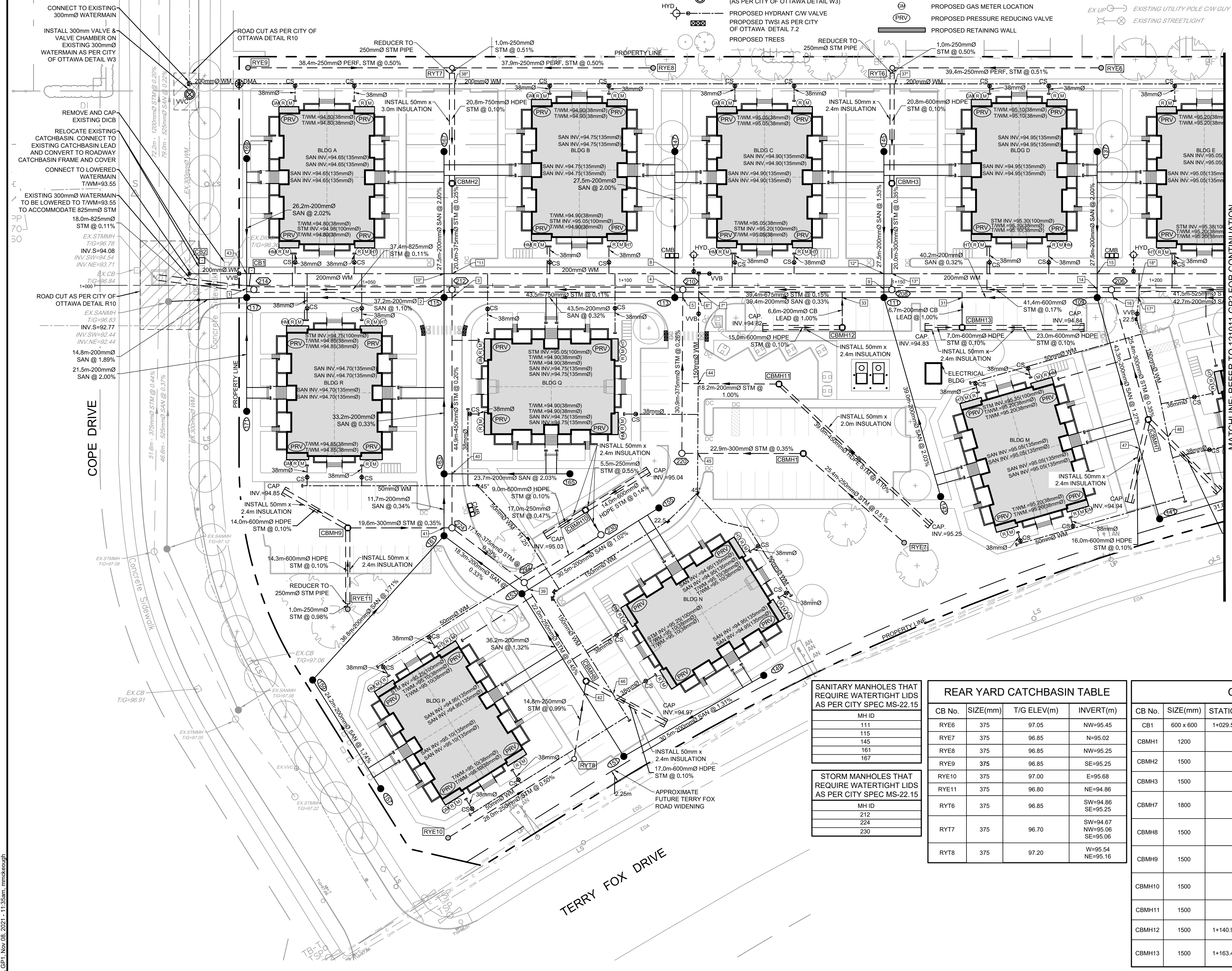
