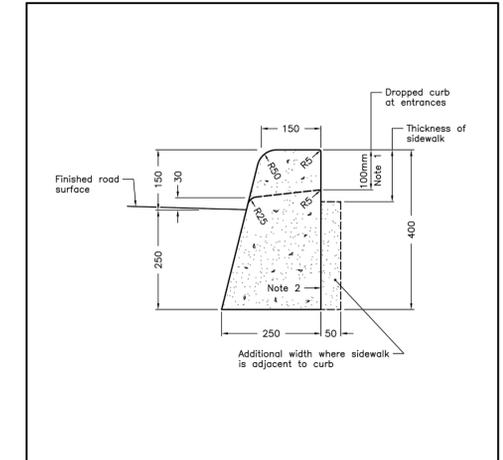


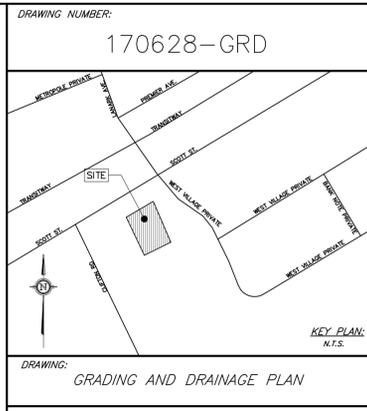
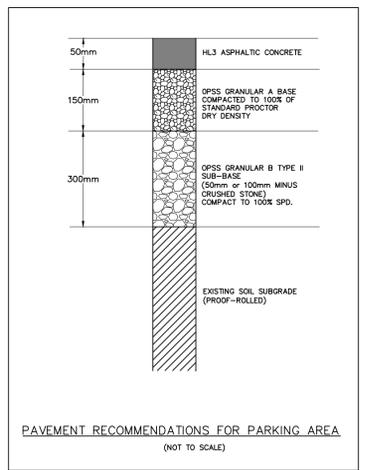
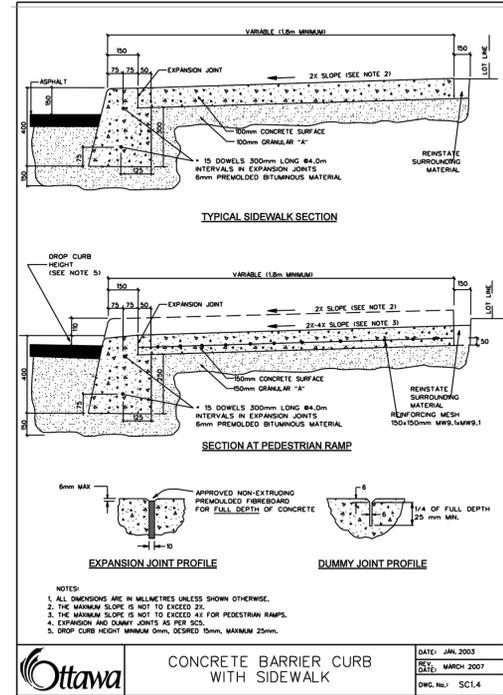
LEGEND

EXISTING ELEVATION	UP	EXISTING UTILITY POLE
PROPOSED/EXISTING ELEVATIONS	AN	EXISTING ANCHOR
PROPOSED CURB ELEVATION	STM	EXISTING STORM MANHOLE
TOP OF RETAINING WALL	SAN	EXISTING SANITARY MANHOLE
DRAINAGE SLOPE	CB	EXISTING CATCH BASIN
PROPERTY LINE	RYCB	EXISTING REAR-YARD CATCH BASIN
WATERMAIN	CBMH	PROPOSED CATCH BASIN/MANHOLE
STORM SEWER	SAN	PROPOSED SANITARY MANHOLE
SANITARY SEWER	CB	PROPOSED CATCH BASIN
5 YEAR PONDING	DS	PROPOSED DOWNSPOUT LOCATION
100 YEAR PONDING	WV	PROPOSED FIRE DEPARTMENT CONNECTION
PROPOSED SILT FENCE BARRIER	W	PROPOSED WATER VALVE
PROPOSED RETAINING WALL	WM	WATER METER
	RM	REMOTE WATER METER
	TM	TEMPORARY BENCHMARK



