



# Coast Guard District Bridge Activities Overview

Office of Bridge Programs, USCG Headquarters

Greetings, as I said before my name is xxxxxxx from the Office of Bridge Programs at Coast Guard Headquarters. We talked a lot about permitting today; I am going to go over some of the other activities the District Bridge Offices handle. For some of you, you may be coordinating these activities even more than permits, so I imagine you may have some questions, right? We will try to address them as we move through these brief slides, now let's get into it.

## District Bridge Activities Overview



Permits

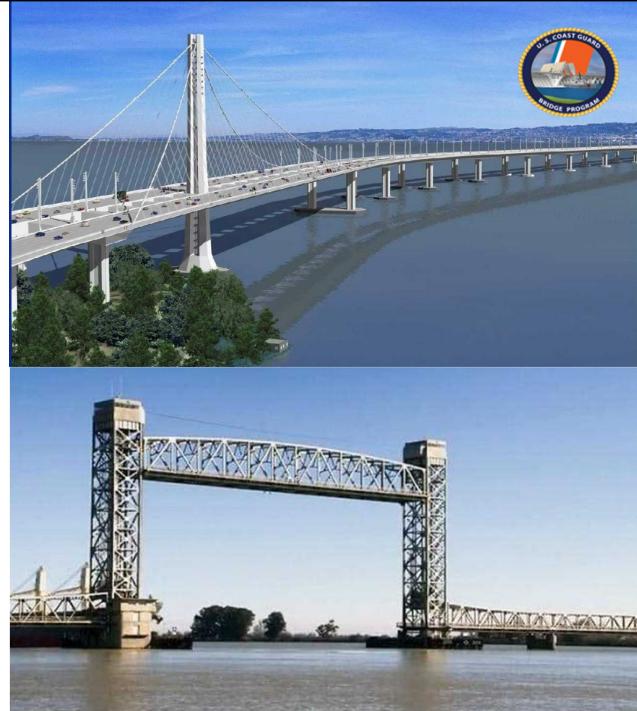
Construction Monitoring

Lighting

Regulations

- General/Temporary Deviations
- Interim/Temporary/Final Rules

Remote Operations



Having checked permits off our list, What other bridge activities are the district offices coordinating? The bridge office staff handles several different activities such as construction and maintenance of bridges, which may be post permit construction activities or may not coincide with a permitted bridge project, bridge **inspections, and the approval of** bridge navigational lighting, which may be required if there is nighttime traffic in the waterway. If drawbridges are a thing in your area, then you may deal with the bridge office when issues arise with the operation of a drawbridge such as opening and closure failures, maintenance and inspections, or if you want to request a change in the drawbridge operating schedule. Furthermore, with new technology these days, remote operations of drawbridge have become more prevalent on our waterways, the district office reviews and approves requests for remote operations of drawbridges. I'll summarize each one of these activities in the coming slides.

First let me ask, how many of you coordinate these types of activities with the Coast Guard? Let raise hands, if your online hit the raise hand button.

## Construction, Maintenance and Monitoring



- Permitted bridge construction, replacement, modification, or demolition
- Bridge Maintenance Work
  - Rehabilitation/Painting
- Major Concerns
  - Restricting vessel traffic, reducing navigational clearances

**Submit work plans as early as practicable to allow time for review and notice to mariners.**

Ok, so one of the major bridge activity Districts handle is bridge construction monitoring. Because the CG permits the building of bridges over navigable waters of the US, it is our job to monitor the construction, replacement, modification, maintenance, and inspections of the bridge throughout its life span. District offices do this by requiring notification from bridge owners for any of the for mentioned activities. Monitoring the construction and maintenance of a bridge requires the submission of a work plan by the bridge owner, which is reviewed, taking into consideration the navigational traffic in the waterway and any proposed restriction of navigational clearances or closures of the waterway.

When considering closures and restrictions of the navigational channel DBO considers the impact to the current waterway users. Are there commercial vessels that would be delayed or re-routed? Is the construction, maintenance, or inspection proposed during summer months when recreational traffic is at it's highest? Do vessels have an alternate channel or waterway for use? Will the work reduce the vertical or horizontal clearances of the bridge and impact the size of vessel able to transit underneath the bridge. How long will the closure, restriction or reduction last? Weeks, months, years? A waterway closure of 4-hours may not be a big issue, but a month might be more challenging to coordinate.

The work plan submitted by the bridge owner should have all these details and more...

be sure to submit work plans as early as practicable to allow time for review and notification to mariners. The earlier you can give us these details, the better.



## Bridge Work Plans

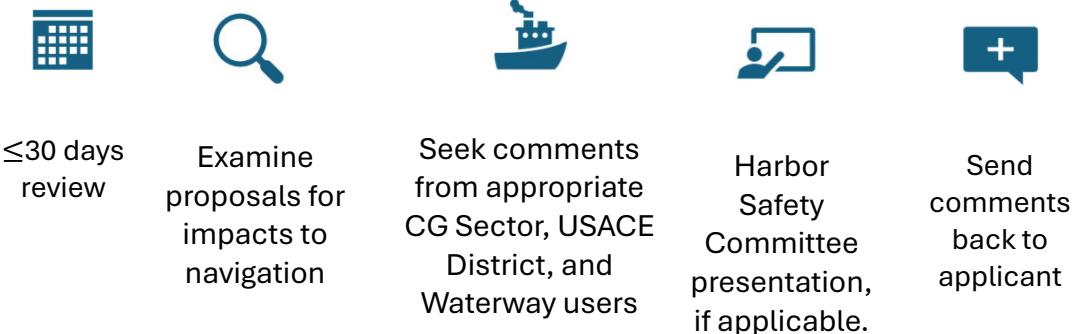
Plan submittals should include:

- Type/size of in-water equipment
- Mooring locations if equipment stays overnight/non-working hours
- Location for movement of equipment if an advance notice of arrival is required for in-water equipment to clear the channel
- Proposal for temporary reductions in clearances for length of time
- Drawings showing how equipment will be staged
- Requests for waterway closures and length of time
- Proposed temporary falsework, work pad, scaffolding, platforms, etc.
- Debris catch methods and channel sweep methods after demolition activities
- Night-time work or staged equipment and lighting
- Communication information for contractors/bridge owner (VHF Channel/Cell Phone)

The work plan should include types and sizes of in-river equipment, mooring locations if equipment will be staying in the water or on location overnight or during non-working hours, location for movement of equipment if an advance notice of arrival is required for in-water equipment to clear the channel, any temporary reductions in clearances and length of time for these reductions, drawings showing the staging of equipment in the waterway, any requests for closure with durations and dates, proposed falsework, methods of catching debris from demolition activities, work schedules including night-time operations and staging of equipment and lighting at night, and of course communication information for contractors in the field such as VHF working channel and cell phone number for foreman.

Districts have different ways to work through this process, be sure to contact your DBO for specific requirements. As I said before submit the work plan as early as you can to allow for review and for notices to reach the waterway users ahead of the activities.

## Work Plan Review



The review process for work plans involves some outreach and investigation. District's review time can vary depending on the complexity and timeline of the project but could take up to 30 days to complete the review and issue no objection letter. Often time is it quicker. As I said before we examine the work plan to see what sort of impacts the work will have to waterway users and part of that is reaching out to those users for feedback. Districts will engage with the USCG Sector Waterways Management staff because they are the experts on the waterways within their area of responsibility and know, in intimate detail, the waterway characteristics, bridges, and maritime traffic. Additionally, District will reach out to the appropriate USACE District to discuss any potential impacts or coordinate work, especially if the USACE has operations in the area such as dredging in designated federal navigation channels. The Sector can assist with reaching out to the local community and stakeholders that could be potentially impacted by the proposed work and typically have long standing relationships with port partners through waterway committees such as Harbor Safety Committees or Area Maritime Security Committees. Through these channels the Districts gather information, evaluate the proposed work, and work with the bridge owner to draft work plans that minimize the impact to waterway users and facilitate bridge work.

Some examples of how to mitigate impacts would be to limit the duration of the

closure, or allow times of opening the waterway to traffic, if feasible, limiting work to weekdays or daytime work only, another could be offering openings three times a day for vessel to pass, this allows transiting vessel to plan their trip ahead of time and avoid delays. Some maintenance work can be done from snooper trucks on top of the bridge, which impacts vertical clearances, but with notice most snooper trucks can move out of the way for vessel traffic.

## Bridge Construction/ Maintenance



### No Objection Letter will include

- Complete Project Information Record
- Lay out clearance minimums; closure times
- Require in-water equipment to be lit IAW CG rules
- Include any Mitigation requirements

### Local Notice to Mariners

### Broadcast Notice to Mariners

Once we have reviewed the work plan and figured out any mitigation needed, the District Office will send a no objection letter signed by the District Bridge Manager that includes details of the proposed construction, maintenance, inspection, the minimum clearances agreed upon (if a reduction is proposed) agreed upon closure schedule (if necessary) and any other requirements that may increase safety and facilitate vessel traffic. The no objection letter also requires any in-water equipment to have lighting for the safety of night-time navigation. The District Bridge office will draft a Local Notice to Mariners and/or Broadcast Notice to Mariner to provide project details to waterway users. Local Notice to Mariners are published and available on the CG NAVCEN website, Broadcast Notice to Mariners are broadcasted over the marine radio on VHF channel 16 which is sent out for the duration of the project.

# Construction/Maintenance/Inspection Monitoring



Stay connected with bridge owner on progress of work

Issue work extensions

Re-issuing BNM/LNM for project updates

Receiving and mitigating any issues reported by mariners

The DBO's job isn't over after we have looked at and had no objections to the proposal for bridge construction, modification, maintenance, or inspection. The DBO is responsible for staying connected with the bridge owner on the progress of work, issuing any work extension as needed, issuing LNM's with details of the project and any updates as the project progresses, and fielding calls/complaints from waterway users reporting issues or impacts and addressing these issues with the bridge owner.

It is important for the bridge owners to contact the DBO immediately if any unforeseen circumstances impact the ability of vessel to transit safely or if dates/times of closures or clearance reductions change so notice can be published immediately to the mariners to ensure safety of transiting vessel.

