JGA 18-003

2018 CAPACITY ASSESSMENT

of the Wastewater Treatment Facility and the Hunt's River Interceptor

for the

TOWN OF EAST GREENWICH

125 Main Street

East Greenwich, Rhode Island 02818

Prepared by:

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2018 CAPACITY ASSESSMENT OF THE WASTEWATER TREATMENT FACILITY AND THE HUNT'S RIVER INTERCEPTOR

The purpose of this study is to determine the availability of the capacity of the Hunt's River Interceptor and of the East Greenwich Wastewater Treatment Facility.

The Town of East Greenwich has committed, to the Commons at Frenchtown Road, a maximum daily average flow of 25,000 gallons per day (gpd). The Town has also committed, to the New England Institute of Technology, a maximum daily average flow of 37,700 gallons per day (gpd).

The Wastewater Treatment Facility has been designed to handle 1.7 MGD of average daily flow, 2.6 MGD maximum daily flow, and 3.0 MGD of peak flow. The average daily flow to the plant from July 2013 through March 2018 is summarized in Table 1 (see Appendix A).

The infiltration/inflow (I/I) rate was determined based on flow data during the wet season months of March through May 2017 and the dry season months of August through October 2018. Based on this data, the I/I was determined to be 0.490 MGD (1.14 MGD – 0.65 MGD).

Table 2 (see Appendix A) presents the areas that have been sewered as well as the total number of connected units and the potential number of units that can be connected to the system. Based upon this data, there is a potential of an additional 416 residential units that can tie into the wastewater collection system at this time. This represents a potential of 129,000 GPD (430 units x 300 gallons per day) of additional residential flow to the facility.

Table 3 (see Appendix A) presents the summary of the existing, as well as the potential future flows.

Based on the capacity assessment of the Wastewater Treatment Facility, the plant has an additional reserve of 268,300 gpd. It is to be noted that when the effluent discharged for a period of ninety (90) consecutive dry weather days exceeds 80% of the designed flow (1.36 MGD), the East Greenwich Wastewater Treatment Facility shall submit to RIDEM authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

The Hunt's River Interceptor was evaluated from the East Greenwich Wastewater Treatment Facility to Jefferson Drive. This segment of the interceptor consists of 27-inch, 24-inch, and 21-inch precast concrete pipes. The capacity of the 27-inch sewer pipe is 17.85 MGD; the capacity of the 24-inch sewer pipe is 4.93 MGD, and the capacity of the 21-inch sewer pipe varies between 5.28 MGD and 4.37 MGD. Based on the treatment facility, the Hunt's River Interceptor transports 50 percent of the total flow that is treated at the plant.

The Hunt's River Interceptor was divided into four segments. The first segment is from the treatment facility to Post Road; the second segment is from Post Road to Woodland Road; the third segment is from Woodland Road to Eugene Street; and the fourth segment is from Eugene Street to Jefferson Drive (See Figure 1).

Table 4 (see Appendix A) summarizes the adequacy of the Hunt's River Interceptor.

Table 5 (see Appendix A) summarizes the future flows to Segments 1 and 2 Hunt's River Interceptor without the Commons at Frenchtown Road.

LEGEND

SEGMENT 1
SEGMENT 2
SEGMENT 3
SEGMENT 4

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FIGURE 1:
HUNT'S RIVER
INTERCEPTOR

NOT TO SCALE

APPENDIX A

TABLE 1 – AVERAGE DAILY FLOWS

(JULY 2013 – MARCH 2018)