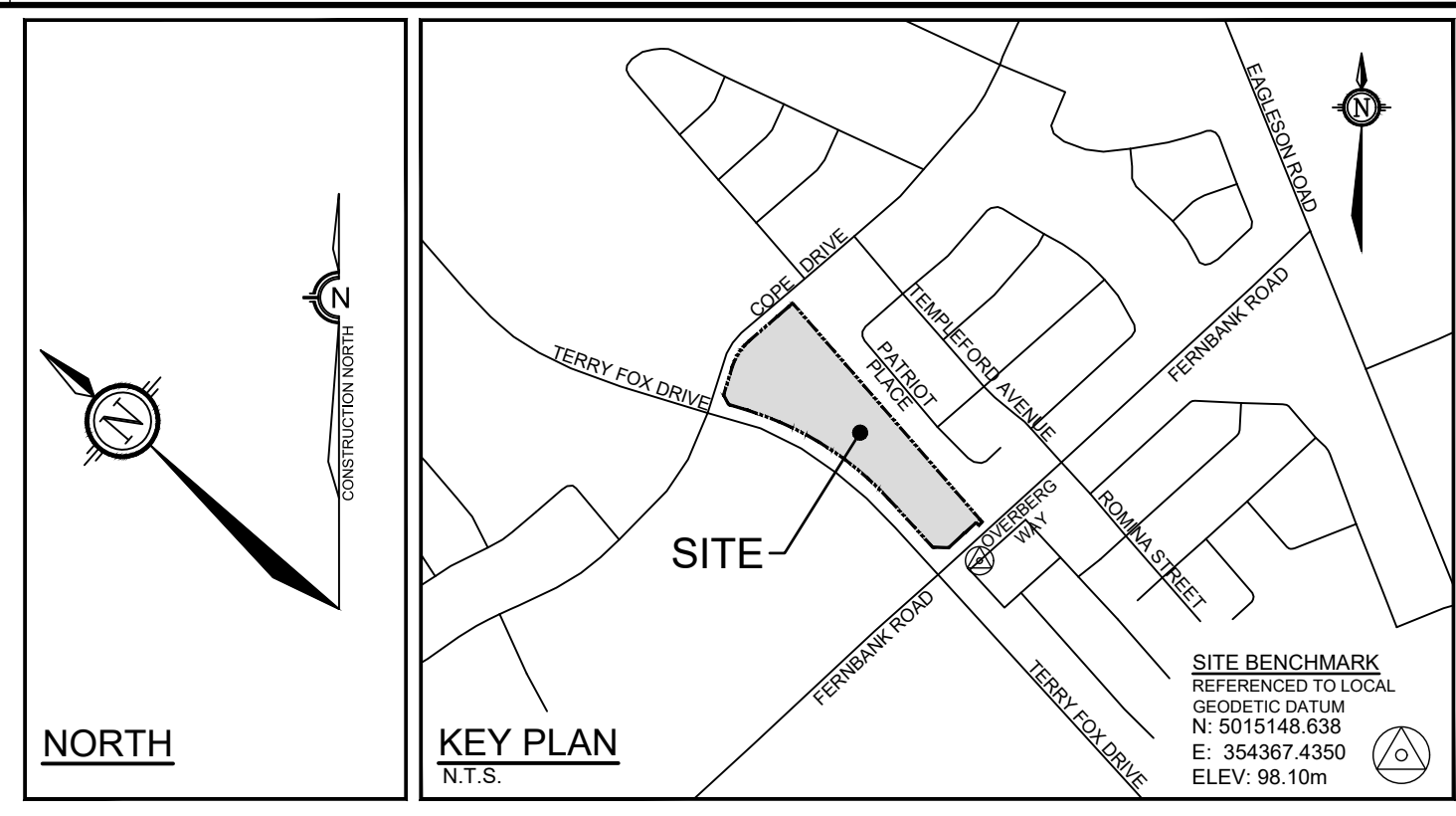


