Washington State Department of Transportation

Community Construction Management Plan

SR 520 Floating Bridge and Landings

3/27/2013

The Community Construction Management Plan (CCMP) is a document that outlines the process through which members of the public have an ongoing opportunity to provide input into construction management decisions that can help to avoid, minimize, and/or mitigate the effects of construction activities on historic and other properties. It also guides the actions of construction contractors**,** provides opportunities for the Washington State Department of Transportation (WSDOT) and hired contractors to keep the public and Section 106 concurring parties informed, and gathers input to improve and modify the construction practices addressed by the CCMP.

Washington State Department of Transportation

Evergreen Point Floating Bridge and Landings Community Construction Management Plan

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Community Construction Management Plan Overview

Purpose and background

WSDOT developed the Community Construction Management Plan (CCMP) as a mitigation commitment for project adverse effects to historic properties during the National Historic Preservation Act Section 106 Consultation process. Because Section 106 consulting parties had significant concerns related to construction effects (both indirect and direct) to historic properties, development of the CCMP was included in the earliest iterations of the Section 106 Programmatic Agreement (PA). Construction effects (as defined in 36 CFR 800.5(a)(2)) may include vibration, noise, change of use or physical features of a property's setting; visual, atmospheric or audible intrusions.

During the consultation process, it was recognized that effects the CCMP was intended to mitigate were not exclusive to historic properties, but could potentially affect other resources in similar ways. The CCMP then became a project-wide commitment, not exclusive to Section 106 PA concurring parties. The PA language references the concurring parties "and others potentially affected by Project construction."

This volume of the CCMP has been developed specifically for the SR 520 Floating Bridge and Landings (FB&L) Project area and construction activities. Additional volumes will be developed in conjunction with each contract awarded for the SR 520, I-5 to Medina: Bridge Replacement and HOV project. The FB&L project covers the SR 520 corridor from the east in Medina, west of the Evergreen Point Road lid, and extends west across the new floating bridge (built to the north of the existing floating bridge), connecting back into the existing SR 520 alignment just north of the Madison Park neighborhood.

WSDOT awarded the design-build contract for the SR 520 Floating Bridge and Landings Project to Kiewit/General/Manson, A Joint Venture (KGM) in August 2011. KGM was granted Notice to Proceed in September 2011, which allowed them to begin work on this contract.

As the design-builder, KGM is responsible for the final design and construction of the improvements included on this project. Their design is guided by the contract documents (RFP – Request for Proposal) which outlines design criteria and commitments. These commitments include agreements with permitting agencies, local governments, and other third parties. The design-builder is responsible for determining the construction methods and techniques needed to build this project. They are responsible for communication and coordination of upcoming impacts to local governments, neighborhoods and businesses. The design-builder is also responsible for obtaining various local government permits not already obtained by WSDOT. Some of the permits that the design-builder is responsible for obtaining include, noise variances, building, and tree clearing permits as well as State and Federal permits such as U.S. Coast Guard and Department of Ecology permits.

WSDOT, as the owner of the project, is responsible for ensuring that the design-builder follows the contract requirements to build a high-quality product. WSDOT staff independently monitor construction operations and track commitments to permitting agencies, local governments, and third parties to ensure that the design-builder is meeting commitments.

How to use the CCMP

The CCMP is part of a process that allows members of the public an ongoing opportunity to have input into construction management decisions that can help to avoid, minimize, or mitigate the effects of construction activities on historic and other properties. The CCMP includes commitments made through the Section 106 PA, best management practices (BMPs), the FB&L contract documents, environmental commitments made through other regulatory processes, and additional tools that will help to avoid, minimize, and/or mitigate construction effects on local communities and historic properties. The FB&L CCMP is a living document which will be updated and revised through the course of the project to incorporate changes to construction activities or approaches to the work. WSDOT and KGM will meet with the concurring parties to the Section 106 Programmatic Agreement every six months during the construction on the project to discuss the CCMP.

This CCMP is best read and reviewed electronically as there are a number of hyperlinks throughout the document. These hyperlinks direct users to websites and permit documentation that will provide more information on each topic.

The public is also encouraged to provide feedback about the effectiveness of the CCMP and suggest changes. Information about this CCMP is available at project-related public meetings and on the project website. While the FB&L CCMP is for construction effects, questions on other topics such as design, permitting, operations and maintenance, and other non-construction related activities on the SR 520 Floating Bridge and Landings Project can be directed to SR520Bridge@wsdot.wa.gov. Contact information for CCMP-related effects is listed in the "Questions or Concerns?" section of this document.

Project Overview

About the SR 520 Floating Bridge and Landings Project

The SR 520 Floating Bridge and Landings Project is one part of the I-5 to Medina: Bridge Replacement and HOV Project, which is one of four projects that makes up the SR 520 Bridge Replacement and HOV Program. The SR 520 Program's 12.8-mile-long corridor area begins at I-5 in Seattle and extends to SR 202 in Redmond. The SR 520 Program also includes the Pontoon Construction Project, the Medina to SR 202: Eastside Transit and HOV Project.

The SR 520 Floating Bridge and Landings Project (see Figure 1 for project limits) replaces the vulnerable SR 520 floating bridge with a new, safer bridge that can withstand windstorms of up to 89 mph. The new bridge will have four general-purpose lanes, two transit/HOV lanes to move people more efficiently and a bicycle/pedestrian path. WSDOT anticipates opening the new six-lane floating bridge to drivers as soon as December 2014. The project also constructs a new bridge maintenance facility in Medina under the new east approach.

Construction activities for the SR 520 Floating Bridge and Landings project are occurring at several locations throughout the Puget Sound:

- 33 pontoons that form the "spine" of the bridge are being constructed in Aberdeen, WA (as part of the SR 520 Pontoon Construction Project).
- 44 supplemental pontoons are being constructed at the Port of Tacoma in Tacoma, WA.
- Precast concrete elements, such as 58 anchors and hundreds of concrete roadway deck sections, are being constructed in Kenmore, WA.
- Major assembly of the new floating bridge is occurring on Lake Washington just north of the existing floating bridge.

Construction activities at the Port of Tacoma began in late 2011 and work at Kenmore began in January 2012. Actual construction activities in Lake Washington began in spring 2012, after all environmental permits were received.

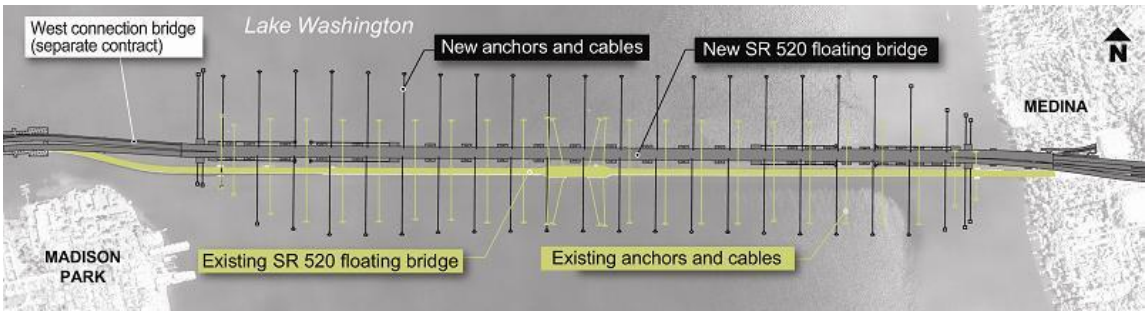


Figure 1

Permitting Agencies and Jurisdictions

WSDOT is the lead agency responsible for the construction of the SR 520 Floating Bridge and Landings project. As part of the construction process, WSDOT and KGM have obtained numerous permits from a number of permitting agencies and jurisdictions.

