Watermark
Engineering • Construction • Operations

Environmental
Infrastructure
Buildings & Facilities

May 17, 2012

Environmental Protection Agency - New England
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attn: Ms. Olga Vergara

Subject: **Mental Health Clinic Addition, Hanscom Air Force Base**
Lincoln, Massachusetts
Dewatering General Permit Notice of Intent
Reference MassDEP No.: X 251606

Dear Ms. Vergara,

Watermark Environmental, Inc. (Watermark) is under contract to the US Army Corps of Engineers, New England District (USACE) to design and construct the Mental Health Clinic Addition at the Hanscom Air Force Base (HAFB) in Lincoln, Massachusetts. The Addition is being designed and constructed to provide a single story 4,000 square foot addition to the existing main clinic, Building 1900. When complete, the Addition is intended to become a fully operational stand-alone Mental Health Clinic by means of an exterior covered patient entry while also providing an internal connection back to the existing building. The facility will provide the mental health counseling and treatment services for HAFB.

In accordance with the requirements of the contract documents that govern this project, Watermark has been delegated as the "Operator" for the construction of the Mental Health Clinic Addition project (facility) located at the Hanscom Air Force Base (HAFB) in Lincoln, Massachusetts; as defined by the . Watermark is seeking coverage under the National Pollutant Discharge Elimination System (NPDES) Permit for authorization of discharges related to construction dewatering activities via the Massachusetts Dewatering General Permit (Permit No. MAG07000); all proposed discharges are identified within the attached NOI and meet the applicable requirements of this NPDES permit. Watermark is submitting the attached NOI for review and approval by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) for written authorization to discharge.

Note: No laboratory analysis results of the proposed discharge are enclosed. Watermark will collect a sample of the proposed discharge for laboratory analysis when the excavation is open and the effluent is first encountered, have it analyzed in accordance with the required NOI parameters and submit the laboratory analysis results. Prior to receiving written approval from both agencies to discharge, all effluent will be pumped from the excavation and stored in fractionation tanks and/or a settling basin.

If you have any questions or require additional information, please contact me at (978) 452-9696.

Sincerely,
WATERMARK

Dana Robertson
Project Manager

Enclosures: EPA Notice of Intent (Dewatering General Permit)

cc:
MassDEP Division of Watershed Management, Worcester, MA (Transmittal Form, EPA NOI, Copy of Check)
MassDEP – P.O. Box 4062; Boston, MA 02211 (Transmittal Form & Check Only)

II. Suggested Notice of Intent (NOI) Form

1. General facility information. Please provide the following information about the facility.

a) Name of facility: Hanscom Air Force Base Mental Health Clinic Addition	**Mailing Address for the Facility:** 1900 Vandenberg Drive Lincoln, MA 01773	
b) Location Address of the Facility (if different from mailing address):	**Facility Location** **longitude:** 71°16'59" W **latitude:** 42°27'28" N	**Type of Business:** Healthcare **Facility SIC codes:** 8062-8069

c) Name of facility owner: Ken Paton **Owner's email:** Kenneth.P.Paton@usace.army.mil

Owner's Tel #: 978-318-8739 **Owner's Fax #:** n/a

Address of owner (if different from facility address)

Owner is (check one): 1. Federal ✓ **2. State** ____ **3.Tribal** ____ **4. Private** ____ **4. Other** ____ **(Describe)**

Legal name of Operator, if not owner: Watermark Environmental, Inc.

Operator Contact Name: Dana Robertson

Operator Tel Number: (978) 452-9696 **Fax Number:** (978) 453-9988

Operator's email: dana.robertson@watermarkenv.com

Operator Address (if different from owner)

d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ✓

e) Check Yes or No for the following:

1. **Has a prior NPDES permit been granted for the discharge? Yes** ____ **No** ✓ **If Yes, Permit Number:** ____
2. **Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes** ✓ **No** ____
3. **Is the facility covered by an individual NPDES permit? Yes** ____ **No** ✓ **If Yes, Permit Number** ____
4. **Is there a pending application on file with EPA for this discharge? Yes** ____ **No** ✓ **If Yes, date of submittal:**

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

a) **Name of receiving water into which discharge will occur:** Shawsheen River Basin
State Water Quality Classification: B **Freshwater:** _____ **Marine Water:** _____

b) **Describe the discharge activities for which the owner/applicant is seeking coverage:**
1. **Construction dewatering of groundwater intrusion and/or storm water accumulation.**
2. **Short-term or long-term dewatering of foundation sumps.**
3. **Other.**

c) **Number of outfalls** 1

For each outfall:

d) **Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow** 75,000 **GPD**
Average Monthly Flow 300,000 **GPD**

e) **What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH** TBD **Min pH** TBD

f) **Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.**

g) **What treatment does the wastewater receive prior to discharge?** Fractionation Tanks and/or a Settling Basin

h) **Is the discharge continuous? Yes** _____ **No** ✓ **If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)** I
If (P), number of days or months per year of the discharge _____ **and the specific months of discharge** _____;
If (I), number of days/year there is a discharge 20
Is the discharge temporary? Yes ✓ **No** _____
If yes, approximate start date of dewatering 5 / 21 / 12 **approximate end date of dewatering** 6 / 21 / 12

i) **Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long.** 71°17'0.67"W **lat.** 42°27'28.35"N;
Outfall 2: long._____ **lat.**_____; **Outfall 3: long.**_____ **lat.**_____.

j) **If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations**_____ **cfs**
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

k) Does the discharge occur in an ACEC? Yes _____ No ✓
If yes, provide the name of the ACEC: _____

3. Contaminant Information

a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for aquatic organism(s)). NO CHEMICALS USED

b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ___ No ✓
b) Has any consultation with the federal services been completed ? Yes ✓ No ___
c) Is consultation underway? Yes ___ No ___
d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion _____ or written concurrence ✓ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met? ___A___
f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website.

