ALL ELEVATIONS ARE GEODETIC

- 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 THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION 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
- 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'.
- 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.
- 9. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT (NO. PG6514-1, REV. 2, DATED OCTOBER 10, 2023) AS WELL AS THE SLOPE STABILITY ANALYSIS (NO. PG6514-MEMO.01, REV. 1, DATED OCTOBER 10, 2023) BOTH 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 'SITE SERVICING AND STORMWATER MANAGEMENT REPORT' (R-2023-069) PREPARED BY NOVATECH.
- 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 LOT PAINTING AS REQUIRED BY ARCHITECT
- 14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A SERVICING PLAN OF 119123-GP1 AND 119123-GP2 INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THE SERVICING PLANS 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:

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'

2.	SPECIFICATIONS:	
	ITEM	

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
TWIN INLET CATCHBASIN (600x1450mm) 'DCB'	705.020	OPSD
DITCH INLET CB 'TYPE A' (600x1200mm) 'DICB'	705.040	OPSD
STORM / SANITARY MANHOLE (1200mmØ)	701.010	OPSD
STORM / CATCHBASIN MANHOLE (2400mmØ)	701.013	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
WATERTIGHT MH FRAME AND COVER	401.030	OPSD
DITCH INLET GRATING	403.010	OPSD
SAFETY PLATFORMS FOR CIRCULAR MHs	404.020	OPSD
SEWER TRENCH	S6	CITY OF OTTAV
SANITARY / STORM SEWER / CB LEAD	PVC DR 35	

STORM SUPER-PIPE (600mm DIAMETER AND OVER) CONCRETE 65-D

- THE WEEPING TILE SERVICE SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION DEVICE AS PER THE CITY OF OTTAWA STANDARD DETAIL S14.
- 4. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.8m 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. 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.
- 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
- 11. ALL WEEPING TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET
- 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, CLEAN AND RE-TELEVISE (CCTV) ALL SEWERS & APPURTENANCES. PROVIDE A COPY OF ALL CCTV INSPECTION REPORTS TO THE ENGINEER FOR

GRADING NOTES

- 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.

ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED

- 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.
- 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.
- 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
- 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 GRADES SHOWN ON PLANS 119123-GR1 AND 119123-GR2.

BENCHMARK INFO:

PrtLt17 Con4(RF) T F.

OLS JOB BENCHMARK No. 1 ON THE TOP OF SPINDLE OF THE

EXISTING MUNICIPAL FIRE HYDRANT LOCATED NEAR THE

OF CITIGATE DRIVE HAVING A GEODETIC ELEVATION OF

97.69m. (JOB BENCHMARK No. 2 AT THE NORTH-EAST

CORNER OF CITIGATE AND DEALERSHIP DRIVE IS ALSO

SHOWN ON THE OLS SURVEYOR'S PLAN Ref. No. 21797-21

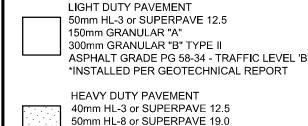
DATUM, BEARINGS ARE GRID, DERIVED FROM CONTROL

THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN

DIRECTLY FROM TOPOGRAPHICAL SURVEY PLAN (Ref. No. 21797-21 PrtLt17 Con4(RF) T F), PREPARED BY ANNIS,

O'SULLIVAN, VOLLEBEKK SIGNED AND DATED JULY 29, 2021.

PAVEMENT STRUCTURES:



150mm GRANULAR "A" 450mm GRANULAR "B" TYPE II ASPHALT GRADE PG 58-34 - TRAFFIC LEVEL 'B' INSTALLED PER GEOTECHNICAL REPORT

BY-LAW 2003-445

WATERMAINS, SEWERS AND OTHER

HEAVY DUTY CONCRET 150mm REINFORCED CONCRETE 150mm GRANULAR "A" 450mm GRANULAR "B" TYPE II INSTALLED PER CITY DETAIL SC23

THE POSITION OF ALL POLE LINES, CONDUITS,

UNDERGROUND AND OVERGROUND UTILITIES AND

STRUCTURES IS NOT NECESSARILY SHOWN ON

THE ACCURACY OF THE POSITION OF SUCH

LOCATION OF ALL SUCH UTILITIES AND

DAMAGE TO THEM.