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 1

2013

July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.88	1	0.62	1	0.75	1	0.59	1	0.60	1	0.72
2	0.89	2	0.64	2	0.85	2	0.60	2	0.57	2	0.68
3	0.86	3	0.64	3	0.87	3	0.59	3	0.56	3	0.69
4	0.79	4	0.60	4	0.82	4	0.58	4	0.57	4	0.68
5	0.81	5	0.61	5	0.78	5	0.61	5	0.60	5	0.67
6	0.80	6	0.61	6	0.74	6	0.60	6	0.55	6	0.68
7	0.77	7	0.62	7	0.73	7	0.59	7	0.62	7	0.73
8	0.75	8	0.61	8	0.73	8	0.59	8	0.58	8	0.67
9	0.78	9	0.78	9	0.69	9	0.60	9	0.58	9	0.70
10	0.75	10	0.65	10	0.68	10	0.59	10	0.56	10	0.71
11	0.82	11	0.60	11	0.69	11	0.60	11	0.55	11	0.69
12	0.76	12	0.61	12	0.68	12	0.62	12	0.58	12	0.67
13	0.78	13	0.62	13	0.73	13	0.54	13	0.57	13	0.66
14	0.76	14	0.62	14	0.68	14	0.57	14	0.57	14	0.65
15	0.63	15	0.61	15	0.67	15	0.58	15	0.55	15	0.82
16	0.65	16	0.60	16	0.65	16	0.59	16	0.58	16	0.72
17	0.66	17	0.60	17	0.67	17	0.61	17	0.58	17	0.69
18	0.65	18	0.60	18	0.64	18	0.57	18	0.60	18	0.69
19	0.66	19	0.59	19	0.64	19	0.58	19	0.58	19	0.71
20	0.67	20	0.60	20	0.63	20	0.57	20	0.57	20	0.71
21	0.66	21	0.62	21	0.62	21	0.56	21	0.56	21	0.74
22	0.66	22	0.69	22	0.65	22	0.56	22	0.58	22	0.72
23	0.70	23	0.59	23	0.58	23	0.58	23	0.59	23	0.79
24	0.64	24	0.61	24	0.57	24	0.58	24	0.58	24	0.80
25	0.70	25	0.59	25	0.61	25	0.60	25	0.56	25	0.72
26	0.69	26	0.63	26	0.51	26	0.58	26	0.59	26	0.75
27	0.67	27	0.77	27	0.67	27	0.59	27	0.98	27	0.75
28	0.64	28	0.65	28	0.66	28	0.58	28	0.72	28	0.74
29	0.64	29	0.63	29	0.62	29	0.57	29	0.67	29	0.84
30	0.63	30	0.63	30	0.59	30	0.57	30	0.68	30	0.82
31	0.62	31	0.63			31	0.57			31	0.81
TOTALS	22.36		19.47		20.40		18.11		18.01		22.42

AVERAGE DAILY FLOW (July - December 2013) **0.678782**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 2

