J.L. Patterson & Associates, Inc.
Environmental Services Group

July 27, 2015

Mr. Josh Baldi, Regional Director
Ms. Alice Kelly, Regional Planner
Washington Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

RE: Ecology Comments on the BNSF Intalco Yard Improvement Project SEPA Checklist (Corps Reference No. NWS-2014-285)

Dear Mr. Baldi and Ms. Kelly,

Thank you for your comment letter dated March 17, 2015 to Glen Gaz, BNSF Railway Company (BNSF), regarding the SEPA for above-referenced project that was submitted to Ecology on January 13, 2015. Your letter was forwarded to us by BNSF on April 1, 2015. We will respond to your italicized comments followed by a response in non-italic text.

Comment:

- *Updated SEPA Checklist*

  The SEPA environmental checklist, WAC 197-11-960, was updated and revised in May 2014. Most questions are identical in both versions of the checklist. However, there are some new and revised questions….Please complete and submit the updated checklist for this proposal as soon as possible.

Response: An updated checklist was prepared and submitted to Ecology for informal review on July 6, 2015. A final updated checklist is attached and has been formally submitted to Ecology as of the date of this letter, July 27, 2015.

Comment:

- *Whatcom County Permits*

  The checklist indicates that a Whatcom County land disturbance permit and a Whatcom County temporary right-of-way permit will be needed. If permit applications will be submitted to Whatcom County, the County should be the SEPA lead agency (WAC 197-11-932). Please clarify when applications will be submitted to Whatcom County.

Response: Per recent communications, Alice Kelly with Ecology is in contact with Whatcom County regarding Ecology continuing to be the lead agency for this SEPA. The permit applications identified will be submitted to the county after feedback has been received from the WUTC regarding the specifics on turn-around needs, barriers, and signs.

Comment:

- *Relation to Custer Spur improvement project*

The Intalco Yard project was previously part of the larger Custer Spur improvement project which includes proposed rail modifications and addition of a second track along the approximately six-mile long Custer spur. The Custer Spur project is currently being reviewed as part of a SEPA and NEPA environmental Impact Statement, in conjunction with the proposed Gateway Pacific Terminal project. Please explain why the Intalco Yard Improvement Project requires separate review.

Response: Although the Intalco Yard Improvement Project does fall within the footprint of the proposed Custer Spur Project, these projects address different needs and achieve different purposes. The Intalco project is a siding extension to allow full length trains to clear the mainline for other full length trains. Presently, trains need to go through multiple switching operations to break the train up and store portions of a train on the shorter yard tracks and existing siding, which increases congestion and road blockages. The Intalco project will serve existing customer needs whether or not the proposed Gateway Pacific Terminal (GPT) and proposed Custer Spur projects are built. The proposed Custer Spur project requires construction of additional mainline tracks and yard tracks specifically for anticipated future customer needs for the proposed GPT project. Neither project is dependent on completion of the other. The Army Corps of Engineers issued a memorandum on September 5, 2014 that determined these projects have independent utility and function for regulatory environmental review and permitting.

Comment:

- *Relation to approved refinery projects*

Both the BP refinery and the Phillips 66 refinery received SEPA threshold determinations and permits from Whatcom County to construct facilities to allow crude oil deliver via the Custer Spur; BP in 2012 and Phillips 66 in 2013. The documentation submitted to the county for both projects indicated that no improvements to the rail line were necessary to accommodate the increased rail traffic transporting crude oil to the refineries. Please explain why Intalco Yard improvements and the road closure are necessary at this time given that the recent previous studies showed adequate capacity.

Response: As noted in the previous comment, the Intalco Yard Improvement Project will extend an existing siding and upgrade existing tracks along and in the Intalco Yard. The track extension will minimize existing rail congestion and multiple switching operations that result in delays on the mainline due to the short length of the existing siding. The existing track rehabilitation work will replace older, lighter, jointed rail and improve switches. The closure of the Valley View Road at-grade crossing will remove any potential for a train-vehicle incident.

The permits for the Intalco Yard Improvement Project identified above are for improvements and impacts addressing BNSF's rail operations needs for efficiency, safety, and security on BNSF lines.

Comment:

- *Environmental Health*

The checklist should describe direct impacts due to upgrading 1.37 miles of rail line, as well as potential impacts associated with operation. The risks associated with transportation of crude oil are reported by the Pipeline and Hazardous Materials Safety Administration in the proposed new rulemaking for High-Hazard Flammable Trains, defined as a train comprised of 20 or more carloads of a Class 3 flammable liquid. The checklist does not adequately explain measures to prevent risk or describe response capabilities.

Response: Subsequent to your March 17, 2015 SEPA comment letter to BNSF, a new federal rule governing the transportation of crude oil by rail was issued on May 1, 2015 by the U.S. Department of Transportation-Pipeline and Hazardous Materials Safety Administration in conjunction with the Federal Railroad Administration. The attached revised SEPA checklist, questions 7.a.4. and 7.a.5., address response capabilities and measures to prevent risk.

Additionally, the same products are being transported by BNSF on this line presently. The construction of the proposed improvements reduces multiple switching operations, breaking the trains into sections, and then rebuilding trains in the area. All of the proposed work provides improvements to tracks, switches and signaling, which improves safety.

Comment:

- *Amount of wetland fill*

Please indicate the area *of wetland fill (question 3.a.1.) in addition to the quantity.*

Response: We believe you are referring to question 3.a.3.; the total area of wetland fill, 0.36 acres, is identified in the revised SEPA checklist.

Thank you for the opportunity to provide this information and clarification to your comments.

Sincerely,

Pierre Bordenave, Vice President
J.L. Patterson & Associates, Inc. – Environmental Services Group

cc: Glen Gaz, BNSF
Rick Wagner, BNSF
Marnie Black, Ecology

SEPA ENVIRONMENTAL CHECKLIST
UPDATED 2014

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:**

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. **Name of proposed project, if applicable:** "BNSF Intalco Yard Improvement" Project

2. **Name of applicant:** BNSF Railway Company (BNSF)

3. **Address and phone number of applicant and contact person:**

   Glen Gaz, Manager Engineering **- OR -** Bruce Sparling, Project Engineer
   2454 Occidental Avenue South, Suite 2-D
   Seattle, WA 98134-1451
   206-625-6150 (Gaz); 206-625-6633 (Sparling)

4. **Date checklist prepared:** Revised 7/24/2015 from 7/6/2015 and 1/13/2015 submissions (prepared for BNSF by J.L. Patterson & Associates, Inc.– Environmental Services Group)

5. **Agency requesting checklist:** Washington Department of Ecology (Ecology)

6. Proposed timing or schedule (including phasing, if applicable):

Estimate of construction start date: When permits are received; estimated to be Spring 2016
Estimate of construction finish date: 6 months from construction start date

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- NPDES Construction Storm Water General Permit Notice of Intent (NOI) (submitted after SEPA Determination is received) and associated Storm Water Pollution Prevention Plan (SWPPP)
- Cultural Resources Survey/Archaeological Report
- Inadvertent Discovery Plan for historic/cultural resource protection
- Wetland and Stream Assessment Report for jurisdictional waters of the U.S. within the project work corridor
- Biological Evaluation for Informal ESA Consultation (BE – No Effect Statement)
- Water Quality Management and Protection Plan (WQMPP)
- JARPA application for minor wetland impacts (for 404 Nationwide Permit)

These documents are available upon request.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

A petition is pending with the Washington Utilities and Transportation Commission (WUTC) for closure of the Valley View Road at-grade railroad crossing (DOT #096110B).

10. List any government approvals or permits that will be needed for your proposal, if known.

- NPDES Construction Storm Water General Permit Authorization
- Corps of Engineers Section 404 Nationwide Permit 14 for Linear Transportation Projects for wetland impacts less than ½ acre
- Ecology Section 401 Water Quality Certification
- WUTC authorization to close crossing at Valley View Rd.
- Whatcom County Land Disturbance Permit
- Whatcom County Temporary ROW Permit

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Intalco Yard Improvement Project will extend both ends of an existing siding track within the BNSF Intalco Yard and upgrade approximately 1.37 miles of track and infrastructure along the BNSF Cherry Point mainline within the Intalco Yard limits (total length 1.62 miles). Key components of the project include: (1) removal and replacement of turnouts, switches and signals; (2) 3,690 feet of new track construction to extend the siding; (3) upgrading tracks and switches in the existing yard; (4) extending four culverts; (5) closing the Valley View Rd. at-grade crossing; and (6) constructing two retaining walls. The overall work area is 16.2+/- acres with approximately 3.4 acres of ground disturbance.