THE CONTRACT DRAWINGS. AND WHERE SHOWN

UTILITIES AND STRUCTURES IS NOT GUARANTEED

BEFORE STARTING WORK, DETERMINE THE EXACT

STRUCTURES AND ASSUME ALL LIABILITY FOR

(w/ INCREASED GRANULAR 'B' THICKNESS)

MATCH EXISTING GRANULAR STRUCTURE OF ROADWAY IN TRENCHES MATCH EXISTING ASPHALT THICKNESSES IN TRENCHES NEW ASPHALT GRADE: PG 58-34 PROVIDE MUNICIPAL ROADWAY ASPHALT OVERLAY AS SHOWN, PER CITY STANDARD DETAIL R10. REFER TO AMENDED ROAD ACTIVITY

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

WATERMAIN NOTES

ALL PROJECT NOTES. DETAILS AND SPECIFICATIONS ARE

TO MEET THE MOST CURRENT AND AMENDED VERSIONS

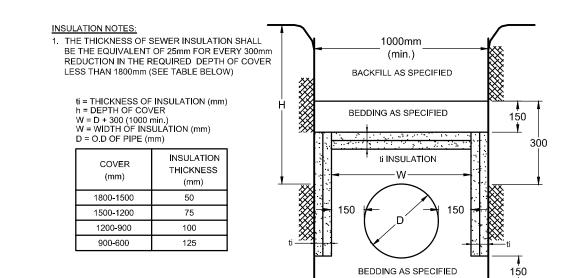
OF THE CITY OF OTTAWA AND PROVINCIAL STANDARDS

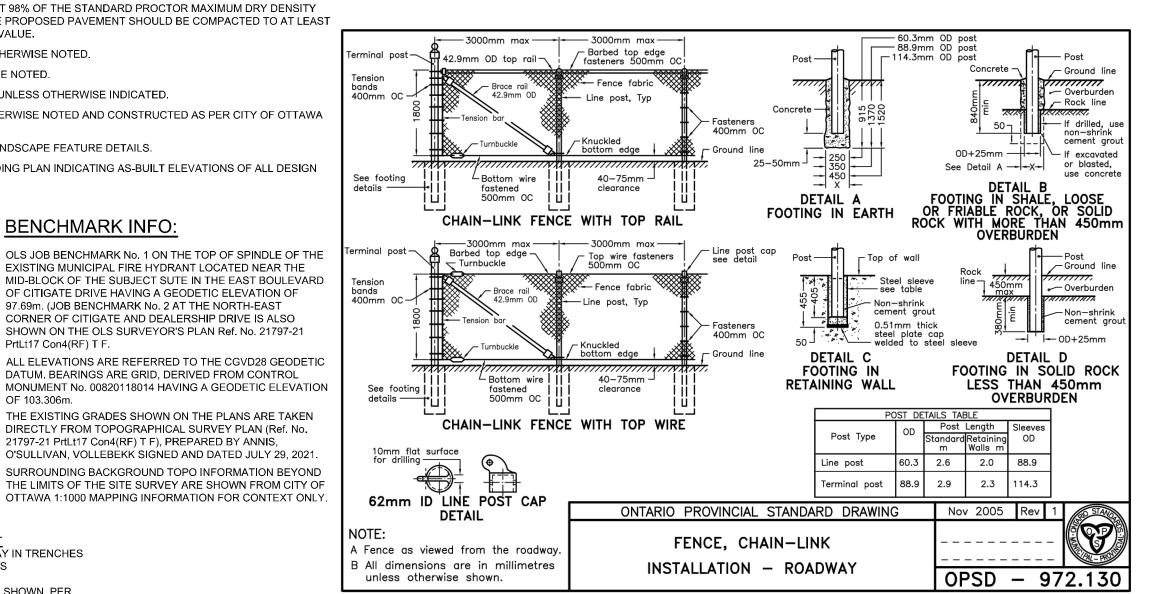
- 1. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED', EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR, CONNECTIONS AND SHUT-OFFS AT THE MAIN BY CITY OF OTTAWA FORCES, CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA FORCES.
- 2. SPECIFICATIONS:

<u>ITEM</u>	SPEC. No.	<u>REFERENCE</u>
DISTRICT METERING AREA CHAMBER	W3	CITY OF OTTAWA
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
HYDRANT INSTALLATION	W19	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
THERMAL INSULATION AT OPEN STRUCTURES	W23	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
CATHODIC PROTECTION FOR PVC WATERMAIN	W40	CITY OF OTTAWA
ANODE INSTALLATION FOR PVC WATERMAIN	W42	CITY OF OTTAWA
	DVC DD 10	
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. 5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED

INSULATION DETAIL FOR





PROPOSED 250mmØ WATERMAIN TABLE: NORTH / SOUTH ON-SITE LOOP SURFACE STATION | ELEVATION | FI EVATIO CONNECTION TO EXISTING 250mm@ PVC STUB /w 11 25° H BENI 96.37 250mmØ VALVE & VALVE BOX @ PROPERTY LINE 0+004.0 96.45 94.00 0+005.4 94.00 96.40 11.25° HORIZONTAL BEND 94.05 ** | CROSS BELOW 200mmØ CB LEAD [Inv=94.49m] (±0.4m CLEARANCE) 0+009.0 96.22 0+025 96.54 94.14 0+050 96.94 94.54 0+071.9 97.15 94.75 ** CROSS BELOW 200mmØ CB LEAD [Inv=95.44m] (±0.7m CLEARANCE) 0+075 97.18 94.78 97.44 95.04 0+100 0+125 95.45 97.85 0+130.1 98.05 95.60 250 x 250 x 150 TEE (HYDRANT No. 01) 0+140.3 98.02 95.62 ** CROSS BELOW 200mmØ CB LEAD [Inv=96.29m] (±0.7m CLEARANCE 0+150 98.58 96.18 0+156.0 98.94 96.54 250 x 200 REDUCER 0+160.9 99.25 96.85 200 x 200 x 200 TEE (1+000) 0+167.7 99.67 97.27 200 x 200 x 200 TEE (BUILDING 'B' WATER SERVICE @ 2+000) 0+174.0 97.64 100.04 200mmØ VALVE & VALVE BOX 0+175 100.09 97.69 0+183.0 100.57 98.17 11.25° HORIZONTAL BEND 101.56 0+200 0+214.8 102.10 99.70 ** CROSS BELOW 200mmØ CB LEAD [Inv=100.34m] (±0.6m CLEARANCE) 0+225 102.42 100.02 0+250 103.21 100.81 11 25° HORIZONTAL BEND 0+273.4 103.95 101.55 0+275.0 103.96 101.56 200 x 150 REDUCER 103.97 101.57 150mmØ VALVE & VALVE BOX 0+276.5 0+280.0 104.18 101.58 FIRE HYDRANT No. 02 1+000 99.25 96.85 200 x 200 x 200 TEE (0+160.9) 1+001.5 99.26 96.80 200mmØ VALVE & VALVE BOX 1+002.5 99.27 96.74 CROSS BELOW 250mm@ SAN [Inv=97 04m] (+0.3m CLEARANCE). 1+004.2 99.29 96.75 CROSS ABOVE 375mmØ STM [Obv=95.97m] (±0.6m CLEARANCE) 1+008.8 99.56 97.16 11.25° HORIZONTAL BEND 1+013.0 100.00 97.60 CROSS ABOVE 200mmØ FIRE LINE [97.10] (±0.3m CLEARANCE 100.05 CROSS BELOW CONCRETE RETAINING WALL (±0.7m CLEARANCE) 1+016.2 97.80 1+025 102.90 98.60 1+050 102.78 100.30 1+075 102.70 100.30 1+100 102.70 100.30 1+125 102.68 100.28 1+150 100.24 102.64 102.75 100.20 1+181.0 102.55 