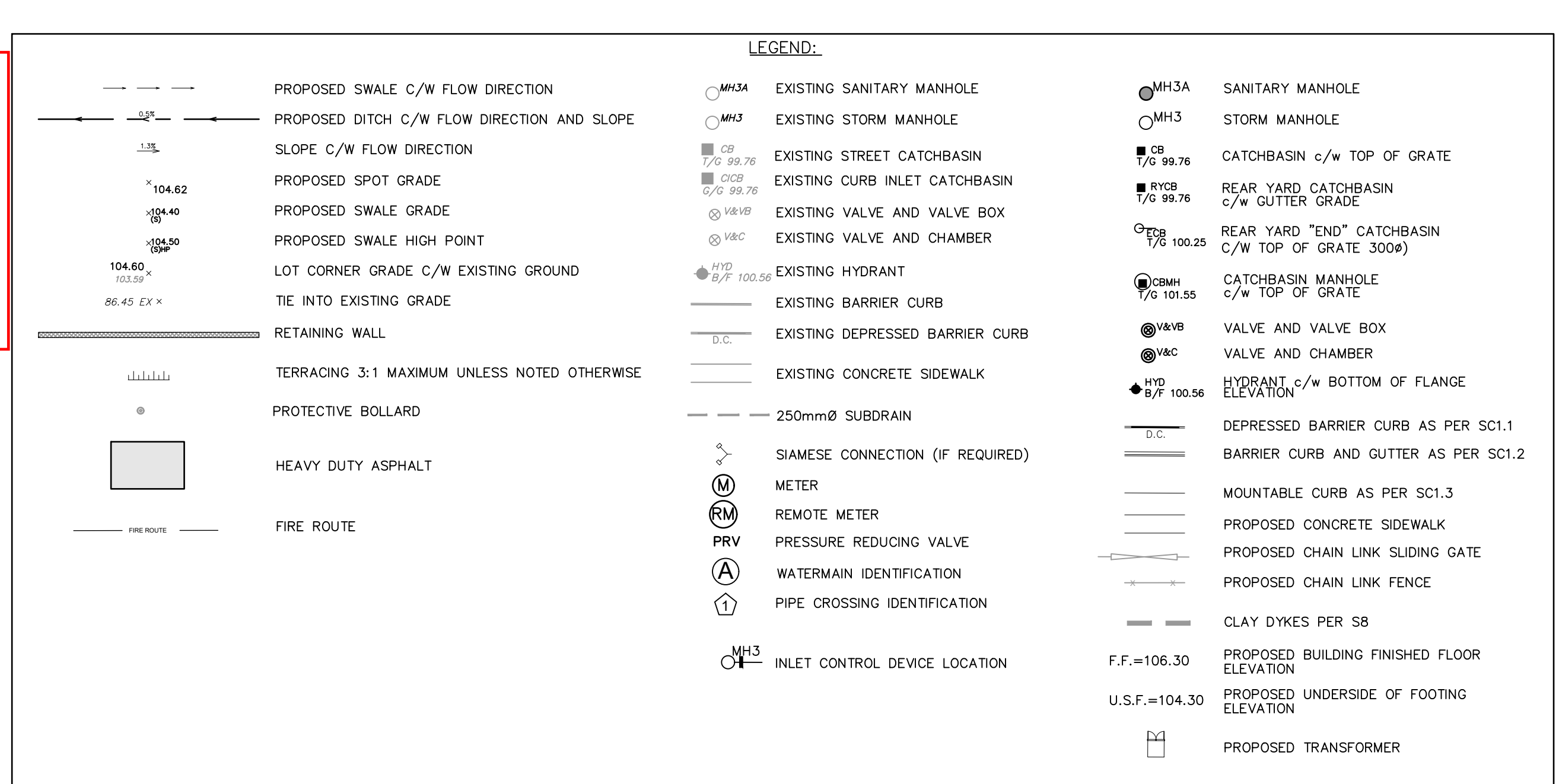


Mark Young

MARK YOUNG, MCIP, RPP
(A) MANAGER, DEVELOPMENT REVIEW - WEST
