



**US Army Corps  
of Engineers**®  
New England District

**REGULATORY DIVISION  
APPLICATION AND PLAN GUIDELINE CHECKLIST**

The following checklist is designed to assist applicants and their consultants when preparing applications and plans and when requesting sampling plans and suitability determinations for dredge projects. This is not a comprehensive list, nor are all items mandatory for all projects. However, the list contains some frequently omitted information often necessary to process a permit application and provides some direction for plan preparation. Applicants are only required to furnish such additional information as deemed essential to make a public interest determination. Please consult with the Corps Regulatory Project Manager assigned to your project to determine which information is required.

**I. APPLICATION INFORMATION:**

- Application Form:** All applicants must submit a Corps application form (ENG FORM 4345) or some state forms are acceptable. Please see the PGP for your state at [www.nae.usace.army.mil](http://www.nae.usace.army.mil) and select “Regulatory/ Permitting,” and then “State Programmatic General Permits.”
- Include the name and address of the applicant. We address any issued permit to this person.
- Historical and Tribal Notification:** All Category 2 applicants shall submit a copy of their application materials to the State Historic Preservation Officer and the appropriate Federally recognized Indian tribes in their state when applicable. See the Corps PGP for your state for addresses. The PGP’s for each of the six New England states are located at [www.nae.usace.army.mil](http://www.nae.usace.army.mil). Please go to “Regulatory/ Permitting,” and then “State Programmatic General Permits.”
- Describe the intended use; public, private, commercial. If it is for multiple uses (multi-family, industrial complex, etc.) indicate whether the entire development is existing or proposed.
- Provide names and complete mailing addresses, including zip code, for adjacent property owners. This information may be obtained from local tax roles/assessors’ offices.
- Provide the street address of the proposed work site. If there is no street address, provide directions to the site using landmarks, types of roads, mileage, etc.
- Provide the longitude and latitude, township, county, and state location of the project site.
- Provide a list of State and local permits or approvals for which you have applied. If none, indicate the basis for determining that no state or local approvals are required. Provide the current zoning classification.
- Provide a list of previous applications applied for and state the outcome of the application; issued, denied, deactivated, and the date. Also reference any nearby activities and/or property owners that may have recently received a Corps permit.
- Provide a signed statement from the property owner giving the Corps permission to enter the site.
- Sign and date the application.
- Describe the proposed activity.

**Structures:**

- Describe the need and intended use of the structure.
- Describe the plans for sewage pump-out facilities, fueling facilities and contingency plans for oil spills.
- Describe the type of vessel to use the facility
- Describe and give dimensions of adjoining structures.
- Provide the width of the waterway and the distance to Federal or other navigation channels.

**Fill Projects:**

- State the project’s purpose to include the intended use & the structures proposed to be erected on the fill.
- Describe the impact area, i.e. wetlands or open water & give the area’s dimensions in SF and/or acres.
- Describe the quantity of dredged material in cubic yards.
- Describe the type and composition of the fill material and its source.
- Describe any temporary construction or access fills possibly required to complete the proposed project.

**Dredging Projects:** Information accompanying sampling plan or suitability determination requests may be submitted before the application, and should include the following:

- State the purpose of the proposed dredging.
- Date the area was last dredged
- Volume (CY) and area (SF) for each dredge location
- Character of the dredge area, including the type of existing bottom material, biota and vegetation.
- Existing or nearby test results. Don't perform new testing without Corps input. Bulk sediment analysis, elutriate and bioassay tests may be required. We will provide detailed instructions should a review of the submitted information indicate further testing is required.
- Describe the dredging purpose – new, maintenance or both
- Describe the dredging method (e.g. mechanical or hydraulic) and what equipment will be used.
- Method of handling/transporting
- Information on any recent spills of oil and/or other hazardous materials and on nearby outfalls. Document the information source. A good source is the harbormaster or fire chief.
- For open-water disposal, provide a brief alternatives analysis showing why inland or beneficial reuse sites aren't practicable.
- Describe methods to retain or prevent dredged material from running back into the wetland or waterway.
- Describe the size of the disposal site in area (square feet) and volume (cubic yards) for beach nourishment
- Describe the area to be dredged, i.e. open water, existing channel, wetlands, uplands, etc. and indicate the surface area to be dredged in square feet and the volume of material to be removed in cubic yards.
- Provide information on any wetland, intertidal or submerged aquatic vegetation that may be affected.

