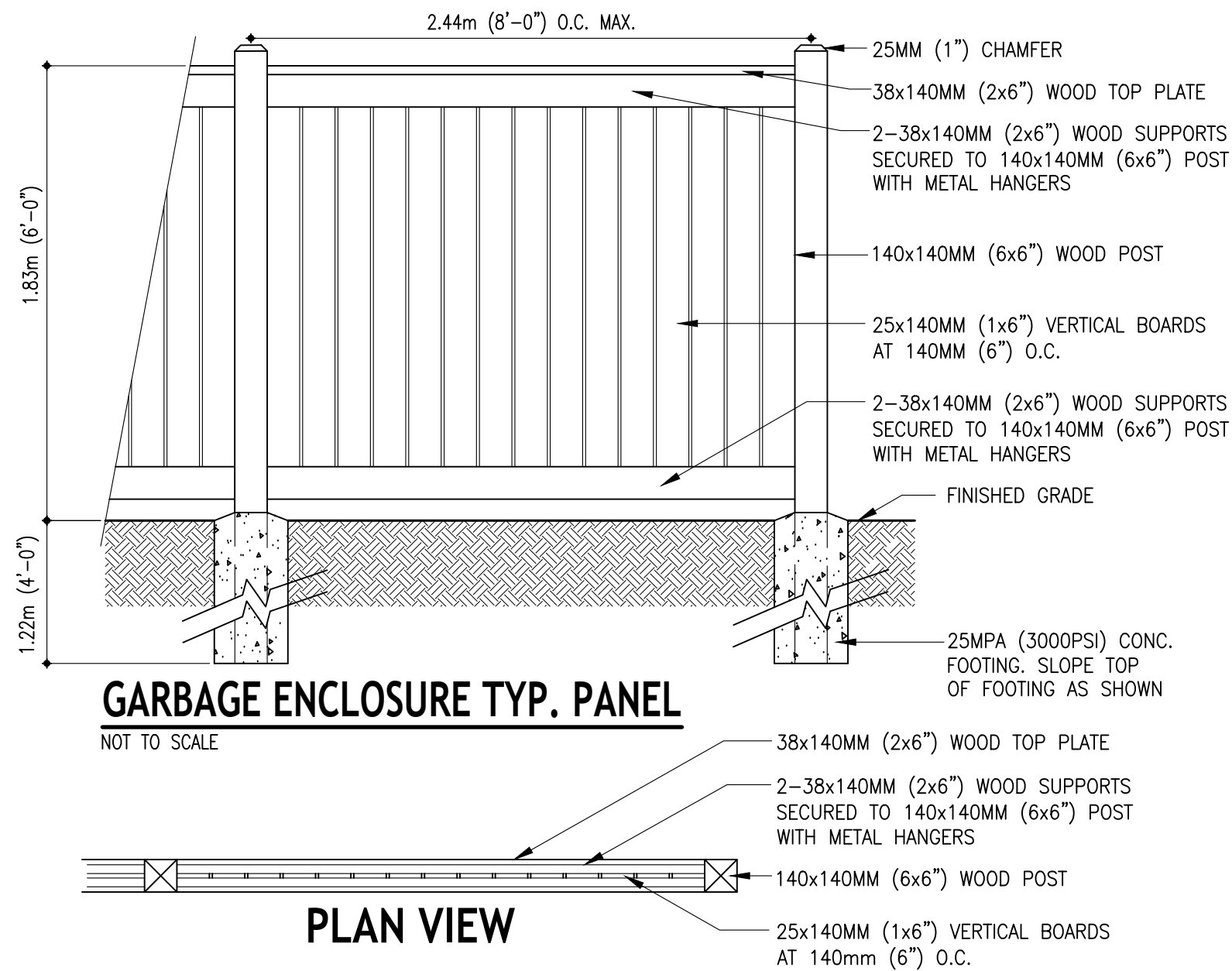
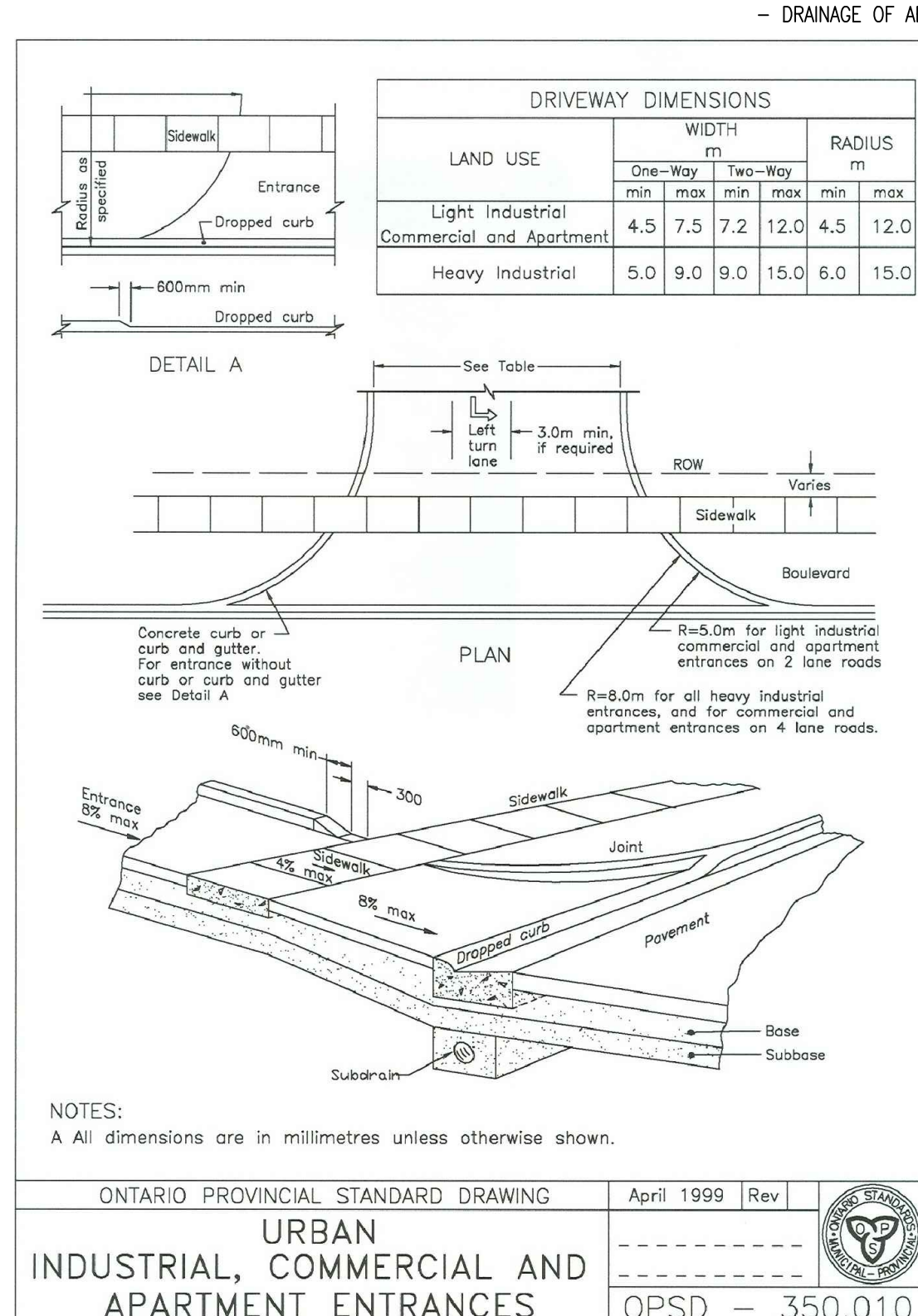