- NOTES:**
- Where sidewalk is continuously adjacent, reduce the dropped curb at entrances to 75mm.
 - For slipforming procedure, a 5% batter is acceptable.
 - Treatment at entrances shall be according to OPSD 351.010.
 - Outlet treatment shall be according to the OPSD 610 Series.
 - The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 500 Series.
 - All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2006	Rev 1
CONCRETE BARRIER CURB		OPSD 600.110	



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 - The owner agrees to prepare and implement an erosion and sediment control plan to the satisfaction of the City of Ottawa, 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 in accordance with the current Best Management Practices for Erosion and Sediment Control such as, and not limited to installing filter cloths across manholes/catchbasin lids to prevent sediments from entering structures and install and maintain a light duty silt fence barrier as required.
 - All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications; sewer and watermain material types; disinfection, provide minimum 2.4 metres of cover for water services, cathodic protection, City of Ottawa insulation specifications for watermain, pipe bedding, reinstatement of disturbed areas and leakage testing.
 - Reference to Kollaard file #170628 for Storm Water Management Design and for Servicing Brief Report.

0	SD	SEPT 5, 2017	ISSUED FOR SITE PLAN CONTROL
REV	BY	DATE	DESCRIPTION

Kollaard Associates Engineers

P.O. BOX 189, 210 PRESCOTT ST. (613) 860-0923
KNOX 1100, KNOX 1100, KNOX 1100, KNOX 1100
KNOX 1100, KNOX 1100, KNOX 1100, KNOX 1100
http://www.kollaard.ca

CONSULTANTS:

CLIENT: INDEPENDENT DEVELOPMENT GROUP

PROJECT: PROPOSED MULTI-UNIT RESIDENTIAL BUILDING

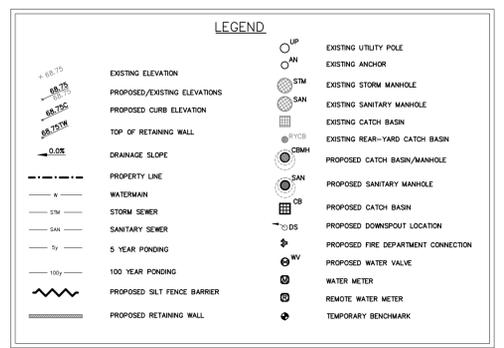
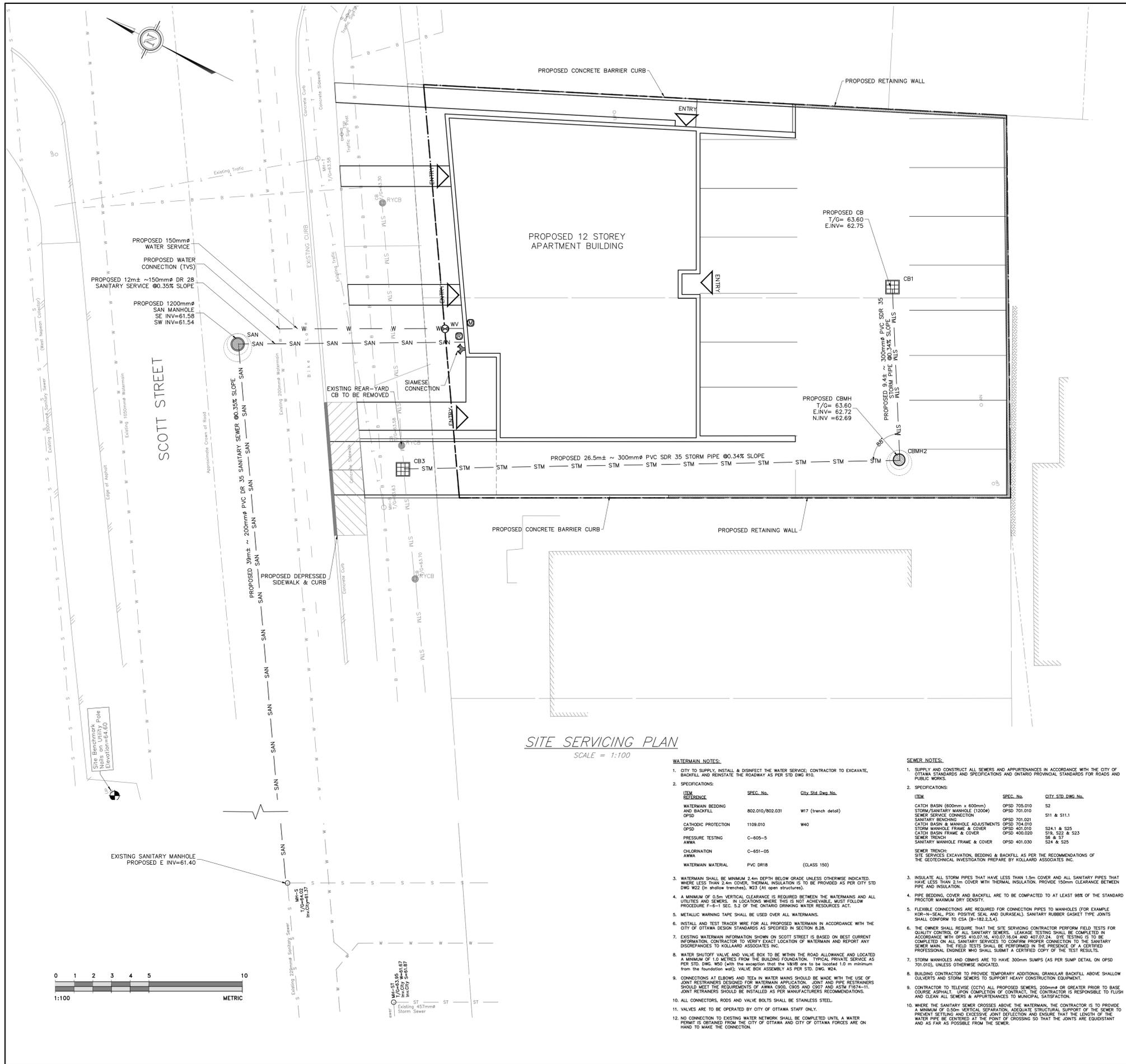
LOCATION: 1946 SCOTT STREET OTTAWA, ON

