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Joint Permit Application

This is a joint application, and must be sent to both agencies, who administer separate permit programs. Alternative forms of permit applications may be acceptable; contact the Corps and DSL for more information.

Date Stamp

U.S. Army Corps of Engineers Portland District	Oregon Department of State Lands
Corps Action ID Number	DSL Number

(1) APPLICANT AND LANDOWNER CONTACT INFORMATION

	Applicant	Property Owner (if different)	Authorized Agent (if applicable) ☑ Consultant ☐ Contractor
Contact Name	William H. Busch		Andy Burke
Business Name	South Beach Road Association		OBEC Consulting Engineers
Mailing Address 1	P.O. Box 354		920 Country Club Rd., Suite 100 B
Mailing Address 2			
City, State, Zip	Neskowin, OR, 97149		Eugene, OR, 97401
Business Phone	503-392-3341		541-762-2116
Cell Phone	503-801-8042		
Fax			541-683-6576
Email	whbbat@gmail.com		aburke@obec.com

(2) PROJECT INFORMATION

A. Provide the project location.

Project Name	Tax Lot #	Latitude & Longitude*	
South Beach Road Bridge Scour Mitigation	ROW, 1100	45.0964 N -123.9790 E	
Project Address / Location South Beach Road	City (nearest) Neskowin	County Tillamook	
Township 5S	Range 11W	Section 36	Quarter/Quarter N/A

Brief Directions to the Site
The project area is located on South Beach Road approximately 0.5 mile south of the community of Neskowin near mile marker 98.25 US Hwy 101.

B. What types of waterbodies or wetlands are present in your project area? (Check all that apply.)

☑ River / Stream ☐ Non-Tidal Wetland ☐ Lake / Reservoir / Pond
☐ Estuary or Tidal Wetland ☐ Other ☐ Pacific Ocean

Waterbody or Wetland Name**	River Mile	6th Field HUC Name	6th Field HUC (12 digits)
Neskowin Creek	0.65	Neskowin Creek – Frontal Pacific Ocean	171002030903

C. Indicate the project category. (Check all that apply.)

☐ Commercial Development ☐ Industrial Development ☐ Residential Development
☐ Institutional Development ☐ Agricultural ☐ Recreational
☐ Transportation ☐ Restoration ☐ Bank Stabilization

(2) PROJECT INFORMATION

☐ Dredging	☐ Utility lines	☐ Survey or Sampling
☑ In- or Over-Water Structure	☑ Maintenance	☐ Other:

* In decimal format (e.g., 44.9399, -123.0283)
** If there is no official name for the wetland or waterway, create a unique name (such as "Wetland 1" or "Tributary A").

(3) PROJECT PURPOSE AND NEED

Provide a statement of the purpose and need for the overall project.
The South Beach Road Association proposes to repair abutment scour at the South Beach Road Bridge. The bridge is the only access for residents living on the west bank of Neskowin Creek. The bridge consists of a one-lane concrete slab superstructure founded on timber piles with concrete pile caps and wing walls. The bridge provides pedestrian access via a dedicated sidewalk on the north (downstream) side, and there is a steel water line attached to the downstream face of the bridge.

A 2011 bridge inspection documented that the superstructure, timber piles, and pile caps are in satisfactory condition. However, the east abutment (Bent 1) and wing walls have been severely scoured resulting in a loss of portions of the concrete backwall and erosion of approach fills. Continued scour could cause the roadway embankment to become unstable, resulting in the bridge becoming unusable. Scour is likewise occurring at the west abutment and wingwalls (Bent 2), although to a lesser extent than at Bent 1. The channel thalweg is adjacent to Bent 1 and strong currents are likely to continue to contribute to scour. The proposed repair will place riprap to protect the remaining portions of Bents 1 and 2. In doing so, the repair will improve the longevity of the bridge so that it may continue to serve local residents. This work is consistent with Nationwide Permit 3 (NWP) (Maintenance), which authorizes the placement of new riprap for the protection of any previously authorized, currently serviceable structure.

(4) DESCRIPTION OF RESOURCES IN PROJECT AREA

A. Describe the existing physical and biological characteristics of each wetland or waterway. Reference the wetland and waters delineation report if one is available. Include the list of items provided in the instructions.
Three water resources and no wetlands were identified within the project area. These include Neskowin Creek and two small, unnamed drainages just upstream of the crossing outside of the South Beach Road right-of-way. Neither of the two small drainages was flowing at the time of the September 2014 site visit, indicating they have intermittent or ephemeral flow patterns. The drainages were not identified in maps consulted in preparation of this application. Since there are no proposed impacts to the drainages, no further characterization was undertaken. According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, Neskowin Creek is a tidal riverine system with an unconsolidated bottom and a permanent-tidal water regime. Streamflow is perennial year-round. According to the Oregon Department of State Lands (DSL) *Heads of Tide for Coastal Streams in Oregon*, Neskowin Creek is tidally influenced in proximity of the project area. However, stream currents were not observed to be tidally influenced during the September 2014 site visit. According to Terrain Navigator Pro (Version 8.51) Neskowin Creek originates approximately 7.4 miles upstream of the project site in the Siuslaw National Forest in the Oregon Coast Range. The stream flows southeast to northwest through the project area toward its confluence with the Pacific Ocean, approximately 0.65 miles downstream of the bridge.

According to StreamNet, Neskowin Creek in the project area serves as rearing and migration habitat for Oregon Coast coho salmon (Endangered Species Act [ESA] listed fish), spawning and rearing habitat for chum salmon, and rearing and migration habitat for winter steelhead. In addition, Neskowin Creek within the project area is designated critical habitat for coho, Essential Salmonid Habitat (ESH) by DSL, and Essential Fish Habitat (EFH) by the National Marine Fisheries Service (NMFS). The project will utilize the U.S. Army Corps of Engineers (USACE) Revised Standard Local Operating Procedures for Endangered Species to Improve Stormwater, Transportation, and Utilities Programmatic Biological Opinion (SLOPES) to cover impacts to ESA species.

(4) DESCRIPTION OF RESOURCES IN PROJECT AREA

Oregon DSL regulates removal and fill activities within jurisdictional waters of the state, as defined in OAR 141-085-0510(95). The project will result in permanent impacts within the jurisdictional limit of Neskowin Creek. Per OAR 141-085-0540 and further described in OAR Division 93, the project will trigger the requirement for a DSL authorization under a General Permit for Transportation-Related Structures (GP). The USACE regulates the discharge of fill materials into waters of the US, as defined in CFR 33 Part 328 and subsequent guidance. Impacts to waters will require authorization under NWP 3. Email communication with Debra Henry, USACE Project Manager for Tillamook County, and Michael De Blasi, DSL Aquatic Resource Coordinator for Tillamook County, confirmed that the ordinary high water (OHW) elevation is the jurisdictional limit of Neskowin Creek for permitting purposes.

A site visit was performed on September 15, 2014 by OBEC Consulting Engineers (OBEC) environmental personnel. The OHW elevation of Neskowin Creek was demarcated throughout the project area based on agency standard field indicators such as a clear, natural line impressed on the shore and a change in vegetation from riparian to upland-dominated. Based on the subsequent survey of the project area, OHW within the project area was determined to be at an elevation of 10.0 feet relative to the North American Vertical Datum of 1988 (NAVD88). Active channel width (ACW) measurements were taken every 30 feet for approximately 200 feet upstream and downstream of the crossing. The average ACW within the project area was determined to be 48 feet. Stream banks are fairly steep within the project area, especially on the eastern side. Stream substrate consists of gravels and cobbles with the intermediate axis of the largest diameter streambed particle (D100) measuring approximately 4 inches. Photos of the project area are provided in Attachment B.

Riparian vegetation is present along the channel both up and downstream of the proposed project area. Riparian vegetation is dominated by an overstory of red alder (*Alnus rubra*). The shrub layer is dominated by willow (*Salix spp.*) and Himalayan blackberry (*Rubus armeniacus*). Herbaceous vegetation is dominated by reed canarygrass (*Phalaris arundinacea*).

The site is located within the Federal Emergency Management Agency (FEMA) floodway with a known base flood elevation. A hydraulic analysis will be performed to determine whether the proposed repair produces backwater for the design flood. However, a less than 1-foot increase in water surface elevation created by proposed conditions at the bridge is allowable, per communications with Tim Murphy, Tillamook County Department of Community Planning Associate Planner. This project will meet all requirements of the Tillamook County Lane Use Ordinances relating to floodplain development.

According to the Oregon Department of Environmental Quality Water Quality Assessment Database, Neskowin Creek is not 303(d) listed and does not have an approved TMDL for any known pollutants.

