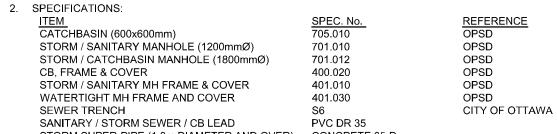
# **GENERAL NOTES:**

# 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS

- 2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON
- 3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- 4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS
- 5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION
- AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES ALL CURRENT VERSIONS AND 'AS AMENDED'. 6. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC. 9. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT (NO. PG4811-1, REV. 1, DATED MAY 31, 2021). PREPARED BY
- PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- 10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS
- 11. REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2020-059) PREPARED BY
- 12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS
- 13. PROVIDE LINE/PARKING PAINTING.
- 14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A SERVICING PLAN OF 119171-GP INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THE SERVICING PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

## **SEWER NOTES:**

- 1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'.



STANDARD DETAIL S18, AS INDICATED ON THE PLAN 119171-GP.

- STORM SUPER-PIPE (1.0m DIAMETER AND OVER) CONCRETE 65-D 3. THE WEEPING TILE SERVICE SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION DEVICE AS PER THE CITY OF OTTAWA
- 4. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH HI-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- 5. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%. 6. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM
- DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED. 7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED
- 8. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- 9. TYPICAL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS UNLESS OTHERWISE INDICATED. 10. ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE
- TO HAVE 600mm SUMPS.
- 11. ALL WEEPING TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET
- 12. THE CONTRACTOR IS TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT, UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS &

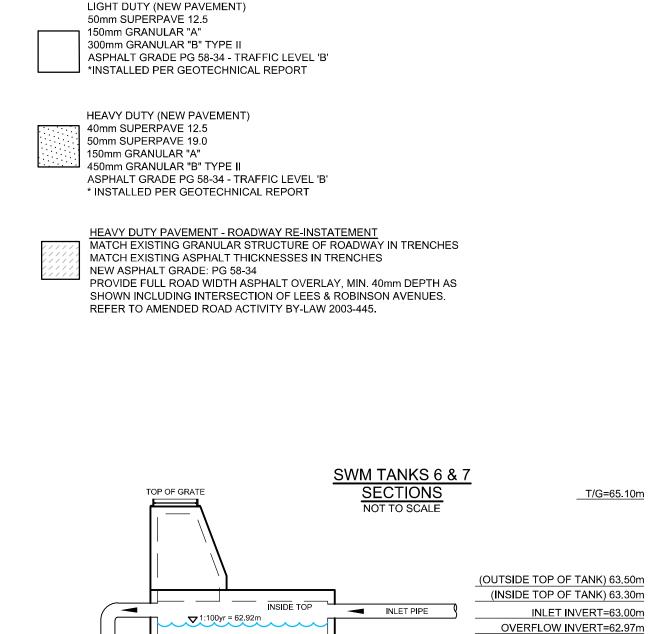
## **GRADING NOTES:**

- 1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER
- EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND
- INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS. 3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE

MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

- 4. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST
- 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- 5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
- 6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED
- 7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
- 8. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA
- 9. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- 10. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN

# PAVEMENT STRUCTURES



**▽** 1:5yr = 61.77m

OUTLET PIPE

WATERMAINS, SEWERS AND OTHER

THE POSITION OF ALL POLE LINES, CONDUITS.

UNDERGROUND AND OVERGROUND UTILITIES AND

THE CONTRACT DRAWINGS. AND WHERE SHOWN.

