

SELECTMEN'S MEETING AGENDA*

Donn B. Griffin Room, Town Hall

732 Main Street, Harwich, MA

Executive Session 6:00 P.M.

Regular Meeting 6:30 P.M.

Monday January 4, 2021

REMOTE PARTICIPATION ONLY
OPEN PUBLIC FORUM – NEW STEPS – PLEASE READ

1. First, send an email to comment@town.harwich.ma.us (send emails at any time after the meeting agenda has been officially posted)
 - a. In the subject line enter "request to speak, your name"
 - b. In the body of the email please indicate which specific agenda item you wish to speak on.
No further detail is necessary.
2. The meeting will close to new attendees promptly at the scheduled start time for the meeting, generally 6:30pm. It will remain closed to new attendees until agenda items with scheduled speakers are reached. This is to minimize interruptions. You may join prior to (6:30) or when the meeting has been opened up. You may participate using your computer and the GoToMeeting interface or simply using your phone. Connection information can be found below.
3. After the Chairman has opened the floor to those wishing to speak callers will be taken in the order the emails are received.
Use *6 to mute and unmute your phone
When you join the meeting by phone you should turn off Channel 18 or your computer if streaming the meeting.

Board of Selectmen Meeting

Mon, Jan 4, 2021 6:00 PM - 9:30 PM (EST)

Please join my meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/988720077>

You can also dial in using your phone.

United States: [+1 \(786\) 535-3211](tel:+17865353211)

Access Code: 988-720-077

I. **CALL TO ORDER**

II. **EXECUTIVE SESSION**

- A. Pursuant to MGL c.30A, §21(6) to consider the purchase, exchange, lease or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body;

III. **PLEDGE OF ALLEGIANCE**

IV. **WEEKLY BRIEFING**

- A. COVID-19 Updates
- B. Update on ongoing efforts by the Town in support of the business community

V. **PUBLIC COMMENTS/ANNOUNCEMENTS**

VI. **ANNUAL COMMITTEE PRESENTATIONS**

- A. Board of Water/Wastewater Commissioners
- B. Capital Outlay Committee
- C. Cemetery Committee
- D. Community Center Facilities Committee

VI. **PUBLIC HEARING/PRESENTATIONS**

- A. Discussion and possible vote on proposed change to Harbor Management Plan; Addition of a Class C (Charter) Unattached permit designed for sail charters
- B. Discussion regarding Monomoy Regional School District Elementary Schools Enrollment and Funding Inequities

VII. **CONSENT AGENDA**

- A. Vote to approve the recommendation of Harwich Housing Committee Chairman, Arthur Bodin to remove member Peg Patterson from the Harwich Housing Committee – Effectively immediately

VIII. **NEW BUSINESS**

- A. Discussion and possible vote – Mooring Licensing Agreements
 1. Allen Harbor Marine Services – Allen Harbor Mooring Field
 2. Harwich Port Boat Yard – Wychmere Inner Harbor and Wychmere Outer Harbor
 3. AGL Mooring Service – Round Cove, Pleasant Bay and Herring River
- B. Discussion and possible vote approving Section 1.07 of the Harwich Board of Selectmen Liquor License Regulations requests for closure by licensed establishments:
 1. Brax Landing
- C. Discussion and possible vote to approve subject to the response from upcoming disciplinary hearing – M.G.L. Chapter 138, Section 12 Annual on premise wines and malt Liquor License Renewal – Ember Pizza Inc. DBA Ember – 600 Route 28
- D. Discussion and possible vote – 2021 Annual Lodging House License Renewal
 1. Barnaby Inn – 36 Route 28
- E. Discussion and possible vote – 2021 Annual Auto License Renewals
 1. All out Performance – 266 Queen Anne Road – Class IV Auto Repairman
 2. Harwich Port Boat Yard, Inc. – 4 Harbor Road – Class I Agents or Sellers

VIII. **NEW BUSINESS cont.**

- F. Discussion and possible vote – 2021 Annual Common Victuallers License Renewals
 - 1. Ashwood Food Service DBA Jake Rooney’s Restaurant – 119 Brooks Road
 - 2. Harwich Inn & Tavern DBA Harwich Inn & Tavern – 77 Route 28
 - 3. Harwichport House of Pizza, Inc. – 330 Route 28
 - 4. Subfleet Inc. DBA Subway – 1 Auston Road
 - 5. Zou Garden Inc. DBA Szechuan Delight – 1421 Orleans Road
- G. Discussion and update on Cape Cod Harwich Junior Theatre Company renovations to property

IX. **OLD BUSINESS**

- A. Vote to approve the reappointment of Arthur Bodin to the Barnstable County HOME Consortium Advisory Council – term to expire January 1, 2024
- B. Discussion and possible vote to approve a hardship reduction for liquor license fee for Zack, Inc. DBA Castaways – 986 Main Street
- C. Discussion and possible vote to extend Robert C. Lawton, Jr’s contract to January 31, 2021
- D. Discussion and possible vote - Shared Streets grant concept plan review – Harwich Center/Main Street
- E. Discussion and possible vote – Sewer Use Regulations – Review – Dan Pelletier
- F. SewerCAD Model Funding – Dan Pelletier

X. **CONTRACTS**

XII. **TOWN ADMINISTRATOR’S REPORT**

X. **SELECTMEN’S REPORT**

XI. **ADJOURNMENT**

**Per the Attorney General’s Office: The Board of Selectmen may hold an open session for topics not reasonably anticipated by the Chair 48 hours in advance of the meeting following “New Business.” If you are deaf or hard of hearing or a person with a disability who requires an accommodation contact the Selectmen’s Office at 508-430-7513.*

Authorized Posting Officer:

Patricia A. Macura, Admin Secretary

Posted by: _____
Town Clerk

Date: _____
December 29, 2020

WEEKLY BRIEFING



Town of Harwich Board of Health

732 Main Street Harwich, MA 02645
508-430-7509 – Fax 508-430-7531
E-mail: health@town.harwich.ma.us

December 30, 2020

Weekly COVID-19 Case Update

As of today, we are following 29 active cases of COVID-19 in Harwich. Of these active cases, 11 are associated with Wingate, our Long Term Care Facility, where several residents and many staff members have tested positive. Wingate is following a rigid testing protocol to attempt to contain the spread.

Over the last two weeks we have had an increase of 41 cases, bringing our cumulative total to 306. Our percent positivity has decreased to 3.88%, however, we continue to see community transmission.

Hospital capacity is still a concern across the Commonwealth and here in Barnstable County. Cape Cod and Falmouth Hospitals report 50 patients with COVID-19, 7 of which are in the ICU's.

Outer Cape Health Services has announced that they are offering **FREE** rapid testing for asymptomatic individuals through January 10th. An appointment is necessary and can be made by calling: 508-905-2888. Additional testing options for those who are symptomatic, have been exposed to a positive case or to meet the travel order are also available at Outer Cape as well as two locations offered by Cape Cod Healthcare at the Melody Tent and the Barnstable Fairgrounds.

To book an appointment for Hyannis or Falmouth locations, call the Community Testing Line at (508) 534-7103.

To book an appointment for the Lower/Outer Cape, call (508) 905-2888.

The Covid-19 vaccine has been administered to frontline healthcare workers and long term care facility staff and residents. The next roll-out of vaccine is scheduled for the week of January 4th for first responders, those clinics are planned for the week of January 10th. Once everyone in Phase 1 has been vaccinated, the State Department of Public Health will work with local boards of health, pharmacies and healthcare providers to distribute vaccine to Phase 2 populations.

For a comprehensive list of who is eligible to receive a vaccine during each phase, please visit: <https://www.mass.gov/info-details/when-can-i-get-the-covid-19-vaccine>

Although the number of residents testing positive this week is lower than the last 3 weeks, I fear we have yet to see the effects of the holiday last week. With New Year's approaching, we will continue to expect higher numbers in 1-2 weeks' time.

I encourage everyone to celebrate the New Year safely and responsibly. Let's all bid farewell to 2020 and welcome 2021 with hope for a better future.

Meggan Eldredge
Health Director



FOR IMMEDIATE RELEASE
December 23, 2020

Gerry Desautels
Outer Cape Health Services
C: (508) 221-5182
O: (508) 905-2853
gdes@outercape.org

Outer Cape Health Services to Offer COVID-19 Asymptomatic Testing Beginning December 23

Affordable testing is now available in all four regions of Cape Cod

PROVINCETOWN (12/23/20) — Outer Cape Health Services (OCHS) now offers COVID-19 testing options for asymptomatic individuals via outdoor “drive up” testing at its three health center sites in Provincetown, Wellfleet and Harwich Port beginning Wednesday December 23.

To receive a test, individuals **must book an appointment in advance** by calling Outer Cape Health Services at **508-905-2888**. Tests for asymptomatic individuals are free through January 10, 2021 in partnership with the Massachusetts Department of Public Health with logistical support from Barnstable County and funds secured by the Cape and Islands legislative delegation.

"The demand for more accessible COVID-19 testing persists on the Lower and Outer Cape, and Outer Cape Health Services has risen to meet this formidable challenge," said **State Senator Julian Cyr (D-Truro)**. "While our region continues to go without a sorely needed Stop the Spread site, Cape Cod's health care providers and public health officials have persistently worked to close our regional testing gap and help more residents receive tests, quarantine if necessary, and save lives."

"Once again, as Outer Cape Health Services has done throughout its history, they are stepping up to provide the best in healthcare and public health support for our communities on the Outer and Lower Cape," said **State Representative Sarah Peake (D-Provincetown)**. Offering these free and low-cost tests will be a real game changer for the people that live here. They continue to be there for us and I am very grateful to them for all of these efforts."

The free antigen testing comes from a state Department of Public Health initiative to local health centers to provide free Abbott BinaxNOW™ COVID-19 Ag Card tests for COVID-19. The self-

From: Vaira Harik [<mailto:vharik@barnstablecounty.org>]

Sent: Wednesday, December 30, 2020 8:56 AM

Subject: 12/30/20: Barnstable County and Regional COVID-19 Daily Update

Vaira Harik, M.S.

Deputy Director

Barnstable County Dept. of Human Services

Cell: 520-271-6314

Email: vharik@barnstablecounty.org

Good Morning All.

1. New Cases
2. Hospitalizations and Fatalities (50% increase in hospitalizations vs. a week ago)
3. Schools and Childcare Centers
4. Testing
5. Weekly Town Risk and Statewide Cluster Analyses
6. Vaccination (Began in long term care facilities this week)
7. COVID Mutation and Changes in Transmissibility/Virulence/Other

1. New Cases

Daily new case numbers in Barnstable County remain high. Our **7-day average cases per 100,000 population per day** is 37/100K, with 7-day **average cases per day** of 78 and has an unclear trend. Yesterday afternoon the DPH reported **64** new case for Barnstable County. On Saturday 12/26 positive test results received on both 12/25 and 12/26 were reported (203 cases).

Barnstable County's 3-day new case tally has set another new record, 311 cases, between 12/14 and 12/26.

Nantucket's 7-day average cases per 100,000 population continues to fall steadily (54/100K; avg. 6 cases per day) and is 1/4 the rates seen earlier this month (202/100K; avg. 23 new cases per day). However, **12** new cases were reported over the weekend for Nantucket, and an additional **9** cases have been reported this week.

Martha's Vineyard's 7-day new case rate per 100,000 also continues a downward trend, dropping to 29/100K (avg. 5 cases per day) which is down from 41/100K (avg. 7 cases/day) during the past 3 weeks. Over the weekend the DPH reported **12** new confirmed cases for MV, and an additional **8** cases have been reported this week.

During the 14-day period from 12/6/20 to 12/19/20 **Barnstable County** added 997 confirmed cases, with a **test positivity rate of 4.85%**--slightly higher than the prior two-week period. During that same two-week period **Nantucket and Martha's Vineyard** jointly added 333 confirmed cases, with a test positivity rate of **6.95%**--significantly lower than the prior two-week period. **Martha's Vineyard and Nantucket's combined percent positivity figures remain higher than the statewide positivity rate of 6.14% during the same period.**

Regionally case levels continue to increase, without exception. Travel restrictions among all states in the Northeast Corridor have been mutually re-imposed. Per the DPH, Hawaii remains the only "low-risk state" state without travel restrictions.

2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness have increased very significantly since the second week of November and remain elevated. Cape Cod Hospital and Falmouth Hospital have **suspended visitation** of inpatients except under very limited circumstances (end-of-life, etc.) and have **stopped non-essential surgeries and other elective procedures.**

As of yesterday (3pm), the DPH's reporting shows that there were **59 COVID patients in hospital**, 7 of which were in the ICU --a 50% increase over the 39 patients in hospital a week ago.

Fatalities from COVID are increasing in Barnstable County. Three additional fatalities were reported on Christmas Eve, with another two over the weekend, and one on Monday. The total is now **229** (see chart below).

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Ward + ICU)
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths	
12/29/2020	Cape Cod Hospital	41	5	5,181	229	43.0
	Falmouth Hospital	11	2			
		52	7			

3. Schools and Childcare Centers

School districts are staying vigilant and reacting well to new cases. Several school districts (Cape and Islands) are dealing with increased confirmed and probable cases and the necessary knock-on effects of information transfer and follow-up. Several school districts on the Cape and Islands have moved to 100% remote learning.

For the 2020-2021 school year the DPH has mandated that all school children be vaccinated for seasonal influenza. This week the DPH extended the deadline for doing so from 12/31/20 to 2/28/21.

During Phase 2 of the national and state vaccination rollout **childcare center** staff are to be vaccinated alongside school staff.

4. Testing

Additional testing locations in Barnstable County for both symptomatic and asymptomatic persons remain open in **Falmouth** at the Fairgrounds and in **Hyannis** at the Melody Tent. Daily testing capacity is 50 at the Falmouth site and 350 at the Hyannis site. Neither site is open daily and persons must call ahead for an appointment. Details: <https://www.capecodhealth.org/medical-services/infectious-disease/coronavirus/covid-19-testing-process/>.

Last week additional testing by **Outer Cape Community Health Services** began and will be held at its 3 locations in **Wellfleet, Harwich Port, and Provincetown** (<https://outercape.org/2020/12/23/outer-cape-health-services-to-offer-covid-19-asymptomatic-testing-beginning-december-23/>). These sites may not open be daily and persons must call ahead for an appointment.

Eligibility criteria for the testing include residency in Barnstable County. Testing will be done by appointment only. Tests cost \$75, \$110 for travel-related tests, and no one will be turned away if unable to pay for a test.

DPH-mandated **routine testing** in skilled nursing facilities/long term care settings (SNF/LTC) continues. This provides critical surveillance and allows these facilities to stay ahead of asymptomatic spread amongst staff and residents. Routine testing in SNF/LTC settings has increased to weekly for staff.

In addition, the State's **BinaxNOW rapid testing program** (already available to **schools**) has been extended to visitors of **nursing homes** and rest home residents (LTC settings) to allow visitation of residents while limiting the risk of infection from visitors. DPH has published guidance on this. The program has also been extended to **childcare centers and homeless shelters** and further information will be forthcoming.

5. Weekly Town Risk and Statewide Cluster Analyses

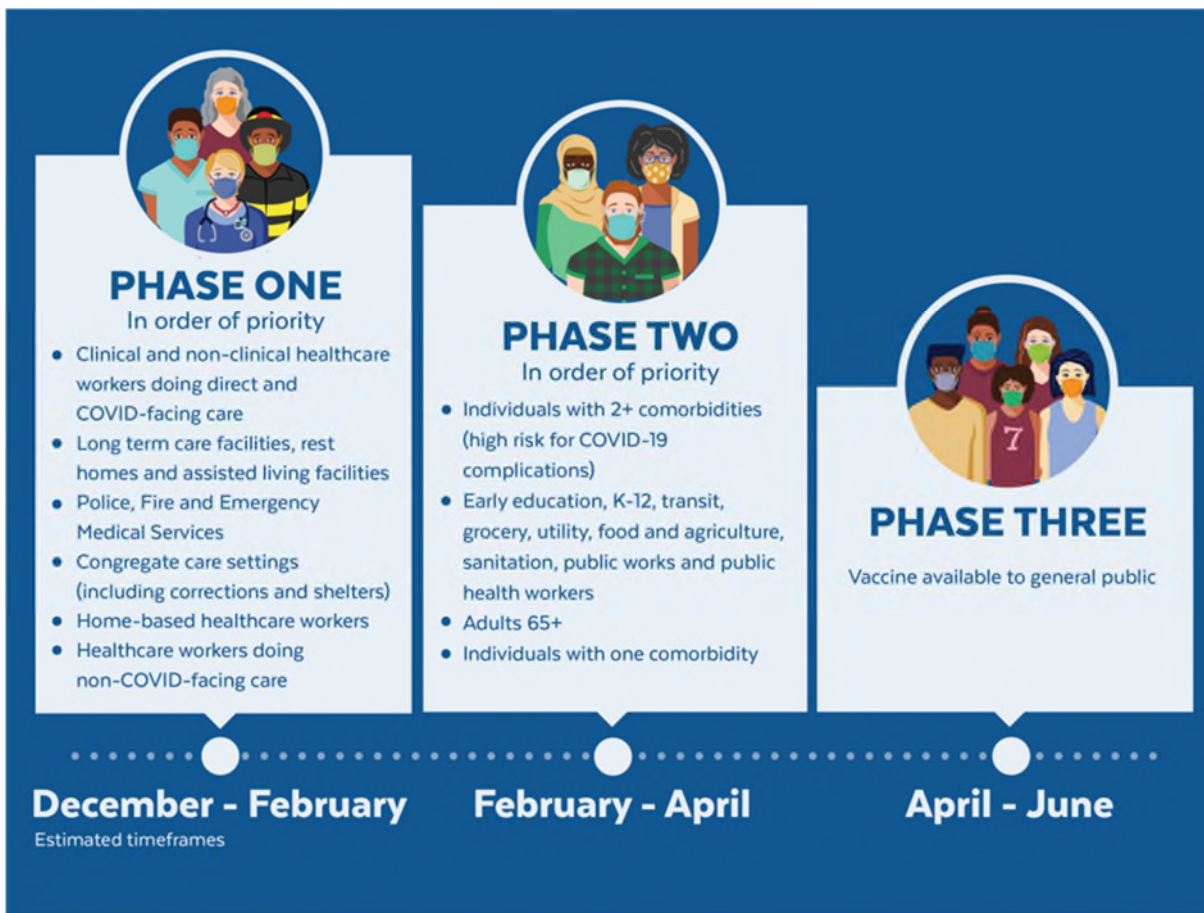
Among the charts below is DPH's weekly analysis of new and active **case clusters**. Note that these data were published last Thursday (12/24/20) and cover the period 11/22 to 12/19. The table presents the number of cases by type of location, statewide. **I have sorted the DPH data to show the listing of cluster settings by greatest number of new confirmed cases.** The top 10 are listed here; the full table can be found below.

Active COVID Clusters by Exposure Setting Type for the Period 11/22/20 to 12/19/20 (as of 12/24/20)										
Source: https://www.mass.gov/info-details/covid-19-response-reporting . Tabulation: V. Harik, Barnstable County DHS										
Sorted by Number of Cases in New Cluster Settings										
Rank	Exposure Setting	New Clusters			Ongoing Clusters			Total		
		(Identified 11/22/20 – 12/19/20)			(Cluster Identified Prior to 11/22 But Not Meeting Criteria for Closing)					
		Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1	Household	18,163	46,534	---	8,302	4,657	---	26,465	51,191	---
2	Long Term Care Facilities	131	1,172	---	195	2,305	---	326	3,477	---
3	Child Care	146	434	604	142	89	244	288	523	848
4	Senior Living	51	381	32	59	278	178	110	659	210
5	Social Gatherings	52	317	78	37	5	16	89	322	94
6	Restaurants & Food Courts	31	249	57	49	18	20	80	267	77
7	24/7 Congregate Settings	39	180	47	67	112	52	106	292	99
8	Hospitals	19	154	21	27	192	61	46	346	82
9	K-12 Schools	36	150	290	55	61	67	91	211	357
10	Industrial Settings	23	137	57	59	145	50	82	282	107

In addition, the weekly **town risk table** for the Cape and Islands is included below. Again, these data were published last Thursday (12/24/20) and they cover the period 12/6 to 12/19. The towns of **Barnstable, Yarmouth, and Brewster** remain coded Red, indicating highest risk of community spread.

6. Vaccination

The **State COVID Vaccination Plan** for Phase 1 has been announced and conforms to the phases and prioritized populations identified by the CDC. In Phase 1 of the State Plan healthcare workers, older adults living in skilled nursing facilities/congregate care settings, police/fire/EMS, shelters/corrections, and other healthcare workers will be prioritized for vaccination as doses become available. **Childcare staff** will be eligible for vaccination alongside school staff in Phase 2. First shipments of the **Pfizer** vaccine have been to hospitals across the state for vaccination of their workers; **Moderna** vaccine has also been shipped to clinical care sites. The State has contracted with **CVS and Walgreens** to arrange vaccination of **older adults in SNFs/congregate care**. **Vaccinations in LTCs will begin this week on Cape Cod.**



7. COVID Mutation and Changes in Transmissibility/Virulence/Other

We note with concern **the emergence of a variant of the COVID-19 virus in the UK**, classified as B.1.1.7. Reports hold that B117 is 50% - 70% more contagious than our predominant variant now circulating (D614G). B117 has already been observed in several west European countries, and **is spreading globally, including in the US.**

Researchers are working to determine if B117 differs from D614G in terms of: **1.** How sick people become, **2.** If natural immunity is different following infection with D614G, and **3.** If immunity from vaccination differs since the vaccine was developed during the period that D614G has been predominant.

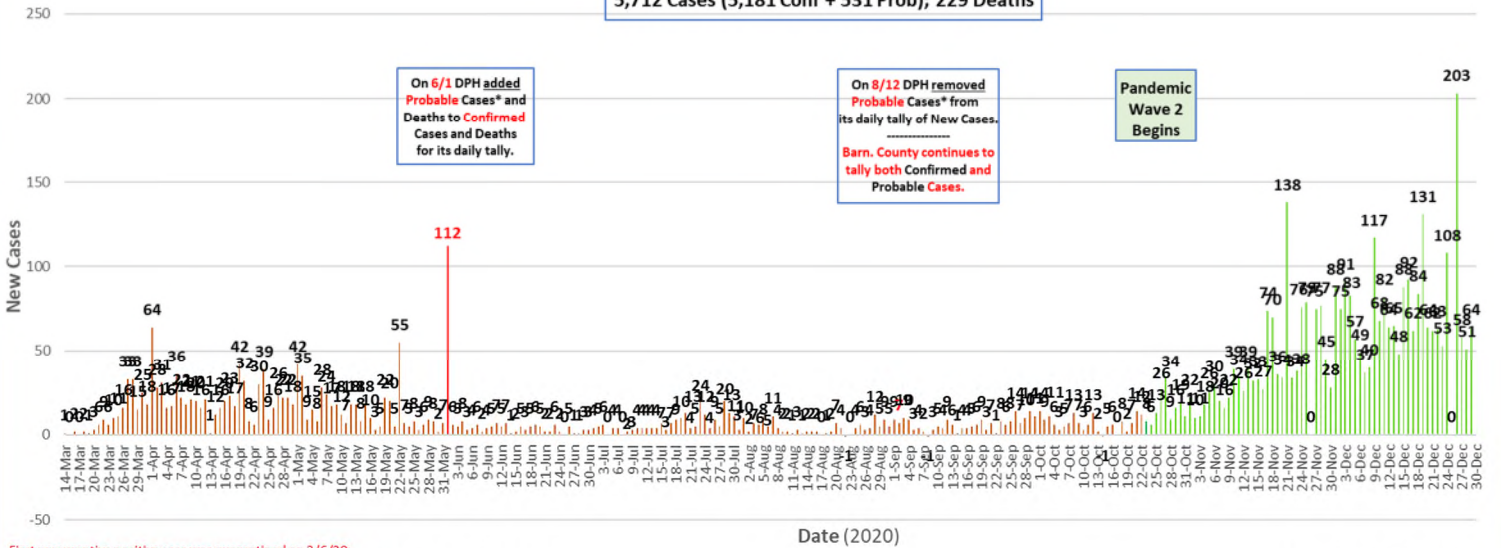
According to an article by Andrew Joseph from StatNews, "Coronaviruses evolve more slowly than viruses like flu, but they do pick up mutations as they spread. **SARS-CoV-2 has been adding one or two changes a month to its RNA genome since it emerged late last year in China**, and different versions of the virus have been continuously circulating throughout the course of the pandemic. **But this variant (B.1.1.7 or VUI-202012/01) showed up with at least 17 mutations**, according to one genetic analysis." (Source: https://www.statnews.com/2020/12/21/looming-questions-new-variant-coronavirus/?utm_source=STAT+Newsletters&utm_campaign=1a74bda2ca-MR_COPY_01&utm_medium=email&utm_term=0_8cab1d7961-1a74bda2ca-150158417).

See the charts below for additional information.

COVID-19 New Cases--Daily (Confirmed + Probable)

Barnstable County, 12/29/20 5:00 pm

5,712 Cases (5,181 Conf + 531 Prob); 229 Deaths



First presumptive positive case was quarantined on 3/6/20;

* Estimate based on Barn. County percentage of state population (3.13%)

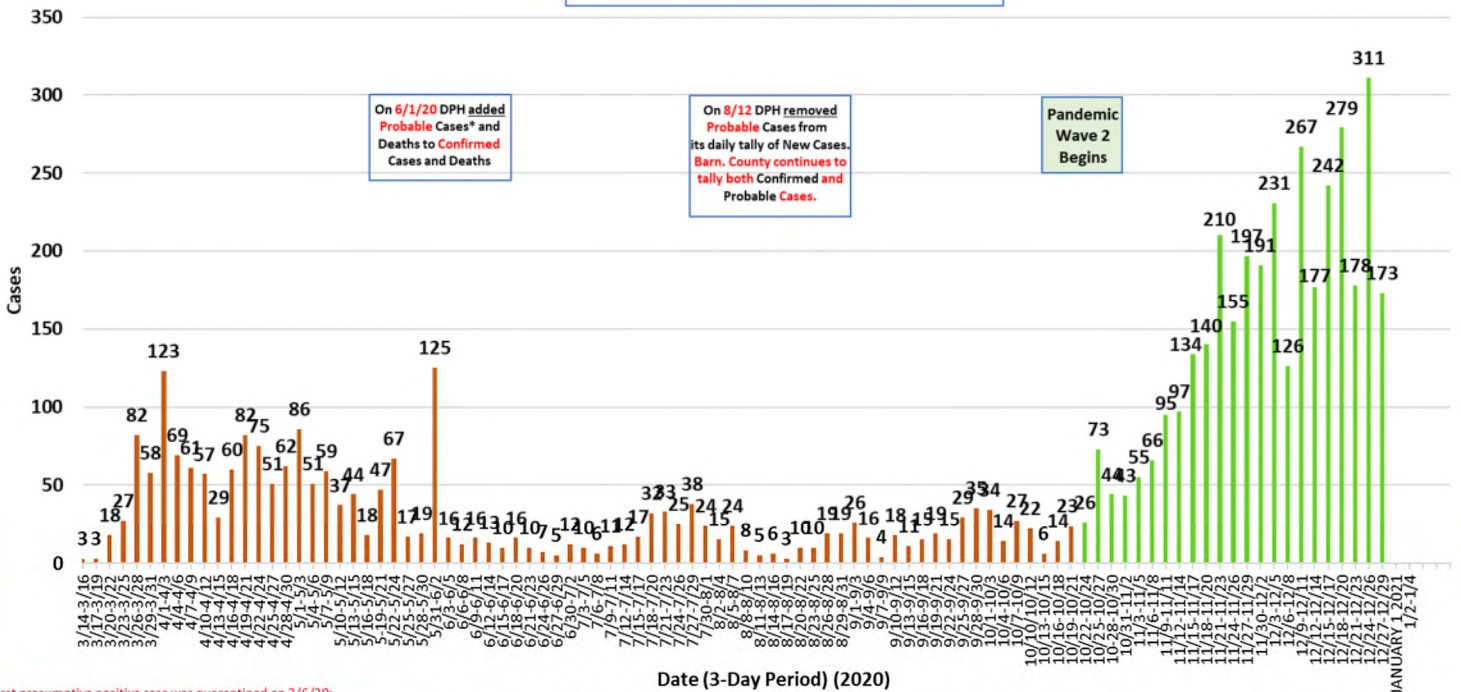
Source: V. Harik, BCDHS

COVID-19 Epidemiological Curve--New Cases (Confirmed + Probable)

Barnstable County, as of 12/29/20 5:00 pm

(New Cases per 3-Day Period)

5,712 Cases (5,181 Conf + 531 Prob); 229 Deaths



First presumptive positive case was quarantined on 3/6/20;

Incubation Period = 14 Days; Data presented in 3-day periods which equal ~1/4 of the Incubation Period; * Estimate based on Barn. County percentage of state population (3.13%)

Source: V. Harik, BCDHS

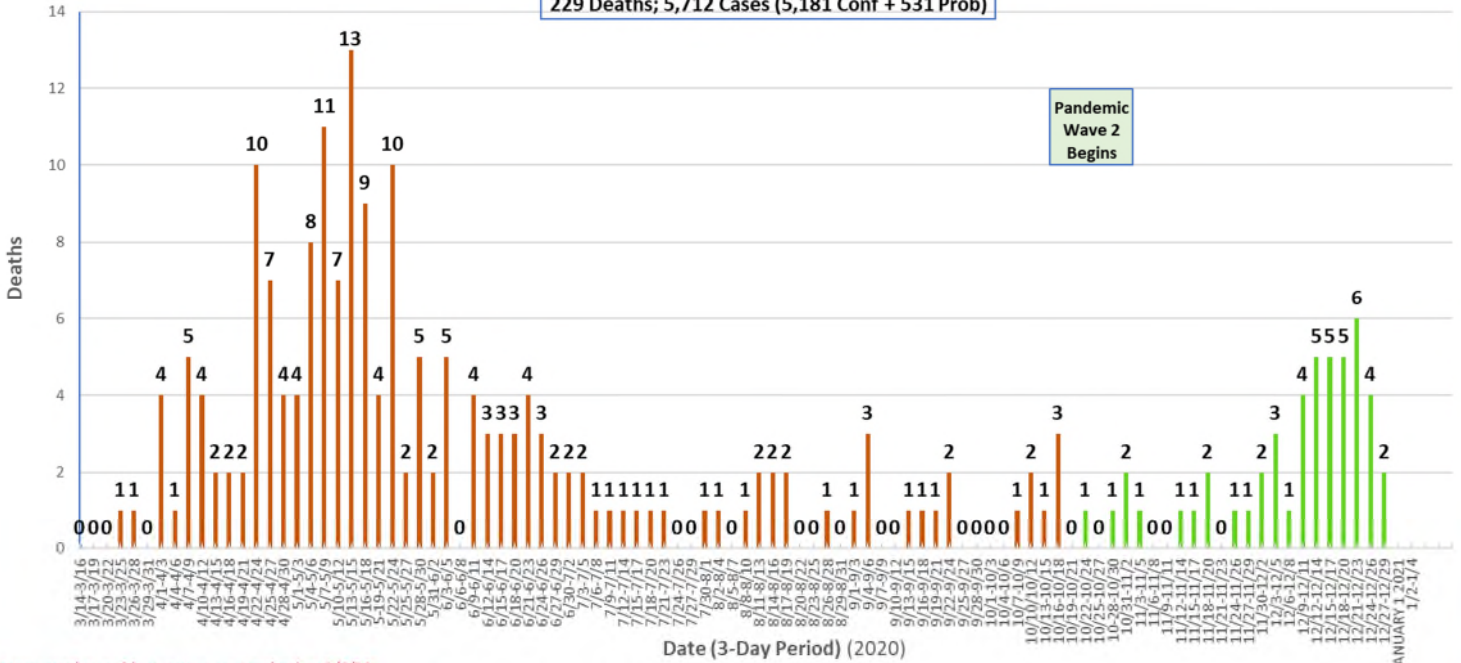
12/30-JANUARY 1, 2021

COVID-19 Epidemiological Curve--New Deaths (Confirmed + Probable)

Barnstable County, as of 12/29/20 5:00 pm

(New Deaths per 3-Day Period)

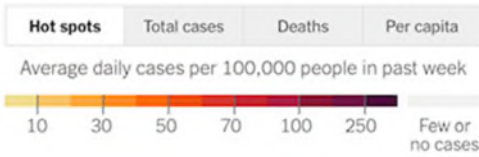
229 Deaths; 5,712 Cases (5,181 Conf + 531 Prob)



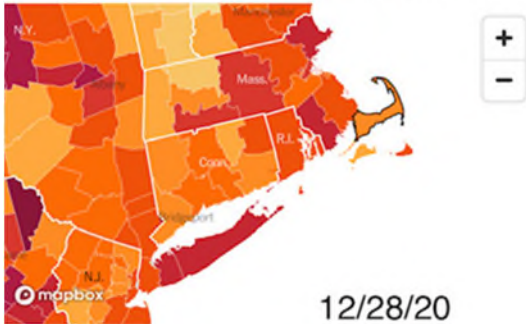
First presumptive positive case was quarantined on 3/6/20;
 Incubation Period = 14 Days; Data presented in 3-day periods which equal ~1/4 of the Incubation Period
 Source: V. Harik, BCDHS; Using data provided by the MA Department of Public Health

12/30-JANUARY 1, 2021

Source: NYTimes.com:



Use two fingers to pan and zoom. Tap for details.



Sources: State and local health agencies. Population and demographic data from Census Bureau.

► About this data

BARNSTABLE

Barnstable County, Mass.

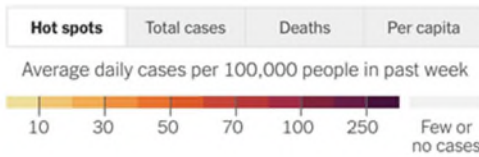
AVG. DAILY CASES

78

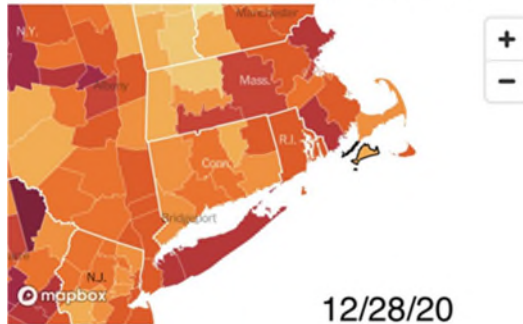
PER 100,000

37

14-DAY TREND



Use two fingers to pan and zoom. Tap for details.



Sources: State and local health agencies. Population and demographic data from Census Bureau.

► About this data

DUKES

Dukes County, Mass.

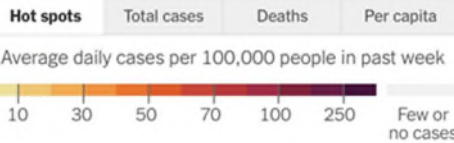
AVG. DAILY CASES

5.0

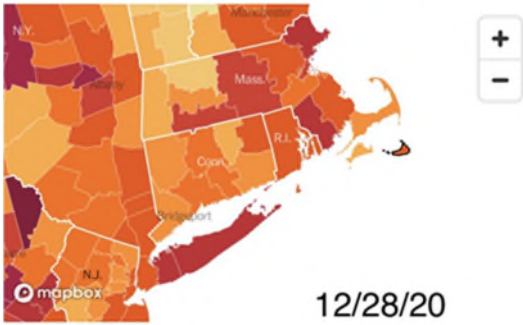
PER 100,000

29

14-DAY TREND



Use two fingers to pan and zoom. Tap for details.



Sources: State and local health agencies. Population and demographic data from Census Bureau.

► About this data

NANTUCKET

Nantucket County, Mass.

AVG. DAILY CASES

6.1

PER 100,000

54

14-DAY TREND



Barnstable County COVID-Related Hospital & ICU Beds Occupied, with Cases & Deaths

Source: V. Harik, Barn. County Dept of Human Services; Tabulation of MA DPH Data

WEEKLY: (On Tuesdays)		Not Cumulative		Cumulative		3-day Avg. of Persons in Hosp. (Ward + ICU)
Date Reported by DPH	Hospital	Hospital Beds Occupied	ICU Beds Occupied	Barnstable County Cases	Barnstable County Deaths	
4/21/2020	Cape Cod Hospital	27	6			
	Falmouth Hospital	19	7			
		46	13	672	22	59.0 (Estimated)
11/12/2020	Cape Cod Hospital	1	0			
	Falmouth Hospital	0	0			
		1	0	2,266	187	1.0
11/17/2020	Cape Cod Hospital	8	1			
	Falmouth Hospital	3	0			
		11	1	2,835	188	9.3
11/24/2020	Cape Cod Hospital	11	0			
	Falmouth Hospital	4	0			
		15	0	3,261	190	15.7
12/1/2020	Cape Cod Hospital	14	3			
	Falmouth Hospital	7	1			
		21	4	3,129	192	25.7
12/8/2020	Cape Cod Hospital	14	5			
	Falmouth Hospital	7	2			
		21	7	3,554	198	19.3
12/15/2020	Cape Cod Hospital	19	5			
	Falmouth Hospital	7	1			
		26	6	4,086	210	27.3
12/21/2020	Cape Cod Hospital	23	1			
	Falmouth Hospital	10	2			
		33	3	4,581	220	28.0
Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Ward + ICU)
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths	
12/29/2020	Cape Cod Hospital	41	5			
	Falmouth Hospital	11	2			
		52	7	5,181	229	43.0

MA DPH Data Dashboard, WEEKLY REPORT of 12/24/20 (for the Period 12/6/20 to 12/19/20)

City/Town	(March 2020 to Present) Total Case Count	Case Count Last 14 Days	Average Daily Incidence Rate per 100K	Relative Change in Case Count	Total Tests	Total Tests Last 14 Days	Positive Tests Last 14 Days	Percent Positivity Last 14 Days	Change in Percent Positivity
Barnstable	1,531	288	45.9	Higher	36,454	4,914	315	6.41%	Higher
Bourne	493	106	36.0	Higher	20,204	2,580	115	4.46%	Higher
Brewster	187	31	22.3	Higher	8,298	1,157	34	2.94%	Higher
Chatham	76	19	23.3	Higher	4,692	623	21	3.37%	Higher
Dennis	248	47	25.7	Lower	9,365	1,243	53	4.26%	Lower
Eastham	46	8	12.4	Lower	2,716	254	9	3.54%	Lower
Falmouth	627	129	29.5	Higher	33,598	4,176	164	3.93%	Higher
Harwich	289	50	28.4	Lower	9,653	1,214	54	4.45%	Lower
Mashpee	250	56	25.7	Lower	13,116	1,729	72	4.16%	No Change
Orleans	49	10	12.7	Higher	3,478	376	10	2.66%	Higher
Provincetown	40	5	13.8	Higher	2,934	297	6	2.02%	Higher
Sandwich	274	59	20.0	Lower	14,873	1,586	61	3.85%	Higher
Truro	18	4	3.6	Lower	1,283	119	1	0.84%	Lower
Wellfleet	26	6	15.5	Lower	1,818	144	7	4.86%	Lower
Yarmouth	543	182	54.0	Higher	19,189	2,822	206	7.30%	Higher
Barnstable County	4,697	1,000	32.9	Higher	181,671	23,234	1,128	4.85%	Higher
Aquinnah	3	0	0	No Change	397	19	0	0%	No Change
Chilmark	6	1	9.4	No Change	2,500	164	1	0.61%	No Change
Edgartown	130	28	48.9	Lower	7,596	756	31	4.10%	Lower
Gosnold	5	0	0	No Change	112	0	0	0%	No Change
Oak Bluffs	103	34	46.6	Lower	5,002	589	35	5.94%	Lower
Tisbury	139	32	54.8	Higher	9,570	1,016	34	3.35%	Higher
West Tisbury	49	12	29.9	Lower	3,348	294	13	4.42%	Lower
Dukes County	440	108	*	Lower	28,525	2,838	114	4.02%	Lower
Nantucket County	683	226	141.4	Lower	14,702	2,170	234	10.78%	Lower
Dukes and Nantucket Counties	1,118	333	82.5	Lower	43,227	5,008	348	6.95%	Lower
State	322,652	61,603	63.2	Lower	10,399,569	1,170,158	71,906	6.14%	Higher

Data Source: MA DPH, 12/24/20 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>); Analysis: V. Harik BCDHS.

Massachusetts COVID Testing Rates, As Applied to Barnstable County (Thru 12/19/20)

Sources: Census.gov; MA DPH Weekly COVID Report, 12/24/20. Analysis: V. Harik, BCDHS

	MA	Barnstable County
Population Estimate (@ July 1, 2019)	6,892,503	212,990
	Barnstable County % of MA Pop.	3.09%
	Barn. County % of Total MA Tests	1.75%
	Barn. County % of MA Tests, Past Two Weeks	1.99%
	Barn. County % of MA <u>Total Confirmed Cases</u>	1.46%
	Barn. County % of MA Confirmed Cases, Past Two Weeks	1.62%
	MA % Positive Tests Last 14 Days	6.14%
	Barnstable County % Positive Tests Last 14 Days	4.85%

MA DPH Data Dashboard, WEEKLY REPORT of 12/23/20 (for the Period 12/6/20 to 12/19/20)

Data Source: MA DPH, 12/23/20 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>)

County	Total Case Count	Case Count (Last 14 Days)	Average Daily Incidence Rate per 100,000 (Last 14 days)	Relative Change in Case Counts ¹	Total Tests	Total Tests (Last 14 days)	Total Positive Tests (Last 14 days)	Percent Positivity (Last 14 days)	Change in Percent Positivity ²
Barnstable County	4,697	997	32.9	Higher	181,671	23,234	1,128	4.85%	Higher
Berkshire County	2,546	410	23.2	Lower	172,753	17,202	467	2.71%	Lower
Bristol County	30,567	6,160	77	Lower	622,922	71,117	7,210	10.14%	No Change
Dukes and Nantucket Counties	1,118	333	82.5	Lower	43,227	5,008	348	6.95%	Lower
Essex County	52,701	10,543	94.5	Lower	1,070,271	137,640	13,172	9.57%	Lower
Franklin County	1,153	329	33	Lower	90,809	9,348	374	4.00%	Lower
Hampden County	23,707	4,349	66	Lower	517,922	60,762	5,266	8.67%	Higher
Hampshire County	3,366	604	26.3	Lower	344,885	23,553	692	2.94%	Lower
Middlesex County	68,154	13,167	57.8	Lower	2,644,980	308,897	15,183	4.92%	Higher
Norfolk County	24,200	4,823	48.2	Lower	908,217	104,945	5,420	5.16%	Higher
Plymouth County	21,568	4,139	56	Higher	500,765	62,592	4,682	7.48%	Higher
Suffolk County	50,032	7,845	69.2	Lower	2,020,413	213,091	9,170	4.30%	Higher
Worcester County	37,915	7,708	65.6	Lower	1,092,678	114,550	8,588	7.50%	Higher
Unknown ³	928	196	*	*	188,056	18,219	206	*	*
State	322,652	61,603	63.2	Lower	10,399,569	1,170,158	71,906	6.14%	Higher

Data are current as of 11:59pm on 12/22/2020;

¹Number of new cases occurring over the current two-week period (12/6/2020 – 12/19/2020) compared to the previous two-week period (11/29/2020 – 12/12/2020). **Higher**=number of new cases in the current two-week period higher than the number of new cases during the last two-week period. **Lower**=number of new cases in the current two-week period lower than number of new cases during the last two-week period. **No change**=number of new cases in current two-week period is equal to the number of new cases during the last two-week period.

²Change in percent positivity compared to the previous week's (12/16/2020) report. **No Change**= <0.10% difference in the percent positivity.

³Address information for these cases is currently being obtained. DPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.)

Please note: Data for these tables are based on information available in the DPH surveillance database at a single point in time. Case counts for specific cities and towns change throughout the day as data cleaning occurs (removal of duplicate reports within the system) and new demographic information (assigning cases to their city or town of residence) is obtained.

Active COVID Clusters by Exposure Setting Type for the Period 11/22/20 to 12/19/20 (as of 12/24/20)

Source: <https://www.mass.gov/info-details/covid-19-response-reporting>. Tabulation: V. Harik, Barnstable County DHS

Sorted by Number of Cases in New Cluster Settings

Rank	Exposure Setting	New Clusters (Identified 11/22/20 – 12/19/20)			Ongoing Clusters (Cluster Identified Prior to 11/22 But Not Meeting Criteria for Closing)			Total		
		Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1	Household	18,163	46,534	---	8,302	4,657	---	26,465	51,191	---
2	Long Term Care Facilities	131	1,172	---	195	2,305	---	326	3,477	---
3	Child Care	146	434	604	142	89	244	288	523	848
4	Senior Living	51	381	32	59	278	178	110	659	210
5	Social Gatherings	52	317	78	37	5	16	89	322	94
6	Restaurants & Food Courts	31	249	57	49	18	20	80	267	77
7	24/7 Congregate Settings	39	180	47	67	112	52	106	292	99
8	Hospitals	19	154	21	27	192	61	46	346	82
9	K-12 Schools	36	150	290	55	61	67	91	211	357
10	Industrial Settings	23	137	57	59	145	50	82	282	107
11	Other Healthcare	21	115	55	24	22	16	45	137	71
12	Other Workplaces	21	113	44	27	40	35	48	153	79
13	Corrections	4	63	3	16	1,004	126	20	1,067	129
14	Places of Worship	6	60	5	15	2	1	21	62	6
15	Colleges & Universities	8	57	15	32	19	2	40	76	17
16	Retail & Services	19	57	26	18	12	8	37	69	34
17	Organized Athletics/Camps	12	50	134	22	14	100	34	64	234
18	Other Food Establishments	6	26	22	14	27	1	20	53	23
19	Recreation/Cultural	4	20	5	5	6	.	9	26	5
20	Offices	4	10	2	11	1	.	15	11	2
21	Shelters	1	4	.	5	3	.	6	7	.
22	Other	.	.	.	8	1	.	8	1	.
23	Travel & Lodging	.	.	.	3	.	.	3	.	.
	TOTAL	18,797	50,283	1,497	9,192	9,013	977	27,989	59,296	2,474
<p>New Clusters: Clusters with the first case (indicated by the first positive lab result) identified during the four week period 11/22 – 12/19/2020</p> <p>Ongoing Clusters: Clusters with the first case identified prior to 11/22 that has not met criteria to be closed. Confirmed cases included in ongoing clusters occurred between 11/22 and 12/19 but are associated with a cluster that began prior to 11/22. Close contacts included in ongoing clusters occurred between 11/22 and 12/19 but are associated with a cluster that began prior to 11/22/20.</p> <p>Closed Clusters: A cluster is closed after 28 days have passed since the last confirmed case; 21,570 clusters are closed, 111,652 cases are associated with closed clusters.</p>										

Vaira Harik, M.S.

Deputy Director

Barnstable County Dept. of Human Services

Cell: 520-271-6314

Email: vharik@barnstablecounty.org

administered test provides a high reliability of the results. Patients who test negative will be notified via text message. Patients who test positive will be contacted directly by OCHS via a phone call. Tests may be billed to individuals with insurance but not charged a co-pay; however, no one will be turned away. Outer Cape Health Services will also continue to provide symptomatic tests at all three sites and bill insurance. If an individual is exhibiting symptoms of COVID-19 or has been referred to testing related to contact tracing, the individual should call OCHS first for a telehealth screening visit. For individuals seeking testing for *travel related reasons*, a \$110 fee applies for the required PCR (Polymerase chain reaction) molecular test to meet state requirements.

