Osceola County
StormCAD Calculations

For

Puffin Road Commercial

Osceola County, Florida
December, 2025

Prepared by:
Hanson, Walter & Associates, Inc.
8 Broadway, Suite 104
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Date:

Appendix

Appendix No.

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Puffin Road Commercial

Osceola County, Florida

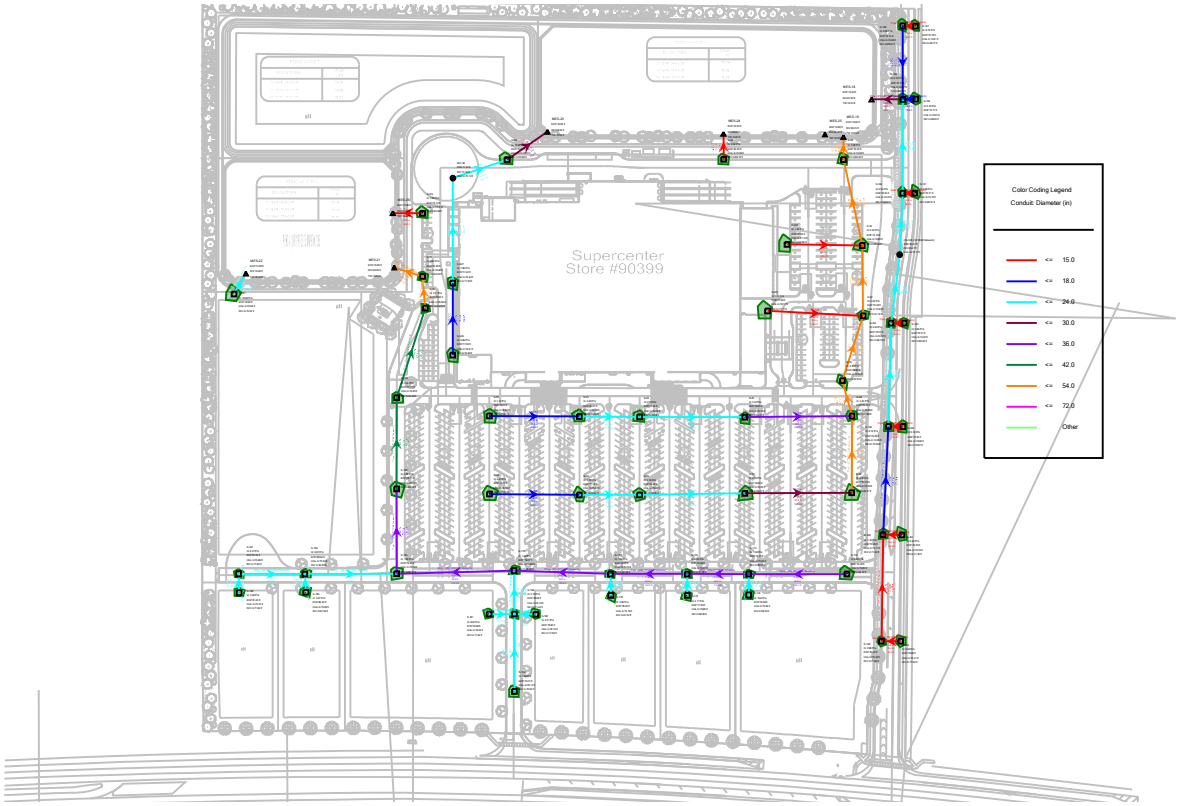
Appendix No. 1

MAP OF LAYOUT

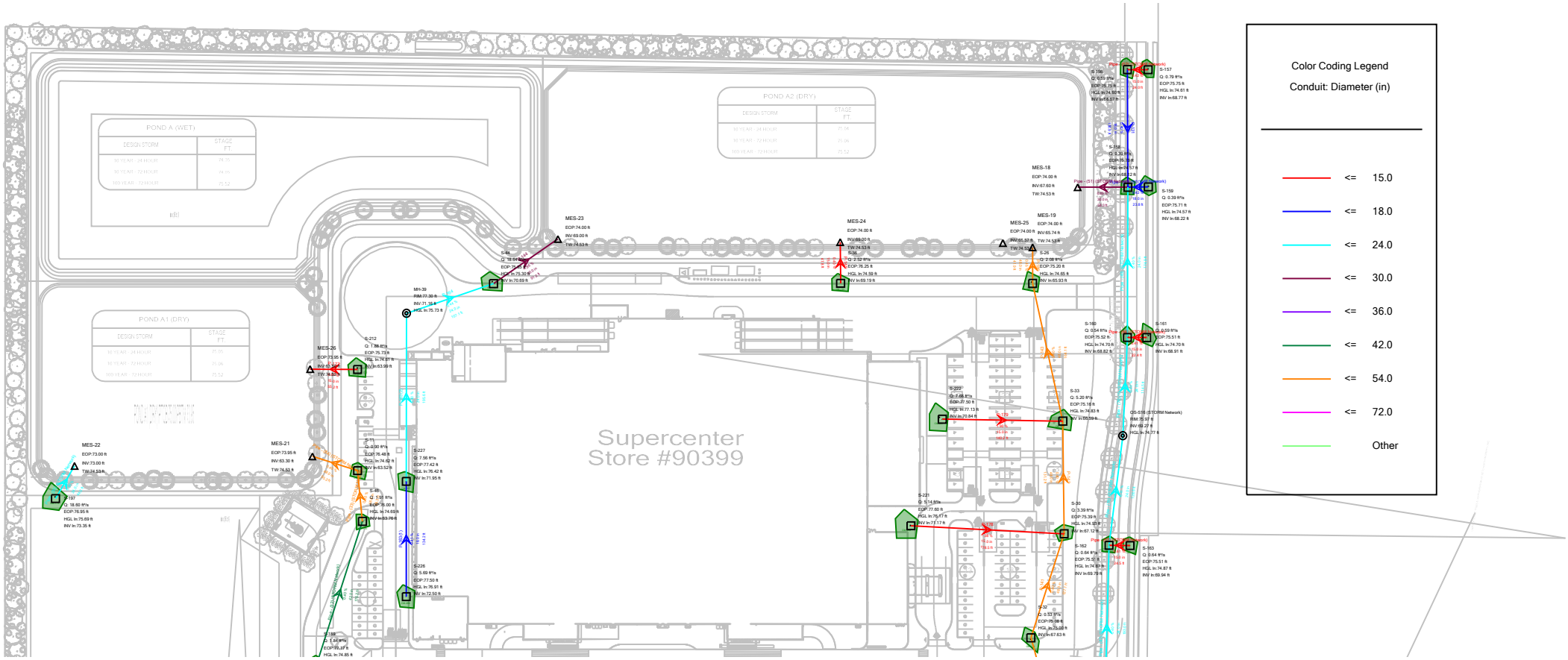
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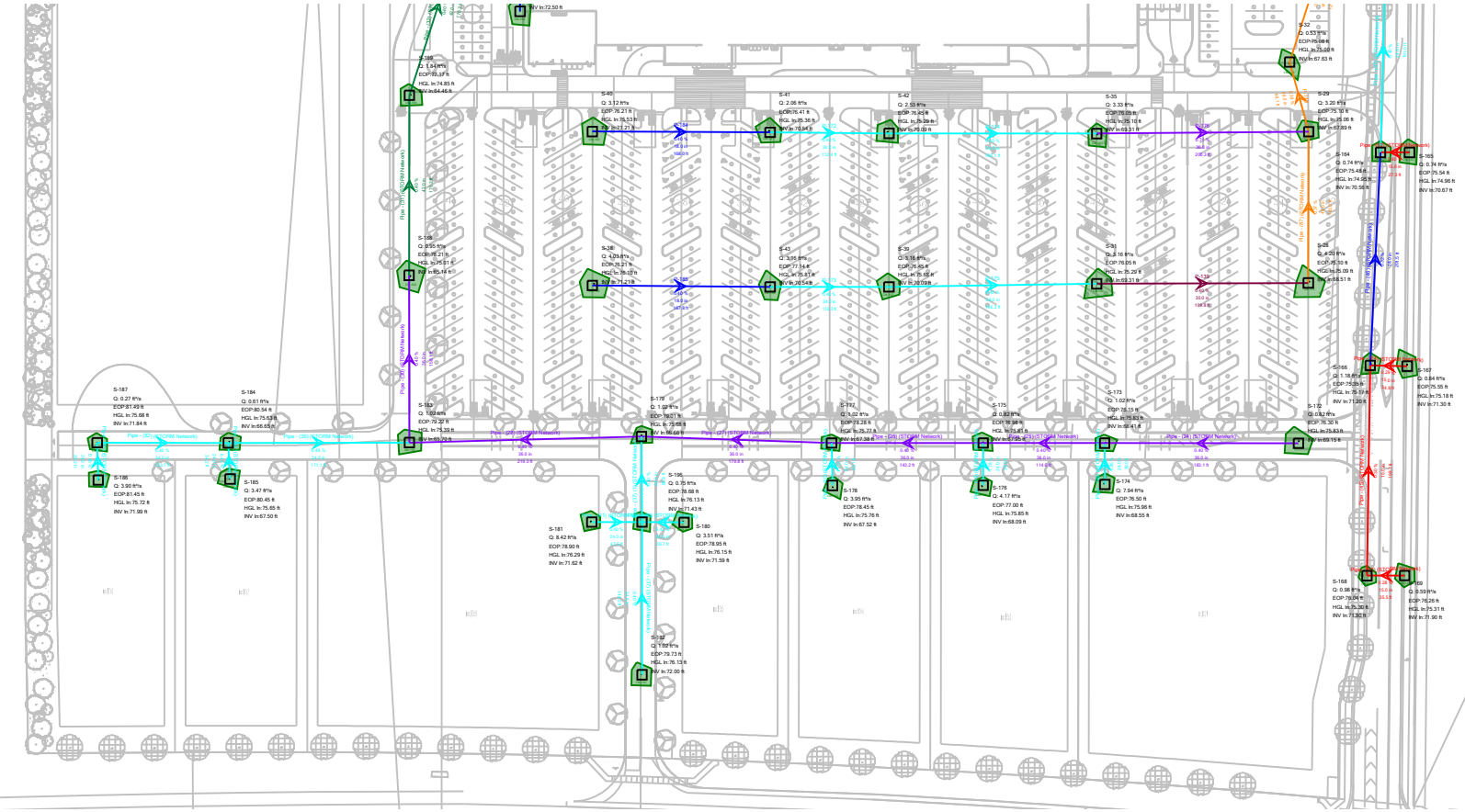
Scenario: Base