Plans (sketches are acceptable for this preapplication request) must accompany the sampling plan or suitability determination request, and must include the following:

- Plan and cross-section views
- Dredge boundaries
- Bathymetry: existing, proposed and historical (include dates and Corps permits) dredge depths
- Location and dimensions or SF of the dredged material disposal area, including the HTL for beach nourishment. A map should be included for upland disposal areas.
- Dewatering methods and areas
- Sampling locations for existing or nearby test results
- Outfall locations
- Proposed detention levees, weirs, and/or other devices for retaining hydraulically placed materials.
- Capacity and the points of runback into the aquatic system.

## II. PLAN INFORMATION:

### General Requirements:

- 8.5x11" plans on white paper, suitable for copying. Larger plans for clarity are ok, but not required.
- Ch.91 plans may be cut to 8.5x11" - ensure proper margins (at least ½ inch).
- Avoid reducing plans. If so, adjust the graphic and numerical scale. Scale should be in common units (1" = 10', 20', 50', 100', etc.) so drawings can be measured with a standard engineering scale.
- Drawings clear enough and of sufficient scale to read, and dark enough to allow clear reproduction.
- For large sites, use a Key Sheet of entire project w/numbered reference to attached detailed sheets.
- Submit the fewest number of sheets necessary to show the proposed work.
- Provide detailed sheets of work in Corps jurisdiction. Don't cut full-size drawings into even sections.
- Try to fit work in a particular area on one sheet. Don't use match lines, unless absolutely necessary.
- Only construction details related to Corps program are necessary.
- Don't use color shading. Use dot shading, hatching or similar graphics to clarify line drawings.
- P.E. stamp isn't required

**Plans for all projects should include:**

- Vicinity Map. This should be the first page of the plan set. Location in upper right-hand corner of the plan is ok, but not preferred. Using a USGS Quad Sheet photocopy or a local road map is ok. A person should be able to find the site from the plan set alone.
  - Include names or numbers of all roads in the site's vicinity
  - Clearly indicate the project location on the map.

Each sheet of the project plan set, including the vicinity map, should contain:

- Title block - project title, address, activity (existing conditions, proposed conditions, etc.)
- Date and revision date, if necessary
- Sheet number indicating total number of sheets in the set (i.e. 2 of 9).
- Numerical *and* graphic scale – avoid reduction and enlargement
- North arrow
- Existing property lines.
- Show the dimensions of the applicant's property.
- On plan view, show the names of adjoining property owners.
- Ebb and flood in tidal waters and direction of flow in non-tidal waters
- Indicate the relationship of the proposed work site to waters of the U.S., i.e. adjacent wetlands, tidal influence through culverts, etc. Include the name of the waterbody and of the large waterbody to which the waterbody is an immediate tributary.
- One set of coordinates to locate the project
- Typical pipeline cross-sections with details of the bedding and backfill to be used in wetlands and waterways. Show proposed trench dams and detail for inland projects.
- Show the dimensions of the work; dimensions of pier, length of bulkhead or shoreline stabilization, dimensions of area to be dredged, dimensions of disposal area, dimensions of fill area, etc. Include all temporary impact areas.
- Show the location and dimensions of culverts.
- Indicate the location of cross-sectional views.
- Cross-sectional views:
  - Show the mean high and low waterlines or the ordinary high and low water elevations.
  - Show the existing contours and the proposed contours indicating existing and proposed elevations.
  - Show the depth of water at the waterward end of piers.
  - Show the dimensions of the work.
  - Show the disposal area for dredged material, including retention dikes and overflow route.
  - Show the finished top elevation of the disposal site.
  - Show the top width, bottom width, and side slopes of road crossings. Include bottom and invert elevations of culverts and the finished top elevation.