- All individuals must call **(508) 905-2888** in advance to make a testing appointment.
- Testing sites and hours for prescheduled appointments are:

[OCHS Harwich Port Health Center, 710 Rt. 28:](#)

Tuesday and Thursday, 1pm-3pm

[OCHS Wellfleet Health Center, 3130 State Highway Route 6:](#)

Monday, Wednesday and Friday, 1:30pm-3:30pm

[OCHS Provincetown Health Center, 49 Harry Kemp Way:](#)

Tuesday, Thursday and Saturday, 1:30pm-3:30pm

After January 10, 2021, individuals will pay a subsidized out-of-pocket fee of \$75 to receive an asymptomatic PCR test, unless the state extends their free testing initiative. No one will be denied a test if they are unable to pay.

Updates for Drive-Through Test Facilities in Hyannis and Falmouth

- When calling to schedule a test at the Hyannis or Falmouth site, please note that the Community Testing Line **has been changed to 508-534-7103**.
- Test results are currently available within **24-96 hours**.
- For individuals seeking testing due to travel, the out-of-pocket cost is \$110. For asymptomatic individuals seeking testing to monitor their health, the out-of-pocket cost is \$75. Accommodations will be made for those unable to pay, as no one seeking testing will be turned away.
- Test sites and hours for prescheduled appointments are as follows:

[Cape Cod Melody Tent, Hyannis](#)

Hours: Monday-Friday, 8am-4pm / Saturday and Sunday, 8am-noon

Please note hours exception: on 12/24/20, this site will be open 8am-noon

[Barnstable County Fairgrounds, Falmouth](#)

Hours: Tuesday and Wednesday, 10am-2pm

Please note hours exception: for the weeks of 12/20/20 and 12/27/20, this site will be open Monday and Tuesday, 10am-2pm. Regular hours of Tuesday and Wednesday, 10am-2pm, will resume week of 1/3/21.

These Cape Cod testing sites are supported by funds secured by the Cape and Islands legislative delegation and contributions by Barnstable County, Cape Cod Healthcare, and Outer Cape Health Services. In order to sustain these limited funds for four to six months, fees must be charged for tests administered to asymptomatic individuals. For full information regarding hours, costs, locations, and contact, please visit [BarnstableCountyHealth.org](https://www.barnstablecountyhealth.org).

###

ANNUAL
COMMITTEE
PRESENTATIONS

January 4, 2021

Capital Outlay Committee (COC) Presentation to the Board of Selectmen

CAPITAL OUTLAY COMMITTEE

The role of the Capital Outlay Committee is to assist the Town Administrator in the effort to develop an annual seven-year capital plan. This plan includes all expenditures of \$50,000 or more, excluding acquisition of land for conservation, open space or watershed protection. The committee meets monthly, all meetings are open to the public with due notice and the minutes are regularly filed with the Town Clerk. In addition, regular participants include the Town Administrator, the Town Finance Director and a liaison from the Board of Selectmen. Membership of the Committee consists of seven members. Two are appointed by the Board of Selectmen, two by the Town Administrator, one by the Planning Board and two by the Finance Committee with three-year overlapping terms. All members are actively involved in discussing and addressing the financial issues impacting the Town of Harwich. Committee membership and participation remains strong and stable. By charter, the Town Administrator presents the "Seven-Year Capital Outlay Plan" to the Board of Selectmen and the Finance Committee each December, followed by and advertised public hearing, all subject to ultimate Town Meeting action.

Members of the Capital Outlay Committee:

Richard Larios	Chairman, Town Administrator Representative (June 2023)
Bruce Nightingale	Selectmen Representative (June 2022)
Joseph P. McParland	Planning Board Representative (June 2022)
Angelo S. LaMantia	Finance Committee Representative (June 2022)
Noreen Donahue	Selectmen Representative (June 2021)
Vacant	Town Administrator Representative
Vacant	Finance Committee Representative
Donald F. Howell	Selectmen's Liaison

In 2020, Peter Wall, a long-time member of the COC retired. We thank him for his valued participation and service.

All members have been sworn in by the Town Clerk.

State Ethics testing has been taken and is up to date.

Agendas and Minutes have been taken and posted as required.

The 2022 Capital projects equal \$19,959,419. Departmental requests and related dollar amounts have been reviewed by the COC. Recommendations by the COC were made on December 11, 2020. The COC thanks our Interim Town Administrator, Joe Powers, for his time, effort and expertise in assisting the COC in completing this year's Capital Plan.

Respectfully,

Richard Larios
COC Chairman

2020 Cemetery Commission Annual Report

The Harwich Cemetery Commission is comprised of three appointed Harwich residents charged with overseeing the town's seventeen cemeteries. We currently have three Commissioners Steven H. Conner, Commission Chair, Cynthia A. Eldredge, Former Commission Chair, and Robert B. Thompson. The Commission wishes to thank Cynthia for her hard work and dedication as Chairwoman. All three of the Commissioners have been sworn in and have up to date State Ethics testing. The Commission meets the first Tuesday of each month. We have had eight meetings this year with four canceled due to lack of quorum. This was addressed with the appointment of Robert Thompson who joined our Commission on October 5, 2020.

The Commission supports and provides guidance to the Cemetery Administrator, prioritizes yearly expenditures of revenues from annual lot sales, and establishes policies and regulations related to the public use, operation, and maintenance of the town's burial grounds. The town's cemeteries cover over one hundred acres of land.

We had a total of 61 burials for the year. We have 30 families who have lost loved ones during this past year and due to the COVID epidemic guideline, are waiting to have services when it is safe for their families to travel. Of those who were interred 23 were Traditional/Casket burials and 39 were cremation burials. Each year the number of cremation burials is increasing, and the Commission will be exploring revisions in certain lot sizes to better accommodate this trend.

On March 10, Governor Baker declared a state of emergency this affected funeral services for the Town. Signs stating that masks are required were installed as instructed by Meggan Eldredge, Health Director, per Governor Bakers Orders at Island Pond, Mount Pleasant, and Evergreen. Funeral Services and were limited the number of attendees at the beginning of the epidemic only 10 were allowed to attend at the graveside, increased to 25 and was at 50 at the end of December. Cemetery Administrator attended services and required attendee to stay six feet apart and to be wearing masks at all times.

As of December 2020, the balance in the Cemetery Revolving Fund was \$93,329.84 of which \$30,110.00 is reserved for Arboretum Mapping and Software leaving an available balance of \$63,219.84.

During the past year the Commission's work included:

- Island Pond Cemetery was certified as a Wildlife Habitat.
- We continued with the cleanup of the cemeteries from the July 2019 Tornado. Damage to the trees was significant and removal of damaged and hanging limbs has continued.
- Approval of Town Meeting Article #18 for Memorial Tree Replacement. The article was funded by the expendable portion of the Cemetery Perpetual Care Fund total cost was \$20,000 and it was for the replacement of trees that were lost due to the Tornado of 2019. The cemeteries lost over 400 trees with the Town Cemeteries with the largest loss being 275 in Island Pond, 75 in Mount Pleasant, and 24 in Evergreen. Replanting of trees at this location and in the other Town Cemeteries is necessary to properly maintain our cemeteries.
- Approval of Town Meeting Article #32 for the Pine Grove Cemetery Gravestone Conservation & Preservation with use of the Historic Preservation Reserve, \$75,000 to

fund the repair and restoration of gravestones and monuments at Pine Grove Cemetery. There are 23 monuments in need of repairs; 116 monuments with new foundations or to be reset; 8 large memorials to be cleaned and consolidated. A total of 147 memorials will be cleaned and consolidated.

- Submitted CPC Article for the Veterans Memorial Circle at Evergreen Cemetery for \$48,385. It will consist of The American Flag in the center next to the gazebo and surrounded by the flags of each branch of the military: Army, Navy, Air Force, Marines, Coast Guard, and Space Force. The Space Force was added as a branch of the military in 2019. Accompanying the article is a letter from Wilfred Remillard, retired Veterans Agent from the Town of Harwich in which he says, "This array of flags will serve to honor all of our Nation's Veterans and to display the pride and patriotism of our community." We also received and attached a letter from Jeffrey K. Beatty, Major US Army Retired, Delta Force Purple Heart Veteran, in which he says "It is truly reflective of how Harwich views its Veterans and I salute the entire town for that."

- Submitted CPC Article for the Gravestone Conservation & Preservation for the East Harwich Union Cemetery for \$ 112,200 (\$102,000 + 10% contingency of \$10,200). Many of the stones within this cemetery are over 200 years old. The oldest being of Revolutionary War Soldier Ebenezer Eldredge who died in 1797. There are 65 repairs needed: 45 Monuments and 20 footstones due to fractures or damage from falling over and/or previous failed repairs. 209 Reset or New Foundation: 107 headstones, 2 corner markers, 100 footstones either need to be reset or require foundation repair. Monuments are leaning and are in need of treatment to be reset so that they will not topple over and to prevent future degradation. New bases will be made where required. 265 memorials will be cleaned and consolidated including headstones and footstones. Slate will not be consolidated but will be cleaned of biologicals. The total number of monuments is 316. This Article was unanimously supported by the Historic Commission.

- Submitted CPC Article for Historic Restoration of Fence Posts & Rails at East Harwich Union Cemetery for \$135,025 (which includes a contingency of \$12,275). There are 24 Stony Creek granite posts that are broken or have fractures that need to be replaced. This requires digging up and removing the broken posts. Removal of any trees or shrubs. Installing new posts installing new rails. This Article was unanimously supported by the Historic Commission.

- Marceline Arboretum at Island Pond: Robbin Kelley, our Administrator has been working with Ashley Boudreau, an AmeriCorps member from September until July 2020 every Tuesday and Wednesday. We are very fortunate to have Ashley working with Robbin on the Island Pond Arboretum. Ashley has completely indexed the trees for the Arboretum and Island Pond property. She has helped put a brochures together with this information for future visitors. We currently have over fifty species of tree identified.

- Letter from Board of Selectmen approving the naming of the James G. Marceline Arboretum at Island Pond Cemetery at their February 10, 2020 meeting.

- Preparing documentation for Level I Accreditation for Marceline Arboretum at Island Pond Cemetery. We have developed the Marceline Arboretum Plan and it has been updated with the help of Amy Usowski, Conservation Administrator, Diane DiGennaro, and Gerie Schumann who are both on the garden club and are master gardeners. The administrator continues to work with Amy Usowski, as well as Russell Norton,

Agriculture & Horticulture Extension Educator from Cape Cod Cooperative Extension. Russell and Amy are both assisting us with information we need to verify species and recommendation for implementation of new plantings in the Arboretum. There was no charge for this service through the Cape Cod Cooperative Extension.

- AmeriCorps Cape Cod Service project for Invasive species removal at Island Pond Cemetery. Eight service members removed invasive species consisting of Japanese knotweed, Asiatic Bittersweet, and Briars.
- A new sign was made for the East Harwich Methodist Cemetery.
- Local historian, Duncan Berry, led a talk at Pine Grove Cemetery along with Harwich Historical Society and Robbin Kelley, Cemetery Administrator on Prominent Residents of West Harwich.
- Robbin Kelley and Ashley Boudreau lead a tour for the Harwich Garden Club members at the Marceline Arboretum at Island Pond Cemetery with the newly created map which included the locations of the trees in the cemetery and within the conservation parcel of the Arboretum property.
- Cemetery Arboretum Mapping and Software Project. Article #32 to be funded by the Cemetery Revolving Account to map the cemetery property estimated cost was \$30,110.00 with an additional cost of \$7,000 for hosting website and online App. Software will allow visitors to find family members plots. It will also show all the species of trees on the property. This went out for bids for proposals. The town was in negotiations with the vendor, but they did not come to an agreement and it was rescinded. It will be going back out to bid. We are working with Griffin Ryder on this procurement.
- Grant for Equitable Parks and Green Spaces in Small in Midsize Cities was successfully submitted to the Robert Wood Johnson Foundation on September 9th. We are hopeful we will receive the grant when it is awarded in December. If not, the Administrator will research for other grants that don't require matching funds.
- Continue to inventory all the cemetery plots in the town-owned cemeteries to be able to locate the older historic burials.
- Fixed electrical problem to the pump at Evergreen Cemetery.
- Ordered Veterans Memorial Flag holders 50 for WWI and 50 for WWII.
- Evergreen Cemetery AmeriCorps project was completed in December 2020. Lifting up the canopy of trees by pruning lower limbs, shaping smaller trees and shrubs and removal of invasive species.

Items that will be addressed by the Commission in 2021:

- We have updated the Rules and Regulations for all the town-owned or maintained cemeteries. The Harwich Center Cemetery has been removed from the list of cemeteries. The Commission also had additional changes that were supposed to go to

the Annual Town Meeting in 2021 but were removed and will be brought before the Annual Town Meeting for approval in 2022.

- Cemetery Administrator will be researching all of the Veterans to make sure that they have flag holders. We have several Civil War Veterans that currently don't have flag holders. We would like all of our veterans to have flags placed on their graves for Memorial Day.
- Request from Yarmouth Ancient Cemetery and Brewster Cemetery to have Robbin Kelley do Ground Penetrating Radar (GPR) surveys at their sites. Ground Penetrating Radar will be done in late winter or early spring.
- Install the new signs at Island Pond Cemetery and at West Harwich Baptist Church Cemetery.
- Finalize the Kelley Cemetery Land taking from 2008 and get the map filed at Barnstable Registry of Deeds.
- Continue working on brochures to map streets within and list the history of each town-owned cemetery.
- Continue to work on various improvements, drainages, brush clearing, and other maintenance projects within the cemetery properties.
- Install tree tags at the Island Pond Arboretum.
- Design the Civil War and Revolutionary War memorials to be placed at the Evergreen Veterans Memorial Circle.

Respectfully submitted,

Steven H. Conner, Chair
Cynthia A. Eldredge
Robert B. Thompson
Robbin Kelley, Administrator

The Facilities Committee is pleased to provide this annual report to the Board of Selectmen and to update you on the essential work and services provided by the Community Center.

As we reflect back on this year, we are endlessly grateful for the leadership and dedication of Lee Culver who sadly passed on January 19, 2020. Lee served as the chairman of the Facilities Committee for 12 years and was the driving force behind the vision for the Harwich Community Center. We thank him and his family for all he did to insure the success of the building and to foster its growth throughout the years. He is greatly missed.

The Facilities Committee has not met since Lee's passing. The Committee has welcomed a new member, Vahan Kachadoorian, who is serving as the representative from the Recreation Commission. All Committee members are up to date with State Ethics training requirements.

Though the Committee has not met, Community Center Director Carolyn Carey has kept us up to date regarding the status and changes to departmental operations over the course of the last year. We wanted to take this opportunity to highlight the work of the Community Center in 2020.

In February, the Community Center celebrated its 20th birthday! For two decades, the Center has served as the host of large scale town-wide events, holiday programs, and activities that provide recreation, education, entertainment, and opportunities to cultivate special interests. The building is also home to dedicated programs and services geared towards youth, seniors, and veterans. Local clubs and organizations, fitness instructors, and community members utilize this space for their meetings and events, creating a space to learn new skills, improve health and wellness, and build relationships within our community.

To celebrate this momentous milestone, Carolyn and her team organized a number of events including a birthday party, dance, night with the Bean Town Medium, "Soup-er Bowl" ice cream and bowling day, time capsule, a fairy door hunt for kids, and more. These events recognized the passionate and visionary town leaders who fought to have this Community Center built, solicited feedback on opportunities for future growth, and provided fun activities for people of all ages.

In March, we experienced the onset of COVID-19. In these unprecedented times, the Town, Community Center, and our patrons stepped up to overcome obstacles and develop new ways of serving the community. The Center closed to the public from the end of March through June, but that did not stop the staff from finding ways to have a public impact. During this time, staff members stayed in constant contact with the community groups and patrons who use this space, updating them on the status of closures, reopening timelines, and planning for how to safely bring folks back onsite when cleared to do so. With guidance from Administration both state and local government and the Health Department, as well as assistance from DPW, they modified work and meeting spaces, implemented heightened sanitation protocols, and developed policies for hosting meetings and events under restricted capacity.

The Easter holiday fell during this period of closure. The annual egg hunt has become a staple event in our community. In recognition of how important this activity is for local families, Carolyn found a way to hold the event in a modified fashion. She partnered with the Monomoy Regional School District to hand out bags of Easter eggs and prizes to kids – all packed and

distributed using a protocol approved by the Health Director - in conjunction with the daily meal program. Over 350 bags were given out in all!

In July, the Community Center reopened to the public on a limited basis. Groups were welcomed back, within certain size and activity guidelines. Contact tracing procedures were implemented to ensure patrons could be reached in the event of a positive case onsite. Access to common equipment (coffee maker, hallway and reception seating areas, mats for fitness classes, etc.) was restricted. Group members were required to maintain social distancing and adhere to mask mandates. Since then, staff members have been available by appointment for meetings and passport services (53 new passports and over 50 renewal applications have been processed). The reopening policy also called for program and activity bookings to occur on a month-to-month basis. This is designed to ensure that building operations remain responsive to changes in local, state, and federal guidelines, to prevent groups from paying for a service they may be unable to utilize (in the event of further restrictions or closures), and to provide a framework for continuous check ins with the groups that use this space. Through the hard work of Community Center staff and the flexibility of groups and patrons, this process has continued successfully over the last six months.

In October, the Community Center reopened its Weight Room. Fitness equipment was spaced out between multiple rooms to provide additional distance between machines. Members now sign up for a designated time slot. Each slot may have a maximum of six participants and there is a scheduled window between each time slot to allow for sanitation. Locker rooms and showers remain closed. The Weight Room continues to be one of the most popular Community Center resources – members are thrilled to be back!

The Fall was a busy time overall. The building hosted both the State Primary Election in September and the Presidential Election in November. The Center has also been the host site for many blood drives since reopening, and has in fact been one of the only community blood drive sites in the area for months. It was also the host of the town employee and community drive-thru flu clinics. As with Easter, the Community Center team found a way to hold a modified Halloween celebration. With help from the Police Department, temporary lights were put up around the building. Kids and families participated in a drive thru Halloween stopping at different doors along the exterior of the Center to trick or treat. The stormy weather did not stop cars from lining up through the parking lot and all down Oak Street to take part in this event! Over 400 families participated!

In December, the Center partnered with the Department of Children and Families for the annual mitten tree program. The donation process was digital this year, but residents and donors helped get presents to 50 local children. We thank our community for their continued generosity! New this year, the Community Center hosted Santa's workshop at the Seaside Marketplace sheds. Kids could see the workshop in action and even send Santa their Christmas letters. Many enjoyed this beautiful display and opportunity.

The accomplishments and undertakings of the last year highlight the invaluable contributions of the Community Center team. We thank Samantha Estabrook, Executive Assistant, Kerry Lotti, Office Assistant, and Mary Beth Buhler, Customer Service Representative Weight Room and of course Carolyn Carey, Director for their commitment and service to our community. These programs and services would be impossible without their efforts. We also wish to thank the other departments that share the building including Channel 18, the Council on Aging, and Recreation – the teamwork and collaboration shared within this space is unparalleled. The Community Center and Town as a whole are well served by their joint passion, creativity, and dedication.

As always, we remain committed to the continued growth and success of the Community Center, both during the pandemic and as we work to return to ordinary circumstances. The Center continues to find innovative ways to meet needs, support local groups and residents, and spread joy during these tumultuous times, while also eagerly awaiting the opportunity to resume the full scope of onsite programming and events once it is safe. We look forward to working with you, with all other Town Departments, and with all members of our community to best serve the Town of Harwich.

Respectfully submitted,


Angelina Chilaka
Sean Libby
Brian Power
Ralph Smith
Vahan Khachadorian

PUBLIC HEARINGS

PRESENTATIONS

Town of Harwich
Harbormaster's Office
715 Main Street – PO Box 207
Harwich, MA 02646
Phone (508) 430-7532
Fax (508) 430-7535

Memo

To: Chairman, Board of Selectmen
Via: Joseph F. Powers, Interim Town Administrator
Chairman, Waterways Committee
From: John C. Rendon, Harbormaster 
Date: December 7, 2020
Subject: Class C (Charter) Unattached Permit- Sail Only

Ref: (a) Harbor Management Plan

As outlined in reference (a), a Class C Unattached permit allows a boat owner with a current U.S. Coast Guard (6-pack) license to carry up to six passengers for hire utilizing designated town facilities. Permits are assigned from the Class C Unattached permit waitlist by the Harbormaster. The permit may only be issued to boats having possession of full season dockage (town or private) or mooring in the Town of Harwich. Currently three permits are allowed to be issued per Section 8.3. There are currently 22 people on the waitlist for the Class C Unattached permit.

I request that the Board of Selectman authorize one additional Class C Unattached permit, and I request that the additional permit be designated for sailboat charters only. For years there was a sailboat charter called Cape Sail that operated out of Saquatucket Harbor, and it was very popular. However, the owner retired two years ago and the vacated charter permit was reassigned from the waiting list to a fishing charter boat. Over the last two years our office has received a number of requests for sailboat charters, yet there are currently none available in Harwich.

If a designated Class C Unattached Sail permit is approved, it would be assigned from the current waitlist. The offer would go to the first person on the current waitlist, and we would continue down the waitlist until accepted by a person who owns a sailboat in his or her name and intends to use the permit to conduct sail charters only. Any person on the waitlist who does not accept the initial offer will not have the refusal count against him/her. The following procedures will be implemented in the management of the designated Class C Unattached Sail permit:

1. There will be no separate waitlist for the Class C Unattached Sail permit; the current Class C Unattached permit waitlist will be maintained, and this office will highlight those on the waitlist who intend to conduct Sailboat Charters.
2. When the Class C Unattached Sail permit becomes available, this office will go to the Class C Unattached permit waitlist and select the first person on the waitlist that intends to conduct Sailboat Charters. All persons on the waitlist that have previously indicated that they do not intend to conduct Sailboat Charters will be bypassed.

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3. A designated Sail Charter who is on the waitlist is not prohibited from accepting an offer for a non-designated Class C Unattached permit. However, the Class C Unattached permit does not become a designated Class C Unattached Sail permit when the permit is vacated; this office will go to the waitlist and assign from the top of the list to a power or sail charter boat.

The diversity of operations conducted from our municipal marina and other harbors, such as commercial fishing, ferry transportation, passenger boat seal tours and fishing excursions, 6-pack fishing charters and recreational boating, is part of what makes Harwich harbors so special. Adding a designated sail charter permit will only add to the diversity and appeal. The additional permit will have little to no increase in the use of parking and offloading areas, and will not adversely impact existing charter businesses operating out of Harwich. This proposal for the addition of a designated Class C Unattached Sail Permit is unanimously supported by the Waterways Committee.

**HARWICH BOARD OF SELECTMEN
NOTICE OF PUBLIC MEETING**

**HARBOR MANAGEMENT PLAN
Monday, January 4, 2021**

The Harwich Board of Selectmen will hold a Public Meeting on Monday, January 4, 2021, no earlier than 6:30 P.M. during their regularly scheduled meeting. This Hearing will be held by remote participation for the purpose of reviewing a proposed amendment to the Harbor Management Plan. All members of the public having an interest in this topic are cordially invited to attend via dial in number. Dial in information will be posted on the meeting Agenda that is located on the Town website.

HARWICH BOARD OF SELECTMEN

The Cape Cod Chronicle
December 24, 2020

Inequities in Monomoy's Elementary Per Pupil Budgets and the Challenges with the Loss of Elementary Enrollment

Across the Cape, there has been a demographic shift, with towns having increasingly fewer young families with school-aged children. Lack of affordable housing, high cost of living, lack of affordable childcare options, and a growing "Airbnb" industry only exacerbate this demographic shift and loss of school-aged children. The rate of the attrition of young families varies by community, and over the past decade, the Town of Chatham has seen some of the greatest loss of year-round school-aged children.

On December 6, 2010, the simultaneous town meetings in Harwich and Chatham voted to regionalize their schools. Heading into the following academic year (FY12), Harwich Elementary School's enrollment was 579. Chatham Elementary School's enrollment was 279, just under half the HES enrollment. In FY12, a significant number of Harwich resident students (53) elected to attend CES through school choice, compared to a half-dozen Chatham resident students who attended HES. Complete elementary enrollment figures since regionalization can be found in Appendix 1.

Over the 10 years since regionalization, CES enrollment has fallen by 62 students, and HES enrollment has dropped by 67 students. While the total number loss of students was similar, HES started as a much larger school. CES enrollment is now just under a third of the HES enrollment. The decrease in CES enrollment and Chatham resident students has escalated over the past four years (FY17 to present).

In the past decade, the enrollment at HES has dropped by 12%, and the school shrank from six classrooms of kindergarteners to five. By contrast, CES lost 39% of its enrollment over the past 10 years and contracted from three classrooms of kindergarteners to only one classroom this year. There are currently not enough resident students in Chatham to fill a single kindergarten classroom, so the district heavily relies on intra- and inter-district school choice to round out that kindergarten class. It is quite possible that in the next few years there will not be enough Chatham kindergarteners and School Choice applicants to fill even a single standalone kindergarten classroom.

Two dilemmas are becoming quite evident as CES enrollment declines, and both are exacerbated by the fact that CES enrollment is declining at a much higher rate than HES enrollment. First, there is a rapidly increasing inequity in per pupil budgets between Monomoy's two elementary schools. Second, declining enrollment at CES potentially compromises our ability to provide enough grade-level peers to provide a rich social environment for students and CES teachers are increasingly lacking opportunities for professional collaboration within the school building.

1. Inequities of Per Pupil Budgets

As the district came together in FY12, the budgeted per pupil budgets at the two elementary schools was similar. The budget per student at CES was \$941 more than at HES, as shown in Table 1.

Ten years later, the FY21 budget finds smaller elementary school populations in both Monomoy elementary schools, sending per pupil budgets upwards at each. This upward trend happens when a school's "fixed costs" (which include main office, custodial, nurse, and librarian salaries, heating and electrical costs, and maintenance expenses) are spread over fewer students. As CES enrollment has

plummeted since FY17, its per pupil costs are nearly double what they were in FY12 – during this time period, the district has seen the difference in per pupil budgets between CES and HES increase from about \$1,000 to nearly \$5,000 per student.

As the enrollment at CES declines, the amount Harwich taxpayers will be subsidizing the funding for CES will quickly escalate. By FY25, CES enrollment will likely decrease to about 100 students. This would result in per pupil school expenditures of around \$26,526, which will likely be nearly double the per pupil budget at HES, based on the projections in Table 1.

Table 1: Per Pupil Budgets at Monomoy’s Elementary Schools, FY12, FY21 & FY25

	FY12 School Budget	Number of Students	FY12 Per Pupil Budgets
Chatham Elementary	\$ 2,499,028	265	\$9,430
Harwich Elementary	\$ 4,999,819	589	\$8,489
Difference in Per Pupil Budgets			\$941

	FY21 School Budget	Number of Students	FY21 Per Pupil Budgets
Chatham Elementary	\$2,869,394	170	\$16,879
Harwich Elementary	\$6,085,214	512	\$11,885
Difference in Per Pupil Budgets			\$4,994

<i>Note: this is a projection*</i>	FY25 School Budget	Number of Students	FY25 Per Pupil Budgets
Chatham Elementary	\$2,652,551	100	\$26,526
Harwich Elementary	\$6,462,331	470	\$13,750
Difference in Per Pupil Budgets			\$12,776

**Based on 2% annual increases and predicted staff reductions as enrollment contracts*

The inequity in per pupil budgets is not that the district is providing a better educational program to students at CES. The educational program, curriculum, and offerings are painstakingly coordinated between the district’s two elementary schools to ensure all Monomoy students have access to the same excellent quality of education and same educational opportunities. The inequity happens in how the district’s Regional Agreement assesses our two towns. Local tax dollars largely fund Monomoy’s budget, with Harwich currently paying (in FY21) 74.35% of the district’s operational costs, based on Harwich having a much larger 3-year average of foundation enrollment.

Some families from Harwich directly benefit from Chatham Elementary School. Since regionalization, between 14% and 19% of CES enrollment has been Harwich resident students. By contrast, only 1% to 2% of HES enrollment has come from Chatham resident students.

Despite the fact that a significant number of Harwich children attend CES, the Harwich taxpayers end up paying the bulk of the total per pupil budget difference at CES. The total per pupil budget difference has escalated significantly since FY17, and will escalate quickly and dramatically heading to FY25, as indicated in the Table 2.

Table 2: Total Per Pupil Budget Difference (CES vs. HES), FY12, FY21 & FY25

<p style="text-align: center;"><u>In FY12</u></p> <p style="text-align: center;">\$941 per pupil difference X 265 CES pupils = \$249,365</p> <p>FY12 predated fiscal regionalization. Chatham fully paid this difference. In FY13, Harwich would have paid a large portion of the difference:</p> <p style="text-align: center;">\$1,263 FY13 per pupil difference x 259 CES pupils = \$327,117, given a 3-year foundation enrollment split that was 72% Harwich</p> <p style="text-align: center;"><u>In FY21</u></p> <p style="text-align: center;">\$4,994 per pupil difference X 170 CES pupils = \$848,980</p> <p style="text-align: center;">Harwich's share of the operating assessment beyond minimum contribution grew to 74.35%.</p> <p style="text-align: center;"><u>In FY25</u></p> <p style="text-align: center;">\$12,776 X 100 CES pupils = \$1,277,587</p> <p style="text-align: center;">It is anticipated that Harwich's share of operating expenses beyond minimum contribution is likely to be around 79%</p>

How to Remedy This Inequity

The remedy involves amending the Regional Agreement, which requires the Selectmen in both towns and the School Committee to adopt a new assessment procedure that would need to be approved by Town Meetings in both communities. A working group of Selectmen and appointees from the towns, as well as Monomoy's School Committee and its appointees, could convene to develop a proposed remedy. Bringing this group together is one of our School Committee's 2020-2021 goals.

The remedy cannot simply be to increase enrollment at CES by moving Harwich resident children to CES (through intra-district school choice, redistricting, or creating upper and lower elementary schools). This would not provide relief to Harwich taxpayers, who would still be subsidizing the education of an ever-dwindling number of Chatham elementary-aged children. Moving Harwich children to CES decreases enrollment at HES, thereby increasing HES per pupil costs – while the difference in per pupil budgets at both elementary schools could be equalized doing this, it happens at the expense of the Harwich taxpayer. Empty classrooms at CES would simply become empty classrooms at HES. A fair remedy ultimately would require Chatham paying more towards the assessment to mitigate the real costs of running a very small elementary school in their town, with an enrollment far less than half that of HES.

Attached to this document are the following appendices to inform this working group conversation:

- Appendix 1: Monomoy Elementary Enrollment FY12-FY21 and beyond
- Appendix 2: Number of Classrooms per Grade (FY12, FY20 & FY25)
- Appendix 3: Elementary Class Sizes (2019-2020)
- Appendix 4: Monomoy Elementary Budgets FY12-FY21 and beyond
- Appendix 5: Monomoy Elementary Per Pupil Budgets FY12-FY21 and beyond
- Appendix 6: FY13 Assessment If Each Town Paid for Their Own Elementary School
- Appendix 7: FY21 Assessment If Each Town Paid for Their Own Elementary School
- Appendix 8: FY25 Assessment If Each Town Paid for Their Own Elementary School

The Superintendent's Recommendation

The simplest and fairest way to deal with the dilemma of inequitable funding at the elementary level would be to have each town pay for its own elementary school. This would require a change to the Regional Agreement. This would work well as long as there is no reconfiguration (redistricting or formation of upper and lower elementary schools). Appendix 6 provides an example of the FY13 Assessment if the towns paid for their own elementary schools, compared to how the Assessment was calculated following the Statutory Method. Appendix 7 provides the same for FY21. Using this alternative assessment methodology, the Town of Chatham would have paid an additional \$408,069 in FY13 and \$572,537 in FY21, if the town were paying for its own elementary school. Had this provision been in the Regional Agreement since the district's formation, this would have found the Town of Harwich paying \$408,069 less in FY13 and \$572,537 less in FY21, if it paid for only its own elementary school.

Projecting forward, Appendix 8 provides an example of what an FY25 Assessment might be if the towns paid for their own elementary schools, compared to how that year's Assessment would be calculated following the Statutory Method. As CES enrollment contracts, the assessment impact of Chatham paying for its own elementary school increases. In FY25, it is anticipated that Chatham would pay \$738,426 more in funding its elementary school, compared to the Statutory method – Harwich would pay \$738,426 less.

Should either redistricting or the formation of upper and lower elementary schools be approved by change to the Regional Agreement, it would artificially shift per pupil budgets, pushing HES spending up and CES down, simply by creating empty classrooms at HES to fill ones at CES. Mathematically, we could calculate a solid estimate of costs that would have been attributable to the Town of Chatham for running its elementary school had elementary reconfiguration not happened.

Plotting the ratio of Chatham resident elementary students to the sum of Harwich and Chatham resident elementary students in Monomoy from FY18 to FY25 against the ratio of the CES budget to the combined elementary school budgets provides a "best fit" line, which can accurately estimate the CES budget had reconfiguration not happened. FY18 to FY25 are used because that is when we are seeing the greatest change in enrollment. This estimate of the CES budget would then be plugged into the Assessment calculation, assessing both towns for the operational costs of their elementary schools while controlling for the fiscal effects of reconfiguration.

The equation predicting the Chatham Elementary Budget if reconfiguration happens:

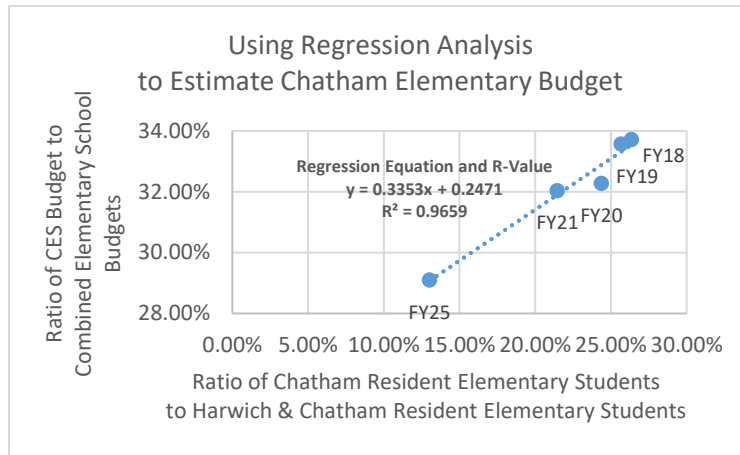
CES Estimated Budget without reconfiguration = (.3353 x (number of elementary-aged students from Chatham divided by the number of elementary-aged students from both Harwich and Chatham) + .2471) times the combined school budgets of both elementary schools

FY12 the equation would predict the CES budget to be $(.3353 \times (182/750) + .2471) \times \$7,498,847 = \$2,463,117$ compared to the actual CES FY12 budget of \$2,499,028, a \$36,911 difference

FY21 the equation would predict the CES budget to be $(.3353 \times (132/615) + .2471) \times \$8,954,608 = \$2,857,118$ compared to the actual CES FY21 budget of \$2,869,394, a \$12,276 difference

FY25 the equation would predict the CES budget to be $(.3353 \times (65/434) + .2471) \times \$9,114,882 = \$2,650,392$ compared to the projected CES FY25 budget of \$2,652,551, a \$2,159 difference

If for whatever reason in the future there is only one Monomoy elementary school, the district would stop using this methodology and simply attribute operational costs based on the Statutory Method.



2. Educational and Developmental Challenges of a Declining Elementary Enrollment

There is a good deal of research in the literature on the positive impacts of smaller class sizes on children’s learning. These studies are largely done in more urban settings where elementary class sizes in the mid-20s are reduced to 15 to 18 students. For the past seven years, Monomoy has operated with this research in mind, striving to keep our elementary class sizes 18 +/- 1 and our middle school and high school class sizes at 19 +/- 2 students. Our district is known for having very educationally supportive, small class sizes (Appendix 3).

The unaddressed question is whether class sizes can become too small. In FY12, many Chatham Elementary School classrooms had 14 or fewer students, Chatham Middle School had as few as 11 students in a classroom, and there was an Advanced Placement class at Chatham High School with only three students. Most educators would agree that there is a point when classes become too small for vibrant discussions and too small for effective group dynamics that keep some individuals from dominating the class and disrupting learning. Classes that are too small also limit the pool of peers for individual students, preventing some children from connecting with a like-minded friend, who may be a key social-emotional support for that child.

Demographic and housing trends in Chatham do not provide any indication that CES enrollment will begin to grow in the near future. Monomoy’s Regional Agreement also provides the district no option to move more elementary-aged students to CES. The district uses intra- and inter-district school choice to bring in additional students to CES and to balance class sizes between the two elementary schools, but school choice alone will not allow CES to have two or three classrooms per grade. The only way to reverse the trends at CES would be to amend the Regional Agreement to permit some sort of reconfiguration: either redistricting Harwich students to CES or creating upper and lower elementary schools. It’s important to note that any reconfiguration option doesn’t fill classrooms in both elementary schools, it just trades empty classrooms in CES for empty classrooms in HES.

Three years ago, Monomoy's Superintendent was increasingly hearing from Chatham teachers and parents concerned about the shrinking size of grade-level cohorts at CES and that CES class sizes were often smaller than those in Harwich. In a November 7, 2017, blog post the Superintendent wrote:

What was a stable elementary population in Harwich and Chatham of 9 classes per grade level (3 at Chatham Elementary School and 6 in Harwich Elementary School) seems to be reaching a new stable state of 8 classes per grade level. No matter what, we will need both elementary schools to house all of our elementary-aged children. Based on the demographics of our towns, Chatham Elementary will likely gradually contract to have two classes per grade level, as it currently has at the kindergarten level. Harwich Elementary may be larger than optimal at six classes per grade, while Chatham Elementary may become smaller than optimal with only two classes per grade. Should Monomoy consider reconfiguring its elementary schools to more optimally support teaching, learning, and children's social development?

[The complete blog post can be found on the Monomoy website](#), and much has changed in just three short years.

To assess the appetite for amending the Regional Agreement, the Superintendent sent out a survey to then current and future elementary parents and elementary staff with options for reconfiguring Monomoy's elementary schools. Parents and staff were asked for their input on the options of maintaining the status quo in the Regional Agreement, allowing for an elementary redistricting option, or allowing for the formation of upper and lower elementary schools. The one-page fact sheet behind that survey is provided in Appendix 9, listing what was seen as the pros and cons of each option, given what we knew at the time.

The Superintendent provided a presentation of the survey results to the School Committee at its November 30, 2017, meeting. The slides of that presentation can be found in Appendix 10. There was not a clear consensus amongst the respondents, who were almost equally split between the three options (no reconfiguration, redistrict, or create upper and lower elementary schools). Staff, Harwich parents, and School Choice parents favored creating upper and lower elementary schools, with one elementary school in each town – no reconfiguration was the least common response for all three of these groups. By contrast, Chatham parents leaned towards no reconfiguration, with a near equal percentage expressing interest in redistricting. Given the lack of consensus, the conversation was tabled, knowing that at some point in the future the subject would need to be revisited, perhaps after CES families experienced first-hand increasingly fewer students in the school.

Today, much has changed. Three years ago, it appeared that CES was rapidly heading to having only two classes per grade level, but the number of elementary-aged children in the town has dropped at a much faster rate. Today, the Town of Chatham does not have enough kindergarteners to fill one classroom, without relying on intra- and inter-district school choice to round out the class. The FY22 cohort of kindergarten children will likely be even smaller. By FY25, it is anticipated that CES will only have one classroom at each grade, kindergarten through Grade 4 (see Appendix 2). In FY21, even before the challenges of running schools during a time of COVID, Chatham's integrated preschool program did not have enough children to merit full-time staff, so Chatham's preschoolers were sent to the PreK program at HES.

Change is also happening at HES, as that school's enrollment has slowly dropped from six classrooms per grade level to five (see Appendix 2). By FY25, it is anticipated that HES will have five classrooms at each grade, kindergarten through Grade 4.

It would be remiss to not clearly point out the obvious. HES long operated with six classrooms of students per grade level. Granted, it was a large elementary school, but it has long had a history of serving over 550 students. By FY25, the district will reach a point where HES will have a steady state of five classrooms per grade level, and CES will have a steady state of one classroom per grade level. All of these classrooms are projected to operate at or below a very supportive 18 students per classroom, and therefore all of Monomoy's elementary classrooms could fit under one roof at HES by FY25.

There is increasing urgency to this dilemma. Where once educators and many parents were concerned about CES only having two classes per grade level, all of these concerns have only magnified as the elementary school-aged population in Chatham dropped to just one classroom of kindergartners. While some may appreciate the intimacy that this creates, many others are concerned about the limitations and challenges of having these kindergartners experiencing the same small grouping of students for five consecutive years (kindergarten through Grade 4), before experiencing larger social groups in middle school.

How to Remedy Having Too Few Students in Any Elementary School

There are options to remedy the situation of having too few students at Chatham Elementary School, but each will require amending the Regional Agreement. Amending the Regional Agreement requires the Selectmen in both towns and the School Committee to adopt new language on how the elementary schools should operate and these changes would need to be approved by Town Meetings in both communities.

The Superintendent strongly emphasizes that cost should not be the main factor in determining how to best educate the district's elementary students, and there will be budgetary implications to each of the options. One of the School Committee's 2020-2021 goals is to establish, organize, and lead a visioning session and/or community forum that includes a representative working group of stakeholders from Chatham and Harwich to discuss an elementary developmental learning program. This conversation will focus on the pros and cons of continuing the status quo with our elementary schools with no reconfiguration. A parallel conversation will be happening with the towns' Selectmen on how to address the inequities in elementary per pupil expenditures if there is no reconfiguration. The conversation will also cover the pros and cons of reconfiguration in one of three different ways.

The first is to "redistrict," where a subset of Harwich students are sent to CES. This would likely impact 50 to 85 children in neighborhoods close to the Chatham line, who would be redistricted to attend CES instead of HES. This would allow CES to maintain two classrooms per grade level. Redistricting would allow students and teachers at CES to have more peer interaction and support.

The second is to create a new elementary system with "upper" and "lower" elementary schools. Here, HES could potentially house all of Monomoy's preschool through Grade 2 students, and CES could then house all Grade 3 and 4 students (or vice versa). Each school would have six classrooms of students for each grade served by the building. This option offers greater connectedness, with all students of the same age attending elementary school together. It provides families better opportunities to connect

with others having children of the same age. All educators will have multiple peers to collaborate with, all in the same building, allowing for much improved professional collaboration, sharing of best practices, and alignment and pacing of curriculum. The schools will be more efficient to staff, so class sizes within grade levels can be homogeneous (rather than balancing class sizes between CES and HES). This option also helps give greater staffing flexibility and efficiency as enrollment numbers shift. Under the current system, small cohort changes at CES create difficult decisions. For example, a single grade-level class of 11 students or 25 students both present staffing challenges – 11 is too small to be effective and efficient, and 25 is above our goal of 18 students but not quite large enough for two separate classes. By having all classes of the same grades in the same building, shifts in cohort population are better managed. There may be increased transportation costs with the creation of upper and lower schools, and this may impact school start times district-wide, if an additional tier of bussing is needed.

The third is to house all Monomoy elementary students “under one roof.” This is more of a theoretical option at present, but by FY25, Monomoy would be able to fit all elementary students within HES with class sizes of 18 or fewer. This provides the most connectedness of all options, with all of Monomoy’s elementary students being educated together. It provides maximum opportunities for families to connect with each other. It provides elementary educators maximum opportunities to professionally collaborate to best support teaching and learning. It provides for homogeneous class sizes within grade level and efficiency in staffing. It would create one large elementary school with slightly under 600 elementary students under one roof, and HES historically has operated with enrollment of this size. If demographic trends were to change dramatically in the opposite direction and the number of elementary-aged children grew exponentially, whether through a baby boom or through families moving here, there is little room for expansion under this model. This option is the only one that provides both towns fiscal relief. A sample Assessment, in FY21 dollars, estimating the savings if all elementary students were consolidated at HES is provided in Appendix 11. Under this option, Harwich taxpayers could realize approximately \$1.5 million in savings and Chatham taxpayers could realize \$500,000 in savings, compared to the current elementary organization and Statutory Assessment dictated in the Regional Agreement.

Next Steps

The Superintendent will once again put out an Elementary Reconfiguration Survey to all current and future Monomoy elementary parents, as well as to our elementary staff. This survey will go out on December 8, 2020, and a report will be available for the School Committee by December 17, 2020. The proposed one-page fact sheet to inform that survey is on the following page. The survey results, along with all of the information in this document, will be used to inform the discussions the School Committee will be having with Selectmen and stakeholders.

Written for the Monomoy Regional School Committee by:

Dr. Scott Carpenter
Superintendent
Monomoy Regional School District
Submitted and presented November 19, 2020

**Monomoy Regional School District
Potential Elementary School Reconfiguration Options**

Why consider reconfiguring Monomoy’s elementary schools?

Enrollment at Chatham Elementary School has been in steady decline, with a much greater loss of enrollment than at Harwich Elementary School. There are concerns that CES is becoming too small, lacking in adequate peers for both students and teachers. Given the loss of elementary enrollment, we must consider what is in the best educational interests of our towns’ children. Some of the possible options below require amending the Regional Agreement.

