



Wellfleet Selectboard

Note: Start Time of 7pm

The Wellfleet Selectboard will hold a public meeting on **Tuesday, February 7, 2023, at 7:00 p.m.** The Chapter 107 of the Acts of 2022, this meeting will be conducted in person and as a courtesy via remote means, per 940 MCR 29.10 and the Town's Remote Participation Policy. While an option for remote attendance and/or participation is provided as a courtesy to the public, the meeting/hearing may not be suspended or terminated if technological problems interrupt the virtual broadcast unless otherwise required by law.

Joining the Meeting:

In-person at the Wellfleet ACC, 715 Old King's Highway, Wellfleet, MA, 02667

Join the meeting hosted in Zoom by using the following link:

<https://us02web.zoom.us/j/85689604806?pwd=blplVFFBZzViQ0xNWkZKMm9iMVdrdz09>

By Phone: **phone to +1 929 205 6099** and enter **Meeting ID: 856 8960 4806** | **Passcode: 611877** Landline callers can participate by dialing *9 to raise their hand.

To Participate during public comment:

- Zoom: Raise hand to be called on to speak.
- Phone: dial *9 to raise your hand.

It is at the Chair's discretion to call on members of the public. All speakers must be recognized to speak. If attending a meeting in person, please find the closest available microphone and confine any personal conversations to outside the meeting room. Anyone may record the session but must notify the Chair and may not interfere with the meeting to record it.

Additionally, the meeting will be broadcast live, in real time, via live broadcast on Comcast cable (Wellfleet Government TV Channel 18), also available via livestream or Video on Demand (VOD) recordings at wellfleet-ma.gov

I. *Announcements, Open Session and Public Comments*

Note: Public comments must be brief. The Board will not deliberate or vote on any matter raised solely during Announcements & Public Comments.

II. *Consent Agenda*

- A. Appoint Lawrence Marschall to the Wellfleet Cable Advisory Committee ~ application received January 18, 2023
- B. Approval of Class II License ~ Wellfleet Service Center ~ Slaibi Enterprises, Inc.

III. *Employee Matters*

- A. Appoint Jack M. Poska as a full-time officer for the Wellfleet Police Department ~ Chief Michael Hurley

- IV. ***Public Hearings***
 - A. **Hearing Continued from January 31, 2023**, ~ Application received on January 3, 2023, for grant license extension #2000-2 ext on Egg Island~ Stephen, Iris and Benjamin Pickard
 - B. Application for Shellfish Grant license #95-15 consisting of 0.92 acres on Egg Island to Karen Johnson
 - C. Application for Shellfish Grant License #95-16 consisting of 0.92 acres on Egg Island to Ross Scherma
- V. ***Licenses***
 - A. Request from Trudy Vermehren, The Fox and Crow Inc. To serve alcohol on Sundays beginning at 10am instead of 12 noon.
- VI. ***Use of Town Property***
 - A. New England Endurance Events ~ Kathleen Walker ~ June 17, 2023, 5am-11am, Wellfleet Sprint Triathlon; September 16, 2023, 5am-12pm ~ The WTP Multistage Race ~ See Packet for full details and breakdown.
 - B. Baker's Field Pavilion ~ Friday September 8, 2023; 3:30pm-10:00pm ~ Rehearsal Dinner Clambake ~ Culley Schultz & Eric Bremicker
 - C. Various locations in Wellfleet for a small film ~ Evan Bergman ~ April 23, 2023 – May 19, 2023. ~ Please see packet for full list.
- VII. ***Board/Committee Appointments and Updates***
 - A. Building Codes Local Option Specialized Code ~ David & Merrill Mead-Fox
 - B. Cape Cod National Seashore Advisory Commission ~ NSP
- VIII. ***Business***
 - A. The Grateful Mind, 15 Bank Street; discussion with selectboard regarding his current license and the final steps that are required. ~ Jason Robicheau
 - B. Dredging and Mitigation Update ~ Chris Allgeier, chair of Dredging Task Force
 - C. Inclusionary Bylaw Amendment ~ Chair Ryan Curley
 - D. Letter Thanking Martha Craig ~ Chair Ryan Curley
 - E. The Opening and Closing of the Herring River ~ Nancy Civetta, Shellfish Constable
- IX. ***Selectboard Reports***
- X. ***Topics for Future Discussion***
- XI. ***Vacancy Reports***
- XII. ***Minutes***
 - A. January 24, 2023
 - B. January 31, 2023
- XIII. ***Adjournment***



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

I

ANNOUNCEMENTS, OPEN SESSION, AND PUBLIC COMMENTS

REQUESTED BY:	Wellfleet Selectboard
DESIRED ACTION:	Announcements to the board and public
PROPOSED MOTION: SUMMARY:	NOTE: Public comments must be brief. The Board will not deliberate or vote on any matter raised solely during Announcements & Public Comments.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

II

CONSENT AGENDA

REQUESTED BY:	Various Parties
DESIRED ACTION:	To approve the following without objection
SUMMARY:	I move to approve the following items with no objection: <ul style="list-style-type: none">• Appoint Lawrence Marschall to the Wellfleet Cable Advisory Committee• Approval of Class II License to Wellfleet Service Center ~ Slaibi Enterprises, Inc.



TOWN OF WELLFLEET
APPLICATION FOR TOWN BOARDS & COMMITTEES MEMBERSHIP

Wellfleet depends on its citizens to carry out many of our government's activities. Your community needs your help. *Please volunteer.*

FILL OUT THE FORM BELOW and mail it to:

Wellfleet Selectmen's Office, Town Hall, 300 Main Street, Wellfleet, MA 02667

Name LAURENCE A. MARSCHALL Date JANUARY 18, 2023

Mailing Address 343 WILLET AVE., RIVERSIDE, RI, 02667

Phone (Home) in Wellfleet - 508 349 8012 (cell) 717 398 9513

E-mail marschal@gettyburg.edu

Please describe briefly any work experience, including volunteer service, that you feel would be useful to the Town: I AM A RETIRED PHYSICS PROFESSOR - 43 YRS TEACHING

+ RESEARCH. INTERESTED IN BROADBAND ACCESS IN WELLFLEET - WE
HAVE OWNED A HOUSE IN THE SEASHORE ON LONG POND SINCE 2000,
AND HAVE NO BROADBAND ACCESS - DSL IS THE ONLY CONNECTIVITY. HOPE
TO ADD MY TECH SAVVY TO EFFORTS TO WIDEN COMMUNITY ACCESS

Please add any other information that you think may be useful, including education or other formal training, specialized courses, professional licenses or certifications, etc.:

RETIRED PHYSICS PROFESSOR - BS ENGINEERING PHYSICS,
CORNELL 1966; PH.D ASTRONOMY + ASTROPHYSICS, UNIVERSITY
OF CHICAGO, 1977.

Committees/Boards of Interest: 1) CABLE ADVISORY COMMITTEE

2) _____

3) _____



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

III

EMPLOYEE MATTERS

REQUESTED BY:	Police Chief ~ Michael Hurley
DESIRED ACTION:	To appoint of Jack M Poska as a full-time police officer for the Wellfleet Police Department
PROPOSED MOTION:	I move to appoint Jack M. Poska as a full time police officer for the Wellfleet Police Department.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

Town of Wellfleet
Police Department

February 07, 2023

To: Select Board
From: Chief Michael P. Hurley

Subject: FULL TIME POLICE OFFICER APPOINTMENT

I request Jack M. Poska be appointed (May 8, 2023 to June 30, 2024) as a Full Time Police Officer subject to the successful completion of the Massachusetts Police Training Council Academy. Mr. Poska will be filling the current vacant position. Mr. Poska is currently enrolled in the police academy and is scheduled to graduate May 06, 2023.

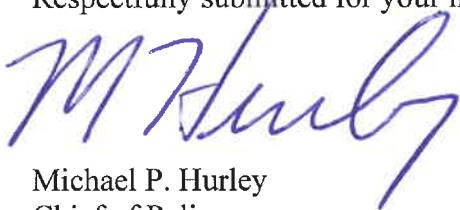
Jack M. Poska:

Physical	In Progress
Physical Agility Test	Completed/Passed
Police Academy Application	Completed/Passed
Background Check	Completed/Passed
Psychological Evaluation	In Progress
POST C Certified Application	Completed/Passed

I recommend that Mr. Poska be appointed as above and that a conditional offer of employment be extended as follows:

- Pass a background investigation.
- Pass a psychological
- Pass a physical
- Pass the Physical Agility Test (PAT test)
- Obtain or be able to obtain a MA license to carry a firearms permit (Class A)
- Complete the Full Time Police Academy
- Satisfactorily complete the Field Training program

Respectfully submitted for your information and consideration.



Michael P. Hurley
Chief of Police

cc: Richard Waldo, Town Administrator

Police Officer Position; Full Time [XX] Part Time []

Communications Position; Full Time [] Part Time []

**WELLFLEET POLICE DEPARTMENT
SUMMARY SHEET OF APPLICANT'S INFORMATION**

Applicant's Name: Poska Jack M.
(Last) (First) (Middle)

The following information is a summary of information provided as part of a 10-page application packet. The entire application is available for your review if you so desire.

I PERSONAL HISTORY

Address: _____
(Number & Street)
Swampscott MA 01907
(City/Town) (State) (Zip)

II EDUCATION

	School Name, Address and Phone Number	Graduated Yes/No	Number of Years Attended	Degree	Major
High School	Swampscott High School 200 Essex St Swampscott, Ma 01907	Yes	4	Diploma	
Undergraduate	Merrimack College 315 Turnpike St. North Andover	Yes	4	Bachelor	Criminal Justice
Graduate	Merrimack College 315 Turnpike St. North Andover	May 17	1	Masters	Criminal Justice
Other					

- b. Have you attended or are attending a Reserve Police Academy? Yes [] No [XX] If yes, give details to include completion date: _____
- c. Have you attended or are attending a Full Time Police Academy? Yes [XX] No [] If yes, give details to include completion date: Merrimack MPTC Graduates May 6, 2023
- d. Do you have a First Responder certificate? Yes [XX] No [] Exp. Date: 2026
- e. Do you have a CPR certificate? Yes [XX] No [] Exp. Date: 4/2026

f. List any special abilities, interests, sports, or hobbies along with degrees of proficiency:

Lacrosse, golf any outdoor sports

g. List any special equipment or computer systems with which you have experience.

I have a lot of experience with windows systems, along with a good amount of experience with all different types of technology including laptops, desktops, and cell phones.

III EMPLOYMENT HISTORY

Dates		Name, Address and Telephone of Employment	Rates of Pay		Supervisor's Name and Title
From Mo./Yr.	To Mo./Yr.		Start	Finish	
03/2020	08/22	Boston Red Sox Fenway Park 4 Jersey Street Boston, Ma 02215			Ryan Kozul
Reason for Leaving: I was accepted into the Merrimack Police Academy					

Dates		Name, Address and Telephone of Employment	Rates of Pay		Supervisor's Name and Title
From Mo./Yr.	To Mo./Yr.		Start	Finish	
01/2017	08/2020	Weiss Commercial Property Services 27 Farm Ave Peabody, Ma 01960			Mike Weiss
Was hired at Boston Red Sox, and did not have time for both jobs					

Dates		Name, Address and Telephone of Employment	Rates of Pay		Supervisor's Name and Title
From Mo./Yr.	To Mo./Yr.		Start	Finish	
08/2017	08/2019	Cape Ann Hockey School 511 Lowell Street Peabody, Ma 01960			Danielle Strauss
Reason for Leaving:					

b. Have you ever been disciplined or forced to resign because of misconduct or unsatisfactory employment? Yes [] No [XX] If yes, give details:

c. Are you eligible for rehire with each of your former employers? Yes [] No [] If no, please explain: _____



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

IV

PUBLIC HEARINGS

~ A ~

REQUESTED BY:	Shellfish Constable Nancy Civetta
DESIRED ACTION:	Request that Stephen, Iris, and Benjamin Pickard withdraw without prejudice their application for a proposed shellfish grant license extension #2000-2 ext. on Egg Island until regulation 7.4 is re-written.
PROPOSED MOTION:	I Move to accept the withdrawal without prejudice of proposed grant license extension #2000-2 ext. from Stephen, Iris, and Benjamin Pickard.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition (s):
VOTED:	

Attached please find the Shellfish Department's requested motion regarding this grant extension as we currently interpret regulation 7.4, however, before having Town Counsel's opinion. I have also included the Pickard's application package and the original Selectboard minutes approving the grant extension in 2002 (see yellow highlighted section).

I have also attached a map and Section 7.4 of the regulations, which have been submitted to Town Counsel for a written opinion.

Of note: Regarding the eastern boundary line of Powers Landing: The extension of the property line shown here shows shellfish grant #2000-6 (Nick Sirucek) to be outside of the boundary because the line drawn is the continuation of the angle of the upland property boundary. However, it seems that the Town approved that grant in its current location because at the time, it seems to have used straight lines coming out from the Powers Landing boundaries in such a way so that grant #2000-6 was considered located within the boundaries of the Town-owned property of Powers Landing.

Please include this email in the packet as well instead of a formal memo. Deputy Shellfish Constable Chris Manulla will attend this meeting.

Thank you,

Nancy

Nancy Civetta

Shellfish Constable

RCVD 1.3.2023

APPLICATION FOR SHELLFISH GRANT LICENSE

DATE: December 20th, 2022

This request is being made under Chapter 130, Sections 57 & 59.

Name Stephen Pickard, Iris Pickard, & Benjamin Pickard
Address 25 Holbrook Ave/Box 622
Wellfleet, Ma 02667

Telephone 508-332-0422 (cell) 508-349-6417 (home)

Approximate location of proposed grant license area:
West of 2000-2 & 2000-3 west side of Egg Island
South of 2000-1 EXT.
North of 2000-3 EXT.

Desired size of proposed grant license area:
1.08 Acres

GENERAL INFORMATION

Previous shellfishing experience:

Stephen Pickard
Grant holder for 22 years
Shellfish License holder
for 41 years

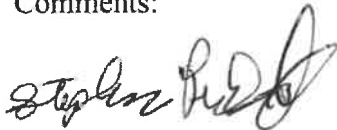
Iris Pickard
Grant holder for 6 years
Shellfish License holder
for 14 years
Bachelor of Science in
Marine Biology and
Aquaculture
Shellfish Hatchery Lab
Technician 5 Years

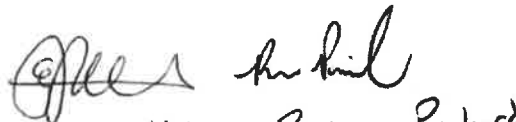
Benjamin Pickard
Grant holder for 6 years
Shellfish License holder
for 11 years
Bachelor of Arts in Marine
Biology and Aquaculture

How long have you had a shellfish permit (commercial/non-commercial)?
Stephen 41 years, Iris 14 years, Benjamin 11 years

How long have you lived in Wellfleet?
Domicile of Wellfleet for my whole life 55 years, 26 years, 23 years

Comments:


Signature of Applicant


Iris Pickard Benjamin Pickard

Shellfish Constable

STEPHEN PICKARD, IRIS PICKARD, BEN PICKARD

TOWN OF WELLFLEET SHELLFISH DEPARTMENT
CHECK LIST FOR AQUACULTURE LEASE APPLICANT

- Applicant ^{s, are} is a domiciled resident of Wellfleet, as that is defined in Section 1 of our regulations.
- Applicant ^{are} is 18 years of age or older.
- Approval of this application will not result in the applicant ^{s,} having more than 7 acres leased to them for aquaculture within the Town's waters.

N/A ^{→ same licenses} All other licensees named to the grant have given written approval for the applicant to be included on their lease. If a corporation is the current lease holder, all persons who are members of the corporation must submit their written approval.

At this time, there are no more than three lease holders named to the lease.

N/A If applicant is applying for a lease on private property, permission from the owner has been obtained.

The applicant has held and been documented by the Shellfish Department using a Wellfleet commercial shellfishing permit during a period of at least three (3) of the four (4) calendar years preceding the date of application for this license. Applicant shall submit copies of state-filed catch reports, OR,

The applicant demonstrates experience in shellfish propagation and aquaculture, continuously, over at least three (3) years preceding the date of application, documented by the Shellfish Department.

N/A This shall be supported by a letter from a license holder who employed the applicant describing the type of work performed and any other information which might be relevant.

The applicant shall present a detailed five-year business plan for how s/he intends to use the grant, including shellfish species, amounts and sizes, and gear to be used, access routes and any other information relevant to proposed operations.

For any proposed new grants or extensions, approximate coordinates and a map should be reviewed by the Shellfish Constable, including a site visit, and provided in the documentation for the Selectboard.

The applicant has received and agreed in writing to comply with the current version of the Town's Shellfish Policy and Regulations.

The applicant acknowledges that s/he will also be held responsible to and will familiarize him/herself with [MGL Ch. 130](#) and [CMR 322](#), as well as the most recent [SEMAC Best Management Practices](#), [DMF's vibrio control plan](#), [National Shellfish Sanitation Program's Guide](#)

ALL ARE
CURRENT
GRANT
HOLDERS

and [DPH's Regulations for Fish and Fishery Products](#), as they apply to the harvest of shellfish governing his/her business operations.

The applicant does not show a pattern of violations of Wellfleet's Shellfishing Policy and Regulations within the last three (3) years.

FROM WELLFLEET SHELLFISH POLICY AND REGULATIONS

SECTION 1: DEFINITIONS

Aquaculture License - An authorization, granted by a vote of the Board of Selectmen, to utilize a specific tract of land, under coastal waters (1) to plant and grow shellfish using in-bottom or off-bottom culture; (2) to place shellfish in or under protective devices affixed directly to the tidal flats or land under Wellfleet's coastal waters, such as boxes, pens, trays, bags or nets; (3) to harvest and take legal shellfish; (4) to plant cultch for the purpose of catching shellfish seed; and (5) to grow shellfish by means of racks, rafts or floats ([MGL Chapter 130; Section 57](#)).

Licensed Area (Grant) - a designated bottom area, certified by the Division of Marine Fisheries (DMF) and licensed by a vote of the Board of Selectmen, on which the licensee may plant, grow and harvest shellfish (MGL Chapter 130; Sections [57 & 68](#)).

Resident - A declared resident of the Town of Wellfleet. Written proof that Wellfleet is the domicile as well as the legal residence of the applicant shall be required to the satisfaction of the Shellfish Constable and Board of Selectmen. Domicile will be established after one year of residency in Wellfleet is demonstrated. Proof of legal residence may include voter registration, automobile registration, driver's license, income tax filings, census data, or passport.

7.8. Issuance of Licenses for Aquaculture

7.8.1. Eligibility Requirements: Licenses shall only be issued to domiciled residents (See Sec.1 Definitions) of the Town, 18 years of age or older, who have the knowledge and experience to fulfill the responsibilities specified in the license, provided that the applicant has held and been documented by the Shellfish Department using a Wellfleet commercial shellfishing permit during a period of at least three (3) of the four (4) calendar years preceding the date of application for a license. Applicant shall submit copies of state-filed catch reports. OR, provided the applicant demonstrates experience in shellfish propagation and aquaculture, continuously, over at least three (3) years preceding the date of application, documented by the Shellfish Department. This shall be supported by a letter from a license holder who employed the applicant describing the type of work performed and any other information which might be relevant. The applicant shall present a detailed five-year business plan for how s/he intends to use the grant, including shellfish species, amounts and sizes, and gear to be used, access routes and any other information relevant to proposed operations. In addition, any applicant shall not show a pattern of violations of Wellfleet's Shellfishing Policy and Regulations within the last three (3) years.

At such time as a licensee ceases to be a domiciled resident of the Town that individual shall be removed from the license. The status of all other licensees will not change. If that licensee is the sole licensee then the license shall be revoked.

To: Wellfleet Selectboard

From: Stephen Pickard, Iris Pickard & Benjamin Pickard

Date: December 20th, 2022

I, Stephen Pickard, Iris Pickard and Benjamin Pickard, Agree to comply with the Town of Wellfleet's Shellfishing Policy and Regulations and assume full responsibility for understanding and adhering to all federal and state regulations as they apply to shellfish propagation, harvest and sales.

Sincerely,



Stephen Pickard



Iris Pickard



Benjamin Pickard

AQUACULTURE DESCRIPTION FORM

Clear Fields

Name: Last Pickard First Stephen, Iris & Benjamin M.I. _____

Business Name (optional): _____

Mailing Address Box 622

City/Town Wellfleet State MA ZipCode 02667

Telephone 5083496417 Cell Phone 5083320422

E-Mail Address uptowngirlpt@comcast.net

A. SITE DESCRIPTION

Location of proposed aquaculture license site(s) and access routes (Include a site map in USGS 1:24,000 or 1:25,000 format with site boundaries clearly outlined and both current and historic Massachusetts Department of Environmental Protection (MassDEP) mapped eelgrass layers depicted on the map. The [MA-ShellFAST](#) tool may be used for generating the map and measuring distances/acreage).

City/Town: Wellfleet

Shellfish Growing Area (SGA): CCB 11

of Acres: 1.08

Site boundaries defined by latitude and longitude in decimal degrees (i.e. 42.36115°, -71.057083°):
N 60 41.92451 -70.04878 *N 59* 41.924 -70.04864 *N 58* 41.92411 -70.04824 *N 57* 41.92386 -70.04816
N 151 41.92437 -70.0493 *N 151* 41.923673 -70.048845 *N 151* 41.924099 -70.049228

Have you conducted a survey of the site (Y/N)? Yes Date? 11/22/2022

Method of Survey:
Walk with shellfish constable and harbor master

Average Depth at Mean Low Tide (MLW): 1 ft

Mean High Tide (MHW): 11 ft

The site is located in an: intertidal area; subtidal area; spans both intertidal and subtidal areas.

What type of sediment or bottom substrate is on the site? (Benthic Habitat Conditions):
sand

Is eelgrass currently present on or within twenty-five (25) ft. of the proposed site¹ (Y/N)? N

If eelgrass is present or currently/historically mapped by DEP within the shellfish growing area, what is the shortest distance to actual or mapped eelgrass from the proposed site? N/A ft.

Are there shellfish currently on the site (Y/N)? No

If yes what species and approximate densities?

Is the proposed grant site located within an [Area of Critical Environmental Concern](#) (ACEC) (Y/N)?
YES

Is the proposed grant site located within [Natural Heritage Endangered Species Project](#) (NHESP) mapped habitat (Y/N)? *If yes, you must submit a MESA Project Review Checklist to NHESP.*
No

Is the proposed grant site located within an [Outstanding Resource Waters](#) (Y/N)? No

Is there an [Environmental Justice \(EJ\) population](#) located within 1-mile of the project site (Y/N)?
No

If so, please complete the attached supplement to this form for projects located within 1-mile of EJ populations.

Describe whether alternative locations were considered and identify the siting criteria used to select this site and the characteristics of the site that make it suitable for aquaculture use. It may be helpful for this evaluation to be based on the siting criteria identified in DMF's Shellfish Planting Guidelines and the Army Corps of Engineers General Permit for Aquaculture.

Has the site been used for private shellfish propagation within the last two years (Y/N)? No

Has the site been used for municipal shellfish propagation within the last two years (Y/N)? No

1. Proposed aquaculture license sites with eelgrass present within the footprint or within 25 ft. of eelgrass will not be granted certification by DMF.

B. SPECIES TO BE CULTURED

What species of shellfish do you plan to cultivate? (Select all that apply)

- Eastern Oyster
- Quahog or Hard Clam
- Softshell Clam or Steamer
- Surf Clam
- Razor Clam
- Bay Scallop
- Blue Mussel
- Other _____

Do you propose on-bottom placement of cultch or spat on shell on the site (Y/N)? No

If yes, explain.

C. GEAR

What methods of culture will be used (specify by species if necessary)?

On- bottom Off- bottom submerged Off- bottom floating

Describe the type of gear to be utilized for each species to be cultured, include dimensions (Cages, Racks, Trays, Bags, Nets, Floating): ***Depending on the gear type used, the project may require additional permitting by the Massachusetts Department of Environmental Protection (MassDEP). Consult with your Harbormaster, and if needed, with the MassDEP Waterways Program.***
100' x14' Tenax netting held down with ½" rebar & rebar "U" hooks for Quahog
racks and bags for oysters

*Include with your submission of this form a site map on a USGS 1:24,000 map with site boundaries clearly outlined and a cross-section schematic of the gear to be deployed on the site. 3

If you will utilize floating gear, what measures will you take to deter birds (bird deterrence plan required)?

- Spikes
- Zip ties
- Kites/streamers
- Faux predators
- Wire cage exclusion
- Sweeps/spinners
- Sonic deterrents
- Other

Please describe your bird deterrence plan:

What methods will you utilize to harvest shellfish? (Hand, Drag, Other) Please describe:
Hand rake and Bull rake

How will the proposed license site be marked? (Buoy color, Type, Lines, Anchor)
20 inch fluorescent yellow balls with grant number affixed with screw anchors

How will you access the license site?

By boat, truck and foot

What equipment do you plan on utilizing to maintain the license site and transport product?

Vehicle: Make: Chevrolet Model: Silverado

Boat: Make: Carolina Skiff Model: 24

Will any accessory structures be used on the license site? (barge, float, upweller, etc.)

No

Will this be a seasonal operation (gear and product removed from site in winter) or year-round?

year-round operation

Please include any additional information here:

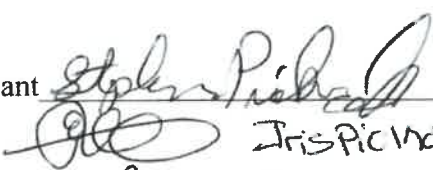


All oyster racks will be removed in winter.

D. CUMULATIVE IMPACTS

After voting to grant the site license at a duly advertised public hearing (M.G.L. c.130 §60), the Select Board of the municipality must submit a request for site certification to the Division of Marine Fisheries (DMF). A site inspection that may include a site survey will be performed by DMF. If DMF determines that issuance of the site license and operational activities thereunder will have no substantial adverse impacts to natural resources and existing fisheries, DMF will issue a conditional certification letter to the municipality and include a summary table that identifies other existing and conditionally certified aquaculture sites, gear types, and acreage within the same embayment as the proposed site.

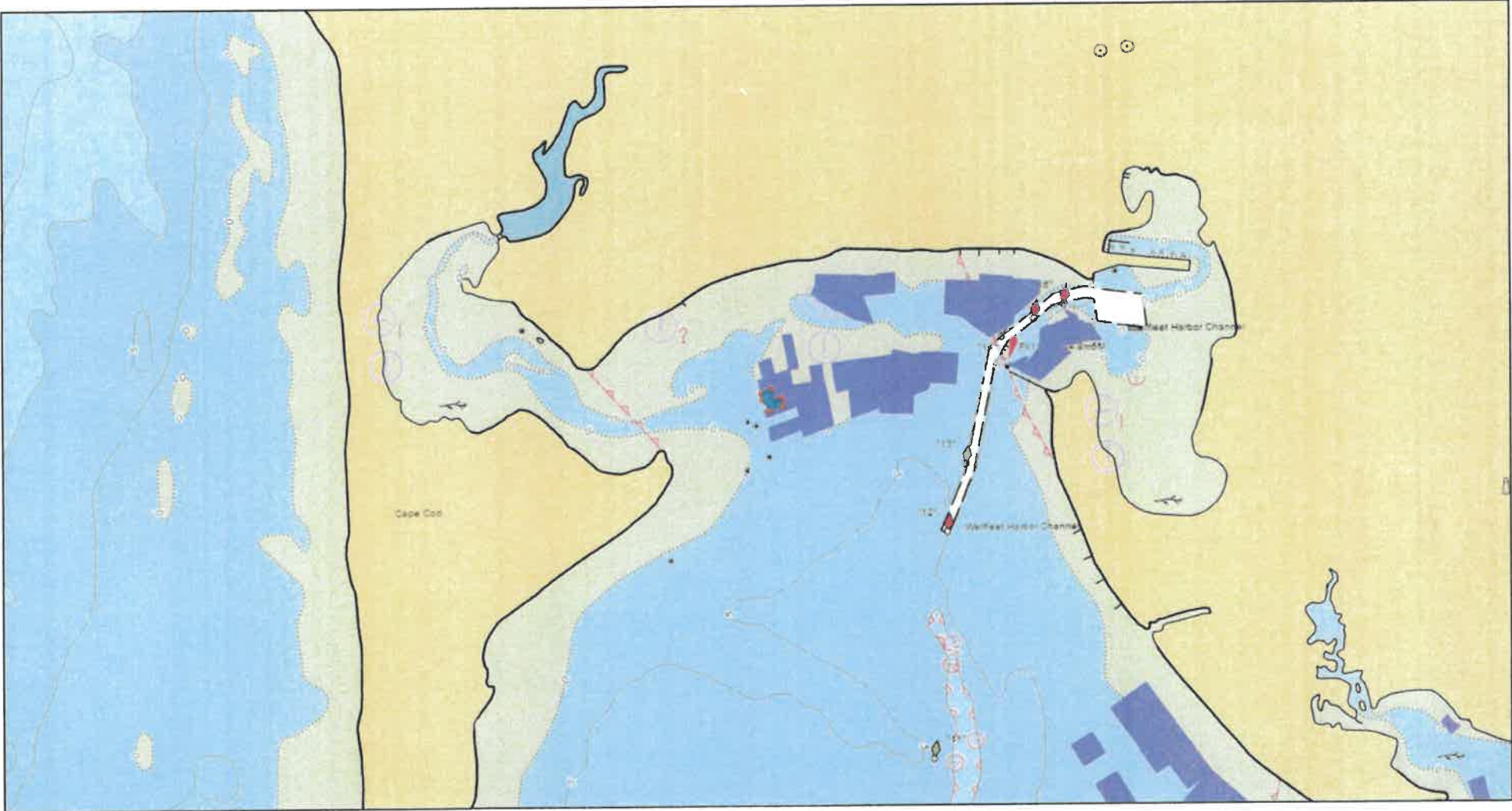
This table will be used to assess cumulative impacts if the project is subject to environmental review by the Massachusetts Environmental Policy Act (MEPA) Office and should be submitted as an attachment with your MEPA filing. If the project is subject to the MEPA Special Review Procedure (SRP), the applicant hereby acknowledges and agrees to following the procedures set forth in the SRP. The SRP can be viewed [here](#).

All information furnished on this application is true and accurate to the best of my knowledge. I will notify the Division Marine Fisheries Shellfish Sanitation and Management Program immediately of any changes.

Signature of Applicant  Date 11/3/23
 Iris Pickard
 Benjamin Pickard

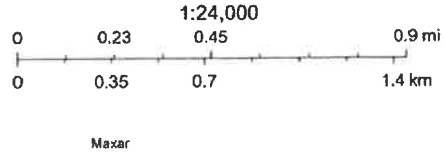
Division of Marine Fisheries
ATTN: Aquaculture Coordinator
706 South Rodney French Boulevard
New Bedford, MA 02744
Phone: (508) 742-9766

Stephen Pickard

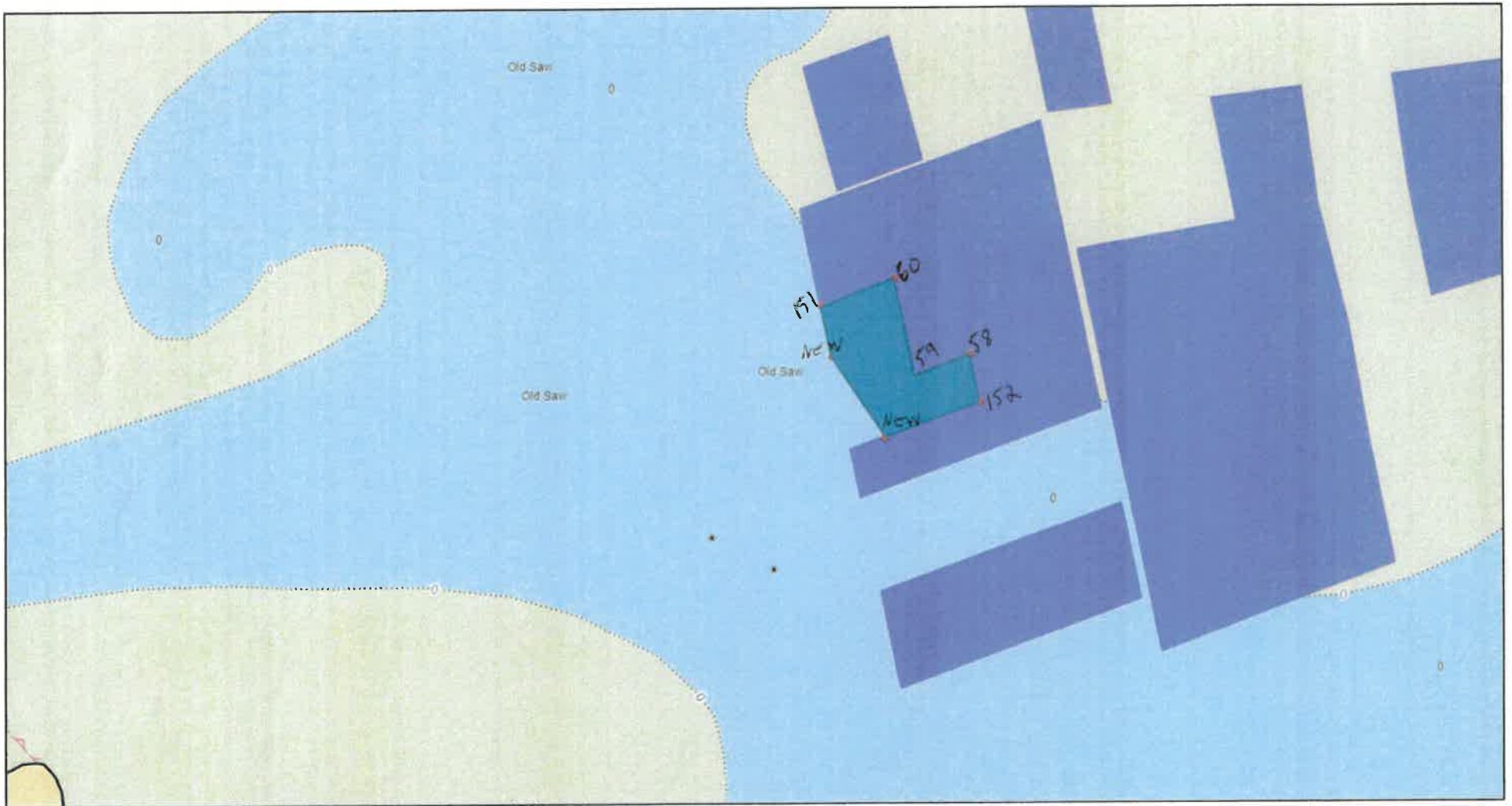


12/18/2022, 8:27:54 PM

- Override 1
 - "100" points with marker number
- Aquaculture
- Shellfish

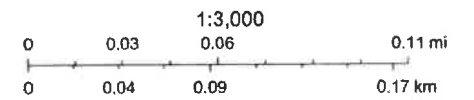


Stephen Pickard



12/18/2022, 8:27:49 PM

- Override 1
- "100"points with marker number
- Aquaculture
- Shellfish



Maxar, Microsoft

Board of Selectmen
Library Meeting Room
March 11, 2002
Minutes

The meeting was called to order at 7:02 p.m. by Chairman Michael Parlante. Selectmen present included Dale Donovan, Roger L. Putnam, Jr. and Jerry Houk. Selectman Michael May was absent. Town Administrator Tim Smith was also present.

Open Session:

- Barbara Echeverria addressed the Board regarding procedure for obtaining information from department heads and initiation of the shellfish fee proposal recently discussed by the Shellfish Advisory Committee.
- Chris Merl requested permission to send a letter from the Shellfish Advisory Committee to Scott Soares regarding the importance of the cultch program – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to give permission for this letter and to follow up with a letter of support from the Board of Selectmen.
- Hugh Guilderson requested that copies of the proposed Harbor Management Policy be forwarded to the NRAB.

On a motion by Putnam, seconded by Donovan, the Board voted unanimously to approve the minutes of February 25, 2002 as presented.

On a motion by Donovan, seconded by Putnam, the Board voted 3-0-1, with Houk abstaining (he had not attended the meeting), to approve the minutes of March 4, 2002 as presented.

On a motion by Putnam, seconded by Donovan, the Board voted unanimously to release the executive session minutes dated 10/9/01, 12/3/01, 12/10/01, 1/7/02, 1/14/02.

On a motion duly made and seconded, the Board voted 2-1-1, with Houk voting against (he indicated that his comments had not been included in the minutes) and Putnam abstaining (he had not attended the meeting) to release the executive session minutes of February 19, 2002.

The Town Administrator reminded the Board that the final Future Search Conference meeting is scheduled for Saturday, March 16th from 8:30 a.m. to 1:30 p.m. at the Wellfleet Elementary School and that he will be meeting with DEP regarding the Administrative Consent Order. There was consensus that Selectmen Donovan and Putnam also attend this meeting.

Comments/Reports:

- Selectman Houk apologized for his comments regarding reported receipt of a copy of executive session minutes by a reporter.
- Selectman Donovan noted improved operations at the Transfer Station and thanked the DPW Director, Assistant Director and Transfer Station staff.
- Selectman Putnam indicated that the Outer Cape Municipal Solid Waste Feasibility Study Committee has recommended the firm of Wright Pierce to perform the study.

Selectman Putnam presented his correspondence report. The letter from the Board of Selectmen to the Cape Cod National Seashore regarding meeting to discuss Herring River Dike issues and the letter from Kopelman and Paige regarding a proposed settlement relative to the Beebe Waste Oil Superfund site were discussed.

The Board discussed:

- a) Use of credit cards – on a motion by Donovan, seconded by Parlante, the Board voted unanimously to look into moving ahead with the use of credit cards in Town offices which take in a considerable amount of money.

The Board held the continuation of the public hearing regarding mooring regulations. Selectman Putnam read the public notice. Harbormaster Michael Flanagan was in attendance and proposed adding two subsections to the Mooring Regulations as follows: “j. Individual mooring permits in the Town of Wellfleet mooring basin are transferable within the immediate family, immediate family being applicant/boat owner, his or her spouse, and children. k. Individual mooring permits in the Federal anchorage are transferable to the applicant/boat owner and his or her spouse.” On a motion by Donovan, seconded by Putnam, the Board voted unanimously to approve the amendments to the Mooring Regulations proposed this evening and at the previous hearing. It was suggested that when new moorings are issued, they conform to the rules of the Federal basin.

The Board continued discussion:

- b) Business Licenses – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to approve the business licenses of Sweet Seasons, Inc.; The Box Lunch, Inc.; Hyannis Ice Cream Corp. (White Crest Beach); Hyannis Ice Cream Corp. (Newcomb Hollow Beach); Old Wharf Dory Co.; The Juice Gallery; Wellfleet Crafts; Francoise Frey; Kelley’s Flowers.
- c) Appointments – on a motion by Putnam, seconded by Donovan, the Board voted 3-0-1, with Houk abstaining (he had not attended the interview meeting), to appoint Jeffrey Hughes as Herring Warden. On a motion by Donovan, seconded by Putnam, the Board voted 3-0-1, with Houk abstaining, to appoint Frederick Felix to the Marina Advisory Committee. On a motion by Putnam, seconded by Donovan, the Board voted 3-0-1, with Houk abstaining, to appoint Zel Levin to the Board of Health.
- d) Request for Approval of Amnesty Day (April 6) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to approve this request from the DPW Director and Health/Conservation Agent pending receipt of the rules for that day and specifics of what the Chamber of Commerce’s participation will be.
- e) STM/ATM Warrants – Article Recommendations as follows:
 - STM Article 1 (transfers) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to recommend this article.
 - Question 1 (Exempt from Proposition 2 ½ - Senior Center) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to place this question on the ATM warrant and ballot.
 - Question 2 (Exempt from Proposition 2 ½ - Fire Department Ladder Truck) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to place this question on the ATM warrant and ballot.
 - ATM Articles 1, 2, 3 (Operating Budget, Capital Budget, Marina Enterprise Fund Budget) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend these articles.
 - ATM Article 4 (gifts) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
 - ATM Article 5 (authorize Town Collector to collect taxes and Treasurer when appointed Collector) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.

- ATM Article 6 (indemnify DEP) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to recommend this article.
- ATM Article 7 (Town Clerk/Treasurer and Town Collector wage increase) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 8 (rescind \$330,000 of borrowing for Library roof project) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 9 (borrow for Senior Center) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to recommend this article.
- ATM Article 10 (rescind \$120,000 of borrowing for Baker Estates) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to recommend this article.
- ATM Article 11 (fireworks) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 12 (Stabilization Fund) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 13 (fund Chamber of Commerce books) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 14 (create two full-time Firefighter/Paramedic positions) – on a motion by Donovan, seconded by Putnam, the Board voted 3-1, with Putnam voting against, to recommend this article.
- ATM Article 15 (create full-time DPW Working Foreman position) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 16 (create full-time Assistant Health/Conservation Agent position) – on a motion by Putnam, seconded by Donovan, the Board voted 3-0-1, with Parlante abstaining, to recommend this article.
- ATM Article 17 (Chapter 90) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 18 (Commercial Street Upper Elevation Stormwater Remediation Project) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 19 (Land Bank – Chavchavadze/Ziering) – on a motion by Donovan, seconded by Putnam, the Board voted unanimously to recommend this article.
- ATM Article 20 (Map 16, Lot 111 to Habitat for Humanity) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Articles 21, 22, 23, 24, 25, 26 (Zoning Bylaw amendments – Affordable Accessory Dwelling Units and Dimensional Special Permits) – consensus to hold recommendation until after the public hearings.
- ATM Article 27 (accept G.L. c. 71, § 16B) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 28 (amend Section I of the Nauset Regional School District Agreement) – on a motion by Putnam, seconded by Parlante, the Board voted 3-1, with Donovan voting against, to recommend this article.
- ATM Article 29 (fund capital improvement costs at Nauset Central Office Complex) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.

- ATM Article 30 (proposed changes to Section IV, Apportionment and Payment of Costs incurred by the District, of the Nauset Regional School District Agreement) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 31 (hear reports) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.
- ATM Article 32 (petition – building at Mayo Beach) – there was consensus to wait on this recommendation pending receipt of a report from Town Counsel.
- ATM Article 33 (petition – Juice Bar) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously not to recommend this article.
- ATM Article 34 (standard last article) – on a motion by Putnam, seconded by Donovan, the Board voted unanimously to recommend this article.

The Board held the continuation of the following Shellfish Department public hearings. Selectman Putnam read the public notice. Shellfish Constable Bill Walton was in attendance. Chairman Parlante disclosed that he holds a commercial shellfish permit, has a shellfish grant license and owns waterfront property. Applicants Stephen Pickard, represented by Attorney Ben Zehnder and Bob Olson were present. Mr. Zehnder presented a new plan, reducing Mr. Pickard's request by ¼ acre. Chairman Parlante proposed an alternative plan for dividing the area. Mr. Pickard indicated that he was not in favor of Chairman Parlante's proposal because the proposed area is too close to the closure line and Chequessett Yacht Club access. Mr. Olson indicated that he was not in favor of the new plan presented by Mr. Zehnder. On a motion by Donovan, seconded by Houk, the Board voted 2-1-1, with Putnam voting against and Parlante abstaining, to grant Mr. Pickard a 1.24 acre extension to shellfish grant license #2000-2 and to grant Mr. Olson the remaining .66 acre extension to shellfish grant license #2000-3.

The Board discussed the article request from the Open Space/Land Bank Committee for transfer of lots to the Conservation Commission. Selectman Donovan suggested that a broader land use policy for the entire Town be considered. On a motion by Putnam, seconded by Houk, the Board voted 3-1, with Donovan voting against, to place this article on the ATM warrant and to hold on making a recommendation.

Selectman Putnam asked that the Board schedule a discussion of a public safety policy as soon as possible.

On a motion by Donovan, seconded by Putnam, the Board voted unanimously to adjourn at 8:39 p.m.

Respectfully submitted,

Linda Smulligan
Administrative Assistant

Michael Parlante, Chair

Dale Donovan

Roger L. Putnam, Jr.

Jerry Houk

ORIGINAL REGULATION 7.4

7.4. Location of Areas Licensed for Aquaculture (Grants)

Grants may be located in the following areas:

Area 1: On tidal flats off Mayo Beach and Chequessett Neck from the eastern boundary of the Town property at Powers Landing to the Town Pier and at least three hundred (300) feet northward of a line from the seaward end of the Breakwater to the easternmost tip of Great Island, except in the area above mean low water on Egg Island.

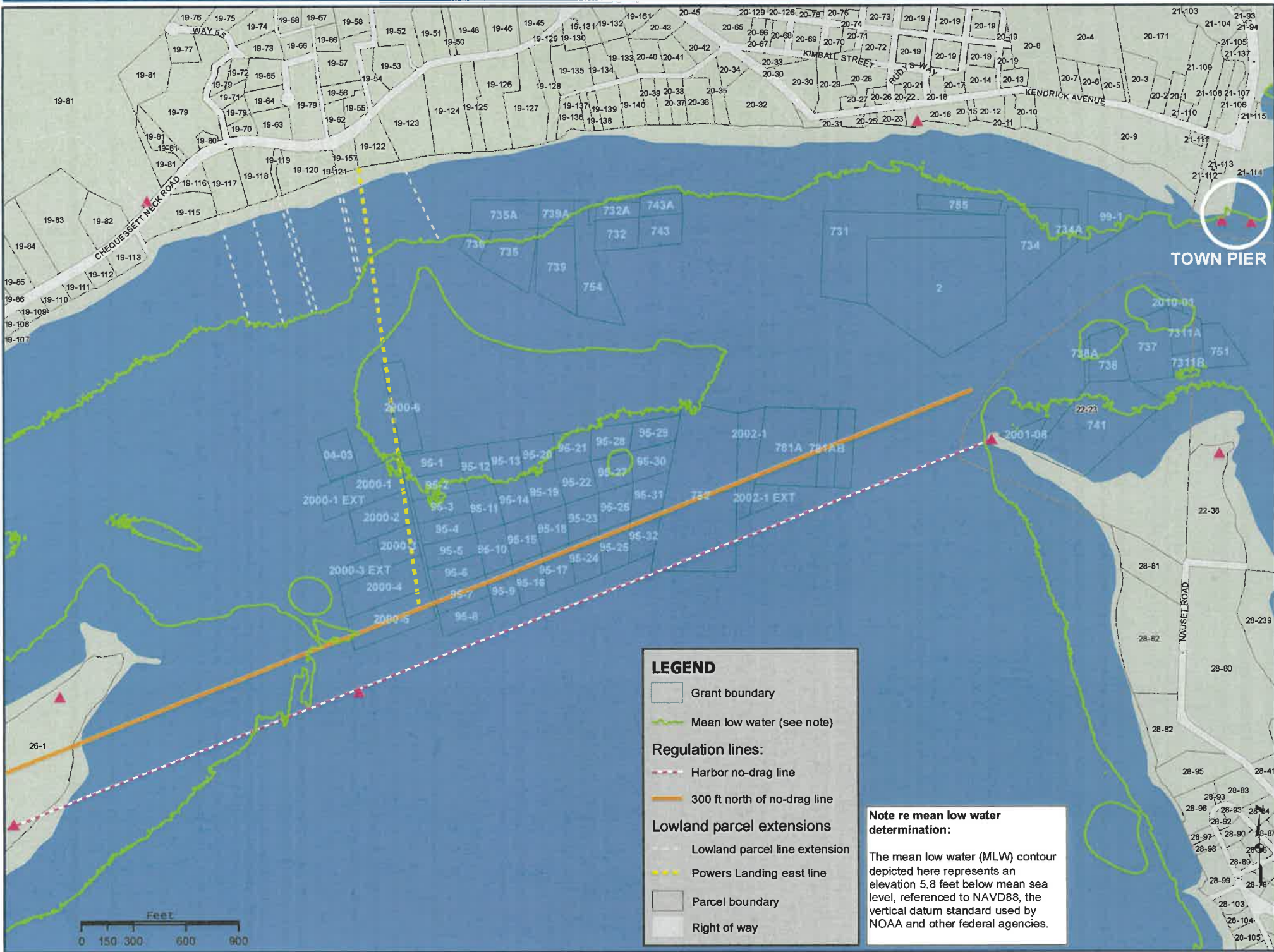
Area 2: On tidal lands lying north and easterly of the Breakwater and of the northerly tip of Indian Neck.

Area 3: On tidal lands off Indian Neck from Omaha Road south to the eastern tip of Field Point.

Area 4: On tidal lands off the westerly side of Old Wharf Point and at the entrance to Loagy Bay.

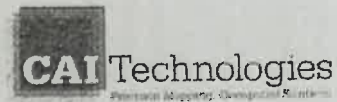
Approval of the proposed licensed area shall be determined by the Selectboard with appropriate regard for reasonable navigational and recreational interest in the areas concerned.

Section 7.4 Area 1 Aquaculture Grants – Wellfleet Harbor





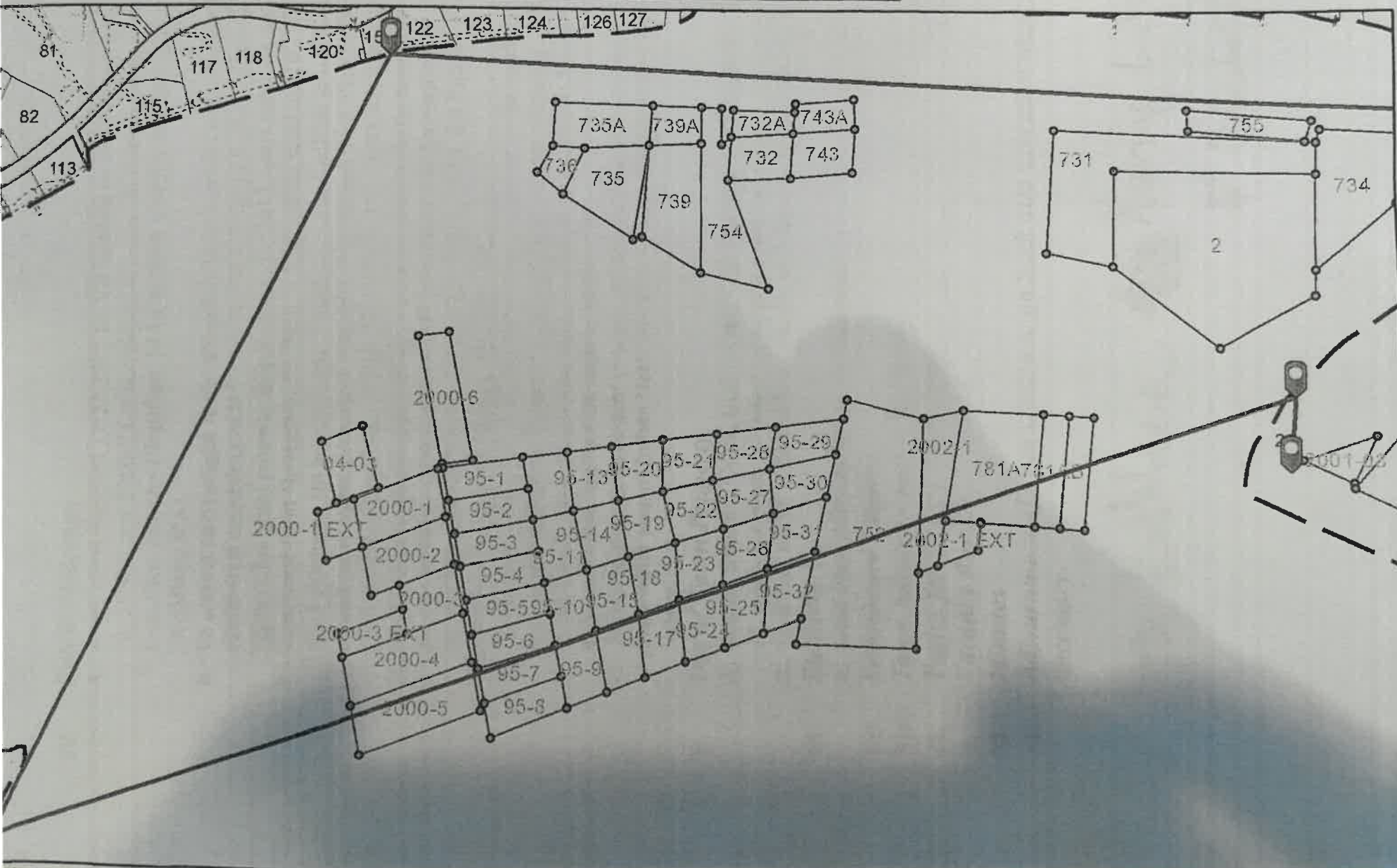
Wellfleet, MA



January 30, 2023

1 inch = 560 Feet

www.cai-tech.com





SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

IV

PUBLIC HEARINGS

~ B ~

REQUESTED BY:	Shellfish Constable Nancy Civetta
DESIRED ACTION:	To assign shellfish grant license #95-15 consisting of 0.92 acres on Egg Island to Karen Johnson
PROPOSED MOTION: SUMMARY:	I move to approve the application from Karen Johnson for shellfish grant license #95-15 consisting of 0.92 acres on Egg Island, which she was selected for in a lottery on December 20, 2022.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s): _____
VOTED:	Yea _____ Nay _____ Abstain _____

Dear Selectboard members via the Town Administrator and Selectboard Chair Curley,

Please accept this email in place of a formal memo for your packet on February 7, 2023.

On December 20, 2022, Karen Johnson was selected in the lottery for shellfish grant license #95-15, and Ross Scherma was selected in this same lottery for shellfish grant license #95-16. When I spoke to the Aquaculture Specialist Chrissy Petitpas from the Mass. Division of Marine Fisheries, she informed me that the Town would need to advertise the assignment of these two grants to the respective people they were awarded to in the lottery. We advertised this public hearing, associating each of their names with the grants they were awarded in the lottery in the Jan. 26, 2023, Cape Cod Times. As part of the administrative procedure, I would ask you to please approve Karen Johnson's assignment to grant #95-15. I would also ask that you work with Ross Scherma, as you did with Nick Sirucek, to have him withdraw his application until regulation 7.4 is re-written as grant #95-16 is located within 300 feet of the no drag line, which is not compliant with the regulation as currently written. After the Shellfish Advisory and the Shellfish Dept. work on the regulation and bring it to Town Counsel and then to you for approval, Ross can resubmit his application for your approval. This will not hold up his process as there is already a map with boundary points (attached) and an Army Corps of Engineers permit (attached), as well as Conservation Commission approval for all of the 95 quadrants of grants on Egg Island.

Johnny Mankevetch will be at the meeting on Feb. 7 to answer any questions.

Thank you,

Nancy

Nancy Civetta

Shellfish Constable

Town of Wellfleet

AQUACULTURE DESCRIPTION FORM

Clear Fields

Name: Last Johnson First Karen M.I. D

Business Name (optional): _____

Mailing Address PO Box 1343

City/Town Wellfleet State MA ZipCode 02667

Telephone _____ Cell Phone 774-268-0169

E-Mail Address shellfishgrl@gmail.com

A. SITE DESCRIPTION

N/A - EXISTING SITE

Location of proposed aquaculture license site(s) and access routes (Include a site map in USGS 1:24,000 or 1:25,000 format with site boundaries clearly outlined and both current and historic Massachusetts Department of Environmental Protection (MassDEP) mapped eelgrass layers depicted on the map. The [MA-ShellFAST](#) tool may be used for generating the map and measuring distances/acreage).

City/Town: Wellfleet

Shellfish Growing Area (SGA): CCB11 95-15 EGG ISLAND

of Acres: .92

Site boundaries defined by latitude and longitude in decimal degrees (i.e. 42.36115°, -71.057083°):

N39: 41.92427422 N4241.92440945
-70.04552876 -70.04492655

Have you conducted a survey of the site (Y/N)? _____ Date? _____

Method of Survey:

N43 41.92380096 N3841.92363702
-70.0447617 -70.04537921

Average Depth at Mean Low Tide (MLW): _____

Mean High Tide (MHW): _____

The site is located in an: intertidal area; subtidal area; spans both intertidal and subtidal areas.

What type of sediment or bottom substrate is on the site? (Benthic Habitat Conditions):

Sand

Is eelgrass currently present on or within twenty-five (25) ft. of the proposed site¹ (Y/N)? No

If eelgrass is present or currently/historically mapped by DEP within the shellfish growing area, what is the shortest distance to actual or mapped eelgrass from the proposed site? _____ ft.

