

ISSUED

| No. | Date        | Description   |
|-----|-------------|---|
| 0   | 2023 MAR 22 | ISSUED FOR SITE PLAN APPROVAL                               |
| 1   | 2023 MAY 12 | ISSUED FOR 100% SCHEMATIC DESIGN                            |
| 2   | 2023 MAY 18 | ISSUED FOR REZONING AND SITE PLAN CONTROL - RESUBMISSION #1 |
| 3   | 2023 JUL 13 | ISSUED FOR SITE PLAN CONTROL - RESUBMISSION #2              |
| 4   | 2023 AUG 25 | ISSUED FOR 100% DESIGN DEVELOPMENT                          |
| 5   | 2023 DEC 11 | ISSUED FOR SITE PLAN CONTROL - RESUBMISSION                 |

**LEGEND**

- NEW AREA DRAIN (REFER TO MECHANICAL FOR CONTINUATION)
- NEW CATCH-BASIN
- ▬ NEW STORM SEWER
- ▬ NEW SANITARY SEWER
- ▬ NEW WATERMAIN
- ⊕ NEW WATER VALVE AND VALVE BOX (W24)
- EXISTING STORMS/SANITARY MANHOLE
- ▬ EXISTING STORM SEWER
- ▬ EXISTING SANITARY SEWER BY
- ▬ EXISTING WATERMAIN
- ▼ NEW ENTRANCE
- ▭ STORMWATER MANAGEMENT CISTERN
- ▭ SITE BOUNDARY
- ▬ EDGE OF SUBSTRUCTURE
- ▭ ENTRANCE OF PARKING GARAGE ACCESS RAMP
- ▬ PROPERTY LINE

**CATCH BASIN DATA**

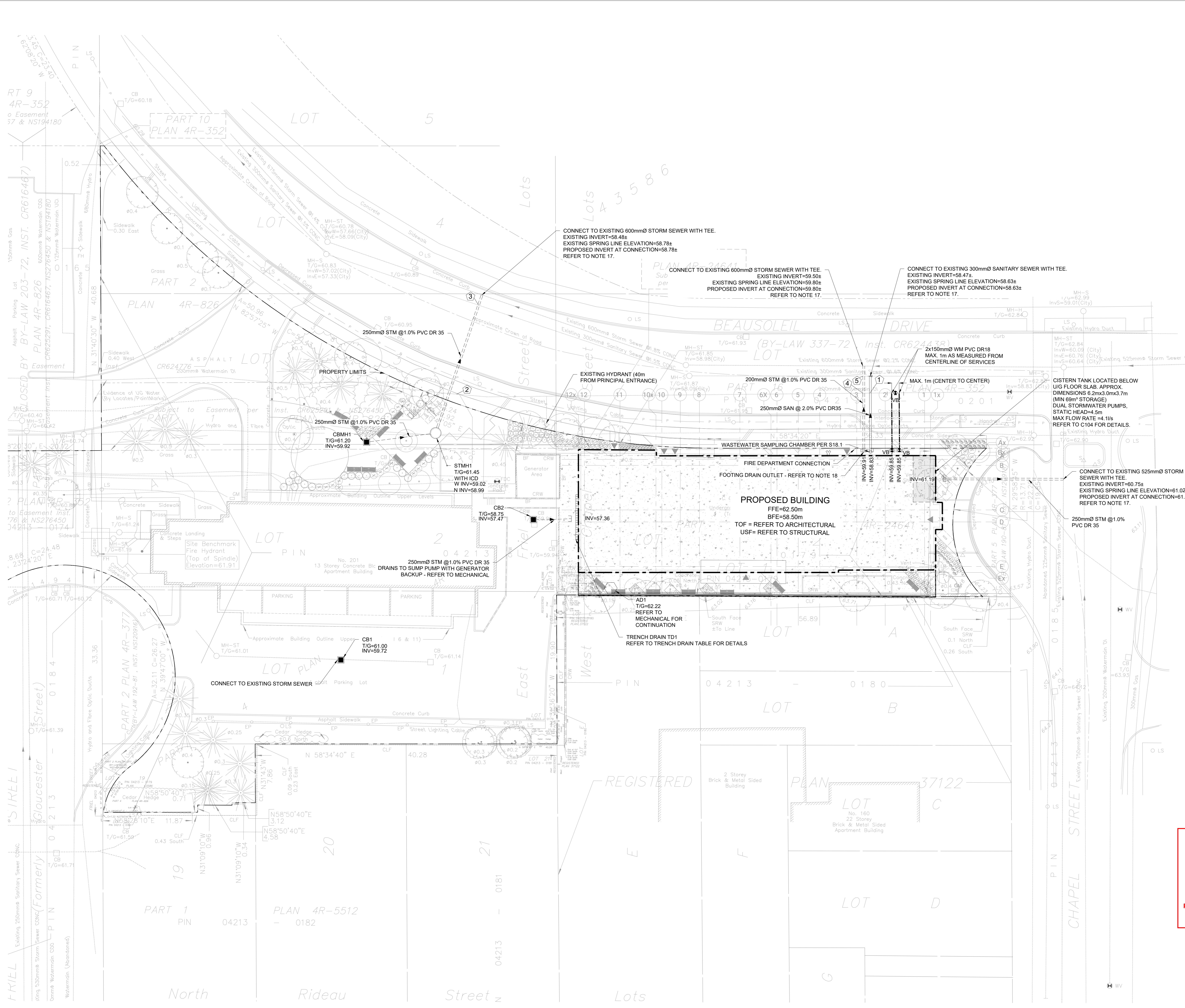
| NO.   | COVER | STRUCT.  | ELEVATION |         | NOTES | CB CONNECTION |          |            |
|-------|-------|----------|-----------|---------|-------|---------------|----------|------------|
|       |       |          | T/FRAME   | LOW/INV |       | DIA (mm)      | TYPE     | LENGTH (m) |
| CB1   | S22   | 705.010B | 61.00     | 59.72   |       | 250           | PVC DR35 | N/A        |
| CB2   | S22   | 705.010B | 58.78     | 57.50   |       | 250           | PVC DR35 | 5.5        |
| CBMH1 | S28.1 | 701.011  | 61.20     | 59.92   |       | 250           | PVC DR35 | 7.5        |