OPTIONS	FACTS
<p>1. No reconfiguration</p> <p>Continue to let CES get very small (meaning only one class per grade level at all grades). HES would operate with five classes at each grade level.</p> <p><i><u>Does not require a change to the Regional Agreement</u></i></p>	<ul style="list-style-type: none"> • This is the only option available under the current regional agreement • Offers limited social connections for students at CES • Class sizes within grades and between buildings differ • Provides CES educators with no grade-level collaboration in the building
<p>2. “Redistrict” some Harwich students to CES</p> <p>Divert a number of elementary students currently slated to attend HES and have them attend CES, which would allow CES to offer two classes at each grade level. HES would have four classes per grade.</p> <p><i><u>Requires a change to the Regional Agreement</u></i></p>	<ul style="list-style-type: none"> • The redistricting would likely impact 50-85 children in a few neighborhoods in Harwich, closest to the Chatham town line • Class sizes within grades and between buildings differ • This would allow students and teachers at CES to have more peer interaction, since the school could maintain two classes per grade level
<p>3. Create a new elementary system with an “upper” and “lower” elementary school</p> <p>This could potentially see HES housing all preschool through Grade 2 students in our district, and CES could then house all Grade 3 and 4 (or vice versa). Each school would have six classrooms of students for each grade served by the building.</p> <p><i><u>Requires a change to the Regional Agreement</u></i></p>	<ul style="list-style-type: none"> • Offers greater connectedness with all students of the same age attending elementary school together, allowing families better opportunities to connect with each other • All educators of the same grade are physically in the same building, allowing for maximum professional collaboration, sharing of best practices, and alignment of curricula and pacing • Allows for efficient staffing, so class sizes within grade levels are more homogeneous • This option may involve greater transportation costs
<p>4. House all Monomoy elementary students “under one roof”</p> <p>With the decline in CES enrollment, as well as HES enrollment, by the 2024-2025 school year all elementary students could now be housed at HES, with all class sizes 18 or fewer.</p> <p><i><u>Requires a change to the Regional Agreement</u></i></p>	<ul style="list-style-type: none"> • Offers greater connectedness with all students attending elementary school together, allowing families better opportunities to connect with each other • All elementary educators are in the same building, allowing for enhanced professional collaboration, sharing of best practices, and alignment of curricula and pacing • Allows for efficient staffing, so class sizes within grade levels are more homogeneous

Appendix 1: Monomoy Elementary Enrollment FY12-FY21 and beyond

Chatham Elementary School				
Fiscal Year	Chatham resident Students	Harwich resident Students	School Choice from other towns	Total Enrollment
FY12	176	53	36	265
FY13	194	44	21	259
FY14	191	44	25	260
FY15	186	39	52	277
FY16	188	42	40	270
FY17	194	41	38	272
FY18	177	32	33	242
FY19	173	25	31	229
FY20	157	23	24	204
FY21	125*	24	21	170
FY25***	53	24	21	100

*includes 13 Chatham resident students currently homeschooled because of COVID

Harwich Elementary School				
Fiscal Year	Chatham resident Students	Harwich resident Students	School Choice from other towns	Total Enrollment
FY12	6	515	68	589
FY13	6	522	58	586
FY14	4	526	68	598
FY15	5	524	71	600
FY16	9	525	63	597
FY17	7	516	43	566
FY18	12	496	42	550
FY19	7	496	53	556
FY20	7	486	59	552
FY21	10	459**	46	512
FY25***	10	410	50	470

**includes 36 Harwich resident students currently homeschooled because of COVID

Monomoy Elementary-Aged Students				
Fiscal Year	Chatham resident Students	Harwich resident Students	Total Resident Students	% Residents from Chatham
FY12	182	568	750	24.3%
FY13	200	566	766	26.1%
FY14	195	570	765	25.5%
FY15	191	563	754	25.3%
FY16	197	567	764	25.8%
FY17	201	557	758	26.5%
FY18	189	528	717	26.4%
FY19	180	521	701	25.7%
FY20	164	509	673	24.4%
FY21	132	483	615	21.5%
FY25***	65	434	499	13.0%

***projection based on FY21 kindergarten enrollments

Appendix 2: Number of Classrooms per Grade at Monomoy’s Elementary Schools (FY12, FY20, FY25)

Grade	FY12		FY21*		FY25**	
	CES	HES	CES	HES	CES	HES
K	3	6	1	5	1	5
1	3	6	2	5	1	5
2	3	6	2	5	1	5
3	3	6	2	6	1	5
4	3	5***	3	6	1	5

*Pre-COVID projection based on enrollment and new kindergarten enrollments

**Projection based on current kindergarten enrollments

***Historically, as the district came together, HES often had 5 large classes of 4th grade, but the enrollment in these classes would have supported 6 classrooms of students.

Appendix 3: Elementary Class Size Ranges by Grade at Monomoy’s Elementary Schools (2019-2020 school year)

Grade	CES		HES	
	Number of Classrooms	Range of Class Sizes	Number of Classrooms	Range of Class Sizes
K	2*	16-18	5	14-16
1	2	17-18	5	17-18
2	2	16-17	6**	19-20
3	3	15-16	5	20-21
4	2	21-22	6**	16-18

*For the 2020-2020, kindergarten in CES would have dropped to only one classroom. This would result in one kindergarten class, two classrooms in Grades 1-3, and three classrooms of Grade 4.

**For 2020-2021, the six sections of second graders would have moved up to Grade 3. The five Grade 3 classrooms would move up to Grade 4; however, the district planned to retain a sixth Grade 4 teacher to pull the class sizes down (from 20-21) to 17. This would leave five classrooms in Grades K-2 and six classrooms of in Grade 3 & 4.

Additional factors behind elementary class sizes and staffing:

It is important to note that since FY14, Monomoy budgets for elementary class sizes of 18 +/- 1 students. Any “free” seats beneath 18 are made available to school choice, potentially rounding out the class size and bringing in some school choice revenue.

It is challenging to equalize class sizes between buildings, particularly when one cohort is being divided by a factor of 2 (classrooms) in one school and by a factor of 5 in the other building. It is far easier to equalize class sizes when the entire cohort (all students of the same grade) are in the same building.

There are occasionally behavioral dynamics within classes that require additional staffing at a particular grade level to address the challenge. This often results in reducing class size at one grade level often at the expense of increased class size elsewhere in the school.

Appendix 4: Monomoy Elementary Budgets FY12-FY21 and beyond

Fiscal Year	CES Budget	HES Budget	Combined Elementary Budgets
FY12	\$2,499,028	\$4,999,819	\$7,498,847
FY13	\$2,321,712	\$4,512,727	\$6,834,439
FY14	\$2,470,218	\$4,592,557	\$7,062,775
FY15	\$2,653,323	\$4,672,135	\$7,325,458
FY16	\$2,667,863	\$4,870,444	\$7,538,307
FY17	\$2,788,339	\$5,165,891	\$7,954,230
FY18	\$2,828,225	\$5,558,808	\$8,387,033
FY19	\$2,953,802	\$5,843,037	\$8,796,839
FY20	\$2,877,296	\$6,035,185	\$8,912,481
FY21	\$2,869,394	\$6,085,214	\$8,954,608
FY25*	\$2,652,551	\$6,462,331	\$9,114,882

*FY25 Elementary budgets estimated by deducting anticipated staff reductions and increasing budget by 2%/year

Appendix 5: Monomoy Elementary Per Pupil Budgets FY12-FY21 and beyond

Fiscal Year	Per Pupil Budgets town's elementary budget/town's elementary school enrollment			Chatham Elementary Enrollment	Difference x Chatham Elementary Enrollment
	CES per pupil budgets	HES per pupil budgets	Difference		
FY12	\$9,430	\$8,489	\$942	265	\$249,630
FY13	\$8,964	\$7,701	\$1,263	259	\$327,117
FY14	\$9,501	\$7,680	\$1,821	260	\$473,460
FY15	\$9,579	\$7,787	\$1,792	277	\$496,384
FY16	\$9,881	\$8,158	\$1,723	270	\$465,210
FY17	\$10,214	\$9,127	\$1,087	273	\$296,751
FY18	\$11,687	\$10,107	\$1,580	242	\$382,362
FY19	\$12,899	\$10,509	\$2,390	229	\$547,310
FY20	\$14,104	\$10,933	\$3,171	204	\$646,884
FY21	\$18,276	\$12,784	\$5,492	157	\$862,244
FY25	\$26,526	\$13,750	\$12,776	100	\$1,277,600

Appendix 6: What the F13 Assessment Would Have Been Had the Towns Paid for Their Own Elementary School (compared to the actual assessment using the Statutory Method at the bottom of the page)

Town Funding of Their Elementary School Assessment FY13

Elementary School Budgets	Total Cost	No. Stds	Per Pupil	
Chatham Elementary School FY21 Budget	\$ 2,321,712	259	\$ 8,964	Per Pupil Difference \$ 1,263
Harwich Elementary School FY21 Budget	\$ 4,512,727	586	\$ 7,701	
Final FY21 Monomoy Budget			\$ 31,054,592	
Revenue				
Ch 70	\$ 2,384,540			
E&D				
Charter School	\$ 284,129			
Medicaid	\$ 170,000			
Interest				
Misc Revenue	\$ 76,240	(regional bonus aid)		
Total			\$ 2,914,909	
Non-Operating Expenditures				
Transportation	\$ 676,931.00			
Capital/Stabilization	\$ 201,312.00			
Debt	\$ 282,654.00			
Total			\$ 1,160,897	
Total Operating Assessment			\$ 26,978,786	
Operating Assessment				
	Harwich	Chatham	Total	
Required Minimum Contribution	\$ 11,444,862	\$ 4,696,121	\$ 16,140,983	
Cost to Run Elementary Schools	\$ 4,512,727	\$ 2,321,712	\$ 6,834,439	
Total Operating Assessment (Required Minimum Plus Elementary Costs)	\$ 15,957,589	\$ 7,017,833	\$ 22,975,422	
Funding Beyond Minimum Contribution Needed to Support Budget			\$ 4,003,364	
	Harwich	Chatham		
Split Based on 3-Year Rolling Foundation Enrollment	72.00%	28.00%		
Additional Operational Funding Per Member	\$ 2,882,422	\$ 1,120,942		
Operating Assessment Per Member	\$ 18,840,011	\$ 8,138,775		
Transportation Assessment			\$ 676,931	
less Regional Transportation Aid			\$ 340,317	
			\$ 336,614	
	Harwich	Chatham		
Split Based on 3-Year Rolling Enrollment from Towns	72.00%	28.00%		
Transportation Assessment Per Member	\$ 242,362	\$ 94,252		
Capital/Stabilization Assessment				
	Harwich	Chatham		
Split Based on 3-Year Rolling Foundation Enrollment	72.00%	28.00%		
Capital/Stabilization Assessment Per Member	\$ 144,945	\$ 56,367	\$ 201,312	
Debt Assessment				
	Harwich	Chatham		
Split Based on 3-Year Rolling Foundation Enrollment	72.00%	28.00%		
MRHS Bond (principal and interest)	\$ 60,281	\$ 222,373	\$ 282,654	
Final MRHS Financing				
Debt Assessment Per Member	\$ 60,281	\$ 222,373	\$ 282,654	
Total FY13 Assessment				
	Harwich	Chatham		
Operating Assessment	\$ 18,840,011	\$ 8,138,775	\$ 26,978,786	
Transportation Assessment	\$ 242,362	\$ 94,252	\$ 336,614	
Capital/Stabilization Assessment	\$ 128,958	\$ 72,354	\$ 201,312	
Total Before Debt	\$ 19,211,331	\$ 8,305,381	\$ 27,516,712	
Debt Assessment	\$ 60,281	\$ 222,373	\$ 282,654	
Total FY13 Assessment	\$ 19,271,612	\$ 8,527,754	\$ 27,799,366	
Total FY13 Statutory Assessment	\$ 19,679,681	\$ 8,119,685	\$ 27,799,366	
Difference between methods	\$ (408,069)	\$ 408,069	\$ -	

Appendix 7: What the FY21 Assessment Would Have Been Had the Towns Paid for Their Own Elementary School (compared to the actual assessment using the Statutory Method at the bottom of the page)

Town Funding of Their Elementary School Assessment FY21

Pro: Harwich has a more equitable assessment. Easily explained and calculated approach. Easily maintains the status quo agreement.

Con: This approach not work if redistricting or elementary reconfiguration happened, each of which places more HES students in CES (emptying classrooms at HES and driving HES per pupil costs up). A different approach would be needed to estimate a CES budget.

Elementary School Budgets	Total Cost	No. Stds	Per Pupil		Per Pupil Difference
Chatham Elementary School FY21 Budget	\$ 2,869,394	170	\$	16,879	
Harwich Elementary School FY21 Budget	\$ 6,085,214	512	\$	11,885	\$ 4,994
Final FY21 Monomoy Budget				\$ 41,261,134	
Revenue					
Ch 70	\$ 3,798,314				
E&D	\$ 850,440				
Charter School	\$ 75,717				
Medicaid	\$ 155,000				
Interest	\$ 7,500				
Misc Revenue	\$ 13,562				
Total				\$ 4,900,533	
Non-Operating Expenditures					
Transportation	\$ 1,484,699				
Capital/Stabilization	\$ 355,000				
Debt	\$ 2,110,916				
Total				\$ 3,950,615	
Total Operating Assessment				\$ 32,409,986	
Operating Assessment					
	Harwich	Chatham	Total		
Required Minimum Contribution	\$ 13,156,660	\$ 4,190,569	\$ 17,347,229		
Cost to Run Elementary Schools	\$ 6,085,214	\$ 2,869,394	\$ 8,954,608		
Total Operating Assessment (Required Minimum Plus Elementary Costs)	\$ 19,241,874	\$ 7,059,963	\$ 26,301,837		
Funding Beyond Minimum Contribution Needed to Support Budget				\$ 6,108,149	
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham			
Additional Operational Funding Per Member	\$ 4,541,409	\$ 1,566,740			
Operating Assessment Per Member	\$ 23,783,283	\$ 8,626,703			
Transportation Assessment				\$ 1,484,699	
less Regional Transportation Aid				\$ 641,360	
				\$ 843,339	
Split Based on 3-Year Rolling Enrollment from Towns	Harwich	Chatham			
	74.80%	25.20%			
Transportation Assessment Per Member	\$ 630,818	\$ 212,521			
Capital/Stabilization Assessment					
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham			
	74.35%	25.65%			
Capital/Stabilization Assessment Per Member	\$ 263,943	\$ 91,058	\$ 355,000		
Debt Assessment					
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham			
	74.35%	25.65%			
MRHS Bond (principal and interest)	\$ 1,475,197	\$ 508,928	\$ 1,984,125		
Final MRHS Financing	\$ 94,269	\$ 32,522	\$ 126,791		
Debt Assessment Per Member	\$ 1,569,466	\$ 541,450	\$ 2,110,916		
Total FY21 Assessment					
	Harwich	Chatham			
Operating Assessment	\$ 23,783,283	\$ 8,626,703	\$ 32,409,986		
Transportation Assessment	\$ 630,818	\$ 212,521	\$ 843,339		
Capital/Stabilization Assessment	\$ 263,943	\$ 91,058	\$ 355,000		
Total Before Debt	\$ 24,678,043	\$ 8,930,282	\$ 33,608,325		
Debt Assessment	\$ 1,569,466	\$ 541,450	\$ 2,110,916		
Total FY21 Assessment	\$ 26,247,509	\$ 9,471,732	\$ 35,719,241		
Total FY21 Statutory Assessment	\$ 26,820,046	\$ 8,899,195	\$ 35,719,241		
Difference between methods	\$ (572,537)	\$ 572,537	\$ -		

Appendix 8: What the FY25 Assessment Would Have Been Had the Towns Paid for Their Own Elementary School (compared to the project assessment using the Statutory Method at the bottom of the page)

Town Funding of Their Elementary School Assessment FY25

Elementary School Budgets	Total Cost	No. Stds	Per Pupil	
Chatham Elementary School FY21 Budget	\$ 2,652,551	100	\$ 26,526	Per Pupil Difference \$ 12,776
Harwich Elementary School FY21 Budget	\$ 6,462,331	470	\$ 13,750	
Final FY21 Monomoy Budget				\$43,006,937
Revenue				
Ch 70	\$ 4,145,292			
E&D	\$ 850,440			
Charter School	\$ 69,043			
Medicaid	\$ 155,000			
Interest	\$ 7,500			
Misc Revenue	\$ 13,414			
Total			\$ 5,240,689	
Non-Operating Expenditures				
Transportation	\$ 1,845,371			
Capital/Stabilization	\$ 388,004			
Debt	\$ 1,824,850			
Total			\$ 4,058,225	
Total Operating Assessment				\$ 33,708,023
Operating Assessment				
	Harwich	Chatham	Total	
Required Minimum Contribution	\$ 14,091,914	\$ 4,148,626	\$ 18,240,540	
Cost to Run Elementary Schools	\$ 6,462,331	\$ 2,652,551	\$ 9,114,882	
Total Operating Assessment (Required Minimum Plus Elementary Costs)	\$ 20,554,245	\$ 6,801,177	\$ 27,355,422	
Funding Beyond Minimum Contribution Needed to Support Budget			\$ 6,352,600	
Split Based on 3-Year Rolling Foundation Enrollment				
	Harwich	Chatham		
Additional Operational Funding Per Member	\$ 5,018,554	\$ 1,334,046		
Operating Assessment Per Member	\$ 25,572,799	\$ 8,135,223		
Transportation Assessment				
less Regional Transportation Aid			\$ 1,845,371	
			\$ 713,287	
			\$ 1,132,084	
Split Based on 3-Year Rolling Enrollment from Towns				
	Harwich	Chatham		
	79.00%	21.00%		
Transportation Assessment Per Member	\$ 894,346	\$ 237,738		
Capital/Stabilization Assessment				
Split Based on 3-Year Rolling Foundation Enrollment				
	79.00%	21.00%		
Capital/Stabilization Assessment Per Member	\$ 306,523	\$ 81,481	\$ 388,004	
Debt Assessment				
Split Based on 3-Year Rolling Foundation Enrollment				
	79.00%	21.00%		
MRHS Bond (principal and interest)	\$ 1,441,631	\$ 383,218	\$ 1,824,850	
Final MRHS Financing				
Debt Assessment Per Member	\$ 1,441,631	\$ 383,218	\$ 1,824,850	
Total FY21 Assessment				
	Harwich	Chatham		
Operating Assessment	\$ 25,572,799	\$ 8,135,223	\$ 33,708,023	
Transportation Assessment	\$ 894,346	\$ 237,738	\$ 1,132,084	
Capital/Stabilization Assessment	\$ 306,523	\$ 81,481	\$ 388,004	
Total Before Debt	\$ 26,773,669	\$ 8,454,442	\$ 35,228,111	
Debt Assessment	\$ 1,441,631	\$ 383,218	\$ 1,824,850	
Total FY25 Assessment	\$ 28,215,300	\$ 8,837,660	\$ 37,052,960	
Total FY25 Statutory Assessment	\$ 28,953,726	\$ 8,099,234	\$ 37,052,960	
Difference between methods	\$ (738,426)	\$ 738,426	\$ -	

Appendix 9: One-page Fact Sheet Guiding the November 2017 Survey on Possible Elementary Reconfiguration

Monomoy Regional School District Possible Elementary School Reconfiguration

Mission Statement

Monomoy Regional School District is a community of learners of all ages focused on building knowledge, positive character, and resiliency in a safe, supportive, creative, and challenging environment.

Why consider reconfiguring Monomoy’s elementary schools?

Given that Chatham Elementary School (CES) enrollment is in decline, relative to the enrollment at Harwich Elementary School (HES), a concern is that Chatham Elementary may become too small, lacking adequate peers for both students and teachers, while Harwich Elementary would be operating at a capacity beyond which is ideal. By statute, a regional school district must periodically review its regional agreement and when doing so needs to consider what is in the best educational interests of our towns’ children. Two of the options below require amending the regional agreement.

OPTIONS	FACTS
<p>#1 No reconfiguration: Let Chatham Elementary School get small (shrinking from three classes per grade level to two) and Harwich Elementary School to operate with six classes per grade level.</p> <p><i>DOES NOT REQUIRE A CHANGE TO THE REGIONAL AGREEMENT</i></p>	<ul style="list-style-type: none"> This is the only option available under the current regional agreement. Limited social connections for children if CES shrinks to only two classes per grade level. Provides our educators at CES only one other grade-level colleague with whom to regularly collaborate and share best practices. HES will be pressed for space and one grade level will likely be compressed into five larger sized classes (as the building has run in recent history). Having five to six classes per grade level provides ample peers for both students and teachers, but it also finds HES operating as a very large, not so intimate, school. With one third of CES likely vacant in future years, the district could consider using this space to expand preschool options.
<p>#2 “Redistrict”: Divert one of elementary-aged students currently attending Harwich Elementary School and have them attend Chatham Elementary School, which will allow Chatham Elementary to continue to operate with three classes per grade level and Harwich Elementary to operate with five classes per grade level.</p> <p><i>REQUIRES A CHANGE TO THE REGIONAL AGREEMENT</i></p>	<ul style="list-style-type: none"> This redistricting would impact only a few neighborhoods in Harwich, closest to the Chatham town line. A bus load of HES children, roughly 15 per grade level, would find CES to be their new elementary school. This would allow CES students and teachers to have more peer interaction, since the school could maintain three classes per grade level. This would also allow HES to get slightly smaller, shrinking from six to five classes per grade level, which would allow the building to be more intimate for the families we serve. This would find HES with up to four classrooms available to consider future expansion of preschool options.
<p>#3 Create a new elementary system with an “upper” and a “lower” elementary school: This could see the Harwich Elementary School building housing all Pre-K through Grade 2 students in our district. Chatham Elementary School would then house all Grade 3 and Grade 4 students, with each elementary grade level having eight sections per grade level.</p> <p><i>REQUIRES A CHANGE TO THE REGIONAL AGREEMENT</i></p>	<ul style="list-style-type: none"> This approach maximizes peer connections for both students and teachers. All students of the same age attend the same elementary school together, which allows both students and parents better opportunities to connect with peers with like interests. All educators teaching the same grade are housed in the same building, allowing for maximum professional collaboration, sharing of best practices, and alignment of curricula and pacing. Allows for more efficient to staffing, so class sizes within grade levels are more homogeneous, while also kept small (averaging 18 or fewer students per class). This would find the HES with the capacity to expand preschool options for Monomoy families, using a few available classrooms, with HES functioning as an early childhood hub. This option may involve greater transportation costs.

For more information, please go to <https://www.monomoy.edu/Page/113>.

Appendix 10: Monomoy Reconfiguration Survey Presentation to the Monomoy Regional School Committee from November 27, 2017

11/15/2020

**Monomoy Elementary
Reconfiguration Survey
Preliminary Results**

Survey closed 11/27/17 at 10 AM
453 responses

Note:

The survey soliciting parents, community members, and staff input is now closed. It was open from November 7 until November 27.

<https://docs.google.com/forms/d/e/1FAIpQLScagLrXpF1R2urdaIFi63iQYZ0hVpkVpyunrVwZsffBX1tw/viewform>

453 people responded to the survey.

Requests to participate in the survey were sent thrice to all parents and staff, and it has been sent out to Monomoy parents "to be" through the local Early Childhood Council.

A one-page document has been created to summarize the three options under consideration. The content of this one-page summary was included in the text of the survey, to help educate and inform those taking it.

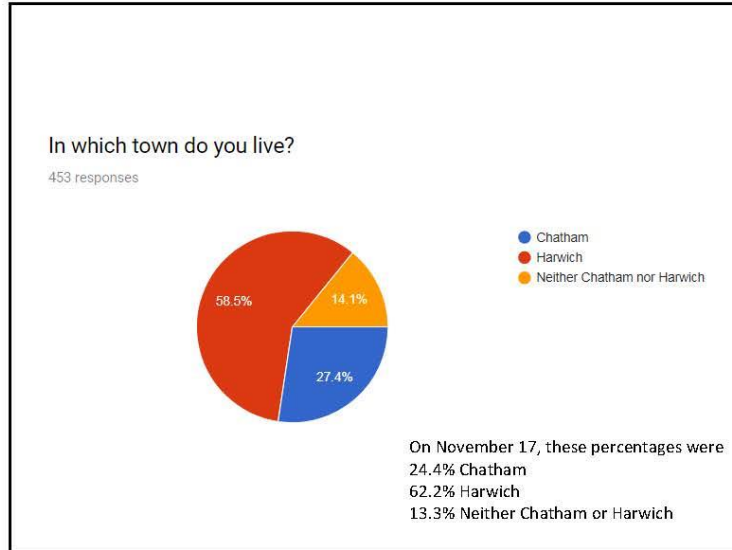
Monomoy Regional School District
Possible Elementary School Reconfiguration

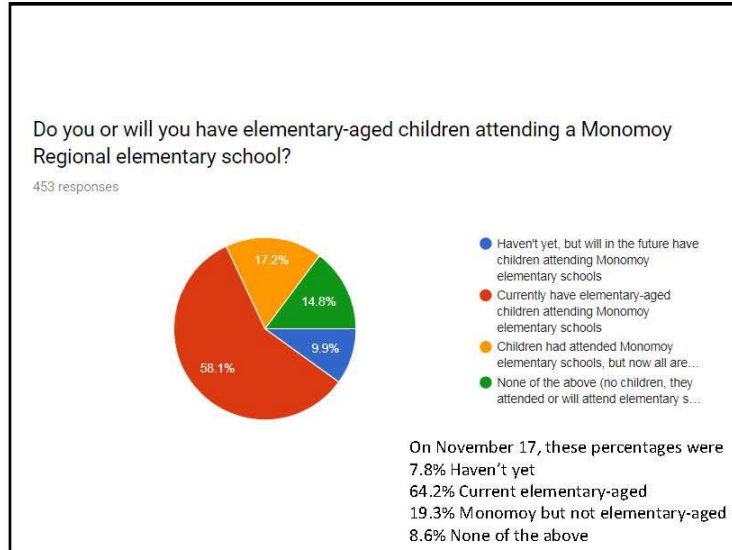
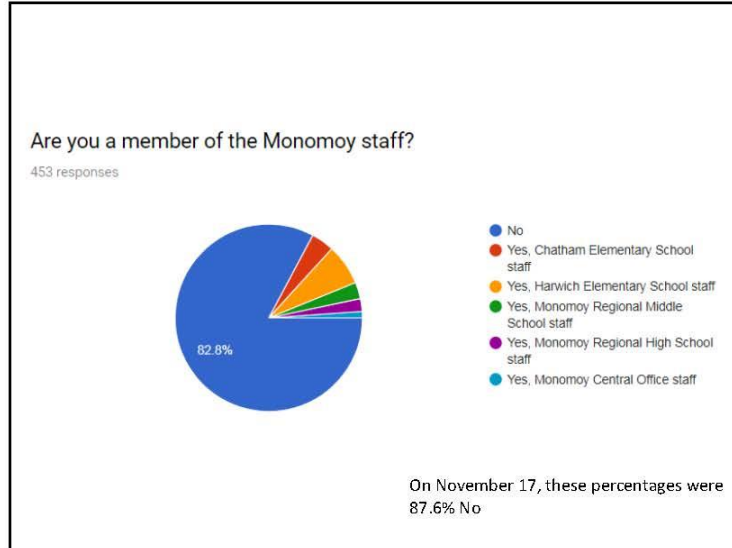
Monomoy Regional School District is a regional district of towns of Chatham, Harwich, and Harwich Port. The district is committed to providing a high quality education for all students.

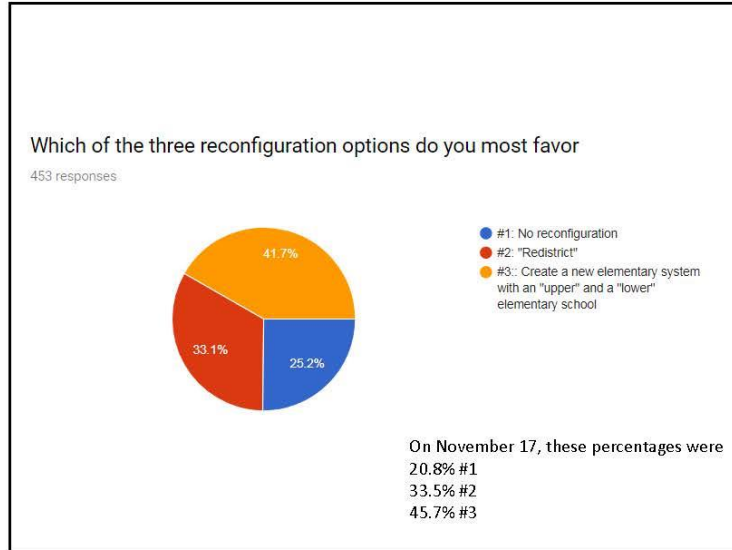
Why consider reconfiguring Monomoy's elementary schools?
Given that Chatham Elementary School (CES) enrollment is in decline, relative to the enrollment at Harwich Elementary School (HES), a concern is that Chatham Elementary may become too small, lacking adequate peers for both students and teachers, while Harwich Elementary would be operating at a capacity beyond which is ideal. By statute, a regional school district must periodically review its regional agreement and when doing so needs to consider what is in the best educational interests of our towns' children. Two of the options below require amending the regional agreement.

OPTIONS	FACTS
<p>#1 No reconfiguration: Let Chatham Elementary School get small (shrinking from three classes per grade level to two) and Harwich Elementary School to operate with six classes per grade level.</p> <p>DOES NOT REQUIRE A CHANGE TO THE REGIONAL AGREEMENT</p>	<ul style="list-style-type: none"> This is the only option available under the current regional agreement. Limited social connections for children: if CES shrinks to only two classes per grade level. Provides our educators at CES only one other grade-level colleague with whom to regularly collaborate and share best practices. HES will be pressed for space and one grade-level will likely be compressed into five larger sized classes (as the building has run in recent history). Having five to six classes per grade level provides ample peers for both students and teachers, but it also finds HES operating as a very large, not so intimate, school. With one third of CES likely vacant in future years, the district could consider using this space to expand preschool options. This redistricting would impact only a few neighborhoods in Harwich, closest to the Chatham town line.
<p>#2 "Redistrict": Divert one of elementary-aged students currently attending Harwich Elementary School and have them attend Chatham Elementary School, which will allow Chatham Elementary to continue to operate with three classes per grade level and Harwich Elementary to operate with five classes per grade level.</p> <p>REQUIRES A CHANGE TO THE REGIONAL AGREEMENT</p>	<ul style="list-style-type: none"> A hot load of HES children, roughly 25 per grade level, would find CES to be their new elementary school. This would allow CES students and teachers to have more peer interaction, since the school could maintain three classes per grade level. This would also allow HES to get slightly smaller, shrinking from six to five classes per grade level, which would allow the building to be more intimate for the families we serve. This would find HES with up to four classrooms available to consider future expansion of preschool options.
<p>#3 Create a new elementary system with an "upper" and a "lower" elementary school: This could see the Harwich Elementary School building housing all Pre-K through Grade 2 students in our district. Chatham Elementary School would then house all Grade 3 and Grade 4 students, with each elementary grade level having eight sections per grade level.</p> <p>REQUIRES A CHANGE TO THE REGIONAL AGREEMENT</p>	<ul style="list-style-type: none"> This approach maximizes peer connections for both students and teachers. All students of the same age attend the same elementary school together, which allows both students and parents better opportunities to connect with peers with like interests. All educators teach the same grade and housed in the same building, allowing for maximum professional collaboration, sharing of best practices, and alignment of curricula and pacing. Allows for more efficient staffing, as class sizes within grade levels are more homogeneous, while also kept small (averaging 28 or fewer students per class). This would find the HES with the capacity to expand preschool options for Monomoy families, using a few available classrooms, with HES functioning as an early childhood hub. This option may involve greater transportation costs.

For more information, please go to <https://www.monomoy.edu/StateFES/>







Staff Responses

Staff	#1	8	10%
	#2	16	21%
	#3	54	69%
		78	

CES

#1 11%

#2 28%

#3 61

HES

#1 15%

#2 25%

#3 60%

90% indicate favoring some kind of change (#2 or #3)

Chatham Responses

Chatham	#1	49	42%	←
	#2	45	39%	
	#3	22	19%	
		116		

58% indicate favoring some kind of change (#2 or #3)

Harwich Responses

Harwich	#1	54	24%	
	#2	78	35%	
	#3	94	42%	←
		226		

77% indicate favoring some kind of change (#2 or #3)

Choice Responses

Choice	#1	3	9%
	#2	11	33%
	#3	19	58%
		33	



91% indicate favoring some kind of change (#2 or #3)

Appendix 11: What the FY25 Assessment Theoretically Could Be (in FY21 dollars) If All Monomoy's Elementary Students Were Educated Under One Roof at HES (this presumes 6 sections per grade)

Elementary Consolidation Assessment FY21

Note: This is not realistically feasible until FY25, but is calculated as a point of reference. The enrollment below is an FY25 projection.

Pro: Both towns save money, because of economies of scale. Smallest possible per-pupil spending. All children in a grade-level are educated together.

Con: Creates one large elementary school, perhaps too large.

Elementary School Budgets	Total Cost	No. Stds	Per Pupil	
Chatham Elementary School FY21 Budget	\$ 2,869,394			"Under One Roof" savings \$ (2,027,076)
less carryover costs from CES required if consolidated with HES	\$ 842,318			
Harwich Elementary School FY21 Budget	\$ 6,085,214			
Revised HES Elementary Combined Budget	\$ 6,927,532	570	\$ 12,154	
Final FY21 Monomoy Budget			\$ 39,234,058	
Revenue				
Ch 70	\$ 3,798,314			
E&D	\$ 850,440			
Charter School	\$ 75,717			
Medicaid	\$ 155,000			
Interest	\$ 7,500			
Misc Revenue	\$ 13,562			
Total			\$ 4,900,533	
Non-Operating Expenditures				
Transportation	\$ 1,484,699			
Capital/Stabilization	\$ 355,000			
Debt	\$ 2,110,916			
Total			\$ 3,950,615	
Total Operating Assessment			\$ 30,382,910	
Operating Assessment				
	Harwich	Chatham	Total	
Required Minimum Contribution	\$ 13,156,660	\$ 4,190,569	\$ 17,347,229	
Funding Beyond Minimum Contribution Needed to Support Budget			\$ 13,035,681	
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham		
	74.35%	25.65%		
Additional Operational Funding Per Member	\$ 9,692,029	\$ 3,343,652		
Operating Assessment Per Member	\$ 22,848,689	\$ 7,534,221		
Transportation Assessment			\$ 1,484,699	
less Regional Transportation Aid			\$ 641,360	
			\$ 843,339	
Split Based on 3-Year Rolling Enrollment from Towns	Harwich	Chatham		
	74.80%	25.20%		
Transportation Assessment Per Member	\$ 630,818	\$ 212,521		
Capital/Stabilization Assessment				
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham		
	74.35%	25.65%		
Capital/Stabilization Assessment Per Member	\$ 263,943	\$ 91,058	\$ 355,000	
Debt Assessment				
Split Based on 3-Year Rolling Foundation Enrollment	Harwich	Chatham		
	74.35%	25.65%		
MRHS Bond (principal and interest)	\$ 1,475,197	\$ 508,928	\$ 1,984,125	
Final MRHS Financing	\$ 94,269	\$ 32,522	\$ 126,791	
Debt Assessment Per Member	\$ 1,569,466	\$ 541,450	\$ 2,110,916	
Total FY21 Assessment				
	Harwich	Chatham		
Operating Assessment	\$ 22,848,689	\$ 7,534,221	\$ 30,382,910	
Transportation Assessment	\$ 630,818	\$ 212,521	\$ 843,339	
Capital/Stabilization Assessment	\$ 263,943	\$ 91,058	\$ 355,000	
Total Before Debt	\$ 23,743,449	\$ 7,837,800	\$ 31,581,249	
Debt Assessment	\$ 1,569,466	\$ 541,450	\$ 2,110,916	
Total FY21 Assessment	\$ 25,312,915	\$ 8,379,250	\$ 33,692,165	
Total FY21 Statutory Assessment	\$ 26,820,046	\$ 8,899,195	\$ 35,719,241	
Difference between methods	\$ (1,507,131)	\$ (519,945)	\$ (2,027,076)	

UPDATED

Inequities in Monomoy's Elementary Per Pupil Budgets and the Challenges with the Loss of Elementary Enrollment

A Report by Monomoy Superintendent Dr. Scott Carpenter
to the MRSD School Committee and Boards of Selectmen

December 2020



Over Two Decades of Gradual Demographic Shift

Happening across the Cape

Fewer young families with school-aged children

Tied to lack of affordable housing, cost of living, childcare options, retirement destination, and a growing “Airbnb” industry

The rate of attrition of young families varies by community, with Chatham having some of the greatest loss in recent years

Changes over the past decade since the vote to regionalize - December 6, 2010

FY12 - the last year Chatham and Harwich fiscally operated schools separately

Harwich Elementary (HES) enrollment = 579 including 6 children from Chatham

Chatham Elementary (CES) enrollment = 279 including 53 children from Harwich

FY21 - the present year, removing the COVID distance learning/homeschooling from the enrollment counts

HES enrollment = 512, including 10 children from Chatham, a 12% drop in HES enrollment since FY12

CES enrollment = 170, including 24 children from Harwich, a 39% drop in CES enrollment since FY12

Enrollment declines, particularly at CES, are exacerbating two dilemmas

Rapidly increasing per pupil budget difference between Monomoy's elementary schools, as CES per pupil costs skyrocket

Potentially compromised ability to provide an ideal teaching and learning environment at CES, when small size may inhibit a rich social environment for children and adequate professional collaboration for educators

Two very different conversations, inextricably interconnected

Per Pupil Budget Difference

Per Pupil Budget at Monomoy's Elementary Schools - FY12, FY21 & FY25

FY12	School Budget	Number of Students	Per Pupil Budget
Chatham Elementary	\$ 2,499,028	265	\$9,430
Harwich Elementary	\$ 4,999,819	589	\$8,489
Difference in Per Pupil Budgets			\$941

FY21	School Budget	Number of Students	Per Pupil Budget
Chatham Elementary	\$2,869,394	170	\$16,879
Harwich Elementary	\$6,085,214	512	\$11,885
Difference in Per Pupil Budgets			\$4,994

FY25 Projection	School Budget	Number of Students	Per Pupil Budget
Chatham Elementary	\$2,652,551	100	\$26,526
Harwich Elementary	\$6,462,331	470	\$13,750
Difference in Per Pupil Budgets			\$12,776

The inequity is
NOT that the
district is
providing a better
educational
experience at
CES

Monomoy painstakingly coordinates the educational program, curriculum, and offerings between our two elementary schools to ensure ALL students have access to the same excellent quality of education and opportunities.

The inequity is
how elementary
per pupil budget
differences
impact the
Harwich taxpayer

Per the Regional Agreement, Harwich and Chatham each pay a percentage of the district's operational costs based largely on the three-year rolling average of foundation enrollment. In FY13, Harwich paid 72%. In FY21, 74.35%. In FY25, likely 79%, and heading toward 87% by FY33. As the Regional Agreement is written, Harwich taxpayers pay a significant portion of the total per pupil budget differences between the two elementary schools.

Increasing Total Per Pupil Budget Differences: A Growing Concern

FY12 Per Pupil Budget

\$941 per pupil difference X 265 CES pupils = \$249,365

FY12 was the last year prior to fiscal regionalization. Chatham would have fully paid this difference; however, in FY13, when the district fully regionalized, Harwich would have been paying for a significant portion of the assessment (72%):

\$1,263 per pupil difference x 259 CES pupils = \$327,117

FY25 Per Pupil Budget

\$12,776 per pupil difference X 100 CES pupils = \$1,277,587

Looking merely four years into the future, the total per pupil difference since regionalization is projected to quadruple, with Harwich's share of the assessment beyond the minimum contribution also rising to about 79%.

FY21 Per Pupil Budget

\$4,994 per pupil difference X 170 CES pupils = \$848,980

The total per pupil difference hovered fluctuated in the a ranged similar to FY13 until the CES population began to rapidly contract in FY18. By FY21, the current fiscal situation, this difference nearly tripled. Compounding the challenge, Harwich's share of the assessment beyond the minimum contribution rose to 74.35%.

Note: *Because the district gets Ch. 70 state aid for children at each elementary school, school choice money that helps pay for staffing, and other revenue offsets, the true impact on the Harwich taxpayers is less than the total per pupil budget differences multiplied by the three-year average of foundation enrollment percentage. This is also further complicated by the fact that some Harwich children attend CES and vice versa.*

How to remedy the fiscal inequity

The funding mechanisms within the Regional Agreement would need to be amended, which would involve support of the Selectmen and approval of voters at both Town Meetings.

The School Committee has a 2020-2021 goal to establish a working group, early in the budget process, to discuss regional assessment at the elementary level.

This group would include Selectmen from both towns and their appointees.

Superintendent's Recommendation

The simplest and fairest way to deal with the growing dilemma of inequitable funding of the elementary schools would be to have each town pay for its own elementary school.

This would involve changing the funding mechanisms in the Regional Agreement.

Note: Any possible future elementary reconfiguration could complicate this recommendation, but there are ways to equitably address even those scenarios.

In **FY13**, if the newly voted upon Regional Agreement had a provision where towns paid for their own elementary schools, Chatham's assessment would have increased by **\$408,069**, and Harwich's would have been decreased by the same amount.

In **FY21**, if the towns were paying for their own elementary schools, Chatham's assessment would have increased by **\$572,537**, and Harwich's would decrease by the same amount.

In **FY25**, if the Regional Agreement is revised to have towns pay for their own elementary schools, it is projected that Chatham's assessment will be **\$738,426** higher than if the agreement was not amended, and Harwich's would be lowered by the same.

Addressing one misconception

If the district's Regional Agreement was amended to permit the placement of Harwich-resident children at CES (either through "redistricting" or the creation of "upper" and "lower" elementary schools), it **DOES NOT** solve this fiscal dilemma. Moving more Harwich children to CES will help equalize per pupil budget discrepancies, but it provides Harwich taxpayers no fiscal relief. It simply trades empty classrooms at CES for empty classrooms at HES.

Compromised Ability to Provide
an Ideal Teaching and Learning
Environment

The impact of small class sizes

Evidence in the literature on a positive impact on learning if elementary class size is reduced from the mid-20s to 15-18 students.

Monomoy budgets for and operates with small class sizes, 18 +/- 1 at the elementary level and 19 +/- 2 at the upper grades.

Coming into regionalization, Chatham Public had very small class sizes ... arguably too small.

There is not a body of literature on the effects of “too small.”

At some point, classes become too small for vibrant discussions and too small to for effective group dynamics.

The impact of a small school

The conversations and concerns about CES becoming too small began just over three years ago, when CES appeared to not have enough kindergarteners to fill three classrooms -- leading to a future with only two classrooms per grade level. Three years later, the pace of enrollment loss at CES finds the school heading toward only one classroom per grade level.

Some appreciate the intimacy of small. Others express concerns.

Imagine classes with the same group children for five consecutive years (K-4). What if a child has a major conflict with another? What if a student doesn't find a single friend within that class?

It's equally important for teachers to have peers to support them with best practices, professional development, sharing curricular resources, etc.

Neither the School
Committee nor the
Superintendent
can unilaterally
move children
from HES to CES

Section V of the Regional Agreement reads:

There shall be no less than one elementary school in each member town. Students in the elementary grades shall attend schools in their towns of residence, except in special cases as defined by the Regional District School Committee.

Note: “special cases” here would be instances where a particular program for students with special needs is located in one building, but not the other. It would also apply to voluntary intra-district school choice.

Monomoy's first Elementary Reconfiguration Survey

In **November 2017**, the Monomoy Superintendent surveyed current and future elementary parents and elementary staff about potential options for elementary reconfiguration given the declining enrollment at CES. Families and staff were provided three options:

1. No reconfiguration. This would not require a change to the Regional Agreement
2. "Redistricting" -- diverting some Harwich-resident children, living closest to the Chatham town line, from HES to CES. This would require a change to the Regional Agreement.
3. Forming "upper" and "lower" elementary schools -- where potentially all preschool through Grade 2 students attend HES and all Grade 3 and 4 students attend CES (or vice versa). This would require a change to the Regional Agreement.

There were 453 respondents.

The results were presented at the November 30, 2017, School Committee meeting.

Monomoy Staff

Staff from both elementary schools favored enhanced peer collaboration and support by forming “upper” and “lower” elementary schools, where all teachers of the same grade level are located under one roof.

Staff Responses

Staff	No Change	8	10%
	“Redistrict”	16	21%
	“Upper” & “Lower”	54	69%
		78	



CES
#1 11%
#2 28%
#3 61


HES
#1 15%
#2 25%
#3 60%

90% indicate favoring some kind of change (#2 or #3)

Chatham Parents

Chatham parents least liked the option of “upper” and “lower” elementary schools, and the Chatham parents were nearly split between no reconfiguration and “redistricting,” with slightly more favoring the status quo.

Chatham Responses

Chatham Parents	No Change	49	42%	
	“Redistrict”	45	39%	
	“Upper” & “Lower”	22	19%	
		116		


58% indicate favoring some kind of change (#2 or #3)

Harwich Parents

Harwich parents went in the complete opposite direction, favoring formation of “upper” and “lower” schools slightly more than “redistricting.” Maintaining the status quo was the least common response.

Harwich Responses

Harwich Parents	No Change	54	24%
	“Redistrict ”	78	35%
	“Upper” & “Lower”	94	42%
		226	




77% indicate favoring some kind of change (#2 or #3)

School Choice Parents

Parents of school choice students had similar preferences as the Monomoy elementary staff and the Harwich parents, favoring the formation of “upper” and “lower” schools.

Choice Responses

Choice Parents	No Change	3	9%
	“Redistrict”	11	33%
	“Upper” & “Lower”	19	58%
		33	



91% indicate favoring some kind of change (#2 or #3)

Much changed in the three years since the Elementary Reconfiguration Survey of 2017.

Enrollment at CES is rapidly declining and there is now only one classroom of kindergarten students, requiring significant school choice applicants to fill it.

Enrollment at HES is now finding a relatively steady state of five classrooms per grade level, where once there was six.

There appears to be no evidence that these trends will reverse.

All of
Monomoy's
elementary
students could
fit "under-one-
roof" by FY25.

HES long operated as an elementary school with six classrooms per grade level. By FY25, CES' one classroom per grade and HES' five classrooms per grade could fit within HES, with all class sizes at 18 students or fewer.

This would require a change to the Regional Agreement.

There is the potential for fiscal relief* for both Harwich and Chatham taxpayers if all elementary children were educated together, but it leaves little wiggle room if there is a future baby boom.

**potentially saving Harwich around \$1.5 million/year and saving Chatham \$500,000/year, compared to operating two elementary schools under the current assessment approach.*

Monomoy's second Elementary Reconfiguration Survey

In **December 2020**, the Monomoy Superintendent surveyed current and future elementary parents and elementary staff about potential options for elementary reconfiguration given the declining enrollment at CES. Families and staff were provided these four options to rank.

There were 461 respondents.

Option 1:

No reconfiguration -- this is the only option that does not require amending the Regional Agreement

Option 2:

“Redistrict” some Harwich students to CES

Option 3:

Create a new elementary system with “upper” and “lower” elementary schools

Option 4:

House all Monomoy elementary students “under one roof” (FY25 or beyond)

Monomoy Staff

Staff from both elementary schools favored enhanced peer collaboration and support by forming “upper” and “lower” elementary schools, where all teachers of the same grade level are located in the same building -- this is consistent with Monomoy staff preference in the 2017 survey.

Monomoy staff clearly wanted to see some change in elementary configuration. CES staff were far less likely to show preference for all elementary students being educated at HES.

Color-coding: the “green zone” reflects the top choice. The “red zone” is the least favorite choice. The “yellow zone” may be a middle ground around which consensus could be found.

CES Teacher/Staff Responses

		No Change	Re-district	Upper/Lower	One Building
CES Staff	37				
	First Choice	2	13	21	1
	Second Choice	8	17	8	6
	Third Choice	13	7	5	15
Fourth Choice	14	0	3	15	

HES Teacher/Staff Responses

		No Change	Re-district	Upper/Lower	One Building
HES Staff	57				
	First Choice	5	4	33	16
	Second Choice	6	25	8	18
	Third Choice	20	21	8	13
Fourth Choice	26	7	8	10	

Chatham Parents

Chatham parents least liked the option of all elementary children being educated under one roof at HES.

The Chatham parents most preferred choice shifted from no change in the 2017 survey to the option of redistricting some Harwich children to CES in 2020.

Chatham Parent Responses

			No Change	Re-district	Upper/Lower	One Building
CES Parents	73	First Choice	27	37	21	10
HES Choice Parents	3	Second Choice	19	40	27	10
Not Yet CES Parents	<u>19</u>	Third Choice	21	13	36	23
Total	95	Fourth Choice	28	5	11	52

Note: a few parents listed multiple fourth choices.

Harwich Parents

Harwich parents went in the complete opposite direction, favoring having all Monomoy elementary children educated under one roof at HES.

Harwich parents least liked the option of no change, followed closely by the option of redistricting.

Harwich Parent Responses

			No Change	Re-district	Upper/Lower	One Building
CES Choice Parents	16	First Choice	50	29	59	111
HES Choice Parents	210	Second Choice	44	77	72	48
Not Yet ^{HES} Parents	<u>15</u>	Third Choice	70	70	68	47
Total	241	Fourth Choice	77	65	42	35

Note: a few parents listed multiple fourth choices.

School Choice Parents

Parents of school choice students had similar preferences as the Harwich parents, favoring having all elementary children educated in one building at HES, followed closely with the formation of “upper” and “lower” schools.