# Completion Report



DEPARTMENT OF HOMELAND SECURITY United States Coast Guard BRIDGES OVER NAVIGABLE WATERS OF THE UNITED STATES COMPLETION REPORT										APPROVED RCN-16590-2		
To: CG-BRG-2 COMMANDANT, Bridge Program			LOCATION: Indicate name of waterway, latitude and longitude to the nearest tenth of a minute, nearest town, route number if a highway bridge and local name of bridge.							INSTRUCTIONS		
BRIDGE NAME: Pier 400			TYPE OF BRIDGE: Abbreviate type of bridge: B - Bascule, F - Fixed ( except a suspension Bridge), P - Pontoon, TR - Trestle, VL - Vertical lift, SUS - Suspension, SW - Swing, RSP - Removable Span, R - Retractable, AT - Aerial Tram, CB - Conveyor Belt.							TYPE OF TRAFFIC: Abbreviate type of traffic: HWY - Highway, HWY-RR - Highway/Railroad, RR-Railroad, FB - Foot Bridge, PL - Pipeline, Pk - Pipeline Road. Indicate character of traffic or use by plain language in parentheses.		
<input type="checkbox"/> NEW CONSTRUCTION <input checked="" type="checkbox"/> MODIFICATION <input type="checkbox"/> RELOCATION <input type="checkbox"/> CONVERSION TO (FIXED) <input type="checkbox"/> REMOVAL <input type="checkbox"/> (DRAW) BRIDGE <input type="checkbox"/> OTHER (Specify in remarks)			TYPE OF TRAFFIC: Abbreviate type of traffic: HWY - Highway, HWY-RR - Highway/Railroad, RR-Railroad, FB - Foot Bridge, PL - Pipeline, Pk - Pipeline Road. Indicate character of traffic or use by plain language in parentheses.							VERTICAL CLEARANCE: Indicate the plane of reference used for measuring the vertical clearance, i.e. MHW, MLW, 2% flowline, NPE, etc. If additional space is required, use remarks column.		
DATE COMMENCED 06/20/2022			DATE COMPLETED 06/29/2023			MILE ID 100092726		HORIZONTAL CLEARANCE: Distance between structural members (piers, bents, fenders, protection cells, etc.) measured perpendicular to the axis of the waterway.			NOTE: If the Vertical or Horizontal clearances differ from those approved in the permit, note the difference in the remarks section.	
MILES ABOVE MOUTH	LOCATION		OWNER	TYPE OF BRIDGE	CLEARANCE		CLEAR-ANCE GAGES (Enter Yes or No)	PIER PLANS APPROVED AND PERMIT NUMBER	DATE OF TRAFFIC			
2.6	Los Angeles/ Long Beach Harbor Port of Los Angeles, California 33.7422 -118.2438		Port of Los Angeles 425 S. Palos Verdes St. San Pedro, CA 90733	F	30.9 FT. (2)	6.21 FT Above MHW(1)	No	No 1a-98-11 1/25/2021 1-98-11 12/15/1998	1a-98-11 1/25/2021	PR-RR		
REMARKS (1) Minimum vertical clearance above elevation 4.7 feet, mean high water, NGVD29. Low steel elevation of bridge: 10.91 feet. (2) Horizontal clearances measured normal to the centerline (axis) of the channel, between pier 6 of added rail bridge (modification) and pier 8 of the vehicle bridge. (3) Bridge lighting and other signals for this bridge are exempted (33 CFR Part 118.40(c)). (4) The modification to the bridge was not built IAW plans and location approved in P(1a-98-11). The as-built clearances are considered a minor deviation by the 11th Coast Guard District Bridge Office with concurrence from CG-BRG-2/Bridge Program Instruction COMDTINST 16590.5D, page 4-8, section 4.F.1.d.(viii)). No new or amended bridge permit required. (5) Enclosed as-built drawings dated 15 Nov 2023, sheets 1,2,3, and 4 of 4 and three pictures, 1a-98-11 spans the waterway.												
COPY: Army Corps of Engineers District (SPL) National Ocean Service Headquarters										Date 01/04/2024		
From Commander, ELEVENTH Coast Guard District			Signature Carl F. Haasner			Previous Edition is Obsolete			Page 1 of 1			
CG-4599 (3/11)												

Circling back to permits really quick...If your bridge activity is related to a permitting bridge activity such as construction of a new bridge or modification or replacement of an existing bridge and work has been completed, we'll need a completion report. We've got, on our website, a form known as a CG-4599 available for download as a fillable PDF. Here you see one that has been completed for a bridge project in our 11<sup>th</sup> District out in Long Beach, California. The 4599 is important insofar as it definitively spells out the horizontal and vertical clearances associated with the bridge. In other words, the Final Navigation Clearance Determination. Copies of this completed form will be forwarded by the Coast Guard to both the Army Corps of Engineers as well as NOAA so that agency may accurately update navigation charts. In addition to the form itself, we'll also need "as built" drawings of the bridge, again following the plan sheet protocol we covered earlier. If you have any questions, then reach out to your project manager at the Coast Guard District Bridge Office and he or she will be able to walk you through the process.

## Bridge Lighting - 33 CFR 118



- Owners are required to construct and maintain navigational lighting on bridges when lighting is required by the District Commander
- Approval must be given prior to the start of construction. Review of plans will be completed in 14 days
- Requirements for having bridge lighting can change if local conditions warrant the addition of bridge lighting or the modification of existing bridge lighting
- The District Commander may exempt bridges over waterways with no significant nighttime navigation from the lighting or other signal requirements in this part
- Plan sheets must be submitted to the District Office for approval and include:
  - ✓ Plan and elevation of the structure showing lights and signals proposed
  - ✓ Small scale vicinity chart showing proposed bridge and all other bridges within 1,000 feet above or below the proposed bridge

The lighting regulations can be found in 33 Code of Federal Regulations 118. Bridge owners are responsible for having lighting on the bridge when so required by the District Commander. For new, replacement, or modification of bridges which require a permit, lighting plan details will typically be explained to you by the district office during the permitting process. Please note that lighting plans are a separate plan and should not be included in the plans used to obtain a permit.