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No ✓
b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No ✓ If yes, attach the results of the consultation(s).
c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 o3) have you met? ___1___

6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e.stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Mental Health Clinic Addition, Hanscom Air Force Base

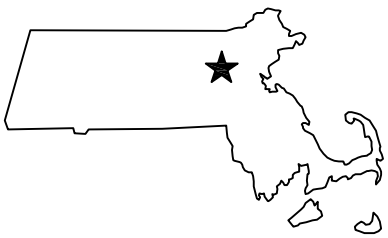
Operator signature: Joseph Spangenberger

Title: Vice President

Date: 5/10/12

Federal regulations require this application to be signed as follows:
1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Notes:
Base map taken from "Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs"
7.5 minute USGS Quadrangle Maps:
Concord, Massachusetts, Revised:1987



Scale: 1:25,000

SHA
IMPROVING EARTH

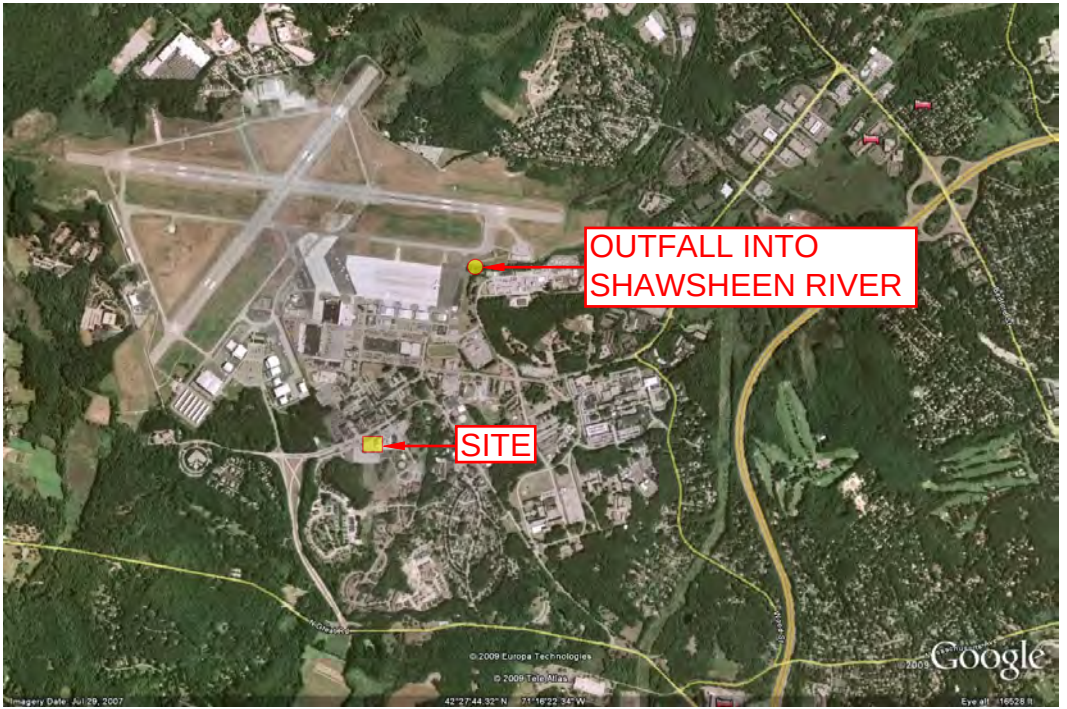
Drawn By: RWH
Designed By: JBH
Reviewed By: KPS
Date: OCT 09
JOB: 3039.00

Figure # 1

LOCUS PLAN

BUILDING 1900 ADDITION
ROGERS, LOVELOCK & FRITZ
BEDFORD, MASSACHUSETTS

FILE: Q:\WESTFORD\3039.00\Dwg\Reports\BLDG-1900-OCT09\20091005_LOCUS.dwg
PLOT DATE: 10-5-09