B. Describe the existing navigation, fishing and recreational use of the waterway or wetland.

Neskowin Creek is not listed as a navigable waterway by DSL. Within the project area there is no public access to the stream and recreational use of the waterway is unknown. Upstream of the project area is the Neskowin Creek RV Resort. Downstream of the project area is bounded by private residences on the west bank and US Hwy 101 on the east bank. Confluence with the Pacific Ocean is approximately 0.65 mile downstream of the project area.

According to Chris Knutsen, Oregon Department of Fish and Wildlife (ODFW) Fish Biologist for the North Coast Division, Neskowin Creek contains coho salmon and non-sustaining populations of chum and Chinook salmon. In addition, there are known populations of steelhead, coastal cutthroat trout, and Pacific lamprey. Adult coho salmon begin to enter the creek after the first rains usually in October and will be present often into February. The juvenile outmigration period is late March through June, although some rearing juveniles will be present in the project area all year. Proposed repairs will be done between July 1 and September 15 to avoid sensitive migratory periods for coho. In addition, the contractor will maintain fish passage during construction so as not to impact upstream or downstream fishing and recreational use of Neskowin Creek.

(5) PROJECT SPECIFIC CRITERIA AND ALTERNATIVES ANALYSIS

Describe project-specific criteria necessary to achieve the project purpose. Describe alternative sites and project designs that were considered to avoid or minimize impacts to the waterway or wetland.

In order to achieve the necessary goals of the project, the following project-specific criteria had to be met:

- The existing crossing is the only access for residents living on the west side of Neskowin Creek. Scour protection for the abutments is necessary to prevent additional loss of approach fills and to protect the integrity of the existing structure.
- Minimize costs of the repair.
- Minimize impacts to surrounding property owners.
- Minimize impacts to Neskowin Creek and the riparian area.
- Minimize impacts to fish passage, the functional floodplain, and the ESA-listed species and its habitat.

Alternatives Analysis

No Build Alternative – Bent scour has caused damage to the concrete abutment and wingwalls, resulting in erosion to approach fills. Failing to address the scour problem will lead to additional erosion of approach fills, and potentially could ultimately cause instability of the bridge approaches. The no-build alternative will not address the safety concerns caused by the scour problem, will leave the bridge susceptible to additional damage, and will reduce the longevity of the structure. As a result the no-build alternative was not furthered for consideration.

Structure Alternatives – No structure alternatives were considered. The existing superstructure was determined to be in satisfactory condition during the 2011 bridge inspection. Therefore, replacement or alteration of the existing superstructure was deemed unnecessary. Protection of the existing abutments and wingwalls was the only suggested repair. Multiple scour repair options for the abutments were considered during the design process, as detailed below:

- **Reconstruction of existing abutments** – In this scenario, the concrete pile caps and wingwalls would be reconstructed and extended to below the thalweg depth of the stream. Riprap toe trenches would be used for scour protection, which would extend laterally into the middle of the channel. Riprap would be overlain by several feet of native streambed material to maintain habitat function. The reconstructed wingwalls would require additional lateral support in order to retain approach fills. Lateral support could consist of driven pile installed directly in front of each wingwall, or horizontal earth anchors installed through the concrete into approach fills. This alternative was determined to result in smaller impacts to Neskowin Creek. However, the additional engineering, materials, and construction required for this alternative would greatly increase project costs. In addition, strong channel currents immediately adjacent to Bent 1 could potentially continue to deteriorate the existing backwall concrete. Primarily due to cost considerations, this design alternative was not furthered for consideration.
- **Other revetment materials** – Gabian baskets were investigated since they provide a more vertical structure for scour protection without substantially increasing costs. However, the use of Gabians would not offer the same stability, durability or level of protection as rock riprap, and would not substantially decrease the amount of fill required. In addition, the use of Gabians requires geotechnical data not available for the project area. Other revetment materials, such as precast concrete blocks and block mats, were not considered due primarily to cost and geotechnical considerations.
- **Biotechnical Stabilization** – The use of a riprap or Gabian basket design with vegetation incorporated for bank stabilization was determined to offer insufficient protection to the abutment. In addition, the location of the repair is immediately under the bridge which would not present a suitable growing location for vegetation. Furthermore, this alternative would require routine maintenance of the site which would pose additional costs to the applicant.
- **Preferred Alternative** – The preferred alternative consists of rock riprap revetment to protect

the remaining concrete. Large size riprap would be utilized, consisting of Class 700 or 2000 rock. The riprap would wrap around the existing backwalls and wingwalls and would extend into the channel at a 1.5 horizontal to 1 vertical slope (1.5H:1V) slope. Abutment protection would be founded on a Class 2000 riprap toe trench, extending laterally mid-channel. Riprap toe trenches will be embedded under 3 feet of native streambed material to meet SLOPES programmatic conditions. This design will adequately protect the existing abutments without requiring additional concrete repairs. Riprap abutment protection will be founded on a stable riprap toe extending laterally into the channel. Furthermore, riprap rocks will be individually placed using an excavator from under the bridge, allowing the riprap to be more carefully fitted. Lastly, durable, angular rock will be utilized for revetment construction to the greatest extent practicable. The design will incorporate large wood at the downstream end ballasted by riprap rock. No pins or cables will be used to anchor the riprap, per SLOPES guidance. Wood will offer aquatic habitat, channel complexity and will provide areas of slower water velocity to aid in fish passage. The wood will be positioned approximately at the OHW elevation so that the emergent portion engages the water at a variety of flows. Willow stakes will be incorporated in the riprap design in areas above the OHW elevation and away from the bridge superstructure. Once mature, willows will provide stream shading, woody material recruitment and bank stabilization. Willows will be installed approximately six feet on center of a species known to be established in the area. If at all possible, willow stakes will be locally sourced.

Minimizing Resource Impacts

Listed Species – SLOPES will be used to evaluate the potential impact of the project on Oregon Coast coho salmon, their critical habitat, and EFH. The USFWS Information, Planning and Conservation System (IPaC) online project scoping tool was utilized to determine the likelihood of USFWS-listed species within or adjacent to the project area. Based on the information provided by the IPaC tool, the project is likely to have no effect on USFWS-listed species due to an absence of these species within or adjacent to the project area.

Fish Passage – Based on communication with Ken Loffink, ODFW Assistant Fish Passage Program Coordinator, the proposed conditions must not result in an increase in stream velocities above 2 ft/sec between the 5 percent and 95 percent exceedance flows. Communication with Annie Birnie, NOAA Biologist, indicated that the 2 ft/sec standard would also satisfy SLOPES requirements. Hydraulic analysis was performed in HEC-RAS for the proposed condition. Results showed that for the 5 percent to 95percent flows, stream velocities did not exceed 1ft/sec, meeting fish passage criteria. Action Notification has been submitted to NMFS for SLOPES approval, and an application has been submitted to ODFW for Fish Passage approval of the project. Based on early coordination with ODFW and NMFS, the project is expected to receive SLOPES concurrence and approval of the Fish Passage Plan.

Floodplain - Neskowin Creek within the project area is within the limits of a detailed FEMA Flood Insurance Study (FIS) and within the limits of the FEMA floodway. The corresponding Flood Insurance Rate Map has an effective date of August 1, 1978, and the community panel number of the map is 410196 0380. The FIS indicates that the bridge is in a Zone A5 designation, which includes areas subject to the 100-year flood with a known base flood elevation. The hydraulic analysis performed for the proposed condition showed that the water surface elevation will not increase the base flood elevation by more than 1 foot. All Tillamook County floodplain development guidelines per Land Use Ordinance Article 3.060 will be followed.

Design Minimization – There are several components of the project design that were implemented to reduce impacts to Neskowin Creek. The project has been designed in accordance with the SLOPES programmatic to minimize impacts to listed fish and other aquatic species, as well as to meet Oregon Fish Passage requirements. The project has been designed to avoid the removal of riparian trees and

(5) PROJECT SPECIFIC CRITERIA AND ALTERNATIVES ANALYSIS

vegetation to the maximum extent practicable. Repair activities will largely occur from the adjacent banks or the dry portion of the channel below the bridge. There will be minimal disruption to traffic and no bridge closure will be required. In addition, the project has been designed to avoid the need for a work bridge during construction.

In-Water Work Restrictions – In-water work timing restrictions have been identified to minimize project impacts on listed fish, their critical habitat, and other aquatic species within Neskowin Creek. In-water work required for this project will occur during the ODFW 2015 prescribed in-water work period (IWWP) for Neskowin Creek of July 1 through September 15. In addition, the contractor will be required to implement best management practices (BMPs) when performing in-water work. The contractor will isolate the work area before any excavation begins and exclude fish to the maximum extent practicable. Fish salvage will be performed within isolation areas per NMFS guidelines.

