US Army Corps
of Engineers ®
New England District

696 Virginia Road
Concord, MA 01742-2751

REVISED
PUBLIC NOTICE

Date: October 16, 2007
Comment Period Ends: November 9, 2007
File Number: NAE-2007-893
In Reply Refer To: David Keddell
Or by e-mail: david.m.keddell@usace.army.mil

The District Engineer has received a permit application from the applicant below to **conduct work in waters of the United States** as described below. The Corps is soliciting comments on both the project itself and the range of issues to be addressed in the environmental documentation.

APPLICANT

National Grid
25 Research Drive
Westboro, MA 01582 Attn: Joshua Holden

ACTIVITY

National Grid is seeking authorization for the general use of swamp/timber mats for temporary access across waters and wetlands to facilitate maintenance activities. The work to be authorized includes the temporary discharge of dredged or fill material, specifically swamp/timber mats while accessing work areas to perform routine maintenance, repair and replacement of their existing power facilities throughout the Commonwealth of Massachusetts. These maintenance activities are otherwise exempt or previously authorized. National Grid operates 2,100 miles of high voltage transmission lines, 17,000 miles of transmission and distribution lines and operates 275 substations within the state of Massachusetts. Typical jurisdictional work activities include:

Establishing safe work/staging area
Replacement of pole guys and anchors
Ground improvements
Vegetative clearing for access & safe environment
Maintaining existing access road maintenance
Repair/replace above and/or below ground infrastructure
Culvert replacement

All work will be done in accordance with the attached, "Standard for Timber Mat Management" and plans entitled "General Use of Swamp/Timber Mats, Commonwealth of Massachusetts," on 4 sheets, and dated "June 2007." Specific sites will be reviewed annually by the Corps of Engineers prior to the start of any work to verify that the project is consistent with the criteria of the permit. Any new infrastructure will not be authorized by this permit but will require separate authorization.

WATERWAY AND LOCATION OF THE PROPOSED WORK

This work is proposed in various navigable waters and waters of the US throughout the Commonwealth of Massachusetts.

AUTHORITY

Permits are required pursuant to:
__X_ Section 10 of the Rivers and Harbors Act of 1899
__X_ Section 404 of the Clean Water Act
_____Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).This project will temporarily impact approximately 8,000 acres of Essential Fish Habitat (EFH) for Atlantic salmon (Salmo salar), Atlantic cod (Gadus morhua), haddock (Melanogrammus aeglefinus), pollock (Pollachius virens), whiting (Merluccius bilinearis), offshore hake (Merluccius albidus), red hake (Urophycis chuss), white hake (Urophycis tenuis), redfish (Sebastes fasciatus), witch flounder (Glyptocephalus cynoglossus), winter flounder (Pleuronectes americanus), yellowtail flounder (Pleuronectes ferruginea), windowpane flounder (Scopthalmus aquosus), American plaice (Hippoglossoides platessoides), ocean pout (Macrozoarces americanus), Atlantic halibut (Hippoglossus hippoglossus), Atlantic sea scallop (Placopecten magellanicus), Atlantic sea herring (Clupea harengus), monkfish (Lophius americanus), bluefish (Pomatomus saltatrix), long finned squid (Loligo pealei), short finned squid (Illex illecebrosus), Atlantic butterfish (Peprilus triacanthus), Atlantic mackerel (Scomber scombrus), summer flounder (Paralicthys dentatus), scup (Stenotomus chrysops), black sea bass (Centropristus striata), surf clam (Spisula solidissima), ocean quahog (Artica islandica), spiny dogfish (Squalus acanthias), tilefish (Lopholatilus chamaeleonticeps). This habitat consists of vegetated salt marsh, tidal mudflats and rocky intertidal areas. Loss of this habitat may adversely affect various life stages for the species named above. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

SECTION 106 COORDINATION

Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

(X) Permit, License or Assent from State.
( ) Permit from Local Wetland Agency or Conservation Commission.
(X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any

questions, please contact David Keddell at (978) 318-8692, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