Permitting agencies and jurisdictions include:

- Federal Highway Administration (FHWA)
- The Washington State Department of Archaeology & Historic Preservation (DAHP)
- The United States Army Corps of Engineers (USACE)
- United States Coast Guard
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- King County
- City of Seattle
- City of Medina
- City of Kenmore
- City of Tacoma

Find more information on how to contact the project in the "Questions or Concerns?" section of this document.

Construction Components and Effects

This section of the CCMP is organized by potential construction effect. Construction effects covered in this section include:

- Noise
- Vibration
- Air Quality and Fugitive Dust
- Visual Quality: Aesthetics, Glare, Lighting
- Traffic and Transportation
- Utilities and Services
- Vegetation Management and Erosion Control
- Over-Water and In-Water Work
- Construction Staging in WSDOT Right of Way

The **What to Expect During Construction** section characterizes the location, potential construction activities, duration and intensity of activity for each construction effect to help readers understand what to expect during construction.

The **Applicable Commitments** section provides information about and website links to documents containing commitments related to construction. Understanding these commitments will help inform readers about the resources that KGM and WSDOT use to determine mitigation activities. All anticipated construction effects are included in the SR 520 Floating Bridge and Landings project Request for Proposals (RFP) document. The RFP is the contract document that WSDOT prepared to support the design-build contractor candidates as they prepared their bids.

The **Measures and Practices** section under each construction effect describes the potential mitigation activities that may be implemented to mitigate for the stated construction effect.

The **How to Get More Information** section links resources and contact information to assist with questions that may arise during construction.

Project construction overview

Construction activities vary by location. See Figure 2 for a map that identifies the construction effects along the SR 520 Floating Bridge and Landings corridor.

Potential construction effects

Noise

WSDOT and KGM is performing many construction activities throughout the duration of floating bridge construction. Each activity uses different types of equipment and results in different levels and kinds of noise.

Construction operations are occurring at several locations for this project: the Kenmore Construction Support Yard (Kenmore Industrial Park), the Concrete Technology Corporation (CTC) pontoon casting facility and adjacent Port of Tacoma property, and on Lake Washington/City of Medina Shoreline.

The Kenmore and CTC/Port of Tacoma sites are located in industrial areas where noise impacts to the public are limited. The work on Lake Washington/City of Medina Shoreline has a greater potential impact to the public.

Figure 2 shows several key work areas on Lake Washington/City of Medina Shoreline and identifies typical construction operations which will occur.

What to expect during construction

KGM is working both night and day to complete the project as required by the contract schedule. However, KGM is minimizing nighttime work activities beyond normal second shift activities whenever possible. When nighttime work activities are necessary, they are being limited whenever possible to operations that are less noisy. In addition, any nighttime work activities may require a noise variance (or exemption) from the City of Seattle and/or City of Medina. Nighttime work in residential areas is typically defined as occurring Monday through Friday between 7 p.m. and 7 a.m. depending on the local jurisdiction.

Many project construction activities create noise that nearby neighbors and passersby may notice. KGM is working with the cities in the construction area to ensure compliance with local noise ordinances and approved noise variances.

A Level of Noise chart has been included in the For More Information section of this document. This chart shows estimated noise levels associated with everyday activities as well as common construction activities. More information about how WSDOT measures noise can be found on the WSDOT website.

Chart 1 is an example of typical activities, which are expected to occur on this project that may generate noise. Figure 3 helps illustrate how such noise is perceived at varying distances.

Noise may sound louder or quieter based on the surface over which it is travelling. Noise from construction activities attenuates over a “hard” surface (like flat water or pavement) less quickly than over “soft” surfaces (like grass). So the same equipment may sound different depending on where you are standing.

Applicable commitments

WSDOT's Noise Program ensures compliance with local, state, and federal environmental regulations on noise from traffic and construction. During construction, WSDOT and the contractor need to comply with permit requirements, as described in more detail later in this section. The process for determining appropriate mitigation is a dynamic process for construction noise because there is so much variation between construction projects. Construction noise is typically exempt from noise control requirements in the Washington Administrative Code (WAC), but is subject to local noise level limits as required through permits.

WSDOT and KGM are adhering to all WSDOT, FHWA, local, and statewide regulatory requirements and as required by the RFP. WSDOT has prepared a Construction Noise and Vibration Mitigation and Monitoring Plan that identifies the expected noise levels at nearby receivers, risk of exceeding the impact criteria, control measures for KGM to implement where exceedances of the criteria is predicted, and locations where monitoring should be conducted. A detailed mathematical model, based on the types of equipment and activities, is used to determine the expected levels of noise at nearby receivers.

KGM is responsible for the regular monitoring and reporting of noise levels on the project; however, on occasion WSDOT will independently verify and confirm noise readings provided by KGM. Applicable local noise regulations include those of the City of Seattle and the City of Medina, both of which are described in more detail below.

City of Seattle Noise Regulations

The Seattle Municipal Code chapter 25.08.425 addresses sounds created by construction and maintenance equipment. City of Seattle noise level limits allow different levels for various types of equipment. For this project, the construction noise analysis used the FHWA's construction noise method to determine future construction noise levels.

City of Medina Noise Regulations

Section 8.06 of Medina's Municipal Code addresses noise related to construction activities. The City of Medina has granted a noise variance for this project. Specific information about the City of Medina's permit requirements can be found in this document.

Measures and practices

Current BMPs and WSDOT standard specifications will be followed.

To help maintain noise levels below the thresholds established as noted above, KGM is implementing BMPs which include but are not limited to:

- Using innovative construction techniques to build precast concrete elements at existing industrial sites at the Port of Tacoma and Kenmore which reduces the need to perform construction operations on Lake Washington.
- Using of muffling devices on exhaust pipes of all appropriate equipment.
- Using modern, efficient and clean equipment with the latest technology for quiet operations.

- Keeping idling trucks to a minimum.
- Avoiding banging tailgates on trucks.
- Using small temporary walls lined with sound-absorbing materials (noise shields) around stationary noise-generating equipment, when practical.
- Limiting night-time work operations; when working at night, limit operations to less noisy construction such as material delivery, concrete placement, and/or reinforcing steel placement. The plan is to limit loud "impact" operations such as pile-driving and demolition to daytime hours.

How to get more information

The issuance of noise variances or exemptions is a formal process with the local jurisdictions. Most jurisdictions have a public notice/comment period prior to the issuance of the noise variance/exemption.

To find out more about noise variances and the process in a specific local jurisdiction contact the jurisdiction:

- Seattle Planning and Development, 206-684-7843 or David.George@seattle.gov
- City of Medina, 425-233-6400

To contact the project about construction noise happening in your area, see the contact information in the Questions or Concerns? section of this document.

Vibration

What to expect during construction

The vibration-causing activities conducted during the construction of the FB&L project will be limited to levels below criteria presented in the I-5 to Medina project final EIS for damage risk to historic and non-historic structures. Examples of construction activities that may induce vibrations include pile driving, drilled shaft foundation construction, cofferdam installation and demolition of the existing bridge. Impacts along the Seattle shoreline should be minimal. Impacts along the Medina shoreline may be greater due to the amount of construction expected along the Medina Shoreline.

Figure 4 shows the location of construction activities along the Medina Shoreline. This figure also indicates a "100 foot Construction Right-of-Way Buffer". Owners of buildings that fall within this 100-foot buffer zone have been contacted by KGM to schedule a pre-construction surveys to document the existing condition of the buildings, as well provide information to the residents about upcoming construction activities which may cause vibrations.