Sometimes modification or addition of lighting is done outside the permitting process for example during a maintenance/repair of bridges, initiated by the bridge owner, or if the nature of the waterway traffic changes at nighttime and lighting is deemed necessary by the District Commander. Conversely, the district command can exempt bridge with no significant nighttime traffic from having navigational lighting.

The district will review lighting plans within 14 days of submission and respond with any changes that may be necessary. Plans should include a plan and elevation view of the structure and lighting as well as a small vicinity map showing the bridge and any other bridges within 1,000 feet. Why, you ask? Because bridges with navigational lighting, that sit close to each other in the waterway, need to be looked at a little further to ensure the lighting from one bridge don't interfere or contradict the other. Approval for the lighting plan must be given prior to beginning construction.

The Bridge Program has a “handy dandy” bridge lighting guide to assist you in drafting the lighting plans. The bridge lighting guide can be found at the USCG Office of Bridge program website under Bridge Lighting, there should be a link being dropped in the chat for those of you online. Those of you not online a simple google search for Coast Guard Bridges will suffice, with our website being the first to pop up. Take a look at the website and click on Bridge Lighting Manual.

## Standard Fixed Lighting

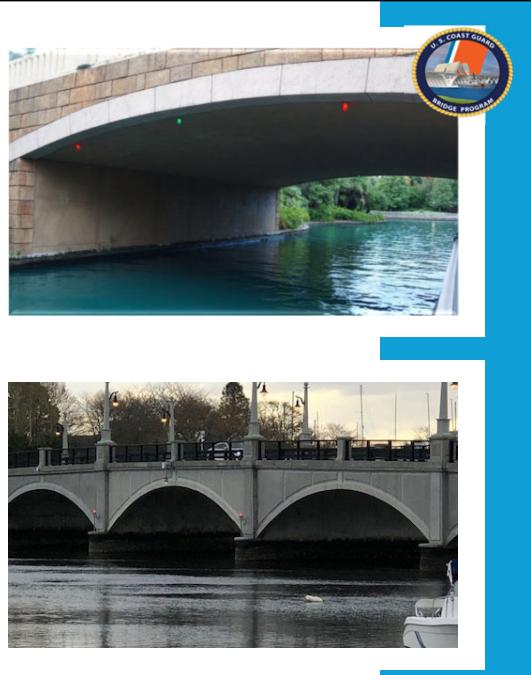
Each span will be marked by a range of two green lights, and each margin of each navigable channel will be marked by a red light

Green lights marking center of channel shall each show through a horizontal arc of 360 °

Red light marking channel boundaries shall show through a horizontal arc of 180°

Three white lights arranged in a vertical line directly above each green light identify the main channel span when there are multiple navigational spans. Each white light shall show through a horizontal arc of 180°.

Note: Until such time that major repairs to or replacements of existing fixed span navigation lights colored green are made, it is permitted that only one of these lights marking the centerline of the same channel under a span shall be visible to an approaching vessel. When major repairs to or replacement of such existing green lights are made, they shall conform with this paragraph.



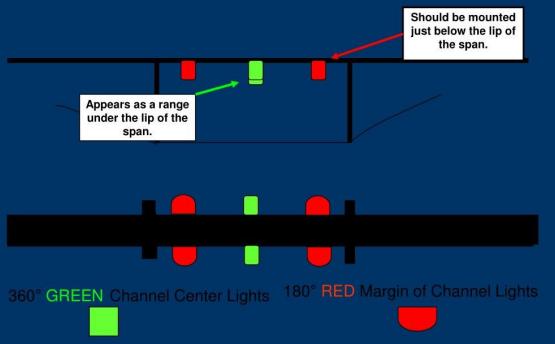
A typical fixed bridge lighting scheme includes two green lights marking the center of the navigational channel and red lights on either side of the navigational channel marking the channel boundaries. The green lights must be visible through a horizontal arc of 360 degrees and red lights must show through a horizontal arc of 180 degrees. Approaching vessels should be able to see these red and green lights when approaching either side of the bridge. If the channel is marked by piers the red lights can be mounted to the piers, if the channel is narrower than the piers, say a 200-foot navigational channel in between piers with a horizontal clearance of 300-feet, then the 200-feet channel must be marked with the red navigational lights.

As a note, coming straight from the regulation, many older existing bridges only provide one green light marking the center of the navigational channel, this is permitted until such time that major repairs or replacements of existing fixed span navigational green lights are made. When major repairs or replacements for these green lights are required, they must be updated to conform with this paragraph i.e. requiring two green lighting marking the center of the channel.

