INLET CONTROL DEVICE DATA TABLE - CB 1

DESIGN EVENT	ICD TYPE	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m^3)	AVAILABLE STORAGE
1:2 YR	CIRCULAR PLUG c/w 165mmØ ORIFICE @ OUTLET PIPE INVERT	250mmØ PVC	65.9	1.24	66.47	0.5	45.0 m^3
1:5 YR			74.1	1.61	66.84	5.3	
1:100 YR			76.3	1.72	66.95	42.9	

PROPOSED BUILDING 'A' WATER SERVICE TABLE

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
1+00	66.87	64.35	200 x 200 x 150 SERVICE TEE (0+029.0)
1+10	66.90	64.50	- - -
1+17.2	67.08	64.68	150mmØ VALVE & VALVE BOX
1+24.3	67.33	64.70	CAP 1.0m FROM BUILDING FACE

PIPE CROSSING TABLE

CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE	SURFACE ELEVATION
A	200mmØ SAN OBV=62.94	1050mmØ STM INV=63.50	± 0.5m	66.08 m
B	300mmØ T/WM=64.05	300mmØ STM INV=64.38	± 0.3m	66.10 m
C	200mmØ SAN OBV=62.98	300mmØ US/WM=63.70	± 0.7m	66.10 m
D	200mmØ SAN OBV=63.34	250mmØ STM INV=64.78	± 1.4m	66.91 m
E	450mmØ STM OBV=65.43	250mmØ STM INV=65.94	± 0.5m	67.00 m
F	200mmØ SAN OBV=64.56	450mmØ STM INV=64.97	± 0.4m	67.03 m
G	300mmØ STM OBV=65.33	250mmØ STM INV=65.46	± 0.13m	67.00 m
H	200mmØ SAN OBV=64.28	300mmØ STM INV=65.02	± 0.7m	67.18 m

Existing Conc. Block/Metal Sided Building (Conc. Block Noted)

✱ PIPE CROSSINGS WITH WATERMAINS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND W25.2 TO AVOID CONFLICTS.

CONNECT TO EXISTING 1050mmØ STORM SEWER FROM ABOVE PER CITY STANDARD S11.1. EXISTING INVERT=63.50±. PROPOSED 300mmØ STORM INVERT AT CONNECTION=64.33±. 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.

CONNECT TO EXISTING 375mmØ SANITARY SEWER FROM ABOVE PER CITY STANDARD S11.1. EXISTING INVERT=62.77±. PROPOSED 200mmØ SANITARY INVERT AT CONNECTION=62.69±. 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.

200mmØ TEE CONNECTION TO EXISTING 300mmØ WATERMAIN BY CITY OF OTTAWA FORCES. EXCAVATION, BACKFILL, CHLORINATION AND REINSTATEMENT BY CONTRACTOR. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD R10.

REMOVE THE EXISTING ON-SITE WATER SERVICE. BLANK EXISTING SERVICE AT THE MAIN PER CITY OF OTTAWA STANDARDS.

REMOVE EXISTING ON-SITE WATER SERVICES. BLANK ALL EXISTING WATER SERVICES AT THE MAIN. (TYPICAL)

CAP ALL EXISTING SANITARY AND STORM BUILDING SERVICES AT THE PROPERTY LINE. ABANDON EXISTING SERVICES WITHIN THE R.O.W. PER STANDARD CITY OF OTTAWA DETAIL S11.4. (TYPICAL)

PROPOSED BUILDING 'A' FFE=67.50 USF=66.50

INTERNAL LOADING DOCK DRAINS TO BE CONNECTED TO THE SANITARY BUILDING SERVICE. REFER TO THE MECHANICAL PLANS FOR DETAILS.

REMOVE EXISTING ON-SITE GAS, HYDRO AND COMMUNICATIONS LINES. COORDINATE SHUT-DOWN AND REMOVAL OF EXISTING INFRASTRUCTURE WITH THE APPROPRIATE UTILITY. (TYPICAL)

CAP AND ABANDON EXISTING 375mmØ STORM SEWER TO THE EAST PER CITY STANDARD S11.4. REMOVE PORTION OF EXISTING STORM SEWER AND STRUCTURE TO THE WEST. MAINTAIN AND PROTECT EXISTING AREA OF RCC AS REQUIRED IN THE FIELD.