The purpose of this project is to enable BNSF to move full-length trains on and off the mainline without blocking the mainline, switches, or roads by allowing trains to exit the mainline onto the extended siding. The project reduces congestion, switching operations, and the need to break and rebuild full length trains to fit onto the shorter siding and Yard Tracks.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located near Custer, WA within Whatcom County in portions of Sections 26, 27, and 28 in Township 40 North, Range 1 East; Willamette Meridian. The project lies within the BNSF right-of-way (ROW) in the Northwest Division, Cherry Point Subdivision, Line Segment 418, from Milepost (MP) 0.20 to MP 1.82; generally from the BNSF Intalco Wye near Custer, west to Ham Rd. Latitudes and longitudes are: East end at Intalco Wye is 48055'21.82"N, 122039'07.46"W; West end at Ham Road is 48055'22.59N, 122041'16.45"W.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site
(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

The project work site is flat, with a localized railroad embankment slope of approximately 45%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The *Soil Survey of Whatcom County Area, Washington* (NRCS,1992) mapped five soil series in the project work corridor that are listed in the table below. All of the soils have inclusions that are found on the Whatcom County Hydric Soil List.

Soil Series	Characteristics
11-Bellingham silty clay loam, 0 to 2 percent slopes.	Very deep, poorly drained soil in depressions on terraces.
45-Edmonds-Woodlyn loam, drained, 0 to 2 percent slopes.	Edmonds soil is very deep and somewhat poorly drained; Woodlyn soil is shallow and poorly drained. It has been artificially drained. Both are on outwash terraces and outwash plains.
99-Lynden sandy loam, 0 to 3 percent slopes	Very deep, well-drained soil on outwash terraces.
149-Skipopa-Blainegate complex, 0 to 8 percent slopes.	Skipopa soil is very deep and somewhat poorly-drained. Blainegate soil is very deep and poorly-drained and formed in loess and marine deposits. This map unit is on marine terraces characterized by a series of elongated ridges and swales.
165-Tromp loam, 0 to 2 percent slopes.	Very deep, moderately well-drained soil on outwash terraces.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Earth disturbing work will encompass 3.4 +/- acres of grading and will involve 2,000+/- cubic yards (CY) of fill along the yard extension and an additional 86+/- CY of fill for culvert extensions. The source of fill is

clean, structural material from local commercial quarries that meets the engineering design criteria for use in mainline railroad construction.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

The potential for erosion is low on the project site because of the generally flat conditions of the existing ROW work corridor and the nature of construction involving stabilized rock structural material. Native soils in the project corridor that will be excavated have low to moderate probability of erosion. Project-specific BMPs will be implemented to avoid and prevent any construction-related erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Currently less than 1% of the area of the project has signal infrastructure pads, bungalows, or other impervious surfaces, and less than 1% of the site will be covered with impervious surfaces after project construction

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

BMPs will be designed and implemented according to the most recent version of the Ecology *Stormwater Management Manual for Western Washington* (as amended 12/2014). The BMPs used will be those most appropriate for the project site and will include, but are not limited to, rock-protected construction entrances/exits, sediment filter rolls, and sediment filter fabric fencing.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Some dust could be generated during construction, and earth moving equipment (excavators, bulldozers, backhoes, graders) and other support vehicles (pickup trucks, equipment maintenance vans) will emit exhaust. Following completion of the project, emissions from the site will be limited to diesel train exhaust which is pre-existing to the project.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust control measures during construction, such as watering of open soil areas and placement of clean rock on BNSF access areas, will be implemented as needed. Any water used for dust control will be from an authorized source. Machinery, equipment, and support vehicles used for the project will be maintained in proper working order to keep emissions within applicable air quality guidelines.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

California Creek flows under existing BNSF bridges at MP 0.85, and three of its unnamed tributaries (UT-2, UT-3, UT-4) flow through culverts under the tracks. California Creek and its associated unnamed tributaries are considered a sub-basin of the Drayton Harbor watershed; California Creek and UT-4 are year-round streams and UT-2 and UT-3 are intermittent.

Additionally, there are 16 jurisdictional ditches at the toe of the rail grade embankment slope in the BNSF ROW that ultimately drain to California Creek or its unnamed tributaries. Portions of 12 wetlands also exist within the BNSF ROW/work corridor as listed in the table below:

Wetland Name	Wetland Type	Wetland Rating Category	Acres in BNSF ROW
W	PSS	III	0.60
X	PSS	III	0.35
V	PSS	III	1.92
Uu	PEM	III	3.38
VV	PFO	III	0.90
U	PFO	III	1.40
u	PEM	IV	0.72
Vv	PEM	IV	0.50
v/vv	PFO	III	2.34
T	PFO	II	0.92
tt	PFO	III	0.25
TT	PSS	IV	0.88
Total Acres			**14.16**

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes; the siding extension, mainline track upgrades, retaining wall installation, maintenance access, and related infrastructure/utility improvements will occur adjacent to the water bodies noted in 3.a.1) above, including edge fill into Wetlands T, tt, and TT; culvert extensions at UT-3 and UT-4, and in-kind replacement of jurisdictional ditches.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Approximately 1,580+/- cubic yards (CY) of edge fill totaling 0.36 acres will be placed in Wetlands T, tt, and TT. Additionally, 86+/- CY of fill totaling 40+/- linear feet will be placed in UT-3 and UT-4 for culvert extensions. The source of fill is clean, structural material from local commercial quarries that meets the engineering design criteria for use in mainline railroad construction.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not applicable.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The only source of runoff would be associated with incident precipitation. Incidental precipitation on railroads typically infiltrates on-site within the BNSF ROW through the subgrade and ballast rock that make up the railroad embankment structure. Temporary, during-construction storm water runoff, as well as permanent after-construction runoff, will not be different from existing conditions.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The project does not have any significant alteration of drainage patterns. Existing impacted trackside ditches will be moved/replaced with new in-kind adjacent ditches with no change to end connectivity.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Site-specific BMPs such as sediment fencing, rock and fabric filter berms, and rock cover will be implemented and managed throughout the project. General drainage patterns will not change.

4. Plants

a. Check the types of vegetation found on the site:

X___deciduous tree: alder, maple, aspen, other: black cottonwood
X___evergreen tree: fir, cedar, pine, other: Western hemlock
X___shrubs
X___grass
____pasture
____crop or grain
____Orchards, vineyards or other permanent crops
X___wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: willow, redosier dogwood, spirea
____water plants: water lily, eelgrass, milfoil, other
X___other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Vegetation removed will be grasses, weeds, and/or shrubs in the already-disturbed BNSF ROW. Removal of existing vegetation will be limited to the minimum needed for the project.

c. List threatened and endangered species known to be on or near the site.

There are no federal or state listed threatened or endangered plant species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Open soil areas not covered with clean rock after final construction and grading will be seeded and mulched with permanent native grasses.

e. List all noxious weeds and invasive species known to be on or near the site.

Canada thistle, reed canary grass, and quackgrass.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

birds: hawk, heron, eagle, songbirds, other: waterfowl
mammals: deer, bear, elk, beaver, other: small rodentia
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.

The following federally-listed species are identified by the U.S. Fish & Wildlife Service (USFWS) and/or National Marine Fisheries Services (NMFS) as on or near the project site.