2014

January		February		March		April		May		June		July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.78	1	0.81	1	1.00	1	1.85	1	1.53	1	0.85	1	0.70	1	0.63	1	0.60	1	0.60	1	0.69	1	0.79
2	0.77	2	0.79	2	0.98	2	1.70	2	1.42	2	0.85	2	0.70	2	0.65	2	0.62	2	0.63	2	0.69	2	0.80
3	0.91	3	0.75	3	0.92	3	1.59	3	1.38	3	0.85	3	0.71	3	0.61	3	0.59	3	0.58	3	0.68	3	0.82
4	0.78	4	0.75	4	0.93	4	1.51	4	1.35	4	0.83	4	0.91	4	0.61	4	0.60	4	0.63	4	0.68	4	0.81
5	0.78	5	0.77	5	0.91	5	1.54	5	1.29	5	0.92	5	0.76	5	0.63	5	0.59	5	0.61	5	0.64	5	0.80
6	0.92	6	0.77	6	0.91	6	1.42	6	1.27	6	0.87	6	0.72	6	0.60	6	0.60	6	0.59	6	0.71	6	0.85
7	0.82	7	0.73	7	0.88	7	1.37	7	1.24	7	0.84	7	0.71	7	0.62	7	0.60	7	0.59	7	0.68	7	0.71
8	0.82	8	0.76	8	0.92	8	1.56	8	1.20	8	0.79	8	0.70	8	0.62	8	0.58	8	0.61	8	0.70	8	0.88
9	0.78	9	0.77	9	0.91	9	1.44	9	1.17	9	0.79	9	0.69	9	0.60	9	0.59	9	0.60	9	0.68	9	1.32
10	0.79	10	0.70	10	0.87	10	1.40	10	1.16	10	0.80	10	0.69	10	0.57	10	0.58	10	0.59	10	0.67	10	1.26
11	0.92	11	0.73	11	0.88	11	1.34	11	1.12	11	0.78	11	0.68	11	0.59	11	0.60	11	0.62	11	0.69	11	1.23
12	0.95	12	0.68	12	0.92	12	1.33	12	1.09	12	0.80	12	0.67	12	0.62	12	0.58	12	0.54	12	0.66	12	1.16
13	0.89	13	0.82	13	0.97	13	1.25	13	1.09	13	0.96	13	0.64	13	0.75	13	0.60	13	0.57	13	0.68	13	1.13
14	0.94	14	0.98	14	0.96	14	1.25	14	1.07	14	0.86	14	0.66	14	0.62	14	0.58	14	0.59	14	0.72	14	1.10
15	0.94	15	0.85	15	0.94	15	1.39	15	1.08	15	0.80	15	0.68	15	0.62	15	0.57	15	0.57	15	0.70	15	1.05
16	0.95	16	0.84	16	0.92	16	1.51	16	1.06	16	0.79	16	0.73	16	0.62	16	0.58	16	0.68	16	0.87	16	1.05
17	0.93	17	0.84	17	0.88	17	1.48	17	1.09	17	0.80	17	0.68	17	0.59	17	0.57	17	0.62	17	0.83	17	1.06
18	0.95	18	0.84	18	0.91	18	1.45	18	1.00	18	0.77	18	0.67	18	0.60	18	0.59	18	0.64	18	0.74	18	1.05
19	0.91	19	0.91	19	0.89	19	1.42	19	1.01	19	0.79	19	0.67	19	0.61	19	0.58	19	0.60	19	0.72	19	1.05
20	0.90	20	0.97	20	0.97	20	1.31	20	1.00	20	0.75	20	0.65	20	0.59	20	0.58	20	0.60	20	0.73	20	1.01
21	0.87	21	1.04	21	0.92	21	1.30	21	0.98	21	0.76	21	0.65	21	0.59	21	0.57	21	0.62	21	0.72	21	1.01
22	0.84	22	1.13	22	0.92	22	1.27	22	1.01	22	0.72	22	0.67	22	0.60	22	0.56	22	0.65	22	0.73	22	0.98
23	0.85	23	1.14	23	0.91	23	1.29	23	0.96	23	0.71	23	0.64	23	0.60	23	0.57	23	0.71	23	0.71	23	1.01
24	0.84	24	1.15	24	0.81	24	1.22	24	0.93	24	0.71	24	0.67	24	0.57	24	0.56	24	0.66	24	0.88	24	1.07
25	0.88	25	1.10	25	0.88	25	1.19	25	0.89	25	0.71	25	0.63	25	0.57	25	0.59	25	0.67	25	0.77	25	1.04
26	0.81	26	1.07	26	0.86	26	1.23	26	0.90	26	0.74	26	0.66	26	0.60	26	0.57	26	0.64	26	0.96	26	1.05
27	0.82	27	1.04	27	0.87	27	1.18	27	0.92	27	0.71	27	0.65	27	0.62	27	0.56	27	0.65	27	0.86	27	1.06
28	0.79	28	0.99	28	0.86	28	1.14	28	0.90	28	0.71	28	0.65	28	0.63	28	0.54	28	0.66	28	0.83	28	1.02
29	0.78			29	0.95	29	1.14	29	0.92	29	0.67	29	0.64	29	0.61	29	0.56	29	0.66	29	0.84	29	1.01
30	0.79			30	1.96	30	1.22	30	0.89	30	0.69	30	0.62	30	0.60	30	0.59	30	0.67	30	0.87	30	1.00
31	0.79			31	1.99			31	0.89			31	0.63	31	0.57			31	0.64			31	0.98
TOTALS	26.49		24.69		30.39		41.30		33.81		23.62		21.12		18.91		17.44		19.28		22.31		31.17

AVERAGE DAILY FLOW (2014) **0.850765**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 3