100.15 11.25° HORIZONTAL BEND 1+188.1 102.20 99.80 200 x 200 x 150 TEE (HYDRANT No. 03) 1+189.0 102.20 45° HORIZONTAL BEND 99.80 200mmØ VALVE & VALVE BOX 1+192.0 102.12 99.72 1+195.1 102.13 99.72 45° HORIZONTAL BEND 1+200 102.10 99.70 1+225 101.29 98.89 100.21 97.81 1+250 97.50 1+257.2 99.90 CROSS BELOW 200mmØ CB LEAD [Inv=98.07m] (±0.6m CLEARANCE 1+275 99.14 96 74 1+308.4 97.67 95.27 22.5° HORIZONTAL BEND 1+311.4 97.55 95.15 11.25° HORIZONTAL BENE 1+325 97.60 94.80 97.66 1+329.4 94.49 22.5° HORIZONTAL BEND CROSS BELOW 375mmØ STM [Inv=94.99m] (+0.5m CLEARANCE) 1+330.8 97.68 94.49 1+338.0 97.25 94.49 DISTRICT METERING CHAMBER AND VALVE (per W3) 1+339.8 97.10 94.49 CONNECTION TO EXISTING 200mmØ PVC STUB 99.67 200 x 200 x 200 BUILDING 'B' SERVICE TEE (0+168.7) 2+000 97.27 CROSS ABOVE 375mmØ STM [Obv=96.17m] (±0.9m CLEARANCE) 2+004 99.71 97.31 2+005.1 99.72 97.32 200mmØ VALVE & VALVE BOX 97.35 2+006.6 99.98 200mmØ BUILDING 'A' SERVICE CAP (1.0m FROM FOUNDATION WALL) 3+000 100.10 97.25 200mmØ FIRE LINE BLDG 'B' CAP (1 0m FROM FOUNDATION WALL 97.10 100.00 3+002.0 CROSS BELOW 200mmØ WM [us/wm=97,40m] (±0,3m CLEARANCE) 3+019.2 98.60 96.20 45° HORIZONTAL BEND 3+025 98.20 95.80 3+025.5 98.05 95.80 CROSS BELOW 250mmØ STM [Inv=96.42m] (±0.6m CLEARANCE) 3+032.9 97.90 95.80 22.5° VERTICAL BEND 3+036.5 98.08 94.34 22.5° VERTICAL BEND 3+039.0 94.34 98.15 CROSS BELOW 1200mmØ STM [Inv=94.99m] (±0.5m CLEARANCE) 98.17 3+040.5 94.34 22.5° VERTICAL BEND 3+044. 98.24 95.85 22.5° VERTICAL BEND 98.25 3+044.7 95.85 45° HORIZONTAL BENI 3+050 98.48 96.05 3+061.0 98.50 96.05 200mmØ FIRE LINE BLDG 'A' CAP (1.0m FROM FOUNDATION WALL 4+000 97.58 94.34 CONNECTION TO EXISTING 200mmØ PVC STUB 4+002.2 98.14 94.34 22.5° VERTICAL BEND 95.77 4+005.6 98.17 50mmØ PEX SERVICE TEE FOR BUILDING 'A' (5+00) 4+006.6 98.19 96.18 200mmØ SERVICE EXTENSION CAP 5+00 98.17 95.77 50mmØ PEX SERVICE TEE FOR BUILDING 'A' (4+00 5+03.0 98.07 95.67 50mmØ SERVICE POST & SHUT-OFF VALVE 97.68 90° LONG RADIUS HORIZONTAL BEND ON PEX SERVICE TUBING 97.95 94.75 50mmØ BUILDING 'A' SERVICE CAP (1.0m FROM FOUNDATION WALL) ** 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. *** PIPE CROSSINGS WITH WATERMAINS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND

*CONNECTIONS TO EXISTING 250mmØ / 200mmØ WM STUBS. EXACT ELEVATIONS TO BE FIELD DETERMINED

SCALE

NOT TO SCALE

SM / BM / DDI

BM / DDE

W25.2 TO AVOID CONFLICTS, WHERE POSSIBLE.