Applicable commitments

WSDOT has engaged the services of a vibration expert to evaluate the SR 520 I-5 to Medina Bridge Replacement and HOV Project corridor, including any potential haul routes along city arterial streets, and to identify areas where impacts to properties within the affected area may

occur as a result of vibration. Mathematical modeling, based on the types of equipment and activities, was used to determine the expected levels of vibration at nearby receivers. Hillslopes and other areas that are potentially vulnerable to vibration from project operations were also identified through this effort.

For the SR 520 Floating Bridge and Landings Project, WSDOT does not anticipate vibration effects to vulnerable structures. WSDOT has prepared a Construction Noise and Vibration Mitigation and Monitoring Plan that identifies how construction activities will be carried out in such a way as to ensure that vibrations do not reach a level that causes architectural or structural damage to any properties.

WSDOT has worked with a qualified structural engineer to perform a condition assessment on any potentially vulnerable properties prior to construction and will perform another assessment when construction has been completed. WSDOT and KGM will work to prevent damage to structures from vibration. However, if any structural or architectural damage to property occurs as a result of project construction, WSDOT will consult with property owners to assess the cause of the damage and will identify and provide for any necessary repairs. If the private property affected is a historic property as defined by the National Historic Preservation Act, the repairs will be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties. Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards.

Measures and practices

As described above, where vibration analysis indicates that a property is potentially vulnerable to construction-related vibration, KGM is taking vibration measurements before and during construction. KGM and WSDOT will maintain contact with owners whose homes are identified as vulnerable during construction and analyze the data to ensure that any damage or concerns are quickly identified. It is KGM's responsibility to monitor and report the vibration data collected during construction. However, WSDOT has access to this data and if there is a question or dispute about the results of KGM's analysis, WSDOT will be able to independently verify the results.

KGM has modified the original WSDOT design concept, reducing the number of pilings which would have been installed at the east approach along the Medina Shoreline. In addition, KGM has modified the foundation design for the east approach bridge to a spread footing instead of a drilled shaft foundation. Both of these changes have further reduced construction-related vibrations for the project.

Figure 5 shows the locations where piling and drilled shafts will be installed on the project.

How to get more information

If damage is identified by a property owner during construction, the property owner should notify WSDOT using the 24/7 project contact phone number listed in the Questions or Concerns? section of this document. WSDOT will respond within 72 hours and will consult with property owners to assess the cause of the damage in order to identify and provide for any necessary

repairs. If WSDOT determines that project construction activities are resulting in structural or architectural damage to properties, WSDOT will direct KGM to stop working on that construction activity until appropriate safeguards can be put in place. If WSDOT determines that an emergency situation is occurring (or has occurred) that threatens injury or significant structural damage, WSDOT will halt the construction activities as rapidly as possible.

To contact the project about construction vibration issues in your area, see the contact information in the "Questions or Concerns?" section of this document.

Air Quality and Fugitive Dust

What to expect during construction

Air quality issues and fugitive dust are generally associated with activities such as mobilization, general construction (particularly earthmoving operations and construction truck traffic), and demolition. Air quality can also be adversely affected by construction truck traffic and the hauling of materials over large distances.

There are three primary construction locations on this project: the Kenmore Construction Support Yard (Kenmore Industrial Park), the CTC pontoon casting facility and adjacent Port of Tacoma property, and on the Lake Washington/City of Medina Shoreline.

The majority of this project is being built on Lake Washington with a relatively small land "footprint" on the Medina shoreline. As a result, there will not be a significant amount of disturbed earth that could result in fugitive dust.

Figure 6 shows the three primary construction sites and identifies the expected construction operations.

Applicable commitments

WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP. A Fugitive Dust Prevention and Control Plan has been prepared by the contractor that provides additional details on activities to mitigate air quality impacts during construction.

The Puget Sound Clean Air Agency is the primary agency overseeing air quality and fugitive dust issues in the Seattle area. More information about their operations and enforcement authority can be found at the Puget Sound Clean Air Agency website.

WSDOT and KGM will comply with additional agreements, such as environmental commitments made through other regulatory and permitting processes.

Measures and practices

KGM's strategy for this project involves completing significant portions of the construction at existing industrial sites – CTC/Port of Tacoma and Kenmore — and then utilizing barges to move

precast concrete elements, anchors, deck sections, and other components into place along the new bridge's alignment on Lake Washington.

Using off-site industrial sites to build precast concrete elements reduces both construction truck traffic and project employee vehicle traffic along the SR 520 corridor. Reducing the number of trucks entering/exiting the Medina shoreline area results in a reduction in potential fugitive dust. WSDOT and KGM will also monitor air quality and fugitive dust generation at off-site locations in Tacoma and Kenmore to ensure compliance with permits.

In addition, KGM plans to remove the existing floating bridge pontoons from Lake Washington and either perform demolition work at the CTC/Port of Tacoma facility or sell/reuse the existing pontoons. This will limit the potential for air quality issues or fugitive dust in the Lake Washington area associated with removal of the existing bridge.

While conducting construction activities, KGM is implementing the following BMPs as appropriate to help prevent, control, and manage the production of fugitive dust and reduce short-term impacts to air quality:

- Applying water to the dust generating active construction work areas as needed and, if applicable, to other areas of the work site, to keep the soil damp to minimize fugitive dust without creating unnecessary muddy areas.
- Stabilizing construction entrances (out of rock or paved entrances) for ingress and egress points to prevent tracking of mud and soil onto paved roads.
- Installing tire washes at construction entrances to reduce tracking of mud and soil onto paved roads (city streets or SR 520) if necessary.
- Implementing BMPs for disturbed areas not supporting construction traffic or active work that may include vegetation, plastic covering, erosion control fabrics and matting, and the early application of a gravel base on areas to be paved.
- During the demolition of concrete structures as well as loading of construction trucks with demolition debris, using a water spray to minimize fugitive dust.
- When appropriate, installing tarpaulins on trucks to cover their loads prior to leaving the site to ensure there is no loss of material while the trucks are in transit. These activities take place primarily in Medina.
- Using efficient and modern equipment with appropriate emission-control devices (where applicable) to reduce CO and NOx emissions in vehicular exhaust. Low-sulfur diesel is used when possible.
- Storing sandblasting materials inside a building and using non-slag (inert) sandblasting abrasives when feasible.
- Immediately containing spent material from construction activities such as sandblasting and disposing at an appropriate facility.
- Implementing methods for efficient paint application to reduce over-spraying, including proper training for painters.
- When possible, using cleaners with low hazardous air pollutant and volatile organic compound content such as water-based, alkaline, or microbial cleaners.

- Limiting idling equipment to reduce emissions.

How to get more information

To contact the project about construction dust or air quality issues in your area, see the contact information in the Questions or Concerns? section of this document.

Visual Quality: Aesthetics, Glare, Lighting

What to expect during construction

The new floating bridge is being built immediately to the north of the existing bridge. To safely and efficiently assemble the new bridge, a staging area has been built on Lake Washington to the north of the new bridge alignment. At the staging area, pontoons will be outfitted (installation of superstructure elements and internal components).prior to moving them into the final bridge alignment.

During construction operations, residents along the Lake Washington shoreline in Medina can see numerous work barges, floating derricks (barges with mounted cranes) to the north and south of the existing floating bridge. There is also a work bridge extending out into Lake Washington from the shore of Medina, north of the existing floating bridge. Work along the Medina shoreline is anticipated to be visible from April 2012 through the summer of 2016.

Residents near the Seattle shoreline can see work activities on Lake Washington, including barges and floating derricks. The work visible from the Seattle shoreline will be shorter in duration.

Figure 7 shows the location of the Eastside staging area.

KGM is conducting most construction activities during daytime hours. Minimizing work at night will reduce the need for construction lights. When work is required to be conducted outside of normal construction hours, notice will be provided to stakeholders.

Applicable commitments

WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP. This includes WSDOT standard specifications.