Species	Scientific Name	Designation	Species in Vicinity	Species on Site
Chinook salmon (Puget Sound ESU)	*Oncorhynchus tshawytscha*	Threatened	Yes	No
Steelhead trout (Puget Sound DPS)	*Oncorhynchus mykiss*	Threatened	Yes	Yes
Bull trout / Dolly Varden	*Salvelinus confluentus / Salvelinus malma*	Threatened (BT) / Proposed Threatened (DV)	Yes	No
Marbled murrelet	*Brachyramphus marmoratus*	Threatened	Yes	No

PHS data also maps coho salmon in the project vicinity. Coho are listed by NMFS as threatened, however they are not listed in the Puget Sound ESU that includes Whatcom County. There are no state-listed threatened or endangered species on or near the site.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

Not applicable.

e. List any invasive animal species known to be on or near the site.

None.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

A minor amount of electricity will be used to operate the signals and switches after project completion.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No change or increase of environmental health hazards are anticipated as a result of project construction, and continued and ongoing railroad operations will be consistent with applicable Hazardous Waste Transport rules and regulations. After construction, the extended siding will reduce switching operations needed to break, store, and rebuild full-length trains in the Intalco Yard, which in turn increases safety.

During construction, all waste materials associated with the project will be handled and disposed of in a manner that does not cause any health hazard. Good housekeeping BMPs at the worksite are outlined in the project-specific SWPPP and will be implemented and managed as follows:

- All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected daily to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
- On-site fueling and petroleum product storage containers will include secondary containment equivalent to at least 1.5 times of the volume of on-site stored material.
- Spill prevention measures, such as drip-pans and absorbent pads, will be used when conducting maintenance and on-site minor repair of vehicles or equipment.
- Prior to performing any minor or emergency vehicle repairs on-site, plastic will be placed beneath the vehicle and, if raining, placed over the vehicle.
- Spill kits shall be available at all point of machinery operations.
- Solid waste will be stored in secure, clearly marked containers and regularly maintained/serviced.
- The Contractor will prepare a Spill Prevention, Containment and Control Plan (SPCC) in accordance to BNSF contractual requirements.

1) Describe any known or possible contamination at the site from present or past uses.

None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Fuel and machinery maintenance fluids will be used during construction. This is a siding extension for switching operations to allow full-length trains to meet and pass without blocking the mainline. No storage, use, or production of toxic or hazardous chemicals are proposed. Operations will continue to serve existing refineries and clients as is the present condition, but with greater efficiency through reduced switching.

4) Describe special emergency services that might be required.

BNSF does not anticipate that special emergency services will be required. However, per BNSF Standard Operating Procedures (SOP), the contractor will develop and submit an emergency Safety Action Plan prior to starting construction. This plan will identify local and regional authorities to contact in case of an emergency and the appropriate protocol to follow.

Following construction, BNSF is responsible and equipped to respond to emergencies. During rail operations, BNSF personnel are required to comply with BNSF's existing health and safety plan and with the US Department of Transportation's (USDOT) 5/7/2014 Emergency Order regarding notification to State Emergency Response Commissions (SERCs) and Tribal Emergency Response Commissions of the expected movement of trains carrying 1 million gallons or more of Bakken crude oil (about 35 tank cars) through individual states and tribal regions.

Additionally, BNSF recently signed a new mutual aid agreement with Washington refineries for rail emergency response. The voluntary agreement establishes the sharing of personnel and resources between refiners, railways, and first responders in the event of an incident involving hazardous materials, and sets up procedures for communicating the need for mutual aid assistance and response. Signatory refineries include BP Cherry Point, Phillips 66, Shell Oil Products US, Tesoro, and U.S. Oil Refining Co. This agreement is an extension of BNSF's existing practice to provide aid to communities no matter if an incident involves rail or not.

5) Proposed measures to reduce or control environmental health hazards, if any:

This action is not anticipated to create an environmental health hazard. The contractor will be required to follow the applicable Washington Industrial Safety and Health Administration (WISHA) regulations during project construction. BNSF will require the contractor's Health and Safety Plan to define the appropriate engineering control methods and personal protection equipment for health and safety and follow BNSF SOP for environmental protection. BNSF is also working with customers to make the transition to next generation or retrofitted tank cars while the new USDOT 5/1/2015 Final Rule "Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains" undergoes review.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None that would affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise levels will increase during construction from machinery and equipment being operated during normal work hours. Following construction, normal background noise levels typical of a mainline railroad will continue to occur. The train horn will no longer be sounded with the closure and removal of the Valley View public at-grade RR crossing.

3) Proposed measures to reduce or control noise impacts, if any:

Adhering to normal work hours and having the construction machinery and vehicles equipped with mufflers in optimum working order.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The current use of the site is the existing BNSF interstate mainline railroad/switch yard. Adjacent properties are used primarily for agriculture and single-family residences. There are also pockets of relatively undisturbed coniferous and deciduous forested areas adjacent to the work corridor.

The proposal will not affect land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The site has not been used as working farmlands or forest lands. No acres in farmland or forest land will be converted.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

Structures within the work corridor consist of the railroad track structural embankment prism and railroad operation communication signals and bungalows. Existing bridges span California Creek within the Intalco Yard and there are five existing culverts within the work corridor.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

The site and surrounding properties are zoned by Whatcom County as R10A: Rural (1 unit/10 acres).

f. What is the current comprehensive plan designation of the site?

The Whatcom County comprehensive plan designates the site as Rural.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes; parts of the project site contain wetlands and salmonid bearing streams (identified in section B.3. above) that are classified as environmentally sensitive areas by the Whatcom County Critical Areas Ordinance/Map.

i. Approximately how many people would reside or work in the completed project?

No one currently resides at the project site and no one will reside at the completed project site. Track crews of 1-4 persons will work on-site periodically as needed for routine BNSF rail operations and maintenance.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This project is specifically related to the existing and continued use of the property as a mainline railroad and switchyard.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Not applicable.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Not applicable.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Not applicable.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No light or glare producing activity is proposed. The only source of light is related to existing railroad operations, such as signals and lights on trains.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Not applicable.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

None.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Not applicable.

.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

Line Segment 418 of the BNSF Cherry Point Subdivision has been identified as eligible for listing in the National Register of Historic Places for its strong association with the history of industrial development at Cherry Point.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None were identified in the *Cultural Resource Survey for the BNSF Intalco Yard Improvement Project*, Whatcom County, Washington; Archeological Investigations Northwest, Inc.; May 28, 2015; Report No. 3453.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Findings identified in the *Cultural Resource Survey* noted in 13.b. above were that the project would maintain the original alignment of the historic-period railroad and only minor changes would result from the proposed project, therefore there would be no adverse effects to historic properties. Additionally, the survey concluded that "no archaeological resources or archaeological high-probability areas were identified in the project APE…and no further archeaological work is recommended."

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Per BNSF SOP for all rail projects, a project specific Inadvertent Discovery Plan will be prepared and implemented for the project.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The project site is only accessible with permission from BNSF. Valley View Road intersects with the site near the project's east end; the west end of the project site is near Ham Road.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The area is served by the Whatcom Transportation Authority (WTA). The nearest WTA transit stop is approximately one mile north/northwest of the project near the intersection of Ham Road and Birch Bay Lynden Rd.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

No parking spaces will be created or eliminated by the project.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The project proposes closure of the at-grade crossing (DOT #096110B) at Valley View Road due to ongoing blockages at this location presently from the need for multiple switching operations to break full length trains in order fit them on the existing shorter siding and Yard Tracks. The Siding extension will block this crossing permanently.

