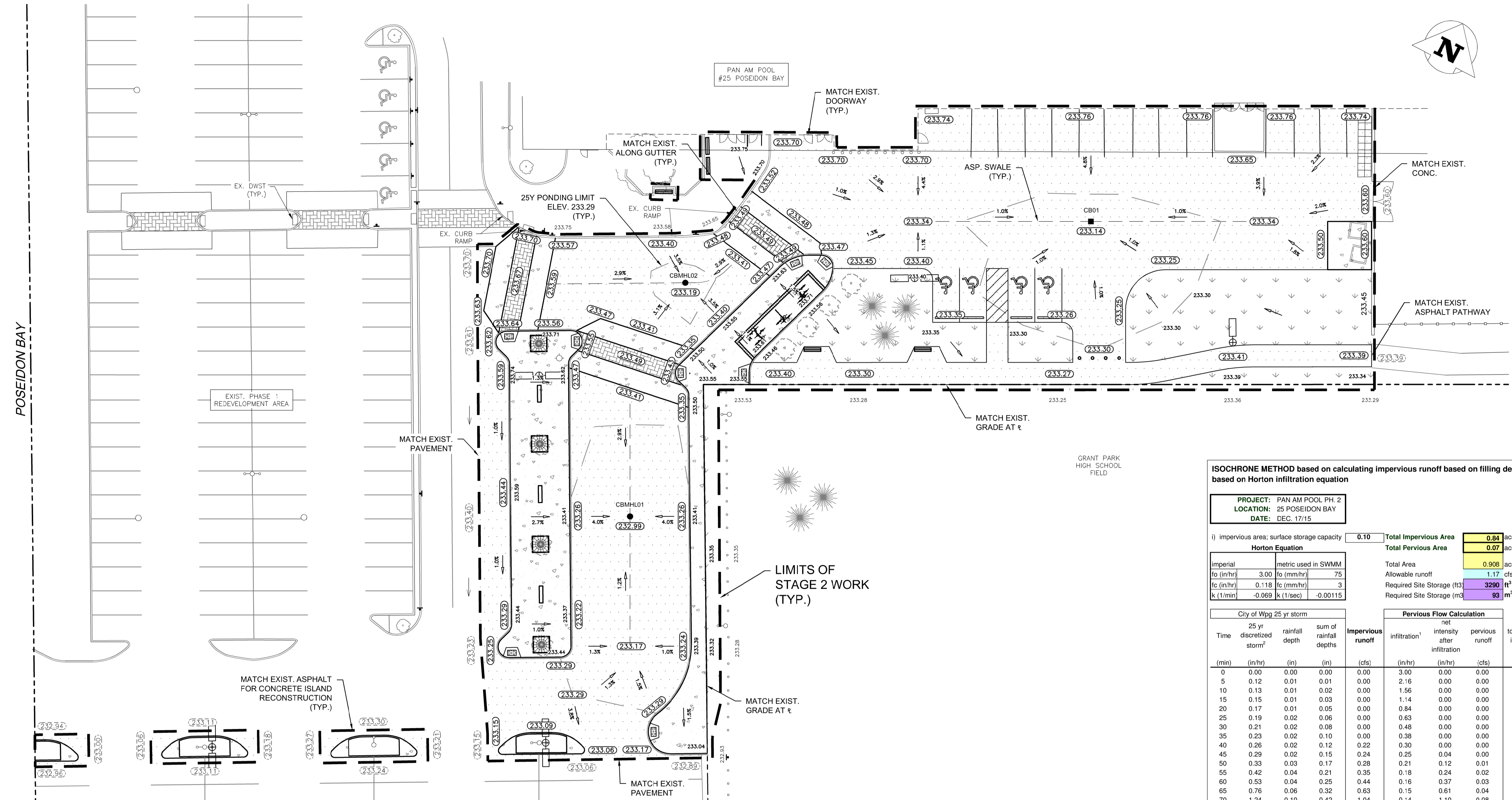


POSEIDON BAY



**ISOCHRONE METHOD based on calculating impervious runoff based on filling depression storage and pervious runoff based on Horton infiltration equation**

PROJECT: PAN AM POOL PH. 2  
 LOCATION: 25 POSEIDON BAY  
 DATE: DEC. 17/15

Impervious area; surface storage capacity	0.10	Total Impervious Area	0.84 acres
		Total Pervious Area	0.908 acres
		Total Area	0.908 acres
		Allowable runoff	1.17 cfs
		Required Site Storage (ft³)	3290 ft³
		Required Site Storage (m³)	93 m³

**Allowable offsite runoff (5yr storm)**

Q = ciA	1.171 cfs
Enter "C" Value =	0.300
Enter from 5 year storm	4.300
"i" =	0.908 In Acres