2015

January		February		March		April		May		June		July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.95	1	0.77	1	0.76	1	1.24	1	0.91	1	0.83	1	0.90	1	0.71	1	0.62	1	0.62	1	0.64	1	0.71
2	0.96	2	0.76	2	0.75	2	1.21	2	0.96	2	0.88	2	0.88	2	0.68	2	0.61	2	0.72	2	0.67	2	0.68
3	0.96	3	0.74	3	0.75	3	1.23	3	0.90	3	0.81	3	0.81	3	0.68	3	0.62	3	0.68	3	0.67	3	0.71
4	1.12	4	0.77	4	0.92	4	1.22	4	0.92	4	0.81	4	0.76	4	0.47	4	0.62	4	0.65	4	0.65	4	0.70
5	1.04	5	0.76	5	0.84	5	1.16	5	0.92	5	0.79	5	0.76	5	0.83	5	0.60	5	0.66	5	0.67	5	0.71
6	0.98	6	0.74	6	0.78	6	1.14	6	0.89	6	0.78	6	0.77	6	0.74	6	0.56	6	0.67	6	0.67	6	0.69
7	0.97	7	0.75	7	0.83	7	1.17	7	0.90	7	0.75	7	0.79	7	0.73	7	0.58	7	0.65	7	0.69	7	0.71
8	0.96	8	0.73	8	0.83	8	1.16	8	0.89	8	0.70	8	0.83	8	0.67	8	0.61	8	0.66	8	0.68	8	0.69
9	0.96	9	0.69	9	0.84	9	1.19	9	0.89	9	0.67	9	0.80	9	0.64	9	0.61	9	0.66	9	0.65	9	0.69
10	0.94	10	0.73	10	0.89	10	1.16	10	0.88	10	0.67	10	0.78	10	0.63	10	0.68	10	0.64	10	0.69	10	0.72
11	0.93	11	0.72	11	1.10	11	1.14	11	0.87	11	0.85	11	0.75	11	0.77	11	0.67	11	0.61	11	0.69	11	0.70
12	0.96	12	0.74	12	1.11	12	1.11	12	0.89	12	0.76	12	0.71	12	0.69	12	0.65	12	0.64	12	0.69	12	0.69
13	0.88	13	0.70	13	1.11	13	1.07	13	0.86	13	0.76	13	0.72	13	0.67	13	0.64	13	0.67	13	0.69	13	0.67
14	0.86	14	0.69	14	1.33	14	1.06	14	0.86	14	0.72	14	0.78	14	0.66	14	0.65	14	0.64	14	0.70	14	0.69
15	0.87	15	0.67	15	1.39	15	1.03	15	0.84	15	0.87	15	0.85	15	0.71	15	0.65	15	0.65	15	0.67	15	0.77
16	0.85	16	0.68	16	1.34	16	1.04	16	0.84	16	0.81	16	0.81	16	0.67	16	0.63	16	0.64	16	0.66	16	0.71
17	0.83	17	0.66	17	1.36	17	1.04	17	0.83	17	0.74	17	0.78	17	0.65	17	0.64	17	0.65	17	0.68	17	0.77
18	0.84	18	0.71	18	1.32	18	1.01	18	0.82	18	0.76	18	0.75	18	0.67	18	0.63	18	0.62	18	0.67	18	0.76
19	0.87	19	0.69	19	1.27	19	0.99	19	0.86	19	0.74	19	0.73	19	0.64	19	0.63	19	0.64	19	0.68	19	0.76
20	0.84	20	0.68	20	1.29	20	1.08	20	0.84	20	0.74	20	0.72	20	0.64	20	0.61	20	0.65	20	0.84	20	0.74
21	0.82	21	0.70	21	1.28	21	1.08	21	0.85	21	0.81	21	0.73	21	0.64	21	0.60	21	0.63	21	0.75	21	0.74
22	0.83	22	0.86	22	1.25	22	1.03	22	0.85	22	0.75	22	0.71	22	0.64	22	0.60	22	0.65	22	0.76	22	0.78
23	0.81	23	0.75	23	1.09	23	1.05	23	0.81	23	0.78	23	0.73	23	0.60	23	0.60	23	0.64	23	0.76	23	0.81
24	0.93	24	0.73	24	1.11	24	1.01	24	0.75	24	0.71	24	0.72	24	0.63	24	0.60	24	0.63	24	0.74	24	1.05
25	0.87	25	0.79	25	1.10	25	1.01	25	0.75	25	0.75	25	0.71	25	0.65	25	0.60	25	0.61	25	0.72	25	0.87
26	0.83	26	0.81	26	1.20	26	0.99	26	0.78	26	0.71	26	0.69	26	0.68	26	0.60	26	0.65	26	0.70	26	0.90
27	0.77	27	0.76	27	1.32	27	0.97	27	0.78	27	0.73	27	0.79	27	0.64	27	0.57	27	0.65	27	0.69	27	0.97
28	0.70	28	0.77	28	1.33	28	0.98	28	0.78	28	1.01	28	0.74	28	0.63	28	0.59	28	0.73	28	0.72	28	0.85
29	0.86			29	1.32	29	0.96	29	0.76	29	0.87	29	0.71	29	0.64	29	0.61	29	0.74	29	0.73	29	1.06
30	0.82			30	1.29	30	0.97	30	0.77	30	0.84	30	0.74	30	0.61	30	0.79	30	0.68	30	0.69	30	0.92
31	0.79			31	1.28			31	0.75			31	0.72	31	0.63			31	0.68			31	0.97
TOTALS	27.62		20.54		34.39		32.51		26.19		23.39		23.66		20.53		18.67		20.31		20.90		24.17