OCT 6/23

MAY 3/23

DATE

REVISED PER CITY COMMENTS

ISSUED FOR CITY OF OTTAWA REVIEW

THIS PLAN IS TO BE READ IN CONJUNCTION WITH CIVIL PLANS 119123-GP1&GP2 AND PLANS 119123-GR1&GR2

> FOR REVIEW ONLY D. D. BLAIR 100122737

LEGEND

USF

T/G=

CB1

CBT1()

HAD 🔶

1:100 YR

0.637

A-1

0.36

— ×—— ×— EXISTING FENCE

---- SITE BOUNDARY

PROPOSED ELEVATION

MAXIMUM 3: 1 SIDESLOPE

PROPOSED SWALE ELEVATION

PROPOSED TERRACE ELEVATION

PARKING GRADE AND DIRECTION

PROPOSED BUILDING ENTRANCE

TOP OF GRATE ELEVATION

PROPOSED CATCHBASIN

DIRECTION OF FLOW

DIRECTION OF FLOW

DIRECTION OF FLOW

11.25°, 22.5°, 45° OR TEE

PIPE CROSSING LOCATION

PROPOSED ROOF DRAIN

PROPOSED BARRIER CURB

PROPOSED DEPRESSED CURB

PROPOSED LIGHT STANDARD

PROPOSED SIAMESE CONNECTION

PROPOSED GAS METER LOCATION

SILT FENCE AS PER OPSD 219.110

EMERGENCY OVERLAND FLOW ROUTE

STRAW BALES AS PER OPSD 219.100

CONSTRUCTION ACCESS MUD MAT

PROPOSED INLET CONTROL DEVICE

APPROXIMATE PONDING LIMITS

STORM DRAINAGE BOUNDARY

SUB-CATCHMENT AREA ID

EXISTING ELEVATION

(-)---- EXISTING STORM MANHOLE AND SEWER

EXISTING WATER MANHOLE

EXISTING CATCHBASIN

--- G --- EXISTING UNDERGROUND GASMAIN

--- UH --- EXISTING UNDERGROUND HYDRO

---- UB ---- EXISTING UNDERGROUND BELL CABLE

EXISTING BELL PEDESTA

EXISTING TREES / SHRUBS

ROADCUT REINSTATEMENT

HEAVY DUTY ASPHALT/FIRE ROUTE

GEO-GRID SLOPE STABILIZATION PER

GEOTECHNICAL RECOMMENDATIONS

WATERMAIN INSULATION AREA AS

PER CITY OF OTTAWA DETAIL W22

EXISTING TOP OF GRATE

EXISTING VALVE AND VALE BOX

EXISTING UTILITY POLE C/W GUY WIRES

EXISTING TRAFFIC STREET LIGHT

1:5 YR POST-DEV. RUNOFF COEFFICIENT

EXISTING SANITARY MANHOLE AND SEWER

PROPOSED HYDRO METER LOCATION

TACTILE WALKING SURFACE INDICATOR (TWSI)