LEGEND

- SITE BOUNDARY
- PROPOSED STORM MANHOLE & SEWER
- PROPOSED SANITARY MANHOLE & SEWER
- PROPOSED WATERMAIN
- PROPOSED VALVE & VALVE BOX
- PROPOSED CURB STOP LOCATION
- PROPOSED WATER CHAMBER (AS PER CITY OF OTTAWA DETAIL W3)
- PROPOSED VALVE & VALVE CHAMBER (AS PER CITY OF OTTAWA DETAIL W3)
- PROPOSED HYDRANT CW VALVE
- PROPOSED TREES
- PROPOSED CATCHBASIN
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED REAR YARD ELBOW
- PROPOSED REAR YARD TEE
- PROPOSED HYDRO METER LOCATION
- PROPOSED HYDRO STEP DOWN TRANSFORMER LOCATION
- PROPOSED WATER METER LOCATION
- PROPOSED REMOTE WATER METER LOCATION
- PROPOSED GAS METER LOCATION
- PROPOSED RETAINING WALL



PIPE CROSSING TABLE

CROSSING	WATERMAIN	SANITARY	STORM
1		INV = 93.14 OVB = 93.34	INV = 94.10 OVB = 95.04
2		INV = 93.55 OVB = 93.75	INV = 94.13 OVB = 95.07
3		INV = 93.46 OVB = 93.66	INV = 94.53 OVB = 95.05
5		INV = 93.69 OVB = 93.89	INV = 94.26 OVB = 95.12
6*	INV = 92.96 OVB = 93.11	INV = 93.61 OVB = 93.81	INV = 94.33 OVB = 95.11
7*	INV = 92.96 OVB = 93.11	INV = 93.75 OVB = 93.95	INV = 94.39 OVB = 95.17
8	INV = 92.76 OVB = 92.96	INV = 93.81 OVB = 94.01	INV = 94.39 OVB = 95.17
10*	INV = 92.76 OVB = 92.96	INV = 93.81 OVB = 94.01	INV = 94.60 OVB = 95.08
11*	INV = 92.76 OVB = 92.96	INV = 93.81 OVB = 94.01	INV = 94.60 OVB = 95.08
12*	INV = 92.96 OVB = 93.16	INV = 93.86 OVB = 94.06	INV = 94.77 OVB = 95.14
13*	INV = 92.96 OVB = 93.16	INV = 93.95 OVB = 94.15	INV = 94.53 OVB = 95.23
14	INV = 94.68 OVB = 94.88	INV = 94.01 OVB = 94.21	INV = 94.85 OVB = 95.21
15	INV = 94.68 OVB = 94.88	INV = 93.87 OVB = 94.07	INV = 94.84 OVB = 95.21
16	INV = 93.24 OVB = 93.39	INV = 93.89 OVB = 94.09	INV = 94.61 OVB = 95.22
17*	INV = 93.24 OVB = 93.39	INV = 93.78 OVB = 93.98	INV = 94.76 OVB = 95.15
18*	INV = 93.24 OVB = 93.39	INV = 93.70 OVB = 93.90	INV = 94.75 OVB = 95.12
31	INV = 94.15 OVB = 94.35	INV = 94.04 OVB = 94.24	INV = 94.85 OVB = 95.11
33	INV = 94.15 OVB = 94.35	INV = 93.92 OVB = 94.12	INV = 94.85 OVB = 95.12
37*	INV = 94.15 OVB = 94.35	INV = 94.04 OVB = 94.24	INV = 94.85 OVB = 95.11
38*	INV = 94.15 OVB = 94.35	INV = 93.92 OVB = 94.12	INV = 94.85 OVB = 95.12
39	INV = 94.04 OVB = 94.24	INV = 94.04 OVB = 94.24	INV = 94.85 OVB = 95.11
40	INV = 94.14 OVB = 94.29	INV = 93.92 OVB = 94.12	INV = 94.59 OVB = 95.12
41	INV = 94.27 OVB = 94.47	INV = 93.66 OVB = 93.86	INV = 94.77 OVB = 95.14
42	INV = 94.27 OVB = 94.47	INV = 94.08 OVB = 94.28	INV = 95.03 OVB = 95.28
43	INV = 94.27 OVB = 94.47	INV = 93.20 OVB = 93.40	INV = 94.85 OVB = 95.12
44	INV = 94.40 OVB = 94.55	INV = 94.14 OVB = 94.29	INV = 95.05 OVB = 95.25
45	INV = 94.40 OVB = 94.55	INV = 94.29 OVB = 94.49	INV = 94.73 OVB = 95.09
46	INV = 94.31 OVB = 94.46	INV = 94.08 OVB = 94.28	INV = 94.96 OVB = 95.62
47	INV = 94.28 OVB = 94.43	INV = 94.31 OVB = 94.51	INV = 94.93 OVB = 95.53
48	INV = 94.28 OVB = 94.43	INV = 94.31 OVB = 94.51	INV = 94.93 OVB = 95.53

* WATERMAIN CROSSING AS PER W25 & W25.2 PROVIDE THERMAL INSULATION AS PER W22

SAN MANHOLE TABLE

MANHOLE ID	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)
109	1200	1+188.95	97.23	SE=93.86 NW=93.86 NE=93.92 SW=93.92
111	1200	1+148.74	96.99	SE=93.73 NW=93.73 SW=93.70 NE=93.79
113	1200	1+109.33	97.06	SE=93.60 NW=93.60 NE=93.66
115	1200	1+065.84	96.98	SE=93.46 NW=93.46 SW=93.52 NE=93.52
117	1200	1+028.64	96.90	SE=93.05 NW=93.05 NE=93.11 SW=93.60
137	1200		97.54	SW=94.47
141	1200		97.44	SE=94.53 NE=94.47
143	1200		97.45	NE=94.58
145	1200		96.95	SW=94.21
147	1200		97.28	SW=94.21
149	1200		97.57	W=94.73
151	1200		97.40	E=94.33 N=94.27
153	1200		97.12	S=93.79 E=93.82 N=93.76
155	1200		97.20	W=94.13
157	1200		97.62	N=94.81
159	1200		97.35	S=94.39 E=94.33
161	1200		96.96	W=93.70 NE=93.67 S=93.70
163	1200		97.02	SW=93.63 SE=93.69 NE=93.63
165	1200		97.30	NW=94.17
167	1200		96.78	SW=94.07
169	1200		97.09	SW=93.64
171	1200		97.17	NE=94.03