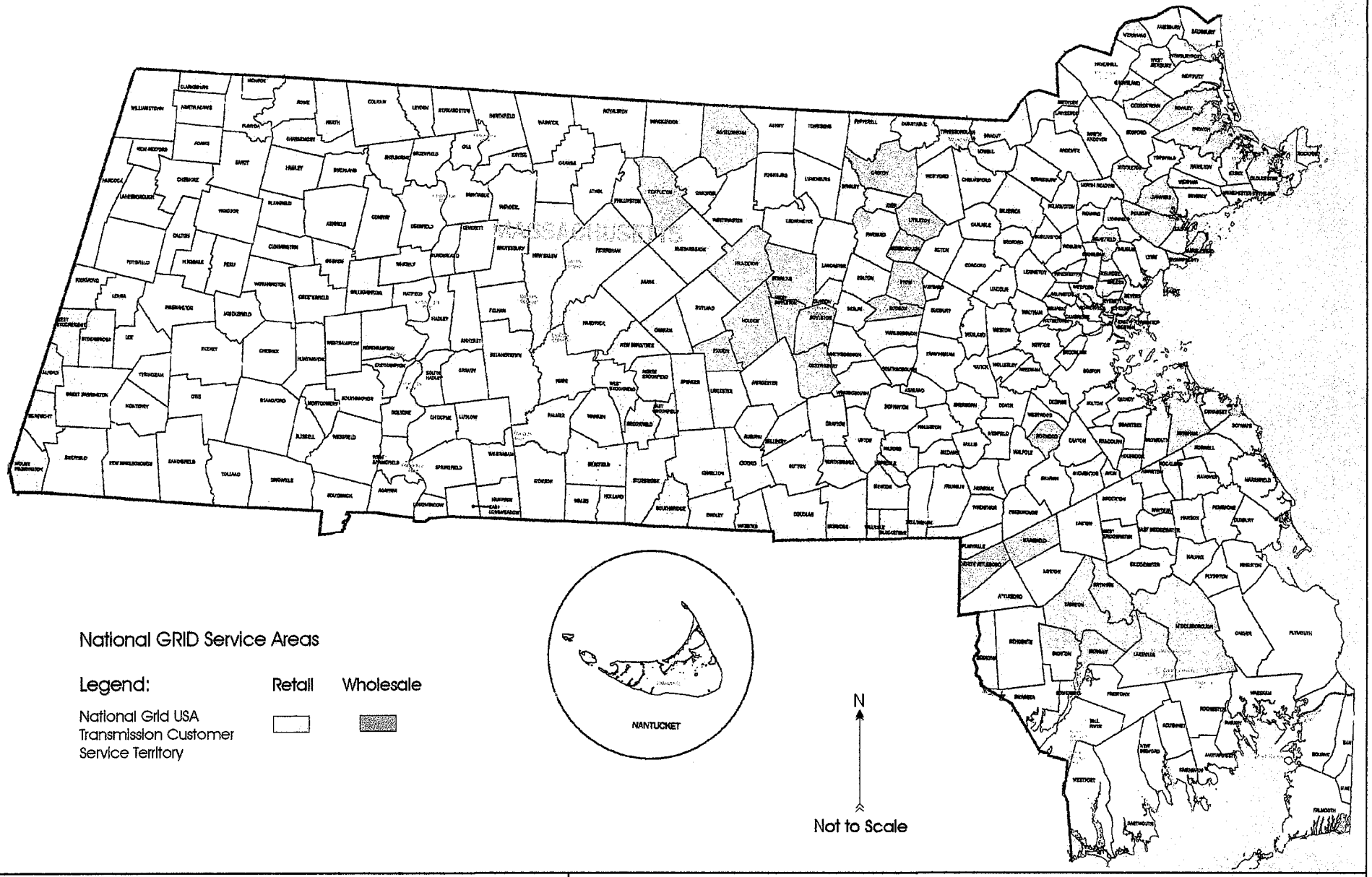
For more information on the New England District Corps of Engineers programs, visit our website at http://www.nae.usace.army.mil.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