UTILITIES AND STRUCTURES IS NOT GUARANTEED

BEFORE STARTING WORK, DETERMINE THE EXACT

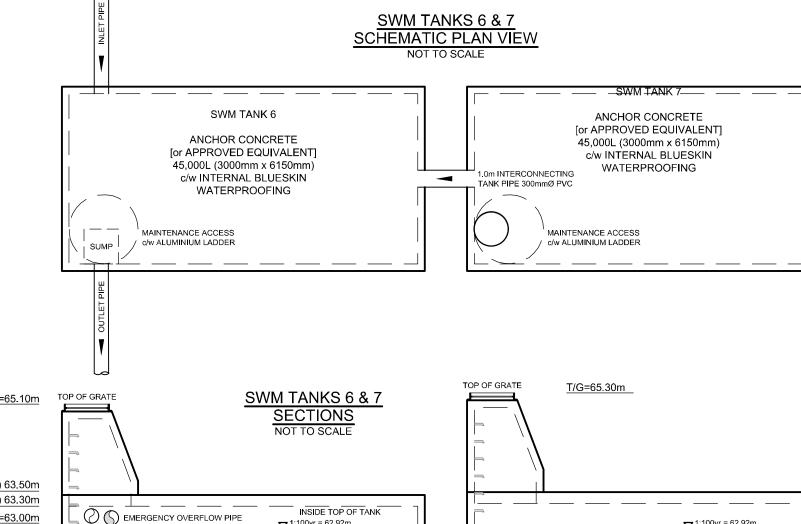
STRUCTURES AND ASSUME ALL LIABILITY FOR

STRUCTURES IS NOT NECESSARILY SHOWN ON

THE ACCURACY OF THE POSITION OF SUCH

LOCATION OF ALL SUCH UTILITIES AND

DAMAGE TO THEM.



▼1:100yr = 62.92m

OUTLET PIPE INSIDE BOTTOM OF TANK \_\_\_\_

1:5yr = 61.77m

# EROSION AND SEDIMENT CONTROL NOTES

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE. DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY

1. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION, THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND

SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN. 2. EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987). THE CONTRACTOR

SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS. 3. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER BAGS WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE

CONSTRUCTION AREA (WHERE APPLICABLE). THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE. 4. TO LIMIT EROSION: MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.

5. FOR MATERIAL STOCKPILING: MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME; APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14

6. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER. 7. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY

STORM SEWER SYSTEM, APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE

IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY 8. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE. DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY

9. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.

AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

W25

W25.2

10. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES. AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS

# WATERMAIN NOTES:

- 1. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN BY CITY OF OTTAWA FORCES. CHLORINATION OF THE
- WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA FORCES. SPECIFICATIONS: ITEM WATERMAIN TRENCHING HYDRANT INSTALLATION CITY OF OTTAWA THERMAL INSULATION IN SHALLOW TRENCHES CITY OF OTTAWA THERMAL INSULATION AT OPEN STRUCTURES CITY OF OTTAWA VALVE BOX ASSEMBLY CITY OF OTTAWA W24
- DISTRICT METERING CHAMBER W3.3

WATERMAIN CROSSING BELOW SEWER

WATERMAIN CROSSING OVER SEWER

- WATERMAIN MATERIAL PVC DR 18 3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- 4. PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, WHERE POSSIBLE UNLESS OTHERWISE INDICATED.

CITY OF OTTAWA

CITY OF OTTAWA

CITY OF OTTAWA

5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED

# **Erosion and Sediment Control Responsibilities:**

				During Construction			After Construction Prior to Final Acceptance		After Final Acceptance
	ESC Measure	Symbol	Specification	Installation Responsibility	Inspection/Maintenance Responsibility	Inspection Frequency	Approval to Remove	Removal Responsibility	Inspection/Maintenance Responsibility
Temporary Measures	Silt Fence (Light Duty)		OPSD 219.110	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Filter Bags	Location as Indicated in ESC Note #3	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Mud Mat	ММ	Drawing Details	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Dust Control	Location as Required Around Site	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Stabilized Material Stockpiling	Location as Required by Contractor	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Sediment Basin (for flows being pumped out of excavations)	Location as Required by Contractor		Developer's Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor	N/A

CRITICAL SEWER PIPE CROSSING TABLE					
CROSSING LOWER PIPE		HIGHER PIPE	CLEARANCE	SURFACE ELEVATION	
(A)	375mmØ STM OBV=60.03	250mmØ SAN INV=61.51	± 1.5m	64.58 m	
B	300mmØ STM OBV=60.86	200mmØ SAN INV=61.87	± 1.0m	64.93 m	
©	1050mmØ STM OBV=61.05	150mmØ U/S WM=61.45	± 0.3m	63.67 m	
0	250mmØ SAN OBV=60.95	150mmØ U/S WM=61.45	± 0.5m	63.69 m	
€	1050mmØ STM OBV=63.45	150mmØ U/S WM=64.25	± 0.7m	66.85 m	
Ē	250mmØ SAN OBV=63.30	150mmØ U/S WM=64.25	± 0.95m	66.80 m	
* SEE 119171-GP PLAN FOR SEWER CROSSING LOCATIONS A and B on SEWERS + C, D, E and F on WATERMAIN.					