	DESIGNED BY: SD	CHECKED BY: SD
	DRAWN BY: AVB	APPROVED BY: SD
	DATE: AUG. 10, 2017	SCALE: AS NOTED
	PROJECT NUMBER: 170628	ARCH: J

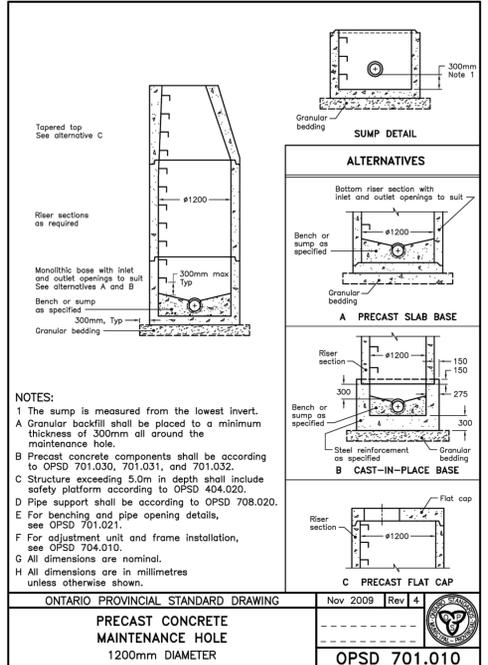
Ottawa CONCRETE BARRIER CURB WITH SIDEWALK