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

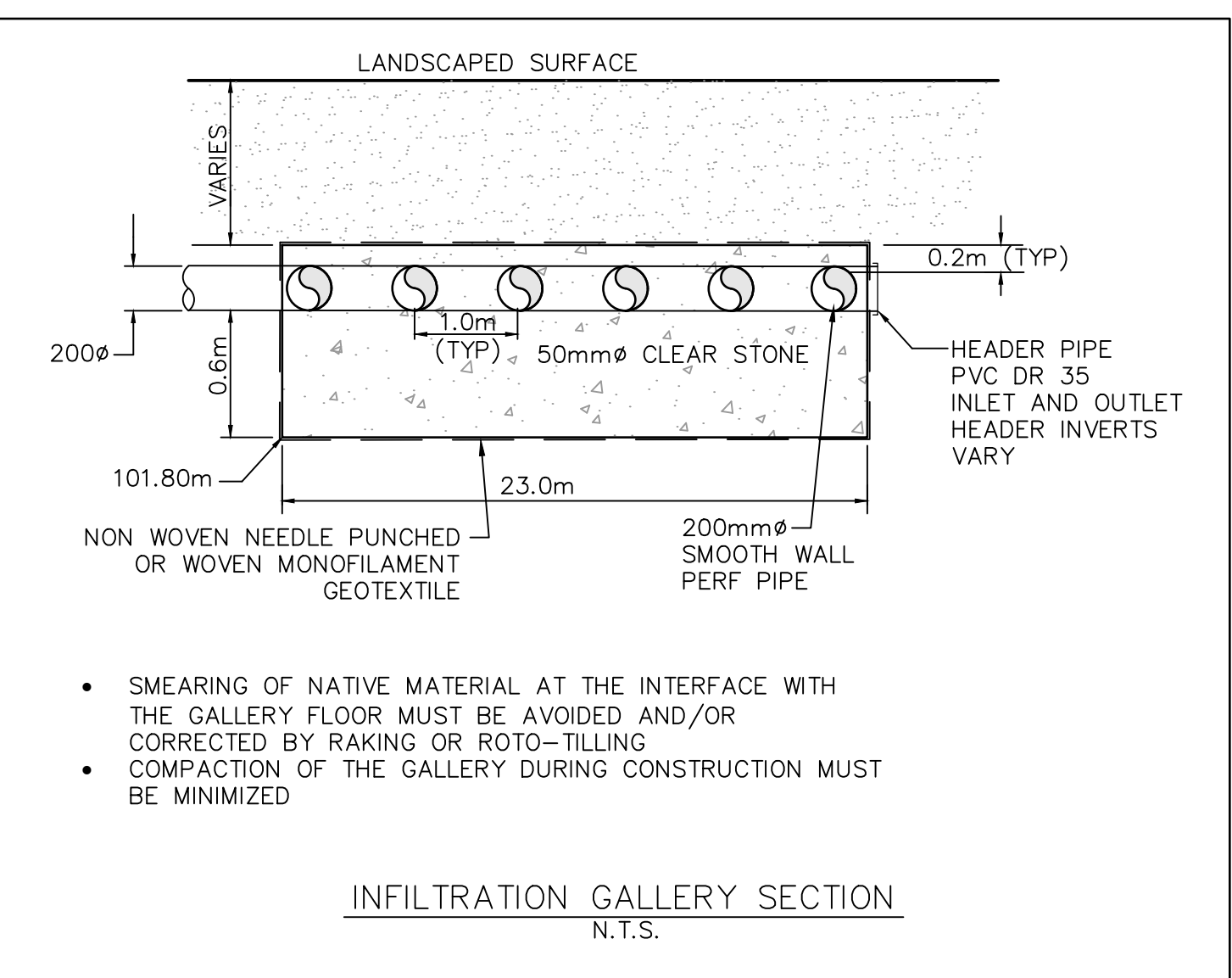
APPROVED
 By Laurel McCreight at 8:01 am, Jan 13, 2020



