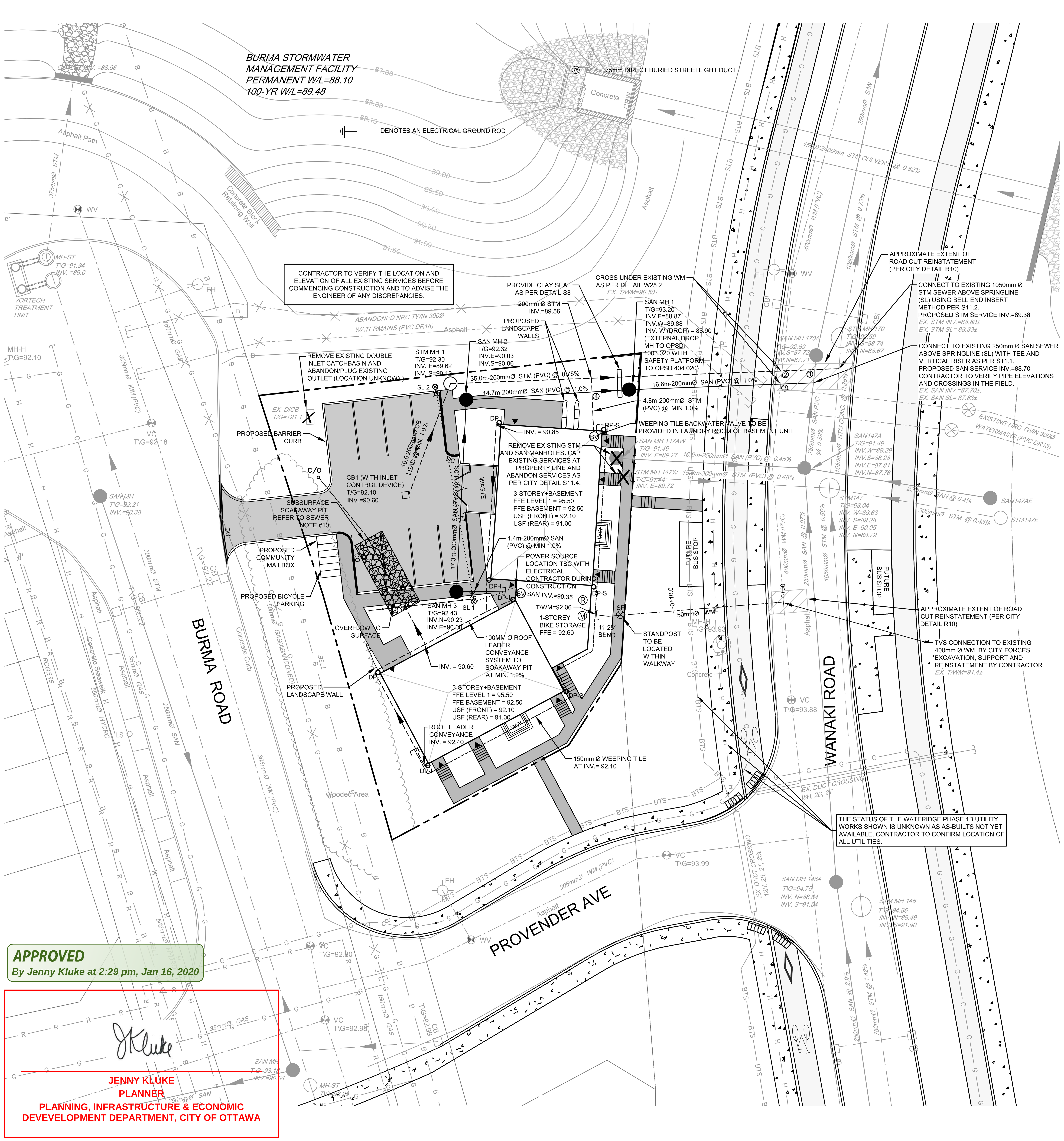
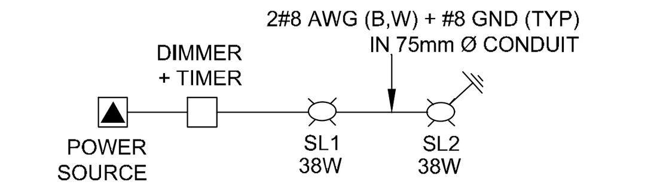
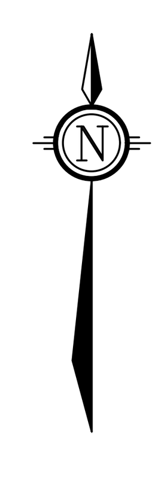