Measures and practices

- KGM's approach to this project is to maximize the use of existing industrial sites in Kenmore and CTC/Port of Tacoma to build precast concrete elements for the bridge and barge these components to the Lake Washington construction site for the assembly of the bridge. This approach reduces the work (both quantity of work as well as the duration of construction) which occurs on the Lake and near residential neighborhoods in Medina and Seattle.

- WSDOT and KGM limit the use of construction lighting as much as possible. When lighting is required it is shielded, directed toward the work, and pointed away from residences, traffic and other sensitive areas to the maximum extent practicable.
- In order to minimize light pollution beyond the construction limits to the greatest degree practicable, KGM uses directional lights instead of flood lights and direct light to the work zones and away from residents. During the winter months (November through March), the public should expect to notice increased work zone lighting at the beginning and end of the work day due to decreased daylight hours.

How to get more information

To contact the project about aesthetics, glare or lighting issues in your area, see the contact information in the "Questions or Concerns?" section of this document.

Traffic and Transportation

What to expect during construction

Construction effects related to traffic and transportation may include:

- Haul routes
- Detours
- Damage resulting from heavy trucks and hauling
- Maintaining access, including emergency service access
- Marine traffic impacts

Much of the project's construction activities occur over-water, north of the existing floating bridge, away from the traveling public. KGM is floating most of the structures (pontoons and the roadway surface) into their permanent location on Lake Washington. Barges are bringing supplies from waterfront locations around the sound. The use of barges reduces truck traffic coming to and from the new bridge.

Applicable commitments

WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP. This includes WSDOT standard specifications.

KGM will obtain a street use permit from the City of Medina to utilize City streets for material haul routes and construction traffic. At this time, KGM does not plan to use City of Seattle streets for material haul routes. If this changes during the course of this project, KGM will develop a Neighborhood Traffic Management plan and comply with the haul route agreements outlined in the Section 106 Programmatic Agreement.

Measures and practices

As appropriate, KGM is following established BMPs, including:

Haul routes

KGM is only using major roadways including I-5, SR 520, and I-90 in Seattle for major material haul routes. It is possible that other major arterials designated as truck routes could be occasionally used by KGM to access these major roadways.

On the west side of Lake Washington, if KGM determines that haul routes not outlined in the SR 520 I-5 to Medina: Bridge Replacement and HOV project Final Environmental Impact Statement might be used, they will consult as appropriate with the City of Seattle. In compliance with the Section 106 PA, WSDOT will also consult with the concurring parties and affected stakeholders.

If non-arterial routes (non-truck routes) are required by KGM for material haul routes, WSDOT will work to identify historic properties along selected haul routes within the affected area that are potentially vulnerable to vibration. WSDOT will perform a condition assessment on potentially vulnerable properties prior to use of the haul route and again when use of that route is completed.

For construction on the Eastside of Lake Washington, KGM is using major roadways, including SR 522, I-405, I-90, and SR 520 as well as City of Medina streets to access the Medina Shoreline work area. For more information about haul routes in Medina, see the Medina Construction Mitigation Plan.

Planning and compliance (Detours)

- Performing the work in such as way as to prevent tracking of dirt and gravel onto local streets in accordance with the WSDOT's temporary erosion and sediment control (TESC) requirements.
- Accessing the site according to the terms of haul route agreements with local jurisdictions where applicable. These agreements will be obtained by KGM and included in this document as they are approved.
- Generating video documentation of the pre-existing conditions prior to starting work.
- Prepare a Transportation Management Plan, Traffic Incident Management Plan, and Maintenance of Traffic plans to follow the requirements of each local jurisdiction affected.
- Submitting and obtaining approval from the local jurisdiction for each planned closure.
- Having all detours, including all signing, in place prior to the closure of any road, and acquiring all detour agreements with the affected local jurisdiction.

Damage minimization and repair

- Repairing any project-generated potholes as needed or as directed by WSDOT.
- Repairing any project-generated damage to guardrails, barriers, attenuators, and traffic system signs.
- Providing adequate stormwater management during the project.

- Restoring property and landscaping that is damaged in the course of construction to a condition similar, equal, or better than that existing before the damage occurred by repairing, replacing, rebuilding, or replanting.

Access

- Maintaining uninterrupted access to all public facilities affected by the project.
- Allowing access to the site for spill response and make personnel and equipment available to respond to emergencies.
- Cooperating with law enforcement and other emergency response agencies in response to accidents, fires, spills or other emergencies in any area affected by the project.
- Working with emergency service providers to address their concerns about emergency access to and through the project corridor.
- Properly notifying all parties in the affected area of any access restrictions near the construction site.

How to get more information

If damage is identified by the owner during construction, the property owner shall notify WSDOT using the 24/7 Project contact phone number described in "Questions or Concerns?" section of this document. WSDOT will respond within 72 hours. If WSDOT determines that project hauling activities are resulting in structural or architectural damage, WSDOT will direct the contractor to stop use of that route until appropriate safeguards can be put in place.

If structural or architectural damage to any property occurs during a period when the route is being used for hauling, WSDOT will consult with property owners to assess the cause of the damage and will identify and provide for any necessary repairs If the private property affected is a historic property, the repairs will be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties. Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards.

To contact the project about traffic or transportation issues in your area, see the contact information in the "Questions or Concerns?" section of this document.

Utilities and Services

What to expect during construction

The new floating bridge and support infrastructure is being built to the north of the existing bridge in a new alignment. During construction, KGM will have minimal impacts to utilities and services.

There will be some minor sanitary sewer reconstruction along the Medina Shoreline which will impact several property owners. Affected property owners will be notified prior to these construction activities.

New electrical (power), water, sewer, and stormwater connections will be necessary for the new bridge and bridge maintenance facility. It is expected that installation of these services will have little impact to nearby residents in Medina.

Impacts to utilities in Seattle are not expected on this project.

Applicable commitments
WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP.

KGM will coordinate with the City of Medina prior to any service interruption.

Work will be performed in line with WSDOT standard specifications.

Measures and practices
KGM will notify potentially impacted residents and other stakeholders at least 7 days before conducting work that may affect utilities or services. Notifications will include contact information for comments or questions.

How to get more information
To contact the project about utility or services in your area, see the contact information in the "Questions or Concerns?" section of this document.

Vegetation Management and Erosion Control

What to expect during construction
To facilitate construction of the new bridge, and the new Bridge Maintenance Facility along the Medina Shoreline, KGM has performed tree removal and earthwork operations. WSDOT and KGM identified trees that will be preserved and protected during the construction. However, some trees and vegetation in Medina needed to be removed as part of construction.

We anticipate no tree removal or vegetative impacts within Seattle associated with this project.

Applicable commitments
WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP.

- Washington State Department of Ecology's Stormwater Management Manual
- Washington State Department of Ecology's Construction Stormwater General Permit
- WSDOT's Highway Runoff Manual
- WSDOT's TESC requirements

The SR 520 Floating Bridge and Landings Stormwater Pollution Prevention Plan (SWPPP) has been developed by the contractor and details measures being used to address erosion control during construction.

WSDOT and KGM will comply with additional agreements, such as environmental commitments made through other regulatory and permitting processes. Section 7 of the Seattle Shoreline Substantial Development permit contains information about the plans and BMPs for the Project. In addition, KGM has obtained a tree removal permit from the City of Medina for this work.

When this project is complete (currently planned for mid-2015), extensive re-vegetation will be completed along the Medina Shoreline. Figure 8 shows the artist concept of the Bridge Maintenance Facility and the re-vegetation along the Shoreline.

Measures and practices
KGM is implementing temporary erosion and sediment control measures along the Medina Shoreline as well as in Tacoma and Kenmore where needed.

