

**PLAN OF RECORD**

This record drawing is a compilation of the sealed engineering drawing for permit and construction, by others, modified based on a field observation by BIG RED DOD. The information shown on the record drawing that was prepared for permit and construction, by others, is shown as is. We warrant that the information shown on this record drawing was prepared for permit and construction, by others, and that we have not modified it for any purpose other than to provide a true and correct copy of the information shown on the original drawings. The original approved sealed drawings are on file at the offices of the City of Rockwall.

Therefore, with the exceptions noted and clouded, this "Plan of Record" is true and correct to the best of my knowledge and was prepared under my supervision.

*[Signature]*



September 28, 2018

**DETENTION CALCULATIONS 10 YR STORM**

Larsen Retail Site Basin A  
Release Rate = 0.90

Area	Acres	Cover	Q <sub>10yr</sub>	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)
C1	0.07	0.90	0.30	0.35	0.35	0.35
A2	0.40	0.90	1.35	1.59	1.59	1.59
A3	0.30	0.90	1.05	1.26	1.26	1.26
<b>Total</b>			<b>2.70</b>	<b>4.29</b>	<b>4.29</b>	<b>4.29</b>

Larsen Retail Site Basin B  
Release Rate = 2.00

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	2.00	0.86	1.72	1.72	1.72	0.00
15	0.90	3.00	1.29	2.58	2.58	2.58	0.00
20	0.90	4.00	1.72	3.44	3.44	3.44	0.00
30	0.90	6.00	2.58	5.14	5.14	5.14	0.00
40	0.90	8.00	3.44	6.84	6.84	6.84	0.00
50	0.90	10.00	4.30	8.54	8.54	8.54	0.00
60	0.90	12.00	5.14	10.24	10.24	10.24	0.00
70	0.90	14.00	6.00	11.94	11.94	11.94	0.00
80	0.90	16.00	6.84	13.64	13.64	13.64	0.00
90	0.90	18.00	7.70	15.34	15.34	15.34	0.00
100	0.90	20.00	8.54	17.04	17.04	17.04	0.00
110	0.90	22.00	9.40	18.74	18.74	18.74	0.00

Area	Acres	Cover	Q <sub>10yr</sub>	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)
C1	0.07	0.90	0.30	0.35	0.35	0.35
A2	0.40	0.90	1.35	1.59	1.59	1.59
A3	0.30	0.90	1.05	1.26	1.26	1.26
<b>Total</b>			<b>2.70</b>	<b>4.29</b>	<b>4.29</b>	<b>4.29</b>

Larsen Retail Site Basin C  
Release Rate = 3.15

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	3.15	0.86	3.15	3.15	3.15	0.00
15	0.90	4.73	1.29	4.73	4.73	4.73	0.00
20	0.90	6.30	1.72	6.30	6.30	6.30	0.00
30	0.90	9.45	2.58	9.45	9.45	9.45	0.00
40	0.90	12.60	3.44	12.60	12.60	12.60	0.00
50	0.90	15.75	4.30	15.75	15.75	15.75	0.00
60	0.90	18.90	5.14	18.90	18.90	18.90	0.00
70	0.90	22.05	6.00	22.05	22.05	22.05	0.00
80	0.90	25.20	6.84	25.20	25.20	25.20	0.00
90	0.90	28.35	7.70	28.35	28.35	28.35	0.00
100	0.90	31.50	8.54	31.50	31.50	31.50	0.00
110	0.90	34.65	9.40	34.65	34.65	34.65	0.00

Larsen Retail Site Basin C  
Release Rate = 3.15

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	3.15	0.86	3.15	3.15	3.15	0.00
15	0.90	4.73	1.29	4.73	4.73	4.73	0.00
20	0.90	6.30	1.72	6.30	6.30	6.30	0.00
30	0.90	9.45	2.58	9.45	9.45	9.45	0.00
40	0.90	12.60	3.44	12.60	12.60	12.60	0.00
50	0.90	15.75	4.30	15.75	15.75	15.75	0.00
60	0.90	18.90	5.14	18.90	18.90	18.90	0.00
70	0.90	22.05	6.00	22.05	22.05	22.05	0.00
80	0.90	25.20	6.84	25.20	25.20	25.20	0.00
90	0.90	28.35	7.70	28.35	28.35	28.35	0.00
100	0.90	31.50	8.54	31.50	31.50	31.50	0.00
110	0.90	34.65	9.40	34.65	34.65	34.65	0.00

Area	Acres	Cover	Q <sub>10yr</sub>	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)	Q <sub>10yr</sub> (c.f.)
C1	0.07	0.90	0.30	0.35	0.35	0.35
A2	0.40	0.90	1.35	1.59	1.59	1.59
A3	0.30	0.90	1.05	1.26	1.26	1.26
<b>Total</b>			<b>2.70</b>	<b>4.29</b>	<b>4.29</b>	<b>4.29</b>

