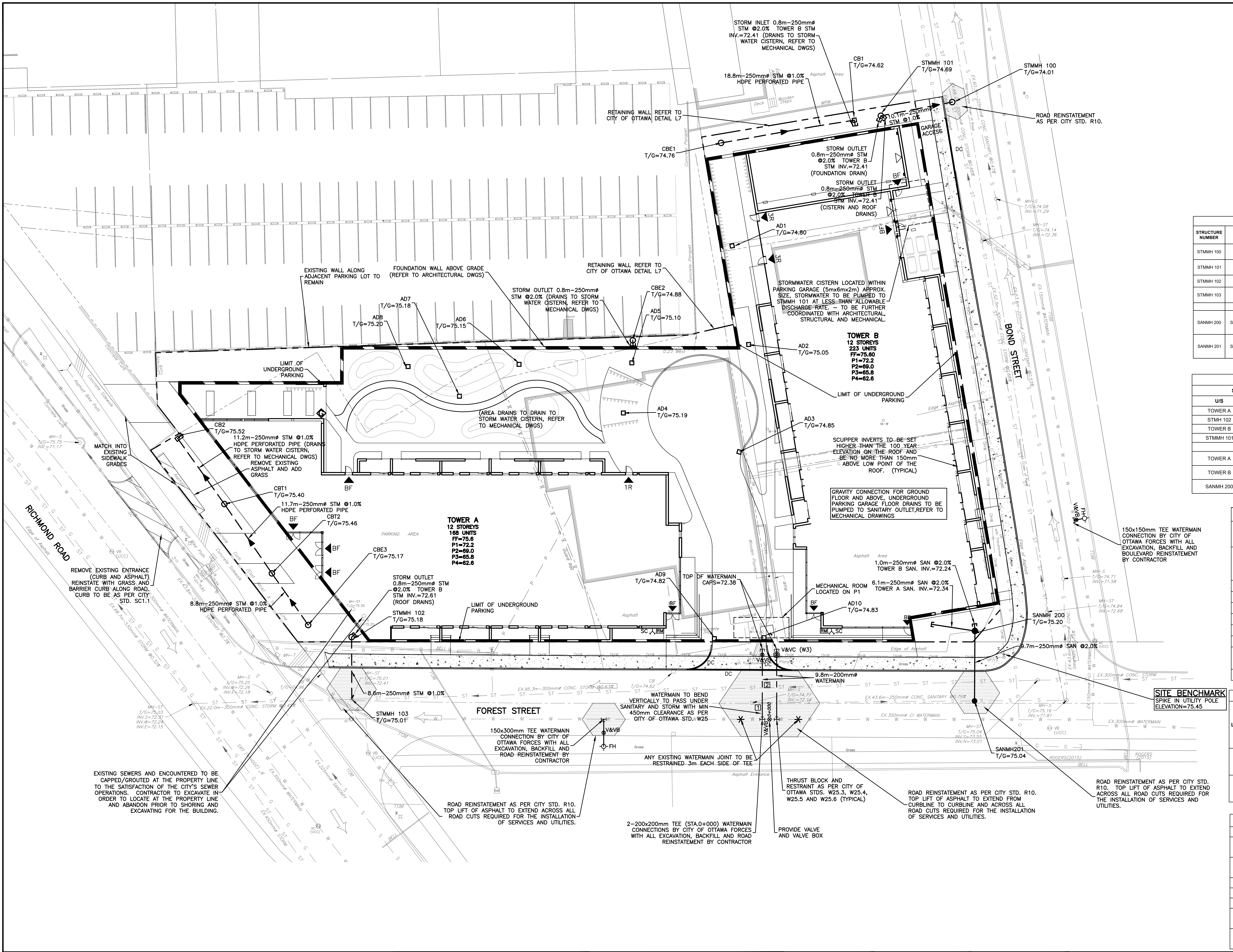
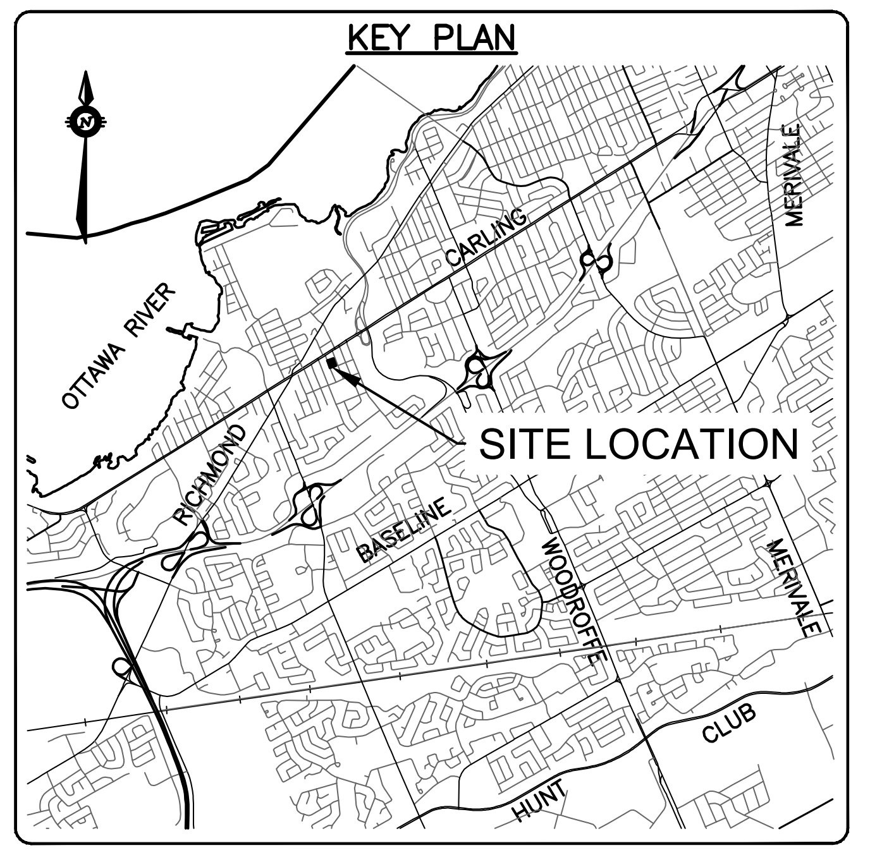

