



U.S. Coast
Guard Bridge
Program
Information
Session



Key Messages



Check with us

- Check with the Coast Guard to determine if a permit is required for your project if over a navigable waterway

Meet with us

- Meet early with the Coast Guard to discuss application requirements

Develop a timeline

- Develop a project timeline that incorporates permits, reviews and authorizations from all applicable agencies

Use the BPAG

- Use the Bridge Permit Application Guide, Application Template and plan sheet checklist on our website

Complete the NIR

- Complete the Navigation Impact Report prior to NEPA scoping so required clearances can be provided and inform alternatives

Communicate with us

- Communicate often with your District Bridge Office

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What are some of the big-ticket items we'd like you to remember?

First, if you're looking at a project that involves a bridge, check with your local District Bridge Office to determine if you're going to need a permit. Don't take anything for granted – you may be dealing with a waterway that's far inland and may not appear to be navigable but looks can be deceiving! Let the Coast Guard figure that one out for you!

Set up a meeting with the local Coast Guard District Bridge Office early in the process so you can get some solid clarification on our application process and requirements. It's also helpful to get to know these folks because they'll be intimately involved right from the start. It's good to be able to match faces to names – and that applies for us as well!

We've found that it's also helpful to get a project timeline going. This will facilitate communications with not only the Coast Guard, but other permitting agencies as well, allowing everybody to see the big picture and get an accurate idea as to where the project stands. The Project Officer from the District Bridge Office assigned to shepherd your project through the permitting process will be able to help you with this.

On our public website we've uploaded our Bridge Permit Application Guide, which literally walks you through the permit process step by step along with an application template and a checklist

for plan sheets. If you have questions, then reach out to us and we can address your concerns.

Keep in mind that your project may, important word is "may," require preparation of a Navigation Impact Report which should describe the variety of vessel traffic using the waterway within the vicinity of the bridge project in question and what sort of navigational clearances will be required for these same vessels to safely proceed through the opening of the proposed bridge. This should be done either prior to or in the beginning stages of your NEPA analysis because the information gleaned from the Navigation Impact Report will inform our Preliminary Navigation Clearance Determination, which in turn will inform the various alternative designs that the Coast Guard will find acceptable.

And above all, talk. Check in with us frequently. The more issues we can address on the front end means fewer problems we'll have to take care of on the back end. Robust communication is the key.



First, how is the Coast Guard organized? Well, we're geographically divided into two distinct areas, the Atlantic Area and Pacific Area. Both of these areas have nine subordinate district commands. Atlantic Area is comprised of five districts while Pacific Area has the remaining four. Of note, our 8th District is a little unusual; given its sheer size, it has been subdivided with two separate District Bridge Offices, one in New Orleans the other in St. Louis. The insert on the lower right-hand corner illustrates the dividing line.

The Coast Guard bridge program itself employs about 53 staff. Coast Guard Headquarters in DC provides programmatic guidance to field staff. That said, we also have our fingers in the permitting process. Any permit requiring either an Environmental Assessment or an Environmental Impact Statement will ultimately be signed and issued at the HQ level.

The workhorse of the bridge program is the District Bridge Office, wherein the bulk of the day-to-day work when it comes to permits and regulatory matters is performed. You'll be coordinating with them if you're looking for a permit or seeking to modify an operating regulation for a movable bridge.

Bridge Program Authorities

- Jurisdiction over 20,000 bridges across navigable waters established by:
 - Bridge Act of 1894, 33 U.S.C. § 499
 - Section 9 of the Rivers and Harbors Appropriations Act of March 3, 1899, as amended, 33 U.S.C. § 401
 - The Act of March 23, 1906, as amended, 33 U.S.C. § 491
 - The General Bridge Act of 1946, as amended, 33 U.S.C. § 525
 - The International Bridge Act of 1972, 33 U.S.C. § 535
- 33 CFR part 2.36
 - Territorial Seas of the United States
 - Internal waters of the United States subject to tidal influence
 - Non-tidal waters that have or could be used as highways for interstate or foreign commerce



The bridge program has jurisdiction over more than 20,000 bridges across navigable waters as established by the following Acts:

- Bridge Act of 1894
- Section 9 of the Rivers and Harbors Appropriations Act of March 3, 1899
- The Act of March 23, 1906
- The General Bridge Act of 1946
- and the International Bridge Act of 1972

And then there's 33 CFR Part 2.36. Reach out to the Coast Guard to determine if the waterway you're looking to build across is considered navigable. The Coast Guard, in accordance with this passage, considers navigable waters to include the territorial seas of the United States; internal waters of the United States subject to tidal influence; and/or non-tidal waters that have or could be used as highways for interstate or foreign commerce... or could be improved to do so at a reasonable cost.

Bridge Program Team Roles and Responsibilities

- Provides for the safe and reasonably unobstructed passage of vessels under bridges
- Conducts or oversees bridge permitting, drawbridge operations, construction monitoring, bridge lighting and alteration of unreasonably obstructive bridges



The Coast Guard Bridge Program is a component within the Marine Transportation Directorate, a larger overall team which advocates for maritime commerce. Accordingly, a bridge crossing any navigable water of the of the United States shall not obstruct the reasonable needs of navigation during any part of the lifecycle of that same bridge including rehabilitation, repair, maintenance and construction while facilitating other modes of transportation. The Coast Guard monitors bridges to ensure bridge lighting, temporary structures, clearance gauges, and bridge protective systems are also in compliance with applicable federal laws and policies. The Coast Guard is also responsible for permitting bridges, prescribing drawbridge operating schedules and managing the alteration of unreasonably obstructive bridges. For the purposes of this presentation though, we'll be primarily focusing on the permitting angle.