DRAWING NOTES

- 1.0 GENERAL**
- 1.1 CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 - 1.2 DO NOT SCALE DRAWINGS.
 - 1.3 CONTRACTOR TO REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE ARCHITECT OR DESIGN ENGINEER AS APPLICABLE.
 - 1.4 USE ONLY THE LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED 'ISSUED FOR CONSTRUCTION'.
 - 1.5 ALL CONSTRUCTION SHALL COMPLY WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
 - 1.6 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.
 - 1.7 FOR LEGAL SURVEY INFORMATION REFER TO REGISTERED PLAN.
 - 1.8 REFER TO SITE PLAN BY McRobie ARCHITECTS.
- 1.09 CONTRACTOR TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) DURING ALL PHASES OF THE SITE PREPARATION AND CONSTRUCTION. THE MEASURES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. SHOULD ANY ADDITIONAL MEASURES BE REQUIRED TO ADDRESS FIELD CONDITIONS THEY SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE CITY OF OTTAWA. SUCH ADDITIONAL MEASURES MAY INCLUDE BUT NOT BE LIMITED TO INSTALLATION OF FILTER CLOTHS ACROSS MANHOLE AND CATCHBASIN LIDS TO PREVENT SEDIMENT FROM ENTERING THE STRUCTURE AND INSTALLATION AND MAINTENANCE OF A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.**
- 1.10 ALL IRON WORK ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR ADJUSTMENTS AS DETERMINED BY THE ENGINEER.
 - 1.11 ALL CONCRETE CURBS AND SIDEWALKS TO CONFORM TO O.P.S. AND CONSTRUCTED TO CITY STANDARDS. ALL ON-SITE CURBS TO BE BARRIER TYPE, WITH DEPRESSIONS AS NOTED.
 - 1.12 ALL CONCRETE SHALL BE "NORMAL PORTLAND CEMENT" IN ACCORDANCE WITH O.P.S.'S. 1350 AND SHALL ACHIEVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.
 - 1.13 ALL CONSTRUCTION TRAFFIC TO ACCESS SITE FROM PALLADIUM DRIVE.
 - 1.14 FOR GEOTECHNICAL REPORT SEE GEOTECHNICAL INVESTIGATION PROPOSED KINAXIS - BLOCK 24 CAMPEAU DRIVE AT PALLADIUM DRIVE - OTTAWA, PG3115-6 SEPT 20, 2019 BY PATERSON GROUP.
 - 1.15 CONTRACTOR TO PROTECT EXISTING INFRASTRUCTURE AND PROPERTY SUCH AS TREES, PARKING METERS, SIDEWALKS, CURBS, ASPHALT, AND STREET SIGNS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR TO PAY THE COST TO REINSTATE OR REPLACE ANY DAMAGED INFRASTRUCTURE OR PROPERTY TO THE SATISFACTION OF THE CITY.
 - 1.16 THE POSITION OF POLE LINES, CONDUITS, WATERMAIN, SEWERS, AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED BEFORE STARTING WORK. THE CONTRACTOR SHALL INFORM ITSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, SHALL PROTECT ALL UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
 - 1.17 CONTRACTOR TO SUPPLY SUITABLE FILL MATERIAL WHERE REQUIRED TO ROUGH GRADE THE SITE. ALL IMPORTED FILL MATERIAL TO BE CERTIFIED AS ACCEPTABLE BY THE GEOTECHNICAL ENGINEER.
 - 1.18 CONTRACTOR TO HAUL EXCESS MATERIAL OFFSITE AS NECESSARY TO GRADE SITE TO MEET THE PROPOSED GRADINGS. ALL EXCESS MATERIAL TO BE HAUL TO OFF-SITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY ENGINEER. ENGINEER TO DETERMINE APPROPRIATE DISPOSAL METHODOLOGY.
 - 1.19 FILL MATERIAL WITHIN THE PARKING LOT AND BUILDING PAD AREAS, AND SUPPORTING BUILDING FOUNDATIONS SHALL BE COMPACTED TO 98% STANDARD MODIFIED PROCTOR DENSITY AND TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
 - 1.20 ALL COMPACTION METHODS TO BE PERFORMED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO INCLUDE BUT NOT BE LIMITED TO THE THICKNESS OF LIFTS, AND COMPACTION EQUIPMENT USED.
 - 1.21 ALL DISTURBED BOULEVARDS TO BE REINSTATE WITH SOD ON 100mm TOPSOIL.
 - 1.22 UTILITY DUCTS TO BE INSTALLED PRIOR TO ROAD BASE CONSTRUCTION.
 - 1.23 CLAY DIKES TO BE INSTALLED WHERE INDICATED ON THE DRAWINGS OR AS APPROVED AND DIRECTED BY THE GEOTECHNICAL ENGINEER ALL IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- 2.0 SANITARY**
- 2.1 ALL SANITARY SEWER MAINS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ONLY FACTORY FITTINGS TO BE USED. SEWER TO BE INSTALLED AS PER OPSD 1005.01. SANITARY SEWER MATERIALS TO BE: 250mmØ AND SMALLER - PVC DR 35
 - 2.2 ALL SANITARY MAINTENANCE HOLES TO BE 1.2m DIAMETER AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, FRAME AND COVER. DROP PIPES AND LANDINGS WHERE NEEDED.
 - 2.3 SANITARY MANHOLE COVERS TO BE CITY OF OTTAWA STD. S25 (MOD. OPSD. 401.020). SANITARY MANHOLE COVER TO BE CLOSED COVER TYPE. AS PER CITY STANDARD S24.
 - 2.4 SANITARY SEWER LEAKAGE TEST AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY SPECIFICATIONS PRIOR TO INSTALLATION OF BASE COURSE ASPHALT.
 - 2.5 ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
 - 2.6 CONNECTION TO THE EXISTING SANITARY SEWER TO BE INCLUDED IN THE COST FOR SANITARY SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.
- 3.0 STORM**
- 3.1 ALL STORM SEWERS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ALL STORM SEWERS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. ONLY FACTORY FITTINGS TO BE USED. STORM SEWER MATERIALS TO BE: 375mmØ AND SMALLER - PVC DR 35, 450mmØ AND LARGER - CONC. CL. 100-D, 825mmØ AND LARGER - CONC. CL. 65-D
 - 3.2 ALL STORM MAINTENANCE HOLES TO BE SIZED IN ACCORDANCE WITH THE PLANS AND AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, DROP PIPES AND FRAME AND COVER.

