

Commonwealth of Massachusetts
 Executive Office of Energy and Environmental Affairs
 Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Town of Barnstable Comprehensive Wastewater Management Planning (CWMP) Project		
Street Address: 382 Falmouth Road, Hyannis, MA 02601		
Municipality: Town of Barnstable	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: Zone 19 x: 393180.0134025 Zone 19 y: 4611915.3119217	Latitude: 70° 16' 57.81"W Longitude: 41° 39' 6.16"N	
Estimated commencement date: 2010	Estimated completion date: 2015	
Project Type: Planning	Status of project design: 0 %complete	
Proponent: Town of Barnstable		
Street Address: 382 Falmouth Road		
Municipality: Hyannis	State: MA	Zip Code: 02601
Name of Contact Person: Nathan C. Weeks, P.E., BCEE		
Firm/Agency: GHD	Street Address: 1545 Iyannough Road	
Municipality: Hyannis	State: MA	Zip Code: 02601
Phone: 774-470-1633	Fax: 774-470-1631	E-mail: nate.weeks@ghd.com

Note 1) This project is the completion of a Comprehensive Wastewater Management Plan (CWMP) for the Town of Barnstable. This project is expected to recommend the extension of sewers and the construction of advanced wastewater treatment and recharge facilities (as well as other nitrogen mitigation efforts) to mitigate excessive nitrogen loading that is entering the watersheds through existing septic systems. The expected recommendations would trigger a MEPA review and we want to initiate MEPA review before the study is complete. The study will be completed after detailed evaluation of five alternative plans and the No Action Alternative described in this ENF document. These five alternative plans are combinations of various wastewater and nitrogen mitigation technologies and management solutions. It is impossible to estimate many of the potential environmental effects of the project as questioned on this form because the environmental impact is To Be Determined (TBD) as part of this planning project.

The Project is described in detail in the Project Narrative which is included as Attachment 1.

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No (see Note 1)

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))

Yes No

a Special Review Procedure? (see 301CMR 11.09)

Yes No

a Waiver of mandatory EIR? (see 301 CMR 11.11)

Yes No

a Phase I Waiver? (see 301 CMR 11.11)

Yes No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

We expect to exceed wastewater thresholds (see Note 1).

Which State Agency Permits will the project require?

We would expect to need the following State agency permits for the recommended wastewater facilities:

- Order of Conditions
- DEP Sewer Extension Permit
- Effluent Discharge Permit

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

We would expect to request funding from the State Revolving Fund (SRF) funding program. The amount is not yet known at this time.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	60 sq. miles. Entire Town of Barnstable		
New acres of land altered		TBD	
Acres of impervious area		TBD	
Square feet of new bordering vegetated wetlands alteration		TBD	
Square feet of new other wetland alteration		TBD	
Acres of new non-water dependent use of tidelands or waterways		TBD	
STRUCTURES			
Gross square footage		TBD	
Number of housing units		TBD	
Maximum height (feet)		TBD	
TRANSPORTATION			
Vehicle trips per day		TBD	
Parking spaces		TBD	
WASTEWATER			
Water Use (Gallons per day)		TBD	
Water withdrawal (GPD)		0	
Wastewater generation/treatment (GPD)		>1,000,000	
Length of water mains (miles)		TBD	
Length of sewer mains (miles)		TBD	
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input checked="" type="checkbox"/> Yes (EEA # <u>6553</u>) <input type="checkbox"/> No			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION: SEE PROJECT NARRATIVE

Describe the existing conditions and land uses on the project site: This is described in the Project Narrative. In summary, the land use in Barnstable, MA is mainly residential with many seasonal properties. There is some commercial land use particularly in Hyannis.

Describe the proposed project and its programmatic and physical elements: As discussed in Note 1, the project is the completion of a Comprehensive Wastewater Management Planning (CWMP) Project that includes detailed evaluations and public and regulatory reviews. The detailed evaluation will evaluate five alternative plans that are very different in approach and structure. As a result, many of the environmental impact/benefit questions on this form are answered as TBD.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

The alternative plans that will be considered (and further discussed in the Project Narrative) are listed below:

1. Alternative Plan No. 1: Decentralized Plan A

This plan would be the first of 2 decentralized wastewater management concepts and would utilize the following main components:

- Continued use of Title 5 septic systems as allowed in areas where nitrogen TMDLs do not require wastewater nitrogen removal.
- Implementation of individual nitrogen removal systems to areas where 25% wastewater nitrogen removal (or less) is required
- Multiple satellite systems and development of remote recharge sites for the areas where additional nitrogen removal is needed.
- Expansion of Hyannis WPCF, sewer extension to eastern portions of Town, and development of remote recharge sites

2. Alternative Plan No. 2: Decentralized Plan B

This plan would be the second of decentralized wastewater management concepts and would utilize the following main components:

- Continued use of Title 5 septic systems as allowed in areas where nitrogen TMDLs do not require wastewater nitrogen removal.
- Construction of up to two new satellite treatment facilities in the western part of Town, and development of associated sewer extensions and recharge sites recharge sites.
- Expansion of the Hyannis WPCF, sewer extensions to eastern portions of Town, and development of remote recharge sites.

3. Alternative Plan No. 3: Centralized Plan A

This plan would be the first of 2 centralized wastewater management concepts and would utilize the following main components:

- Continued use of Title 5 septic systems as allowed in areas where nitrogen TMDLs do not require wastewater nitrogen removal.

- Expansion of the Hyannis WPCF, sewer extension to all portions of Town needing wastewater nitrogen removal, and development of remote recharge sites.

4. Alternative Plan No. 4: Centralized Plan B

This plan would be the second of the centralized wastewater management concepts and would utilize the following main components:

- Use of an ocean outfall from the Hyannis WPCF.
- Continued use of Title 5 septic systems as allowed in areas where nitrogen TMDLs do not require wastewater nitrogen removal.
- Expansion of the Hyannis WPCF, sewer extension to all portions of Town needing wastewater nitrogen removal, and development.

5. Alternative Plan No. 5: Development of New Public Water Supply Sites to Mitigate Impacts to Current Water

This plan would work to relocate water supplies in Town and would utilize components of the decentralized and centralized plans/concepts No 1-4. It would utilize the following main components:

- Development of new public water supply sites and Zone II Water Supply Protection Areas which would allow impacted water supply wells to be abandoned
- Possible use of the abandoned water supply areas for treated water recharge
- Continued use of Title 5 septic systems as allowed in areas where nitrogen TMDLs do not require wastewater nitrogen removal.
- Expansion of the Hyannis WPCF, sewer extension to portions of Eastern Barnstable needing wastewater nitrogen removal, and development of remote recharge sites.
- Development of up to 2 new satellite treatment facilities and associated sewer extensions and recharge sites in portions of Western Barnstable

6. Additional items Common to all Alternative Plans.

The following non-wastewater nitrogen management components would be part of all Alternative Management Plans:

- Fertilizer and pet waste management through education and county initiatives
- Stormwater management through best management practices and education to homeowners,
- Sediment removal at Mill Pond to increase Nitrogen Attenuation for the Marstons Mills River watershed
- Estuarine inlet opening and maintenance for Rushy Marsh Pond
- New zoning or land use bylaw to create growth neutral requirements for sewer extensions where Growth Centers are not identified. This will need to comply with MassDEP requirements to gain eligibility for 0% low interest loans as allowed by the 2009 Environmental Bond Bill legislation.
- Expanded use of aquaculture in the estuaries to reduce nitrogen concentrations and to promote local fisheries

7. No Action Alternative.

The No Action alternative was presented in the Needs Assessment Report to identify the consequences of doing nothing. Under the No Action alternative, degradation of Popponesset Bay, Three Bay System, Centerville River System, and Lewis Bay will continue from the excessive nitrogen loading in the watersheds to these water bodies, primarily from the on-site septic systems. The MEP technical reports used colored maps to illustrate how the nitrogen concentrations would increase from their current levels to the projected buildout levels defined by current zoning. The increased nitrogen would promote further algal blooms, fish kills, eel grass loss, and other impacts to the habitat of the marine estuaries.

A portion of the Eastern side of Barnstable probably would be sewered as allowed by the 2007

Wastewater Facilities Plan.

If the Town did not demonstrate progress to meet the nitrogen TMDLs, MassDEP would most likely initiate an enforcement action against the Town as allowed by state law.

If the Town did not demonstrate progress to meet the new Total Organic Carbon (TOC) discharge limit, MassDEP would most likely initiate an enforcement action against the Hyannis WPCF and the Marstons Mills WWTF as allowed by state law

If progress is not made on the Barnstable Ponds Action Plan as developed in the Needs Assessment Report, pond water quality will decline.