PROPOSED 150mmØ HYDRANT LEAD TO CROSS BELOW ADJACENT SANITARY AND BOTH STORM SERVICES WITH A MINIMUM OF 0.5m CLEARANCE IN ACCORDANCE WITH CITY STANDARD DETAIL W25. T/WM=63.82 AT SANITARY CROSSING. THE MINIMUM CLEARANCE TO THE UNDERSIDE OF THE STORM SEWERS WILL BE APPROXIMATELY 1.2m. PROVIDE VERTICAL BENDS ON HYDRANT LEAD AS REQUIRED.

CONNECT TO EX.STMMH WITH NEW 300mmØ STORM SEWER FROM THE NORTH. PROPOSED 300mmØ INVERT=64.92m. MAINTAIN AND PROTECT EXISTING STORM SEWERS TO THE SOUTH AND WEST. REINSTATE THE EXISTING MANHOLE STRUCTURE AS REQUIRED.

PROVIDE CUSTOM 4.0m LONG KEY TO OPERATE REAR FIRE HYDRANT VALVE AND BUILDING 'B' SERVICE VALVE AT APPROXIMATELY 3.6m DEPTH. KEY TO BE KEPT ON-SITE AND AVAILABLE AT ALL TIMES FOR EMERGENCY OPERATION OF THE VALVES.

REMOVE AND REPLACE EXISTING STRUCTURE WITH NEW 1500mmØ CBMH 1. ON EXISTING 750mmØ HDPE STORM SEWER. EXISTING SEWER INVERT=64.55m±. MAINTAIN AND PROTECT EXISTING 750mmØ SEWER TO THE SOUTH-WEST. CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

REPLACE EX. STRUCTURE WITH 1500mmØ CBMH1

CONNECT TO EX.STMMH WITH NEW 300mmØ STORM SEWER FROM THE WEST. REMOVE THE EXISTING 375mmØ STORM SEWER TO THE NORTH-WEST. PROPOSED 300mmØ INVERT=64.97m. MAINTAIN AND PROTECT EXISTING STORM SEWERS TO THE NORTH AND EAST. REINSTATE THE EXISTING MANHOLE STRUCTURE AS REQUIRED IN THE FIELD.

INSTALL NEW 1500mmØ 'DOGHOUSE' STYLE MANHOLE ON EXISTING 750mmØ HDPE STORM SEWER. EXISTING SEWER INVERT=64.36m±. PROPOSED 450mmØ INVERT=64.66m±. MAINTAIN AND PROTECT EXISTING 750mmØ SEWER TO THE EAST. PLUG AND ABANDON EXISTING 750mmØ SEWER TO THE WEST. CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

CONNECT TO EX.STMMH A WITH NEW 375mmØ STORM SEWER FROM THE EAST. PROPOSED 375mmØ INVERT=64.31m. MAINTAIN AND PROTECT EXISTING STORM SEWERS TO THE NORTH AND WEST. REINSTATE THE EXISTING MANHOLE STRUCTURE AS REQUIRED IN THE FIELD.

CONNECT TO EX.STMMH B WITH NEW 300mmØ STORM SEWER FROM THE SOUTHEAST. PROPOSED 300mmØ INVERT=64.43m. MAINTAIN AND PROTECT EXISTING STORM SEWER TO THE WEST. CAP AND REMOVE PORTION OF EXISTING 750mmØ SEWER TO THE EAST. REINSTATE THE EXISTING MANHOLE STRUCTURE AS REQUIRED IN THE FIELD.