Appropriate permitting applications will be filed with the County for road improvements and appropriate barriers and signs, which will be partially within the County ROW as indicated in the submitted project plans.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project is within BNSF ROW, which is a mainline, interstate railroad.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

No daily vehicle trips would be generated by the completed project.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

Barriers and signage will be installed on Valley View Road indicating that the road is closed.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utilities are proposed for this project.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Diane M. Williams

Name of signee: Diane M. Williams

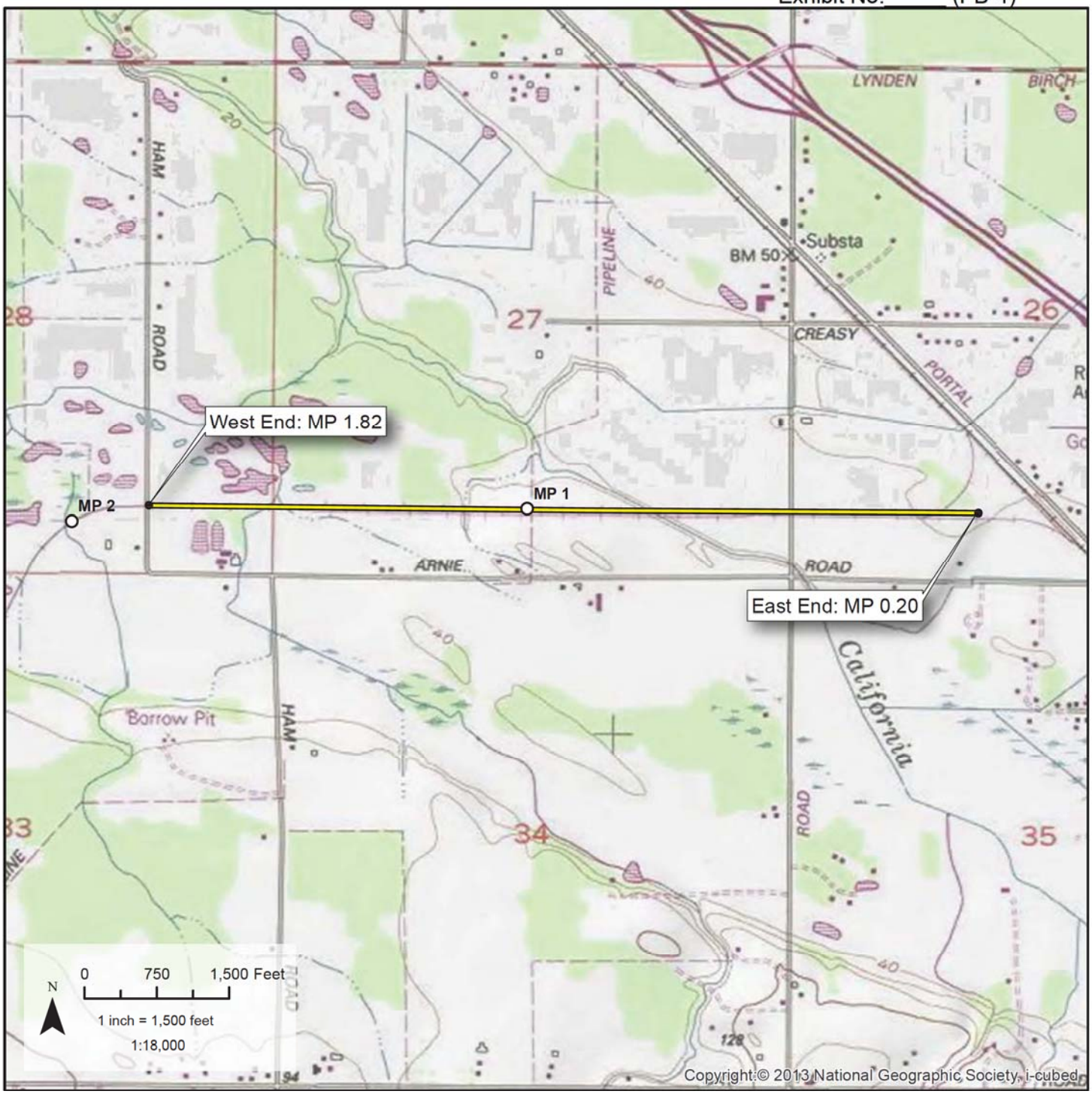
Position and Agency/Organization:
Senior Environmental Coordinator/J.L. Patterson & Associates, Inc.- Environmental Services Group (JLP)

Date Resubmitted (2014 Revised Checklist): July 27, 2015

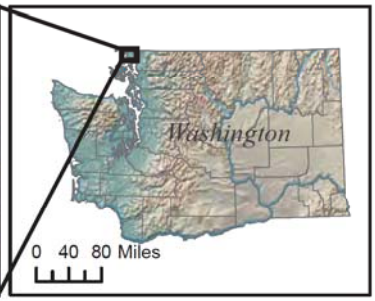
REFERENCE MAPS

- **USGS Project Vicinity**
- **NWI Wetlands Overview**
- **NRCS Soils Overview**
- **FEMA Flood Zone**
- **Hydrology Overview**
- **WDFW Priority Habitat and Species (PHS) Map**

Exhibit No._____ (PB-4)



- BNSF Milepost
- Project Ends
- Project Corridor

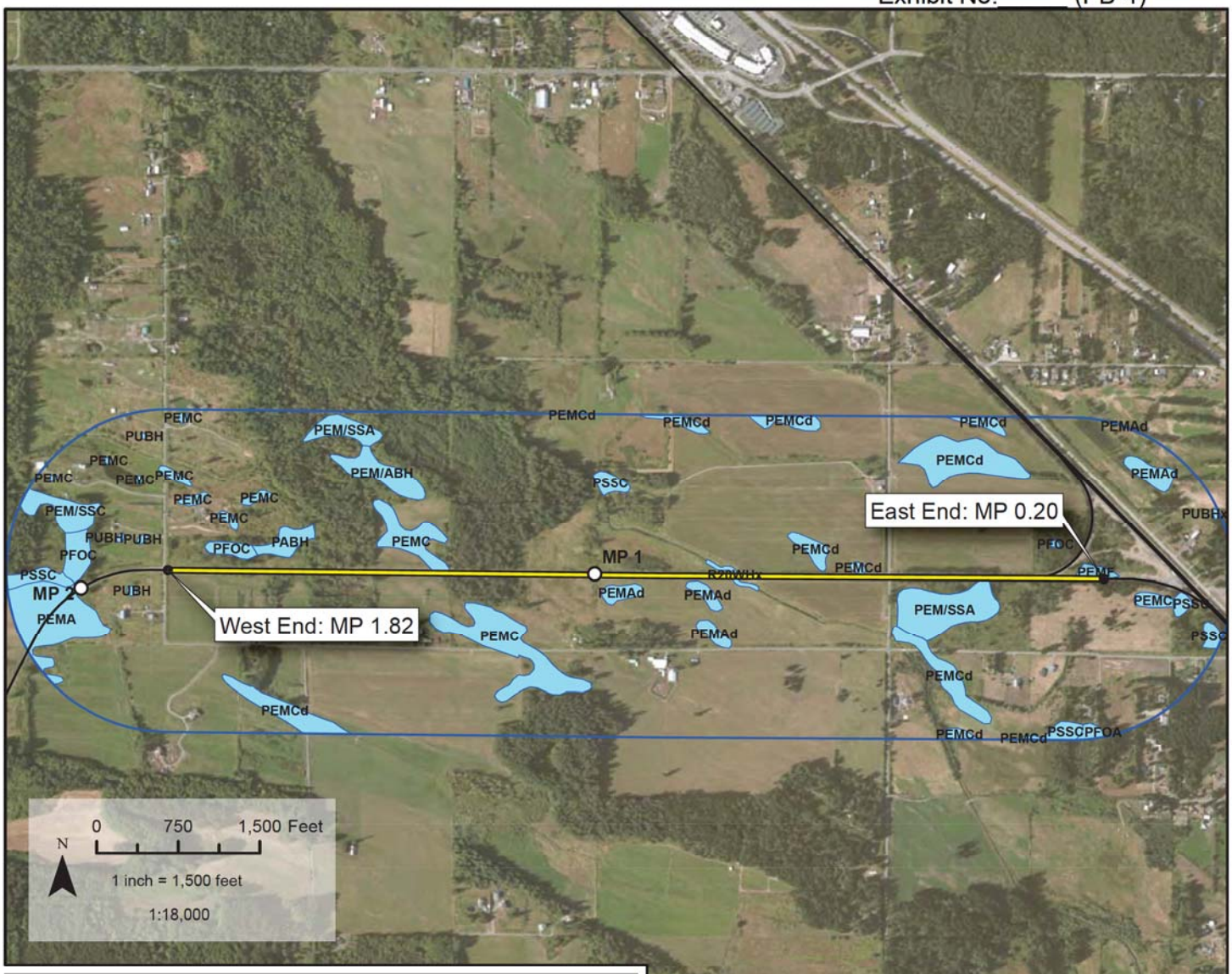


PROJECT VICINITY MAP (USGS BLAINE QUAD)