**Plans for Section 10 projects should include:**

- Shoreline/limits of waterways on all views [labels: HTL (fill projects), MHW (structures) & MLW]
- Delineate and place specific labels on biological resources. E.g. special aquatic sites: salt marsh, mudflats, riffles and pools, and vegetated shallows (eelgrass, etc.); and endangered species and shellfish habitat.
- Datum in plan and elevation views
  - Standard Coordinate Systems – Grid lines or marginal hash marks should be based on a standard coordinate system, i.e. Geographic (at least to the nearest tenth of a second), State Plane or UTM. Indicate on the plan legend the coordinate system (and zone for UTM), units (English or metric) and the corresponding geodetic datum, either NAD27 or NAD83.
  - Vertical Datum – On each plan show the NGVD 1929 equivalent for the project's vertical datum (MLW, MLLW or NGVD) with the vertical units.
  - Don't use local datum.
- If near a Federal project call your Corps Regulatory Project Manager (PM).
- Dimensions of the existing and proposed structures

- Cross-section view for piers, floats and other projects, if necessary
- For piers and other structures, show minimal height of structure above the marsh.
- For floats, show methods of securing (piles, bottom anchors) and keeping off substrate (skids, stops).
- Water depths around the project in all views
- Show distance waterward of the MHW line for proposed structures.
- Show distances from two fixed upland points to the landward end of proposed structures.
- Show any existing structures and moorings in waters adjacent to the proposed activity and show the distance to the proposed work. If no structures exist (or are proposed), state this on the project plans.
- Show the location and dimensions of existing bulkheads and/or shoreline stabilization on adjacent properties and, if applicable, how the proposed work will tie into existing structures.
- Shoreline of adjacent properties
- Distance to opposite shoreline. In narrow waterbodies, show water width and show structures across from proposed work.
- State plane coordinates of seaward end(s) of structures near a Federal Navigation Project (FNP) (anchorage or channel). Contact Corps PM for details.
- Show adjacent FNP and/or state/local navigation projects, distance to them and the authorized depths.
- Delineate and place specific labels on special aquatic sites: salt marsh, mudflats, riffles and pools, and vegetated shallows (eelgrass, etc.).
- Provide existing Corps permit numbers. Provide the names under which the permits were obtained if the permit numbers are unknown. Provide construction dates and proof of existence (aerials, photos, town hall records, affidavits, state or local permits, etc.) to verify “grandfathering.”
- For reconfiguration zones, provide the coordinates of the corners and specify the maximum number of vessels moored within the zone.

**In addition to the above, plans for Section 10 dredge projects should include:**

- See Section I (Dredging Projects) and Section III (40 CFR 230 Guideline) for additional required dredge info.
- Dredge boundaries
- Volume (CY) and area (SF) for each dredge location
- Cross-section
- Based on the physical characterization of the material to be dredged and based upon the high/ medium/low, wave or current energy of the location, identify the likely final angle of repose of the sidecuts. Incorporate total final footprint of dredged area in characterizing impact to resources.
- Disposal location on a separate sheet
  - For beach disposal: the disposal footprint, existing and proposed nourishment profiles (include profiles for each site for multiple non-contiguous sites. Multiple profiles may also be appropriate if the placement site is more than 50 meters long), total fill area (SF) and volume (CY), fill area and volume below the HTL, and delineation of dunes, banks, existing beach vegetation, and contours. Sediment sample analysis for beach should typically consist of standard grain size analysis with results presented in graphical form using the Unified Soils and Wentworth Classification systems.
  - For upland sites, provide a vicinity map in the plan set. If immediately adjacent to wetlands, provide plan with wetland delineation.
  - For open-water sites, provide a vicinity map.

**Plans for Section 404 projects should include:**

- Limits of wetlands (label: wetland boundary) and waterways (labels: OHW or HTL) on all views.
- Area (SF) of each fill area in waters and wetlands. State if fill is permanent or temporary.
- Volume (CY) and area (SF) for each fill area below the OHW line.
- Show limits of temporary and permanent fill to be used in any wetlands or waterway, including construction access and work areas, cofferdams, bedding, and backfill.
- Show the total plan of development, including the proposed use of upland and wetland areas.
- The 100, 500-year and regulatory floodway boundaries as shown on the community’s current National Flood Insurance Program maps, if applicable.