RUNGS ON WEST WAL

TANK PIPE 300mmØ PVC



PROPOSED 250mmØ WATERMAIN TABLE - EAST / WEST SITE LOOP

TEE CONNECTION TO NEW 300mmØ WATERMAIN EXTENSION

22.5° VERTICAL BEND

22.5° VERTICAL BEND

CROSS BELOW EX.600mmØ WM [U/S=67,34m] (±1,0m CLEARANCE)

22.5° VERTICAL BEND

22.5° VERTICAL BEND

22.5° HORIZONTAL BEND

CROSS BELOW EX. BELL DUCT (±1.2m CLEARANCE)

CROSS BELOW EX. BELL DUCT (±1.5m CLEARANCE)

SURFACE

69.93±

70.10

70.12

70.05

69.90

69.75

69.30

69.29

69.28

| FLEVATION | FLEVATION

67.50 🍍

67.45

66.34

66.34

67.35

66.90

66.89

66.88

66 34 \*\*\*

STATION

4+000

4+002.8

4+005.4

4+006.7

4+010.4

4+008.0

4+018.0

4+020.0

4+020.8

					ĺ
	* CONNECTIO	NS TO EXIST	ING 150mmØ and	NEW 300mmØ WATERMAINS. EXACT ELEVATIONS TO BE FIELD DETERM	INED.
4	* PROVIDE TI	HERMAL INSU	ILATION AS PER (	CITY OF OTTAWA DETAILS W22 IN SHALLOW TRENCHES	
	WHERE CO	VER IS LESS.	THAN 2 4m AND/C	OR W23 ADJACENT TO OPEN STRUCTURES	

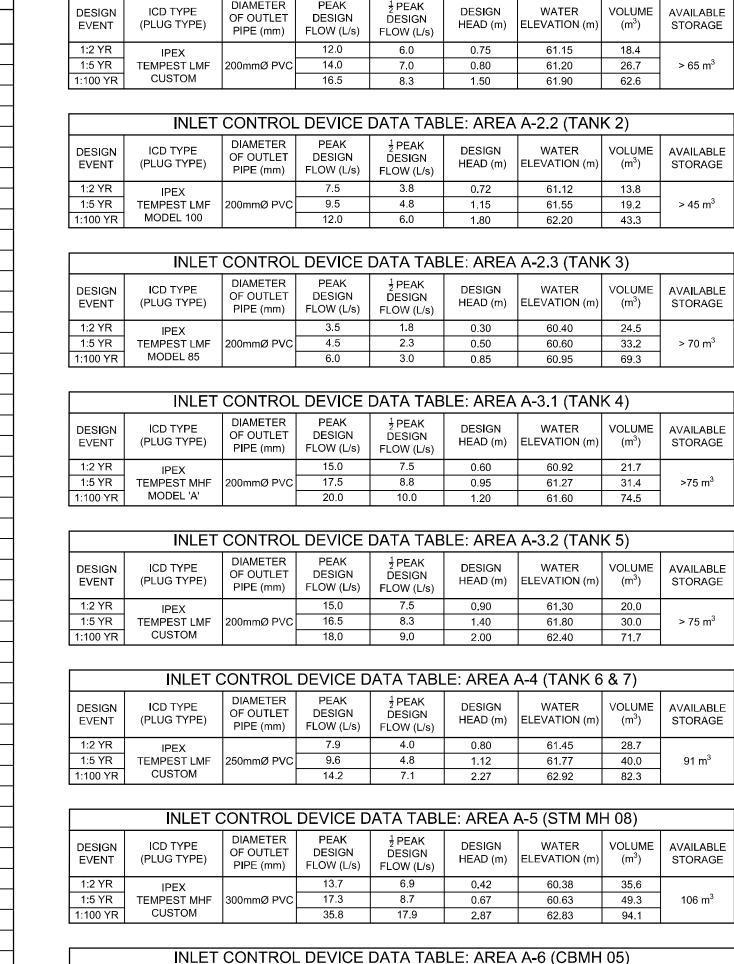
STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
5+000	64.48	62.08	250 x 250 x 250 TEE (4+197.2)
5+001.0	64.46	62.10 **	250mmØ VALVE & VALVE BOX
5+002.5	64.45	** 62.10 ***	CROSS ABOVE 300mmØ STM [Obv=60.10m] (±1.75m CLEARANC
5+004.5	64.45	** 62.15 ***	CROSS ABOVE 250mmØ SAN [Obv=61.62m] (±0.3m CLEARANCE
5+005.6	64.45	62.15 **	22.5° HORIZONTAL BEND
5+008.0	64.43	62.03	22.5° HORIZONTAL BEND
5+011.9	65.55	62.15	150mmØ HYDRANT TEE
5+025	64.05	61.65 **	
5+040.4	63.72	61.32 ***	CROSS BELOW 200mmØ STM [Inv=61.91m] (±0.6m CLEARANCE
5+048.3	63.76	61.26	45° HORIZONTAL BEND
5+049.3	63.75	61.25	150mmØ HYDRANT TEE
5+049.7	63.75	61.25	45° HORIZONTAL BEND
5+050.6	63.60	61.20	250mmØ VALVE & VALVE BOX
5+051.4	63.60	61.20 ***	CROSS ABOVE 375mmØ STM [Obv=59.58m] (±1.35m CLEARANCI
5+052.9	63.60	61.20	45° HORIZONTAL BEND
5+054.3	63.58	61.18	45° HORIZONTAL BEND
5+062.3	63.53	61.13 **	INSULATE IN PROXIMITY TO OPEN STRUCTURE
5+075	63.88	61.48	
5+078.8	64.08	61.68 ***	CROSS ABOVE 200mmØ STM [Obv=59.83m] (±1.6m CLEARANCE
5+091.9	64.50	62.10	150 x 250 x 250 BUILDING SERVICE TEE
5+093.2	64.55	62.15	250mmØ VALVE & VALVE BOX
5+094.4	64.60	62.20	150 x 250 x 250 BUILDING SERVICE TEE
5+098.0	64.66	62.32 ***	CROSS ABOVE 250mmØ SAN [Obv=61.82m] (±0.25m CLEARANCI
5+100.0	64.66	62.25 ***	CROSS ABOVE 300mmØ STM [Obv=60.55m] (±1.45m CLEARANCI
5+102.5	64.65	62.20	250 x 250 x 250 TEE (4+203.3)

