HYDRAULIC CALCULATIONS TABLE

1. DESIGNATES THE TYPE OF STORM PIPE CONNECTION (SOFFIT TO SOFFIT, CENTERLINE TO CENTERLINE, OR FLOWLINE TO FLOWLINE) OR THE ELEVATION DIFFERENCE ACROSS THE STRUCTURE AT THE UPSTREAM STATION.
2. THE STATION AT WHICH THE HYDRAULIC GRADE LINE INTERSECTS THE NORMAL DEPTH IN THE PIPE.
3. THE ELEVATION AT WHICH THE HYDRAULIC GRADE LINE INTERSECTS THE NORMAL DEPTH IN THE PIPE.
4. START HGL INSIDE TOP OF PIPE.
5. START HGL AT 100 YEAR WATER SURFACE OF DETENTION POND.

Design Storm:	100 Year Storm Event

Line ST-	1																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type (1)**	**Connect or FL**	**Dwn HGL (4)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station (2)**	**Partial Elevation (3)**
0+00.00	0+04.00	151.90	Box	7 x 3	0.013	0.0010	Manhole - Through	Flowlines	595.27	595.29	596.01	592.27	592.27	7.23	0.81	0.0038	151.90	N/A	N/A	N/A	N/A	N/A	N/A
0+04.00	0+14.00	58.89	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.01	596.01	596.07	592.27	592.28	2.80	0.12	0.0006	78.42	1.99	N/A	N/A	N/A	N/A	N/A
0+14.00	0+32.78	58.89	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.07	596.08	596.13	592.28	592.30	2.80	0.12	0.0006	78.42	1.99	N/A	N/A	N/A	N/A	N/A
0+32.78	0+75.80	45.42	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.13	596.15	596.18	592.30	592.35	2.16	0.07	0.0003	78.42	1.66	N/A	N/A	N/A	N/A	N/A
0+75.80	1+36.79	45.42	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.18	596.20	596.23	592.35	592.41	2.16	0.07	0.0003	78.42	1.66	N/A	N/A	N/A	N/A	N/A
1+36.79	1+88.77	37.22	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.23	596.24	596.26	592.41	592.46	1.77	0.05	0.0002	78.42	1.45	N/A	N/A	N/A	N/A	N/A
1+88.77	3+49.97	37.22	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.26	596.30	596.32	592.46	592.62	1.77	0.05	0.0002	78.42	1.45	N/A	N/A	N/A	N/A	N/A
3+49.97	3+83.90	37.22	Box	7 x 3	0.013	0.0010	Wye	Flowlines	596.32	596.33	596.35	592.62	592.65	1.77	0.05	0.0002	78.42	1.45	N/A	N/A	N/A	N/A	N/A
3+83.90	3+89.88	30.25	Box	7 x 3	0.013	0.0010	Size Change	Soffits	596.35	596.35	596.35	592.65	592.66	1.44	0.03	0.0001	78.42	1.26	N/A	N/A	N/A	N/A	N/A
3+89.88	4+66.90	22.05	Pipe	36"	0.013	0.0010	Size Change	Flowlines	596.35	596.43	596.43	592.66	592.74	3.12	0.15	0.0011	22.05	2.60	N/A	N/A	N/A	N/A	N/A
4+66.90	4+97.65	22.05	Pipe	36"	0.013	0.0010	Inlet	N/A	596.43	596.47	596.69	592.74	592.77	3.12	0.15	0.0011	22.05	2.60	N/A	N/A	N/A	N/A	N/A