These alternative management plans will be evaluated in the Project Scope as detailed in Attachment 4.

NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

TBD

If the project is proposed to be constructed in phases, please describe each phase:

TBD

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify Sandy Neck Barrier Beach System)
- No

if yes, does the ACEC have an approved Resource Management Plan? Yes No;
If yes, describe how the project complies with this plan.

This is a planning project and it will comply with the ACEC management plan.

Will there be stormwater runoff or discharge to the designated ACEC? Yes No;
If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

- Yes (Specify There are several in the Town.)
- No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

- Yes (Specify There are several in the Town.)
- No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify _____) No

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? Yes No;

if yes, identify the ORW and its location. Barnstable Harbor

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical

Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? Yes No; if yes, identify the water body and pollutant(s) causing the impairment: _____.

Recent work by the Massachusetts Estuaries Project has determined that the following estuaries are impaired due to excessive nitrogen loading in their watersheds:

- Popponesset Bay
- Three Bay System
- East Bay and Centerville River System
- Lewis Bay System

The following water bodies are listed on the MassDEP 2010 Integrated List of Waters:

1. Listed waters in Category 4a for waters which "TMDL is completed":
 - Barnstable Harbor segment MA 96-01 for pathogens
 - Bumps River (of East Bay and Centerville River system) segment MA 96-02 for pathogens
 - Centerville River segment MA 96-04 for pathogens and nutrients
 - Cotuit Bay (of Three Bay system) segment MA 96-63 for pathogens and bio-assessments
 - Hyannis Harbor (of Lewis Bay) segment MA 96-05 for pathogens
 - Maraspin Creek (of Barnstable Harbor) segment MA 96-06 for pathogens
 - Northe Bay (of Three Bay system) segment MA 96-66 for nutrients and pathogens
 - Popponessett Bay segment MA 96-40 for nutrients
 - Prince Cove (of Three Bay system) segment MA 96-07 for nutrients and pathogens
 - Seapuit River (of Three Bay system) segment MA 96-64 for pathogens
 - Shoestring Bay (of Popponessett Bay) segment MA 96-06 for nutrients and pathogens
 - West Bay (of Three Bay system) segment MA 96-65 for nutrients
2. Listed waters in Category 4c for waters with "Impairment caused by a pollutant":
 - Bearse Pond segment MA 96012 for exotic species
 - Long Pond segment MA 96184 for exotic species
 - Wequaquet Lake segment MA 96333 for exotic species
3. Listed waters in Category 5 for "Waters requiring a TMDL":
 - Red Lily Pond segment MA 96257 for nutrients, pathogens, and noxious aquatic plants

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? Yes No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations: The Project will develop a plan for long-term stormwater management.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes No ; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response

Action Outcome classification): TBD

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No ___; TBD
if yes, describe which portion of the site and how the project will be consistent with the AUL:
_____.

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?
Yes ___ No ; if yes, please describe: _____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood: TBD

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ No ___; TBD
if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment: TBD

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No ;
if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the “outstandingly remarkable” resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?
Yes ___ No ___; if yes, specify name of river and designation: _____;

if yes, will the project will result in any impacts to any of the designated “outstandingly remarkable” resources of the Wild and Scenic River or the stated purposes of a Scenic River.

Yes ___ No ___;

if yes, describe the potential impacts to one or more of the “outstandingly remarkable” resources or stated purposes and mitigation measures proposed.

REQUESTED ATTACHMENTS:

1. List of all attachments to this document.
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing

- conditions upon the completion of each phase).
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
 7. List of municipal and federal permits and reviews required by the project, as applicable. (TBD)

Provided Attachments

1. Project Narrative that is developed from the Executive Summary of the Needs Assessment Report and the Alternatives Screening Analysis Report and contains the following:
 - Location map
 - Maps illustrating existing conditions, environmental constraints, and water supply protection areas
2. Figures as developed and presented in the Needs Assessment Report:
 - ES-1: Project Location
 - ES-2: Existing Septic System Nitrogen Removal Needed to Meet the TMDLs
 - 5-3: Hydrology and Related Areas
 - 5-4: Sensitive Habitat and Natural Areas
 - 5-5: Shellfish Resource Map
 - 5-6: Topography Map
 - 5-7: Geology Map
 - 5-8: Soils Map
 - 5-9: Flood Zones Map
 - 5-10: Open Space Map
 - 5-11: Land Use Map
 - 5-12: Historic Districts
3. ENF Distribution List.
4. Town of Barnstable Nutrient Management Project Scope, August 2008.
5. CD of the complete Needs Assessment Report and Alternatives Screening Analysis Report.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
___ Yes ___ No; if yes, specify each threshold: TBD