The Coast Guard Bridge Permit



BRIDGE PERMIT (4-20-1)

NOV 06 2020

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. § 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS the Secretary of Homeland Security has delegated the authority of Section 502(b) of that act to the Commandant, U.S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

AND WHEREAS before construction is commenced, the Commandant must approve the location and plans of any such bridge and may impose any specific conditions relating to the construction, maintenance and operation of the structure deemed necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the Commandant of the Coast Guard has further delegated to the District Commander, by Section 1.01-60(b) of Title 33, Code of Federal Regulations, authority to issue permits for the construction, reconstruction, or alteration of bridges across navigable waters of the United States;

AND WHEREAS the STATE OF NEW JERSEY has submitted for approval the location and plans of a bridge to be constructed across the Shrewsbury River between Rumson and Sea Bright, Monmouth County, New Jersey;

NOW THEREFORE, This is to certify that the location and plan sheets 1, 2, 3, 4, 5 (of 6) dated 25 July 2019 and plan sheet 6 (of 6) dated 21 September 2020 are hereby approved by the Commander, First Coast Guard District subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the District Commander.
2. The construction of falsework, pilings, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, First Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the

And here we have what most applicants hope to see when they approach the Coast Guard for a bridge they'd like to build. A Coast Guard Bridge Permit is the official authorization to construct or modify a bridge that crosses a navigable waterway. Any individual, partnership, corporation, or local, state or federal legislative body planning to construct or modify a bridge must apply for a bridge permit. This includes all temporary bridges used for construction access or as a means to detour traffic around the construction zone.

Most bridge repair jobs are not going to require permit action on the part of the Coast Guard, but that doesn't necessarily hold true if the proposed repair will impact the previously approved navigation clearances or configuration of the bridge, in which case you may be staring down at a permit amendment. Just food for thought there.

Another scenario – if there's some kind of natural disaster impacting a bridge, the construction of a temporary bridge can be authorized without a Coast Guard Bridge Permit as a purely emergency measure. The important word to remember is "temporary" and such a measure will last only as long as it takes to restore the existing bridge to full operation. If it's decided that the bridge must be replaced, however, then we're talking a bridge permit. Finally, if you've it's eventually decided

to retain the structure for whatever reason then a permit from the Coast Guard will be required.

Bridge Permitting Process: Responsibilities of the Applicant

- Meet early with the USCG to determine if your bridge project requires a permit
- Request the USCG walk you through application requirements documented in the BPAG
- Submit a Project Initiation Request (PIR)
- If necessary, prepare and submit a Navigation Impact Report (NIR)
- Await the Preliminary Navigation Clearance Determination (PNCD) from the USCG



What do we expect from you if you're looking for a bridge permit? First things first, grab a hold of us and start a conversation. Give us a good idea of what you're proposing and that'll allow us to look at the waterway and determine if you even need a permit to proceed. Second, presuming you're going to need a permit, ask the Coast Guard Project Manager assigned to shepherd your endeavor through the process to walk you through the Bridge Permit Application Guide. If this thing you want to build will require a permit after all, you'll need to gin up a project initiation request which is discussed in further detail in the BPAG. Once we have that letter, we're off to the races.

Your Coast Guard Project Manager will let you know if you need to prepare a Navigation Impact Report. This should be done early in the process, even prior to NEPA scoping. If that's the case, he or she will work with you and let you know what we'll be looking for in the NIR. We'll use data gleaned from the NIR to inform our preparation of the Preliminary Navigation Clearance Determination. The PNCD is important insofar as it will definitively state the minimum horizontal and vertical clearances the Coast Guard will tolerate so as not to impede maritime traffic utilizing the waterway. The PNCD should be used in order to inform NEPA alternatives when you're looking to nail down your preferred alternative.

Bridge Permitting Process:

Responsibilities of the Applicant - continued

- Submit application and supporting materials to the USCG
- Ensure enough material has been provided to the USCG to publish a Public Notice
- Ensure that all documents provided to the USCG conform to BPAG requirements
- Await final permit decision



When you feel you've accumulated enough information to do so, it'll be time to send a Bridge Permit Application our way. A couple of caveats. We're going to consider this to be the "initial application" which may not necessarily have everything we need to issue a permit, but has enough meat on the conceptual bones that we can get the process started. We'll review the permit application and within 30 days or so you'll get a letter from us noting one of two things, either that it's complete or incomplete. More often than not, particularly this early in the process, we'll tell you that it's incomplete, but we'll also furnish details regarding what pieces happen to be missing. Some of this stuff you likely won't be able to nail down until later in the process anyway, for example the Water Quality Certification. That doesn't mean the process stops of course, things will keep trucking along as you gather additional items necessary to plug holes and keep forward momentum going.

Now, once we've got enough data on hand we can proceed to issuing a public notice. The PN is what it says, a notification that will allow the public at large the opportunity to sort of digest what is being proposed and to furnish feedback to the Coast Guard, all of which is taken into consideration when it comes time to render a permit decision. Generally, most comment periods run for about 30 days. Now, we'll generally want by this stage of the game to know what level of environmental review

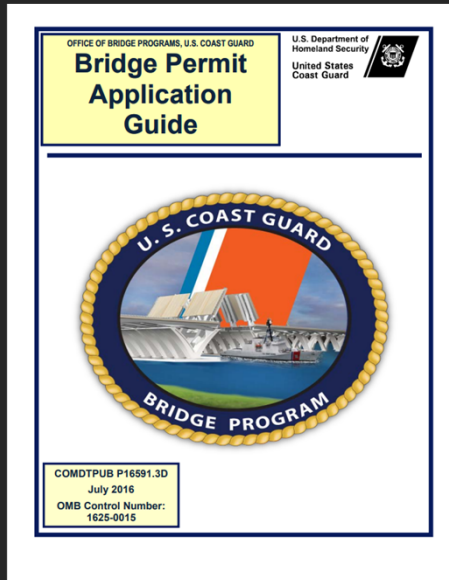
we're looking at as well as the Lead Federal Agency. We'll also want to know that a Water Quality Certification has at least been applied for. If we're not the Lead Federal Agency then the Coast Guard will be primarily interested in the effects the proposed bridge may have on waterway navigation and we'll defer any comments of an environmental nature to the lead. If we're running the entire show though, of course we'll be taking everything into account.