STORM INLET 0.8m–250mmø STM @2.0% TOWER B STM INV.=72.41 (DRAINS TO STORM WATER CISTERN, REFER TO MECHANICAL DWGS)
CB1 T/G=74.62
STMMH 101 T/G=74.69
STMMH 100 T/G=74.01
18.8m–250mmø STM @1.0% HDPE PERFORATED PIPE
ROAD REINSTATEMENT AS PER CITY STD. R10.
RETAINING WALL REFER TO CITY OF OTTAWA DETAIL L7
10.1m–250mmø STM @1.0%
GARAGE ACCESS
CBE1 T/G=74.76
STORM OUTLET 0.8m–250mmø STM @2.0% TOWER B STM INV.=72.41 (FOUNDATION DRAIN)
STORM OUTLET 0.8m–250mmø STM @2.0% TOWER B STM INV.=72.41 (CISTERN AND ROOF DRAINS)
Asphalt Area
Deck
Wooden Steps
WRW
Concrete Parapet
BF
3R
DC
MH–S T/G=74.08 INV.=71.29
MH–ST T/G=74.14 INV.=72.36
AD1 T/G=74.80
400mm HYDRO ABOVE
Approximate Crown of Road
Edge of Asphalt
BOND STREET
EX.60.?m–225mmø CONC. SANITARY @0.47%
EX.52.3m–300mmø CONC. STORM @0.68%
EX.53.4m–225mmø CONC. SANITARY @0.53%
EX.150mmø WATERMAIN
BELL
EXISTING WALL ALONG ADJACENT PARKING LOT TO REMAIN
FOUNDATION WALL ABOVE GRADE (REFER TO ARCHITECTURAL DWGS)
AD7 T/G=75.18
AD8 T/G=75.20
AD6 T/G=75.15
STORM OUTLET 0.8m–250mmø STM @2.0% (DRAINS TO STORM WATER CISTERN, REFER TO MECHANICAL DWGS)
RETAINING WALL REFER TO CITY OF OTTAWA DETAIL L7
CBE2 T/G=74.88
AD5 T/G=75.10
Vent
AD2 T/G=75.05
STORMWATER CISTERN LOCATED WITHIN PARKING GARAGE (5mx6mx2m) APPROX. SIZE, STORMWATER TO BE PUMPED TO STMMH 101 AT LESS THAN ALLOWABLE DISCHARGE RATE. – TO BE FURTHER COORDINATED WITH ARCHITECTURAL, STRUCTURAL AND MECHANICAL.
TOWER B
12 STOREYS
223 UNITS
FF=75.60
P1=72.2
P2=69.0
P3=65.8
P4=62.6
LIMIT OF UNDERGROUND PARKING
LIMIT OF UNDERGROUND PARKING
(AREA DRAINS TO DRAIN TO STORM WATER CISTERN, REFER TO MECHANICAL DWGS)
AD4 T/G=75.19
AD3 T/G=74.85
SCUPPER INVERTS TO BE SET HIGHER THAN THE 100 YEAR ELEVATION ON THE ROOF AND BE NO MORE THAN 150mm ABOVE LOW POINT OF THE ROOF. (TYPICAL)
GRAVITY CONNECTION FOR GROUND FLOOR AND ABOVE, UNDERGROUND PARKING GARAGE FLOOR DRAINS TO BE PUMPED TO SANITARY OUTLET,REFER TO MECHANICAL DRAWINGS
CB2 T/G=75.52
11.2m–250mmø STM @1.0% HDPE PERFORATED PIPE (DRAINS TO STORM WATER CISTERN, REFER TO MECHANICAL DWGS)
REMOVE EXISTING ASPHALT AND ADD GRASS
MATCH INTO EXISTING SIDEWALK GRADES
MH–S T/G=75.75 INV.=71.17
CBT1 T/G=75.40
11.7m–250mmø STM @1.0% HDPE PERFORATED PIPE
CBT2 T/G=75.46
1R
TOWER A
12 STOREYS
168 UNITS
FF=75.6
P1=72.2
P2=69.0
P3=65.8
P4=62.6
PARKING AREA
CBE3 T/G=75.17
Guard Rail
Wooden Planter
Asphalt Area
1.0m–250mmø SAN @2.0% TOWER B SAN. INV.=72.24
RICHMOND ROAD
Edge of Asphalt
Concrete Curb
Asphalt Bike Path
Concrete Sidewalk
Grass
VB (UCC)
REMOVE EXISTING ENTRANCE (CURB AND ASPHALT) REINSTATE WITH GRASS AND BARRIER CURB ALONG ROAD. CURB TO BE AS PER CITY STD. SC1.1
8.8m–250mmø STM @1.0% HDPE PERFORATED PIPE