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	_____	_____	<u>TBD</u>
Internal roadways	_____	_____	<u>TBD</u>
Parking and other paved areas	_____	_____	<u>TBD</u>
Other altered areas	_____	_____	<u>TBD</u>
Undeveloped areas	_____	_____	<u>TBD</u>
Total: Project Site Acreage	_____	_____	<u>TBD</u>

B. Has any part of the project site been in active agricultural use in the last five years?
___ Yes ___ No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use? TBD

C. Is any part of the project site currently or proposed to be in active forestry use? TBD
___ Yes ___ No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes ___ No; if yes, describe: TBD

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ___ Yes ___ No; if yes, does the project involve the release or modification of such restriction? ___ Yes ___ No; if yes, describe: TBD

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes ___ No; if yes, describe: TBD

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No ___; if yes, describe: TBD

III. Consistency

A. Identify the current municipal comprehensive land use plan
Title: Barnstable Comprehensive Plan^(Note 2) Date 2010

B. Describe the project's consistency with that plan with regard to:

- 1) economic development TBD
- 2) adequacy of infrastructure TBD
- 3) open space impacts TBD
- 4) compatibility with adjacent land uses TBD

Note 2) Prepare in compliance with Cape Cod Commission guidelines

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: Cape Cod Commission

Title: Regional Policy Plan Date October 30, 2008

- D. Describe the project's consistency with that plan with regard to:
- 1) economic development TBD
 - 2) adequacy of infrastructure TBD
 - 3) open space impacts TBD

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes ___ No; if yes, specify, in quantitative terms: TBD

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to **rare species or habitat**? ___ Yes ___ No
TBD
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes ___ No.
- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes ___ No. If yes,
1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ___ Yes No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ___ Yes ___ No; if yes, attach the letter of determination to this submission. TBD
 2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts TBD
 3. Which rare species are known to occur within the Priority or Estimated Habitat? See attached map
 4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? ___ Yes ___ No TBD
 4. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No TBD
- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat: TBD

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? Yes No; if yes, specify, in quantitative terms: TBD

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? Yes No; if yes, specify which permit: TBD

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits TBD

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? Yes No; if yes, has a Notice of Intent been filed? Yes No; if yes, list the date and MassDEP file number: _____; if yes, has a local Order of Conditions been issued? Yes No; Was the Order of Conditions appealed? Yes No. Will the project require a Variance from the Wetlands regulations? Yes No.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (square feet) or Length (linear feet)</u>	<u>Temporary or Permanent Impact?</u>
Land Under the Ocean	_____	_____
Designated Port Areas	_____	_____
Coastal Beaches	_____	_____
Coastal Dunes	_____	_____
Barrier Beaches	_____	_____
Coastal Banks	_____	_____
Rocky Intertidal Shores	_____	_____
Salt Marshes	_____	_____
Land Under Salt Ponds	_____	_____
Land Containing Shellfish	_____	_____
Fish Runs	_____	_____
Land Subject to Coastal Storm Flowage	_____	_____
 <u>Inland Wetlands</u>		
Bank (lf)	_____	_____
Bordering Vegetated Wetlands	_____	_____
Isolated Vegetated Wetlands	_____	_____
Land under Water	_____	_____
Isolated Land Subject to Flooding	_____	_____
Borderi ng Land Subject to Flooding	_____	_____
Riverfront Area	_____	_____

D. Is any part of the project:

1. proposed as a **limited project**? Yes No; if yes, what is the area (in sf)? _____
2. the construction or alteration of a **dam**? Yes No; if yes, describe: _____
3. fill or structure in a **velocity zone** or **regulatory floodway**? Yes No

4. dredging or disposal of dredged material? ___ Yes ___ No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes ___ No
6. subject to a wetlands restriction order? ___ Yes ___ No; if yes, identify the area (in sf):
7. located in buffer zones? ___ Yes ___ No; if yes, how much (in sf) _____

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes ___ No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes ___ No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits TBD

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ___ Yes ___ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? ___ Yes ___ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

B. Does the project require a new or modified license or permit under M.G.L.c.91? ___ Yes ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current ___ Change ___ Total ___
If yes, how many square feet of solid fill or pile-supported structures (in sf)?