Protection of Existing Resources – The contractor will be required to immediately establish the construction limits in the vicinity of all waters. Erosion control BMPs will then be installed around the perimeter of work areas to prevent discharge of construction stormwater into the adjacent un-impacted waters. Anticipated erosion and sediment control BMPs to be utilized on this project include, but are not limited to, sediment fencing, stream isolation barrier (sandbags and plastic sheeting), visual turbidity monitoring, and permanent seeding. Once the erosion control BMPs have been installed, the contractor will then complete all necessary construction activities. It is anticipated that Bent 2 excavation activities and riprap placement will be performed from the gravel bar located on the western portion of Neskowin Creek. Gravels have accumulated in this portion of the channel over time as the thalweg have migrated toward the eastern bank. This will provide the contractor with the ability to perform excavation of the Bent 2 gravel toe and placement of riprap material from the dry portion of the channel. It is anticipated that the contractor will utilize the northwest or southwest bridge quadrants to access the channel. Bent 1 work will be performed from the dry portion of the channel to the maximum extent practicable. However, some equipment access within the wetted channel may be required to reach the Bent 1 work area. SLOPES guidelines for use of heavy equipment in the water will be followed. Equipment will be cleaned and inspected prior to entering the work area to ensure it is free of weeds, leaks, and grease. Emergency erosion control and spill response materials will be on-site prior to construction. Equipment will cross the wetted portion of Neskowin Creek at right angles to the direction of flow and protective matting will be utilized to reduce damage to the streambed. Equipment will be positioned within the isolation area during excavation activities. This will reduce overall project impacts by eliminating the need for construction of a second access path on the steeper east bank.

Post-Construction Minimization – All disturbed areas will be seeded with native seed as needed. Erosion and sediment control BMPs will be left in place until permanent erosion and sediment control measures have established.

(6) PROJECT DESCRIPTION

A. Briefly summarize the overall project including work in areas both in and outside of waters or wetlands.
The project consists of installing riprap at the existing abutments for scour protection. Installation of riprap will be performed using an excavator located on the dry channel within the creek. The areas immediately in front of each abutment will be isolated from the flowing channel and excavated. Riprap will be installed to include a toe trench, large wood, and abutment protection sloping up from the stream channel to the remaining concrete at a 1.5H:1V. Riprap will be embedded with 3 feet of native streambed material.

(6) PROJECT DESCRIPTION

B. Describe work within waters and wetlands.

Construction of riprap revetment protection will be required within the Neskowin Creek general scour prism. Riprap revetment is necessary to protect the integrity of the abutments from additional scour damage. The riprap will be installed within the Neskowin Creek channel both above and below the OHW elevation and will result in net fill within the creek. Existing native material will be excavated and temporarily stored above OHW for reuse. Once the riprap is installed it will be embedded with 3 feet of native material to meet SLOPES guidelines.

Work area isolation will be required during the construction of the riprap revetment protection. It is anticipated that the contractor will fully isolate the work area from the flowing channel one side at a time. For the purposes of this construction narrative, it is assumed that the contractor will begin work on Bent 2. The channel thalweg is presently against Bent 1, and beginning work on Bent 2 will allow flows to pass through the construction area with minimal temporary water management. For the purposes of permitting quantities, it is anticipated that the contractor will have to fully isolate around the Bent 2 excavation area. However, less isolation from the wetted channel could potentially be required since most of the Bent 2 excavation area will likely be within the existing gravel bar. An estimated 40 cubic yards (CY) of isolation structures (sandbags and plastic sheeting or similar) will be necessary to isolate the work area around Bent 2 impacting 240 square feet (SF) in area. It is assumed that the isolation will be installed entirely below the OHW elevation of Neskowin Creek and be placed so that the median section (parallel with flow) is approximately mid-channel. Once the work area has been fully isolated and fish salvage has been conducted, bank excavation and riprap placement will begin. Excavated materials will be temporarily sidecast above OHW for future project use embedding the riprap. Excavation of streambed material will result in the permanent removal of 450 CY impacting 100 SF in area. Once the riprap and wood (see below for details of wood installation) have been installed and backfilled with native bed material, sediment within the work isolation area will be allowed to settle. Riprap, wood, and gravel placement will result in the permanent fill of 350 CY, 3 CY, and 60 CY, respectively at Bent 2 impacting 1,000 SF. Lastly, the upstream and downstream sections of the isolation structure perpendicular to flow will be removed in preparation of Bent 1 isolation. Of the total fill volume at Bent 2, approximately 409 CY will be below OHW and 4 CY will be above OHW.

The contractor will utilize the main portion of the Bent 2 isolation structure in place (parallel to channel flow) to isolate the area in front of Bent 1. This will save time and reduce impacts to the stream. Moving the perpendicular upstream section from Bent 2 to the upstream Bent 1 side, the channel will be temporarily re-routed through the newly constructed section created during Bent 2 work. Likewise the downstream perpendicular isolation section will be relocated from Bent 2 to Bent 1. Placement of additional isolation structures will result in 20 CY of temporary fill within Neskowin Creek impacting 120 SF. Normal stream flows will pass through the newly constructed stream section that will be at thalweg elevation, allowing flows to bypass the Bent 1 isolation area. Once the Bent 1 work area has been isolated and fish salvage has been conducted, bank excavation and riprap placement will begin. The contractor will position excavation equipment within the isolation area. Equipment will cross the wetted channel at right angles to the direction of flow utilizing matting to protect the streambed. Excavated materials will be temporarily sidecast above OHW for future project use embedding the riprap. Excavation of streambed material will result in the permanent removal of 250 CY of material impacting 800 SF.

Care will be taken to excavate around the exposed wastewater diffuser pipe north of Bent 1. The streambank has been eroded around the pipe over time, exposing an approximately four-foot horizontal section which connects to a vertical steel section extending into the stream substrate. Approval has been received from Roger Noble of the Neskowin Regional Sanitary Authority to encase the pipe in concrete in its existing location to protect it during riprap placement. The diffuser head, positioned in the sand approximately 8 feet below the connection of the iron section, will not be encased in concrete and will remain covered in sand. Once the concrete has fully cured, riprap will be placed around the encased pipe so that no concrete is exposed to flows. Large wood will then be placed in the excavation area, and the remainder of the riprap will be installed and fully backfilled with native bed material. Lastly, sediment within the work isolation area will be allowed to settle and the isolation structure will be removed. Riprap, concrete, wood, and gravel placement will result in the permanent fill of 250 CY, 1CY, 3 CY and 40 CY,

respectively at Bent 1 impacting 800 SF. Of the total fill volume at Bent 1, approximately 280 CY will be below OHW and 14 CY will be above OHW.

Large wood will be installed as a component of the project according to NMFS and ODFW guidance. Wood will be incorporated into the riprap design to provide habitat diversity and complexity, improve flow heterogeneity, provide substrate for aquatic organisms, provide refuge for aquatic organisms during a range of flow events, and aid in fish passage. Large wood selected for this project will be intact, hard, and un-decayed. If at all possible, wood will be selected with attached, untrimmed root wads. Wood will be ballasted entirely by riprap rock, with no cables or pins utilized for anchoring. The diameter and length of the wood will be determined during the final design phase. During excavation, wood will be placed within the excavated toe trenches, and angled so that rootwads are exposed and positioned approximately at the OHW elevation. The contractor may make minor adjustments to position the wood based on field conditions. However, the as-built condition of the wood installation shall not increase the impacts detailed in this application. It will be paramount that the wood is sufficiently ballasted by the rock so that the abutment protection is not jeopardized. Engineering calculations will be performed to ensure all forces are counterbalanced with an added factor of safety.

The last component of the riprap design will be to introduce soil into the voids above OHW and outside of the footprint of the bridge. Willow stakes will be placed in the riprap voids at a density of 6 feet on center.

C. Construction Methods. Describe how the removal and/or fill activities will be accomplished to minimize impacts to waters and wetlands.

The construction site will be accessed from the South Beach Road right-of-way on the west side of the bridge. The applicant will be coordinating with the adjacent landowner to gain permission to place riprap on portions of the upstream wingwalls outside of right-of-way and for construction access in the southwest bridge quadrant. If right-of-entry cannot be negotiated with the adjacent landowner, permitting quantities will likely be lower than what is presented in this application, and construction access will be within the northwest bridge quadrant within right-of-way. Anticipated construction equipment includes excavators, dump trucks, generators, and other standard bridge construction equipment. Due to space constraints, staging will occur in upland sites away from the river and within right-of-way. Equipment will operate from the bank and within the dry channel of Neskowin Creek.

Construction is anticipated to begin in June 2015 and will be completed by October 2015. However, all work within the regulated channel will be conducted during the 2015 IWWP (July 1 through September 15). The following is a general list of activities that outline the expected project schedule and methods. The contractor may modify this schedule and the proposed methods as long as the overall impacts are not increased. Careful design and planning have been developed for this project to minimize impacts to Neskowin Creek.