LIGHT SCHEDULE

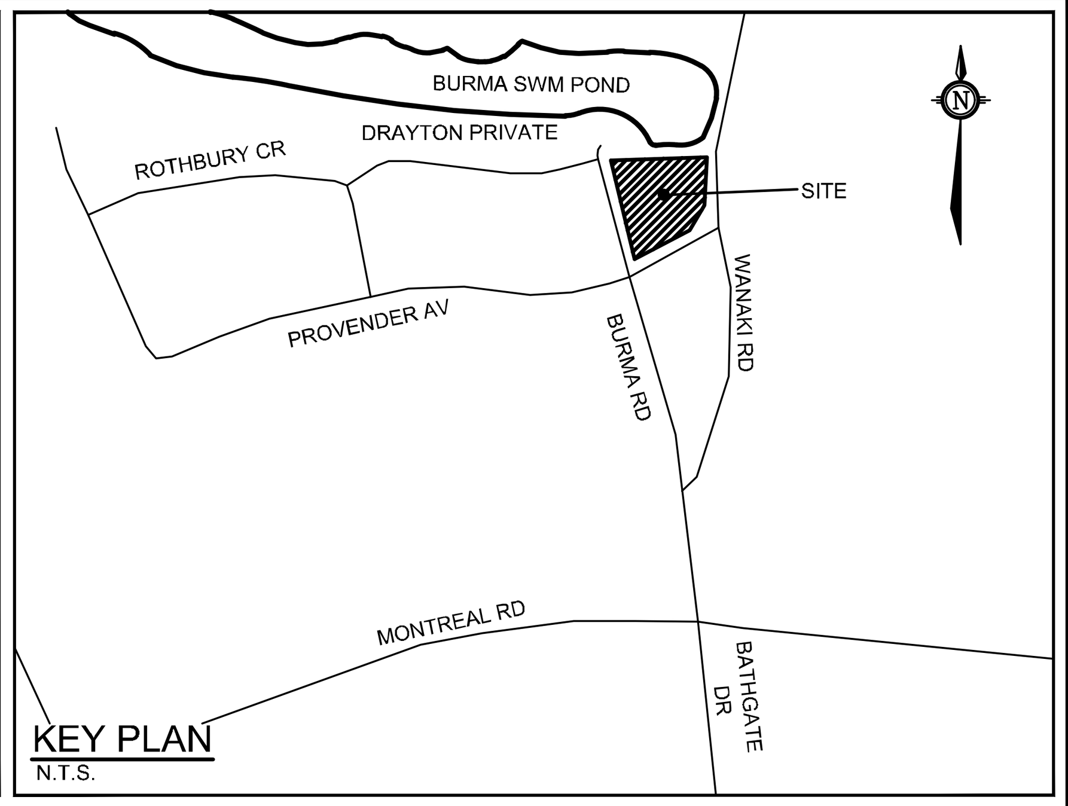
TYPE	VOLTAGE	LAMP	DESCRIPTION
	120V	1-71W LED	PROPOSED LITHONIA LIGHTING DSX0 LED P1 40K LCCO MVOLT - LED LANTERN STYLE LUMINAIRE ON A M30 BRACKET AND RA 804 POLE, REFER TO THE FOLLOWING CATALOGUE NUMBERS : • DSX0 LED P3 40K LCCO MVOLT (LUMINAIRE) • SSS 15 4C DM29AS DNAXD CAD - 15' (POLE)



LIGHTING SCHEMATIC
(NTS)



NORTH



KEY PLAN
N.T.S.

LEGEND

Symbol	Description	Symbol	Description	Symbol	Description
50mmØ WM	PROPOSED WATER SERVICE		*EXISTING FIRE HYDRANT*	— G — G —	*EXISTING GASMAIN*
SAN MH 1	PROPOSED SANITARY SEWER AND MANHOLE		*EXISTING VALVE CHAMBER*	— B — B —	*EXISTING BELL CABLE*
STM MH 2	PROPOSED STORM SEWER AND MANHOLE	SP	*EXISTING STANDPOST*	— R — R —	*EXISTING ROGERS CABLE*
300mmØ STM STM147E	*EXISTING STORM SEWER AND MANHOLE*	SP	PROPOSED STANDPOST (AS PER CITY DETAIL W3.3)	— H — H —	*EXISTING HYDRO CABLE*
			PROPOSED BEND	— BTS — BTS —	*EXISTING BELL/TELUS/ STREET LIGHT CABLE*
250mmØ SAN SAN100	*EXISTING SANITARY SEWER AND MANHOLE*		PROPOSED BARRIER CURB (AS PER CITY DETAIL SC1.1)	M	PROPOSED WATER METER
150mmØ WM (PVC)	*EXISTING WATERMAIN*	DC	PROPOSED DEPRESSED CURB (AS PER CITY DETAIL SC1.1)	BV	PROPOSED SANITARY / STORM BACKWATER VALVE
CB	PROPOSED CATCHBASIN		PROPOSED SIDEWALK	R	PROPOSED REMOTE WATER METER
X	EXISTING INFRASTRUCTURE TO BE REMOVED		FUTURE PROPOSED CYCLE TRACK (BY OTHERS)	DP-I	PROPOSED DOWNPIPE (TO DRAIN TO SOAKAWAY PIT)
	PROPOSED SOAKAWAY PIT (REFER TO 119066-DET)		FUTURE PROPOSED SIDEWALK (BY OTHERS)	DP-S	PROPOSED DOWNPIPE (TO DRAIN TO SURFACE)
	PROPOSED ROAD CUT REINSTATEMENT (PER CITY DETAIL R10)	··············	PROPOSED STREET LIGHT CONDUIT		
SL 1	PROPOSED STREETLIGHT POLE AND LUMINAIRE (SEE DETAILS ABOVE)				