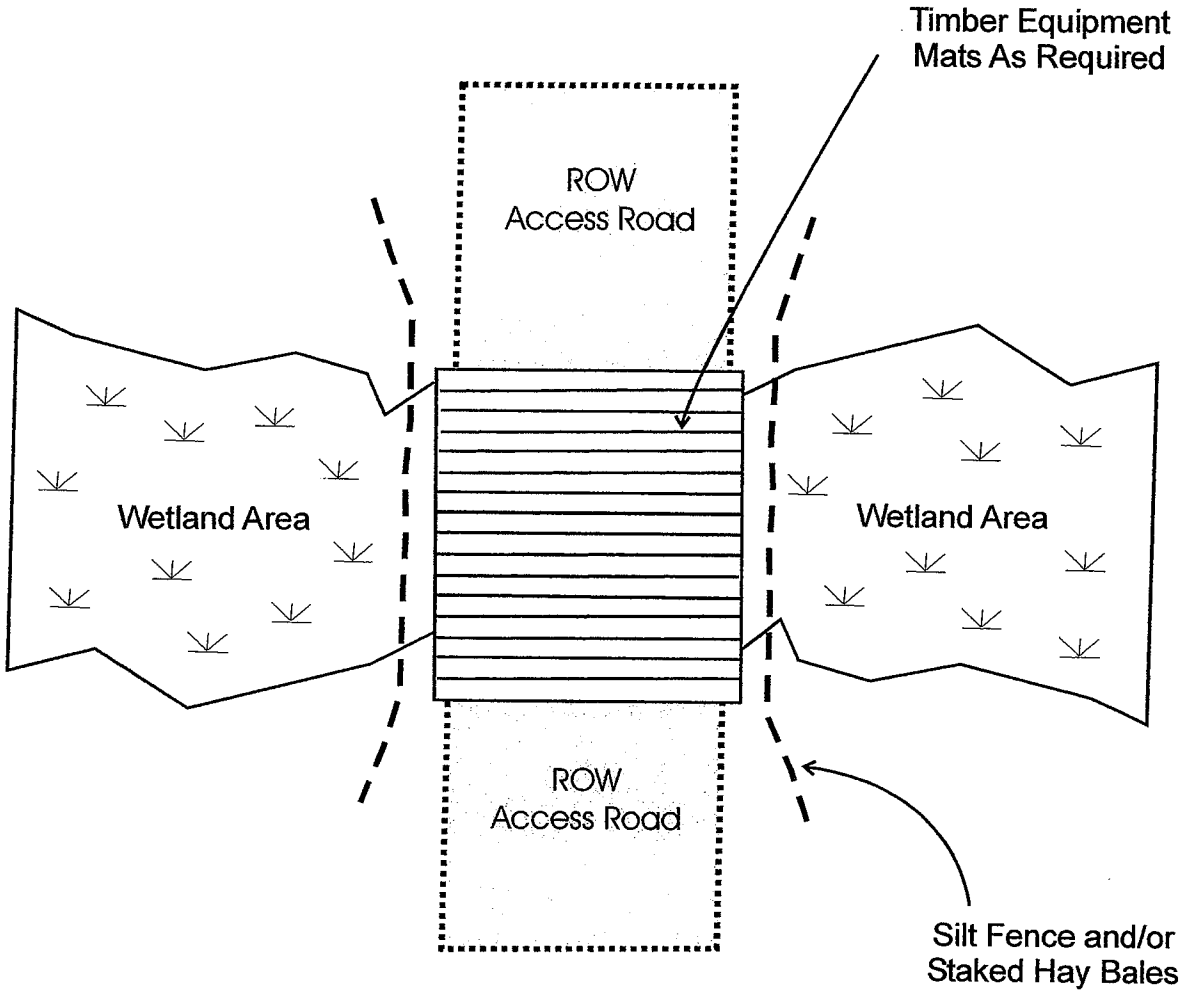
Karen K. Adams
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

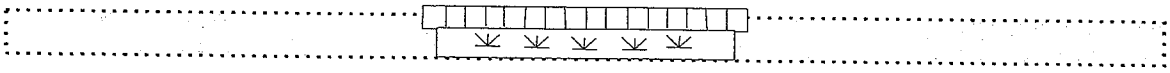
NAME: _____
ADDRESS: _____



General Use of Swamp/Timber Mats Commonwealth of Massachusetts	**Vicinity Map/National Grid Service Areas**
MASON & ASSOCIATES, INC. *Environmental Consulting & Projects* 219 East Main Street, Suite 100B, Milford, Mass. 01757	Application by: nationalgrid
	June 2007 / Sheet 1 of 4