HANSCOM AFB SITE

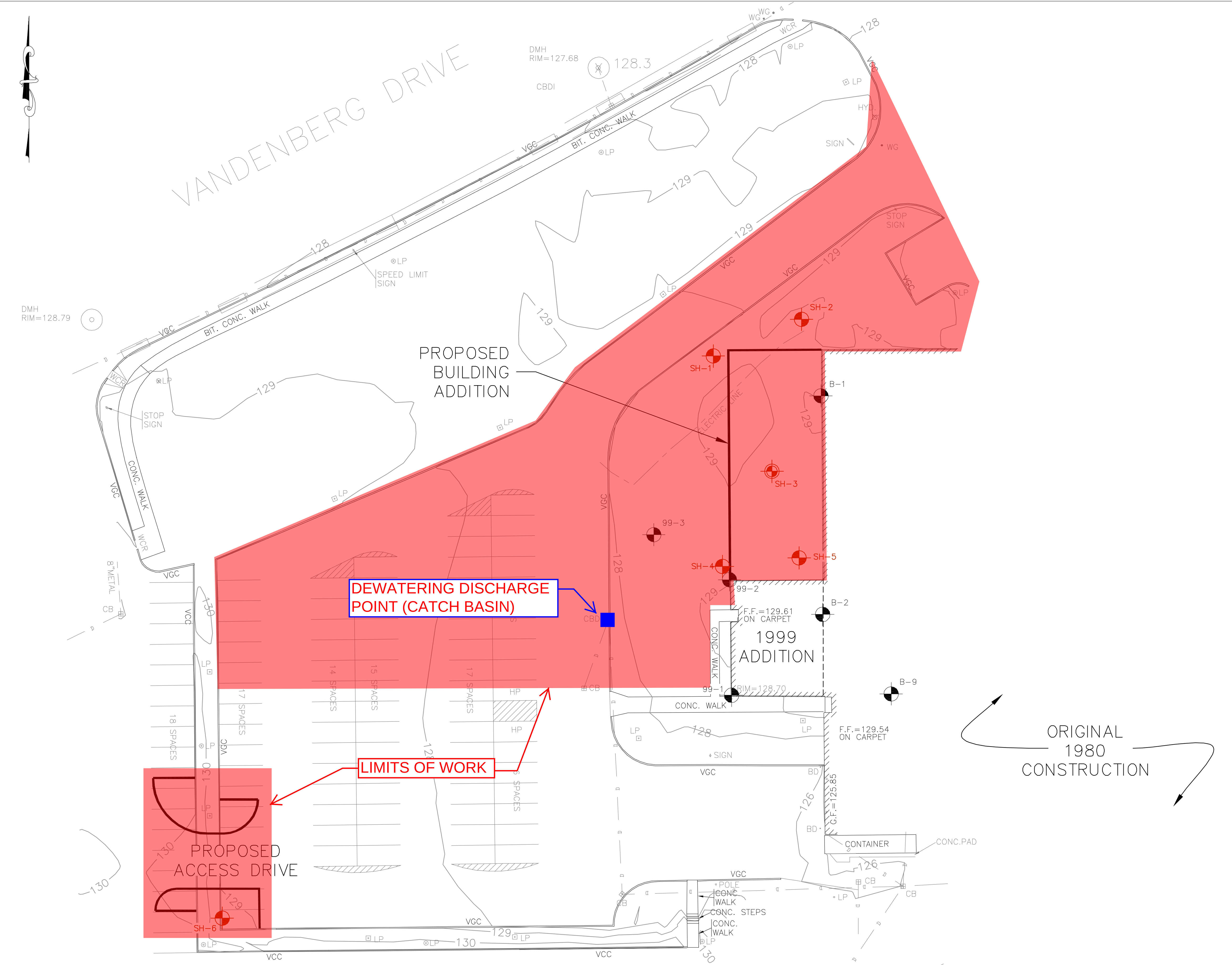

VANDENBERG DRIVE
PROPOSED BUILDING ADDITION
DEWATERING DISCHARGE POINT (CATCH BASIN)
LIMITS OF WORK
1999 ADDITION
ORIGINAL 1980 CONSTRUCTION
PROPOSED ACCESS DRIVE
BIT. CONC. WALK
CONC. WALK
SPEED LIMIT SIGN
STOP SIGN
DMH RIM=127.68
DMH RIM=128.79
F.F.=129.61 ON CARPET
F.F.=129.54 ON CARPET
RIM=128.70
G.F.=125.85
CONTAINER
CONC. PAD
CONC. STEPS
SH-1
SH-2
SH-3
SH-4
SH-5
SH-6
B-1
B-2
B-9
99-1
99-2
99-3
17 SPACES
14 SPACES
15 SPACES
18 SPACES

Figure No. 2

EXPLORATION LOCATION PLAN

GEOTECHNICAL ENGINEERING SERVICES

BUILDING 1900 ADDITION
ROGERS, LOVELOCK & FRITZ
BEDFORD, MASSACHUSETTS

Drawn By: RWH
Designed By: JBH
Reviewed By: KPS
Date: OCT 09

Figure Narrative

This plan was based on a plan entitled "Topographic Plan of Land" provided by Noonan & Mc Dowell, Inc. of Billerica, MA dated June 30, 2009. Original scale 1" = 40'.

Legend

SH-1 — Approximate location and designation of soil boring

SH-3 — Approximate location and designation of soil boring completed as monitoring well