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 THIS DRAWING.
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 CO-INSURED.
5. 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.
6. 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.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT (REPORT NO. PG4965-1, DATED SEPTEMBER 13, 2019, 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.
9. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
10. REFER TO SITE SERVICING AND STORMWATER MANAGEMENT REPORT (R-2019-094) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
11. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
12. PROVIDE LINE/PARKING PAINTING.
13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS 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.
14. REFER TO TOPOGRAPHICAL PLAN OF SURVEY (BLOCK 29-REGISTERED PLAN 4M-1581) BY ANNIS, O'SULLIVAN VOLLEBEKK FOR DETAILS OF THE EXISTING SITE.

CRITICAL SEWER PIPE CROSSING TABLE

CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE
①	EX. 250mm Ø SAN OBV.=87.85±	250mm Ø STM INV.=89.37	1.52m±
②	250mm Ø STM OBV.=89.65	EX. 400mm Ø WM B/W=90.10±	0.45m±
③	200mm Ø SAN OBV.=88.93	EX. 400mm Ø WM B/W=90.10±	1.17m±
④	200mm Ø STM OBV.=89.77	200mm Ø SAN INV.=89.92	0.15m

50mmØ WATER SERVICE TABLE

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+00	93.8±	91.4±	TVS CONNECTION TO EXISTING 400mmØ WM
0+14.9	94.38	91.98	STANDPOST AT PROPERTY LINE
0+16.6	94.46	92.06	CAP 1m FROM BUILDING FACE

INLET CONTROL DEVICE DATA - CB1

ICD TYPE: TEMPEST LMF ICD VORTEX 98 (AS PER S4.1)
DIAMETER OF OUTLET PIPE: 200mm

DESIGN EVENT	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m^3)
1:5 YR	10.1	1.46	92.16	1.3
1:100 YR	10.3	1.52	92.22	6.2

SEWER NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SEWER TRENCH - BEDDING (GRANULAR A) COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)		
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	

2. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 0.5%.
4. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
5. 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.
6. 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.
7. STORM MANHOLES AND CBMHS ARE TO HAVE 300mm AND 600mm SUMPS RESPECTIVELY, UNLESS OTHERWISE INDICATED.
8. CONTRACTOR 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 & APPURTENANCES.
9. ALL STORM AND SANITARY SERVICES SHALL BE EQUIPPED WITH BACKFLOW PREVENTERS AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
10. FOR SOAKAWAY PIT DETAILS, REFER TO DRAWING 119066-DET.
11. All PROPOSED COVER FRAMES LOCATED OUTSIDE OF THE TRAVELLED PORTION OF THE ROADWAY OR THE SIDEWALK SHALL BE ANCHORED DIRECTLY TO THE TOPS OF THE PRECAST TOPS/CAPS AS PER S.P. NO. F-4070 (SAN MH1 AND STM MH1)

WATERMAIN NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN	COPPER "TYPE K"	

2. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.50m VERTICAL CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS WHEN WATERMAIN IS BELOW AND A MINIMUM OF 0.25m VERTICAL CLEARANCE WHEN WATERMAIN IS ABOVE.
5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
6. CONTRACTOR TO INVESTIGATE THE PRESENCE OF AN EXISTING WATER SERVICE ON SITE AND IF EXISTING, THE EXISTING STAND POST TO BE REMOVED AND THE EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN.

REFER TO 119066-DET FOR ADDITIONAL DETAILS

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.

OWNER INFORMATION

HABITAT FOR HUMANITY GREATER OTTAWA
768 BELFAST ROAD
OTTAWA, ON K1G 027

PHONE: 613-749-9950

No.	REVISION	DATE	BY
5.	PARKING LOT LIGHTING ADDED	19 DEC 2019	GJM
4.	REVISED PER CITY COMMENTS	08 NOV 2019	GJM
3.	REVISED PER CITY COMMENTS	18 SEPT 2019	GJM
2.	ISSUED FOR COORDINATION	13 SEPT 2019	GJM
1.	ISSUED FOR SITE PLAN APPROVAL	22 JUN 2019	GJM

SCALE 1:200

DESIGN LGB
CHECKED JAG
DRAWN RG
CHECKED LGB/JAG
APPROVED GJM

FOR REVIEW ONLY

SITE LIGHTING:

LICENSED PROFESSIONAL ENGINEER G.J. MacDONALD Dec 17, 2019 PROVINCE OF ONTARIO

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

LOCATION
CITY OF OTTAWA
455 WANAKI ROAD (BLOCK 29)

DRAWING NAME
GENERAL PLAN OF SERVICES AND SITE LIGHTING

PROJECT No. 119066-00
REV REV # 5
DRAWING No. 119066-GP

D07-12-19-0117

#17982

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