**NEW STORM STRUCTURE**

| NO.   | COVER                        | STRUCT. | ELEVATION |                        | LOCATION   |           | NOTES |
|-------|------------------------------|---------|-----------|------------------------|------------|-----------|-------|
|       |                              |         | T/FRAME   | INVERTS                | NORTHING   | EASTING   |       |
| STMH1 | S24.1 OR OPSD 401.010 TYPE B | 701.011 | 61.45     | 59.02 (N)<br>58.99(SW) | 5032694.90 | 368763.08 |       |

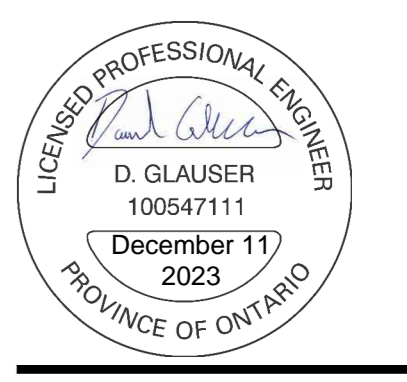
**PIPE CROSSING TABLE**

| NO. | PIPE             | CLEARANCE OVER | OVERLAPPING STRUCTURE | STM INV       | STM OBV       |
|-----|------------------|----------------|-----------------------|---------------|---------------|
| 1   | 200mmØ WM 0.97m  | CLEARANCE OVER | 250mmØ SAN            | WM INV=59.90  | STM OBV=58.93 |
| 2   | 200mmØ WM 0.30m  | CLEARANCE OVER | 250mmØ STM            | WM INV=59.50  | STM OBV=59.20 |
| 3   | 250mmØ STM 0.48m | CLEARANCE OVER | 600mmØ SAN            | STM INV=58.78 | SAN OBV=58.30 |
| 4   | 200mmØ WM 0.41m  | CLEARANCE OVER | 200mmØ STM            | WM INV=59.48  | STM OBV=59.07 |
| 5   | 200mmØ STM 0.60m | CLEARANCE OVER | 600mmØ SAN            | STM INV=58.88 | SAN OBV=58.28 |