Activities may include:

- Marking clearing limits with high-visibility and silt fencing.
- Implementing BMPs for disturbed areas not supporting construction traffic or active work that may include vegetation, plastic covering, erosion control fabrics and matting, and the early application of a gravel base on areas to be paved.
- Protecting drain inlets.
- Stabilizing channels and outlets – using measures such as check dams and grass-lined channels.
- Maintaining BMPs – during the course of construction, maintenance work will be performed to ensure BMPs continue to function as intended.
- Re-vegetating exposed areas and maintain that vegetation.
- Assuring TESC plan and SWPPP are followed.

How to get more information
To contact the project about vegetation management or erosion control issues in your area, see the contact information in the Questions or Concerns? section of this document.

Over-water and In-water Work

This project involves the construction of a new floating bridge as well as removal of the existing floating bridge. The project has significant construction activities in Lake Washington. These activities include movement of materials by barge, construction of work bridges, pontoon towing, pontoon moorage, installation of bridge anchors, anchor cables, pontoon assembly, bridge superstructure construction, and existing bridge removal. The project is also transporting materials and bridge components through the Lake Washington Ship Canal.

What to expect during construction
The new floating bridge is being built on the water, north of the existing bridge. A large floating staging area has been created adjacent to the Medina Shoreline in Lake Washington. This staging

area is being used for pontoon assembly (connection of multiple pontoons) as well as outfitting (installation of superstructure elements and internal components). KGM is floating much of the structure (pontoons and the roadway surface) by barge from Kenmore, Tacoma and Aberdeen. Pontoons coming from Aberdeen are part of the SR 520 Pontoon Construction Project.

The public should expect barge trips and pontoon transfers to and from the Lake Washington work zone from these locations:

- Tacoma – On average 2 trips per month. However, when we are taking delivery of girders, there will be approximately 17 extra barges over a short period. We will also take delivery of 47 pontoons over the life of the project.
- Kenmore –Approximately 30-60 round trips per month on average to deliver pre-cast elements and supplies from the fabrication site to the work area.
- Ballard Locks – 77 pontoons over the life of the project will be transferred from the fabrication locations in Grays Harbor and the Port of Tacoma through the Locks to the work area. Dozens of barges and other vessels will pass through the Ballard Locks during the life of this project.

Figure 2 shows construction locations and activities on Lake Washington.

Marine traffic using the east navigational channel will be impacted by construction operations from April 2012 through 2015. As of late 2012, the east navigation channel is closed due to obstructions. WSDOT and KGM have worked with the Coast Guard to finalize the conditions of these temporary changes to navigation in Lake Washington. Additional details on navigation span closures and revised drawspan operating rules can be found on the SR 520 - Floating Bridge and Landings: Drawspan Information page. The west navigational channel remains open to marine traffic.

Applicable commitments

WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and/or as required by the RFP including, but not limited to:

- Sections 401 & 404 of the Clean Water Act
- Section 10 of the Rivers and Harbors Act
- WAC Chapters 173, 220, 332
- Coast Guard Permit Requirements
- City of Medina Municipal Code
- King County Code
- Section 7 of the Seattle Shoreline Substantial Development permit

WSDOT and KGM will comply with additional agreements, such as environmental commitments made through other regulatory and permitting processes.

Measures and practices
KGM will work closely with WSDOT, the Coast Guard, the City of Medina and other regulatory agencies to ensure that work operations are in compliance with the commitments listed above.

KGM is limiting nighttime operations on the Lake whenever possible. There are also restrictions in the contract for work during certain fish windows, around certain events such as SeaFair and the opening day of boating season and during the winter storm season.

Figure 9 shows the some of the in-water work restrictions included in the construction contract.

How to get more information
To contact the project about in-water construction issues in your area, see the contact information in the "Questions or Concerns?" section of this document.

Construction Staging in WSDOT Right of Way

What to expect during construction
KGM has developed an in-water staging area along the Medina Shoreline north of the existing bridge and the alignment of the new bridge. In addition, KGM has equipment and materials staged along the Medina Shoreline in the WSDOT Right of Way between Evergreen Point Road and Lake Washington.

Staging activities may take place at other, yet to be determined, locations. As part of the on-going updates to the FB&L CCMP, this portion of the plan will be updated if/when additional staging locations have been determined.

Figure 7 illustrates the Eastside staging area near Medina.

Applicable commitments
WSDOT and KGM will adhere to all WSDOT, FHWA, local, and statewide regulatory requirements and or as required by the RFP.

As part of the permit requirements with the City of Medina, KGM has developed a Construction Mitigation Plan for work within Medina.

Measures and practices
To the maximum extent practicable, WSDOT and KGM will:

- Locate construction sheds, barricades, and material storage away from private properties, and avoid obscuring views of and from private properties.
- Install temporary construction screens/barriers (fencing, plantings, etc.) around construction areas so that visual impacts of construction activities on private properties

are minimized. The location and type of screens/barriers will be determined in consultation with adjacent property owners.

- Avoid placement of temporary work bridges and other short-term construction features where they would require permanent removal of or would damage mature trees.
- Consult with adjacent property owners and others to restore staging areas as appropriate, once construction is finished.

How to get more information

To contact the project about an SR 520 staging area, see the contact information in the "Questions or Concerns?" section of this document.

Questions or Concerns?

Visit the program website at WSDOT - SR 520 Bridge Replacement and HOV Program

Visit the project website at WSDOT – Project – SR 520 – Floating Bridge and Landings Project

Call the 24-hour KGM Construction Hotline at 425-576-7098 for immediate concerns regarding construction activities happening in the field.

Call the 24-hour WSDOT Project Contact number at 206-708-4657 for concerns about possible property impacts caused by Project-related vibration.

For general project information, call the automated SR 520 Information Line: 1-888-520-NEWS (6397). Options available on the information link include:

- Option 1: To connect directly to the WSDOT Project Contact.
- Option 2: To hear about Eastside construction
- Option 3: To hear about the SR 520 I-5 to Medina Bridge Replacement and HOV Project
- Option 4: To hear about the Pontoon Construction Project
- Option 5: To hear general information about the SR 520 Bridge Replacement and HOV Program
- Option 6: To hear about the tolling on SR 520
- Option 7: To leave a message for the project team or to be added to the email distribution list

Send an email requesting more information to: SR520Bridge@wsdot.wa.gov

Other tools available for the public to stay informed and involved related to project construction:

- Highway advisory radio, variable message signs, active traffic management signs, project identification signs.
- E-mail distribution lists – Login or subscribe to the SR 520 distribution list to get regular updates about construction activities.
- Public engagement activities (meetings, briefings and open houses) are posted on the program website.