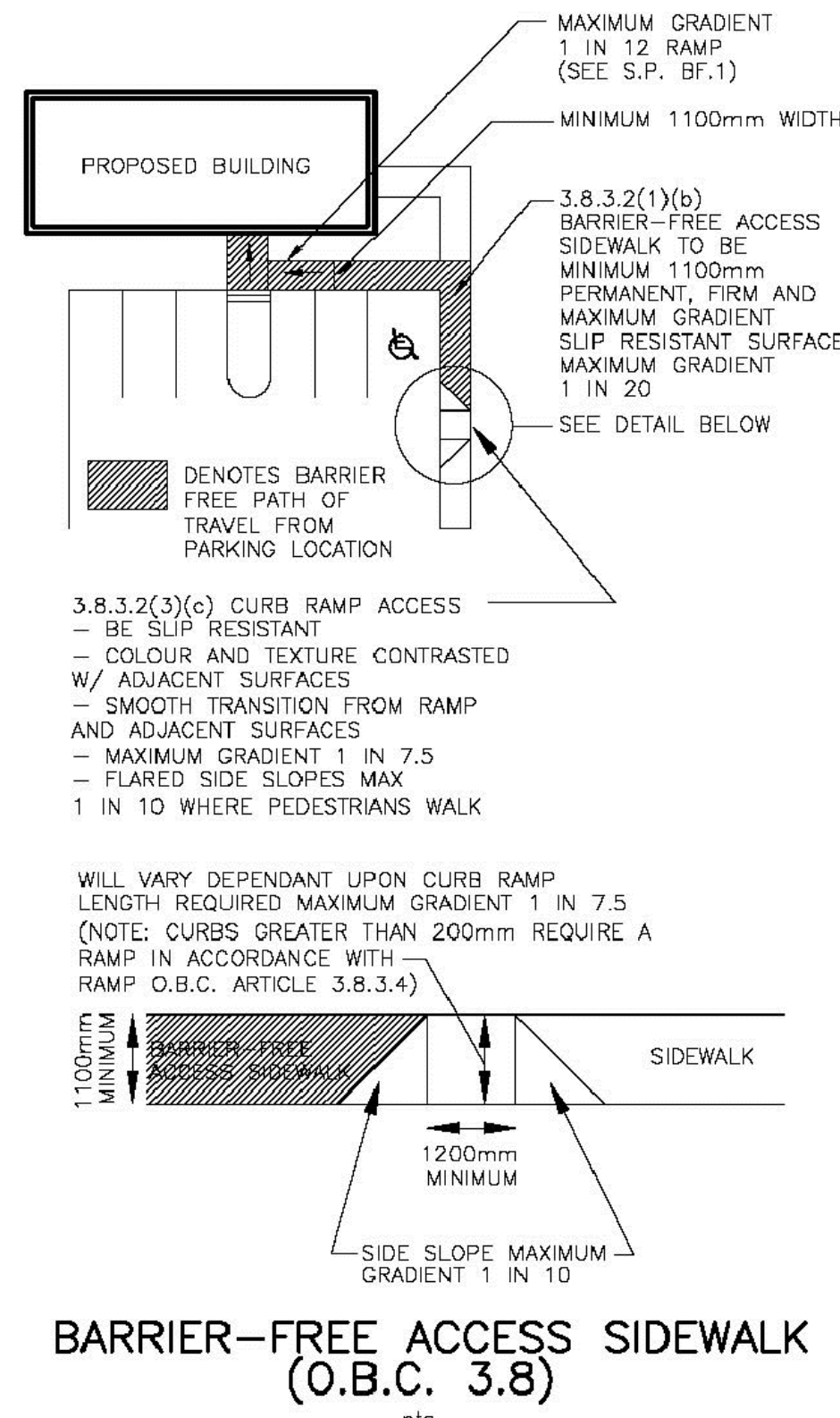