MH–B T/G=75.62
EX.43.8m–225mmø SANITARY @2.3%
EX.68.7m–530mmø STORM @0.32%
EX.300mmø WATERMAIN
STORM OUTLET 0.8m–250mmø STM @2.0% TOWER B STM INV.=72.61 (ROOF DRAINS)
STMMH 102 T/G=75.18
LIMIT OF UNDERGROUND PARKING
MH–ST T\G=75.30
MH–S T/G=75.25
AD9 T/G=74.82
TOP OF WATERMAIN CAPS=72.38
MECHANICAL ROOM LOCATED ON P1
AD10 T/G=74.83
6.1m–250mmø SAN @2.0% TOWER A SAN. INV.=72.34
SANMH 200 T/G=75.20
SC RM
V&VC (W3)
V&VB
9.7m–250mmø SAN @2.0%
9.8m–200mmø WATERMAIN
MH–S T/G=75.25 INV.W=72.26 INV.E=72.18
MH–ST T/G=75.03 INV.S=72.31 INV.W=72.24 INV.E=72.15
EX.22.0m–300mmø CONC. STORM @0.45%
MH–ST T/G=75.01 INV.=72.41
8.6m–250mmø STM @1.0%
STMMH 103 T/G=75.01
CB T/G=74.96
CB T/G=74.62
EX.95.3m–300mmø CONC. STORM @0.63%
FOREST STREET
WATERMAIN TO BEND VERTICALLY TO PASS UNDER SANITARY AND STORM WITH MIN 450mm CLEARANCE AS PER CITY OF OTTAWA STD. W25
MH–S T/G=74.77 INV.=72.14
0+000
1
2
EX.43.6m–250mmø CONC. SANITARY @0.75%
EX.300mmø CI WATERMAIN
MH–ST T/G=75.04 INV.S=73.55 INV.N=73.01
MH–S T/G=75.16 INV.=71.81
SANMH201 T/G=75.04
150x300mm TEE WATERMAIN CONNECTION BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION, BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR
V&VB
FH
ANY EXISTING WATERMAIN JOINT TO BE RESTRAINED 3m EACH SIDE OF TEE
Asphalt Entrance
8" (200mm) GAS
EX.300mmø WATERMAIN
EX.225mmø SANITARY
EX.450mmø STORM
VC (UCC)
EXISTING SEWERS AND ENCOUNTERED TO BE CAPPED/GROUTED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY'S SEWER OPERATIONS. CONTRACTOR TO EXCAVATE IN ORDER TO LOCATE AT THE PROPERTY LINE AND ABANDON PRIOR TO SHORING AND EXCAVATING FOR THE BUILDING.
ROAD REINSTATEMENT AS PER CITY STD. R10. TOP LIFT OF ASPHALT TO EXTEND ACROSS ALL ROAD CUTS REQUIRED FOR THE INSTALLATION OF SERVICES AND UTILITIES.
2–200x200mm TEE (STA.0+000) WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION, BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR
PROVIDE VALVE AND VALVE BOX
THRUST BLOCK AND RESTRAINT AS PER CITY OF OTTAWA STDS. W25.3, W25.4, W25.5 AND W25.6 (TYPICAL)
ROAD REINSTATEMENT AS PER CITY STD. R10. TOP LIFT OF ASPHALT TO EXTEND FROM CURBLINE TO CURBLINE AND ACROSS ALL ROAD CUTS REQUIRED FOR THE INSTALLATION OF SERVICES AND UTILITIES.
ROGERS(2015)
BELL
150x150mm TEE WATERMAIN CONNECTION BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION, BACKFILL AND BOULEVARD REINSTATEMENT BY CONTRACTOR
FH
V&VB
MH–S T/G=74.71 INV.=71.58
MH–ST T/G=74.84 INV.=72.68
EX.300mmø CONC. STORM
SITE BENCHMARK
SPIKE IN UTILITY POLE ELEVATION=75.45
ROAD REINSTATEMENT AS PER CITY STD. R10. TOP LIFT OF ASPHALT TO EXTEND ACROSS ALL ROAD CUTS REQUIRED FOR THE INSTALLATION OF SERVICES AND UTILITIES.