For More Information

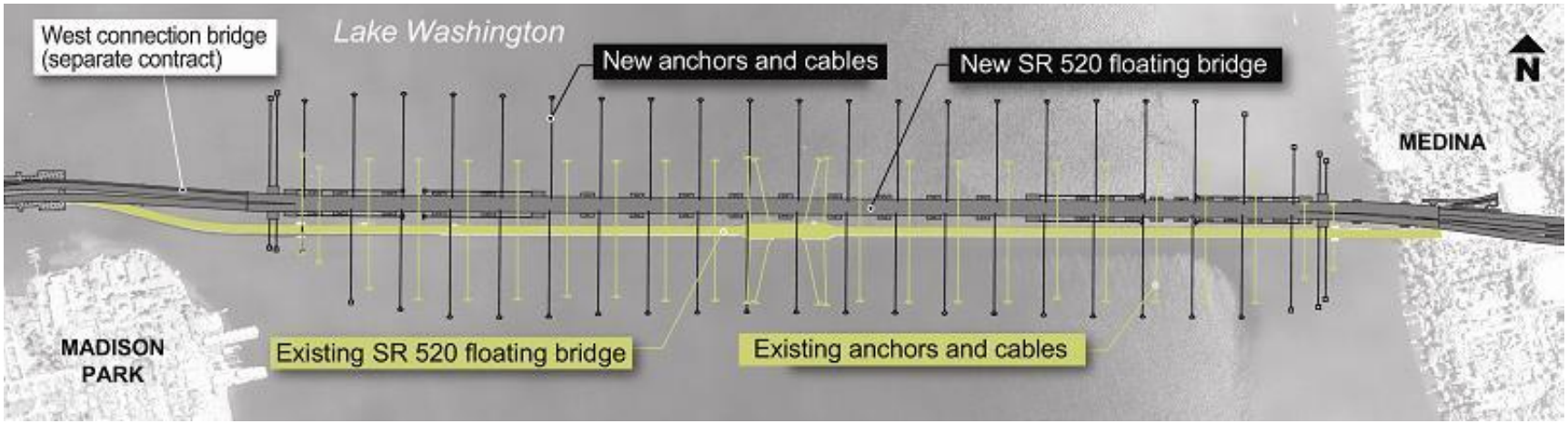


Figure 1: Location of existing and new SR 520 Floating Bridge and Landings.

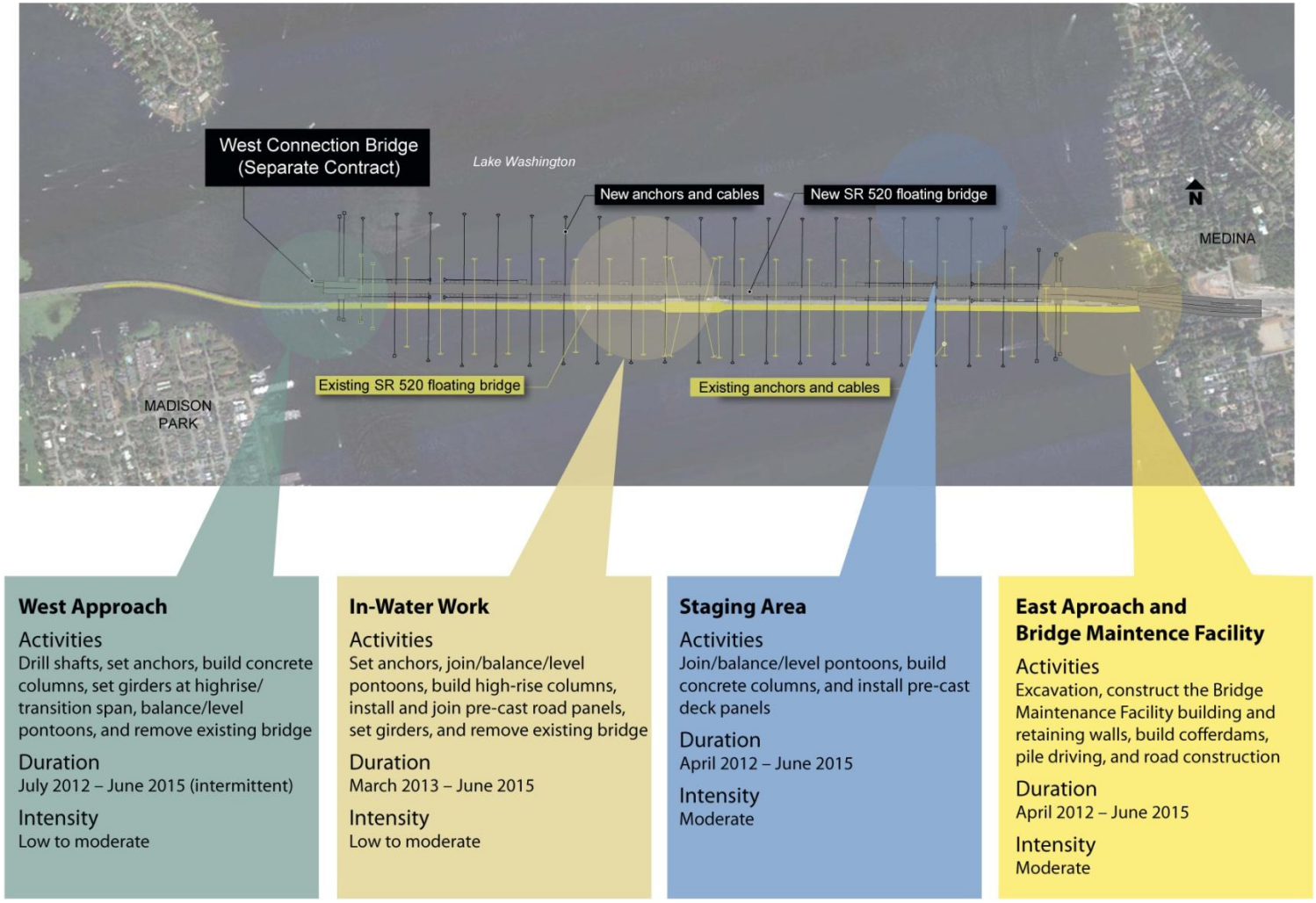


Figure 2: Construction Overview Map

Chart 1: Noise Generating Activities

Equipment Type	**Estimated Noise Level**	**Estimated Noise Level at 100 feet** (approx. 6 dBA reduction)*	**Estimated Noise Level at 500 feet** (approx. 20 dBA reduction)*	**Estimated Noise Level at 1000 feet** (approx. 26 dBA reduction)*
Pile Driver	99-105 dBA	93-99 dBA	79-85 dBA	73-79 dBA
Air Compressor	70-76 dBA	64-70 dBA	50-56 dBA	44-50 dBA
Jackhammer	74-82 dBA	68-76 dBA	54-62 dBA	48-56 dBA
Loader	84-86 dBA	78-80 dBA	64-66 dBA	58-60 dBA
Concrete Pump	78-82 dBA	72-76 dBA	58-62 dBA	52-56 dBA
Forklift	87-94 dBA	81-88 dBA	67-74 dBA	61-68 dBA
Excavator	84-93 dBA	78-87 dBA	64-73 dBA	58-67 dBA
Tower Crane	70-76 dBA	64-70 dBA	50-56 dBA	44-50 dBA
Crane	90-96 dBA	84-90 dBA	70-76 dBA	64-70 dBA
Generator	81-90 dBA	75-84 dBA	61-70 dBA	55-64 dBA