- Datum in plan and elevation views.
  - Standard Coordinate Systems – Grid lines or marginal hash marks should be based on a standard coordinate system, i.e. Geographic (at least to the nearest tenth of a second), State Plane or UTM. Indicate on the plan legend the coordinate system (and zone for UTM), units (English or metric) and the corresponding geodetic datum, either NAD27 or NAD83.
  - Vertical Datum – On each plan show the NGVD 1929 equivalent for the project’s vertical datum with the vertical units.
  - Don’t use local datum.
- Show the disposal site of the excess excavated material. If necessary, submit an additional sheet showing the location of the proposed disposal site. Provide quantity of excess excavated material.
- Show the existing and proposed ground contours or spot elevations on all views.
- Wetland delineation report showing the delineation was performed in conformance with the 1987 Corps wetlands delineation manual or the Massachusetts DEP three-parameter delineation.
- Provide any known vernal pool information. How do you know an area is or isn’t a vernal pool?
- Show and label the mitigation areas. Clearly show boundaries and provide SF of each area.
- Copies of sections of National Wetland Inventory Maps, marked to show locations and site boundaries. Please be sure to ID the quad name and year.
- Copies of County Soil Surveys, marked to show locations and site boundaries. Please be sure to ID the County, Sheet Number, and year.

**III. OTHER INFORMATION:**

- Please submit a copy of any environmental assessments or impact statements done by or for any local, state, or federal agencies.

**40 CFR 230 Guidelines for Specification of Disposal Sites for Dredged or Fill Material**

- Waterways and wetlands are vital areas that constitute productive and valuable public resource, the unnecessary alteration or destruction of which is to be discouraged. Therefore, federal regulations state that no discharges of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.
- An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
- Where the activity associated with a discharge that is proposed for a special aquatic site (as defined in at 40 CFR 230, Subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not “water dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

**Flood Zone**

- The following questions pertain to your project's potential impact on flooding. Where appropriate, the information should also be included on your plan.
  - Is the project located in a flood zone designated on the current Flood Insurance Rate Map or Flood Hazard Boundary Map?
    - What Zone?
    - What is the 100-year flood elevation?
    - Date of Map?
  - Is the project partially or wholly located in the floodway on the Flood Boundary & Floodway Map?
  - If the project is located in the floodway, how much does the project increase the 100-year frequency flood level?
  - How much effective floodplain storage will be removed from the 100-year floodplain by fill?

## Commonly Used Terms

**Section 10 of the Rivers and Harbors Act of 1899** [33 U.S.C. 403] authorizes the Corps to regulate certain structures or work in or affecting navigable waters of the United States.

**Section 404 of the Clean Water Act** [33 U.S.C 1344] authorizes the Corps to regulate the discharge of dredged or fill material into waters of the United States.

**Navigable Waters of the United States** [33 CFR 329.4] are those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water line and/or those waters that are presently used, or have been used in the past or may be susceptible to use for interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity. These are waters that are navigable in the traditional sense. Permits are required in these waters pursuant to Section 10 of the Rivers and Harbors Act. This term should not be confused with the term waters of the United States (below).

**Waters of the United States** [33 CFR 328.3] is a broader term than navigable waters of the United States defined above. This term includes navigable waters and all their tributaries, adjacent wetlands and other waters or wetlands where degradation or destruction could affect interstate or foreign commerce. Permits are required for the discharge of dredged or fill material in these waters pursuant to Section 404 of the Clean Water Act.

**High Tide Line (HTL)** [33 CFR 328.3(d)] is a line or mark left upon tidal flats, beaches, or along shore objects that indicates the intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined by tidal gages, physical markings or characteristics, vegetation lines, a more or less continuous deposit of fine shell or debris on the foreshore or berm, or other suitable means such as a line of oil or scum along the shore that delineate the general height reached by a rising tide. The term includes spring high tides and other high tides that occur with periodic frequency, but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm. *We frequently receive questions regarding the HTL. We often verify the HTL using the current year's NOAA Tide Tables, which provides the elevation of the highest predicted tide in a given year. This elevation can be used to draw the HTL on the project plans. Note: the NOAA Tide Tables reference a MLLW datum.*

**Mean High Water (MHW) Line**, [33 CFR 329.12(a)(2)] with respect to ocean and coastal waters, is the line on the shore established by the average of all high tides. It is established by survey based on available tidal data (preferably averaged over a period of 18.6 years because of the variations in tide). In the absence of such data, less precise methods to determine the mean high water mark are used, such as physical markings, lines of vegetation or comparison of the area in question with an area having similar physical characteristics for which tidal data are readily available.

**Ordinary High Water (OHW) Line**, [33 CFR 328.3(d)] with respect to non-tidal waters, is the line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.