DATE: JUN 2003
REV: MARCH 2007
DWG. No.: SC1.4

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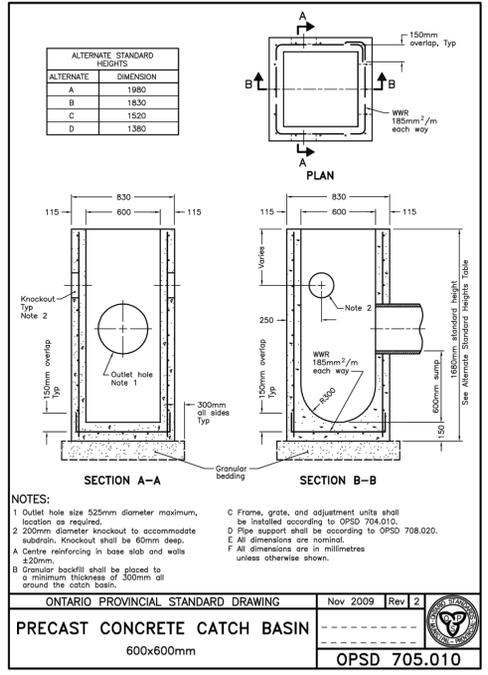


SITE SERVICING PLAN
SCALE = 1:100

- WATERMAIN NOTES:**
- CITY TO SUPPLY, INSTALL & DISINFECT THE WATER SERVICE, CONTRACTOR TO EXCAVATE, BACKFILL AND REINSTATE THE ROADWAY AS PER STD DWG R10.
 - SPECIFICATIONS:

ITEM REFERENCE	SPEC. No.	City Std. Des. No.
WATERMAIN BEDDING AND BACKFILL	802.010/802.031	W17 (trench detail)
CATHODIC PROTECTION	1109.010	W40
PRESSURE TESTING	C-605-5	
CALIBRATION	C-651-05	
WATERMAIN MATERIAL	PVC DR18	(CLASS 150)
 - WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. WHERE LESS THAN 2.4m COVER, THERMAL INSULATION IS TO BE PROVIDED AS PER CITY STD DWG W22 (in shallow trenches), W23 (At open structures).
 - A MINIMUM OF 0.5m VERTICAL CLEARANCE IS REQUIRED BETWEEN THE WATERMANS AND ALL UTILITIES AND SEWERS. IN LOCATIONS WHERE THIS IS NOT ACHIEVABLE, MOST FOLLOW PROCEDURE F-8-1 SEC. 5.2 OF THE ONTARIO DRINKING WATER RESOURCES ACT.
 - METALLIC WARNING TAPE SHALL BE USED OVER ALL WATERMANS.
 - INSTALL AND TEST TRACKER WIRE FOR ALL PROPOSED WATERMANS IN ACCORDANCE WITH THE CITY OF OTTAWA DESIGN STANDARDS AS SPECIFIED IN SECTION 6.28.
 - EXISTING WATERMAIN INFORMATION SHOWN ON SCOTT STREET IS BASED ON BEST CURRENT INFORMATION. CONTRACTOR TO VERIFY EXACT LOCATION OF WATERMAIN AND REPORT ANY DISCREPANCIES TO KOLLAARD ASSOCIATES INC.
 - WATER SHUTOFF VALVE AND VALVE BOX TO BE WITHIN THE ROAD ALLOWANCE AND LOCATED A MINIMUM OF 1.0 METRES FROM THE BUILDING FOUNDATION. TYPICAL PRIVATE SERVICE AS PER STD. DWG. W24 (with the exception that the V&VB are to be located 1.0 m minimum from the foundation wall); VALVE BOX ASSEMBLY AS PER STD. DWG. W24.
 - CONNECTIONS AT ELBOWS AND TEES IN WATER MAINS SHOULD BE MADE WITH THE USE OF JOINT RESTRAINERS DESIGNED FOR WATERMAIN APPLICATION. JOINT AND PIPE RESTRAINERS SHOULD MEET THE REQUIREMENTS OF ANWA C900, C905 AND C907 AND ASTM F1874-11. JOINT RESTRAINERS SHOULD BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
 - ALL CONNECTORS, RODS AND VALVE BOLTS SHALL BE STAINLESS STEEL.
 - VALVES ARE TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY.
 - NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA AND CITY OF OTTAWA FORCES ARE ON HAND TO MAKE THE CONNECTION.
- SEWER NOTES:**
- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORKS.