SANITARY MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15

MH ID	SIZE(mm)	T/G ELEV(m)	INVERT(m)
111	1200	96.85	NW=95.45
115	1200	96.85	NW=95.02
145	1200	96.85	NW=95.25
161	1200	96.85	SE=95.25
167	1200	96.85	SE=95.25

STORM MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15

MH ID	SIZE(mm)	T/G ELEV(m)	INVERT(m)
212	1500	96.85	SW=94.86 SE=95.25
224	1500	96.85	SW=94.67 NW=95.08 SE=95.06
230	1500	96.85	W=95.54 NE=95.16

REAR YARD CATCHBASIN TABLE

CB No.	SIZE(mm)	T/G ELEV(m)	INVERT(m)
RYE6	375	97.05	NW=95.45
RYE7	375	96.85	NW=95.02
RYE8	375	96.85	NW=95.25
RYE9	375	96.85	SE=95.25
RYE10	375	97.00	E=95.68
RYE11	375	96.80	NE=94.86
RYT6	375	96.85	SW=94.86 SE=95.25
RYT7	375	96.70	SW=94.67 NW=95.08 SE=95.06
RYT8	375	97.20	W=95.54 NE=95.16

CATCHBASIN TABLE

CB No.	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)	ICD DIA.(mm)
CB1	600 x 600	1+029.57	96.88	SW=95.27	83mm PLATE
CBMH1	1200		96.85	S=94.89 NW=94.86	83mm PLATE
CBMH2	1500		96.70	SW=94.64 NE=94.64	105mm PLATE
CBMH3	1500		96.85	SW=94.83 NE=94.83	80mm PLATE
CBMH7	1800		96.95	NE=94.92 SW=94.92 S=94.92	114mm PLATE
CBMH8	1500		96.85	N=94.95 SW=95.01 S=94.95	TEMPEST LMF VORTEX 92
CBMH9	1500		96.80	SE=94.83 SW=94.83 N=94.83	83mm PLATE
CBMH10	1500		96.85	S=95.02 E=95.02 W=95.02	87mm PLATE
CBMH11	1500		96.80	NW=95.21 S=95.21	80mm PLATE
CBMH12	1500	1+140.90	96.83	NE=94.81 NW=94.81	TEMPEST LMF VORTEX 73
CBMH13	1500	1+163.49	96.83	NE=94.82 NW=94.82 SE=94.82	TEMPEST LMF VORTEX 75

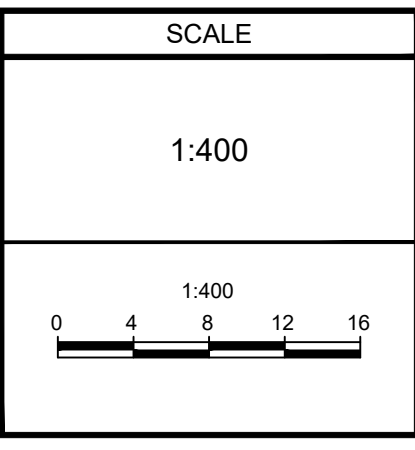
STM MANHOLE TABLE

MANHOLE ID	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)
206	1200	1+191.63	97.26	SE=94.60 SW=94.83 NW=94.53
208	1500	1+150.24	97.03	SE=94.46 NE=94.76 NW=94.39
210	1500	1+110.84	97.09	SE=94.33 SW=94.63 NW=94.26
212	1500	1+067.34	96.94	SE=94.21 SW=94.52 NE=94.59 NW=94.14
214	1500	1+029.99	96.91	NW=94.10 SE=94.10
220	1200		97.16	SE=94.78 NE=94.71
222	1200		97.12	N=94.73 S=94.85 E=94.85
224	1200		96.97	S=94.68 NE=94.61 NW=94.76
230	1200		97.03	N=94.99 W=94.93

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.

**PRELIMINARY
NOT FOR
CONSTRUCTION**

No.	REVISION	DATE	BY
2.	REVISED PER CITY COMMENTS	NOV 5/21	DDB
1.	ISSUED FOR CITY OF OTTAWA REVIEW	JUN 2/21	DDB



DESIGN

DDB

CHECKED

MSP

DRAWN

MTM

CHECKED

DDB

APPROVED

MSP

FOR REVIEW ONLY

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CITY OF OTTAWA
5331 FERNBANK ROAD
FERNBANK ZENS

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No.: 121011-00
REV #2
DRAWING No.: 121011-GP1
#18539

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D07-12-21-0080