They least preferred no change and were not fond of the redistricting option either.

School Choice Parent Responses

		No Change	Re-district	Upper/Lower	One Building
CES Choice Parents	5	5	7	9	10
HES Choice Parents	<u>26</u>	6	7	9	9
Total	31	5	14	7	8
		15	3	6	4

Note: a few parents listed multiple fourth choices.

How to remedy one school potentially becoming “too small”

Any change to the elementary school configuration would require amending the Regional Agreement.

Amending the Regional Agreement would require support of the Selectmen in both towns and approval of voters at both Town Meetings.

The School Committee has a 2020-2021 goal to establish, organize, and lead a visioning session and/or community forum that includes representative stakeholders from Harwich and Chatham to discuss an elementary developmental program. This process has already begun.

Questions?

CONSENT AGENDA

HARWICH HOUSING COMMITTEE

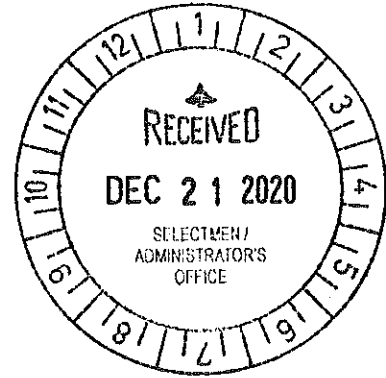
Town Hall

Board of Selectmen

Town of Harwich

732 Main Street, Harwich Ma. 02645

December 12, 2020



Board of Selectmen

I recommend that Meg Patterson member and Secretary of the Harwich Housing Committee be removed from the committee. Ms Patterson has been absent from numerous meetings without cause. All attempts to contact her have failed (both through emails and telephone calls).

Respectfully


Arthur F. Bodin

Harwich Housing Committee - Chairmen

NEW BUSINESS

Town of Harwich
Harbormaster's Office
715 Main Street – PO Box 207
Harwich, MA 02646
Phone (508) 430-7532
Fax (508) 430-7535

Memo

To: Chairman, Board of Selectmen
Via: Joseph F. Powers, Interim Town Administrator
Chairman, Waterways Committee
From: John C. Rendon, Harbormaster 
Date: December 23, 2020
Subject: Mooring Servicing Agent License Agreement

Ref: (a) Harbor Management Plan

I recommend Board of Selectmen approval of the attached three-year License Agreements for the following Mooring Servicing Agents:

- Allen Harbor Marine Service Inc., servicing Allen Harbor mooring field.
- Harwich Port Boat Yard Inc., servicing Wychmere Inner and Outer Harbor mooring fields
- AGL Mooring & Dock Co., servicing Round Cove, Pleasant Bay, and Herring River mooring fields

A two-week public notice was advertised in the Cape Cod Chronicle soliciting individuals, corporations or business entities interested in performing mooring services in the Town of Harwich; there were no competing bids. All of the above listed Mooring Servicing Agents have previously performed the required mooring services and inspections for the Town of Harwich as outlined in reference (a).

Applications from the recommended Mooring Servicing Agents have been reviewed by the Waterways Committee and the committee unanimously supports the award of a three-year License Agreement. The proposed License Agreement has been reviewed and approved as to form by Town Counsel.

Please let me know if you any questions or concerns. Thank you.

- Encl: (1) License Agreement, Allen Harbor Marine Service Inc. with attached application and required Certificate of Liability Insurance
(2) License Agreement, Harwich Port Boat Yard Inc. with attached application and required Certificate of Liability Insurance
(3) License Agreement, AGL Mooring & Dock Co. with attached application and required Certificate of Liability Insurance

Town of Harwich
License Agreement
Mooring Services

This License Agreement (this "License") is executed this ____ day of _____, 2021 by and between the Town of Harwich, acting by and through its Board of Selectmen (hereinafter referred to as the "Town") and **Allen Harbor Marine Service, Inc.**, having an address of 335 Lower County Road, Harwich Port, MA 02646, (the "Licensee").

Whereas, the Town has adopted a Harbor Management Plan (the "Plan") the purpose of which is to promote the public safety; define proper harbor area uses; and, promote mariner awareness of all Town By-laws and Harwich Harbor Rules and Regulations; and,

Whereas, pursuant to the Plan, "Mooring Servicing Fields" have been created within Town of Harwich Harbor and said "Mooring Servicing Fields" are to be assigned to a "Mooring Services Agent"; and

Whereas, pursuant to the Plan, a "Mooring Services Agent" must possess adequate marine liability insurance as well as the equipment necessary to retrieve, inspect, repair, upgrade and replace individual moorings within an assigned "Mooring Services Field; and

Whereas, further pursuant to the Plan, the Town's Harbormaster retains authority to manage all mooring activities, permits, inspections and fees even when a "Mooring Servicing Agent has primary responsibility and liability for the management of a "Mooring Servicing Field"; and,

Whereas the Licensee is an individual, corporation or other entity in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use; and,

Whereas, the Licensee possesses the marine insurance, facilities, inventory, equipment and staffing specified in Section 3.12 of the Plan entitled "Mooring Servicing Agent Requirements," which is attached hereto as Exhibit 1 and incorporated by reference herein; and

Whereas, the Town is willing to grant the Licensee access to the Town's "Mooring Servicing Fields" in order to perform the mooring servicing activities required under the Plan as a Licensee. The Licensee shall perform such mooring servicing activities as an independent contractor, as is not an employee of the Town.

Now, therefore, the Town hereby grants by License to the Licensee the right to enter and use that Mooring Servicing Field designated herein as the "Premises" subject to the following terms and conditions.

I. PREMISES

A. The Premises to which this License shall apply shall be the **Allen Harbor Mooring Field** as shown on the map in Attachment A

B. It is the intention of the Town to provide continuing access and use of the Premises to the Licensee. It is not anticipated that relocation of the Premises will be necessary during the term of this License. However, the Town expressly reserves the right to relocate the Premises as may be necessary to effectuate the purposes of the Plan. The Licensee agrees to make any such relocation within the time frame stated by the Town in a written notice designating the relocation of the Premises.

C. The Town shall consult with the Licensee in advance of any relocation of the Premises at least thirty (30) days prior to the proposed effective date of relocation, and shall provide written notice of the new location of the Premises at least ten (10) days in advance of the effective date of the relocation.

II. USE, PURPOSE, TERM

Entry and use of the Premises are limited as herein defined.

A. Entry upon and use of the Premises is specifically but not exclusively granted to the Licensee, its contractors, agents, representatives, employees, and invitees solely for the purposes of providing mooring services consistent with the Plan, and Licensee further acknowledges that no use shall be made of the Premises which will be unlawful, improper, offensive, or contrary to any law or any municipal by-law or regulation in force in the Town.

B. The Licensee shall have control over his/her mooring servicing operations during the term of this License. Licensee agrees, however, to comply with the directions of Town Harbormaster so as to assure that all of its mooring servicing operations are conducted safely and in manner consistent with the Plan.

C. The Licensee hereby covenants and agrees that during the term of this License it shall comply with all of the "Mooring Servicing Agents Requirements" set forth in Section 3.12 of the Plan, which has been attached hereto and incorporated by reference herein as Exhibit 1. The Licensee further agrees that at all times it shall possess and maintain all of the implements, facilities, equipment, inventory and qualified staffing necessary to provide daily monitoring of its Mooring Servicing Field and perform any and all mooring related functions within said field twenty four (24) hours a day, seven (7) days a week, including but not limited to, repair and retrieval of lost tackle, storm preparation and emergency services. The Licensee further agrees that during the term of this License, it shall maintain the clerical capability necessary to process mooring applications, conduct inspections, and support the issuance of mooring stickers and tags in cooperation with the Town's Harbormaster.

Licensee shall retain 100% of the revenues derived from mooring servicing it provides within the Premises.

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition for the purpose of this License, and that the Town has made no representation or warranty regarding the Premises or any of its facilities for the purposes intended by the Licensee.

Such entry and use by the Licensee shall be exercised from the date of the execution of this License and shall continue through **12/31/23** subject to the Termination provisions set forth in Section VI below. On an annual basis the Town shall review the License to ensure

that the Licensee is in performance of all of the obligations and covenants set forth in the License to the reasonable satisfaction of the Town. The provisions of Section V shall further limit such entry and use.

III. CONSIDERATION

The consideration for this License shall be for the period January 1st through December 31st of the calendar year for a total annual fee of \$200 per mooring field paid to the Town no later than March 1st of each year. Licensee acknowledges that said License Fee shall be due and payable regardless of the revenues Licensee derives from the exercise of its rights under this License. Consideration shall also include the payment of all costs and expenses associated with the exercise of the rights granted hereunder not otherwise provided for herein, together with the observation and performance by the Licensee of all the obligations and covenants set forth within this License to the reasonable satisfaction of the Town.

IV. INDEMNIFICATION AND INSURANCE

The Licensee agrees to indemnify, defend and hold harmless the Town from and against any and all claims, demands, suits, actions, costs, judgments, whatsoever, including reasonable attorney's fees, which may be imposed upon, incurred by, or asserted against the Town by reason of (a) any failure on the part of the Licensee to comply with any covenant required to be performed or complied with by Licensee under this License, or (b) for the death, injury or property damage suffered by any person sustained or occurring on the Premises on account of or based upon the act, omission, fault, negligence or misconduct of the Licensee, or (c) for the death, injury or property damage suffered by any person sustained or occurring on land outside the Premises and related to the activities of the Licensee upon said Premises, or (d) for actions in trespass against the Town and/ or Licensee brought by a property owner abutting the Premises or any other person having any right, title or interest in the Premises locus.

The Licensee shall maintain general liability and marine and other insurance, including coverage for bodily injury, wrongful death and property damage, all in amounts reasonably acceptable to the Town and in an amount sufficient to support the obligations of the Licensee under the terms of this License and as stated in Exhibit 2, which is attached hereto and incorporated by reference herein. The Licensee will provide the Town with certificates of insurance, naming the Town as an additional insured, and evidencing that the Licensee's insurance is in force and that such insurance shall not be canceled or materially changed without giving the Town at least sixty (60) days written notice. Licensee shall maintain such insurance continually throughout the duration of this License and shall provide the Town with evidence of renewal of such coverage at least thirty days prior to the expiration of any current coverage.

V. CONDUCT

During the exercise of the rights hereby granted, the Licensee shall at all times conduct itself so as not to unreasonably interfere with the Town's use of the Premises, and shall observe and obey directives of the Town and its duly designated representatives, as well as all other applicable laws, statutes, ordinances, regulations and permitting or licensing requirements. The

Licensee shall notify the Town orally and in writing to the Town Administrator and the Town Harbormaster prior to entering the Premises to commence activities under this License and shall coordinate his / her use of the Premises on a daily basis with the Town Harbormaster. Nothing in this Agreement shall be construed as requiring the Town to maintain the Premises or any of its facilities in any manner or to supply or pay for any utilities other than as expressly provided herein.

VI. TERMINATION AND MODIFICATION

This License shall be revocable by either party upon written notice of revocation at least sixty (60) days prior to the termination date stated within said notice, except that the License shall be revocable by either party for violation of the terms of this License upon notice of revocation at least seven (7) days prior to the termination date stated within said notice for violation of the terms of this License. The Town may revoke this License upon such prior oral or written notice as is reasonable under the circumstances, in an emergency or if the Town discontinues the use of the licensed property as a municipal harbor, or if the Licensee fails to engage in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use, or fails to maintain upon its business premises the implements, facilities, equipment, staffing or professional capacities required by Plan, or if the Licensee violates any regulation set forth in the Plan as currently enacted or as may from time to time be amended or any other regulation which shall govern the conduct of the Licensee, or if the Licensee at any time conducts its mooring servicing business in a manner considered by the Town, in its sole discretion, to be improper.

In the event that this License is terminated by revocation of either party pursuant to this section, then the Licensee, at its own expense, shall remove all its implements, facilities, apparatus, equipment and property from the Premises. This obligation shall survive the termination of this License.

VII. MODIFICATIONS and AMENDMENTS

Modifications or amendments to this License shall be in writing and duly executed by both parties hereto to be effective.

VIII. NOTICE

For purposes of this License, the parties shall be deemed duly notified in accordance with the terms and provisions hereof, if written notices are mailed to the following addresses:

Licensee: Allen Harbor Marine Service, Inc. 335 Lower County Road, Harwich Port
MA 02646

Town: Harwich Town Hall, 732 Main Street Harwich, MA 02645,
Attn: Town Administrator

These addresses are subject to change, and the parties hereto agree to inform each other of such change as soon as practicable.

IX. NO ESTATE CREATED

This License shall not be construed as creating or vesting in the Licensee any estate in the Premises, but only the limited right of use as hereinabove stated.

X. EXHIBITS and ATTACHMENTS

Any and all exhibits and attachments referenced herein or attached hereto are duly incorporated within this agreement.

Attachment A – Allen Harbor Mooring Field



IN WITNESS WHEREOF, the parties hereto have caused this License Agreement to be executed as a sealed instrument and signed in duplicate by their duly authorized representatives, on the date first indicated above.

TOWN OF HARWICH BOARD OF SELECTMEN

Date: _____

LICENSEE:

Date: _____

Town of Harwich Mooring Servicing Agent Application Form

Application Date: October 26, 2020

New

X Renewal

Business Name: Allen Harbor Marine Service, Inc.

Business Principal: Craig M. LeBlanc

Business Address: 335 Lower County Road

Harwich Port, MA 02646

Mailing Address: P.O. Box 445

(If different from above)

F.I.D. Number: 04-2242320

Telephone Number: 508-432-0353

FAX Number: 508-432-0487

Pager Number:

Mobile/Cell Number: 508-294-5399

Emergency Number: 508-294-5399, 508-394-8770

(24 Hour)

Please select the areas of Harwich for which you are applying to become the Mooring Servicing Agent.

Check all that apply:

- Round Cove
- Red River
- Wychmere Outer Harbor
- Wychmere Inner Harbor
- Herring River
- Allen Harbor, incl. Oyster Creek
- Pleasant Bay

Please answer the following questions pertaining to your qualifications to be a Mooring Servicing Agent, as required in the Town of Harwich Harbor Management Plan, Section 3.12. Please attach separate sheets for your answers, as needed. Also, please feel free to provide any plans, photographs, or other illustrative materials you may think are of benefit to this application.

1.) Provide evidence of current, or ability to obtain, sufficient insurance as shown in attached.

Note: Prior to any individual, corporation or other business entity commencing with the performance of duties as a Mooring Servicing Agent, an insurance policy must be in place and certificate of insurance for the same must be filed with the Town of Harwich.)

Our Certificate of Insurance is attached.

2.) Do you currently carry Worker's Compensation Insurance?

Yes Carrier: Hanover Insurance Group Policy # WHN-D637880-01

3.) Provide a detailed description of all on site equipment to accomplish the task of Mooring Servicing Agent.

Allen Harbor Marine has the following equipment at its Lower County Road facility:

- A Mooring skiff work boat powered by a 60hp outboard to haul and set service moorings.
- A Caterpillar forklift with 18,000-lb. capacity to haul moorings to shore and to haul boats as conditions warrant.
- Allen Harbor Marine has the following equipment at its Lower County Road Four (4) yard trucks to transport moorings and related hardware, as needed.
- Three (3) pressure washers to clean tackle.
- Hydraulic and roller trailers capable of hauling boats up to 33 feet long and 4-foot draft.

4. Describe plans to stock sufficient inventory to service moorings.

Allen Harbor Marine is a full-service marine facility with an extensive marine parts inventory. Included in this inventory is a supply of mushrooms, chains, lines, shackles, mooring balls, thimbles, chafe-guard, wire ties, paint and miscellaneous hardware. We also have next-day availability from our suppliers, should the situation arise.

5. Describe plans for the daily monitoring of the mooring field(s) assigned and reaction time to the mooring area from home or office.

Allen Harbor Marine staff will conduct a visual inspection of the boats in the mooring field on a daily basis and more frequently as conditions warrant. This inspection will seek to insure that the boats are not taking water, not coming in contact with each other, dragging their mooring or chafing their pennant lines. Staff will also conduct periodic verification of transom stickers. In addition Allen Harbor Marine provides a launch service, enabling personnel to visually monitor the status of the mooring field continually throughout the day. Reaction time to the mooring is immediate from the office and within ½ hour from home.

6.) Provide a list of all staff names, years experience servicing moorings and related experience(s) which demonstrate your/their ability to perform the duties of Mooring Servicing Agent.

Allen Harbor Marine has provided services for the moorings in Allen Harbor for approximately 80 years as an integral part of our business. Consequently, most of the service personnel at the company have significant experience in all aspects of mooring service and maintenance. Allen Harbor Marine employs four (4) licensed launch operators.

<u>Key Personnel, Name</u>	<u>Position</u>	<u>Years Experience</u>
Craig LeBlanc	Owner	22
Eric Awalt	Service Technician	37
Garry Ormsby	Service Technician	34
Roger Peterson	Parts Manager	16

- 7.) **Include a description of a plan for storm preparation and emergencies including, but not limited to, the hours that staff members will be available to perform duties.**

In the event of a significant storm or other emergency, all resources of Allen Harbor Marine are available to perform tasks necessary for adequate preparation and clean up. All employees are "on call" during storm situations. This includes approximately ten (10) service related employees who will monitor the moorings and the respective boats, check all lines, cleats, bow yes, canvas and hardware and, when appropriate, will double up lines and pump out any water. If necessary, we have the capacity to haul the boats and secure them on land. Allen Harbor Marine is fully staffed from 8:00am – 4:30pm and management is available 24 hours by cell phone.

- 8.) **Provide a business plan to provide complete mooring services including, but not limited to, subcontracting of services when necessary.**

Allen Harbor Marine offers service packages for mooring customers ranging from basic setting and hauling of mooring tackle to more comprehensive packages that include leasing of mooring tackle, repairs to mooring tackle, maintenance, storage, launch service, use of the Allen Harbor Marine docks, providing ice, fresh water, fuel, etc.

- 9.) **Provide a list of all clerical or support staff names and describe their ability regarding the processing of applications, performance of inspections and providing support for the issuance of stickers and mooring tags.**

The administration staff involved in the mooring service activities has been providing related services for more than a decade. The administrative staff will generate invoices and collect fees for the inspections, tackle, rental, etc. and will communicate regularly with the Harbormaster's office regarding mooring assignments and points of interest.

- 10.) **Does the company have access to a certified diver to perform repairs and/or retrieve lost tackle?**

Yes we do.

- 11.) **Are any mooring permits within the Town of Harwich currently held by the applicant? If so, please list.**

The following mooring permits are held by Allen Harbor Marine Service, Inc.:
Boatyard Working Moorings: 302, 303, 311, 318
Boatyard Transient Moorings: 307, 316, 319, 323, 325, 326

12. A) **Has the applicant served as a Mooring Servicing Agent in any other Town(s)?**

No we have not served as a Mooring Servicing Agent in any other town(s).

12. B) **Has the applicant served as a Mooring Servicing Agent in Harwich?**

Yes we have served as Mooring Servicing Agent in Harwich from 2002 - Present.

- 13.) **Describe what method of mooring storage you will provide and how it will be controlled.**

The Company has ample space for storing moorings and tackle in our secure Lower County Road facility which is illuminated at night.

- 14.) **Provide a plan for placement of moorings with consideration for the draft and length of vessels, protection of channels and access to public/private docks and landings.**

Allen Harbor Marine employees navigate the waters of Allen Harbor and Oyster Creek on a daily basis. They are familiar with the depth variations and channels and have managed moorings in the subject areas for many years with no complaints or issues arising from improper placement. The Company will work closely with the Harbormaster to insure proper placement of all moorings.

- 15.) **If you are planning to use a Town landing as sole access for this service, describe how you intend to manage around other uses of that site.**

We do not intend to use the Town Landings to any great extent. In Allen Harbor, we use our own facilities.

- 16.) **Provide a proposed fee schedule* which includes, but is not limited to, fees for the following:**

Mooring inspections (per anchor) \$20.00
Mooring installation (per pound) \$90.00 all sizes
Mooring removal (per pound) \$90.00 all sizes (Includes pressure washing of tackle)
Mooring storage \$15.00
Mooring maintenance (such as hawsers, chain, ground tackle, etc.) (per hour) \$90.00 plus materials
Diving charges (per hour, minimum) \$150.00/hour. Minimum 1 hour charge
Handling Helix moorings N/A
Pumping charges (per hour) N/A

***The fee schedule is seen as an important value added item in general for the mooring permit customers and represents an important factor in rating bid applications.**

- 17.) **Please provide a resume listing any other business ventures in which you have been involved and for how long.**

We are not involved with any other business ventures.

Under the penalties of perjury, I declare that the information I have provided is true to the best of my knowledge.

Craig Jessem
Signed

October 26, 2020
Date

Reviewed by Harwich Harbormaster [Signature] 11/12/2020 Date

Reviewed by Waterways Committee [Signature] 12/18/20 Date

Reviewed by Board of Selectman _____ Date

Town of Harwich
License Agreement
Mooring Services

This License Agreement (this "License") is executed this ____ day of _____, 2021 by and between the Town of Harwich, acting by and through its Board of Selectmen (hereinafter referred to as the "Town") and **Harwich Port Boat Yard Inc.**, having an address of 4 Harbor Road P.O. Box 218 Harwich Port, MA 02646 (the "Licensee").

Whereas, the Town has adopted a Harbor Management Plan (the "Plan") the purpose of which is to promote the public safety; define proper harbor area uses; and, promote mariner awareness of all Town By-laws and Harwich Harbor Rules and Regulations; and,

Whereas, pursuant to the Plan, "Mooring Servicing Fields" have been created within Town of Harwich Harbor and said "Mooring Servicing Fields" are to be assigned to a "Mooring Services Agent"; and

Whereas, pursuant to the Plan, a "Mooring Services Agent" must possess adequate marine liability insurance as well as the equipment necessary to retrieve, inspect, repair, upgrade and replace individual moorings within an assigned "Mooring Services Field; and

Whereas, further pursuant to the Plan, the Town's Harbormaster retains authority to manage all mooring activities, permits, inspections and fees even when a "Mooring Servicing Agent has primary responsibility and liability for the management of a "Mooring Servicing Field"; and,

Whereas the Licensee is an individual, corporation or other entity in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use; and,

Whereas, the Licensee possesses the marine insurance, facilities, inventory, equipment and staffing specified in Section 3.12 of the Plan entitled "Mooring Servicing Agent Requirements," which is attached hereto as Exhibit 1 and incorporated by reference herein; and

Whereas, the Town is willing to grant the Licensee access to the Town's "Mooring Servicing Fields" in order to perform the mooring servicing activities required under the Plan as a Licensee. The Licensee shall perform such mooring servicing activities as an independent contractor, as is not an employee of the Town.

Now, therefore, the Town hereby grants by License to the Licensee the right to enter and use that Mooring Servicing Field designated herein as the "Premises" subject to the following terms and conditions.

I. PREMISES

A. The Premises to which this License shall apply shall be the **Wychmere Inner and Outer Harbor Mooring Fields** as shown on the map in Attachment A.

B. It is the intention of the Town to provide continuing access and use of the Premises to the Licensee. It is not anticipated that relocation of the Premises will be necessary during the term of this License. However, the Town expressly reserves the right to relocate the Premises as may be necessary to effectuate the purposes of the Plan. The Licensee agrees to make any such relocation within the time frame stated by the Town in a written notice designating the relocation of the Premises.

C. The Town shall consult with the Licensee in advance of any relocation of the Premises at least thirty (30) days prior to the proposed effective date of relocation, and shall provide written notice of the new location of the Premises at least ten (10) days in advance of the effective date of the relocation.

II. USE, PURPOSE, TERM

Entry and use of the Premises are limited as herein defined.

A. Entry upon and use of the Premises is specifically but not exclusively granted to the Licensee, its contractors, agents, representatives, employees, and invitees solely for the purposes of providing mooring services consistent with the Plan, and Licensee further acknowledges that no use shall be made of the Premises which will be unlawful, improper, offensive, or contrary to any law or any municipal by-law or regulation in force in the Town.

B. The Licensee shall have control over his/her mooring servicing operations during the term of this License. Licensee agrees, however, to comply with the directions of Town Harbormaster so as to assure that all of its mooring servicing operations are conducted safely and in manner consistent with the Plan.

C. The Licensee hereby covenants and agrees that during the term of this License it shall comply with all of the "Mooring Servicing Agents Requirements" set forth in Section 3.12 of the Plan, which has been attached hereto and incorporated by reference herein as Exhibit 1. The Licensee further agrees that at all times it shall possess and maintain all of the implements, facilities, equipment, inventory and qualified staffing necessary to provide daily monitoring of its Mooring Servicing Field and perform any and all mooring related functions within said field twenty four (24) hours a day, seven (7) days a week, including but not limited to, repair and retrieval of lost tackle, storm preparation and emergency services. The Licensee further agrees that during the term of this License, it shall maintain the clerical capability necessary to process mooring applications, conduct inspections, and support the issuance of mooring stickers and tags in cooperation with the Town's Harbormaster.

Licensee shall retain 100% of the revenues derived from mooring servicing it provides within the Premises.

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition for the purpose of this License, and that the Town has made no representation or warranty regarding the Premises or any of its facilities for the purposes intended by the Licensee.

Such entry and use by the Licensee shall be exercised from the date of the execution of this License and shall continue through **12/31/23** subject to the Termination provisions set forth in Section VI below. On an annual basis the Town shall review the License to ensure

that the Licensee is in performance of all of the obligations and covenants set forth in the License to the reasonable satisfaction of the Town. The provisions of Section V shall further limit such entry and use.

III. CONSIDERATION

The consideration for this License shall be for the period January 1st through December 31st of the calendar year for a total annual fee of \$200 per mooring field paid to the Town no later than March 1st of each year. Licensee acknowledges that said License Fee shall be due and payable regardless of the revenues Licensee derives from the exercise of its rights under this License. Consideration shall also include the payment of all costs and expenses associated with the exercise of the rights granted hereunder not otherwise provided for herein, together with the observation and performance by the Licensee of all the obligations and covenants set forth within this License to the reasonable satisfaction of the Town.

IV. INDEMNIFICATION AND INSURANCE

The Licensee agrees to indemnify, defend and hold harmless the Town from and against any and all claims, demands, suits, actions, costs, judgments, whatsoever, including reasonable attorney's fees, which may be imposed upon, incurred by, or asserted against the Town by reason of (a) any failure on the part of the Licensee to comply with any covenant required to be performed or complied with by Licensee under this License, or (b) for the death, injury or property damage suffered by any person sustained or occurring on the Premises on account of or based upon the act, omission, fault, negligence or misconduct of the Licensee, or (c) for the death, injury or property damage suffered by any person sustained or occurring on land outside the Premises and related to the activities of the Licensee upon said Premises, or (d) for actions in trespass against the Town and/ or Licensee brought by a property owner abutting the Premises or any other person having any right, title or interest in the Premises locus.

The Licensee shall maintain general liability and marine and other insurance, including coverage for bodily injury, wrongful death and property damage, all in amounts reasonably acceptable to the Town and in an amount sufficient to support the obligations of the Licensee under the terms of this License and as stated in Exhibit 2, which is attached hereto and incorporated by reference herein. The Licensee will provide the Town with certificates of insurance, naming the Town as an additional insured, and evidencing that the Licensee's insurance is in force and that such insurance shall not be canceled or materially changed without giving the Town at least sixty (60) days written notice. Licensee shall maintain such insurance continually throughout the duration of this License and shall provide the Town with evidence of renewal of such coverage at least thirty days prior to the expiration of any current coverage.

V. CONDUCT

During the exercise of the rights hereby granted, the Licensee shall at all times conduct itself so as not to unreasonably interfere with the Town's use of the Premises, and shall observe and obey directives of the Town and its duly designated representatives, as well as all other applicable laws, statutes, ordinances, regulations and permitting or licensing requirements. The

Licensee shall notify the Town orally and in writing to the Town Administrator and the Town Harbormaster prior to entering the Premises to commence activities under this License and shall coordinate his / her use of the Premises on a daily basis with the Town Harbormaster. Nothing in this Agreement shall be construed as requiring the Town to maintain the Premises or any of its facilities in any manner or to supply or pay for any utilities other than as expressly provided herein.

VI. TERMINATION AND MODIFICATION

This License shall be revocable by either party upon written notice of revocation at least sixty (60) days prior to the termination date stated within said notice, except that the License shall be revocable by either party for violation of the terms of this License upon notice of revocation at least seven (7) days prior to the termination date stated within said notice for violation of the terms of this License. The Town may revoke this License upon such prior oral or written notice as is reasonable under the circumstances, in an emergency or if the Town discontinues the use of the licensed property as a municipal harbor, or if the Licensee fails to engage in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use, or fails to maintain upon its business premises the implements, facilities, equipment, staffing or professional capacities required by Plan, or if the Licensee violates any regulation set forth in the Plan as currently enacted or as may from time to time be amended or any other regulation which shall govern the conduct of the Licensee, or if the Licensee at any time conducts its mooring servicing business in a manner considered by the Town, in its sole discretion, to be improper.

In the event that this License is terminated by revocation of either party pursuant to this section, then the Licensee, at its own expense, shall remove all its implements, facilities, apparatus, equipment and property from the Premises. This obligation shall survive the termination of this License.

VII. MODIFICATIONS and AMENDMENTS

Modifications or amendments to this License shall be in writing and duly executed by both parties hereto to be effective.

VIII. NOTICE

For purposes of this License, the parties shall be deemed duly notified in accordance with the terms and provisions hereof, if written notices are mailed to the following addresses:

Licensee: Harwich Port Boat Yard Inc. 4 Harbor Road P.O. Box 218, Harwich Port
MA 02646

Town: Harwich Town Hall, 732 Main Street Harwich, MA 02645,
Attn: Town Administrator

These addresses are subject to change, and the parties hereto agree to inform each other of such change as soon as practicable.

IX. NO ESTATE CREATED

This License shall not be construed as creating or vesting in the Licensee any estate in the Premises, but only the limited right of use as hereinabove stated.

X. EXHIBITS and ATTACHMENTS

Any and all exhibits and attachments referenced herein or attached hereto are duly incorporated within this agreement.

Attachment A

Wychmere Inner Harbor Mooring Field



Wychmere Outer Harbor Mooring Field



IN WITNESS WHEREOF, the parties hereto have caused this License Agreement to be executed as a sealed instrument and signed in duplicate by their duly authorized representatives, on the date first indicated above.

TOWN OF HARWICH BOARD OF SELECTMEN

Date: _____

LICENSEE:

Date: _____

Town of Harwich Mooring Servicing Agent Application Form

Application Date: 10/27/20

New
Renewal

Business Name: Harwich Port Boat Yard

Business Principal: John D. Cur

Business Address: 4 Harbor Rd
P. O. Box 218
Harwich Port, MA 02646

Mailing Address: _____
(If different from above)
F.I.D. Number: 201-804-346

Telephone Number: 508-432-1322

FAX Number: 508-430-0742

Pager Number: _____

Mobile/Cell Number: John D. 508-509-5105 / Dan 508-237-9072

Emergency Number: 508-432-2467
(24 Hour)

Please select the areas of Harwich for which you are applying to become the Mooring Servicing Agent.

Check all that apply:

- Round Cove
- Wychmere Outer Harbor
- Wychmere Inner Harbor
- Herring River
- Allen Harbor, incl. Oyster Creek
- Pleasant Bay

Please answer the following questions pertaining to your qualifications to be a Mooring Servicing Agent, as required in the Town of Harwich Harbor Management Plan, Section 3.12. Please attach separate sheets for your answers, as needed. Also, please feel free to provide any plans, photographs, or other illustrative materials you may think are of benefit to this application.

1.) Provide evidence of current, or ability to obtain, sufficient insurance as shown in attached.

Note: Prior to any individual, corporation or other business entity commencing with the performance of duties as a Mooring Servicing Agent, an insurance policy must be in place and certificate of insurance for the same must be filed with the Town of Harwich.)

2.) Do you currently carry Worker's Compensation Insurance?

Yes # No

3.) Provide a detailed description of all on site equipment to accomplish the task of Mooring Servicing Agent. See attached

4.) Describe plans to stock sufficient inventory to service moorings. See attached

5.) Describe plans for the daily monitoring of the mooring field(s) assigned and reaction time to the mooring area from home or office. *See attached*

6.) Provide a list of all staff names, years experience servicing moorings and related experience(s) which demonstrate your/their ability to perform the duties of Mooring Servicing Agent. *See attached*

7.) Include a description of a plan for storm preparation and emergencies including, but not limited to, the hours that staff members will be available to perform duties. *see attached*

8.) Provide a business plan to provide complete mooring services including, but not limited to, subcontracting of services when necessary. *see attached*

9.) Provide a list of all clerical or support staff names and describe their ability regarding the processing of applications, performance of inspections and providing support for the issuance of stickers and mooring tags. *see attached*

10.) Does the company have access to a certified diver to perform repairs and/or retrieve lost tackle?

Yes # No

11.) Are any mooring permits within the Town of Harwich currently held by the applicant? If so, please list. *see attached*

12. A) Has the applicant served as a Mooring Servicing Agent in any other Town(s)?

Yes # No

If yes, please list and provide reference contacts.

12. B) Has the applicant served as a Mooring Servicing Agent in Harwich?

If yes, please list dates. *yes. see attached*

13.) Describe what method of mooring storage you will provide and how it will be controlled. *see attached*

14.) Provide a plan for placement of moorings with consideration for the draft and length of vessels, protection of channels and access to public/private docks and landings. *see attached*

15.) If you are planning to use a Town landing as sole access for this service, describe how you intend to manage around other uses of that site. *see attached*

16.) Provide a proposed fee schedule which includes, but is not limited to, fees for the following:

Mooring inspections (per anchor)

Mooring installation (per pound)

Mooring removal (per pound)

Mooring storage

Mooring maintenance (such as hawsers, chain, ground tackle, etc.) (per hour)

Diving charges (per hour, minimum)

Handling Helix moorings

Pumping charges (per hour)

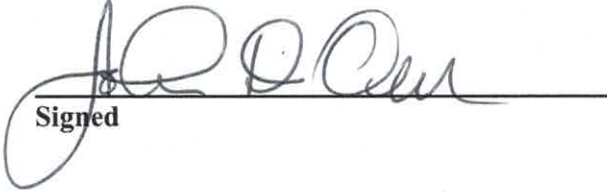
***The fee schedule is seen as an important value added item in general for the mooring permit customers and represents an important factor in rating bid applications.**

See attached

17.) **Please provide a resume listing any other business ventures in which you have been involved and for how long.**

See attached

Under the penalties of perjury, I declare that the information I have provided is true to the best of my knowledge.


Signed

10/27/20
Date

Reviewed by Harwich Harbormaster  11/12/2020 Date

Reviewed by Waterways Committee  02/16/20 Date

Reviewed by Board of Selectman _____ Date

Harwich Port Boat Yard, Inc. Application

1. Provide evidence of current, or ability to obtain, sufficient marine insurance, specifically:
 - A. A minimum of \$500,000 Marina Operators Legal Liability and Protection Indemnity

Yes-Copy Attached

2. Do you currently carry Worker's Compensation Insurance?

Yes-Copy Attached

3. Provide a detailed description of all on site equipment to accomplish the task of Mooring servicing Agent

16' x 10' Mooring Barge outfitted w/ crane and 5000 lb, winch powered by a Honda Engine w/ 85 watt alternator, 8 D 12 volt Battery. Barge powered by 25 HP outboard. Honda Powered Water Pump w/ 20 ft. / 2" hose.

16' Tow Boat powered by 20 HP Yamaha 4 stroke outboard.

16' Yard Skiff power by 90HP Two Stroke Johnson Outboard

Catapillar Fork Truck w/ 30,00 lb negative lift capacity

2 Trucks w/ Hydraulic Trailers Capable of hauling boats up to 34' with draft of 5.5' and 14,000 lb. capacity

Hostar trailer capable of hauling power boat to 45', sailboats to 40' and 50,000 lb capacity

**25' x 60' Mooring Storage Area – Lighted at Night
Located at our Facility at 4 harbor Road Harwich MA.**

**Will also have off-site equipment from R.B. Our, Co.
Generators, pumps, cranes, fork lifts etc...**

4. Describe plans to stock sufficient inventory to service moorings.

HPBY maintains a stock of various sized shackles, thimbles, barrels of chain, rope, premade pennants etc. We have a contract with Marine Supplier for overnight delivery of any additional equipment needed.

5. Describe plans for the daily monitoring of the mooring field(s) assigned and reaction time to the mooring area from home or office

Workers monitor the mooring field daily (“Daily Harbor Patrol”). Each morning the mooring field will be “scanned” for Entanglements, Boats Hitting, Boats sitting low in the water, chafe gear, fuel leaks, etc.

Traveling from office, Workers can reach any Wychmere Inner or Wychemere Outer Harbor mooring in 5-10 minutes. Traveling from their homes, Workers can be on site, in 10-15 minutes. John Our could travel from his home, to the Mooring fields, in less then 5 minutes.

6. Provide a list of all staff names, years of experience servicing moorings and related experience(s) which demonstrate your/their ability to perform the duties of Mooring Servicing Agent.

**Dan Lowery: 33 years of Boat Yard Experience
28 years Mooring Experience at Wychmere Harbor
All aspects of Mooring Service
Certified Diver**

**John Our: 42 years boating experience
Several years at Marine Construction
Salvage from boat to aircraft**

**John Molander: 32+ years mooring experience
Certified Diver
CPR instructor**

**Mike Joy: 24 year of Boat Yard Experience
Hauling/Launching, Repair
5 years mooring experience**

Zachary Volpecelli: 14 years Boat Yard Experience

7. Include a description of a plan for storm preparation and emergencies including, but not limited to, the hours that staff members will be available to perform duties.

Monitor weather for storm severity.

Ability to remove smaller boats with fork truck upon mooring permit holders' request

Ability to remove other boat with 3 hydraulic trailers upon request

Double up and/or lengthen mooring pennant line upon mooring permit holders' request

Use of "Sea Anchors" when/where applicable

Use of pumps for Boats taking on water

Employees are considered "On Call" during storms; emergency numbers will be posted

Upon mooring permit holders request, we will be able to utilize our ramp and the extra equipment to remove boats

8. Provide a business plan to provide complete mooring services including, but not limited to, subcontracting of services when necessary.

HPBY will offer a complete menu of Mooring Options.

Customers (Mooring Permit Holders) will have a variety of choices. From a "Complete Mooring Package", thru to an "Ala Carte" option, choosing only the service that they want. These options will be sent to all permit holders within the Wychmere Inner and Outer fields.

9. Provide a list of all clerical or support staff names and describe their ability regarding the processing of applications, performance of inspections and providing support for the issuance of stickers and mooring tags.

Barbara Our: Office Manager 14 year at HPBY

Assisted in the collection and sending application/inspection forms to the Town of Harwich.

Ryan Our: Office Assistant and Book Keeper, First year at HPBY

Completed current mooring service agent renewal permit applications for the Town of Harwich. The applications and checks were sent to HPBY and these were forwarded to the Harbormasters Office. Upon completion of Mooring Inspection by The Harbormasters Office the mooring stickers and tags were delivered to HPBY to be attached to the appropriate boat and Mooring. Except for sending out the original application, all other processes will be done in the same manner.

10. Does the company have access to a certified diver to perform repairs and /or retrieve lost tackle?

Dan Lowery - P.A.D.I Certified in 1988

John Molander - Certified

11. Are any mooring permits within the Town of Harwich currently held by the applicant? If so, please list.

Yes – Permits #1, #2, #17, #51, #62, #78, #201

12. Has the applicant served as a Mooring Servicing Agent in any other Town(s)?

A: No

B: Yes: Wychmere Inner Harbor 2008-2011, 2011-2014, 2014-2017, 2017-2020

Wychmere Outer Harbor 2008-2014, 2017-2020

13. Describe what method of mooring storage you will provide and how it will be controlled.

Mooring storage is always available in a specified area of our yard. The yard has night lighting. Mooring will be tagged and monitored throughout the off-season.

14. Provide a plan for placement of mooring with consideration for the draft and length of vessels, protection of channels and access to public/private docks and landings.

Moorings will be placed as defined by our experience in vessel type, size, draft, swing rate, prevailing winds and currents while allowing passage thru navigable channels, access to Town and Private docks and piers.

15. If you are planning to use a Town landing as sole access for this service, describe how you intend to manage around other uses of that site.

HPBY has its own facilities for its mooring services and would not use the Town Landings for mooring activities.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/16/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).


PRODUCER License # 1780862 HUB International New England 600 Longwater Drive Norwell, MA 02061-9146	CONTACT NAME: PHONE (A/C, No, Ext): (781) 792-3200	FAX (A/C, No): (781) 792-3400
	E-MAIL ADDRESS:	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED Harwich Port Boat Yard, Inc. P.O. Box 218 Harwich Port, MA 02646	INSURER A : Atlantic Specialty Ins. Co. 27154	
	INSURER B : Safety Indemnity Insurance Company 33618	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			B5JH54890	11/15/2020	11/15/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPI/OP AGG \$ 2,000,000 P&I \$ 1,000,000
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			TBD	11/15/2020	11/15/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			B5JH54891	11/15/2020	11/15/2021	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER Town of Harwich 209 Queen Anne Road Harwich, MA 02645	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
----------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Town of Harwich
License Agreement
Mooring Services

This License Agreement (this "License") is executed this ____ day of _____, 2021 by and between the Town of Harwich, acting by and through its Board of Selectmen (hereinafter referred to as the "Town") and **AGL Mooring & Dock Co.**, having an address of P.O. Box 808 Hyannis Port MA 02647 (the "Licensee").

Whereas, the Town has adopted a Harbor Management Plan (the "Plan") the purpose of which is to promote the public safety; define proper harbor area uses; and, promote mariner awareness of all Town By-laws and Harwich Harbor Rules and Regulations; and,

Whereas, pursuant to the Plan, "Mooring Servicing Fields" have been created within Town of Harwich Harbor and said "Mooring Servicing Fields" are to be assigned to a "Mooring Services Agent"; and

Whereas, pursuant to the Plan, a "Mooring Services Agent" must possess adequate marine liability insurance as well as the equipment necessary to retrieve, inspect, repair, upgrade and replace individual moorings within an assigned "Mooring Services Field; and

Whereas, further pursuant to the Plan, the Town's Harbormaster retains authority to manage all mooring activities, permits, inspections and fees even when a "Mooring Servicing Agent has primary responsibility and liability for the management of a "Mooring Servicing Field"; and,

Whereas the Licensee is an individual, corporation or other entity in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use; and,

Whereas, the Licensee possesses the marine insurance, facilities, inventory, equipment and staffing specified in Section 3.12 of the Plan entitled "Mooring Servicing Agent Requirements," which is attached hereto as Exhibit 1 and incorporated by reference herein; and

Whereas, the Town is willing to grant the Licensee access to the Town's "Mooring Servicing Fields" in order to perform the mooring servicing activities required under the Plan as a Licensee. The Licensee shall perform such mooring servicing activities as an independent contractor, as is not an employee of the Town.

Now, therefore, the Town hereby grants by License to the Licensee the right to enter and use that Mooring Servicing Field designated herein as the "Premises" subject to the following terms and conditions.

I. PREMISES

A. The Premises to which this License shall apply shall be the **Round Cove, Pleasant Bay, and Herring River Mooring Fields** as shown on the map in Attachment A.

B. It is the intention of the Town to provide continuing access and use of the Premises to the Licensee. It is not anticipated that relocation of the Premises will be necessary during the term of this License. However, the Town expressly reserves the right to relocate the Premises as may be necessary to effectuate the purposes of the Plan. The Licensee agrees to make any such relocation within the time frame stated by the Town in a written notice designating the relocation of the Premises.

C. The Town shall consult with the Licensee in advance of any relocation of the Premises at least thirty (30) days prior to the proposed effective date of relocation, and shall provide written notice of the new location of the Premises at least ten (10) days in advance of the effective date of the relocation.

II. USE, PURPOSE, TERM

Entry and use of the Premises are limited as herein defined.

A. Entry upon and use of the Premises is specifically but not exclusively granted to the Licensee, its contractors, agents, representatives, employees, and invitees solely for the purposes of providing mooring services consistent with the Plan, and Licensee further acknowledges that no use shall be made of the Premises which will be unlawful, improper, offensive, or contrary to any law or any municipal by-law or regulation in force in the Town.

B. The Licensee shall have control over his/her mooring servicing operations during the term of this License. Licensee agrees, however, to comply with the directions of Town Harbormaster so as to assure that all of its mooring servicing operations are conducted safely and in manner consistent with the Plan.

C. The Licensee hereby covenants and agrees that during the term of this License it shall comply with all of the "Mooring Servicing Agents Requirements" set forth in Section 3.12 of the Plan, which has been attached hereto and incorporated by reference herein as Exhibit 1. The Licensee further agrees that at all times it shall possess and maintain all of the implements, facilities, equipment, inventory and qualified staffing necessary to provide daily monitoring of its Mooring Servicing Field and perform any and all mooring related functions within said field twenty four (24) hours a day, seven (7) days a week, including but not limited to, repair and retrieval of lost tackle, storm preparation and emergency services. The Licensee further agrees that during the term of this License, it shall maintain the clerical capability necessary to process mooring applications, conduct inspections, and support the issuance of mooring stickers and tags in cooperation with the Town's Harbormaster.

Licensee shall retain 100% of the revenues derived from mooring servicing it provides within the Premises.

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition for the purpose of this License, and that the Town has made no representation or warranty regarding the Premises or any of its facilities for the purposes intended by the Licensee.

Such entry and use by the Licensee shall be exercised from the date of the execution of this License and shall continue through **12/31/23** subject to the Termination provisions set forth in Section VI below. On an annual basis the Town shall review the License to ensure

that the Licensee is in performance of all of the obligations and covenants set forth in the License to the reasonable satisfaction of the Town. The provisions of Section V shall further limit such entry and use.

III. CONSIDERATION

The consideration for this License shall be for the period January 1st through December 31st of the calendar year for a total annual fee of \$200 per mooring field paid to the Town no later than March 1st of each year. Licensee acknowledges that said License Fee shall be due and payable regardless of the revenues Licensee derives from the exercise of its rights under this License. Consideration shall also include the payment of all costs and expenses associated with the exercise of the rights granted hereunder not otherwise provided for herein, together with the observation and performance by the Licensee of all the obligations and covenants set forth within this License to the reasonable satisfaction of the Town.

IV. INDEMNIFICATION AND INSURANCE

The Licensee agrees to indemnify, defend and hold harmless the Town from and against any and all claims, demands, suits, actions, costs, judgments, whatsoever, including reasonable attorney's fees, which may be imposed upon, incurred by, or asserted against the Town by reason of (a) any failure on the part of the Licensee to comply with any covenant required to be performed or complied with by Licensee under this License, or (b) for the death, injury or property damage suffered by any person sustained or occurring on the Premises on account of or based upon the act, omission, fault, negligence or misconduct of the Licensee, or (c) for the death, injury or property damage suffered by any person sustained or occurring on land outside the Premises and related to the activities of the Licensee upon said Premises, or (d) for actions in trespass against the Town and/ or Licensee brought by a property owner abutting the Premises or any other person having any right, title or interest in the Premises locus.