KEY PLAN
OTTAWA RIVER
CARLING
MERIVALE
RICHMOND
SITE LOCATION
BASELINE
WOODROFFE
MERIVALE
CLUB
HUNT

## STRUCTURE TABLE

| STRUCTURE NUMBER | TYPE | LID ELEV (m) | INVERT IN (m) and DIA (mm) | | INVERT OUT (m) and DIA (mm) | | STRUCTURE | | | | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SIZE | REFERENCE | FRAME | COVER | |
| STMMH 100 | STORM | 74.01 | 72.23<br>72.23 | (300)<br>(250) | 72.17 | (300) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24.1 | |
| STMMH 101 | STORM | 74.69 | 72.39<br>72.33 | (250)<br>(250) | 72.33 | (250) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24.1 | |
| STMMH 102 | STORM | 75.18 | 72.60 | (250) | 72.54 | (250) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24.1 | |
| STMMH 103 | STORM | 75.01 | 72.45<br>72.41 | (250)<br>(300) | 72.41 | (300) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24.1 | |
| | | | | | | | | | | | |
| SANMH 200 | SANITARY | 75.20 | 72.220<br>72.220 | (250)<br>(250) | 72.160 | (250) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24 | |
| SANMH 201 | SANITARY | 75.04 | 71.920<br>71.970 | (250)<br>(250) | 71.910 | (250) | 1200 DIA | OPSD 701.010 | Ottawa S25 | Ottawa S24 | |

## SEWER TABLE

| STRUCTURE | | TYPE | INVERT ELEV (m) | | NOMINAL DIA. (mm) | LENGTH (m) | Type | Class | Comment |
|---|---|---|---|---|---|---|---|---|---|
| U/S | D/S | | U/S | D/S | | | | | |
| TOWER A | STMH 102 | STORM | 72.610 | 72.600 | 250 | 0.6 | PVC | SDR35 | Insulation required |
| STMH 102 | STMMH 103 | STORM | 72.540 | 72.450 | 250 | 8.6 | PVC | SDR35 | Insulation required |
| TOWER B | STMMH 101 | STORM | 72.410 | 72.390 | 250 | 0.9 | PVC | SDR35 | Insulation required |
| STMMH 101 | STMMH 100 | STORM | 72.390 | 72.290 | 250 | 10.1 | PVC | SDR35 | Insulation required |
| | | | | | | | | | |
| TOWER A | SANMH 200 | SANITARY | 72.340 | 72.220 | 250 | 6.1 | PVC | SDR35 | |
| TOWER B | SANMH 200 | SANITARY | 72.240 | 72.220 | 250 | 1.0 | PVC | SDR35 | |
| SANMH 200 | SANMH 201 | SANITARY | 72.160 | 71.970 | 250 | 9.7 | PVC | SDR35 | |