** Approximate reductions based on distance.*

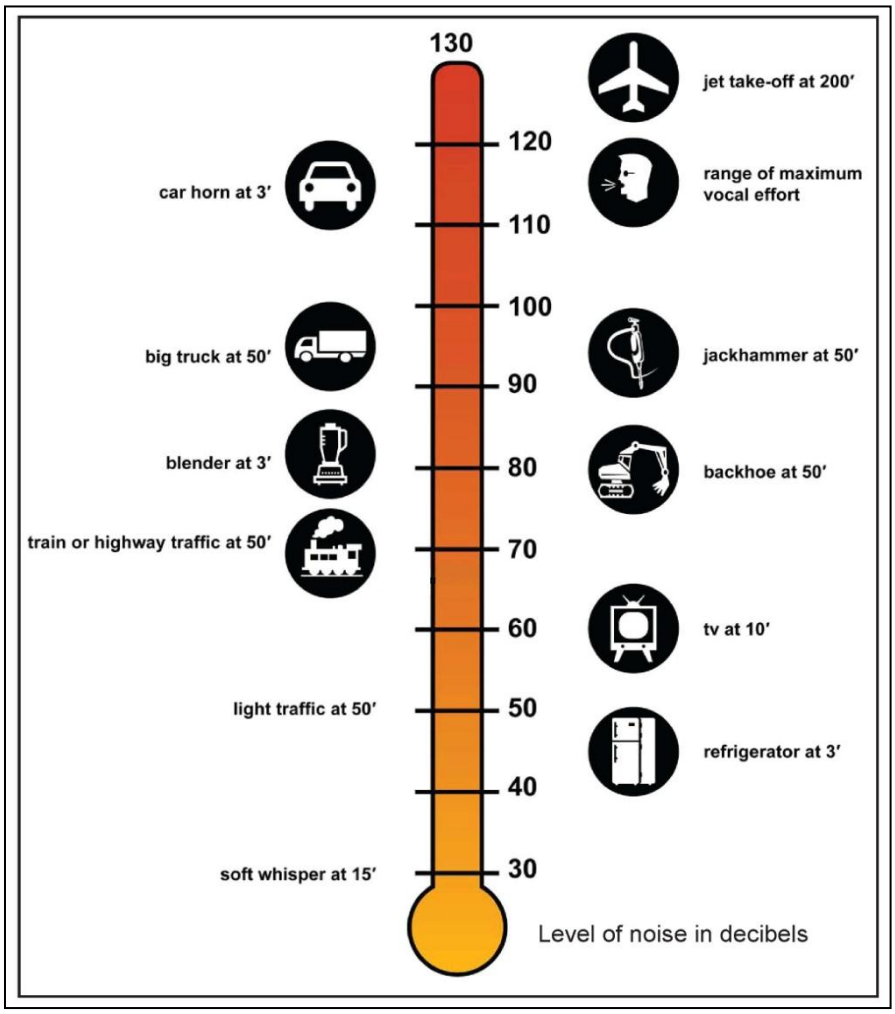


Figure 3: Relative Noise Thermometer

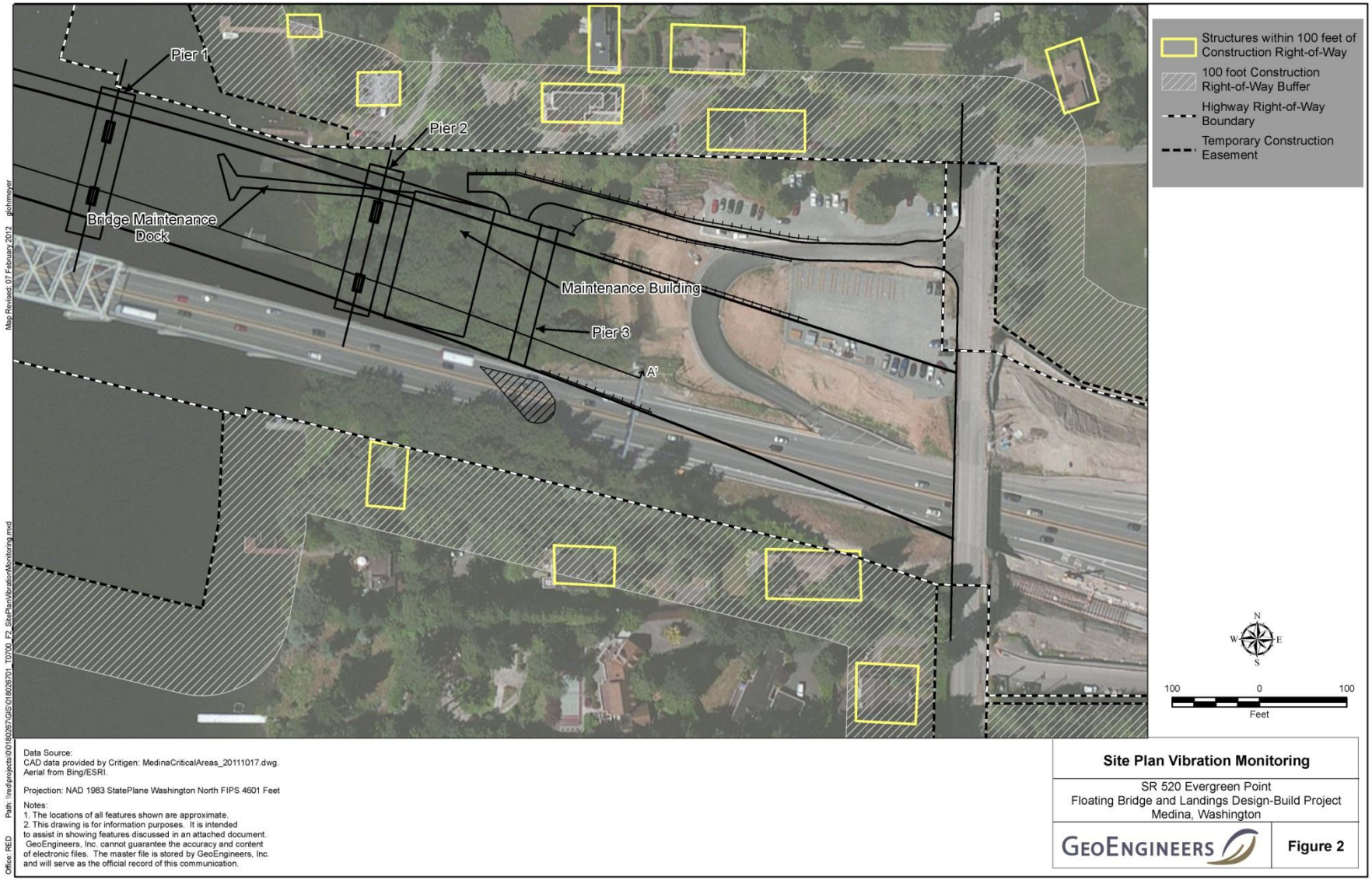


Figure 4: Site plan showing structures in Medina near construction activities that may generate vibrations