The Licensee shall maintain general liability and marine and other insurance, including coverage for bodily injury, wrongful death and property damage, all in amounts reasonably acceptable to the Town and in an amount sufficient to support the obligations of the Licensee under the terms of this License and as stated in Exhibit 2, which is attached hereto and incorporated by reference herein. The Licensee will provide the Town with certificates of insurance, naming the Town as an additional insured, and evidencing that the Licensee's insurance is in force and that such insurance shall not be canceled or materially changed without giving the Town at least sixty (60) days written notice. Licensee shall maintain such insurance continually throughout the duration of this License and shall provide the Town with evidence of renewal of such coverage at least thirty days prior to the expiration of any current coverage.

V. CONDUCT

During the exercise of the rights hereby granted, the Licensee shall at all times conduct itself so as not to unreasonably interfere with the Town's use of the Premises, and shall observe and obey directives of the Town and its duly designated representatives, as well as all other applicable laws, statutes, ordinances, regulations and permitting or licensing requirements. The

Licensee shall notify the Town orally and in writing to the Town Administrator and the Town Harbormaster prior to entering the Premises to commence activities under this License and shall coordinate his / her use of the Premises on a daily basis with the Town Harbormaster. Nothing in this Agreement shall be construed as requiring the Town to maintain the Premises or any of its facilities in any manner or to supply or pay for any utilities other than as expressly provided herein.

VI. TERMINATION AND MODIFICATION

This License shall be revocable by either party upon written notice of revocation at least sixty (60) days prior to the termination date stated within said notice, except that the License shall be revocable by either party for violation of the terms of this License upon notice of revocation at least seven (7) days prior to the termination date stated within said notice for violation of the terms of this License. The Town may revoke this License upon such prior oral or written notice as is reasonable under the circumstances, in an emergency or if the Town discontinues the use of the licensed property as a municipal harbor, or if the Licensee fails to engage in the business of supplying, servicing and/or renting mooring hardware and other equipment in the Town for fresh and salt water boating use, or fails to maintain upon its business premises the implements, facilities, equipment, staffing or professional capacities required by Plan, or if the Licensee violates any regulation set forth in the Plan as currently enacted or as may from time to time be amended or any other regulation which shall govern the conduct of the Licensee, or if the Licensee at any time conducts its mooring servicing business in a manner considered by the Town, in its sole discretion, to be improper.

In the event that this License is terminated by revocation of either party pursuant to this section, then the Licensee, at its own expense, shall remove all its implements, facilities, apparatus, equipment and property from the Premises. This obligation shall survive the termination of this License.

VII. MODIFICATIONS and AMENDMENTS

Modifications or amendments to this License shall be in writing and duly executed by both parties hereto to be effective.

VIII. NOTICE

For purposes of this License, the parties shall be deemed duly notified in accordance with the terms and provisions hereof, if written notices are mailed to the following addresses:

Licensee: AGL Mooring & Dock Co. P.O. Box 808 Hyannis Port MA 02647

Town: Harwich Town Hall, 732 Main Street Harwich, MA 02645,
 Attn: Town Administrator

These addresses are subject to change, and the parties hereto agree to inform each other of such change as soon as practicable.

IX. NO ESTATE CREATED

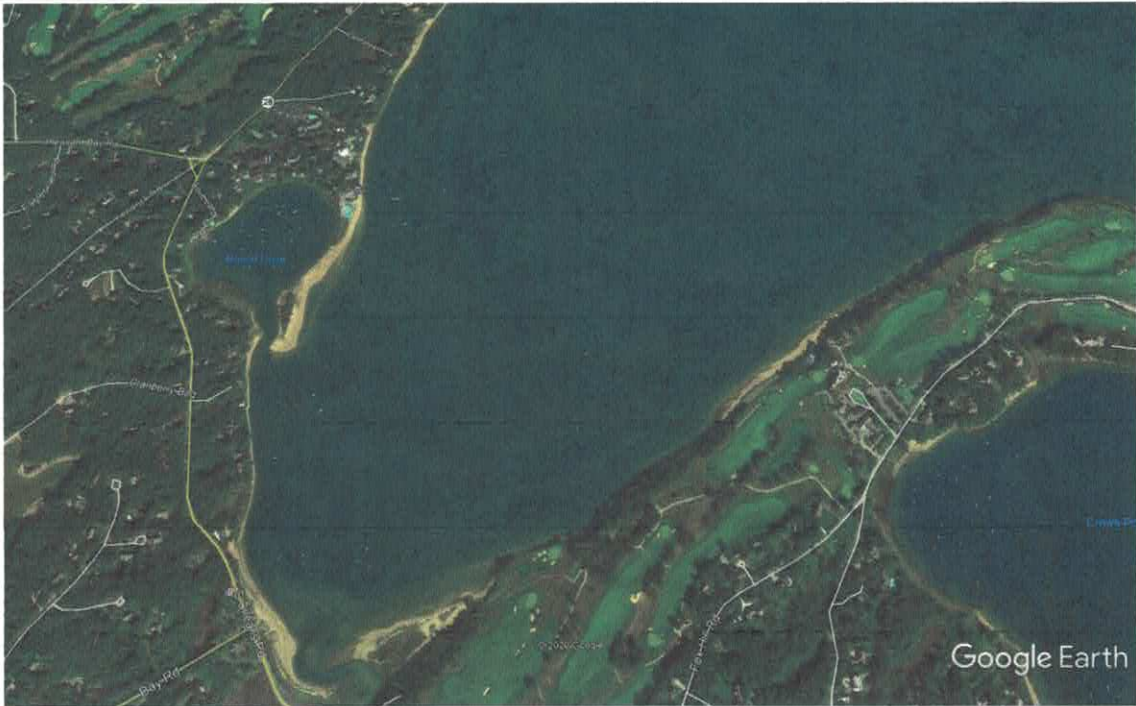
This License shall not be construed as creating or vesting in the Licensee any estate in the Premises, but only the limited right of use as hereinabove stated.

X. EXHIBITS and ATTACHMENTS

Any and all exhibits and attachments referenced herein or attached hereto are duly incorporated within this agreement.

Attachment A

Pleasant Bay and Round Cove Mooring Fields



Herring River Mooring Field



IN WITNESS WHEREOF, the parties hereto have caused this License Agreement to be executed as a sealed instrument and signed in duplicate by their duly authorized representatives, on the date first indicated above.

TOWN OF HARWICH BOARD OF SELECTMEN

Date: _____

LICENSEE:

Date: _____

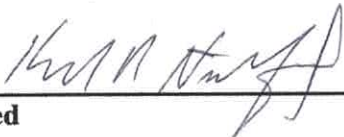
- 5.) Describe plans for the daily monitoring of the mooring field(s) assigned and reaction time to the mooring area from home or office. *DRIVE BY FIELDS + WEEKLY W/SKIFF*
- 6.) Provide a list of all staff names, years experience servicing moorings and related experience(s) which demonstrate your/their ability to perform the duties of Mooring Servicing Agent. *TBNAMED*
- 7.) Include a description of a plan for storm preparation and emergencies including, but not limited to, the hours that staff members will be available to perform duties. *during EMERGENCIES ON CALL 24 HOURS TO HELP*
- 8.) Provide a business plan to provide complete mooring services including, but not limited to, subcontracting of services when necessary. *NO SUBCONTRACTING*
- 9.) Provide a list of all clerical or support staff names and describe their ability regarding the processing of applications, performance of inspections and providing support for the issuance of stickers and mooring tags. *KARL NIEHOFF*
- 10.) Does the company have access to a certified diver to perform repairs and/or retrieve lost tackle?
 # Yes # No
- 11.) Are any mooring permits within the Town of Harwich currently held by the applicant? If so, please list. *YES - WYCHMERE OUTER HARBOR*
12. A) Has the applicant served as a Mooring Servicing Agent in any other Town(s)?
 # Yes # No *BARNSTABLE, YARMOUTH, DENNIS,*
 If yes, please list and provide reference contacts.
12. B) Has the applicant served as a Mooring Servicing Agent in Harwich?
 If yes, please list dates. *CONTINUALLY SINCE 2008*
- 13.) Describe what method of mooring storage you will provide and how it will be controlled. *AT YARD*
- 14.) Provide a plan for placement of moorings with consideration for the draft and length of vessels, protection of channels and access to public/private docks and landings. →
- 15.) If you are planning to use a Town landing as sole access for this service, describe how you intend to manage around other uses of that site. *WORK AT TIMES WHEN OTHERS ARE NOT THERE - IF OTHERS ARE - THEY HAVE PRIORITY*
- 16.) Provide a proposed fee schedule which includes, but is not limited to, fees for the following:

- Mooring inspections (per anchor)
 - Mooring installation (per pound)
 - Mooring removal (per pound)
 - Mooring storage
 - Mooring maintenance (such as hawsers, chain, ground tackle, etc.) (per hour)
 - Diving charges (per hour, minimum)
 - Handling Helix moorings
 - Pumping charges (per hour)
- ATTACHED SHEET*

***The fee schedule is seen as an important value added item in general for the mooring permit customers and represents an important factor in rating bid applications.**

17.) Please provide a resume listing any other business ventures in which you have been involved and for how long.

Under the penalties of perjury, I declare that the information I have provided is true to the best of my knowledge.


Signed

10/29/2020
Date

Reviewed by Harwich Harbormaster  11/12/2020 Date

Reviewed by Waterways Committee  12/16/20 Date

Reviewed by Board of Selectman _____ Date

AGL PROPOSED RATE SHEET FOR 2021,2022,2023

	<u>HAUL-PER LB.</u>	<u>PLACE-PER LE</u>	<u>INSPECTIONS</u>	<u>STORAGE</u>	<u>LABOR-PER HOUR</u>
<u>HERRING RIVER</u>	FLAT RATE OF \$225 HAUL&PLA		\$25	\$25	\$50
<u>ROUND COVE</u>	\$0.35	\$0.35	\$25	\$25	\$50
<u>PLEASANT BAY</u>	\$0.35	\$0.35	\$25	\$25	\$50

Round Cove & Pleasant Bay there is a minnum of\$55 to haul or place

ie: 100lb.mooring will be \$55
ie: 200lb.mooring will be \$70
ie; 300lb.mooring will be \$105



CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Boston Marin Ins. Services 10 Mazzeo Dr. Suite 218 P. O. Box 298 Randolph, MA 02368 Boston Marine Insurance Servc	CONTACT NAME: Boston Marine Insurance Servc PHONE (A/C, No, Ext): 781-986-5050 FAX (A/C, No): 781-986-5749 E-MAIL ADDRESS: _____ INSURER(S) AFFORDING COVERAGE NAIC # INSURER A: Atlantic Specialty Ins. Co 27154 INSURER B: _____ INSURER C: _____ INSURER D: _____ INSURER E: _____ INSURER F: _____
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INSURED
 AGL Moorings
 Karl Niehoff
 25 Cozy Home Terr.
 W. Yarmouth, MA 02673

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL/INSUR	SUBR/WRD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> MARINE GENERAL LIABILITY	X		B5 JH55808	11/16/2020	11/09/2021	EACH OCCURRENCE \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER: _____		DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 25,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ _____ GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/POF AGG \$ 1,000,000				
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ _____ BODILY INJURY (Per persn) \$ _____ BODILY INJURY (Per accident) \$ _____ PROPERTY DAMAGE (Per accident) \$ _____
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE						EACH OCCURRENCE \$ _____ AGGREGATE \$ _____
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE \$ _____ OTH-ER \$ _____ E.L. EACH ACCIDENT \$ _____ E.L. DISEASE - EA EMPLOYEE \$ _____ E.L. DISEASE - POLICY LIMIT \$ _____
A	PROTECTION & INDEMNITY			B5 JH55808	11/16/2020	11/16/2021	SEE BELOW

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

SUBJECT TO ACTUAL POLICY CONDITIONS.
 PROTECTION & INDEMNITY LIMIT: \$1,000,000 COMBINED SINGLE LIMIT, DEFENSE WITHIN LIMITS.
 CERTIFICATE HOLDER IS LISTED AS ADDITIONAL INSURED AS THEIR INTEREST MAY APPEAR FOR MARINE GENERAL LIABILITY.

CERTIFICATE HOLDER Harwich Town Hall 732 Main Street Harwich Center, MA 02645	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Boston Marine Insurance Servc
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Request to close

Due to the new restrictions on restaurants, we are no longer able to operate. To continue to do so, would force us to close permanently. There has been no break buy insurance companies, who still insist liquor liability be paid for a full year. There are no breaks on any policies. To try and survive on take out is near impossible! This was just something they did do it looked like someone cared about the industry. We hope to only be closed until mid-March. If the restrictions are not lifted, the end of March.

Thank you
Jeffrey Gomes
Brax Landing



Jean M. Lorizio, Esq.
Commission Chairman

**Commonwealth Of Massachusetts
Alcoholic Beverages Control Commission
95 Fourth Street, Suite 3
Chelsea, MA 02150-2358**

**2021
Retail License Renewal**

License Number: 00082-PK-0506

Municipality: HARWICH

License Name : Ember Pizza Inc

License Class: Annual

DBA : Ember

License Type: Restaurant
~~Package Store~~

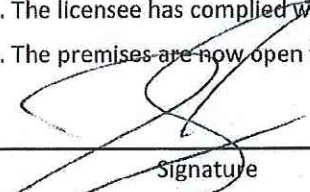
Premise Address: 600 Route 28 Harwich, MA 02646

License Category: Wines and Malt

Manager: Justin R Brackett

I hereby certify and swear under penalties of perjury that:

1. I am authorized to sign this renewal pursuant to M.G.L. Chapter 138;
2. The renewed license is of the same class, type, category as listed above;
3. The licensee has complied with all laws of the Commonwealth relating to taxes; and
4. The premises are now open for business (if not, explain below).



 Signature
 Justin Brackett

 Printed Name

11-10-2020

 Date
 President

 Title

Additional Information:



2020



OFFICE OF THE SELECTMEN
732 MAIN ST., HARWICH, MA 02645
508-430-7513

APPLICATION FOR LODGING HOUSE OR INNHOLDERS LICENSE

LICENSE APPLIED FOR: Lodging House X Innholders

Fee: \$50 New application Annual # of rooms 6
Renewal ✓ Seasonal Opening date

Business Name Barnaby Inn Phone 508 432-6789

Doing Business As (d/b/a) Barnaby Inn

Business Address 36 Route 28 W Harwich MA 02671

Mailing Address

Winter Address & Phone *same as above*

Email Address

Name of Owner Huilin Zhao & Lan Wang

(If corporation or partnership, list name, title and address of officers)

Lan Wang manager
Signature of applicant & title Federal I.D. #

INNOLDERS ONLY – List total number of seats in dining/lounge area.

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required under law.

 By
Signature of individual or corporate name Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected and found to be in compliance with applicable local codes and regulations, including zoning ordinances, health regulations and building and fire codes.

[Signature]
Building Commissioner

[Signature]
Board of Health

[Signature]
Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
732 MAIN ST., HARWICH, MA 02645
www.harwich-ma.gov
(508) 430-7513

LICENSE FOR: _____ CLASS I - AGENTS OR SELLERS
_____ CLASS II - USED CAR DEALERS
_____ CLASS III - JUNK CAR DEALERS
 X CLASS IV - AUTO REPAIRMAN

_____ NEW APPLICATION X RENEWAL FEE: \$100 each

BUSINESS NAME ALL OUT PERFORMANCE

D/B/A _____ PHONE 774-408-7758

BUSINESS ADDRESS 266 QUEEN ANNE RD HARWICH 02645

MAILING ADDRESS 266 QUEEN ANNE RD HARWICH MA 02645

NAME OF OWNER Joseph Long

EMAIL ADDRESS ALL OUT PERFORMANCE 2019@YOLHO.COM

IF CORPORATION OR PARTNERSHIP, LIST OFFICER INFORMATION BELOW.

Name	Title	Address

[Signature] OWNER
Signature of applicant & title

_____ Federal I.D. #

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required by law.

_____ By _____
Signature of individual or corporate name Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected & found to be in compliance with applicable local codes & regulations including zoning ordinances, health regulations, building & fire codes.

N/A
Building Commissioner

[Signature]
Board of Health

[Signature]
Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
732 MAIN ST., HARWICH, MA 02645
www.harwich-ma.gov
(508) 430-7513

LICENSE FOR: CLASS I - AGENTS OR SELLERS
 CLASS II - USED CAR DEALERS
 CLASS III - JUNK CAR DEALERS
 CLASS IV - AUTO REPAIRMAN

NEW APPLICATION RENEWAL FEE: \$100 each

BUSINESS NAME Harwich Port Boat Yard, Inc

D/B/A _____ PHONE 508 - 432 - 1322

BUSINESS ADDRESS 4 Harbor Rd.

MAILING ADDRESS _____

NAME OF OWNER John D. Our

EMAIL ADDRESS hpbw@verizon.net

IF CORPORATION OR PARTNERSHIP, LIST OFFICER INFORMATION BELOW.

Name	Title	Address
<u>John D. Our</u>	<u>President</u>	<u>508</u>

J D Our
Signature of applicant & title Federal I.D. # _____

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required by law.

Signature of individual or corporate name _____ By J D Our
Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected & found to be in compliance with applicable local codes & regulations including zoning ordinances, health regulations, building & fire codes.

N/A Building Commissioner M. Eley Board of Health B. H. Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
732 MAIN STREET
HARWICH, MA 02645
508-430-7513

APPLICATION FOR COMMON VICTUALLERS LICENSE

Fee: \$50 New application Annual # of seats 133
Renewal Seasonal Opening date June 1994

In accordance with the provisions of the Statutes relating thereto, application for a Common Victuallers license is hereby made by:

Business Name Jake Rooney's Ashwood Food Service Phone 508-430-1100

Doing Business As (d/b/a) Jake Rooney's Restaurant

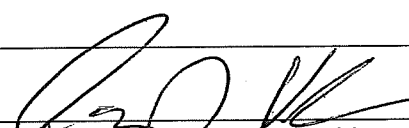
Business Address 119 Brooks Rd.

Mailing Address Harwichport, MA 02646

Email Address jakeroney12@yahoo.com

Name of Owner Peter D. Klaus

(If corporation or partnership, list name, title and address of officers)

 owner _____
Signature of applicant & title Federal I.D. #

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required under law.

Signature of individual or corporate name By _____
Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected and found to be in compliance with applicable local codes and regulations, including zoning ordinances, health regulations and building and fire codes.


Building Commissioner


Board of Health


Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
732 MAIN ST., HARWICH, MA 02645
508-430-7513

APPLICATION FOR LODGING HOUSE OR INNHOLDERS LICENSE

LICENSE APPLIED FOR: Lodging House Innholders

Fee: \$50 New application Annual # of rooms _____
Renewal Seasonal Opening date _____

Business Name Harwich Inn + Tavern LLC Phone 617 947 7600

Doing Business As (d/b/a) Harwich Inn + Tavern

Business Address 77 Route 28 W Harwich, ma 02671

Mailing Address Same

Winter Address & Phone Same

Email Address Jptsockalas@verizon.net

Name of Owner James Tsockalas

(If corporation or partnership, list name, title and address of officers)

James Tsockalas Manager
[Signature] manager Federal I.D. # _____

INNHOLDERS ONLY - List total number of seats in dining/lounge area. 97

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required under law.

Harwich Inn + Tavern LLC By [Signature]
Signature of individual or corporate name Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected and found to be in compliance with applicable local codes and regulations, including zoning ordinances, health regulations and building and fire codes.

[Signature]
Building Commissioner

[Signature]
Board of Health

[Signature]
Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
732 MAIN STREET
HARWICH, MA 02645
508-430-7513

APPLICATION FOR COMMON VICTUALLERS LICENSE

Fee: \$50

New application
Renewal

Annual
Seasonal

of seats 40
Opening date _____

In accordance with the provisions of the Statutes relating thereto, application for a Common Victuallers license is hereby made by:

Business Name HARWICHPORT HOUSE OF PIZZA, INC Phone 5084321047

Doing Business As (d/b/a) _____

Business Address 330 RT. 28

Mailing Address HARWICH PORT, MA 02646

Email Address _____

Name of Owner ALEKS SOTIRI

(If corporation or partnership, list name, title and address of officer)

ALEKS SOTIRI, PRES.

A SOTIRI, PRES. Federal I.D. # _____

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required under law.

HARWICHPORT HOUSE OF PIZZA, INC By A SOTIRI
Signature of individual or corporate name Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected and found to be in compliance with applicable local codes and regulations, including zoning ordinances, health regulations and building and fire codes.

[Signature]
Building Commissioner

[Signature]
Board of Health

[Signature]
Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.



OFFICE OF THE SELECTMEN
 732 MAIN STREET
 HARWICH, MA 02645
 508-430-7513

APPLICATION FOR COMMON VICTUALLERS LICENSE

Fee: \$50 New application _____ Annual _____ # of seats _____
 Renewal X Seasonal _____ Opening date _____

In accordance with the provisions of the Statutes relating thereto, application for a Common Victuallers license is hereby made by:

Business Name Subfleet Inc DBA Subway Phone 508 432 1280

Doing Business As (d/b/a) Subway

Business Address 1 Auston Rd E Harwich MA 02645

Mailing Address 1 Auston Rd E Harwich MA 02645

Email Address _____

Name of Owner Thomas E Roberts

(If corporation or partnership, list name, title and address of officers)

Thomas E Roberts

Thomas E Roberts Pres

Signature of applicant & title

Federal I.D. # _____

Pursuant to MGL Ch. 62c, Sec. 49A, I certify under the penalties of perjury that to the best of my knowledge and belief I have filed all state tax returns and paid all state taxes required under law.

Subfleet Inc

Signature of individual or corporate name

By Thomas E Roberts

Corporate officer (if applicable)

REGULATORY COMPLIANCE FORM

The premises to be licensed as described herein have been inspected and found to be in compliance with applicable local codes and regulations, including zoning ordinances, health regulations and building and fire codes.

N/A
 Building Commissioner

Myron Eldredge
 Board of Health

Bill
 Fire Department

Required signatures to be obtained by the applicant prior to submission of new applications.

New Business G

Will be brought back at a later date

Discussion and update on Cape Cod
Harwich Theatre Company
renovations to property

OLD BUSINESS



**BARNSTABLE COUNTY
DEPARTMENT OF HUMAN SERVICES**

3195 Main Street, Post Office Box 427
Barnstable, Massachusetts 02630
Office: 508-375-6628 | Fax: 508-362-0290
www.bchumanservices.net

December 7, 2020

Board of Selectmen, Town of Harwich
c/o Joseph F. Powers, Interim Town Administrator
685 route 134
South Dennis, MA 02660

Via email only: jpowers@town.harwich.ma.us

RE: Barnstable County HOME Consortium Advisory Council

Dear Board of Selectmen:

I am writing to inform you that the three-year term of the Town of Harwich's representative member on the Barnstable County HOME Consortium's Advisory Council, currently Arthur Bodin, expires on January 1, 2021. Mr. Bodin has graciously expressed an interest in continuing on as Harwich's member representative and we respectfully request that you submit your reappointment of Arthur Bodin, or another nominee of your choosing, to fill this position for a three-year term to run through January 1, 2024.

The Barnstable County HOME Consortium Advisory Council is a regional council made up of experienced affordable housing advocates from all fifteen towns. Please see the attached information sheet on the primary tasks of the Advisory Council.

As the County Commissioners are the formal appointing body for Council members, please address your letter of nomination to the County Commissioners but send the request to my attention. Your cooperation in this matter is greatly appreciated. If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Renie Hamman, HOME Program Manager
(508) 375-6622

Renie.hamman@barnstablecounty.org

cc via email only:

Patti Macura, Administrative Secretary

Arthur Bodin, Barnstable County HOME Consortium member

Creating a Healthy Connected Cape Cod

The Mission of the Department of Human Services is to plan, develop, and implement programs which enhance the overall delivery of human services in Barnstable County and promote the health and social well-being of County residents through regional efforts that improve coordination of services.



**BARNSTABLE COUNTY
DEPARTMENT OF HUMAN SERVICES**

3195 Main Street, Post Office Box 427
Barnstable, Massachusetts 02630
Office: 508-375-6628 | Fax: 508-362-0290
www.bchumanservices.net

Barnstable County HOME Consortium Advisory Council

The HOME Consortium Advisory Council consists of seventeen members: one representative from each town and two at-large members. Additionally, the Affordable Housing Specialist of the Cape Cod Commission is an ex officio member.

The primary tasks of the Advisory Council include the following:

1. Determines the allocation of federal HOME funds received by the County (*currently about \$450,000 per year*) and reviews and approves project applications for funding for the development of affordable rental housing units located in Barnstable County. *Additionally, this past year, the HOME Consortium operating under COVID-19 related HUD regulations, allocated up to \$100,000 for a county-wide tenant-based rental assistance program to be administered by Housing Assistance Corporation.*
2. Establishes local HOME program policies as allowed by regulations.
3. Remains current on local, state, and federal housing issues and advocates for policies that will promote the creation and preservation of affordable housing in the region.
4. Acts as a liaison with their respective towns and local housing partnerships/committees and reports relevant regional, state, or federal housing policy information
5. Participates in round-table discussions to share local affordable housing successes and/or concerns with the Advisory Council.

Advisory Council town members are nominated by the governing bodies in all fifteen towns and are appointed by the County Commissioners. At large members are recommended by HOME Consortium staff and are appointed by the County Commissioners. The term of each member is three years with no limit established on the number of terms any member can serve.

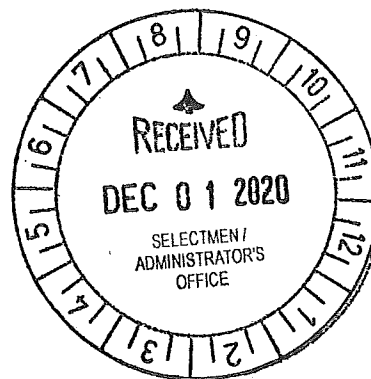
The Advisory Council has a standard meeting schedule of once a month on the second Thursday at 10:00 a.m. currently being held virtually pursuant to *Governor Charles D. Baker's Order Suspending Certain Provisions of the Open Meeting Law on March 12, 2020.*

Creating a Healthy Connected Cape Cod

The Mission of the Department of Human Services is to plan, develop, and implement programs which enhance the overall delivery of human services in Barnstable County and promote the health and social well-being of County residents through regional efforts that improve coordination of services.

Deborah Merrill

Zack Inc dba Castaways



November 30 2020

Attn: Board of Selectmen

Town of Harwich

This letter serves as a request for a reduction of fees for my annual liquor license for 2021. This year has proven difficult in trying to stay afloat with the current covid restrictions especially with a smaller restaurant. After 31 years in business, I am doing all I can to remain open. I realize my situation is not unique, but any consideration would be greatly appreciated as it appears that current restrictions will not be lifted in the near future and outdoor service dwindles.

Thanks for the opportunity to address you.


Deborah B Merrill

OFFICE OF THE TOWN ADMINISTRATOR

Phone (508) 430-7513

Fax (508) 432-5039

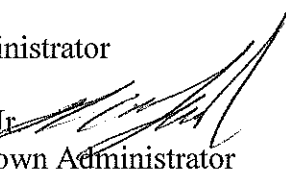


Robert C. Lawton, Jr.
Interim Assistant Town Administrator

732 MAIN STREET, HARWICH
02645

MEMO

TO: Joseph Powers
Interim Town Administrator

FROM: Robert C. Lawton, Jr. 
Interim Assistant Town Administrator

RE: Contract Continuation

DATE: December 16, 2020

I wanted to formally remind you that my contract with the Town expires on December 31, 2020.

I am able, if you wish, to complete the review of the applications for Assistant Town Administrator, several procurement issues, transfer of duties to a new Assistant and other mutually agreed to items. I would be in the office on Wednesdays and would work on some mutually schedule from home on projects. I believe this work would be completed by the end of January 2021 and I would do the work at the existing rate of pay.

Let me know if you would like to extend the contract. As always, I appreciate the opportunity to work with you in Harwich.

RCL

**EMPLOYMENT AGREEMENT
BETWEEN
TOWN OF HARWICH
AND
INTERIM ASSISTANT TOWN ADMINISTRATOR**

THIS AGREEMENT, pursuant to Chapter 41, Section 108N of the Massachusetts General Laws, and in accordance with Chapter 18 of the Acts of 2006, an Act Establishing a Board of Selectmen-Town Administrator Form of Government in the Town of Harwich (Special Act), made and entered into this 4th day of January, 2021, by and between the Town of Harwich, Commonwealth of Massachusetts, a municipal corporation, hereinafter called the "Town", acting by and through its Interim Town Administrator, hereinafter called "Town Administrator" and Robert C. Lawton Jr., hereinafter called "Interim Assistant Town Administrator".

Section I – Function and Duties of the Position

The Town hereby offers to employ said Robert C. Lawton Jr. as Interim Assistant Town Administrator of said Town, and the Interim Assistant Town Administrator accepts said offer. The Interim Assistant Town Administrator shall perform the duties specified in the job description entitled Assistant Town Administrator and in the Special Act, and other such duties as shall be from time to time legally assigned to him.

Section II – Term

This Agreement shall become effective January 1, 2021. The Agreement may be terminated at any time by either party upon fifteen (15) days written notice. Notwithstanding the foregoing, the Agreement shall be for a term ending on January 31, 2021, subject to the provisions noted herein.

Section III – Salary

The Town agrees to pay the Interim Assistant Town Administrator for services rendered under this Agreement \$500 per day. The Interim Assistant Town Administrator will devote time as determined by the Town Administrator (days and work schedule can be changed by agreement of the Interim Assistant Town Administrator and Town Administrator) to the position. The Interim Assistant Town Administrator will attend meetings as required by the Town Administrator. Salary shall be payable in regular installments as other employees of the Town of Harwich are paid.

Section IV – Benefits

During the term of this employment, Robert C. Lawton Jr. shall not be entitled to vacation, sick leave, health insurance, or any other benefits from the Town of Harwich, and shall not make any claim for unemployment compensation upon expiration or termination of this Agreement.

Section V – Professional Development

The Town shall pay the Interim Assistant Town Administrator's registration, travel and subsistence expenses for educational courses, institutes and seminars that are necessary for the good of the Town, and approved by the Town Administrator in advance, subject to budget limitations.

Section VI - Indemnification

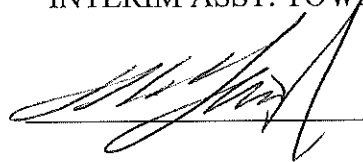
- A. To the extent allowed under G.L. c. 258, the Town shall defend, save harmless and indemnify the Interim Assistant Town Administrator against any tort, professional liability, claim or demand, or other civil legal action, whether groundless or otherwise arising out of an alleged act or omission occurring in the performance of his duties as Interim Assistant Town Administrator, provided that the Interim Assistant Town Administrator has acted in good faith, without gross negligence or misconduct and within the authority of his position, even if said claim has been made following the expiration or termination of this Agreement. The Interim Assistant Town Administrator shall be indemnified in accordance with the provisions of Section 13 of Chapter 258 of the General Laws. The Interim Assistant Town Administrator agrees to promptly notify the Town of any such claim and to cooperate fully with Counsel designated by the Town to handle such claim. The Town may obtain such insurance to cover its obligations hereunder as it deems appropriate.
- B. This section shall survive the termination of this Agreement.

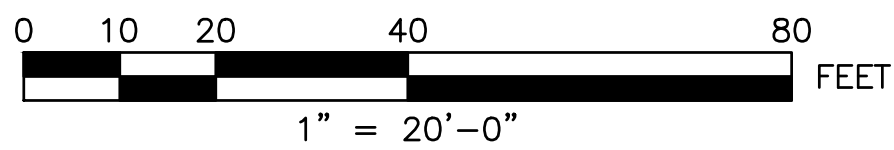
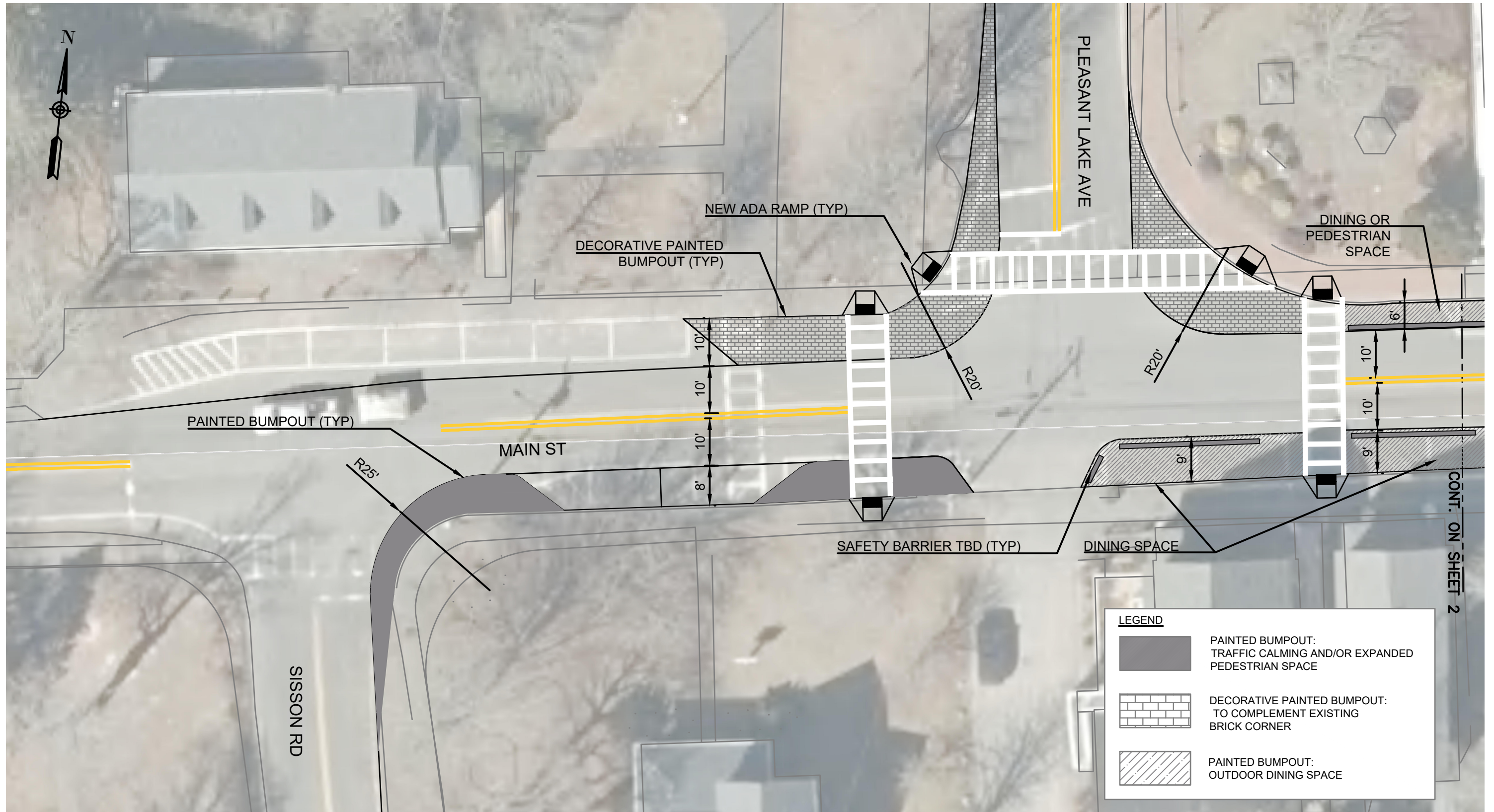
IN WITNESS WHEREOF, the Town of Harwich, Massachusetts, has caused this Agreement to be signed and executed on its behalf by its Board of Selectmen and duly attested by its Town Clerk, and the Interim Assistant Town Administrator has signed and executed this Agreement, both in duplicate, the day and first above written.

Approved this 4th day of January, 2021 by:

JOSEPH F. POWERS
INTERIM TOWN ADMINISTRATOR

ROBERT C. LAWTON Jr.
INTERIM ASST. TOWN ADMINISTRATOR

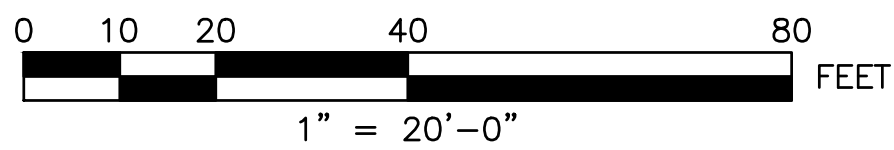
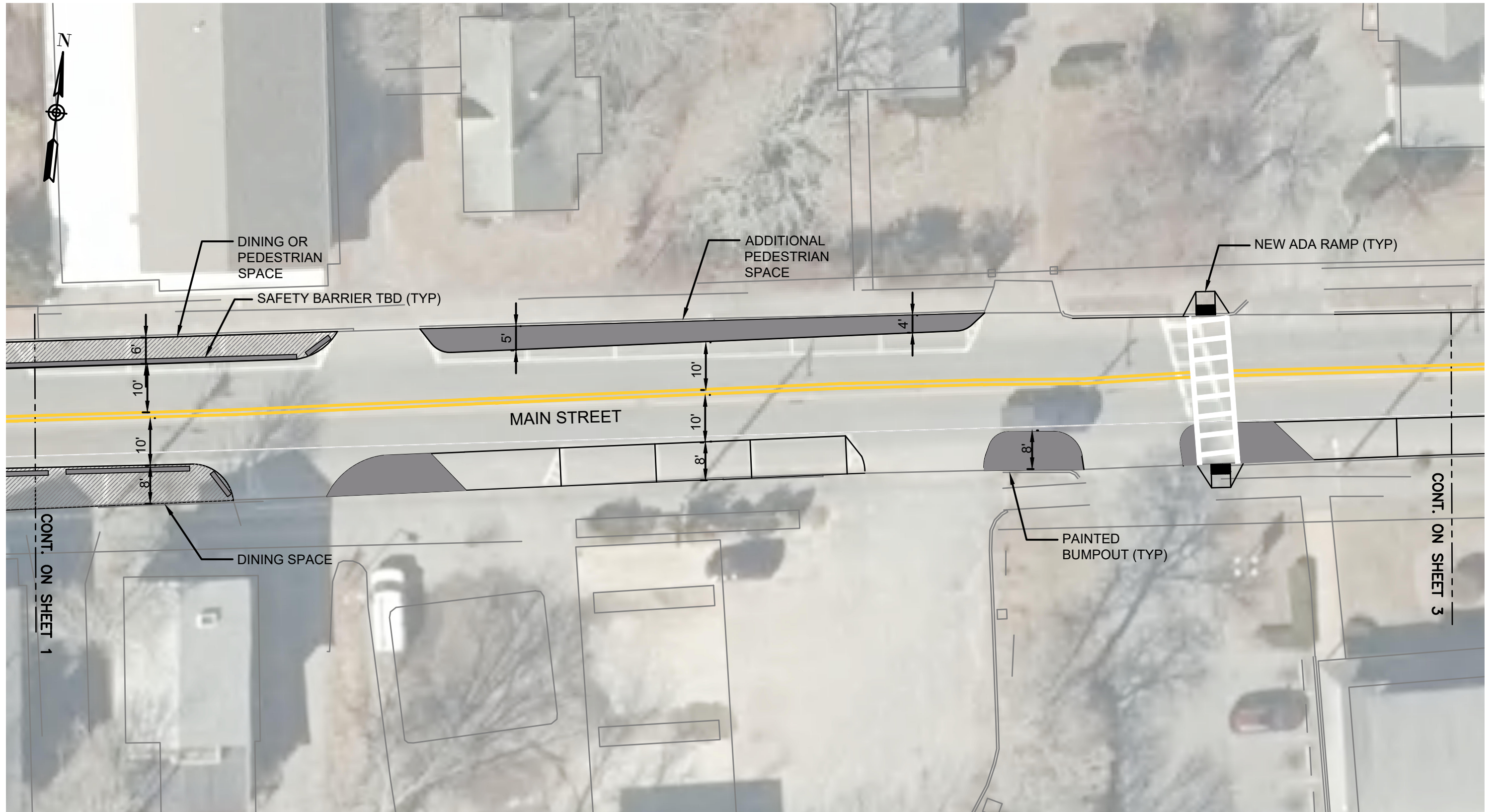




**MASSDOT'S WINTER SHARED STREETS
& SPACES GRANT PROGRAM
HARWICH**

DATE 1/4/2021 SHEET 1 OF 4

**TOOLE
DESIGN**

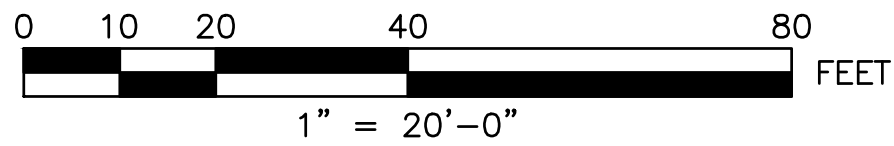
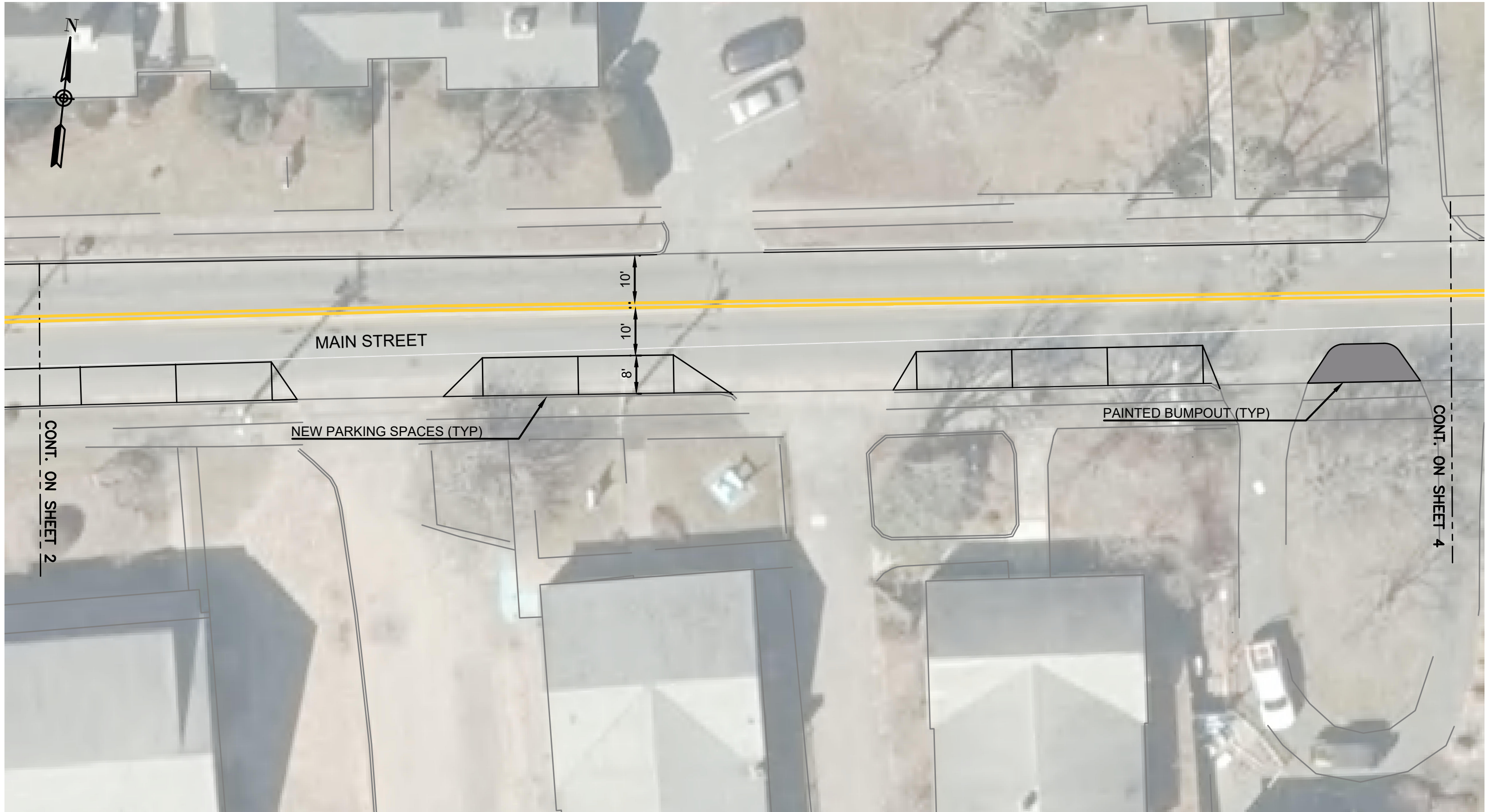


**MASSDOT'S WINTER SHARED STREETS
& SPACES GRANT PROGRAM
HARWICH**

DATE 1/4/2021 SHEET 2 OF 4



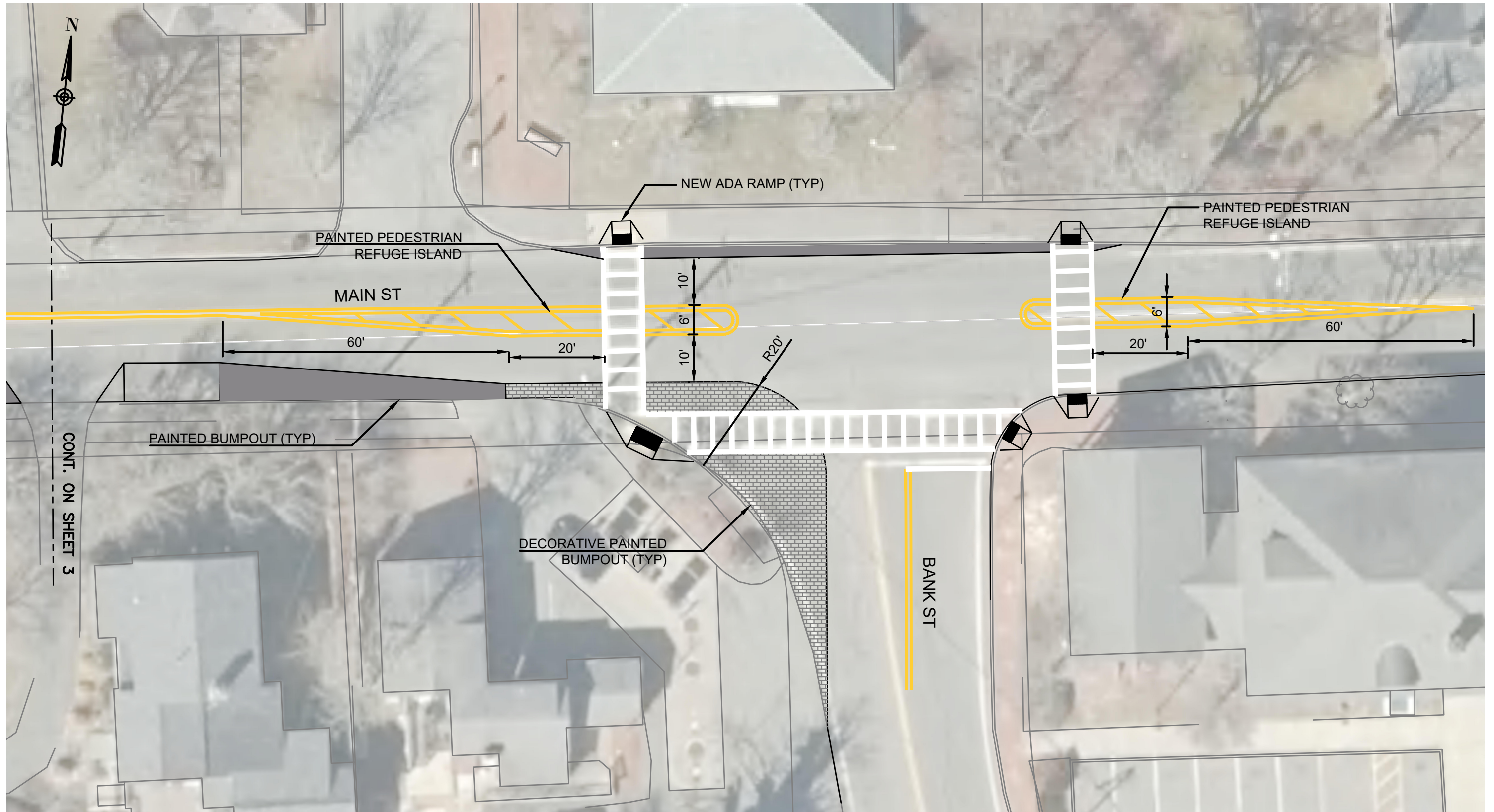
CONT. ON SHEET 3



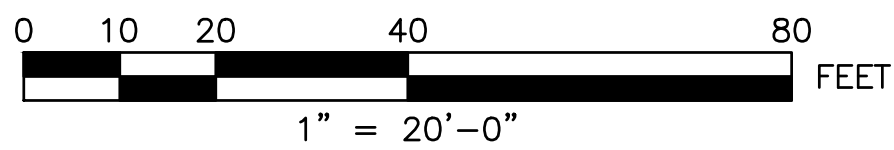
**MASSDOT'S WINTER SHARED STREETS
& SPACES GRANT PROGRAM
HARWICH**

DATE 1/4/2021 SHEET 3 OF 4

**TOOLE
DESIGN**



CONT. ON SHEET 3



**MASSDOT'S WINTER SHARED STREETS
& SPACES GRANT PROGRAM
HARWICH**

DATE 1/4/2021 SHEET 4 OF 4

**TOOLE
DESIGN**

Harwich Sewer Use Regulations - Edit Log

Page #	Section	Edit	Note
Page 2	n/a	Strike "Modifications" Section in its entirety	Not included in 2017 ATM Article 13
Page 4	Section 8	Replace his w/ the	
Page 6/7	Section 34	Add additional abbreviations	
Page 8	Section 2	Strike "his"	
Page 9	Section 6	Replace "one year (365)" w/ "two years (730)"	Extend hook-up window
Page 10	Section 5	Replace "his" w/ "the" and replace his w/ "the Director"	
Page 13	Section 7	Strike "the" & remove "his"	
Page 16	Section 1	Strike "his" replace w/ "their"	
Page 17	Article IX	Insert Rate Language	
Page 20	Article XII	Insert Land Use Controls	
Page 22	Section 1	Insert "Civil" before engineer, Strike "in accordance with the Towns approved wastewater treatment facility plan" insert "or registered sanitarian for systems generating less than 2000gpd" & Replace "chatham" w/ "Harwich"	Add Language to allow RS to design sewer services
Page 24	Section 7	Strike "when he of his representative will be available" & replace "his" w/ their	
Page 25	Section 9c	Chatham to Harwich	
Page 25	Section 9d	Chatham to Harwich, Strike "for him"	
Page 26	Section 9e	Replace "him" w/ "them", replace Chatham w/ Harwich, Replace "his" w/ "its"	
Page 26	Section 9f	Chatham to Harwich	
Page 26	Section 10	Chatham to Harwich	
Page 27	Section 12	Replace "mylar" w/ "digital" and add "in PDF and .DWG format"	
Page 36	Section 21 - Testing	Replace "Article V" w/ "Appendix B"	
Page 47	Section 2	Chatham to Harwich	
Page 47	Section 4	Chatham to Harwich	
Page 47	Section 5	Replace "Chatham Suveryor of Highways" w/ "Harwich Department of Public Works" and Chatham to Harwich	
Page 56	Section 14	Replace "Chatham Suveryor of Highways" w/ "Harwich Department of Public Works"	
Page 57	Section 17	Chatham to Harwich	
Page 58	Section 17c	Replace "his" w/ "the"	

Town Of Harwich, Massachusetts
SEWER USE RULES AND REGULATIONS

Pursuant to provisions of Massachusetts General Laws Chapter 83, Section 10, the Town of Harwich hereby establishes the following sewer use rules and regulations (Regulations) governing the use of the wastewater collection system in Harwich, County of Barnstable, Commonwealth of Massachusetts.