Are there shellfish currently on the site (Y/N)? Yes (planted quahogs)

If yes what species and approximate densities? QUAHOGS
UNSURE
N/A

Is the proposed grant site located within an Area of Critical Environmental Concern (ACEC) (Y/N)? Yes

Is the proposed grant site located within Natural Heritage Endangered Species Project (NHESP) mapped habitat (Y/N)? Yes
If yes, you must submit a MESA Project Review Checklist to NHESP.

Is the proposed grant site located within an Outstanding Resource Waters (Y/N)? No

Is there an Environmental Justice (EJ) population located within 1-mile of the project site (Y/N)?
No

If so, please complete the attached supplement to this form for projects located within 1-mile of EJ populations.

Describe whether alternative locations were considered and identify the siting criteria used to select this site and the characteristics of the site that make it suitable for aquaculture use. It may be helpful for this evaluation to be based on the siting criteria identified in DMF's Shellfish Planting Guidelines and the Army Corps of Engineers General Permit for Aquaculture.

N/A - (existing site in an approved grant area, only change is name of lease holder)

Has the site been used for private shellfish propagation within the last two years (Y/N)? Yes

Has the site been used for municipal shellfish propagation within the last two years (Y/N)? No

1. Proposed aquaculture license sites with eelgrass present within the footprint or within 25 ft. of eelgrass will not be granted certification by DMF.

B. SPECIES TO BE CULTURED

What species of shellfish do you plan to cultivate? (Select all that apply)

- Eastern Oyster
- Quahog or Hard Clam
- Softshell Clam or Steamer
- Surf Clam
- Razor Clam
- Bay Scallop
- Blue Mussel
- Other _____

Do you propose on-bottom placement of cultch or spat on shell on the site (Y/N)? No



If yes, explain.

C. GEAR

What methods of culture will be used (specify by species if necessary)?

On- bottom Off- bottom submerged Off- bottom floating

Describe the type of gear to be utilized for each species to be cultured, include dimensions (Cages, Racks, Trays, Bags, Nets, Floating): ***Depending on the gear type used, the project may require additional permitting by the Massachusetts Department of Environmental Protection (MassDEP). Consult with your Harbormaster, and if needed, with the MassDEP Waterways Program.***

Oysters - standard oyster bag and condo setup for seed, bottom cages and on-bottom grow out / harvest holding.

*Include with your submission of this form a site map on a USGS 1:24,000 map with site boundaries clearly outlined and a cross-section schematic of the gear to be deployed on the site. 3

If you will utilize floating gear, what measures will you take to deter birds (bird deterrence plan required)?

- Spikes
- Zip ties
- Kites/streamers
- Faux predators
- Wire cage exclusion
- Sweeps/spinners
- Sonic deterrents
- Other

N/A

Please describe your bird deterrence plan:

What methods will you utilize to harvest shellfish? (Hand, Drag, Other) Please describe:

Hand

How will the proposed license site be marked? (Buoy color, Type, Lines, Anchor)

Yellow buoys as specified in town shellfish regulations.

How will you access the license site?

Boat and foot access

What equipment do you plan on utilizing to maintain the license site and transport product?

Vehicle: Make: _____ Model: _____

Boat: Make: Wooden skiff Model: _____

Will any accessory structures be used on the license site? (barge, float, upweller, etc.)

No

Will this be a seasonal operation (gear and product removed from site in winter) or year-round?

year-round operation

Please include any additional information here:

Gear removed in winter, bottom crop to remain for winter harvest.

D. CUMULATIVE IMPACTS

After voting to grant the site license at a duly advertised public hearing (M.G.L. c.130 §60), the Select Board of the municipality must submit a request for site certification to the Division of Marine Fisheries (DMF). A site inspection that may include a site survey will be performed by DMF. If DMF determines that issuance of the site license and operational activities thereunder will have no substantial adverse impacts to natural resources and existing fisheries, DMF will issue a conditional certification letter to the municipality and include a summary table that identifies other existing and conditionally certified aquaculture sites, gear types, and acreage within the same embayment as the proposed site.

N/A

This table will be used to assess cumulative impacts if the project is subject to environmental review by the Massachusetts Environmental Policy Act (MEPA) Office and should be submitted as an attachment with your MEPA filing. If the project is subject to the MEPA Special Review Procedure (SRP), the applicant hereby acknowledges and agrees to following the procedures set forth in the SRP. The SRP can be viewed [here](#). p/7

All information furnished on this application is true and accurate to the best of my knowledge. I will notify the Division Marine Fisheries Shellfish Sanitation and Management Program immediately of any changes.

Signature of Applicant  Date 1/23/23

Division of Marine Fisheries
ATTN: Aquaculture Coordinator
706 South Rodney French Boulevard
New Bedford, MA 02744
Phone: (508) 742-9766

SUPPLEMENT TO DMF AQUACULTURE DESCRIPTION FORM

Only For Projects Located Within 1 Mile of Environmental Justice (EJ) Populations

<p>Describe any public hearings or other public outreach conducted in relation to the project. Were there any concerns raised during the municipality’s public hearing or other process? If so, how were they resolved?</p>	
<p>Indicate whether the project is located within a municipality that exhibits “vulnerable health EJ criteria,” as indicated on the <u>DPH EJ Tool</u>, and specify the relevant public health criteria.</p> <p><i>Navigate to the DPH EJ Tool, click the “EJ Data and Reports” tab at the top of the webpage, find your municipality in the table, review the “Vulnerable Health/EJ Criteria Met” column of the table.</i></p>	<p><i>E.g., Town of XX meets vulnerable health EJ criteria for heart attack, low birth weight, childhood lead, childhood asthma.</i></p> <p align="center">N/A</p>
<p>Identify potential environmental or public health benefits of the project that may extend to the identified EJ populations.</p>	<p><input type="checkbox"/> Water quality benefits <input type="checkbox"/> Recreational opportunity <input type="checkbox"/> Commercial opportunity <input type="checkbox"/> Other (please specify)</p>
<p>Identify any environmental or public health impacts of the project that may extend to the identified EJ populations.</p>	<p><input type="checkbox"/> Bird attraction/water quality degradation <input type="checkbox"/> Hindrance of recreational opportunity <input type="checkbox"/> Hindrance of subsistence activities <input type="checkbox"/> Other (please specify)</p>

RCVD
11.8.2022

APPLICATION FOR SHELLFISH GRANT LICENSE #95-15

DATE: November 5, 2022

This request is being made under Mass. General Law, Chapter 130, Sections 57 & 59 and the Town of Wellfleet Shellfishing Policy and Regulations 7.2. Previously Established Grants that Become Available.

Name Karen Johnson

Address 365 Chequessett Neck Road

Telephone / Cell Phone 774-268-0169

Email shellfishgrl@gmail.com

GENERAL INFORMATION

Previous shellfishing experience:

Nearly a decade as a shellfish laborer for multiple grants including three (3) years as a farm manager in charge of seven (7) oyster and quahog shellfish farms across two towns with a crew of 4-6 people and two years of supplementing this work with wild commercial shellfishing of oysters and quahogs here in Wellfleet.

How long have you had a commercial shellfish permit? (list years)


State permit for six (6) years, Town of Wellfleet commercial shellfish permit for two (2) years.

How long have you lived in Wellfleet?

Three (3) years.

Additional comments:

By applying for this license and signing below, the applicant agrees to comply with the Town of Wellfleet's Shellfish Policy and Regulations. The applicant also acknowledges that s/he will be held responsible to MGL Ch. 130 and CMR 322, as well as the most recent SEMAC Best Management Practices, DMF's vibrio control plan, National Shellfish Sanitation Program's Guide and DPH's Regulations for Fish and Fishery Products, as they apply to the harvest of shellfish governing his/her business operations.


Signature of Applicant


Shellfish Constable

12-9-2022

GRANT EXPERIENCE

November 5, 2022

To Whom it May Concern:

Karen Johnson has been working with me as a farm laborer for my shellfish grant on Indian Neck since the Spring of 2019. During this time she has assisted with all aspects of running a shellfish farm growing quahogs and oysters - including (but not limited to) setting up and tearing down gear, planting / bagging / grading seed, digging, culling, bringing product to market, completing paperwork, gear repairs, preparing and setting oyster spat collection devices and overwintering gear and seed.

I believe she is well qualified and prepared to start her own shellfish farm.

Sincerely,

A handwritten signature in black ink that reads "Richard H. Blakeley". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Richard H. Blakeley
Owner of Blackfish Creek Shellfish Company

124



DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254-9149

REPLY TO
ATTENTION OF

January 23, 1996

Regulatory Division
CENED-OD-R
1996-00051

Karl Rask
The Resource, Inc.
P.O. Box 2837
10 Cummings Road
Orleans, MA 02653



RE: Wellfleet Shellfish Aquaculture Zone

Dear Mr. Rask:

This is to inform you that we have reviewed your application, on behalf of the Town of Wellfleet, to engage in activities and deploy structures associated with shellfish aquaculture facilities in a 30 acre site in Wellfleet Harbor at Wellfleet, Massachusetts, as shown on your plan entitled: " PROPOSED GRANT AREA", undated, portion attached.

Based on the information you have provided, we have determined that your project will have only minimal individual or cumulative environmental effects, and therefore qualifies for authorization under the Massachusetts Programmatic General Permit (PGP), provided that you comply with the following special conditions:

- 1. Deployment of gear and structures is limited to a height no greater than 18" off the bottom. Other than buoys demarcating the zone, there shall be no gear or lines in the water column.**
- 2. The permittee (Town of Wellfleet) shall ensure that leaseholders or grantees who may be assigned the use of all or part of the zone are in compliance with the terms and conditions of this authorization.**

The activity authorized herein must be performed in compliance with the special conditions provided above, and all the terms and conditions of the PGP. Enclosed is a copy of the PGP permit requirements. Please review it carefully to familiarize yourself with its contents. You may wish to discuss the conditions of this authorization with your contractor to ensure the work can be accomplished in a manner that conforms to all requirements. You are responsible for complying with all of the permits' requirements and conditions;

therefore, you should be certain that whoever does the work fully understands all of the conditions.

Please note that this determination does not constitute an authorization to proceed until all other applicable state and local permits are obtained.

Performing work not specifically authorized by this permit, starting work without obtaining other applicable state and local approvals, or failing to comply with the permit conditions may subject you to the enforcement provisions of our regulations.

Condition 31 of the PGP (page 7) provides one year for the completion of work commenced prior to the expiration of this PGP on March 1, 2000. You will need to apply for reauthorization for any work (deployment of gear) in Corps jurisdiction that is not completed by that date.

If you have any questions, please contact Grant Kelly, Regulatory Project Manager, at (617) 647-8491 or toll-free at 800-343-4789 or 800-362-4367 if calling within Massachusetts.

Sincerely,

Karen Kirk Adams
Chief, Permits Branch
Regulatory Division

Enclosures

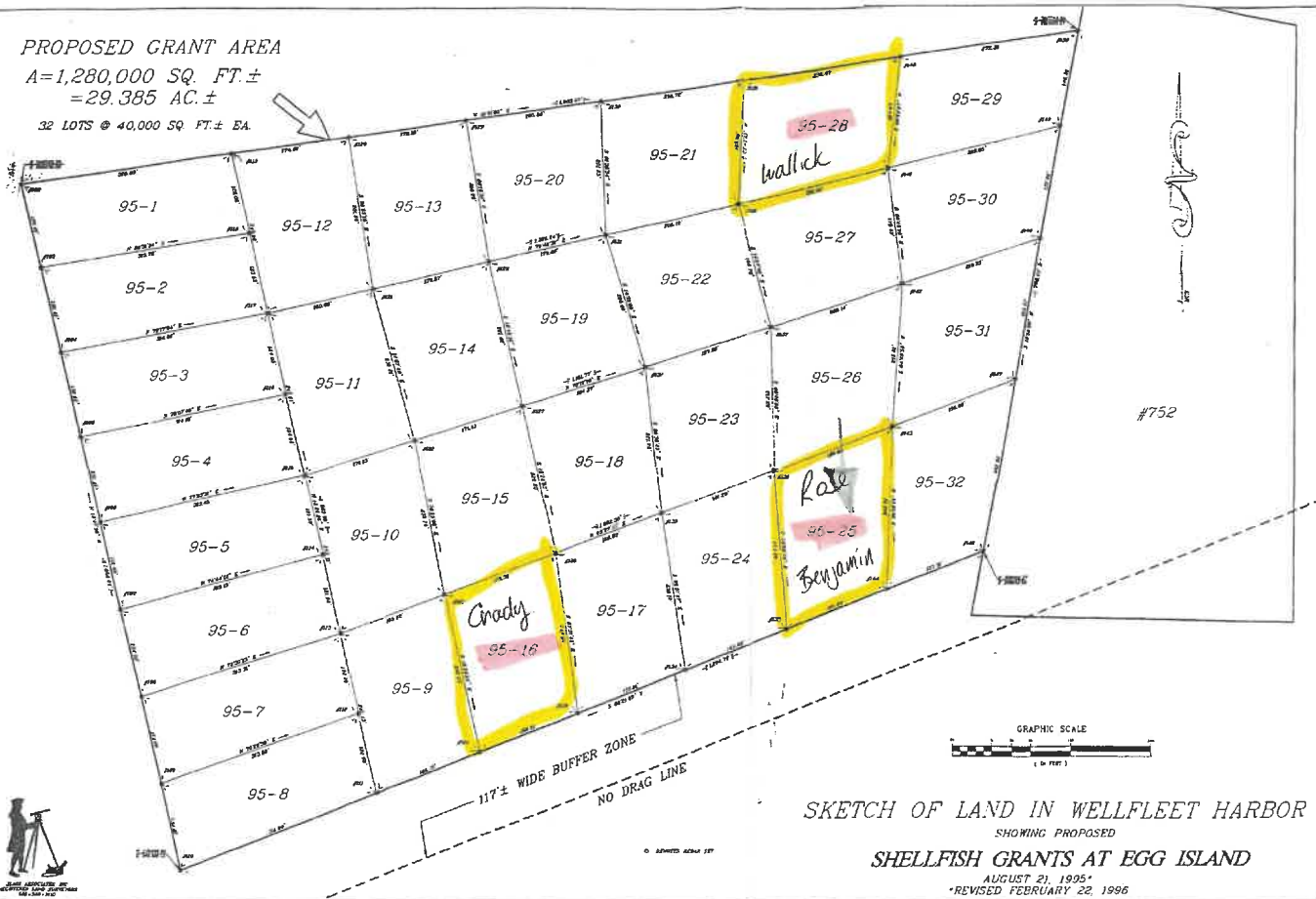
Copy Furnished:

Michael Hickey, MA DMF, Sandwich, MA

PROPOSED GRANT AREA

A=1,280,000 SQ. FT. ±
=29.385 AC. ±

32 LOTS @ 40,000 SQ. FT. ± EA.



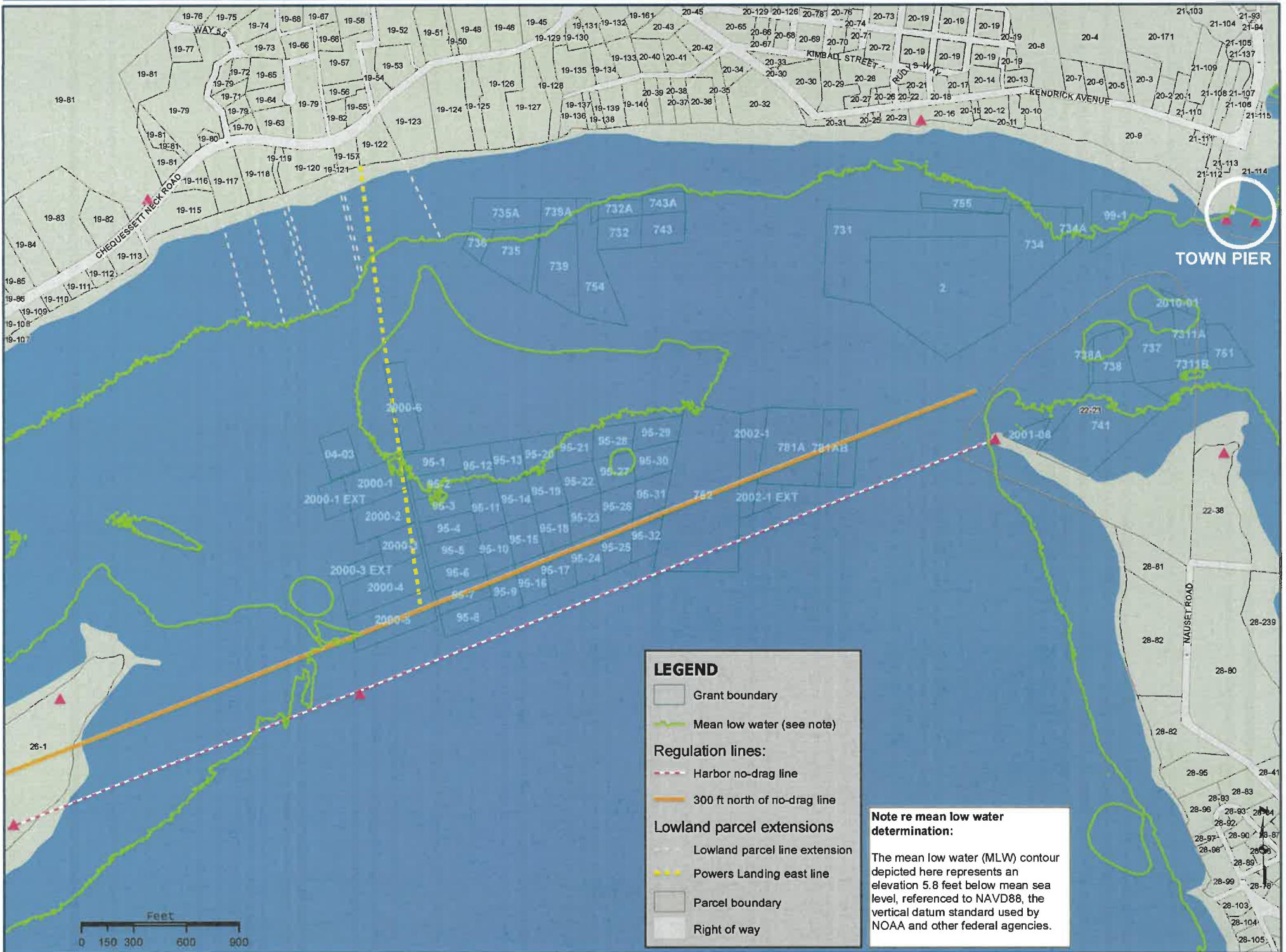
SKETCH OF LAND IN WELLFLEET HARBOR

SHOWING PROPOSED

SHELLFISH GRANTS AT EGG ISLAND

AUGUST 21, 1995*
*REVISED FEBRUARY 22, 1996

Section 7.4 Area 1 Aquaculture Grants – Wellfleet Harbor

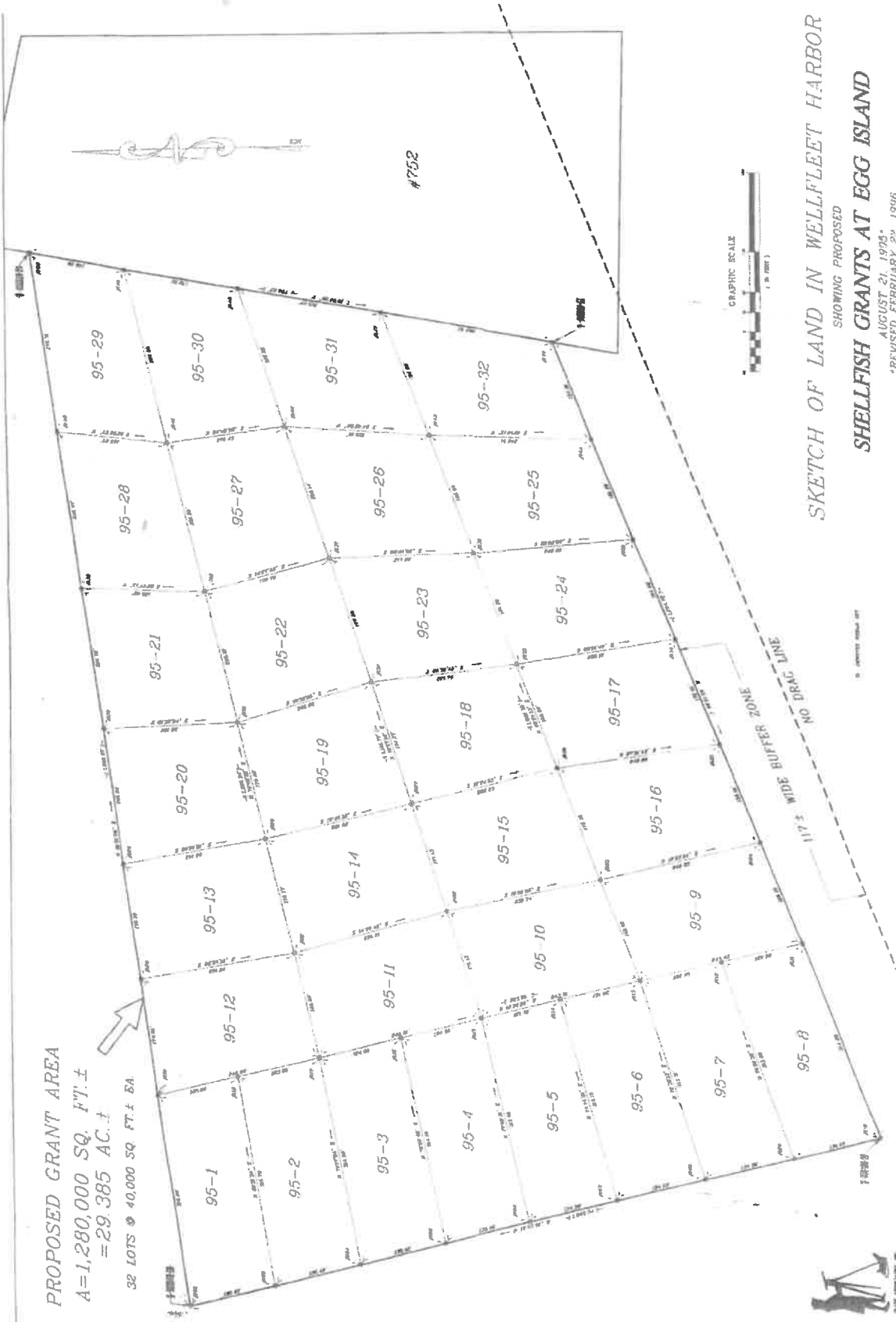


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A=1,280,000 SQ. FT. ±

=29,385 AC. ±

32 LOTS @ 40,000 SQ. FT. ± EA.



SKETCH OF LAND IN WELFLEET HARBOR

SHOWING PROPOSED

SHELLFISH GRANTS AT EGG ISLAND

AUGUST 21, 1995*

*REVISED FEBRUARY 22, 1996





SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

IV

PUBLIC HEARINGS

~ C ~

REQUESTED BY:	Shellfish Constable Nancy Civetta
DESIRED ACTION:	To request that Ross Scherma withdraw without prejudice his application for shellfish grant license #95-16 consisting of 0.92 acres on Egg Island until regulation 7.4 is re-written.
PROPOSED MOTION:	I move to accept the withdrawal without prejudice of the application for grant license #95-16 from Ross Scherma, for which he was selected in a lottery on December 20, 2022.
SUMMARY:	
Project	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

AQUACULTURE DESCRIPTION FORM

Clear Fields

Name: Last Scherma First Ross M.I. D

Business Name (optional): _____

Mailing Address 1426 US-6, South Wellfleet, MA 02663 P.O. Box 538

City/Town S. Wellfleet State MA ZipCode 02667

Telephone — Cell Phone (508) 468-6969

E-Mail Address rossscherma@gmail.com

A. SITE DESCRIPTION

Location of proposed aquaculture license site(s) and access routes (Include a site map in USGS 1:24,000 or 1:25,000 format with site boundaries clearly outlined and both current and historic Massachusetts Department of Environmental Protection (MassDEP) mapped eelgrass layers depicted on the map. The [MA-ShellfAST](#) tool may be used for generating the map and measuring distances/acreage).

City/Town: Wellfleet, MA

Shellfish Growing Area (SGA): CCB-11

of Acres: .92

Site boundaries defined by latitude and longitude in decimal degrees (i.e. 42.36115°, -71.057083°):
N38: 41.92363702 N43: 41.92380096 N19: 41.92313849
-70.04537921 -70.0447617 -70.04465983

N20: 41.92298543
-70.04520308

Have you conducted a survey of the site (Y/N)? (N) Date? _____

Method of Survey: _____

Average Depth at Mean Low Tide (MLW): ≈ 3'

Mean High Tide (MHW): ≈ 12'

The site is located in an: intertidal area; subtidal area; spans both intertidal and subtidal areas.

What type of sediment or bottom substrate is on the site? (Benthic Habitat Conditions):

sand

Is eelgrass currently present on or within twenty-five (25) ft. of the proposed site¹ (Y/N)? N

If eelgrass is present or currently/historically mapped by DEP within the shellfish growing area, what is the shortest distance to actual or mapped eelgrass from the proposed site? _____ ft.

Are there shellfish currently on the site (Y/N)? N

If yes what species and approximate densities?

Is the proposed grant site located within an Area of Critical Environmental Concern (ACEC) (Y/N)?

yes

Is the proposed grant site located within Natural Heritage Endangered Species Project (NHESP) mapped habitat (Y/N)? *If yes, you must submit a MESA Project Review Checklist to NHESP.*

yes

Is the proposed grant site located within an Outstanding Resource Waters (Y/N)?

Is there an Environmental Justice (EJ) population located within 1-mile of the project site (Y/N)?

If so, please complete the attached supplement to this form for projects located within 1-mile of EJ populations.

Describe whether alternative locations were considered and identify the siting criteria used to select this site and the characteristics of the site that make it suitable for aquaculture use. It may be helpful for this evaluation to be based on the siting criteria identified in DMF's Shellfish Planting Guidelines and the Army Corps of Engineers General Permit for Aquaculture.

N/A

Has the site been used for private shellfish propagation within the last two years (Y/N)?

Has the site been used for municipal shellfish propagation within the last two years (Y/N)? N

1. Proposed aquaculture license sites with eelgrass present within the footprint or within 25 ft. of eelgrass will not be granted certification by DMF.

B. SPECIES TO BE CULTURED

What species of shellfish do you plan to cultivate? (Select all that apply)

- Eastern Oyster
- Quahog or Hard Clam
- Softshell Clam or Steamer
- Surf Clam
- Razor Clam
- Bay Scallop
- Blue Mussel
- Other _____

Do you propose on-bottom placement of cultch or spat on shell on the site (Y/N)?

If yes, explain.

C. GEAR

What methods of culture will be used (specify by species if necessary)?

On- bottom Off- bottom submerged Off- bottom floating

Describe the type of gear to be utilized for each species to be cultured, include dimensions (Cages, Racks, Trays, Bags, Nets, Floating): **Depending on the gear type used, the project may require additional permitting by the Massachusetts Department of Environmental Protection (MassDEP). Consult with your Harbormaster, and if needed, with the MassDEP Waterways Program.**

- 1) Racks & Bags → OYSTER
- 2) 10x net → rebar / u-hooks - clams

*Include with your submission of this form a site map on a USGS 1:24,000 map with site boundaries clearly outlined and a cross-section schematic of the gear to be deployed on the site. 3

If you will utilize floating gear, what measures will you take to deter birds (bird deterrence plan required)?

- Spikes
- Zip ties
- Kites/streamers
- Faux predators
- Wire cage exclusion
- Sweeps/spinners
- Sonic deterrents
- Other

Please describe your bird deterrence plan: *N/A*

What methods will you utilize to harvest shellfish? (Hand, Drag, Other) Please describe:

How will the proposed license site be marked? (Buoy color, Type, Lines, Anchor)

How will you access the license site?

skiff / on-foot

What equipment do you plan on utilizing to maintain the license site and transport product?

Vehicle: Make: ^{97'} Toyota Model: Tacoma

Boat: Make: Johnboat^{8'} Model: custom craft

Will any accessory structures be used on the license site? (barge, float, upweller, etc.)

NO

Will this be a seasonal operation (gear and product removed from site in winter) or year-round?

year round (all gear removed in winter)

Please include any additional information here:


/

D. CUMULATIVE IMPACTS

After voting to grant the site license at a duly advertised public hearing (M.G.L. c.130 §60), the Select Board of the municipality must submit a request for site certification to the Division of Marine Fisheries (DMF). A site inspection that may include a site survey will be performed by DMF. If DMF determines that issuance of the site license and operational activities thereunder will have no substantial adverse impacts to natural resources and existing fisheries, DMF will issue a conditional certification letter to the municipality and include a summary table that identifies other existing and conditionally certified aquaculture sites, gear types, and acreage within the same embayment as the proposed site.

This table will be used to assess cumulative impacts if the project is subject to environmental review by the Massachusetts Environmental Policy Act (MEPA) Office and should be submitted as an attachment with your MEPA filing. If the project is subject to the MEPA Special Review Procedure (SRP), the applicant hereby acknowledges and agrees to following the procedures set forth in the SRP. The SRP can be viewed [here](#).

All information furnished on this application is true and accurate to the best of my knowledge. I will notify the Division Marine Fisheries Shellfish Sanitation and Management Program immediately of any changes.

Signature of Applicant  Date 1/25/2023

Division of Marine Fisheries
ATTN: Aquaculture Coordinator
706 South Rodney French Boulevard
New Bedford, MA 02744
Phone: (508) 742-9766

SUPPLEMENT TO DMF AQUACULTURE DESCRIPTION FORM

Only For Projects Located Within 1 Mile of Environmental Justice (EJ) Populations

<p>Describe any public hearings or other public outreach conducted in relation to the project. Were there any concerns raised during the municipality's public hearing or other process? If so, how were they resolved?</p>	
<p>Indicate whether the project is located within a municipality that exhibits "vulnerable health EJ criteria," as indicated on the DPH EJ Tool, and specify the relevant public health criteria.</p> <p><i>Navigate to the DPH EJ Tool, click the "EJ Data and Reports" tab at the top of the webpage, find your municipality in the table, review the "Vulnerable Health EJ Criteria Met" column of the table.</i></p>	<p><i>E.g., Town of XX meets vulnerable health EJ criteria for heart attack, low birth weight, childhood lead, childhood asthma.</i></p>
<p>Identify potential environmental or public health benefits of the project that may extend to the identified EJ populations.</p>	<p><input type="checkbox"/> Water quality benefits <input type="checkbox"/> Recreational opportunity <input type="checkbox"/> Commercial opportunity <input type="checkbox"/> Other (please specify)</p>
<p>Identify any environmental or public health impacts of the project that may extend to the identified EJ populations.</p>	<p><input type="checkbox"/> Bird attraction/water quality degradation <input type="checkbox"/> Hindrance of recreational opportunity <input type="checkbox"/> Hindrance of subsistence activities <input type="checkbox"/> Other (please specify)</p>

RWD 12 2 2022

APPLICATION FOR SHELLFISH GRANT LICENSE #95-16

DATE: 11/29/22

This request is being made under Mass. General Law, Chapter 130, Sections 57 & 59 and the Town of Wellfleet Shellfishing Policy and Regulations 7.2. Previously Established Grants that Become Available.

Name Ross Scherma

Address 120 Goss Ln. So. Wellfleet

Telephone ~~608~~ " " Cell Phone (508) 468 6969

Email rossscherma@gmail.com

GENERAL INFORMATION

Previous shellfishing experience: James O'Connell 2019-2021/2022 ^{full} ^{part}
Andrew Cummings 2021-22 ^{full}
Paine Hollow (Bvd Paine) 2020-2022 ^{full}
Pocomo Meadow Oyster Farm (Nantucket) Sept. 2022

How long have you had a commercial shellfish permit? (list years)


2021
2022


How long have you lived in Wellfleet?

4 years

Additional comments: I have worked in a variety of settings in the aquaculture space paired with ~~an~~ experience in the wild oyster & clam fishery.

By applying for this license and signing below, the applicant agrees to comply with the Town of Wellfleet's Shellfish Policy and Regulations. The applicant also acknowledges that s/he will be held responsible to MGL Ch. 130 and C'AR 322, as well as the most recent SEMAC Best Management Practices, DMF's vibrio control plan, National Shellfish Sanitation Program's Guide and DPH's Regulations for Fish and Fishery Products, as they apply to the harvest of shellfish governing his/her business operations


Signature of Applicant


Shellfish Constable

12.9.2022
GRANT EXPERIENCE

11/28/2022

Wellfleet Shellfish Office
Application for Egg Island Grant
(#95-15 & #95-16)

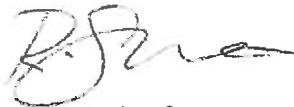
To Whom It May Concern,

I have been working in aquaculture since arriving in Wellfleet in 2019. I have invested a lot of time in resource's in learning the business. Having worked with two top growers in town I have a unique perspective on different methodologies, infrastructure and science behind the animals and environment. I am confident that I will be able to sustain a profitable and cohesive farm in town.

I felt the need to express my long-term desire to shellfish farm as a full-time trade and grow my business here in town. I would like to formally express my interest in BOTH acres up for lottery in an effort to procure a larger space that will enable me to grow. In the event that there are not enough potential candidates &/or said candidates are not yet qualified, I would like the opportunity to potentially be considered for both acres.

That being said, I appreciate your consideration.

Best,
Ross Scherma



Additional References:

Jim O'Connell – Indian Neck- (508)237-8026
Andrew Cummings—Mayo – (617)733-1729
Bud Paine—Paine Hollow—(508)843-8597
Tom Siggia—SAB—(518)935-3093
Emil Bender—ACK Farm—(508)333-2089

Nancy Civetta

From: James O'Connell <clamfam@comcast.net>
Sent: Tuesday, December 6, 2022 9:09 AM
To: Nancy Civetta
Subject: Re: Ross Scherma recommendation

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom it May Concern,

Ross Scherma has been a valued employee on my shellfish grant since 2019. I first met Ross when he was an intern with the Shellfish Advisory Board conducting a study on re-usable plastic in aquaculture. Ross is a steward of the environment and is committed to the shellfishing industry. Ross has performed all duties related to the planting of oysters and clams, grow out of shellfish and grant maintenance on my farm. His responsibilities also include harvesting of oysters following Vibrio Control protocols and harvesting clams. He runs clams on the culling machine and culls and tumbles oysters and helps to remove oysters and gear to overwinter oysters in our root cellars. Ross is a worthy candidate for the opportunity to obtain a shellfish grant. If I can elaborate upon his experience on my grant please contact me.

Sincerely,

Jim O'Connell

On 12/06/2022 8:52 AM Nancy Civetta <nancy.civetta@wellfleet-ma.gov> wrote:

Good morning, Jim.

As I reviewed Ross's grant lottery applications, I read your letter, which was eloquent and nicely done. However, the regulations specify that the letter should describe the type of work performed and any other information which might be relevant. Could you please elaborate by responding to this email? It is due by 8 a.m. tomorrow.

Thank you,

Nancy

Ross Scherma:
November 25, 2023
To: Wellfleet Shellfish Department

To whom it concerns,

Ross Scherma has been working with me for consistent periods of time throughout the entire 2023 season. He has participated with early season seed and infrastructure deployment, culling duties, annual seed deployment, seed density breakdowns, market practices, gear maintenance and winter preparation - including assistance with infrastructure relay and winter storage (pit) prep.

Given the addition of Ross' prior experience working with other established shellfish growers, I feel he is capable of managing an aquaculture site of his own. Ross is a worthy candidate for the up-coming lottery involving two available sites on Egg Island. Thank you for your time and consideration.

Sincerely,
R. Andrew Cummings
Owner/Operator
Wash-Ashore Oyster Ranch LLC Site # 752 - CCB11
Wellfleet, MA



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

V

LICENSES

~ A ~

REQUESTED BY:	The Fox and Crow, Inc. ~ Trudy Vermehren
DESIRED ACTION:	To Approve the restaurant to serve alcohol beginning at 10am on Sundays for brunch
PROPOSED MOTION:	I move to approve the Fox and Crow to begin serving alcohol on Sundays at 10am for brunch services.
SUMMARY:	
Project	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea ____ Nay ____ Abstain ____



Board of Selectmen

Request for Placement on Agenda

Name: Trudy Vermehren
Address: 340 Coles Neck Rd.
Company or Organization Representing: The Fox and Crow Inc
Phone Number: 508-349-1639
Email Address: trudy10@mac.com

Specific Request: To request to serve alcoholic beverages starting at 10AM instead of 12 PM on Sundays for brunch service. Alcoholic Beverage Control Commission allows the LLA to approve such change as the LLA sees fit for its own jurisdiction

To be Filed out by Dept.

Applicant Notified: _____ Date of Hearing: _____

Date Request Completed: _____



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VI

USE OF TOWN PROPERTY

~ A ~

REQUESTED BY:	New England Endurance Events ~ Kathleen Walker
DESIRED ACTION:	To approve routes in Wellfleet for the Wellfleet Sprint Triathlon on June 17, 2023, from 5am – 11am and the WTP Multistage Race on September 16, 2023, from 5am – 12pm.
PROPOSED MOTION: SUMMARY:	I move to approve New England Events to hold the Wellfleet Sprint Triathlon on June 17, 2023, from 5am to 11am using Long Pond parking lot, grassy area, Long Pond Rd., Lawrence Rd. Gross Hill Rd. Ocean View Drive and the Elementary School Parking Lot, and the WTP Multi Stage Race on September 16, 2023 from 5am to 12pm using unpaved roads and trails on Long Pond Rd, Gull Pond Rd, Cahoon Hollow Rd, and the Elementary School Parking Lot and field. For a fee of \$800 per event.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



OPERATIONS PLAN

WELLFLEET-TRURO MULTI-STAGE RACE - 2023

- EVENT OVERVIEW
- WHAT'S NEW
- COMMUNITY IMPACT
- COURSE MAPS
- EVENT ORGANIZERS
- REFERENCES
- OPERATIONAL PLAN
- CONCLUSION

Contact:

Kathleen Walker
New England Endurance Events
39 Eldridge Rd.
Brewster, MA 02631
Cell: (617) 240-4805
Answering Service: (617) 240-5577
Email: kathleen@neeevents.com
Website: neeevents.com

Event Overview:

This will be the 4th year for our endurance event; held within Wellfleet, Truro, and the Cape Cod National Seashore. **Requested event date for 2023 is Saturday, September 16.**

With up to 150 athletes and their families staying in Wellfleet, Truro and Provincetown from three days up to a week or more, the event provides significant economic benefits to the communities of the Lower Cape as well as expanding the public's recognition of the area as one of the most beautiful and enjoyable places of New England.

In recognition of the need to create more affordable housing on the Cape, our charity partner for 2023 will be **Habitat for Humanity of Cape Cod**. Also, we would once again like to **fully fund two scholarships for lifeguard training** — so that more Wellfleet youths will be able to become lifeguards at town beaches each summer.

What's New This Year:

- In the interest of minimizing inconvenience to residents and visitors who use the town's beaches, and after consultation with the Wellfleet Police and Fire departments, we are asking to hold the event on **Saturday, September 16**. Due to the nature of this low-impact, low-participant event, all beaches will be able to remain open and welcoming to anyone who wishes to visit all morning long.
- In years past, we have started the event with a 27-mile bicycle segment. Given the logistical challenges of having a bicycle leg — requiring significant police and EMS assistance — we plan to **not** hold the bicycle portion this year. The race will start by foot in Truro, entering into Wellfleet at the northern portion of the Ponds Area.
- This event is **unlike** a typical "road race." Participants will have run 4 miles by the time they enter Wellfleet. After that distance they will be spread out along the course. By the time they reached the finish the time gap between all athletes will likely be over two hours apart.

Community Impact:

Like many other endurance events in the U.S., this event has attracted athletes from throughout the Northeast, the nation and the world, who stay in inns, resorts and cottages for the week or a long weekend. They dine in local restaurants, shop in local stores, and visit parks and other attractions in the region.

The National Park Service's own formula which calculates the economic impact of overnight visitors would indicate a total direct benefit of over **\$270,000** to Wellfleet and surrounding communities for an average three-day stay by the 150 race participants (*Natural Resource Report NPS/NRSS/EQD/NRR—2018*). In addition, our budget indicates the race organization itself would disburse over **\$55,000** to local residents and vendors, for a **total community benefit in excess of \$325,000**.

The Course:

The event begins with a beach run at Ballston Beach in Truro, then becomes a combination run/swim effort (9 miles of running, 1.6 miles of swimming, across 15 legs) through National Seashore land and the unpaved roads on the back side of Wellfleet. The runners would follow existing footpaths and both dirt and paved roads. There will be no running on animal trails, dunes or posted fragile areas. All directional signs are temporarily planted with wire stakes and removed that same weekend. The race ends across the road from the Wellfleet Elementary School.

Earlier this fall, the organizers met twice with the **Wellfleet Conservation Commission** to solicit their input on the course, which we used to draw up a final map (see page 4). Their vote in favor of our plan was unanimous. We thank them for their guidance.

A route map is enclosed within this plan. Our experience has been that minor route changes are likely as we consult with police and fire chiefs as well as the National Park Service in the weeks and months leading up to race day.

The participants "spread out" as the race continues. As we saw in 2019 and 2021, **rarely were any two or three athletes near each other on the course**. No other people are allowed to accompany the participants as they move along the course.

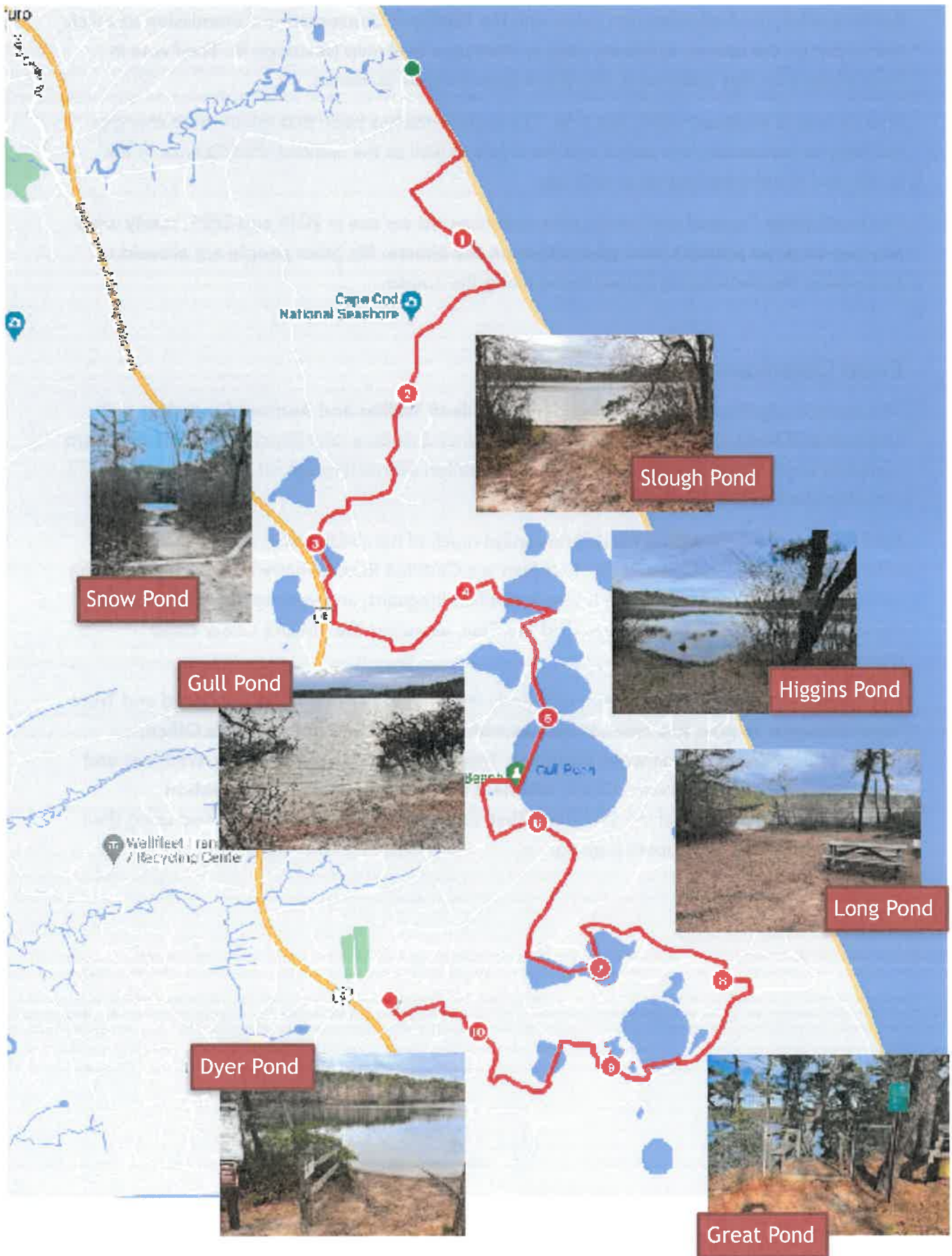
Event Organizers:

This event is organized by Orleans residents **Kathleen Walker and Andrew Scherding**. Kathleen and Andy operate *New England Endurance Events*, a race direction and management company which currently stages seven annual triathlon events throughout New England — including the Wellfleet Sprint Triathlon.

EMT trained and lifeguard certified, Andy spent much of his childhood in South Wellfleet, where his family continues to reside. Kathleen is a Certified Race Director by USA Triathlon: the governing body for the sport. She is also a certified lifeguard, and volunteers as the elected President of the Friends of the Cape Cod Rail Trail, as well as the YMCA's Lower Cape Development Committee.

Prior to the last two events, Kathleen and Andy met with the **Wellfleet Select Board** and **Truro Town Manager to plan this race, as well as with the CCNS Superintendent's Office; Wellfleet Beaches Administrator; Wellfleet, Truro and Provincetown Police; Wellfleet and Truro Fire/Emergency Services Chief; Wellfleet DPW and Wellfleet Conservation Committee**. The trustees of the **Wellfleet First Congregational Church** approved using their church's grounds for participant parking.

Proposed Run/Swim Course:



Operational Summary:

- Event Type:** Swim/Run: 9 miles total run, 1.6 miles total swim
- Event Location:** The race will begin at Ballston Beach in Truro and end at the grassy strip next to the athletic field, across the road from the Wellfleet Elementary School.
- Event Date:** Saturday, September 16, 2022
- Time:** Start: 8am. Most participants will finish before 11am; all participants will be off the course by noon.
- Participants:** 150 — all of whom have proved their ability by having completed recent races of a similar difficulty within set time limits.
- Setup/Cleanup:** Setup will largely occur in the early morning hours: run course signs will be small wire “flags” temporarily stuck in the ground.
- For each of the ponds which would host the swim courses, one vehicle per pond will access the landings in the morning to offload lifeguards, rescue equipment and race buoys. During the event those vehicles will remain parked in designated public parking locations.
- Cleanup of the course — including removal of all signs — will commence within minutes after the start of the race, with a “rolling” crew following the last participant.
- Stakeholders:** The event team will thoroughly communicate and coordinate with these officials, stakeholders and interested parties, before and at the time of the event:
- National Seashore Superintendent’s Office
 - Wellfleet Select Board
 - Wellfleet Town Administrator
 - Wellfleet Beach Administrator
 - Wellfleet Police Department
 - Wellfleet Fire Department
 - Wellfleet Department of Public Works
 - Wellfleet Conservation Commission
 - Truro Town Manager
 - Truro Police Department
 - Truro Fire Department

- Volunteers:** Volunteer organizations as well as local area athletes (not participating in the race) make up the majority of the volunteer positions, with a 12-person New England Endurance staff handling supervisory roles. Most volunteers will be positioned at the start/finish and along paved areas of the course; some will be stationed in the watershed areas to ensure the racers are following the proper paths and roads.
- Road Conditions:** All sections of public roads used by the competitors will be open to traffic. These are all secondary roads, with light vehicular traffic.
- Insurance:** The triathlon will be sanctioned through the USA Triathlon Association, the national governing body for organized triathlon competitions. The insurance coverage from this sanctioning provides comprehensive liability for landowners, participants, and named insureds including municipalities, and is the "gold standard" for triathlons nationwide. Additionally, New England Endurance Events will provide certificates of our comprehensive insurance coverage as required by permitting entities.
- Sanitary Plan:** A portable restroom (not including those stationed by the town for summer use) will be provided for the athletes at Ballston Beach, the Gull Pond parking lot and Great Pond parking lot if the summer facilities have been removed by event date, and the finish line across Lawrence Road from the elementary school. They will be removed on the next business day.
- Recycling/Trash:** Trash & recycling bins will be brought in the morning of the event and removed at the conclusion. There will be a volunteer and trash/recycle receptacles just before, and after, each of the ponds.
- Course Marshals:** A volunteer coordinator will be on-site at the start area in the morning and will make course patrols throughout the day, providing relief when needed.
- Signage Plan:** "Pennant" signs with thin wire stakes will be used on the run course. No nails will be driven into trees. All signs will be removed immediately after the event.
- Safety/Medical Plan:** As in prior years, the race directors will work with the local fire chiefs and the CCNS Fire Crew to develop a plan to provide medical and safety coverage on-site and throughout the race course. Certified open-water lifeguards will be stationed throughout the swim courses. The event will have at least one lifeguard for every 35 swimmers in the

water at a time, in accordance with the *USA Triathlon* sanctioning rules and current best practices standards.

Communications: Radios will be used by on-site event staff, with the addition of cell phone communications as back-up. All volunteers will be given cell phone numbers for the staff, and our staff members will have the phone numbers of local EMS stationed at points along the course.

Parking Plan: Racers will be directed to park at the First Congregational Church (permission for this has been granted by the Church's board). All participant vehicles will be directed to the church, from where they will ride Funk buses to the start. Town residents and vacationers (non-competitors) will be able to park, as they always do, in all beach and pond parking lots that morning. We would appreciate permission for parking for staff and spectators near the finish line at the elementary school.

Our promise:

We will do our utmost to make this event one which causes as little inconvenience as possible for Wellfleet's residents, National Seashore visitors, and those visiting the Outer Cape. Much like the annual Wellfleet Sprint Triathlon, this will be continue to be an event that enhances the character and spirit of the Outer Cape community.

We look forward to working with the towns of Wellfleet and Truro, and with the Cape Cod National Seashore. We welcome your input and suggestions.

Kathleen Walker
617-240-4805
kathleen@neeevents.com

Andy Scherding
508-246-6664
andy@neeevents.com

APPLICATION FOR PERMIT TO USE TOWN OWNED PROPERTY

TOWN OF WELLFLEET
300 MAIN STREET
WELLFLEET, MA 02667

Applicant: WOMR/John Braden & Kathleen Walker Affiliation or Group: Wellfleet Sprint Triathlon

Telephone Number 617-240-4805 Mailing Address 39 Eldridge Rd, Brewster MA 02631

Email kathleen@neeevents.com

Town Property to be used (include specific area) Long Pond and grassy park area & Long Pond parking lot, Long Pond Rd, Lawrence Rd., Gross Hill Rd, Ocean View Drive, Elementary School parking lot

Date(s) and hours of use: June 17, 2023 5am - 11am (event start time: 8am)

Describe activity including purpose, number of persons involved, equipment to be used, parking arrangements, food/beverage service, etc. Also please indicate if fees will be charged by applicant.

The Wellfleet Sprint Triathlon has taken place at Long Pond since 2011, it has become a time-honored tradition for locals and visitors alike. It consists of a 1/4 mile swim, 10 mile, bike and 3 mile run. Number of participants - 125. All equipment provided by event. Parking to take place at Elementary School on Lawrence Rd and in lot across the street. Food/beverage service will be prepackaged. There is no fee to watch the event. The Wellfleet Sprint Triathlon is WOMR's largest fundraiser.

Describe any Town services requested (police details, DPW assistance, etc.)

police, beaches, EMS, DPW

NOTE TO APPLICANTS: All applications must be accompanied by a non refundable \$50.00 processing fee. Applications must be received at least 30 days prior to the first event date to insure that all reviews can be completed prior to the event. This application is only for permission to use Town property. Any additional licenses, such as food service permit, etc., may be required and it is the applicant's responsibility to secure the same.

Action by the Board of Selectmen:

Approved as submitted
Approved with the following condition(s):
Disapproved for following reason(s):

Date: Processing Fee: \$50.00
Fee: 800-

(over)

APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS

Health/Conservation Agent: <i>ok - Shelary Lemas</i> Comments/Conditions: Permits/Inspections needed:	Inspector of Buildings: Comments/Conditions: Permits/Inspections needed:
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Police Department: <i>police ok - per Lt. Kevin LaRocco</i> Comments/Conditions:	Fire Department: <i>ok - Chief Pauley</i> Comments/Conditions:
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DPW: <i>ok - Fay Norton</i> Comments/Conditions:	Community Services Director: <i>ok - Suzanne Thomas</i> Comments/Conditions:
---	---

Harbormaster: Comments/Conditions	Shellfish: Comments/Conditions
---	--

Recreation: Comments/Conditions	Town Administrator: Comments/Conditions
---	---

APPLICATION FOR PERMIT TO USE TOWN OWNED PROPERTY

**TOWN OF WELLFLEET
300 MAIN STREET
WELLFLEET, MA 02667**

Applicant: Kathleen Walker & Andy Scherding

Affiliation or Group: New England Endurance Events

Telephone Number 617-240-4805

Mailing Address 39 Eldridge Rd, Brewster MA 02631

Email kathleen@neccevents.com

Town Property to be used (include specific area) Unpaved roads and trails in pond area. Small sections of Long Pond Rd., Gull Pond Rd. and Cahoon Hollow Rd, as well as the Elementary School parking lot and field. *Please see a full map in the Operations plan included.*

Date(s) and hours of use: September 16, 2023 5am – 12pm (event start time: 8am)

Describe activity including purpose, number of persons involved, equipment to be used, parking arrangements, food/beverage service, etc. Also please indicate if fees will be charged by applicant.

The **W-T-P Multi-Stage Race** is a running and swimming event starting in Truro and traversing through the Wellfleet pond area until participants end at the finish line positioned at the Wellfleet Elementary School field (as it has in the past). *Please see Operations Plan for details.*

Number of participants – 150. All equipment provided by event. Parking to take place at First Congregational Church and Elementary School as well as the lot across the street. Food/beverage service will be prepackaged. There is no fee to watch the event.

Benefactors of this event is Habitat for Humanity of Cape Cod and the Wellfleet Lifeguard fund.

Describe any Town services requested (police details, DPW assistance, etc.)

police, beaches, EMS, DPW _____

NOTE TO APPLICANTS: All applications must be accompanied by a nonrefundable \$50.00 processing fee.

Applications must be received at least 30 days prior to the first event date to ensure that all reviews can be completed prior to the event. This application is only for permission to use Town property. Any additional licenses, such as food service permit, etc., may be required and it is the applicant’s responsibility to secure the same.

Action by the Board of Selectmen:

_____ Approved as submitted

_____ Approved with the following condition(s): _____

_____ Disapproved for following reason(s): _____

Date: _____

Processing Fee: \$50.00

Fee: 800-

(over)

APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS

Health/Conservation Agent:

Comments/Conditions: *ok - Delany Lemos*

Permits/Inspections needed:

Inspector of Buildings:

Comments/Conditions:

Permits/Inspections needed:

Police Department:

Comments/Conditions: *ok - Det. Kevin Lafosse*

Fire Department:

Comments/Conditions: *ok - Chief Pauley*

DPW:

Comments/Conditions: *ok - Jay Norton*

Community Services Director:

Comments/Conditions: *ok - Suzanne Thomas*

Harbormaster:

Comments/Conditions

Shellfish:

Comments/Conditions

Recreation:

Comments/Conditions

Town Administrator:

Comments/Conditions



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VI

USE OF TOWN PROPERTY

~ B ~

REQUESTED BY:	Culley Schultz & Eric Bremicker
DESIRED ACTION:	To approve the use of Baker's Field Pavilion for a rehearsal dinner on Friday September 8, 2023.
PROPOSED MOTION: Summary:	I move to approve the use of Baker's Field Pavilion to Culley Schultz and Eric Bremicker on Friday September 8, 2023 for their rehearsal dinner, from 3:30pm to 10:00pm for a fee of \$110, applicants are to be responsible for working with the recreation director for use of the pavilion and is responsible for their own portable toilets and trash and recyclables. The area is to be left the way it was before the event and to the satisfaction of the recreation director.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

APPLICATION FOR PERMIT TO USE TOWN OWNED PROPERTY

TOWN OF WELFLEET
300 MAIN STREET
WELFLEET, MA 02667

Applicant Culley Schultz + Eric Bremicker Affiliation or Group n/a

Telephone Number 862 596 0211 Mailing Address 3747 N. Clark St., 3N

Email address schultz.culley@gmail.com Chicago, IL 60613

Town Property to be used (include specific area) Baker's Field Pavilion

Date(s) and hours of use: Friday, Sept 8th 2023, 3:30 - 10:00 pm

Describe activity including purpose, number of persons involved, equipment to be used, parking arrangements, food/beverage service, etc. Also, please indicate if fees will be charged by applicant.