Scenario: Base



Scenario: Base



Color Coding Legend

Conduit: Diameter (in)

<= 15.0

<= 18.0

<= 24.0

<= 30.0

<= 36.0

<= 42.0

<= 54.0

<= 72.0

Other

Puffin Road Commercial

Osceola County, Florida

Appendix No. 2

INLET REPORT

Puffin Road Commercial

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FlexTable: Catch Basin Table

Label	Elevation (Ground) (ft)	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Inlet Drainage Area (acres)	Inlet C	Total Inlet CA (acres)	Headloss Coefficient (Standard)	Total Inlet Tc (min)	Total Rational Flow to Inlet (ft^3/s)	Inlet Location	Flow (Known) (ft^3/s)	Inlet
S-156	75.75	75.75	68.67	74.60	74.59	0.120	0.65	0.078	1.00	10.00	0.59	In Sag	0.00	Curb FDOT Inlet Type 6
S-157	75.75	75.75	68.77	74.61	74.60	0.160	0.65	0.104	0.80	10.00	0.79	In Sag	0.00	Curb FDOT Inlet Type 6
S-158	75.73	75.73	68.12	74.57	74.55	0.080	0.65	0.052	0.60	10.00	0.39	In Sag	0.00	Curb FDOT Inlet Type 6
S-159	75.71	75.71	68.22	74.57	74.57	0.080	0.65	0.052	0.80	10.00	0.39	In Sag	0.00	Curb FDOT Inlet Type 6
S-160	75.52	75.52	68.82	74.70	74.67	0.110	0.65	0.072	0.60	10.00	0.54	In Sag	0.00	Curb FDOT Inlet Type 5
S-161	75.51	75.51	68.91	74.70	74.70	0.120	0.65	0.078	1.00	10.00	0.59	In Sag	0.00	Curb FDOT Inlet Type 6
S-162	75.51	75.51	69.79	74.87	74.83	0.130	0.65	0.084	0.90	10.00	0.64	In Sag	0.00	Curb FDOT Inlet Type 6
S-163	75.51	75.51	69.94	74.87	74.87	0.130	0.65	0.084	1.00	10.00	0.64	In Sag	0.00	Curb FDOT Inlet Type 6
S-164	75.48	75.48	70.56	74.95	74.93	0.150	0.65	0.097	0.70	10.00	0.74	In Sag	0.00	Curb FDOT Inlet Type 6
S-165	75.54	75.54	70.67	74.96	74.96	0.150	0.65	0.097	1.00	10.00	0.74	In Sag	0.00	Curb FDOT Inlet Type 6
S-166	75.35	75.35	71.20	75.17	75.14	0.240	0.65	0.156	0.70	10.00	1.18	In Sag	0.00	Curb FDOT Inlet Type 6
S-167	75.55	75.55	71.30	75.18	75.18	0.170	0.65	0.111	1.00	10.00	0.84	In Sag	0.00	Curb FDOT Inlet Type 6
S-168	76.04	76.04	71.80	75.30	75.28	0.200	0.65	0.130	0.80	10.00	0.98	In Sag	0.00	Curb FDOT Inlet Type 6
S-169	76.26	76.26	71.90	75.31	75.30	0.120	0.65	0.078	1.00	10.00	0.59	In Sag	0.00	Curb FDOT Inlet Type 6
S-172	76.30	76.30	69.15	75.83	75.83	0.120	0.90	0.108	1.00	10.00	0.82	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-173	76.15	76.15	68.41	75.83	75.82	0.150	0.90	0.135	0.70	10.00	1.02	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-174	76.50	76.50	68.55	75.96	75.86	1.810	0.68	1.231	1.00	15.00	7.94	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-175	76.98	76.98	67.95	75.81	75.79	0.120	0.90	0.108	0.70	10.00	0.82	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-176	77.00	77.00	68.09	75.85	75.82	0.950	0.68	0.646	1.00	15.00	4.17	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-177	78.28	78.28	67.38	75.77	75.73	0.150	0.90	0.135	0.70	10.00	1.02	In Sag	0.00	Ditch FDOT Bottom Inlet Type F