AVERAGE DAILY FLOW (2015) **0.802394**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 4

2016

January		February		March		April		May		June		July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.85	1	0.82	1	1.08	1	0.90	1	0.91	1	0.75	1	0.67	1	0.59	1	0.58	1	0.63	1	0.67	1	0.79
2	0.90	2	0.84	2	1.09	2	0.99	2	0.92	2	0.76	2	0.66	2	0.63	2	0.54	2	0.53	2	0.64	2	0.76
3	0.89	3	0.93	3	1.06	3	1.03	3	0.97	3	0.78	3	0.60	3	0.58	3	0.53	3	0.55	3	0.64	3	0.76
4	0.85	4	0.96	4	1.03	4	0.96	4	0.95	4	0.78	4	0.58	4	0.53	4	0.49	4	0.55	4	0.64	4	0.72
5	0.84	5	1.00	5	1.03	5	1.00	5	0.96	5	0.82	5	0.67	5	0.54	5	0.52	5	0.55	5	0.64	5	0.72
6	0.85	6	1.03	6	1.00	6	1.04	6	0.95	6	0.75	6	0.62	6	0.57	6	0.60	6	0.57	6	0.63	6	0.74
7	0.84	7	1.02	7	0.99	7	1.31	7	0.93	7	0.74	7	0.65	7	0.51	7	0.56	7	0.60	7	0.62	7	0.74
8	0.83	8	1.00	8	0.99	8	1.25	8	0.91	8	0.79	8	0.64	8	0.54	8	0.55	8	0.52	8	0.63	8	0.72
9	0.83	9	1.04	9	0.96	9	1.23	9	0.88	9	0.81	9	0.64	9	0.53	9	0.53	9	0.69	9	0.62	9	0.73
10	1.01	10	0.99	10	0.94	10	1.20	10	0.87	10	0.79	10	0.62	10	0.54	10	0.54	10	0.59	10	0.62	10	0.71
11	0.93	11	0.99	11	0.98	11	1.14	11	0.87	11	0.74	11	0.63	11	0.46	11	0.52	11	0.66	11	0.62	11	0.69
12	0.94	12	0.95	12	0.95	12	1.17	12	0.87	12	0.70	12	0.60	12	0.72	12	0.50	12	0.63	12	0.63	12	0.76
13	0.91	13	0.94	13	0.92	13	1.13	13	0.90	13	0.71	13	0.59	13	0.67	13	0.53	13	0.59	13	0.60	13	0.74
14	0.91	14	0.92	14	0.94	14	1.12	14	0.89	14	0.72	14	0.64	14	0.59	14	0.56	14	0.59	14	0.60	14	0.73
15	0.90	15	0.89	15	1.22	15	1.09	15	0.85	15	0.71	15	0.64	15	0.58	15	0.52	15	0.60	15	0.76	15	0.71
16	1.02	16	1.19	16	1.10	16	1.08	16	0.85	16	0.71	16	0.58	16	0.64	16	0.51	16	0.58	16	0.67	16	0.68
17	0.91	17	1.11	17	1.09	17	1.02	17	0.85	17	0.71	17	0.58	17	0.66	17	0.53	17	0.58	17	0.65	17	0.76
18	0.94	18	1.08	18	1.07	18	1.00	18	0.85	18	0.71	18	0.58	18	0.60	18	0.51	18	0.60	18	0.64	18	0.79
19	0.92	19	1.06	19	1.06	19	1.00	19	0.86	19	0.68	19	0.59	19	0.61	19	0.59	19	0.57	19	0.65	19	0.73
20	0.92	20	1.07	20	1.03	20	0.98	20	0.84	20	0.70	20	0.57	20	0.58	20	0.61	20	0.56	20	0.67	20	0.75
21	0.92	21	1.05	21	1.04	21	0.97	21	0.82	21	0.77	21	0.58	21	0.54	21	0.55	21	0.60	21	0.66	21	0.78
22	0.89	22	1.02	22	1.08	22	0.96	22	0.77	22	0.71	22	0.59	22	0.62	22	0.53	22	0.65	22	0.65	22	0.79
23	0.86	23	1.01	23	0.96	23	0.99	23	0.72	23	0.69	23	0.65	23	0.57	23	0.52	23	0.60	23	0.68	23	0.79
24	0.88	24	1.11	24	0.98	24	0.96	24	0.76	24	0.67	24	0.56	24	0.56	24	0.55	24	0.60	24	0.64	24	0.81
25	0.86	25	1.22	25	0.97	25	0.95	25	0.73	25	0.66	25	0.57	25	0.55	25	0.52	25	0.61	25	0.63	25	0.72
26	0.93	26	1.18	26	0.96	26	0.98	26	0.74	26	0.65	26	0.58	26	0.57	26	0.53	26	0.60	26	0.66	26	0.74
27	0.89	27	1.15	27	0.93	27	0.94	27	0.73	27	0.65	27	0.57	27	0.55	27	0.57	27	0.67	27	0.64	27	0.76
28	0.86	28	1.12	28	0.97	28	0.94	28	0.71	28	0.65	28	0.58	28	0.53	28	0.53	28	0.69	28	0.63	28	0.76
29	0.88	29	1.10	29	0.94	29	0.93	29	0.67	29	0.66	29	0.61	29	0.55	29	0.52	29	0.64	29	0.79	29	0.84
30	0.88			30	0.93	30	0.92	30	0.86	30	0.66	30	0.57	30	0.56	30	0.53	30	0.65	30	0.76	30	0.84
31	0.82			31	0.92			31	0.77			31	0.54	31	0.56			31	0.65			31	0.83
TOTALS	27.63		29.79		31.21		31.16		26.16		21.61		18.74		17.84		16.17		18.71		19.59		23.38