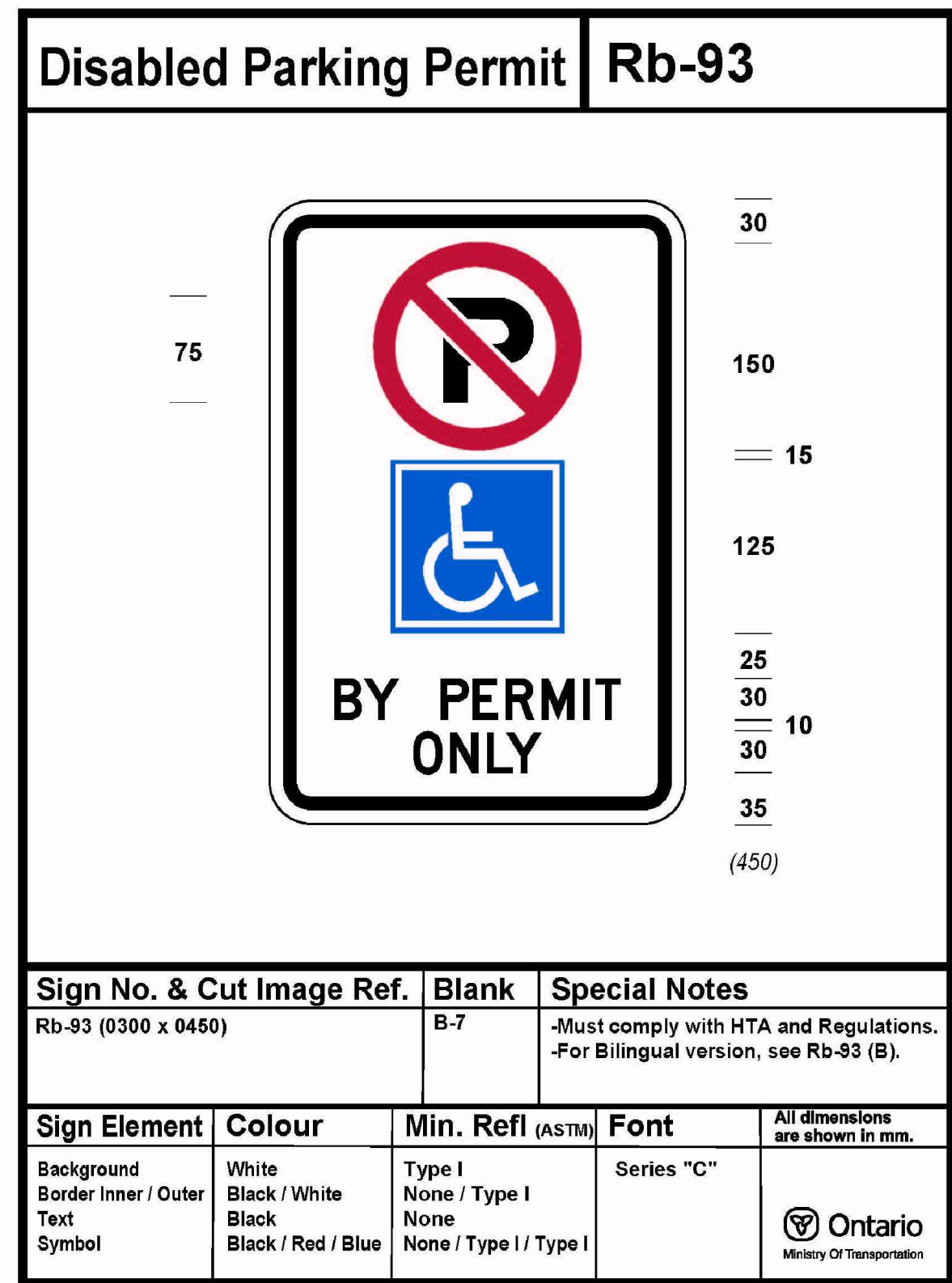
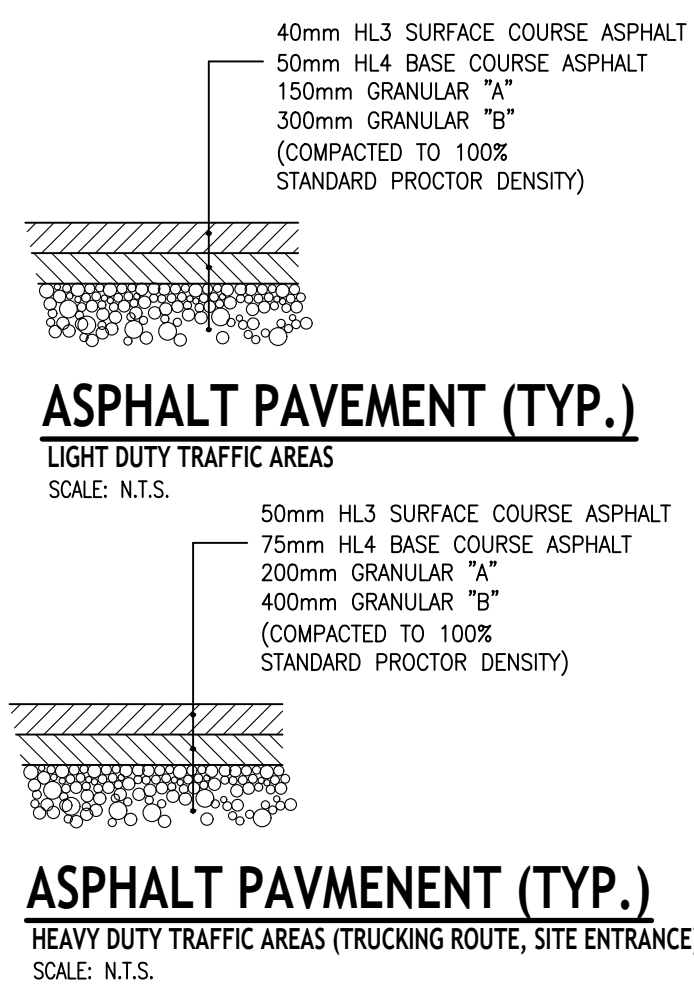