Prior to the IWWP:

1. Mobilize and install erosion and sediment control once the main contract notice to proceed is provided. Vegetation removal will be completed as necessary and in concert with erosion control construction.
2. Identify the OHW elevation and begin construction activities landward of OHW to include construction access.

2015 IWWP:

1. Grade bank to provide equipment access to dry portions of the channel.
2. Install protective matting, as needed, to protect gravel areas.
3. Install sandbag and plastic sheeting isolation structures (or similar) to isolate the work area at Bent 2; perform fish salvage within isolated area. Channel will continue to flow along Bent 1 during this time.
4. Excavate native streambed material around Bent 2. Sidecast streambed material and temporarily store landward of OHW to be reused as backfill upon completion of riprap installation.
5. Position large wood according to the plans and install riprap toe trench and abutment cover.
6. Backfill streambed material over riprap toe trench.

(6) PROJECT DESCRIPTION

7. Allow turbidity to settle within the isolation area, if needed. Reposition perpendicular sections of isolation from the west bank to east bank in order to redirect channel flows to the newly-constructed channel along Bent 2.
8. Fully isolate the Bent 1 work area and perform fish salvage.
9. Excavate native streambed material around Bent 1. Sidecast streambed material and temporarily store landward of OHW to be reused as backfill upon completion of riprap installation.
10. Encase the exposed sewer overflow pipe in concrete.
11. Repeat steps 5-6 above to Bent 1.
12. Allow turbidity to settle within the isolation area.
13. Remove all isolation structures from the stream.
14. Remove any stream protection BMPs.

After IWWP:

1. Install soil within riprap voids above OHW; install willow stakes at approximately 6 feet on center as indicated in plans.
2. Re-contour and permanently seed all disturbed areas around the bridge site.

D. Describe source of fill material and disposal locations if known.

Fill material source and disposal locations are not currently fully identified. Some of the excavated streambed gravels will be temporarily stored above the OHW elevation and reused on-site. The remaining material will be disposed of at an approved upland site, and the contractor will be responsible for ensuring that all source and disposal locations are in uplands or are operating under the appropriate permits. No materials will be sourced from or disposed in any waters on site that are not proposed to be impacted. The contractor will be responsible for demarcating regulated work zones in the field.

(6) PROJECT DESCRIPTION

E. Construction timeline.

What is the estimated project start date? June, 2015

What is the estimated project completion date? October, 2015

Is any of the work underway or already complete? If yes, describe. ☐ Yes ☑ No

F. Fill Volumes and Dimensions (if more than 4 impact sites, include a summary table as an attachment)

Wetland / Waterbody Name *	Fill Dimensions					Duration of Impact**	Material***
	Length (ft.)	Width (ft.)	Depth (ft.)	Area (sq.ft. or ac.)	Volume (c.y.)		
Neskowin Creek	102	varies	varies	1800 SF	600	Permanent	Rock riprap
Neskowin Creek	180	3	3	360 SF	60	Temporary	Isolation structure (sandbags)
Neskowin Creek	25	2	2	50 SF	6	Permanent	Large wood
Neskowin Creek	50	18	3	900 SF	100	Permanent	Native Streambed Material
Neskowin Creek	10	1	1	10 SF	1	Permanent	Concrete

G. Total Fill Volumes and Dimensions			
Fill Impacts to Waters	**Length (ft.)**	**Area (sq. ft or ac.)**	**Volume (c.y.)**
Total Fill to Wetlands	N/A	N/A	N/A
Total Fill Below Ordinary High Water	varies	1800 SF	707
Total Fill Below Highest Measured Tide	N/A	N/A	N/A
Total Fill Below High Tide Line	N/A	N/A	N/A
Total Fill Below Mean High Water Tidal Elevation	N/A	N/A	N/A

H. Removal Volumes and Dimensions (if more than 4 impact sites, include a summary table as an attachment)

Wetland / Waterbody Name*	Removal Dimensions					Duration of Impact**	Material***
	Length (ft.)	Width (ft.)	Depth (ft.)	Area (sq. ft. or ac.)	Volume (c.y.)		
Neskowin Creek	102	varies	varies	1800 SF	700	Permanent	Native streambed material

I. Total Removal Volumes and Dimensions			
Removal Impacts to Waters	**Length (ft.)**	**Area (sq. ft or ac.)**	**Volume (c.y.)**
Total Removal to Wetlands	N/A	N/A	N/A
Total Removal Below Ordinary High Water	102	1800 SF	700
Total Removal Below Highest Measured Tide	N/A	N/A	N/A
Total Removal Below High Tide Line	N/A	N/A	N/A
Total Removal Below Mean High Water Tidal Elevation	N/A	N/A	N/A

* If there is no official name for the wetland or waterway, create a unique name (such as "Wetland 1" or "Tributary A").
** Indicate the days, months or years the fill or removal will remain. Enter "permanent" if applicable. For DSL, permanent removal or fill is defined as being in place for 24 months or longer.
*** Example: soil, gravel, wood, concrete, pilings, rock etc.

(7) ADDITIONAL INFORMATION

Are there any state or federally listed species on the project site?	☑ Yes	☐ No	☐ Unknown
Is the project site within designated or proposed critical habitat?	☑ Yes	☐ No	☐ Unknown
Is the project site within a national Wild and Scenic River?	☐ Yes	☑ No	☐ Unknown
Is the project site within the 100-year floodplain?	☑ Yes	☐ No	☐ Unknown

*** If yes to any of the above, explain in Block 4 and describe measures to minimize adverse effects to these resources in Block 5.**

Is the project site within the Territorial Sea Plan (TSP) Area?	☐ Yes	☑ No	☐ Unknown

*** If yes, attach TSP review as a separate document for DSL.**

Is the project site within a designated Marine Reserve?	☐ Yes	☑ No	☐ Unknown

*** If yes, certain additional DSL restrictions will apply.**

Will the overall project involve construction dewatering or ground disturbance of one acre or more?	☐ Yes	☑ No	☐ Unknown

*** If yes, you may need a 1200-C permit from the Oregon Department of Environmental Quality (DEQ).**

Is the fill or dredged material a carrier of contaminants from on-site or off- site spills?	☐ Yes	☑ No	☐ Unknown

(7) ADDITIONAL INFORMATION

Has the fill or dredged material been physically and/or chemically tested? ☐ Yes ☑ No ☐ Unknown

***If yes, explain in Block 4 and provide references to any physical/chemical testing report(s).**

Has a cultural resource (archaeological) survey been performed on the project area? ☐ Yes ☑ No ☐ Unknown

*** If yes, provide a copy of the survey with this application. Do not describe any resources in this document.**

Identify any other federal agency that is funding, authorizing or implementing the project.

Agency Name	Contact Name	Phone Number	Most Recent Date of Contact
NOAA/NMFS	Annie Birnie	503-230-5407	January 9, 2015
USACE	Debra Henry	503-808-4391	December 12, 2014
USACE	Michael Turaski	503-808-4381	January 8, 2015

List other certificates or approvals/denials required or received from other federal, state or local agencies for work described in this application. For example, certain activities that require a Corps permit also require 401 Water Quality Certification from Oregon DEQ.

Approving Agency	Certificate/ approval / denial description	Date Applied
ODFW	Fish Passage Approval	January, 2015
NMFS	SLOPES - Transportation Approval	January, 2015
Tillamook County	Floodplain Development	January, 2015

Other DSL and/or Corps Actions Associated with this Site (Check all that apply.)

☐ Work proposed on or over lands owned by or leased from the Corps

☐ State owned waterway DSL Waterway Lease #

☐ Other Corps or DSL Permits Corps # DSL #

☐ Violation for Unauthorized Activity Corps # DSL #

☐ Wetland and Waters Delineation Corps # DSL #

- ☐ A wetland / waters delineation has been completed (if so, provide a copy with the application)
- ☐ The Corps has approved the wetland / waters delineation within the last 5 years
- ☐ DSL has approved the wetland / waters delineation within the last 5 years

(8) IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

A. Describe unavoidable environmental impacts that are likely to result from the proposed project. Include permanent, temporary, direct, and indirect impacts.

The project will result in unavoidable permanent impacts below the jurisdictional boundary of Neskowin Creek. Approximately 1,800 SF of unavoidable impacts are associated with the placement of buried riprap revetment protection, placement of abutment protection, and placement of native streambed material to embed the riprap toe trenches.

The project will require temporary impacts below the jurisdictional boundary of Neskowin Creek. A total of 360 SF of temporary impacts are proposed below OHW related to placement of isolation structures within the channel. Approximately 300 SF of riparian area will be temporarily impacted associated with construction access from South Beach Road to the channel.

A hydraulic evaluation was performed for the existing and proposed conditions within the stream crossing to evaluate potential impacts to fish passage. The velocities analyzed for fish passage under the proposed condition will not increase over the existing condition.