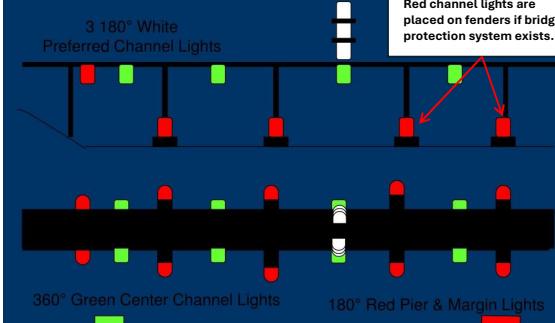
# Standard Fixed Bridge Lighting Plan



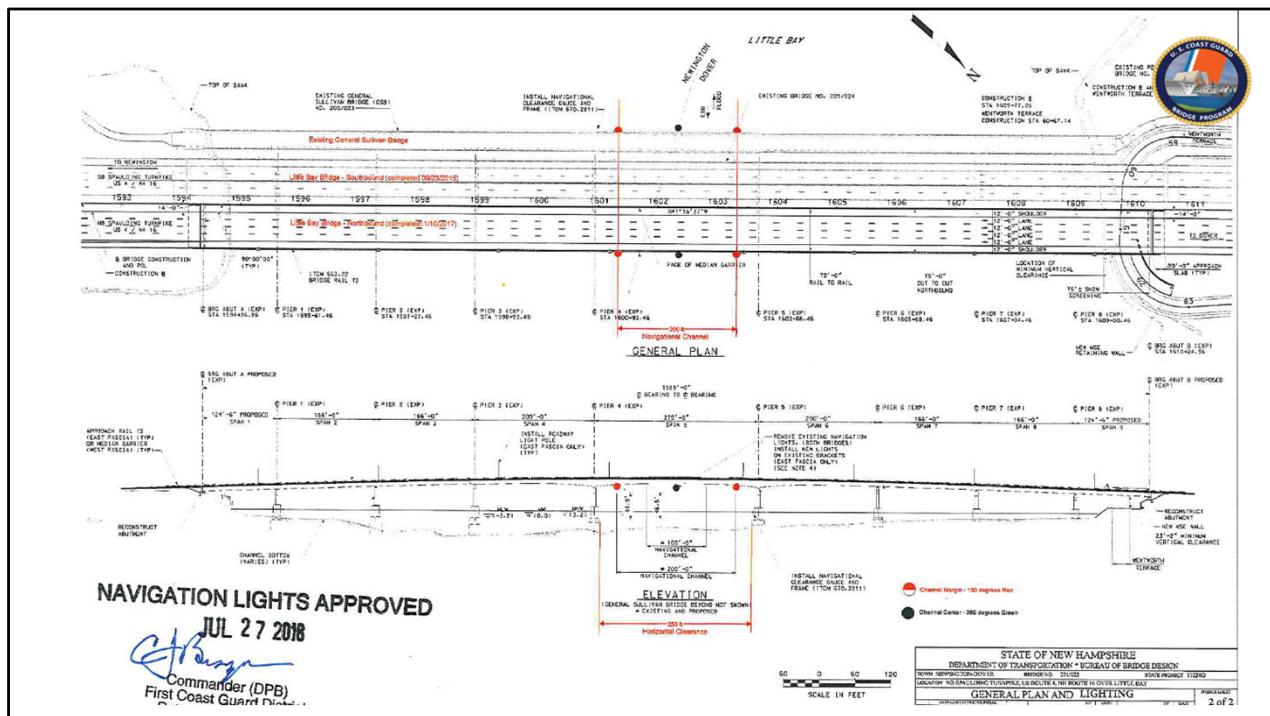
## SINGLE SPAN FIXED BRIDGE



## MULTIPLE SPAN FIXED BRIDGE



As you can see here in the two examples the single span bridge example shows the two red channel boundaries light with the green center navigational span. The multiple navigational span example shows the lighting for each navigational span and the preferred channel is identified with the three white lights. This requirement for three white lights marking the preferred channel on multi channel bridge come from 33 CFR 118.



This is an example of an approved lighting plan submitted for General Sullivan Bridge across Little Bay, in New Hampshire, which has one single navigational span. The details here show the two red lights marking the channel boundaries and the 180 arc of visibility shown by the half circle and the center of the navigational span marked with a green light showing the 360-degree light with the full circle.

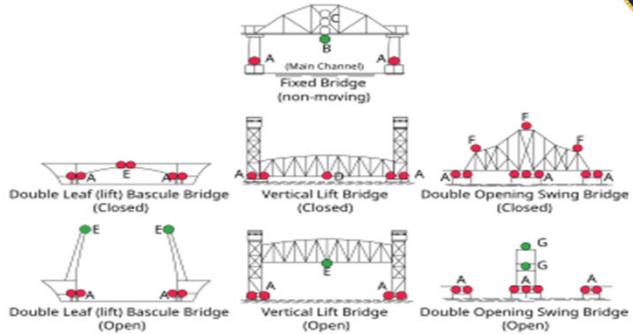


- Movable Bridge lighting scheme can vary depending on the type of movable bridge.
- Each bridge lighting plan should meet the specific requirements in 33 CFR 118 for the type of movable bridge.
  - ✓ Swing
  - ✓ Lift
  - ✓ Bascule

Drawbridge or Moveable bridges lighting requirements are address in 33 CFR 118 and vary depending on if the bridge is a single-opening drawbridge, bascule, vertical lift, or swing bridge. Because these bridges require different navigational lighting when the bridge are in the open position vs. closed position it's important to familiarize yourself with the requirements and discuss your lighting plans with the district office. You can find examples of different lighting scheme for these types of bridges in the Bridge Lighting Guide. As stated before, the lighting plan review and approval process is necessary to protect the mariners and the bridge infrastructure and reduces the likelihood of a bridge allision by transiting vessels.