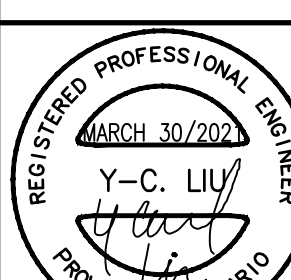
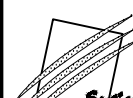
SITE DATA GENERAL COMMERCIAL (C4) ZONE REGULATIONS		
BUILDING	REQUIREMENTS	PROPOSED
LOT AREA (min.)	464.0 sq.m.	2050.0 sq.m.
LOT FRONTAGE (min.)	15.0 m. (min.)	29.68 m.
FRONT YARD DEPTH (min.)	4.0 m. (min.)	29.68 m.
INT. SIDE YARD N. (min.) (ABUTTING EDUCATIONAL)	NOT APPLICABLE	1.29 m.
INT. SIDE YARD S. (min.) (ABUTTING RESIDENTIAL)	4.5 m. + 1.5 m. /ADD. FLOOR = 5.5 (2 FLOORS)	10.0 m.
REAR YARD SETBACK (min.)	6.00 m. (min.)	14.39 m.
LOT COVERAGE (max.)	60%	27.2%
LANDSCAPE OPEN SPACE (min.)	15%	34%
BUILDING HEIGHT	16.5 m	6.7m (22' EAVE)