CONNECT TO EX.STMMH A WITH NEW 375mmØ STORM SEWER FROM THE EAST. PROPOSED STORM SEWER INVERT AT OUTLET MANHOLE CONNECTION=64.12m±. MAINTAIN AND PROTECT EXISTING 450mmØ SEWER TO THE EAST AND WEST. REINSTATE THE EXISTING MANHOLE STRUCTURE AS REQUIRED IN THE FIELD. CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

MAINTAIN AND PROTECT EXISTING 450mmØ CSP STORM SEWER DURING ALL PHASES OF CONSTRUCTION. (TYPICAL)

REPLACE THE EXISTING OGS WITH NEW VORTECH'S 5000 SWM QUALITY CONTROL UNIT

SNOW STORAGE AREA

PROPOSED BUILDING 'B' FFE=68.70 USF=66.75

DEPOSITION TANKS

REFER TO PLAN 119007-NDT FOR NOTES, DETAILS AND TABLES. ALL NOTES, DETAILS AND SPECIFICATIONS ARE TO MEET THE CURRENT CITY AND PROVINCIAL STANDARDS.

INLET CONTROL DEVICE DATA TABLE - EX. STM MH 'B'

DESIGN EVENT	ICD TYPE	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	SURFACE VOLUME	AVAILABLE STORAGE
1:2 YR	CIRCULAR PLUG c/w 210mmØ ORIFICE @ OUTLET PIPE INVERT	300mmØ PVC	112.5	2.19	66.77	-	315 m^3
1:5 YR			117.6	2.44	67.02	84.5 m^3	
1:100 YR			120.0	2.53	67.11	315 m^3	

INLET CONTROL DEVICE DATA TABLE - EX. STM MH 'A'

DESIGN EVENT	ICD TYPE	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	SURFACE VOLUME	AVAILABLE STORAGE
1:2 YR	SLIDE-IN-PLATE ICD c/w 127mmØ ORIFICE @ OUTLET PIPE INVERT	375mmØ PVC	49.4	2.30	66.76	-	583 m^3
1:5 YR			61.9	3.51	67.97	28 m^3	
1:100 YR			64.8	3.84	68.30	196 m^3	

PROPOSED WATERMAIN TABLE

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+000	66.08±	64.05± ✱	200mmØ TEE CONNECTION TO EX. 300mmØ WM
0+004.0	66.20	63.90	CROSS BELOW EX.100mmØ GAS(±1.4m CLEARANCE)
0+005.8	66.25	63.85	PROPERTY LINE / 200mmØ VALVE & VALVE BOX
0+025	66.92	64.30	- - -
0+029.0	66.93	64.35	200 x 200 x 150 SERVICE TEE (1+00)
0+030.5	66.91	64.35	CROSS ABOVE 200mmØ SAN (±0.5m CLEARANCE)
0+032.0	66.88	64.35	CROSS BELOW 250mmØ STM (±0.5m CLEARANCE)
0+045.5	66.85	64.45	CROSS BELOW 250mmØ STM (±0.5m CLEARANCE)
0+084.1	67.17	64.65	200 x 200 x 150 HYDRANT TEE
0+100	67.20	64.65	- - -
0+121.7	67.25	64.65	CROSS BELOW 300mmØ STM (±0.4m CLEARANCE)
0+150	67.56	64.65	- - -
0+169.2	68.35	64.65	200 x 200 x 200 HYDRANT TEE
0+171.2	68.32	64.65	200 x 150 REDUCER
0+173.0	68.30	64.65	150mmØ VALVE & VALVE BOX
0+179.1	68.32	64.65	CROSS BELOW 450mmØ STM (±0.3m CLEARANCE)
0+200	68.62	64.95	- - -
0+204.0	68.68	65.20	CAP 1.0m FROM BUILDING FACE

✱ TEE CONNECTION TO EXISTING 300mmØ WATERMAIN. EXACT ELEVATIONS TO BE FIELD DETERMINED.

✱✱ PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAILS W22 IN SHALLOW TRENCHES AND/OR W23 ADJACENT TO OPEN STRUCTURES.

✱✱✱ PIPE CROSSINGS WITH WATERMAINS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND W25.2 TO AVOID CONFLICTS.

REFER TO PLAN 119007-OGP FOR THE OVERALL PROPERTY LIMITS

NORTH

KEY PLAN N.T.S.