Finally you get that letter from the Coast Guard notifying you that the permit application is considered complete! It's at that point that the Coast Guard will begin the process of rendering its final decision. Within the space of about 90 days after you get that final bit of correspondence, you'll have our final permit determination. Again though, that application complete letter is contingent on us having everything in hand, in accordance to requirements noted in the Bridge Permit Application Guide including suitable plan sheets, NEPA documentation, the Water Quality Certification, Coastal Zone Management Act consistency determination as necessary, Section 106 consultations – the list goes on.

Bottom line, while it's not a convoluted process it can be complex, no doubt, so early and frequent communication is the best means by which you'll be able to get through this maze.



Let's talk some about Bridge Permit Application Guide, or as we affectionately refer to it, the BPAG.



Bridge Permit Application Guide



The BPAG which was designed from the ground up as a tool you can reference that kind of walks you through the permit application process. We have that guide in addition to a Word-based Bridge Permit Application template on our public facing website.

Navigation Impact Report (NIR)

- Required by the Coast Guard/DOT MOU for all DOT funded projects
- Developed by the applicant and serves to inform the USCG's navigation evaluation and preliminary/final navigational determination
- Examines historic, present and prospective navigation on the waterway
- Helps determine if proposed bridge may unreasonably obstruct navigation.



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Okay, let's talk about the Navigation Impact Report in a little more detail. First, it's required under the provisions of a Memorandum of Understanding between the Coast Guard and the Department of Transportation for those projects federally funded through DOT. Appendix A of the BPAG gives the reader a pretty good breakdown of what sort of data we're looking for in a solid Navigation Impact Report. Important note here – it's on you guys to develop the Navigation Impact Report. Yup, you can use a contractor if you'd like, but it's on you. If you run into a roadblock or have questions about it then by all means reach out to us, but you'll be the folks who'll be writing the thing. Kind of oversimplified, the Navigation Impact Report should document not only historic and present waterway usage up and downstream of the site of proposed construction, but projected usage as well, which yes, can be a little tricky sometimes. That means talking to Metropolitan Planning Organizations or other entities who may have designs on certain portions of waterfront and what they visualize in terms of future development. All that stuff must be taken into consideration. Again, the bottom line is we're looking for assurance that the proposed bridge will not unreasonably obstruct waterway navigation. The sooner we can get this thing in hand, the better. Your Navigation Impact Report will inform our Preliminary Navigation Clearance Determination which in turn will inform your selection of a preferred alternative during NEPA scoping.

Appendix A of the Bridge Program Application Guide

- ✓ Physical Characteristics of the waterway
- ✓ Vessel types (including air draft)
- ✓ Vessel traffic/activity at proposed bridge site
- ✓ Navigation channel information
- ✓ Existing commercial and recreational users
- ✓ Impacts to vessel owner ability to transit waterway if bridge is built
- ✓ Bridges upstream and downstream from proposed site



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What sort of stuff are we going to be looking for in a Navigation Impact Report? Well, painting with broad strokes here, but we'll be looking for you to provide:

- The physical characteristics of the waterway.
- Different vessel types and their air draft (or the clearance needed between the water and bridge bottom).
- Type and variety of vessel activity at the proposed bridge site.
- Information about the navigation channel itself.
- Existing commercial and recreational users.
- Potential impacts to vessel owner ability to transit waterway if bridge is built.
- A listing of bridges and other over-water structures upstream and downstream from proposed bridge site.

Now, if the project is going to be built across a federally maintained waterway, you're going to need to speak with the Corps of Engineers. Not only can they provide information that'll assist in the preparation of your Navigation Impact Report, but they may also need to be involved in the process since we're looking at a potential Section 408 analysis. Since I don't work for the Corps, I'm not going to step into their playground, but suffice it to say that it's an involved process as well. Again, the

earlier you get the ball rolling, the better.

Navigation Impact Report – Not Required

- The District Bridge Office (DBO) already has the required information for that waterway
- A bridge permit has recently been issued for a bridge in the vicinity of the proposed bridge project
- The proposed project is between two existing bridges with similar clearances
- Modification or replacement with similar clearances as the existing bridge with no waterway usage changes that warrant a NIR

Note: Only the DBO determines if a previous navigation evaluations are sufficient for current use



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There are those times when a Navigation Impact Report won't be required! The Coast Guard may already have plenty of waterway usage data on hand if we've been dealing with another, or even multiple project on the same waterway. Or we may be looking at a modification or replacement that doesn't alter the clearances already offered. Bottom line though, it'll be the Project Manager at the District Bridge Office who'll determine if you need to generate a Navigation Impact Report, so again, the earlier you get that discussion started, the better!

Preliminary Navigation Clearance Determination

- District Bridge Office (DBO) reviews the NIR, conducts a navigation evaluation, then issues a Preliminary Navigation Clearance Determination (PNCD)
- Defines the minimum clearances favorable to meet the reasonable needs of navigation
- Used by the applicant in the development of NEPA alternatives
- PNCD is valid for 3 years

The permit and approved plan sheets serve as the Final Navigation Clearance Determination



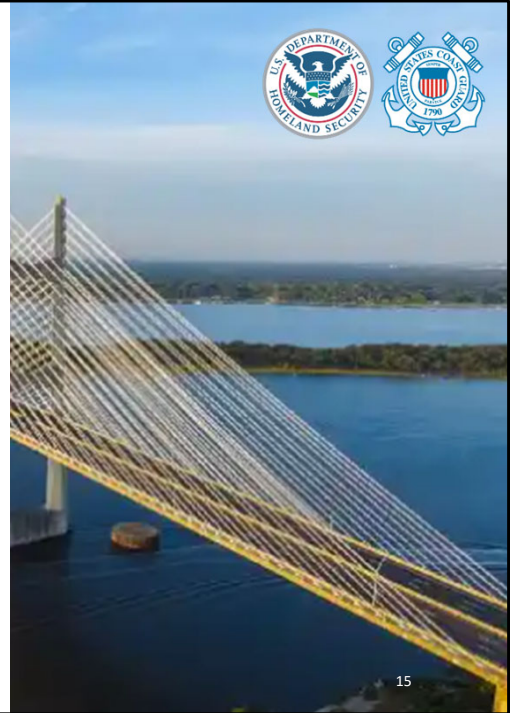
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Once we've had an opportunity to digest the NIR, we'll then start work on generating the PNCD. The PNCD will define the minimum navigation clearances the Coast Guard will tolerate that do not unreasonably affect waterway navigation and you guys will use that document to inform your NEPA alternatives. Important note here, the PNCD remains valid for three years. After that point it may be necessary to start the process once again, so something to keep in mind if you're dealing with a complex project with a weird and unpredictable revenue stream. Another note – the "Final Navigation Clearance Determination" consists of the issued permit and the plan sheets that'll bear a Coast Guard approval stamp.