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
EAST END LAT LONG (MP 0.20): 48°55'21.82"N, 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N, 122°41'16.45"W
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: US GEOLOGICAL SURVEY (TOPOGRAPHY), BNSF (TRACK AND MILEPOSTS), ESRI (STREET MAP), NATURAL EARTH (STATE MAP)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

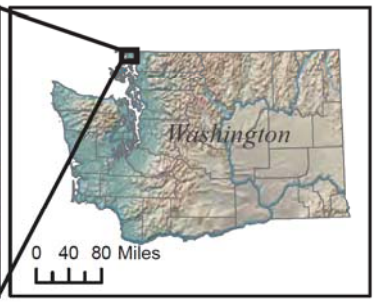
Exhibit No.____ (PB-4)



Project Ends
BNSF Mileposts
Project Track
BNSF Track
NWI Wetlands

NWI WETLANDS WITHIN 1500 FT OF PROJECT TRACK

PABH: Palustrine Aquatic Bed – Permanently Flooded
PEM/ABH: Palustrine Emergent / Palustrine Aquatic Bed
PEM/SSA: Palustrine Emergent / Palustrine Scrub-Shrub – Temporarily Flooded
PEM/SSC: Palustrine Emergent / Palustrine Scrub-Shrub – Seasonally Flooded
PEMA: Palustrine Emergent – Temporarily Flooded
PEMAd: Palustrine Emergent – Temporarily Flooded, Partially Drained, Ditched
PEMC: Palustrine Emergent – Seasonally Flooded
PEMCd: Palustrine Emergent – Seasonally Flooded, Partially Drained, Ditched
PEMF: Palustrine Emergent – Semipermanently Flooded
PFOA: Palustrine Forested – Temporarily Flooded
PFOC: Palustrine Forested – Seasonally Flooded
PSSC: Palustrine Scrub-Shrub – Seasonally Flooded
PUBH: Palustrine Unconsolidated Bottom – Permanently Flooded
PUBHx: Palustrine Unconsolidated Bottom – Permanently Flooded, Excavated
R20WHx: Riverine, Lower Perennial, Open Water – Permanently Flooded, Excavated

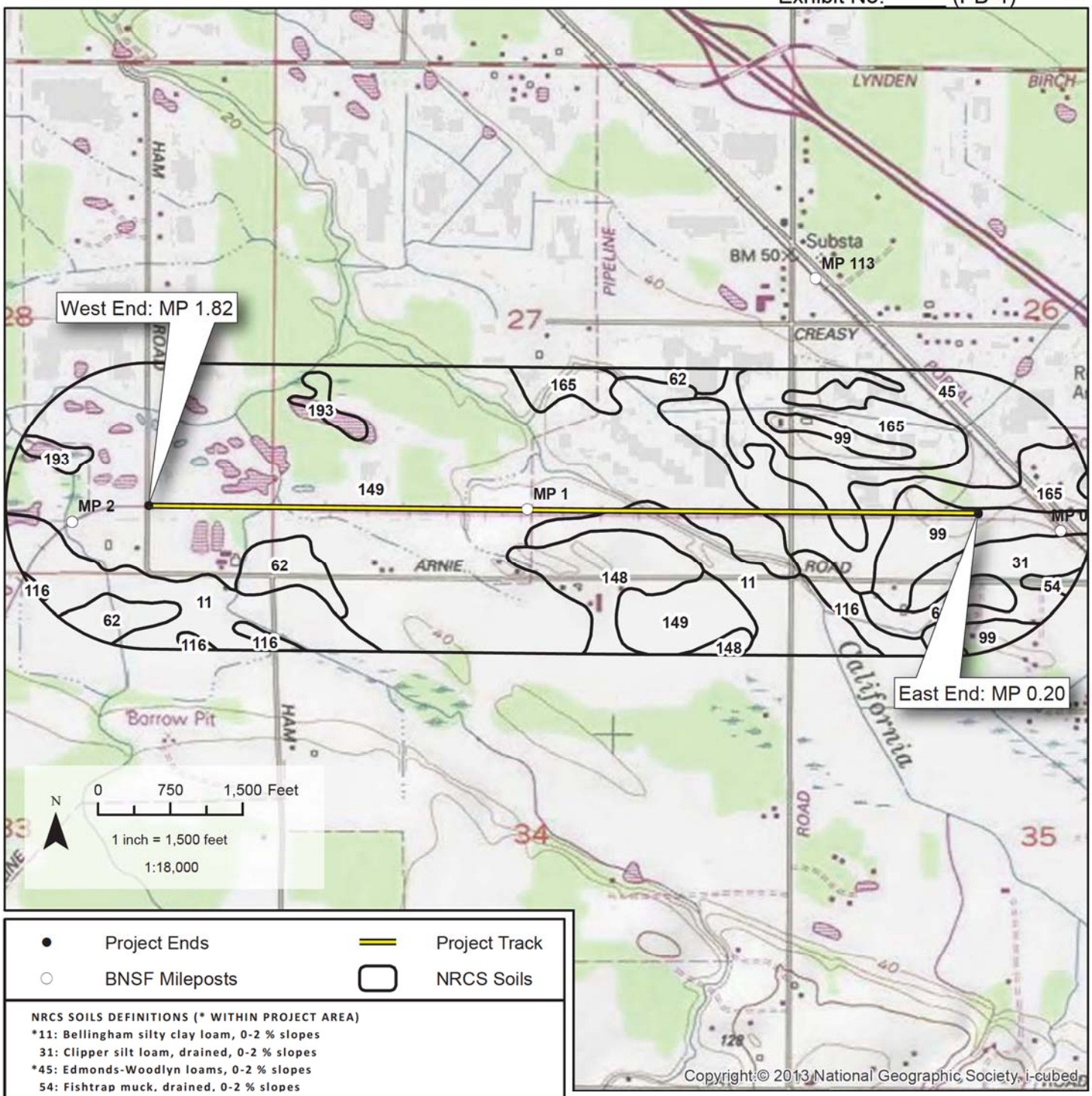


NWI WETLANDS OVERVIEW MAP

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
EAST END LAT LONG (MP 0.20): 48°55'21.82"N, 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N, 122°41'16.45"W
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: ESRI (AERIAL IMAGERY, STREET MAP), BNSF (TRACK AND MILEPOSTS), US FISH AND WILDLIFE SERVICE - NATIONAL WETLAND INVENTORY (WETLANDS), NATURAL EARTH (STATE MAP)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

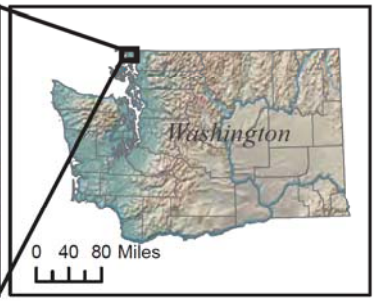
Exhibit No._____ (PB-4)



● Project Ends	Project Track
○ BNSF Mileposts	NRCS Soils

NRCS SOILS DEFINITIONS (* WITHIN PROJECT AREA)

*11: Bellingham silty clay loam, 0-2 % slopes
31: Clipper silt loam, drained, 0-2 % slopes
*45: Edmonds-Woodlyn loams, 0-2 % slopes
54: Fishtrap muck, drained, 0-2 % slopes
62: Hale silt loam, drained, 0-2 % slopes
*99: Lynden sandy loam, 0-3 % slopes
116: Pangborn muck, drained, 0-2 % slopes
148: Skipopa silt loam, 0-8 % slopes
*149: Skipopa-Blainegate complex, 0-8 % slopes
*165: Tromp loam, 0-2 % slopes
193: Water