- 3.3 STORM MH COVERS TO BE OPEN TYPE, AS PER CITY STANDARD S24. FRAMES TO BE PER CITY OF OTTAWA STD. S25. CONTRACTOR TO INSTALL FILTER FABRIC UNDER STORM MH COVER UNTIL SODDING IS COMPLETE.
 - 3.4 STORM MAINTENANCE HOLES TO BE OPSD, SIZE AS SPECIFIED, TAPER TOP.
 - 3.5 ALL CATCH BASINS TO BE AS PER OPSD 705.010, FRAME & FISH TYPE GRATE AS PER CITY OF OTTAWA STD. S19.1.
 - 3.6 ANY STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
 - 3.7 CONNECTION TO THE EXISTING STORM SEWER TO BE INCLUDED IN THE COST FOR STORM SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUT TO CITY STANDARDS.
 - 3.8 CONTRACTOR TO PROVIDE IPEX-TEMPST MFH ICD'S SHOP DRAWINGS, OR EQUIVALENT, FOR ENGINEERS REVIEW PRIOR TO ORDERING ICD'S.
- 4.0 WATER**
- 4.1 ALL WATERMANS TO BE PVC DR 18, WITH MINIMUM COVER OF 2.4M AND INSTALLED PER CITY OF OTTAWA STANDARDS. ALL DOMESTIC WATER SERVICES ARE TO BE 200MMØ.
 - 4.2 THRUST BLOCKS TO BE INSTALLED AT ALL BENDS, TEES, AND CAPS ALL AS PER OPSD 1103.01 AND 1103.02.
 - 4.3 CONTRACTOR TO CONDUCT PRESSURE AND LEAKAGE TESTING OF ALL WATERMANS AND DISINFECT AND CHLORINATE ALL WATERMANS TO THE SATISFACTION OF M.O.E. AND THE CITY OF OTTAWA.
 - 4.4 TRACER WIRE TO BE INSTALLED ALONG THE FULL LENGTH OF WATERMAIN AND ATTACHED TO EACH MAIN STOP AS PER CITY OF OTTAWA STANDARDS.
 - 4.5 ALL COMPONENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE CATHODICALLY PROTECTED AS PER CITY OF OTTAWA STANDARDS.
 - 4.6 ALL VALVES & VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLIES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS.
 - 4.7 ANY WATERMAIN WITH LESS THAN 2.4M COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
 - 4.8 CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THE WATER PERMIT FROM THE CITY OF OTTAWA AND PAYMENT OF ANY FEES ASSOCIATED WITH SECURING THE WATER PERMIT. OWNER IS RESPONSIBLE FOR REIMBURSING THE CONTRACTOR FOR THE ACTUAL COST OF ACQUIRING THE WATER PERMIT.
 - 4.9 CONNECTION TO EXISTING WATERMAIN TO BE INCLUDED IN THE COST FOR THE WATERMAIN INSTALLATION. THIS COST INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.