Bridge Permit Application

Administrative Info:

- Application Date
- Applicant info: Agency, Primary POC, street address, telephone number, email address
- Consultant agency info
- Name of the proposed bridge(s)
- Name of waterway
- Number of miles above the mouth of the waterway (statute miles)
- City/town, county and state the bridge will be located



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And the Bridge Permit application itself. We'll be covering this in further detail this morning in a technical presentation that'll run you through the application line by line, but here are some of the administrative preliminaries we'll be asking for.

Bridge Permit Application



- Brief description of the project to include type of bridge(s) proposed
- Applicable drawbridge regulation, if any
- Date and number of plan sheets
- Project cost and source of funding
- Proposed timeline
- Other Federal actions
- Right to build
- Proposed and any temporary dimensions – vertical/horizontal clearance, length overall, out-to-out width
- Existing bridge info – name, type, location, dimensions, owner
- Construction methodology, maintenance of land traffic, removal extent and demolition method

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Again, some more of the info that we'll be requesting in the permit application, but again we'll be covering all of this very shortly.



Environmental Compliance

NEPA
National Environmental Policy Act

- What federal agency is lead for NEPA?
- Who are cooperating agencies?
- What is the level of NEPA documentation—EA/FONSI, or EIS/ROD? Or is it a CATEX?
- What are the date(s) of NEPA documentation and have there been modifications?

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Issuance of a Coast Guard Bridge Permit is a federal action and therefore, whether we like it or not, triggers NEPA. So, right from the get-go we're going to need some information to proceed. First things first, what agency is driving this bus? If it's a highway bridge, more likely than not we're looking at the Federal Highway Administration as the Lead Federal Agency. Railroad bridge, probably FRA or FTA. Pedestrian bridge, who knows? Bottom line, some agency must be calling the shots. And guess what? If no federal funding is involved, but a bridge permit is still required, the Coast Guard by default will assume the role as the Lead Federal Agency for NEPA review purposes, so lucky us! On top of identifying the Lead Federal Agency, it's also a good idea to determine who the rest of the players are. Always good to know who the cooperating agencies will be because as the process moves along, we'll run into a little thing known as "dependencies." By way of oversimplification, a dependency occurs when a pending action by one agency is dependent upon another action taken by a cooperating agency. Whether we like it or not, this sort of kabuki dance is part and parcel of the picture and it's important. Of course, it might be helpful to know what level of environmental review we're looking at. The more complex or large the project, the more important early engagement is, and it would be valuable to develop a Coordinated Project Plan, which we'll talk about in a bit.



Clean Water Act

Section 401 –

- Provide the Water Quality Certificate and related documentation
- If a modification, confirm the WQC is still applicable

Section 404 –

- Any in-water work? Consult the regional USACE district and obtain a 404 permit or confirm one is not necessary

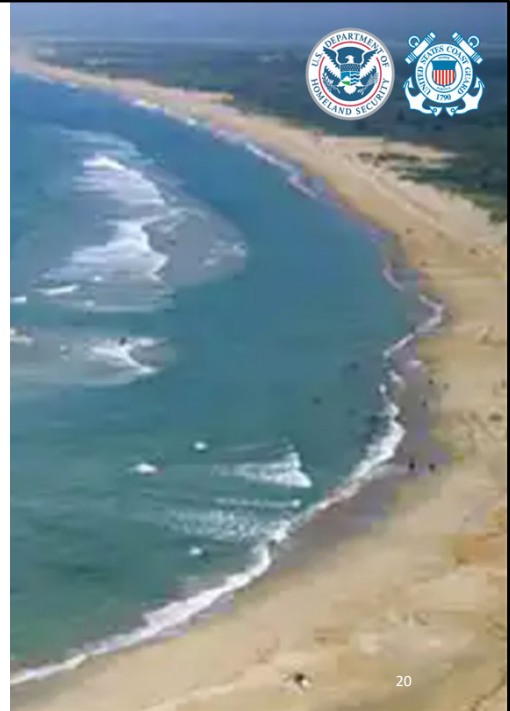
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So let's get a broad overview of some of the Environmental Control laws we're expected to adhere to no matter what, even if we're looking at a CATEX. First off, Section 401 of the Clean Water Act comes into play, so you'll need to furnish us a Water Quality Certification, a waiver or some sort of confirmation that a WQC isn't necessary, which is pretty rare. Bottom line is this, no WQC, no permit. Also, just to make things even more complicated, if you've got a bridge project that spans a waterway cutting between two states, then we may need two separate Water Quality Certifications. We do, however, deal with Corps Nationwide Permits, so if you're going that route, make sure it covers the scope of the proposed project, including both the date as well as the type of NWP in your application.

Which brings us to Section 404. Under Section 404 of the Clean Water Act, if construction of the bridge is going to involve in-water work, meaning piers, pier protection systems, falsework, etcetera along with potential dredging and/or discharge of fill into the waterway, then the applicant must obtain a permit from the Corps of Engineers. The Corps at their discretion may issue either an individual or nationwide 404 permit for the project.

Coastal Zone Management Act

- Is the bridge within an area with a Federally approved CZM plan?
- If not excluded from the state's plan, include the state's CZM concurrence with the applicant's consistency determination.
- Not required for every state.