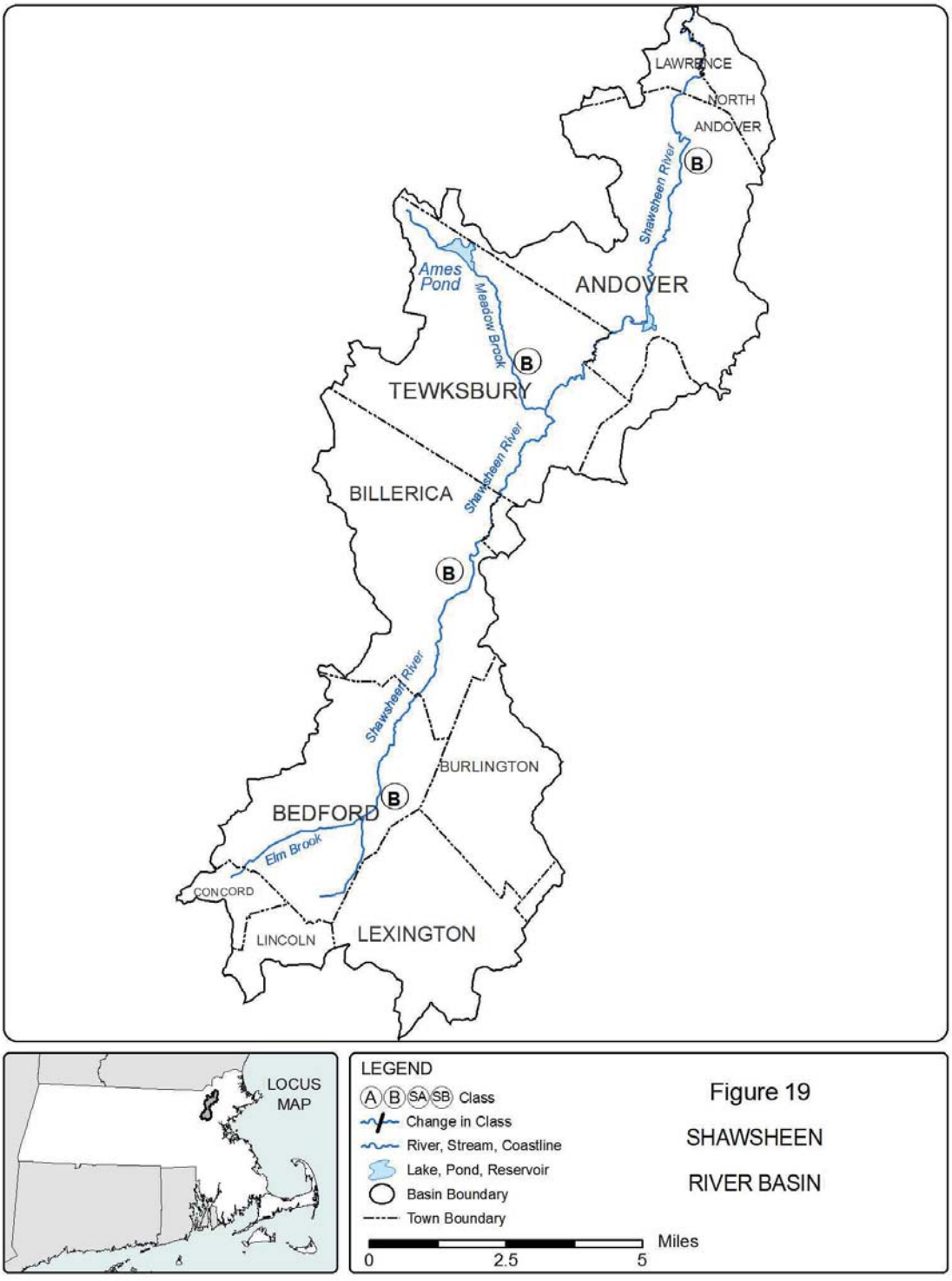
B-1 — Approximate location and designation of previous borings completed by others

PROJECT NO.: 3039.00

GRAPHICAL SCALE
0 20 40 60 FEET

SHA
IMPROVING EARTH

4.06: continued



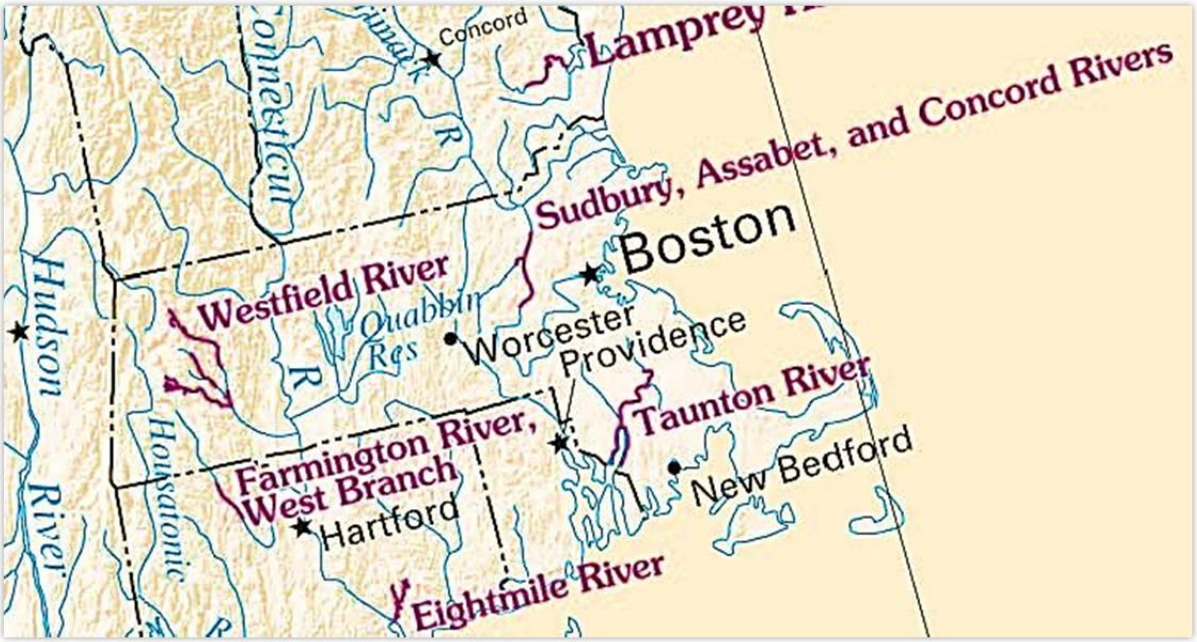
4.06: continued

TABLE 19
SHAWSHEEN RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Shawsheen River			
Source to water withdrawal point in Billerica (approximately Cook Street and Alexander Road)	25.0 - 18.0	B	Treated Water Supply Warm Water
Water withdrawal point in Billerica to confluence with the Merrimack River	18.0 - 0.0	B	Warm Water

Designated Wild & Scenic Rivers in Massachusetts

- Westfield River
- Sudbury, Assabet and Concord Rivers
- Taunton River



Bryan,

Thank you for providing the map depicting the Limit of Work for the proposed project. This area in question is not mapped for state-listed species within Priority or Estimated Habitat as mapped in the current 2008 Massachusetts Natural Heritage Atlas (13th Edition). Thus, a filing pursuant to the Massachusetts Endangered Species Act is not required. Please contact our office with questions.

