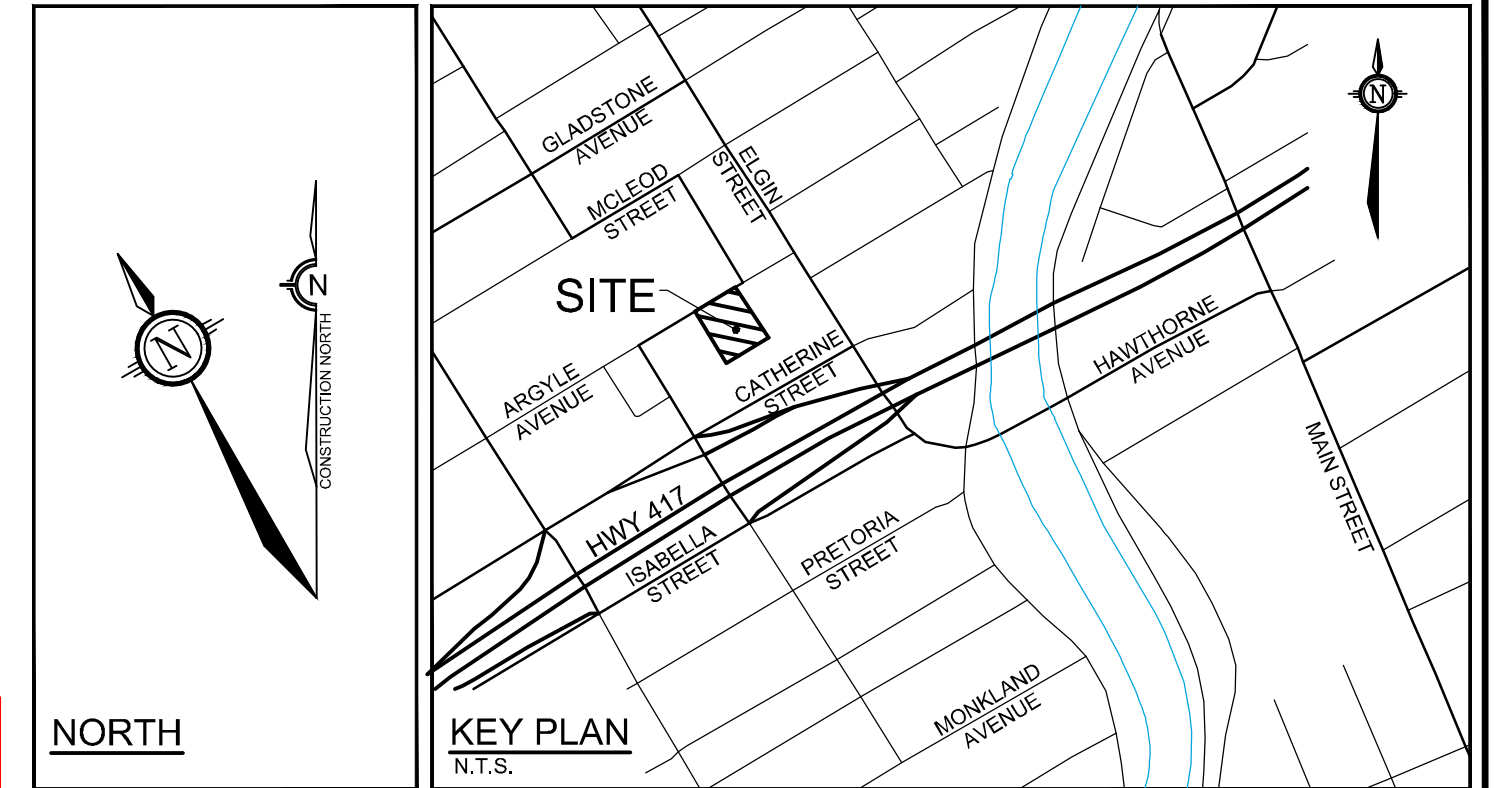


### INTERNAL SWM STORAGE SYSTEM

| DESIGN EVENT | STORAGE SYSTEM CONTROLLED FLOW | STORAGE VOLUMES REQUIRED | STORAGE VOLUMES PROVIDED |
|--------------|--------------------------------|--------------------------|--------------------------|
| 1:2 YR       | 4.4 L/s                        | 17.7 m³                  | > 82 m³                  |
| 1:5 YR       |                                | 27.2 m³                  |                          |
| 1:100 YR     |                                | 64.3 m³                  |                          |
| 1:100+20%    |                                | 81.6 m³                  |                          |

NOTES:

- ALL DRAINAGE FROM AREA A-2 (PROPOSED BUILDING DECK DRAINS AND ALL ROOF + PATIO DRAINS) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
- REFER TO MECHANICAL PLANS FOR PUMP INFORMATION AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM.