PROPOSED TRANSFORMER PAD C/W BOLLARDS

CLAY DIKE AS PER CITY OF OTTAWA DETAIL S8

PROPOSED SANITARY SEWER AND

PROPOSED CAP

CURB CUTOUT

------ PROPOSED WATERMAIN

PROPOSED STORM MANHOLE

PROPOSED CATCHBASIN TEE

PROPOSED CATCHBASIN ELBOW

PROPOSED STORM SEWER AND

PROPOSED SANITARY MANHOLE

PROPOSED BEND AND THRUSTBLOCK

PROPOSED VALVE AND VALVE BOX

PROPOSED HYDRANT C/W VALVE & LEAD

PROPOSED CATCHBASIN LEAD AND

PROPOSED CATCHBASIN SUBDRAIN AND

PROPOSED FINISHED FLOOR ELEVATION

PROPOSED LIMIT OF BUILDING OVERHANG

PROPOSED UNDER SIDE OF FOOTING ELEVATION

PROPOSED CATCHBASIN WITH TEMPORARY SILTSACK

EXISTING ELEVATION





DESIGN

EVENT

1:5 YR



CITY of OTTAWA DRAWING NAME

REV # 2

39 m³

KEY PLAN

00mmØ T/WM=96.74

75mmØ STM OBV=96.13 | 250mmØ SAN INV=97.65

200mmØ T/FL=97 10 | 200mmØ U/S WM=97 40

200mmØ T/FL=94.34 | 1200mmØ STM INV=94.99 |

200mmØ T/WM=94.49 | 375mmØ STM INV=94.99 |

75mmØ STM OBV=96.17 | 200mmØ U/S WM=97.1

75mmØ STM OBV=95.97

200mmØ T/FL=95.80

ROOF DRAIN

3/4 EXPOSED

3/4 EXPOSED

3/4 EXPOSED

3/4 EXPOSED

3/4 EXPOSEI

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3/4 EXPOSED

3/4 EXPOSE

3/4 EXPOSED

OPENING SETTING

3/4 EXPOSEI

3/4 EXPOSED

3/4 EXPOSED

FULLY EXPOSE

1/4 EXPOSED

1/4 EXPOSED

1/4 EXPOSEI

1/4 EXPOSE

1/4 EXPOSEI

1/4 EXPOSED

3/4 EXPOSED

3/4 EXPOSED

3/4 EXPOSEI

3/4 EXPOSED

OF OUTLET

PVC DR35

OF OUTLET |

PVC DR35

NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

DESIGN

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

DESIGN

141.1

OPENING SETTING

ROOF DRAIN No.

(WATTS MODEL)

RD 1 (RD-100-A-ADJ)

RD 2 (RD-100-A-ADJ)

RD 3 (RD-100-A-ADJ)

RD 6 (RD-100-A-ADJ)

RD 7 (RD-100-A-ADJ)

RD 8 (RD-100-A-ADJ)

RD 9 (RD-100-A-ADJ

RD 11 (RD-100-A-ADJ)

TRD 12 (RD-100-A-ADJ)

RD 14 (RD-100-A-ADJ)

RD 15 (RD-100-A-ADJ)

IRD 16 (RD-100-A-ADJ)

RD 17 (RD-100-A-ADJ)

RD 18 (RD-100-A-ADJ)

RD 19 (RD-100-A-ADJ)

RD 21 (RD-100-A-ADJ)

RD 22 (RD-100-A-ADJ)

IRD 24 (RD-100-A-ADJ) I

ROOF DRAIN No.

(WATTS MODEL)

RD 3 (RD-100-A-ADJ)

RD 6 (RD-100-A-ADJ)

RD 7 (RD-100-A-ADJ)

RD 8 (RD-100-A-ADJ)

RD 9 (RD-100-A-ADJ)

D 10 (RD-100-A-ADJ)

RD 11 (RD-100-A-ADJ)

RD 12 (RD-100-A-ADJ)

RD 13 (RD-100-A-ADJ)

RD 14 (RD-100-A-ADJ)

RD 15 (RD-100-A-ADJ)

RD 16 (RD-100-A-ADJ)

RD 17 (RD-100-A-ADJ)

RD 18 (RD-100-A-ADJ)

IRD 19 (RD-100-A-ADJ) I

RD 20 (RD-100-A-ADJ)

RD 21 (RD-100-A-ADJ)

RD 23 (RD-100-A-ADJ)

RD 24 (RD-100-A-ADJ)

(PLUG TYPE)