Volume	Elevation
5622.36	551.33
5348.71	551.27

Larsen Retail Site Basin B  
Release Rate = 2.34

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	2.34	0.86	2.34	2.34	2.34	0.00
15	0.90	3.51	1.29	3.51	3.51	3.51	0.00
20	0.90	4.68	1.72	4.68	4.68	4.68	0.00
30	0.90	7.02	2.58	7.02	7.02	7.02	0.00
40	0.90	9.36	3.44	9.36	9.36	9.36	0.00
50	0.90	11.70	4.30	11.70	11.70	11.70	0.00
60	0.90	14.04	5.14	14.04	14.04	14.04	0.00
70	0.90	16.38	6.00	16.38	16.38	16.38	0.00
80	0.90	18.72	6.84	18.72	18.72	18.72	0.00
90	0.90	21.06	7.70	21.06	21.06	21.06	0.00
100	0.90	23.40	8.54	23.40	23.40	23.40	0.00
110	0.90	25.74	9.40	25.74	25.74	25.74	0.00

Larsen Retail Site Basin C  
Release Rate = 3.15

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	3.15	0.86	3.15	3.15	3.15	0.00
15	0.90	4.73	1.29	4.73	4.73	4.73	0.00
20	0.90	6.30	1.72	6.30	6.30	6.30	0.00
30	0.90	9.45	2.58	9.45	9.45	9.45	0.00
40	0.90	12.60	3.44	12.60	12.60	12.60	0.00
50	0.90	15.75	4.30	15.75	15.75	15.75	0.00
60	0.90	18.90	5.14	18.90	18.90	18.90	0.00
70	0.90	22.05	6.00	22.05	22.05	22.05	0.00
80	0.90	25.20	6.84	25.20	25.20	25.20	0.00
90	0.90	28.35	7.70	28.35	28.35	28.35	0.00
100	0.90	31.50	8.54	31.50	31.50	31.50	0.00
110	0.90	34.65	9.40	34.65	34.65	34.65	0.00

Larsen Retail Site Basin A  
Release Rate = 0.90

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	0.90	0.86	0.90	0.90	0.90	0.00
15	0.90	1.35	1.29	1.35	1.35	1.35	0.00
20	0.90	1.80	1.72	1.80	1.80	1.80	0.00
30	0.90	2.70	2.58	2.70	2.70	2.70	0.00
40	0.90	3.60	3.44	3.60	3.60	3.60	0.00
50	0.90	4.50	4.30	4.50	4.50	4.50	0.00
60	0.90	5.40	5.14	5.40	5.40	5.40	0.00
70	0.90	6.30	6.00	6.30	6.30	6.30	0.00
80	0.90	7.20	6.84	7.20	7.20	7.20	0.00
90	0.90	8.10	7.70	8.10	8.10	8.10	0.00
100	0.90	9.00	8.54	9.00	9.00	9.00	0.00
110	0.90	9.90	9.40	9.90	9.90	9.90	0.00

Volume	Elevation
8415.32	551.33
8155.24	551.30

Larsen Retail Site Basin B  
Release Rate = 2.34

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	2.34	0.86	2.34	2.34	2.34	0.00
15	0.90	3.51	1.29	3.51	3.51	3.51	0.00
20	0.90	4.68	1.72	4.68	4.68	4.68	0.00
30	0.90	7.02	2.58	7.02	7.02	7.02	0.00
40	0.90	9.36	3.44	9.36	9.36	9.36	0.00
50	0.90	11.70	4.30	11.70	11.70	11.70	0.00
60	0.90	14.04	5.14	14.04	14.04	14.04	0.00
70	0.90	16.38	6.00	16.38	16.38	16.38	0.00
80	0.90	18.72	6.84	18.72	18.72	18.72	0.00
90	0.90	21.06	7.70	21.06	21.06	21.06	0.00
100	0.90	23.40	8.54	23.40	23.40	23.40	0.00
110	0.90	25.74	9.40	25.74	25.74	25.74	0.00

Larsen Retail Site Basin C  
Release Rate = 3.15

Duration (min.)	C	I/S (in/hr)	A (ac)	O/D (c.f.s)	Inflow (c.f.)	Outflow (c.f.)	Storage (c.f.)
10	0.90	3.15	0.86	3.15	3.15	3.15	0.00
15	0.90	4.73	1.29	4.73	4.73	4.73	0.00
20	0.90	6.30	1.72	6.30	6.30	6.30	0.00
30	0.90	9.45	2.58	9.45	9.45	9.45	0.00
40	0.90	12.60	3.44	12.60	12.60	12.60	0.00
50	0.90	15.75	4.30	15.75	15.75	15.75	0.00
60	0.90	18.90	5.14	18.90	18.90	18.90	0.00
70	0.90	22.05	6.00	22.05	22.05	22.05	0.00
80	0.90	25.20	6.84	25.20	25.20	25.20	0.00
90	0.90	28.35	7.70	28.35	28.35	28.35	0.00
100	0.90	31.50	8.54	31.50	31.50	31.50	0.00
110	0.90	34.65	9.40	34.65	34.65	34.65	0.00