FlexTable: Catch Basin Table

Label	Elevation (Ground) (ft)	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Inlet Drainage Area (acres)	Inlet C	Total Inlet CA (acres)	Headloss Coefficient (Standard)	Total Inlet Tc (min)	Total Rational Flow to Inlet (ft^3/s)	Inlet Location	Flow (Known) (ft^3/s)	Inlet
S-178	78.45	78.45	67.52	75.76	75.76	0.900	0.68	0.612	0.00	15.00	3.95	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-179	79.01	79.01	66.66	75.68	75.58	0.150	0.90	0.135	0.70	10.00	1.02	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-180	78.95	78.95	71.59	76.15	76.14	0.800	0.68	0.544	1.00	15.00	3.51	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-181	78.90	78.90	71.62	76.29	76.18	1.920	0.68	1.306	1.00	15.00	8.42	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-182	79.73	79.73	72.00	76.13	76.13	0.150	0.90	0.135	1.00	10.00	1.02	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-183	79.22	79.22	65.70	75.39	75.23	0.150	0.90	0.135	0.70	10.00	1.02	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-184	80.54	80.54	66.65	75.63	75.56	0.090	0.90	0.081	0.70	10.00	0.61	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-185	80.45	80.45	67.50	75.65	75.63	0.790	0.68	0.537	1.00	15.00	3.47	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-186	81.45	81.45	71.99	75.72	75.69	0.890	0.68	0.605	1.00	15.00	3.90	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-187	81.49	81.49	71.84	75.68	75.66	0.040	0.90	0.036	0.80	10.00	0.27	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-188	78.21	78.21	65.14	75.01	74.95	0.140	0.90	0.126	0.50	10.00	0.95	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-189	77.17	77.17	64.46	74.85	74.77	0.270	0.90	0.243	0.60	10.00	1.84	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-46	76.00	76.00	63.76	74.69	74.64	0.320	0.79	0.253	0.60	10.00	1.91	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-11	76.48	76.48	63.52	74.62	74.55	0.140	0.85	0.119	0.80	10.00	0.90	In Sag	0.00	Curb FDOT Inlet Type 6
S-28	75.10	75.10	68.51	75.09	75.07	0.740	0.75	0.555	0.80	10.00	4.20	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-29	75.10	75.10	67.89	75.06	75.01	0.550	0.77	0.424	0.80	10.00	3.20	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-30	75.39	75.39	67.12	74.93	74.88	0.690	0.65	0.449	0.60	10.00	3.39	In Sag	0.00	Curb FDOT Inlet Type 5
S-26	75.20	75.20	65.93	74.65	74.56	0.340	0.81	0.275	0.60	10.00	2.08	In Sag	0.00	Curb FDOT Inlet Type 6
S-196	78.68	78.68	71.43	76.13	75.88	0.110	0.90	0.099	1.00	10.00	0.75	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-197	76.95	76.95	73.35	75.69	74.90	4.240	0.68	2.883	1.00	15.00	18.60	In Sag	0.00	Ditch FDOT Bottom Inlet Type F