While these Regulations will apply to the wastewater collection system throughout the town they have been specifically developed herein for the wastewater collection system to be implemented in the Pleasant Bay Watershed area of Harwich. Wastewater collected in this area will be conveyed to the Town of Chatham wastewater treatment facility. It is anticipated that these Regulations will be modified accordingly for systems to be implemented in other watersheds.

Purpose

The purpose of these Rules and Regulations are:

- a) To establish the technical and administrative procedures for making connections to the sanitary sewer system including standards of materials and design;
- b) To establish requirements, restrictions, and controls on the quantities and quality of what may be discharged to the sanitary sewer system; such as discharges that may:
 - 1. Interfere with the operation of the sewer system, pumping station or publicly owned treatment works (POTW) in any way;
 - 2. Pass through the POTW, to the groundwaters, inadequately treated effluent that may cause contravention of standards for these waters or surface waters or cause violation of the POTW's Groundwater Discharge Permit (GWDP) or negatively impact the watershed into which treated effluent is discharged;
 - 3. Reduce the opportunity to reclaim or recycle treated wastewater and/or sludge from the system;
 - 4. Increase the cost or otherwise hamper or limit the disposal of sludges and other residuals;
 - 5. Endanger municipal employees or the public;
 - 6. Cause, directly or indirectly, any public nuisance condition;
- c) To prevent new sources of inflow and infiltration (I/I) and eliminate private source inflow;
- d) To provide for equitable distribution to all users of the POTW, all costs associated with the collection, transmission, treatment, and residuals disposal, and to provide for the collection of such costs; and
- e) To provide for the orderly planning of sewer systems' and treatment systems' components to improve the health and environmental quality of the Town of Harwich and its people and resources while discharging wastewater into the Chatham Sewer System.

The following rules and regulations are a part of the contract with every person who discharges wastewater into the Town of Chatham Sewer System from the East Harwich area, and governs the relationship between the Town of Harwich and its consumers, contractors and/or developers, and all other persons who install sewers, discharges wastewater, is connected into the sewer system or applies for a connection to the sewer system.

DRAFT

**TOWN OF HARWICH
SEWER USE RULES AND REGULATIONS**

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ARTICLE I DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:

Section 1. “Act” or “the “Act” shall mean the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq, and the regulations promulgated thereunder, as amended from time to time.

Section 2. “Board” shall mean the Board of Wastewater Commissioners of the Town of Harwich.

Section 3. “BOD” (Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures in five (5) days at 20 degrees centigrade, expressed in milligrams per liter (mg/l).

Section 4. “Building Drain” shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer. The building drain ends at the building sewer which begins five (5) feet or (1.5) meters outside the inner face of the building’s wall.

Section 5. “Building Sewer” shall mean the extension from the building drain, five feet (5’) or one and one half (1.5) meters outside the inner face of the building’s wall, to the public sewer or other place of disposal.

Section 6. “Combined Sewer” shall mean a sewer receiving both surface runoff water and sanitary sewage.

Section 7. “Department of Environmental Protection”, or “DEP” shall mean the Massachusetts Department of Environmental Protection, established pursuant to M.G.L. Chapter 21, Section 26 or, where appropriate, the Administrator, Director or other duly authorized official of said agency.

Section 8. “Director” (or Superintendent) shall mean the person appointed by the Town of Harwich as the Superintendent of the Wastewater (or Sewer) Department of the Town of Harwich, who is vested with the authority and responsibility for the implementation and enforcement of these rules and regulations or the authorized deputy, agent, or representative.

Section 9. “Environmental Protection Agency”, or “EPA” shall mean the United States Environmental Protection Agency, or, where appropriate, the Administrator or other duly authorized official of said Agency.

Section 10. “Garbage” shall mean solid wastes from the domestic or commercial handling, storage, preparation, cooking, and dispensing or sale of produce.

Section 11. “Industrial Wastes” shall mean any water carried or liquid wastes resulting from any process or industrial manufacturing processes, trade, business, or activity listed in 310 CMR 15.004.

Section 12. “Licensed Utility Installer” or “L.U.I.” shall mean a person, as defined in Section 15, who upon submitting a License and Permit Bond, Certificate of Insurance, and pays the Utility Installer’s License fee, all of which are approved by the Director of the Sewer Department, is permitted to perform the installation of sanitary sewers or building sewers.

Section 13. “Natural Outlet” shall mean any outlet into a watercourse, pond, lake, or other body of surface ground water.

Section 14. “NPDES” shall mean National Pollutant Discharge Elimination System.

Section 15. “Person” shall mean any individual, partnership, co-partnership, firm, company, corporation, association, joint venture, joint stock company, trust, estate, governmental entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

Section 16. “pH” shall mean the logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

Section 17. “Private Wastewater Collection, Treatment, and Disposal Facilities” shall mean any system, not owned and/or controlled by a municipal (town) sewer department, used for the collection, treatment, and disposal of wastewater from one or more properties.

Section 18. “Properly Shredded Garbage” shall mean the wastes from the preparation, cooking, and dispensing and sale of food that has been shredded to such a degree that all particles will be carried freely under the conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.

Section 19. “Public property” shall mean land, right-of way, or easement owned or controlled by the Town, or other Town, the Commonwealth of Massachusetts, United States government, or any department, political subdivision, or governmental entity.

Section 20. “Public Sewer” shall mean a sewer in which all owners of abutting properties have equal rights and is controlled by a municipal sewer department.

Section 21. “Sanitary Sewer” shall mean a sewer which carries wastewater from residential dwellings or commercial facilities without industrial waters or waste and to which stormwaters, surface waters, and groundwaters are not intentionally admitted.

Section 22. “Sewage” shall mean a combination of the water-carrying wastes from residences, business buildings, institutions, and industrial establishments, together with such materials, surface waters, and storm waters as may be present. The preferred term is wastewater.

Section 23. “Sewage Treatment Facility” shall mean any arrangement of devices and structures used for treating wastewater. The preferred phrase is wastewater treatment facility.

Section 24. “Sewage Works” shall mean all facilities for collecting, pumping, treating, and disposing of wastewater. The preferred phrase is wastewater facilities.

Section 25. “Sewer” shall mean a pipe or conduit for carrying wastewater.

Section 26. “Sewer Department” shall mean the Town of Harwich’s wastewater collection, treatment, and disposal system(s) owned and operated by the Town of Harwich.

Section 27. “Shall” is mandatory; “May” is permissive.

Section 28. “Slug” shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds, for any period of duration, longer than fifteen (15) minutes, more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

Section 29. “Storm Drain” (sometimes termed “Storm Sewer”) shall mean a sewer which carries storm, surface, and drainage waters, but excludes wastewater and industrial wastes, other than unpolluted cooling water.

Section 30. “Suspended Solids” shall mean solids that either float on the surface of, or are in suspension in water, wastewater, or other liquids, and which are removable by laboratory filtering.

Section 31. “Town” shall mean the Town of Harwich, Massachusetts or its legal representative, agent, or assign.

Section 32. “Town Administrator” shall mean the Town of Harwich Board of Selectmen’s appointed Town Administrator.

Section 33. “Watercourse” shall mean a channel in which a flow of water occurs, either continuously or intermittently.

Section 34. “Wastewater” shall mean the liquid and water-carried industrial, non-domestic or domestic wastes, including sewage, industrial wastes, other wastes, or any combination thereof, from dwellings, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water and stormwater that may be present.

Section 34. Abbreviations:

ANSI	American National Standards Institute
ASTM	American Society for testing and Materials
AWWA	American Water Works Association

BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
COD	Carbonaceous Oxygen Demand
CWMP	Comprehensive Wastewater Management Plan
DEP	Department of Environmental Protection
EPA	Environmental Protection Agency
HDPE	High Density Polyethylene
I/I	Inflow and Infiltration
MEP	Massachusetts Estuaries Project
MEPA	Massachusetts Environmental Policy Act
POTW	Publicly Owned Treatment Works
PVC	Polyvinyl Chloride
SSA	Sewer Service Area
TSS	Total Suspended Solids

ARTICLE II REGULATION OF SEWER FLOW

Section 1. Existing Structures.

Any structure in existence on July 1, 2016, regardless of its flow, may maintain that flow. No person shall modify an existing structure or change its use so as to increase its wastewater flow. Design criteria contained in 310 CMR 15.203, and any Board of Health Regulation modifying such, shall be used to determine whether a proposed modification or change in use shall constitute an increase in wastewater flow. Expansion or modification of existing structures, which may result in increased flow, shall not be allowed unless the increase is in compliance with the Board of Health's Regulations in effect on July 1, 2016.

Section 2. Determination of Present Wastewater Flow.

Wastewater flow to the municipal sewer shall be determined using provisions set forth in 310 CMR 15.203: System Sewage Flow Design Criteria, and any local Board of Health Regulation modifying such in effect on July 1, 2016. The owner of any property shall, upon reasonable notice and request, allow an inspection of a property for a determination of flow by an agent of the Board of Health, except that in lieu of this inspection, the owner of the property may submit a floor plan with sufficient detail to account for all outside structure dimensions. This floor plan must bear the signature of approval of a Certified Septic System Inspector.

Section 3. Undeveloped Parcels.

For the purpose of determining wastewater flow, any existing lot, otherwise qualified, may be permitted for that wastewater flow as determined under the Board of Health's Regulations in effect on July 1, 2016, or 310 CMR 15,000 et. Seq, whichever is less.

Section 4. Rebuilding because of fire, flood, storm or other acts of nature.

A property owner may rebuild a structure destroyed by fire, flood, storm or other acts of nature as a matter of right provided that the new structure does not exceed the wastewater flow of the structure being replaced.

Section 5. Variances.

In the case of unusual and substantial hardship, not the result of acts or omissions of the landowner, the Board of Wastewater Commissioners, after a public hearing of which notice has been given by publication and posting for a minimum of two weeks, may grant a variance to this part of the regulation, provided that sufficient capacity exists and such relief may be granted without substantially derogating from the intent or purpose of this regulation or the latest version of the Town of Harwich Comprehensive Wastewater Management Plan (CWMP).

ARTICLE III BUILDING SEWERS AND CONNECTIONS

Section 1. No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Superintendent. Any person proposing a new discharge into the system or a substantial change in the volume or character of pollutants that are being discharged into the /system shall notify the Superintendent in writing, and receive the Superintendents' written approval at least ninety (90) days prior to the proposed change in discharge or sewer connection.

No person shall construct, uncover, make any connections with or opening into, use, alter or disturb any public wastewater collection, treatment, and disposal facilities or appurtenance thereof without first obtaining a written permit from the Superintendent working on behalf of the Wastewater Commission.

Section 2. There shall be two (2) classes of building sewer permits for: (a) residential and commercial service and (b) service to establishments producing industrial wastes. In either case, the owner (or agent) shall make application on a special form furnished by the Town of Harwich. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the Superintendent and Director of the Health Department. A permit and inspection fees connection charges, and inspection fee shall be paid at the time the application is filed.

Section 3. All costs and expenses incident to the installation and connection of the building sewer to the sewer works shall be borne by the owner. The owner shall indemnify the Town from any loss or damage that may occur either directly or indirectly or occasioned by the installation or repair of the building sewer. Construction of all building sewers shall be performed only by a Licensed Utility Installer.

Section 4. A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another on an interior lot and no private or public sewer is available or can be constructed to the rear building through either: an adjoining alley, courtyard, driveway, or easement. If these conditions exist, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

Section 5. Old building sewers may be used to connect new buildings only when they are found, on examination and test, to meet all requirements of these rules and regulations and are approved by the Superintendent.

Properties with building sewers that will be connected to the sewer system from a septic system, a portion of the existing pipe may be used as part of the building lateral to a public sewer or to a pumping system only if it meets the requirements in the previous paragraph.

Section 6. A property that is generating wastewater, where a common sewer is available for connection, shall be connected to the common sewer, within one year (365) days of written notification from the Board of Health, unless the Board determines a different connection schedule following a public hearing. For new construction, connection to the common sewer, where a common sewer is available for connection, shall be completed prior to the issuance of a Certificate of Occupancy.

In the case of construction of new common sewers, or extensions of existing common sewers, said Board of Health written notification shall follow notice from the Board of Water & Sewer Commissioners that said common sewer(s) are complete.

ARTICLE IV USE OF THE PUBLIC SEWER

Section 1. No person shall discharge or cause to be discharged any stormwater, surface water, ground water, roof runoff water, subsurface drainage water, uncontaminated cooling water or unpolluted industrial waters to any sanitary sewer.

Section 2. Stormwater and all other unpolluted drainage waters shall be discharged to such systems as are specifically designated as storm sewers or to a natural outlet as approved by the Town Conservation Commission, Town Surveyor of Highways (or equivalent), and/or the Commonwealth of Massachusetts DEP or EPA. Any such discharge may be subject also to an NPDES permit. It shall be the responsibility of the originator of the discharge to obtain all required permits.

Section 3. Cleaning, maintaining, and repairing of building sewers, from the building to the property line at the street, shall be done at the expense of the owner, provided there is a manhole or cleanout at the property line. If there is no manhole or cleanout at the property line, the owner shall be responsible for the building sewer from the building to the public sewer.

Section 4. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer or wastewater works.

A. Any liquids, solids or gases which, by reason of their nature or quantity, are or may be sufficient, either alone or by interaction with other substances, to cause fire or an explosion or be injurious, in any way to the sewage works, or to the operation of the sewage works, or to the safety and welfare of the workers and the public at large shall be prohibited from discharge to the wastewater works. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, carbides, hydrides, and sulfides, and any other substance which the Director, the Town of Chatham (for Harwich wastewater collected and treated in Chatham), the State, or EPA has determined to be a fire hazard to the sewer works.

B. Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage collection or treatment process, constitute a hazard to humans or animals and/or create a public hazard in the receiving waters of the sewage treatment facility.

C. Any water or wastes having a pH less than 5.5 or greater than 9.5 or having any other corrosive property capable of causing damage or hazard to structure, equipment, and/or personnel of the sewage works.

D. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works, such as, but not limited to: fish scales, fish gurry, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, diapers, feathers, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails, and paper dishes, towels, cups, milk containers, and etc. .

E. Due to the special nature and environmental needs of the Town and the surface and groundwaters of the Town, no person shall discharge or cause to be discharged wastewater containing nitrogen and/or phosphorus compounds in a concentration greater than 50mg/L. Any non-domestic discharges having concentration greater than 50mg/L shall require a special permit from the Director. Said permit may include sampling, flow measurement, pretreatment, and/or special fees as a condition of permit issuance.

Any non-domestic discharge having a BOD or TSS concentration greater than 300 mg/L shall require a special permit from the Director. Said permit may include sampling, flow measurement, pretreatment, and/or special fees as a condition of permit issuance.

F. Any wastewater which will cause interference or pass through.

Section 5. No person shall discharge or cause to be discharged the following described substances, materials, water, or waste if it appears likely in the opinion of the **Director** that such waste can harm the wastewater treatment process, or equipment, have an adverse effect on the

receiving stream or can otherwise endanger life, limb, public or private property or cause a nuisance.

Informing the opinion as to the acceptability of these substances, the Director will give consideration to such factors as: the quantities of subject substance in relation to flows and velocities in the sewers; material use in the construction of the wastewater collection and treatment facilities; nature of the wastewater treatment process; capacity of the wastewater collection and treatment facilities; and other factors which in the Directors judgment are pertinent.

The limitations on wastewater strength or mass discharge contained herein may be supplemented with more stringent limitations when, in the opinion of the Director they are warranted:

- (1) The limitations in this set of regulations are not sufficient to protect the POTW and the sewage works;
- (2) The limitations herein are not sufficient to enable the POTW to comply with applicable water quality standards, the effluent limitations specified in the POTW's groundwater discharge permit, or effluent reuse;
- (3) The POTW sludge or other residuals will be rendered unacceptable for disposal or reuse at the Town of Chatham treatment facility desires as the result of discharge of wastewaters at the above prescribed limitations;
- (4) Municipal employees or the public will be endangered or otherwise affected by nuisance conditions;or
- (5) Air or ground water impacts will be caused.

The restricted substances are as follows:

A. Any solid, liquid, vapor, or gas having temperature higher than 65 degrees C (150)degrees F): however, such materials shall not cause the POTW influent temperature to be greater than 40 degrees C (104 degrees F). The Director reserves the right to prohibit or limit the discharge of wastes whose maximum temperatures are lower than 65 degrees C.

B. Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty two (32) and one hundred and four (104) degrees F (0 and 40 degrees C).

C. Any garbage that has not been properly shredded to a maximum of one half of an inch (1/2"), 1.27 centimeters, in any dimension. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Director.

- D. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- E. Any waters or wastes containing iron chromium, copper, zinc, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage works exceeds any limits established by EPA or DEP for such material.
- F. Any waters or wastes containing phenols or other taste or odor producing substances in concentration exceeding limits, established by the Director, as necessary, after treatment of the composite sewage to meet the requirements of the State, Federal, or other public agencies having jurisdiction over sewage treatment facilities' discharge to receiving waters.
- G. Any radioactive wastes or isotopes of such half-life or in concentration as may exceed limits, established by the Director and not in compliance with applicable State or Federal regulations.
- H. Any water or wastes having a ph in excess of 9.5.
- I. Materials which exert or cause:
1. Unusual concentrations of inert suspended solids, such as, but not limited to: fullers earth, lime slurries, and lime residues or of dissolved solids, such as, but not limited to: sodium chloride and sodium sulphate.
 2. Excessive discoloration (such as, but not limited to: dye wastes and vegetable-tanning solutions).
 3. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage works.
 4. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein under Article 1, Definitions.
- J. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment facilities' effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.
- K. Concentration and/or mass-based limits-No person shall discharge, directly or indirectly, into the sewer works, wastewater containing any of the following substances in concentrations exceeding those specified below on either a daily basis or an instantaneous basis, except by permit. Limits are applicable at the point of exit from a property to the public sewer.

POLLUTANT CONCENTRATION: PARTS PER MILLION (mg/L)

Arsenic as As	0.05
Barium as Ba	5.0
Boron as B	5.0
Cyanides as Cn (amenable)	0.1
Fluoride as F	20
Chromium (total)	1.0
Chromium (Cr+6)	0.1
Magnesium as Mg	100
Manganese as Mn	5.0
Copper as Cu	1.0
Zinc as Zn	1.0
Cadmium	0.07
Lead	0.1
Tin	2.0
Silver	0.1
Mercury	0.01
Nickel	1.0

Note: All metals are to be measured as total metals.

Section 6. If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which contain the substances or possess the characteristics enumerated in Section 5 of this Article, and which in the judgment of the Director may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters or which otherwise create a hazard to life or constitute a public nuisance, the Director may:

- A. Reject the wastes.
- B. Require pretreatment to an acceptable condition before discharge to the public sewers.
- C. Require control over the quantities and rates of discharge and/or
- D. Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges.

If the Director permits the pretreatment or equalization of waste flows, the design and installation of the pretreatment facility and equipment shall be subject to the review and approval of the Director and subject to the requirements of all applicable codes, ordinances, and laws.

Section 7. Grease, oil, and sand interceptors shall be provided when, in the opinion of the Director they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; Except such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of the type and capacity approved by the Director, and shall be located as to be readily

and easily accessible for cleaning and inspection. MDC Grease Interceptors shall be installed in the building sewer serving restaurants or hotels, boarding houses that prepare and serve food or business of a similar nature. Maintenance, operation, and repair of all installed interceptors shall be at the expense of the owner and subject to inspection by the Director or an authorized representative.

1. Grease traps shall be inspected monthly, for the months in use, by a duly appointed representative of the Town and shall be cleaned by a licensed septage hauler whenever the level of grease is 25% of the effective depth of the trap or at least every three months whichever is sooner. Facility owners/operators shall be responsible for notifying the Wastewater Department of extended periods of time (one [1] month or more) when the grease trap is not in use (i.e. the facility will be closed) to avoid being inspected and billed for those months.
2. Following pumping of a grease trap the grease trap shall be filled with treated water from the WPCF to a point above the discharge pipe.

Section 8. The owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances, as determined by the Director, in the building sewer to facilitate observation, sampling, and measurement of wastes. Such manhole shall be accessible and safely located, and shall be constructed in accordance with plans approved by the Director. The manhole shall be installed by the owner at the owner's expense and shall be maintained by owner so as to be safe and accessible at all times.

Section 9. All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association and 40CFR, Part 136, and shall be determined from suitable samples taken at the control manholes provided. In the event that no special manhole has been provided, the control manhole shall be determined by the Director. (Normally the control manhole will be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected). Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewer works and to determine the existence of hazards to life, limb, and property. (The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample for samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24 hour composites of all outfalls, whereas pH's are determined from periodic grab samples or continuous monitors).

Section 10. No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the Town and any industrial concern whereby any waste of unusual strength or character may be accepted by the Town for treatment, subject to payment therefore, provided that such agreements do not contravene any requirements of existing federal, state, or local laws and are compatible with any user charge and industrial cost recovery system in effect.

**ARTICLE V
PROTECTION FROM DAMAGE**

Section 1. No person shall maliciously, willfully or negligently break damage, destroy, uncover, deface, or tamper with any structure, appurtenance or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

**ARTICLE VI
POWER AND AUTHORITY OF INSPECTION**

Section 1. The Director and other duly authorized employees of the Town of Harwich Wastewater Department, bearing proper credentials and identification, shall be permitted to enter all properties for the purpose of inspection, observation, measuring, sampling, and testing in accordance with the provisions of this ordinance. The Director, or their representative, shall have no authority to inquire into any processes including metallurgical, chemical, oil refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for wastes treatment.

Section 2. While performing the necessary work on private properties, referred to in Article VII, Section 1., above, the Director, or duly authorized representative of the Director shall observe all safety rules applicable to the premises established by the owner or occupant person and the owner and/or occupant person shall be held harmless for injury or death to the Director's representative and the Town shall indemnify the owner and/or occupant person against loss or damage to its property by Director's representatives and against liability claims and demands for personal injury or property damage asserted against the and owner /or occupant person and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the owner and/or occupant person to maintain safe conditions as required in Article V Section 9.

Section 3. The Director, and other duly authorized representative of the Wastewater Department, bearing proper credentials and identification shall be permitted to enter all private properties through which the Town holds a duly negotiated easement for the purpose of, but not limited to: operation, inspection, observation, measuring, sampling, repairing, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any in said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

ARTICLE VII PENALTIES

Section 1. Any person found to be violating any provisions of these Rules and Regulations except Article IV shall be served by the Town with written notice stating the nature of violation and the offender shall permanently cease all violations. The Director may immediately halt or prevent any discharge of pollutants which reasonably appears to present an imminent endangerment to the health or welfare of persons. In the event that the Director determines that a discharge of pollutants reasonably appears to present an imminent endangerment to the health or welfare of persons, the Director may provide informal (oral or written) notice of such determination to the discharger. The offender shall, within the period of time stated in such notice, permanently cease all violations by immediately stopping or eliminating such discharge and shall submit written proof of the elimination of the discharge to the Director within forty-eight (48) hours of receipt of notice of the Director's determination. If said person fails to voluntarily halt such discharge, the Director will take such actions as deems necessary to prevent or minimize endangerment to the health or welfare of persons. Such actions may include, but are not limited to: seeking temporary injunctive relief, entry onto private property to halt such discharge, severance of the sewer connection, suspension of wastewater disposal service, suspension or revocation of a discharge permit, and/or implementation of legal action. After such discharge has been halted, the Director may take such other and further actions as may be necessary to ensure elimination of said discharge and to ensure compliance with the terms of these Rules and Regulation and any discharge permits issued hereunder.

Section 2. Any person who shall continue any violation beyond the time limit provided for in Article VIII, Section 1 shall be guilty of a misdemeanor, and on conviction thereof, shall be fined an amount not exceeding five thousand dollars (\$5,000) for each day for each violation of any provisions of these Rules and Regulations. Each day in which any such violation shall continue shall be deemed a separate offense. These penalties are stated in the Massachusetts General Laws, Chapter 83, as amended by Chapter 174 of the Acts of 1987. Enforcement action shall be considered to begin immediately upon discovery of the violation for the purpose of calculating penalties, etc.

Section 3. Any person violating any of the provisions of this ordinance shall become liable to the Town for any expense, loss or damage occasioned by the Town by reason of such violation.

Section 4. Neither the Town nor any of its employees shall be liable for damages arising out of a malfunction of the system including, but not limited to, backups.

ARTICLE VIII VALIDITY

Section 1. All ordinances or parts of ordinances in conflict with these Rules and Regulations of the Sewer Department are hereby repealed.

Section 2. The invalidity of any section, clause, sentence, or provision of this ordinance shall not affect the validity determined by the Board as to which of any other part of this ordinance which can be given effect without such invalid part or parts.

**ARTICLE IX
COLLECTION OF SEWER AND SERVICE CHARGES:**

Section 1. Establishment of Rates

Rates and fees for water and sewer shall be determined by the Harwich Board of Water and Wastewater Commissioners as instructed under applicable Massachusetts General Law Chapters 40 and 83.

Section 2. Bills Payable

Bills are due and payable within thirty (30) days from the date of issuance. The failure of the customer or his/her agent to receive notice of their bill or other related charges does not relieve them from the obligation for payment or from the consequences of nonpayment under the Department Rules & Regulations and under applicable Massachusetts General Laws Chapters 40 and 83.

All sewer bills that are outstanding after 30 days will be mailed a demand notice which shall be due within fourteen (14) days. If the charges are still unpaid after the due date of the demand notice, a demand fee will be assessed. If the water service shall be turned off for non-payment of the sewer service charges, the water service will not be turned on until all past charges are paid in full, including all expenses associated with collection of such sewer charges and the shut off of water service. In order to turn off or plug a sewer service without causing a health problem the water service shall also be turned off. Such shut off of water charges shall be as approved by the Commissioners as water rates and charges of the Water Department.

**ARTICLE X
GRIEVANCE AND VARIANCE PROCEDURE:**

A person who seeks a variance or feels aggravated due to the interpretation of these Rules and Regulations as it affects them shall have recourse, without prejudice or retribution, to seek a response to the alleged situation, condition, problem or misunderstanding in the following manner:

Step 1. The person shall present the issue to the Director in writing using the forms available at the Wastewater Departments' office, documenting the time and/or dates of the circumstances and reasons for a variance request or said grievance. The person may expect a reply to the request for variance or grievance within thirty (30) days from the date of filing with the Director.

Step 2. Should the issue not be resolved with the response from the Director or not received within thirty (30) days, the person may take the issue to the Wastewater Commission. Such

submission shall include copies of all written documentation of the variance request or said grievance, with all sequence of actions or inactions taken to date.

The Wastewater Commission will use its best effort to hold a hearing within forty-five (45) days of receipt of an application for a abatement, variance or grievance request, and shall render a decision within forty-five (45) days after holding such hearing on the application for a abatement, variance or grievance request.

Step 3. Should the issue not be resolved with the response from the Wastewater Commission or not received within forty-five (45) days after the Wastewater Commission closes the hearing on a person's application for abatement, variance or grievance request, the person may take the issue to the Board of Selectmen. Such submission shall include copies of all written documentation of the variance request or said grievance, with all sequence of actions or inactions taken to date. The Board of Selectmen will use their best effort to hold a hearing within sixty (60) days of receipt of an application for an abatement, variance or grievance request and shall render a decision within forty-five (45) days from date of the hearing.

ARTICLE XI ORDINANCE IN FORCE

Section 1. This ordinance shall be in full force and effect from and after its passage, approval, recording, and publication as provided by law.

ARTICLE XII LAND USE CONTROLS – WASTEWATER FLOW MANAGEMENT

Preamble:

The Town of Harwich Board of Selectmen being responsible for the design and construction of the town sewer systems and for the implementation of the Comprehensive Wastewater Management Plan (CWMP) adopt the following Land Use Control – Wastewater Flow Management regulation to achieve Flow Neutral requirements. Sewer Service Areas (SSAs) to be implemented over eight phases during a 40-year period and wastewater flow projections for those areas have been defined after completing a comprehensive and deliberate study of the existing and projected wastewater needs of the Town. Reference is hereby made to the Final CWMP accepted by the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) in 2016. The intent of this regulation is to manage the wastewater flows in Town to those projected in the approved CWMP, and sewage treatment provided through intermunicipal agreements and/or in the case of construction of a wastewater treatment facility, the issuance of flow limits issued through a MassDEP Groundwater Discharge permit.

Background:

Any owner of a house, building, or other structure used for human habitation, occupancy, employment, or recreation shall install sanitary facilities thereon in order to connect at his or her own expense to a public sanitary sewer of the Town based on the following sections.

All Connection and Extension Permits for sanitary sewers shall be issued at the sole discretion of the Harwich Board of Selectmen. Implementation of the Comprehensive Wastewater Management Plan and construction of the sewer systems are the responsibility of the Board of Selectmen. The Town of Harwich completed a CWMP in 2016 prepared by CDM Smith Inc., to provide a comprehensive wastewater management plan that outlines the existing and future wastewater needs of the Town in order to protect and restore water quality.

To analyze existing wastewater flows and estimate future wastewater needs, the Town was divided into eight Sewer Service Areas primarily by watershed. The Campground Area, Great Sand Lakes area, and the Route 28 Harwich Port area are outside of the Massachusetts Estuaries Project (MEP) watershed areas and thus are grouped separately. Figure 13-4 from the CWMP shows the watersheds and SSAs. Existing and future wastewater flows were also calculated for each of the five watersheds. The approved March, 2016 CWMP, used water use data from 2004 through 2007 to estimate existing and future wastewater needs, identifying a future need of 1,259,000 gallons per day (gpd). The sewer service area flows for each of the eight (8) watershed areas are summarized in attached Table 1-1.

The Harwich Board of Selectmen will use information and recommendations included in the CWMP as a guide when considering applications for new connection and extension permits and thereby manage the capacity within the sewer system to serve the needs of the Town for the 40-year planning period.

Regulation: Land Use Control – Wastewater Flow Management

The Harwich Board of Selectmen are adopting this new Sewer Use Regulation article that will ensure managed smart growth and prevent excessive growth based on availability of municipal sewer service.

General Land Use Controls

The Sewer Use Regulation as adopted by the Board of Selectmen delineates and designates eight SSAs and the wastewater flow to be allocated to those individual areas. The areas are shown on Figure 1-1 and the flows are shown on Table 1-1, are both attached and made a part of this sewer use regulation Article XII. Those flows shall be utilized as a guide by the Town in allocating flows for new connections within the individual SSA during the noted 40-year planning period (2017-2057). Flows are based on actual flows.

Wastewater Flow Management

The Board of Selectmen reserve the right to reallocate flows within all SSAs provided that the following provisions are met:

1. An applicant seeking to alter a SSA or flow within a SSA shall be responsible for all costs associated with that change including potential for filing a Notice of Project Change with the Massachusetts Environmental Policy Act (MEPA) Office as well as burden of proof to demonstrate the public health need or water quality need, and public benefit;
2. A re-allocation of flows within the SSA shall not exceed the total project flow increase for Harwich in the projected 40-year planning period as presented in the March, 2016 CWMP and shown in Table 1-1;
3. A re-allocation of flow from one SSA to another SSA without exceeding the total flow increase shall be subject to a simple majority vote of the Board of Selectmen; and
4. A re-allocation of flows to an area outside an existing SSA shall only be allowed under the following circumstances:
 - a. For non-public health emergencies or water quality benefits, by unanimous vote of the Board of Selectmen and by positive vote of a legally convened town meeting if zoning changes or Town funding is required. This provision is possible provided the total flow for the projected 40-year planning period is not exceeded.
 - b. For public health emergencies, by unanimous vote of the Board of Selectmen and by recommendation of the Harwich Board of Health. This provision is possible provided the total flow for the projected 40-year planning period is not exceeded.

Abandonment of Systems

Existing on-site septic systems that are connected to the Town's sewer system shall comply with Commonwealth of Massachusetts – Department of Environmental Protection Regulations 310 CMR 15.354 – Abandonment of Systems and any local Harwich Board of Health regulations.

Adopted

The Board of Selectmen for the Town of Harwich, MA, do hereby adopt the following Land Use Control – Wastewater Flow Management regulation. The sewer service areas and projected wastewater flows have been designated following comprehensive and deliberate study of the existing and projected wastewater needs of the Town. Reference is hereby made to the Final Comprehensive Wastewater Management Plan (CWMP) accepted by the MEPA Office in 2016.

Table 1 – 1
Sewer Service Areas

Sewer Service Area Name (SSAs)	Flow Allocation (in gpd)	Approved Flow (in gpd)
Allen Harbor	61,500	0
Herring River	628,000	0
Route 28/Out MEP	28,000	0
Pleasant Bay	326,000	300,000 (1)
Saquatucket Harbor	113,000	0
Wychemere Harbor	31,900	0
Campground	34,800	0
Great Sand Lake	35,800	0
CWMP Total Flow	1,259,000	300,000

- (1) Town has an executed Inter-municipal Agreement with the Town of Harwich for 300,000 gallons to service the Pleasant Bay Sewer Service Area.
- (2) Phased approvals for wastewater flow to the listed SSAs will be approved by the town Wastewater Commissioners as inter-municipal agreements and construction of a wastewater treatment facility with an issued MassDEP Groundwater Discharge Permit that outline maximum available sewer flows.

APPENDICES

Appendix A: Design of Sewers

Appendix B: Construction Technical Specifications

APPENDIX A DESIGN OF SEWERS

Section 1. General

Wastewater collection systems shall be designed separately from stormwater systems. Wastewater collection systems shall not allow for the introduction of rain water, noncontract cooling water, and groundwater from foundation drains, sump pumps, surface drainage or any other source of inflow. Overflows from wastewater collection systems shall also not be permitted.

New sanitary sewers and all extensions to sanitary sewers owned and operated by the Town of Harwich shall be either gravity sewers or low pressure sewers and shall be designed by a professional civil engineer, or registered sanitarian for systems generating less than 2000gpd licensed to practice in the Commonwealth of Massachusetts, in accordance with the Guides for the Design of Wastewater Treatment Works (TR-16), and in strict accordance with appropriate Massachusetts codes and the Town of Harwich Rules and Regulations of the Sewer Department. Plans and specifications shall be submitted to and approved by the Director before initiating any construction. The design shall anticipate and allow for flows from all possible future extensions or development within the immediate drainage area in conformance with Town planning documents.

Section 2. Building sewers shall be constructed of such materials and shall be a minimum four (4") inch diameter pipe for single family residential connections and six (6") inch diameter pipe for multi-family, commercial or industrial connections or as the Superintendent may determine. Sewer pipe shall be made from: ductile iron with the outside coated with extra heavy bituminous coating approved for buried utilities and the inside cement lined, minimum schedule 35 P.V.C. or acceptable substitute approved by the Superintendent. The building sewer shall be laid straight in line and grade.

Single family residential building sewers must have watertight wye cleanouts, with H-20 rated valve frame and cover box, with the word "SEWER" in raised lettering, at all locations where pipe size, slope or direction changes and at the property line. Additional cleanouts may be required for runs of 100 feet or more, or at the discretion of the Director. The cleanout shall be brought to within four (4") inches below final grade, except for paved surfaces, (bituminous concrete, concrete, paving blocks, etc.) the cover shall be flush with the finished surface. Cleanouts in pressure sewers shall be located and constructed per the manufacturer's recommendation.

For multi-family, commercial or industrial sewer connections manholes shall be used at all locations where pipe size, slope or directions changes. Commercial or industrial sewer connections shall include a sampling station, to be used for discharge sampling, located in the road layout at the property line. The sampling station shall consist of a precast manhole with approved frame & cover.

Pressure Sewer Laterals:

If building is to be connected to a low pressure sewer or requires a pump to lift sewage to a gravity sewer, the gravity portion of the installation shall meet the requirements of the previous paragraph. The pressure pipe shall be minimum 1-1/4 inch diameter if a grinder pump is used and 2-inch diameter if a grinder pump is not used or other such larger size if the sewage flow and characteristics differ from a single-family residence.

Materials

Polyethylene for 1-1/4 –inch pipe through 4 inch pressure pipe with material conforming to ASTM D3350, Type PE-4710 HDPE pressure Class PC 200, SDR-11. Fittings for use with polyethylene pipe and tubing shall be manufactured and furnished by the pipe supplier and in conformance with AWWA C901 requirements. Joints for polyethylene pipe shall be jointed by the butt fusion method in a manner recommended by the pipe manufacturer.

Polyvinyl Chloride (PVC) Pipe- ASTM D2241 PVC pressure pipe material conforming to ASTM D1784, minimum class SDR 21 for pipe 1-1/4-inch through 4-inch, push-on joint conforming to ASTM D3139 with flexible elastomeric gaskets conforming to ASTM F477.

A ball valve with curb stop and check valve shall be installed on all low pressure and force mains, as close as feasible to a property line. Ball valves for low pressure sewers shall be true union type constructed from PVC Type I cell classification with EPDM O-rings. All valve components shall be replaceable. Ball valves 2 inch and smaller shall be pressure rated to 235 psi, while valves larger than 2 inches shall be rated to 150 psi. Ball valves shall have a Safe-T-Block seal carrier to stop flow in either direction, allowing safe removal of the downstream union nut for system service or modification. Ball valves shall be true union ball valves as manufactured by Spears Manufacturing Company, or equal. Check valves for low pressure sewer laterals shall be made of stainless steel or fabric-reinforced synthetic elastomer to allow for a positive seal with minimum backpressure. Check valves shall be true union ball check valves.

Curb stop valves shall be of brass or bronze construction and two rubberized O-ring seals to provide pressure-tight seal. Curb stop valves shall be figure H-15204 as manufactured by Mueller-Oriseal, B22 as manufactured by Ford Meter Box Company, Hayes, Nueseal, or equal. Curb boxes shall be 2-1/2 inch shaft size two-piece screw type. They shall be adjustable from 48-inch to 72-inch. Curb boxes shall be constructed of cast iron and thoroughly coated with two coats of asphaltum varnish. Curb box shall be stainless steel supplied with a hole in the “U” portion for the insertion of a stainless steel pin. Pins shall be supplied and shall be made of

stainless steel. Curb boxes shall be as manufactured by Ford Meter Box Company, Mueller Company, or equal.

Gravity or low pressure pipe shall have magnetic marking tape 2 inches wide with the words "SANITARY SEWER BELOW," installed not more than two (2') feet below finished grade on all mainline and service laterals.

Section 3. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. All buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer or public sanitary sewer, as specified by the Director.

Low Pressure Grinder Pumps or Lift Pumps:

Each property serviced by a low pressure sewer shall have a dedicated pre-manufactured pump station suitable for the flow, pressure and other conditions defined by the property and the public sanitary sewer. The station shall include an in-ground self contained unit with submersible motor, level controls, sensors, alarms, and an emergency generator plug-in connection. Properties whose sewage quantities and characteristics are equivalent to four or more families shall install a duplex pump. Refer to further requirements in Article IV-Design of Sewers, Section 11- Grinder Pump Systems.

Section 4. No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a building sewer or building drain which is connected directly or indirectly to a public sanitary sewer.

Section 5. Exhaust from engines, blowoff from boilers, drainage of gasoline or any explosive liquor, liquids, or other flammable substances shall not be permitted to be discharged into any building sewer which is connected directly or indirectly to a public sanitary sewer. At the time a connection is made to the Town's sanitary sewer system, the interior plumbing shall be inspected to ensure that no connections to roof drains, yard drains, foundation drains, sump pumps, or other sources of drainage water is connected to the sanitary sewer.

Section 6. The connection of the building drain into the building sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town.

Section 7. The Licensed Utility Installer, listed on the approved sewer connection permit, shall notify the Water and Sewer Departments, a minimum of 72 hours, before the building sewer will be ready for connection to the public sewer. The Director will schedule the time and date to perform an inspection of the building sewer's connection to the public sewer, connection shall be made only under the supervision of the Director or their representative.

Section 8. All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and

other public property and/or private property disturbed in the course of the work shall be restored in a manner satisfactory to the Director.

Section 9a. Plumbers and private contractors, of established reputation and experience, who have paid the required filing fees, as stated in Section 13b, and have provided the required license and permit bonds, as stated in Section 13c, and have submitted a Certificate of Insurance with required coverage, as stated in Section 13d, may be approved by the Director as a Licensed Utility Installer (L.U.I.).

Applicants for licenses for installing sewer main and sewer services shall attend a training seminar on the installation of low pressure pumps that is conducted by the manufacturer, and the applicant shall show evidence of course completion.

Note: The installation of grinder pumps may require other permits such as, but not limited to: electrical and plumbing.

Section 9b. Applicants for licenses as sewer main and sewer service installers (Licensed Utility Installer) are required to pay a filing fee. As set by the Board (see rates and fees schedule).

Section 9c. Applicants for licenses as sanitary sewer and building sewer installers (Licensed Utility Installer) shall obtain a License and Permit Bond in the amount of Five Thousand (\$5,000.00) Dollars or an amount equal to 100% of the construction cost of any proposed sewer connection located within or on public property or an amount approved by the Director, whichever is greater. Said license and permit bond shall remain in full force and effect for a period of one (1) year from date of acceptance by the Town of the L.U.I.'s last sewer connection. This bond will guarantee that the Licensed Utility Installers (L.U.I.) will comply with the statutes, regulations, or ordinances of the Town of Harwich. The license and permit bond shall be duly executed by the Principal of the L.U.I. and by a Surety Company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Director.

Section 9d. Before any Licensed Utility Installer performs any work in, on, under or around streets, sidewalks and property belonging to the Town of Harwich, it will be necessary to furnish, simultaneously with the submittal of the License and Permit Bond, a Certificate of Insurance showing that the contractor has the following coverage:

- | | | | |
|----|-----------------------|------------------------------------|----------------------------------|
| 1. | General Liability - | \$500,000
\$500,000-\$1,000,000 | Property Damage
Bodily Injury |
| 2. | Automotive Liability- | \$500,000
\$500,000-\$1,000,000 | Property Damage
Bodily Injury |

3. Workmen's Compensation and Employer's Liability as required under Massachusetts General Laws.
4. Insurance shall include coverage for collapse of underground structures.
5. Insurance shall include coverage for projects completed operations.

All above insurance coverage shall remain in full force and effect for a period of at least one (1) year from the date of acceptance by the Town of the last sewer connection installed by the L.U.I. The L.U.I. shall take all responsibility for the work, and take all precaution for preventing injuries to persons and property in or about the work.

Section 9e. The L.U.I. shall pay all debts for labor and materials contracted for or by them on account of the work and shall assume the defense of and indemnify and save harmless the Town of Harwich and its Officers and Agents from all claims relating to labor and or alleged infringement of inventions, patents, or from injuries to any person or corporation caused by the acts of negligence of the L.U.I. any of its agents or employees, or any subcontractor, in doing the work or in consequence of any improper materials, implements, or labor used therein.

Section 9f. Before the L.U.I.'s License and Permit Bond or any coverage listed in the L.U.I.'s Certificate of Insurance expires, the L.U.I.'s shall send a revised License and Permit Bond or Certificate of Insurance to the Water and Sewer Department showing that the bond or insurance coverage, is still in place. The Licensed Utility Installer shall NOT perform any work in, on, under or around streets, sidewalks and property belonging to the Town of Harwich or any other public property if their License and Permit Bond or any coverage listed in their Certificate of Insurance has elapsed.