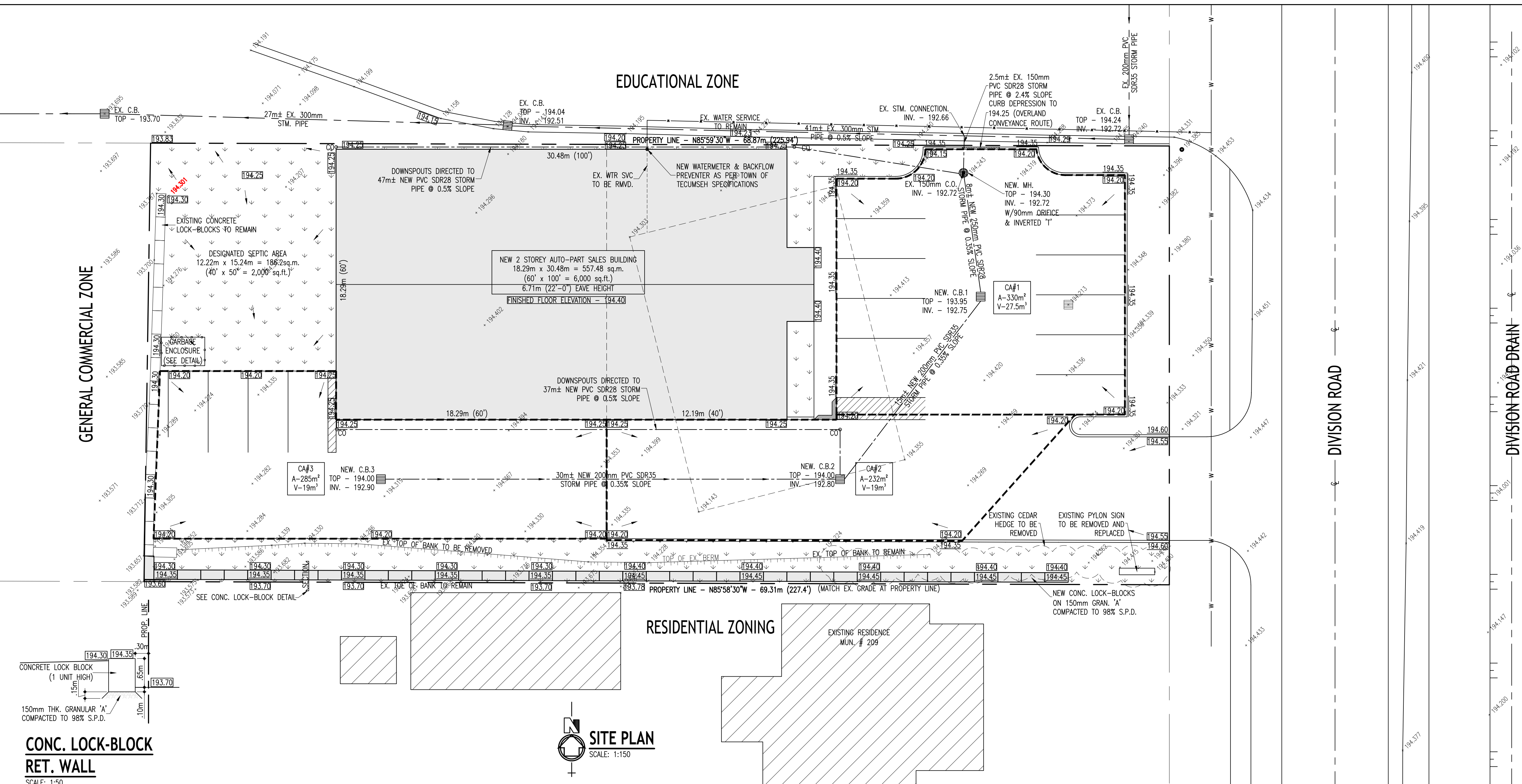
BUILDING DATA NEW AUTO –PARTS SALES BUILDING – 18.29m x 30.48m = 557.48 sq.m. WAREHOUSE AREA – 18.29m x 18.29m = 334.52 sq.m. RETAIL AREA = 18.29m x 12.19m = 222.96 sq.m. MEZZANINE (WAREHOUSE) 18.29m x 18.29m = 334.52 sq.m.
PARKING REQUIREMENTS RETAIL AREA – 1 SPACE PER 22.5 sq.m. = 222.96/22.5 = 9.9 SPACES WAREHOUSE AREA – 1 SPACE PER 200.0 sq.m. = 669.0/200 = 3.4 SPACES TOTAL PARKING SPACES REQUIRED – 14 SPACES PARKING SPACES PROVIDED – 16 SPACES (1 BARRIER FREE) 2 LOADING SPACES PROVIDED