CONNECTIONS TO EXISTING 150mmØ and NEW 300mmØ WATERMAINS. EXACT ELEVATIONS TO BE FIELD DETERMINED

\*\* PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAILS W22 IN SHALLOW TRENCHES WHERE COVER IS LESS THAN 2.4m AND/OR W23 ADJACENT TO OPEN STRUCTURES.

W25.2 TO AVOID CONFLICTS, WHERE POSSIBLE

\*\*\* PIPE CROSSINGS WITH WATERMAINS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND T/G=66.65m (OUTSIDE TOP OF TANK) 65.60m (INSIDE TOP OF TANK) 65.40m INSIDE TOF **▽**1:100yr = 64.52m ALUMINIUM ACCESS RUNGS ON WEST WALL OUTLET PIPE INSIDE BOTTOM (INSIDE BOTTOM OF TANK) 62.75m \_ INSIDE BOTTOM\_



OF OUTLET | DESIGN | DESIGN |

PIPE (mm) | FLOW (L/s) | FLOW (L/s) |

ICD TYPE

(PLUG TYPE)

CUSTOM

TEMPEST LMF 300mmØ PVC

DESIGN

EVENT

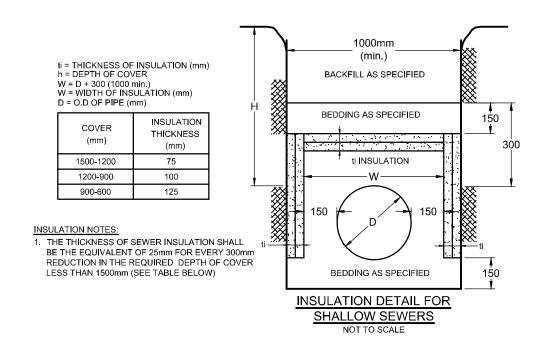
INLET CONTROL DEVICE DATA TABLE: AREA A-2.1 (TANK 1)

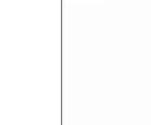
SUMERSET EAST STREET EAST OOF ZEE ZEE
SUMER EAS STREET READ ON STREET READ
THE WIGGINS PUT
LEES AVE.
NICHOLAS ST HWY417 ROBINSON AVE.
KEY PLAN N.T.S.
BENCHMARK INFO:

CITY OF OTTAWA MONUMENT No. 2011-0127 LOCATED NEAR THE SOUTH-WEST CORNER OF THE INTERSECTION OF LEES AVENUE AND ROBINSON AVENUE. GEODETIC ELEVATION = 63.60m.