227mmØ

(PLUG TYPE)

TEMPES1

VORTEX LMF

MODEL 60

1:100 YR ORIFICE PLUG

R-2 RD 25 (RD-100-A-ADJ) FULLY EXPOSED

R-2 RD 5 (RD-100-A-ADJ)

R-2 RD 4 (RD-100-A-ADJ) 3/4 EXPOSED

R-1 RD 23 (RD-100-A-ADJ)

R-1 RD 13 (RD-100-A-ADJ) 1/4 EXPOSED

RD 20 (RD-100-A-ADJ)| FULLY EXPOSE

IRD 25 (RD-100-A-ADJ) | FULLY EXPOSED

RD 1 (RD-100-A-ADJ) | FULLY EXPOSE

R-1 RD 5 (RD-100-A-ADJ)

I RD 4 (RD-100-A-ADJ) I 3/4 EXPOSED

AREA ID

R-1

AREA ID *

R-2

R-2

R-2

R-2

CRITICAL SEWER PIPE CROSSING TABLE

250mmØ SAN INV=97.04

375mmØ STM INV=96.42

BUILDING 'A' ROOF DRAIN TABLE: AREA R-1 (ROOF DRAINS A1 to A25)

APPROX. 5-YR

11 cm

HEAD (m)

1.61

182.4 91.2 2.69 97.66 435

1.20

2.15

1:5 YEAR

RELEASE RATE

1.26 L/s

1.26 L/s

1.26 L/s

1 26 L/s

1.26 L/s

1.26 L/s

1.26 L/s

0.79 L/s

1.34L/s

1.34L/s

1.34L/s

1 34 L/s

1.34 L/s

BUILDING 'B' ROOF DRAIN TABLE: AREA R-2 (ROOF DRAINS B1 to B25)

1:5 YEAR

RELEASE RATE

1.34 L/s

1.34 L/s

1.34 l /s

1.34 L/s

1.34 L/s

0.79 L/s

1.26 L/s

1.34 L/s

1.34 L/s

1.34 L/s

1.34 L/s

1.26 L/s

1.34 L/s

* REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2023-069) PREPARED BY

**ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDINGS TO BE WATTS 'ADJUSTABLE ACCUTROL' ROOF DRAIN

INLET CONTROL DEVICE DATA TABLE: AREA A-5 (OUTLET PIPE of STM MH 06)

DESIGN

INLET CONTROL DEVICE DATA TABLE: AREA A-6 (OUTLET PIPE of STM MH 11)

DESIGN

1.8

2.4

FLOW (L/s) | FLOW (L/s)

70.6

❖ SEE 119123-GP1 AND GP2 PLANS FOR SEWER CROSSING LOCATIONS AND NOTES ON 119123-NLD

99.29 m

99.62 m

100 00 m

98.05 m

98 15 m

14 cm

15 cm

15 cm

14 cm

15 cm

14 cm

15 cm

14 cm

14 cm

14 cm

14 cm

14 cm

14 cm

1:100 YEAR

PONDING DEPTH | RELEASE RATE | PONDING DEPTH

1.34 L/s

0.95 L/s

0.95 L/s

0.95 L/s

0.95 L/s

0 95 L/s

0.95 L/s

1.89 L/s

1.58 L/s

1.58 L/s

1.58 L/s

1.58 L/s

1.89 L/s

PONDING DEPTH | RELEASE RATE | PONDING DEPTI

1.58 L/s

1.58 L/s

1.58 L/s

1.58 L/s

1.89 L/s

0.95 L/s

1.34 L/s

1.58 L/s

1.58 L/s

1.58 L/s

1.58 L/s

1.34 L/s

1.58 L/s

ELEVATION (m) (m³)

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

96.58

95.80

96.75

98.00

WATER | VOLUME | AVAILABLE

LOCATION 80 & 486 CITIGATE DRIVE - PROPOSED WAREHOUSES

NOTES, LEGEND AND DETAILS

119123-NLD