CONSTRUCTION NOTES:

- 1. GENERAL**
 - SITE PLAN PROVIDED BY Y.C. LIU ENGINEERING
 - TOPOGRAPHIC SURVEY PROVIDED BY Y.C. LIU ENGINEERING
 - ALL WORKS TO BE COMPLETED IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS, AND THE MINISTRY OF THE ENVIRONMENT AND ENERGY GUIDELINES (LATEST EDITION)
 - THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES PRIOR TO AND DURING CONSTRUCTION
 - CONTRACTOR RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO THE START OF CONSTRUCTION
 - NO OUTDOOR STORAGE, FENCING OR GATES TO BE PROVIDED
- 2. RECOMMENDED MINIMUM PAVEMENT STRUCTURE FOR ASPHALT SURFACES:**
 - GRAVEL :**
 - 150mm GRANULAR 'A' COMPACTED TO 100% S.P.M.D.D.
 - 300mm GRANULAR 'B' COMPACTED TO 100% S.P.M.D.D.
 - LIGHT DUTY:**
 - 150mm GRANULAR 'A' COMPACTED TO 100% S.P.M.D.D.
 - 300mm GRANULAR 'B' COMPACTED TO 100% S.P.M.D.D.
 - 40mm HL3 SURFACE ASPHALT COMPACTED TO 92-97% M.R.D.
 - 50mm HL4 BINDER ASPHALT COMPACTED TO 92-97% M.R.D.
 - HEAVY DUTY:**
 - 200mm GRANULAR 'A' COMPACTED TO 100% S.P.M.D.D.
 - 400mm GRANULAR 'B' COMPACTED TO 100% S.P.M.D.D.
 - 50mm HL3 SURFACE ASPHALT COMPACTED TO 92-97% M.R.D.
 - 75mm HL8 BINDER ASPHALT COMPACTED TO 92-97% M.R.D.
- SERVICING NOTES**
 - 1. GENERAL NOTES**
 - ALL WORK WITHIN RIGHT OF WAY TO BE COMPLETED TO SATISFACTION OF TOWN OF KINGSVILLE
 - COMPLETED WORKS MUST BE APPROVED BY CONSULTING ENGINEER
 - 2. SEWERS**
 - BACKFILL AND SEWER BEDDING AS PER OPSD 802.010, 802.013, 802.014
 - ALL BEDDING AND COVER MATERIAL TO BE GRANULAR 'A' OR 19mm CRLS COMPACTED TO 95% SPMD
 - STORM SEWER PIPE TO BE PVC SDR 35, OR SDR 28 AS SPECIFIED
 - SANITARY SEWER PIPE TO BE PVC SDR 28
 - 3. EROSION CONTROL MEASURE NOTES:**
 - PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION
 - ALL EROSION CONTROL MEASURES ARE TO BE IN PLACE BEFORE STARTING CONSTRUCTION AND REMAIN UNTIL RESTORATION IS COMPLETE
 - ALL COLLECTED SEDIMENT MUST BE DISPOSED OF AT AN APPROVED LOCATION
 - PROTECT ALL CB'S, MANHOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE (TERRAFIX 270R)
 - KEEP ALL SUMPS CLEAN DURING CONSTRUCTION
 - STRAW BALES TO BE USED IN LOCALIZED AREAS AS SHOWN AND AS DIRECTED BY THE ENGINEERING DEPARTMENT FOR THE WORKS WHICH ARE IN OR ADJACENT TO FLOODLINES, FILL LINES, AND HAZARDOUS SLOPES
 - STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF
 - OBTAIN APPROVAL FROM CONSERVATION AUTHORITY PRIOR TO CONSTRUCTION FOR WORKS WHICH ARE IN, OR ADJACENT TO FLOODLINES, FILL LINES, AND HAZARDOUS SLOPES
 - PROVIDE GRAVEL ENTRANCE WHEREVER EQUIPMENT LEAVES THE SITE TO PREVENT MUD TRACKING ON PAVED SURFACES. GRAVEL BED SHOULD BE A MINIMUM OF 15m LONG, 6m wide AND 300mm DEEP AND SHALL CONSIST OF COARSE (2" CRUSHER-RUN LIMESTONE) MATERIAL. MAINTAIN GRAVEL ENTRANCE THROUGHOUT CONSTRUCTION
 - DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES TO BE SEEDED IF THEY ARE TO REMAIN ON-SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 1 MONTH)
 - CONTROL WIND-BLOWN DUST OFF-SITE TO ACCEPTABLE LEVELS, BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY, AND/OR WATERING AS REQUIRED
 - ALL OF THE ABOVE NOTES AND ANY SEDIMENT AND EROSION CONTROL MEASURES AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES
 - 4. MANHOLES/CATCHBASINS**
 - STORM MANHOLES AS OPSD 701.010 WITH FRAME AND COVER
 - PRECAST CATCHBASINS AS PER OPSD 705.010 & 702.050 WITH FRAME AND CAST IRON GRATE AS SPECIFIED
 - MINIMUM HORIZONTAL CLEARANCE BETWEEN SEWER AND WATER SERVICE IS 2.5m. WHERE THE WATERMAIN PASSES OVER THE SEWER, MINIMUM VERTICAL CLEARANCE IS 0.15m AND 0.50m WHERE THE WATERMAIN PASSES UNDER THE SEWER
 - 5. WATERMANS**
 - WATERMANS/SERVICES MIN. COVER 1.7M BELOW FINISHED GRADE
 - WATER SERVICE TO BE INSTALLED AS PER TOWN STANDARDS WITH GRANULAR 'A' BEDDING AND COVER
 - PVC WATERMAIN IN SIZES 100mm THROUGH TO 300mm SHALL BE CLASS 150 DR18 CONFORMING TO AWWA C900. TRACER WIRE (10AWG min) SHALL BE INSTALLED ON PVC WATERMAIN WITHIN THE ROAD ALLOWANCE
 - CORROSION PROTECTION MEASURES FOR METAL WATER MAIN COMPONENTS TO INCLUDE DENSO MASTIC/TAPE AND CAS CAPS
 - ALL WATERWORKS CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS OF THE TOWN OF KINGSVILLE ENGINEERING DEPARTMENT
 - 6. GRADING NOTES**
 - EXISTING GROUND ELEVATIONS TO BE MAINTAINED ALONG PERIMETER OF SITE UNLESS SPECIFIED OTHERWISE
 - ALL DISTURBED AREAS TO BE REINSTATE TO EXISTING CONDITIONS OR BETTER. LANDSCAPE AREAS TO BE RESTORED WITH 100mm TOPSOIL AND No. 1 NURSERY SOD OR SEED
 - EMBANKMENTS MAXIMUM SLOPE OF 3:1
 - TOPSOIL TO BE STRIPPED FROM ALL PROPOSED HARD SURFACE AREAS PRIOR TO PROCEEDING WITH GRADING AND FILLING OPERATIONS
 - GRASS SURFACE MINIMUM SLOPE 1:5X UNLESS OTHERWISE SPECIFIED
 - ASPHALT PAVEMENT/CONCRETE SURFACES MINIMUM SLOPE 1:0%
 - ALL SURFACE DRAINAGE SHALL BE SELF CONTAINED, COLLECTED, AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT
 - DRAINAGE OF ABUTTING PROPERTIES SHALL NOT BE NEGATIVELY AFFECTED