AVERAGE DAILY FLOW (2016) **0.770445**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 5

2017

January		February		March		April		May		June		July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.80	1	0.98	1	0.96	1	1.33	1	1.16	1	1.13	1	0.83	1	0.70	1	0.64	1	0.63	1	0.85	1	0.85
2	0.82	2	0.97	2	0.94	2	1.20	2	1.22	2	1.10	2	0.76	2	0.70	2	0.61	2	0.64	2	0.81	2	0.82
3	0.93	3	0.95	3	0.90	3	1.17	3	1.14	3	1.07	3	0.76	3	0.69	3	0.63	3	0.64	3	0.80	3	0.82
4	0.94	4	0.94	4	0.89	4	1.44	4	1.11	4	1.04	4	0.71	4	0.70	4	0.64	4	0.64	4	0.80	4	0.80
5	0.89	5	0.91	5	0.86	5	1.38	5	1.29	5	1.09	5	0.74	5	0.75	5	0.64	5	0.64	5	0.78	5	0.85
6	0.87	6	0.91	6	0.86	6	1.50	6	1.37	6	1.09	6	0.75	6	0.66	6	0.66	6	0.63	6	0.77	6	0.90
7	0.85	7	0.91	7	0.87	7	1.53	7	1.32	7	1.08	7	0.96	7	0.68	7	0.34	7	0.62	7	0.76	7	0.86
8	0.84	8	0.90	8	0.88	8	1.50	8	1.29	8	1.05	8	0.84	8	0.70	8	0.65	8	0.64	8	0.78	8	0.83
9	0.79	9	0.87	9	0.87	9	1.43	9	1.27	9	1.02	9	0.78	9	0.67	9	0.65	9	0.69	9	0.75	9	0.83
10	0.84	10	0.88	10	0.87	10	1.37	10	1.23	10	1.00	10	0.78	10	0.68	10	0.64	10	0.64	10	0.75	10	0.84
11	0.96	11	0.88	11	0.85	11	1.32	11	1.18	11	0.96	11	0.82	11	0.68	11	0.63	11	0.63	11	0.74	11	0.82
12	0.99	12	0.86	12	0.83	12	1.25	12	1.17	12	0.95	12	0.86	12	0.70	12	0.64	12	0.65	12	0.73	12	0.85
13	0.96	13	0.88	13	0.80	13	1.17	13	1.16	13	0.98	13	0.91	13	0.64	13	0.65	13	0.62	13	0.75	13	0.86
14	0.94	14	0.89	14	1.06	14	1.14	14	1.35	14	0.94	14	0.87	14	0.66	14	0.64	14	0.64	14	0.76	14	0.88
15	0.91	15	0.91	15	1.06	15	1.13	15	1.25	15	0.88	15	0.87	15	0.68	15	0.65	15	0.62	15	0.72	15	0.84
16	0.91	16	0.91	16	1.02	16	1.08	16	1.21	16	0.98	16	0.82	16	0.64	16	0.63	16	0.61	16	0.78	16	0.83
17	0.93	17	0.88	17	1.02	17	1.07	17	1.16	17	0.96	17	0.82	17	0.65	17	0.61	17	0.65	17	0.76	17	0.80
18	0.94	18	0.92	18	1.01	18	1.02	18	0.95	18	0.92	18	0.82	18	0.69	18	0.61	18	0.61	18	0.77	18	0.80
19	0.90	19	0.91	19	1.01	19	1.02	19	1.23	19	0.92	19	0.80	19	0.68	19	0.63	19	0.63	19	0.83	19	0.83
20	0.89	20	0.94	20	1.01	20	1.00	20	1.14	20	0.93	20	0.78	20	0.63	20	0.62	20	0.61	20	0.78	20	0.82
21	0.88	21	0.95	21	1.02	21	1.08	21	1.03	21	0.87	21	0.77	21	0.64	21	0.62	21	0.62	21	0.79	21	0.81
22	0.86	22	0.96	22	0.98	22	1.05	22	1.12	22	0.86	22	0.76	22	0.66	22	0.65	22	0.60	22	0.98	22	0.81
23	0.87	23	0.96	23	0.96	23	1.00	23	1.10	23	0.88	23	0.74	23	0.64	23	0.64	23	0.60	23	0.90	23	0.88
24	1.19	24	0.96	24	0.96	24	0.99	24	1.04	24	0.93	24	0.79	24	0.64	24	0.60	24	0.67	24	0.88	24	0.85
25	1.16	25	0.96	25	0.95	25	1.12	25	1.08	25	0.82	25	0.74	25	0.64	25	0.60	25	0.73	25	0.90	25	0.84
26	1.11	26	0.96	26	0.95	26	1.44	26	1.22	26	0.81	26	0.72	26	0.62	26	0.61	26	0.79	26	0.88	26	0.84
27	1.09	27	0.92	27	0.97	27	1.31	27	1.10	27	0.84	27	0.75	27	0.60	27	0.60	27	0.70	27	0.86	27	0.82
28	1.07	28	0.93	28	0.97	28	1.31	28	1.02	28	0.80	28	0.74	28	0.61	28	0.61	28	0.69	28	0.86	28	0.80
29	1.03			29	0.98	29	1.24	29	1.06	29	0.81	29	0.74	29	0.63	29	0.60	29	0.71	29	0.84	29	0.79
30	1.01			30	0.95	30	1.18	30	1.06	30	0.82	30	0.69	30	0.67	30	0.62	30	1.06	30	0.83	30	0.79
31	0.99			31	1.01			31	1.14			31	0.75	31	0.64			31	0.84			31	0.76
TOTALS	29.17		25.81		29.27		36.76		36.18		28.52		24.46		20.56		18.53		20.68		24.18		25.74