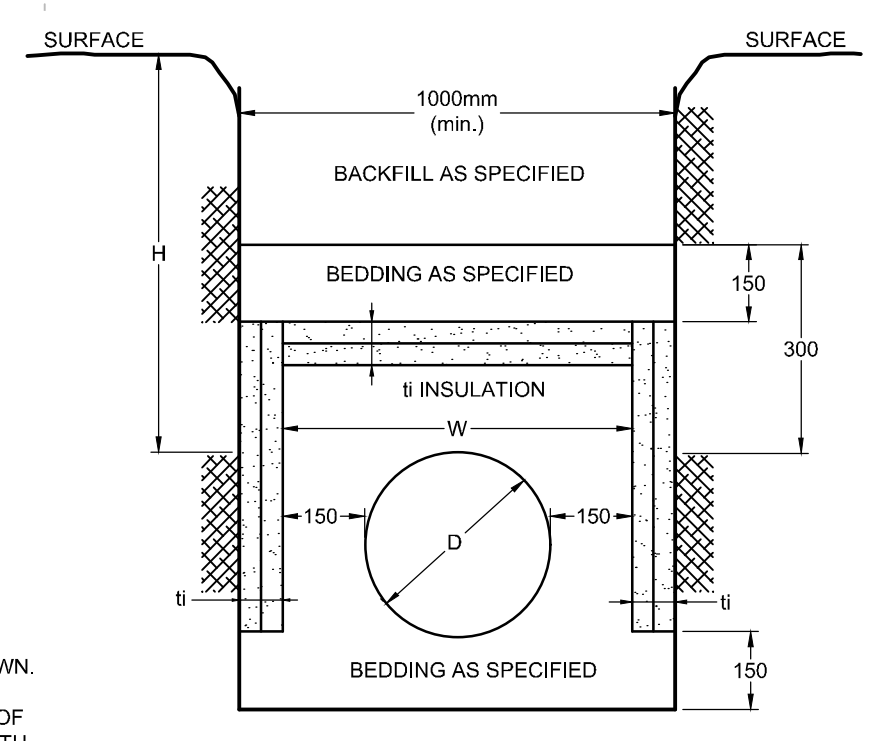


### LEGEND

|     |   |          |   |
|-----|---|----------|---|
| --- | PROPERTY LINE                           | ---      | EXISTING OVERHEAD WIRES                 |
| --- | PROPOSED SANITARY SERVICE               | ---      | EXISTING CONCRETE CURB                  |
| --- | PROPOSED STORM SERVICE                  | ---      | EXISTING SANITARY MANHOLE & SEWER       |
| DD2 | PROPOSED MECHANICAL DECK DRAIN          | ---      | EXISTING CATCHBASIN MANHOLE             |
| (M) | PROPOSED WATER METER AND REMOTE METER   | ---      | EXISTING STORM MANHOLE & SEWER          |
| --- | PROPOSED BARRIER CURB                   | ---      | EXISTING CATCHBASIN C/W CATCHBASIN LEAD |
| DC  | PROPOSED DEPRESSED CURB                 | ---      | EXISTING HYDRANT & VALVE                |
| --- | PROPOSED WATER SERVICE AND DIAMETER     | ---      | EXISTING TREES/VEGETATION               |
| VB  | PROPOSED VALVE & VALVE BOX              | ---      | EXISTING UTILITY POLE                   |
| --- | PROPOSED CAP                            | ---      | EXISTING FENCE                          |
| --- | PROPOSED BUILDING ENTRANCE              | ---      | EXISTING WATERMAIN                      |
| X   | REMOVALS                                | ---      | EXISTING HYDRANT C/W VALVE & LEAD       |
| --- | THERMAL INSULATION FOR SHALLOW SEWERS   | TOF      | TOP OF FOUNDATION WALL ELEVATION        |
| --- | PROPOSED BIKE RACK (REFER TO LANDSCAPE) | FFE      | FINISHED FLOOR ELEVATION                |
|     |   | P1 LEVEL | PARKING GARAGE LEVEL ELEVATION          |
|     |   | USF      | UNDERSIDE OF FOOTING ELEVATION          |

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

**APPROVED**  
 By Andrew McCreight at 10:24 am, Oct 18, 2022



| COVER (mm) | INSULATION THICKNESS (mm) |
|------------|---------------------------|
| 1800-1500  | 50                        |
| 1500-1200  | 75                        |
| 1200-900   | 100                       |
| 900-600    | 125                       |

$i$  = THICKNESS OF INSULATION (mm)  
 $h$  = DEPTH OF COVER  
 $W = D + 300$  (1000 min.)  
 $W$  = WIDTH OF INSULATION (mm)  
 $D$  = O.D. OF PIPE (mm)

- NOTES:
- INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.0m COVER WITH EXPANDED POLYSTYRENE INSULATION AS SHOWN.
  - THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER (SEE TABLE).