Section 9g. Approved Licensed Utility Installers will renew their Utility Installers Licenses by submitting a revised License and Permit Bond, Certificate of Insurance, and License Fee by January 1st of each year. All Utility Installers' Licenses expire at Midnight, December 31st of each year.

Section 10. All sanitary sewer extensions shall require inspection by a qualified inspector or the Director may determine that a building sewer installation or repair will require full time inspection by a qualified inspector. In either case the Director will designate a private inspector as Town Inspector who shall represent the interest of the Town of Harwich during construction of any sanitary sewer extension or building sewer installation or repair, and will monitor and inspect the ongoing progress of the work, full-time observation is required. The costs for the services performed by said Town Inspector shall be paid by the developer or owner, through the Water and Sewer Departments. Flows will not be permitted to be discharged from any service connection until a Certificate of Compliance is submitted by the Town Inspector and the report is approved by the Director.

Section 11. After the completion of any building sewer's repairs or connection to the municipal sewer, the L.U.I. shall fill out a sewer connection tie card, on the forms provided at the Water and Sewer Departments' office, for each building sewer the L.U.I. has performed work

on. The tie-card shall be completed before the inspection of the L.U.I.'s work, and before the L.U.I. backfills the building sewer and connection to the municipal sewer.

Section 12. After completion and before the final inspection of any sanitary sewer connection or building sewer connection for residential dwellings with four (4) or more dwelling units, industrial connections, commercial connections with five (5) or more water closets, commercial connection with industrial water or waste, connections of private sewer system or whenever the Director requires, the Licensed Utility Installer, developer or owner will furnish a reproducible digital "as-built" drawing (1" = 20') in .PDF and .DWG format to the Director. The as-built drawing(s) shall contain a plot plan(s) with building(s) and highway layouts, sewer layouts with profiles, force mains, force main gates, pump station(s), pump station(s) details, and descriptions of each building sewer showing the depth of all connections, pipes, and manholes, using buildings or other permanent markers as reference points. The as-built drawing (s) shall contain any other information deemed necessary by the Director.

Section 13. Alternative Sewer Collection Systems:

Sewer collection systems not stated in these Rules and Regulations of the Sewer Department shall only be permitted with the Director's conditional approval.

Section 14. Design Capacity and Design Flow

Design Factors:

- Peak hourly sewage flow
- Additional peak flows of industrial and commercial wastes
- Maximum groundwater infiltration
- Topography of the immediate area
- Difficulty of installation

Design Period:

Sewage collection systems shall be designed for a life span of 50 years, and interceptor sewers shall be designed to handle the maximum capacity of uses in the drainage area as determined by the Director.

Design Flow:

Submit a detailed description of the procedures used for calculating sewer design flow to the Director.

The Massachusetts 310 CMR 15.000, the State Environmental Code, Title 5, shall be used for calculating the design flow for sewers. If the Massachusetts 310 CMR 15.000, the State Environmental Code, Title 5, does not have a flow rate for the proposed use, the following methods may be used with the approval of the Director:

Flow Related to Water Consumption;

When available, use existing sewage flow and/or consumption data as a basis for sewer design. If such data are not available, using flow data from a similar community or users;

Per Capita Flow;

Where actual flow data cannot be obtained, base residential flows from new collection systems on an average daily per capita flow of not less than 70 gallons per day (0.27 m³/day). Add an appropriate allowance for infiltration to this flow;

In all cases, add a minimum allowance of 250-500 gpd/in. diam/mile of sewer (0.24-0.48 m³/cm of pipe diam/km/day) for infiltration to the water consumption, per capita flow or any other calculation method required by the Director.

Section 15. Details of Gravity Sewer Pipe Design and Construction

Minimum Sewer Pipe Size:

No gravity sewer shall be less than 8 inches in diameter (20 cm).

Depth:

In general, sewers shall be deep enough to drain basement fixtures and to prevent freezing. Water tight insulation shall be provided for sewers that cannot be placed deep enough to prevent freezing. For house connections chimneys (vertical pipe) preformed block units shall be used when the sewer main is greater than or equal to 12 feet deep.

Buoyancy:

Where high groundwater conditions are anticipated, the buoyancy of sewers shall be considered, and the floatation of pipe shall be prevented with appropriate design and construction of the sewer.

Slope:

Minimum Slopes:

All sewers shall be designed and constructed to give a velocity (when flowing full) of not less than 2.0 feet per second (0.61 m/s) based on Manning's formula using an "n" value of 0.013. The Director may permit the use of other "n" values if deemed justified on the basis of research or field data. The following minimum slopes shall only be used if absolutely necessary because of grade restrictions; however, greater slopes are desirable.

<u>Sewer Size</u>	<u>Minimum Slope in Feet per 100 Feet (m/100m)</u>
8 inches (203 mm)	0.40
10 inches (254 mm)	0.28
12 inches (305 mm)	0.22
14 inches (356 mm)	0.17
15 inches (381 mm)	0.15
16 inches (406 mm)	0.14
18 inches (457 mm)	0.12
21 inches (533 mm)	0.10
24 inches (610 mm)	0.08
27 inches (686 mm)	0.067
30 inches (762 mm)	0.058
36 inches (914 mm)	0.046
42 inches (1067 mm)	0.037

The use of oversized sewers in order to justify flatter slopes is not permitted.

Slope Between Manholes:

Sewers shall be laid out with uniform slope between manholes.

High Velocity Protection:

Velocities greater than 12 feet per second (3.7 m/s) shall not be permitted under any flow conditions, unless the Director approves special provisions that will protect against pipe erosion and impact.

Steep Slope Protection:

Securely anchor sewers on 15 percent slopes, or greater, to prevent displacement.

Impervious Dams:

Impervious dams shall be installed every 300 feet to control the flow of groundwater within the pipe bedding material, when:

- The surrounding native material is considerably less impervious than the pipe bedding material;
- The pipe bedding could produce a hydraulic head of 25 feet on the pipe gaskets and joints during periods of high groundwater flow; and/or
- The sewer is constructed downstream of a waterway or wetland crossings.

Alignment:

Sewers shall be laid out in a straight line and alignment, and shall be checked with a laser beam.

Sewer Pipe Material:

Sewer pipe material shall be as specified in Article V, Construction Technical Specifications, Section 12:

Sewer Pipe Inspection and Testing:

The specifications shall include deflection and leakage testing of sewer pipes, as stated in Article V, Construction Technical Specifications, Sections 17. and 18

Section 15. Details of Sewer Manhole and Cleanout Design and Construction

Manholes and cleanouts shall be as specified in Article V, Construction, Technical Specifications, Section 13:

Manhole Inspection And Testing:

The specifications shall include a requirement for the inspection and testing of manholes for leaks or damage as specified in Article V, Construction Technical Specifications, Section 21.

Section 16. Inverted Siphons (Depressed Sewers)

Inverted siphons shall only be allowed if there is no other option and it is approved by the Director. Depressed sewers shall have no less than two barrels with a minimum pipe size of 6 inches (15 cm) and shall be provided with necessary appurtenances for convenient flushing and maintenance. Manholes shall have adequate clearances for cleaning equipment and for inspection and flushing. The design shall provide for sufficient heads and pipe sizes to secure velocities of at least 3.0 feet per second (0.92 m/s) for average flows under initial conditions.

The inlet and outlet details shall be arranged so that the normal flow is diverted to one barrel and so that either barrel may be taken out of service for maintenance. A hose connection shall be provided to the siphon for flushing purposes.

Section 17. Aerial Crossings

Aerial crossings shall only be allowed if there is no other option, and it is approved by the Director. All aerial crossings shall provide appropriate support for all joints and pipes used for aerial crossing. The supports shall withstand frost heaves as well as overturning, settlement, flooding, thermal expansion, vibrations, and other loads that may act against the piping. Precautions against freezing shall be provided (e.g., insulation and increased slope). Expansion joints between above-ground and below-ground sewers shall be provided. Where buried sewers change to aerial sewers, special construction techniques to minimize damage from frost heaves shall be used. Ductile iron pipe with restrained mechanical joints are required. The bottom of the pipe shall be no lower than one (1') foot above the 100 year flood elevation level.

Section 18. Location of Sewers in Streams

Sewers shall be designed to minimize the number of stream crossings.

Cover Depth:

The top of all sewers entering or crossing a stream shall be sufficiently below the natural bottom of the stream bed to protect the sewer line. The following cover requirements shall be met:

- 1 foot (305 mm) of cover where the sewer is located in rock.
- 3 feet (914 mm) of cover in other material. In major streams, more than 3 feet (914 mm) of cover shall be required.
- In paved stream channels, the top of the sewer line shall be at least 1 foot (305 mm) below the channel pavement.

Horizontal Location:

Sewers located along streams shall be located sufficiently outside of the stream bed to allow for stream widening in the future and for the prevention of siltation during construction.

Structures:

Locate sewer manholes or other structures outside of streams whenever possible. Where structures must be located in a stream, they shall not interfere with the free discharge of flood flows or navigation in the stream. The manholes' covers shall be no lower than one (1') above the 100 year flood elevation level.

Alignment:

Sewers shall cross streams perpendicular to the flow without a change in grade.

Materials:

Sewers entering or crossing streams shall be watertight and free from changes in alignment or grade. Joints shall be restrained in order to prevent movement from stream forces. Ball-and-socket or restrained joints designed for hard service applications shall be provided.

Backfill materials shall be stone, coarse aggregate, washed gravel, or other materials that will not readily erode, cause siltation, damage pipe during backfill, or corrode the pipe and shall be approved by the Director. In large stream crossings, where required by the Director, place riprap over the sewer pipe for stability and to prevent erosion.

Siltation and Erosion:

The design engineer or L.U.I. shall include construction methods that will minimize siltation and erosion in the project specifications the construction methods for sewers in or near streams. Such methods shall control siltation and erosion by limiting unnecessary excavation, including disturbing or uprooting of trees and vegetation, dumping of soil or debris, or pumping silt-laden water into the stream. Specifications shall require cleanup, grading, planting, and restoration of all work areas to begin immediately.

Section 19. Protection of Water Supplies**Cross Connections:**

No physical connection shall exist between a public or private potable water supply system and a sewer or any appurtenance that would permit the passage of wastewater or polluted water into the potable supply. No sewer shall come into contact with a water pipe and no water pipe shall pass through any part of a sewer manhole or any part of the sewer system.

Relation To Water Works Structures:

Sewers shall be located as far as possible from public water supply wells or other potable water supply sources and structures.

Engineering plans shall show all existing waterworks units, such as treatment facilities, basins, pipes, wells, or other waterworks units that are within 50 feet of the proposed sewer or to within the minimum distances required by the Director.

Water Mains' Relation:

Horizontal Separation:

Whenever possible, lay out sewers at least 10 feet (3.0 m) from any existing or proposed water main. If local conditions prevent a lateral Separation of 10 feet, the Director may make an exception on a case-by-case basis when supported by data from the design engineer. Such an exception may allow the sewer to be installed closer than 10 feet to a water main, provided that it is laid out in a separate trench with the top (crown) of the sewer at least 18 inches (46 cm) below the bottom (invert) of the water main or is encased in a water tight sleeve.

Vertical Separation:

Whenever sewers must cross water mains, lay out the sewer so that the top of the sewer is at least 18 inches (46 cm) below the bottom of the water main. The sewer joints should be equidistant and located as far away as possible from the water main joints. When the sewer cannot meet the above requirements, relocate the water main to provide for this separation or reconstruct it with mechanical-joint pipe for a distance of 10 feet (3.0 m) on each side of the sewer. One full-length (twenty feet) water main pipe shall be centered over the sewer so that both joints will be as far from the sewer as possible.

Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade.

When it is impossible to achieve horizontal and/or vertical separation as stipulated above, both the water main and sewer shall be constructed of mechanical-joint cement-lined ductile iron pipe or another equivalent that is watertight and structurally sound. Both pipes shall be pressure tested to 150 psi to ensure that they are watertight, and one of the pipes shall be installed in a water tight sleeve for a horizontal perpendicular distance of 10 feet (3.0) on each side of the other pipe. Any joints in the watertight sleeve shall be as far as possible from the water main's intersection with the sewer.

Section 20. Details of Low Pressure Sewer Design and Construction

Layout: The branched configuration of a pressure sewer is required. Looped piping shall not be permitted. Pipe routing shall include long radius sweeps no less than those recommended by the pipe manufacturer.

Pressure pipes shall be designed and installed so that a minimum of five (5) feet of cover material exists over the crown of the pipe at all times. Appurtenances such as isolation valves, air release valves, and clean-outs shall be provided as required by the Director.

Pipe Size: The diameter of the pressure sewer shall be calculated so that it provides a cleansing velocity based on the average daily flow of the system. Force Mains shall have a minimum velocity of three feet per second, 3ft/sec.

Minimum low pressure sewer pipe sizes shall be as follows (unless there is a significant change in grade):

NUMBER OF HOMES OR EQUIVALENT	MINIMUM PIPE SIZE
1-3	1.5
4-9	2
10-18	2.5
19-30	3 (model recommended)
>30	Must be modeled

Isolation Valves:

Isolation valves shall be required to allow isolation of individual girder units, system expansion, and at key locations such as at the property line.

Ball valves for low pressure sewer manholes shall be true union type constructed from PVC Type I cell CLASSIFICATION WITH EPDM O-RINGS. All valve components shall be replaceable. Ball valves 2 inches and smaller shall be pressure rated to 235 psi, while valves larger than 2 inches shall be rated to 150 psi. Ball valves shall have a Safe-T-Block seal carrier to stop flow in either direction, allowing safe removal of the downstream union nut for system service or modification. Ball valve ends shall be as needed to connect to Schedule 430 PVC pipe in low pressure sewer manholes. Ball valves shall be true union ball valves as manufactured by Spears Manufacturing.

Curb Stop Valve:

Curb stop valves shall be located at the property line of the street or easement of the sewer main. Curb stop valves shall be of brass or bronze construction and two rubberized O-ring seals to provide pressure-tight seal. Curb stop valves shall be figure H-15204 as manufactured by Mueller-Oriseal, B22 as manufactured by Ford Meter Box Company, Hayes, Nuseal, or equal. Curb boxes shall be 2-1/2-inch shaft size two-piece screw type. They shall be adjustable from 48-inch to 72-inch. Curb boxes shall be constructed of cast iron and thoroughly coated with two coats of asphaltum varnish. Curb box rods shall be stainless steel supplied with a hole in the “U” portion for the insertion of a stainless steel pin. Pins shall be supplied and shall be made of stainless steel. Curb boxes shall be as manufactured by Ford Meter Box Company, Mueller Company, or equal.

Air Release Valves:

Air and vacuum valves shall be installed on low pressure mains. The air and vacuum valves shall be designed to release air from the main when the main is being filled and/or air becomes entrapped in the main, and to admit air into the sewer main when pumps are stopped and the main is being drained by gravity. The body and cover of air and vacuum valve shall be cast iron, floats of stainless steel, protective hood of steel, seats of Buna-N, and miscellaneous internal

parts of stainless steel, Manufacturer-Crispin, or equal. Air and vacuum valves shall be located in a manhole or structure with a diameter of 60 inches to allow access for repairs and maintenance.

Cleanout Connections:

Cleanouts shall be installed on the pressure mains at sags and other locations where debris can accumulate and clog the lines, and proper valving to conduct required maintenance shall be provided.

Miscellaneous.

Magnetic marking tape two (2) inches wide with the words "SANITARY SEWER BELOW," shall be installed not more than 2 feet below finished grade on all mainline and service laterals.

Section 21. Force Mains

Minimum Size:

Force mains shall have a minimum velocity of three feet per second, 3ft/sec.

Force Main Pipe Material:

Force main pipe material shall as specified in Article IV, Construction Technical Specification, Section 14:

Velocity:

At design average flow, velocity in excess of 3 feet per second (0.91m/s) shall be maintained.

When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

Variable Terrain:

As far as possible, the alignment and depth of a force main should provide a constant upgrade profile. All force mains shall be designed and installed so that a minimum of five (5') feet of cover material is over the crown (top) of the pipe at all times.

Air Relief Valve:

An automatic air relief valve shall be placed at all relative high points in the force main and at 400 feet intervals on level force main runs. All air relief valves shall be protected from freezing.

Drain Valves:

Drain valves at all relative low points in the force main shall be provided. These valves shall be connected to gravity sewers or provided with connections for vacuum pumper trucks. All drain valves shall be protected from freezing.

Termination:

Force mains shall enter the gravity sewer at a point not more than 2 feet (0.61 m) above the flow line of the receiving manhole.

Testing:

Leakage Testing shall be as specified in Appendix B, Construction Technical Specifications, Sections 17 and 18:

Section 22. Grinder Pump Systems:

Pumping equipment shall include an integral grinder capable of handling a reasonable quantity of foreign objects that may find their way into a building's sewerage system. The grinder pump shall be capable of processing foreign objects without jamming, stalling, or overloading, and without making undue noise. The grinder shall provide a positive flow of solids into the grinding zone. Grinder pump stations shall be of the wetwell type.

A list of suitable manufacturers will be available from the Director. Properties whose sewage quantities and characteristics are equivalent to four or more dwelling units shall install a duplex pump.

Design of Pump Station:

Access: Outside installation shall be designed with the service manhole constructed of the same material, and at least as thick as the tank. The manhole shall have an opening at the surface with a minimum inside diameter of 30 inches (76 cm); its cover shall be securely lockable. The size of the manhole shall allow for the performance of maintenance and repair functions.

Tank: Construct each tank of concrete or custom-molded, fiberglass reinforced polyester resin using a filament wound process, layup and spray technique, or other approved process that will ensure a smooth and resin rich interior surface that is designed for two times the maximum loading.

The basin shall be concrete, fiberglass-reinforced polyester resin, or other material meeting the minimum strength specifications herein. The basin shall be furnished with one PVC closet flange or one flexible inlet flange suitable for connection to the household gravity line. At a minimum, the basin wall and bottom shall withstand two times the anticipated maximum pressure exerted on the basin, either from soil loadings or buoyancy forces. All station components must function normally when exposed to these loadings. All seals and joints shall pass factory tests to ensure that they are water tight.

Electrical Equipment: Wiring and electrical connections shall be NEMA rated for the environment in which they are to be placed. System shall include an emergency generator plug-in connection.

Pumps:

Pump Removal: The grinder pump shall be readily removable without the need for manual disconnection of piping.

Grinder: The grinder shall be positioned immediately below the pumping elements, securely fastened to the pump motor shaft, and driven directly by the same motor. The grinder shall be a rotating type with a stationary hardened and ground stainless steel shredding ring that carries stainless steel cutter bars. This assembly shall be dynamically balanced and run without objectionable noises or vibrations over the entire range of recommended operating pressures.

Pump Opening: The grinder shall be capable of reducing all components in normal domestic sewage or the sewage to be discharged from the building drain, including a reasonable amount of foreign objects (e.g., paper, wood, plastic, glass, and rubber). Objects shall be reduced to finely divided particles that will pass through the passages of the pump and a minimum 1.25 inch (3.2 cm) diameter discharging pipe.

Intake: The grinder shall be positioned so that solids are fed into it from the bottom in an upward flow, reducing the possibility of overloading or jamming. In addition, sufficient turbulence shall be created to keep the tank bottom free of permanent deposits or sludge banks.

Check Valve:

The grinder pump shall be equipped with a check valve that is installed in a horizontal position on the discharge pipe. This valve shall provide a full-ported passageway when open.

Ventilation:

Adequate ventilation shall be provided in accordance with local and national codes.

Controls:

Sensing devices to detect wastewater levels for initiating pump operation and to detect high water levels shall be installed. Level sensing devices shall only be used and shall not be located near flows entering the well.

Section 23. Pumping Station:**Design Capacity:**

A sewage pumping station shall handle the projected peak sewage flows of its tributary sewer collection system. As recommended by TR-16, Guides for the Design of Wastewater Treatment Works (Technical Report #16) and the Hydraulic Institute's Recommended Standards for Pumping Stations. This information may be included in the Comprehensive Management Plan or other engineering report and any applicable updates or amendments. Pumping stations shall accommodate future expansion, when in the opinion of the Director it is appropriate.

Site Layout:

Stations shall be readily accessible to personnel and service vehicles during all weather conditions.

Flood Protection:

Wastewater pumping stations shall be protected from physical damage by the 100-year flood elevation and shall remain fully operational and accessible during the 100-year flood. All entrances and/or unsealable openings of the station shall be a minimum of one (1') foot above the 100-year flood elevation. These flood elevations shall be determined from the Federal Emergency Management Agency, and U.S. Army Corps of Engineers, and from the local regulations and ordinances.

Environmental Considerations:

Wastewater pumping stations shall be sensitive to the environmental conditions of the site. Visual impacts, architectural style, security, noise levels, odor control, and landscaping shall be considered carefully in station design and shall be reviewed and approved by the Director.

Types of Stations:

Wastewater pumping stations fall into three categories: wetwell/drywell, submersible, or suction lift. The preferred type of station is the Suction Lift type. The Director may approve other types under certain circumstances.

Structural Design:

Earthquake Loads and Uplift Forces:

Stations shall withstand earthquake loads and uplift forces from high groundwater conditions.

Separation:

Wet and drywells, including their superstructure, shall be completely separated. Common walls shall be sealed against gas leaks.

Equipment Removal;

Provisions shall be made for removing all equipment (i.e., pumps, motors, mechanical screens, motor control centers, etc.) from the station. Access openings, hatches, and/or skylights shall be sized accordingly. Permanent hoisting devices shall be provided as necessary.

Substructure:

Station substructures shall be constructed of reinforced concrete, either cast-inplace or precast. Small, prefabricated stations may be constructed of steel plate or fiberglass with the approval of the Director.

Access:

The designer shall minimize the confined spaces and shall indicate which spaces meet the definition of confined space on the drawings. Suitable, safe, and separate means of access shall be provided for dry and wetwells. Stairways and/or steps are required for drywells and wetwells containing either bar screens or mechanical equipment that requires inspection or maintenance. A landing with railings shall be provided for stairways or ladders for every 10 vertical feet. Local, state and federal safety codes shall govern in all cases.

Pumps:

Number of Pumps:

As a minimum, two pumps shall be provided, with each pump being capable of handling peak design flows. Where three or more pumps are provided, the overall station capacity shall be capable of handling peak design flow when any one pump is out of service.

Design:

Pumps shall be designed specifically for wastewater use and shall be non-clogging and as allowed by the Director.

Incoming Wastewater and Rate Discharge:

Pumping stations shall balance the rate of incoming wastewater with the rate discharged.

Each pump shall have an individual intake valve.

Pump suction and discharge openings shall be a minimum of 4 inches in diameter.

Centrifugal Pumps:

Centrifugal pumps shall be used in the drywell/wetwell pumping stations. The pump casing and suction elbow shall be provided with a clean-out access port. Impellers shall be enclosed or semi-open. To ensure primed pump conditions, the wetwell level shall not drop below the centerline of the pump impeller under normal operating conditions.

Submersible Pumps:

Submersible pumping stations may be used when, in the opinion of the Director, circumstances warrant. It shall be possible to remove and replace the submersible pumps without dewatering the wetwell or disconnecting the piping. Pumps shall be of the pull-up design, using a lifting cable and guides for pump removal. The pump shall be connected to the fixed discharge piping with a self-locking coupling. Shaft seal failure or potential seal failure detection alarms shall be provided. Submersible pumps may also be used in a wetwell/drywell configuration, with the Director's approval.

Suction Lift Pumps:**Suction pumps shall be self- or vacuum-priming.**

Location: The pump equipment compartment shall be above grade or offset, and shall be isolated from the wetwell to prevent humid and corrosive sewer atmospheres from entering the equipment compartment. Access to the wetwell shall not be located in the equipment compartment. Valves shall not be located in the wetwell.

Self-priming Pumps: Self-priming pumps shall be capable of rapid priming at the lead pump-on elevation. Such self-priming and repriming shall be accomplished automatically under design operating conditions. Suction piping shall not exceed the size of the pump suction and shall not exceed 25 feet (7.6 meters) in total length. Priming lift at the lead pump on elevation shall include a safety factor of at least 4 feet (1.2 meters) from the maximum allowable priming lift for the specific equipment at design operating

conditions. The combined total of dynamic suction lift at the pump-off elevation and required net positive suction head at design operating conditions shall not exceed 22 feet (6.7meters).

Vacuum-priming Pumps: Vacuum-priming pump stations shall be equipped with dual vacuum pumps capable of automatically removing all air from the suction lift pump. The vacuum pumps shall be adequately protected from sewage damage. The combined total of dynamic suction lift at the pump-off elevation and required net positive suction head at design operating conditions shall not exceed 22 feet (6.7 meters).

Wetwells:

Divided Wells:

The wetwell shall be divided into two sections that are properly interconnected and gated to facilitate repair and cleaning.

Storage Capacity:

The effective storage capacity of the wetwell shall be based upon the recommended number of pump starts per hour and the design filling time. The effective volume of the wetwell shall be based on a filling time of 30 minutes under design average-daily-flow rates. To determine the frequency of starts used for design, refer to the pump manufacturer's warranty.

Where tributary wastewater flows are anticipated to be significantly less than the design average flow, provisions should be made so that the filling time under initial conditions does not exceed 30 minutes (i.e., providing a divided wetwell or shortening the wetwell operation range) and the duration of storage in the pump station and force main does not result in septic conditions in the system or the release of objectionable odors to the environment.

Pump Protection:

Pumps shall be protected from large solids by readily accessible mechanically cleaned bar racks (screen) or combination device located at the wetwell influent. Bar racks should have clear opening not exceeding 1.25 inches (3.1 cm) unless pneumatic ejectors are used or special devices are installed to protect the pumps from clogging or damage.

Floor Slope:

The wetwell floor shall have a minimum slope of 1-to-1 to the hopper bottom. The horizontal area of the hopper bottom shall be no greater than is needed for proper installation and function of the wetwell inlet.

Vortexes:

The wetwell and suction inlets of dry-pit pumps shall eliminate the possibility of vortexes. The required submergence of the intake valves shall be determined for the day-pit pump's location. Intake valves should be flared, with the inlet opening facing down. Every effort shall be made to minimize flow rotation in the wetwell.

Sewage Channels:

Sewage channels located in wetwells shall be covered with nonskid, corrosion-resistant grating. They shall be installed flush with a floor, and capable of supporting anticipated loads. All channels shall be drained when not in use. Where the side meets the floor of the channel, fillets shall be provided.

Inlet Sewers:

Sewer piping entering the wetwell shall not have air in the pump suction line.

Drywells:

Automatic heating and dehumidification equipment shall be provided in all drywells. The electrical requirements shall meet those outlined in subsequent paragraphs of this section.

A sump pump shall be provided in the drywell to remove extraneous water. The discharge pipe of the sump pump shall be equipped with dual check valves and shall be pumped from the drywell into the wetwell above the high water level. Water ejectors connected to a potable water supply shall not be permitted. All floor and walkway surfaces shall slope to a point of drainage. Pump seal leakage shall be piped or channeled directly to the sump.

Valves:

Suitable shutoff valves shall be placed on the suction lines and on the discharge lines of each pump (except on submersible and vacuum-primed pumps). A suitable check valve shall be placed on a horizontal section of each discharge line between the shutoff valve and the pump.

Unless adequate space is available in a dry pit pump room, valves on the discharge piping (including flow meters, if required) shall be in a separate underground precast concrete vault.;

Every pump station shall include appropriate valves and quick disconnects to allow the Town to bypass the existing pumping equipment and valves. The piping shall allow the

Town to install temporary piping into the wet well, and discharge to a location downstream of the check and shutoff valves.

Valves shall not be located in wetwells.

Section 24. Controls:

All pump stations, grinder pump stations, vacuum sewer stations, and other sewer handling facilities required by the Director shall be connected to the Water and Sewer Departments' Supervisory Control and Data Acquisition (SCADA) System.

All sensing, alarm, and SCADA system devices shall be of the same type, configuration, and function as that used by the Water and Sewer Departments. Each pumping station shall have its own screen display, processor logic controller (PLC), and communications equipment for the SCADA system and shall also display the required monitoring controls and alarm on the all SCADA system screens of the water and/or sewer systems.

Level Sensing Devices:

Level sensing devices shall not be affected by flows entering the wetwell or by the suction of the pumps. All wall penetrations between the wet and drywells shall withstand gas leaks and be located as high as possible to prevent overflow from the wetwell to the drywell. The pumps shall be automatically alternated. Running-time meters shall be installed at all pumping stations for each pump.

Alarm Systems:

Alarm systems shall be provided for all pumping stations. At a minimum, the alarm system shall be activated in any one of the following cases:

- * High water in the wetwell;
- * Low water in the wetwell;
- * Loss of one or more phases of power supply;
- * High water level in the pump room sump;
- * Loss of the alarm transmission or communications;
- * Loss of air pressure in the bubbler tube system/level sensing trouble or failure;
- * Standby power failure or malfunction of the pump;

- * Flooding of building or drywell;
- * Smoke/fire alarms;
- * Low temperature;
- * Surge suppressor failure;
- * PLC processor failed;
- * PLC low battery;
- * Intrusion; and
- * Three spare connections

Section 25. Pump Station Ventilation

General:

Adequate ventilation shall be provided for all pumping stations. Where the pump pit is below the ground surface, mechanical ventilation is required, especially when screens or mechanical equipment requiring maintenance or inspection are located in the wetwell. The wet and dry well ventilation systems shall not be connected. In pits more than 15 feet (4.6 m) deep, multiple inlets and outlets shall be installed. Switches for the operation of ventilation equipment shall be marked and located conveniently. If odors are a problem, an odor control system shall be installed.

Wetwells:

Ventilation may be either continuous or intermittent. For continuous ventilation, at least 12 air changes per hour shall be provided. For intermittent ventilation, at least 30 air changed per hour shall be provided. Heating shall be installed where needed.

Drywells:

Ventilation shall be continuous. Heating and dehumidification is required. At least 6 complete air changes per hour shall be provided.

Section 26. Flow Measurement:

Suitable devices, as approved by the director, for measuring wastewater flow and power consumption shall be installed in all pump stations.

Section 27. Pump Station Water Supply:

Water under pressure shall be provided for cleanup at the pumping station. If a public water supply is used, a Reduced Pressure Zone (RPZ) backflow preventer or other approved device shall be installed on the water service entering the station. No other potable water supply and other piping systems or fixtures shall be connected to the systems supplied by the public water supply.

Section 28. Electrical:

Electric Equipment

Electrical systems shall be designed and installed in strict conformance with the latest edition of the National Electrical Code. Electrical equipment in enclosed places where gas may accumulate shall be noncorrosive and in compliance with the National Electrical Code requirements for Class I Group D, Division I locations.

Submersible Pump Motors

Electrical supply and control circuits shall allow disconnection at a junction box located at or accessible from outside the wetwell. Terminals and connectors shall have watertight seals located outside of the wetwell and shall be protected by separate strain relief.

The motor control center shall be located outside of the wetwell and protected by a conduit seal or other appropriate sealing method meeting the requirements of the National Electrical Code for Class 1, Division 2 locations.

The pump motor shall meet the requirements of the National Electrical Code for Class 1, Division 2 locations.

Submersible pump motors that are totally submerged during the pumping cycle are not required to protect against explosions.

Power cords for pump motor shall be flexible and serviceable under conditions of extra hard use. Ground fault interruption protection shall deenergize the circuit in the event of any failure in the electrical integrity of the cable.

Power cord terminal fittings shall be provided with strain relief appurtenances, and shall facilitate field connecting.

Section 29. Emergency Operations:

When the Director deems it is necessary, an independent natural gas or propane engine-generator type source of electric power shall be provided for electrically driven pumps. This source shall be automatically activated when or if any phase of the power supply fails or upon any fluctuation

in voltage. Installation shall comply with all applicable requirements of the National Electrical Code.

Small Pumping Stations: When the Director agrees that a small pump station does not require a permanent alternative power supply, electrical connections for portable standby generator or pneumatic connection for portable air compressor shall be installed as approved by the Director.

Controls:

Provisions shall be made for automatic and manual startup and cut-in. The controls shall be such that upon automatic startup under emergency conditions, shutdown can be accomplished only manually, except in conditions that would damage the generator or engine.

Size:

Unit size shall be sufficient to start up and run all pumps needed to handle peak flows as well as lighting, ventilation, pump controls, and the sump pump.

Exerciser:

The engine controls shall be equipped with an automatic exerciser that may be set on any selected schedule to start the generator, to run it under no-load conditions, and to shut it off without activating the alarm system.

Noise Attenuation:

Noise attenuation components must be incorporated in the design to produce no more than 60 decibels (db) of noise at the property line.

Section 30. Safety

Adequate provisions shall be made to protect the operator and visitors from hazards. The design and construction of pumping stations shall meet all prescribed local, state, and federal safety laws and codes. Safety provisions shall include the following:

- Handrails at openings, stairways, and other hazardous areas;
- Guards around the belt drives, gears, rotating shafts, and moving equipment;
- Warning signs as appropriate;
- Provisions for power lockout controls at all pumps and equipment;
- Eye wash stations where chemicals are used;

- Adequate lighting in all areas of the pumping station;
- Provisions for confined space entry in accordance with OSHA and regulatory agency requirements;
- First aid equipment; and
- Fire extinguisher.

Section 31. Overflows and Bypasses

Overflows and bypasses shall not be allowed on pumping stations serving sanitary sewage collection systems.

Section 32. Site Protection and Aesthetics:

The Director will review the design and location of the pump stations and may determine that fencing, aesthetics vegetation plantings, intrusion alarms, and aesthetics superstructures style or any other site conditions may warrant site protection and/or aesthetics.

Section 33. Odor Control:

Odor control equipment may be required by the Director, depending on the siting of the pumping station and force main discharge point.

Appendix B CONSTRUCTION TECHNICAL SPECIFICATIONS

The owner of the property, the developer, and/or Licensed Utility Installer, shall construct and install all sanitary sewers and all building sewers in accordance with the following rules and regulations:

Section 1. The owner, developer, or LUI shall submit to the Director (for approval) plans and profiles of the proposed public sewer extensions and/or building sewer connections.

Section 2. The owner, developer or L.U.I. of a subdivision shall submit to the Director, a subdivision plan approved by the Harwich Planning Board along with the plans and profiles of the proposed public sewer extension.

Section 3. The Contractor doing all the work shall be approved by the Director as a Licensed Utility Installer (L.U.I.) as described in Article II-Building Sewers and Connections, Sections 13a through 13g.

Section 4. All materials, including pipe and manhole structures, shall be of the same make and quality used by the Harwich Sewer Department and approved by the Director.

Section 5. Public sewers and building sewers shall be laid using a transit or laser level. All sewer pipes shall be laid on a bed of crushed stone of at least six inches (6") in depth under the pipe and crushed stone shall extend at least halfway up the side of the pipe. Approved gravel, with no stones larger than two inches (2") in any dimension, shall be used to cover pipe to one foot above pipe. The rest of the backfill material must be approved by the Director, Massachusetts Highway Department or Town of Harwich Department of Public Works. The approved backfill material shall be placed in mechanically compacted lifts of no more than six inches (6") deep or as specified by the Harwich Surveyor of Highways, Massachusetts Highway Department, or other specifications more stringent than the above. The approved backfill material above the gravel shall contain no stones greater than 6 inches in any dimension.

Section 6. Impervious dams shall be considered every 300 feet to control the flow of groundwater within the pipe bedding material when:

- The surrounding native material is considerably less impervious than the pipe bedding material;
- The pipe bedding could produce a hydraulic head of 25 feet on the pipe gaskets and joints during periods of high groundwater flow; and/or
- The sewer being constructed is downstream of any waterway and wetland crossings.

Section 7. Sewers may be deep enough to drain basement fixtures, and shall be deep enough to prevent freezing. Watertight insulation shall be provided for sewers that cannot be placed deep enough to prevent freezing.

House connections chimneys (vertical pipe) preformed block shall be used when the sewer main is greater than or equal to 12 feet deep.

Section 8. Where high groundwater conditions are anticipated, the buoyancy of sewers shall be considered, and the floatation pipe of pipe shall be prevented with appropriate design and construction of the sewer.

Section 9. No mud, gravel or debris shall be allowed to enter the sewer pipes at any time. All pipes shall be capped at end of day's laying and water shall be pumped out of excavation prior to removing the cap.

Section 10. Building sewer connection to the public sewer shall have a wye branch fitting, as approved by the Director, made of the same type of materials as the sewer main being tapped.

Section 11. Minimum size of gravity public sewer pipe diameter shall be eight (8") inches and building sewer pipes shall not be less than four (4") inches in diameter. Minimum sizes of low pressure sewer mains shall be in accordance with Article IV-Design of Sewers, Section 9. Details of Low Pressure Sewer Design and Construction.

Section 12. Sewer pipe and building sewer pipe material shall be:

(a) Reinforced Concrete Pipe shall meet the following specification:

Portland cement shall conform to ASTM C-150 Type II;
The pipe and its appurtenances shall conform to ASTM Specification C-76;
The reinforcing wire cage shall conform to ASTM Specification A 15, A 82, or A 185, as appropriate;
Entrained air shall be 5.0% to 9.0% by ASTM C-890;
Water absorption and three-edge bearing tests shall conform to ASTM Specification C-497; and
Gaskets shall conform to Sections 3.3 and 3.4 of AWWA Specification C-302.

Note: non-reinforced concrete pipe shall not be used.

(b) Extra Heavy Cast Iron Pipe shall meet the following specifications:

Pipe, fittings, and appurtenances shall conform to the requirements of ASTM Specification A-74 or ANSI A-21.11 and gaskets shall conform to ASTM Specification C-564.

(c) Heavy Wall Polyvinyl Chloride (PVC) Pipe shall meet the following specifications:

Pipe shall be made from Class 12454-B materials or better in accordance with ANSI/ASTM Specification D-1784, and shall ultraviolet light (UV) protected.

The pipe and accessories shall conform to the requirements of the following, with a minimum pipe stiffness of 46 PSI at a maximum deflection of five percent (5%):

ANSI/ASTM	D 3034	(4" – 15")
ASTM	F 679 Type I	(18" – 27").

(d) Ductile Iron Pipe shall meet the following specifications:

Pipe, fittings, and appurtenances shall be manufactured in accordance with ASTM Specification A-746;
Pipe shall have a minimum thickness of Class 50;
Fittings shall conform to ANSI Specification A-21.11 and have a minimum pressure class rating of 150 PSI;

All pipe and fittings shall be cement mortar lined in accordance with ANSI Specification A-21.4 at twice the specified thickness, and have an internal and

external bituminous seal coating and closure pieces shall be jointed by means of a mechanical coupling of the cast sleeve type.

- (e) Extra Strength Vitrified Clay Pipe shall meet the following specifications:

Pipe shall conform to the current requirements of NCPI Specification ER 3300 – 67 and meet the requirements of ASTM Specification C 700.

Note: standard strength vitrified clay pipe shall not be used).

- (f) Acrylonitrile – Butadiene – Styrene (ABS) Pipe shall meet the following specifications:

Pipe and fittings shall conform to the requirements of ASTM Specification D 2661.

- (g) Plastic Pipe, sizes 4 inches through 12 inches, shall be ANSI/ASTM D3034, SDR-35 Type PSM Poly (Vinyl Chloride) (PVC) material; minimum pipe stiffness (F/Y) is 46 psi; bell and spigot style and rubber gasket conforming to ASTM F477.

- (h) Low Pressure Mains and Services for 1-1/4-inch pipe through 4-inch pressure pipe shall be polyethylene pipe with material conforming to ASTM D3350, Type PE-3408 pressure Class PC 160, SDR-11. Fittings for use with polyethylene pipe and tubing shall be manufactured and furnished by the pipe supplier and in conformance with AWWA C901 requirements. Joints for polyethylene pipe shall be jointed by the butt fusion method in a manner recommended by the pipe manufacturer.

Pipe sizes 1-1/4 inches through 4 inches shall be Polyvinyl Chloride (PVC) pipe ASTM D2241 PVC pressure pipe material conforming to ASTM D1784, minimum class SDR 21 for pipe 1-1/4-inch, push-on joint conforming to ASTM D3139 with flexible elastomeric gaskets conforming to ASTM F477.

Fittings for use on PVC pressure pipe of 4-inch nominal inside diameter or greater shall be ductile iron with mechanical joints as described in ANSI 21.10/AWWAC110. The coatings and linings of the fittings shall be as specified for ductile iron pipe.

- (i) Other pipe materials:

Other pipe materials shall require prior written approval of the Director before being installed.

Materials for sewer construction shall be appropriate for local conditions, including the character of industrial wastes, septicity, soil characteristics, external loadings, and

problems such as abrasion and corrosion. All sewers shall be able to withstand damage from superimposed loads. Proper allowances for soil and potential groundwater conditions, as well as the width and depth of the trench shall be used. Where necessary, special bedding, haunching and initial backfill, concrete cradles, or other special construction elements shall be used.

The minimum internal pipe diameter shall be eight (8) inches for gravity sewers.

Joints for the selected pipe shall be designed and manufactured such that “O” ring gaskets of the “snap-on” type are used.

Gaskets shall be continuous, solid, natural or synthetic rubber, and shall provide a positive compression seal in the assembled joint.

Joint preparation and assembly shall be in accordance with the manufacturer’s recommendations.

Wye branch fittings, as approved by the Director, shall be installed for connection of laterals.

Bedding, Haunching, and Initial Backfill:

Based on the bedding support of the type of soil and potential groundwater conditions, use the following for the anticipated loads:

- Bedding classes A, B, and C, or crushed stone as described in the American Society of Testing Materials standard ASTM C 12, should be used for all rigid pipe, or
- Materials for bedding, haunching, and initial backfill, or classes I, II, or III as described in ASTM D 2321, should be used for all flexible pipe.

Safety and Load Factors:

Selection of pipe class shall be predicated on the following criteria:

Safety factor	-	1.5
Load factor	-	1.7
Weight of soil	-	120 lbs/cu.ft.
Wheel loading	-	H-20

Section 13. Manholes and Cleanouts:

Manhole and Cleanout Size:

Cleanouts. Cleanouts shall be constructed of the same material as the building sewer. The size of the cleanout shall be the same size as the building sewer up to six (6") inches in diameter, for building sewers larger than six (6") inches in diameter manholes shall be used. Cleanouts shall be sealed with removable, re-useable threaded screw-in plug or screw-on cap.

Manholes. Manholes shall be minimum of four (4') feet in diameter with a minimum access diameter of 30 inches (76 cm). Larger diameter manholes may be required by the Director. A minimum drop of 0.10 foot shall be used between entrance and exit inverts.

Location:

Manholes and cleanouts shall be installed at the end of each line; at all changes in grade, size, or alignment; and at all intersections. Distances shall not be greater than 300 feet for sewers measuring 15 inches (38 cm) or less in diameter, or 400 feet for sewers 18-30 inches (46-76 cm) in diameter. Greater distances may be permitted for larger sewers or for those carrying a settled effluent, but only with prior approval of the Director. The top of the manhole cover shall be no lower than one (1') foot above the 100 year flood elevation level. Junction manholes on low pressure sewers shall be installed at all intersections

Drop Type:

A drop pipe for a sewer pipe with an invert entering a manhole of more than 24 inches (61 cm) above the manhole invert shall be provided. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches (61 cm), the invert shall be filleted to prevent solids deposition.

Drop manholes shall be constructed with an outside drop connection. Outside drop connections shall be encased in concrete, and shall provide access for cleaning as the sewer enters the manhole at the top of the drop connection.

Inside drop connections may be used provided the manhole has the area to facilitate safe access into the manhole with the inside drop in place, and shall be approved by the Director. The inside drop connection shall be secured to the interior wall of the manhole, and shall provide access for cleaning as it enters the manhole at the top. Internal drop pipes and fittings shall be PVC plastic sewer pipe in compliance with ASTM D2241. Corrosion resistant anchors shall be used to attach the drop pipe to the inside surface of the manhole barrel.

Structural Base:

Manhole bases shall be constructed or placed on a minimum of twelve (12) inches of crusher run with a maximum stone diameter in all directions of one half ½ inch and free of organic materials.

Diameter:

The manhole’s minimum diameter shall be 48 inches (122 cm) for standard manholes and 60 inches (153 cm) for inside drop manholes. A minimum access diameter of 30 inches (76 cm) shall be provided. Larger openings shall be provided for manholes that house equipment, as specified by the Director.

Materials:

Manholes shall be precast concrete with barrel sections, cones, and bases, manufactured in compliance with ASTM C 478, and shall have an O-ring or bituminous-based gasketed joints. “Precast concrete walls shall be made up using straight, circular barrel sections and eccentric cone sections if manhole steps are required, and concentric cone sections where no steps are require. Manholes can also be poured-in-place concrete. Other types are allowed subject to the approval of the Director.

All tongue-and-groove (or male and female joints in the precast wall, including the joint at the top of the base, shall be made up using the “Snap-On” type O-ring gasket, and shall conform to ASTM C443; except that joint taper shall not exceed 3-1/2 degrees. The precast sections shall be provided with a special groove (cast into the male end) to receive and hold the gasket in position during joint assembly. After joint assembly, the gap between sections shall be packed on the inside and outside with Anti-Hydro “Azpandcretes,” Masterflow 713 by Master Builders; or Five Star Grout by U.S. Grout Corp., and shall be troweled smooth so that no projections remain on the inside.

Manhole bases shall be constructed of 4,000 psi (28 day) concrete 8 inches thick, or shall be precast bases properly bedded in the excavation. Field constructed bases shall be monolithic, properly reinforced, and extend at least 6 inches beyond the outside walls of lower manhole sections. Precast manhole bases shall extend at least 6 inches beyond the outside walls of lower manhole sections.

Manholes shall be constructed using minimum 4 foot diameter, precast concrete manhole barrel sections, and an eccentric top section, conforming to ASTM Specification C-478, with the following exceptions on wall thickness:

Manhole Diameter	Wall Thickness
Feet	Inches
4	5
5	6
6	7
6-1/2	7-1/2
7.	8
8.	9

All Sections shall be cast solid, without lifting holes. Flat top slabs shall be a minimum of 8 inches thick and shall be capable of supporting a H-20 wheel loading.

All joints between sections shall be sealed with “O” ring rubber gasket, meeting the same specifications as pipe joint gaskets, or butyl joint sealant completely filling the joint.

All joints shall be sealed against infiltration. All metal parts shall be thickly coated with bitumastic or elastomeric compound to prevent corrosion.

No holes shall be cut into the manhole sections closer than 6 inches from joint surfaces.

Manholes which extend above grade shall not have an eccentric top section. The top plate shall be large enough to accommodate the cover lifting device and the cover.

Manhole Covers:

The elevation of the top section shall be such that the cover frame top elevation is one (1) foot above the 100-year flood elevation (in a field), 0.5 foot above a lawn elevation, or at finished road or sidewalk grade.

When located in a traveled area (road or sidewalk), the manhole frame and cover shall be heavy duty cast iron. When located in a lawn or in a field, the manhole frame and cover may be light duty cast iron. The cover shall provide a minimum access diameter of 30 inches (76 cm). The mating surfaces shall be machined, and painted with tar pitch varnish. The cover shall not rock in the frame. Infiltration between the cover and frame shall be prevented by proper design and construction. Covers shall have “Sewer” cast into them. Covers shall be designed so that infiltration is prevented.

Manhole frames, installed at grade, shall be set in a full bed of mortar with no less than two nor more than four courses of brick underneath to allow for later elevation adjustment. In lieu of brick, grade rings may be used for elevation adjustment. Grade rings shall not exceed 6 inches in depth. The total number of grade rings shall not exceed 12 inches in height, however, in no event shall more than 3 grade rings be used.