ITEM	SPEC. No.	CITY STD. DWG. No.
CATCH BASIN (600mm x 600mm)	OPSD 705.010	S2
STORM/SANITARY MANHOLE (1200#)	OPSD 701.010	S11 & S11.1
SEWER SERVICE CONNECTION	OPSD 701.021	S18, S22
SANITARY BENCHING	OPSD 704.010	S24.1 & S25
CATCH BASIN & MANHOLE ADJUSTMENTS	OPSD 401.010	S24 & S23
STORM MANHOLE FRAME & COVER	OPSD 402.020	S8 & S7
SEWER TRENCH	OPSD 401.030	S24 & S25
SANITARY MANHOLE FRAME & COVER	OPSD 401.030	S24 & S25
 - SEWER TRENCH: SITE SERVICES EXCAVATION, BEDDING & BACKFILL AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION PREPARED BY KOLLAARD ASSOCIATES INC.
 - INSULATE ALL STORM PIPES THAT HAVE LESS THAN 1.5m COVER AND ALL SANITARY PIPES THAT HAVE LESS THAN 2.1m COVER WITH THERMAL INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
 - PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
 - FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTION PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, FIBRE, POSITIVE SEAL AND DURASCAL). SANITARY RUBBER GASKET TYPE JOINTS SHALL CONFORM TO CSA (B-182.2.4.4).
 - 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 OPSD 402.016, 410.07.16, AND 422.07.24. 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.
 - STORM MANHOLES AND CBMHS ARE TO HAVE 300mm SUMPS (AS PER SUMP DETAIL ON OPSD 701.010), UNLESS OTHERWISE INDICATED.
 - BUILDING CONTRACTOR TO PROVIDE TEMPORARY ADDITIONAL GRANULAR BACKFILL ABOVE SHALLOW CULVERTS AND STORM SEWERS TO SUPPORT HEAVY CONSTRUCTION EQUIPMENT.
 - CONTRACTOR TO TELETEST (CPTV) ALL PROPOSED SEWERS, 200mm# OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES TO MUNICIPAL SATISFACTION.
 - WHERE THE SANITARY SEWER CROSSES ABOVE THE WATERMAIN, THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 0.50m VERTICAL SEPARATION. ADEQUATE STRUCTURAL SUPPORT OF THE SEWER TO PREVENT SETTLING AND EXCESSIVE JOINT DEFLECTION AND ENSURE THAT THE LENGTH OF THE WATER PIPE BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.



0 SD SEPT 5, 2017 ISSUED FOR SITE PLAN CONTROL

REV BY	DATE	DESCRIPTION

Kollaard Associates Engineers

P.O. BOX 189, 210 PRESCOTT ST. (613) 860-0923
KEMPTVILLE, ONTARIO info@kollaard.ca
KOG 1J0 FAX (613) 258-0475
http://www.kollaard.ca

CONSULTANTS:

CLIENT: INDEPENDENT DEVELOPMENT GROUP

PROJECT: PROPOSED MULTI-UNIT RESIDENTIAL BUILDING

LOCATION: 1946 SCOTT STREET OTTAWA, ON

DESIGNED BY:	CHECKED BY:
SD	SD
DRAWN BY:	APPROVED BY:
AVB	SD

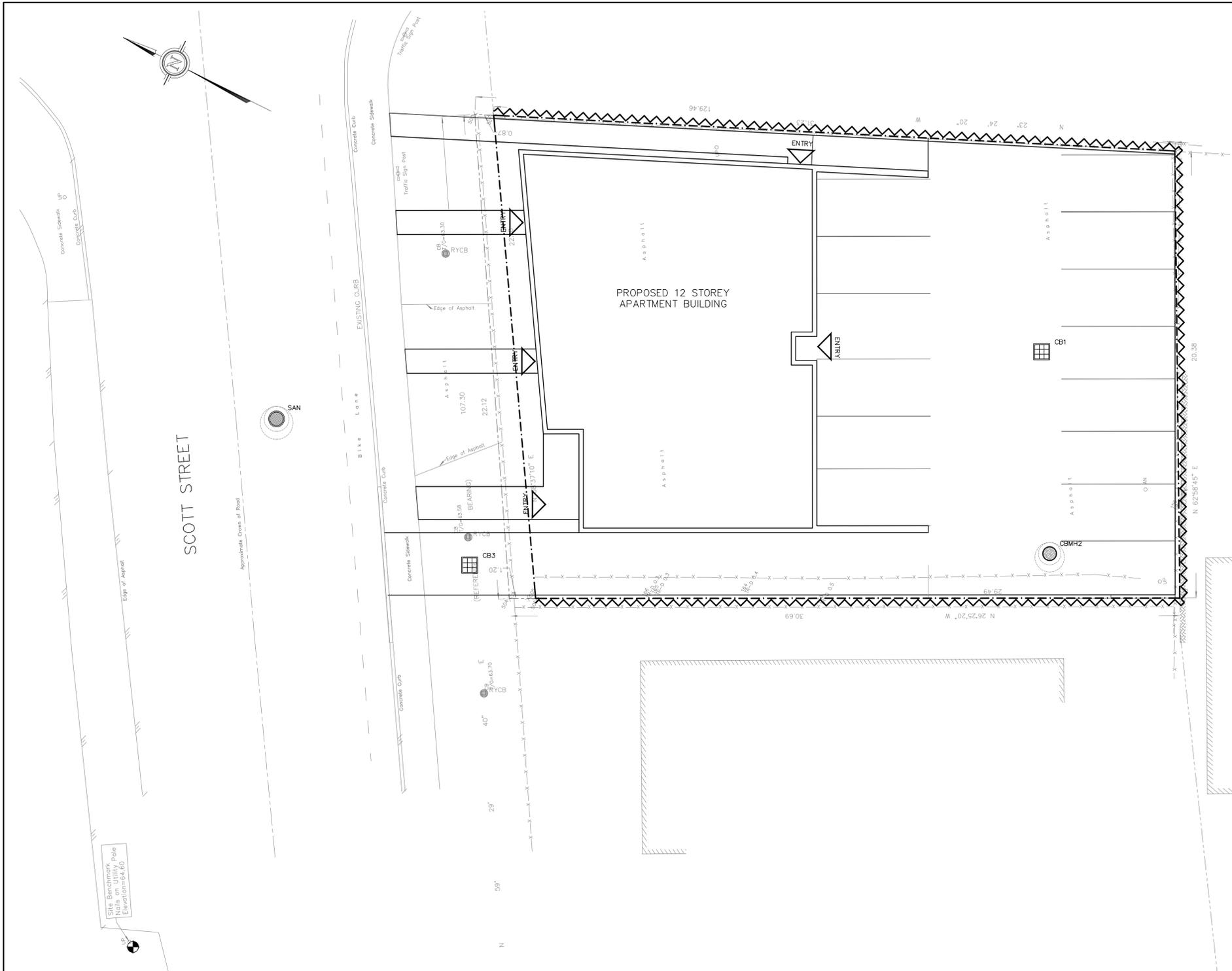
DATE: AUG. 10, 2017

SCALE: AS NOTED

PROJECT NUMBER: 170628

LICENSED PROFESSIONAL ENGINEER
SEP. 06, 2017
S. E. deWit
100079612
PROVINCE OF ONTARIO

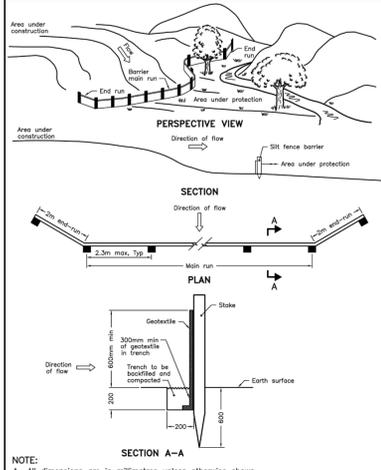
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LEGEND