FlexTable: Catch Basin Table

Label	Elevation (Ground) (ft)	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Inlet Drainage Area (acres)	Inlet C	Total Inlet CA (acres)	Headloss Coefficient (Standard)	Total Inlet Tc (min)	Total Rational Flow to Inlet (ft^3/s)	Inlet Location	Flow (Known) (ft^3/s)	Inlet
S-40	76.21	76.21	71.21	75.53	75.48	0.590	0.82	0.484	1.00	15.00	3.12	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-41	76.41	76.41	70.54	75.36	75.34	0.390	0.82	0.320	0.50	15.00	2.06	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-42	76.45	76.45	70.09	75.29	75.26	0.380	0.88	0.334	0.50	10.00	2.53	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-35	76.05	76.05	69.31	75.10	75.09	0.440	15.00	0.440	0.50	10.00	3.33	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-38	76.21	76.21	71.21	76.10	76.02	0.650	0.82	0.533	1.00	10.00	4.03	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-43	77.14	77.14	70.54	75.81	75.77	0.510	0.82	0.418	0.50	10.00	3.16	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-39	76.45	76.45	70.09	75.68	75.60	0.510	0.82	0.418	0.50	10.00	3.16	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-31	76.05	76.05	69.31	75.29	75.25	0.510	0.82	0.418	0.50	10.00	3.16	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-32	75.08	75.08	67.63	75.00	74.96	0.140	0.50	0.070	0.60	10.00	0.53	In Sag	0.00	Curb FDOT Inlet Type 6
S-33	75.16	75.16	66.59	74.83	74.75	0.930	0.74	0.688	0.60	10.00	5.20	In Sag	0.00	Curb FDOT Inlet Type 6
S-44	75.85	75.85	70.69	75.30	74.95	2.900	0.85	2.465	0.60	10.00	18.64	In Sag	0.00	Curb FDOT Inlet Type 6
S-36	76.25	76.25	69.19	74.59	74.59	0.370	0.90	0.333		10.00	2.52	In Sag	0.00	Curb FDOT Inlet Type 6
S-212	75.73	75.73	63.99	74.61	74.57	0.280	0.89	0.249	1.00	0.00	1.88	In Sag	0.00	Curb FDOT Inlet Type 5
S-221	77.60	77.60	71.17	76.17	75.90	0.850	0.80	0.680	1.00	10.00	5.14	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-222	77.50	77.50	70.84	77.13	76.52	1.270	0.80	1.016	1.00	10.00	7.68	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-226	77.50	77.50	72.50	76.91	76.75	0.940	0.80	0.752	1.00	10.00	5.69	In Sag	0.00	Ditch FDOT Bottom Inlet Type F
S-227	77.42	77.42	71.95	76.42	76.28	1.250	0.80	1.000	0.50	10.00	7.56	In Sag	0.00	Ditch FDOT Bottom Inlet Type F

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Appendix No. 3

MANHOLE REPORT

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FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Diameter (in)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Headloss Coefficient (Standard)	Headloss Method
OS-S16 (STORM Network)	75.97	69.27		74.77	74.75	0.50	Standard
MH-39	77.30	71.16	36.0	75.73	75.58	0.60	Standard