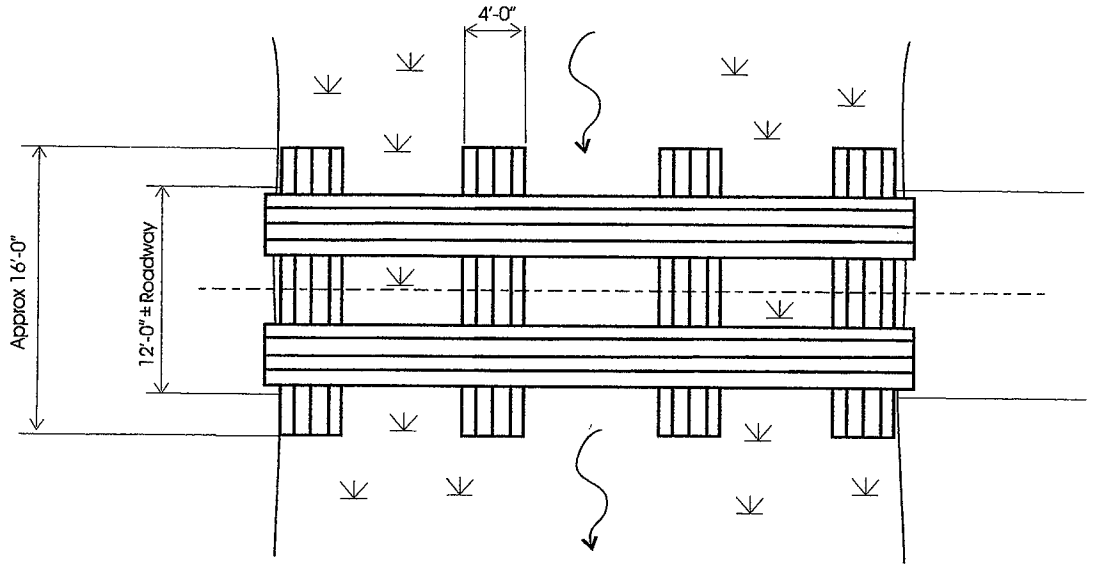


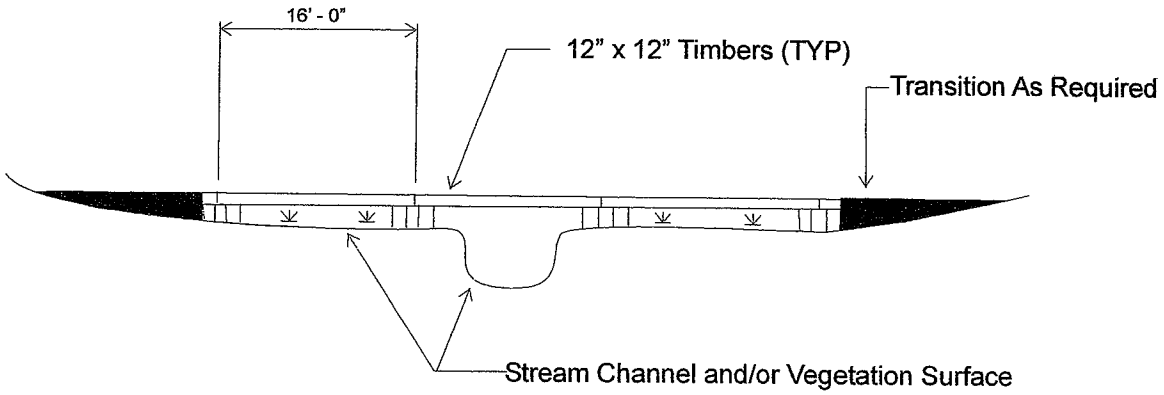
Timber Mat or Equivalent as Required



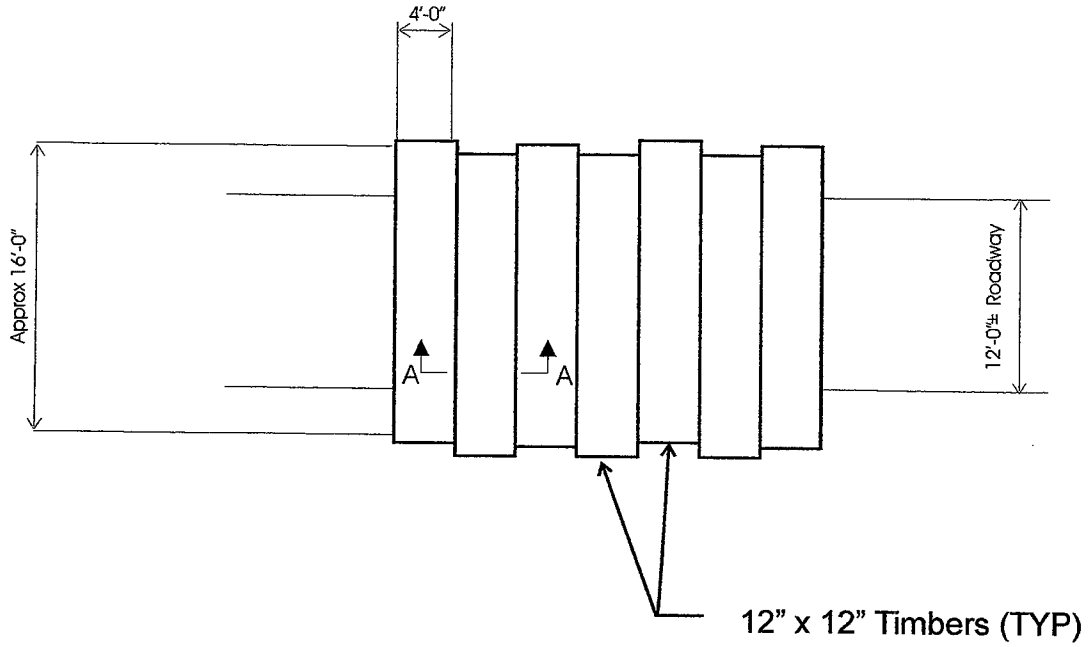
Access Road **Wetland Area** **Access Road**

General Use of Swamp/Timber Mats Commonwealth of Massachusetts	**Typical Wetland Crossing**
MASON & ASSOCIATES, INC. *Environmental Consulting & Projects* 219 East Main Street, Milford, Massachusetts 01757	Application by: nationalgrid
	June 2007 / Sheet 2 of 4

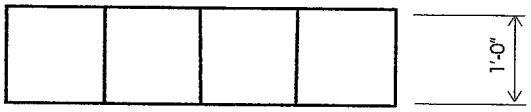




General Use of Swamp/Timber Mats Commonwealth of Massachusetts	**Typical Stream Crossing**