We are hoping to host our rehearsal dinner at the pavilion to share a place special to us with our closest friends and family. The event will be catered by Clambakes, Etc. and will have beer and wine only. The actual event will be 5-8pm but the hours of use are extended to include set up/clean up.

Describe any Town services requested (police details, DPW assistance, etc.) N/A We will have a small speaker for music. Guest count is 30 people.

NOTE TO APPLICANTS: All applications must be accompanied by a non-refundable \$50.00 processing fee. Applications must be received at least 30 days prior to the first event date to ensure that all reviews can be completed prior to the event. This application is only for permission to use Town property. Any additional licenses, such as food service permit, etc., may be required and it is the applicant's responsibility to secure the same.

Action by the Board of Selectmen:

_____ Approved as submitted

_____ Approved with the following condition(s): _____

_____ Disapproved for following reason(s): _____

Date: _____

Processing Fee: \$50.00 pd

Fee: _____

APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS

Health/Conservation Agent: Comments/Conditions: Permits/Inspections needed:	Inspector of Buildings: Comments/Conditions: Permits/Inspections needed:
--	---

Police Department: ok - Lt. Kevin LaRocco Comments/Conditions: ↓ agrees with Jay + Suzanne	Fire Department: ok - Chief Pauley Comments/Conditions: ↓ agrees with Jay + Suzanne
--	---

DPW: ok - Jay Norton Comments/Conditions - must provide own portable toilets and be responsible for trash + recyclables	Community Services Director: ok - Suzanne Thomas Comments/Conditions: - Applicant must provide their own portable toilets and be responsible for trash + recyclables
---	--

Harbormaster: Comments/Conditions	Shellfish: Comments/Conditions
---	--

Recreation: Comments/Conditions	Town Administrator: Comments/Conditions
---	---



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

V

USE OF TOWN PROPERTY

~ C ~

REQUESTED BY:	Evan Bergman
DESIRED ACTION:	To approve the use of various locations in Wellfleet for a small film
PROPOSED MOTION: SUMMARY:	I move to approve the use of Old Wharf Bay, Loagy Bay Beach, tennis courts and sitting bench across the street in public parking lot, Left Bank Gallery side walk in front of gallery, King Philip Road Parking lot and beach to Evan Bergman for a small film from April 23, 2023 through May 19, 2023 for a fee of \$600 and all parcels of land used be cleaned up to the satisfaction of the DPW director.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

APPLICATION FOR PERMIT TO USE TOWN OWNED PROPERTY

TOWN OF WELLFLEET
300 MAIN STREET
WELLFLEET, MA 02667

Applicant Evan Bergman

Affiliation or Group _____

Telephone Number 917-741-7178

Mailing Address 372 Central Park West

Email address evanJBergman@gmail.com 14R, NYC NY 10025

Town Property to be used (include specific area) preservation Hall Entrance, Stree, m.d Cape lumber parking lot, side walk in front of Bldg.

Date(s) and hours of use: April 23, 2023 - May 19, 2023

Describe activity including purpose, number of persons involved, equipment to be used, parking arrangements, food/beverage service, etc. Also, please indicate if fees will be charged by applicant.

Filming Independent feature film - life on the flats
film crew approximately 15-20 including actors

Describe any Town services requested (police details, DPW assistance, etc.)

NOTE TO APPLICANTS: All applications must be accompanied by a non refundable \$50.00 processing fee. Applications must be received at least 30 days prior to the first event date to ensure that all reviews can be completed prior to the event. This application is only for permission to use Town property. Any additional licenses, such as food service permit, etc., may be required and it is the applicant's responsibility to secure the same.

Action by the Board of Selectmen:

_____ Proof of Insurance Required

_____ Approved as submitted

_____ Approved with the following condition(s): _____

_____ Disapproved for following reason(s): _____

Date: 1/30/2023

Processing Fee: \$50.00 pd 2/1/23

Fee: _____

APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS

Health/Conservation Agent: <i>ok - Helary</i> Comments/Conditions: Permits/Inspections needed:	Inspector of Buildings: <i>N/A</i> Comments/Conditions: Permits/Inspections needed:
--	---

Police Department: <i>ok - St. Kevin LaRocco</i> Comments/Conditions:	Fire Department: <i>ok - Chief Pauley</i> Comments/Conditions:
--	---

DPW: <i>ok - Jay Norton</i> Comments/Conditions:	Community Services Director: <i>ok - Suzanne Thomas</i> Comments/Conditions:
---	---

Harbormaster: Comments/Conditions	Shellfish: Comments/Conditions
---	--

Recreation: Comments/Conditions	Town Administrator: Comments/Conditions
---	---

TOWN OF WELLFLEET
Application for Permit

Evan Bergman
evanjbergman@gmail.com
917-741-7178

Town property attachment to Application
Old Wharf Bay, Loagy Bay Beach
Tennis courts and sitting bench across street in public parking lot
Left Bank Gallery-side walk in front of Gallery
King Philip Road Parking lot and Beach



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VII

BOARD/COMMITTEE APPOINTMENTS AND UPDATES

~ A ~

REQUESTED BY:	David and Merrill Mead Fox
DESIRED ACTION:	To review and take possible votes on Building Codes Local Option Specialized Code
PROPOSED MOTION:	If a motion is required one will be made at the time of the meeting.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

**Municipal Specialized Opt-in Stretch Code
Wellfleet Selectboard 2/7/23 meeting**

Overview

In 2020, Wellfleet passed the following overwhelmingly:

Town of Wellfleet, MA / Division 1 – Bylaws / Part I: Administrative Legislation
Chapter 19
Climate Policy

[HISTORY: Adopted by the Town Meeting of the Town of Wellfleet 9-12-2020 ATM by Art. 35 (Art. VII, Sec. 39, of the General Bylaws). Amendments noted where applicable.]

§ 19-1

Policy and intent; implementation.

“The Town of Wellfleet recognizes that the climate emergency, driven by human activity including energy consumption and land use practices and leading to global warming, rising seas, deadly storms, dangerous heat waves, acidifying oceans, and melting ice sheets, poses an imminent threat to the health, safety, and economic security of the residents of the Town. The Town of Wellfleet therefore adopts as its policy the objective of reducing net greenhouse gas emissions from human activity within and by the Town to zero at the earliest technically and economically feasible time, but no later than 2050, and directs that all officers, departments, committees, and representatives of the Town take such measures within the scope of their respective responsibilities and authority as may be necessary and prudent to facilitate such policy and objective.”

The Specialized Code is directly and fully consistent with this policy, including the target of reducing net greenhouse gases to zero by 2050. And, the State Law passed in 2021 (AN ACT CREATING A NEXT-GENERATION ROADMAP FOR MASSACHUSETTS CLIMATE POLICY) explicitly contains the same 2050 target.

Introduction

The Municipal Opt-in Specialized Stretch Energy Code (Specialized Code) is required ([MGL 25A Section 6](#)) to be designed to help achieve MA GHG emission limits and building sector sub-limits set every five years from 2025 to 2050. As a result, all compliance pathways under the Specialized Code are designed to ensure new construction that is consistent with a net-zero Massachusetts economy in 2050, primarily through building envelope energy efficiency, that it turn enables reduced heating loads and efficient electrification. The largest greenhouse gas emissions impact for many buildings stems from the heating loads and choice of heating fuel for the building. Buildings reliant on combustion equipment have no clear path to zero emissions, while electrically heated buildings using heat pump technologies do due to the steady increase in renewable and clean energy sources on the ISO-NE electric grid, and opportunities for distributed solar and other on-site renewable energy generation. Accordingly, the Specialized Code requires all new buildings to be designed with electric service and wiring sufficient for future electrification of space and water heating as well as any combustion equipment appliance loads.

The following is additional information on various concerns and issues that have been raised:

Effective Time table

The State recommendation is to have the new Specialized Code go into effect 6-12 months after adoption to allow for preparation and adjustment.

Lawrence Road Project

As per the email from Jay Coburn in the Selectboard packet, the Project is already being designed to be in compliance with the Specialized Code.

Existing Buildings

The Specialized Code does not add any additional requirements beyond those in the new Stretch Code (effective 1/1/23).

New Construction - Residential

The only notable changes for new Residential construction are for homes of over 4,000 sq. ft. Due to the higher carbon footprint of such large homes the Code is more stringent for them.

New Construction - Commercial

See section below, [Overall extent of changes to adopt Specialized Code](#)

Additions

The updated Stretch Code that was effective 1/1/23 applies to projects that are permitted after 7/1/24. It applies only to Additions that are 1,000 sq ft or greater and even for these, the rest of the house does not need to meet the new code. Additions below 1,000 sq ft can electively follow the new code or at a minimum, the Base building code. In addition, for comparison, the average home built in Massachusetts in 2020 was HERS 51 which is more stringent than the HERS ratings required for additions in both the currently in force stretch code and the Specialized Code. See table below from DOER 2023 Technical Guidance:

TABLE R406.5 MAXIMUM ENERGY RATING INDEX

Clean Energy Application	Maximum HERS Index score ^{a, b}		
	New construction until June 30, 2024	New construction permits after July 1, 2024	Major-alterations, additions, or Change of use ^c
<i>Mixed-Fuel Building</i>	52	42	52
Solar Electric Generation	55	42	55
<i>All-Electric Building</i>	55	45	55
Solar Electric & <i>All-Electric Building</i>	58	45	58

^a Maximum HERS rating prior to onsite renewable electric generation in accordance with Section R406.5

^b The building shall meet the mandatory requirements of Section R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

^c Alterations, Additions or Change of use covered by Section R502.1.1 or R503.1.5 are subject to this maximum HERS rating.

Importantly, the Specialized Code contains no increase in stringency from the Code that we are already under. From the 2023 Technical Guidance (DOER), Massachusetts Stretch Energy Codes (p. 77):

“There are no additional requirements in the Specialized Code for Existing Buildings that are undergoing Additions, Alterations or Changes of Use. If the permitting Authority Having Jurisdiction has adopted the Specialized Code, Existing Building projects should comply with the requirements in the Stretch Code.”

What triggers bringing a whole existing house up to the new Code?

There is no trigger requiring a whole house to be brought up to the current code or the Specialized Code.

From the 2023 Technical Guidance (DOER), Massachusetts Stretch Energy Codes (p. 51):

“In an alteration, what do I have to update?”

In general – if you touch it, you have to update. If you don’t touch, you don’t have to update. The key requirement in this section is (added italics):

“Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new

construction without requiring the unaltered portions of the existing building or building system to comply with this code.”

Benefit and Durability of Air Source Technology Equipment

It is highly efficient and cost effective - An Air source heat pump has a 1.8 or higher coefficient of performance (COP); which means that it is 180% more efficient than standard electric resistance heaters. Some can even have a COP of 2.4, rendering them almost 240% more efficient. This makes them cost effective against furnaces that use propane or oil.

It is environment-friendly - A heat pump is environment friendly owing to its high SEER rating (Seasonal Energy Efficiency Ratios). As it does not burn any fossil fuel when in use, it helps in reduce carbon footprint.

Two systems in one - Both heating and cooling systems in one device and can use either depending on the season, saving money and energy.

Durability - Heat pumps last approximately 15 years, according to the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). And with proper maintenance—paired with sufficient insulation and professional air sealing - up to 20–25 years. This is comparable to or exceeds other heating/cooling methods.

Equipment Shortages?

From an article about the \$9 billion in funds from the Inflation Reduction Act that was announced this past November: “The funds allocated Wednesday fall under a new state- and tribe-administered rebate program made possible by the IRA. The White House said this helps put the country on track to achieve the president’s campaign promise of weatherizing 2 million homes.

To get on track for the goal of net zero by 2050, the [International Energy Agency](#) has said the global stock of heat pumps needs to reach roughly 600 million by 2030. Last year saw a 25% increase in investment in the technology and record-high growth in sales, and roughly 190 million units were in operation worldwide. However, the organization said this growth has been stymied somewhat by ongoing supply chain issues.” (the full article is [here](#))

Clearly, many industries are experiencing supply chain issues but heat pump technology has significant government and private sector support.

Cost of Construction

While changes in building and construction methods can be daunting, most of them have been in place for some time and many builders have adapted successfully.

All-Electric homes are generally easier and cheaper to build. A Mass State study shows the costs and benefits of meeting the new stretch code (already in place as of 1/1/23) compared to the base code for five types of residential buildings. Compared to the Base Code, the net cost **savings** to builders for all-electric homes ranged from \$11,492 to \$28,597 and for gas/electric homes the range of the cost was from \$61 to \$7,907 **higher**. The full report is [here](#)

Overall extent of changes to adopt the Specialized Code

By far the biggest changes have already happened as of 1/1/23 when the new Stretch Code went into effect. The more stringent Specialized Code changes are*:

- All Mixed-Fuel Residential and Commercial buildings must provide pre-wiring for electric space heating, electric water heating, and electric appliances. This will accelerate the clean energy transition and avoid cost premiums to convert these buildings to all-electric in the future.

- Mixed-Fuel Residential buildings greater than 4,000 square feet (i.e., large homes) must achieve HERS 0 or PHIUS ZERO, meeting energy efficiency requirements prior to renewable energy offsets. These exemplary performance standards encourage large homes to “go All-Electric.”
- Mixed-Fuel Commercial buildings greater than 20,000 square feet must offset their emissions by providing 1.5W of on-site solar panels for each square foot of the largest three floors or not less than 75% of the Potential Solar Zone Area – OR— achieve Passive House certification.
- Starting July 1, 2024, Multi-Family residential buildings greater than 12,000 square feet must achieve pre-certification to Passive House Standards. Even without this code requirement, many affordable housing projects currently being developed in MA are being designed to meet this standard.

These changes are generally meant to encourage but require movement to all electric buildings.

* Note: These are from the Northeast Energy Efficiency Partnerships FAQ provided in your packets.

Summary

It is true that there are significant changes at play but it is important to remember that the vast majority of these already went into effect on 1/1/23 due to our Green Communities status. Plus, please recall that 85% of the towns and cities in the State are already Green Communities and the number continues to grow. Clearly, we are not outliers but right in the mainstream of the State. And of course, all of the current Green Communities are currently under the updated stretch code that went into effect in January. Thus, while this is all above the base code, nearly all of the State has made the decision to move forward with the more stringent codes.

In conclusion, the newly updated code and the proposed Specialized Opt-in Code will provide:

- Better energy efficiency, lower energy bills, higher indoor air quality, less risk of fire, higher comfort and better performance.
- May include additional incentives for Municipalities
- Lowered Life Cycle Costs for all building types
- Reduced energy use, fossil fuel use, and greenhouse gas emissions
- A quieter, more comfortable home

Lastly, as per the Town's 2020 passage of General By-Laws Chapter 19 - Climate Policy, a clear directive was given by an overwhelming majority of citizens:

“The Town of Wellfleet therefore adopts as its policy the objective of reducing net greenhouse gas emissions from human activity within and by the Town to zero at the earliest technically and economically feasible time, but no later than 2050, and directs that all officers, departments, committees, and representatives of the Town take such measures within the scope of their respective responsibilities and authority as may be necessary and prudent to facilitate such policy and objective.”

So, I submit that putting the Specialized Code before the town at the upcoming Town meeting is clearly the will of the people.

Proposed Specialized Energy Code - Town Meeting Warrant Article

2/1/23

The following Warrant Article, Town Meeting Motion, and Bylaw are provided by DOER. The only changes are those noting Wellfleet and Chapter/Article information.

TOWN WARRANT ARTICLE:

To see if the Town will vote to replace Chapter 124 (Building Construction), Article II of the Town of Wellfleet General Bylaws, with an Article entitled "Specialized Energy Code" for the purpose of regulating the design and construction of buildings for the effective use of energy and reduction of greenhouse gas emissions, pursuant to the entirety of 225 CMR 22 and 23 including Appendices RC and CC, including future editions, amendments or modifications thereto, with an effective date of January 1, 2024 a copy of which is on file with the Town Clerk, or take any other action relative thereto.

TOWN MEETING MOTION:

I move that the Town will replace Chapter 124 (Building Construction), Article II of the Town of Wellfleet General Bylaws, with an Article entitled "Specialized Energy Code" for the purpose of regulating the design and construction of buildings for the effective use of energy and reduction of greenhouse gas emissions, pursuant to the entirety of 225 CMR 22 and 23 including Appendices RC and CC, including future editions, amendments or modifications thereto, with an effective date of January 1, 2024

DRAFT BYLAW:
Chapter 124, Article II
SPECIALIZED ENERGY CODE
[Adopted 0-0-2023 ATM / STM by Art.]

- 1. Definitions**
- 2. Purpose**
- 3. Applicability**
- 4. Stretch Code**

1. Definitions

International Energy Conservation Code (IECC) – The International Energy Conservation Code (IECC) is a building energy code created by the International Code Council. It is a model code adopted by many state and municipal governments in the United States for the establishment of minimum design and construction requirements for energy efficiency, and is updated on a three-year cycle. The baseline energy conservation requirements of the MA State Building Code are the IECC with Massachusetts amendments, as approved by the Board of Building Regulations and Standards and published in state regulations as part of 780 CMR.

Specialized Energy Code – Codified by the entirety of 225 CMR 22 and 23 including Appendices RC and CC, the Specialized Energy Code adds residential and commercial appendices to the Massachusetts Stretch Energy Code, based on amendments to the respective net-zero appendices of the International Energy Conservation Code (IECC) to incorporate the energy efficiency of the Stretch energy code and further reduce the climate impacts of buildings built to this code, with the goal of achieving net-zero greenhouse gas emissions from the buildings sector no later than 2050.

Stretch Energy Code - Codified by the combination of 225 CMR 22 and 231, not including Appendices RC and CC, the Stretch Energy Code is a comprehensive set of amendments to the International Energy Conservation Code (IECC) seeking to achieve all lifecycle cost-effective energy efficiency in accordance with the Green Communities Act of 2008, as well as to reduce the climate impacts of buildings built to this code.

2. Purpose

The purpose of 225 CMR 22.00 and 23.00 including Appendices RC and CC, also referred to as the Specialized Energy Code is to provide a more energy efficient and low greenhouse gas emissions alternative to the Stretch Energy Code or the baseline Massachusetts Energy Code, applicable to the relevant sections of the building code for both new construction and existing buildings.

3. Applicability

This energy code applies to residential and commercial buildings.

4. Specialized Code

The Specialized Code, as codified by the entirety of 225 CMR 22 and 23 including Appendices RC and CC, including any future editions, amendments, or modifications, is herein incorporated by reference into the Town of Wellfleet General Bylaws, Chapter 124, Article II.

The Specialized Code is enforceable by the inspector of buildings or building commissioner.

From DOER:

Note: The Stretch energy code was previously codified in 780CMR appendix 115.aa, prior to the passage of the 2021 Act Creating a Next-generation Roadmap for Massachusetts Climate Policy (2021 Climate Act). The 2021 Climate Act transferred authority for promulgation of the Stretch energy code to the Department of Energy Resources.

Please note, once the Specialized Code is adopted by a municipality, all future editions, amendments, and modifications of the Specialized Code are automatically adopted unless the municipality rescinds adoption of the Specialized Code itself. A community must adopt the Specialized Code “as-is,” without applying any amendments or conditions, and in full; both the low rise residential and the commercial appendices are adopted together. As such, Municipalities must adopt the entirety of 225 CMR 22 and 23 including Appendices RC and CC



David Mead-Fox <dmeadfox@gmail.com>

Fwd: Lawrence Road Project and DOER Municipal Opt-In Stretch Code

1 message

Jay Coburn <jay@capecdp.org>
To: "dmeadfox@gmail.com" <dmeadfox@gmail.com>

Mon, Jan 30, 2023 at 10:28 AM

David:

See below from Alex Bushkoff at Studio G - the project Architects. The development is being designed to the requirements of the stretch code.

Could you please pass this information along to Higgins Steele who also called me about this?

Thanks,

Jay

Jay Coburn
Chief Executive Officer
Community Development Partnership
Capecdp.org | (508) 240-7873 x16 | jay@capecdp.org



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Begin forwarded message:

From: Alex Bushkoff <alex@studiogarchitects.com>
Subject: RE: Lawrence Road Project and DOER Municipal Opt-In Stretch Code
Date: January 30, 2023 at 10:23:26 AM EST
To: Jay Coburn <jay@capecdp.org>, Vitalia Shklovsky <vshklovsky@poah.org>, Gail Sullivan <gails@studiogarchitects.com>

CAUTION: This email originated from outside of your organization. Do not click on links or open attachments unless you recognize the sender's address and trust the content to be safe.

Jay –

I've spoken with Matt Bean at Norian Siani about this previously, and we are designing to the requirements of this code.

Alex Bushkoff
Project Manager
617.524.5558
617.669.6024 C



From: Jay Coburn <jay@capecdp.org>
Sent: Monday, January 30, 2023 10:19 AM
To: Vitalia Shklovsky <vshklovsky@poah.org>; Gail Sullivan <gails@studiogarchitects.com>
Cc: Alex Bushkoff <alex@studiogarchitects.com>
Subject: Fwd: Lawrence Road Project and DOER Municipal Opt-In Stretch Code

Vita & Gail:

Below is a query
from David Mead-Fox who sits on the Wellfleet Planning Board and Energy & Climate
Committee.

They lobbying the town to adopt the new Municipla Opt-in Stretch Code but wanted to make
sure that doing so would not cause problems for 95 Lawrence Road.

My understanding is that we would meet that code - correct?

Jay

Begin forwarded message:

From: David Mead-Fox <dmeadfox@gmail.com>
Subject: Lawrence Road Project and DOER Municipal Opt-In Stretch Code
Date: January 30, 2023 at 9:48:59 AM EST
To: Jay Coburn <jay@capecdp.org>
Cc: David Mead-Fox <dmeadfox@gmail.com>

CAUTION: This email originated from outside of your organization. Do not click on links or open attachments unless you recognize the sender's address and trust the content to be safe.

Hi Jay,

I left you a voicemail this morning but thought I would send you an email as well. I
am a member of the Wellfleet Energy and Climate Action Committee. We are

working with the Wellfleet Selectboard to have them consider placing the new Municipal Opt-in Stretch Code on the Warrant for our upcoming Town Meeting.

From what I have seen of the Lawrence Road project plans, it looks like you will be meeting the requirements of the Opt-in Code but I will appreciate it very much if you can confirm this. We want to be sure that in asking the Town to adopt the Opt-in Stretch Code that we do not create difficulty for the Lawrence Road project. I will be meeting with the Selectboard very soon so I hope you can get back to me as soon as possible.

Thank you,

David

David Mead-Fox
PO Box 761
[35 Pine Point Way](#)
Wellfleet, MA 02667

617-480-6835 (cell)
dmeadfox@gmail.com

Owner/Operator:

Mead-Fox Woodworking
See dmeadfox on Instagram

and,

Nurture Democracy
<https://www.nurturedemocracy.com/>
David.Mead-Fox@nurturedemocracy.com

1. What is a stretch code?

A stretch code is part of the state building code which sets “above code” requirements for building energy performance compared to the base energy code – aiming to reduce greenhouse gas emissions related to the building sector to comply with statewide legal limits for 2025, 2030, 2040 and 2050.

2. How is a stretch code adopted?

A stretch code is adopted (or rescinded) by municipal action – a city council or town meeting vote.

3. How many MA communities have adopted the current Stretch Code?

A total of 300 “Green Communities,” representing nearly 90% of the state’s population, have adopted the current Stretch Code, available since 2009.

4. What is the impetus for both the Updated Stretch Code and Municipal Opt-In Specialized Code?

The climate bill resulting in [A Next-Generation Roadmap for Massachusetts Climate Policy \(2011\)](#) directed DOER’s efforts to revise the stretch code to meet emissions reduction limits mandated by the [Global Warming Solutions Act \(2008\)](#).

5. Does the Municipal Opt-In Specialized Code apply to existing structures?

No, the Municipal Opt-In Specialized Code applies only to new construction and not to existing structures. Additions and renovations, depending on size, are regulated by the Updated Stretch Code and Base Code.

6. What is the main difference between the Updated Stretch Code vs Municipal Opt-In Specialized code?

For all Green Communities, the Updated Stretch Code automatically took effect on January 1, 2023. Certain provisions took effect immediately; other provisions become effective on July 1, 2023 or July 1, 2024. By contrast, the Municipal Opt-In Specialized Code requires municipal adoption with an effective date decided by the municipality.

7. Are there other differences?

The Municipal Opt-In Specialized Code builds on the Updated Stretch Code with several important additional provisions that help meet legal emissions reduction limits, promote the cost-effective transition to all-electric buildings and preservation of property values. To better understand these differences in detail, see DOER’s [MA Stretch Energy Codes](#), Northeast Energy Efficiency Partnerships’ [Commercial](#) and [Residential](#) resources, MassSave’s [MA Energy Code Training](#), Resnet’s Home Energy Rating System [HERS Index](#), and [Passive House Massachusetts’](#) website.

8. What are these stricter provisions required by the Municipal Opt-In Specialized Code?

- All Mixed-Fuel Residential and Commercial buildings must provide pre-wiring for electric space heating, electric water heating, and electric appliances. This will accelerate the clean energy transition and avoid cost premiums to convert these buildings to all-electric in the future.
- Mixed-Fuel Residential buildings greater than 4,000 square feet (i.e., large homes) must achieve HERS 0 or PHIUS ZERO, meeting energy efficiency requirements prior to renewable energy offsets. These exemplary performance standards encourage large homes to “go All-Electric.”
- Mixed-Fuel Commercial buildings greater than 20,000 square feet must offset their emissions by providing 1.5W of on-site solar panels for each square foot of the largest three floors or not less than 75% of the Potential Solar Zone Area – OR— achieve Passive House certification.
- Starting July 1, 2024, Multi-Family residential buildings greater than 12,000 square feet must achieve pre-certification to Passive House Standards. Even without this code requirement, many affordable housing projects currently being developed in MA are being designed to meet this standard.

9. Will the Municipal Opt-In-Specialized Code discourage the creation of affordable housing?

No, because financial incentives through Mass Save and competitive incentives from the Department of Housing and Community Development make this attractive. All-Electric buildings entail little if any additional construction costs. Third party power purchase agreements provide solar energy with no upfront cost. The result is affordable housing that delivers comfort and energy efficiency in perpetuity, providing affordable housing residents with health benefits and lower energy bills over time.

10. Why adopt the Municipal Opt-In Specialized Code?

The Municipal Opt-In Specialized Code requires pre-wiring, avoiding costly retrofits down the road for which consumers will inevitably have to pay. It also has other requirements to help meet our climate goals. Additionally, early adopters may be well positioned to receive priority training, technical advice, and incentives.

11. Why are fossil fuels permitted if the climate bill required DOER to produce a “net zero” code?

The definition of “Net Zero” is evolving. The Federal Department of Energy (DOE) compiled 20+ net zero definitions used in official publications over the past decade; many definitions permit fossil fuel use. Both the Updated Stretch Code and Municipal Opt-In Specialized Code offer Mixed Fuel and All Electric compliance pathways. This preserves market choice at a time when economic uncertainty makes utility pricing highly volatile, and utility costs vary significantly from one community to another.

12. Is it possible to install a gas cooktop, water heater or other appliance along with all-electric heating and cooling?

Yes, but this would be a Mixed Fuel building and must meet the Mixed Fuel requirements including installation of electrical service and wiring for eventual conversion of those gas appliances to electric. All Electric buildings allow fossil fuels for emergency backup generation systems.

13. What is TEDI and how is it calculated?

TEDI stands for “Thermal Energy Demand Intensity.” Like, EUI, “Energy Use Intensity,” TEDI is a computed value derived from building energy modeling software such as eQuest. Whereas EUI measures annual energy consumption, TEDI measures annual thermal demand (not usage), reflecting the building envelope and mechanical design quality. DOER has issued [2023 Technical Guidance for Massachusetts Stretch Codes](#) and [Guidelines for TEDI Modeling](#), explaining, among many other things, how TEDI values are calculated.

14. How many communities are mobilizing to adopt the Municipal Opt-In Specialized Code?

At least 20 communities have indicated their intention to vote on the adoption of the Municipal Opt-In Specialized Code this spring. These communities include cities and towns.

15. Won’t the electric grid be overwhelmed by building electrification?

Today, the electric grid is operating at 20% below the all-time system electric peak in 2006, due to energy efficiency measures. Nearly 50% greater energy efficiency will be gained by switching from fossil fuels to electric vehicles, electric heat pumps, and electric appliances. Electric heat pumps are 2.5 to 4 times more efficient than the most efficient gas boiler. By 2035, building electrification will cause the grid to switch from summer peaking to winter peaking. This will not require a lot of transmission upgrades in the next 10 years. By 2050, New England capacity is planned to double from 25 to 50GW; an additional 10 GW is planned to be available by 2035. The electric grid is mandated to get greener by 3% per year.



Massachusetts Codes

Updated Stretch Code and Municipal Opt-In Stretch Code for Commercial Buildings

Background and Introduction

Massachusetts has consistently been a national leader in energy efficiency, especially in new construction.

With buildings making up 40 percent of total greenhouse gas emissions in the United States, decarbonization measures in new construction offer critical solutions to mitigate the worst impacts of climate change. Base codes only go so far to address emission reduction goals, so states must take the lead and adopt above code measures in order to effectively respond to a changing climate.

Massachusetts has recently revamped its energy stretch code in order to meet the targets set by the Global Warming Solutions Act. This ambitious Updated Stretch Code adopts stronger measures that greatly exceed those of the 2021 International Energy Conservation Code (IECC). In addition to the Updated Stretch Code, the Climate Act of 2021 in Massachusetts required the Department of Energy Resources (DOER) to create a Municipal Opt-In Stretch Code that provides even more opportunities for energy savings than the Updated Stretch Code.

The Green Communities Program in Massachusetts requires that existing and newly-designated Green Communities adopt the Updated Stretch Code. As of November 2022, 299 cities and towns in Massachusetts have joined the program. This document summarizes the new provisions of both the Updated Stretch Code and Municipal Opt-In Stretch Code for commercial buildings. For information regarding low-rise residential buildings, please see NEEP's resource on the Residential Updated Stretch Code and Municipal Opt-In Stretch Code.

The Updated Stretch Code requirements outlined in this document take effect for buildings permitted on or after July 2023. For existing Green Communities, the Updated Stretch Code will automatically take effect immediately in July 2023 without the need for adoption by municipalities.

The Municipal Opt-In Stretch Code will be available for adoption in late December 2022. The recommended effective period is at least six months after adoption, allowing an easier transition for developers, builders, and designers, and giving time for training municipal code officials. This adoption cycle mirrors that of the stretch code, which would initially take effect in either January or July, depending on which is at least six months from the adoption date.



Base Code

Massachusetts recently promulgated the 10th Edition of the Building Code which will take effect in early 2023 after a public comment period. The 52 municipalities in Massachusetts that haven't joined the Green Communities Program must follow the Massachusetts amended 2021 International Energy Conservation Code (IECC)¹.

Updated Stretch Code

All 299 municipalities in the Green Communities Program are automatically enrolled in the Updated Stretch Code and must follow the requirements in the base code, the 2021 IECC, along with the amendments of the Massachusetts Updated Stretch Code. The Updated Stretch Code provisions are noted in this section

Pathways to Compliance

- 1. C401.2.1 Targeted Performance (Thermal Energy Demand Intensity (TEDI)) Pathway:** TEDI is defined as a measure of the thermal energy required by a building for space conditioning and for conditioning of ventilation air. This is an optional new compliance pathway for any building type, but specifically applies to dormitories, fire and police stations, libraries, offices, schools, post offices and town halls (greater than 20,000 square feet that have ventilation rates less than or equal to 0.5 cubic feet per minute per square feet (cfm/sf)). This pathway is intended to minimize heating demand with improved envelopes and heat recovery in ventilation systems. It calculates the TEDI using factors such as insulation and air tightness to determine how much energy is needed to heat and ventilate a space. This is beneficial because it helps guide decisions on equipment sizing and other energy saving measures.
- 2. C401.2.1 Relative Performance (American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2019 Appendix G) Pathway:** This is an optional new compliance pathway for commercial high ventilation buildings (defined as projects with more than 0.5cfm/sf of ventilation) and for any building that does not fall under the requirements of the Targeted Performance Path, that stipulates that buildings can't earn credits for compliance unless the design complies with the Massachusetts Amended Appendix G of the ASHRAE 90.1-2019 standard. The stricter limit imposed here allows for further energy savings.
- 3. C401.2.1 Prescriptive Pathway:** This is an optional new compliance pathway for small commercial buildings (less than 20,000 square feet) that provides a mandatory list of measures that buildings must meet or exceed in order to comply with the code.
- 4. C401.2.2 Passive House Compliance Pathway:** This is an existing alternative compliance pathway that can be used for all types of commercial buildings. This pathway requires a Passive House Institute United States (Phius) CORE 2021 or Phius ZERO 2021 certification or a Passive House International (PHI) certification as described in Section C407.3.

¹ Commercial IECC 2021 MA amendments- UNOFFICIAL: <https://www.mass.gov/doc/chapter-13-energy-efficiency-amendments-unofficial-posted-102022/download>



5. C401.2.2 HERS Compliance Pathway: This is an existing alternative compliance pathway that can be used for Group-R buildings with multiple individual dwelling units. A Home Energy Rating System (HERS) score is assigned to the individual dwelling units based on the unit’s energy features. The required HERS Index is noted in Table C407.4.

Additional Energy Efficiency Updates

C401.4 Efficient Electrification: For commercial high ventilation buildings, 25% of the space heating load has to be electric, and for high glazed wall system buildings (where 50% or more of the above grade wall is glazed) 100% of the space heating load has to be electric except for buildings using the Relative Performance Pathway because average ventilation at full occupancy is greater than 0.5 cfm/sf.

C402.1.5 Mandatory Envelope “Area-weighted U value (btu/hr-sf-F) of an Envelope Section: This section simplifies the U-value provisions in section C402.1.5 with some exceptions.

C402.5 Air Leakage: Adopts the language used in the updated IECC 2024, reducing air leakage from 0.40 cubic feet per minute (CFM) at 75 pascals (CFM75) per square foot of thermal envelope area in the current code to 0.35 CFM75 per square foot of thermal envelope area in the Updated Stretch Code. This change will create a tighter thermal envelope which will result in less energy and heat escaping through the building.

C402.7 Thermal Bridges: Adds provisions to reduce thermal bridging, which is when heat can move through a building’s envelope by way of construction material such as steel. This would increase the effectiveness of the building’s thermal envelope by reducing heat loss.

C403.5 Economizers: Strengthens requirements by requiring a dedicated outdoor air system (DOAS) which would improve indoor air quality and thermal comfort of occupants.

C403.7 Ventilation Energy Recovery: Strengthens ventilation requirements by increasing energy recovery and adding new provisions to address high ventilation buildings and toxic exhaust.

C405.13 Wiring for Electric Vehicle (EV) Charging: Requires 20 percent of parking spaces to be EV Ready, which means the spaces have to be wired to accommodate future electric vehicle use, for Group R and B, and 10 percent of spaces for all other occupancy types. This would help ease the transition to EV infrastructure and use.

C406 Additional Efficiency Requirements: Point based system to select options for improved energy efficiency, which gives building professionals more choice in their proposed design.

C502 Additions: Additions less than 20,000 square feet and up to 100% of existing buildings can follow base code, whereas larger additions must follow stretch code.

C503 Alterations: Alterations must follow prescriptive stretch pathway with 10 percent reduced envelope requirements. Also removes an exception, now requiring any altered walls be brought up to prescriptive stretch code (besides historic buildings).



Municipal Opt-In Stretch Code

These requirements are for municipalities that want to go above and beyond the stretch code requirements. In addition to following the IECC 2021 and Updated Stretch Code, the municipalities must also follow the provisions outlined in this section.

Municipalities must comply with one of the following sections depending on building energy fuel type.

CC104 (All-Electric): For buildings to be considered all electric, they must use air source or ground source heat pumps for space heating, heat pumps or solar thermal systems for water heating, and all electric appliances, including those used for cooking and drying. In addition, there are minimum efficiency standards that must be achieved.

CC105 and CC106 (Mixed Fuel): This path is for buildings using fossil fuels for space heating, water heating, cooking, or clothes drying. Unlike the Updated Stretch Code, this option requires electric readiness for future electrification of homes, meaning that homes should be wired to accommodate future electric use and plugs must be installed near the fossil fuel equipment for future installation of electric equipment. In addition, the Municipal Opt-In Stretch Code requires on site solar PV and minimum efficiency requirements for fossil fuel equipment.

CC103 (Zero Energy Buildings): This is an optional pathway for buildings that are designed to result in net zero energy consumption for a year, using the PHIUS ZERO or HERS 0 certification.

Conclusion

The Massachusetts Updated Stretch Code and Municipal Opt-In Stretch Code offer solutions that would save money on energy bills, improve indoor air quality, and ease the transition to a clean energy future. The state has used energy codes as one of many tools to reduce carbon emissions and meet its goals set forth in the Global Warming Solutions Act. The state also added provisions dedicated to addressing equity and environmental justice such as strengthened ventilation requirements, which creates a healthier living space for occupants of a home or building. Stretch codes are unique because they go above and beyond what is expected, which demonstrates strong leadership and a commitment to addressing the challenges posed by climate change. Although there is always more that can be done, Massachusetts has taken a great first step in advancing its clean energy and climate goals.



Comparison Chart

	UPDATED STRETCH CODE	MUNICIPAL OPT-IN STRETCH CODE
1. Dormitories, Fire and Police Stations, Libraries, Offices, Schools, Post Offices and Town Halls > 20,000 sf (with < 0.5cfm/sf of ventilation)		
C401.2.1 Targeted Performance (TEDI) Pathway ¹	Modeled TEDI	Same As Updated Stretch Code
C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
2. Commercial High Ventilation Buildings and All Other Building Types > 20,000 sf (with > 0.5cfm/sf of ventilation)		
C401.2.1 Relative Performance (ASHRAE 90.1-2019 Appendix G) ¹	Complies with MA Amended ASHRAE 90.1-2019 Appendix G	Same As Updated Stretch Code
C401.2.1 Targeted Performance (TEDI) Pathway ¹	Modeled TEDI	
C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
3. Small Commercial Buildings < 20,000 sf		
C401.2.1 Prescriptive Pathway ¹	Prescriptive Requirements	Same As Updated Stretch Code
C401.2.1 Targeted Performance (TEDI) Pathway ¹	Modeled TEDI	
C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
4. Group-R Buildings with Multiple Individual Dwelling Units		
C401.2.1 Targeted Performance (TEDI) Pathway ¹	Modeled TEDI	Compliance Paths as Noted in Table CC101.2
C401.2.2 HERS Compliance Pathway ¹	HERS Index as Noted in Table C407.4	
C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
Additional Commercial Energy Efficiency Requirements		
C401.4 Efficient Electrification ¹	Relative Performance Pathway: 25% Electric Space Heating (C401.4.1), High Glazed Wall Systems (50% or more glazed): 100% Electric Space Heating (except for Relative Performance) (C401.4.2)	CC104.1: 100% Electric Space and Water Heating (C401.4.3)
C402.1.5 Mandatory envelope Area-weighted U value (btu/hr-sf-F) of an envelope section ¹	Simplifies C402.1.5	Same As Updated Stretch Code
C402.5 Air Leakage ¹	Reduce Air Leakage	
C402.7 Thermal Bridges ¹	Reduced Thermal Bridging	
C403.5 Economizers ¹	Adds Dedicated Outdoor Air Systems (DOAS)	
C403.7 Ventilation Energy Recovery ¹	Increases ventilation recovery	
C405.13 Wiring for Electric Vehicle (EV) Charging ¹	20% EV Ready Spaces for Group R+B, 10% for others	
C406 Additional Efficiency Requirement ¹	Point based system to select options for improved energy efficiency	
C502 Additions ¹	Additions and up to 100% of existing buildings over 20,000 sq ft must follow stretch	
C503 Alterations ¹	Alterations prescriptive stretch – 10% Envelope Requirements	
C503 Change of Occupancy ¹	Change of Use prescriptive stretch – 10% Envelope Requirements	
R501.6 Historic Buildings ¹	Follow Base Code	
CC104 All Electric Building Performance Standard ²	N/A	Full Electrification with Minimum Efficiency Standards
CC105 and CC106 Mixed Fuel Building Performance Standard ²	N/A	Fossil fuel buildings must meet minimum efficiency requirements, have on-site PV, and be wired to accommodate future electrification
CC103 Zero Energy Building Performance Standard ²	N/A	Net Zero via Phius ZERO or HERS 0

1. Impacts buildings permitted on or after July 1, 2024 for Updated Stretch Code

2. Impacts buildings permitted on or after January 1, 2023 for Updated Stretch Code

* Municipal Opt-In Stretch Code requirements only take effect after adoption, with a recommended 6 month waiting period



Massachusetts Codes

Updated Stretch Code and Municipal Opt-In Stretch Code for Commercial Buildings

Background and Introduction

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With buildings making up 40 percent of total greenhouse gas emissions in the United States, decarbonization measures in new construction offer critical solutions to mitigate the worst impacts of climate change. Base codes only go so far to address emission reduction goals, so states must take the lead and adopt above code measures in order to effectively respond to a changing climate.

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The Green Communities Program in Massachusetts requires that existing and newly-designated Green Communities adopt the Updated Stretch Code. As of November 2022, 299 cities and towns in Massachusetts have joined the program. This document summarizes the new provisions of both the Updated Stretch Code and Municipal Opt-In Stretch Code for commercial buildings. For information regarding low-rise residential buildings, please see NEEP's resource on the Residential Updated Stretch Code and Municipal Opt-In Stretch Code.

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Municipal Opt-In Stretch Code

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Municipalities must comply with one of the following sections depending on building energy fuel type.

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CC103 (Zero Energy Buildings): This is an optional pathway for buildings that are designed to result in net zero energy consumption for a year, using the PHIUS ZERO or HERS 0 certification.

Conclusion

The Massachusetts Updated Stretch Code and Municipal Opt-In Stretch Code offer solutions that would save money on energy bills, improve indoor air quality, and ease the transition to a clean energy future. The state has used energy codes as one of many tools to reduce carbon emissions and meet its goals set forth in the Global Warming Solutions Act. The state also added provisions dedicated to addressing equity and environmental justice such as strengthened ventilation requirements, which creates a healthier living space for occupants of a home or building. Stretch codes are unique because they go above and beyond what is expected, which demonstrates strong leadership and a commitment to addressing the challenges posed by climate change. Although there is always more that can be done, Massachusetts has taken a great first step in advancing its clean energy and climate goals.



Comparison Chart

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C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
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C401.2.2 Passive House Compliance Pathway ¹	Phius Core 2021, Phius Zero 2021, or PHI	
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C401.2.1 Targeted Performance (TEDI) Pathway ¹	Modeled TEDI	Compliance Paths as Noted in Table CC101.2
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Additional Commercial Energy Efficiency Requirements		
C401.4 Efficient Electrification ¹	Relative Performance Pathway: 25% Electric Space Heating (C401.4.1), High Glazed Wall Systems (50% or more glazed); 100% Electric Space Heating (except for Relative Performance) (C401.4.2)	CC104.1: 100% Electric Space and Water Heating (C401.4.3)
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C503 Change of Occupancy ¹	Change of Use prescriptive stretch – 10% Envelope Requirements	
R501.6 Historic Buildings ¹	Follow Base Code	
CC104 All Electric Building Performance Standard ²	N/A	Full Electrification with Minimum Efficiency Standards
CC105 and CC106 Mixed Fuel Building Performance Standard ²	N/A	Fossil fuel buildings must meet minimum efficiency requirements, have on-site PV, and be wired to accommodate future electrification
CC103 Zero Energy Building Performance Standard ²	N/A	Net Zero via Phius ZERO or HERS 0

1. Impacts buildings permitted on or after July 1, 2024 for Updated Stretch Code

2. Impacts buildings permitted on or after January 1, 2023 for Updated Stretch Code

* Municipal Opt-In Stretch Code requirements only take effect after adoption, with a recommended 6 month waiting period



Massachusetts Codes

Updated Stretch Code and Municipal Opt-In Stretch Code for Residential Low Rise

Background and Introduction

Massachusetts has consistently been a national leader in energy efficiency, especially in new construction. With buildings making up 40 percent of total greenhouse gas emissions in the United States, decarbonization measures in new construction offer critical solutions to mitigate the worst impacts of climate change. Base codes only go so far to address emission reduction goals, so states must take the lead and adopt above-code measures in order to effectively respond to a changing climate.

Massachusetts has recently revamped its energy stretch code in order to meet targets set by the [Global Warming Solutions Act](#). This ambitious [Updated Stretch Code](#) adopts stronger measures that greatly exceed those of the 2021 International Energy Conservation Code (IECC). In addition to the Updated Stretch Code, the Climate Act of 2021 in Massachusetts requires the Department of Energy Resources (DOER) to create a [Municipal Opt-In Stretch Code](#) that provides even more opportunities for energy savings than the Updated Stretch Code.

The Green Communities Program in Massachusetts requires that existing and newly- designated Green Communities adopt the Updated Stretch Code. As of November 2022, 299 cities and towns in Massachusetts have joined the program. This document summarizes the new provisions of both the Updated Stretch Code and Municipal Opt-In Stretch Code for low-rise residential buildings. For information regarding commercial buildings, please see NEEP's resource on the Commercial Updated Stretch Code and Municipal Opt-In Stretch Code.

The Updated Stretch Code requirements outlined in this document take effect for buildings permitted on or after January 1, 2023, except for Section R406 for HERS Ratings, which have an interim score that will be reduced in July 2024. The HERS Index reflected in this document is the updated score that will take effect in July 2024. For existing Green Communities, the Updated Stretch Code will automatically take effect immediately on January 1, 2023 without the need for adoption by municipalities.

The Municipal Opt-In Stretch Code will be available for adoption in late December 2022. The recommended effective period is at least six months after adoption, allowing an easier transition for developers, builders, and designers, and giving time for training municipal code officials. This adoption cycle mirrors that of the stretch code, which would initially take effect in either January or July, depending on which is at least six months from the adoption date.



Base Code

Massachusetts recently promulgated the 10th Edition of the Building Code which will take effect in early 2023 after a public comment period. The 52 municipalities in Massachusetts that haven't joined the Green Communities Program must follow the Massachusetts amended 2021 International Energy Conservation Code (IECC)¹.

Updated Stretch Code

All 299 municipalities in the Green Communities Program are automatically enrolled in the Updated Stretch Code and must follow the requirements in the base code, the 2021 IECC, along with the amendments of the Massachusetts Updated Stretch Code. The Updated Stretch Code provisions are noted in this section.

R405: There is a new optional compliance pathway via Passive House Institute US (PHIUS), or Passive House International (PHI), which requires a home to meet PHIUS CORE 2021, PHIUS ZERO 2021, or PHI. Passive House is a holistic approach to durability, high air quality, occupant comfort, and energy savings.

R406: The other pathway to compliance is a Home Energy Rating System (HERS) Rating, which is a points-based rating system performed by a third-party verifier used to quantify overall energy use, similar to a miles-per-gallon sticker on a car. A HERS 100 is equivalent to a new home constructed in 2006 from the perspective of energy use, and the lower the score the better. The required HERS Index for compliance is HERS 42 if the building is using fossil fuels, or HERS 45 if the building is all electric.

R403.6.1: An Energy Recovery Ventilator (ERV) or Heat Recovery Ventilator (HRV) is required to meet the whole home ventilation requirements of the code. These systems are more effective than traditional exhaust-only ventilation systems (such as a bath fan) because they provide supply air from the outside and also remove stale air from the home, which effectively balances the flow of the system and improves indoor air quality.

R404.4: For single family homes, one parking space is required to be Electric Vehicle (EV) Ready, which means it has to be wired to accommodate future electric vehicle use. For multifamily homes, 20 percent of the parking spots have to be EV Ready. This will ease the transition for new homeowners who want to purchase EVs.

R503.1.5: The HERS Index required for alterations, additions, and change-of-use is lowered to a HERS 52 if the home is using fossil fuels, a HERS 55 if the home is all electric or using solar PV, or a HERS 58 if it is both all electric and using solar PV. This will allow for more efficient existing building upgrades.

¹ Residential IECC2021 MA amendments-UNOFFICIAL: <https://www.mass.gov/doc/residential-iecc2021-ma-amendments-unofficial-posted-12121/download>



Municipal Opt-In Stretch Code

These requirements are for municipalities that want to go above and beyond the stretch code requirements. In addition to following the IECC 2021 and Updated Stretch Code, these municipalities must also follow the provisions outlined in this section.

Each municipality must comply with one of the following sections depending on building energy fuel type.

RC103 (All-Electric): For a building to be considered all electric, it must use air source or ground source heat pumps for space heating, a heat pump or solar thermal system for water heating, and all electric appliances. A HERS 45, PHIUS CORE, or PHI is required for compliance for single family dwellings. Unlike the Updated Stretch Code, however, there is an additional provision for multifamily buildings greater than 12,000 square feet to only allow PHIUS CORE or PHI for compliance, removing the HERS Index Option. This means that multifamily projects must be built to the Passive House Standard.

RC104 and RC105 (Mixed Fuel): This path is for buildings using fossil fuels for space heating, water heating, cooking, or clothes drying. Unlike the Updated Stretch Code, this option requires electric readiness for future electrification of a home, meaning that homes should be wired to accommodate future electric use and plugs must be installed near fossil fuel equipment for future installation of electric equipment. In addition, the Municipal Opt-In Stretch Code contains specific requirements depending on the size of the unit. For dwelling units up to 4,000 sq ft, a HERS 42 or PHIUS CORE or PHI is required, and solar PV must be installed, with an exception for shaded sites. For dwelling units over 4,000 sq ft, a HERS 0 or PHIUS ZERO is required and solar PV or other renewables must be installed. For multifamily units over 12,000 sq ft, PHIUS CORE or PHI is required and renewable generation is optional.

RC102 (Zero Energy Buildings): This is an optional pathway for buildings that are designed to result in annual net zero energy consumption through a combination of highly energy efficient design and onsite renewable energy generation. If using the HERS Rating path, the HERS Index must be 42 or below before factoring in solar, and HERS 0 after solar is installed. If using the Passive House Path, a PHIUS ZERO certification is required without the use of renewable energy credits (RECs) or off-site renewable energy sources.

Conclusion

The Massachusetts Updated Stretch Code and Municipal Opt-In Stretch Code offer solutions that would save money on energy bills, improve indoor air quality, and ease the transition to a clean energy future. The state has used energy codes as one of many tools to reduce carbon emissions and meet its goals set forth in the Global Warming Solutions Act. The state also added provisions dedicated to addressing equity and environmental justice such as strengthened ventilation requirements, which creates a healthier living space for occupants of a home or building. Stretch codes are unique because they go above and beyond what is expected, which demonstrates strong leadership and a commitment to addressing the challenges posed by climate change. Although there is always more that can be done, Massachusetts has taken a great first step in advancing its clean energy and climate goals.



Comparison Chart

		UPDATED STRETCH CODE	MUNICIPAL OPT-IN STRETCH CODE	
RESIDENTIAL LOW-RISE				
R406.5 Maximum Energy Rating Index (HERS Index) ¹	Fossil Fuel	HERS 42	<4000 sf - Mixed Fuel*	HERS 42
	Solar		<4000 sf - All-Electric	HERS 45
	All-Electric	HERS 45	>4000 sf - Mixed Fuel*	HERS 0
	Solar & All-Electric		>4000 sf - All-Electric	HERS 45
R405 - Passive House Building Certification Pathway ²	Passive House	PHIUS CORE, PHIUS ZERO, or PHI	All Building Sizes	PHIUS CORE, PHIUS ZERO, or PHI
R403.6.1 Mechanical Ventilation ²	ERV/HRV for Ventilation		ERV/HRV for Ventilation	
R404.4 - EV Ready Parking Spaces ²	1 EV Ready Space		1 EV Ready Space	
EXISTING BUILDINGS				
R503.1.5 Alterations ¹	Fossil Fuel	HERS 52	Fossil Fuel	HERS 52
	Solar	HERS 55	Solar	HERS 55
	All-Electric		All-Electric	
	Solar & All-Electric	HERS 58	Solar & All-Electric	HERS 58
MULTI-FAMILY				
R406 Maximum Energy Rating Index (HERS Index) ¹	Fossil Fuel	HERS 42	None	
	Solar			
	All-Electric	HERS 45		
	Solar & All-Electric			
R405 - Passive House Building Certification Pathway ²	Passive House	PHIUS CORE, PHIUS ZERO, or PHI	>12,000 sf Mixed Fuel	PHIUS CORE or PHI
			>12,000 sf All Electric	
R403.6.1 Mechanical Ventilation ²	ERV/HRV for Ventilation		ERV/HRV for Ventilation	
R404.4 - EV Ready Parking Spaces ²	20% of Spaces EV Ready		20% of Spaces EV Ready	

1. Impacts buildings permitted on or after July 1, 2024 for Updated Stretch Code

2. Impacts buildings permitted on or after January 1, 2023 for Updated Stretch Code

* Municipal Opt-In Stretch Code requirements only take effect after adoption, with a recommended 6 month waiting period



Ryan Curley <ryan.d.curley@gmail.com>

Fwd: Lawrence Road Project and DOER Municipal Opt-In Stretch Code

David <dmeadfox@gmail.com>

Mon, Jan 30, 2023 at 11:03 AM

To: Ryan Curley <ryan.d.curley@gmail.com>

Cc: Mead-Fox <dmeadfox@gmail.com>

Hi Ryan,

Please see below confirming that the Municipal Opt-in Code is not a problem for the Lawrence Rd project.

Please let me know if you have any questions or would like to discuss the Opt-in code.

David

David Mead-Fox

PO Box 761
35 Pine Point Way
Wellfleet, MA 02667

617-480-6835 (cell)
dmeadfox@gmail.com

Owner/Operator:

Mead-Fox Woodworking
See dmeadfox on Instagram

and,

Nurture Democracy
<https://www.nurturedemocracy.com/>
David.Mead-Fox@nurturedemocracy.com

Begin forwarded message:

From: Jay Coburn <jay@capecdp.org>
Date: January 30, 2023 at 10:28:36 AM EST
To: dmeadfox@gmail.com
Subject: Fwd: Lawrence Road Project and DOER Municipal Opt-In Stretch Code

David:

See below from Alex Bushkoff at Studio G - the project Architects. The development is being designed to the requirements of the stretch code.

Could you please pass this information along to Higgins Steele who also called me about this?

Thanks,

Jay

Jay Coburn
Chief Executive Officer
Community Development Partnership
Capecdp.org | (508) 240-7873 x16 | jay@capecdp.org



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Begin forwarded message:

From: Alex Bushkoff <alex@studiogarchitects.com>
Subject: RE: Lawrence Road Project and DOER Municipal Opt-In Stretch Code
Date: January 30, 2023 at 10:23:26 AM EST
To: Jay Coburn <jay@capecdp.org>, Vitalia Shklovsky <vshklovsky@poah.org>, Gail Sullivan <gails@studiogarchitects.com>

CAUTION: This email originated from outside of your organization. Do not click on links or open attachments unless you recognize the sender's address and trust the content to be safe.

Jay –

I've spoken with Matt Bean at Norian Siani about this previously, and we are designing to the requirements of this code.