NRCS SOILS OVERVIEW MAP

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
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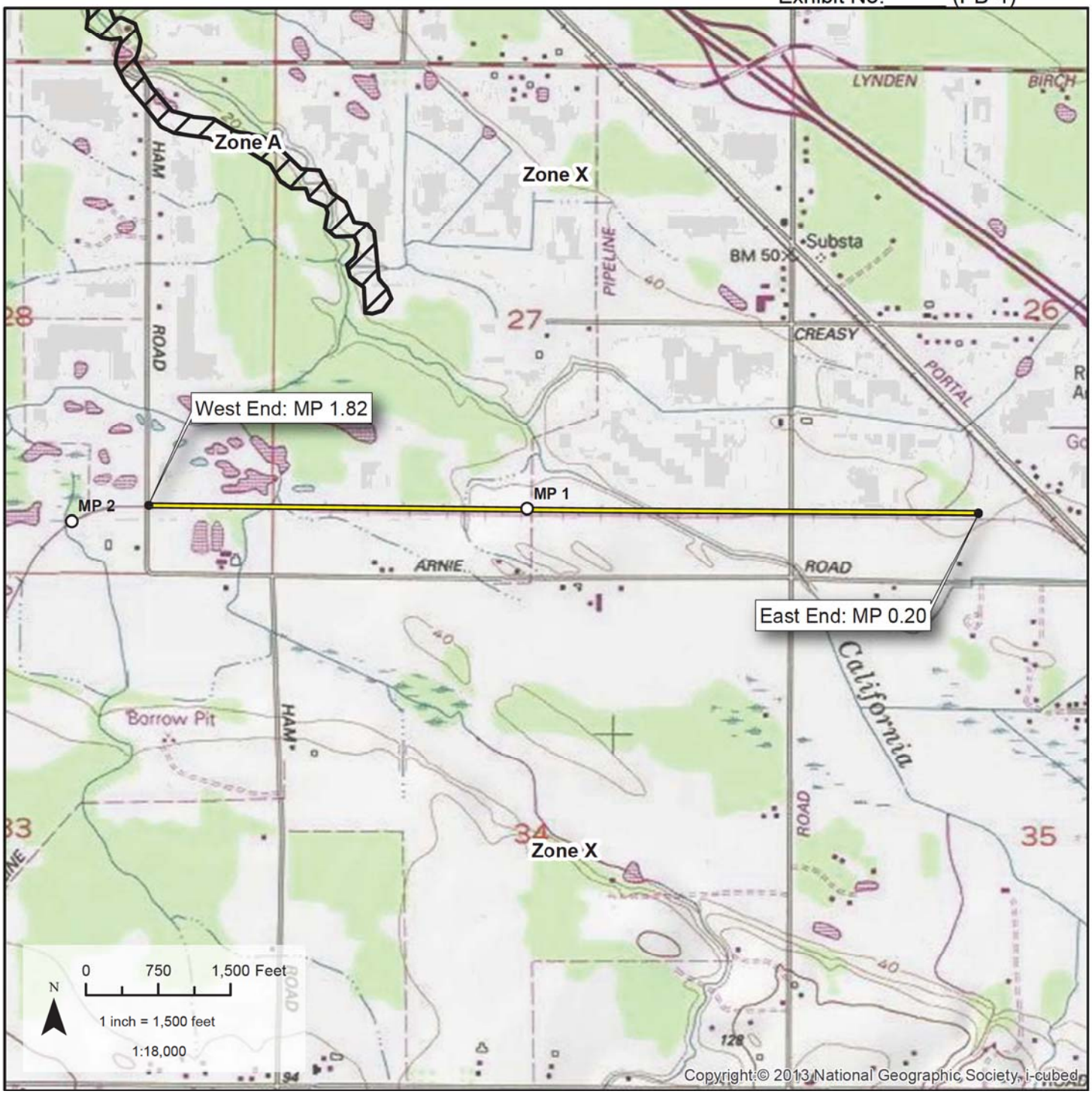
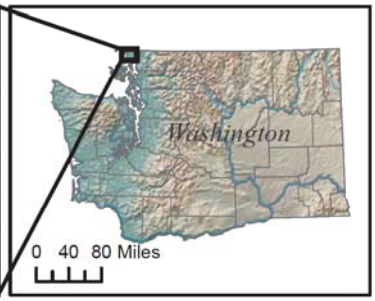
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: US GEOLOGICAL SURVEL (TOPOGRAPHY), BNSF (TRACK AND MILEPOSTS), ESRI (STREET MAP), NATURAL RESOURCES CONSERVATION SERVICE (SOILS), NATURAL EARTH (STATE MAP)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

Exhibit No._____ (PB-4)



- Project Ends
- BNSF Milepost
- Project Track
- Zone X: Minimal rist area outside the 0.2-percent-annual-chance floodplain
- Zone A: Area subject to inundation by the 1-percent-annual-chance flood event

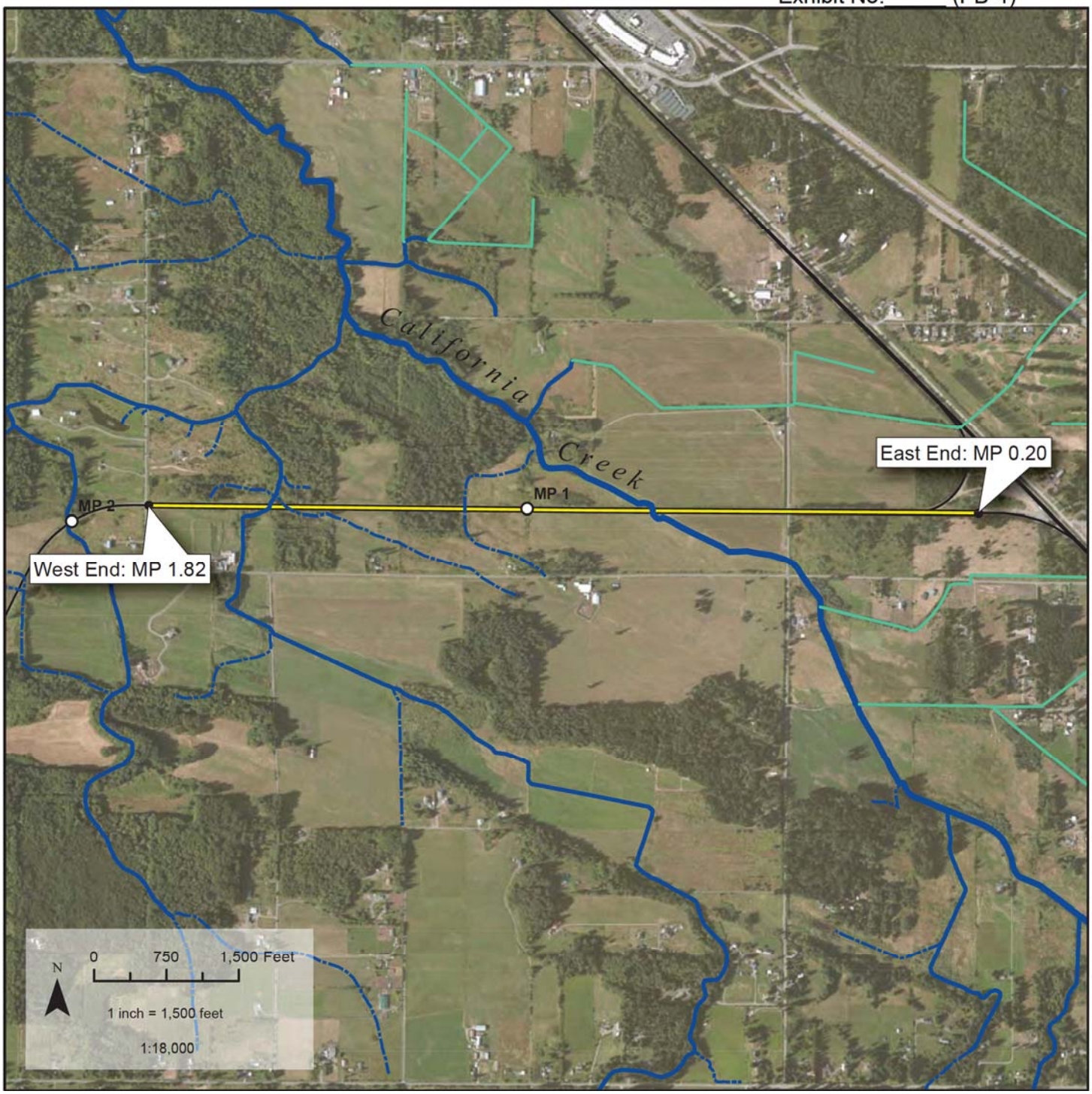


FEMA FLOOD ZONE MAP

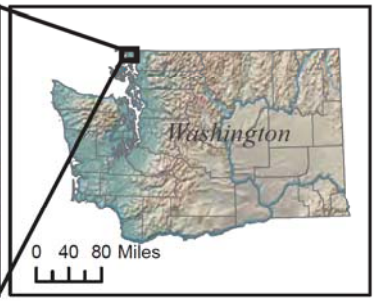
USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
EAST END LAT LONG (MP 0.20): 48°55'21.82"N, 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N, 122°41'16.45"W
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: ESRI (AERIAL IMAGERY, STREET MAP), BNSF (TRACK AND MILEPOSTS), NATIONAL HYDROGRAPHY DATABASE (STREAMS AND CREEKS), JLP-ENVIRONMENTAL (HYDROLOGY UPDATES)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