- SMEARING OF NATIVE MATERIAL AT THE INTERFACE WITH THE GALLERY FLOOR MUST BE AVOIDED AND/OR CORRECTED BY RAKING OR ROTO-TILLING
- COMPACTION OF THE GALLERY DURING CONSTRUCTION MUST BE MINIMIZED

NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
CB7	104.45			NE102.520		OPSD 705.010
CB11	104.13	SW102.310		NE102.310		OPSD 705.010
CB12	104.13			NE102.398		OPSD 705.010
CBMH6	104.35	SW102.432		NE101.008		1500mmØ OPSD-701.011
CBMH10	104.13	SW102.190		NE101.440		1500mmØ OPSD-701.011
MH2	104.44	W101.171	W100.496			2400mmØ OPSD-701.013
MH3	104.38	NW101.242		E101.242		1800mmØ OPSD-701.012
MH4	104.30	SW100.831		E100.655		1500mmØ OPSD-701.011
MH9	104.46	SW101.322		SE101.282		1800mmØ OPSD-701.012
MH25	104.57	SE102.560		NE102.769		1200mmØ OPSD-701.010
MH26	104.39	SW102.600	W100.608			1500mmØ OPSD-701.011

NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
MH1A	104.69	SE102.305		NE101.706		1200mmØ OPSD-701.010
MH2A	104.45	SW100.586		NE99.987		1200mmØ OPSD-701.010

Station	Description	Clearance
0+000.00	375 mm Ø STM 0.500 m CLEARANCE OVER	200 mm Ø W/M
0+007.00	200 mm Ø W/M 0.358 m CLEARANCE OVER	675 mm Ø STM
0+020.00	250 mm Ø STM 0.500 m CLEARANCE OVER	200 mm Ø W/M
0+040.00	200 mm Ø SAN 0.500 m CLEARANCE OVER	200 mm Ø W/M
0+060.00	250 mm Ø STM 0.750 m CLEARANCE OVER	675 mm Ø STM
0+137.73	675 mm Ø STM 0.750 m CLEARANCE OVER	250 mm Ø SAN
0+158.83	250 mm Ø W/M 2.050 m CLEARANCE OVER	200 mm Ø SAN

ROAD STRUCTURE *

EXISTING CAMPEAU DRIVE :

40MM WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 2x50MM BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE
 150MM BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE
 600MM SUBBASE - OPSS GRANULAR "B" TYPE II
 SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II
 MATERIAL PLACED OVER IN SITU SOIL