MASON & ASSOCIATES, INC. *Environmental Consulting & Projects* 219 East Main Street, Milford, Massachusetts 01757	Application by: nationalgrid
	June 2007 — Sheet 3 of 4

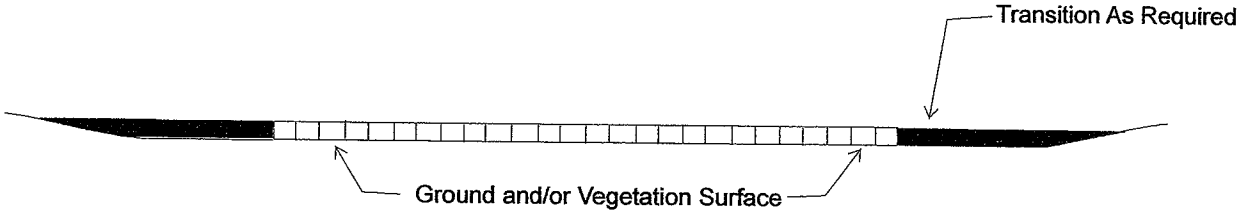


TYPICAL PLAN VIEW



SECTION A-A
TYPICAL MAT SECTION

BOLTED TOGETHER



TYPICAL SECTION VIEW

NOTE:
1. TO BE INSTALLED IF NECESSARY TO PREVENT RUTTING, TO ACCESS STRUCTURES.
2. THIS DETAIL SHOWS TYPICAL DIMENSIONS. SOME CONTRACTOR'S SWAMP MATS ARE DIMENSIONALLY DIFFERENT.
3. DEPENDENT ON SITE CONDITIONS, MULTIPLE LAYERS OF SWAMP MATS MAY BE INSTALLED.