REVIEWS	ISSUED FOR	DATE	
	OWNER REVIEW	JAN. 22/2021	
	PRELIMINARY MUNICIPAL REVIEW	FEB. 25/2021	
	SITE PLAN APPROVAL	MARCH 5/2021	
	REVISED PER MUNICIPAL COMMENTS	MARCH 30/2021	
CONTRACTOR:			
PROJECT:			
SITE PLAN FOR 2013 DIVISION ROAD		KINGSVILLE, ONTARIO	
2013 DIVISION ROAD			
SHEET TITLE			
SITE PLAN			
	Y.C. LIU ENGINEERING 59 BROADVIEW AVE. WEST CHATHAM, ONTARIO N7L 5G2 TEL: (519) 351-9612 FAX: (519) 351-9038		
			
DRAWN	CHECKED	FILE NO.	DWG. NO.
C.W.	C.L.	201-067	1
BCIN	FIRM BCIN	DATE	
20529	29635	DEC./20	SP-1 of



CONC. LOCK-BLOCK RET. WALL
SCALE: 1:50

CONC. LOCK-BLOCK DETAIL

NOTES:

- The sump is measured from the lowest invert.
- Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole.
- Precast concrete components according to OPSD-701.030, 701.031, or 701.032.
- Structure exceeding 5.0m in depth to include safety platform according to OPSD-404.020.
- Pipe support according to OPSD-708.020.
- For benching and pipe opening details, see OPSD-701.021.
- For adjustment unit and frame installation see OPSD-704.010.
- All dimensions are nominal.
- All dimensions are in millimetres unless otherwise shown.