Puffin Road Commercial

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Appendix No. 4

PIPE REPORT

Puffin Road Commercial

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FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
P-131	18.0	Concrete	136.9	0.40	0.013	0.65	0.120	1.35	68.67	68.12	7.363	0.76	74.59	74.57
P-139	30.0	HDPE Pressure Pipe	199.8	0.40	0.012	0.82	0.510	12.27	69.31	68.51	6.812	2.50	75.25	75.19
P-140	48.0	HDPE Pressure Pipe	68.1	0.38	0.012	0.77	0.550	23.87	67.89	67.63	5.452	1.90	75.01	75.05
P-141	48.0	HDPE Pressure Pipe	127.1	0.40	0.012	0.50	0.140	24.04	67.63	67.12	5.404	1.91	74.96	74.99
P-142	48.0	HDPE Pressure Pipe	131.2	0.40	0.012	0.65	0.690	29.70	67.12	66.59	5.315	2.36	74.88	74.92
P-143	48.0	HDPE Pressure Pipe	164.1	0.40	0.012	0.74	0.930	38.29	66.59	65.93	5.241	3.05	74.75	74.79
P-144	30.0	HDPE Pressure Pipe	91.2	1.86	0.012	0.85	2.900	30.08	70.69	69.00	7.076	6.13	74.95	75.11
P-145	15.0	HDPE Pressure Pipe	47.8	0.40	0.012	0.90	0.370	2.52	69.19	69.00	7.500	2.05	74.59	74.60
P-163 (1)	18.0	HDPE Pressure Pipe	134.2	0.41	0.012	0.80	0.940	5.69	72.50	71.95	7.500	3.22	76.75	76.58
P-163 (2)	24.0	HDPE Pressure Pipe	195.6	0.40	0.012	0.80	1.250	12.98	71.95	71.16	7.347	4.13	76.28	76.00
P-164	24.0	HDPE Pressure Pipe	107.1	0.44	0.012	(N/A)	(N/A)	12.67	71.16	70.69	7.173	4.03	75.58	75.55
P-172	24.0	HDPE Pressure Pipe	112.4	0.40	0.012	0.82	0.390	4.98	70.54	70.09	6.146	1.58	75.34	75.33
P-173	24.0	HDPE Pressure Pipe	112.3	0.40	0.012	0.82	0.510	6.93	70.54	70.09	7.230	2.21	75.77	75.75
P-174	24.0	HDPE Pressure Pipe	196.1	0.40	0.012	0.88	0.380	6.83	70.09	69.31	5.958	2.18	75.26	75.18

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
P-175	24.0	HDPE Pressure Pipe	196.3	0.40	0.012	0.82	0.510	9.72	70.09	69.31	7.044	3.09	75.60	75.44
P-176	36.0	HDPE Pressure Pipe	200.3	0.71	0.012	15.00	0.440	9.09	69.31	67.89	5.718	1.29	75.09	75.08
P-177	15.0	HDPE Pressure Pipe	55.2	0.89	0.012	0.89	0.280	1.88	63.99	63.50	7.500	1.54	74.57	74.57
P-178	15.0	HDPE Pressure Pipe	178.5	1.38	0.012	0.80	0.850	5.14	71.17	68.70	7.500	4.19	75.90	75.21
P-179	15.0	HDPE Pressure Pipe	140.2	1.90	0.012	0.80	1.270	7.68	70.84	68.18	7.500	6.26	76.52	75.44
P-184	18.0	HDPE Pressure Pipe	168.0	0.40	0.012	0.82	0.590	3.12	71.21	70.54	6.400	1.77	75.48	75.41
P-185	18.0	HDPE Pressure Pipe	167.8	0.40	0.012	0.82	0.650	4.03	71.21	70.54	7.500	2.28	76.02	75.89
P-186	48.0	HDPE Pressure Pipe	41.9	0.45	0.012	0.81	0.340	39.20	65.93	65.74	5.170	3.12	74.56	74.68
Pipe - (24) (STORM Network)	36.0	HDPE Pressure Pipe	183.1	0.40	0.012	0.90	0.120	0.82	69.15	68.41	7.500	0.12	75.83	75.83
Pipe - (25) (STORM Network)	36.0	HDPE Pressure Pipe	114.6	0.40	0.012	0.90	0.150	6.56	68.41	67.95	4.418	0.93	75.82	75.82
Pipe - (26) (STORM Network)	36.0	HDPE Pressure Pipe	143.2	0.40	0.012	0.90	0.120	9.64	67.95	67.38	4.294	1.36	75.79	75.79