(8) IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

B. For temporary removal or fill or disturbance of vegetation in waterways, wetlands or riparian (i.e., streamside) areas, discuss how the site will be restored after construction.

Areas temporarily impacted within the channel will be fully restored after construction. All isolation structures will be removed, and the streambed will be re-contoured following installation of streambed material.

During the construction minimal riparian vegetation will be impacted and no trees will be removed. All areas disturbed during construction will be re-graded to match pre-construction contours and supplied with a native seed mix, as needed.

Compensatory Mitigation N/A

C. Proposed mitigation approach. Check all that apply:

☐ Permittee-responsible Onsite Mitigation	☐ Permittee-responsible Offsite mitigation	☐ Mitigation Bank or in-lieu fee program	☐ Payment to Provide (not approved for use with Corps permits)

D. Provide a brief description of mitigation approach and the rationale for choosing that approach. If you believe mitigation should not be required, explain why.

The project proposes riprap protection using the minimal amount of material necessary to protect the integrity of the existing structure. Large wood and vegetation have been incorporated in the riprap design to the maximum extent practicable. The project has been carefully designed to meet all relevant criteria relating to Oregon Fish Passage Law and conditions of the SLOPES programmatic. Based on early coordination with regulatory agencies, the proposed design elements sufficiently address all agency requirements. Therefore, additional mitigation is not proposed for this project.

Mitigation Bank / In-Lieu Fee Information: N/A

Name of mitigation bank or in-lieu fee project:

Type of credits to be purchased:

If you are proposing permittee-responsible mitigation, have you prepared a compensatory mitigation plan?

☐ Yes. Submit the plan with this application and complete the remainder of this section.

☐ No. A mitigation plan will need to be submitted (for DSL, this plan is required for a complete application).

Mitigation Location Information (Fill out only if permittee-responsible mitigation is proposed)

Mitigation Site Name/Legal Description	Mitigation Site Address	Tax Lot #
County	City	Latitude & Longitude (in DD.DDDD format)

Township	Range	Section	Quarter/Quarter

(9) ADJACENT PROPERTY OWNERS FOR PROJECT AND MITIGATION SITE

☐ Pre-printed mailing labels of adjacent property owners attached	**Project Site Adjacent Property Owners**	**Mitigation Site Adjacent Property Owners**
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**	Seabreeze Associates Limited Partnership 865 Highland Dr. Boulder Creek, CA 95006-9422	
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**	OPI LLC PO Box 449 Lincoln City, OR 97367	
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**	Sound Pacific Resources of Oregon, Inc. 27350 SW 95th Ave. Suite 3028 Wilsonville, OR 97070	
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**	Nydahl, Peggy S. Co-Trustee 15305 Rivercrest Dr. Vancouver, WA 98683	
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**		
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**		
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**		
Contact Name **Address 1** **Address 2** **City, ST ZIP Code**		

(10) CITY/COUNTY PLANNING DEPARTMENT LAND USE AFFIDAVIT (TO BE COMPLETED BY LOCAL PLANNING OFFICIAL)

I have reviewed the project described in this application and have determined that:

- ☐ This project is not regulated by the comprehensive plan and land use regulations.
- ☐ This project is consistent with the comprehensive plan and land use regulations.
- ☐ This project will be consistent with the comprehensive plan and land use regulations when the following local approval(s) are obtained:
  - ☐ Conditional Use Approval
  - ☐ Development Permit
  - ☐ Other Permit (see comment section)
- ☐ This project is not consistent with the comprehensive plan. Consistency requires:
  - ☐ Plan Amendment
  - ☐ Zone Change
  - ☐ Other Approval or Review (see comment section)

An application ☐ has ☐ has not been filed for local approvals checked above.

Local planning official name (print)	Title	City / County (circle one)

Signature	Date

Comments:

(11) COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement, which will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact DLCD at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050.

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print /Type Name William H. Busch	Title South Beach Road Association
Signature	Date

(12) SIGNATURES

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities. By signing this application I consent to allow Corps or DSL staff to enter into the above-described property to inspect the project location and to determine compliance with an authorization, if granted. I hereby authorize the person identified in the authorized agent block below to act in my behalf as my agent in the processing of this application and to furnish supplemental information in support of this permit application. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. I understand that payment of the required state processing fee does not guarantee permit issuance.
To be considered complete, the fee must accompany the application to DSL. The fee is not required for submittal of an application to the Corps.

Fee Amount Enclosed	$ 435.00

Applicant Signature

Print Name William H. Busch	Title South Beach Road Association
Signature	Date

Authorized Agent Signature

Print Name Andy Burke	Title OBEC Consulting Engineers Environmental Specialist
Signature	Date JAN. 14, 2015

Landowner Signature(s)

Landowner of the Project Site (if different from applicant)

Print Name	Title
Signature	Date

Landowner of the Mitigation Site (if different from applicant)

Print Name	Title
Signature	Date

Department of State Lands, Property Manager (to be completed by DSL)

If the project is located on state-owned submerged and submersible lands, DSL staff will obtain a signature from the Land Management Division of DSL. A signature by DSL for activities proposed on state-owned submerged/submersible lands only grants the applicant consent to apply for a removal-fill permit. A signature for activities on state-owned submerged and submersible lands grants no other authority, express or implied and a separate proprietary authorization may be required.

Print Name	Title
Signature	Date

(13) ATTACHMENTS

- ☑ **Drawings (items in bold are required)**
  - ☑ **Location map with roads identified**
  - ☑ **U.S.G.S topographic map**
  - ☑ **Tax lot map**
  - ☑ **Site plan(s)**
  - ☑ **Cross section drawing(s)**
  - ☑ **Recent aerial photo**
  - ☑ Project photos
  - ☐ Erosion and Pollution Control Plan(s), if applicable
  - ☐ DSL/Corps Wetland Concurrence letter and map, if approved and applicable
- ☐ Pre-printed labels for adjacent property owners (Required if more than 5)
- ☐ Restoration plan or rehabilitation plan for temporary impacts
- ☐ Mitigation plan
- ☐ Wetland functional assessment and/or stream functional assessment
- ☐ Alternatives analysis
- ☐ Biological assessment (if requested by Corps project manager during pre-application coordination.)
- ☐ Stormwater management plan (may be required by the Corps or DEQ)
- ☐ Other:
  - ☐
  - ☐

Send Completed form to:

U.S. Army Corps of Engineers
ATTN: CENWP-OD-GP
PO Box 2946
Portland, OR 97208-2946
Phone: 503-808-4373

Counties:
Baker, Clackamas, Clatsop, Columbia, Gilliam, Grant, Hood River, Jefferson, Lincoln, Malheur, Marion, Morrow, Multnomah, Polk, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco, Washington, Wheeler, Yamhill

OR

U.S. Army Corps of Engineers
ATTN: CENWP-OD-GE
211 E. 7th AVE, Suite 105
Eugene, OR 97401-2722
Phone: 541-465-6868

Counties:
Benton, Coos, Crook, Curry, Deschutes, Douglas Jackson, Josephine, Harney, Klamath, Lake, Lane, Linn

Send Completed form to:

DSL - West of the Cascades:

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
Phone: 503-986-5200

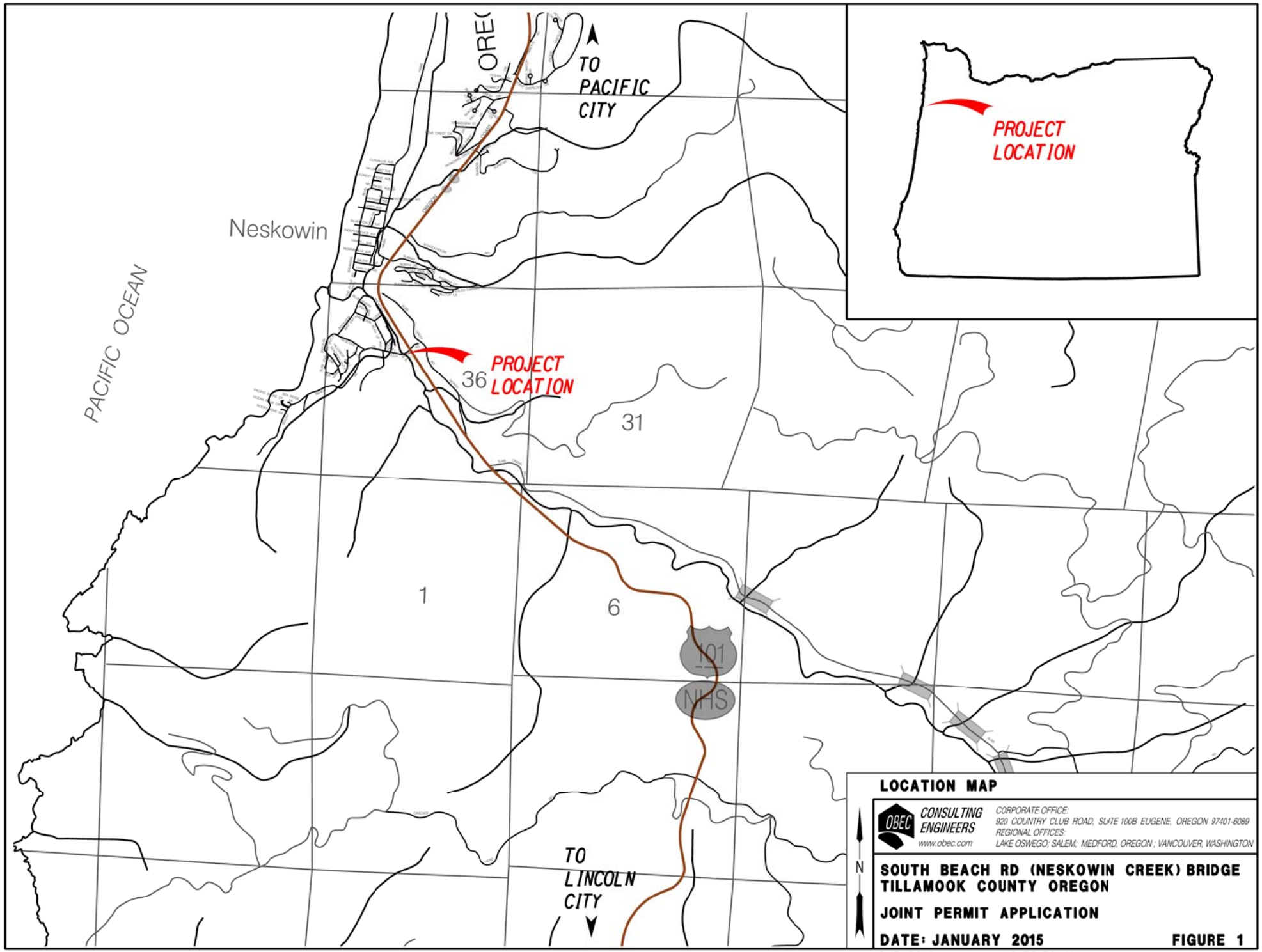
OR

DSL - East of the Cascades:

Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, Oregon 97701
Phone: 541-388-6112

Send all Fees to:
Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
Pay by Credit Card by Calling 503-986-5253

ATTACHMENT A
JPA Figures



LOCATION MAP

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920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
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SOUTH BEACH RD (NESKOWIN CREEK) BRIDGE
TILLAMOOK COUNTY OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 1**

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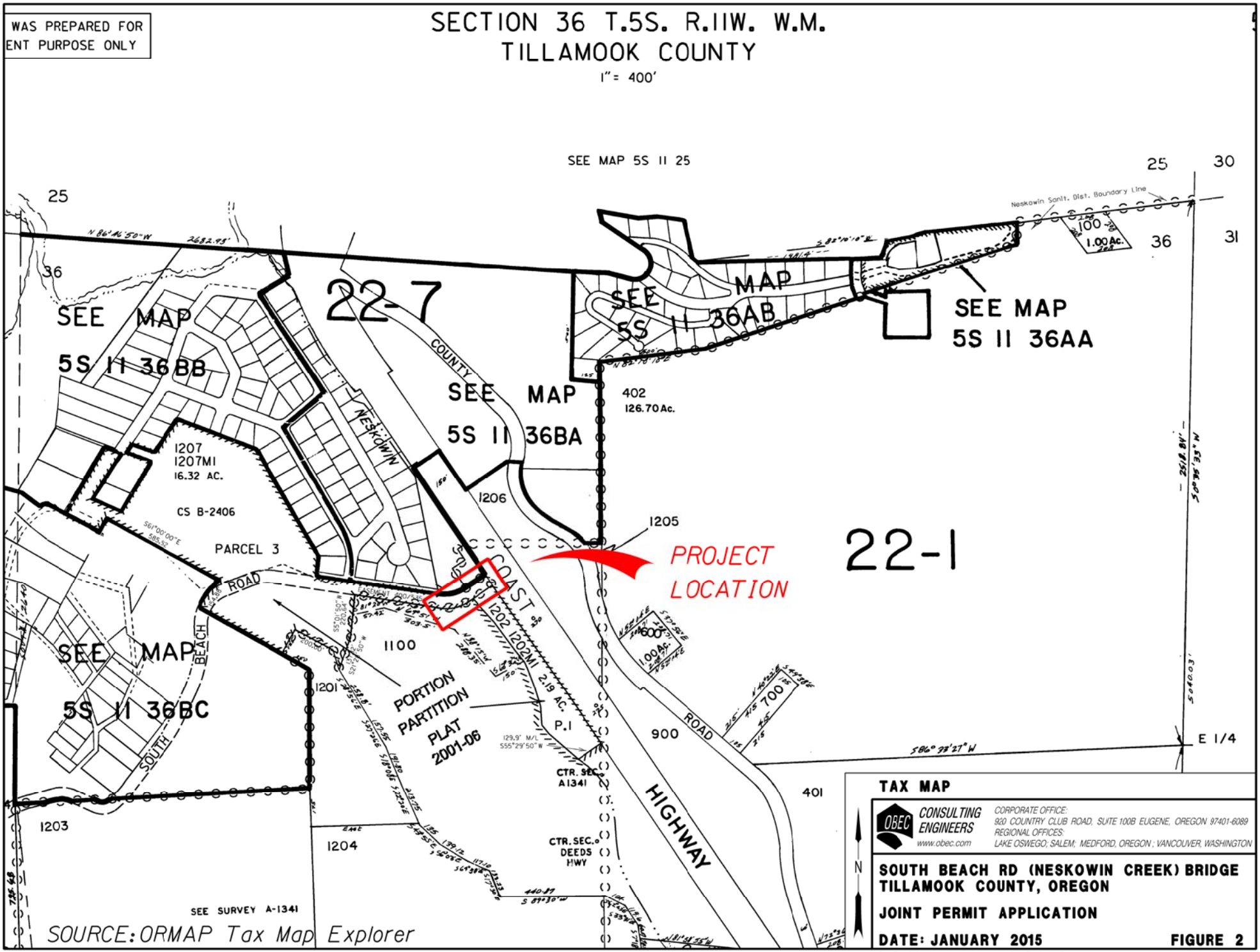
WAS PREPARED FOR
ENT PURPOSE ONLY

SECTION 36 T.5S. R.11W. W.M.
TILLAMOOK COUNTY
1" = 400'



TAX MAP

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SOUTH BEACH RD (NESKOWIN CREEK) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 2**

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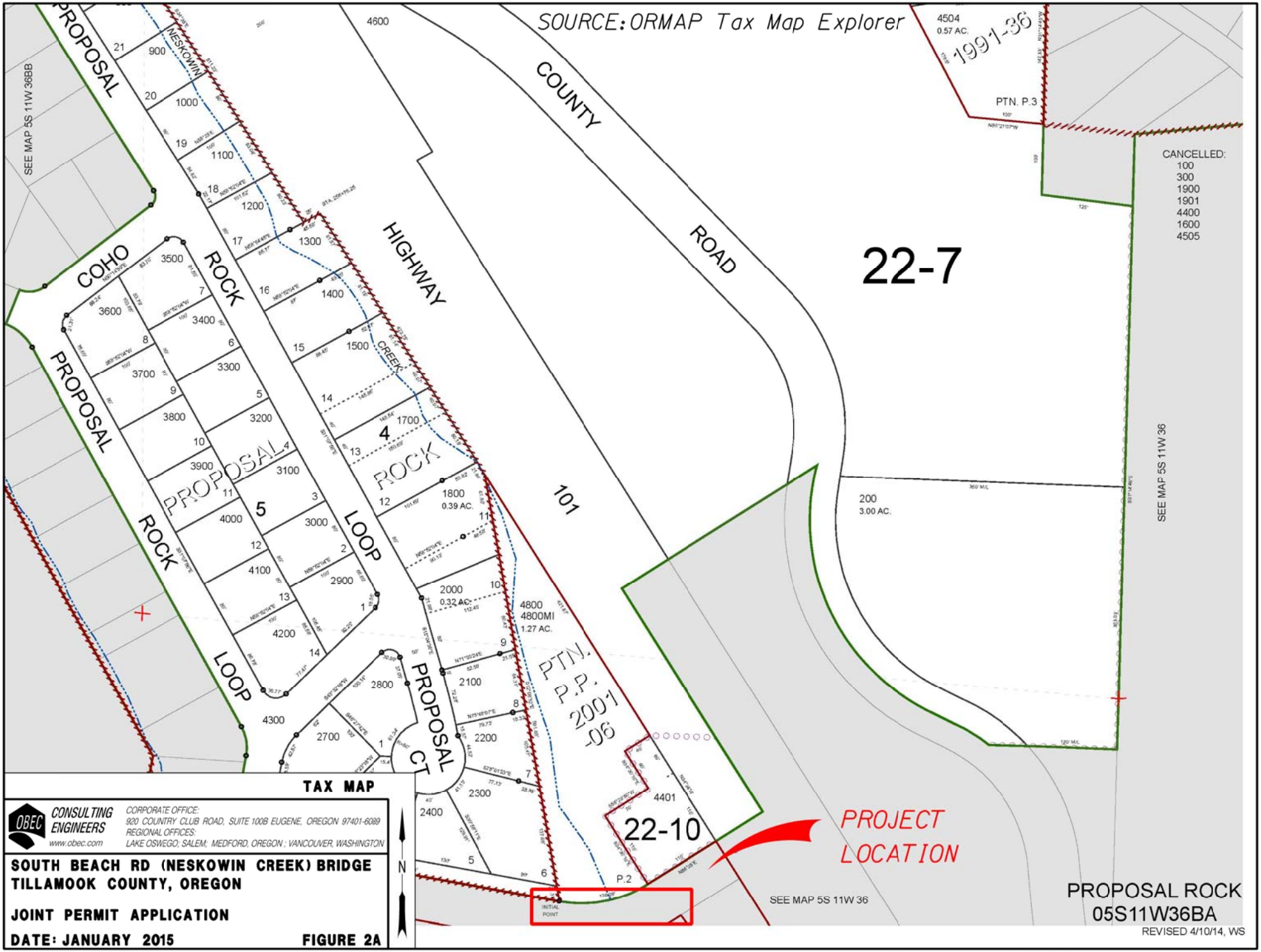