AVERAGE DAILY FLOW (2017) **0.881110**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

TABLE 1
EAST GREENWICH WASTEWATER TREATMENT FACILITY
AVERAGE DAILY FLOWS (JULY 2013 - MARCH 2018)

SHEET 6

2018

January		February		March		April		May		June		July		August		September		October		November		December	
Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow	Date	Flow
1	0.76	1	1.05	1	1.24	1		1		1		1		1		1		1		1		1	
2	0.77	2	1.05	2	1.67	2		2		2		2		2		2		2		2		2	
3	0.77	3	1.01	3	1.82	3		3		3		3		3		3		3		3		3	
4	0.75	4	1.03	4	1.65	4		4		4		4		4		4		4		4		4	
5	0.76	5	1.19	5	1.71	5		5		5		5		5		5		5		5		5	
6	0.78	6	1.10	6	1.62	6		6		6		6		6		6		6		6		6	
7	0.76	7	1.16	7	1.60	7		7		7		7		7		7		7		7		7	
8	0.78	8	1.15	8	1.67	8		8		8		8		8		8		8		8		8	
9	0.79	9	1.12	9	1.63	9		9		9		9		9		9		9		9		9	
10	0.74	10	1.12	10	1.60	10		10		10		10		10		10		10		10		10	
11	0.76	11	1.30	11	1.50	11		11		11		11		11		11		11		11		11	
12	1.01	12	1.37	12	1.45	12		12		12		12		12		12		12		12		12	
13	1.55	13	1.27	13	1.41	13		13		13		13		13		13		13		13		13	
14	1.21	14	1.29	14	1.48	14		14		14		14		14		14		14		14		14	
15	1.17	15	1.27	15	1.45	15		15		15		15		15		15		15		15		15	
16	1.18	16	1.30	16	1.42	16		16		16		16		16		16		16		16		16	
17	1.13	17	1.20	17	1.39	17		17		17		17		17		17		17		17		17	
18	1.10	18	1.21	18	1.34	18		18		18		18		18		18		18		18		18	
19	1.08	19	1.20	19	1.30	19		19		19		19		19		19		19		19		19	
20	1.07	20	1.22	20	1.27	20		20		20		20		20		20		20		20		20	
21	1.01	21	1.13	21	1.27	21		21		21		21		21		21		21		21		21	
22	0.94	22	1.17	22	1.26	22		22		22		22		22		22		22		22		22	
23	1.21	23	1.19	23	1.23	23		23		23		23		23		23		23		23		23	
24	1.19	24	1.22	24	1.21	24		24		24		24		24		24		24		24		24	
25	1.14	25	1.35	25	1.18	25		25		25		25		25		25		25		25		25	
26	1.11	26	1.34	26	0.89	26		26		26		26		26		26		26		26		26	
27	1.11	27	1.31	27	1.34	27		27		27		27		27		27		27		27		27	
28	1.10	28	1.27	28	1.23	28		28		28		28		28		28		28		28		28	
29	1.08			29	1.10	29		29		29		29		29		29		29		29		29	
30	1.06			30	1.11	30		30		30		30		30		30		30		30		30	
31	1.05			31	1.12			31				31		31				31				31	
