | |
| \bigcirc | EXISTING DECIDUDUS TREE | | | | | | |
| \$ | EXISTING SHRUBS | | | | | | |
| | EXISTING CONIFEROUS TREE | | | | | | |
| | EXISTING FIRE HYDRANT | | | | | | |
| 0 UP | EXISTING UTILITY POLE | | | | | | |
| • AN | EXISTING ANCHOR | | | | | | |
| W | EXISTING WATERMAIN | | | | | | |
| ST | EXISTING STORM SEWER | | | | | | |
| S | EXISTING SANITARY SEWER | | | | | | |
| OHW | EXISTING DVERHEAD WIRE | | | | | | |
| —— P —— | EXISTING POWER LINE | | | | | | |
| G | EXISTING GAS | | | | | | |
| | EXISTING EDGE OF ASPHALT | | | | | | |
| | | | | | | | |
| | | | | | | | |
| LEGEND | | | | | | | |
| | | | | | | | |
| | PROPOSED CATCHBASIN PROPOSED STORM MANHOLE | | | | | | |
| | PROPOSED SANITARY MANHOLE | | | | | | |
| SANMH () | PROPOSED VALVE AND BOX | | | | | | |
| _ | PROPOSED STORM SEWER | | | | | | |
| | PROPOSED SANITARY SEWER | | | | | | |
| | PROPOSED SANITARY SEWER PROPOSED WATER SERVICE | | | | | | |
| T/G 64.55 | | | | | | | |
| FFE 64.5 5 | | | | | | | |
| T/C 63.50 | PROPOSED TOP AND BOTTOM OF CURB | | | | | | |
| △B/C 63.45 ↓T/L 63.55 | PROPOSED TOP AND BOTTOM OF CORB | | | | | | |
| B/L 63.45 T/S 64.60 | PROPOSED TOP AND BOTTOM OF LANDING ELEVATION | | | | | | |
| [∧] B/S 64.27 <u>√ 63.25</u> | PROPOSED FLEVATION | | | | | | |
| <u><5.9%</u> | PROPOSED ELEVATION PROPOSED SLOPE | | | | | | |
| X | PROPOSED 3:1 SLOPE | | | | | | |
| | | | | | | | |

| PIPE CROSSING TABLE | | | | | | | | |
|---------------------|--------------|--------|------|-----------------|--------|---------------|--|--|
| | | Obvert | | | Invert | | | |
| 1 | EX 450mm SAN | 59.89 | 0.99 | Clearance Under | 60.88 | 150mm WM | | |
| 2 | EX 450mm SAN | 59.86 | 1.02 | Clearance Under | 60.88 | 150mm WM | | |
| 3 | 250mm STM | 58.62 | 2.12 | Clearance Under | 60.74 | EX 203mm WM | | |
| 4 | 250mm STM | 58.75 | 0.44 | Clearance Under | 59.19 | EX 450mm SAN | | |
| 5 | 2-150mm WM | 61.41 | 0.37 | Clearance Under | 61.78 | 250mm CB LEAD | | |
| 6 | 200mm STM | 59.30 | 2.50 | Clearance Under | 61.8 | 250mm CB LEAD | | |
| 7 | 250mm SAN | 59.30 | 2.51 | Clearance Under | 61.81 | 250mm CB LEAD | | |
| 8 | 200mm STM | 59.19 | 0.22 | Clearance Under | 59.49 | EX 450mm SAN | | |
| 9 | 200mm STM | 59.18 | 1.68 | Clearance Under | 60.86 | EX 203mm WM | | |

SILT SACK FILTER

LIGHT DUTY SILT DENCE

OVERLAND FLOW DIRECTION

CLIENT KEY PLAN

P.N.