UP	EXISTING UTILITY POLE
AN	EXISTING ANCHOR
STM	EXISTING STORM MANHOLE
SAN	EXISTING SANITARY MANHOLE
RYCB	EXISTING CATCH BASIN
CBMH	EXISTING REAR-YARD CATCH BASIN
SAN	PROPOSED CATCH BASIN/MANHOLE
CB	PROPOSED CATCH BASIN
DS	PROPOSED DOWNSPOUT LOCATION
DS	PROPOSED FIRE DEPARTMENT CONNECTION
WV	PROPOSED WATER VALVE
WM	WATER METER
WM	REMOTE WATER METER
WB	TEMPORARY BENCHMARK
(Symbol)	EXISTING ELEVATION
(Symbol)	PROPOSED/EXISTING ELEVATIONS
(Symbol)	PROPOSED CURB ELEVATION
(Symbol)	TOP OF RETAINING WALL
(Symbol)	DRAINAGE SLOPE
(Symbol)	PROPERTY LINE
(Symbol)	WATERMAIN
(Symbol)	STORM SEWER
(Symbol)	SANITARY SEWER
(Symbol)	5 YEAR PONDING
(Symbol)	100 YEAR PONDING
(Symbol)	PROPOSED SILT FENCE BARRIER
(Symbol)	PROPOSED RETAINING WALL

- 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 AGENCY.
 - THE OWNER (AND/OR CONTRACTOR) AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN AT LEAST EQUAL TO THE STATED MINIMUM REQUIREMENTS AND TO THE SATISFACTION OF THE CITY OF OTTAWA, 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 IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL.
 - THE CONTRACTOR IS TO ENSURE THAT THE SITE ACCESS POINTS AND ADJACENT STREETS TO THE ACCESS POINTS ARE MAINTAINED AND KEPT CLEAN OF CONSTRUCTION MATERIALS SUCH AS, BUT NOT LIMITED TO MUD, DIRT, CLAY AND GRANULARS ON A DAILY BASIS OR AS NECESSARY, TO THE SATISFACTION OF THE CITY OF OTTAWA.
 - EVERY EFFORT WILL BE MADE TO ENSURE THAT ALL DISTURBED AREAS ARE TOPSOILED AND SEEDS AS SOON AS REASONABLY POSSIBLE.
 - THE SEDIMENT AND EROSION CONTROL PLAN IS A LIVING DOCUMENT WHICH MAY BE AMENDED BY ON-SITE REQUIREMENTS AT THE APPROVAL OF THE MUNICIPALITY AND THE CONSERVATION AUTHORITY.
- MINIMUM EROSION AND SEDIMENT CONTROL PLAN REQUIREMENTS:**
- TIME THE DEMOLITION AND EXCAVATION ACTIVITIES SO THAT THEY OCCUR NO SOONER THAN IS NECESSARY FOR SUBSEQUENT CONSTRUCTION ACTIVITIES.
 - LANDSCAPE THE SITE AS SOON AS PRACTICALLY POSSIBLE.
 - USE SILT FENCES AROUND ANY STOCKPILES OF SOIL.
 - PRIOR TO CONSTRUCTION, SILT FENCE BARRIERS (OPSD 219.110) WILL BE PLACED ALONG THE PROPERTY LINES AS SHOWN ON THE DRAWING.
 - THE SILT FENCE SHOULD BE REMOVED ONLY WHEN THE SITE IS STABILIZED.
 - INSTALL FILTER SOCKS ACROSS ALL EXISTING AND PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES PRIOR TO CONSTRUCTION.

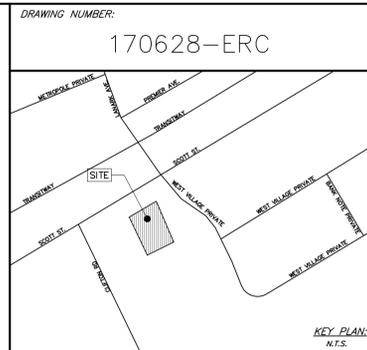


NOTE:
A - All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2006 Rev. 1

LIGHT-DUTY SILT FENCE BARRIER

OPSD 219.110



DRAWING: **EROSION & SEDIMENT CONTROL PLAN**

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CONSULTANTS:

CLIENT:

INDEPENDENT DEVELOPMENT GROUP

PROJECT:

PROPOSED MULTI-UNIT RESIDENTIAL BUILDING

LOCATION:

1946 SCOTT STREET
OTTAWA, ON

DESIGNED BY:	CHECKED BY:
SD	SD
DRAWN BY:	APPROVED BY:
AVB	SD
DATE:	AUG. 10, 2017
SCALE:	AS NOTED
PROJECT NUMBER:	170628



EROSION AND SEDIMENT CONTROL PLAN
SCALE = 1:100