Okay, the Coastal Zone Management Act. If you're going to build your bridge within an area within an area subject to the CZMA then you'll have to consult with the state in order to nail down a consistency certification.

Endangered Species Act

- The applicant conducts consultation with USFWS and NMFS and prepares a Biological Assessment if necessary
- Provide documentation including:
 - ✓ Informal and formal consultations
 - ✓ Biological Assessment (BA)
 - ✓ Biological Opinion (BO)



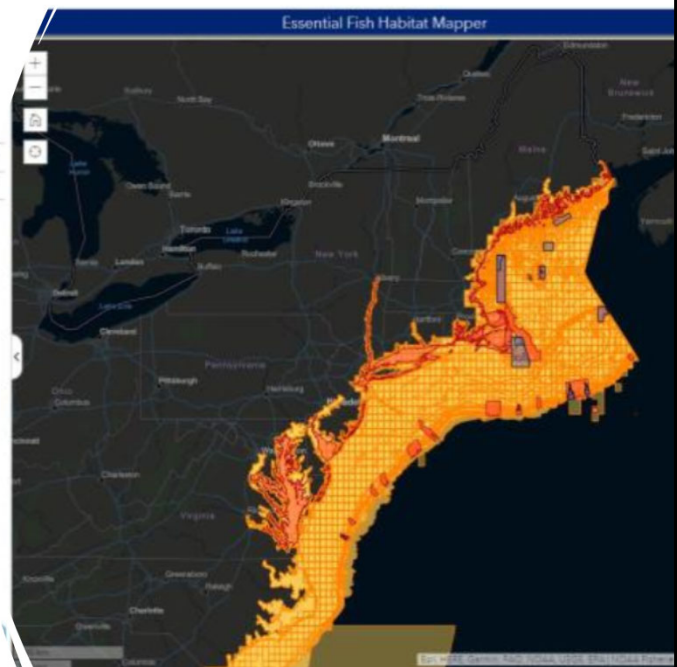
The Endangered Species Act. Often, any projects you have planned will likely intrude in some fashion into a critical habitat for a threatened species or somehow impact a species protected under the ESA. If that's the case, then you're going to need to furnish us documentation as noted in the slide with your permit application. Contingent on the type of species you happen to be talking about you'll be dealing with either the National Marine Fisheries Service or the Fish and Wildlife Service. If those guys concur that the bridge project isn't likely to adversely affect listed species or that a species isn't likely present, then no further consultation will be necessary. The trick is documentation, documentation, documentation. Make sure your bases are covered. A conversation that isn't documented never happened. Include that documentation as an enclosure to your permit application package.

If protected resources might be present in the proposed project area then you may be on the hook for a Biological Assessment. And yup, you should include that BA with your permit application. Better yet, if the project is likely to pose an adverse impact to any threatened or protected species in the are of proposed construction, then it'll be time for some formal consultation with NMFS and/or USFWS and they're going to have to generate a Biological Opinion. Again, talk to us and make sure that

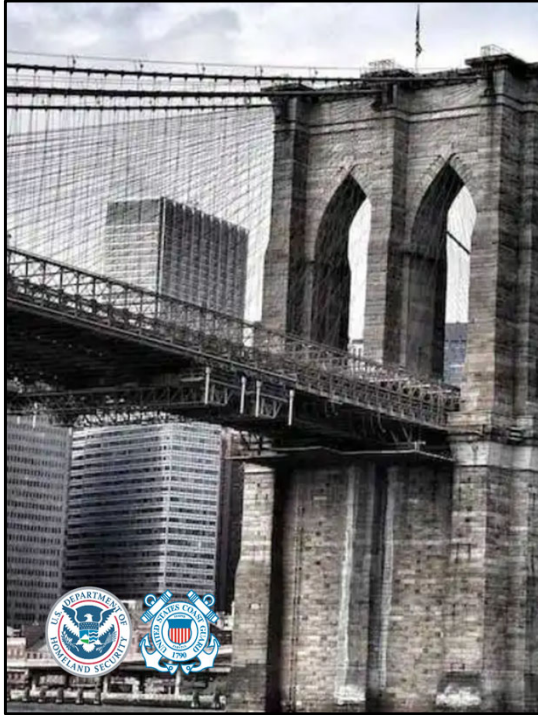
whatever documentation you have on hand is sent out way.

Magnuson-Stevens Fishery Conservation and Management Act

- Provide impacted species list, EFH assessment, relevant correspondence with NMFS, and any proposed mitigation
- NMFS often addresses EFH in ESA correspondence



Magnuson-Stevens! Long story short, if the bridge you're looking to build may affect a designated essential fish habitat, then we're going to need to review your list of impacted species, the EFH assessment, along with any discussions you've had with NMFS and proposed mitigation. If you have to gin up an assessment then include a list of the impacted species, offer an analysis of the effects the bridge project will bring to bear on the Essential Fish Habitat and summarize NMFS's point of view regarding those same effects as well as proposed mitigation. NMFS may very likely lump EFH into their Endangered Species Act analysis if for no other reason than to be a little more efficient, so just be ready for that.



Section 106 – National Historic Preservation Act

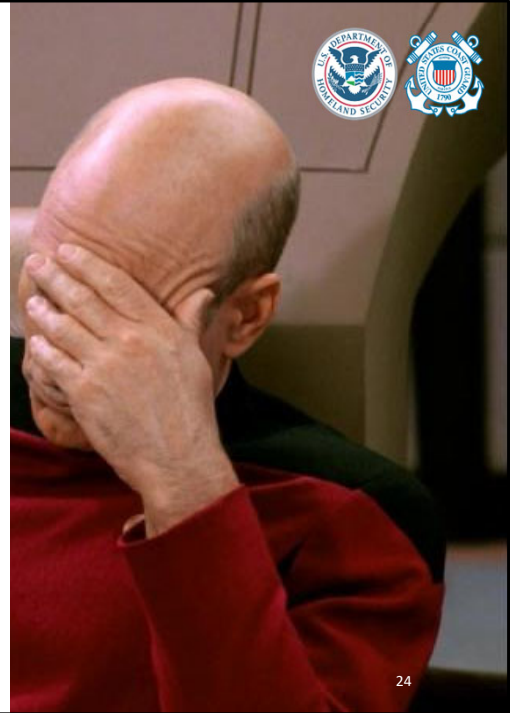
- All projects will require some form of Section 106 consultation
- Include correspondence with the State Historic Preservation Office and/or Tribal Historic Preservation Office(s) as applicable
- Include any Programmatic Agreement or Memorandum of Agreement