Exhibit No.____ (PB-4)



- Project Ends
- BNSF Mileposts
- Project Track
- BNSF Track
- Primary Waterway
- Perennial Stream
- Intermittent Stream
- Irrigation Canal



HYDROLOGY OVERVIEW MAP

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
EAST END LAT LONG (MP 0.20): 48°55'21.82"N, 122°39'7.46"W
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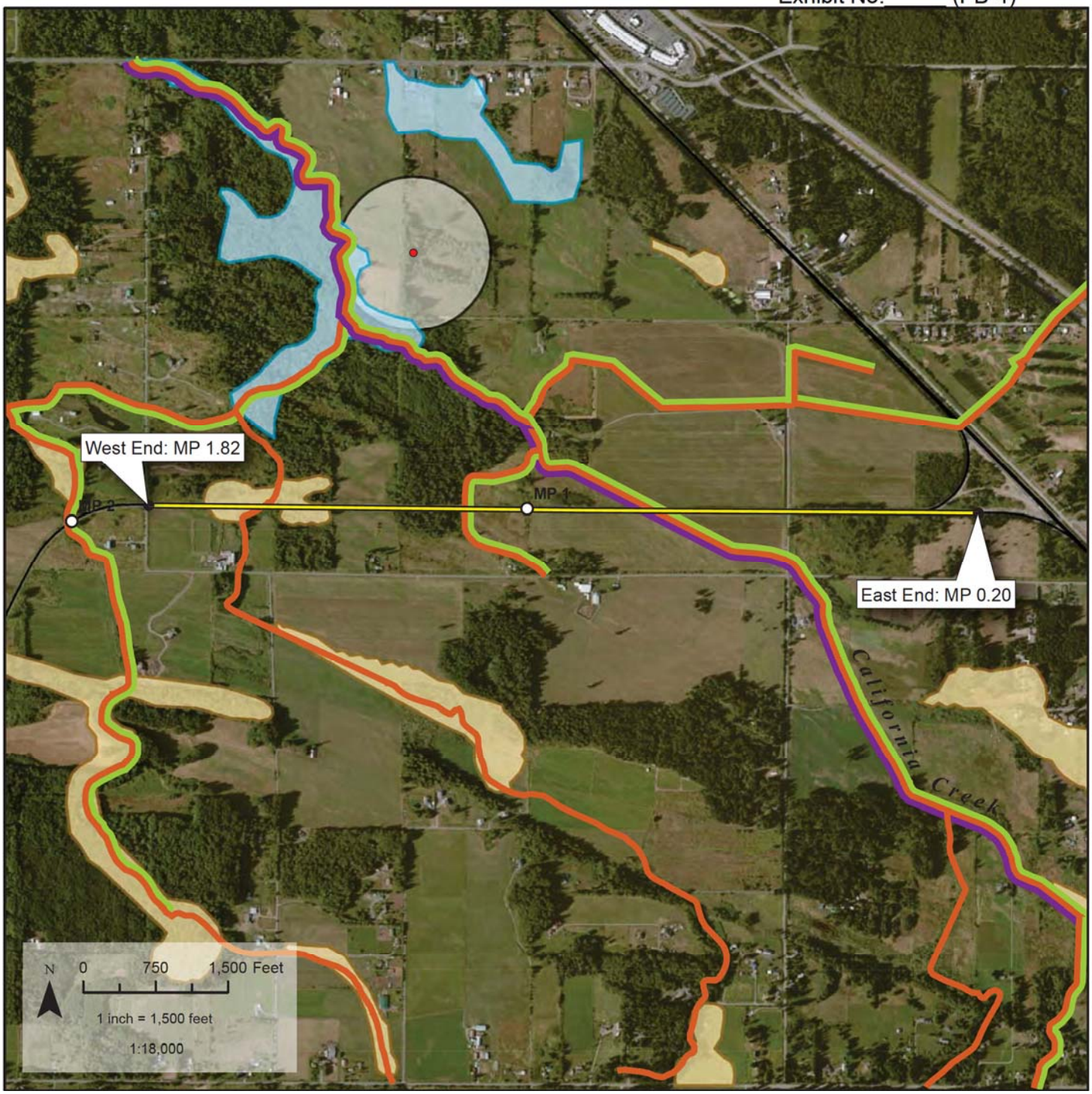
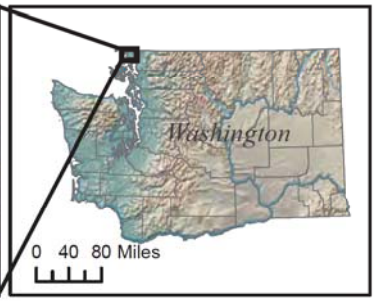
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: ESRI (AERIAL IMAGERY, STREET MAP), BNSF (TRACK AND MILEPOSTS), NATIONAL HYDROGRAPHY DATABASE (STREAMS AND CREEKS), JLP-ENVIRONMENTAL (HYDROLOGY UPDATES)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

Exhibit No.____(PB-4)



- Bald Eagle Nest
- BNSF Milepost
- Project Ends
- BNSF Track
- Project Track
- Coast Resident Cutthroat
- Coho Salmon
- Steelhead Trout
- California Creek Wetlands
- Birch Bay and Drayton Harbor Wetlands
- 800ft Nest Buffer



WDFW PRIORITY HABITAT AND SPECIES (PHS) MAP

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION, LS 418, MP 0.20 – MP 1.82
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LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