Alex Bushkoff
Project Manager
617.524.5558
617.669.6024 C



From: Jay Coburn <jay@capecdp.org>
Sent: Monday, January 30, 2023 10:19 AM
To: Vitalia Shklovsky <vshklovsky@poah.org>; Gail Sullivan <gails@studiogarchitects.com>
Cc: Alex Bushkoff <alexb@studiogarchitects.com>
Subject: Fwd: Lawrence Road Project and DOER Municipal Opt-In Stretch Code

Vita & Gail:

Below is a query
from David Mead-Fox who sits on the Wellfleet Planning Board and Energy & Climate Committee.

They lobbying the town to adopt the new Municipla Opt-in Stretch Code but wanted to make sure that doing so would not cause problems for 95 Lawrence Road.

My understanding is that we would meet that code - correct?

Jay

Begin forwarded message:

From: David Mead-Fox <dmeadfox@gmail.com>
Subject: Lawrence Road Project and DOER Municipal Opt-In Stretch Code
Date: January 30, 2023 at 9:48:59 AM EST
To: Jay Coburn <jay@capecdp.org>
Cc: David Mead-Fox <dmeadfox@gmail.com>

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Hi Jay,

I left you a voicemail this morning but thought I would send you an email as well. I am a member of the Wellfleet Energy and Climate Action Committee. We are working with the Wellfleet Selectboard to have them consider placing the new Municipal Opt-in Stretch Code on the Warrant for our upcoming Town Meeting. From what I have seen of the Lawrence Road project plans, it looks like you will be meeting the requirements of the Opt-in Code but I will appreciate it very much if you can confirm this. We want to be sure that in asking the Town to adopt the Opt-in Stretch Code that we do not create difficulty for the Lawrence Road project. I will be meeting with the Selectboard very soon so I hope you can get back to me as soon as possible.

Thank you,

David

David Mead-Fox

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2023 TECHNICAL GUIDANCE

MASSACHUSETTS
STRETCH ENERGY CODES



A reference and instructional guide for
**Massachusetts Energy Stretch and
Specialized Codes**

About this Guide

This guide is intended to help building officials, designers, builders, and industry professionals become more familiar with the 2023 Stretch and Specialized Codes portions of the Massachusetts Energy Codes.

The guide provides information about major revisions and additions to the Stretch and Specialized Codes in 2023, navigating compliance pathways, and application guidance for successful compliance and realized energy savings.

Massachusetts Department of Energy Resources' Energy Efficiency Division develops, implements, and oversees energy efficiency activities in the Commonwealth in conjunction with other state and federal agencies.

To learn more, visit <https://www.mass.gov/orgs/energy-efficiency-division>

Contact the Department of Energy Resources at stretchcode@mass.gov

DRAFT FOR PUBLIC COMMENT, DECEMBER 2022

Team

This guide was written by a project team composed of individuals from the Department of Energy Resources and the following partners:

The logo for NORESKO, featuring the word "NORESKO" in a bold, sans-serif font with a stylized globe icon to the left.

NORESKO



Karpman Consulting Firm



Steven Winter & Associates

Document Number

20221111

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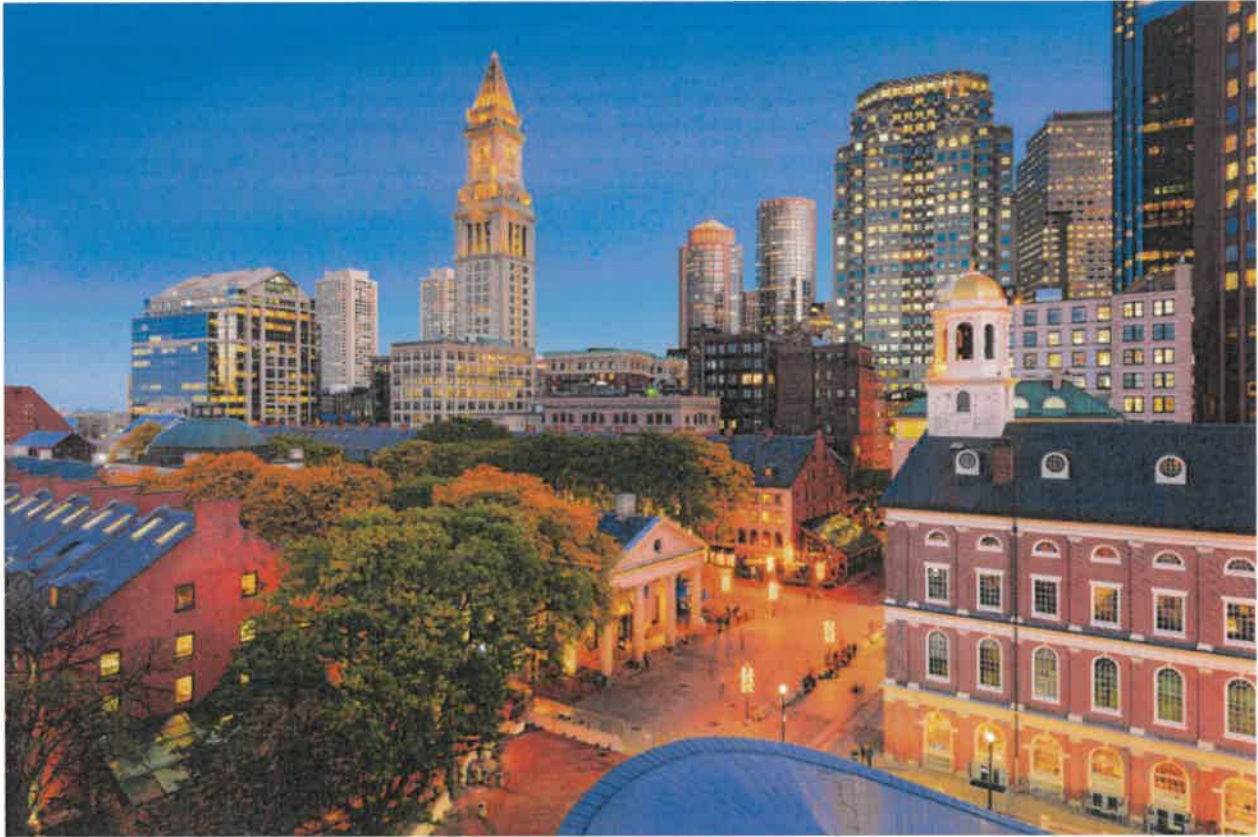
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Introduction

Overview

Model energy codes, such as the International Energy Conservation Code (IECC), are developed through a consensus process with industry experts and stakeholders. Massachusetts' energy codes are based on the 2021 edition of the IECC, a part of the I-Codes from the International Code Council (ICC). Additionally, portions of ASHRAE Standard 90.1-2019 are included by reference.

Stretch energy codes have been in place in Massachusetts for over a decade. Now overseen by the Department of Energy Resources (DOER), 225 CMR 22.00 (Residential) and 225 CMR 23.00 (Commercial) mirror the model code's division of residential and commercial chapters. New this code cycle, adopting jurisdictions have a Specialized Opt-in Code available, providing additional requirements for renewable energy generation and electric readiness as well as some additional energy efficiency.

The official Stretch and Specialized Codes can be found at the [Massachusetts Bookstore](#). These documents show where the IECC code is amended for use in Massachusetts.

Unofficial copies of the front-end amendments for [residential](#) and [commercial](#) portions of the energy code are available for reference in PDF format on the DOER website.

Additional Information

How to Use This Guide

Visual cues have been used throughout this guide to aid navigation the content of this guide. Look for these color-coded icons and boxes with helpful context, additional information and calculation support.



Additional Information



Important Information



Illustrations



FAQ about Example Scenarios



Example Calculations

Additional Information

The 2021 IECC will be amended to create the Massachusetts 10th edition IECC 2021 (Base Energy Code.) The MA Stretch Code and Specialized Opt-in Code further amend the IECC 2021.

[2021 International Energy Conservation Code \(IECC\) BASIC](#)

This resource is read-only; code sections are at the left of the page. Various paid versions of 2021 IECC (with [commentary](#), for example) are available at the [ICC Bookstore](#).

Tenth Edition Base Code (2021 IECC with MA amendments) for commercial and residential are adopted by the Massachusetts Board of Building Regulations and Standards (BBRS), and once finalized can be found at the [Massachusetts Bookstore](#).

Redline for [residential](#) and [commercial](#) portions as currently proposed is available for reference on the BBRS website.

How Overlay Energy Codes Work

Each Municipality in the Commonwealth can adopt one of three levels of building energy code; the MA Base Energy Code, Stretch Code or Specialized Code.

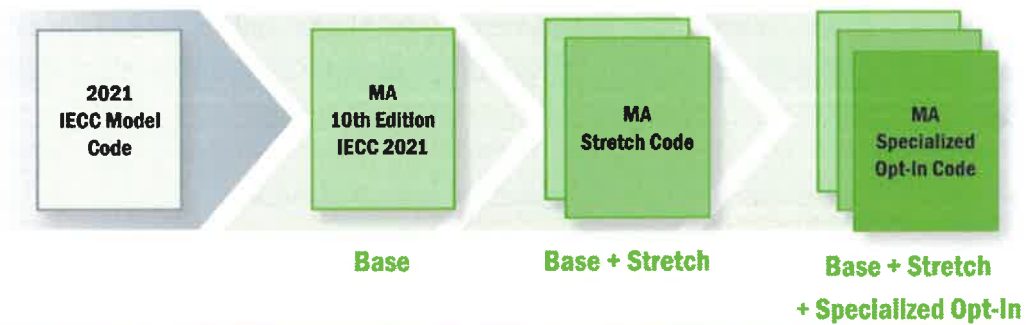
- a) Base Energy Code: By default, a municipality is on the Base energy code, which requires compliance with the 2021 IECC model code combined with the BBRS amendments in the 780

CMR building code regulations to create the Massachusetts Base Energy Code. Municipalities that remain on the Base Energy Code, refer to requirements in this code.

- b) **Stretch Code:** Many municipalities in Massachusetts have previously voted to adopt the Stretch Code as their energy code, since it has been available since 2010. The updated Stretch code makes significant amendments to the IECC 2021 energy code with a focus on cost-effective energy efficiency. Where the Stretch Code is adopted, these requirements must be met in addition to the Base Energy Code.
- c) **Specialized Code:** The newest option is the Specialized Opt-In Code (Specialized Code) which is focused on achieving net zero buildings in alignment with the Commonwealth’s 2050 required emissions reductions. As the Specialized Code is newly available in December 2022 it will require an affirmative vote to adopt at the city or town level. Where adopted the Specialized Code requires additional measures to reduce greenhouse gas emissions and make buildings ready for a clean energy future, in addition to the energy efficiency requirements in the Base and Stretch Codes.

Project teams will need to determine which of the three energy code options is adopted in the municipality where the permit application will be filed to ascertain requirements that apply to the project.

Illustration



Additional Information

Projects must confirm the applicable code because jurisdictions can adopt any of the Massachusetts Energy Code versions (Base, Stretch, Specialized.) The following resource, maintained by the State, can help you determine which code has been adopted by each jurisdiction. It is still recommended that permit applicants confirm locally, with the Authority Having Jurisdiction, which code applies.

[Stretch Code Adoption, by Community | Mass.gov](#)

If you are a City or Town in Massachusetts (Authority Having Jurisdiction) intending to update your energy code, model language for municipal adoption for Stretch and Specialized codes can be found at the Specialized Energy Code Adoption Process [website](#).

What's New for the 2023 Code Cycle – PLACEHOLDER for a short 3-5 page summary (based on the current DOER energy code summary document)

Important Information

Questions about this code can be directed to the [Department of Energy Resources](#).

Compliance Resources

Important Information

Compliance Resources

Many resources available to answer questions and assist with demonstrate compliance.

Department of Energy Resources (DOER)



[MA Energy Code Development website](#) has additional information about code development updates.

Summary: This high-level summary covers major requirements in the Stretch and Specialized Codes. <https://www.mass.gov/doc/commercial-and-other-stretch-energy-code-and-specialized-opt-in-code-language/download>

Checklists

Informational Appendix B includes checklists to track and document compliance.

Mass Save



The Mass Save collaborative is a rate-payer funded partnership among local electric and natural gas utilities and energy efficiency service providers to provide energy expertise and incentives to residents and businesses across Massachusetts.

Energy code questions? Call 1-855-757-9717 or email energycodesma@psdconsulting.com

Training

Building energy code compliance training sessions are available here:

<https://www.masssave.com/learn/partners/energy-code-training-and-events>



Commercial & High-rise Multi-family Stretch & Specialized Code Measures

This chapter applies to all nonresidential occupancies and *Group-R* occupancies not defined as *Residential Buildings* by section R202 in MA 10th edition IECC 2021. That is, all buildings other than detached one- and two-family dwellings, townhouses and Group R-2, R-3, and R-4 buildings three stories or less in height above grade are within the scope of the Commercial chapters.

The guidance in this chapter applies to projects that will permit within an Authority Having Jurisdiction that has adopted the MA Stretch Code and those that have adopted the Specialized Code. As explained earlier in this Guideline, projects subject to the Specialized Code must meet requirements of the Stretch code and additional requirements from [Appendix CC](#). These additional requirements for the Specialized Code only are included in the next chapter.

Additional Information

The State has published resources to help users easily identify code updates and requirements.

Front-end amendments: This “clean” version of the Commercial Stretch and Specialized Codes highlights only the Massachusetts amendments to the 2021 IECC, and so should be read together with the IECC. <https://www.mass.gov/doc/225-cmr-22-ma-commercial-front-end-amend-clean-december-8->

2022/download A redline version is also available that shows changes to the first public comment draft from June 2022.

Summary: This high-level summary covers major requirements in the Stretch and Specialized Codes. <https://www.mass.gov/doc/commercial-and-other-stretch-energy-code-and-specialized-opt-in-code-language/download>

Stretch and Specialized Codes: Stretch Code and Specialized Code (225 CMR 22.00 and 23.00) are final regulations. Residential Stretch Code is effective January 1, 2023, and Commercial Stretch Code is effective July 1, 2023. For both, effective dates apply to ALL projects with permits pulled on or after the effective date. The Specialized Code is available for adoption beginning on final promulgation date of December 23, 2022.

Some of the new requirements in the Stretch and Specialized codes are relatively straightforward and will not be discussed in detail in this Technical Guidance Document. See the table below for a summary of changes that will not be further discussed. This table does not include a comprehensive list of all code updates, refer to the code language to view all updates.

Code Section	Summary of Measure
C103.2	Adds documentation requirements for Solar Ready, EV Ready Spaces, ventilation rate for Relative Performance (see Additional Information for more guidance), and Mixed-Fuel systems’ plans for electrification for the Specialized Code. Clarification of COMcheck submittal documentation.
C202	Adds definitions for All-Electric Building, Automatic Load Management System, Class 3 Exhaust, Class 4 Exhaust, Clean Biomass Heating System, Combustion Equipment, Glazed Wall System, Dedicated Outdoor Air System, Electric Vehicle, Electric Vehicle Ready Parking Space, Enthalpy Recovery Ratio, Exempt Exhaust, Fuel Gas, Fuel Oil, Mixed-Fuel Building, Other Exhaust, Sensible Energy Recovery Ratio, Spandrel Section, Thermal Bridge
C402.2.4.1	Insulation Installation, Delete C402.2.4.1 Exception
C402.2.8	New section listing specifications for fireplaces.
C402.4	Lowers fixed and operable U-factors and makes performance documentation explicit for all fenestration.
C402.6	Approved Calculation Software Tools, Allows MA Stretch COMcheck
C405.2	Lowers existing threshold requiring controls in daylight zones to 100W.
Appendix CB	Solar-Ready Zone – Commercial, included without modification

Simple code measures that don’t require further explanation. Refer to code for specific requirements.

Chapter 3 Construction Documents

C103.2 Information on construction documents

Highlights. Adds new documentation requirements for high ventilation buildings and mixed fuel buildings following Appendix CC.

Compliance. Section C103.2 is required for all compliance paths, including the Specialized Code. High ventilation buildings and mixed fuel buildings now have additional information which needs to be supplied in the construction documents.

Summary.

C103.2 #16: High Ventilation Exception Documentation Requirements

Buildings using the Relative Performance pathway due to average ventilation at full occupancy exceeding 0.5 CFM/ft² as allowed in C401.2.1 #2, must submit the supporting information described below at building permitting including the following as required in C103.2(16):

- i. Mechanical equipment schedules showing all new and/or existing air handling equipment designed to supply any quantity of outdoor air to the space indicating the total design outdoor airflow for each unit.
- ii. An airflow riser diagram encompassing the complete project boundary, including all supply, exhaust, and return air systems serving the spaces.
- iii. Calculations showing the total outdoor air supplied by each unit, the project *conditioned and semiheated floor area*, and the overall flow rate per area in cfm/sf using Equation 1 below

$$\text{Average Ventilation Rate } \left[\frac{\text{CFM}}{\text{ft}^2} \right] = \frac{\sum \text{Design Outdoor Air Flow } [\text{CFM}]}{\text{Conditioned Floor Area } [\text{ft}^2]} \quad \text{Equation 1}$$

PLACEHOLDER FOR C103.2 #17 SUMMARY

SIDEBAR: Walk through a compliance scenario

Example 1. A school projects is at the schematic design development stage and mechanical ventilation is not yet specified. Design team uses the calculations below, based on the ventilation rates and occupancy prescribed in ASHRAE 62.1, to determine whether the project qualifies for the Relative Performance pathway (C401.2.1, Part 3) on account of ventilation. Based on the calculations, the average ventilation rate at full occupancy is 0.38 CFM/SF threshold. Since this is less than 0.5 CFM/SF threshold, project does not qualify for the Relative Performance pathway (C407.2) and must use the Targeted Performance pathway (C407.2).

Occupancy Category	Floor Area	People Outdoor Air Rate	Area Outdoor Air Rate	Default Occupant Density	Ventilation	
Units	SF	CFM/Person	CFM/SF	#/1000 SF	CFM	CFM/SF
Source of Information	From Drawings	From ASHRAE 62.1 Table 6-1			Calculated	
	A	B	C	D	$E=A*C+A*B*D/1000$	$F=E/A$
Classrooms (age 9 plus)	65,000	10	0.12	35	30,550	0.47
Media center	5,000	10	0.12	25	1,850	0.37
Science laboratories	5,000	10	0.18	25	2,150	0.43
Computer lab	7,500	10	0.12	25	2,775	0.37
Corridors	17,500		0.06		1,050	0.06
Total	100,000				38,375	0.38

Example 2 Based on mechanical equipment schedules and air-flow riser diagram included in the submittal, a veterinary office has average ventilation rate at full occupancy over 0.5 CFM/SF. The associated calculations (below) are included in the submittal package. The project may document compliance using the Relative Performance pathway in lieu of Targeted Performance on account of high ventilation rate.

Occupancy Category	Floor Area	Outdoor Air	Ventilation Rate
Units	SF	CFM	CFM/SF
Source of Information	From Construction Documents		Calculated
Animal exam rooms	16,000	10000	0.625
Animal procedure rooms	20,000	11000	0.55
Administrative offices	5,000	700	0.14
Waiting rooms	1,000	700	0.7
Corridors	500	50	0.1
Total	42,500	22,450	0.53

Chapter 4 Commercial Energy Efficiency

Existing buildings projects should begin in [Chapter 5](#) before proceeding to Chapter 4.

C401.2 Application.

Highlights. Compliance with the commercial requirements has been revised to incorporate new compliance pathways, including Prescriptive, Targeted Performance, Relative Performance, and Certified Performance.

Additional Information

New Compliance Pathway Terms (more detail below)

Prescriptive (based on IECC 2021)

Reserved for nonresidential buildings not larger than 20,000ft². A nonresidential space within a mixed-use building also could use this path.

Targeted Performance (TEDI)

Dormitories, fire stations, libraries, offices, schools, police stations, post offices, and town halls over 20,000ft² and having average ventilation at full occupancy of 0.5 cfm/sf or less are required to use Targeted Performance. After 1 July 2024, residential buildings over 12,000-sf, or portions of buildings which have residential use over 12,000-sf, are required to use Targeted Performance.

Relative Performance (based on ASHRAE 90.1 Appendix G)

Buildings not required to use Targeted Performance Compliance are permitted to use Relative Performance.

Certified Performance (Passive House or HERS)

There are two means of Certified Performance:

- **Passive House Compliance.** All buildings or spaces in buildings are permitted to use Passive House Compliance.
- **HERS Compliance.** All Group R buildings and Group R spaces in buildings with multiple dwelling units are permitted to use HERS Compliance.

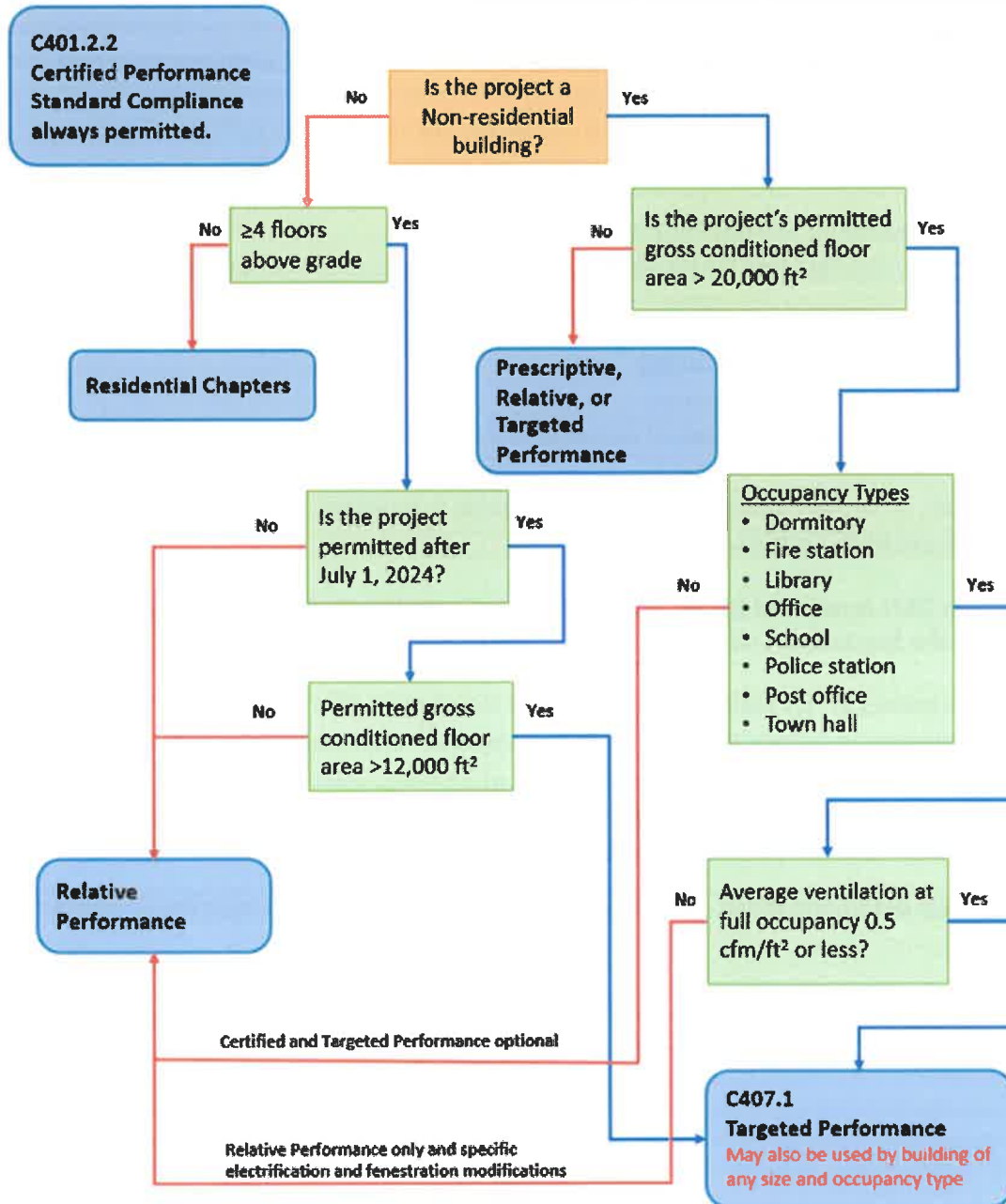
Compliance. Section C401 is required for all compliance paths, including the Specialized Code, except as further modified by the Specialized Code.

Summary. For the purposes of this section, all buildings are *commercial*. The general term “residential” includes *Group R* buildings, as defined by IECC and “nonresidential” is all other construction. For core-and-shell buildings, each tenant fit-out within the building, when constructed for the first time must also show compliance as new construction within the host building. For new mixed-use buildings, each use space must follow the compliance paths and requirements for that respective space, *per* [C401.2.4](#).

The flowchart will help determine which compliance paths are available, in addition to the descriptions below:

C401.2.1

Key Start process Decision End of process



Prescriptive Compliance:

The prescriptive compliance path is reserved for nonresidential buildings not larger than 20,000ft² or portions of space within a mixed-use building less than 20,000-sf as allowed by C402.1.4. Prescriptive compliance requires a thermal envelope certificate *per* C401.3 (unchanged from IECC), the prescriptive requirements in C402 through C406, and maintenance and commissioning *per* C408 (unchanged from IECC).

Targeted Performance Compliance:

Dormitories, fire stations, libraries, offices, schools, police stations, post offices, and town halls, or portions thereof when following C401.2.4, over 20,000ft² and having average ventilation at full occupancy of 0.5 cfm/sf or less are required to use Targeted Performance. Starting 1 July 2024, residential buildings over 12,000-sf, or portions of buildings which have residential use over 12,000-sf, are required to use Targeted Performance, unless complying using Certified Performance *per* C401.2.2.

Buildings having average ventilation at full occupancy of more than 0.5 cfm/sf may use Relative Performance path instead of Targeted Performance path. To qualify for this, requisite documentation showing a completed ventilation system design per C103.2, item 16 is required to be produced at the time of permitting. If the building does not have a completed ventilation design and cannot produce documentation per C103.2 at the time of permitting, even if the project intends to include high ventilation uses in the future, then the building shall show compliance using Targeted Performance.

Other building types of any size are permitted to use Targeted Performance. Residential buildings permitting before 1 July 2024 as also permitted to use Targeted Performance.

This path requires a thermal envelope certificate *per* C401.3 (unchanged from IECC), the prescriptive requirements in C402 through C406, [C407.1](#), and maintenance and commissioning *per* C408 (unchanged from IECC), and sections of ASHRAE Standard 90.1-2019 Appendix G as described in C407.1. Review [C407.1](#) before beginning planning for this compliance path. This path includes compliance with improved Thermal Energy Demand Intensity (TEDI) requirements. Additional guidance regarding TEDI calculations is provided in this Guideline.

Relative Performance Compliance:

Only buildings not otherwise required to use Targeted Performance Compliance may use Relative Performance. This path requires a thermal envelope certificate *per* C401.3 (unchanged from IECC), [C402.1.5](#), C402.2.8, C402.3 through C402.7, C405.2.4, C405.13, C406, [C407.2](#), and maintenance and commissioning *per* C408 (unchanged from IECC), and Standard 90.1-2019 Appendix G, as modified by C407.2. Review [C407.2](#) before beginning planning for this compliance path.

As noted above, there are additional construction documents required by C103.2 when following this path for buildings with completed ventilation designs having an average ventilation rate greater than 0.5 cfm/ft².

Certified Performance Standard Compliance:

Certified Performance, generally, provides deemed-to-comply options, leveraging the professional guidance and quality assurance of national programs. Documentation, solar ready, electric vehicle charging, and commissioning are added to the base certification. There are two means of Certified Performance, as follows:

Passive House Compliance. All buildings or spaces in buildings are permitted to use Passive House Compliance. This path requires a thermal envelope certificate *per* C401.3 (unchanged from IECC), C402.3, C405, [C407.3](#), and maintenance and commissioning *per* C408 (unchanged from IECC).

HERS Compliance. All Group R buildings and Group R spaces in buildings with multiple dwelling units are permitted to use HERS Compliance. This path requires a thermal envelope certificate per C401.3 (unchanged from IECC), C402.3, C405, [C407.4](#), and maintenance and commissioning per C408 (unchanged from IECC).

The table below illustrates the IECC amended sections that apply for each code compliance pathway (besides the prescriptive path where all apply):

Code Requirements		C407.1 Targeted Performance	C407.2 Relative Performance	C407.3 Passive House	C407.4 HERS
C401.3 Thermal envelope certification Requirement to post thermal envelope certificate with the key performance characteristics of the opaque envelope and fenestration and air leakage testing results.		Yes	Yes	Yes	Yes
C401.4.1 Partial Space Heating Electrification		No	Yes	No	No
C401.4.2 Full Space Heating Electrification		Note 1	Note 1	No	No
C402 Building Envelope Requirements	C402.1.5 Component Performance Alternative Maximum area-weighted U-factor of the opaque above-grade walls and the maximum U-factor of the glazed wall systems specified in either Section C402.1.5.1 or C402.1.5.2 depending on the percentage of the exterior wall taken by glazed wall systems; the maximum SHGC of the glazed wall systems	Yes	Yes	No	No
	C402.2.8 Requirement for combustion fireplaces	Yes	Yes	No	No
	C402.3 Rooftop solar readiness	Yes	Yes	Yes	Yes
	C402.4.6 Fenestration Documentation Allowed methods for determining fenestration performance.	Yes	Yes	No	No
	C402.5 Air Leakage – Thermal Envelope Air barrier design and testing requirements; maximum allowed air leakage rates.	Yes	Yes	No	No
	C402.7 Derating and Thermal Bridges Methodology that must be used to account for thermal bridging losses in exterior walls	Yes	Yes	No	No

C403 Building Mechanical Systems	Yes	No except must meet C403.5 (Economizer) and C403.7 (Exhaust Air Energy Recovery)	No	No
C404 Service Water Heating The minimum equipment efficiency and controls; piping insulation.	Yes	No	No	No
C405 Electric Power and Lighting Systems Interior and exterior lighting power and controls; electric metering; transformers; motors; vertical and horizontal transportation systems and equipment; voltage drop; automatic receptacle controls; energy monitoring; provisions for the electric vehicles ready parking spaces.	Yes	Yes	Yes	Yes
C406 Additional Efficiency Requirements Projects must implement efficiency measures to achieves at least 15 credits.	(Note 2)	(Note 2)	No	No
C408 Maintenance Information and System Commissioning Requirements related to systems commissioning, functional testing and maintenance information.	Yes	Yes	Yes	Yes
<p>Note 1: Full heating electrification is required for high <i>glazed wall system</i> buildings (C402.1.5.2) except buildings using Relative Performance Path because average ventilation at full occupancy is greater than 0.5 cfm/sf in which case partial heating electrification is required.</p> <p>Note 2: Some specified systems and equipment that contribute toward compliance with Section C406 may be included in the whole building energy models and thus contribute toward compliance with the performance thresholds of a given compliance path. Others cannot be modeled as specified following the simulation rules of the given compliance option. Error! Reference source not found. shows energy efficiency credits that may contribute toward modeled performance for each performance-based compliance path.</p>				

C401.2.4 Mixed Use Buildings.

Where different building use types within a new building require different Section C401.2 Compliance Pathways, each use type shall **separately** and **individually** show compliance with C401.2.1 or C401.2.2 for that respective use type.

Q & A

Q: A new construction project includes an office use on the first floor (15,000 ft²) and residential multi-family use on floors 2-5 (60,000 ft²). Which compliance options are permitted? (Note: the requirements for multifamily residential change on 1 July 2024.)

A: The office and residential multifamily portions require separate and individual compliance.

Office portion: The total office floor area is less than 20,000 ft², so this portion of the building can follow Prescriptive Compliance. (Note that this portion of the building could also follow: Targeted Performance, Relative Performance, or Passive House.)

Multi-family portion (up through 1 July 2024): The multifamily residential portion can follow any compliance option in Section C401.2.1 except for the Prescriptive Compliance.

Multifamily portion (after 1 July 2024): Either the C401.2.1 Targeted Performance or any of the options in Section C401.2.2 must be used for the multi-family portion.

Alternatively, if the office was >20,000 ft², Prescriptive Compliance no longer would be an option. Assuming the average ventilation rate at full occupancy is under 0.5 cfm/ft², the office would be limited to Targeted Performance or Passive House.

Special Provision for Mixed Use Buildings Subject to Targeted Performance

Note that Section C407.1.1.6 has a special provision for use types subject to Targeted Performance. If there are two use types that are both subject to Targeted Performance (use types subject to Targeted Performance are: dormitory, fire station, library, office, school, police station, post office, town hall, and (after 1 July 2024) residential) and one of the uses is less than 10% of the total area, then the minority area can be incorporated into the majority. (See example)

Q: A new construction project being permitted after 1 July 2024 includes an office occupancy on the first few floors (16,500 ft²) and multi-family residential occupancy on the upper floors (160,000 ft²). Which compliance options are permitted?

A: Both the office and multifamily are uses subject to Targeted Performance. The office portion is less than 10% of the total conditioned space subject to Targeted Performance compliance ($16,500 \div (16,500 + 160,000)$, or 9.3%) and separate Targeted Performance compliance is not required for the office. The office can be incorporated into the larger building and compliance can be simplified. The entire building could show compliance with Targeted Performance Compliance using the use type and appropriate TEDI limits for “Residential Multifamily and Dormitory” in Table C407.1.1.5.

Alternatively, being less than 20,000-sf, the office could follow Prescriptive compliance. If this strategy was used, the office and multifamily residential would have to be separately and individually permitted, with the office using Prescriptive compliance and, separately, the multifamily residential using Targeted compliance.

This 10% accommodation does not extend into use types not subject to Targeted Performance. See example)

Q: A new construction project consists of 15,000-sf of restaurant the first of a building and office occupancy on the upper floors (160,000 ft²). Which compliance options are permitted?

A: The restaurant and office portions require separate and individual compliance. Even though the restaurant is less than 10% of area of the building, the 10% accommodation in Section C407.1.1.6 does not extend to the restaurant because “restaurant” is not a use type subject to Targeted Performance.

Restaurant portion: The restaurant floor area is less than 20,000 ft², so this portion of the building can follow Prescriptive Compliance. (Note that this portion of the building could also follow: Targeted Performance, Relative Performance, or Passive House.)

Office portion: The office portion of the building would follow Targeted Compliance. (Note that this portion of the building could also show compliance with Passive House).

C401.4 Building Electrification.

Highlights. This entire section is new language, requiring different levels of space- and water heating electrification by project type.

Compliance. This section is referenced by multiple compliance paths, including the Specialized Code. The pathway leading into this section affects the required level of electrification.

- High glazed wall system compliance in [C402.1.5.2](#) requires [C401.4.2](#) full space heating electrification (except that [C401.4.1](#) is required if those buildings also have high ventilation).
- Relative performance, C407.2.1, requires partial space heating electrification in highly ventilated buildings in accordance with [C401.4.1](#) (connected to the C402.1.5 exception).
- The All-Electric Pathway of the Specialized code, [CC104.1](#), and the pre-wiring design in Mixed Fuel Buildings, [CC106.1.6.3](#), requires compliance with [C401.4.3](#) full space and water heating electrification.
- This section further references heat pump efficiencies and ventilation elsewhere in the code.

Summary. This section requires buildings to electrify space- and water heating end uses fully or partially within the building. It adds heat pump requirements. The levels of heating electrification are explained in greater detail in the sub-sections.

PLACEHOLDER FOR C401.4 FLOWCHART

The full electrification sections require no fossil fuels used for end uses in their respective scopes: space heating, or space- and water heating. A new defined term, *exhaust source heat pump*, is just that: a heat pump capturing exhaust heat. All design loads are the ASHRAE 99.6% winter condition.

PLACEHOLDER FOR EXHAUST SOURCE HEAT PUMP

C401.4.1 Partial Space Heating Electrification.

Twenty-five percent of heating design load must be met with heat pumps, as described in C401.4.4. During normal operation, controls and schedules use the heat pump before electric resistance or fossil-fuel heating.

C401.4.2 Full Space Heating Electrification

All the heating design load must be met with heat pumps, as described in C401.4.4. No fossil fuel equipment is allowed for either space heating or ventilation air heating.

C401.4.3 Full Space and Water Heating Electrification

All the heating design load must be met with heat pumps, as described in C401.4.4. Water heating must be met with heat pumps, electric resistance, or solar thermal systems. Heat pump water heaters must comply with C404.2, and solar thermal must have a solar fraction of not less than 0.4. No fossil fuel heating equipment is allowed.

C401.4.4 Heat Pump Requirements

Heat pumps must meet minimum efficiencies for ventilation air heating and space heating as specified in C403.3.2. Where multiple heat pumps are used, compliance is based on the combined capacity of all heat pump systems serving the building. For compliance calculations, no individual system capacity shall exceed the design heating load of the space it serves. For compliance calculations, the capacity of *exhaust source heat pumps* must not exceed the capacity at 50% of the design airflow and must exclude the heating capacity provided by energy recovery required in C403.7.4.

C402 Building Envelope Requirements.

Highlights. Insulation R-value compliance no longer is permitted. Except for prescriptive compliance, vertical assemblies must meet an area-weighted U-factor backstop. Fenestration U-factors are lower than the national model code and performance documentation is explicit. Air leakage testing and mitigation is required. COMcheck-Web is approved for C401.2.1(1) "Prescriptive Compliance." Thermal bridging calculation and mitigation is required.

Compliance. Refer to individual subsections.

Summary. This section has multiple, significant revisions.

Prescriptive compliance for insulation components based on R-value tables, [C402.1.3](#), has been removed. Compliance options in [C401.2.1](#) must use the Assembly U-factor, C-factor, and F-factor-based method in [C402.1.4](#) or the Component Performance Alternative in C402.1.5 (to demonstrate minimum assembly performance compliance).

C402.1.3 Insulation Component R-value-based Method.

Highlights. This entire section is deleted and reserved.

Compliance. There is no R-value-based compliance path; no references to this section are valid.

Summary. Removing this section requires compliance with U-factor performance using either C402.1.4 or C402.1.5, and C402.7.



C402.1.4 Assembly U-factor, C-factor or F-factor-based Method.

Highlights. There are no changes to this section in the Stretch and Specialized Code, but it is a requirement in additional compliance pathways.

Compliance. Where a project uses [C401.2.1](#) “Prescriptive and Performance Compliance” (not Passive House or HERS), C402.1.4 sets the minimum opaque envelope thermal performance values. U-factors must be derated *per* [C402.7](#) before using C402.1.4.

Summary. See [C402](#) for an overview of new requirements affecting this section. There is no R-value compliance method in the Stretch or Specialized Codes. All projects not using [C407.3](#) “Passive House” or [C407.4](#) “HERS Index (HERS) for multi-family buildings” must derate above grade wall U-factors in accordance with [C402.7](#) before complying with this section. Examples and additional background are in the Envelope Performance and Thermal Bridge Derating Appendix.

C402.1.5 Component Performance Alternative

Highlights. Splits compliance for low glazed and high glazed wall systems. This section provides an alternative to C402.1.4 to allow more flexible glazing limits. No longer allows tradeoffs between horizontal envelope (roof and floors) and vertical envelope (walls and windows). Only “intra-vertical” tradeoffs are allowed.

Compliance. Where a project uses [C401.2.1](#) “Prescriptive and Performance Compliance” (not Certified Performance Standard through Passive House or HERS) and does not comply with Sections [C402.1.4](#) and C402.4, C402.1.5 is required. U-factors must be derated *per* [C402.7](#) before using C402.1.5.

Summary. This section performs the same function for multiple compliance options. First, it provides U-factor area-weighting for Prescriptive Compliance vertical assemblies. Second, it prepares wall and fenestration inputs for Appendix G modeling used in performance compliance. It allows performance trade-offs among vertical building envelope components (walls and vertical fenestration), but also imposes performance requirements on the vision portion of *glazed wall systems*. See examples in [C402.1.4](#) and [C402.7](#) below; those sections inform C402.1.5.

As noted in Section C402.7’s summary, BC Hydro / BC Housing Research Center provides a Building Envelope Thermal Bridging Guide free to [download](#) or use with and [online](#) database and calculator.

PLACEHOLDER FOR C402.1.5 FLOWCHART

The flowchart shows the ways C402.1.5 fits within the larger compliance paths of [C401.2.1](#). Certified Performance (C401.2.2) does not use this section. There are two paths in C401.2.1 circumventing C402.1.5, Prescriptive and Targeted Compliance where all building thermal envelope components comply with [C402.1.4](#), C402.4, and [C402.5](#). Note that all vertical envelope assemblies must use this section to prepare values for 90.1 Appendix G compliance (Targeted and Relative Performance).

The simplest way to think about this section is that all thermal performance derates are applied, then an area-weighting of derated U-factors demonstrates whole-building compliance.

C402.1.5.1 Low Glazed Wall System Buildings.

A building is “low glazed” when the *glazed wall system* area is not greater than 50% of the above-grade wall area. If a building has no *glazed wall system* area—all punched windows, for example—it would comply using this subsection.

Where the *glazed wall system* area is not greater than 50% of the above-grade wall area, the maximum allowed area-weighted U-factor is U-0.1285. The maximum allowed vision glass assembly U-factor for vision glass within a *glazed wall system* is U-0.25.

Importantly, the above-grade walls included must be part of the building thermal envelope. Unconditioned garages, loading docks, and storage should be excluded from the percentage calculation.

C402.1.5.2 High Glazed Wall System Buildings.



5 Broadgate Building, [Wikimedia](#)/Creative Commons

Where the *glazed wall system* area exceeds 50% of the above-grade wall area, the maximum allowed area-weighted U-factor is U-0.1600. The maximum allowed vision glass assembly U-factor for vision glass within a *glazed wall system* is U-0.25.

Calculations for high glazed buildings are fundamentally the same as those for low glazed buildings; see [C402.1.5.1](#).

C402.3 Rooftop Solar Readiness.

Highlights. Rooftop solar readiness using IECC 2021 Appendix CB is required for new buildings 5 stories or less above grade.

Compliance. The existing Solar-ready appendix is unmodified from the IECC2021, but as with the prior stretch code is required for commercial buildings of 5 stories or less above grade plane. Buildings 6 stories or higher above grade do not need to comply.

Summary. [Appendix CB](#) is unmodified and mandatory in the Stretch Code. Note that the solar ready zone must be identified on construction documents *per* C103.2(14).

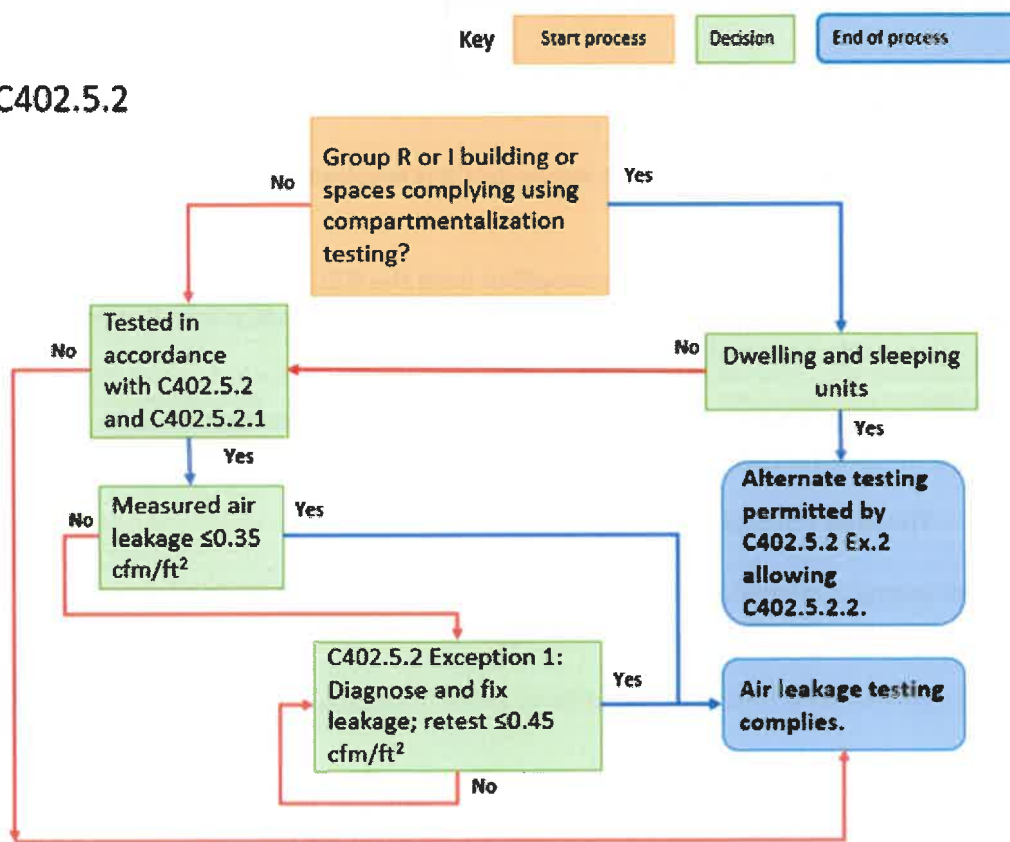
C402.5 Air Leakage – Thermal Envelope.

Highlights. Air leakage testing is mandatory. Compared to the IECC, this entire section has been rearranged with changes to requirements as noted.

Compliance. All Prescriptive and Performance Compliance paths in [C401.2.1](#) require compliance with this section.

Summary. The requirements have been rearranged to align more with the design, construction, and inspection process. All testing now flows through C402.5.2, with two testing options: whole-building and dwelling units (Exception #2, which points to C402.5.2.2), or a combination of the two.

C402.5.2



Air barrier testing and documentation is required for all buildings. The maximum air leakage allowance has been reduced from 0.40 cfm/ft²@75Pa to 0.35CFM/ft²@75Pa. Sealing of electrical and communication boxes has been added *per* C402.5.1.2.2. All portions of the air barrier must be verified *per* C402.5.2.3. Where present, fenestration, vestibules, *etc.*, have requirements in C402.5.3 through C402.5.10.

Two major exceptions to whole building testing, now C402.5.2 “Air leakage testing,” are retained, but modified. Exception 1 allows whole building tested leakage to increase to 0.45CFM/ft²@75Pa after diagnostic testing and remediation has been performed. Exception 2 previously was a separate section allowing compartmentalization testing of Group R and I buildings or spaces within buildings. For stairs, corridors, and spaces other than dwelling- and sleeping units verification requirements can be found in C402.5.2.3.

C402.7 Derating and Thermal Bridges.

Highlights. This entire section is new language. Thermal bridge derating is added for exterior insulation layers, where the IECC and ASHRAE 90.1 currently only derate the interior insulation layers. This section also includes provisions to address the thermal performance of the opaque portions of *glazed wall systems*.

Compliance. Section C402.7 is required for all paths in [C401.2.1](#) “Prescriptive and Performance Compliance.” The results from these calculations adjust the performance used for compliance in

[C402.1.4](#) “Assembly U-factor, C-factor, or F-factor-based Method” and in [C402.1.5](#) “Component Performance Alternative.” Note that [C402.1.3](#) no longer exists for R-value compliance.

Neither the Stretch nor Specialized Code modifies C103.2.2, which requires that the building thermal envelope be represented on the construction drawings.

Where used *per* C402.6 “Approved Calculation Software Tools,” Massachusetts Stretch-specific COMcheck is permitted to demonstrate compliance with this section, because the software automatically accounts for thermal bridging.

Summary. Thermal bridge accounting is added to the Stretch Code to represent the insulation performance of an exterior wall more accurately in the building envelope. “Prescriptive”, “reference”, and “modeled” accounting approaches are available.

When following “reference” accounting approach, the code requires using the “Building Envelope Thermal Bridging Guide”, version 1.6 or higher, published by BC Hydro Power Smart. BC Hydro / BC Housing Research Center has made available a Building Envelope Thermal Bridging Guide free to download ([PDF](#)) or use with an [online](#) database and calculator. A [help page](#) provides general background (Modules 1, 2, and 4) and specific guidance for using the database and calculator (Module 3). This background provides an understanding of thermal bridging and is suggested reading for professionals new to thermal bridging.

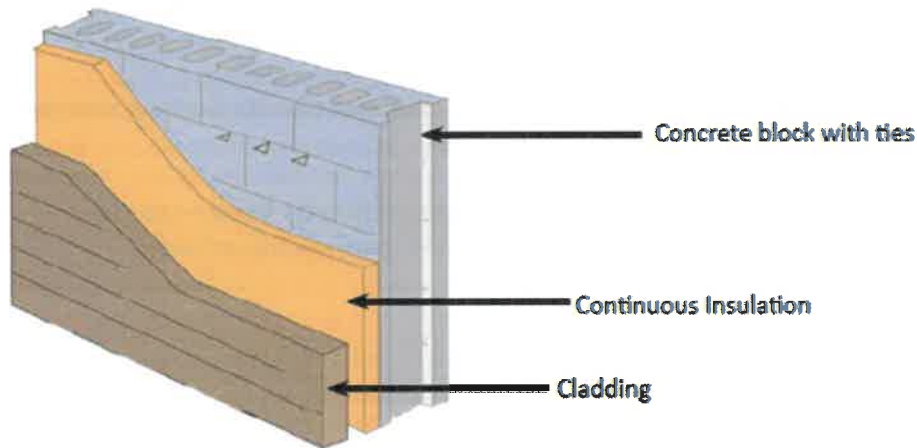
There are many ways to account for thermal bridges. The code allows the use of approved prescriptive calculations, pre-solved reference values, and modeling to demonstrate compliance. Compliance choices and details must be included in construction documents. Highlighting component manufacturers, models, performances, and method of installation is encouraged. Examples and additional background are in the Envelope Performance and Thermal Bridge Derating Appendix.

C402.7.1 General.

The calculated effects of thermal bridges in walls are required for both [C402.7.2](#) and [C402.7.3](#). Where spandrel sections are present in glazed wall systems, performance is calculated in [C402.7.4](#).

C402.7.2 Continuous Insulation for Vertical Walls.

Adding uninterrupted, continuous insulation (c.i.) is one approach to reduce the heat flow through structural members. However, continuous insulation and exterior cladding requires its own connections to the structural portion of the wall which create thermal bridges through the insulation layer. These connections must be considered when estimating installed thermal performance. This section describes prescriptive calculations (C402.7.2.1), pre-solved references (C402.7.2.2) and modeled (C402.7.2.3) derating compliance options. A building may require only one option or could use all of them for a more complicated design. Any combination of prescriptive, pre-solved, and modeled can be used for different components.



C402.7.2.1 Prescriptive Derating.

Prescriptive derating calculations are detailed in this section, generally of the form in Equation C402.7.2.1:

$$R_{\text{derated}} = R_0 \times \text{Derating Factor}$$

The derated R-value (R_{derated}) is the product of the fully rated R-value (R_0) and the prescriptive Derating Factor, as determined by the subsections. Low-conductivity (≤ 3 Btu-in/hr-ft²-F) plastic or fiberglass fasteners used in cladding systems have a unique derating factor in C402.7.2.1.3. Where present, shelf angles further derate brick veneer systems in C402.7.2.3.

C402.7.2.2 Reference Derating.

Derating can be based on the pre-solved derating information contained in the “Building Envelope Thermal Bridging Guide”, version 1.6 or higher, published by BC Hydro Power Smart

C402.7.2.3 Modeled Derating.

PLACEHOLDER

C402.7.3 Linear Thermal Bridges.

Inter- and intra-assembly linear thermal bridges can be significant. Derated continuous insulation (from C402.7.2) shall be further derated per C402.7.3 using Equation C402.7.3.

$$U_{\text{derated}} = \frac{\text{PSI} * \text{Length}}{A_{\text{total}}} + U_o$$

Simply, it converts a *psi* value into a U-factor by considering both the magnitude of heat transferred by the element and the relative area of that element in the assembly. Typical linear thermal bridge *psi* values are described in Table C402.7.3.1. Pre-solved and modelled *psi* values are permitted.

C402.7.3.2 Reference PSI Values.

PSI values can be based on the pre-solved PSI values contained in the “Building Envelope Thermal Bridging Guide”, version 1.6 or higher, published by BC Hydro Power Smart

C402.7.3.3 Modeled PSI Values.

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C402.7.4 Thermal Resistance of Spandrel Sections.



Mass wall (gray, left), spandrel (light blue, between floors), and vision glazing (darker blue).

Spandrels sections are the opaque portions of *glazed wall systems*. Spandrel default R-values are found in Table C402.7.4.1. All spandrel in *glazed wall systems* must have a minimum of R-12 insulation when using this table. Thermally broken spandrel has nonmetal spacers or mitigating gaps between metal components.

C402.7.4.2 Reference R-values.

The thermal performance of the opaque portion of glazed wall systems can be based on the pre-solved performance information contained in the “Building Envelope Thermal Bridging Guide”, version 1.6 or higher, published by BC Hydro Power Smart

Where present in the building, pre-solved values derived from BC Hydro’s Building Envelope Thermal Bridging Guide can be used for compliance.

C402.7.4.3 Modeled R-values.

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C403.5 Economizers.

Highlights. Adds a requirement that when *dedicated outside air systems* are installed, they have water economizers, if the chilled water system is required to have a water economizer per C403.5.1 and does not fall under any of the Exceptions listed in section C403.5.

Additional Information

Water economizers are defined by IECC 2021 as a system where the supply air of a cooling system is cooled indirectly with water that is itself cooled by heat or mass transfer to the environment without the use of mechanical cooling.

Compliance. Section C403.5 is required for all paths in C401.2.1 “Prescriptive and Performance Compliance.” Tables C403.5(1) and (2) have been reduced and deleted, respectively, to highlight only requirements for climate zone 5A.

Summary. The updated Stretch Code intent is to clarify that the chilled water economizer requirements apply to buildings with DOAS systems. In addition, a new definition was added for DOAS:

DEDICATED OUTSIDE AIR SYSTEM (DOAS). A ventilation system that supplies 100 percent outdoor air primarily for the purpose of ventilation and that is a separate system from the zone space conditioning system.

Further Information. The Stretch Code indicates that the chilled water economizer requirements apply to buildings with dedicated outside air systems (DOAS). While DOAS systems provide 100% outside air to serve ventilation needs, they can benefit from the use of a water economizer, when the building has a chilled water system with capacity equal to or greater than the values listed in table C403.5(1) and when the system does not fall under the Exceptions listed in section C403.5. In this case, the water economizer shall be used to provide free cooling for the DOAS unit. This will limit the amount of time that compressors serving the DOAS unit need to come on for cooling or for dehumidification of outside air.

DOAS systems do not require air economizers, as they should be sized to only provide ventilation and not provide the primary space cooling.

C403.7.4 Energy Recovery Systems.

Highlights. Expands when energy recovery systems are mandated by eliminating many exceptions and reducing minimum size thresholds. Mandates that outdoor air must be delivered directly to each dwelling unit. Adds significant specificity to energy recovery systems in *Group R* occupancies, and especially in “All Other” spaces.

Compliance. Section C403.7 is required for all paths in C401.2.1 “Prescriptive and Performance Compliance.”

Summary. Ventilation energy recovery requirements are strengthened in the updated Stretch Code. Sensible or enthalpy energy recovery is required, depending on the occupancy and exhaust class.

Requirements include both sensible energy recovery and enthalpy energy recovery. The sensible energy recovery ratio refers only to transfer of sensible heat. The enthalpy recovery ratio refers to the transfer of both heat and moisture from the exhaust air stream to the supply air stream. Enthalpy recovery is sometimes referred to as total energy recovery, because it transfers both the sensible and latent heat between the two air streams.

Sensible energy recovery ratio and enthalpy recovery ratio are defined in Chapter 2 Definitions. It is important to note that the definitions specify the ratio of change required between the entering supply airflow and the leaving supply airflow, compared to the difference between the entering supply airflow and the entering exhaust airflow. This means that it is important to bring as much of the exhaust air back to the energy recovery device as possible, to help achieve compliance. The enthalpy recovery ratio also must not take credit for any air leakage from exhaust to supply airstreams.

C403.7.4.1 Non-Transient Dwelling Units

Non-transient dwelling units typically use energy recovery ventilators to provide ventilation directly to each dwelling unit. Another configuration is to have a central DOAS unit that serves several dwelling units on each building floor. Energy recovery for dwelling units with a design airflow greater than 300 cfm must have a minimum enthalpy recovery effectiveness in cooling conditions of 50%, and a minimum enthalpy recovery effectiveness of heating of 60%. If some of the units have lower ERV effectiveness, the building can still comply by showing that the airflow-weighted average effectiveness meets the Stretch Code requirements. Smaller ERV units with a design airflow of 300 cfm or less, typical for apartments, must have a sensible recovery effectiveness (SRE) of at least 65% at an outdoor design condition of 32F.