Sincerely,

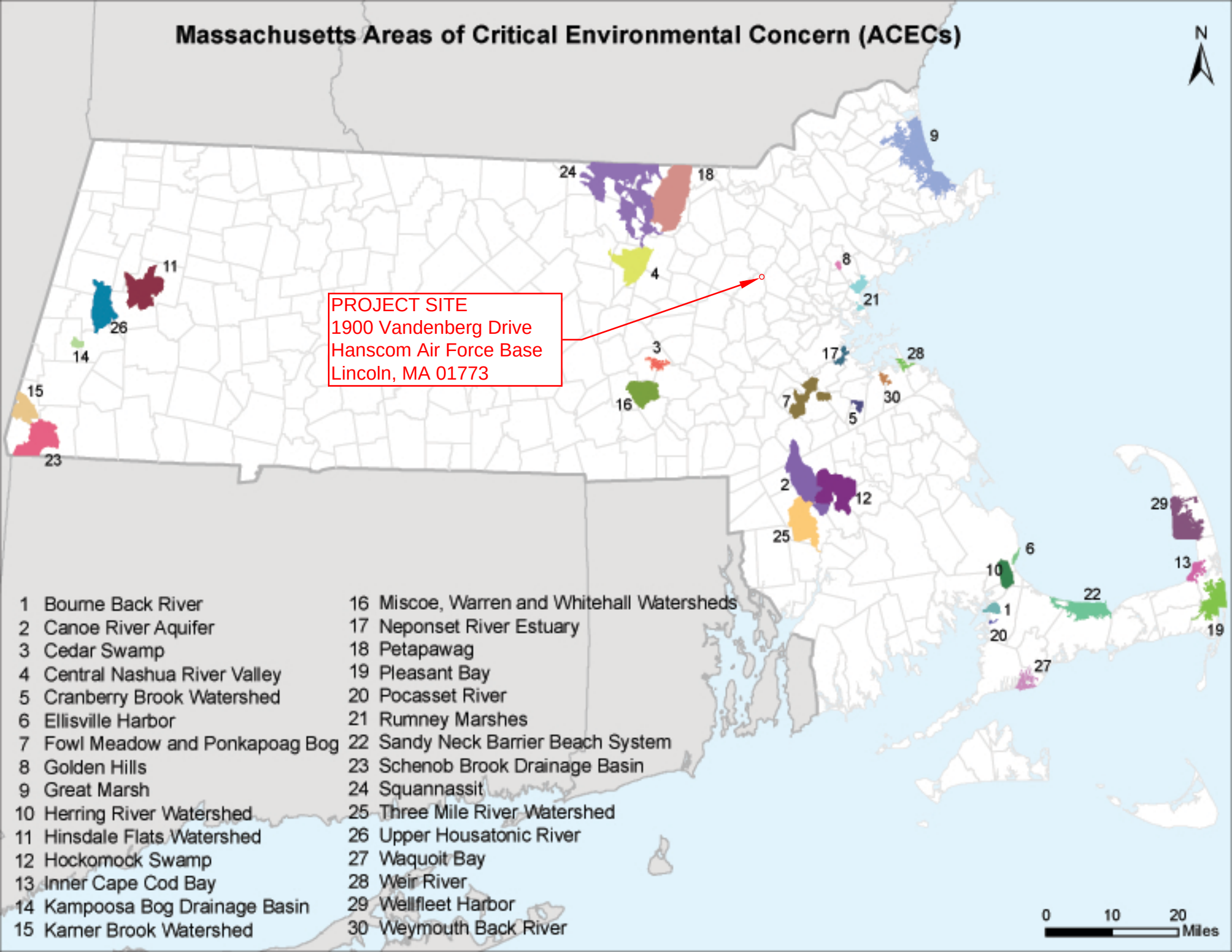
Lauren Glorioso
Endangered Species Review Assistant | Natural Heritage & Endangered Species Program | Division of Fisheries & Wildlife | 1 Rabbit Hill Road | Westborough, MA 01581 | ph: 508-389-6361 | fax: 508-389-7891 | lauren.glorioso@state.ma.us | **www.nhesp.org**

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague, Warwick
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

Revised 10/7/2011


Massachusetts Areas of Critical Environmental Concern (ACECs)
N
PROJECT SITE
1900 Vandenberg Drive
Hanscom Air Force Base
Lincoln, MA 01773
1 Bourne Back River
2 Canoe River Aquifer
3 Cedar Swamp
4 Central Nashua River Valley
5 Cranberry Brook Watershed
6 Ellisville Harbor
7 Fowl Meadow and Ponkapoag Bog
8 Golden Hills
9 Great Marsh
10 Herring River Watershed
11 Hinsdale Flats Watershed
12 Hockomock Swamp
13 Inner Cape Cod Bay
14 Kampoosa Bog Drainage Basin
15 Karner Brook Watershed
16 Miscoe, Warren and Whitehall Watersheds
17 Neponset River Estuary
18 Petapawag
19 Pleasant Bay
20 Pocasset River
21 Rumney Marshes
22 Sandy Neck Barrier Beach System
23 Schenob Brook Drainage Basin
24 Squannassit
25 Three Mile River Watershed
26 Upper Housatonic River
27 Waquoit Bay
28 Weir River
29 Wellfleet Harbor
30 Weymouth Back River
0 10 20
Miles