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
Pipe - (27) (STORM Network)	36.0	HDPE Pressure Pipe	179.8	0.40	0.012	0.90	0.150	12.56	67.38	66.66	4.189	1.78	75.73	75.73
Pipe - (28) (STORM Network)	36.0	HDPE Pressure Pipe	219.3	0.40	0.012	0.90	0.150	21.40	66.66	65.80	4.089	3.03	75.58	75.53
Pipe - (30) (STORM Network)	36.0	HDPE Pressure Pipe	158.1	0.40	0.012	0.90	0.150	26.68	65.80	65.14	4.018	3.77	75.23	75.23
Pipe - (31) (STORM Network)	42.0	HDPE Pressure Pipe	170.2	0.40	0.012	0.90	0.140	26.90	65.14	64.46	3.974	2.80	74.95	74.97
Pipe - (32) (STORM Network)	42.0	HDPE Pressure Pipe	175.2	0.40	0.012	0.90	0.270	27.44	64.46	63.96	3.914	2.85	74.77	74.82
Pipe - (33) (STORM Network)	48.0	HDPE Pressure Pipe	59.3	0.40	0.012	0.79	0.320	28.12	63.96	63.63	3.870	2.24	74.64	74.69
Pipe - (35) (STORM Network)	24.0	HDPE Pressure Pipe	44.0	0.80	0.012	0.68	4.240	18.60	73.35	73.00	6.400	7.81	74.90	75.36

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
Pipe - (36) (STORM Network)	24.0	HDPE Pressure Pipe	171.1	0.49	0.012	0.90	0.090	7.70	66.65	65.80	6.069	2.45	75.56	75.48
Pipe - (37) (1) (STORM Network)	24.0	HDPE Pressure Pipe	80.9	0.40	0.012	0.90	0.110	12.64	72.43	72.13	6.016	4.02	75.88	75.93
Pipe - (37) (STORM Network)	24.0	HDPE Pressure Pipe	144.2	0.40	0.012	0.90	0.150	1.02	73.00	72.43	7.500	0.32	76.13	76.13
Pipe - (38) (STORM Network)	24.0	HDPE Pressure Pipe	39.0	5.85	0.012	0.68	1.810	7.94	73.28	71.33	6.400	2.53	75.86	75.93
Pipe - (39) (STORM Network)	24.0	HDPE Pressure Pipe	39.9	7.78	0.012	0.68	0.950	4.17	73.49	70.87	6.400	1.33	75.82	75.84
Pipe - (40) (STORM Network)	24.0	HDPE Pressure Pipe	40.1	11.57	0.012	0.68	0.900	3.95	74.24	70.30	6.400	13.61	75.76	75.79
Pipe - (41) (STORM Network)	24.0	HDPE Pressure Pipe	47.5	0.40	0.012	0.68	1.920	8.42	72.62	72.43	6.400	2.68	76.18	76.24

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
Pipe - (42) (STORM Network)	24.0	HDPE Pressure Pipe	34.2	6.43	0.012	0.68	0.790	3.47	73.50	71.34	6.400	1.10	75.63	75.65
Pipe - (45) (STORM Network)	15.0	Concrete	198.7	0.30	0.013	0.65	0.200	1.52	71.80	71.20	7.229	1.24	75.28	75.20
Pipe - (46) (STORM Network)	18.0	Concrete	201.5	0.32	0.013	0.65	0.240	3.18	71.20	70.56	6.639	1.80	75.14	75.00
Pipe - (47) (STORM Network)	24.0	Concrete	193.0	0.40	0.013	0.65	0.150	4.23	70.56	69.79	6.275	1.35	74.93	74.89
Pipe - (49) (STORM Network)	24.0	Concrete	174.9	0.40	0.013	0.65	0.110	5.52	68.82	68.12	5.539	1.76	74.67	74.61
Pipe - (50) (STORM Network)	18.0	Concrete	23.8	0.42	0.013	0.65	0.080	0.39	68.22	68.12	7.500	0.22	74.57	74.57
Pipe - (51) (STORM Network)	30.0	Concrete	58.3	0.89	0.013	0.65	0.080	6.94	68.12	67.60	5.406	1.41	74.55	74.56