General Use of Swamp/Timber Mats Commonwealth of Massachusetts	**Typical Swamp Mat Detail**
MASON & ASSOCIATES, INC. *Environmental Consulting & Projects* 219 East Main Street, Milford, Massachusetts 01757	Application by: nationalgrid
	June 2007 / Sheet 4 of 4

Standard for Timber Mat Management

1.0 INTRODUCTION

The Standard for Timber Mat Management as described herein shall serve as the standard operating practice for National Grid regarding the use and implementation of swamp/timber mats. This Standard is restricted to use of said mats in conjunction with performing exempt maintenance activity, PGP Category 1 activity, previously permitted activity and emergency action. However, the primary focus of this Standard, intended to be incorporated by reference into the Department of the Army Permit, Water Quality Certification and Coastal Zone Management Consistency Determination, is to establish a method to facilitate National Grid's continuous mandated maintenance activity to provide ample supply and reliable electric delivery service in support of the economy and to serve the health, welfare and safety of the general public.

This Standard shall address maintenance activity, notification, pre-construction planning, methodology, inspection and restoration.

2.0 MAINTENANCE ACTIVITY

National Grid performs ongoing maintenance, repair and replacement of their above ground and below ground electric utilities along their existing ROW (easements and fee properties) for the purposes of maintaining the operability, integrity and safety of their electric transmission, subtransmission and distribution facilities. All maintenance activities utilize appropriate BMPs (e.g. swamp/timber mats) as necessary based on existing field conditions to minimize temporary environmental impact.

As defined, maintenance activity is exempt from the regulatory provisions appurtenant to the federal regulatory program, Massachusetts Wetlands Protection Act and the Massachusetts Environmental Policy Act. In addition, in response to the development of the approved Operation and Maintenance (O& M) Plan for Maintaining Existing National Grid Facilities dated June 2005, maintenance activities are also exempt from the requirements of the Massachusetts Endangered Species Act.

Associated with the operation and maintenance of National Grid's transmission, subtransmission and distribution facilities, substation and switching station facilities, and ROW, the following is a representative listing including but not limited to various O&M activities that may be undertaken annually by National Grid:

- Establishing safe work/staging areas;
- Replacement of wooden poles;
- Replacement of wood poles with steel poles;

- Replacement of cross-arms, cross braces and insulators;
- Replacement of pole guys and anchors;
- Grounding improvements;
- Reconductoring;
- Thermal upgrades;
- Vegetative clearing for access and safe work environment;
- Existing road maintenance;
- Repair/replacement of below ground infrastructure;
- Repair/replacement of above ground infrastructure;
- Replenishment of crush stone base and SPCC berm within existing substation;
- Reconditioning/repaving existing access drive to substation;
- Pole/structure/foundation inspections and repairs/treatments;
- Culvert replacement;
- Painting steel poles/towers;
- Maintenance of transmission switching points;
- Gate repairs; and
- Debris removal.

To facilitate National Grid's mandated responsibility to perform on-going maintenance, access through wetlands and/or the need to establish a safe work/staging area within wetlands is sometimes unavoidable. Historically and routinely used as a non-regulated BMP, swamp/timber mats were implemented as a cost effective means (compared to gravel roads in wetlands), having minimal temporary environmental impact, to perform required maintenance activity. In addition, it is important to note that swamp/timber mats are generally used in previously disturbed areas.

3.0 NOTIFICATION

National Grid shall provide annual notification to the agencies in advance of the anticipated maintenance activity scheduled for the upcoming fiscal year. This notification shall include shape files of the various projects that may involve the use of swamp/timber mats. It is important to note that the nature of National Grid's maintenance program is dynamic such that the subject advance notification will not include unanticipated, required maintenance activity resulting from routine inspection and/or extreme storm events. As such, the annual notification is likely to include certain maintenance activity that will not occur in lieu of having to perform non-listed maintenance activity of relatively higher priority. Consequently, in addition to providing notification of planned work for the upcoming fiscal year, said notification will report on the status of compliance regarding the previous year's planned and unplanned work; e.g., level of completion, inspection and status of restoration. This notification procedure is not intended to include non-reporting Category 1 activity as authorized by the Massachusetts PGP.

Finally, National Grid's ability to plan for and schedule O&M work may be dependent upon coordination with ISO-NE with regard to outages necessary for system maintenance and internal system-wide prioritization of projects based on improvements required to ensure reliable electric supply.

4.0 PRE-CONSTRUCTION PLANNING

National Grid relies on its environmental staff and environmental consultants to be involved in the long range planning of large-scale maintenance activities; i.e. refurbishment and reconductoring. This up-front coordination is meant to facilitate the identification of environmentally sensitive areas within the project area during the pre-construction planning phase of the project. Pre-construction meetings are conducted for said projects to discuss, among other details, environmental requirements. These meetings serve to identify environmental sensitive receptors and those BMPs to be instituted during construction to avoid and/or minimize project-related impacts to these areas. In addition, National Grid presents annual in-house training to its environmental engineers, field construction coordinators, environmental contractors and field personnel with a focus on environmental compliance procedures.