## Drawbridge Lighting Examples

### United States Coast Guard Bridge Lighting Systems



#### Bridge Lamp Meaning

- A -Piers and supports.
- B -Centerline of navigable channel.
- C -Three white lights stacked vertically, show preferred route, if there is more than one navigable channel.
- D -Used on some lift bridges to indicate the lift is closed.
- E -Lift is open to vessel traffic.
- F -Double-opening swing bridges show three red lights when closed.
- G -Double-opening swing bridges show two green lights when open.

Each type of movable bridge has the basic concept of green and red lights with variations which identify to the mariner when the bridge is in the open vs. closed position.

The bascule bridge here shows all red lights, two marking each channel boundary and two at the center of the main navigational span when in the closed position. When the bridge is in the open position, the two red lights, once on each end of the open bridge turn green indicating the bridge is in the open position.

The vertical lift bridge shows all red lights, two marking each channel boundary and two lights (one green and one red) at the center of the navigational span. When the bridge lifts to its open position the red center span light switches to green.

The swing bridge typically has two passage lanes, but not always. These ones can get a little complicated depending on the design and channel depth/availability. The swing bridge shows two green light when open and three red lights when closed.

Unique situations do arise that may require deviation from the CFR, work with the district bridge offices to have these lighting schemes approved.

## Decorative Lighting Plans

- Currently the bridge regulations in 33 CFR 114 – 118 does not include any information pertaining to the operation of decorative lighting on bridges.
- 118.10 Interference or obstruction - No person shall obstruct or interfere with any lights or signals maintained in accordance with the regulations prescribed in this part.
- District Commander shall be notified 14 days prior to the scheduled date of activation in order to notify the waterway users through the LNM's, BNM's or any other appropriate method necessary.
- The decorative lights shall be extinguished when directed by the Coast Guard if at any time there is a concern for navigational safety. The lights shall remain extinguished until the issue is corrected to the satisfaction of the District Commander.



Decorative lighting is becoming more popular, but regulations haven't made it to the CFR yet. Decorative lighting may present with some migratory bird challenges, "don't go towards the light," but our main concern is the interference of navigational lighting. The lighting plans should be provided to the CG District office 14 days prior to the scheduled date of activation, with a general overview of the lighting scheme, so a preliminary determination can be made on the interference with navigational lighting or impact on the navigation opening. The plans must clearly show that the navigation opening is not impaired by the decorative lighting or any of its appurtenances (ah-purr-tin-ances). If you are looking to add decorative lighting to a bridge, work with the District office to ensure the plan does not interfere with the navigational lighting on the bridge. This will help protect both the mariners and the bridge structure.

If the lighting is temporary, for example for a specific event, the bridge owner shall provide dates and times when the lights will be installed, activated and removed. The decorative lighting plan must identify any special operating instructions, such as weather restrictions or remote operating system, if so equipped.

Bottom line, we don't necessarily "approve" decorative lighting, but we definitely want to see the plan well before it's activated. District offices experiences have shown that decorative lighting is often shut down a day or two after implementation because they never had a chance to review or weigh in on the lightings impact to navigation. So, it just makes sense to discuss lighting schemes with the DBO prior to purchasing and installing decorative lighting.

## Regulations for Drawbridges



- Each District Commander has the authority to issue drawbridge regulations
- Drawbridges will open on signal – on demand – in the absence of specific operating guidelines
- Specific bridge opening requirements can be found in 33 CFR 117 Subpart B

General requirements for Bridge Owners:

- ✓ Provide the necessary draw tender(s) for the safe and prompt opening of the drawbridge
- ✓ Maintain the working machinery of the drawbridge in good operating condition
- ✓ Cycle the draw span(s) periodically to ensure operation of the drawbridge
- ✓ Ensure that the drawbridge operates in accordance with the requirements of this part

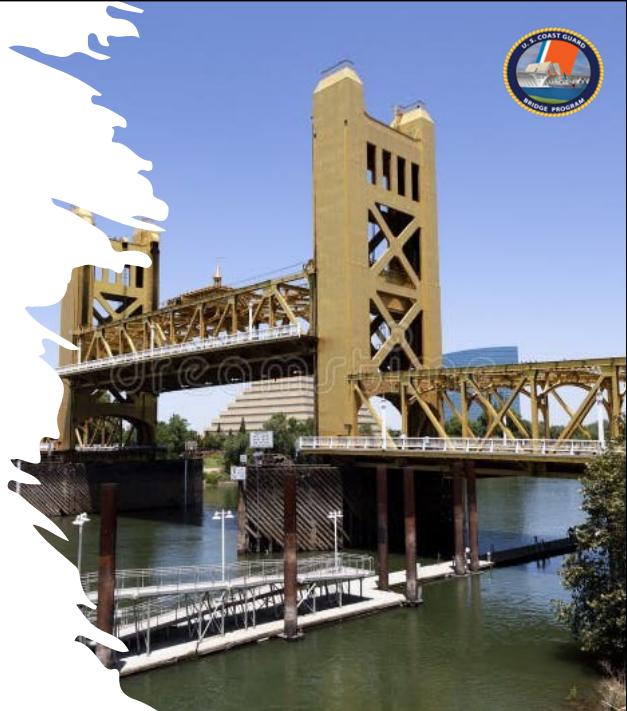
Ok moving on, we are going to discuss briefly regulations for drawbridges. The authority to change bridge regulations has been delegated down to the District Commanders. At HQ we assist Districts, as needed, in drafting regulations and evaluating proposed changes to a bridge regulations, especially if the request is highly controversial. General bridge regulations in 33 CFR 117 require bridges to open upon requested unless otherwise specified in the regulations. For example, some bridges may stay in the closed position and open only at certain times throughout the day or once every hour. A proposed schedule like this must go through the regulatory process, allowing for public comment on how the alternate opening schedule will impact waterway users. The Districts will reach out to the maritime community to get feedback on the feasibility of the proposed schedule and try to find an operating schedule that works for everyone.