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

Total Approximate Acreage: 268,000 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River
(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp
(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley
(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed
(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor
(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog
(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills
(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)
(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed
(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed
(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp
(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay
(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin
(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed
(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds
(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary
(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag
(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay
(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River
(160 acres, 1980) Bourne

Rumney Marshes
(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System
(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin
(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit
(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed
(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River
(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay
(2,580 acres, 1979) Falmouth and Mashpee

Weir River
(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor
(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River
(800 acres, 1982) Hingham and Weymouth

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

Towns with ACECs within their Boundaries — November 2010

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
Hull	Weir River
Ipswich	Great Marsh
Lancaster	Central Nashua River Valley
	Squannassit
Lee	Kampoosa Bog Drainage Basin
	Upper Housatonic River
Lenox	Upper Housatonic River
Leominster	Central Nashua River Valley
Lunenburg	Squannassit
Lynn	Rumney Marshes
Mansfield	Canoe River Aquifer
Mashpee	Waquoit Bay
Melrose	Golden Hills
Milton	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Mt. Washington	Karner Brook Watershed
	Schenob Brook
Newbury	Great Marsh
Norton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Norwood	Fowl Meadow and Ponkapoag Bog
Orleans	Inner Cape Cod Bay
	Pleasant Bay
Pepperell	Petapawag
	Squannassit
Peru	Hinsdale Flats Watershed
Pittsfield	Upper Housatonic River
Plymouth	Herring River Watershed
	Ellisville Harbor
Quincy	Neponset River Estuary
Randolph	Fowl Meadow and Ponkapoag Bog
Raynham	Hockomock Swamp
Revere	Rumney Marshes
Rowley	Great Marsh
Sandwich	Sandy Neck Barrier Beach System
Saugus	Rumney Marshes
	Golden Hills
Sharon	Canoe River Aquifer
	Fowl Meadow and Ponkapoag Bog
Sheffield	Schenob Brook
Shirley	Squannassit
Stockbridge	Kampoosa Bog Drainage Basin
Taunton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Truro	Wellfleet Harbor
Townsend	Squannassit
Tyngsborough	Petapawag
Upton	Miscoe-Warren-Whitehall Watersheds
Wakefield	Golden Hills
Washington	Hinsdale Flats Watershed
	Upper Housatonic River
Wellfleet	Wellfleet Harbor
W Bridgewater	Hockomock Swamp
Westborough	Cedar Swamp
Westwood	Fowl Meadow and Ponkapoag Bog
Weymouth	Weymouth Back River
Winthrop	Rumney Marshes

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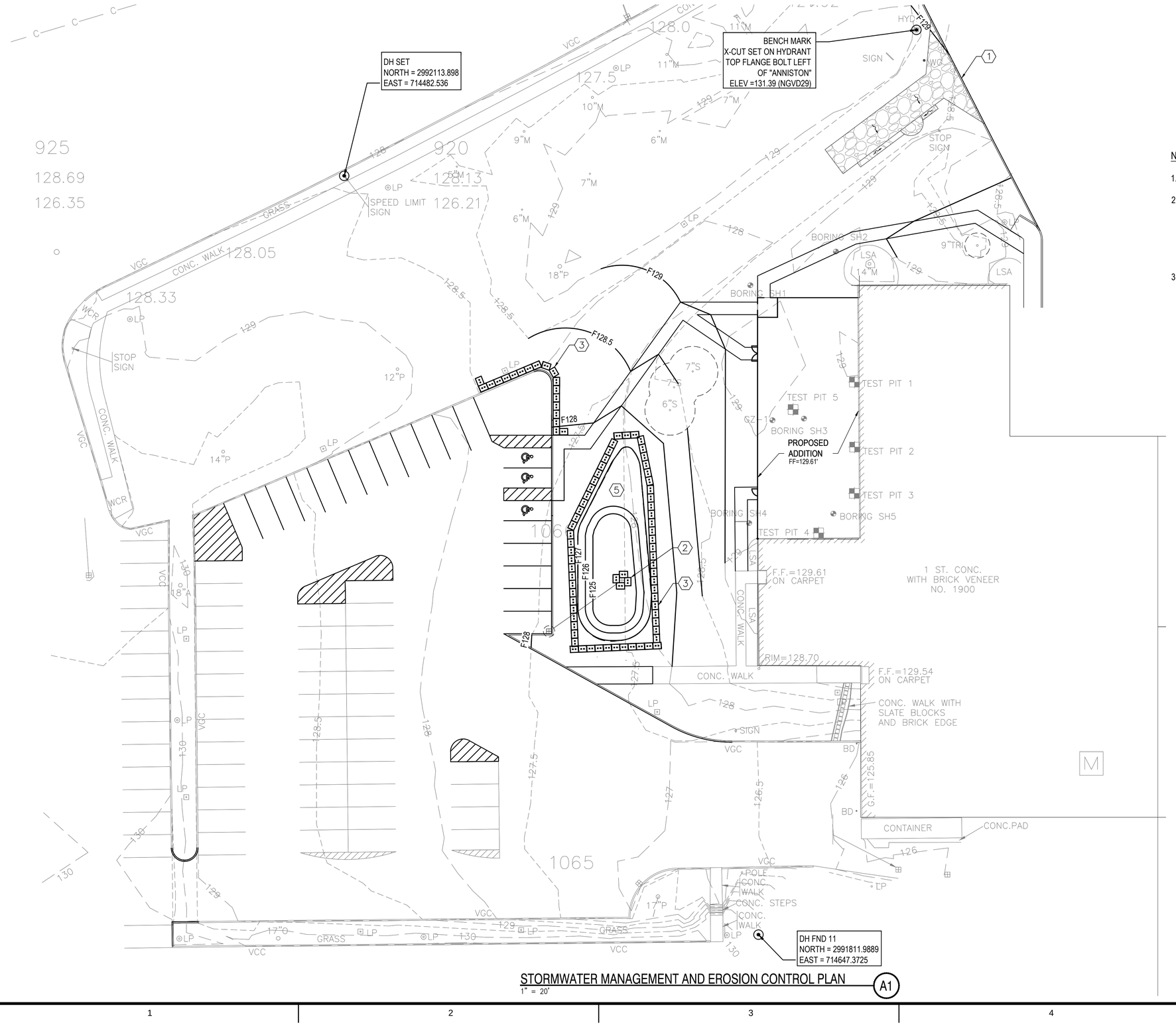