### WATERMAIN NOTES:

- SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SPECIFICATIONS:
 

|  |                              |                |
|--|------------------------------|----------------|
| ITEM                                   | SPEC. No.                    | REFERENCE      |
| WATERMAIN TRENCHING                    | W17                          | CITY OF OTTAWA |
| THERMAL INSULATION IN SHALLOW TRENCHES | W22                          | CITY OF OTTAWA |
| THERMAL INSULATION BY OPEN STRUCTURES  | W23                          | CITY OF OTTAWA |
| VALVE BOX ASSEMBLY                     | W24                          | CITY OF OTTAWA |
| WATERMAIN CROSSING BELOW SEWERS        | W25                          | CITY OF OTTAWA |
| CATHODIC PROTECTION FOR PVC WATERMANS  | W40                          | CITY OF OTTAWA |
| WATERMAIN MATERIAL                     | PVC DR 18 (100mm AND LARGER) |                |
- EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS. EXCAVATION, INSTALLATION OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

### 150mmØ WATER SERVICE TABLE (WEST)

| STATION | SURFACE ELEVATION | T/WM ELEVATION | COMMENTS   |
|---------|-------------------|----------------|--|
| 0+00    | 70.17±            | 67.77±         | 150mmØ WM CONNECTION TO EX. 200mmØ DI WM             |
| 0+03.1  | 70.15             | 67.75          | CROSS BELOW EX. 200mm GAS (CLEARANCE = ±1.3m)        |
| 0+07.3  | 70.24             | 67.82          | CROSS BELOW EX. 542mm HYDRO DUCT (CLEARANCE = ±1.2m) |
| 0+09.3  | 70.29             | 67.84          | 150mmØ V&VB  |
| 0+09.8  | 70.31             | 67.85          | CAP 0.5m FROM FOUNDATION WALL                        |

### 150mmØ WATER SERVICE TABLE (EAST)

| STATION | SURFACE ELEVATION | T/WM ELEVATION | COMMENTS   |
|---------|-------------------|----------------|--|
| 1+00    | 70.17±            | 67.77±         | 150mmØ WM CONNECTION TO EX. 200mmØ DI WM             |
| 1+03.1  | 70.15             | 67.75          | CROSS BELOW EX. 200mm GAS (CLEARANCE = ±1.3m)        |
| 1+07.3  | 70.22             | 67.82          | CROSS BELOW EX. 542mm HYDRO DUCT (CLEARANCE = ±1.2m) |
| 1+09.3  | 70.27             | 67.84          | 150mmØ V&VB  |
| 1+09.8  | 70.29             | 67.85          | CAP 0.5m FROM FOUNDATION WALL                        |

\* CONNECTIONS TO EXISTING 200mmØ DI. EXACT ELEVATIONS TO BE FIELD DETERMINED.  
 \*\* PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W22 IN SHALLOW TRENCHES AND/OR CITY OF OTTAWA DETAIL W23 ADJACENT TO OPEN STRUCTURES.

### CRITICAL PIPE CROSSING TABLE

| CROSSING | LOWER PIPE       | HIGHER PIPE          | CLEARANCE | SURFACE ELEVATION |
|----------|------------------|----------------------|-----------|-------------------|
| (A)      | 200mmØ TWM=67.76 | 250mmØ SAN INV=68.27 | ± 0.5m    | 70.17 m           |
| (B)      | 200mmØ TWM=67.75 | 250mmØ STM INV=68.27 | ± 0.5m    | 70.17 m           |

\* PIPE CROSSINGS WITH WATERMANS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND W25.2 TO AVOID CONFLICTS.

NOTE:  
 THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

OWNER INFORMATION  
 100 ARGYLE CORPORATION  
 BONNIE MARTELL C/O COLONNADE BRIDGEPORT  
 200-16 CONCOURSE GATE  
 OTTAWA, ON K2E 7S8  
 TEL: 613-225-8118  
 bmartell@colonnadebridgeport.ca

| No. | REVISION                      | DATE      | BY  |
|-----|-------------------------------|-----------|-----|
| 2   | REVISED PER CITY COMMENTS     | DEC 21/21 | FST |
| 1   | ISSUED FOR SITE PLAN APPROVAL | AUG 13/21 | FST |

| DESIGN | CHECKED | DRAWN | APPROVED |
|--------|---------|-------|----------|
| DWM    |         |       |          |
| FST    |         |       |          |
| DWM    |         |       |          |
| FST    |         |       |          |
| FST    |         |       |          |

SCALE: 1:150

FOR REVIEW ONLY

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LOCATION  
 CITY OF OTTAWA  
 100 ARGYLE AVENUE

DRAWING NAME  
 GENERAL PLAN OF SERVICES

PROJECT No.  
 118116

REV # 2

DRAWING No.  
 118116-GP