Line ST-	2	Connects to Line ST-	1	At Station	0+04.00	Junction Type	Manhole - 90°	Flowlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+27.44	95.01	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.02	596.06	596.18	592.27	592.30	4.52	0.32	0.0015	95.01	2.80	N/A	N/A	N/A	N/A	N/A
0+27.44	1+30.23	74.53	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.18	596.27	596.37	592.30	592.40	3.55	0.20	0.0009	78.42	2.35	N/A	N/A	N/A	N/A	N/A
1+30.23	2+33.53	74.53	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.37	596.46	596.56	592.40	592.51	3.55	0.20	0.0009	78.42	2.35	N/A	N/A	N/A	N/A	N/A
2+33.53	2+66.28	74.53	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.56	596.59	596.64	592.51	592.54	3.55	0.20	0.0009	78.42	2.35	N/A	N/A	N/A	N/A	N/A
2+66.28	3+77.64	64.21	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.64	596.72	596.76	592.54	592.65	3.06	0.15	0.0007	78.42	2.11	N/A	N/A	N/A	N/A	N/A
3+77.64	4+89.00	53.89	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.76	596.81	596.85	592.65	592.76	2.57	0.10	0.0005	78.42	1.87	N/A	N/A	N/A	N/A	N/A
4+89.00	5+57.01	42.60	Box	7 x 3	0.013	0.0010	Bend - 45°	Soffits	596.85	596.87	596.90	592.76	592.83	2.03	0.06	0.0003	78.42	1.59	N/A	N/A	N/A	N/A	N/A
5+57.01	5+75.27	42.60	Box	7 x 3	0.013	0.0010	Wye	Centerlines	596.90	596.91	596.95	592.83	592.85	2.03	0.06	0.0003	78.42	1.59	N/A	N/A	N/A	N/A	N/A
5+75.27	5+82.27	26.90	Box	7 x 3	0.013	0.0010	Size Change	Soffits	596.95	596.95	596.95	592.85	592.86	1.28	0.03	0.0001	78.42	1.16	N/A	N/A	N/A	N/A	N/A
5+82.27	7+62.01	26.90	Box	4 x 3	0.013	0.0010	Bend - 45°	Soffits	596.95	597.03	597.07	592.86	593.04	2.24	0.08	0.0005	39.14	1.89	N/A	N/A	N/A	N/A	N/A
7+62.01	7+99.21	26.90	Box	4 x 3	0.013	0.0010	Bend - 45°	Soffits	597.07	597.09	597.13	593.04	593.07	2.24	0.08	0.0005	39.14	1.89	N/A	N/A	N/A	N/A	N/A
7+99.21	8+04.21	20.81	Box	4 x 3	0.013	0.0010	Wye	Centerlines	597.13	597.13	597.13	593.07	593.08	1.73	0.05	0.0003	39.14	1.57	N/A	N/A	N/A	N/A	N/A
8+04.21	8+68.00	20.81	Pipe	36"	0.013	0.0010	Size Change	Soffits	597.13	597.19	597.19	593.08	593.14	2.94	0.13	0.0010	21.09	2.42	N/A	N/A	N/A	N/A	N/A
8+68.00	9+67.00	20.81	Pipe	36"	0.013	0.0010	Bend - 45°	Soffits	597.19	597.29	597.36	593.14	593.24	2.94	0.13	0.0010	21.09	2.42	N/A	N/A	N/A	N/A	N/A
9+67.00	10+08.63	20.81	Pipe	36"	0.013	0.0010	Wye	Centerlines	597.36	597.40	597.47	593.24	593.28	2.94	0.13	0.0010	21.09	2.42	N/A	N/A	N/A	N/A	N/A
10+08.63	10+13.63	13.58	Pipe	36"	0.013	0.0010	Size Change	Soffits	597.47	597.47	597.47	593.28	593.29	1.92	0.06	0.0004	21.09	1.75	N/A	N/A	N/A	N/A	N/A
10+13.63	12+05.15	13.58	Pipe	30"	0.013	0.0016	None	Soffits	597.47	597.68	597.68	593.79	594.09	2.77	0.12	0.0011	16.41	1.73	N/A	N/A	N/A	N/A	N/A
12+05.15	12+09.93	0.00	Pipe	30"	0.013	0.0016	None	Soffits	597.68	597.68	597.68	594.09	594.10	0.00	0.00	0.0000	16.41	0.63	N/A	N/A	N/A	N/A	N/A

Line ST-	3	Connects to Line ST-	1	At Station	4+66.90	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	1+52.79	8.20	Pipe	24"	0.013	0.0017	Wye	Centerlines	596.48	596.68	596.79	593.24	593.50	2.61	0.11	0.0013	9.33	1.45	N/A	N/A	N/A	N/A	N/A
1+52.79	1+55.79	0.00	Pipe	24"	0.013	0.0017	None	Soffits	596.79	596.79	596.79	593.50	593.50	0.00	0.00	0.0000	9.33	0.50	N/A	N/A	N/A	N/A	N/A

Line ST-	4	Connects to Line ST-	2	At Station	0+27.44	Junction Type	Wye	Flowlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+70.00	20.48	Pipe	30"	0.013	0.0020	None	Soffits	596.11	596.28	596.28	592.30	592.44	4.17	0.27	0.0025	20.48	N/A	N/A	N/A	N/A	N/A	N/A
0+70.00	2+16.81	20.48	Pipe	30"	0.013	0.0063	Wye	Centerlines	596.28	596.65	596.85	592.44	593.37	4.17	0.27	0.0025	32.56	1.44	N/A	N/A	N/A	N/A	N/A
2+16.81	2+27.43	10.24	Pipe	30"	0.013	0.0063	Wye	Centerlines	596.85	596.86	596.91	593.37	593.43	2.09	0.07	0.0006	32.56	0.96	N/A	N/A	N/A	N/A	N/A
2+27.43	2+30.43	5.12	Pipe	30"	0.013	0.0063	Size Change	Soffits	596.91	596.91	596.91	593.43	593.45	1.04	0.02	0.0002	32.56	0.67	N/A	N/A	N/A	N/A	N/A
2+30.43	2+47.64	5.12	Pipe	18"	0.013	0.0320	None	Soffits	596.91	596.95	596.95	594.45	595.00	2.90	0.13	0.0024	18.79	0.54	N/A	N/A	N/A	N/A	N/A