PLAN NORTH

NOTES:

1. SEE SHEET C-001 FOR ABBREVIATIONS, LEGEND AND NOTES.
2. THIS CONSTRUCTION SITE AREA IS LESS THAN ONE ACRE AND DOES NOT REQUIRE AN NPDES STORM WATER CONSTRUCTION PERMIT. THE ACTIVITIES TAKING PLACE AT THIS SITE HAS BEEN EVALUATED FOR THEIR POTENTIAL TO GENERATE OR CONTAMINATE STORM WATER. BEST MANAGEMENT PRACTICES AND POLLUTION PREVENTION PRACTICES APPROPRIATE FOR THIS SIZE AND TYPE PROJECT WILL BE IMPLEMENTED DURING PROJECT CONSTRUCTION.
3. SEE SHEET C-108 FOR MORE INFORMATION.

KEYED NOTES:

1. PROVIDE TEMPORARY CONSTRUCTION ENTRANCE. A1/C-108
2. PROVIDE INLET PROTECTION. C2/C-108
3. PROVIDE HAYBALES. B2/C-108
4. INSTALL TEMPORARY EROSION CONTROL MATTING ON EMBANKMENT SLOPE FOLLOWING SEEDING TO PROTECT UNTIL VEGETATION IS ESTABLISHED.

MARK	DESCRIPTION	DATE	APPR.
B	PRE-FINAL DESIGN SUBMITTAL	4/16/2012	RBB
A	CONCEPT DESIGN SUBMITTAL	3/2/2012	RBB

US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

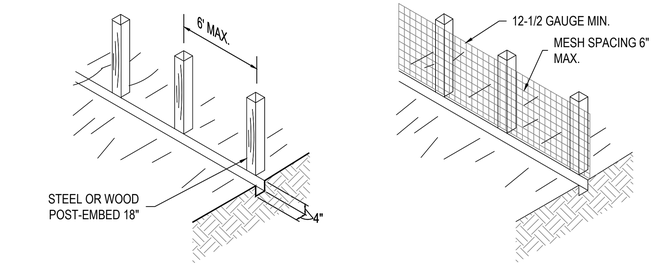
Watermark

DESIGNED BY: MEJ
DWN BY: MEJ
CKD BY: RBB
SUBMITTED BY:
FILE NAME: C-107.dwg
SIZE: ANSI D
DATE: 2/17/2012
SOLICITATION NO.:
CONTRACT NO: W912KJ-12-C-0002
DRAWING CODE:
PLOT SCALE: 1" = 20'

MENTAL HEALTH CLINIC ADDITION
HANSCOM AIR FORCE BASE
STORMWATER MANAGEMENT AND EROSION CONTROL PLAN

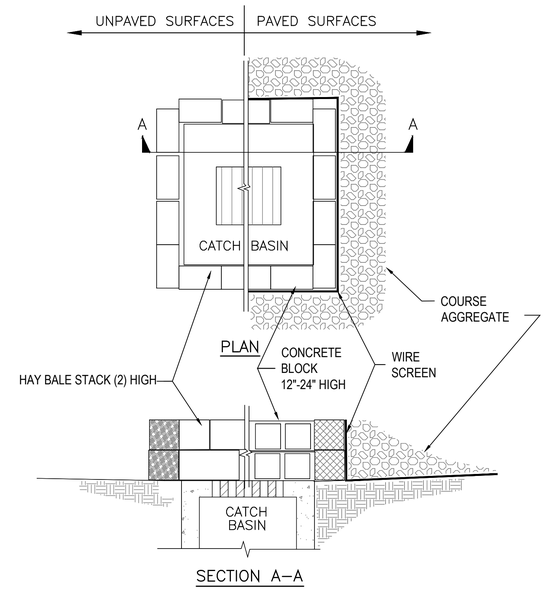
C-107

SHEET X OF X



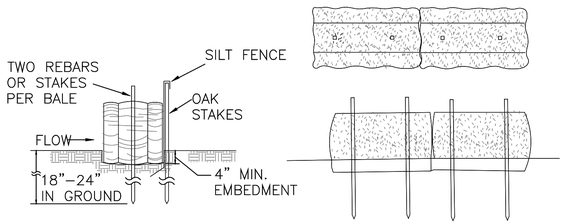
TEMPORARY SEDIMENT FENCE (SF) B1

NOT TO SCALE



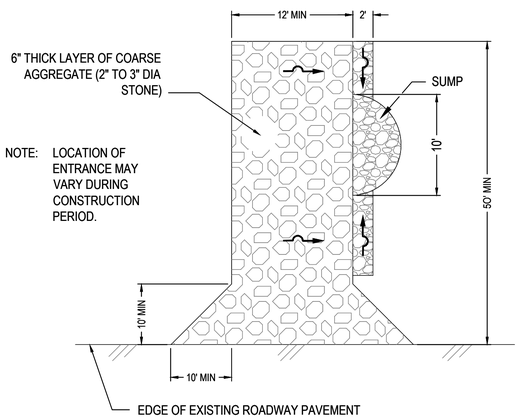
INLET PROTECTION C2

NOT TO SCALE



TYPICAL HAY BALE EROSION CONTROL B2

NOT TO SCALE



TYPICAL CONSTRUCTION ENTRANCE A1

NOT TO SCALE

CONSTRUCTION ENTRANCE SPECIFICATIONS:

1. THE ENTRANCE TO THE SITE SHALL INITIALLY HAVE 6" OF 2" CRUSHED STONE LAID DOWN AS A TRAFFIC SEDIMENT CONTROL SURFACE AS SHOWN IN THE STABILIZED CONSTRUCTION ENTRANCE DETAIL. THIS STONE PACK SHALL BE PLACED FOR A MINIMUM DISTANCE OF 50 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE REMOVED WHEN CONSTRUCTION HAS BEEN COMPLETED.
2. STONE SIZE - USE 2" CRUSHED STONE.
3. WIDTH - TWENTY (12) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS OF INGRESS OR EGRESS.
4. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED NEAR CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT OUT OF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR ANY MEASURES USED TO TRAP SEDIMENT.
7. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO EXIT FROM SITE. WHEN WASHING IS DONE IT SHALL BE DONE ON STABILIZED ENTRANCE WITH STONE AND WHICH DRAINS INTO THE SEDIMENT SUMP AS SHOWN.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM.

NOTES:

1. THE LIMITS OF WORK SHALL BE MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION ON THE SITE.
3. SILT FENCE, HAYBALES, AND INLET PROTECTION SHALL BE PLACED IN ALL AREAS AS SHOWN ON ALL THE PLANS AND IN ANY OTHER AREAS AS DETERMINED NECESSARY DURING CONSTRUCTION.
4. ALL SOIL STOCKPILES SHALL HAVE EROSION CONTROL MEASURES AROUND THEIR EDGES AT ALL TIMES. SOIL STOCKPILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FASTENED TARPAULIN SHEETS.
5. THE INFILTRATION SHALL BE CONSTRUCTED DURING THE EARLIEST STAGES OF THE PROJECT IN ORDER TO COLLECT RUNOFF, SEDIMENT AND BE USED AS A DEWATERING BASIN DURING CONSTRUCTION. THE BASIN SHALL BE CLEANED OF ALL SILT AND DEBRIS PRIOR TO BEING PUT ONLINE FOR PERMANENT USE.
6. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 6" OF LOAM AND BE SEEDED DURING THE GROWING SEASON (APRIL 1 TO NOVEMBER 1) OR COVERED WITH HAYMULCH DURING THE NON-GROWING SEASON (NOVEMBER 1 TO APRIL 1).
7. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL RECEIVE 6" OF LOAM AND BE SEEDED FOLLOWING CONSTRUCTION.
8. THE SILTATION BARRIER SHALL BE MAINTAINED UNTIL VEGETATIVE COVER HAS BEEN SUITABLY ESTABLISHED AND GRADED SLOPES AR STABLE.

INSPECTION/MAINTENANCE:

9. THE CONTRACTOR IS RESPONSIBLE TO CLEAN UP ANY SEDIMENT WHICH ERODES FROM THE SITE ONTO PRIVATE PROPERTY AND TO REMOVE SEDIMENT OR DEBRIS THAT ENTERS ANY EXISTING DRAINAGE SYSTEM TO INCLUDE CATCH BASIN SUMPS, PIPE LINES, MANHOLES, AND DITCHES.
10. CONTRACTOR PERSONNEL MUST INSPECT THE CONSTRUCTION SITE AT LEAST EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. DISTURBED AREAS THAT HAVE BEEN STABILIZED MUST BE INSPECTED AT LEAST ONCE PER MONTH.
11. DURING CONSTRUCTION, THE CONTRACTOR SHALL SPRAY DOWN THE SITE WITH A WATER TRUCK AS NEEDED FOR DUST CONTROL.
12. DURING CONSTRUCTION THE CONTRACTOR SHALL INSPECT THE PAVED DRIVEWAYS AND SWEEP AS NECESSARY.
13. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES AND DEVICES THROUGHOUT CONSTRUCTION. ANY EROSION CONTROL DEVICES FOUND TO NO LONGER BE SERVICEABLE SHALL BE REMOVED AND REPLACED. ALL ACCUMULATED SEDIMENTS MUST BE REMOVED WHEN DEPOSITS REACH NO MORE THAN ONE HALF THE HEIGHT OF THE SILTATION BARRIER.
14. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 CALENDAR DAYS OF FINAL GRADING (7 CALENDAR DAYS IF WITHIN 100 FEET OF A STREAM, POND OR WETLAND) AND TEMPORARILY STABILIZED WITHIN 30 CALENDAR DAYS OF INITIAL DISTURBANCE OF THE SOIL.
15. A STOCKPILE OF ADDITIONAL SILT FENCE AND HAYBALES SHALL BE KEPT ONSITE IN ORDER TO BE ABLE TO IMMEDIATELY RESPOND TO ISSUES WHICH MIGHT DEVELOP DURING CONSTRUCTION.

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MENTAL HEALTH CLINIC ADDITION
HANSCOM AIR FORCE BASE
EROSION CONTROL DETAILS

C-108

SHEET X OF X