Mixed-use buildings often contain both residential dwelling units and office, retail, or other commercial spaces. The requirements of C403.7.4.1 apply only to the floor area in the dwelling units. Common areas and commercial spaces are subject to the requirements of C403.7.4.2. Compliance is determined by comparing the airflow-weighted sensible and enthalpy effectiveness with the minimum requirements of the Stretch Code. An example of energy recovery in a mixed-use building is shown below.

C403.7.4.2 Spaces Other Than Non-Transient Dwelling Spaces.

The Massachusetts Energy Code includes requirements for energy recovery, for systems with a minimum design ventilation flow rate. The Stretch Code reduces the airflow threshold above which energy recovery is required in systems serving commercial buildings. For systems operating 8,000 or more hours annually (nearly continuously), energy recovery is always required. For systems operating less than 8,000 hours annually, energy recovery is always required for systems designed to supply $\geq 40\%$ outdoor air and is required for systems with lower outdoor air percentages when the system exceeds the specified airflow thresholds per table C403.7.4.2(1).

The required recovery ratio varies based on the type of air class in the spaces or being exhausted from the spaces served by the system. The air class designates the contamination level of the air, as defined by ASHRAE 62.1-2019. Class 1 air, found in many commercial spaces such as office and classroom spaces, can be recirculated to any other space type. Class 2 air, considered moderately contaminated

and possibly with odors, is found in daycare areas, dining facilities, fitness centers and certain laboratory spaces and is restricted in its circulation. Class 3 or 4 air contain contaminants that require the air to be exhausted without recirculation to other spaces or to any space, respectively. Class 4 air includes laboratory fume hood exhaust. In addition, there are certain exhaust types that are exempt from heat recovery, as defined in the Exceptions to C403.7.4.2.

The recovery ratio requirements treat systems that provide makeup for Class 3 and Class 4 air differently from all other systems. In cases where Class 3 or 4 air and other exhaust classes are combined into a single exhaust, the entire exhaust flow is typically classified as Class 3 or 4 air and therefore the associated make up air systems are regulated by section C403.7.4 as make up air systems for Class 3 or 4 air.

Systems that provide makeup for Class 3 or 4 exhaust require a sensible recovery ratio of at least 50% at heating design conditions. All other make up air systems require a minimum enthalpy recovery ratio of 70% at heating and cooling design conditions.

The requirement can be satisfied either for each fan system individually or based on a weighted average of the ventilation air flow for all applicable fan systems in the entire building. The weighted average recovery ratio is the average recovery ratio that is weighted by the outside air flow rate to each system, as defined by equations C403.7.4.2(1) and C403.7.4.2(2). Recovery ratios for recovery devices are provided in manufacturer's system specifications. The recovery ratio used in compliance calculations is the value at the design airflow rate.

For mixed-use buildings that contain both dwelling units and commercial spaces, the dwelling units are subject to the recovery requirements of Equation 403.7.5.1-1, and the commercial spaces are subject to the requirements of Equation 403.7.5.2-1 and Equation 403.7.5.2-1.

Example Calculation 1

A midrise apartment building has fifty dwelling units. Forty of these units have energy recovery ventilators with an enthalpy effectiveness of 78% at design heating conditions. These units each have a design airflow of 200 cfm through the energy recovery ventilator. Ten of the junior apartments have an ERV with an enthalpy recovery effectiveness of 70% at design heating conditions. All fifty of the energy recovery ventilators meet the required 50% enthalpy effectiveness at design cooling conditions. These smaller units each has a design airflow of 100 cfm through the energy recovery ventilator. Does this building meet the energy recovery requirements of the Stretch code? The airflow-weighted average enthalpy effectiveness can be determined by:

$$\text{ENTH_EFF}_{\text{prop}} = ((200 \times 40 \times 0.78 + (100 \times 10 \times 0.70) / (200 \times 40 + 100 \times 10)) \\ = 6,940 / 9,000 = 0.771 \text{ (or 77.1\%)}$$

Since the weighted average enthalpy effectiveness exceeds the Stretch code requirement of 0.75, the building complies.

Example Calculation 2

An office building has three 100% outdoor air HVAC units with enthalpy recovery wheels. The first has a supply airflow of 1,000 cfm with an enthalpy recovery ratio of 60%. The second has a ventilation airflow

of 2,000 cfm and an enthalpy recovery ratio of 80%. What is the required enthalpy recovery ratio of a third unit, if it has a design ventilation airflow of 2,000 cfm?

Answer

Compliance with the Stretch Code is verified by calculating the weighted-average enthalpy recovery ratio of the three HVAC units.

$$\text{ENTHALPY.RATIO}_{\text{PROPOSED}} = (1,000 \text{ cfm} \times 0.60 + 2,000 \text{ cfm} \times 0.80 + 2,000 \text{ cfm} \times \text{ENTHALPY.RATIO}_3) / (5,000 \text{ cfm})$$

Since the required enthalpy recovery ratio of all three systems in both heating and cooling modes is 75% or 0.75, we can set the proposed enthalpy recovery ratio to 0.75, and solve for the one unknown, ENTHALPY.RATIO₃.

$$0.75 = (1,000 \text{ cfm} \times 0.60 + 2,000 \text{ cfm} \times 0.80 + 2,000 \text{ cfm} \times \text{ENTHALPY.RATIO}_3) / 5,000 \text{ cfm}$$

$$\text{ENTHALPY.RATIO}_3 = (0.75 \times 5,000 - 1,000 \text{ cfm} \times 0.60 + 2,000 \text{ cfm} \times 0.80) / 2,000 \text{ cfm} = 0.775$$

Therefore, the enthalpy recovery ratio of the third HVAC unit must be at least 0.775, or 77.5%, for the building to comply.

Example Calculation 3

A school building has four identical HVAC supply units, each with a ventilation airflow of 1,000 cfm and a general exhaust airflow of 500 cfm. The school also contains a kitchen exhaust system with an exhaust rate of 2,000 cfm. The makeup air for the kitchen exhaust is provided by the four HVAC supply units. The winter design heating condition is 10F dry-bulb temperature, with a heating setpoint of 70F. The HVAC units have an enthalpy recovery ratio of 35%, and the commercial kitchen hood exhaust system has no heat recovery. Does the project meet the recovery requirements of the Stretch code?

Answer

The commercial kitchen hood exhaust is exempt. Therefore, the ratio of the makeup air volume not exhausted by the kitchen hoods, divided by the total makeup air volume is used to adjust the required enthalpy recovery ratio.

In addition, since the four HVAC supply units are identical, the proposed enthalpy recovery ratio can be calculated for a single HVAC supply unit and used to demonstrate compliance for all four HVAC supply units.

$$\text{ENTHALPY.RATIO}_{\text{REQUIRED}} = 75\% \times (2,000 \text{ CFM} / 4,000 \text{ CFM}) = 37.5\%$$

$$\text{ENTHALPY.RATIO}_{\text{PROPOSED}} = 35\%$$

$$\text{ENTHALPY REATIO}_{\text{REQUIRED}} (37.5\%) > \text{ENTHALPY RATIO PROPOSED} (35\%)$$

Therefore, the enthalpy recovery ratio requirement is not met, and the building does not comply. The enthalpy recovery ratio must be increased to at least 37.5% to achieve compliance.

Example Calculation 4

A laboratory building that includes both laboratories and non-laboratory spaces throughout the building has a single combined makeup air system and a single combined exhaust air system. A glycol run-around system recovers sensible energy between the exhaust and supply. The laboratories include fume hood exhaust that will be connected to the combined exhaust system serving the building.

The winter ambient design dry bulb condition is 0°F and the exhaust air dry bulb temperature entering the exhaust heat recovery coil is 75°F. Assuming that the exhaust heat recovery meets the sensible energy recovery ratio requirements, what would be the expected supply air temperature leaving the exhaust heat recovery device?

Answer

The expected supply air temperature leaving the heat recovery coil would be 50% of the difference between the outdoor air dry bulb temperature and the heat recovery coil entering exhaust air dry-bulb temperature.

$$\text{SENSIBLE.RATIO}_{\text{REQUIRED}} = 50\%$$

$$\text{Expected supply air temperature leaving heat recovery coil} = 50\% \times (75^{\circ}\text{F} - 0^{\circ}\text{F}) = 37.5^{\circ}\text{F}$$

Therefore, expected supply air temperature leaving the heat recovery coil would be 37.5°F.

C405.13 Electric Vehicle Ready Parking Spaces (“EV Ready Spaces”).

Highlights. This entire section has been revised, both in Stretch Code and in the proposed 10th edition Base Energy Code.

Compliance. Section C405.13 is required for all paths in C401.2 “Application,” including Certified Performance using Passive House or HERS.

Summary. The Stretch Code raises the minimum number of spaces requiring EV wiring to 20% in Group R and B occupancies (as defined in the Building Code [Chapter 3](#) under *Group R* and *Group B*), with 10% for all other occupancies. Extensive documentation is required for compliance with Section C405.13.2.

Two definitions from section C202 are relevant when determining the requirements. The first is the definition for Electric Vehicle Supply Equipment (EVSE), which describes the scope of what is included in EVSE to transfer energy between the building and the Electric Vehicle. The second is a definition for Electric Vehicle Ready Parking Space which clarifies that the parking space must include wiring and electrical service sufficient to provide AC Level II or equivalent EV charging. This section also requires a dedicated branch circuit in the panel or subpanel labeled as “EV Ready”, as well as requirements for the location and type of termination point at the parking space. The MA electrical code includes requirements for conductors and outlets within the system.

One of the design issues related to providing EV charging is appropriately sizing the electrical service. EV charging can be met with either dedicated electric branch circuits or with an automatic load management service (ALMS) that allows multiple spaces to be served by a higher amperage circuit, thus improving overall charging capacity at a lower installed cost.

C405.13 describes the installed infrastructure required for electric vehicle ready parking spaces (EV Ready Spaces), including minimum power capacity and locations of terminations. Parking spaces serving a storage, medium- or heavy-duty vehicle, or repair role are excluded. As well, tradeoffs between 40-amp Level II and 20-amp Level I spaces are permitted to add flexibility for a building’s expected parking schedule. The use of DC fast chargers is also permitted as an alternative to Level II chargers.

C405.13.1 Minimum Charging Performance Requirements.

An automatic load management system (ALMS) is permitted to manage charging across multiple EV Ready or EV Service Equipment-Installed (EVSE-Installed) parking spaces. Table C405.13.1 describes the number of parking spaces permitted on a branch circuit, depending on the fraction of total spaces that are EV Ready.

Example calculations are provided, determining the *EV Ready* spaces for a sample parking lot.

Calculation

Example: 16 spaces
Minimum 20% EV Ready Spaces Required
 $16 \times .2 = 3.2$
Therefore 4 spaces must be EV Ready

EV Ready
EV space that has circuit installations and panel capacity, raceway with wiring, receptacle, and circuit overprotection devices.

EV Installed
EVSE fully installed from the electrical panel to the EV space.

C405.13.2 Identification.

The locations of EV Ready Spaces are required in construction documents *per* C103.2(15). Additionally, construction documents shall include branch circuit terminations, future electric vehicle service details, and calculations showing that all infrastructure can support the design load for EV charging.

C406.1 Additional Energy Efficiency Credit Requirements.

Highlights. Total credits to be achieved have been increased relative to the IECC2021 from 10 to 15 in new buildings and from 5 to 10 for tenant spaces. Some of the credits have been replaced and others have been removed.

Compliance. Section C406.1 is required for the Prescriptive, Targeted Performance, and Relative Performance compliance paths in Section [C401.2.1](#) “Prescriptive and Performance Compliance.”

Certified Performance Compliance (Section C401.2.2), *i.e.*, Passive House and HERS, are not required to meet the additional efficiency requirements (C406). When the Relative Performance path is used (C401.2.1(3)), the baseline model need not include credits from C406 to meet the requirements of the section; the project, however, must demonstrate compliance with the additional efficiency requirements (C406) and energy reduction from achieved credits may be counted toward compliance.

Summary. New buildings are required to achieve a total of 15 credits from the available measure options. Where there is more than one occupancy use group in the building, achieved credits from each use group must be weighted by the floor area of that group to calculate a weighted average building credit total.

Tenant spaces are required to achieve a total of 10 credits. Tenant spaces meeting existing building requirements of Section C501 are exempt from C406. When the building complies with energy measures that are applicable to the entire building—for example, reduced air infiltration—tenant spaces are deemed to comply with Section C406. This group of building measures includes provision of a dedicated on-site renewable energy (C406.5), enhanced envelope performance (C406.8), reduced air infiltration (C406.9), and Type IV heavy timber construction (C406.12). When using measures other than the three listed above, tenant spaces must choose from Section C406.2, C406.3, C406.4, C406.6, C406.7 or C406.10.

Credits related to fossil fuels and small improvements (Section C406.7.3 “Efficient fossil fuel water heater” and Section C406.2.1 “5% heating efficiency improvement”) have been removed. Section C406.2.3 “10% heating efficiency improvement” option has been replaced with a renewable space heating requirement that specifies cold-climate air-source heat pumps or ground-source heat pumps. The cold-climate heat pump must have a rated coefficient of performance (COP) of at least 1.75 at 5 °F.

To achieve the heavy timber construction credit not less than 4 stories above grade or above a podium must be constructed of [Type IV](#) heavy timber. Such timber has characteristics that comply with Table 601 “Fire-resistance rating requirements for building elements (hours)” of the MA Building Code.

A new credit for reduced air leakage is available for buildings demonstrating tested leakage not greater than 0.20 cfm/ft² at 75 Pa, with the calculated surface area being the sum of the above- and below-grade thermal envelope (*i.e.*, the surfaces enclosing conditioned spaces within the building). This credit does not permit the use of the exceptions in C402.5.2.

Table of final sections with titles and credits for user reference (15 credits for new construction, 10 credits for tenant spaces).

Climate Zone 5A	Occupancy				
	B	R, I	E	M	Other
Section					
C406.2.2: 5% cooling efficiency improvement	2	1	1	1	1
C406.2.3: Renewable space heating	15	15	15	15	15
C406.2.4: 10% cooling efficiency improvement	4	1	2	2	2

C406.3: Reduced lighting power	7	2	8	12	7
C406.4: Enhanced digital lighting controls	2	NA	2	3	2
C406.5: On-site renewable energy	9	7	6	7	7
C406.6: Dedicated outdoor air system	5	8	NA	2	5
C406.7.2: Recovered or renewable water heating	NA	14	1	NA	14
C406.7.4: Heat pump water heater	NA	5	1	NA	5
C406.8: Enhanced envelope performance	10	4	2	4	5
C406.9: Reduced air infiltration	11	9	1	3	6
C406.10: Energy monitoring	2	1	2	3	2
C406.11: Fault detection and diagnostics system	1	1	1	1	1
C406.12 Heavy timber construction	8	8	8	8	8

Note: Confirm occupancy in the Building Code [Chapter 3](#).

C407 Total Building Performance Certification Methods.

Highlights. This entire section has been replaced.

Compliance. Section C407 is required for all paths in C401.2 “Application,” except C401.2.1(1) “Prescriptive Compliance.”

Overview.

The Stretch code includes four performance-based compliance options: the Targeted Performance (Section C407.1), the Relative Performance (C407.2), Passive House (C407.3) and HERS (C407.4). Each path has different modeling rules, methodology for establishing pass/fail compliance outcomes based on modeling results, submittal requirements, minimum modeler qualification requirements, and the approved energy modeling tools. Table 1 provides side-by-side comparison of the performance-based pathways.

MA Stretch Code Performance-based Compliance Options Comparison

	Targeted Performance (C407.1)	Relative Performance (C407.2)	Passivehouse (C407.3)	HERS (C407.4)
Modeling Rules	Targeted Performance Simulation	ASHRAE 90.1 2019 Appendix	Phius CORE 2021, ZERO 2021 or PHI	RESNET/ICC 301-2019

	Guidelines in Appendix C of this document.	G with MA amendments		
Approved simulation software	eQUEST, EnergyPlus, IESVE	Any BEM tool compliant with 90.1 Appendix G	As approved by PHIUS or PHI, as applicable, ex. WUFI Passive.	As approved by Standard 301, ex. REM/Rate
Minimum Modeler Qualifications	Yes, Modeler Quas FINAL.pdf (energycodes.gov)		Certified Passive House Consultant, or Designer and Certifier	Certified HERS Rater
Applicable Building Types	Allowed for any, required for multifamily (after 7/1/2024), dormitory, fire station, library, office, K-12 school, police station, post office and town halls except if high ventilation	Allowed only for projects that are not required to follow the Targeted Performance path	Allowed for any building of any size.	Allowed for residential buildings and dwelling units within buildings.
Compliance Criteria	Modeled heating and cooling annual energy demand intensities of the proposed design must not exceed the set targets	Modeled site energy use of the proposed design must improve over that of the baseline by a required margin	Modeled heating and cooling demand intensity, peak heating and cooling limits, and source energy use; envelope air leakage and moisture management.	Calculations, design, and verification to compare proposed design model to a geometric equivalent IECC-2006 baseline.
Systems that may be adjusted	Envelope shape and thermal and solar properties, air infiltration, exhaust air energy recovery effectiveness.	Any system regulated by code	All.	All, limited by ENERGY STAR MFNC requirements.
Trade-off limits	Must meet all prescriptive requirements except some aspects of envelope.	Must meet 90.1 2019 mandatory requirements and certain prescriptive	Minimum heating and cooling loads may not be exceeded.	HERS Index limit may not be exceeded.

		requirements of MA Stretch.		
Prescribed modeling inputs for proposed design	HVAC system type, efficiency and controls, lighting, misc. equipment, and all schedules.	Must be modeled per design documents; schedules must reflect expected use of the building.	Operating conditions: efficiencies/capacities, schedules, loads.	Operating conditions: efficiencies/capacities, loads, generation.
Documentation in addition to design documents	COMcheck, simulation reports, average ventilation rate calculations	Filled out DOE/PNNL Compliance Form, simulation reports, average ventilation rate calculations	Extensive; see C407.3.2.1 or C407.3.2.2	Extensive; see C407.4.2.1 and C407.4.2.2

The Targeted Performance and Passive House pathways establish compliance by comparing results of a single energy simulation to the performance targets expressed as fixed numeric values. With the Relative Performance and HERS, the compliance is based on the relative energy use of two models – one representing the proposed design and another serving as a point of reference.

Targeted Performance Simulation Guidelines can be found in Appendix XXX of this document.

The pathways also differ in their scope. For example, the Targeted Performance focuses on building envelope and treatment of ventilation air – all other building systems such as lighting, HVAC, and service water heating must meet the prescriptive requirements. On the other hand, the Relative Performance allows all building systems that are regulated by the energy code to participate in the trade-offs within set limits.

All performance-based compliance options establish performance “floor” (i.e., backstops) for certain buildings systems and components. For example, both the Targeted Performance and Relative Performance paths allow contribution of air-tight envelope toward compliance, however projects must not exceed the air leakage requirements of Section C402.5.

The energy models developed for compliance with Section C407 are not predictive of the future measured post-occupancy energy use. The actual consumption will differ from the model projections due to variations in occupancy, programming, building operation and maintenance, HVAC system design, weather, and precision of the energy modelling tool. The modeled energy use of the proposed design developed following the Relative Performance path is more representative of the future energy use than models developed for other performance-based pathways because, with a few minor exceptions, the Relative Performance path requires that all systems are modeled as shown on design documents and calls for using the expected post-occupancy operating schedules. The other performance-based compliance pathways prescribe many modeling inputs, e.g., to represent standard operating conditions.

C407.1 Targeted Performance

Highlights. This is a new compliance option

Compliance with this section requires performing a whole building energy simulation using an [approved energy modeling tool](#) and following the Targeted Performance [Simulation Guidelines](#) found in Appendix XX of this document to demonstrate that project's heating and cooling Thermal Energy Demand Intensities (TEDIs) do not exceed the limits in Table C407.1.1.5. In addition, projects must demonstrate compliance with the requirements applicable to other building systems and components as prescribed in [Section C401.2.1](#) and as shown in Table XXX of this document.

The **heating TEDI** is the annual heating energy delivered to the spaces and ventilation within the building to maintain heating thermostat setpoints normalized by the floor area. The **cooling TEDI** is the annual energy extracted from the spaces and ventilation to maintain cooling thermostat setpoint normalized by the floor area.

Q & A

Q: Is heating TEDI the same as heating Energy Use Intensity (EUI)?

A: No. Although TEDI and EUI have the same units (kBtu/sf-yr), they are not the same.

- Heating TEDI represents the annual heating load on the HVAC systems.
- Heating EUI represents the annual amount of energy used to operate equipment that heats spaces and ventilation air.

If a heat pump delivers 4.8 kBtu/SF heating energy to spaces annually and has annual average COP = 3.2, the site heating EUI is 1.5 kBtu/SF while the Heating TEDI is 4.8 kBtu/SF.

TEDI depends on performance of building envelope and ventilation energy recovery. Unlike heating EUI, heating TEDI does not depend on heating system efficiency.

- Reduced thermal bridging and high performance windows help reduce both site heating EUI and heating TEDI.
- Improved heat pump efficiency reduces site heating EUI but does not impact heating TEDI.

Q: How does one achieve low heating TEDI and low cooling TEDI?

A: Achieving low heating and cooling TEDIs requires careful attention to envelope performance (including thermal bridging), solar gains, and ventilation system design. It's important to design with all three in mind to achieve **both** low heating and cooling TEDIs. For example, improving envelope without also addressing solar gains can decrease heating TEDI while increasing cooling TEDI. Solar gains can be addressed with attention to aperture, solar heat gain coefficient, and external shading. Other factors, such as internal heat gains, also affect heating and cooling TEDI. However, the associated modeling inputs are fixed per the Targeted Performance Simulation Guidelines, and cannot be adjusted as a strategy to meet TEDI requirements.

Q: Is heating thermal energy demand intensity (TEDI) the same as "heating demand"?

A: Although the word “demand” is used in both, the term “heating demand” differs from heating TEDI in two ways.

1. “Heating TEDI” represents a **total annual** energy demand on the HVAC systems associated with heating. In contrast, the term “heating demand” usually represents a monthly or annual **peak rate** of energy consumption associated with heating - i.e., energy consumed per unit of time. The units reflect this difference: “heating TEDI” has units of kBtu/ft²-yr, while “heating demand” is expressed in units of MBtu/hr (often abbreviated to MBH) or kW.
2. The other important difference reflects the TEDI vs EUI discussion above: “heating TEDI” is the energy demand on the HVAC system while the “heating demand” is the energy consumption associated with heating.

The Targeted Performance Simulation Guidelines (TEDI Guidelines) included in Appendix XXX of this document specify aspects of design that must be modeled based on the construction documents, prescribe simulation inputs for systems and components that are treated as energy neutral (i.e., are meant to have no impact on TEDI compliance), and describe the modeling procedures to ensure consistency of the compliance outcomes across different modelers and simulation tools.

Following the TEDI Guidelines, building envelope and certain aspects of ventilation design must be modeled as specified. The modeling inputs that are prescribed (fixed) and are independent of design include lighting and miscellaneous equipment loads; the HVAC system type, efficiency and controls; fan system design; and operating condition such as building occupancy and lighting runtime hours that are likely to change over the life of the building.

The TEDI Guidelines also require certain simplifications to the modeled interior floor plan and thermal zones. The approach is consistent with the intent of the ASHRAE Standard 209¹¹ Energy Simulation Aided Design Modeling Cycles #2 and #3 (Conceptual Design and Load Reduction Modeling). While additional energy modeling, other than to show TEDI compliance, is not required, projects are encouraged to complete other modeling as necessary to inform HVAC system design and minimize impact of value engineering on performance.

Q&A

Q: A school project was modeled based on the Design Development drawings and reflected simplified HVAC zoning prescribed in the TEDI Guidelines. Does the TEDI model need to be updated once design is finalized and the HVAC zones are shown on drawings?

A: In most cases, the simplified zoning does not need to be updated if it continues to comply with the TEDI Guidelines. Exceptions include cases when the programming has substantially changed, for example to add or remove gym or cafeteria that must be modeled as separate thermal blocks based on the Guidelines.

Q: The model was developed before infiltration testing was performed and includes an assumed air leakage rate. Does the TEDI model need to be updated with the measured air leakage rates once testing is completed?

A: Yes, if the measured air leakage was larger than originally modeled, a new TEDI model should be produced based on the as-measured value to ensure that project continues to comply after the

measured air leakage is entered into the TEDI model. If the air leakage was found to be less than originally modeled, it's not necessary to conduct another model

C407.1.1.1 Building performance modeling

The allowed simulation programs are listed in the TEDI Guidelines in Appendix XX

C407.1.1.2 Climatic Conditions

The simulations must be completed using the weather file included in the TEDI Guidelines supplement.

C407.1.1.3 Modeling Building Envelope Infiltration

Envelope air leakage modeling rules are described in the TEDI Guidelines.

C407.1.1.4 Internal loads, scheduling, and other modeling assumptions

The assumptions are prescribed in the TEDI Guidelines and the TEDI Guidelines Supplement.

C407.1.1.5 Thermal energy demand intensity (TEDI) limits

Project heating and cooling TEDIs must be determined using whole building energy modeling as described in the TEDI Guidelines. Heating and cooling TEDIs must not exceed the individual limits in Table C407.1.1.5 for the appropriate building use type and size. The heating TEDI should be rounded to a single decimal point and the cooling TEDI should be rounded to the nearest whole number following the standard rounding rules.

C407.1.2 Documentation

The construction documents submitted with the application for permit must be accompanied by the following documentation:

- a. Completed COMcheck Envelope, Lighting and Mechanical Compliance Certificates, and a Plan Review Inspection Checklist (C103.2.2).
- b. Simulation reports:
 - **eQUEST**: <project name>.SIM file with the complete set of simulation reports.
 - **Energy Plus / Open Studio**: Complete set of simulation reports in the HTML format. See Annex A for the report generation instructions.
 - **IESVE**: TBD (Room Loads Report, Zone Loads Report, Space Loads & Ventilation Report, System Loads Report, Energy Model Output Report, Unmet Hours Report, Detailed Simulation Report)
- c. Calculation of the average ventilation rate similar to what is required by Section C103.2 #16

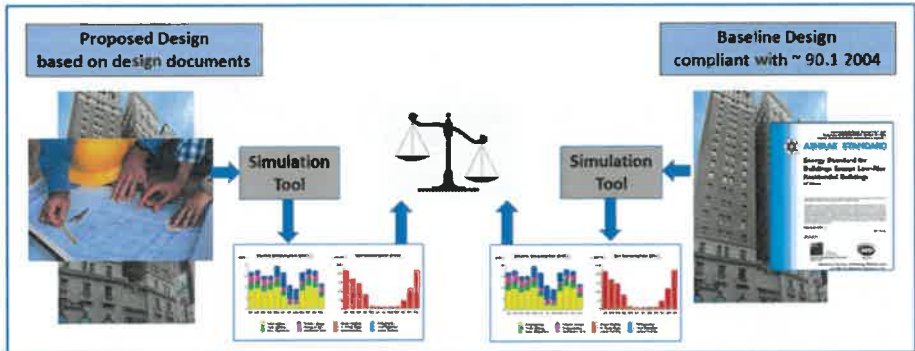
C407.2 Relative Performance

Highlights. The Relative Performance path is based on ASHRAE 90.1 Appendix G Performance Rating Method (PRM) with MA amendments. It establishes compliance based on the relative energy use of two models - the *proposed design* model and the *baseline design* model (Figure 1). The *proposed design model* must reflect design documents.

Prior to 2016 edition of 90.1, the *baseline model* represented a version of the proposed design with all its systems and components modified to minimally comply with the current edition of 90.1. Starting with 2016 edition of 90.1, the *baseline model* is fixed at the efficiency levels that are approximately aligned

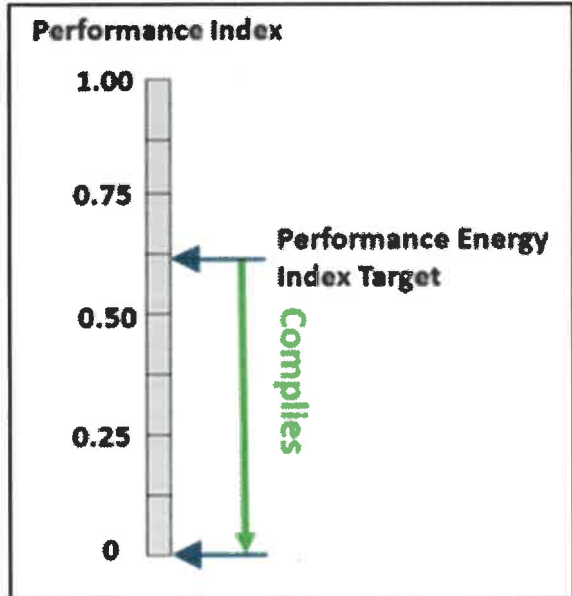
with efficiency requirements in 90.1 2004. The increase in stringency of the consecutive editions of 90.1 is achieved by increasing the margin of improvement that proposed design must demonstrate relative to this stable baseline. In addition, except for the space programming and operating schedules, configuration of the baseline model is now independent of the proposed design. For example, the baseline space and service water heating fuel and fenestration area are prescribed based on building occupancy type and climate zone and independent of the specified systems and components. The new Appendix G stable and independent baseline is conceptually similar to the numeric targets used by the Targeted Performance path.

General Concept of the Relative Performance Path



Compliance is established by calculating the *performance index* as a ratio of the proposed building energy use to the baseline building energy use and comparing this performance index to the performance index target. Projects with performance index at or below the performance index target comply with code (Figure 2). The Performance Index can go down to zero for a Net Zero building when accounting for contribution of renewable energy. While contribution of renewable energy is not allowed for demonstrating compliance with C407.2 Relative Performance, it should be considered by the design team when setting project’s efficiency goals.

Compliance Using Performance Index Target



Since the baseline design is generally aligned with efficiency levels required by 90.1 2004, improvement over the baseline must not be confused with improvement over code.

Note that the code does not require energy performance improvement beyond the level mandated by the Performance Energy Index Target (Section C407.2.2.1). However, if the level of improvement over code is desired to be calculated, it may be calculated using Equation 1.

$$\% \text{ Improvement Beyond Code} = 100\% \times (PEI_t - PEI) / PEI_t \quad (\text{Equation 1})$$

Where

PEI_t = Performance Energy Index Target calculated following Section C407.2.2.1

PEI = Performance Energy Index calculated following Section C407.2.2.2

Example Using Relative Performance Simulation Results to Demonstrate Improvement Beyond Code

Q1: A project was modeled following the Relative Performance path. The modeling results are shown below:

- Site energy use intensity of the *baseline building design* is 50 kBtu/ft²
- Site energy use intensity of the proposed design is 25 kBtu/ft²
- Performance Energy Index Target is 0.55
- Performance Energy Index = 25/50=0.5

Proposed design has 50% lower site EUI than the baseline. Does this mean that the project is 25/50*100=50% improved over code?

A1: No. The baseline design represents a building that is approximately as efficient as was necessary to comply with 90.1 2004 and the proposed design is 50% better than this inefficient baseline building.

Q2: Continuing the above example, is there a way to estimate improvement of the proposed design beyond MA Stretch code without developing an additional model of a minimally code compliant design?

A2: Yes. Improvement over code may be calculated using Equation 1:

$$\text{Improvement Beyond Code} = (0.55 - 0.5) / 0.55 = 9.1\%$$

Section C407.2 includes several impactful amendments to 90.1 2019 Appendix G that are summarized in Table 2. The amendments affect how energy modeling results are used to establish compliance and include additional requirements for building systems that projects must meet. These additional requirements are further detailed in **Table XXX** that is included in the commentary to Section C401.2.1.

Key Differences Between 90.1 2019 Appendix G and MA Stretch Code

	90.1 2019 Appendix G	C407.2 Relative Performance
Compliance Criteria	Modeled energy use of the proposed design must improve over modeled baseline energy use by a required margin	
Compliance Metric (Note 1)	energy cost	site energy
Allows contribution of renewable energy toward compliance?	Yes, up to 5% of baseline energy cost	No
Additional Efficiency Requirements (Section C406) apply?	No	Yes, the proposed design must meet C406 additional efficiency requirements. The improvement in performance due to C406 measures can contribute toward achieving building performance factors. Note that baseline is unmodified and does not need to contain C406 additional efficiency requirements.
Additional envelope requirements	90.1 mandatory provisions, must use envelope trade-off method to show that proposed envelope is not worse than prescriptively required by a set margin.	90.1 mandatory provisions, MA Stretch Section C402.1.5 (component performance alternative), prescriptive fenestration requirements
Additional lighting requirements	90.1 mandatory provisions; must not be worse than baseline lighting power (90.1 2004)	90.1 mandatory provisions, MA Stretch daylighting requirements
Additional HVAC requirements	90.1 mandatory provisions	90.1 mandatory provisions, prescriptive requirements for economizer and exhaust air energy recovery
Additional SWH requirements	90.1 mandatory provisions	90.1 mandatory provisions
Stringency (Note 2)	As prescribed in 90.1 2019	10% more stringent than 90.1 2022 on site energy bases

Note 1: The use of site energy metric instead of energy cost allows focusing on energy efficiency and eliminates impact of cost differential between gas and electricity.

Note 2: The Building Performance Factors (BPFs) adopted by Massachusetts are derived from ASHRAE 90.1-2019 Appendix CH, Table X3-1 which provides the set of BPFs for jurisdictions adopting ASHRAE Appendix G on a site basis for compliance with 90.1 2022. The BPFs from this appendix have been further reduced by 10% for the Stretch Code. This 10% reduction, therefore, is “built into” the BPFs. Proponents do not have to further improve energy efficiency of the proposed design beyond what is mandatory to achieve the Performance Energy Index Target in Section C407.2.2.1.

Compliance.

Compliance with the Relative Performance pathways (C407.2) is achieved by using whole building energy modeling following the Relative Performance Simulation Guidelines (Relative Performance Guidelines) in Appendix D of this document to demonstrate compliance with the Performance Energy Index Target (PEIt). In addition, projects must meet requirements listed in Section C401.2.1 #3 that are further described in the commentary to that section. Additionally, projects must meet all applicable mandatory requirements in 90.1 2019 Sections 5.2.1, 6.2.1, 7.2.1, 8.2.1, 9.2.1, 10.2.1 and verification, testing and commissioning requirements in Section 4.2.5 (90.1 Section G1.2.1).

C407.2.1 Electrification and Documentation for Highly Ventilated Buildings

Buildings using the Relative Performance pathway due to average ventilation at full occupancy exceeding 0.5 CFM/ft² as allowed in C401.2.1 #2, must submit the supporting information as described in the commentary to Section C103.2#16. Such projects must also have space heating partially electrified as described in the commentary to Section C401.4.1.

C407.2.2 Compliance.

Building shall comply with ANSI/ASHRAE/IESNA 90.1-2019 Section 4.2 using the Appendix G pathway as modified by C407.2.2.1 and C407.2.2.2.

C407.2.2.1 Modification to ANSI/ASHRAE/IESNA 90.1-2019 Section 4.2.

The modifications include changes from energy cost metric to site energy metric for determining performance outcomes. In addition, Table 4.2.1.1 is modified to include the Building Performance Factors (BPFs) that are based on site energy and modifies Table G3.1.1-1 to require modeling baseline fenestration area equal to 24% of gross above-grade wall area in multifamily building types. The modeling requirements of C407.2 Relative Performance pathways are further detailed in the Relative Performance Simulation Guidelines.

C407.3 Passive House

Passive House compliance requires pre-certification either with Phius CORE 2021 or Phius ZERO 2021 with Phius-approved software and a Certified Passive House Consultant, or with the Passive House Institute (PHI) Certified Passive House standard with approved software and a Certified Passive House Designer and Certifier.

Additional Information

Passive House Building and Professional Certifications

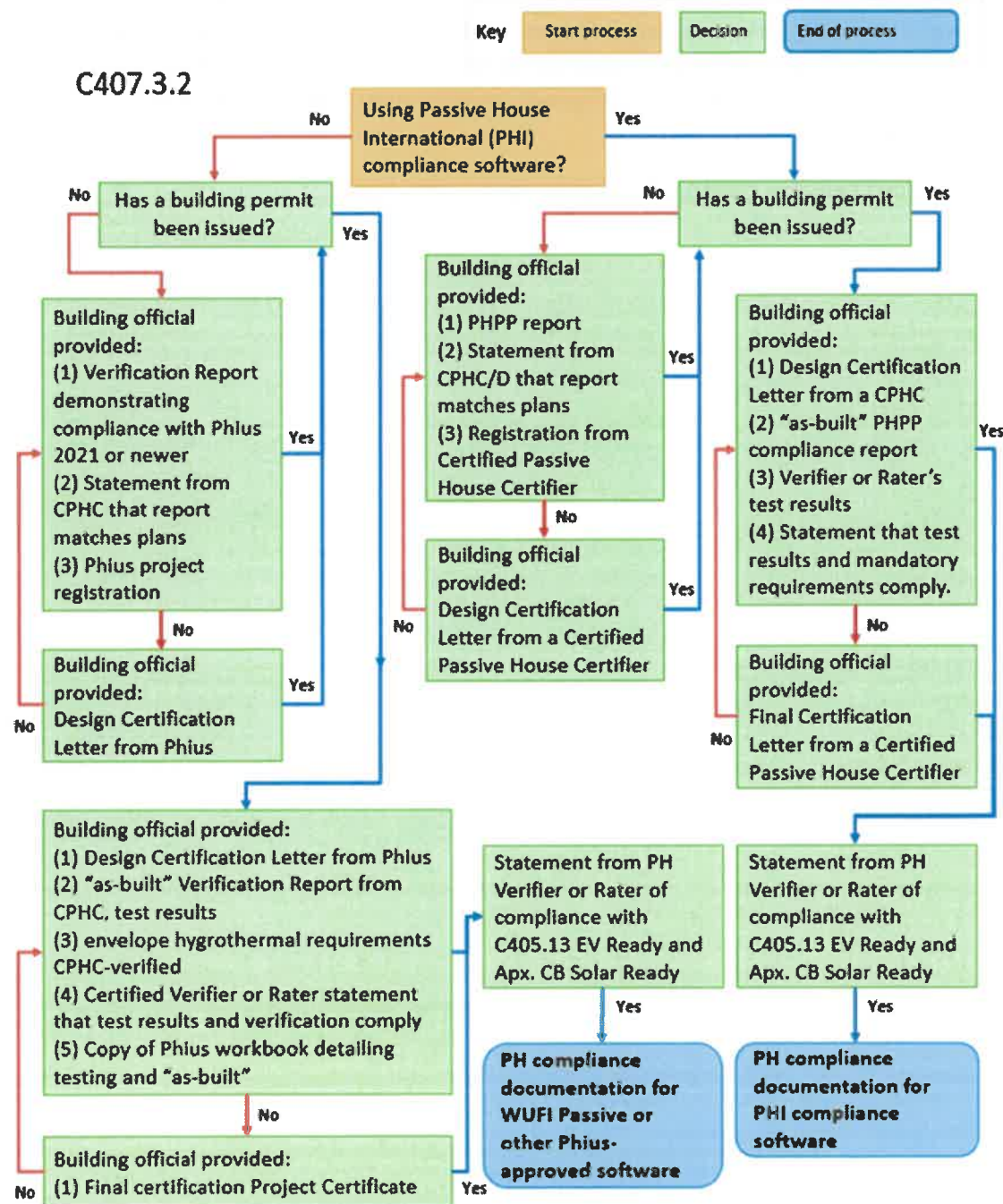
The Passive House Institute US (Phius) is a non-profit organization which certifies professionals, buildings and products to promote climate-specific high-performance passive buildings. If pursuing Phius certification for code compliance, certified professionals to assist can be found on the Phius website:

[Find a Professional | Phius](#)

The Passive House Institute (PHI), based in Germany, maintains a separate international passive house certification program. PHI also certifies buildings, products and professionals to advance high-performance passive buildings. Certified professionals and other resources to learn more about PHI certification can be found on their website:

[Passivhaus Institut \(passivehouse.com\)](http://Passivhaus Institut (passivehouse.com))

Documentation varies by the Passive House compliance program chosen, but generally is divided into building permit and certificate of occupancy documentation phases. Requirements are detailed in C407.3.2.2 for Passive House International (PHI) compliance and C407.3.2.1 when using WUFI Passive or other Phius approved software.



CPHC/D = Certified Passive House Consultant/Designer

C407.4 HERS Index (HERS) for multifamily buildings

The Residential Energy Services Network (RESNET) Home Energy Rating System (HERS) Index is a calculation comparing a proposed design to a 2006 IECC geometric copy, resulting in a score where 100 is equivalent to the 2006 model and zero is net-zero energy use. Unique to a HERS rating, calculation and field-verification is performed by a Certified HERS Rater. All building systems contribute to a HERS score and are tradeable to achieve the final value. Maximum HERS scores without on-site renewable energy by compliance path are in Table C407.4. Additionally, buildings must comply with [ENERGY STAR Multifamily New Construction](#) requirements, creating backstops for HVAC, envelope, lighting, appliances, and water heating.

Documentation is divided between construction and occupancy permitting.

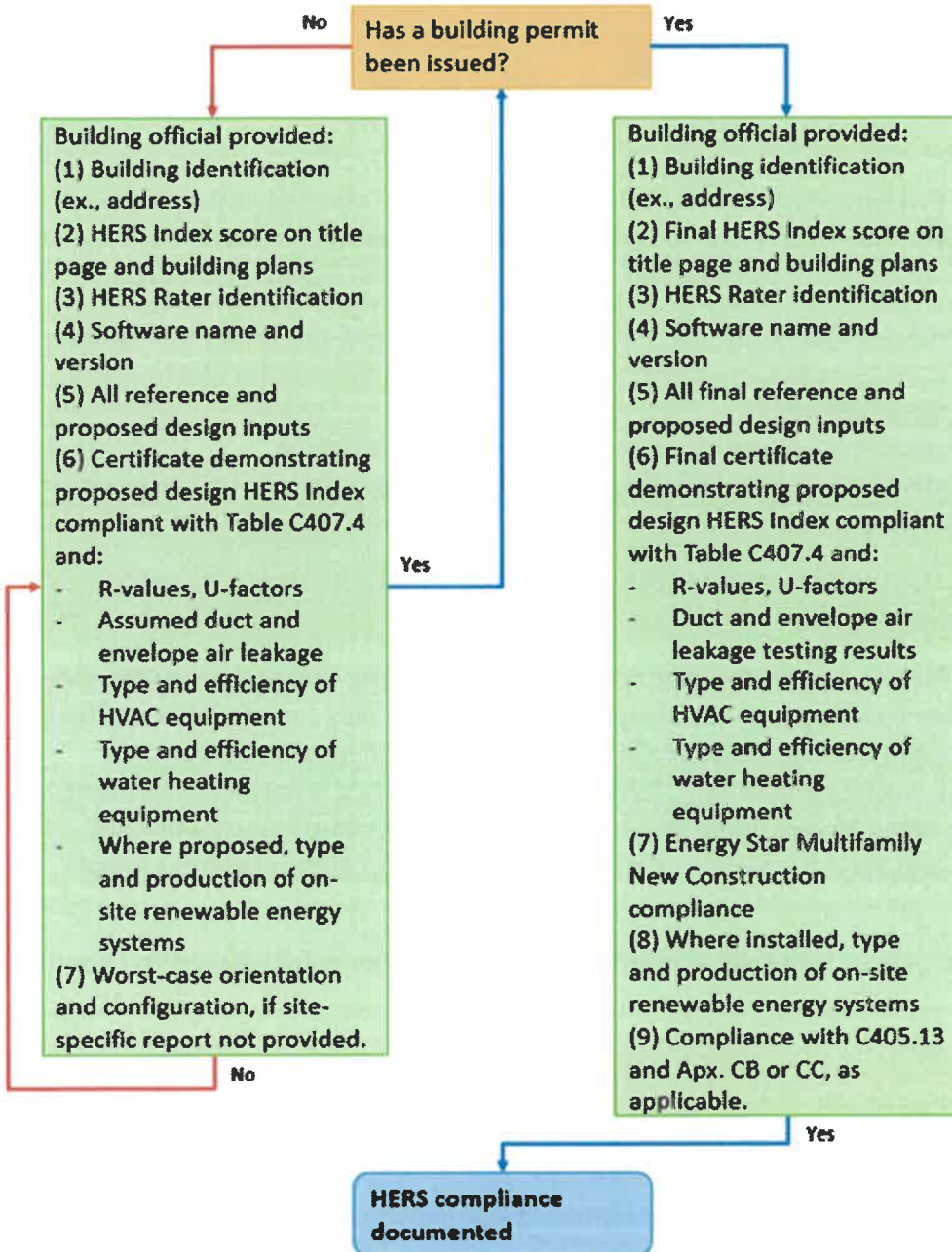
Key

Start process

Decision

End of process

C407.4.2



Chapter 5 [CE] Existing Buildings

Changes to existing buildings are treated as either: Additions, Alterations, Repairs, or Change of Use depending upon the planned changes to the existing building (see sidebar for definitions).

Additional Information

For reference, the unchanged definition from IECC:

ADDITION. An extension or increase in the conditioned space floor area, number of stories or height of a building or structure.

ALTERATION. Any construction, retrofit or renovation to an existing structure other than repair or addition. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the original installation.

CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following:

1. A change of occupancy classification.
2. A change from one group to another group within an occupancy classification.
3. Any change in use within a group for which there is a change in the application of the requirements of this code.

REPAIR. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance or to correct damage.

Of particular note: Buildings or spaces changing occupancy and increasing energy use are not treated as simple alterations. These buildings must comply with Sections C401.3, C402 through C406, and Section C408. (See sidebar) Existing buildings always have the option of complying as if they were new buildings, following the requirements in [C401.2](#). For example, converting a factory into apartments could comply with a certified Passive House design. Mixed-use buildings must comply with C401.2.4 where multiple space uses are in the scope of the project. Exceptions for historic buildings remain unchanged in C501.5.

The Chapter 5 decision tree is a high-level application of requirements for potential modifications to existing buildings.

Additional Information

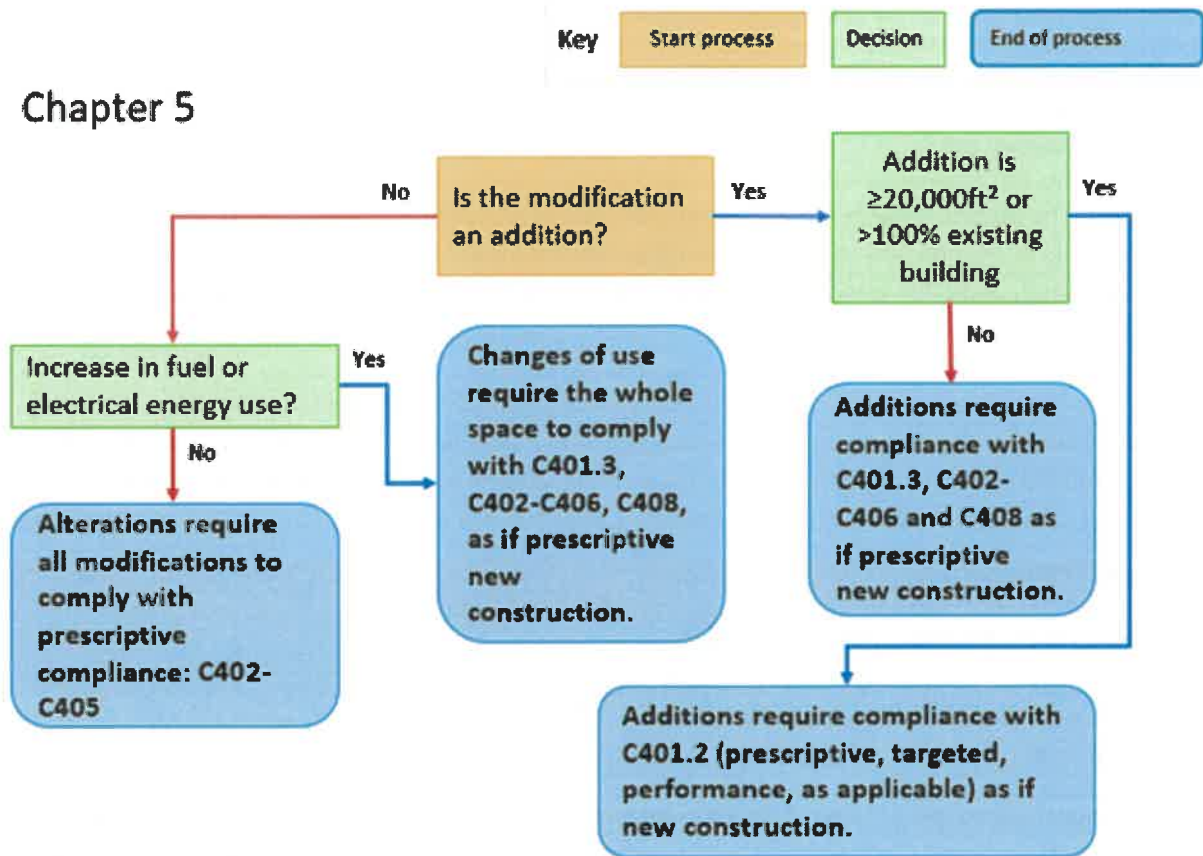
Is the proposed change an “Alteration” or “Change of Use”

If proposed changes to a building will increase demand for energy, including but not limited to fossil fuel, biomass or electric energy, then you have a **change of use**, not an alteration. Change of use requires the building conform to prescriptive Stretch Code provisions, like new construction, including envelope requirements, albeit with a UA accommodation.

Proposed changes are an Alteration only when you don’t increase either energy, including but not limited to fossil fuel, biomass or electric use.

IECC has always required change of use be treated like new construction. The stretch code amendments make it explicit that prescriptive stretch code is required.

While not shown in the decision tree, compliance as if new construction, *i.e.*, C401.2, always is an option for any building.



C502.1 (Additions) General.

Highlights. Requires large additions to be treated like new construction, including following TEDI, ASHRAE, etc. as applicable. Requires small additions to be treated like prescriptive new construction.

Compliance. Section C502.1 is required for all additions to existing buildings under C501.1 “Scope” and C501.2 “Compliance.” Compliance paths are detailed below.

Summary. Small additions (see below) comply like prescriptive new construction. Large additions comply as if a new building.

The updated Stretch Code allows building additions which are both (a) less than 20,000ft² and (b) less than 100% additional floor area of original to meet the prescriptive requirements of Sections C401.3, C402 through C406, and Section C408. Additions greater than 20,000ft² or which are larger than 100% of the size of the existing building must meet applicable Stretch Code requirements for that building type and size as determined by [C401.2](#). Additions can comply alone or the entire new and existing space, together, can comply. Note that C502.2 exceptions are deleted because the sections referenced have been changed significantly.

C503.1 (Alterations) General.

Highlights. Explicitly requires that any alterations shall comply to Section C402, C403, C404, C405, and C503. Adds compliance with additional sections.

Compliance. Compliance with Section C503.1 is required where work done to an existing building does not constitute an addition, repair, routine maintenance, or a change in occupancy resulting in an increase in energy use.

Summary. The Stretch Code requires altered portions of an existing building comply with the requirements of Section 503 and the prescriptive Sections C402 (envelope), C403 (mechanical), C404 (water heating), and C405 (electrical) without requiring unaltered portions of an existing building to comply.

Of primary importance, if the construction changes the occupancy and increases energy use, it is a Change of Occupancy or Use complying with [C505](#), **not** an alteration. If construction adds conditioned space – whether new space or unconditioned existing space becoming conditioned – it is an Addition complying with [C502](#), **not** an alteration. Repairs, C504, and Maintenance, C501.3, are not alterations.

Additional Information

In an alteration, what do I have to update?

In general – if you touch it, you have to update. If you don't touch, you don't have to update.

The key requirement in this section is (added italics):

*“Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction *without requiring the unaltered portions of the existing building or building system to comply with this code.*”*

The Stretch Code replaces an existing exception, C503.1 Ex.3, which allowed exterior opaque assemblies exposed during construction to be in compliance when “filled with insulation.” Instead, the Stretch Code allows walls not meeting the prescriptive envelope requirements to use an area-weighted U-factor, allowing what is permitted in [C402.1.5](#) to be increased by 10%. Importantly, this 10% reduction in required performance still requires the derating calculations in [C402.7](#). Because only above-grade exterior walls are in the scope of [C402.1.5](#), other assemblies are required to comply prescriptively – which, also, allows using Massachusetts Stretch Code-specific [COMcheck](#) in accordance with Section C402.6.

Example Calculation

Area-weighted U-factor for Alterations

For low glazed wall system buildings, the area-weighted U-factor of the proposed design must be not greater than U-0.1285, the target UA. Where complying with C503.1 Ex.3, that target UA is permitted to be increased by 10%, therefore $0.1285 * 1.1 = 0.1414$. Likewise, the target UA for high glazed wall system buildings, 0.1600, becomes U-0.176.

C505.1 (Change of Use or Occupancy) General.

Highlights. Explicitly adds compliance with additional sections but is functionally unchanged.

Compliance. Section C505.1 is required for spaces or buildings changing occupancy with an increase in energy demand. Compliance is detailed below.

Summary. The IECC 2021 requires buildings going through change of use or occupancy to comply prescriptively as if new construction. The Stretch Code makes that requirement explicit by referencing the prescriptive sections, but it functionally is the same as the original language. Language requiring lighting retrofit compliance is retained, as is an allowance for existing fenestration above the limits set in the prescriptive path. Three critical takeaways:

- (1) Spaces where energy use is increased must comply with the requirements for new construction. Where the scope of the change is the whole building, the whole building must comply as a new building.
- (2) Usually, prescriptive compliance is chosen, because it is perceived as being the easiest path. However, any new construction compliance is permitted. For example, any building could use [C401.2.2](#) “Passive House Compliance”; buildings not required to use Targeted Performance could use [C401.2\(3\)](#) “Relative Performance”. Sometimes certified or modeling compliance adds flexibility for existing conditions.
- (3) Where an area-weighted U-factor is chosen for vertical assembly compliance, an additional 10% allowance is provided for Change of Use or Occupancy. See calculations in [C503.1](#).



Appendix CC, Massachusetts Municipal Opt-in Specialized Energy Code 2023.

Highlights. This appendix is entirely new in MA code but utilizes the IECC 2021 Appendix CC with revisions.

Compliance. Where adopted by a jurisdiction, Appendix CC and corresponding Appendix RC (for low-rise residential buildings) define the eligible energy code compliance pathways for the Specialized opt-in energy code. Broadly, three compliance paths overlay the changes already made by the Stretch Code, these compliance paths are: Zero Energy, All-Electric, and Mixed-Fuel.

Summary. In the same way that the Massachusetts Stretch Code overlays the 2021 IECC, the Specialized Code overlays the changes in the Stretch Code. In addition, Residential buildings and dwelling units in Mixed-Use buildings have different requirements by size and are phased-in by permit date.

The Specialized Code maintains the same energy efficiency requirements as the Updated Stretch Code for all building types except multi-family, including Prescriptive, Targeted Performance, and Relative Performance Compliance.

Multi-family buildings over 12,000ft² built to the Commercial Specialized Code must achieve precertification to Passive House standards (PHI or Phius). These requirements are phased-in for buildings up to five stories required to meet Passive House requirements if applying for permits on or after January 1, 2023, and taller buildings six stories and above required to meet Passive House for permit applications beginning on or after January 1, 2024.

CC101.2 Scope.

Highlights. Specific requirements for all new buildings, including residential buildings and dwelling units, depending on size, fuel, and permit date.

Compliance. Where adopted by the jurisdiction, all new buildings that use energy are in scope.

Summary. Residential buildings having more than 12,000ft² of conditioned floor area comply with Table CC101.2 – see flowchart. Dwelling units over 4,000ft² in buildings using fossil fuels comply with either [CC103](#) or [RC102](#). Compliance for other buildings is in [CC101.3](#). Residential buildings less than 12,000ft² of conditioned floor area may comply with the low-rise residential options in Appendix RC.