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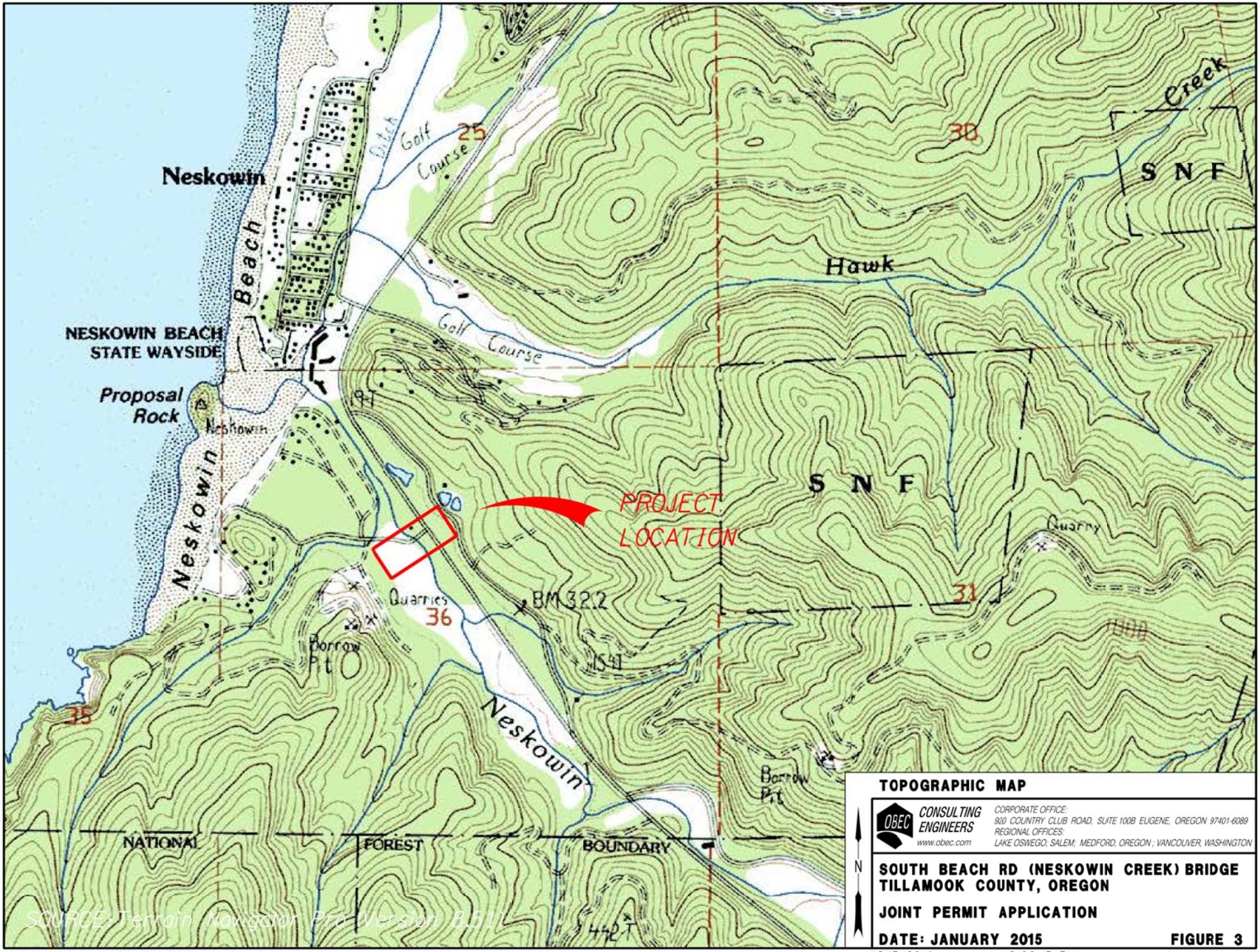

TOPOGRAPHIC MAP

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SOUTH BEACH RD (NESKOWIN CREEK) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 3**

AERIAL IMAGE

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SOUTH BEACH RD (NESKOWIN CREEK) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 4**

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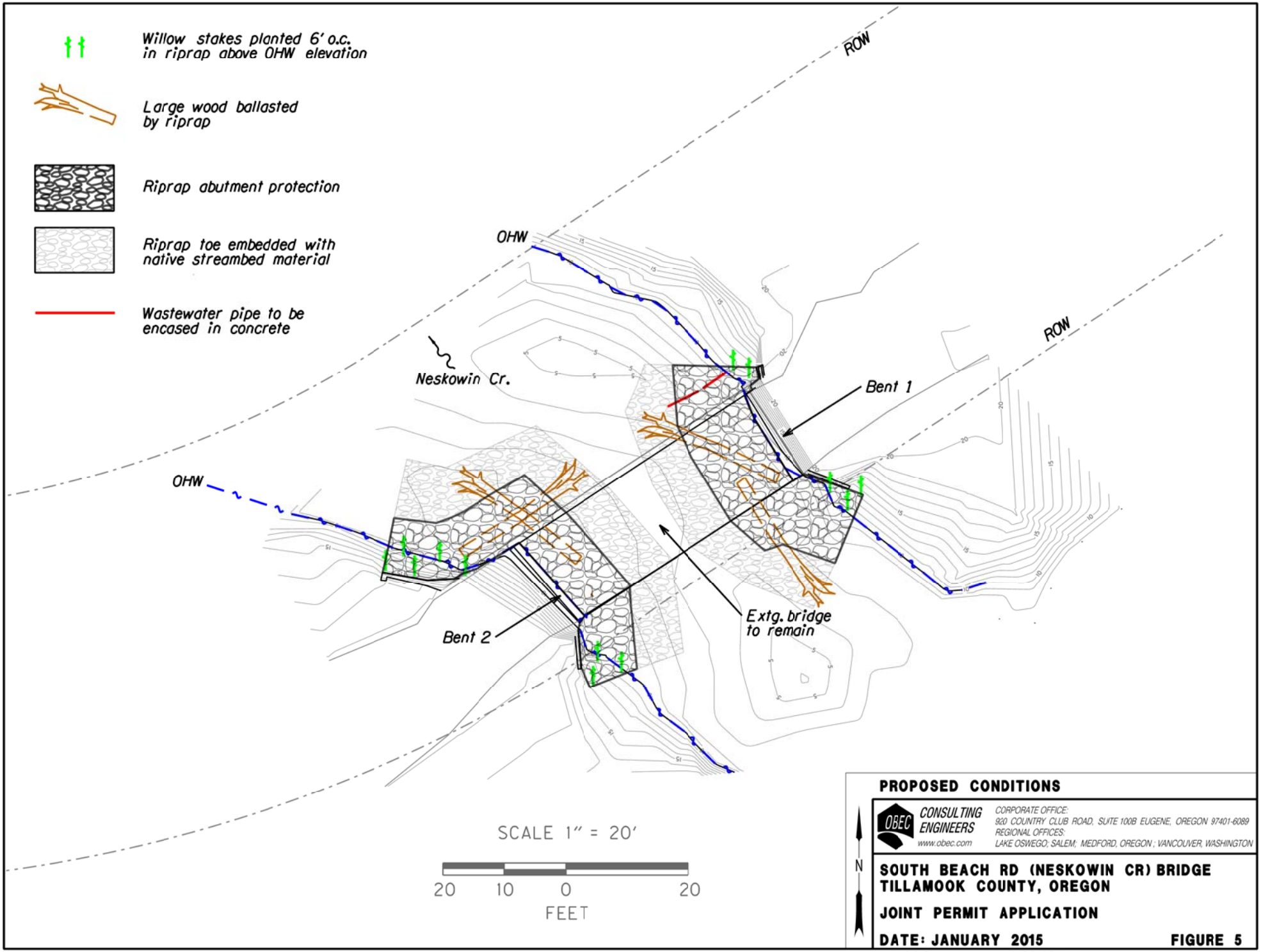