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: _____

Area of filled tidelands covered by buildings: _____

For portions of site on filled tidelands, list ground floor uses and area of each use:

_____ Does the project include new non-water-dependent uses located over flowed tidelands?

Yes ___ No ___

Height of building on filled tidelands _____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? ___ Yes ___ No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ___ Yes ___ No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? ___ Yes ___ No;

(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ___ Yes ___ No; if yes, answer the following questions:
What type of dredging? Improvement ___ Maintenance ___ Both _____

What is the proposed dredge volume, in cubic yards (cys) _____

What is the proposed dredge footprint ____length (ft) ____width (ft)____depth (ft);

Will dredging impact the following resource areas?

Intertidal Yes__ No__; if yes, ____ sq ft

Outstanding Resource Waters Yes__ No__; if yes, ____ sq ft

Other resource area (i.e. shellfish beds, eel grass beds) Yes__ No__; if yes __
sq ft

If yes to any of the above, have you evaluated appropriate and practicable steps
to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either
avoidance or minimize is not possible, mitigation?

If no to any of the above, what information or documentation was used to support
this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in
accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the
sediment shall be included in the comprehensive analysis.

Sediment Characterization

Existing gradation analysis results? __Yes __No: if yes, provide results.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? __Yes
____No; if yes, provide results.

Do you have sufficient information to evaluate feasibility of the following management
options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment ____

Unconfined Ocean Disposal ____

Confined Disposal:

 Confined Aquatic Disposal (CAD) ____

 Confined Disposal Facility (CDF) ____

Landfill Reuse in accordance with COMM-97-001 ____

Shoreline Placement ____

Upland Material Reuse____

In-State landfill disposal____

Out-of-state landfill disposal ____

(NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency: TBD

A. Does the project have effects on the coastal resources or uses, and/or is the project located
within the Coastal Zone? __ Yes __ No; if yes, describe these effects and the projects consistency
with the policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? __ Yes __ No; if yes,
identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits TBD

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits TBD

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ___ Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____ Will the project require an increase in that withdrawal? ___ Yes ___ No; if yes, then how much of an increase (gpd)? _____

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted Flow</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking

water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency TBD

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits TBD

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits TBD

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No; if yes, describe as follows:

	<u>Permitted</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ___ Yes ___ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency TBD

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit TBD

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits TBD

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ___ Yes ___ No; if yes, describe if and how will the project will participate in the TMA:

D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ___ Yes ___ No; if yes, generally describe:

E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency TBD

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds TBD

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts TBD

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan: TBD

ENERGY SECTION

I. Thresholds / Permits TBD

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits TBD

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___ Yes ___ No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency TBD

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds TBD

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits TBD

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency TBD

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits TBD

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes ___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes ___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits TBD

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?
___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency TBD

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts TBD

A. Have you consulted with the Massachusetts Historical Commission? ___ Yes ___ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ___ Yes ___ No; if yes, attach correspondence

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes ___ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes ___ No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts TBD

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

III. Consistency TBD

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name) Barnstable Patriot (Date) XXXXXX

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing NPC (if different from above)
	<u>Thomas K. Lynch, Acting Town Manager</u> Name (print or type)		<u>Nathan C. Weeks, P.E., BCEE, Sr. Project Mgr.</u> Name (print or type)
	<u>Town of Barnstable</u> Firm/Agency		<u>GHD Inc.</u> Firm/Agency
	<u>367 Main Street</u> Street		<u>1545 Iyannough Road</u> Street
	<u>Hyannis, MA 02601</u> Municipality/State/Zip		<u>Hyannis, MA 02601</u> Municipality/State/Zip
	<u>508-790-6400^(Note 3)</u> Phone		<u>774-470-1633</u> Phone
			<u>nate.weeks@ghd.com</u> Email

Note 3) The telephone number is for the following Town department which is overseeing the review of this ENF:

Barnstable Department of Public Works
 382 Falmouth Road
 Hyannis, MA 02601
 ATTN: Dale Saad, Ph.D., Senior Project Manager
 dale.saad@town.barnstable.ma.us