



Mediterranean Plaza Commercial Drainage Area Inlet Number	AREA ACRES	C _s	C ₁₀₀	T _c (Min) S 100	T _s (In/hr)	T ₁₀₀ (In/hr)	Design Q _s (CFS)	Q ₁₀₀ (CFS)	Spread S ₁₈ Design 100-YR	Intercept S ₁₈ Design 100-YR	Bypass S ₁₈ Design 100-YR	
Parcel #6 & 11 R.O.W. Penstemon (East) ①	3.85	0.76	0.87	19	15	4.10	7.37	12.0	24.7	13.9	5.8	6.2
②								16.21	18.91	10.9	3.5	2.7
Parcel #42, 43, 44, & 45 R.O.W. 32nd St. (South Side) ③	1.30	0.88	0.93	15	4.56	7.37	5.2	8.9	10.2	3.1	2.1	5.8
To Area Inlet - Stub at SE Corner of 32nd St. W. & Penstemon 102	1.35	0.69	0.90	21	15	3.90	7.37	14.4	31.5	14.4	-	24" RCP Stub Sump
Sub-Total	10.50	0.74	0.84	21	15	3.90	7.37	30.3	65.0	28.8	3.5	(38.2)
Parcel #42, 43, 44, & 45 R.O.W. Penstemon (West Side) ④	1.37	0.88	0.93	15	4.56	7.37	5.5	9.4	10.6	3.2	2.3	6.2
To Grate Manhole SW Corner of 32nd St. W. & Penstemon 104	1.50	0.74	0.83	19	15	4.10	7.37	4.6	9.2	4.6	-	Neenan Type 12" Grate STD Radial @ 0.6' Depth (4.6)
Sub-Total	13.37	0.75	0.85	21	15	3.90	7.37	39.1	83.8	24.6	4.5	(49.2)
Bypass Flow to SW Corner of 32nd St. W. & Penstemon ⑤							4.5	49.2	9.2	2.6	1.9	46.6
Parcel #42, 43, 44, & 45 R.O.W. 32nd St. W. (North Side) ⑥	5.00	0.72	0.82	22	16	3.81	7.18	15.4	33.0	14.7	9.2	23.5
Sub-Total	18.97	0.74	0.84	22	16	3.81	7.18	53.5	114.4	43.4	10.1	(71.0)
To Street Sump East of Theatre Parking Lot	1.50	0.74	0.83	19	15	4.10	7.37	4.6	9.2			
North Portion of Theatre Parking Lot Entrance to St. Sump	1.03	0.87	0.89	15	4.56	7.37	4.1	6.8				
Parcel #25, 26, 27, & 28 R.O.W. 32nd St. W. (South Side) to Street Sump	0.44	0.88	0.93	15	4.56	7.37	1.8	3.0				
Above 3 Area Sub-Total	2.97	0.81	0.87	20	15	4.00	7.37	9.6	19.0			
Total Q to South Sump Along 32nd St. W. ⑦								11.5	65.6	11.5	30.0	35.6
Parcel #6, 11 R.O.W. 32nd St. W. (North Side) to Street Sump	0.69	0.88	0.93	15	4.56	7.37	2.8	4.7				11'(11)+10'
Total Q to North Sump Along 32nd St. W. ⑧								12.0	28.2	12.0	18.0	10.2
Sub-Total - Both Sumps	22.63	0.75	0.85	23	17	3.73	7.00	63.3	134.6	63.3	39.9	11'(11)+10'
North Side 32nd St. W. at St. Sta. 3 + 00' ⑨								10.2 Bypass	12.9	5.1	5.1	11'(11)+10'
South Side 32nd St. W. at St. Sta. 3 + 00' ⑩								35.6 Bypass	20.7	10.3	25.3	11'(11)+10'
Curb Inlet in Theatre Parking Lot ⑪	0.40	0.87	0.89	15	4.56	7.37	1.6	2.6		1.6	2.6	11'(11)+5'
Parcel #6, 11 R.O.W. 32nd St. W. (North Side) at Rock Road ⑫	0.72	0.88	0.93	18	4.20	6.24	2.7	4.6				
Plus Bypass ⑬							2.7	9.7	12.7	5.0	4.7	11'(11)+10'
Parcel #6, 11 R.O.W. 32nd St. W. (South Side) at Rock Road ⑭	0.30	0.88	0.93	17	4.31	7.00	1.1	2.0				
Plus Bypass ⑮							1.1	27.3	18.8	0.9	18.4	11'(11)+10'
To Area Inlet - Sump at SE Corner of 32nd St. W. and Rock Road ⑯	1.24	0.87	0.89	15	4.56	7.37	4.9	8.1		4.9	8.1	21" RCP Stub Sump
To Area Inlet - Sump at NE Corner of 32nd St. W. and Rock Road ⑰	2.26	0.69	0.90	21	16	3.90	7.27	6.1	13.1	6.1	13.1	24" RCP Stub Sump
Total Discharge Out of Mediterranean Plaza Commercial & Rock Road Systems								178.1	247.1			