ALL ELEVATIONS ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM VERTICAL CONTROL MONUMENT NO. 3603 HAVING AN ELEVATION OF 76,959 METRES. BEARINGS ARE GRID. DERIVED FROM THE NORTHERLY LIMIT OF PART 1 ON PLAN 4R-1381 AND ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9 (76°30' WEST LONGITUDE) NAD-83 (ORIGINAL) THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN DIRECTLY FROM

TOPOGRAPHICAL SURVEY PLAN (Ref. # 21029-20 JRE Lt 7 PL 49 T F), PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK SIGNED AND DATED AUGUST 14, 2020. SURROUNDING BACKGROUND TOPO INFORMATION BEYOND THE LIMITS OF THE SITE SURVEY ARE SHOWN FROM CITY OF OTTAWA 1:1000 MAPPING FOR CONTEXT ONLY.





WATER | VOLUME | AVAILABLE

HEAD (m) | ELEVATION (m) | (m³) | STORAGE

DESIGN

9.0 4.5 2.04 62.82 25.9

SWM TANK 8

ANCHOR CONCRETE

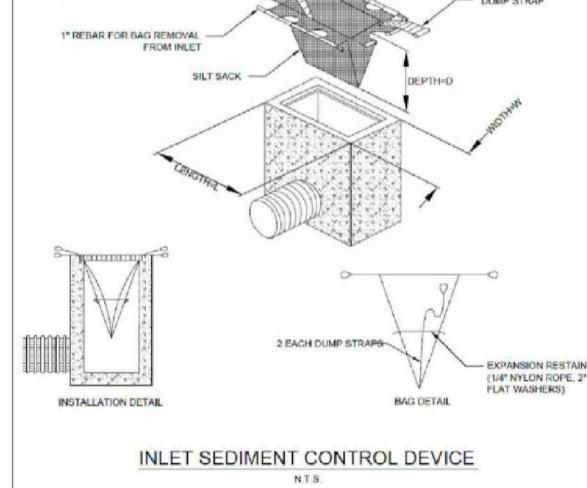
for APPROVED EQUIVALENT

45,000L (3000mm x 6150mm c/w INTERNAL BLUESKIN

WATERPROOFING

c/w ALUMINUM LADDER

4.8 2.30 63.08 38.3



ALL PROJECT NOTES, DETAILS AND SPECIFICATIONS ARE TO MEET THE MOST CURRENT AND AMENDED VERSIONS OF THE CITY OF OTTAWA AND PROVINCIAL STANDARDS

THIS PLAN IS TO BE READ IN CONJUNCTION WITH CIVIL

PLANS 119171-GP, 119171-GR, 119171-PR1 AND 119171-PR2

(INSIDE BOTTOM OF TANK) 60.65m

(UNDERSIDE OF TANK) 60.45m

SUMP=60.05m (UNDERSIDE OF SUMP) 59.90m

> OWNER INFORMATION 2 ROBINSON AVENUE LIMITED PARTNERSHIP 88 ALBERT STREET OTTAWA, ONTARIO, K1P 5E9 CONTACT: MR. KIERAN WAUGH PHONE: (416) 903-1377 EMAIL: kwaugh@placedoree.com

(INSIDE TOP OF TANK) 63.35m

(UNDERSIDE OF TANK) 60.50m

SCALE NOT TO SCALE REVISED PER CITY COMMENTS / UPDATED SITE PLAN MAR 30/21 ISSUED FOR SITE PLAN APPROVAL NOV 15/21 FS REVISION DATE B'

**FOR REVIEW ONLY** F.S. THAUVETTE 100041399 MAR. 30, 2022 Facsimile Website

Engineers, Planners & Landscape Architects Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6 (613) 254-9643 (613) 254-5867 www.novatech-eng.com

LOCATION CITY OF OTTAWA 2 ROBINSON AVENUE

DRAWING NAME CIVIL NOTES, DETAILS & TABLES

> REV# 119171-NDT

I" REBAR FOR BAG REMOVAL FROM