SITE

LEGEND

- SAN MH 1 — PROPOSED SANITARY MH & SEWER (WT/I=WATERTIGHT LID)
- CBMH 3 — PROPOSED CATCHBASIN MANHOLE & SEWER INCLUDING RADIAL SUBDRAINS (PER GEOTECHNICAL REPORT)
- STM MH 1 — PROPOSED STORM MANHOLE & SEWER
- CB 2 — PROPOSED CATCHBASIN AND LEAD INCLUDING RADIAL SUBDRAINS (PER GEOTECHNICAL REPORT)
- HYD — VB — PROPOSED HYDRANT c/w VALVE & VALVE BOX
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- 200mmØ — PROPOSED WATERMAIN AND DIAMETER
- VC — PROPOSED VALVE & VALVE CHAMBER (PER CITY STD W3)
- SP — PROPOSED STANDPOST
- BEND — PROPOSED BEND AND THRUSTBLOCK 11.25°, 22.5°, 45° or TEE
- PROPOSED CAP
- ICD — PROPOSED INLET CONTROL DEVICE
- RD — CONTROLLED FLOW ROOF DRAIN
- THERMAL INSULATION FOR SHALLOW SEWERS
- PROPOSED BUILDING ENTRANCE
- C.S. — PROPOSED CLAY SEAL SEEPAGE BARRIER (PER GEOTECHNICAL REPORT)
- M / IM — PROPOSED WATER METER AND REMOTE METER
- PROPOSED TRANSFORMER
- GM — PROPOSED GAS METER (REFER TO MECHANICAL PLANS)
- PROPOSED STORMWATER QUALITY TREATMENT UNITS (VORTECHS AND CDS MODELS)
- PROPOSED RETAINING WALL
- EXISTING CONCRETE CURB
- SANMH — EXISTING SANITARY MANHOLE AND SEWER
- CBMH — EXISTING CATCHBASIN MANHOLE
- STMMH — EXISTING STORM MANHOLE AND SEWER
- CB — EXISTING CATCHBASIN C/W CATCHBASIN LEAD
- HYD — EXISTING HYDRANT
- EX UP — EXISTING UTILITY POLE C/W GUY WIRES
- 300mmØ WM — EXISTING WATERMAIN
- HYD — VB — EXISTING HYDRANT C/W VALVE & LEAD
- LS — EXISTING LIGHT STANDARD
- X — X — EXISTING FENCE
- OHW — OHW — EXISTING OVERHEAD UTILITY WIRES

NOTE:
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.

CLIENT CONTACT INFORMATION
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cbrisebois@aim-global.com

No.	REVISION	DATE	BY
11	REVISED REAR WORK YARD	AUG 24/22	FST
10	ISSUED FOR PERMIT REVISION	AUG 23/21	FST
9	ISSUED FOR CONSTRUCTION	JUL 7/21	FST
8	ISSUED FOR ADDENDUM 02	JUL 27/20	FST
7	ISSUED FOR TENDER	JUL 7/20	FST
6	ISSUED TO CITY OF OTTAWA AND MECP	JUN 30/20	FST
5	ISSUED FOR PERMIT	JUN 26/20	FST
4	REVISED PER CITY COMMENTS / UPDATED SITE PLAN	MAY 29/20	FST
3	RE-ISSUED FOR SITE PLAN APPROVAL	MAR 26/20	FST
2	REVISED PER CITY COMMENTS / UPDATED SITE PLAN	JAN 31/20	FST
1	ISSUED FOR SITE PLAN APPROVAL	JUL 18/19	FST

SCALE 1:500 (1:500 0 5 10 15 20)

DESIGN SM | CHECKED FST | DRAWN SM / BF | CHECKED SM / FST | APPROVED FST

F.S. THAUVETTE 100041399 AUG. 14, 2020 — LICENSED PROFESSIONAL ENGINEER — PROVINCE OF ONTARIO

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LOCATION
CITY OF OTTAWA
2555 SHEFFIELD ROAD

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 119007
REV # 11
DRAWING No. 119007-GP

D07-12-19-0124

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