Residential occupancies have requirements that vary by size – floors above grade, floor area – and date permitted. This flowchart includes the project characteristics that expand or restrict compliance options.

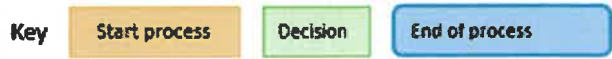
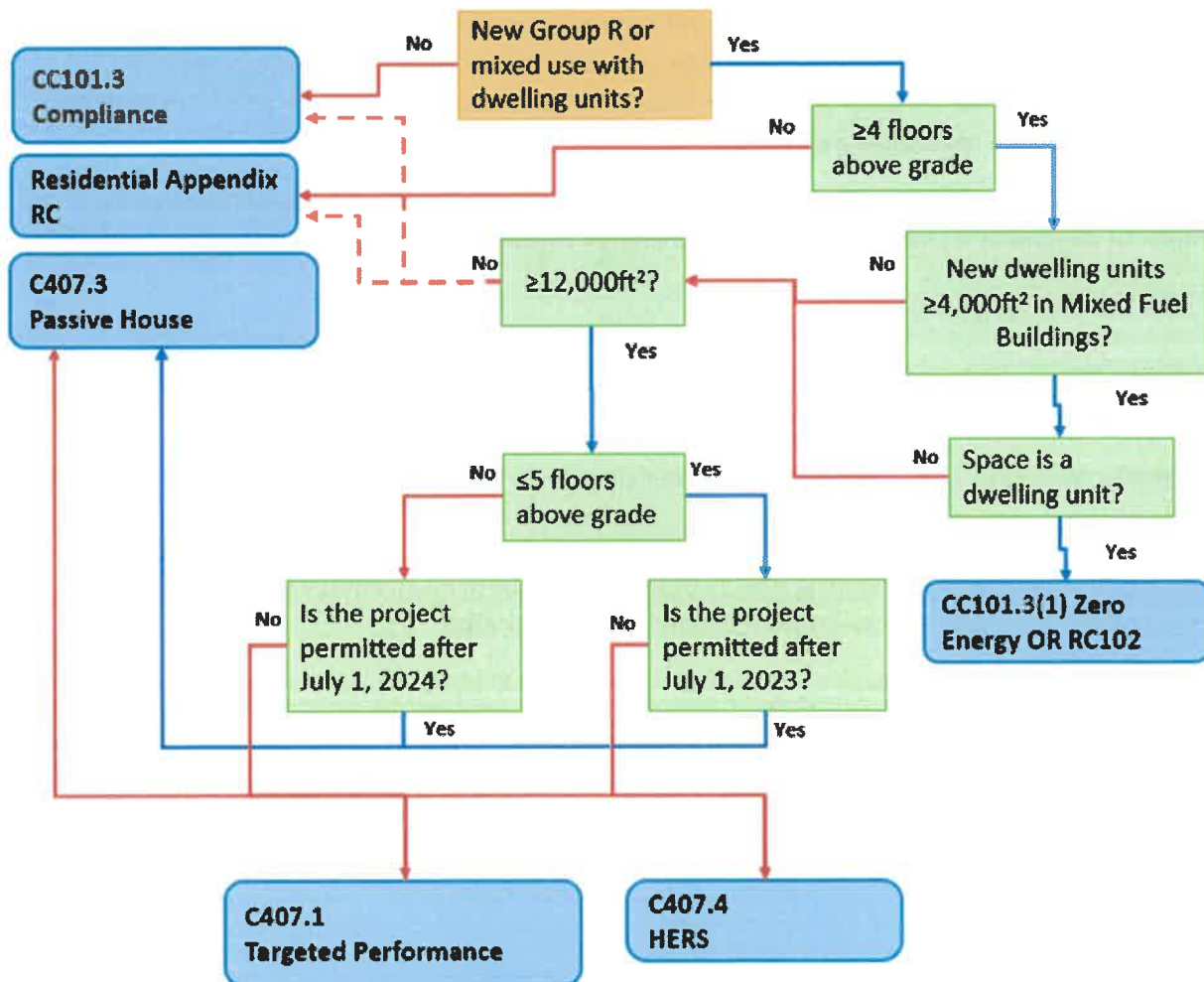


Table CC101.2



CC101.3 Compliance.

Highlights. Entirely new language. Three primary pathways are available.

Compliance. All new buildings must comply.

Summary. Buildings must comply with CC101.4 (essentially [C401.2](#), one of the Stretch Code compliance paths) and CC101.5 ([C405.13](#), electric vehicle parking spaces). Additionally, in general, compliance with the Specialized Code is achieved through 1 of 3 pathways:

1. Zero Energy, [CC103](#), where renewable energy is used to offset all annual energy used by the building, and any fossil fueled equipment is pre-wired for future electric equipment.
2. All-Electric, [CC104](#), any Stretch code compliance pathway equipped with all-electric equipment. **Note:** the HERS pathway starts at HERS 45 rather than HERS 55.
3. Mixed-Fuel, [CC105](#) and [CC106](#), requiring the installation of on-site renewable generation, high-efficiency equipment, and pre-wiring for any buildings with fossil fueled equipment.

CC102 Definitions.

Unlike the Solar Zone from the 2021 IECC, MA Base Energy Code, or Stretch Code, the Potential Solar Zone Area as defined includes parking areas and additional roof areas; that is, the area described in the Specialized Code allows considerably more solar access for compliance with on-site generation requirements. Note that the solar zone in the Mixed Fuel pathway (CC105.2) is supplemented by the installation of on-site renewable generation.

Based on site energy, through efficiency and on-site generation, a Zero Energy Building that contributes as much to the grid as it consumes. The scope is energy consumed on-site, so EV charging is excluded.

CC103 Zero Energy Pathway.

Highlights. This is entirely new to MA code but utilizes the IECC Appendix CC with modifications to include only on-site renewable energy.

Compliance. One of three Specialized Code compliance paths in [CC101.3](#) in addition to the portions of the [Stretch Code](#) required by building type, size, and date permitted.

Summary. This path requires building energy modeling to determine an energy utilization intensity (EUI), the annual average energy used per square foot of floor area.

CC103.1 Renewable Energy.

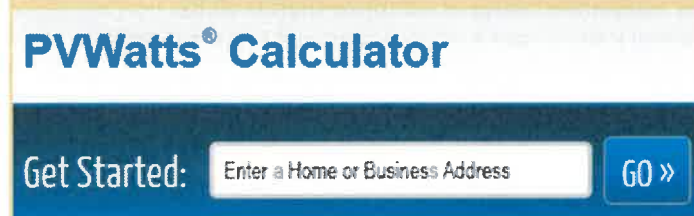
[Table CC103.1](#) has EUI limits for climate zone 5A by use type. Ideally, the EUI is minimized so that the needed on-site renewable generation to offset it is simpler; expressed in Equation CC-1, the on-site generation must be equal to, or greater than, the building energy use. On-site back-up generators and charging/fueling stations are not included in this calculation.

CC103.2 Calculation of On-site Renewable Energy.

The National Renewable Energy Laboratory has developed the [PVWatts Calculator](#), which is the default tool for solar energy generation estimates; other approved means are an option and likely will be necessary for larger or more complicated systems. Group R buildings can comply by demonstrating that all units achieve not greater than HERS = 0 or Phius ZERO using the Passive House pathway in Appendix RC. Note that off-site renewable generation or the purchase of Renewable Energy Credits (RECs); while allowed, are not an option for compliance with the on-site renewable energy requirements in the Specialized Code.

Additional Information

NREL's PV Watts Calculator can be used to estimate the production of on-site solar systems. A solar contractor should be consulted for an additional estimate.



[PVWatts Calculator \(nrel.gov\)](#)

CC104 All Electric Pathway.

Highlights. Entirely new language for All-Electric buildings compared to the IECC Appendix CC. This pathway requires all energy services to be provided by electric power, with exceptions for external back-up generation.

Compliance. One of three Specialized Code compliance paths in [CC101.3](#) is required in addition to the portions of the [Stretch Code](#) required by building type, size, and date permitted.

Summary. There are five compliance options for *All-Electric buildings*.

1. Prescriptive Compliance and all electric equipment
2. Passive House
3. Group R before 2024 can have all units not greater than HERS 45.
4. TEDI for offices and municipal buildings
5. ASHRAE for high ventilation buildings

CC105 Mixed-Fuel Building Pathway.

Highlights. Entirely new language for Mixed-Fuel buildings compared to IECC Appendix CC.

Compliance. One of three Specialized Code compliance paths in [CC101.3](#) in addition to the portions of the [Stretch Code](#) required by building type, size, and date permitted. [CC106](#) also is required.

Summary. Mixed-Fuel buildings generally must install renewable energy generation and high-efficiency equipment. Under the Specialized code mixed-fuel buildings require a solar PV installation onsite in available unshaded spaces, except when complying with Passive house. In all cases mixed-fuel buildings are required to be electrification-ready including pre-wiring for future electric conversion of any fossil fuel end uses.

CC105.1.1 Biomass Heating.

If biomass combustion equipment is included in a building it puts the building in the mixed-fuel building pathway. However, where the biomass combustion equipment used meets the definition below, [CC105.3](#) is not required.

CLEAN BIOMASS HEATING SYSTEM. Wood-pellet fired central boilers and furnaces with less than 3 million Btu/hour rated heat input, where the equipment has a thermal efficiency rating of 85% (higher heating value) or greater; and a particulate matter emissions rating of no more than 0.08 lb. PM_{2.5}/MMBtu heat output. Or wood chip fired central boilers and furnaces with less than 3 million Btu/hour rated heat input, where the equipment has a thermal efficiency rating of 80% or greater and a particulate matter emissions rating of no more than 0.10 lb. PM_{2.5}/MMBtu heat output.

Note: This definition is also used to qualify Clean Biomass heating systems for incentives under the Alternative Portfolio Standard (APS), for more information see: <https://www.mass.gov/service-details/qualifying-woody-biomass-in-the-aps>

CC105.2 On-site Renewable Energy

On-site renewable energy systems must have a rated capacity of 1.5 watts multiplied by the sum of the conditioned floor area of the three largest floors. If this amount of renewable generation is not possible, a system utilizing 75% of the *Potential Solar Zone Area* can be installed.

Calculation

Solar PV Minimum Sizing Example

Per Code:

CC105.2 On-site renewable energy. New mixed-fuel buildings shall have equipment installed for the on-site renewable energy with a rated capacity of not the less than 1.5 W/ft² (16.1 W/m²) multiplied by the sum of the gross conditioned floor area of the three largest floors. Exception: Where the building site cannot meet the requirement in full with an on-site renewable energy system, the building site shall install a partial system designed to utilize not less than 75% of the *Potential Solar Zone Area*.

Examples of minimum Solar PV size:

1. Four story 200,000 ft² High School with 160,000 ft² on three largest floors

$$\text{Minimum Solar} = 1.5 \times 160,000 = 240 \text{ kW system}$$

2. Three story 80,000 ft² Elementary School

$$\text{Minimum Solar} = 1.5 \times 80,000 = 120 \text{ kW system}$$

However, in this example the elementary school is on a shaded site and a 120 kW system is not achievable. The potential solar zone area is measured to be 10,000 ft² of the roof in this example. Using the Exception, a system covering at least 7,500 ft² is permitted, and perhaps results in an approximately 75 kW system rather than 120 kW.

CC105.3 Additional Efficiency Requirements.

Additional requirements are in [RC104.3.1](#) through RC104.3.3. Space heating, space cooling, and water heating systems are required to be more efficient in this compliance path. Additionally, where multiple systems serve the space, collectively they are sized not to exceed the heating and cooling demand; that is, no oversizing. Clean biomass heating systems are deemed to comply.

CC106 Wiring for Future Electrification.

Highlights. Entirely new language for Mixed-Fuel buildings.

Compliance. Required for compliance with [CC105](#) Mixed-Fuel Building Pathway.

Summary. Where fossil-fueled equipment or end-uses is installed, space, access, and electric infrastructure must be provided to install equivalent electric equipment in the future; generally, that means at least a branch circuit terminated within 3 feet of the installed equipment and additional capacity at the electrical panel.

Starting with exceptions:

- *Dwelling and sleeping units* comply with [RC104.4](#). Commercial kitchen equipment for business use and drying equipment for manufacturing is exempted.
- Equipment not specifically listed in this section requires continuous conduit, electrical panel space, and bus sizing to accommodate future electrification.
- Equipment not specifically listed in this section in highly ventilated buildings (average ventilation greater than 0.5cfm/ft²) complies with CC106.1.6.

Water heating. Fossil-fueled water heaters with a capacity less than 300,000 Btu/h require a 30-amp branch circuit, a condensate drain, space, supply and exhaust air volume.

Cooking equipment. Commercial equipment likely is exempted and dwelling- and sleeping units comply with Appendix RC. What equipment remains must have a 40-amp circuit installed.

Clothes drying. A 30-amp circuit is required. Equipment for manufacturing and process loads is exempt. A commercial laundromat it would be exempt. Laundry in multifamily must meet this requirement.

Other equipment. Uninterrupted conduit and increased sizing of electrical infrastructure for each combustion device. Again, the intent is that fossil-fueled equipment energy needs are translated to electrical energy when sizing all components and paths to connect the future electrical equipment are installed and labeled.

Additional Information

What Needs to Be Shown on Contract Documents?

Section C103.2 has additional documentation requirements, including a new item, #17, showing the future electric HVAC retrofit design required in CC106.1.6 for Mixed-Fuel Buildings. Fossil-fueled HVAC equipment replacement plans must include the existing pre-installed electric infrastructure, the structural and architectural infrastructure installed, the equipment to be replaced, the space for it, and the specifications the new equipment must meet.

Other equipment in highly ventilated buildings. For HVAC, an approved design must be provided in construction documents *per* C103.2(17) with fossil-fueled equipment, detailing retrofits for electrification serving all current loads without altering distribution systems. Efficiencies for retrofit space and water heating are in [C401.4.3](#). Like other electric-ready requirements in this section, infrastructure for electric equipment must be installed at the time of initial construction, including electric service, controls conduit, future interior and exterior space, and structural and architectural elements.

Additional Information

What needs to be installed during original building construction?

Reference Section: C106.1.6.4

- Power infrastructure to building to accommodate future electric retrofit system
- Electric service to future distributed equipment within building
- Conduits to accommodate controls to future distributed equipment within building

Structural and architectural elements to accommodate future retrofit equipment

Additional Information

What space needs to be aside for future electrification during original construction?

Reference Section: C106.1.6.5

- Interior and exterior space shall be allotted to accommodate all future electric retrofit equipment.
- Where interior or exterior allotted space exceeds the space used for combustion equipment to be replaced, and/or does not correspond to the combustion equipment locations to be replaced, such space shall be set aside and may not be used for any other purpose.
- Signage, labels, and borders shall be used to prominently display areas and limits set aside for future equipment to prevent encroachment.



Residential and Low-rise Multi-family Stretch and Specialized Code Measures

This chapter applies to low-rise R-use occupancies defined as *Residential Buildings* by section R202 in MA 10th edition IECC 2021. This includes detached one- and two-family dwellings, townhouses and Group R-2, R-3 and R-4 buildings three stories or less in height above grade. Buildings with 4 stories or more above grade plane follow the commercial chapter, except that multi-family buildings less than 12,000 sf of total conditioned floor area of any height may follow this chapter.

The guidance in this chapter applies to projects that will permit within an Authority Having Jurisdiction that has adopted the MA Stretch Code and those that have adopted the Specialized Code. As explained earlier in this Guideline, projects subject to the Specialized Code must meet the requirements of the Stretch code and additional requirements from Appendix RC. These additional requirements for the Specialized Code only are included in the next chapter.

Additional Information

The State has published some resources to help users easily identify code updates and requirements.

Summary: This high-level summary covers major requirements in the Stretch and Specialized Codes.

<https://www.mass.gov/doc/summary-document-explaining-stretch-energy-code-and-specialized-opt-in-code-language/download>

Residential Stretch and Specialized Codes Massachusetts front-end amendments to the IECC 2021:

<https://www.mass.gov/doc/225-cmr-2200-residential-specialized-stretch-energy-code-clean-front-end-amendment-for-december-8-2022/download>

Some new requirements in the Stretch and Specialized codes are relatively straight forward and do not warrant additional guidance. Although not a comprehensive list of all code updates, the table below includes brief summaries of key new requirements that should be reviewed in the relevant code sections. Additional guidance for more complex or nuanced code updates has been included in this chapter.

Table: Brief Summaries of Key New Requirements Not Included in Chapter

Code Section	Summary of Measure
R103.2	Requires Solar Zone Area to be shown on construction documents when complying with Appendix RC for fossil-fuel heated homes and Solar-Ready Zone to be shown when complying with Appendix RB.
R202	Adds definitions for All-Electric Building, Combustion Equipment, Enthalpy Recovery Ratio, Mixed-fuel Building and Potential Solar Zone Area. Modifies definitions for Clean Biomass Heating System, Electric Vehicle Charging Space and High-efficacy Lamps.
R405.2	Modifies requirements for proof of project registration, Design certification with PHIUS or pre-certification approval at time of permit application or Certificate of Occupancy. Also requires compliance with Appendix RB: Solar Ready Provisions.
R406.2	Adds Heat or Energy Recovery Ventilation to requirements for Energy Rating Index.
R502.2	Unconditioned or low-energy spaces that are altered to become conditioned space are required to meet code requirements without exception.
R502.3	Only new envelope assemblies in additions less than 1,000sf can be exempted from insulation installation criteria requirements.
RB103.1	Solar Ready Zone requirements in Appendix RB apply to all R-use buildings, not only one- and two-family dwellings and townhouses.

R202 General Definitions

Highlights. New definitions have been added while others have been modified.

Compliance. Section R202 is applicable to all projects utilizing the Stretch Code.

Summary. The definitions for All-Electric Building and Mixed-Fuel Building are of particular importance because they dictate compliance requirements in the Stretch Code.

In particular, the definition for *All-Electric Building* dictates that no combustion equipment can be used on-site for space heating, water heating, cooking or drying appliances (clothes drying). Exterior generators and outdoor propane grills may be included in All-Electric buildings, however indoor gas fireplaces and propane/ gas cooktops may not be included. Homes built with non-electric fireplaces and gas, or propane cooking equipment are instead required to comply with the Mixed-Fuel compliance path.

All-Electric buildings must comply with both space heating and water heating requirements from R408 and have higher allowed HERS Scores, compared to Mixed-Fuel buildings, when using the HERS compliance path in R406.

Mixed-Fuel Buildings on the other hand do include combustion equipment or piping for combustion equipment. Fossil fuel fireplaces or biomass heating equipment also trigger the Mixed-fuel pathway. The maximum allowed HERS scores are also lower, when compared to All-Electric Buildings, when using the HERS compliance path in R406.

Additions, Alterations and Change of Use requirements in Chapter 5 depend on the square footage of the project or dwelling unit. Large additions, specified in R502.1.1 as additions to a dwelling unit exceeding 1,000 ft² or exceeding 100% of the existing conditioned floor area, have different requirements than additions 1,000 ft² or less. Requirements for Alteration and Change of Use projects also depend on whether or not the project exceeds 1,000 ft².

Historic Buildings, as defined in Chapter 2, are exempt from these code requirements for repairs, restorations, alterations and change of occupancy per R501.6 and with the approval of the Authority Having Jurisdiction.

R401 General

Highlights. The residential Stretch Code continues with HERS rating as the primary pathway for new construction. ENERGY STAR® is dropped as a compliance path, while Passive House options remain. Compliance pathways for HERS and Passive House have been updated. Projects eligible for prescriptive compliance are limited, and primarily apply to existing building alterations and additions.

Compliance. Section R401 is applicable to all projects utilizing the Stretch Code.

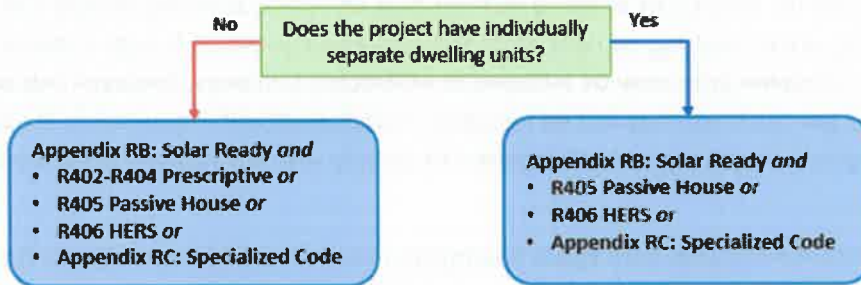
Summary. Compliance paths available to each project depend on the scope of the project as well as other factors such as size of project (square footage) or level of alteration. The following flowchart can help you identify which compliance paths are available to your project.

Key Start process Decision End of process

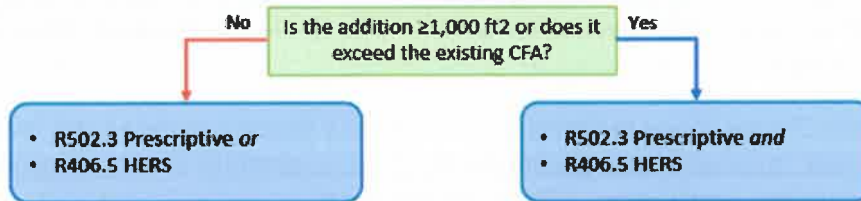
Table R401

What is the scope of your project?

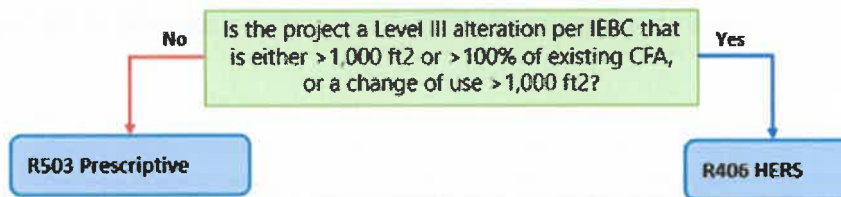
New Construction



Additions or Change in Space Conditioning



Alteration or Change of Use



Additional Information

Individually separate dwelling units.

Individually separate dwelling units are units that provide complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation (i.e., do not share cooking, bathing, or toilet facilities.) Apartments, condominiums, townhomes and single-family homes are examples of individually separate dwelling units. Examples of buildings that may not have individual separate dwelling units are dormitories, barracks, and assisted living facilities.

Each compliance path is summarized below, though code sections should be reviewed in detail for requirements.

HERS Index Score: Sections R403.6 (Ventilation), R404.4 (EV Ready), R406 (HERS) & Appendix RB (Solar Ready)

Complying via the HERS Certification pathway involves meeting lowered HERS score maximums as well as providing a balanced mechanical ventilation system, EV Ready parking and meeting Solar Ready provisions per Appendix RB.

The HERS score maximums have been revised and vary based on whether the building is Mixed-Fuel, All-Electric and whether onsite solar is included. The allowed maximums for new construction reduce for projects permitted after June 30, 2024. Major alterations, additions and changes of use have their own scores in Table R406.5.

Table R406.5 MAXIMUM ENERGY RATING INDEX

Clean Energy Application	Maximum HERS Index Score ^{a, b}		
	New Construction until 6/30/24	New Construction after 7/1/24	Major alterations, additions, Change of Use ^c
<i>Mixed-Fuel Bldg</i>	52	42	52
Solar Electric Generation	55	42	55
<i>All-Electric Bldg</i>	55	45	55
Solar Electric & <i>All-Electric Bldg</i>	58	45	58

^a Maximum HERS rating prior to onsite renewable electric generation in accordance with Section R406.5

^b The building shall meet the mandatory requirements of Section R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table R402.1.2 or Table R402.1.4 of the 2015 IECC.

^c Alterations, Additions or Change of Use covered by Section R502.1.1 or R503.1.5 are subject to this maximum HERS rating.

In addition to meeting HERS scores, projects must meet mechanical ventilation requirements. Minimum system airflow, heat or energy recovery, field testing, fan sound ratings, and air inlet and exhaust locations are all regulated in R403.6. Electric Vehicle (EV) Ready requirements include pre-wiring, a connection point and dedicated panel capacity. Projects must also either install solar systems per Appendix RC102/RC105 or be Solar Ready which includes dedicating a solar zone for future solar system installation, confirming structural loads, providing electrical interconnection pathways and reserved panel space.

Additional Information

HERS Index Score vs. Energy Rating Index (ERI)

Massachusetts amendments to the IECC 2021 require projects to demonstrate compliance with the R406 Energy Rating Index compliance path using the HERS® Index rating. This means all maximum HERS scores in the Stretch and Specialized codes are utilizing the HERS Index rating determined in accordance with the latest version of RESNET/ICC 301. Massachusetts’ amendment to only utilize HERS scores

ensures that ratings are subject to quality assurance reviews for consistency, and avoids confusion related to differing ERI and HERS scores. Lists of HERS raters working in Massachusetts are available on the [Mass Save website](#), and from the Northeast HERS Alliance: www.NEHERS.org

For more information on why the two scores differ, refer to this article by RESNET®.

[The IECC Energy Rating Index and HERS Index: What's the Difference? - RESNET](#)

[HERS Index and Energy Codes - RESNET](#)

Passive House: Sections R404.4 (EV Ready), R405 (Passive House) & Appendix RB (Solar Ready)

Projects utilizing the Passive House Building Certification compliance path can comply via Phius certification or PHI certification per R405, must include EV Ready Spaces per R404.4 and meet Solar Ready provisions from Appendix RB. Approved software must be used to demonstrate compliance with Phius and a Certified Passive House Consultant must be used for design-certification while a Phius Certified Verifier or Rater is used during construction. For the alternate PHI certification, projects are pre-certified using a Certified Passive House Designer and Certified Passive House Certifier.

Both Passive House Building Certification options must also meet Electric Vehicle (EV) Ready requirements including pre-wiring, a connection point and dedicated panel capacity. Both options must also either install solar systems per Appendix RC102/RC105 or be Solar Ready which includes dedicating a solar zone for future solar system installation, confirming structural loads, providing electrical interconnection pathways and reserved panel space.

Additional Information

Passive House Building and Professional Certifications

The Passive House Institute US (Phius) is a non-profit organization which certifies professionals, buildings and products to promote climate-specific high-performance passive buildings. If pursuing Phius certification for code compliance, certified professionals to assist can be found on the Phius website:

[Find a Professional | Phius](#)

The Passive House Institute (PHI), based in Germany, maintains a separate international passive house certification program. PHI also certifies buildings, products and professionals to advance high-performance passive buildings. Certified professionals and other resources to learn more about PHI certification can be found on their website:

[Passivhaus Institut \(passivehouse.com\)](http://Passivhaus Institut (passivehouse.com))

New Construction Prescriptive: Sections R401- R404 (Prescriptive), R408 (Additional Efficiency Packages) & Appendix RB (Solar Ready)

Prescriptive compliance is only allowed for new construction buildings that do not include individually separate dwelling units, as well as small additions and building alterations. The prescriptive sections include requirements for envelope (R402), HVAC and service water heating systems (R403), and electrical and lighting systems- including EV Ready (R404.) Massachusetts has amended the prescriptive requirements for software eligible for the opaque envelope UA alternative, insulation installation, duct testing, mechanical ventilation, and EV Ready parking, so be sure to reference the base code and Stretch Code amendments if complying prescriptively.

In addition to sections R402-R404, Prescriptive compliance also requires the project to implement two of the additional efficiency packages from R408. Three packages are available including enhanced envelope performance, more efficient HVAC equipment and reduced energy use in service water heating. These packages have also been amended by the State, so reference the Stretch Code for amended requirements.

Like the HERS and Passive House compliance paths, the prescriptive path requires either installation of solar systems per Appendix RC102/RC105 or Solar Ready which includes dedicating a solar zone for future solar system installation, confirming structural loads, providing electrical interconnection pathways and reserved panel space per Appendix RB.

Appendix RC- Specialized Code: Sections R404 (Electrical/Lighting/EV Ready) & Appendix RC (Specialized Code)

Even if the Authority Having Jurisdiction (town or city) has not adopted the Specialized Code, meeting the requirements in Appendix RC may be used for compliance with the Stretch Code. Electrical and lighting system requirements in section R404, including EV Ready amendments, are also required when using Appendix RC to comply. As the Specialized Code builds upon the Stretch Code, guidance in this chapter is relevant for projects electing to comply with Appendix RC. Additional guidance is provided in the Residential Specialized Code chapter.

Existing Buildings Chapter 5: Sections R502 (Additions), R503 (Alterations), R504 (Repairs)

Additions, alterations, repairs, changes of use and converting unconditioned to conditioned space must comply with the relevant sections of Chapter 5 of the residential code. The Stretch Code amends how requirements apply to additions and changes in space conditioning (which must meet the same requirements as additions.) Additions less than 1,000 ft² can demonstrate compliance for the addition only or for the addition and the existing building together using prescriptive requirements in R502.3, or for the addition and the existing building together using the HERS certification requirements in R406.5. Additions equal or greater than 1,000 ft² or when the addition exceeds the existing building's conditioned floor area must meet the HERS certification requirements of R406.5 together with the prescriptive requirements in R502.3. HERS certification can be demonstrated on just the addition or for the addition and the existing building together.

Alterations or Change in Use (treated the same as alterations) depend upon the scope of the alteration. Level 3 alterations (as defined in the IEBC) or Extensive alterations (as defined in the IRC Appendix AJ), or a change of use, that are greater than 1,000 ft² must demonstrate a certified HERS rating at or below

the maximum HERS rating in Table R406.5. Level one or two alterations, or any alterations less than 1,000 ft² can use the prescriptive pathway from R503.

R403.6 Mechanical Ventilation

Highlights. Requires site verified continuously operating balanced mechanical ventilation for each dwelling unit, with either heat or energy recovery.

Compliance. Section R403.6 is required for all projects complying via the HERS Index or Prescriptive compliance pathways.

Summary. Balanced ventilation systems utilize supply and exhaust fans to intake and exhaust ventilation air with the intention of providing good indoor air quality, but proper filtration, design and installation are key. R403.6 requires heat recovery or energy recovery ventilators to reclaim heat (while in heating mode) or remove heat (while in cooling mode) from the supply or exhaust air. Generally speaking, heat recovery ventilators work well in dry climates while energy recovery ventilators work well in humid climates. It's important to note balanced ventilation systems do not preclude the need for local exhaust in bathrooms and kitchens, which are intended to exhaust moisture and odors right where they are produced.

Adequate airflow is critical to the performance of balanced ventilation systems emphasizing proper equipment and duct system design. R403.6 requires airflow to be verified in the field per RESNET/ICC Standard 301, or ASHRAE Standard 62.2 (2019 or 2022 acceptable), or the formula included in R403.6 which utilizes the verified blower door air leakage rate. The formula also uses a shielded weather factor (WSF) shown in the code language for counties in Massachusetts. See example below for calculating airflow using the formula.

Heat or energy recovery ventilators must be included in the system design per R403.6.1. The required system efficiency depends upon whether the rated airflow is greater than 300 cfm (considered a "large" system.) Large systems may apply for a central balanced dedicated outdoor air system (DOAS) for a low-rise multi-family building, for example one with six or more units each with a ventilation rate of ~50 cfm (= 300cfm total.) The installed equipment also must be HVI 920 certified (or equivalent) and fans must be rated at a maximum of 1 sone with limited exceptions. Regulations on air inlet and exhaust locations are included to avoid contaminated air being drawn into the residence as well as inadequate airflow.

The code also requires the homeowner and occupants be provided with instruction on maintenance and control requirements.

Example Calculation

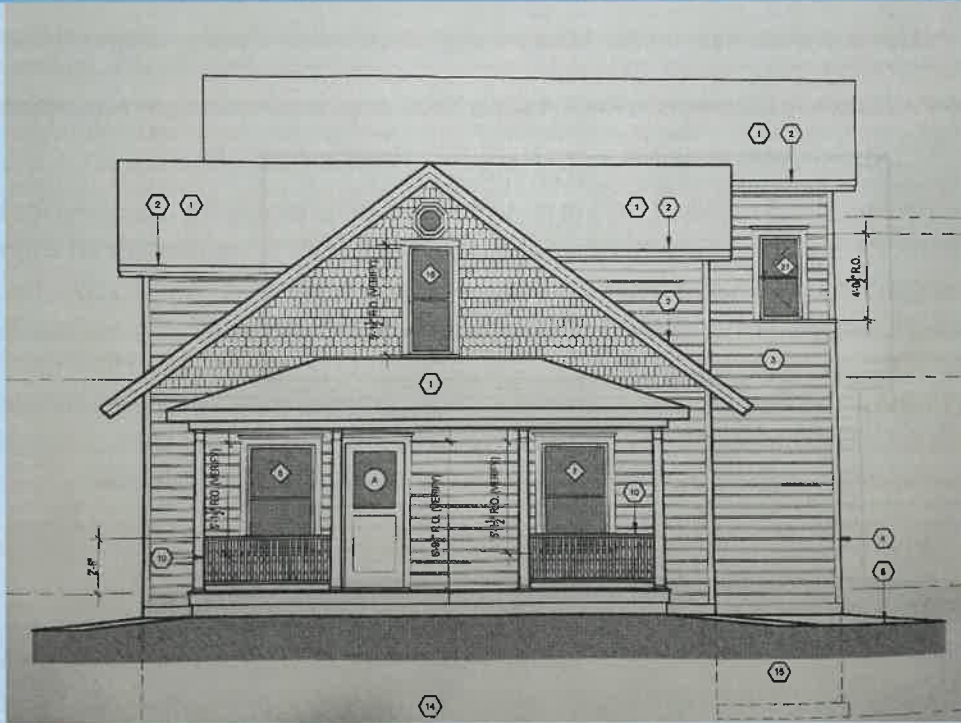


Image Courtesy of NORESCO

This 2,700 ft² single-family, four-bedroom home in Essex County includes a balanced ventilation system. The blower door air leakage rate was measured at 2 ACH₅₀, which must be converted to CFM using Conditioned Volume (V) based on the home's average ceiling height (9ft in this example) using the equation below:

$$Q_{50} = (V \times 2 \text{ ACH}_{50}) / 60 = (24,300 \text{ ft}^3 \times 2 \text{ ACH}_{50}) / 60 = 810 \text{ CFM}$$

Where $V = 2,700 \text{ ft}^2 \times 9\text{ft} = 24,300 \text{ ft}^3$

The formula in R403.6 can be used to determine minimum airflow for this home:

$$Q = 0.03 \times \text{CFA} + 7.5 \times (N_{br} + 1) - 0.052 \times Q_{50} \times S \times \text{WSF}$$

$$= 0.03 \times 2,700 \text{ ft}^2 + 7.5 \times (4 + 1) - 0.052 \times 810 \text{ CFM} \times 1.32 \times 0.58 = 86.25 \text{ CFM}$$

Where:

CFA is conditioned floor area (2,700 ft² in this example)

N_{br} is number of bedrooms (4 in this example)

Q₅₀ is blower door air leakage rate in CFM measured at 50 Pascals (810 in this example)

S is the building height factor from the table in R403.6 (1.32 for two stories)

WSF is the shielded weather factor from the table in R403.6 (0.58 for Essex County)

R404.4 Wiring for Electric Vehicle Charging Spaces (EV Ready)

Highlights. This section is entirely new for the MA base code with Stretch Code amendments.

Compliance. The EV Ready requirements in R404.4 apply to all new construction projects, regardless of compliance pathway.

Summary. Two definitions from section R202 are relevant when determining the requirements to comply with R404.4. The first is the definition for Electric Vehicle Supply Equipment (EVSE) which describes the scope of what is included in ESVE to transfer energy between the building and the Electric Vehicle. The second is a definition for Electric Vehicle Ready Parking Space which clarifies that the parking space must include wiring and electrical service sufficient to provide AC Level II or equivalent EV charging. Section R404.4 also requires a dedicated branch circuit in the panel or subpanel labeled as “EV Ready”, as well as requirements for the location and type of termination point at the parking space. The MA electrical code includes requirements for conductors and outlets within the system.

Additional information

Standard SAE J1772 Electrical Connectors (J Plug)

The Society of Automotive Engineers has been publishing Standard SAE J1772 since 1996 to standardize physical, electrical, functional and performance requirements for EV chargers. Connectors following this Standard, known as “J Plugs,” are the most common type of Level 2 connector in the U.S.

[J1772 201710: SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler - SAE International](#)



Images courtesy of NORESO

One of the design issues related to providing EV charging is appropriately sizing the electrical service. To optimize panel capacity, there are power-sharing switch devices that can be used to share power between 240V outlets. This is especially useful when the home includes an EV charger that can share power with an intermittently used appliance such as a clothes dryer or cooking range. New homes may also install smart electrical panels to allow for peak load management and to allow for lower total electrical service requirements while complying with the MA electrical code.


The number of EV Ready Spaces required depends on whether the building is a one- or two-family dwelling or townhome, or another R-use occupancy. For one- or two-family dwellings or townhomes, Table R404.4 requires at least one 50-amp branch circuit per dwelling unit to provide AC Level II charging.

For all other R-use occupancies, example calculations are provided below to illustrate the minimum number of EV Ready Spaces that would need to be shown on the site plan. Note the footnote in Table R404.4 that allows substitution of Level II chargers for Level I chargers, with conditions.

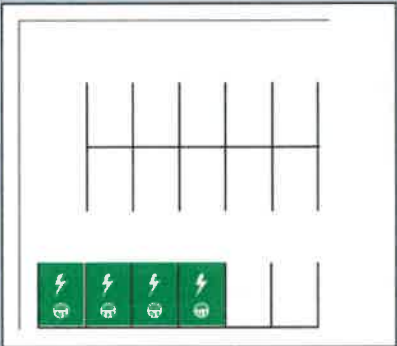
Example Calculation:

R Occupancies Other Than One- and Two-family Dwellings and Town Homes

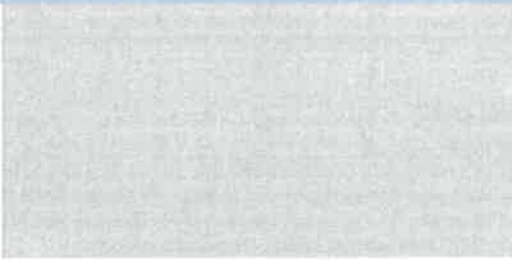
Table R404.4 requires at least 20% of parking spaces be served by a 40-amp, 208/240-volt circuit with a minimum capacity of 9.6 kVA. The calculation below shows the number of spaces that would need to be at least EV Ready (EV Installed would also comply.)



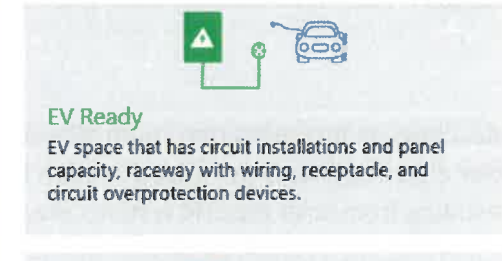
Calculation



Example: 16 spaces
Minimum 20% EV Ready Spaces Required
 $16 \times .2 = 3.2$
Therefore 4 spaces must be EV Ready



EV Ready
EV space that has circuit installations and panel capacity, raceway with wiring, receptacle, and circuit overprotection devices.



EV Installed
EVSE fully installed from the electrical panel to the EV space.

Note R-2 multi-family properties may elect to comply with Commercial EV Ready requirements in C405.13 Electric Vehicle Ready Parking Spaces (“EV Ready Spaces”).

R406 Energy Rating Index Compliance Alternative (HERS Index Score)

Highlights. Maximum HERS Index scores have been modified in the Stretch code, including using a phase-in approach based on permit application date for new construction and specific maximum scores for additions, alterations or changes of use.

Compliance. This section is relevant to new construction projects using the HERS compliance path as well as additions, alterations or changes of use demonstrating compliance with a HERS score. See flowchart on [page X](#) of this Guideline for details on when HERS is required and when it is an option.

Summary. The Stretch Code modifies Table R406.5 to reduce the maximum allowed HERS score after June 30th, 2024, for new construction projects. Mixed-Fuel Buildings, All-Electric Buildings and buildings with solar electric systems have different allowance levels as seen below. The project HERS score used to demonstrate compliance with this table must be without any onsite solar electric generation.

TABLE R406.5 MAXIMUM ENERGY RATING INDEX

Clean Energy Application	Maximum HERS Index score ^{a, b}		
	New construction until June 30, 2024	New construction permits after July 1, 2024	Major-alterations, additions, or Change of use ^c
<i>Mixed-Fuel Building</i>	52	42	52
Solar Electric Generation	55	42	55
<i>All-Electric Building</i>	55	45	55
Solar Electric & All-Electric Building	58	45	58

^a Maximum HERS rating prior to onsite renewable electric generation in accordance with Section R406.5

^b The building shall meet the mandatory requirements of Section R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

^c Alterations, Additions or Change of use covered by Section R502.1.1 or R503.1.5 are subject to this maximum HERS rating.

The Massachusetts code allows an increased maximum allowable score when dwelling units are All-Electric or served by solar electric systems per added Section R406.5.1. Note that for new construction, the additional points resulting from solar electric systems are only available for projects permitted through June 30, 2024. Starting July 1, 2024, additional points are only available for All-Electric buildings. For alterations, additions and changes in use, the points for solar electric systems remain regardless of permit date.

R408 Additional Efficiency Package Options

The additional efficiency package options in R408 only apply to new construction projects which don't have individually separate dwelling units and are using the prescriptive compliance path, as well as projects that are complying via the All-Electric path in the Specialized Code.

Projects complying prescriptively have the option to choose two of the three packages. Note that Massachusetts has amended all three packages to increase stringency and promote decarbonization. The amendment to the enhanced envelope performance option lowers the allowed building thermal envelope UA as compared to the code baseline UA, requiring a higher performing envelope to comply with this option. The HVAC amendment eliminates the option for gas furnace plus AC thereby requiring either air-source or ground-source heat pumps if selecting this option. It also dictates minimum equipment efficiencies and requires all heating systems to be sized to serve 100% of the cooling and heating design loads. The water-heating option has also been amended to disallow fossil fuel equipment

in this option, requiring minimum efficiencies for electric or solar systems. Large additions and alternations over 1,000 ft² that must comply with new construction requirements are thereby incentivized to electrify space and water heating systems if pursuing prescriptive compliance.

For All-Electric homes, both the more efficient HVAC equipment and reduced energy use in service water-heating options are required. The requirement to use heat pumps for space heating along with the equipment efficiency requirements in both subsections effectively prevents projects from using electric resistance heating as the primary heating system.

R502 Additions or Change in Space Conditioning

Large additions (those that are greater than 1,000 sf or exceed the existing building's conditioned floor area) are required to comply with the maximum allowed HERS scores in Table 406.5. The Table includes a separate column for additions though the maximum allowed score still depends on whether the project is Mixed-Fuel or All-Electric and whether onsite solar is included. For example, a Mixed-Fuel large addition must not exceed a HERS Index score of 52 while an All-Electric addition must not exceed a score of 55. Three additional HERS points are given to projects that include onsite solar systems, bringing the maximum allowed to 55 for Mixed-Fuel and 58 for All-Electric. However, these maximum HERS scores must be complied with without counting any onsite solar in the project's HERS score.

Additions that are not considered large may utilize the prescriptive requirements in Section R502.3 or may elect to meet the HERS score requirements from Table 406.5. An amendment to prescriptive envelope requirements under R502.3.1 exempts additions less than 1,000 sf from air leakage testing requirements in R402.4.1.2.

Changes in space conditioning (i.e., unconditioned or low-energy spaces that are being altered to conditioned space) are treated the same as additions in the Massachusetts code. The State amended Section R502.2 to delete the exceptions that relaxed requirements for change in space conditioning.

R503 Level 3 Alterations or Change of Use

Major alterations, defined as Level 3 alterations in the International Existing Building Code (IEBC) or as Extensive Alterations in the International Residential Code (IRC) Appendix J (section AJ501.3) as projects where the reconfigured space exceeds 50% of the existing building area also requires compliance with the HERS Index maximum scores in Table R406.5. Changes of use that exceed 1,000 sf or 100% of the existing building conditioned floor area also require HERS compliance. Table R406.5 includes alterations and change of use in the same column as additions to set maximum HERS scores.

Important Information

Change of Occupancy and Change of Use

Section 202 of the International Existing Building Code defines Change of Occupancy and Change of Use. These definitions are important to the Massachusetts code because application of code requirements depends on correctly classifying the project scope.

Change of Use: A change in the use of a building or a portion of a building, within the same group classification, for which there is a change in application of the code requirements.

Change of Occupancy: Any of the following shall be considered as a change of occupancy where the

current International Building Code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- Any change in the occupancy classification of a building or structure. Any change in the purpose of, or a change in the level of activity within, a building or structure.
- A change of use.



Massachusetts Municipal Opt-in Specialized Energy Code 2023 (Appendix RC)

New for this 2023 code cycle jurisdictions have the option of adopting the Specialized Opt-in Energy Code (Specialized Code) instead of the Massachusetts 10th edition IECC2021 (Base Energy Code) or the 2023 updated Stretch Code. As explained earlier in this Guideline, the Specialized Code builds upon the Stretch Code which builds upon the IECC 2021 edition. This means for projects permitting in jurisdictions that have adopted the Specialized Code, the Stretch Code requirements apply where not amended by the Specialized Code. Therefore, it is recommended that the previous chapter which provides guidance on the Stretch Code be reviewed in addition to the guidance provided here on Specialized Code amendments.

Just as the Massachusetts Stretch Code is predicated on the 2021 IECC, the Specialized Code is based on the 2021 IECC Appendix RC, Zero Energy Residential Buildings. Significant amendments have been made by the State to create the Specialized Code.

Generally, the Specialized Code requires Zero Energy or All-Electric buildings, with limited compliance options for electric-ready Mixed-Fuel buildings. All compliance options require EV Ready and either on-site renewables or Solar-Ready. Passive House certification can be used by any project complying with the Specialized Code while HERS compliance is limited to small buildings 12,000 ft² or less.

RC101 Compliance

Highlights. The Specialized Code Appendix RC is new for this code cycle.

Compliance. Where adopted by a jurisdiction, requirements in Appendix RC are in addition to requirements in the MA 2023 Residential Stretch code.

Summary. New construction low-rise residential buildings must follow the compliance paths and associated requirements in the Specialized Code. Additions, alterations, changes in use or conversions of unconditioned to conditioned space must meet requirements in the Stretch Code (see previous chapter for guidance.)

There are several compliance paths available for projects based on the building size and dwelling unit size (square footage).

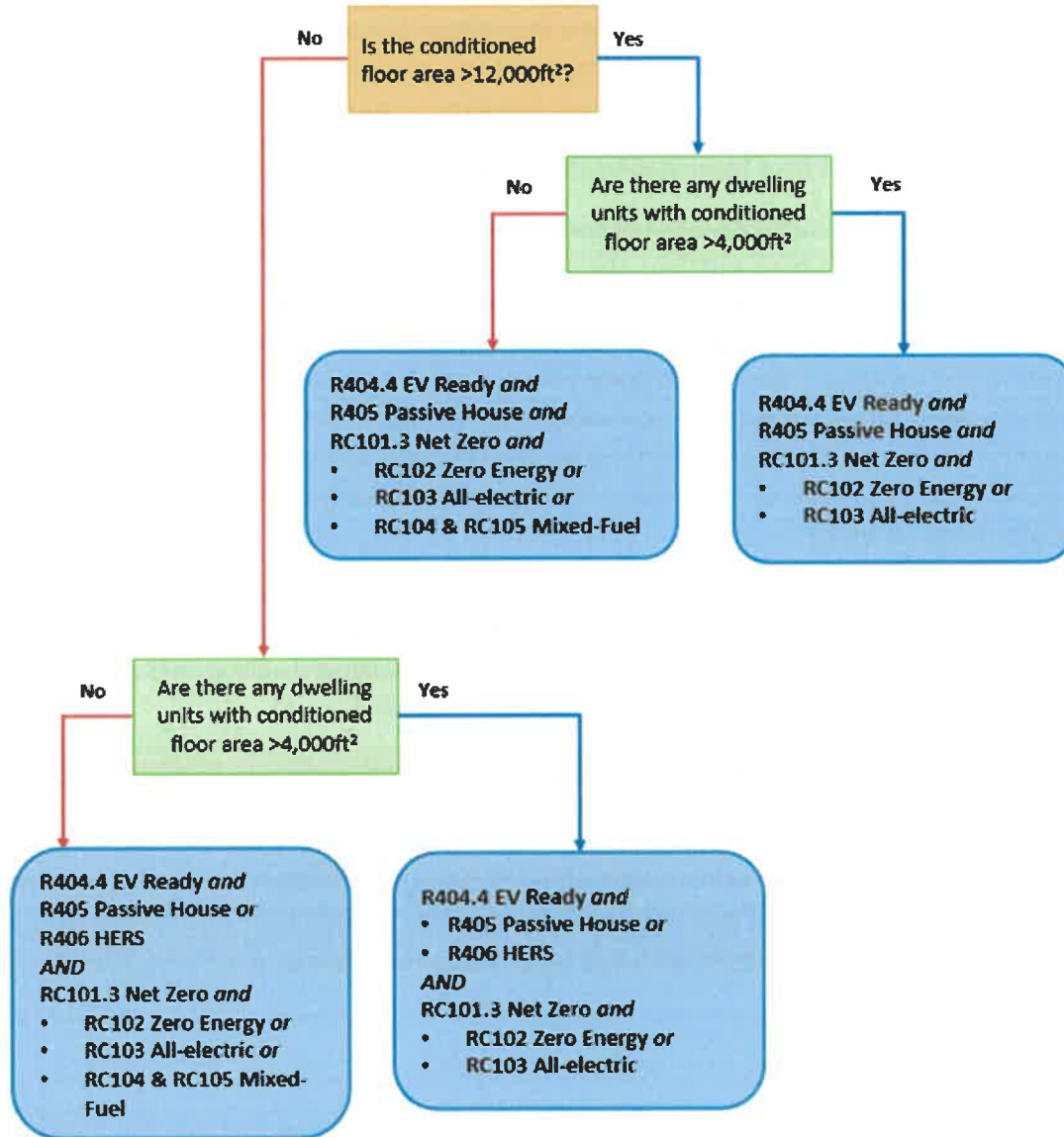
Key

Start process

Decision

End of process

Table RC101



Each compliance path is summarized below, though code sections should be reviewed in detail for requirements.

Passive House: Sections RC101.3 (Net Zero), R404.4 (EV Ready) and R405 (Passive House)

Any project complying with the Specialized Code can use the Passive House compliance path. Projects using this compliance path must meet Passive House requirements from Section R405 of the Stretch Code. See the residential chapter of this Guideline for more details on complying with Section R405. In addition to meeting Passive House requirements, projects using this path must also comply with EV

Ready requirements in R404.4 of the Stretch Code. The previous chapter also includes additional guidance on EV Ready compliance.

Projects complying using Passive House for the Specialized Code that do not have dwelling units with greater than 4,000 ft² of conditioned floor area must also choose to meet the Zero Energy requirements in RC102, the All-Electric requirements in RC103 or the Mixed-Fuel requirements in RC104 and RC105. Dwelling units with greater than 4,000 sf of conditioned floor area may not use the Mixed-Fuel option and therefore must choose either the Zero Energy or All-Electric option.

HERS Score: Sections RC101.3 (Net Zero), R404.4 (EV Ready) and R406 (HERS)

HERS may only be used for compliance with the Specialized Code for new residential buildings 12,000 sf or less, or where applicable to large additions and alterations. These buildings may choose between the Passive House compliance path or the HERS compliance path, with maximum HERS scores of 42, or 45 for all-electric units that are new construction. The HERS compliance path requires the project to meet requirements in Section R406 of the Stretch Code, however through June 30, 2024, the required HERS scores are lower when complying with the Specialized Code as seen in Table RC102.2. Compliance for large additions and alterations is unchanged from the Stretch code. EV Ready requirements in Section R404.4 are also required to comply. The previous chapter on the Stretch Code provides guidance on complying with these sections.

Buildings that do not have dwelling units with greater than 4,000 sf of conditioned floor area can choose to meet the Zero Energy requirements in RC102, or the All-Electric requirements in RC103, the Mixed-Fuel requirements in RC104 and RC105. Buildings that do have individual dwelling units greater than 4,000 ft² of conditioned floor area may not use the Mixed-Fuel option.

Additional Information

Additions, Alterations, Change of Use

There are no additional requirements in the Specialized Code for Existing Buildings that are undergoing Additions, Alterations or Changes of Use. If the permitting Authority Having Jurisdiction has adopted the Specialized Code, Existing Building projects should comply with the requirements in the Stretch Code.

RC101.3 & R202 Definitions

Highlights. Two new definitions have been added in the Specialized Code; definitions from R202 in the Stretch Code are also relevant.

Compliance. Sections RC101.3 and R202 are applicable to all projects utilizing the Specialized Code.

Summary.

The definition for *Zero Energy Building* is important because it lays the foundation for the requirements in RC102 (see flowchart above for more details.) A Zero Energy Building has sufficient onsite renewable energy generation (typically Solar PV) that it is expected to achieve net zero annual site energy excluding energy used for EV charging. This net zero on an annual basis can include fossil fuel use, provided that it is offset on an equal or greater energy (MMBTU) basis with onsite renewable energy generation.

Several definitions in the Stretch Code Section R202 are of particular importance because they dictate compliance requirements. In particular, the definition for *All-Electric Building* dictates that no combustion equipment can be used on-site for space heating, water heating, cooking or drying appliances (clothes drying.) Exterior generators and freestanding outdoor propane grills may be included in All-Electric buildings, however indoor gas fireplaces and propane/ gas cooktops may not be included. Requirements for All-Electric Buildings are found in RC103 and can be used by any project for partial compliance.

Mixed-Fuel Buildings on the other hand do include combustion equipment or piping for combustion equipment. Under the Specialized Code, Mixed-Fuel Buildings are only allowed for dwelling units with conditioned floor area no more than 4,000 sf and they must be electric ready, EV Ready, and include onsite solar systems where feasible based on the available potential solar roof zone area . Where the exception in RC105.1 solar-roof zone applies due to shading, a solar installation is not required.

If biomass combustion equipment is included in a building it puts the building in the mixed-fuel building pathway. This means that fireplaces and wood stoves are permitted in this pathway. However, any biomass combustion equipment used as the primary heating system must meet the Clean Biomass Heating System definition from Section R202 shown here:

CLEAN BIOMASS HEATING SYSTEM. Wood-pellet fired central boilers and furnaces where the equipment has a thermal efficiency rating of 85% (higher heating value) or greater; and a particulate matter emissions rating of no more than 0.08 lb. PM_{2.5}/MMBtu heat output.

Note: This definition is also used to qualify Clean Biomass heating systems for incentives under the Alternative Portfolio Standard (APS), for more information see: <https://www.mass.gov/service-details/qualifying-woody-biomass-in-the-aps>

RC102 Zero Energy Pathway

The Zero Energy Pathway is one option to meet the Specialized Code. There are two ways to demonstrate compliance with the Zero Energy Pathway:

1. Comply with HERS in Section R406 of the Stretch Code and achieve a HERS rating of 0 or less
2. Comply with Passive House in Section R405 of the Stretch Code and achieve a Plus ZERO standard Design Certification.

If complying with the HERS 0 option #1 above, Table RC102.2 requires a maximum allowable HERS Rating Index of 45 for all-electric homes or 42 for mixed-fuel homes, prior to counting on-site power production in the score. This means the project must achieve a compliant score without on-site power and then must achieve a score of zero or less after on-site power is included. Envelope assembly U-factor or R-value requirements from Section R402.1 of the IECC-2021 also apply to these projects setting minimum assembly performance requirements.

Additional Information

HERS Index Score of Zero

The HERS Index is a scale used to communicate the energy performance of a residence. The higher the score, the worse the energy performance. HERS scores are determined by RESNET® accredited HERS

energy raters and compare a reference design against the home's design (rated design.) When the expected energy performance of the rated design does not require an annual net purchase of energy (i.e., it produces as much as it consumes), the HERS Index score is 0. This includes not only offsetting electricity use in the home, but also offsetting fossil fuel or biomass fuel use on a site MMBtu basis. This means solar systems should be sized to offset all energy use, both electric and non-electric.