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Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to take into account the effects of any undertaking on sites listed in the National Register of Historic Places. This includes submerged abandoned shipwrecks. One thing worth noting – 106 isn't NEPA but is run concurrent with that process. The whole thing starts with a determination of the Area of Potential Effect followed by a sit-down with the State Historic Preservation Officer and, if necessary, the Tribal Historic Preservation Officer. Again, and I know I'm beating a dead horse at this point, but document everything and communicate with us. If a programmatic agreement or MOA comes out of the consultations, then we'll want to see it included as a part of your permit application.

Other Environmental Control Laws

- Floodplains Management Act
- Environmental Effects Abroad
- Coastal Barrier Resources Act
- Land and Water Conservation Fund Act
- National Marine Sanctuaries Act
- Environmental Effects Abroad
- Wild and Scenic Rivers
- Marine Protected Areas
- Fish and Wildlife Coordination Act
- Marine Mammal Protection Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Invasive Species
- Clean Air Act
- Environmental Justice
- CERCLA and RCRA



As I mentioned earlier, those were just a few examples of environmental control laws. These are just a few more that you'll have to discuss when you shoot us permit application. Now, that comes with the understanding that some may not necessarily apply to your project, but if that's the case, you'll have to note why in the application.

Requirements for plan sheets



33 CFR 115.50

- Title 33 – Navigation and Navigable waters
- Chapter I – Coast Guard, Department of Homeland Security
- Subchapter J – Bridges
- Part 115 – Bridge Locations and Clearances, Administrative Procedures
- 115.50 – Application for bridges

Coast Guard requirements for plan sheets may be found in 33 CFR 115.50. Now, let's make one thing clear, these are not, repeat not construction grade plan sheets we're looking for here. The plan sheets we want will serve as a physical depiction of the characteristics of the bridge approved under the auspices of the permit itself, namely the navigation clearances. Lucky for you, we provide a checklist on our website that you can use to make sure all of your bases are covered. Bottom line, follow that and you should be golden.

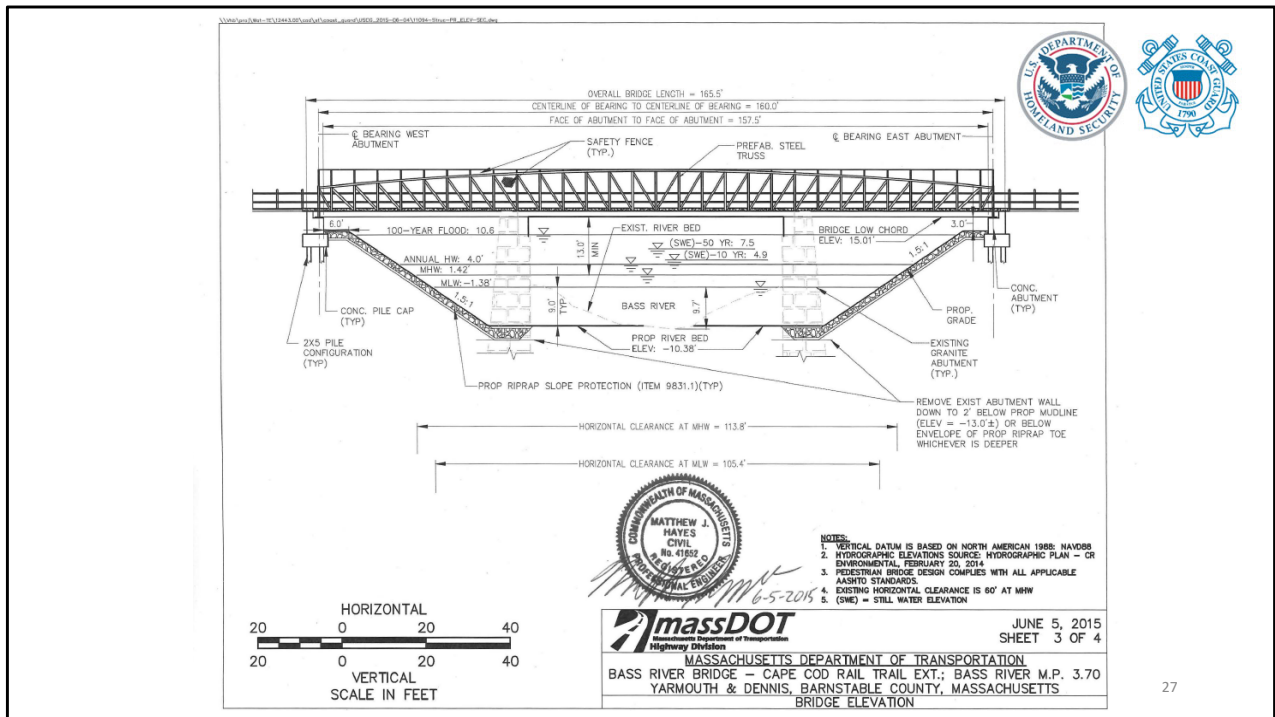
Plan Sheet Job Aid



Follow the Plan Sheet Job Aid Template!

- Use standard 8 ½" X 11" size
- Use as few plan sheets as possible to depict the project
- Depict the plans in an easily decipherable format – target audience is the general public
- All plan sheets must bear the date and signature of a Professional Engineer for final approval
- Submit navigation lighting plans separately

That checklist, referred to as the plan sheet job aid, is available as a fillable template for download from our bridge program website. Your Coast Guard contact should also be able to provide you a copy. Basically, what you see there in the slide covers it. The bottom line to remember is that when you're generating plan sheets for the Coast Guard, try to gear it for Joe Public, particularly because these plan sheets will go out with a Public Notice for the project. Just follow the template and keep in mind the KISS principle and you'll be okay.