*Andrew McCreight*  
**ANDREW MCCREIGHT**  
MANAGER (A), DEVELOPMENT REVIEW CENTRAL  
PLANNING, REAL ESTATE & ECONOMIC DEVELOPMENT  
DEPARTMENT, CITY OF OTTAWA

**APPROVED**  
By Andrew McCreight at 4:14 pm, Dec 21, 2023



- NOTES:**
- GENERAL**
  - TOPOGRAPHICAL SURVEY PREPARED BY FARLEY, SMITH & DENIS SURVEYING LTD. DATED SEPT 13, 2022. MTD ZONE 9, GEODETIC DATUM CGVD-1928-1978.
  - SITE BENCHMARK HYDRANT TOP OF SPINDLE ELEV. 61.91
  - SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING.
  - REFER TO "SITE SERVING AND STORMWATER MANAGEMENT DESIGN BRIEF" PREPARED BY MORRISON HERSHFIELD.
  - REFER TO "GEO-TECHNICAL INVESTIGATION REPORT (AUG 2017) GEOTECH REPORT (04/29-1) PREPARED BY PATTERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT SHALL REVIEW EXCAVATIONS PRIOR TO THE PLACEMENT OF GRANULAR MATERIAL.
  - CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AT CONNECTION AND CROSSING LOCATIONS PRIOR TO CONSTRUCTION AND ADVISE THE ENGINEER OF ANY DISCREPANCIES.
  - UNLESS DIRECTED OTHERWISE ANY DAMAGED ASPHALT OR CURB (REGARDLESS OF WHETHER WITHIN OR EXTERNAL TO THE SITE) SHALL BE REINTEGRATED IN ACCORDANCE WITH CITY STD. DET. R10 AND S1.
  - UNLESS DIRECTED OTHERWISE THE CONTRACTOR SHALL REINSTATE ALL SIGNS, LIGHTING AND OTHER STREET FURNITURE DISTURBED BY THE WORK.
  - THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT TRAFFIC MANAGEMENT PLANS FOR WORK IN RIGHT OF WAY IN ACCORDANCE WITH OTM BOOK 7.
  - THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY SERVICING NEEDED, AND SHALL ALSO COORDINATE WITH OTHER TRADES AS NECESSARY.

- SEWERS**
- ALL STORM SEWERS, SANITARY SEWERS AND CATCH BASINS LEADS SHALL BE PVC DR 35 UNLESS OTHERWISE SPECIFIED.
  - REFER TO CITY STD. DETAIL S6 ON DRAWING C102 FOR SEWER INSTALLATION.
  - CONTRACTOR SHALL MAINTAIN EXISTING SEWER FLOWS DURING CONSTRUCTION IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS.
  - ALL MAINTENANCE HOLES, CATCHBASINS AND AREA DRAINS SHALL BE ADJUSTED TO POST-CONSTRUCTION GRADE.
  - LEAKAGE TEST (SANITARY SEWER ONLY) AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY OF OTTAWA SPECIFICATIONS PRIOR TO THE INSTALLATION OF BASE COURSE ASPHALT.
  - BACKWATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD S14 & S14.2.
  - CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD R10. CONNECTION TO SEWER MAIN PER S11.1
  - FOOTING DRAINS OUTLET TO THE BUILDING'S SUMP PUMP. THE BUILDING SUMP PUMP IS CONNECTED TO THE BACKUP GENERATOR.