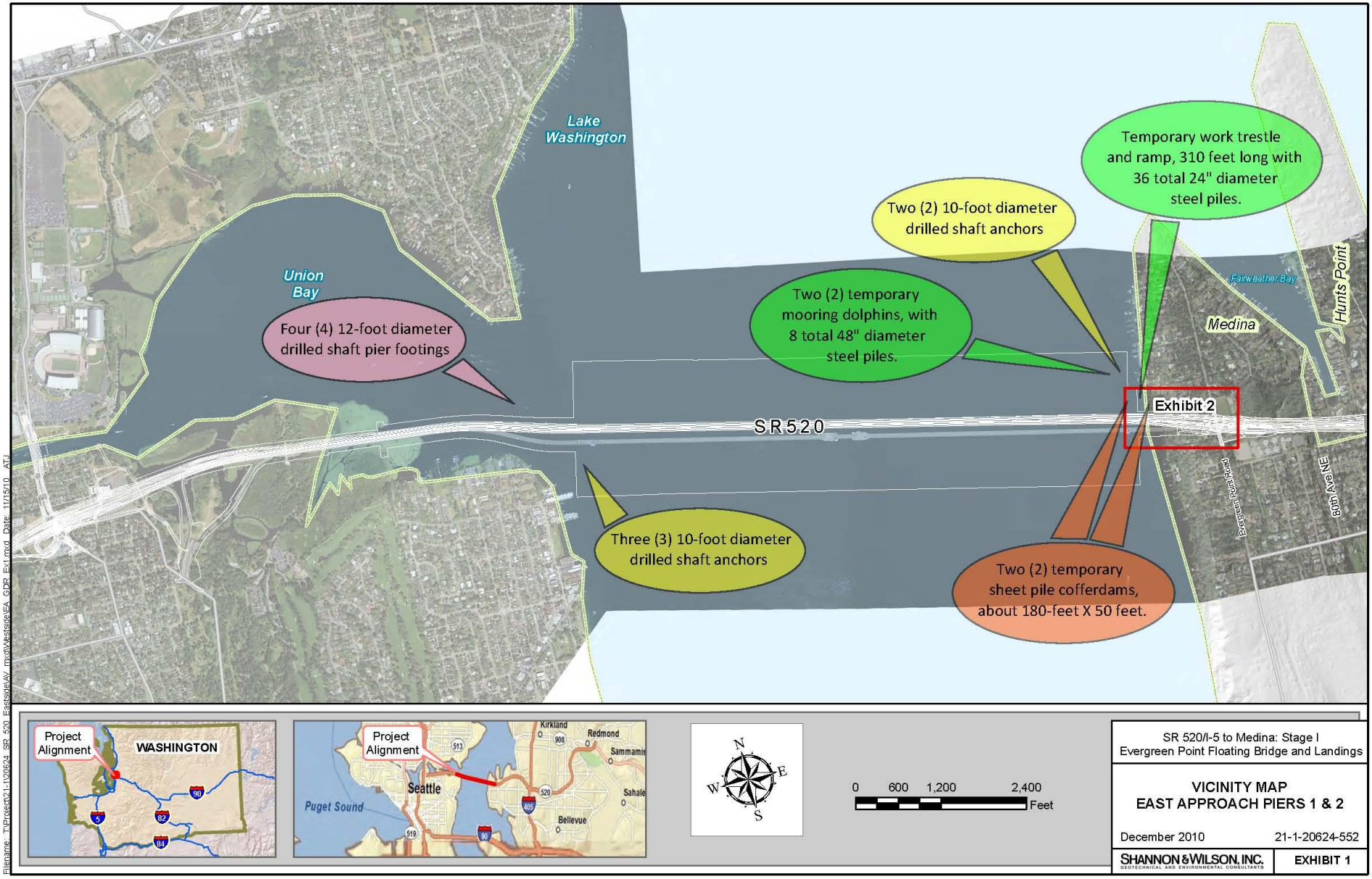


Figure 5: Locations where piling and drilled shafts will be installed on the project

SR 520 floating bridge construction around the state

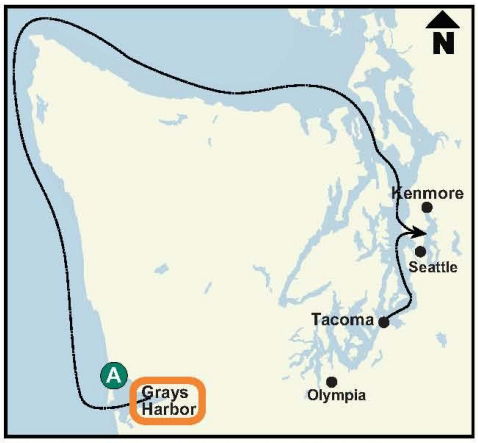
Construction activities are planned at multiple locations in Washington state. Pontoons and other bridge components will be towed to Lake Washington for assembly.

A. Grays Harbor
(March 2011 – 2014)
- Pontoon construction
- Pontoon moorage

B. Port of Tacoma
(Nov. 2011 – mid 2014)
- Pontoon construction
- Pre-cast concrete elements
- Pontoon moorage and outfitting

C. Kenmore
(Feb 2012 – early 2014)
- Anchors
- Deck sections

D. Lake Washington
(spring 2012 – 2015)
- Pontoon outfitting
- Eastside staging area
- Bridge assembly
- East Approach construction
- Bridge Maintenance Facility
- East and West Approach connections



All towing will occur in designated shipping lanes.

Figure 6: Construction sites for the SR 520 Floating Bride and Landings Project

Proposed Eastside Staging Area

Figure 7: Eastside Staging area and Medina shoreline

Figure 8: Artist rendering of vegetation plantings and growth at the bridge maintenance facility

I-5 to Medina: Bridge Replacement and HOV Project
DRAFT - Floating Bridge and Landings Work Window Restrictions

February 13, 2012

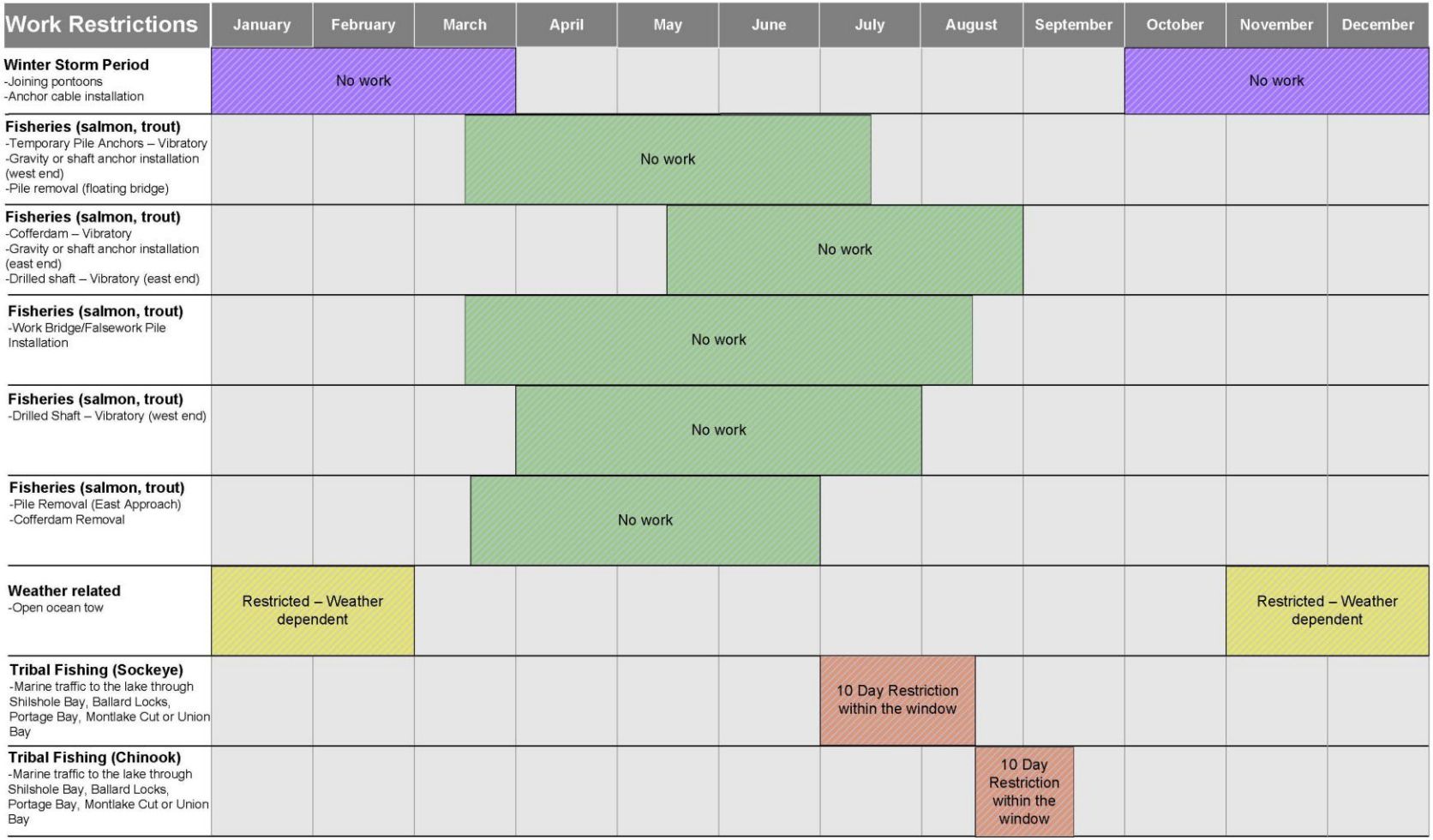


Figure 9: In-water work restrictions