Line ST-	5	Connects to Line ST-	4	At Station	2+16.81	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+97.09	10.24	Pipe	18"	0.013	0.0051	Wye	Centerlines	596.65	597.57	597.96	593.87	594.36	5.79	0.52	0.0095	10.24	N/A	N/A	N/A	N/A	N/A	N/A
0+97.09	1+93.79	5.12	Pipe	18"	0.013	0.0051	Bend - 45°	Soffits	597.96	598.19	598.25	594.36	594.85	2.90	0.13	0.0024	7.50	0.91	N/A	N/A	N/A	N/A	N/A
1+93.79	2+00.86	5.12	Pipe	18"	0.013	0.0051	Bend - 45°	Soffits	598.25	598.27	598.34	594.85	594.89	2.90	0.13	0.0024	7.50	0.91	N/A	N/A	N/A	N/A	N/A
2+00.86	2+21.76	5.12	Pipe	18"	0.013	0.0051	None	Soffits	598.34	598.39	598.39	594.89	595.00	2.90	0.13	0.0024	7.50	0.91	N/A	N/A	N/A	N/A	N/A

Line ST-	6	Connects to Line ST-	4	At Station	2+27.43	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+97.07	5.12	Pipe	18"	0.013	0.0181	Bend - 45°	Soffits	596.86	597.09	597.16	593.93	595.69	2.90	0.13	0.0024	14.13	0.62	1.40	2.99	0.14	N/A	N/A
0+97.07	1+04.14	5.12	Pipe	18"	0.013	0.0181	Bend - 45°	Soffits	597.16	597.17	597.24	595.69	595.82	2.90	0.13	0.0024	14.13	0.62	1.35	3.05	0.14	N/A	N/A
1+04.14	1+14.28	5.12	Pipe	18"	0.013	0.0181	None	Soffits	597.24	597.27	597.27	595.82	596.00	2.90	0.13	0.0024	14.13	0.62	1.27	3.22	0.16	N/A	N/A

Line ST-	7																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (5)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+31.59	15.08	Pipe	24"	0.013	0.0075	Bend - 45°	Soffits	592.00	592.14	592.32	589.20	589.44	4.80	0.36	0.0044	19.59	1.32	N/A	N/A	N/A	N/A	N/A
0+31.59	1+73.97	15.08	Pipe	24"	0.013	0.0075	Inlet	N/A	592.32	592.95	593.49	589.44	590.50	4.80	0.36	0.0044	19.59	1.32	N/A	N/A	N/A	N/A	N/A

Line ST-	8																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+86.49	36.15	Pipe	36"	0.013	0.0010	Wye	Centerlines	594.50	594.75	594.94	591.50	591.59	5.11	0.41	0.0029	36.15	N/A	N/A	N/A	N/A	N/A	N/A
0+86.49	1+31.99	26.45	Pipe	36"	0.013	0.0010	Wye	Centerlines	594.94	595.01	595.09	591.59	591.63	3.74	0.22	0.0016	26.45	N/A	N/A	N/A	N/A	N/A	N/A
1+31.99	1+51.58	21.16	Pipe	36"	0.013	0.0010	Bend - 45°	Soffits	595.09	595.11	595.18	591.63	591.65	2.99	0.14	0.0010	21.16	2.47	N/A	N/A	N/A	N/A	N/A
1+51.58	2+49.31	21.16	Pipe	36"	0.013	0.0010	Inlet	N/A	595.18	595.28	595.49	591.65	591.75	2.99	0.14	0.0010	21.16	2.47	N/A	N/A	N/A	N/A	N/A

Design Storm:	100 Year Storm Event

Line ST-	9	Connects to Line ST-	8	At Station	0+86.49	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+93.28	9.70	Pipe	24"	0.013	0.0252	Wye	Centerlines	595.01	595.18	596.42	592.09	594.44	3.09	0.15	0.0018	35.91	0.71	0.75	9.07	1.28	N/A	N/A
0+93.28	0+96.28	4.85	Pipe	24"	0.013	0.0252	Size Change	Soffits	596.42	596.43	596.43	594.44	594.51	1.54	0.04	0.0005	35.91	0.50	1.91	1.57	0.04	N/A	N/A
0+96.28	1+23.70	4.85	Pipe	18"	0.013	0.0685	None	Soffits	596.43	597.32	597.32	595.01	596.89	2.74	0.12	0.0021	27.49	0.43	0.43	11.72	2.13	1+11.15	596.46