PIPE WISE WIDE LEVEL

PIPE NO.	INCH	WIDE	LEVEL
101	12	12	101.52
102	12	12	101.52
103	12	12	101.52
104	12	12	101.52
105	12	12	101.52
106	12	12	101.52
107	12	12	101.52
108	12	12	101.52
109	12	12	101.52
110	12	12	101.52
111	12	12	101.52
112	12	12	101.52
113	12	12	101.52
114	12	12	101.52
115	12	12	101.52
116	12	12	101.52
117	12	12	101.52
118	12	12	101.52
119	12	12	101.52
120	12	12	101.52
121	12	12	101.52
122	12	12	101.52
123	12	12	101.52
124	12	12	101.52
125	12	12	101.52
126	12	12	101.52
127	12	12	101.52
128	12	12	101.52
129	12	12	101.52
130	12	12	101.52
131	12	12	101.52
132	12	12	101.52
133	12	12	101.52
134	12	12	101.52
135	12	12	101.52
136	12	12	101.52
137	12	12	101.52
138	12	12	101.52
139	12	12	101.52
140	12	12	101.52
141	12	12	101.52
142	12	12	101.52
143	12	12	101.52
144	12	12	101.52
145	12	12	101.52
146	12	12	101.52
147	12	12	101.52
148	12	12	101.52
149	12	12	101.52
150	12	12	101.52
151	12	12	101.52
152	12	12	101.52
153	12	12	101.52
154	12	12	101.52
155	12	12	101.52
156	12	12	101.52
157	12	12	101.52
158	12	12	101.52
159	12	12	101.52
160	12	12	101.52
161	12	12	101.52
162	12	12	101.52
163	12	12	101.52
164	12	12	101.52
165	12	12	101.52
166	12	12	101.52
167	12	12	101.52
168	12	12	101.52
169	12	12	101.52
170	12	12	101.52
171	12	12	101.52
172	12	12	101.52
173	12	12	101.52
174	12	12	101.52
175	12	12	101.52
176	12	12	101.52
177	12	12	101.52
178	12	12	101.52
179	12	12	101.52
180	12	12	101.52
181	12	12	101.52
182	12	12	101.52
183	12	12	101.52
184	12	12	101.52
185	12	12	101.52
186	12	12	101.52
187	12	12	101.52
188	12	12	101.52
189	12	12	101.52
190	12	12	101.52
191	12	12	101.52
192	12	12	101.52
193	12	12	101.52
194	12	12	101.52
195	12	12	101.52
196	12	12	101.52
197	12	12	101.52
198	12	12	101.52
199	12	12	101.52
200	12	12	101.52

ARE THE RESULTS FOR THIS SIMULATION FOLLOW:

PIPE NO.	INCH	WIDE	LEVEL
101	12	12	101.52
102	12	12	101.52
103	12	12	101.52
104	12	12	101.52
105	12	12	101.52
106	12	12	101.52
107	12	12	101.52
108	12	12	101.52
109	12	12	101.52
110	12	12	101.52
111	12	12	101.52
112	12	12	101.52
113	12	12	101.52
114	12	12	101.52
115	12	12	101.52
116	12	12	101.52
117	12	12	101.52
118	12	12	101.52
119	12	12	101.52
120	12	12	101.52
121	12	12	101.52
122	12	12	101.52
123	12	12	101.52
124	12	12	101.52
125	12	12	101.52
126	12	12	101.52
127	12	12	101.52
128	12	12	101.52
129	12	12	101.52
130	12	12	101.52
131	12	12	101.52
132	12	12	101.52
133	12	12	101.52
134	12	12	101.52
135	12	12	101.52
136	12	12	101.52
137	12	12	101.52
138	12	12	101.52
139	12	12	101.52
140	12	12	101.52
141	12	12	101.52
142	12	12	101.52
143	12	12	101.52
144	12	12	101.52
145	12	12	101.52
146	12	12	101.52
147	12	12	101.52
148	12	12	101.52
149	12	12	101.52
150	12	12	101.52
151	12	12	101.52
152	12	12	101.52
153	12	12	101.52
154	12	12	101.52
155	12	12	101.52
156	12	12	101.52
157	12	12	101.52
158	12	12	101.52
159	12	12	101.52
160	12	12	101.52
161	12	12	101.52
162	12	12	101.52
163	12	12	101.52
164	12	12	101.52
165	12	12	101.52
166	12	12	101.52
167	12	12	101.52
168	12	12	101.52
169	12	12	101.52
170	12	12	101.52
171	12	12	101.52
172	12	12	101.52
173	12	12	101.52
174	12	12	101.52
175	12	12	101.52
176	12	12	101.52
177	12	12	101.52
178	12	12	101.52
179	12	12	101.52
180	12	12	101.52
181	12	12	101.52
182	12	12	101.52
183	12	12	101.52
184	12	12	101.52
185	12	12	101.52
186	12	12	101.52
187	12	12	101.52
188	12	12	101.52
189	12	12	101.52
190	12	12	101.52
191	12	12	101.52
192	12	12	101.52
193	12	12	101.52
194	12	12	101.52
195	12	12	101.52
196	12	12	101.52
197	12	12	101.52
198	12	12	101.52
199	12	12	101.52
200	12	12	101.52

THE NET SYSTEM DEPTH = 12"

PIPE NO.	INCH	WIDE	LEVEL
101	12	12	101.52
102	12	12	101.52
103	12	12	101.52
104	12	12	