Okay, here's sort of an example of what we're looking for. This is an elevation view of a pedestrian bridge over the Bass River in Massachusetts, right by Cape Cod. It depicts the navigational clearances afforded mariners at Mean High Water, Mean Low Water and the 100-year flood elevation. We also require a few other items such as noting the datum used as well as a graphic bar scale. On a plan view we'll want to see a north arrow. And of course, we've got the plan sheet stamped and signed by a Professional Engineer. Why do we want PE's stamping and signing these things if they're not construction grade? Bottom line, we want those navigational clearances verified by someone with the requisite background and professional qualifications.

What is a Complete Bridge Permit Application



All the documentation listed in the BPAG provided to the District Bridge Office, including, but not limited to:

- ✓ Completed application template
- ✓ Final NEPA documents
- ✓ Completed consultations (MMPA, Migratory Bird, ESA, CZMA, NHPA, etc.)
- ✓ USACE final permit(s)/permissions (Section 404, Section 10, 408)
- ✓ WQC or waiver issued by certifying authority
- ✓ Coast Guard approved plan sheets stamped and dated by a PE

Okay, so when is your application complete? We talked about the bulk of this stuff already, again at sort of the 30,000-foot level, but bottom line, when you've submitted all the materials noted in this slide, you'll get a letter from your assigned Project Manager informing you that the permit application is complete, and the Coast Guard is now on the clock. That means we should render a permit decision within 90 days. Now that doesn't necessarily mean that it'll take the full 90 days – if communication between the applicant and the Coast Guard has been robust from the get-go and potential snags have been headed off at the pass, then you could conceivably see the permit within an abbreviated timeframe.

Design Build



Once a project is considered for design-build, the Coast Guard should be contacted to be part of the planning/scoping and project development process

Coast Guard bridge permit requirements should be documented in the RFP

Changes to design and NEPA documentation should be shared with your local District Bridge Office as early as practicable

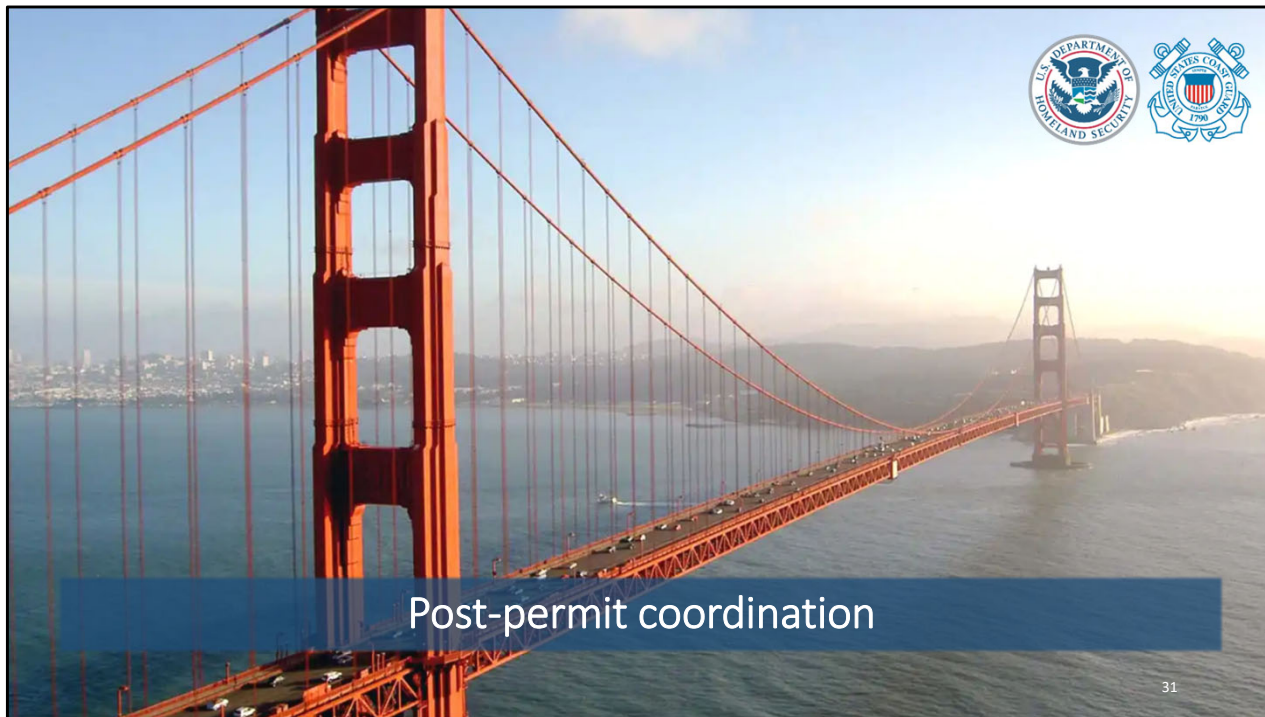
Frequent communication with your local DBO can mitigate permitting issues down the line

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And time to discuss the latest craze in the engineering universe, design-build. If you've got a project that's a DB candidate, then definitely start chatting up your assigned Project Manager at the District Bridge Office. We'll want to make sure that our permit and navigational clearance requirements are included in the RFP. Yup, they're going to have to be baked in from the start. The important thing to remember is that yes, design-build takes for granted that there may be design changes as the project progresses, but those navigational clearances are sacrosanct. If you want a change then you'll need to talk to us, but far better to solve issues on the front end and take every eventuality into account. Now, we understand that the design concept you're going to send our way may be only at the 30% to 40% stage and that's fine! The idea is to lock in those navigation clearances for the RFP. If you need to generate a Navigation Impact Report, then far better to get it done ASAP, way before you start thinking about the RFP. Wait on our Preliminary Navigation Clearance Determination and then we can go from there. Bottom line, keep the lines of communication open and ensure the Coast Guard is apprised, particularly if it appears as if the final design may impact the previously agreed upon navigation clearances.