ALTERNATIVES

A PRECAST SLAB BASE

B CAST-IN-PLACE BASE

C PRECAST FLAT CAP

OPSD - 701.010

SITE PLAN
SCALE: 1:150

EDUCATIONAL ZONE

GENERAL COMMERCIAL ZONE

RESIDENTIAL ZONING

NOTES:

- Right angle bend
- Tee connection
- Three way junction
- Four way junction
- Straight through
- Dead end
- Wye connection
- 45° bend

MAXIMUM SIZE HOLE IN THE WALL IN PRECAST RISER SECTIONS

Maintenance Hole Diameter	No. 1-4	No. 5 & 6	No. 7	Inlet Hole	Outlet Hole
1200	700	860	780	700	860
1500	860	1220	960	860	1170
1800	1220	1485	1220	1220	1485
2400	1485	2020	1760	1485	2020
3000	1930	2450	2300	1930	2450
3600	2195	3085	2730	2195	3085

NOTES:

- Concrete for benching to be 30MPa.
- Benching to be given wood float finish, channel to be given steel trowel finish.
- Benching slope and height to be as specified.
- All dimensions are nominal.
- All dimensions are in millimetres unless otherwise shown.

OPSD - 701.021

PIPE IN SUPPORTED EXCAVATION

PIPE IN UNSUPPORTED EXCAVATION

PIPE IN SUPPORTED EXCAVATION

LEGEND:

NOTES:

- Height of fill is measured from the finished surface to top of pipe.
- The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
- Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
- Condition of excavation is symmetrical about centreline of pipe.
- A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
- B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
- C All dimensions are in metres unless otherwise shown.

CLEARANCE TABLE

Pipe Inside Diameter (mm)	Clearance (mm)
900 or less	300
Over 900	500

OPSD 802.010

OUTLET C.B.M.H. #1 DETAIL
SCALE: 1:20

NOTES:

- 150mm# SEALED REMOVABLE END CAP FOR MAINTENANCE
- INSTALL INVERTED 'T' ON OUTLET OF SITE FOR WATER QUALITY
- 150mm# OUTLET TO STORM SEWER
- PROVIDE RESTRICTOR PLATE ON OUTLET PIPE w/ 90mm# DRILLED ORIFICE
- 600mm DEEP SUMP PIT
- B.O. SUMP 192.12

OPSD 802.010

CONCRETE BARRIER CURB
OPSD 600.110

NOTES:

- Where sidewalk is continuously adjacent, reduce the dropped curb at entrances to 75mm.
- For slipforming procedure, a 5% batter is acceptable.

A Treatment at entrances shall be according to OPSD 351.010.

B Outlet treatment shall be according to the OPSD 610 Series.

C 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 900 Series.

D All dimensions are in millimetres unless otherwise shown.

PRECAST CONCRETE CATCH BASIN
600x600mm

NOTES:

- Outlet hole size 525mm diameter maximum, location as required.
- 200mm diameter knockout to accommodate subdrain. Knockout to be 50mm deep.
- A Centre reinforcing in base slab and walls $\geq 20mm$.
- B Granular backfill to be placed to a minimum thickness of 300mm all around the catch basin.
- C Frame, grate, and adjustment units shall be installed according to OPSD-704.010.
- D Pipe support according to OPSD-708.020.
- E All dimensions are nominal.
- F All dimensions are in millimetres unless otherwise shown.

OPSD - 705.010

SITE PLAN FOR 2013 DIVISION ROAD DRAINAGE PLAN

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR OWNER REVIEW	JAN. 22/2021
2	PRELIMINARY MUNICIPAL REVIEW	FEB. 25/2021
3	SITE PLAN APPROVAL	MARCH 5/2021
4	REVISED PER MUNICIPAL COMMENTS	MARCH 30/2021

CONTRACTOR:

PROJECT:

2013 DIVISION ROAD

KINGSTOWN, ONTARIO

Y.C. LIU ENGINEERING

REGISTERED PROFESSIONAL ENGINEER

PROVINCE OF ONTARIO

Y.C. LIU

2013 DIVISION ROAD

20529

29635

DEC./20

SP-2 of 2