4.1 Activity Classification

Initially, it is National Grid's responsibility to categorize the proposed work. In the context of using swamp/timber mats to facilitate said work, the activity must be considered 1) maintenance, 2) non-reporting Category 1 (area of mats as temporary fill notwithstanding), 3) previously authorized or 4) an emergency action. Use of swamp/timber mats in conjunction with non-maintenance activity or Category 2 activity is not authorized by this permit/approval. Project specific permitting will be required for those activities not eligible as described herein. Upon confirmation that said activity qualifies as maintenance, Category 1, previously authorized or emergency action, swamp/timber mats may be used as necessary to facilitate the work in accordance with the Terms and Conditions of the permit/approval.

4.2 Environmental/Regulatory Constraints Analysis

Following confirmation that the proposed activity qualifies for approval, National Grid shall perform a preliminary assessment (due diligence) to determine if the project area contains any potential environmental constraints including but not limited to wetlands, waterways/water bodies, vernal pools, essential fish habitat, and rare species habitat. In addition, potential regulatory constraints such as local bylaws, Areas of Critical Environmental Concern (ACECs) and Outstanding Resource Waters (ORWs) shall be identified at this time to determine if there are any regulatory implications or additional permitting required beyond the exemptions in effect. It is National Grid's policy to avoid such wetlands, streams, vernal pools and rare species habitat to the extent practicable. Therefore, it is important to determine in advance the presence and extent of any on-site environmental constraint that may affect the proposed activity.

4.3 Field Identification

Within National Grid's designated project area, existing wetlands, streams, vernal pools and rare species habitat will be identified and/or flagged in accordance with prescribed National Grid protocol and agency criteria. In addition, construction access roads, access routes, work staging areas and wetland resource areas warranting the use of temporary swamp/timber mats will be identified/flagged. Although avoidance of sensitive receptors to the extent practicable is the first order of mitigation and minimization of environmental impact related to unavoidable alteration is the objective, safety is paramount to National Grid. In response to existing field conditions, it is important to identify feasible and prudent access routes and temporary wetland crossings so as to establish a safe work environment while providing environmental safeguards; i.e. swamp/timber mats and other BMPs as appropriate. Field identification of resource areas and construction access routes is important for purposes of updating National Grid's plan drawings of company ROWs (T-sheets) as well as assisting construction personnel.

4.4 Access Route Determination

As stated, construction access routes shall be identified in the field. Selection of said routes shall consider a number of factors including but not limited to prior access routes, property boundaries, property rights, avoidance and/or minimization of wetland alteration and vegetative clearing, topography, hydrology, soil conditions, time of year, safe equipment operation, vehicular load weights, and vertical and horizontal clearances and turning radii, respectively. Where possible, access is achieved via the most direct and safe route following prior access.

Equipment used in the maintenance of existing electric infrastructure generally consists of rubber-tired or track mounted bucket trucks and aerial lifts, cranes, rubber-tired backhoes and/or track mounted excavators, rubber-tired or track mounted drilling rigs with power augers, wide-tracked bombardiers, pickup trucks, tractor or excavator mounted mowers, helicopters and other specialized heavy equipment.

4.5 Access Route Documentation

As stated, construction access routes and required swamp/timber mat locations shall be flagged in the field. Existing T-Sheets shall be updated to document both the designated temporary access routes and swamp/timber mat locations to facilitate proposed construction activity and to serve as a means for future reference. In addition, said T-Sheets shall be updated to depict boundaries of wetlands and waterways, buffer zones, vernal pools and/or rare species habitats.

5.0 METHODOLOGY

5.1 Avoidance and Minimization

Wherever possible, access shall be achieved by utilizing existing access roads and upland routes in an effort to avoid wetland impacts. In the event that an existing access road/route is not available, installation of temporary swamp/timber mats is required to provide access through wetland resource areas and/or to establish a safe work/equipment staging area. To the extent known, previously used temporary access routes will be utilized.