Some general bridge requirements are shown in this slide. Draw tenders are important and provide real time responses to a request for bridge opening and have eyes on the vessel and bridge during the transit. Many drawbridges are old, built 50 or even 100 years ago, parts and machinery for these bridge can be difficult to find but regardless the bridge owner must always maintain the drawbridge in good operating condition. Part of this process includes periodically opening the bridge or cycling the bridge, if it doesn't get many request for openings. Owners are required to ensure the bridge

operates as required by 33 CFR 117 and failure to do so can result in fines or civil penalties.

## Requests for Deviations

- Allows a bridge owner to temporarily not comply with the current operating schedule for a period of 180 days or less
- Two types: General Deviation and Test Deviation
- Notice through LNM and BNM, other local media
- Submit requests 90 days before the needed change
- Determination is forwarded back to the bridge owner typically within 10-30 working days



A deviation allows a bridge owner to temporarily NOT comply with the current operating schedule for a period of 180 days or less. A general deviation can be used for events, maintenance/repair, **inspections** or any action requiring a temporary change in drawbridge operating schedule. A general deviation is not published in the Federal Register. A request must be sent to the DBO from the bridge owner, or bridge owners' representative, with owner's agreement, along with the proposed schedule change, length of time for the deviation, why the deviation is being requested, and any other pertinent information. Submit requests 90 days before the needed change and a determination is forwarded back to the bridge owner typically within 10 working days.

A Test Deviation is used to test a proposed operating schedule modification and to gather information, through public comment, on how the modification might affect vessel and land traffic. When the needed operating schedule is not immediately evident, it might be necessary to test one or more operating schedule to determine which one best meets the needs of navigational and land traffic.

Be cognizant that the bridge must return to its regular operating schedule immediately at the end of the general or test deviation in accordance with 33 CFR 117.

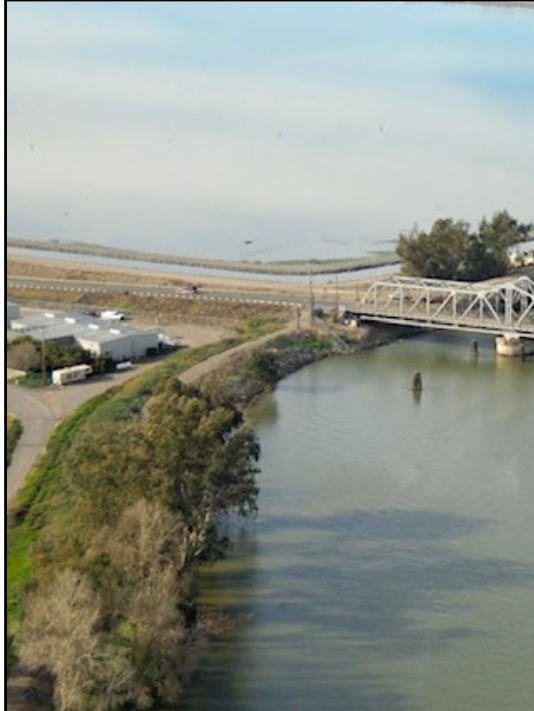
## Closures for Emergency Repair



- When a drawbridge unexpectedly becomes inoperable or should be immediately rendered inoperable because of mechanical failure or structural defect, the drawbridge owner must notify the District Commander of the closure without delay and give the reason for the emergency closure of the drawbridge and an estimated time when the drawbridge will be returned to operating condition
- The District Commander will notify mariners about the drawbridge status through Broadcast Notices to Mariners, Local Notice to Mariners and any other appropriate local media
- Repair work under this section must be performed with all due speed in order to return the drawbridge to operation as soon as possible



Drawbridges have one downside compared to fixed bridge and that is they are operated mechanically and thus require maintenance and sometimes repair if/when the bridge unexpectedly becomes inoperable. Please notify the District Bridge Office of the emergency closure immediately so notification can be made to the mariners via BNM. Repair work is expected to be performed as quickly as possible to minimize the impact to vessel traffic. If the repair will take longer than a week, please relay that to the District Bridge Office and work with them to mitigate any impacts to vessel traffic, if possible. If an extended closure is required Districts may issue a temporary deviation for repairs and will draft an LNM.



Request closure of drawbridge due to infrequent request for openings through Regulation action or Permit



Regulations:

- At least two years with no openings
- Request in writing submitted to the District Commander requesting authorization to remain closed to navigation and to be untended
- Drawbridge must remain in operable condition

Permit Amendment:

- Permit Amendment Process

When there have been no requests for drawbridge openings for at least two years, a bridge owner may request in writing that the District Commander authorize the drawbridge to remain closed to navigation and to be untended. The District Commander may authorize the closure of the drawbridge, set conditions, and revoke the authorization and order the drawbridge to return to operation when necessary.