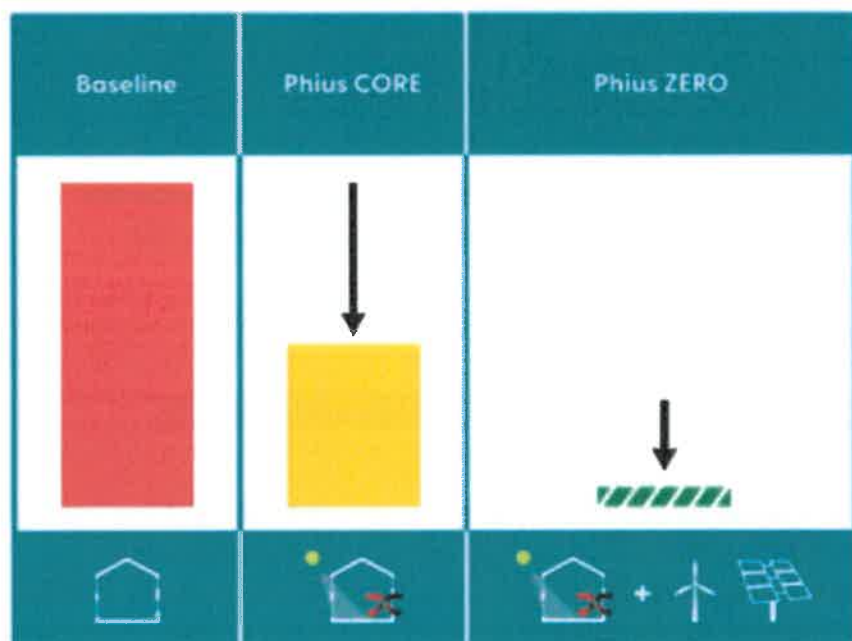
[Understanding the HERS Score - HERS Index | Home Energy Rating System | Energy Audit & Ratings | RESNET](#)

The Phius ZERO option is the only option in the Specialized code that allows for credit for off-site renewable energy. Under this compliance path both on-site and off-site renewables can count toward the Phius ZERO certification when approved by Phius.

Additional Information

Phius ZERO Standard

Phius ZERO is the Passive House US net zero standard. The same Passive House principles apply (Phius CORE) but then on-site or off-site renewable energy is used to offset energy consumption reaching a net zero status.



Both on-site and off-site renewables can be used.

[Phius ZERO | Phius Phius ZERO for New Construction](#)

RC103 All-Electric Pathway

The All-Electric pathway is another option to comply with the Specialized Code and can be used by any project pursuing compliance. This is anticipated to be the most commonly used option to comply. Projects using this option must comply with HVAC and water-heating additional efficiency packages in Section R408.2 of the Stretch Code which preclude use of electric resistance heating in primary systems.

EV Ready requirements in R404.4 and Solar Ready requirements in Appendix RB are required, plus one of the following:

1. Achieve a Certified Final HERS rating without on-site power of 45 or less, and
 - a. Comply with heat/ energy recovery ventilation, and
 - b. Meet lighting requirements in R406.2 of the Stretch Code, and
 - c. Meet U-factor/R-value requirements in R402.1 of the base code
2. Comply with Passive House in Section R405 of the Stretch Code and achieve a pre-certification to Phius CORE or PHI Standard.

Additional guidance for the Additional Efficiency Packages, EV Ready, Solar Ready and Phius CORE/ PHI certifications can all be found in the Residential Stretch Code chapter of this Guideline.

RC104 Mixed-Fuel Pathway

The Mixed-Fuel pathway may only be used to comply with the Specialized Code for dwelling units with conditioned floor area less than 4,000 ft². Mixed-Fuel buildings include space or water heating systems or appliances capable of using fossil fuels. Buildings using *Clean Biomass Heating Systems* also must comply with the Mixed-Fuel option. Complying with this option entails meeting one of the two options below:

1. Achieve a HERS index without on-site power of 42 or less, and
 - a. Comply with heat/ energy recovery ventilation and lighting requirements in R406.2 of the Stretch Code, and
 - b. Meet U-factor/R-value requirements in R402.1 of the base code, and
 - c. Meet electric readiness requirements in RC104.3, and
 - d. Meet on-site renewable requirements in RC104.4/RC105, and
 - e. Comply with EV Ready requirements in R404.4 of the Stretch Code.
2. Pre-certify using Passive House from Section R405 of the Stretch Code, and
 - a. Meet electric readiness requirements in RC104.3, and
 - b. Comply with EV Ready requirements in R404.4 of the Stretch Code.

If space conditioning or water-heating requirements are being met with fossil fuel equipment the project must include the infrastructure to change that equipment to electric with minimal impact in the future. This includes planning for a heat-pump space heating system, which requires designing with proper equipment location for future indoor and outdoor units. Outdoor units need to be located without close obstructions so there is adequate airflow, at a location where sound will not impact the occupants or neighbors and have an appropriate place for the condensate to drain without causing a slip hazard if frozen. Electrical requirements include a dedicated branch circuit reserved and labeled.

Design considerations for future heat pump water heating equipment will also need to be taken into account in the building design. This includes a location indoors that meets the size requirements listed in RC104.3.4 as well as considering sound attenuation, if necessary, based on surrounding space uses. Heat pump water heaters utilize heat from the surrounding air to heat the water in the tank so locating the water heating equipment with other appliances such as a clothes dryer that heat surrounding air should be considered. Heat pump water heaters are also typically taller than traditional gas tank water heaters, so a minimum height of 7 feet is required for any installed hot water heating equipment.

Electric readiness is also required for cooking and clothes drying appliances. Induction cooking and electric clothes dryers require higher voltage (220 - 240Volts), so this needs to be considered when calculating the correct electrical service size. Section RC104.3 requires a 250-volt, 40 Amp outlet within three feet of any gas or propane range or cooktop, and a 250-volt, 30 Amp outlet within three feet of the clothes dryer. This pre-wiring will allow a homeowner to more easily exchange gas or propane appliances for electric ones in the future, without tearing out drywall to add electric infrastructure.

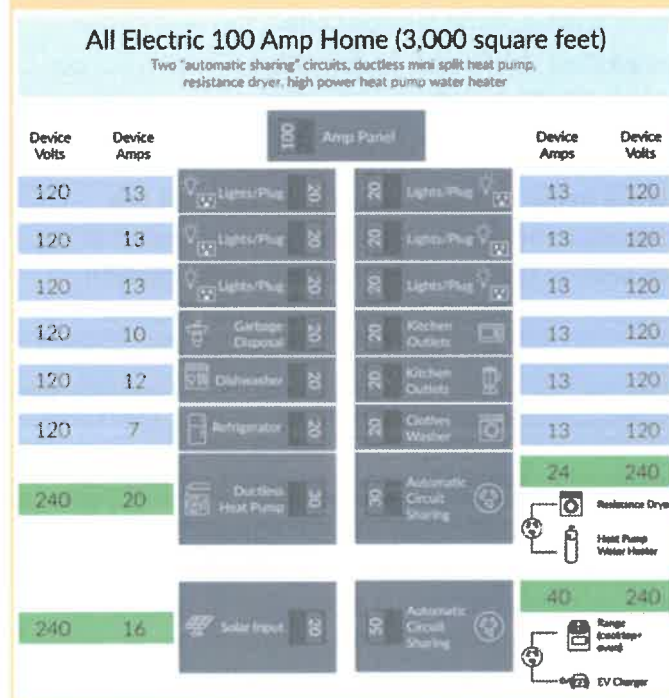
Additional Information

The Watt Diet

Appropriately sizing the electrical service is an important consideration when planning for a future All-Electric home. Upsizing the service has cost implications, so carefully planning the electric load in the home is critical. There are design approaches that can be used to minimize the required panel size including implementing automatic circuit sharing as shown in the image below for the clothes dryer/ water heater and cooking range/ EV charger. Smart service panels are also available that easily integrate PV, battery, EV chargers and demand response and connect to Wi-Fi to enable more efficient operation through homeowner alerts.

Through load management and intentional design, residential units can be All-Electric on a 200 Amp panel (or even smaller.) Building or renovating for All-Electric or pre-wiring a mixed-fuel home to be All-Electric capable doesn't necessarily mean increased electrical service capacity.

The example panel diagram below shows conceptually how All-Electric homes can be intentionally designed to be on a lower amperage service. This diagram is not meant to provide design direction or imply code compliance.



Example panel diagram created and designed by: Josie Gaillard, Courtney Beyer and Tom Kabat

Mixed-Fuel buildings with a potential solar zone of at least 300 ft² must install on-site renewable energy to comply. One- and two-family dwellings must install solar photovoltaic panels, while multi-family occupancies can install solar PV or solar water heating; the minimum system size is dictated in Section RC104.4.

RC105 Solar Roof Zone

Designated Solar Roof Zones are areas on the roof that have adequate solar access and can be set aside for future solar system installations. These areas must be shown on the roof plan free of obstructions such as roof vents or exhaust fans, meeting MA Fire Code setbacks and must be at least 5 feet wide and 80 ft² to accommodate solar panels. The minimum total area that must be designated depends on the building's height and square footage, per RC105.3. Restrictions on shading from nearby architectural or natural elements apply and structural design loads to accommodate solar systems must be calculated and documented on the construction documents.

Electrical infrastructure must also be installed including a designated interconnection pathway from the zone to the water heater (for future solar water heating) and electrical service (for future PV panels.) The electrical panel must also have a reserved space for a dual pole circuit breaker and a capped roof penetration sleeve must be included at the zone for future conduit (minimum size designated in RC105.)

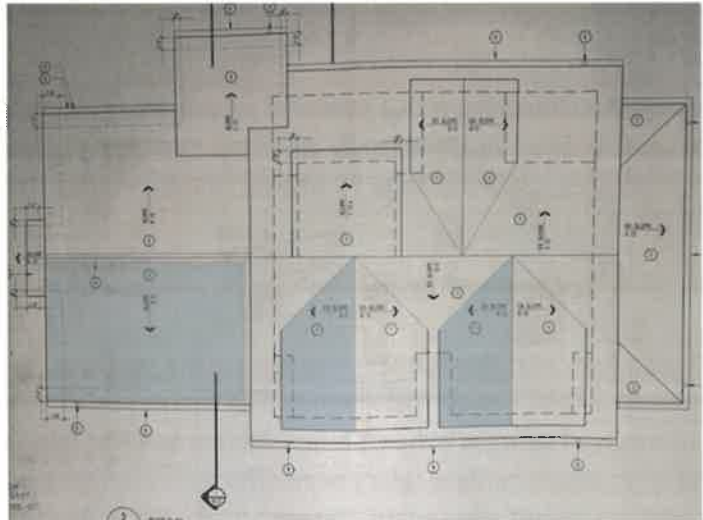
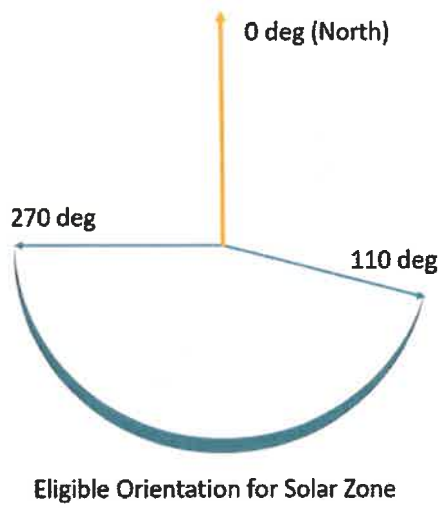
The homeowner or building owner must be made aware of the solar infrastructure included in their building via a certificate indicating the solar system size the infrastructure can accommodate & detailing the infrastructure provided.

There are two exceptions to providing a solar roof zone when the building's roof is not amenable to solar systems. Specifically, the following exceptions do not need to comply with RC105:

- Detached one- and two-family dwellings or townhomes with less than 600 ft² of roof area oriented between 110 & 270 degrees of true North*
- Buildings where all areas of the roof are in full or partial shade for more than 70% of annual daylight hours (demonstrate with a solar shading study)

* Unshaded flat roofs count as being oriented between 110-270 degrees of true North and therefore should be counted as eligible for the Solar Roof Zone.

The roof plan below depicts roughly 400 ft² of roof area eligible for the solar zone on this single-family home (within orientation and at least 80 ft² of unobstructed roof.) Because this is less than 600 ft², this home would be excepted from the requirements in RC105.



Eligible Roof Areas for Solar Zone

Image credit: NORESO

Informative Appendices.

- A. [Model bylaw language](#) for municipal adoption for specialized code and stretch code
- B. Plans examiner & building inspector checklists



Massachusetts Energy Stretch and Specialized Codes

The Massachusetts Department of Energy Resources (DOER) mission is to develop and implement policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable and resilient energy future for all residents, businesses,

Massachusetts Department of Energy Resources' Energy Efficiency Division develops, implements, and oversees energy efficiency activities in the Commonwealth in conjunction with other state and federal agencies.





SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VII

BOARD/COMMITTEE APPOINTMENTS AND UPDATES ~ B ~

REQUESTED BY:	National Seashore Parks
DESIRED ACTION:	To review and possibly nominate Cape Cod National Seashore Advisory Commission Members
PROPOSED MOTION:	If a motion is decided upon one will be made at the time of the meeting.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



United States Department of the Interior

NATIONAL PARK SERVICE
Cape Cod National Seashore
99 Marconi Site Road
Wellfleet, MA 02667

IN REPLY REFER TO:

January 23, 2023

Ryan Curley, Chair
Town of Wellfleet Selectboard
300 Main Street
Wellfleet, MA 02667

Dear Mr. Curley,

The Cape Cod National Seashore Advisory Commission (Commission) was originally authorized in 1961 as a part of Public Law 87-126, Cape Cod National Seashore's enabling legislation, and began operation in 1966. The Commission was last authorized for a ten-year period by Public Law 111-11 in 2009 and expired on September 26, 2018. Recently, the Commission has been reestablished as part of the Consolidated Appropriations Act signed by President Biden on December 29, 2022, until September 26, 2029. Pursuant to the Cape Cod National Seashore enabling legislation, the Secretary of the Interior appoints one member from nominations submitted by the Board of Selectmen of Wellfleet, MA.

Accordingly, I invite you to nominate, within 30 days of the date of this letter, two individuals for consideration in appointing one voting member and one voting alternate member to the Commission. All appointments are for two-year terms. For each nomination, please include a resume with home and business addresses, telephone numbers, and date of birth. Please indicate which individual you are nominating as the voting member and alternate member respectively.

Nominations should be submitted to Superintendent, Cape Cod National Seashore, 99 Marconi Site Road, Wellfleet, MA 02667. We will forward all nominations to the Department of the Interior once we have received a complete package with all requested information. The Secretary of the Interior will make the final decision on appointments to the Commission and will send the appointment letter directly to each appointee.

If you have any questions about the appointment process or other matters related to the park, please contact me at 508-957-0701 or email at Leslie_Reynolds@nps.gov

Sincerely,

Leslie Reynolds
Acting Superintendent



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VIII

BUSINESS

~ A ~

REQUESTED BY:	Jason Robicheau ~ The Grateful Mind
DESIRED ACTION:	To discuss with the selectboard his current license and the final steps that are required for him.
PROPOSED MOTION:	If a motion is needed one will be made at the time of the meeting.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



Board of Selectmen

Request for Placement on Agenda

Name: Jason Robicheau

Address: 1069 Browns Neck Rd

Company or Organization Representing: The Grateful Mind (15 Bank Street)

Phone Number: (508)579-4461

Email Address: jasonrobicheau@netscape.net

Specific Request: I would like to speak with the Selectboard regarding my
current licensing progress and the final steps required.

To be Filed out by Dept.

Applicant Notified: _____ Date of Hearing: _____

Date Request Completed: _____

2-7-2023



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023



BUSINESS

~ B ~

REQUESTED BY:	Dredging Task force, Chris Allgeier, Curt Felix, Will Sullivan, Harbormaster
DESIRED ACTION:	To present an up-to-date dredging and mitigation update
PROPOSED MOTION:	If a motion is needed one will be made at the meeting.
SUMMARY:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____

Selectboard Meeting – February 7, 2023
Wellfleet Harbor Dredging Update
Area 2 (Chipman’s Cove)
USACE Permit – Mitigation Scenario

USACE Permit /Mitigation Discussions

2022

Mitigation discussions with USACE in fall 2022 concentrated on various town properties to be considered for mitigation, including the HDTLTA property. After reviewing the menu of potential properties, USACE expressed strong interest in the HDYLTA property as an appropriate candidate for mitigation. The Wellfleet Selectboard had severe reservations about utilizing the HDYLTA property for mitigation and instructed the Town Administrator and the Dredging Task Force to seek alternates, especially an alternate associated with the Herring River, given its regional significance.

USACE initial reaction to a Herring River mitigation plan was that approval of such a plan was unlikely because the Herring River Restoration Project (HRRP) includes federal funding. Additional discussion with USACE clarified the many sources of non-federal funding and a Herring River mitigation plan became a viable option.

As a result of further discussions, the USACE discussed the various credits applied to projects which they categorize based on Federally acceptable classes of ecosystem “uplift” namely a project characterized as “preservation”, “enhancement” or “restoration”. HDYLTA falls into a preservation category requiring a 20:1 mitigation offset to impact. The Herring River option looks like the possibility of an “enhancement” or “restoration” which would require a 3:1 or 2:1 ratio of offset to impact. In plain terms this translates to 14 to 28 acres for an acceptable mitigation plan vs. 143 acres that would have been required for a HDYLTA mitigation option.

January/February 2023

Several calls were held in January with the USACE to discuss options and parameters for an acceptable mitigation plan and learn more about how to maximize the benefits and minimize the Town’s obligation. The USACE focused on a restoration of shellfish habitat in the Herring River, either upstream or downstream of the existing Herring River dike. Their view was that this is not something already contemplated in the Herring River Restoration, therefore not largely Federally funded, and largely a true Town contribution which they felt would be acceptable under Federal guidelines. In clarifying whether shellfish could be harvested from a mitigation, they indicated this was possible, not preferable and that it could not be commercially exploited as the Federal intent is a mitigation of a \$14 million damage, (the dredging) requiring permanent restitution.

After the January calls, there were several discussions with the Shellfish Department, members of the shellfish community, and members of the Shellfish Advisory Board. There was an in-depth discussion at the Shellfish Advisory Board meeting held on January 30, 2023. Discussion centered on the potential mitigation scenario described below. Key areas of concern included how much acreage USACE would require for an acceptable mitigation plan, would there be restrictions on future shell fishing, and if so, would those restrictions preclude shellfish relay, recreational shell fishing, or commercial shell fishing. As a result of the January 30, 2023, discussions, additional information is required from USACE.

A call was held with USACE on February 2, 2023. This discussion focused on improving water quality and on defining the acreage required for an acceptable mitigation plan. A preliminary plan that is acceptable to USACE includes creating a 14-acre area south of the dike and envisions the placement of culch this year. This area is currently classified as prohibited. As the area cleans up, harvesting would eventually be allowed, albeit possibly with some restrictions. After the Herring River Restoration Project work is completed, a 14-acre area north of the dike would be implemented. This area would also then be culched.

USACE provided guidance on some of the details that will be required as part of the mitigation plan including performance standards, frequency for monitoring performance, etc. USACE emphasized their availability to answer any questions we may have as we generate the mitigation plan. Frequent recurring calls will be implemented.

WELLFLEET HARBOR MAP

Attached, for reference is a map of the Herring River area under discussion.



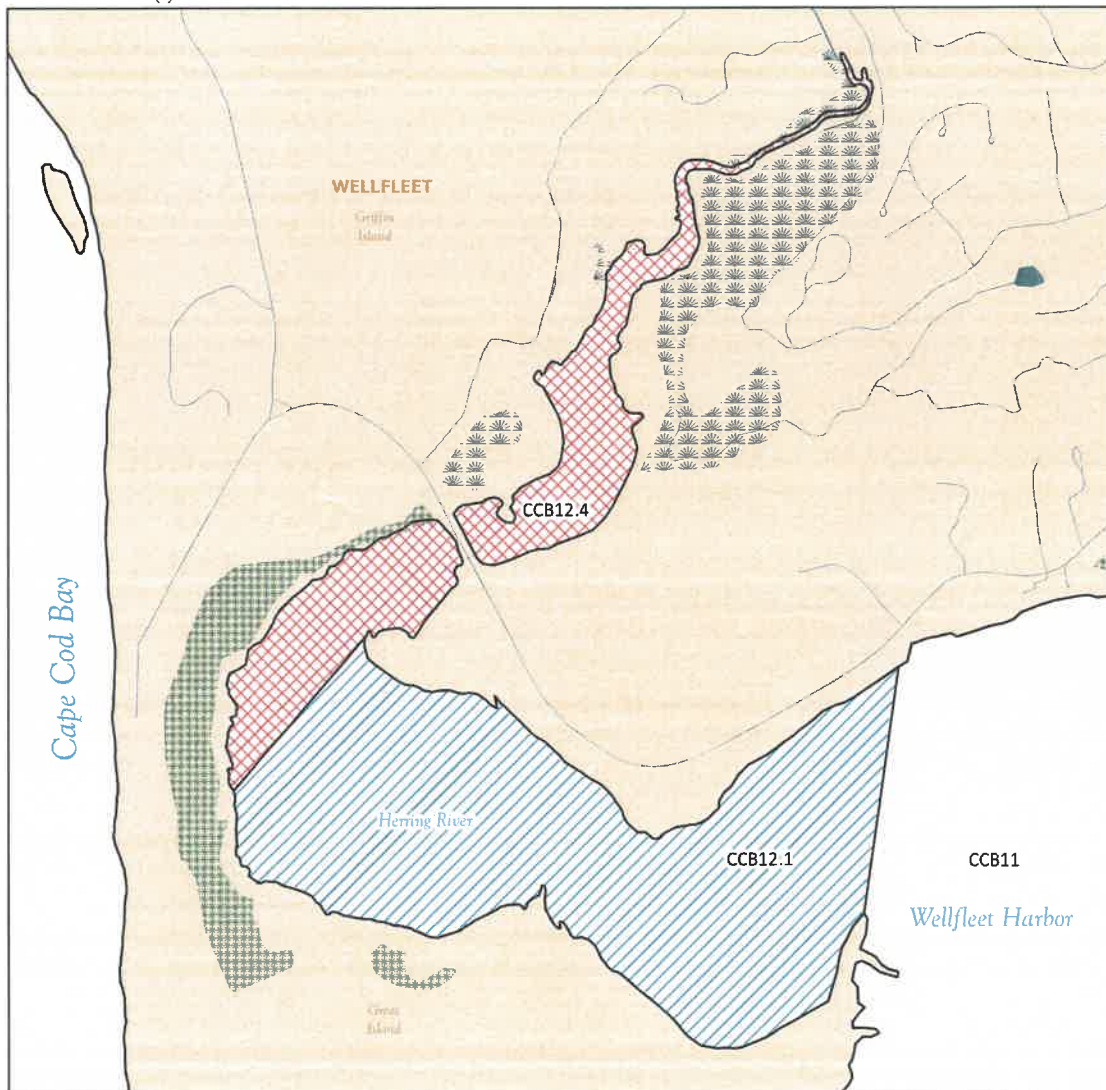
Massachusetts
Division of Marine Fisheries
SHELLFISH SANITATION AND MANAGEMENT

Growing Area Code: CCB12
 Area Name: HERRING RIVER
 Area Town(s): Wellfleet

Shellfish Area Classification

Approved	Conditionally Restricted
Conditionally Approved	Prohibited
Restricted	

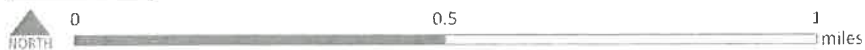
Produced: 01/17/2019



Area of detail

This map depicts the Marine Fisheries' sanitary classification of shellfish growing waters in accordance with the National Shellfish Sanitation Program. It does not indicate the current status, either "open" or "closed" to harvesting due to shellfish management or public health reasons. Always confirm the status with local authorities and/or Marine Fisheries. Information on this map may be out-dated or otherwise incorrect, and should not be relied upon for legal purposes.

- Marsh/Wetland
- Saltmarsh
- Pond/Lake/Reservoir
- Town Boundaries
- Stream/Ditch/Canal



Additional Background Information

Below is background information prior to the SAB meeting on January 30, 2023.

Summary of Recent Dredging

2020 – United States Army Corps of Engineers (USACE) dredged the Federal Channel and the Federal Anchorage.

2020 – Town of Wellfleet dredged a portion near the L-pier and the fuel dock.

2021 – Town of Wellfleet dredged the town anchorage at the boat ramp, the north and south access channels, and the areas of the slips.

2022 – no dredging was performed, awaiting resolution of the USACE Permit issues.

Status of Dredging Area 2

Area 2, the mooring field, consists of 23.4 acres. Estimated volume to be removed from Area 2 is approximately 230,000 cubic yards. The plan is to dredge Area 2 over two seasons, October 1, 2023, to December 31, 2023, and October 1, 2024, to December 31, 2024.

Permits

The following permits are required to dredge Area 2:

USACE Permit. This permit has been the subject of much discussion with USACE. USACE (and NOAA, National Marine Fisheries) have stated that because the area has not been dredged for a long time (last dredged in 1957) it does not qualify for maintenance dredging. The agencies have classified it as improvement dredging, thus getting a permit requires either a cash payment of approximately \$13.5 million or implementation of a mitigation plan that is acceptable to the USACE.

In addition, some of the permits that have been in place for many years have expired and must be renewed:

Chapter 91 and 401 water permits. These permits were previously issued as a combined permit. They are in the process of being renewed separately because the extension dates are different.

Urgency for Dredging in 2023 (October 1, 2023, to December 31, 2023).

Massachusetts EOHED awarded the Town of Wellfleet a \$2.5 million grant for 2022 dredging. This grant money remains available for 2023 dredging PROVIDED the Town has a dredging contract in place by June 30, 2023.

Black Custard sedimentation represents a severe threat to the shellfish industry within Chipman's Cove. Chipman's Cove is approximately 120 acres; the area to be dredged is 23.4 acres. If Area 2 is not dredged, the black custard sedimentation will continue to encroach upon the shellfish grants and wild shellfish located in the remaining 100 acres of Chipman's Cove.

Each year of delay will increase the cost of dredging due to inflation.

Each year of delay provides an opportunity for the un-dredged material in Area 2 to slough off into the recently dredged areas.

Potential Mitigation Scenario

Herring River Shellfish Habitat – there are 30 acres (north of the dike) and 30 acres (south of the dike) where shell fishing is currently “prohibited” due to fecal coliform and low pH inhibits spat settlement and growth. There is additional acreage approximately 100 acres downstream where shell fishing is “conditional” due to fecal coliform.

Mitigation scenario:

- Identify 14-30 acres (of the 30 acres either north or south of the dike) as an area that will be the focal point of our mitigation plan. This designated area will be the beneficiary of increased inter-tidal flow as a result of the Herring River Restoration Project. Our mitigation plan would accelerate its improvement as follows:
- The area would remain off-limits for shell fishing until conditions improve.
- The area will then be culched to promote spat settlement and significant oyster repopulation
- After the area achieves a target restoration density, it could be open to harvest in such a way that it maintains an improved level of ecosystem function. The shellfish could be transferred to Town shellfish areas as part of a relay program or harvested if DMF water quality requirements are met. (USACE indicated they would have limitations that ensure the mitigation results in a permanent ecosystem improvement or “uplift”. Some level of sustainable restoration of habitat and improved water quality must be demonstrated to meet Federal mitigation requirements.)

QUESTIONS AND ANSWERS

1. Explain where we are in the process of the \$2.5m dredging grant.
See above.
2. Can we negotiate with the Army core of engineers?
Yes, communication with USACE has been established.
3. Willing to give up “above dyke” but not “below dyke”
Incorporated in the scenario above, but USACE is looking for 30-60 acres less if it is completely restored, more if it is not.
4. What bottom does USACE want.
USACE mitigation is formulaic using 23 acres of required mitigation habitat:
1:20 ratio if land preservation is proposed (460 acres)
1:2 ratio if habitat restoration is proposed (46 acres)
1:3 ratio if habitat creation is proposed (69 acres)
 - HDYLTA was judged to be a mix coming in at an initial request of approximately 145 acres
 - A mix of some enhancement/restoration above and/or below the dyke could be acceptable in the range of 30-60 acres
5. if we do a “Chipman’s Cove #2” ...who manages, what restrictions?
USACE requirement is that mitigation land cannot be used for commercial exploitation. Specific response from the corps on shellfish harvest was that residential or recreational harvest would be ok in certain parts, but that genuine habitat restoration must be clearly demonstrated. This may mean maintaining a population target and or other harvest restrictions while still allowing harvest. These goals would mean delineation on maps detailing any restrictions, patrol by

shellfish department and inspection at any time to ensure the spirit of the agreement is being followed.

6. What is timing of all of this?

Urgent for the reasons stated above.

7. What if we gave money back for dredging, can we ever get it back without mitigation?

The grant is not tied to mitigation; the permit is tied to mitigation. However, without a permit we cannot dredge, and the grant money "expires". We can re-apply for a grant but no guarantees on whether we'd be successful.

8. Is Herring River the only area available?

A Herring River scenario was attractive to USACE, and they stated it was a scenario they would try to expedite. HDYLTA had been discussed previously at a macro level; USACE expressed surprise that the Town Selectboard took it off the table.

9. Who will decide moving forward?

A Mitigation Plan must be acceptable to USACE in order to obtain the USACE Permit. Presumably, the Selectboard must also approve any such plan submitted by the Town.



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

October 27, 2021

Regulatory Division
File No. NAE-2015-1414

Dan Robbins
GEI Consultants
400 Unicorn Park Drive
Woburn, Massachusetts 01801

Dear Mr. Robbins:

Thank you for your letter dated September 20, 2021 that was submitted on behalf of the Town of Wellfleet which contains mitigation approaches for the proposed South Anchorage (Area 2) dredging project in Wellfleet, Massachusetts. In the September 20, 2021 letter you have presented two preservation proposals that could provide compensatory mitigation to offset unavoidable impacts associated with your project. The preservation project associated with the HDYLTA and the preservation project associated with the Wellfleet Conservation Trust may have the potential to provide compensatory mitigation. Prior to the Corps making an official determination on the merit of the proposed mitigation additional information will be required.

In accordance with 33 CFR 332, Compensatory Mitigation for Losses of Aquatic Resources (Federal Register April 10, 2008, effective June 9, 2008) please provide a complete draft mitigation plan and address how the proposed project meets each requirement for preservation (33 CFR 332.3(h)(1)). For a draft mitigation plan to be considered complete it must include and address all 12 components of a mitigation plan ((33CFR 332(c)(2)-(14)). If the 12 components are not thoroughly addressed the application will be deemed incomplete. Attached you will find a letter describing the 12 components to guide your application. In addition to the letter, please utilize the New England District Compensatory Mitigation Procedures for more information about the 12 components

(<https://www.nae.usace.army.mil/Portals/74/docs/regulatory/Mitigation/Compensatory-Mitigation-SOP-2020.pdf>).

For the proposed mitigation project, the following requirements must be met (33 CFR 332.3(h)(1)) before the Corps can consider preservation:

- The resources to be reserved provide important physical, chemical, or biological functions for the watershed;
- The resources to be preserved contribute significantly to the ecological sustainability of the watershed;
- The resources are under threat of destruction or adverse modification;

- The preserved site will be permanently protected through an appropriate real estate instrument (e.g., easement, title transfer to state resource agency or land trust).

As part of the complete mitigation plan, long-term management must be thoroughly documented and established prior to any permit decision. I have included an example long-term management plan. The proposed preservation parcels must have long-term protection through a real estate instrument such as a conservation easement. A third party, such as a non-profit conservation organization, land trust, state or federal entity will hold the conservation easement to oversee long-term management of the property. Please check with the State of Massachusetts Division of Ecological Restoration to see if your preservation proposal is eligible and consistent with Article 97 of the state constitution, as they may be able assist with the long-term management.

Depending on the aquatic resource function of the two proposed preservation projects, additional mitigation measures may be needed. An initial estimate of the proposed mitigation projects indicates that 118.5 acres of intertidal land would be preserved. This mitigation may generate an estimated 5.925 mitigation credits. Based on the best available information, the proposed dredging of 23.851 acres of mudflats would require the generation of 7.16 mitigation credits to offset impacts. Therefore, a minimum of 1.235 mitigation credits are currently required in addition to the proposed mitigation. To meet the compensatory mitigation requirements, you may: reduce the overall dredge footprint by approximately 4.12 acres; or purchase the remaining credits from the Massachusetts Department of Fish and Game In-Lie Fee Program; or provide another permittee responsible mitigation not included in the September 20, 2021 mitigation proposals.

If you have any questions or need assistance in preparing the mitigation plan, please contact Mr. Charles Farris at (978) 318-8336.

Sincerely,



Taylor Bell
Mitigation Program Manager
Regulatory Division

Enclosures

cc:

William Sullivan, Town of Wellfleet Harbormaster
Alyssa Richard, GEI Consultants

Mitigation Plan 33CFR 332(c) (2) through (14)

- A. Goals and Objectives:** *[Insert a description of the resource type(s) and amount(s) that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, or preservation), and the manner in which the resource functions of the compensatory mitigation project will address the needs of the watershed, ecoregion, physiographic province, or other geographic area of interest.]*
- B. Site Selection:** *[Insert a description of the factors considered during the site selection process. This should include consideration of watershed needs, onsite alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site. See 33 C.F.R. § 332.3(d).]*
- C. Site Protection Instrument:** *[Insert a description of the legal arrangements and instrument, including site ownership that will be used to ensure the long-term protection of the compensatory mitigation project site. See 33 C.F.R. § 332.7(a).]*
- D. Baseline Conditions:** *[Insert a description of the ecological characteristics of the proposed compensatory mitigation project site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the Property, the geographic coordinates, and other site characteristics appropriate to the type of resource proposed for compensatory mitigation. The baseline information should also include a delineation of Waters of the U.S. on the proposed compensatory mitigation project site.].*
- E. Determination of Credits:** *[Insert a description of the number of Credits to be provided, including a brief explanation of the rationale for this determination. The explanation shall describe the proposed mitigation approach for each wetland and stream reach within the project site that will be considered in the Mitigation Plan (establishment, re-establishment, rehabilitation, enhancement, preservation – listed separately). This description should be accompanied by a list presented in a table and organized by wetland or stream reach, area/length, proposed mitigation approach, and proposed mitigation ratio. See 33 C.F.R. § 332.3(f).]*
- F. Mitigation Work Plan:** *The mitigation work plan should contain detailed written specifications and work descriptions for the Project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For mitigation projects proposing stream restoration*

(rehabilitation or reestablishment), the mitigation work plan should also include: planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, riparian area plantings, and other relevant information].

G. Maintenance Plan: *[Insert a description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed].*

H. Performance Standards: *Appropriate Performance Standards are ecologically-based standards that will be used to determine whether the mitigation project is achieving its objectives. Performance Standards should relate to the objectives of the mitigation project, so the project can be objectively evaluated to determine if it is developing into the desired resource type, providing expected functions, and attaining any other applicable metrics (e.g. acres). Performance Standards must be based on attributes that are objective and verifiable. Ecological Performance Standards must be based on the best available science that can be measured or assessed in a practicable manner. Performance Standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics, and/or comparisons to reference aquatic resources of similar type and landscape position. The use of reference aquatic resources to establish Performance Standards will help ensure that those Performance Standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. Performance Standards based on measurements of hydrology should take into consideration the hydrologic variability exhibited by reference aquatic resources, especially wetlands. Where practicable, Performance Standards should take into account the expected stages of the aquatic resource development process, in order to allow early identification of potential problems and appropriate Adaptive Management. In general, Performance Standards should be SMART (Specific, Measureable, Attainable, Reasonable (Practicable), Trackable). See 33 C.F.R. § 332.5.]*

I. Monitoring Requirements: *[Monitoring the Project is necessary to determine if the Project is meeting its Performance Standards and if measures are necessary to ensure the Project is accomplishing its objectives. The submission of monitoring reports to assess the development and condition of the compensatory mitigation project is required, but the content and level of detail for those monitoring reports must be commensurate with the scale and scope of the mitigation project, as well as the mitigation type. The Mitigation Plan must address the monitoring requirements for the Project, including the parameters to be monitored, the length of the Monitoring Period, the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to USACE and the IRT, and the party responsible for submitting those monitoring reports to USACE and the IRT. See 33 C.F.R. § 332.6.]*

i. Monitoring Methods: *In general, compensatory mitigation monitoring methods should include quantitative sampling methods following established, scientific protocols. Sampling documentation, as part of monitoring reports, should include maps and coordinates (also shapefiles, if available) showing locations of sampling*

points, transects, quadrats, etc. In addition, permanent photo stations should be established coincident with sampling locations. Additionally, where structures are placed in Waters of the U.S. and/or State, photo stations should be established that capture the structures and any consequent effect on channel morphology.

*Monitoring reports shall be prepared in accordance with **RGL 08-03**, which identifies specific contents and formatting of the report. Monitoring reports shall include the data collected from all applicable sections of this guidance: however, not all monitoring reports will include the same information (e.g., for five monitoring periods, monitoring reports submitted in years two and four typically will not include vegetation plot data). Performance Standards, as provided in the Mitigation Plan or in the permit conditions, must be restated verbatim in the monitoring report. Additionally, each monitoring report shall include baseline data and data from preceding monitoring years presented in both graphic and tabular forms.*

Stream mitigation Projects with in-channel modifications, high levels of complexity and scale shall provide As-Built surveys that include at minimum the following information: photo documentation at all cross-sections and structures, a plan view survey, a longitudinal profile, and vegetation information (type, number and location of species planted).

As-Built Plan surveys for wetland mitigation projects shall be completed immediately following the completion of construction to document post-construction conditions. Projects provide As-Built Plan surveys that include the following: photo documentation at permanent documented photo points with bearing and azimuth, a plan view diagram, baseline location and in-situ soil profile descriptions at well locations, and vegetation information (type, number of species planted). Also, any special permit condition relating to signage or Deed Restriction should be submitted. These projects shall also provide location data including coordinates and shapefiles, if available, of all monitoring activities (permanent vegetation plots, wells, piezometers, pressure transducer gages, surface water gauges, crest gauges, stream cross-sections, bank pins, water quality and aquatic biota sampling points, etc.).]

J. Long-Term Management Plan: *[Provide a description of how the mitigation project will be managed after Performance Standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for Long-Term Management. Long-Term Management activities may include, but are not limited to: Maintenance of Signage, Conservation Easement Enforcement, Access/Gate Maintenance, Fencing, Non-Native Invasive Species Management, Tax Payments, Maintenance of Property Insurance, Reporting, and other project-specific items as listed in the Long-Term Management Plan. See 33 C.F.R. § 332.7(d).]*

K. Adaptive Management Plan: *[Provide a management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project,*

including the party or parties responsible for implementing Adaptive Management. The Adaptive Management Plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success. See 33 C.F.R. § 332.7(c).]

L. Financial Assurances: *[Provide a description of Financial Assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with its Performance Standards. See 33 C.F.R. § 332.3(n).]*

LONG TERM MANAGEMENT PLAN TEMPLATE

MANAGEMENT PLAN

for

Fill in Project Name

Organization

Author and title

Date

The general outline that follows is designed to assist in the development of the Long-term Management Plan for Mitigation Projects. Objectives and tasks are provided for illustrative purposes only and may not represent management requirements suitable or necessary for every site. Sections in plain text represent language that should be included in a plan. Items in italics describe the type of information to be included in that section and should be deleted and replaced with the pertinent information for the project site.

Note: Maps are required. *Maps may be put into an Appendix or interspersed throughout the document. Maps showing the following are required, as outlined in the text that follows:*

- *General vicinity of the parcel showing other conservation lands;*
- *Parcel boundaries, on a topo or aerial photo;*
- *Road map showing how to get to property, with parking and trailhead information, if applicable;*
- *Man-made features on the property including structures, trails, roads, etc.;*
- *Aquatic resources including wetlands, streams and other resources related to the aquatic environment;*
- *Biological and other natural resources and communities of note;*
- *Soils and Geology;*
- *Hydrology and Topography;*
- *Threats such as locations of invasive species infestations and trash or trespass locations.*

Maps of similar content may be combined as long as the information they are to convey is clear and well-defined.

I. Geographic Information

II. Introduction

III. Property Description

IV. Natural Resources

V. Management Vision & Goals

VI. Management Actions

VII. Funding & Task Prioritization

APPENDICES

Appendix A: Invasive Species Control Plan (if applicable)

Appendix B: Legal Documents

Appendix C. Restoration or Enhancement Plan (if applicable)

Appendix D. other

I. Geographic Information

Site Name: _____

Town/County: _____

Total Site Size: _____

Type of Ownership: (i.e., fee or conservation easement; if easement include landowner's name)

Date Acquired: _____

II. Introduction

A. Purpose of Management plan

The purpose of this management plan is to ensure that the property is managed and maintained in perpetuity in the Mitigation Plan referenced in Corps Permit Number [*Corps permit number*].

B. Long-Term Steward and Responsibilities

The Long-Term Steward of the site is [*steward organization*]. [*Steward organization*], and subsequent Long-Term Stewards if the property is transferred, shall implement this management plan, managing and monitoring the property in perpetuity to preserve its habitat and conservation values. Before any action is taken to void or modify the deed (or easement), management plan, or long-term protection mechanism, including transfer of title to, or establishment of any other legal claims over the site, 60-day advance notification must be given to the U.S. Army Corps of Engineers district engineer.

C. Management Plan Review

The management plan will be reviewed at a minimum once every 5 years by the Long-Term Steward. The plan may be revised or supplemented with additional information and management recommendations. Any revisions other than edits that change the management actions beyond standard maintenance activities will be reviewed with the U.S. Army Corps of Engineers.

III. Property Description

A. Setting and Location

Describe the location and general physical setting of the property: rural, urban, forest, field, upland, wetland, streams, etc. Detailed natural resource information will be described in Section V. Note if the property is adjacent to other conservation holdings. Provide maps of:

- 1) the general vicinity to show the parcel location in relation to municipal boundaries, major roads, lakes and streams, and other distinguishable landmarks, and*
- 2) the project parcel which shows the property boundaries on a topographic map or aerial photo.*

B. Directions and Access

Include driving directions, legal access points for the property, and information on parking and trailhead amenities (include road map with any access points, rights of way, trailhead and parking locations that are applicable).

C. History and Land Use of Property

1. Acquisition History

Describe the permittee's and/or steward's acquisition of the site, as well as historic land ownership, if known.

2. Land Use

Describe past and present land use including farming/agriculture, forest harvest history, development history, history of recreational use, etc.

3. Man-made/Cultural Features

Describe all existing man-made features including roads, trails, buildings, stone walls/fencing, water control structures, boat launches, historic areas, etc., and their intended future use on the property.

Include a map, plan, or aerial photo showing locations of all man-made/cultural features on the property including: roads, hiking and/or snowmobile/ATV trails, structures, walls, buildings, boat launches, easements, rights-of-way, leases, etc.

4. Historic or Archaeological Sites

Describe any known historic features or archaeological sites (without providing specific locations of archaeological sites), and include a summary of the results of any site surveys/inventories, including who conducted them. An assessment of the impacts of management should be given for such sites. If you are uncertain about whether there may be any Historic or Archaeological sites on your property, contact the state's Historic Preservation Office.

5. Existing Easements or Other Restrictions

Include descriptions/locations of any existing easements, rights-of-way or leases held by others, their nature (buried pipeline, overhead power, ingress/egress, snowmobile trail, mineral or timber rights or other interests), authorized users (if known), access procedures, etc.

6. Legal Documents Appendix

General note about status of legal documents with a reference to the Appendix, as applicable. The Appendix may include copies of legal documents such as deeds, legal descriptions, rights-of-way, deed restrictions, survey, mineral rights, conservation easements, conditions of transfer, etc.

D. Adjacent Land Uses

Description of adjacent uses around the property -- Detail the baseline adjacent land uses. These land uses may change over time; however, the description of the baseline conditions will

give the Long-Term Steward some idea of the conditions present when the management plan was first developed.

IV. Natural Resources

Sections below provide documentation of the current conditions on the site

A. Aquatic Resources

Describe all wetlands, streams and aquatic resources on the site with acreage/length, species and general characteristics and habitat quality.

Include maps showing all aquatic resources on the site.

B. Baseline Description of Biological Resources

1. Biological Species and Communities

Include a general description of biological and other natural resources including but not limited to: natural community structure, natural resource inventory data, wildlife use, conservation targets, natural disturbance, assessment of native vs. invasive and non-native species, an overview of native plant species present, if applicable, including their habitat and management.

Include maps of resources as appropriate.

Complete lists of species may be included in Appendices.

If invasives are present see subsection F, "Threats" below

2. Endangered, Threatened and Rare Species, and Species of Special Concern

i. Describe all federal and state endangered and threatened species that occur or may occur on the site.

ii. Describe all rare species and species of special concern such as natural heritage mapped species and community occurrences that occur or may occur on the site.

iii. Provide a map showing locations, if appropriate.

C. Soils & Geology

Describe soils & geology on the site. A soil scientist or other professional may also be used. Include a Soils and Geology map. This map may be combined with the Hydrology and Topography map; see section below.

NRCS has information on soils data online: <http://soils.usda.gov/>;

NRCS online soil survey web application:

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

An informational brochure about the soil data can be found at:

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_050731.pdf

D. Hydrology and Topography

Describe hydrology and topography of the site. Indicate the general topography of the site and describe surface flows onto and off of the site.

USGS has online data for topographic maps, the national hydrography data set and hillshade.

<http://nationalmap.gov/>

Map viewer: <http://viewer.nationalmap.gov/viewer/>

Indicate whether wetlands are driven by surface flows (i.e., fluvial systems) or groundwater flows from offsite sources. If possible, describe the Strahler stream order of the streams onsite,

([\[mrs.cr.usgs.gov/NHDHelp/WebHelp/NHD_Help/Introduction_to_the_NHD/Feature_Attribution/Stream_Order.htm\]\(http://mrs.cr.usgs.gov/NHDHelp/WebHelp/NHD_Help/Introduction_to_the_NHD/Feature_Attribution/Stream_Order.htm\)\) and provide a description of the channel structure.*](http://usgs-</i></p></div><div data-bbox=)*

To the extent possible, include a Hydrology and Topography map.

E. Summary of Restored or Enhanced Resources

If restoration/enhancement has taken place (or will take place) on the property, describe all restored or enhanced resources, including acreages and/or lengths. Include final, as-built plans and a map showing the locations. A brief summary is all that is needed. The Restoration/Enhancement plan should be included by reference, and may be attached as an Appendix.

F. Threats (existing or potential)

Identify areas that may be of management concern or items that may compromise biological integrity over time. Include any known or potential issues such as:

1. Motorized Vehicle Use

Including issues with ATVs or other vehicles that are causing, or may cause damage to resources on the site

2. Waste Disposal (such as dumping of trash or debris)

3. Invasive Species, Pests and Pathogens

Invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat. Describe any current invasive species infestations on the site or in adjacent areas and include a map showing locations.

4. Vandalism and Encroachment (such as destruction of signs or other property, boundary encroachments, etc.)

V. Management Vision & Goals

Describe the overall vision and goals for management of the site as a whole into the future.

The overall goal of long-term management is to foster the long term viability of the resources, and any listed species/habitat. Routine monitoring and minor maintenance tasks are intended to assure the viability of the site in perpetuity. Those who are chosen to carry out monitoring activities will have the knowledge, training, and experience to accomplish monitoring responsibilities. An objective of this long-term management plan is to conduct regular monitoring to identify any issues that arise, and use adaptive management to determine what actions might be appropriate. Adaptive management means an approach to natural resource management which incorporates changes to management practices, including corrective actions as determined to be appropriate. Adaptive management includes those activities necessary to address the effects of climate change, fire, flood, or other natural events. Before considering any adaptive management changes to the long-term management plan, the Long Term Steward will consider whether such actions will help ensure the continued viability of site's biological resources and conservation values.

Sample goals: The primary management goal is to preserve the ecological integrity of the various wetlands and other natural resources located on the property while simultaneously providing limited human access to this unique ecological area through a network of pedestrian trails.

OR The preserve shall be forever used, operated and maintained in its current undeveloped and open space condition for the long-term protection of wetlands, conservation of wildlife and other natural resources. Low-impact recreation and nature observation will be allowed.

OR The future condition of the property will be high value, forested wetlands with associated, upland buffers. Long-Term Steward will manage the property as habitat for wildlife and as a recreational/educational resource for the public. No forestry or active wildlife management is planned. The existing woods roads/trails on the property will be maintained for low impact recreation and nature observation.

A bulleted list of goals may be included.

To reach these goals, the Long-Term Steward will: (examples)

- *Maintain the property in its undeveloped state.*
- *Maintain the quality of the existing natural resources.*
- *Maintain and expand Best Management Practices that limit soil erosion and protect local water quality;*
- *Provide regulated, passive recreational opportunities where appropriate;*
- *Protect, maintain, and enhance existing cultural (aesthetic) resources; and*
- *Facilitate educational opportunities relating to natural resources, natural resource management, and conservation.*

A. Permitted Uses: (examples)

1. *Passive Recreation (hiking/walking, snowshoeing, cross-country skiing)*

2. *Hunting & fishing – may be allowed on the site but are not specifically funded or a part of this long-term management plan.*

B. Prohibited Uses: (examples)

1. *Off-road/motorized vehicles*
2. *Camping or overnight use*
3. *Fires*
4. *Cutting or removal of vegetation*

C. Public Use Guidelines: (i.e., general guidelines Long-Term Steward has developed for its holdings – if desired and applicable)

- *Carry in, carry out*
- *Day-use only*
- *Keep dogs on leash at all times*
- *Stay on the trails*
- *Respect abutting private property*
- *Avoid disturbing plants and wildlife*

VI. Management Actions

This section includes the actions that need to be taken over time to maintain the site. Subsections may include:

A. Natural Resources

1. *Management of wetlands, streams and other natural resources*

Objectives: *Monitor, conserve and maintain the site's natural resources. Limit any impacts to resources from human use, vehicular travel, invasive species or other adverse impacts*

- *Action: At least one annual walk-through survey will be conducted to qualitatively monitor the general condition of these habitats. General topographic conditions, hydrology, general vegetation cover and composition, invasive species, erosion, will be noted, evaluated and mapped during a site examination. Notes to be made will include observations of species encountered, water quality, general extent of wetlands and streams, and any occurrences of erosion, structure failure, or invasive or non-native species establishment.*
- *Action: Establish reference sites for photographs and prepare a site map showing the reference sites for the file. Reference photographs will be taken of the overall site at least every f--- year(s) (no less than five) from the beginning of the long-term management plan, with selected reference photos taken on the ground more frequently, _____ times per year (if applicable).*

Special attention should be paid to any area adjacent to or draining into the property from off-site lands. Streams and wetlands should be observed near bank boundaries to observe if increased sediment deposition has occurred. The monitoring report should provide a discussion of any recent changes in the watershed (i.e., subdivision being developed upstream of stream bank).

2. *Ecological Monitoring for Threatened/Endangered/Rare/Special Concern Species (If applicable).* *The methodology used may vary for different plant and animal species as determined in consultation with the appropriate agencies.*

Objectives: *Monitor population status and trends. Manage to maintain habitat for _____.*

- *Action: Monitor status every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate period as identified by the applicable agencies and will generally occur from _____ through _____ each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years.*
- *Action: Visually observe for changes to occupied habitat, such as changed hydrology or vegetation composition. Record any observed changes. Size of population (1 acre, etc.).*
- *Action: Implement other actions that enhance or monitor habitat characteristics for _____.*

3. *Invasive Species, Pests and Pathogens*

Note: *Given the growing problem with invasive species, an invasive species inventory should be carried out at regular intervals on all sites.*

Objectives: *Monitor and maintain control over invasive species, pests and pathogens that diminish native natural resources on the site. If invasive species are present, an Invasive Species Control Plan (ISCP) shall be developed and attached to this management plan as an Appendix (see ISCP Template in Appendix).*

Action: *Mapping of presence of invasive species, pests and pathogens presence shall occur during the first two years of site management, to establish a baseline. Mapping shall be accomplished through use of available technologies, such as GIS, GPS, and aerial photography. Note: Invasives are easier to control if they are located and a control plan is undertaken before they become established. It is recommended that all properties be evaluated for the presence of invasive species, even if none are known to occur on the site]*

- *Action: Each year's annual walk-through survey (or a supplemental survey) will include a qualitative assessment (e.g., visual estimate of cover) of invasive species and actions taken, in accordance with an Invasive Species Control Plan.*
- *Action: Actions shall be taken to control invasive species in accordance with the Invasive Species Control Plan in Appendix A.*

4. *Forest/Vegetation Management (if approved)*

Objectives: *Adaptively manage vegetation based on site conditions and data acquired through monitoring to maintain biological values. Analyze effects of any authorized forestry, agricultural or field maintenance activities on the wetland, streams, and buffers on the site. If determined appropriate, develop and implement specific vegetation management techniques (e.g., selective thinning) in coordination with the U.S. Army Corps of Engineers. [Site specific targets for vegetation may be specified here and actions revised or added to achieve those targets].*

- *Action: If determined appropriate, develop a forest, or other vegetation, management plan for review and approval by the Corps.*
- *Action: Implement forest/vegetation management techniques.*

B. Infrastructure and Facilities, Security and Public Access

1. Gates, Parking, Fences, Signage, and Property Boundaries

Objective: *Monitor and maintain condition of gates, parking areas, fences, signage, and property boundaries to prevent casual trespass, allow necessary access, and facilitate management.*

- *Action: During each site visit, record condition of parking areas, gates, fencing, signs, crossings, and property boundaries. Record location and type of any maintenance issues, with actions to be taken for resolution, if applicable. Action: Maintain gates, fences, signs, crossings and property boundary markers as necessary. Repair or replace as necessary, and as funding allows.*

2. Roads, Trails and Structures

Objectives: *Create/maintain trails to allow public access as necessary and as approved by the Corps. Any construction or maintenance of trails shall be conducted in such a manner as to avoid any disturbance to wetland habitat and buffers or habitat for sensitive species. Monitor and maintain condition of roads, trails and structures to facilitate management, public use, and prevent adverse impacts to wetlands, streams and other resources. Retire unnecessary sections of existing road.*

- *Action: During each site visit, record condition of roads, trails and structures. Record location and type of any maintenance issues, with actions to be taken for resolution.*
- *Action: Maintain roads, trails and structures as necessary. Replace as necessary, and as funding allows.*

3. Trash and Trespass

Objectives: *Monitor sources of trash and trespass. Collect and remove trash, repair vandalized structures, and rectify trespass impacts. Specifically address any ATV issues, existing or potential.*

- *Action: During each site visit, record occurrences of trash and/or trespass. Record location and type of any trespass issues, with actions to be taken to avoid, minimize, or rectify trash and/or trespass impacts.*
- *Action: At least once yearly collect and remove as much trash as possible and repair and rectify vandalism and trespass impacts.*
- *Action Take appropriate action to address issues of vandalism, trespass, or ATV violations including but not limited to:*
 - *Outreach to violators*
 - *Placement of boulders, gates or other obstructions to prevent access*
 - *Contacting local law enforcement*

VII. Funding and Task Prioritization

A. Funding

Long-Term Steward will oversee implementation of the management plan, monitoring activities, and long-term stewardship of the property. With assistance from stewardship volunteers, the Long-Term Steward will maintain and monitor the property in perpetuity.

Table 1 summarizes the anticipated start-up/development costs for the site. Table 2 summarizes the anticipated annual costs for long-term management for the site. After initial start-up costs, annual costs associated with the long-term maintenance of the property are estimated to be \$ _____. \$ _____ will be/has been placed into a stewardship endowment to be maintained by _____ and distributions from the endowment will cover costs associated with stewardship of the property, if applicable. With the current annual estimated capitalization rate of _____ the total endowment amount required will be \$ _____.

[The sample lists of tasks in Tables 1 and 2 are not meant to be exhaustive. Some sites may have more elements to consider and some may have fewer depending on the attributes of the site.]