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
Pipe - (52) (STORM Network)	15.0	Concrete	24.0	0.42	0.013	0.65	0.160	0.79	68.87	68.77	7.500	0.64	74.60	74.60
Pipe - (61) (STORM Network)	15.0	Concrete	35.5	0.28	0.013	0.65	0.120	0.59	71.90	71.80	7.500	0.48	75.30	75.30
Pipe - (62) (STORM Network)	15.0	Concrete	27.3	0.40	0.013	0.65	0.150	0.74	70.67	70.56	7.500	0.60	74.96	74.96
Pipe - (63) (STORM Network)	15.0	Concrete	24.5	0.61	0.013	0.65	0.130	0.64	69.94	69.79	7.500	0.52	74.87	74.87
Pipe - (64) (STORM Network)	15.0	Concrete	22.4	0.41	0.013	0.65	0.120	0.59	68.91	68.82	7.500	0.48	74.70	74.70
Pipe - (74) (STORM Network)	15.0	Concrete	34.8	0.29	0.013	0.65	0.170	0.84	71.30	71.20	7.500	0.68	75.18	75.18
Pipe - (76) (1) (STORM Network)	24.0	Concrete	114.5	0.40	0.013	(N/A)	(N/A)	4.80	69.27	68.82	5.677	1.53	74.75	74.73

FlexTable: Conduit Table

Label	Diameter (in)	Material	Length (Scaled) (ft)	Slope (Calculated) (%)	Manning's n	Upstream Inlet C	Upstream Inlet Area (acres)	Flow (ft^3/s)	Invert (Start) (ft)	Invert (Stop) (ft)	System Intensity (in/h)	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
Pipe - (76) (STORM Network)	24.0	Concrete	128.6	0.41	0.013	0.65	0.130	4.98	69.79	69.27	5.893	1.59	74.83	74.81
Pipe - (81) (STORM Network)	24.0	HDPE Pressure Pipe	35.2	0.45	0.012	0.68	0.890	3.90	72.00	71.84	6.400	1.24	75.69	75.71
Pipe - (82) (STORM Network)	24.0	HDPE Pressure Pipe	123.7	0.40	0.012	0.90	0.040	4.09	71.84	71.34	6.324	1.30	75.66	75.65
Pipe - (83) (STORM Network)	24.0	HDPE Pressure Pipe	39.7	0.42	0.012	0.68	0.800	3.51	72.59	72.43	6.400	1.12	76.14	76.15
Pipe - (84) (STORM Network)	48.0	HDPE Pressure Pipe	55.2	0.40	0.012	0.85	0.140	28.31	63.63	63.35	3.832	2.25	74.55	74.61
Pipe - (87) (STORM Network)	48.0	HDPE Pressure Pipe	143.0	0.37	0.012	0.75	0.740	15.39	68.51	67.89	6.518	1.22	75.07	75.08

Puffin Road Commercial

Osceola County, Florida

Appendix No. 5

OUTLET REPORT

Puffin Road Commercial

Prepared by:
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Kissimmee, FL 34741
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FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Boundary Condition Type	Elevation (User Defined Tailwater) (ft)	Hydraulic Grade (ft)	Flow (Total Out) (ft^3/s)	Notes
MES-18	74.00	67.60	User Defined Tailwater	74.53	74.53	6.87	TYPE H INLET
MES-19	74.00	65.74	User Defined Tailwater	74.53	74.53	39.06	TYPE H INLET
MES-21	73.95	63.30	User Defined Tailwater	74.53	74.53	28.08	TYPE H INLET
MES-22	73.00	73.00	User Defined Tailwater	74.53	74.43	18.56	MITERED END SECTION
MES-23	74.00	69.00	User Defined Tailwater	74.53	74.53	29.85	
MES-24	74.00	69.00	User Defined Tailwater	74.53	74.53	2.49	
MES-25	74.00	66.57	User Defined Tailwater	74.53	(N/A)	(N/A)	
MES-26	73.95	63.50	User Defined Tailwater	74.53	74.53	1.88	