PROPOSED CONDITIONS

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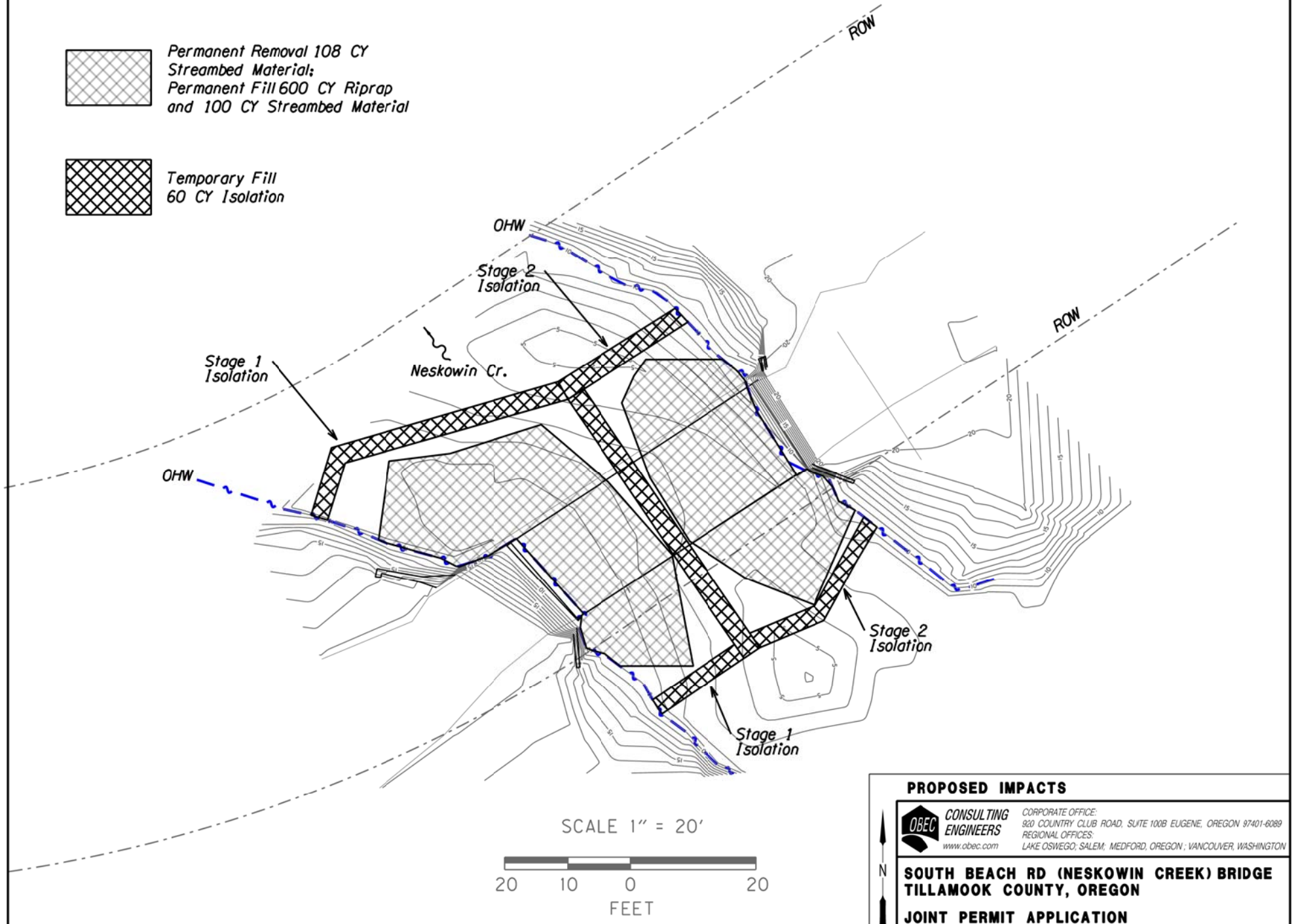
SOUTH BEACH RD (NESKOWIN CR) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 5**



PROPOSED IMPACTS

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SOUTH BEACH RD (NESKOWIN CREEK) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 6**

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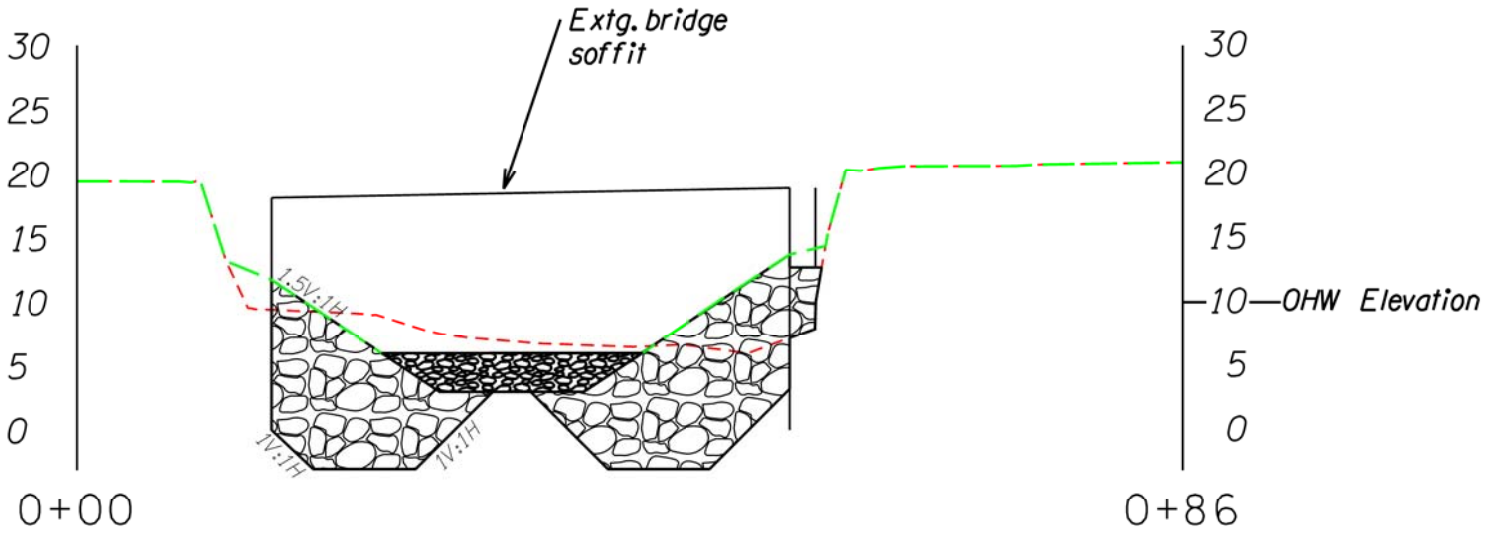

Riprap embedded with 3' native bed material

Existing ground at upstream face

Class 2000 riprap

Proposed ground at upstream face

ELEVATION VIEW - PROPOSED CONDITION

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SOUTH BEACH RD (NESKOWIN CR) BRIDGE
TILLAMOOK COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: JANUARY 2015 **FIGURE 7**

ATTACHMENT B
Color Photographs

Photo 1: Looking east at the South Beach Road Bridge

Photo 2: Looking downstream at the South Beach Road Bridge.

Photo 3: Looking east at Bent1

Photo 4: Looking west at Bent 2

Photo 5: Looking upstream at Neskowin Creek from the bridge.

Photo 6: Looking upstream at Neskowin Creek from the water level.

Photo 7: Looking downstream at Neskowin Creek from the bridge.

Photo 8: Looking downstream at Neskowin Creek from the water level.

Photo 9: Looking at the downstream end of the bridge from the east side.

Photo 10: Looking at the upstream end of the bridge from the east side.