EXISTING PALLADIUM DRIVE :

40MM WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 2x50MM BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE
 150MM BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE
 600MM SUBBASE - OPSS GRANULAR "B" TYPE II
 SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II
 MATERIAL PLACED OVER IN SITU SOIL

CAR ONLY PARKING AREAS:

50MM WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 150MM BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE
 300MM SUBBASE - OPSS GRANULAR "B" TYPE II
 SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II
 MATERIAL PLACED OVER IN SITU SOIL

HEAVY TRUCK PARKING AREAS AND ACCESS LANES:

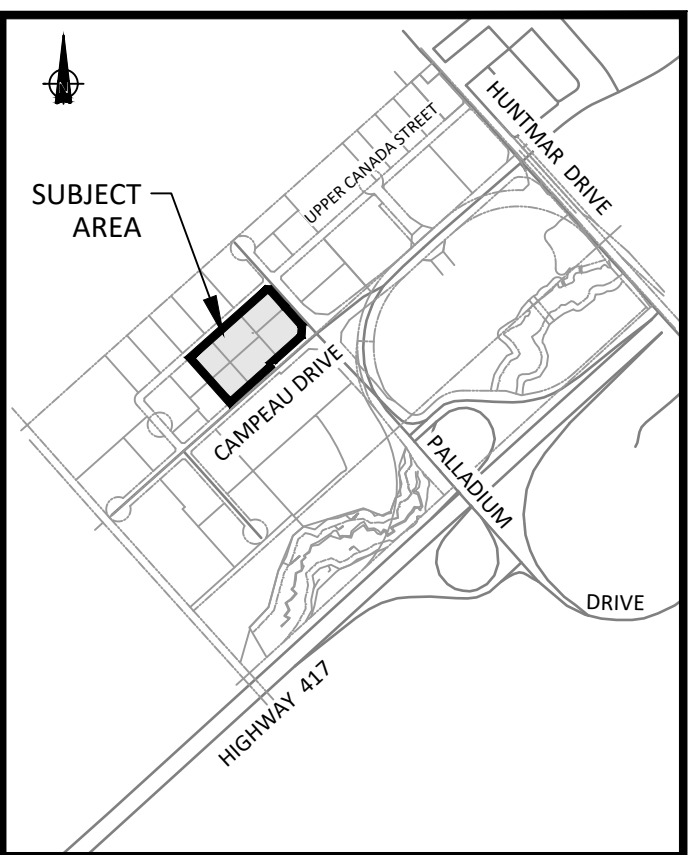
40MM WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 50MM BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE
 150MM BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE
 400MM SUBBASE - OPSS GRANULAR "B" TYPE II
 SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II
 MATERIAL PLACED OVER IN SITU SOIL

* REFER TO GEOTECHNICAL REPORT BY PATERSON GROUP PG 3115 -1R DATED MAY 3, 2016

** REFER TO GEOTECHNICAL REPORT BY PATERSON GROUP PG3115-6 DATED SEPT 20, 2019

STRUCTURE ID	AREA ID	STRUCTURE	COVER	ELEVATION			DIAMETER (mm)	TYPE	HEAD	FLOW	ICD TYPE
				TOP OF GRATE	INLET	OUTLET					
CB1	CB1	OPSD 705.010	S19	104.35		103.250	200	PVC DR-35	1.15	44.0	Tempst HF Type D
CB2	CB2	OPSD 705.010	S19	104.50		103.000	200	PVC DR-35			
CB3	CB3	OPSD 705.010	S19	104.25	103.000	102.750	200	PVC DR-35			
CB4	CB2	OPSD 705.010	S19	104.40	102.860	102.850	200	PVC DR-35			
CB5	CB5	OPSD 705.010	S19	104.35	102.850	102.850	200	PVC DR-35			
CB13	CB5	OPSD 705.010	S19	104.50		103.000	200	PVC DR-35			
CBMH6	CBMH6	OPSD 701.011	S25 & S28.1 Open	104.35	102.432	101.008	675	CONC 100D			
CB7	CB7	OPSD 705.010	S19	104.45		102.520	375	PVC DR-35			
CB8	CB8	OPSD 705.010	S19	104.13		102.630	250	PVC DR-35			
CB9	CB9	OPSD 705.010	S19	104.13		102.630	250	PVC DR-35			
CBMH10	CBMH10	OPSD 701.011	S25 & S28.1 Open	104.13	102.190	101.440	750	CONC 100D			
CB11	CB11	OPSD 705.010	S19	104.13	102.310	102.310	375	PVC DR-35			
CB12	CB12	OPSD 705.010	S19	104.13		102.398	375	PVC DR-35			
MH3		OPSD 701.012	Closed lid			101.242	450	CONC 100D	2.91	130.0	Tempst HF Type E
MH4		OPSD 701.011	Closed lid			100.655	450	CONC 100D	3.72	110.0	Tempst HF Type E

