TOWN OF CALEDON
PLANNING
RECEIVED
Apr. 11, 2022

TOWN OF CALEDON

DEVELOPMENT: CARANTANIA DEVELOPMENTS
CONSULTANT: RAND ENGINEERING CORP.

STORM DRAINAGE DESIGN CHART (10 YEAR STORM)
FOR CIRCULAR DRAINS FLOWING FULL

DATE: April 2022
SHEET No. : 1 of 1

LOCATION					DRAINAGE				RUNOFF				PIPE SELECTION							PROFILE							
	FROM		TO																		UPSTREAM			DOWNSTREAM			
STREET / BLOCK	MH No.	Sta.	MH No.	Sta.	A ha.	C	AXC	Cumml. AXC	Tc external min	Cumml. Tc (Ti=10.0min.) min	I (10) mm/hr	Q (10) m^3/s	Pipe L m	Pipe So m/m	Pipe Diam. Mm	Actual Capacity (full) m^3/s	^ V Change in Velocity m/s (Max 0.6)	Time of Flow min	Minor Losses m	Fall in Sewer m.	Surface Elev. m	Inv. Elev. m	Cover m	Surface Elev. m	Inv. Elev. m	Cover m	Percent Pipe Utilization
PEMBROOK ST.	**1**		**2**		0.30	0.55	0.17	0.17	10.00	10.75	134.2	0.06	**43.5**	**0.50**	**300**	0.07	0.97	0.75		0.22							90%
"	**2**		**3**		0.97	0.55	0.53	0.70	10.75	11.38	130.1	0.25	**68.0**	**1.00**	**450**	0.28	1.79	0.63		0.68							89%
EXTERNAL - RICHELIEU COURT	**3**				0.02	0.55	0.01																				
PEMBROOK ST.			**4**		0.27	0.55	0.15	0.86	11.38	11.94	126.9	0.30	**55.5**	**0.70**	**525**	0.36	1.66	0.56		0.39							84%
STORM SEWER BLOCK	**4**		**5**		0.00	-	0.00	0.86	11.94	12.74	124.3	0.30	**80.0**	**0.70**	**525**	0.36	1.66	0.80		0.56							82%
EX. AUTUMN OAK COURT	**5**		**EX. 4**		0.00	-	0.00	0.86	12.74	12.77	120.6	0.29	**7.0**	**5.06**	**600**	1.38	4.88	0.02		0.35							21%
SOUTHBURY MANOR DR.	**6**		**7**		0.26	0.55	0.14	0.14	10.00	10.51	134.2	0.05	**35.0**	**0.70**	**300**	0.08	1.14	0.51		0.25							66%
"	**7**		**8**		0.23	0.55	0.13	0.27	10.51	11.05	131.4	0.10	**36.0**	**0.50**	**375**	0.12	1.12	0.53		0.18							79%
"	**8**		**9**		0.00	-	0.00	0.27	11.05	11.15	128.6	0.10	**10.0**	**1.00**	**375**	0.18	1.59	0.11		0.10							55%
EX. AUTUMN OAK COURT	**9**		**EX. 2**		0.67	0.55	0.37	0.64	11.15	12.28	128.1	0.23	**104.0**	**0.50**	**600**	0.43	1.53	1.13		0.52							52%
EX. ASHBURY CRES.			**EX. 2**		0.15	0.55	0.08	0.08	10.00	10.52	134.2	0.03	**40.9**	**0.91**	**300**	0.09	1.30	0.52		0.37							33%
EX. AUTUMN OAK COURT	**EX. 2**		**EX. 4**		0.45	0.55	0.25	0.97	12.28	13.07	122.7	0.33	**98.0**	**0.90**	**600**	0.58	2.06	0.79		0.88							57%
"	**EX. 4**		**EX. 5**		0.44	0.55	0.24	2.07	13.07	13.68	119.1	0.68	**73.6**	**0.64**	**750**	0.89	2.01	0.61		0.47							77%
PEMBROOK ST.	**1**		**10**		0.45	0.55	0.25	0.25	10.00	10.77	134.2	0.09	**52.0**	**0.50**	**375**	0.12	1.12	0.77		0.26							74%
"	**10**		**11**		0.74	0.55	0.41	0.65	10.77	11.46	130.0	0.24	**74.0**	**1.00**	**450**	0.28	1.79	0.69		0.74							83%
"	**11**		**EX. 111**		0.33	0.55	0.18	0.84	11.46	11.78	126.6	0.29	**42.0**	**1.50**	**450**	0.35	2.19	0.32		0.63							84%
SHEARDOWN TRAIL	**EX. CBs**		**EX. 111**		0.24	0.55	0.13	0.13																			
PEMBROOK ST.	**EX. 111**		**EX. 112**		0.39	0.55	0.21	1.18	11.78	11.93	125.0	0.41	**27.8**	**2.81**	**450**	0.48	3.00	0.15		0.78							86%
Drainage to Ex. DCB's on Pembrook St. to Ex. Queensgate Blvd. 1050mm Storm Sewer																											
EXTERNAL - RICHELIEU COURT					0.05	0.55	0.03																				
EXTERNAL - PEMBROOK ST.					0.05	0.55	0.03																				
INTERNAL - PART OF LOT 72					0.01	0.25	0.00	0.06	10.00	10.00	134.2	0.02															
Uncontrolled Drainage to Queensgate Blvd. from part of Lot 72 and Storm Sewer Block																											
					0.03	0.25	0.01	0.01	10.00	10.00	134.2	0.00															