Where wetland impacts are unavoidable, adverse effects are minimized to the extent practicable. In addition to no loss of wetland area, no alteration to wetland hydrology and no long-term changes to existing functions/values, the short-term effect of using swamp/timber mats is primarily restricted to temporary vegetation and ground disturbance. In summary, avoidance is the first order of mitigation; however, in the event that avoidance is not practicable, swamp/timber mats constitute an acceptable BMP/mitigating measure resulting in no significant or long-term adverse effect to the aquatic environment.

5.2 Site Preparation and Installation

First and foremost, site/surface preparation shall be limited only to that necessary to *safely* provide access and/or to *safely* operate equipment and conduct the required work. Ground disturbance will be a function of topography, existing soil conditions and vegetative cover. In those instances where access is required through an emergent wetland dominated by herbaceous species, swamp/timber mats are generally placed directly onto the wetland plant surface. Swamp/timber mat installation will be determined by existing topography, wetland cover type, soil conditions, hydrologic conditions and time of year.

5.3 Wetland and Stream Crossings

As stated, swamp/timber mats will be used at previous wetland crossing locations to the extent that such prior information exists. Absent this information, wetland crossing locations will be identified to minimize the area and extent of temporary wetland disturbance. The duration of time that swamp/timber mats are in place will vary. Generally, they are removed upon completion of work.

Similarly, swamp/timber mats will be used to provide temporary access across streams. Such waterways will be "bridged" so as not to restrict stream flow during installation, use and removal of said mats. To the extent practicable, preferable steam crossing locations will be sited at existing, unimproved stream crossing areas and/or at the narrow point in the channel. In addition, stream crossings should be oriented at right angles to the stream to limit the overall area of temporary disturbance to soils and vegetation.

5.4 Best Management Practices

All maintenance activities utilize appropriate BMPs as needed based on existing field conditions. As stated, BMPs (i.e. swamp/timber mats) are implemented to minimize temporary environmental impact and to ensure environmental stewardship.

Standard operating procedures for National Grid employees and its contractors include the implementation of BMPs, as dictated by conditions encountered in the field, on a project-by-project basis. These additional BMPs (excluding swamp/timber mats), intended to minimize adverse effects and restore any construction-related disturbances, may include but are not limited to the following:

- Visual inspection of work areas and access routes prior to mobilization for evidence of wildlife activity;
- Installation of visual barriers to identify wildlife nesting habitat;
- Use of existing access roads/routes through uplands for access is preferable;
- Minimization of work space;
- Construction staging areas in uplands;
- Avoidance of fill in wetland resource areas;
- Use of low bearing/tracked vehicles;
- Avoidance/minimization of temporary disturbances vegetation and ground surfaces and to sensitive receptors;
- Grading of existing access roads for safety and to repair erosion;
- Erosion and sediment controls to prevent sedimentation into wetlands/streams;
- Dewatering and filtration of runoff;
- Removal of construction materials;
- Avoidance of disturbances to vernal pools to the extent practicable;
- Restoration of rutting within access roads/routes;
- Stabilization of unvegetated surfaces; and
- Restoration of work areas to pre-existing conditions.

6.0 INSPECTION

For National Grid's maintenance projects, National Grid environmental engineers and/or its environmental consultants perform, at a minimum, periodic field inspections, and in many cases, regularly scheduled field inspections during construction to monitor environmental compliance with National Grid's internal environmental standard operating procedures. National Grid's standard field inspection report form dated November 1, 2006 is included in the appended Environmental Guidance Document as Attachment A. Final project completion inspections are typically conducted to determine that work areas have been restored to pre-existing conditions and that no permanent environmental impacts have occurred as a result of the completed project.

7.0 RESTORATION

Upon completion of work, swamp/timber mats used for temporary wetland and/or stream crossings shall be removed and the site restored to pre-existing conditions. To the extent necessary, temporary disturbance areas within wetlands will be re-graded, seeded and/or mulched. In most instances, natural re-vegetation is an appropriate means to re-establish the wetland plant community in lieu of seeding. With regard to temporary stream crossings, bank restoration/stabilization will be performed as necessary to re-establish pre-existing flow conditions. Finally, should any significant rutting result from the placement of the mats, the area will be graded/back bladed and mulched. It is National Grid's photo-documented experience that temporary wetland disturbance areas resulting from the use of swamp/timber mats become vegetatively restored within one growing season thus confirming that implementation of this BMP does not adversely affect wetlands (refer to enclosed Narrative, Figures 5 and 6).