- WATERMANS**
- REFER TO CITY STD. DETAIL W17 ON DRAWING C102 FOR WATERMAIN INSTALLATION.
  - ALL WATERMAIN MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND STANDARD DRAWINGS. PVC PIPE TO BE CLASS 150 DR18 TO LATEST EDITION OF A.W.W.A. SPECIFICATION C900 AND CSA B137.3 LATEST AMENDMENT WITH GASKETED BELL AND SPIGOT COUPLINGS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER PERMIT AS REQUIRED FROM THE CITY OF OTTAWA, AND COMPLYING WITH ALL CITY OF OTTAWA REQUIREMENTS. THE CITY MAY REQUIRE THAT CERTAIN ACTIVITIES (E.G. VALVE OPERATION, CONNECTION OF NEW WATER SERVICE TO EXISTING WATERMAIN, DISINFECTION) BE CARRIED OUT ONLY BY CITY FORCES.
  - ALL VALVES 300mm DIAMETER AND SMALLER SHALL INCLUDE A VALVE BOX AS PER W24.
  - THE NEW WATERMAIN IS TO BE INSTALLED WITH A MINIMUM OF 2.4m COVER WHERE 2.4m COVER IS NOT POSSIBLE, PROVIDE INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAILS W22 & W23.
  - THRUST RESTRAINT SHALL BE PROVIDED BY BOTH RESTRAINING/RETAINING RINGS AND THRUST BLOCKS AT ALL DEAD END CAPS, PLUGS, VALVES, BENDS AND REDUCERS AS PER CITY OF OTTAWA STANDARD DETAILS W25.3, W25.4, W25.5 AND W25.6. ALL TEMPORARY THRUST RESTRAINTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
  - TRACER WIRE SHALL BE PROVIDED FOR ALL NEW PVC WATERMANS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAIL W36.
  - CATHODIC PROTECTION SHALL BE PROVIDED FOR ALL NEW WATERMANS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAILS W39, W40, W41, W42 AND W47. CATHODIC PROTECTION OF EXISTING WATERMANS SHALL ALSO BE PROVIDED AT CONNECTIONS BETWEEN EXISTING AND NEW WATERMANS.

- UTILITY NOTE**
- THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ANY EXISTING UTILITIES AS REQUIRED, IN ACCORDANCE WITH THE UTILITY OWNERS' REQUIREMENTS. CONTRACTOR IS REQUIRED TO OBTAIN LOCATES, IN ADVANCE OF EXCAVATION WORK, AND FORWARD COPIES OF THE LOCATES TO THE CONSULTANT AND THE OWNER PRIOR TO EXCAVATION.
  - ALL CROSSING OF EX. UTILITIES TO BE IN ACCORDANCE WITH CITY STD. DET. S10

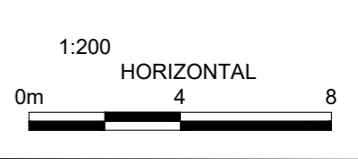
**TRENCH DRAIN DATA**

| NO. | TRENCH DRAIN WIDTH | GRATE   | ELEVATION |         | TO CONNECTION |          |            |                     |
|-----|--------------------|---|-----------|---------|---------------|----------|------------|---------------------|
|     |                    |   | T/FRAME   | LOW/INV | DIA (mm)      | TYPE     | LENGTH (m) | INV.                |
| TD1 | 100mm              | STAINLESS STEEL, ACCESSIBLE, HEEL SAFE, LIGHT DUTY (ACO 4470/4480 OR APPROVED EQUIVALENT) | 58.50     | 57.70   | 200           | PVC DR35 | 1.2        | REFER TO MECHANICAL |

NOTE: POLYMER CONCRETE TRENCH DRAIN WITH 2% INTERNAL SLOPE AND MATCHING CATCH BASIN, UNLESS OTHERWISE SPECIFIED.

**INLET CONTROL DEVICE DATA TABLE - STMH1**

| DESIGN EVENT | ICD TYPE         | DIAMETER OF OUTLET PIPE (mm) | DESIGN FLOW (L/s) | WATER ELEVATION (m) | REQUIRED VOLUME (m³) | TOTAL VOLUME PROVIDED (m³) |
|--------------|------------------|------------------------------|-------------------|---------------------|----------------------|----------------------------|
| 1:5 YR       | HYDROVEX 50VHV-2 | 250mmØ PVC                   | 2.1               | 60.17               | 4.9                  | 42                         |
| 1:100 YR     | HYDROVEX 50VHV-2 | 250mmØ PVC                   | 3.0               | 61.32               | 9.1                  | 42                         |



OCH FRIEL STREET / CHAPEL  
200201 FRIEL STREET  
221021

SITE SERVING PLAN  
Scale: 1:200  
Project No: 220262000  
Date: 11/12/23  
**C001**  
#18930