I'd like to very briefly address the potential impacts associated with climate change and resultant sea-level rise. This is a concept the Coast Guard is still working on wrapping its organizational arms around. Neither the Department of Homeland Security nor the Coast Guard have any officially promulgated policies on how sea level rise should be accounted for, but we're working with other federal agencies such as NOAA and the Corps of Engineers in order to determine what predictive modeling sets may be viable for use and to ensure future consistency in our approaches. This is obviously going to play an increasingly important role in our future permitting decisions, particularly with respect to Navigation Impact Reports and Preliminary Navigation Clearance Determinations because we'll have to make up our mind if a proposed vertical clearance for a particular bridge will still suffice for vessel traffic fifty to a hundred years on down the line. We haven't baked any requirements into the process yet, but suffice it to say that once we do have authoritative, government-wide accepted data sets, we'll generate a tool applicants will be able to use to inform proposed navigational clearances.



So, what happens after you have your permit in hand?

Construction

- Routinely talk to the District Bridge Office regarding any possible waterway closures and/or restrictions needed to facilitate construction
- USCG routinely publishes Local Notices to Mariners
- USCG prescribes lights and other signals for temporary work barges, trestles, and/or platforms



While you're building your new bridge, the Coast Guard will actively monitor your progress. If you need to temporarily restrict vessel movements in order to facilitate construction, then you'll need to talk to the District Bridge Office who'll then coordinate with the local Captain of the Port. Our District staff also routinely publish Local Notice to Mariners that advise waterway users of what's going on within when it comes to bridge construction including the type of work, location, mile marker, the dates of construction and any waterway closures. Your contractors need to be talking to us frequently so we can keep everybody effectively in the loop.



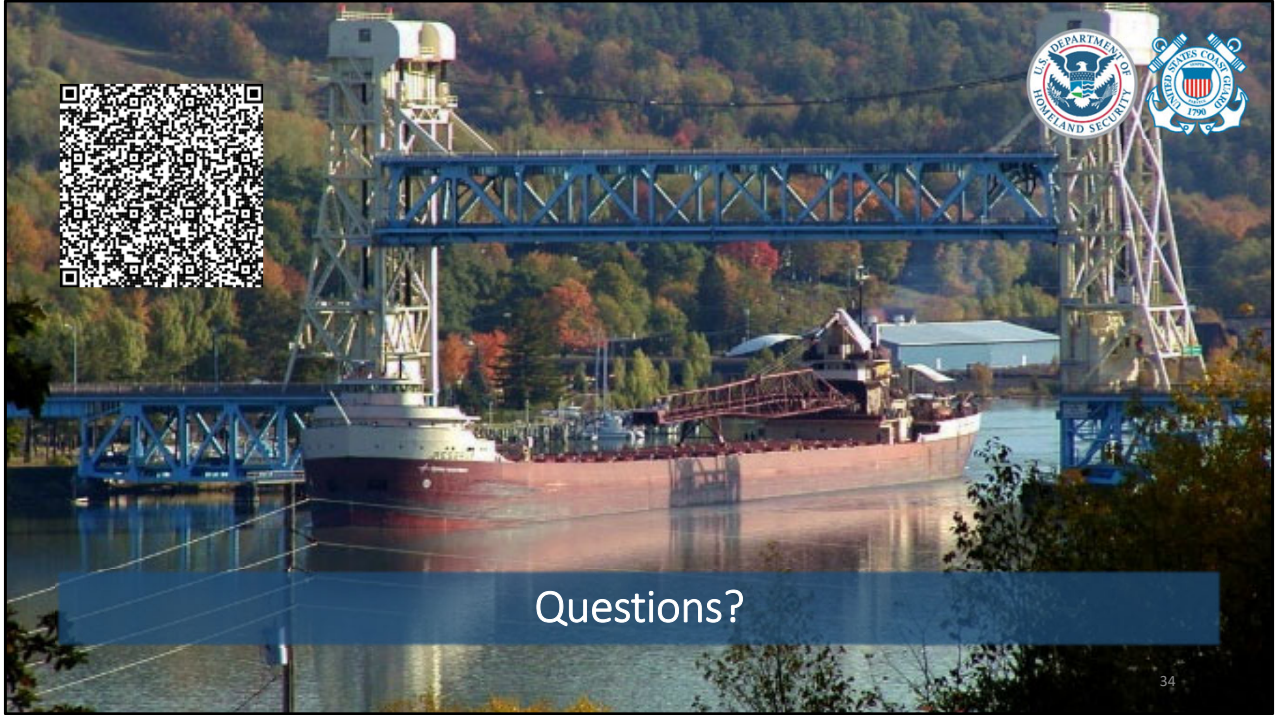
Bridge Lighting

- Coast Guard has authority to ensure that all bridges are properly marked and lighted to facilitate safe passage of vessels
- Decorative lighting cannot interfere or obstruct the display or visibility of navigation lighting

Bridge lights. We handle bridge lighting separately from actual bridge permits. Bottom line, the Coast Guard will determine if a bridge requires navigation lights in order to ensure the safety of mariners utilizing the waterway as well as protecting the bridge itself. Bridge lighting schemes aren't super complicated. As depicted in the photograph, red lights mark the edge of the navigation channel and green lights mark the centerline. Nothing overly complex.

You can find our standard lighting configurations for both fixed and movable bridges in 33 CFR part 118, but we also have available for your use a hand-dandy bridge lighting manual on our website, which I earlier gave you guys the QR code for. We may on occasion prescribe a special lighting configuration for a specific bridge that presents kind of unusual circumstances, but that's rare. Again, talk with the District Bridge Office and they'll get you pointed in the right direction.

Finally, a word about decorative lighting. If you go down that road, you have to talk to the Coast Guard in order to ensure that the lights you're going to rig do not interfere with or obstruct visibility of the navigation lights from the perspective of the mariner trying to safely proceed underneath the bridge.



Questions?