If the drawbridge is allowed to remain closed to navigation or in the close position the bridge must be maintained in operable condition meaning the bridge must be maintained, so that if the District Commander orders the bridge to open, the bridge is able to with no issues. This authorization does not authorize the removal of operating machinery or any physical changes to the drawbridge structures.

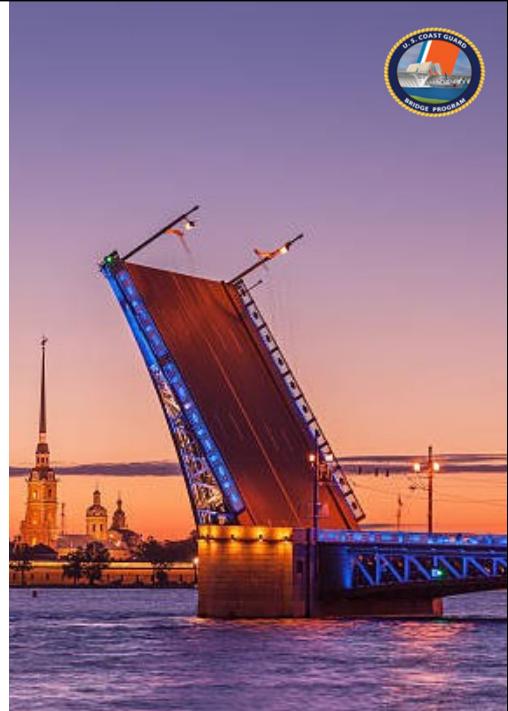
The authorization to remain closed to navigation will be included in subpart B of 33 CFR 117 for reference.

A permanent change in drawbridge opening requirement must be made through

the regulatory process. Another option, if a permanent change is desired to convert a movable bridge to a fixed bridge, a permit amendment can be used to permit the bridge as a fixed bridge vs a movable bridge which also removes the requirement to open regulation in 33 CFR 117. Once the

## Requesting a Change to Existing Bridge Regulation

- Name of person/agency
- Name/location of bridge.
- Explanation of the problem
- Proposed new schedule
- Rulemaking consists of a notice of proposed rulemaking, a public comment period, and a final rule
- Public comment period 30-90 days



Anyone may request a permanent change to a bridge's operating schedule. Normal Process can take 6 months but could take years.

Request must be in writing and include:

- Name of the person/agency.
- Name and location of bridge.
- Thorough explanation of the problem.
- Proposed new schedule and how it addresses/solves the perceived issue.

The DBO will review the request and gather information such as the current bridge clearances, waterway usage and traffic flows, draw tenders' logs to see how often the bridge opens, evaluate how the change may impact the waterway users, the environment, small entities, and the economy. The DBO will determine if the requested change is needed and return in writing their determination with reasoning. If the change is deemed necessary, a notice of proposed rulemaking will be drafted and published in the Federal Register for public comment. Public comment typically runs between 30-90 days and CAN influence the proposed operating regulation, if mariners are concerned about delays or impacts and the request may need to be altered to

accommodate for those mariners' concerns. However, just know we always strive to have these tough conversations and reached an agreeable schedule for both waterway users and bridge owners prior to publishing a proposed rulemaking. Once all the comments have been considered and a determination to proceed with the change is made, a Final Rule is published.

The final rule is the standard rulemaking document used to permanently change the operating schedule of a drawbridge in the CFR. The publication of the final rule in the Federal Register informs stakeholders of the change and its effective date.

The DBO may also investigate and propose a potential rule change based on outdated or ineffective rules, changes in waterway usage.

## Remote Operations



**Remote Operations Guide**  
[https://www.dco.uscg.mil/Portals/9/Remote\\_Operation\\_Request.pdf](https://www.dco.uscg.mil/Portals/9/Remote_Operation_Request.pdf)

The remote operations request must include:

- ✓ Bridge Control System and its capabilities
- ✓ Communications
- ✓ CCTV Cameras and it's capabilities
- ✓ Sensing and field devices
- ✓ Back up systems
- ✓ Programmatic and Risk Assessments
- ✓ Technical Assessment
- ✓ Cyber Security Assessment
- ✓ Contingency planning
- ✓ Incident Response
- ✓ Maintenance Considerations



Bridge owners can request authorization to operate their drawbridge remotely. This request will be evaluated by the DBO which will take into consideration the detailed list on this slide, the bridge owners stewardship in the past, responsiveness to bridge openings, and any history of delays and mechanical/electrical failures, among other things.

It is important that the bridge owner provide, in intricate detail, how they plan to operate the bridge remotely, maintain reliable communication, monitor

the bridge visually and electronically, protect the bridge from being compromised by adversaries, and contingency and response plans for any issues or incidents.

If bridge owner request is denied a letter will be provided to the bridge owner with the reason for denial and DBO's will allow bridge owner to correct their proposed system and forward it back for reevaluation and possible approval.

If bridge owner request is approved the DBO will draft a Notice of Proposed Rulemaking and publish it on the Federal Register for public comment, comments will be adjudicated, a test deviation will be run while live bridge tenders are still on site. If all goes well the Final Rule will be published in the Federal Register.

You can use the Remote Operations Guide to assist you in your request. The guide can be found at our website at the link the slide. There should be a link being dropped into the chat as well.