Station	Description	Finished Grade	Top of Watermain	Watermain Cover	As Built Watermain
A	0+000.00 TEE 250mm x 200mm	104.36	101.96	2.40	
	0+007.00 V&VB 200mm	104.48	102.08	2.40	
	0+020.00 --	104.35	101.45	2.90	
	0+040.00 --	104.60	102.20	2.40	
	0+060.00 --	104.75	102.35	2.40	
	0+076.56 HYDRANT TEE	104.68	102.28	2.40	
	0+082.12 45° BEND	104.70	102.30	2.40	
	0+092.07 45° BEND	104.74	102.34	2.40	
	0+148.06 HYDRANT TEE	104.73	102.33	2.40	
	0+155.28 VERTICAL BEND	104.74	102.34	2.40	
	0+155.48 VERTICAL BEND	104.74	102.13	2.61	
	0+157.03 SERVICE TEE	104.73	102.13	2.60	
	0+157.73 --	104.73	102.13	2.60	
	0+158.83 --	104.72	101.84	2.88	
	0+161.03 VERTICAL BEND	104.72	101.84	2.88	
	0+161.71 VERTICAL BEND	104.71	102.31	2.40	
	0+180.00 --	104.61	102.21	2.40	
	0+202.54 V&VB 200mm	104.49	102.09	2.40	
B	0+218.84 TEE 200mm x 200mm	104.20	101.80	2.40	



KEY PLAN (N.T.S.)

- NOTES:**
1. SEE DETAIL DRAWING C-010 FOR ADDITIONAL DETAILS AND NOTES.
 2. SITE BENCHMARK TO BE OBTAINED FROM LEGAL SURVEYOR STANTEC GEOMATICS.

No.	REVISIONS	By	Date
14			
13			
12			
11			
10			
9			
8			
7	REVISED INFILTRATION GALLERY	T.R.B.	2019-12-02
6	ISSUED FOR TENDER	T.R.B.	2019-11-29
5	REVISE SERVICES TO BUILDING PER NEW MECHANICAL DESIGN	T.R.B.	2019-11-27
4	REVISED AS PER CITY COMMENTS	T.R.B.	2019-10-29
3	REVISED AS PER CITY COMMENTS	T.R.B.	2019-09-30
2	INTERIM SUBMISSION - KINAXIS INTERIORS	T.R.B.	2019-08-12
1	ISSUED FOR SPA	T.R.B.	2019-07-09

PC KANATA DEVELOPMENTS INC.

IBI GROUP
 400 - 333 Preston Street
 Ottawa ON K1S 5N4 Canada
 Tel 613 225 1311 fax 613 225 9868
 ibigroup.com

Project Title
kinaxis
8700 CAMPEAU DRIVE

Professional Engineer
T. R. BRULE
 2019/12/02
 PROVINCE OF ONTARIO

GENERAL NOTES, LEGEND AND CB DATA TABLE

Scale	N.T.S.
Design	JB
Date	JULY 2019
Drawn	DPS/DD/EH
Checked	TRB
Project No.	121693
Drawing No.	C-010

D07-12-19-0122