Line ST-	10																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+88.56	4.67	Pipe	18"	0.013	0.0508	None	Soffits	595.49	597.45	597.45	592.50	597.00	2.64	0.11	0.0020	23.68	0.45	0.45	10.42	1.69	0+51.99	595.59

Line ST-	11	Connects to Line ST-	9	At Station	0+93.28	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	1+13.94	4.85	Pipe	18"	0.013	0.0166	Bend - 45°	Soffits	596.34	597.20	597.58	594.69	596.58	2.74	0.12	0.0021	13.53	0.62	0.62	7.02	0.77	0+71.65	596.50
1+13.94	1+20.97	4.85	Pipe	18"	0.013	0.0166	Bend - 45°	Soffits	597.58	597.60	597.75	596.58	596.70	2.74	0.12	0.0021	13.53	0.62	0.90	4.37	0.30	N/A	N/A
1+20.97	1+38.97	4.85	Pipe	18"	0.013	0.0166	None	Soffits	597.75	597.78	597.78	596.70	596.99	2.74	0.12	0.0021	13.55	0.62	0.79	5.15	0.41	N/A	N/A

Line ST-	12																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+50.00	34.55	Pipe	39"	0.013	0.0015	None	Soffits	590.50	590.59	590.59	587.25	587.33	4.16	0.27	0.0018	34.55	N/A	N/A	N/A	N/A	N/A	N/A

Line ST-	13																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (5)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+16.00	20.81	Pipe	24"	0.013	0.0050	None	Soffits	592.00	592.14	592.14	588.90	588.98	6.62	0.68	0.0085	20.81	N/A	N/A	N/A	N/A	N/A	N/A
0+16.00	0+52.66	20.81	Pipe	24"	0.013	0.1120	Bend - 45°	Soffits	592.14	593.80	595.43	588.98	593.09	6.62	0.68	0.0085	75.71	0.72	0.72	20.56	6.57	0+39.55	592.33
0+52.66	0+58.91	20.81	Pipe	24"	0.013	0.0100	Inlet	N/A	595.43	595.48	596.50	593.09	593.15	6.62	0.68	0.0085	22.62	1.51	N/A	N/A	N/A	N/A	N/A

Line ST-	14																						
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+15.00	9.88	Pipe	24"	0.013	0.0050	None	Soffits	592.40	592.43	592.43	590.40	590.48	3.14	0.15	0.0019	16.00	1.14	1.95	3.16	0.16	N/A	N/A
0+15.00	0+34.42	9.88	Pipe	24"	0.013	0.0595	Bend - 30°	Soffits	592.43	592.47	592.91	590.48	591.63	3.14	0.15	0.0019	55.18	0.57	0.84	7.95	0.98	N/A	N/A
0+34.42	0+40.61	9.88	Pipe	24"	0.013	0.0595	Inlet	N/A	592.91	592.92	594.06	591.63	592.00	3.14	0.15	0.0019	55.18	0.57	0.92	7.00	0.76	N/A	N/A

Line ST-	1A	Connects to Line ST-	1	At Station	0+32.78	Junction Type	Wye	Flowlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft) (Auto Calc)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+38.40	11.47	Pipe	30"	0.013	0.0169	Inlet	592.95	596.12	596.15	596.28	592.30	592.95	2.34	0.08	0.0008	53.25	0.79	N/A	N/A	N/A	N/A	N/A

Line ST-	1B	Connects to Line ST-	1	At Station	3+83.90	Junction Type	Wye	Flowlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft) (Auto Calc)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	1+04.45	6.97	Pipe	24"	0.013	0.0033	Inlet	593.00	596.33	596.43	596.55	592.65	593.00	2.22	0.08	0.0009	13.02	1.04	N/A	N/A	N/A	N/A	N/A

Line ST-	2A	Connects to Line ST-	2	At Station	5+75.27	Junction Type	Wye	Centerlines															
Downstream Station	**Upstream Station**	**Q (cfs)**	**Pipe Type**	**Size Box (W x H) Pipe (")**	**'n" Value**	**Design Slope (ft/ft)**	**Upstream Junction Type**	**Connect or FL**	**Dwn HGL (Auto Calc)**	**Up HGL**	**Up HGL w/ Jump**	**Dwn FL (Auto Calc)**	**Up FL**	**V (fps)**	**V2/2g (ft)**	**Sf**	**Qcap (cfs)**	**Dn (ft)**	**Dp (ft)**	**Vp (fps)**	**$V_n^2/_{1.5}$ (ft)**	**Partial Station**	**Partial Elevation**
0+00.00	0+36.69	15.70	Pipe	24"	0.013	0.0122	Inlet	N/A	596.91	597.08	597.67	593.35	593.80	5.00	0.39	0.0048	24.99	1.15	N/A	N/A	N/A	N/A	N/A

Line ST-	2B	Connects to Line ST-	2	At Station	7+99.21	Junction Type	Wye	Centerlines															