Manholes which extend above grade, shall have the frames cast into the manhole top plate. The top plate shall be securely anchored to the manhole barrel, by a minimum of six, ½ inch diameter, corrosion resistant anchor bolts, to prevent overturning when the cover is removed. The anchor bolts shall be electrically isolated from the manhole frame and cover.

Ladders:

Manhole steps are to be provided in manholes. Steps are to be cast in or grouted solid into the precast units at intervals of 12 inches. Steps shall be in conformance with OSHA requirements having drop front or equivalent. Bolted-on type is not acceptable. Manhole steps to be M.A. Industries, Inc. copolymer polypropylene reinforced with ½-inch steel rod or equal.

Flow Channel or Invert:

The flow channel through the manholes shall conform in shape and slope to that of the sewers entering and leaving the manholes. Construct the top of the flow channel so that the flow will remain in the channel under peak conditions. Form or shape the channel walls to the full height of the crown of the outlet sewer and so as not to obstruct maintenance, inspection, or flow in the sewers. When curved flow channels are required, including branch inlets, increase minimum slopes to maintain acceptable velocities. Provide a minimum 0.1-foot drop through the manhole.

Bench or Shelf:

Provide a bench on each side of every manhole channel. The bench should have a slope of no less than 0.1 inch per foot or no greater than 0.5 inch per foot. No lateral sewer, service connection, or drop manhole pipe should discharge onto the surface of the bench.

Manhole Inverts:

Manhole inverts shall be constructed by laying sewer bricks on their long side with their water structured face up, in straight line or sweeping arch to from the bottom of the invert, from pipe to pipe. Additional sewer bricks will fan out with their water structure facing towards the center of the invert from the invert brick. The invert's width will be the same diameter of the effluent pipe of the manhole. The minimum height of the shelf shall be equal to the crown of the manhole's effluent pipe and it shall be constructed from sewer brick with their water structured face up.

Buoyancy:

Where high groundwater conditions are anticipated, the manholes shall be designed and constructed to prevent floatation.

Watertightness:

Solid or watertight manhole covers shall be used in areas subject to flooding. All manhole lift holes and grade adjustment rings shall be sealed with a nonshrinking mortar or other material approved by the Director. A bituminous coating shall also be used on the exterior. Inlet and outlet pipes shall be joined to the manhole with a gasketed, flexible watertight connection or with another watertight connection arrangement that allows for differential settlement of the pipe and the manhole.

The Contractor shall furnish manholes waterproofed over the entire exterior surface that will be below finished grade. The water proofing shall not mar or interfere with the specified exterior finish for these structures. Waterproofing shall be accomplished prior to structure installation for precast sections, and shall be applied to dry surfaces under proper weather conditions.

Waterproofing shall consist of a two-coat application of coal tar compound as manufactured by Koppers Bitumastic Super Service Black; Tnemec Heavy Duty Black 46-449; Preco Nitroproof

600; or equal, and shall be applied according to manufacturer's specification. Total thickness of the two-coat application shall no be less than 16 mils.

Pipe Connections:

Pipes being connected to new manholes shall be connected to the manhole with cast-in-place rubber boot with clamp around gasket. Pipes being connected to existing manholes shall be core drill opening and seal with link seal water stop between pipe and manhole wall.

Section 14. Force main pipe shall be either:

(a) Ductile Iron Pipe:

Pipe shall conform to ANSI A21.51;
The minimum wall thickness shall be Class 52 (ANSI A21.50);
The pipe shall be clearly marked with either "D" or "DUCTILE";
Fittings shall conform to ANSI A21.10;
Pipe shall be furnished with push-on joints and fittings shall be furnished with mechanical joints. Both conforming to ANSI A21.11; and
Pipe and fittings shall be cement mortar lined and have an internal and external bituminous seal coating.

(b) Polyvinyl Chloride (PVC) Plastic Pipe:

Pipe shall conform to ASTM D2241;
Materials used in the manufacturer of PVC pipe shall meet ASTM C1784; and be ultraviolet light (UV) protected;
The minimum wall thickness shall be SDR-21;
Fittings shall conform to ASTM D2241; and
Joints and gaskets shall conform to ASTM D2241, D1869, and F477.

(c) Other pipe materials:

Other pipe materials shall require prior written approval of the Director before being installed.

Trenching, bedding, and backfilling shall be as approved by the authority having jurisdiction over the property, such as but not limited to: the Massachusetts Highway Department, Town of Harwich Department of Public Works, or Harwich Wastewater Superintendent.

Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.

Anchorage, concrete blocking, and/or mechanical restraint shall be provided when there is a change of direction of 7-1/2 degrees or greater.

When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

The force main shall terminate, in the receiving manhole, at a PVC plastic sewer pipe "T". The vertical arms of the "T" shall be twice the diameter of the force main. The upper arm shall be at least 4 feet long; the lower arm shall terminate in a PVC plastic sewer pipe 90 degree elbow in a flow channel directed to the manhole exit pipe. The "T" and its arms shall be securely fastened to the inside surface of the manhole wall using corrosion resistant anchors.

Force mains shall have a minimum velocity of three feet per second, 3ft/Sec.

Section 15. No sanitary sewer pipe shall be left open into an unfinished house or cellar hole. All pipes must be capped to prevent the flow of surface water or debris from entering the sanitary sewer.

Section 16. All sewer works located in the flood plain district area, established under the zoning by-law, shall require that new and replacement sewer works be designed and constructed to minimize or eliminate infiltration of flood waters into the system or discharge sewerage from the system into the floodwater.

Section 17. Sewer Pipe Testing:

A. General

The L.U.I. shall test the first section of pipeline as soon as it is installed to demonstrate that the work conforms to these specifications. The initial section shall not be less than five hundred (500) feet and not more than one thousand (1000) feet of pipeline. Testing of pipe shall closely follow pipe laying.

For all sewer pipe tests, the L.U.I. shall furnish an air or water test pump, an air or water meter, and suitable pressure gauge. The L.U.I. shall also furnish all labor and materials required to install suitable temporary testing plugs or caps for the pipeline and perform the test. The meter and gauge shall be installed by the L.U.I. in such a manner that all air or water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests.

The scheduling of deflection and pressure and leakage tests shall be as approved and attended by the Town of Harwich's Sewer Department or Town Inspector.

Before accepting any sewer segment, the L.U.I. shall provide a television tape of the entire sewer including point of connection an existing sewer or pumping station. Television inspection shall be performed by a firm specializing in this work and shall produce the following information:

2. A continuous videotape recording of the entire length of pipe being inspected. The tape shall include location of each section, direction of camera travel, a commentary of the pipe's condition, and various irregularities found and lateral connections.
3. The section of pipe being televised shall be identified at least once every 50 ft.
4. Documentation on television logs and voice recorded on tape shall consist of the following information:
 - a. Distance from the numbered manhole point of beginning on each sewer section to the location of the specific condition being inspected.
 - b. Angular orientation of all above conditions inside pipe (i.e., leak at 10:00, service connection at 3:00).
 - c. Sewer size, material, and joint spacing.

B. Deflection

Deflection tests shall be performed on all flexible pipes. The tests shall be conducted after the final backfill has been in place at least 30 days to permit stabilization of the pipe system.

No pipe shall exceed a deflection of 5 percent. If deflection exceeds 5 percent, the pipe shall be replaced.

The rigid ball or mandrel used for the deflection test shall have a diameter of not less than 95 percent of the base inside diameter or the average inside diameter of the pipe as specified by ASTM D 2122 Standard Test Method of Determining Dimensions of Thermoplastic Pipe and Fittings. The tests shall be performed without mechanical pulling devices.

C. Air Testing:

The Town requires air testing in lieu of the exfiltration or infiltration tests. The L.U.I. shall submit the proposed method of air testing to the Director for approval. All air testing shall be performed in accordance with the procedures described in ASTM C828-86 for Clay Pipe or ASTM C924 for Concrete Pipe or those procedures approved by the Director, and shall be specifically designed and manufactured for testing pipelines with low-pressure air and shall be provided with an air regulator valve or air safety valve set to prevent the air pressure in the pipeline from exceeding ten (10) psi. If the results of the air test are unsatisfactory, the L.U.I. shall repair the sewer pipe and perform the air tests until the sewer pipe passes the air test. If site conditions are not conducive to air test, as determined by the Director, the L.U.I. will be required to perform an exfiltration and/or an infiltration test as outlined below.

Low pressure air tests shall conform to ASTM Specification C 828. All sections to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing.

Air shall be added until the internal pressure of the test section is raised to approximately 4.0 PSIG. The air pressure test shall be based on the time, measured in seconds, for the air pressure to drop from 3.5 PSIG. Acceptance is based on limits tabulated in the "Specification Time Required for a 1.0 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

Before pressure is applied to the line all connections shall be firmly plugged. Before the test period starts, the air shall be given sufficient time to cool to ambient temperature in the test section.

If the test section is below groundwater, the test pressure shall be increased by an amount sufficient to compensate for groundwater hydrostatic pressure, however, the test pressure shall not exceed 10 PSI.

The pressure test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Director prior to testing.

Exfiltration Test:

If for any reason, approved by the Director, air testing cannot be performed, the Director shall require exfiltration testing. Leakage tests by exfiltration shall be made before or after backfilling at the discretion and under the supervision of the Town Inspector. The length of pipe to be tested shall not exceed 1,000 feet and be such that the head over the crown at the upstream pipe is not less than two (2) feet and the head over the downstream pipe crown is not more than six (6) feet. The pipe shall be plugged, by pneumatic bags or mechanical plugs, in such a manner that the air can be released from the pipe while it is being filled with water. Before any measurements are made, the pipe shall be kept full of water long enough to allow absorption of water and the escape of any trapped air. Following this, a test period of at least two hours shall begin. Provisions shall be made for measuring the amount of water required to maintain the water at a constant level during the minimum two (2) hours test period. If any joint shows an appreciable amount of leakage, the joining material shall be removed and replaced. If the water required to maintain a constant level in the pipe does not exceed twenty-five (25) gallons per nominal diameter, in inches, per 24 hours per mile of pipe and if all leakage is not confined to a few joints, workmanship shall be considered satisfactory. If the amount of leakage indicates defective joints or broken pipes, they shall be corrected or replaced.

Infiltration Test:

If for any reason, approved by the Director, air testing and exfiltration testing cannot be performed, the Director shall require infiltration testing be performed. Pipe shall be tested for infiltration after backfill has been placed and the ground water allowed to return to normal elevation. Infiltration tests shall be made only under the supervision of the Town Inspector, and the length of line to be tested shall be not less

than the length between adjacent manholes and not more than the total length of each size pipe and shall not exceed 1000 feet. The allowable infiltration shall be twenty-five (25) gallons per nominal diameter, in inches, per 24 hours per mile of pipe in each section tested as determined by means of V-Notch weirs, pipe spigots, or by plugs in the end of the pipe to be furnished and installed by the L.U.I., in an approved manner, and at such times and locations as may be directed by the Town Inspector.

There shall be no gushing or spurting leaks. If an inspection of the completed sewer or any part thereof shows pipes or joints which allow noticeable infiltration of water, the defective work or material shall be replaced or repaired.

Section 18. Sewer Force Main Testing:

The sewer force main pipe shall be given pressure and leakage tests in sections of approved length as approved by the Director. For these tests, the L.U.I. shall furnish a water test pump, water meter, and a pressure gauge. The L.U.I. shall also furnish all labor and equipment to install suitable temporary testing plugs or caps for the pipeline and to perform the tests. The meter and gauge shall be installed by the L.U.I. in such a manner that all water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests.

The scheduling of pressure and leakage tests shall be as approved and attended by the Town Inspector.

The section of pipe to be tested shall be filled with water by pumping water into it and opening the air release valves and expelling all air from the pipe. If air release assemblies are not available at high points for releasing air, the L.U.I. shall perform: all excavation(s); make the necessary tap(s) at such highpoint(s); plug said holes of the tapping saddles after completion of the test with brass or bronze plug(s); and backfill the excavation(s).

The L.U.I. shall make a leakage test by metering the flow of water into the pipe while maintaining (in the section being tested) a pressure equal to 1.5 times the highest pressure to which the pipe will be subjected under normal conditions of service or 150 psi, whichever is greater. This shall be done by placing the section under pressure by pumping.

The lengths of joint to be used in determining the allowable leakage shall be based on the nominal diameter of the pipe. The allowable leakage shall be less than 11.65 gallons per inch diameter per day per mile of force main tested, maintaining a pressure within 5 psi for a minimum of two (2) hours duration. If the section shall fail to pass the pressure test, the L.U.I. shall locate and repair or replace the defective pipe, fitting, or joint, at the L.U.I.'s own expense.

If, in the judgment of the Director, it is impracticable to follow the foregoing procedure exactly, modifications in the procedures may be made if approved by the Director, but in any event the L.U.I. shall be responsible for the ultimate tightness of the line within the above leakage requirements with no allowances for leakage from valves.

Section 19. Low Pressure Sewer Testing:

The sewer low pressure pipe shall be given pressure and leakage tests in sections of approved length as approved by the Director. For these tests, the L.U.I. shall furnish a water test pump, water meter, and suitable pressure gage. The L.U.I. shall also furnish all labor and equipment required to install suitable temporary testing plugs or caps for the pipeline and perform the test. The meter and gage shall be installed by the L.U.I. in such a manner that all water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests.

The scheduling of pressure and leakage tests shall be as approved and attended by the Town Inspector.

The section of pipe to be tested shall be filled with water by pumping water into it and opening the air release valves and expelling all air from the pipe. If air release assemblies are not available at high points for releasing air, the L.U.I. shall perform: all excavation(s); make necessary tap(s) at such highpoint(s); plug said holes of the tapping saddles after completion of the test with brass or bronze plug(s); and backfill the excavation(s).

The L.U.I. shall make a leakage test by metering the flow of water into the pipe while maintaining (in the section being tested) a pressure equal to 1.5 times the highest pressure to which the pipe will be subjected under normal conditions of service or 150 psi whichever is greater. This shall be done by placing the section under pressure by pumping.

The lengths of joint to be used in determining the allowable leakage shall be based on the nominal diameter or the pipe. The allowable leakage shall be less than 11.65 gallons per inch diameter per day per mile of pipe tested, maintaining a pressure within 5 psi for a minimum of two (2) hours duration. If the section shall fail to pass the pressure test, the L.U.I. shall locate and repair or replace the defective pipe, fitting, or joint at the L.U.I.'s own expense.

If, in the judgment of the Director, it is impracticable to follow the foregoing procedure exactly, modifications in the procedures may be made if approved by the Director, but in any event the L.U.I. shall be responsible for the ultimate tightness of the line within the above leakage requirements with no allowances for leakage from valves.

Section 20. Cleaning Sewer Lines:

At the conclusion of the work, the L.U.I. shall thoroughly clean all pipelines by washing with water or other means to remove all dirt, stones, pieces of wood, or other material which may have entered the pipes during the construction period. Debris cleaned from the lines shall be removed from the low end of the pipeline by installing a screening device that will prevent any debris from entering the public sewer system or a section of the sewer works already approved. If after this cleaning, obstructions remain, they shall be removed. After the pipelines are cleaned and if the groundwater level is above the pipe or following a heavy rain, the Town Inspector will examine the pipes for leaks. If any defective pipes or joints are discovered, they shall be repaired or replaced as directed by the Town Inspector.

Section 21. Sewer Manhole Leakage Tests:

Leakage tests shall be made and observed by the Town Inspector on each manhole. The test shall be the exfiltration test or vacuum test as described below:

For these tests, the L.U.I. shall furnish an air or water test pump, an air or water meter, and suitable pressure gage. The L.U.I. shall also furnish all labor and materials required to install suitable temporary testing plugs or caps for the pipeline, and perform the test. The meter and gage shall be installed by the L.U.I. in such a manner that all air or water entering the manhole under the test will be measured and the pressure in the manhole indicated and they shall be kept in use throughout all tests.

After the manhole has been assembled in place, all lifting holes and exterior joints surface shall be filled and pointed with an approved non-shrinking mortar. The test shall be made prior to placing the shelf and invert and before filling and pointing the interior horizontal joints. If the groundwater table has been allowed to rise above the bottom of the manhole, it shall be lowered for the duration of the test. All pipes and other openings into the manhole shall be suitable plugged and the plugs braced to prevent blow out.

Exfiltration Testing:

The manhole shall then be filled with water to the top of the cone section. If the excavation has not been backfilled and observation indicates no visible leakage that is, no water visible moving down the outside surface of the manhole, the manhole may be considered to be satisfactory water-tight. If the test, as described is unsatisfactory, as determined by the Town Inspector or if the manhole excavation has been backfilled, the test shall be continued. A period of time may be permitted, if the Contractor so wishes, to allow for absorption. At the end of this period the manhole shall be refilled to the top of the cone and the measuring time of at least two (2) hours shall begin. This amount shall be extrapolated to a 24 hour rate and the leakage determined on the basis of depth. The leakage for each manhole shall not exceed one (1) gallon per vertical foot per day, a twenty-four (24) hour period shall equal one day. If the manhole fails this requirement, but the leakage does not exceed three (3) gallons per vertical foot per day, repairs by approved methods may be directed by the Town Inspector to bring the leakage within the allowable rate of one (1) gallon per foot per day. Leakage due to a defective section or joint or exceeding the three (3) gallon vertical foot per day, shall be the cause for the rejection of the manhole. It shall be the L.U.I.'s responsibility to uncover the manhole, as necessary, and to disassemble, reconstruct, or replace it as directed by the Town Inspector. The manhole shall then be retested and, if satisfactory, interior joints shall be filled and pointed and the invert constructed.

No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc., it will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete. Furthermore, the L.U.I. shall take any steps necessary to assure the Town Inspector that the water table is below the bottom of the manhole throughout the test.

If the groundwater table is above the highest joint in the manhole, and there is no leakage into the manhole, as determined by the Town Inspector, such a test can be used to evaluate the water-tightness of the manhole. However, if the Town Inspector is not satisfied, the Contractor shall lower the water table and carry out the test as described hereinbefore.

Vacuum Testing:

The vacuum test shall be based on the time, measured in seconds, for the vacuum to decrease from 10 inches of mercury to 9 inches of mercury for manholes.

Acceptance of manholes is based on the following:

<u>Manhole</u>	<u>Manhole Diameter</u>	<u>Time to Drop 1" Hg (10" to 9")</u>
10 ft or less	4 ft	120 seconds
10 ft to 15 ft	4 ft	150 seconds
15 ft to 25 ft	4 ft	180 seconds

NOTE: For 5 ft diameter manholes, add 30 seconds to the times above.
For 6ft diameter manholes, add 60 seconds to the times above.

The vacuum test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Director prior to testing.

If the test on the manhole fails (the allowable gallons or the time is less than that tabulated above), necessary repairs shall be made and the vacuum test repeated, until the manhole passes the test.

Section 22. Manhole Cleaning

All new manholes shall be thoroughly cleaned of all silt, debris and foreign matter of any kind, prior to final inspection.

MEMORANDUM



Harwich Water Department

196 Chatham Road

Harwich MA 02645

P: 508-432-0304

F: 888-774-3557

www.harwichwater.com

To: Board of Selectmen

From: Dan Pelletier, Water/Wastewater Superintendent

CC: Joe Powers, Interim Town Administrator
Carol Coppola, Finance Director
Griffin Ryder, Town Engineer

Date: December 29th 2020

RE: SewerCAD Model Funding

I am writing to follow up on the SewerCAD modeling contract and funding mechanism discussed at the December 8th 2020 Board of Selectmen meeting. Town staff have identified and confirmed the availability of two funding sources to be used jointly to support the SewerCAD modeling contract in the amount of \$150,000:

1. \$98,992 - Remaining funds from 2007 ATM Article 17

ARTICLE 17. To see if the Town will vote to raise and appropriate, transfer from available funds or borrow a sufficient sum of money for the purpose of conducting a Comprehensive Wastewater Management Plan (CWMP) to determine the most cost effective way to meet the DEP/EPA imposed nitrogen limits for Pleasant Bay, the Nantucket Sound coastal estuaries of Allen, Wychmere and Saquatucket Harbors and Herring River and to authorize the Board of Selectmen to accept any state or other grants available and further enter into an agreement with qualified consultant(s) to assist the Town with said CWMP, and to act fully thereon. By request of the Water Quality Task Force. Estimated Cost: \$ 500,000.

2. \$51,008 - FY21 Sewer Operating Budget

At the time the FY21 Sewer Operating Budget was developed the Phase 2 sewer construction schedule indicated project completion in January 2021, the most recent schedule now reflects completion on/around May 2021. As a result, flow variable payments, contract operations and other operational expenses will be deferred leaving funds available to support the model.

I believe the funds to be appropriate for the intended use and recommend the Board act favorably on the Town-wide SewerCAD Modeling Agreement(attached) for services outlined in Exhibit A with GHD in the amount of \$150,000.

**AGREEMENT FOR PROFESSIONAL
ENGINEERING SERVICES
BETWEEN
THE TOWN OF HARWICH, MASSACHUSETTS
AND GHD
FOR TOWN-WIDE SEWER MODELING**

THIS AGREEMENT made this ____ day of _____, 2020 between GHD, with a usual place of business at 1545 Iyannough Road, Hyannis, MA 02601, hereinafter called the “ENGINEER,” and the Town of Harwich, MA, acting by its Board of Selectmen, with a usual place of business at Harwich Town Hall, 732 Main Street, Harwich, MA 02645, hereinafter called the “TOWN”.

The ENGINEER and the TOWN, for the consideration hereinafter named, agree as follows:

1. Scope of Work

The ENGINEER shall perform the work set forth in the Scope of Services attached hereto as Exhibit A.

2. Contract Price

The TOWN shall pay the ENGINEER for services rendered in the performance of this Agreement a lump sum of \$150,000, subject to any additions and deductions provided for herein at the hourly rates set forth in Exhibit B. The amount to be paid to the ENGINEER shall not exceed \$150,000 without the prior written consent of the TOWN.

3. Commencement and Completion of Work

A. This Agreement shall commence on _____ and shall expire on _____, unless terminated sooner in accordance with this Agreement.

B. Progress and Completion: ENGINEER shall commence work promptly upon execution of this Agreement and shall prosecute and complete the work regularly, diligently and uninterruptedly at such a rate of progress as will insure completion in a timely manner.

4. Performance of the Work

The ENGINEER shall supervise and direct the Work, using his best skills and attention, which shall not be less than such state of skill and attention generally rendered by the engineering/design profession for projects similar to the Project in scope, difficulty and location.

A. Responsibility for the Work:

- (1) The ENGINEER shall be responsible to the TOWN for the acts and omissions of his employees, subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the ENGINEER. Consistent with the standard of care referenced above, the ENGINEER shall be responsible for the professional and technical accuracy for all work or services furnished by him or his consultants and subcontractors. The ENGINEER shall perform his work under this Agreement in such a competent and professional manner that detail checking and reviewing by the TOWN shall not be necessary.
- (2) The ENGINEER shall not employ additional consultants, nor sublet, assign or transfer any part of his services or obligations under this Agreement without the prior approval and written consent of the TOWN. Such written consent shall not in any way relieve the ENGINEER from his responsibility for the professional and technical accuracy for the work or services furnished under this Agreement.
- (3) All consultants must be registered and licensed in their respective disciplines if registration and licensure are required under the applicable provisions of Massachusetts law.
- (4) The ENGINEER and all consultants and subcontractors shall conform their work and services to any guidelines, standards and regulations of any governmental authority applicable to the type of work or services covered by this Agreement.
- (5) The ENGINEER shall not be relieved from its obligations to perform the work in accordance with the requirements of this Agreement either by the activities or duties of the TOWN in its administration of the Agreement, or by inspections, tests or approvals required or performed by persons other than the ENGINEER.
- (6) Neither the TOWN's review, approval or acceptance of, nor payment for any of the work or services performed shall be construed to operate as a waiver of any rights under the Agreement or any cause of action arising out of the performance of the Agreement.

- B. Deliverables, Ownership of Documents: One (1) reproducible copy of all drawings, plans, specifications and other documents prepared by the ENGINEER shall become the property of the TOWN upon payment in full therefor to the ENGINEER. Ownership of stamped drawings and specifications shall not include the ENGINEER's certification or stamp. Any re-use of such documents without the ENGINEER's written verification of suitability for the specific

purpose intended shall be without liability or legal exposure to the ENGINEER or to the ENGINEER's independent professional associates, subcontractors or consultants. Distribution or submission to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as an act in derogation of the ENGINEER's rights under this Agreement.

- C. Compliance With Laws: In the performance of the Work, the ENGINEER shall comply with all applicable federal, state and local laws and regulations, including those relating to workplace and employee safety.

5. Site Information Not Guaranteed; Contractor's Investigation

The TOWN shall furnish to the ENGINEER available surveys, data and documents relating to the area which is the subject of the Scope of Work. All such information, including that relating to subsurface and other conditions, natural phenomena, existing pipes, and other structures is from the best sources at present available to the TOWN. All such information is furnished only for the information and convenience of the ENGINEER and is not guaranteed. It is agreed and understood that the TOWN does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes, or other structures will be the same as those indicated in the information furnished, and the ENGINEER must reasonably satisfy himself as to the correctness of such information. If, in the opinion of the ENGINEER, such information is inadequate, the ENGINEER may request the TOWN's approval to verify such information through the use of consultants or additional exploration. In no case shall the ENGINEER commence such work without the TOWN's prior written consent. Such work shall be compensated as agreed upon by TOWN and ENGINEER.

6. Payments to the Contractor

- A. Cost incurred on this project shall be billed monthly on a lump sum basis as outlined in the attached Scope of Services. Payment shall be due 30 days after receipt of an invoice by the TOWN.
- B. If there is a material change in the scope of work, the TOWN and the ENGINEER shall mutually agree to an adjustment in the Contract Price.
- C. If the TOWN authorizes the ENGINEER to perform additional services, the ENGINEER shall be compensated in an amount mutually agreed upon, in advance, in writing. Except in the case of an emergency, the ENGINEER shall not perform any additional services until such compensation has been so established.

7. Reimbursement

Except as otherwise included in the Contract Price or otherwise provided for under this Agreement, the ENGINEER shall be reimbursed by the TOWN: (a) at 1.0 times the actual cost to the ENGINEER of consultants retained to obtain information pursuant to Article 5 hereof or otherwise. No such reimbursement shall be made unless the rates of compensation have been

approved, in advance, by the TOWN; or (b) at 1.0 times the actual cost of additional or specially authorized expense items, as approved by the TOWN.

8. Final Payment, Effect

The acceptance of final payment by the ENGINEER shall constitute a waiver of all payment-related claims by the ENGINEER arising under the Agreement.

9. Terms Required By Law

This Agreement shall be considered to include all terms required to be included in it by the Massachusetts General Laws, and all other laws, as though such terms were set forth in full herein.

10. Indemnification

- A. General Liability: The ENGINEER shall indemnify and hold harmless the TOWN, to the proportionate extent of its liability, from and against claims, damages, losses, and expenses, including reasonable attorney's fees, to the extent directly related to the performance of this Agreement and to the extent the same relate to matters of general commercial liability, when such claims, damages, losses, and expenses are caused, in whole or in part, by the negligent or wrongful acts or omissions of the ENGINEER or his employees, agents, subcontractors or representatives.

- B. Professional Liability: The ENGINEER shall indemnify and hold harmless the TOWN, to the proportionate extent of its liability, from and against claims, damages, losses, and expenses, including reasonable attorney's fees, directly related to the performance of this Agreement and to the extent the same relate to the professional competence of the ENGINEER's services, when such claims, damages, losses, and expenses are caused, in whole or in part, by the negligent acts, negligent errors or omissions of the ENGINEER or his employees, agents, subcontractors or representatives.

Limitation of Liability: Notwithstanding anything to the contrary in this Agreement, neither party to this Agreement shall be liable to the other for any consequential, special, indirect, incidental or punitive damages arising from this Agreement including but not limited to loss of use, revenue, profits and goodwill. The foregoing disclaimer of liability shall apply regardless of whether such liability is based on breach of contract, tort (including without limitation negligence), strict liability, breach of a fundamental term, fundamental breach, or otherwise.

11. Insurance

- A. The ENGINEER shall at his own expense obtain and maintain a Professional Liability Insurance policy for errors, omissions or negligent acts directly related to the performance of this Agreement in a minimum amount of \$1,000,000.00.

- B. The coverage shall be in force from the time of the agreement to the date when all construction work for the Project is completed and accepted by the TOWN. If, however, the policy is a claims made policy, it shall remain in force for a period of three (3) years after completion.

Since this insurance is normally written on a year-to-year basis, the ENGINEER shall notify the TOWN should coverage become unavailable.

- C. The ENGINEER shall, before commencing performance of this Agreement, provide by insurance for the payment of compensation and the furnishing of other benefits in accordance with M.G.L. c.152, as amended, to all its employees and shall continue such insurance in full force and effect during the term of the Agreement.
- D. The ENGINEER shall carry insurance in a sufficient amount to assure the restoration of any plans, drawings, computations, field notes or other similar data relating to the work covered by this Agreement in the event of loss or destruction until the final fee payment is made or all data are turned over to the TOWN.
- E. The ENGINEER shall also maintain public liability insurance, including property damage, bodily injury or death, and personal injury and motor vehicle liability insurance against claims for damages because of bodily injury or death of any person or damage to property.
- F. Evidence of insurance coverage and any and all renewals substantiating that required insurance coverage is in effect shall be filed with the Agreement. Any cancellation of insurance, whether by the insurers or by the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the TOWN at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice.
- G. Upon request of the ENGINEER, the TOWN reserves the right to modify any conditions of this Article.
- H. Liability is limited to the proceeds of the applicable insurance policies taken out by ENGINEER under this Agreement, but not to exceed the minimum amounts of those policies specified in this Agreement.

12. Notice

All notices required to be given hereunder shall be in writing and delivered to, or mailed first class to, the parties' respective addresses stated above. In the event that immediate notice is required, it may be given by telephone or facsimile, but shall, to the extent possible, be followed by notice in writing in the manner set forth above.

13. Termination

- A. Each party shall have the right to terminate this Agreement in the event of a failure of the other party to comply with the terms of the Agreement. Such termination shall be effective upon seven days' notice to the party in default and the failure within that time of said party to cure its default.
- B. The TOWN shall have the right to terminate the Agreement without cause, upon ten (10) days' written notice to the ENGINEER. In the event that the Agreement is terminated pursuant to this subparagraph, the ENGINEER shall be reimbursed in accordance with the Agreement for all work performed up to the termination date.

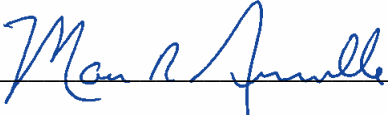
14. Miscellaneous

- A. Assignment: The ENGINEER shall not assign or transfer any of its rights, duties or obligations under this Agreement without the written approval of the TOWN.
- B. Governing Law: This Agreement shall be governed by and construed in accordance with the law of the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals, the TOWN by its authorized representative who, however, incurs no personal liability by reason of the execution hereof or of anything herein contained, as of the day and year first above written.

ENGINEER:

TOWN OF HARWICH:

By: 

By: _____

Name: Marc Drainville, P.E.

Name: _____

Title: Vice President

Title: _____

519856/KOPE/0003

This is **EXHIBIT A**, consisting of three pages, referred to in and part of the **Agreement between Town of Harwich and GHD for Professional Services** dated November 2020.

GHD's Services

GHD shall provide Basic Services as set forth below.

PART 1 – BASIC SERVICES

A1.01 Specific Project Data

Title: TOWN-WIDE SEWER MODELING OF TOWN OF HARWICH

Description: To develop a SewerCAD model for the proposed and existing sewers within the Town of Harwich (Town). The following tasks outline what is required to develop a SewerCAD Model of the existing sewers recently installed and the future sewer systems proposed as part of the Town's CWMP. Exhibit C identifies areas where the sewer model will be developed. Only shaded areas will be included in the sewer model. Non-shaded (white) parcels will not be included in the sewer model development.

The following scope of services identifies the tasks as part of this Agreement:

Task 1. Internal Chartering. Meet internally with project team members. Develop critical success factors, review past relevant information, develop proposed project schedule, and prepare for Town kick-off meeting.

Task 2. Town Kick Off Meeting. Meet with the Town and discuss the schedule, goals, milestones, and deliverables of the project. Specific modeling-related items that will be discussed at the kick-off meeting will include location of proposed pump stations, design requirements, and development of order-of-magnitude costs for new sewers.

Submittals include: Meeting Minutes.

Task 3. Flow Development. Develop a "per parcel" flow based on water use data provided by the TOWN. GHD will utilize up to the past five (5) years of water use information to develop "per parcel" flows. Flow anomalies will be reviewed on a parcel-by-parcel basis. Actual water use will be used to develop flows per parcel for buildout conditions for applicable residential, commercial, and industrial flow.

Task 4. Drawing Conversion. Develop GIS database that shall be used to import model information based on record drawing information. The database will be imported into the sewer model to populate required information for model completion. GHD will provide developed shapefiles of the existing sewer systems to the Town's Water and Sewer Department for use on the Town's GIS platform.

Task 5. Model Development – Existing System. Develop a sewer model for the existing sewer areas in the Town of Harwich. Modeling software used will be SewerCAD by Bentley. Model input shall be from record drawing information provided by the Town.

The Following Tasks apply only to the proposed sewer areas shown in Exhibit C:

Task 6. Model Development – Proposed System. Develop a sewer model for the proposed sewer areas in Exhibit C using the pump station and design information developed in Tasks 1 and 2 along with water use data from Task 3. Modeling software used will be SewerCAD by Bentley.

Model will focus on maximizing gravity sewers where feasible to a depth of no more than 20-feet below grade. Pump station sites will identify the type of station that may be used at each site based on design parameters

including either submersible, suction lift, or wet pit/dry pit style stations. Pipe sizing, slope, and system design will follow the guidelines of TR-16.

Incorporate previous model that was developed for the four (4) DHY areas—north, central, southeast, and southwest.

Task 7. Draft Cost Estimate. Prepare a draft cost estimate. Cost estimate to include:

- Unit price items at the discretion of GHD, similar to previously provided cost estimates for the four (4) DHY areas.
- 30% contingency and 30% fiscal/engineering/legal placeholder.
- Project estimates for future years based on a percent inflation rate as determined by GHD and the Town.

Task 8. Final Cost Estimate. Prepare a final cost estimate based on written comments from Town. Cost estimate to include:

- Unit price items at the discretion of GHD, similar to previously provided cost estimates for the four (4) DHY areas.
- 30% contingency and 30% fiscal/engineering/legal placeholder.
- Project estimates for future years based on a percent inflation rate as determined by GHD and the Town.

Task 9. Draft Memorandum. Prepare a draft memorandum of findings based on feedback from the above tasks. Memorandum to include:

- Summary of Design Criteria.
- Figure of proposed sewer layout showing limits of gravity mains, low pressure mains, and pump station sites. Manholes to be color-coded based on depth of sewers.
- Quantities of gravity and low pressure sewers based on linear foot.

Submittals include: Draft Memorandum.

Task 10. Final Memorandum. Prepare a final memorandum of findings based on feedback from the above tasks and written comment from the Town. Memorandum to include:

- Summary of Design Criteria.
- Figure of proposed sewer layout showing limits of gravity mains, low pressure mains, and pump station sites. Manholes to be color-coded based on depths of sewers.
- Quantities of gravity and low pressure sewers based on linear foot.

Submittals include: Final Memorandum and SewerCAD Model.

*Included in the above scope of work will be:

- The preparation and presentations of up to two (2) workshops with the Town and representation at requested Town Board Meetings.
- A construction phasing plan (CPP) for all proposed areas of new sewer construction. Up to three (3) plans will be provided including a CPP focusing on construction contracts under \$10M, a CPP focusing on construction contracts under \$20M, and a third CPP based on guidance from the Town. Duration of the CPP will be based on guidance from the Town (either 20-year, 30-year or other duration).

- Assistance with the preparation and drafting of Town Meeting articles associated with funding for new sewer infrastructure.

PART 2 - TOWN RESPONSIBILITIES

A2.01 Services Required by TOWN

- A. Water Flows: Town to provide water use data for parcels within the sewer modeling areas. Data to be provided on a “per parcel” basis with quantity of water use per parcel and parcel identifier in Excel format.
- B. Design Criteria: Town shall provide the preferred maximum depth of sewer installation. Other applicable design criteria identified in TR-16 shall be considered for the model development including minimum pipe sizes, slopes, and minimum cover requirements.
- C. Record Drawings of the existing sewer system.
- D. Comments: Town shall provide comments on submittals within five (5) days of receipt.

PART 3 - OUT OF SCOPE WORK

A3.01 The following is considered out of scope work:

- A. Conceptual, preliminary, or final design plans for sewers within any of the study areas.

PART 4 – PAYMENTS TO GHD FOR SERVICES

TOWN shall pay GHD for Basic Services set forth in Exhibit A as follows:

- A. TOWN shall pay GHD a Lump Sum fee of One Hundred and Fifty Thousand Dollars (150,000.00) for work performed under this Agreement.
- B. GHD may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the TOWN.
- C. The Lump Sum includes compensation for GHD’s services and services of GHD’s Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and reimbursable expenses.
- D. GHD shall submit invoices on a monthly basis.

PART 5 - PERIOD OF SERVICE

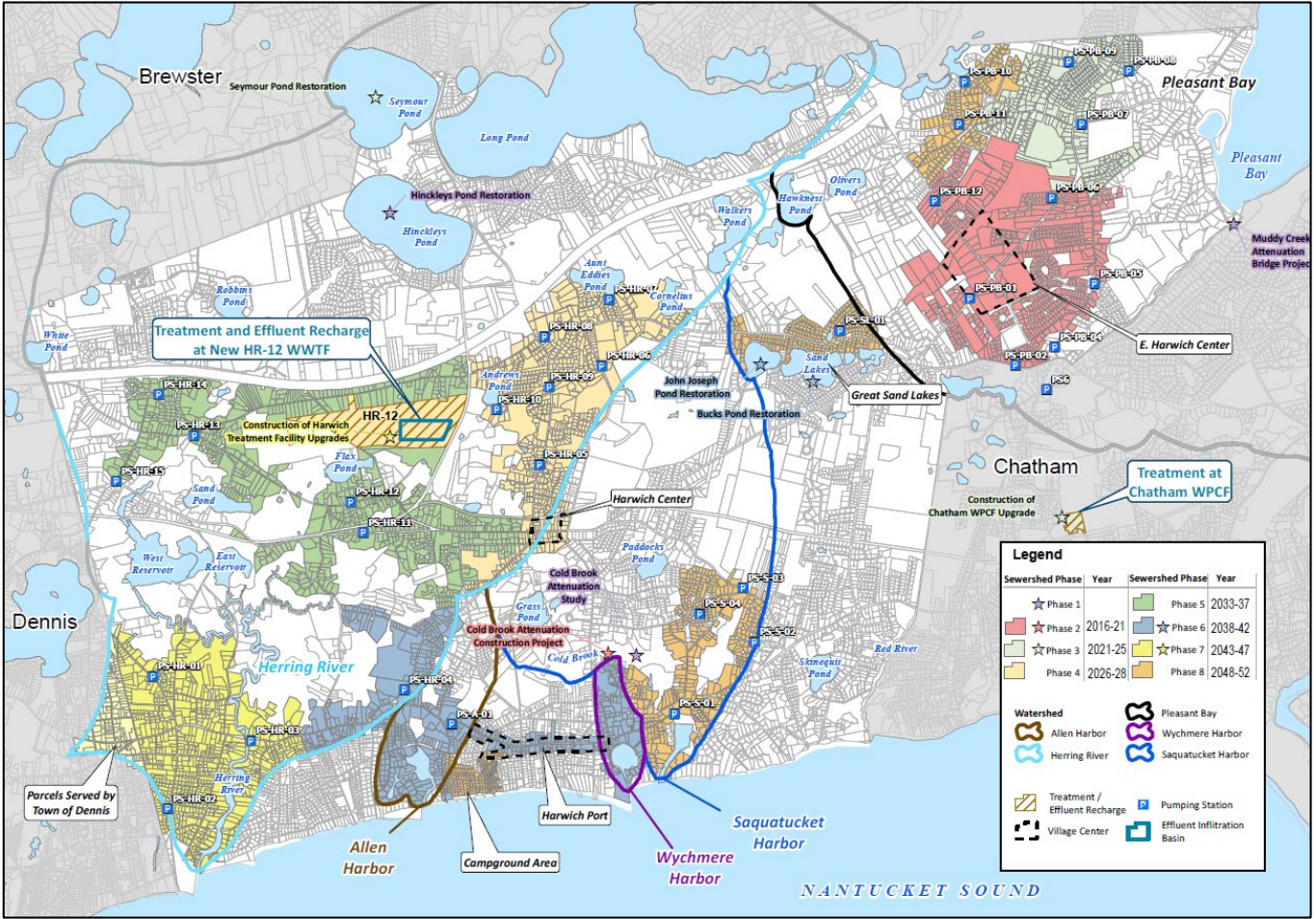
The compensation amount stipulated above for all project tasks is anticipated to be completed within 210 calendar days of authorization.

Exhibit B
Proposed Budget for
Town-Wide Sewer Model Development
Town of Harwich, Massachusetts

TASK	Project Director Marc Drainville, P.E., BCEE	Project Manager Russell Kleekamp	Project Engineers Anastasia Rudenko, P.E. Jeff Bellino, P.E.	Staff Engineers Craig Curtin Lenna Quackenbush	Managing Designer James Fosdick	Admin	Total Hours	GHD Labor Cost	GHD Expenses	GHD Total Cost
1 Internal Chartering	2	4	0	4	4	0	14	\$2,404	\$0	\$2,404
2 Client Kick-Off Meeting	2	4	0	4	4	1	15	\$2,494	\$0	\$2,494
3 Flow Development	0	8	8	40	40	0	96	\$13,354	\$0	\$13,354
4 Convert Existing Drawings - Existing System Model	0	8	0	16	60	0	84	\$13,196	\$0	\$13,196
5 Model Development - Existing System	8	16	8	60	40	0	132	\$19,032	\$0	\$19,032
6 Model Development - Future System	8	16	16	140	172	0	352	\$49,899	\$0	\$49,899
7 Cost Estimate - Draft	2	50	2	50	8	0	112	\$17,378	\$0	\$17,378
8 Cost Estimate - Final	8	22	8	22	4	0	64	\$10,614	\$0	\$10,614
9 Memorandum - Draft	6	12	14	48	30	8	118	\$16,445	\$0	\$16,445
10 Memorandum - Final	2	4	2	12	10	8	38	\$5,184	\$0	\$5,184
TOTAL	38	144	58	396	372	17	1025	\$150,000	\$0	\$150,000

Notes:

1. Mileage based on \$0.58 per mile



Town of Harwich
Town-Wide Sewer Modeling



Exhibit C – Sewer Modeling Area

Project No.
Report No.
Date 10/27/20

Budget/Warrant Timeline for 2021 Annual Town Meeting (FY 2022)

DATE	DELIVERABLE	GOVERNANCE	TARGET DATE
Monday, October 5, 2020	BOS issues general policy statement on FY '22 budget development (on or before)	Charter, §9-2-2	Monday, October 5, 2020
Thursday, October 1, 2020	ITA presents current financial assessment (on or before)	Charter, §9-2-1	Monday, October 5, 2020
Monday, October 26, 2020	Joint meeting with Cape Cod Tech, Capital Outlay Committee, Finance Committee, Monomoy Regional School District and Board of Selectmen		Monday, October 26, 2020
Tuesday, October 27, 2020	Capital Outlay Committee presents capital plan to ITA		Tuesday, October 27, 2020
Tuesday, October 27, 2020	ITA presents operating budget development instructions to department heads		Tuesday, October 27, 2020
Friday, October 30, 2020	Community Preservation Act (CPA) project applications due by 4:00pm	CPC Policy	Friday, October 30, 2020
Monday, November 2, 2020	Board of Selectmen reviews capital outlay plan and sets priorities		Monday, November 2, 2020
Thursday, December 3, 2020	Finance Committee publishes notice of hearing on capital outlay plan in newspaper	Charter, §9-7-1	Thursday, December 3, 2020
Friday, December 4, 2020	Department heads submit budget requests to ITA (on or before)	Charter, §9-2-3	Friday, December 4, 2020
Friday, December 4, 2020	Department heads submit article requests to ITA (on or before)		Friday, December 4, 2020
Wednesday, December 30, 2020	Supplemental documents for CPA project applications due by 4:00pm	CPC Policy	Wednesday, December 30, 2020
Monday, December 14, 2020	ITA and Capital Outlay Committee present plan to joint BOS/FinCom meeting	Charter, §9-6-3	Thursday, December 31, 2020
Monday, January 11, 2021	Presentation of draft Monomoy Regional School District budget		Monday, January 25, 2021
Monday, January 11, 2021	Presentation of draft Cape Cod Regional Technical High School budget		Monday, February 1, 2021
Tuesday, January 19, 2021	Final review of Capital Outlay Budget for FY 2022 and Plan through FY 2028		Tuesday, January 19, 2021
Friday, January 29, 2021	Bid specifications for related articles must be submitted to Administration by 12:00pm		Friday, January 29, 2021
Monday, February 8, 2021	ITA submits comprehensive budget and budget message to BOS (on or before)	Charter, §9-2-4	Monday, February 8, 2021

Budget/Warrant Timeline for 2021 Annual Town Meeting (FY 2022)

Friday, February 12, 2021	Final form of articles submitted to Board of Selectmen no later than noon on date shown	Code, § 271-1A	Friday, February 12, 2021
Monday, February 22, 2021	BOS shall submit budget to the Finance Committee	Charter, §9-3-2	Monday, February 22, 2021
Friday, February 26, 2021	Board of Selectmen submits articles to Finance Committee not later than 14 days after deadline for submission	Code, § 271-1B	Friday, February 26, 2021
Friday, February 26, 2021	Board of Selectmen submits articles proposing changes to bylaws or charter to Bylaw/Charter Review Committee not later than 14 days after deadline for submission	Code, § 271-1B	Friday, February 26, 2021
Saturday, February 27, 2021	Joint hearing between Board of Selectmen & Finance Committee on budget	Charter, §9-3-3	Saturday, February 27, 2021
Monday, March 8, 2021	Monomoy Regional School District to submit final line item budget to BOS/FinCom		Friday, March 12, 2021
Monday, March 15, 2021	Board of Selectmen votes to establish Special Town Meeting on 5/3/2021 (if necessary)		Monday, March 15, 2021
Monday, March 22, 2021	Board of Selectmen to close and sign Warrant for Special Town Meeting (if necessary)		Monday, March 22, 2021
Monday, March 29, 2021	Board of Selectmen to close and sign Warrants for Town Meeting and Town Election		Monday, March 29, 2021
Monday, March 22, 2021	Finance Committee submits written recommendations on budget/articles	Charter, §9-3-3	Wednesday, March 31, 2021
Tuesday, March 30, 2021	Send warrants to Cape Cod Chronicle and printer		Tuesday, March 30, 2021
Monday, April 19, 2021	Publish warrant in newspaper and every precinct (no later than 14 days before ATM)	Charter, §2-2-1	Thursday, April 15, 2021
Monday, May 3, 2021	2021 Annual Town Meeting (Fiscal Year 2022)	Charter, §2-3-1	

Annual Town Meeting – Monday, May 3, 2021

Annual Town Election – Tuesday, May 18, 2021

Special Town Meeting – Monday, May 3, 2021 (if necessary)

= Further discussion needed