TOTALS	30.9128		33.5989		43.1809		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00

AVERAGE DAILY FLOW (January - March 2018) **1.196584**

Average Daily Flow data provided by the East Greenwich Wastewater Treatment Facility

APPENDIX A

TABLES 2, 3, 4 AND 5

TABLE 2
CONNECTIONS FOR NEWLY SEWERED AREAS

Area	Total Connections to Date	Total Potential Connections	Balance To Connect
Meadowbroook	68	110	42
Lillibridge	96	132	36
Lower Cindy Ann	81	87	6
Maplewood	54	63	9
Upper Cindy Ann	69	81	12
Tanglewood	47	59	12
Knollwood	29	35	6
Phase 3A	41	90	49
Malm	34	34	0
Numbered Streets & Avenues	36	50	14
Grand View	22	22	0
River Farm Drive	20	25	5
Kent Drive	10	11	1
Edward and Clemente	15	18	3
H&H, Brisas and Dedford	77	78	1
Kenyon Avenue	8	18	10
South Pierce	17	17	0
Route 2	14	30	16
Cindy Ann Phase 2a	8	8	0
Misty Oak	5	9	4
Atherton Road Phase 2a	3	4	1
Cedar	27	27	0
Gaps & Queens Grant	125	164	39
Sun Valley	126	201	75
Cedar Heights	91	140	49
Pinewood	29	69	40
Total	**1,152**	**1,582**	**430**

Note: Table 2 provided by the East Greenwich Wastewater Treatment Facility.

TABLE 3
SUMMARY OF FUTURE FLOWS

	Average Daily Flow (GPD)
Present Flow [1]	650,000
Infiltration/Inflow	490,000
Potential Future Flow	129,000
Commons at Frenchtown Rd.	25,000[1]
New England Institute of Technology	37,700[1]
Future Town Reserve	100,000
Total	**1,431,700**
The Town has an additional reserve of 268,300 gallons per day (1,700,000 – 1,431,700)	

[1] Committed flows by the Town

TABLE 4
ADEQUACY OF HUNT'S RIVER INTERCEPTOR

Segment	Capacity (MGD)	Future Peak Flow (MGD)	Comments
Segment 1	17.85	2.90	Adequate
Segment 2	4.93	2.90	Adequate
Segment 3	5.28	1.28	Adequate
Segment 4	4.37	1.02	Adequate

TABLE 5
FUTURE FLOWS TO SEGMENTS 1 AND 2 OF HUNT'S RIVER INTERCEPTOR

	Average Daily Flow (MGD)	Peak Daily Flow (MGD)
Existing	325,000	975,000
I/I	245,000	245,000
Potential Future Flow	129,000	387,000
Commons at Frenchtown Rd.	25,000	75,000
N.E. Institute of Technology	37,700	113,100
Future Town Reserve	100,000	300,000
Reserve Capacity	268,300	804,900
Total	**1,130,000**	**2,900,000**