## WATERMAIN TABLE

| STATION | DESCRIPTION | GROUND ELEVATION (m) | TOP OF WATERMAIN. ELEV (m) | |
|---|---|---|---|---|
| | | | PROPOSED (m) | AS-BUILT (m) |
| 0+000 | 200x300 TEE | 74.70 | 72.8± | |
| | 200x300 TEE | 74.70 | 72.8± | |
| | 200 VALVE & VALVE BOX | 74.70 | 72.8± | |
| 0+000.8 | 45° VERTICAL BEND | 74.72 | 72.80 | |
| 0+002.0 | 45° VERTICAL BEND | 74.75 | 71.63 | |
| 0+002.3 | CROSSING SANITARY SEWER | 74.76 | 71.63 | |
| 0+002.5 | 45° VERTICAL BEND | 74.76 | 71.63 | |
| 0+003.0 | 45° VERTICAL BEND | 74.76 | 72.17 | |
| 0+004.4 | CROSSING STORM SEWER | 74.76 | 72.24 | |
| 0+009 | 200 VALVE AND VALVE BOX | 74.87 | 72.48 | |
| | 200 VALVE AND VALVE CHAMBER (W3) | 74.87 | 72.48 | |
| 0+09.8 | CAP - FROM BUILDING | 74.92 | 72.52 | |

## WATERMAIN / SEWER CROSSING TABLE

| LOCATION | FINISHED GRADE (m) | SANITARY SEWER | | | STORM SEWER | | | WATERMAIN | | | CLEARANCES (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INV ELEV (m) | DIA (mm) | OBV ELEV (m) | INV ELEV (m) | DIA (mm) | OBV ELEV (m) | INV ELEV (m) | DIA (mm) | OBV ELEV (m) | |
| 1 | 74.96 | 72.13 | 250 | 72.38 | | | | 71.48 | 200 | 71.63 | 500 (WATER SERVICE BELOW SEWER AS PER CITY STD. W38) |
| 2 | 74.65 | | | | 72.74 | 300 | 73.04 | 72.04 | 200 | 72.24 | 500 (WATER SERVICE BELOW SEWER AS PER CITY STD. W38) |

## STORM CATCHBASIN STRUCTURE TABLE

| CB# | TOP OF GRATE ELV. | INVERTS | REFERENCE | FRAME | COVER |
|---|---|---|---|---|---|
| CB1 | 74.6 | NW=72.45 (250mm)<br>SW=72.39 (250mm) | OPSD 705.010 | S19 | S19 |
| CB2 | 75.52 | SW=72.91 (250mm)<br>N=72.87 (250mm) | OPSD 705.010 | S19 | S19 |
| CBE1 | 74.76 | SE=72.64 (250mm) | S31 | S31 | S31 |
| CBE2 | 74.88 | W=72.23 (250mm) | S31 | S31 | S31 |
| CBE3 | 75.17 | NE=73.31 (250mm) | S31 | S31 | S31 |
| CBT1 | 75.40 | SW=73.06 (250mm)<br>NE=73.02 (250mm) | S30 | S30 | S30 |
| CBT2 | 75.46 | SW=73.22 (250mm)<br>NE=73.18 (250mm) | S30 | S30 | S30 |

CAUTION
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.

| REV | REVISION DESCRIPTION | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |

| REV | REVISION DESCRIPTION | DATE | BY | APPD |
|---|---|---|---|---|
| 3 | REVISED PER CITY COMMENTS | 27/05/21 | AC | BMT |
| 2 | ISSUED FOR REZONING APPLICATION | 27/01/20 | MZG | BMT |
| 1 | ISSUED FOR REVIEW | 12/09/19 | SAB | BMT |

SCALE
0 2m 4m 10m
HORIZONTAL 1:250

NORTH

DESIGNED BY

REVIEWED BY
LICENSED PROFESSIONAL ENGINEER
B. M. THOMAS
2021-05-27
PROVINCE OF ONTARIO

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APPROVED BMT

PROJECT
11061917 CANADA INC
RESIDENTIAL DEVELOPMENT
365 FOREST STREET
OTTAWA, ONTARIO.

TITLE
SITE SERVICING PLAN

PROJECT No. OTT–252570–A0
SURVEY AOV
DATE JAN 2020
DRAWING No. C100

DO7-12-20-0041

#18191

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