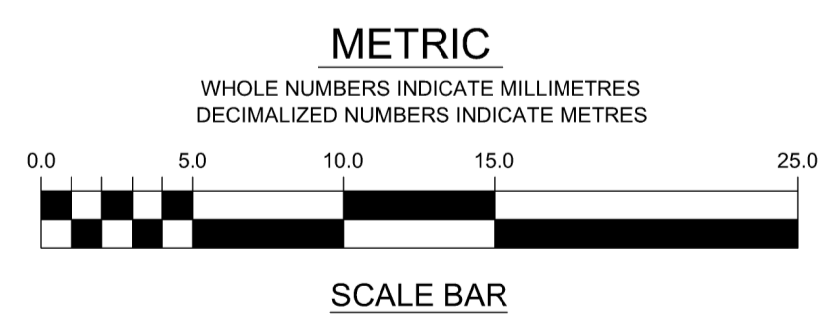
City of Wpg 25 yr storm				Pervious Flow Calculation				total per. + imp. flow	allowable discharge offsite	net runoff requiring storage	mass sum of storage
Time (min)	25 yr discretized storm <sup>2</sup> (in/hr)	rainfall depth (in)	sum of rainfall depths (in)	Impervious runoff (cfs)	infiltration <sup>1</sup> (in/hr)	intensity after infiltration (in/hr)	pervious runoff (cfs)				
0	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0
5	0.12	0.01	0.01	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0
10	0.13	0.01	0.02	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0
15	0.15	0.01	0.03	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0
20	0.17	0.01	0.05	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0
25	0.19	0.02	0.06	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0
30	0.21	0.02	0.08	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0
35	0.23	0.02	0.10	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0
40	0.26	0.02	0.12	0.22	0.30	0.00	0.00	0.22	0.22	0.00	0
45	0.29	0.02	0.15	0.24	0.25	0.04	0.00	0.25	0.25	0.00	0
50	0.33	0.03	0.17	0.28	0.21	0.12	0.01	0.29	0.29	0.00	0
55	0.42	0.04	0.21	0.35	0.18	0.24	0.02	0.37	0.37	0.00	0
60	0.53	0.04	0.25	0.44	0.16	0.37	0.03	0.47	0.47	0.00	0
65	0.76	0.06	0.32	0.63	0.15	0.61	0.04	0.68	0.68	0.00	0
70	1.24	0.10	0.42	1.04	0.14	1.10	0.08	1.12	1.12	0.00	0
75	2.96	0.25	0.67	2.47	0.13	2.83	0.21	2.68	1.17	1.51	452
80	7.86	0.66	1.32	6.56	0.13	7.73	0.56	7.13	1.17	5.96	2239
85	3.93	0.33	1.65	3.28	0.13	3.80	0.28	3.56	1.17	2.39	2955
90	2.29	0.19	1.84	1.91	0.12	2.17	0.16	2.07	1.17	0.90	3225
95	1.54	0.13	1.97	1.29	0.12	1.42	0.10	1.39	1.17	0.22	3290
100	1.17	0.10	2.07	0.98	0.12	1.05	0.08	1.05	1.05	0.00	3290

**STORMWATER MANAGEMENT CRITERIA**

C<sub>ALLOWABLE</sub> = 0.3  
 Q<sub>BY ALLOWABLE</sub> = 0.03 m³/s  
 Q<sub>RESTRICTED</sub> = 0.03 m³/s (USING 100 DIA. RESTRICTOR INSTALLED AT OUTLET OF CBMHL01, OR APPROVED EQUIVALENT INLET CONTROL DEVICE)

REQUIRED TOTAL ON-SITE STORAGE = 93 m³ (USING ISOCHRONE METHOD)  
 AVAILABLE TOTAL ON-SITE STORAGE = 95 m³ (FOR MAX DEPTH OF PONDING = 0.30m)

(25 YEAR WATER ELEV. = 233.29, OBTAINED FROM PAN AM POOL PARKING LOT REDEVELOPMENT PHASE 1 STORM DESIGN BRIEF REPORT BY OTHERS)



REFER TO DWG C01 FOR GENERAL CONSTRUCTION NOTES

150 WM	WATERMAIN	180 WM	+	SURVEY BAR	235.380	GROUND ELEVATION	235.38	LOCATION APPROVED UNDERGROUND STRUCTURES	C.W.B.M. 52-012..... 233.701m N.E. COR. TAYLOR AVE. & CAMBRIDGE ST., AT REAR OF No. 880 CAMBRIDGE ST. FACING TAYLOR AVE., TBLT. IN S. SIDE OF SQUARE CONC. VENTILATOR, 0.6m E. OF W. EDGE & 0.6m BELOW TOP OF CONC. VENTILATOR FOR UNDERGROUND GARAGE.	 SisonBlackburn Consulting Inc. Unit 10 - 5 Scurfield Boulevard Winnipeg, MB, R3Y 1G3 T: (204) 505-0855 / F: (204) 505-0850 www.SBCinc.ca	ENGINEER'S SEAL	 THE CITY OF WINNIPEG PLANNING, PROPERTY & DEVELOPMENT	SHEET 4 OF 6 CITY DRAWING NO. 921-2015-C04
250 WWS	WASTEWATER	180 WWS	+	SIGN	235.38	DITCH ELEVATION	235.38				DESIGNED BY		
300 LDS	LAND DRAINAGE SEWER	300 LDS	+	UTILITY POLE	235.400	ROAD ELEVATION	235.400	DATE		APPROVED BY	RC		
	HYDRANT ASSEMBLY		+	UTILITY PEDESTAL		CURB		NOTE:		RELEASED FOR CONSTRUCTION			
	GATE VALVE		+	HYDRO		CONCRETE		LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.					
	CURB STOP		+	GAS		ASPHALT							
	REDUCER		+	MTS		PAVING STONE							
	MANHOLE		+	TREE LINE		GRASS							
	CATCH BASIN		+	CULVERT		DWST							
	TESTHOLE		+	SWALE									
	PROBEHOLE		+	DIRECTION OF FLOW									
EXISTING	LEGEND	PROPOSED	EXISTING	LEGEND	PROPOSED	EXISTING	LEGEND	PROPOSED					