B. Task Prioritization and Cost Estimates

Table 1: Schedule of Start-up Activities (examples)

Goal	Action	Prior-ity	Target Date	Completed By	Cost	Other Cost	Notes
Natural Resources	Establish baseline for monitoring	2	Summer 201x	Steward & volunteers	\$200		
Natural Resources	Invasive species baseline	1	Summer/Fall 201x	Steward & volunteers	\$200		
Infra-structure	Boundary Line Marking	1	Summer 201x	Steward	\$200		
Infra-structure	Install Gates and locks	1	Summer 201x	Contractor	\$1,000		
Infra-structure	Install Boulders/ Barricades	1	Spring 201x	Contractor	\$4,000		
Infra-structure	Parking lot development	2	Fall 201x	Contractor		\$5,000	Gravel and equipment costs
Infra-structure	Trail Planning & Development	3	Spring-Fall 201y	Steward & volunteers		\$1,000	Mileage & equipment
Infra-structure	Signs & Installation	2	Summer 201y	Steward & volunteers	\$500		Mileage & equipment
Infra-structure	Garbage Dump Cleanup	2	Summer 201x	Contractor	\$5,000		

Total Start-up Costs: _____

Table 2 Estimated Annual Costs (examples)

Cost	Cost per year*	Notes
Staff Time	\$2,000	
Trail Maintenance	\$500	
Property Taxes	\$5,000	
Boulder/Road Barricade Maintenance	\$400	

<i>Sign Maintenance/replacement</i>	\$100	
<i>Trash Removal</i>	\$500	
<i>Brochures, Information</i>	\$100	
<i>Mileage</i>	\$200	
<i>Monitoring</i>	\$500	
<i>Boundary Marking (every 5 years)</i>	\$100	<i>5 year cost/5 for cost per year</i>
<i>Management Plan Update (every 5 years)</i>	\$50	<i>5 year cost/5 for cost per year</i>

Total Annual Costs: _____

*These costs are examples only and don't necessarily represent expected costs.

Total stewardship account that will be used to fund these costs: _____

VIII. Literature Cited

IX. Appendices

May include:

Invasive Species Control Plan

Maps (if not incorporated into the main body of the plan)

Legal Documents

Species lists,

Restoration plan (if a restoration project),

Historical documents,

etc.

Appendix A

Invasive Species Control Plan (ISCP) Template

General Notes on this template: Invasive species are an ever-increasing issue all across New England. Removal of invasive species when there are very few plants is critical and should be given the highest priority. Most light infestations can be controlled by pulling or digging and this should be done when invasives are found, or immediately after. Larger infestations may require the use of a licensed herbicide applicator.

The New England District of the US Army Corps of Engineers has information on Invasive Species and control on their website. The Invasive Species Plant Atlas of New England includes descriptions, as well as links to management information on other sites. It may also be useful to consult with appropriate state or federal agencies for guidance on what species may threaten the site and or management of those species.

iMapInvasives website: <http://www.imapinvasives.org/>

iMapInvasives Invasive plant Management Decision Analysis tool:

http://www.imapinvasives.org/IPMDAT_v1.1_06-30-11.pdf

The template that follows is designed to help project sponsors create a plan of action when invasives are found on their property. It also includes forms that can be used to track inventory, actions taken and progress over time. Information in the template and form is based on information collected by a number of other organizations and agencies. The level of detail needed will depend on the level and type of infestation.

There are many sources of information about invasives species and their control online.

Links to Invasive Plant Information and Fact Sheets to include with your plan:

The Plant Conservation Alliance Alien Plant Working Group Fact Sheets. Includes management information. <http://www.nps.gov/plants/alien/fact.htm>

Invasive Plant Fact Sheets from the State of Michigan have good detailed information, particularly on control. http://www.michigan.gov/dnr/0,4570,7-153-10370_59996_61470---,00.html

Vermont Invasives “Gallery of Invaders.” Includes description, control measures and videos on website, with links to fact sheets. <http://www.vtinvasives.org/invaders/imagesall>

Additional information:

<http://www.nae.usace.army.mil/Portals/74/docs/regulatory/InvasiveSpecies/ISCPGuidance.pdf>

http://www.maine.gov/dacf/mnap/features/invasive_plants/invasives.htm

<http://umaine.edu/invasivespecies/>

http://umaine.edu/invasivespecies/home/id_resources/

<http://www.invasivespeciesinfo.gov/index.shtml>

<http://www.vtinvasives.org/invaders/imagesall>

<http://www.fws.gov/contaminants/Documents/GuidanceIPMPlan.pdf>

<http://www.fws.gov/invasives/staffTrainingModule/planning/plans.html>

<http://www.blm.gov/pgdata/etc/medialib/blm/wy/programs/invasiveplants/docs.Par.42434.File.dat/IWMhandbook.pdf>

<http://www.invasive.org/gist/products.html>

<http://www.weedcenter.org/management/planning.html>

<http://clean-water.uwex.edu/pubs/pdf/InvasivePlants.pdf>

https://extension.unh.edu/resources/files/Resource000988_Rep1135.pdf

Invasive Species Control Plan Template

For [Project name]_____

Organization

Author(s) and Title(s)

Date

Table of Contents

Page

- I. Introduction
- II. Baseline Invasive Species Inventory
- III. Plan Objectives/Goals
- IV. Implementation (monitoring?)
- V. Evaluation

I. Introduction

Write a brief discussion of the context of the invasive species problem within the project, project site management objectives, and conservation targets.

II. Baseline Invasive Species Inventory

- A. Survey the property and nearby areas and make a list of the invasive/nuisance species found. Attach information (such as fact sheets) for all invasive/non-native species known to be present on the site and those that might pose a danger of infestation from other locations nearby. (see links to sources of fact sheets at the beginning of the template). Specifically locate each site where invasive species are found, preferably with GPS coordinates. Label each site with a unique ID for reference and tracking purposes. See the survey form in the Appendix for an example of the kinds of data to collect.
- B. Describe each area where invasives were found noting species, size of area infested and level of infestation (percent cover) for each area. Note the type of infestation, such as single plant or small patch, large patch; linear patch such as along road or stream, and whether it is increasing, decreasing or staying the same at each location, if this can be determined.
- C. Identify the threats and/or issues posed by specific invasive species and how they are interfering, or could interfere in the future, with your site management objectives.
 1. Within the project area
 2. From adjacent properties and/or the surrounding area, watershed and/or region. (To the extent possible. Surveying the surrounding areas helps to determine potential sources of re-infestation)
- D. Create baseline maps showing extent of the invasive species on and/or around the project area and identify photo reference points for use in monitoring. Show boundary of project site and, if the entire site has not been searched for invasives, indicate on the map which areas have been searched.
- E. Prioritize species and/or infestation areas to be controlled. Include a rationale for the level of priority assigned. Priorities may be numbered or categorized as "High", "Medium", or "Low". In the long run, it is usually most efficient to devote resources to preventing new problems and immediately addressing recently established infestations. The following may be useful in determining which areas to focus on first:
 1. current extent of the species on or near the site;
 2. value of the habitats/areas that the species infests or may infest; and
 3. current and potential impacts on the management goals for the project site;
 4. ability to manage a particular species/difficulty of control

III. Plan Objectives/Goals

- A. Goals and Anticipated Results of Control Plan. Outline the goals for management of invasive species on the site. Include measures for success, such as reduction of % cover or size of area impacted by the invasive species and the timeframe in which you hope to achieve this.

Establish measurable objectives for the planned control activities. Include:

- *the impact on numbers, density, cover, etc. that you want to achieve;*
- *the size of the area in which you hope to achieve this;*
- *the period in which you hope to achieve it.*

- B. Summary of Actions Planned: Identify the control / management method(s) selected for each species. Different invasives may need different control methods so be sure to research each species, particularly what not to do, so you avoid spreading the problem further. Some methods of control may require permits or professional applicators. Indicate which of the available control options are preferred for this site and why, and the circumstances under which they may be used. Summarize the techniques, including disposal methods, if applicable. Escalating measures may need to be outlined in case the first measures don't work.

1. Prevention
2. Mechanical/Physical methods (such as cutting, digging, pulling, mowing, prescribed burning)
3. Chemical Methods (such as herbicides)
4. Biological Control Agents
5. Cultural control (altering the habitat to make it less suitable to the invasive; such as maintaining a level of forest canopy closure that impedes shade intolerant species, or restoration/re-vegetation of native plants)
6. No Treatment (explain the rationale)

- C. Constraints. Identify any constraints such as site conditions or regulatory issues that impact practicable solutions.

D. Required Resources

1. Personnel Qualifications and permits
2. Equipment
3. Sanitation/recontamination considerations

E. Project Partners (government agencies and/or others available for technical, administrative or practical support)

IV. Implementation

A. Implementation Schedule. A table is one way of outlining the schedule, or text format may

B. Best Management practices and record-keeping methods to be used.

C. Budget

V. Monitoring Program

A. Describe monitoring plan, frequency of monitoring and outline procedures if re-treatment or alternative methods of control are needed.

VI. Evaluation: *This section is to be filled in later, after treatment and evaluation of preliminary monitoring results. The evaluation should be used to determine whether any of the sections above should be modified.*

Invasive Species Treatment and Monitoring Form

Project Name: _____

Date: _____

Personnel Names and roles: _____

Activity Type: (circle one) initial evaluation, pre-treatment evaluation, post-treatment monitoring, other

Infestation site ID: _____ Location Lat/Long (center point)

Invasive Species Scientific and Common Name:

Attach photos of invasive species.

Estimated Infested Area size with unit of measure (i.e., sq. ft.): _____

An infested area is defined by drawing a line around the actual perimeter of the infestation. If multiple invasive species exist in an area, a separate form should be filled out for each one.

Estimated Gross Area size with unit of measure: _____

Like Infested Area, Gross Area is the area occupied by an invasive species. Unlike Infested Area, the area is defined by drawing a line around the general perimeter of the infestations, not the area covered by individual or groups of invasive species. Gross area may contain significant parcels of land that are not occupied by invasives. Gross area is used in describing large infestations. When a value is entered for gross area, the assumption is that the area within the perimeter of the invasive population (area perimeter) is an estimate, or the product of calculating the area within a described perimeter. It is not a measured value. If a value for Gross Area is entered, a value for Infested Area must still be entered. Infested Area is derived from estimating the actual or percentage of area occupied by invasives.

(Helpful Gross Area and Infested Area article with diagram:

<http://www.se-eppc.org/wildlandweeds/pdf/Spring2009-Price-pp4-6.pdf>)

Total Area Surveyed with unit of measure: _____

Total area surveyed is the entire land area surveyed for invasive species, whether invasives were found or not. This provides a general understanding of the locations that may be resistant to invasion, provides an estimation of the extent of invasions, and allows examination of areas searched so gaps in searched area and habitats can be assessed.

Abundance: Single plant or clump Scattered individuals or clumps Scattered dense patches or clumps Linear patches (e.g. along stream, trail, road) Dominant cover/Dense throughout Monoculture, Other _____

Life stage at time of observation: Seedling Vegetative Flowering Fruit Seeds Sapling Mature >4" dbh Dead

Percent of area covered by invasive plant: Trace (less than 1%) Low (1 - 5%) 5-25% 26-50% 51-75% 75-100%

Habitat in which invasive is located:

Habitat description: _____ (such as community type, wetland, lakeshore, forest edge or interior, field, disturbed ground, roadside, etc.)

Disturbance factors (*logging, grazing, mowing, erosion/sedimentation, etc.*) _____

Control method(s) used / planned (circle all that apply)

- None
- Herbicide*: Pre-emergent / Foliar / Basal bark / Cut stump
- Mechanical: Clip Pull Mow
- Fire: Controlled burn / Torch
- Soil: Bulldoze / Soil removal / Disk / Till
- Other: Flooding Plastic / Shade cloth / Biological

Herbicide Formulation(s): _____

Herbicide application method: _____

Herbicide rates used: _____

Acres treated: _____ Is this a re-treatment, if so, how many previous visits? _____

**If area to be treated is within an aquatic resource a permit is likely needed, as well as a licensed applicator to do the work.



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VIII

~ BUSINESS ~

~ C ~

REQUESTED BY:	Ryan Curley ~ Chair
DESIRED ACTION:	To review and vote on the Amended Inclusionary Bylaw
PROPOSED MOTION:	I move to refer the Inclusionary Bylaw Amendment as discussed at tonight's meeting to town counsel for review and comment and to the Planning Board as a draft for comment
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s): _____
VOTED:	Yea _____ Nay _____ Abstain _____

ARTICLE NO. ## INCLUSIONARY ZONING BYLAW

- A. To amend Chapter 235, Article II DEFINITIONS by inserting the following definitions in alphabetical order

§235 - 2.1 Definitions

Affordability Gap – the difference ~~in~~ between the ~~apprised~~appraised value of dwelling units permitted pursuant to §235 – 6.28, Inclusionary Zoning Bylaw, ~~to and~~ affordable units with a comparable number of bedrooms eligible for inclusion in the Town’s Chapter 40B Subsidized Housing Inventory as maintained by the Department of Housing and Community Development (DHCD).

~~B. To repeal Chapter 235, Section 6.28, PROVISIONS TO ENCOURAGE THE DEVELOPMENT OF AFFORDABLE DWELLINGS IN WELLFLEET, and replace it with the following:~~

§235 – 6.28 INCLUSIONARY ZONING BYLAW

§235 – 6.28.1 Purpose and Intent

The purpose of this bylaw is to encourage development of ~~new~~ housing that is affordable to persons of various age and income levels in accordance with Massachusetts General Law, Chapter 40A, Section 9, which allows municipalities to adopt “incentive” ~~bylaws ordinances~~ for the creation of affordable year-round housing, and for the purposes of:

- A. Helping people who, because of rising land prices, have been unable to obtain suitable housing at an affordable price; and,
- B. Encouraging the creation of a range of housing opportunities for households of all incomes, ages and sizes in order to support a strong, stable and diverse year-round community and a viable and healthy local workforce and to prevent the displacement of Wellfleet residents;
- C. Mitigating the negative impact of residential development on the availability and cost of housing;
- D. Protecting the long-term affordability of such housing through appropriate, enforceable restrictions that run with the land;
- E. ~~to Create~~ing dwelling units eligible for inclusion ~~on~~ in the Town’s Chapter 40B Subsidized Housing Inventory as maintained by the Department of Housing and Community Development (DHCD) under the Local Initiative Program.

§235 6.28.2 Applicability

In the CD, R1, R2, C and C2 zoning districts, the inclusionary zoning provisions of this section shall apply to the following uses:

- A. Any project that results in a net increase of ~~two~~three or more dwelling units as part of a single application, whether by new construction or by the alteration or rehabilitation of existing structures.

Commented [CMM1]: Should this compare the value of market rate units to affordable units within the proposed development?

Commented [CMM2]: Based on how this is set up, it appears the intent is to repeal the existing 6.28 and replace with this version. Please confirm that we are not keeping any of the existing provisions of 6.28, such as the definition of Affordable Dwelling Unit.

Commented [RC3R2]: Hi I think you are looking at an old copy of the zoning bylaws. We redid 6.28 at the STM. Because of some of the issues with it. It is not 6.26 Affordable Dwelling Developments

Commented [CMM4]: In my experience, imposing an affordability requirement when two or more units are applied for is an unusually low threshold. I have seen bylaws applying to 10 units or more and generally requiring 10% of those units to be affordable.

Commented [RC5R4]: We had settled on 3

§235 6.28.3 Mandatory Provision of Affordable ~~or Community~~ Housing for Development of New Residential Units

In order to contribute to the local stock of Affordable ~~and Community~~ Housing, any residential project that results in a net increase of two or more dwelling units as part of a single application as described development identified in Section 6.28.2 A shall provide a percentage of the dwelling units as deed restricted Affordable ~~and/or Community~~ Housing units. For purposes of this bylaw, "Affordable Housing" shall mean a dwelling unit that is affordable to and occupied by a Low or Moderate Income Household and meets the requirements for inclusion on the Subsidized Housing Inventory maintained by DHCD. This Affordable/~~Community~~ Housing requirement shall be one-sixth (16.67%) of the new dwelling units developed rounded up to the nearest whole affordable unit and shall be made a condition of a Special Permit, or the applicant shall meet the requirement in accordance with the following:

- A. Development of 3 to 6 new dwelling units shall require the granting of a Special Permit by the Zoning Board of Appeals and a Payment in Lieu of providing the required number of affordable units to be made to the Wellfleet Affordable Housing Trust Fund to fulfill the Affordable/~~Community~~ Housing requirement.
- (1) Payment shall be made in accordance with the following formula:
 - For 3-4 new dwelling units, the Payment in Lieu= (total # of new dwelling units)x(16.67%)x(affordability gap)x(67%)
 - For 4-6 new dwelling units, the Payment in Lieu= (total # of new dwelling units)x(16.67%)x(affordability gap)x(100%)
 - (2) The applicant shall pay for all appraisals, and the Town shall approve the applicant's chosen appraiser
 - (3) The Payment in Lieu shall be made at and upon the sale or certificate of occupancy of each unit, whichever occurs sooner. When the development consists of year-round rental units, a lien shall be filed against the property which states that the Payment in Lieu shall be deferred until such time as the year-round rental use ceases, with the full balance due upon change of use
- B. Development of 7 or more new dwelling units shall require the granting of a Special Permit by the Zoning Board of Appeals and at least one-sixth (16.67%) of the new units created shall be established as Affordable ~~or Community~~ Housing units in any one or combination of methods provided for below:
- (1) The Affordable ~~or Community~~ Housing units shall be constructed or rehabilitated on the site subject to the Special Permit, in accordance with [§235 Section 6.28.4](#); or
 - (2) The Affordable ~~or Community~~ Housing units shall be constructed or rehabilitated on a site other than the one subject to the Special Permit, in accordance with [§235 6.28.4](#), provided justification is provided that on-site development of units is not feasible and off-site development of units is beneficial to the Town, and Special Permits are granted contemporaneously for both developments; or
 - (3) A Payment in Lieu of providing Affordable ~~or Community~~ Housing units shall be made to the Wellfleet Affordable Housing Trust Fund. Payment shall be made in accordance with the following formula:

Commented [CMM6]: You have not defined Affordable or Community Housing. Affordable Housing has a clear understanding under G.L. c. 40B and its related regulations, but Community Housing is not defined under this statute. If the intent is for Affordable and Community Housing to be interchangeable, I suggest we use Affordable Housing, as that term is given meaning under G.L. c. 40B. You may also want to insert the definition in the Definitions section of the ZBL, rather than here.

Commented [RC7R6]: Affordable Housing is already in definitions DWELLING, AFFORDABLE A dwelling unit which is subject to an affordable dwelling restriction. [Added 9-10-2022 ATM by Art. 17]

Commented [CMM8]: There is no SP criteria for approval of the dwelling units, other than the requirement for providing affordable units. Will Sec. 8.4.2 be the default for SP criteria? If so, we should cross-reference to that section.

Commented [CMM9]: I am not sure I understand the math here. Wouldn't it be easier to require a developer to make a payment equal to the value of the required number of Affordable Housing Units multiplied by the median sales price of a Wellfleet market-rate home comparable in type, size, and number of bedrooms over a period of XX months prior to the date of application submission, provided the amount of such payment shall not be decreased based on the value of an Affordable Housing Unit. Data for sales could be provided by the Wellfleet Assessors.

Commented [RC10R9]: The sample size would be too small in 2022 we had 62 home sales and 15 condos. To get a large enough sample for certain bedroom sizes it would require multiple years of sales at that would introduce lag in the values accessed.

This schedule is a modification of Provincetown, it progressively becomes more expensive not to include the units.

Commented [CMM11]: This seems like a loophole where a developer could rent the unit in perpetuity and avoid the Payment in Lieu? Regardless I don't know that a lien is the best mechanism. The payment will be memorialized

Commented [RC12R11]: No, if the developer is renting "affordable units" in perpetuity, that is an acceptable outcome. If they were to later sell the property and the use of those units were to cease the payment in lieu of is due.

Commented [CMM13]: What if a developer is required to provide 2 affordable units and offers to create one at a property that is already developed? There would be no contemporaneous SP for the off-site unit.

Commented [RC14R13]: Permits are required to be in hand

- a) For 6-7 or more new dwelling units, the Payment in Lieu = (total # of new dwelling units)x(16.67%)x(affordability gap)x(150%)
 - b) The applicant shall pay for all appraisals, and the Town shall approve the applicant's chosen appraiser
 - c) The Payment in Lieu shall be made at and upon the sale or certificate of occupancy of each unit, whichever occurs sooner. When the development consists of year-round rental units, a lien shall be filed against the property which states that the Payment in Lieu shall be deferred until such time as the year-round rental use ceases, with the full balance due upon change of use; or:
- (4) A Land Donation in Lieu of providing Affordable or Community Housing units shall be provided to the Wellfleet Affordable Housing Trust, provided that:
- a) The receiving organization agrees in writing to accept the land; and
 - b) The applicant demonstrates to the Zoning Board of Appeals's satisfaction that the land serves the future development of Affordable and/or Community Housing; and
 - c) The value of donated land shall be equivalent to or greater than the value of the required Payment in Lieu. The Zoning Board of Appeals may require, prior to accepting land as satisfaction of the requirements of this bylaw, that the applicant submit an appraisal of the land in question that was prepared by a licensed appraiser using professionally accepted methods, as well as other data relevant to the determination of equivalent value, and the Zoning Board of Appeals may obtain expert peer review of the appraisal at the applicant's expense; and
 - d) Closing on the land donation shall occur before the issuance of the first building permit.

Commented [CMM15]: Same comment as above re: lien.

§235 6.28.4 Provisions Applicable to Affordable and Community Housing Units Located On-Site and/or Off-Site

- A. Affordable and Community Housing units created in accordance with this bylaw shall have a use deed restriction and Regulatory Agreement to regulate the future re-sale or rental of the unit and that requires the units to remain income restricted in perpetuity or the longest period allowed by law. Said deed restriction and Regulatory Agreement shall be consistent with the forms used in the Local Initiative Program and Regulatory Agreement approved by DHCD. The Regulatory Agreement shall be prepared by the Applicant and submitted to Town Council for review and approval. The Regulatory Agreement will be executive by the Applicant, the Town of Wellfleet and DHCD and shall be recorded with the Barnstable County Registry of Deeds or and for so long as the unit or project does not conform to the otherwise applicable underlying zoning requirements and any such restriction shall be held by the Town and be released only by a vote of Town Meeting as provided for by state law. Such restriction shall also grant the Town a right of first refusal to purchase a unit in the event that a subsequent qualified purchaser cannot be located, which the Town shall have the right but not the obligation to exercise and shall not release the deed restriction if a qualified purchaser cannot be located.

Commented [CMM16]: The deleted language is usually included in 40B projects where the development does not comply with zoning. This will not be the case here.

B. The applicant shall be responsible for preparing and submitting any documentation that may be required to receive Local Action Unit approval from DHCD and to qualify the Affordable Housing Units for listing on the SHI. The applicant shall also be responsible for providing annual compliance monitoring and certification to the Town or its monitoring agent and to pay for the costs of the Town for providing such compliance monitoring.

~~B.C.~~ No Building Permit shall be issued for any units in the development until the Zoning Board of Appeals receives evidence that the Affordable Housing deed restriction has been approved by DHCD, ~~or the Community Housing restriction has been approved~~ by Town Counsel.

~~C.D.~~ No Certificate of Occupancy shall be issued for any units in the development until the Building Commissioner receives evidence that the ~~deed housing~~ restriction has been executed and recorded at the Barnstable County Registry of Deeds.

~~D.E.~~ Affordable ~~and Community~~ Housing units shall be integrated with the rest of the development or with the off-site location, and shall be comparable to and indistinguishable from market rate units in exterior design, including appearance, construction and quality of materials, and in energy efficiency.

~~E.F.~~ The number of bedrooms in each Affordable ~~or Community~~ Housing unit shall be made a part of the Special Permit and shall be based on local need as determined by the Zoning Board of Appeals in consultation with the Wellfleet Housing Authority.

~~F.G.~~ Owners and tenants of Affordable ~~and Community~~ Housing units and market rate units shall have the same rights and privileges to access and use any of the development's amenities and facilities.

~~G.H.~~ The development of Affordable ~~and Community~~ Housing units shall take place at the same rate and timeframe as the development of market rate units.

- 1) Building Permits for any phase shall be issued at a ratio of five (5) market rate units to one (1) Affordable/~~Community~~ Housing unit. Building Permits for subsequent phases shall not be issued unless all the required Affordable ~~and/or Community~~ Housing units in the preceding phase are constructed and the deed restrictions recorded. The last unit permitted, constructed and occupied shall be a market rate unit.
- 2) The project may also be constructed in its entirety with all permits issued at once, provided that the occupancy permits are issued at a ratio of five (5) market rate units to one (1) Affordable/~~Community~~ Housing unit. The last certificate of occupancy to be issued shall be for a market rate unit and shall not be issued unless and until all Affordable ~~and/or Community~~ Housing units are occupied.

§235 6.28.5 Maximum Incomes and Selling Price; Affordable ~~and Community~~ Housing Inventory

Maximum rents and/or sale price shall not exceed 30% of an occupant's or tenant's annual income for a household at or below 80% of Area Median Income adjusted by household size.

§235 6.28.6. Segmentation Prohibition

Developments shall not be phased or segmented to avoid compliance with conditions or provisions of this bylaw. "Segmentation" shall be defined as subdividing one parcel of land into two or more parcels of land in such a manner that each parcel can support only a single dwelling unit or phased development that cumulatively results in a net increase of two or more dwelling units above the number existing

thirty-six (36) months earlier on any parcel or set of contiguous parcels held in common ownership or under common control on or after the effective date of this Section.

§235 6.28.7 Conflict with Other Bylaws

The provisions of this bylaw shall be considered supplemental of existing zoning bylaws. To the extent that a conflict exists between this bylaw and others, the more restrictive bylaw, or provisions therein, shall apply.

§235 6.28.8 Severability

If any provision of this bylaw is held invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected thereby. The invalidity of any section or sections or parts of any section or sections of this bylaw shall not affect the validity of the remainder of Wellfleet's Zoning Bylaws.



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VIII

BUSINESS

~ D ~

REQUESTED BY:	Ryan Curley ~ Chair
DESIRED ACTION:	To review and approve the letter written to Martha Craig
PROPOSED MOTION:	I move to approve the letter written to Martha Craig and send it to her on behalf of the town of Wellfleet, thanking her for her service with the Herring River Project.
Summary:	
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



TOWN OF WELLFLEET

300 MAIN STREET WELLFLEET MASSACHUSETTS 02667

Tel (508) 349-0300

www.wellfleet-ma.gov

Dear Martha Craig,

Wellfleet deeply appreciates your efforts in moving the Herring River Restoration Project forward. We want to express our gratitude for all that you did as the Executive Director of the Friends of the Herring River. We deeply value your dedication and hard work toward restoring the natural beauty and ecological health of the Herring River. The Town relies heavily on the Friend of the Herring River to advance this incredibly ambitious project. It is hard to believe that we are entering the actual construction phase, and we hope you continue to monitor the developments of the project and know that your contributions towards it is greatly valued.

Your tireless efforts to educate the public on the project and the importance to the surrounding ecosystem have significantly impacted the community. Your passion for the environment and commitment to making a positive difference is admirable. You comported yourself with professionalism and calm even when dealing with charged conversations and meetings.

On behalf of everyone who values the river, its ecosystem, and the Town of Wellfleet, we want to thank you for your unwavering commitment and tireless work.

Please keep up the excellent work and know that your efforts are truly appreciated.

Sincerely,
The Wellfleet Selectboard

Ryan Curley, Chair

Michael DeVasto, Vice Chair

Kathleen Bacon

Barbara Carboni

John Wolf



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

VIII

BUSINESS

~ E ~

REQUESTED BY:	Nancy Civetta, Shellfish Constable
DESIRED ACTION:	The opening and closing of the Herring River
PROPOSED MOTION: SUMMARY:	I move to open the Herring Rivers as of sunrise on Wednesday March 15, 2023 or when the town receives written approval from the Mass Division of Marine Fisheries that it meet water quality standards for the safe harvest of shellfish and can be opened, and to close it at sunset om Thursday August 31, 2023,or as otherwise directed by the Mass. Division of Marine Fisheries.
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

IX

SELECTBOARD REPORTS:

Reported by:	Topic:



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

X

TOPICS FOR FUTURE DISCUSSION

- **The Selectboard will discuss a list of current items that are outstanding**



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

XI

VACANCY REPORTS

*****Please see the packet for full report*****

Date: February 7, 2023
To: Board of Selectmen
From: Rebekah Eldridge
Re: Vacancies on Town Boards

Bike and Walkways Committee (5 members)

Vacant Positions	Appointing Authority	Length of Term
2 Positions	Selectboard	1 year (complete term)

Requesting Appointment: No applications on file

Board of Assessors (3 members, 1 alternate)

Vacant Positions	Appointing Authority	Length of Term
1 alt Position	Selectboard	3 years

Requesting Appointment: No applications on file

Board of Health (5 members, 2 alternates)

Vacant Positions	Appointing Authority	Length of Term
0 alt Positions	Selectboard	3 years

Requesting Appointment: No applications on file

Board of Water Commissioners (5 Members, 2 Alternates)

Vacant Positions	Appointing Authority	Length of Term
2 alt Positions	Selectboard	3 years

Requesting Appointment: No applications on file

Cable Advisory Committee (5 Members)

Vacant Positions	Appointing Authority	Length of Term
1 Position	Selectboard	1 year

Requesting Appointment: Mark Washburn submitted his resignation 1-27-2023.

Lawrence Marshall: Application to be appointed 2-7-2023.

Commission on Disabilities (up to 5 Members)

Vacant Positions	Appointing Authority	Length of Term
1 Position	Selectboard	3 years

Requesting Appointment: No applications on file

Conservation Commission (7 Members + 2 alternates)

Vacant Positions	Appointing Authority	Length of Term
0 Positions	Selectboard	
2 alt Positions		3 years

Requesting Appointment:

Council on Aging (11 Members)

Vacant Positions	Appointing Authority	Length of Term
2 Positions	Selectboard	3 years

Requesting Appointment: No application on file

Cultural Council (no more than 15 Members)

Vacant Positions	Appointing Authority	Length of Term
7 Positions	Selectboard	3 years

Requesting Appointment: no applications on file

Dredging Task Force (5 Members)

Vacant Positions	Appointing Authority	Length of Term
0 Positions	Selectboard	3 years

Requesting Appointment: No applications on file

Energy and Climate Action Committee

Vacant Position	Appointing Authority	Length of Term
1 Position	Selectboard	

Alternate Position
1 Position

Finance Committee (9 members, 2 alternate)

Vacant Positions	Appointing Authority	Length of Term
1 Alternate Position	Town Moderator	3 years

Requesting Appointment: **one application on file** ~ Timothy Sayer

Historical Commission (7 members)

Vacant Positions	Appointing Authority	Length of Term
0 Vacancies	Selectboard	3 years

Requesting Appointment: **no** application on file

Local Housing Partnership (at least 10 members)

Vacant Positions	Appointing Authority	Length of Term
0 Vacancy	Selectboard	1 year

Requesting Appointment: No application on file

Marina Advisory Committee (7 Members, 2 Alternates)

Vacant Positions	Appointing Authority	Length of Term
1 Alternate Position	Selectboard	2 years

Requesting Appointment: No applications on file

Natural Resources Advisory Committee (7 Members)

Vacant Positions	Appointing Authority	Length of Term
3 Position	Selectboard	3 years

Requesting Appointment: No application on file

Open Space Committee (7 Members)

Vacant Positions	Appointing Authority	Length of Term
0 Positions	Selectboard	1 year

Requesting Appointment: **No** application on file

Personnel Board (4 members + TA + FinCom Rep)

Vacant Positions	Appointing Authority	Length of Term
2 Positions	Selectboard	3 years

Requesting Appointment: No applications on file

Planning Board (7 members + 2 alternates)

Vacant Positions	Appointing Authority	Length of Term
2 Alternate Position	Selectboard	5 years

Requesting Appointment: No applications on file

Recreation Committee (7 Members)

Vacant Positions	Appointing Authority	Length of Term
2 Positions	Selectboard	3 years

Requesting Appointment: No applications on file

Recycling Committee (7 Members + 2 Alternates)

Vacant Positions	Appointing Authority	Length of Term
2 Alternate Positions	Selectboard	3 years
Requesting Appointment: No applications on file		

Rights of Public Access (5 Members)

Vacant Positions	Appointing Authority	Length of Term
2 Positions	Selectboard	1-2 years
Requesting Appointment: No application on file		

Shellfish Advisory Board (7 members + 2 Alternates)

1 Vacant Positions	Appointing Authority	Length of Term
1 Alternate Position	Selectboard	3 years
Requesting Appointment: No application on file		

Zoning Board of Appeals (5 Members, 4 Alternates)

Vacant Positions	Appointing Authority	Length of Term
0 Position	Selectboard	3 years
Requesting Appointment: No applications on file		



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

XII

MINUTES

REQUESTED BY:	Executive Assistant
DESIRED ACTION:	Approval of Minutes
PROPOSED MOTION:	I move to approve the meeting minutes of January 24, 2023. January 31, 2023
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea ____ Nay ____ Abstain ____

Wellfleet Selectboard
Virtual Meeting: Zoom
Tuesday January 24, 2023, 7pm
Meeting Minutes

Members Present: Ryan Curley, Chair; John Wolf, Barbara Carboni, Kathleen Bacon
Michael DeVasto, Vice Chair

Others Present: Richard Waldo, Town Administrator; Rebekah Eldridge, Executive Assistant;
Josh Yeston, Chris Easley, Nauset School District; Joe Aberdale, Chair of the Marina Advisory
Committee; Merrill Mead-Fox, Cultural Committee; David Mead-Fox; James Badera, Building
Commissioner

Chair Curley called the meeting to order at 7:03pm

I. *Announcements, Open Session and Public Comments*

Note: Public comments must be brief. The Board will not deliberate or vote on any
matter raised solely during Announcements & Public Comments.
There were no announcements.

II. *Consent Agenda*

- A. Approve the DPW Spring Tax Insert ~ DPW~ has been approved by the collector.
- B. Appointment of Adrien Kmiec to the Shellfish Advisory Board ~ **Bacon recused herself from this agenda item.**
- C. Support Letter ~ FY22/23 Housing Rehab & Childcare Voucher Program Application
- D. Compact of Cape Cod Conservation restriction, signatures needed ~ Dennis O'Connell
- E. Common Victualler Licenses ~
 - Wellfleet Beachcomber
 - The Bagel Hound

Chair Curley Moved, Board Member Wolf Seconded; and it was voted to approve all items in the consent agenda with the exception of item B.

Roll Call Vote: 5-0

Chair Curley Moved; Board Member Seconded; and it was voted to approve Adrien Kmiec to the Shellfish Advisory Board, to be sworn in by the town clerk and follow all bylaws and regulations of the town of Wellfleet.

Roll Call Vote: 3-1-1 (Devasted abstained, Bacon recused).

III. Public Hearings

Chair Curley Opened the below public hearings:

- A. **Continued from January 17, 2023**; Application received December 9, 2022, from New Fleet Corporation, dba Hog Island Surf Lodge & Beer Yard, 842 Route 6 Wellfleet, MA, Mike McNamara, Manager, for a new Year-Round All Alcohol Restaurant License.

McNamara presented to the board the plans to keep the restaurant open year-round. He stated he is the owner and founder of the Hog Island in Orleans and is now the manager and part owner of Hog Island Surf Lodge and Beer Yard. He explained that his goal is to have people be able to socialize and bring the community together throughout the year. The board thanked him to be willing to stay open and face the challenges of the winter season on Cape Cod. They questioned him about his concern for staffing, he had none.

Board Member Bacon Moved; Board Member Wolf Seconded; and it was voted to approve the application from New Fleet Corp., DBA Hog Island Surf Lodge & Beer Yard, Manager Mike McNamara to go from a seasonal alcohol license to a year-round alcohol license following all the rules and regulations of the Town of Wellfleet.

Roll Call Vote: 5-0

IV. Use of Town Property

- A. Second Summer Cycle, LLC ~ Cape Cod Chamber of Commerce ~ September 17, 2023, 10:30am – 2:30pm ~ See packet for full details.

Chair Curley questioned if the applicant was on the meeting. Chair Curley stated he had some issues with this application and needed to speak with the applicants. He stated the route is on dirt roads and the map doesn't make sense. He would like to meet with the applicant. The board will take this up at the January 31, 2023, meeting.

NO ACTION WAS TAKEN

V. Board/Committee Appointments and Updates

- A. CNR Bridge noise bylaw ~ work being performed ~ Town Administrator Waldo spoke to this agenda item discussing with the board that this project is going to be tide dependent at certain times. He stated that the crews may need to get into the area between 6am through 6:45am. This will be a slow moving project but once the infrastructure is ready it will be important to get this project moving. He stated he isn't looking for the later half of the day more for the early part of the day and is asking for an exemption.

Yeston spoke to the board asking about the noise and what noise would be heard. Waldo explained diesel engines would be heard and the construction equipment would be heard. He stated that it wouldn't be overwhelming loud.

Chair Curley Moved; Board Member Wolf Seconded; and it was voted to authorize Mig Construction to start work outside of the hours so controlled in the noise bylaw subject to the prior approval of the town administrator.

Roll Call Vote: 5-0

- B. Possible Wellfleet Residential Zoning Task Force ~ Wellfleet Affordable Housing Trust ~ Harry Terkanian
Terkanian spoke to the board about having a zoning task force and explained to the board why. He stated the affordable housing trust voted to try and replicate what the town of Eastham has, however he stated that the staff in Wellfleet has much to do and there isn't enough time for the staff to take this on now. He stated he has not spoken to the Planning Board about this suggestion yet but haven't asked for any formal input yet. The board discussed this and upcoming funding possibilities for the town. Chair Curley stated the administration staff doesn't have the capacity to file for upcoming grant opportunities. Terkanian stated he would be willing to attempt this as long as it wasn't an urgent matter.
NO ACTION WAS TAKEN

- C. Nauset Regional school district agreement
Easley spoke to the board about the agreement for funding for the new Nauset High School. He explained that they have received the same information that the board has received and the documents have been sent to the attorney's for the school. He explained the process of augmenting regional agreements and stated it is a difficult process and towns that wish to join need to do so before this project begins. Chair Curley asked the committee to take into account the interest in investments other towns have made into consideration. Bacon agreed. They discussed when this negotiation would begin. Easley stated that next year the negotiations would begin next year and explained what the agreement entails.

Chair Curley Moved; Board Member DeVasto Seconded, and it was voted to request the Nauset Regional School Committee take into consideration the investments that the other towns within the district have made into the school when negotiating tuition agreements.

Roll Call Vote: 5-0

- D. Marina Advisory Committee Charge Amendment ~ Joe Aberdale MAC Chair
Aberdale spoke to the board regarding the change in the Marina Advisory amendment. He explained what was added into the charge and the changes made. They discussed the fee schedule that Aberdale put into the charge. Chair Curley stated that the section that discusses complaints needs to be removed, as he feels it interferes with employee rights, and not having the marina advisory committee enforce complaints with employees. Aberdale continued explaining that boaters and people at the pier who have issues or concerns go to the Harbormaster and the committee to help resolve those issues, and not have to go up to the Selectboard or Administration. Chair Curley stated that he is concerned about potential violation of employee rights. He explained that there are procedures to be followed. DeVasto explained that he has a concern of overlapping of charges with other committees, he used the natural resources advisory board and the harbor management board. Aberdale stated he would strike the complaints part of the updated charge and approve the other changes.

Bacon stated she is uncomfortable having a complaint committee for the harbormaster. She continued that there is a human resource director and town administrator who can field any and all complaints. Chair Curley asked Aberdale to come back before the board with these items removed. They discussed the changes in the charge further. This will be put on the February 21, 2023, Agenda.

NO ACTION WAS TAKEN

- E. Discuss amendments to Wellfleet's Demolition Delay Bylaws, to resemble the Massachusetts Historical Commission's Sample Demolition Delay Bylaws ~ Wellfleet Historical Commission ~ Merrill Mead-Fox

Mead-Fox spoke to the board about amending and updating the bylaws for demolition. She presented on the screen changes that have been made with the building commissioner James Badera. She explained to the board why these needed to be updated. She continued her presentation to the board. The board had questions and discussed percentages with Mead-Fox. Badera spoke to the board with regard to his comments and recommendations with this amendment. They continued suggesting changes and what could be presented as a new bylaw. Mead-Fox suggested to the board that she go back to the historical commission with changes and make the changes that were discussed at tonight's meeting.

NO ACTION TAKEN

- F. Update & New Specialized Code ~ Wellfleet Energy and Climate Action Committee ~ David Mead Fox

Mead-Fox spoke to the board and stated he was at the meeting representing the energy and climate action committee. He stated he wanted to present changes to the board, explain the process of how these changes can go into effect, and to possibly put these changes into the warrant for the spring town meeting. He explained the documents that were in the selectboard packet. He discussed the code changes to the board and why they would benefit the town. He stated that they will be sitting down with the building commissioner and the builders throughout the lower cape, they will hold an event to go through these changes. Badera spoke to these changes and his point of view on the changes and some of his concerns on the process. The board had questions for Mead-Fox with some concerns they had with this new code. Mead-Fox stated he would take the board's comments back to his committee and the building commissioner for further development.

NO ACTION WAS TAKEN

VI. *Business*

- A. Letter regarding wastewater funding and DEP draft regulations

Chair Curley discussed the letter he had written with the board and stated he was considering deleting a paragraph. Bacon stated it was a good letter and didn't think there needed to be a paragraph deleted. She questioned if the Board of Health had read the letter. He stated they hadn't because the deadline for the letter was January 31, 2023, and he didn't feel there was time to bring it in front of

them now. He screen shared the letter and the paragraph he wished to delete. The boards agreed with his decision to delete. They discussed the letter and agreed to sign this letter so it could be sent immediately.

Chair Curley Moved; Board Member Carboni Seconded, and it was voted to approve the letter as drafted.

Roll Call Vote: 5-0

B. Capital Improvement Budgets ~ Town Administrator

- Wellfleet IT Department

Waldo went over the Information Management System; he stated that this is a reoccurring request and explained that it will eventually change as he would like to IT department to change. He explained why the budget was what it was listed at stating that staying on top of technology equipment is very important.

Chair Curley Moved; Board Member Wolf Seconded, and it was voted to approve the IT capital improvement plan

Roll Call Vote: 5-0

- Maurice's Campground Planning & Development

Waldo discussed with the board that the town is now owners of a campground and they need to start thinking about running and updating this property. He stated one of the biggest project is getting the campground onto the Eastham Water System. He explained that he had met with Eastham to discuss how to pay for the connection the their water system. The board had questions for Waldo and the planning of this project.

Chair Curley Moved; Board Member Wolf Seconded; and it was voted to approve the Maurice's Campground Planning and Development Capital Improvement Plan.

Roll Call Vote: 5-0

C. Zoning Bylaw Amendment ~ Food Establishment ~ Chair Curley

Chair Curley stated that the meeting on the 31st was a light agenda and asked the board to move this item to next week.

VII. ***Selectboard Reports***

Wolf gave an update on the marina advisory committee meeting he attended and the dredging task force.

VIII. ***Topics for Future Discussion***

Chair Curley stated he had a list of upcoming items and would discuss them at a future meeting.

IX. ***Adjournment***

Chair Curley Moved; Board Member Seconded; and it was voted to adjourn the meeting.

Roll Call Vote: 5-0

Meeting Adjourned: 9:58pm

Public Documents:

Spring Tax Insert for department of public works
Application from Adrien Kmiec to the Shellfish Advisory Board
Support Letter ~ FY22/23 Housing Rehab & Childcare Voucher Program Application
Compact of Cape Cod Conservation restriction, signatures needed ~ Dennis O'Connell
Common Victualler Licenses ~

- *Wellfleet Beachcomber*
- *The Bagel Hound*

Shellfish Public Hearing Documents for Nick Sirucek
Application for Use of Town Property ~ Bike Race
Documents for the Herring River Bridge noise exception
Zoning Task force paperwork
Nauset Regional School District Documents
Marina Advisory Charge Amendments
Historical Commission Documents of Demolition Bylaw amendment
Amended specialized code documents for energy and climate action.
Letter to Department of Environmental Protection
Capital Improvement Budgets for IT, and Maurice's Campground
Food Establishment Zoning Bylaw Amendment

Wellfleet Selectboard
Tuesday January 31, 2023; 7pm
Hybrid Meeting: Zoom/715 Old King's Highway
Open Session Meeting Minutes

Members Present: Ryan Curley, Chair; Michael DeVasto, Vice Chair; Kathleen Bacon, Barbara Carboni, John Wolf

Others Present: Rebecca Roughley, Assistant Town Administrator; Rebekah Eldridge, Executive Assistant; Nancy Civetta, Shellfish Constable; Rich Pauley, Fire Chief; Joseph Capello, Fire Captain; Deidre Oringer, Wellfleet SPAT; Nick Sirucek, Helen Miranda Wilson, Becca Taylor, Samuel Blakely, Pat Lindell, applicant for use of town property applicant, Kevin LaRocco, Police Department

Chair Curley called the meeting to order at 7:03pm

I. *Announcements, Open Session and Public Comments*

Note: Public comments must be brief. The Board will not deliberate or vote on any matter raised solely during Announcements & Public Comments.

Chief Hurley spoke to the reclassification of Joe Capello and spoke very highly of him and stated he was excited to have him reclassified. He congratulated Capello for his hard work and dedication to the town.

II. *Consent Agenda*

A. Hazard Mitigation Grant paperwork to be approved by the board and executed by the Town Administrator

B. Recommendation of Award ~ Engineering Drawings/Permit Application for Clean Sand Dredging/Beach Nourishment ~ Assistant Town Administrator ~ Rebecca Roughley

Chair Curley Moved; Board Member DeVasto Seconded; and it was voted to adopt the consent agenda as drafted.

Roll Call Vote: 5-0

III. *Employee Matters*

A. Reclassification of the existing Captain's position to Deputy Fire Chief
Chief Pauley stepped up and spoke to the board about the capabilities of Joe Capello and how beneficial Capello has been to the fire department and the fire department is overdue. Chief stated that he would like to promote Lt. Joe Capello from Lieutenant to Deputy Fire Chief, as he has done beyond the work asked of him.

Bacon spoke to the board and public, stating that the town is beyond fortunate to have this talent in their fire department. She discussed that Capello was third generation Wellfleet and she is more proud of his accomplishments.

Silverman spoke to the board giving background on deputy fire chief and stated the town needs a deputy to stand in when the chief is unavailable.

Chair Curley Moved; Board Member Wolf Seconded and it was voted to endorse the fire chief's reclassification of from lieutenant to Deputy Fire Chief.

Roll Call Vote: 5-0

IV. Public Hearings *Board Member DeVasto recused himself from all shellfish hearings.*

Chair Curley Opened the public hearing for shea and Sartura Murphy

- A. Application received 12/22/2022 for the transfer of shellfish grant license #s 01-02, 2000-7 and 2000-7 Ext consisting of a total of three acres on Field Point from Shea Murphy (Wellfleet, MA), to Shea Murphy and Saruta Murphy (Wellfleet, MA).

Chair Curley Moved, Board Member Bacon Seconded; and it was voted to approve the transfer of grant license #'s 01-02, 2000-7, and 2000-7 ext.

Roll Call Vote: 4-0-1

Chair Curley opened the hearing for the next public hearing.

- B. To correct an oversight in the non-issuance of a grant license for grant extension #2006-01B consisting of 0.9 acres on Field Point to Robert LaPointe and to approve his grant renewal from October 25, 2011, until April 30, 2028. Civetta spoke to the board and explained that due to an error with the town LaPointe was never issued his grant license, she stated that she would like this to be rectified tonight.

Chair Curley Moved; Board Member Bacon Seconded and it was voted to rectify the oversight in the non-issuance of a grant license #2006-01B for Robert LaPointe by approving a renewal of this grant from October 25, 2011, through April 30, 2028.

Roll Call Vote: 4-0-1

Chair Curley opened the next public hearing.

Chair Curley recused himself from this public hearing item:

- C. Continued from November 22, 2022, ~ Application received 10/13/2022 for a grant extension (to be numbered #2000-6 ext.) to shellfish grant license #2000-6 consisting of approximately 1.2 acres on Egg Island from Nick Sirucek (Wellfleet, MA). **HEARING CONTINUED TO JANUARY 31, 2023** Civetta spoke to the board stating that she reported to town counsel and found out from town counsel that they couldn't grant this extension because it is located on mean low water. She continued stating what town counsel had said and gave reasons why town counsel gave this advice to the town. She used the maps in the selectboard packet for reference. Town Counsel suggested rewriting the regulations, She stated she spoke to the Shellfish Advisory Board and they agreed Egg Island should be renamed Area 5. Carboni asked the map to be shared on the board so that she can work on the new regulations she explained that on Egg Island there is wild fishing and grants. Civetta explained to the board that she would like to work with town counsel and the shellfish advisory board and continue this hearing to April 4, 2023.

Carboni stated that she feels the board needs to comply with the current regulations and have the applicant pull his application and reapply once the regulations have been changed. Sirucek spoke to the board and understands the boards decisions. Civetta stated that there isn't much room to for many extensions. And the two extensions that are in front of them are the only two that could be extended. Wilson spoke to the board about this grant extension with some questions. Wolf questioned him losing his place while these issues are negotiated,

Board Member Bacon Moved, Board Member Wolf seconded; and it was voted to accept the withdrawal of this application without prejudice.

Roll Call Vote: 3-0-2

Chair Curley opened this public hearing.

- D.** Application received 1/3/2023 for a grant extension (to be numbered #2000-2 ext.) to shellfish grant license #2000-2 consisting of approximately 1.08 acres on Egg Island from Stephen Pickard (Wellfleet, MA), Iris Pickard (Wellfleet, MA) and Benjamin Pickard (Wellfleet, MA).

Civetta spoke to the board about this grant not being above mean low water as she stated previously this grant needs to be held until the regulations are changed. Pickard stated his maps were not in the public documents, Civetta stated that they were pulled because they were not in compliance with the regulations, which was advice given by town counsel. Pickard stated the boundaries go by boxes and stated he was in disagreement with town counsel and the shellfish constable. He continued to give his explanation as to why he disagreed with this continuance. Pickard asked for his hearing to be continued to February 7, 2023. Civetta explained that DMF stated the grant would no longer be valid, she continued to explain to the board and Pickard that she is trying to do the right thing with shellfish grants. Pickard presented the approval he was granted in February of 2002. Civetta stated that the Army Core of engineers and the Conservation Commission didn't do there reports.

Sirucek spoke to the board stating that he feels if his extension isn't being allowed to move forward he would ask that they not grant this extension.

Bacon questioned Civetta on what she wanted to do regarding this. She stated she would recommend what was voted on at the last hearing.

Pickard stated he would not be willing to withdraw his application, he asked to have this continued to February 7th so he could bring his own counsel. The discussion continued, Chair Curley stated he would be agreeable to continue this until town counsel has had an opportunity to give an opinion.

Chair Curley Moved; Board Member Carboni Seconded and it was voted to continue the shellfish grant extension (to be numbered #2000-2 ext.) to shellfish grant license #2000-2 consisting of approximately 1.08 acres on Egg Island from Stephen Pickard (Wellfleet, MA), Iris Pickard (Wellfleet, MA) and Benjamin Pickard (Wellfleet, MA).

Roll Call Vote 4-0-1

- E. Application received 1/10/2023 for a grant extension (to be numbered #99-1 Ext) to shellfish grant license #99-1 consisting of approximately .43 acres on Mayo Beach from Angela Osowski (Wellfleet, MA), Robert Mallory (Wellfleet, MA) and Mary Mallory (Wellfleet, MA).

Civetta spoke to the board stating she had the same reservations about granting this extension as she had with the Pickard's. She stated that Pickard didn't trust her judgement and wanted the Selectboard to make a decision regarding this grant extension. They discussed the approvals that were missing. She stated right now the town doesn't have the maps and it would need to be surveyed professionally. There were comments made by Benjamin Pickard regarding following the rules and regulations. There was much discussion with this application and much disagreement. Bacon spoke on behalf of Civetta, stating since she was hired in 2017 Civetta has been working hard to find documents since she stepped in the door. Wolf spoke to the board in favor of the administration. Taylor spoke to the board stating that she has since 2002 been operating on this grant as if it were her extension. She asked for the opportunity to reapply. Blakely spoke to the board, stating that the applicant knew the grant was being used.

Chair Curley Moved; Board Member Bacon Seconded; and it was voted to continue the public hearing for grant extension #99-1 ext on mayo beach to March 21, 2023 at 7pm.

Roll Call Vote: 4-0-1.

Chair Curley opened this public hearing.

- F. Subdividing two three-acre grants (currently license #s 01-06 and 792) in the deep-water area of Indian Neck into four 1.5-acre parcels to then be put up for lottery.

Civetta spoke to the board about subdividing the grants. The board discussed this further.

Chair Curley moved; Board Member Bacon Seconded; and it was voted to approve the subdivision of two 3-acre deep Indian Neck grants that are moving to be within the HDYLTA boundary into four 1.5 acre grants and put them up for lottery.

V. ***Use of Town Property***

- A. Second Summer Cycle, LLC ~ Cape Cod Chamber of Commerce ~ September 17, 2023, 10:30am – 2:30pm ~ See packet for full details.

Chair Curley stated that there are many issues with this application and the route they are asking for. Bacon stated that she would like the applicant to go back to the drawing board and come back to the board with a more thought-out route.

The applicant agreed to come back with a revised route.

NO ACTION WAS TAKEN

- B. Wellfleet SPAT ~ Use of Main Street, save the date for Oysterfest 2023
Eldridge explained that the department heads had met and will continue meeting to figure out details.

Board member Bacon moved; Board Member Wolf Seconded; and it was voted to approve the use of Main Street and surrounding areas from October 10, 2023 – October 17, 2023 for the 2023 Wellfleet Oysterfest. With meeting to continue with all department heads to finalize all details for a fee to be determined at a later date when locations are finalized, subject to the approval of all department heads.

Roll Call Vote 4-0-1 (DeVasto was recused).

VI. *Business*

- A. Food Establishment Bylaw Amendment

Chair Curley spoke to this amendment and explained the changes that were made, and concerns of the planning board. He explained the concerns of the planning board. Meeting design criteria.

Chair Curley moved, Board Member Bacon Seconded, and it was voted to strike four from the full-service restaurant.

Roll Call Vote: 4-0-1 (DeVasto Abstained)

NO ACTION WAS TAKEN

VII. *Selectboard Reports*

- A. Bacon explained that she has been meeting with the NRAB as their liaison and there is still much discussion on the Harbor Flora Fauna Survey. She gave details on this survey they are asking for and asked Roughley to attend their next meeting to help the group come to a decision on the need for a survey.

VIII. *Topics for Future Discussion*

Chair Curley Stated they will have the Division of Local Services will attend a future meeting.

Bacon stated she would like to have a discussion regarding the naming of the development of the 95 Lawrence Road project, she stated maybe getting the public involved in that process.

She would like surveillance cameras on the front of town hall, she stated that all the Christmas lights were cut from the trees in front of town hall leaving the trees not lit for the season.

IX. *Vacancy Reports*

X. *Minutes*

- A. January 17, 2023

Board Member Bacon Moved; Board Member Carboni Seconded, and it was voted to approve the meeting minutes of January 17, 2023, as printed in draft.

Roll Call Vote: 5-0

- XI. ***Adjournment of open session to go back into executive session if necessary.***

DRAFT *** A full recording of this meeting can be found on the town's website***

Chair Curley Moved; Board Member Carboni seconded; and it was voted to adjourn open session.

Meeting Adjourned 10:00pm

Public Records:

Hazard Mitigation Grant Documents

Award documents for clean sand nourishment

Reclassification of Lieutenant Joseph Capello to Deputy Fire Chief

Shellfish Public Hearing Documents and Maps

Use of Town Property application for second summer cycle, LLC

Use of town Property Wellfleet SPAT

Food Establishment Bylaw Amendment

Meeting Minutes January 17, 2023



SELECTBOARD

AGENDA ACTION REQUEST
Meeting Date: February 7, 2023

XIII

ADJOURNMENT

REQUESTED BY:	Selectboard Chair Ryan Curley
DESIRED ACTION:	To Adjourn
PROPOSED MOTION:	I move to Adjourn open session and go back into executive session if necessary
ACTION TAKEN:	Moved By: _____ Seconded By: _____ Condition(s):
VOTED:	Yea _____ Nay _____ Abstain _____