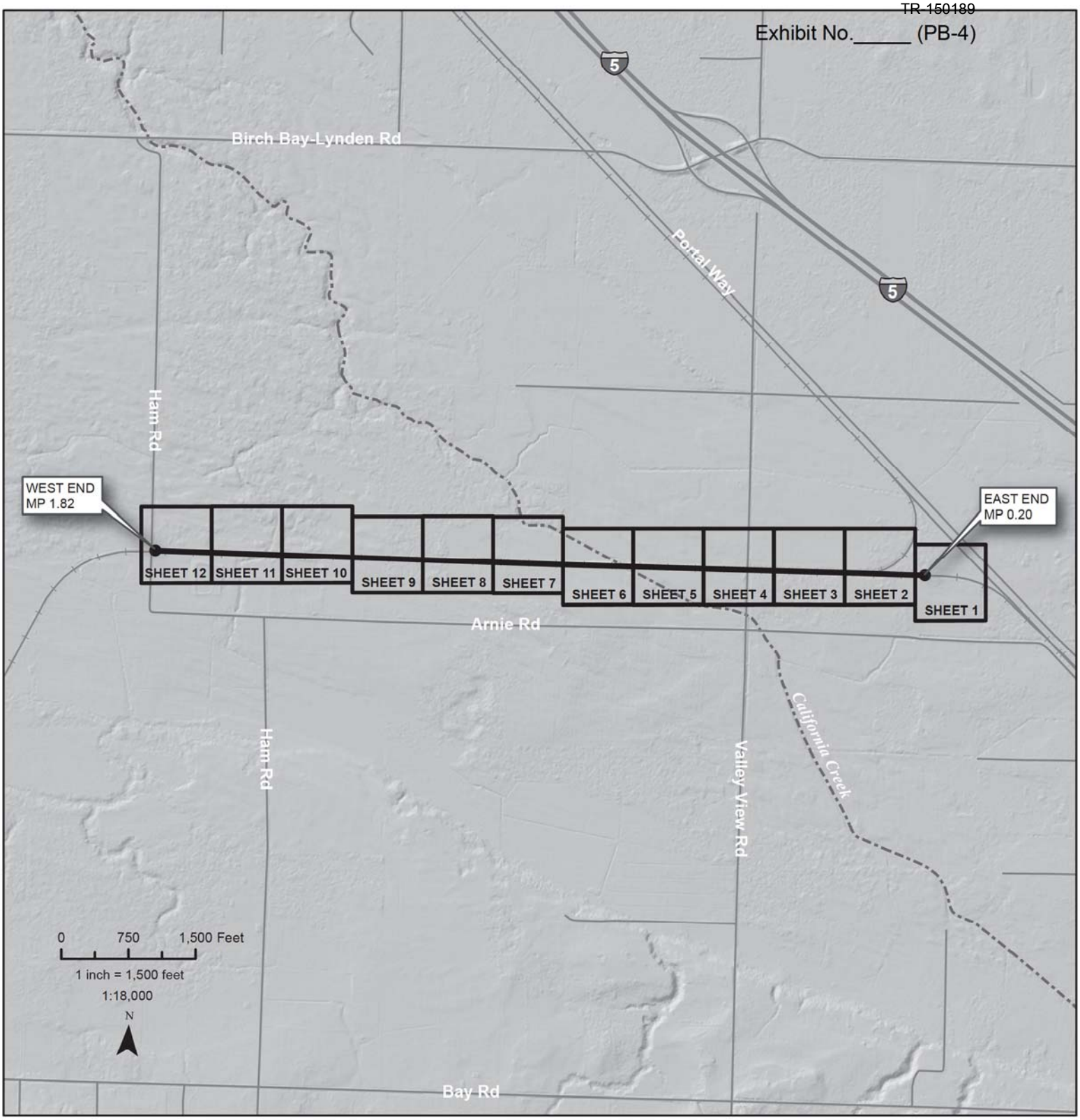
DATA SOURCES: ESRI (AERIAL IMAGERY, STREET MAP), BNSF (TRACK AND MILEPOSTS), WASHINTON DEPARTMENT OF FISH AND WILDLIFE (PRIORITY HABITAT AND SPECIES)
MAP PRODUCED BY: J.L. PATTERSON AND ASSOCIATES INC. - ENVIRONMENTAL | INFO@JLPATTERSON.COM | 208.263.9391

PLANS

- **Proposed Conditions – Intalco Project**
  (From the 12/2014 JARPA submittal)

- **Concept Plans for Valley View Rd. Closure**
  (Preliminary)

Exhibit No._____ (PB-4)



- JARPA Plan Sheets
- Project Corridor
- Roads
- Highway
- BNSF Rail
- California Creek
- Project Ends

INTALCO YARD IMPROVEMENT PROJECT
JARPA PLAN SHEET LOCATION OVERVIEW

USACE REF NO.: NWS-2014-285
PROJECT: INTALCO YARD IMPROVEMENT
APPLICANT: BNSF RAILWAY
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
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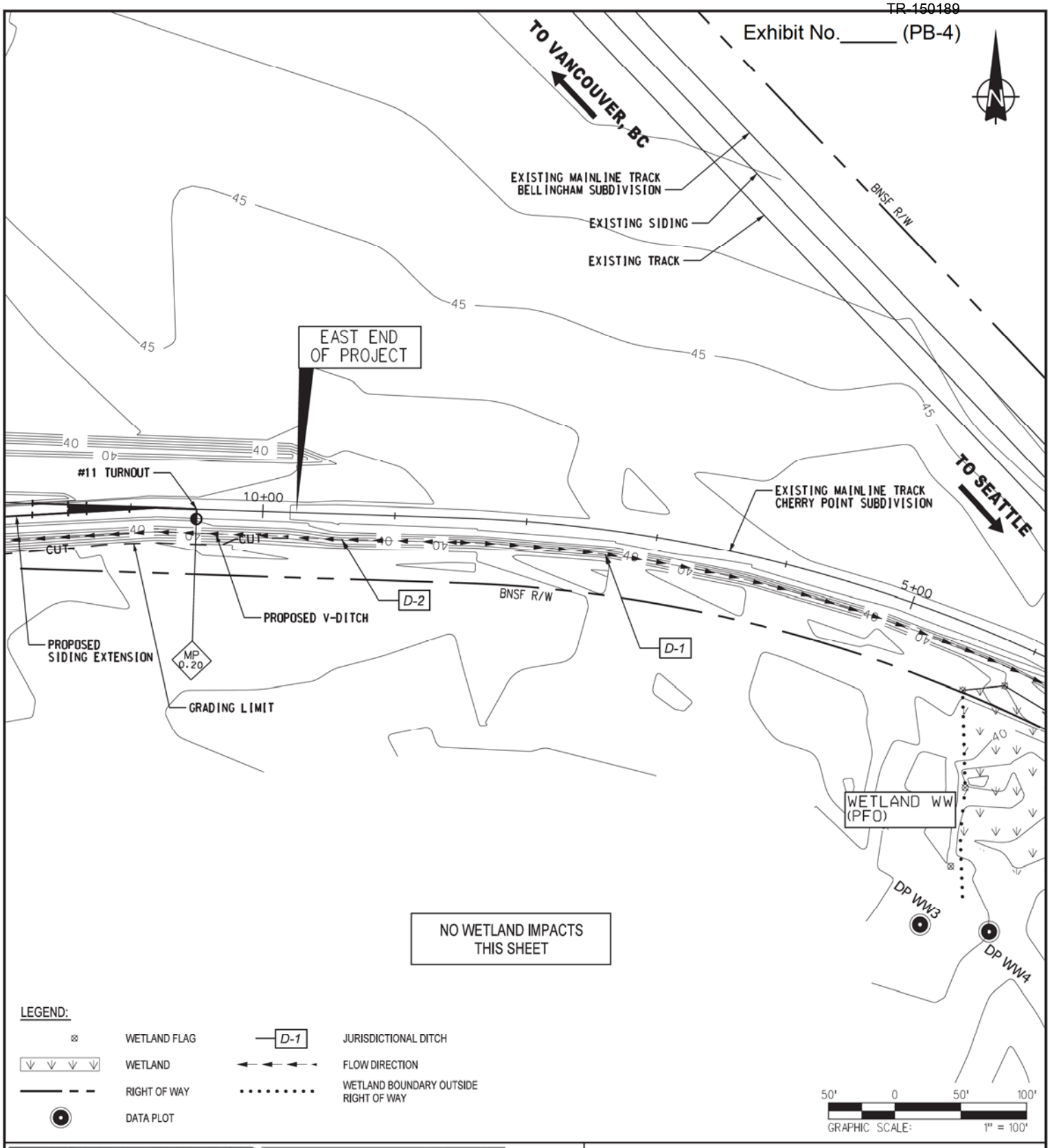
LEGAL: IN PORTIONS OF SECTIONS 26, 27, 28 T40N R1E
STATE: WA **COUNTY:** WHATCOM **NEAREST CITY:** CUSTER
DATE: FEBRUARY 2014; REVISED DECEMBER 2014

DATA SOURCES: BNSF (tracks & mileposts), J.L. Patterson (JARPA sheet extent), ESRI (streets), USGS (Columbia River) Natural Earth (state map)
MAP PRODUCED BY: J.L. Patterson – Environmental (info@jlpatterson.com)

Exhibit No._____ (PB-4)



LEGEND:

⊠	WETLAND FLAG	D-1	JURISDICTIONAL DITCH
	WETLAND		FLOW DIRECTION
	RIGHT OF WAY		WETLAND BOUNDARY OUTSIDE RIGHT OF WAY
	DATA PLOT		

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

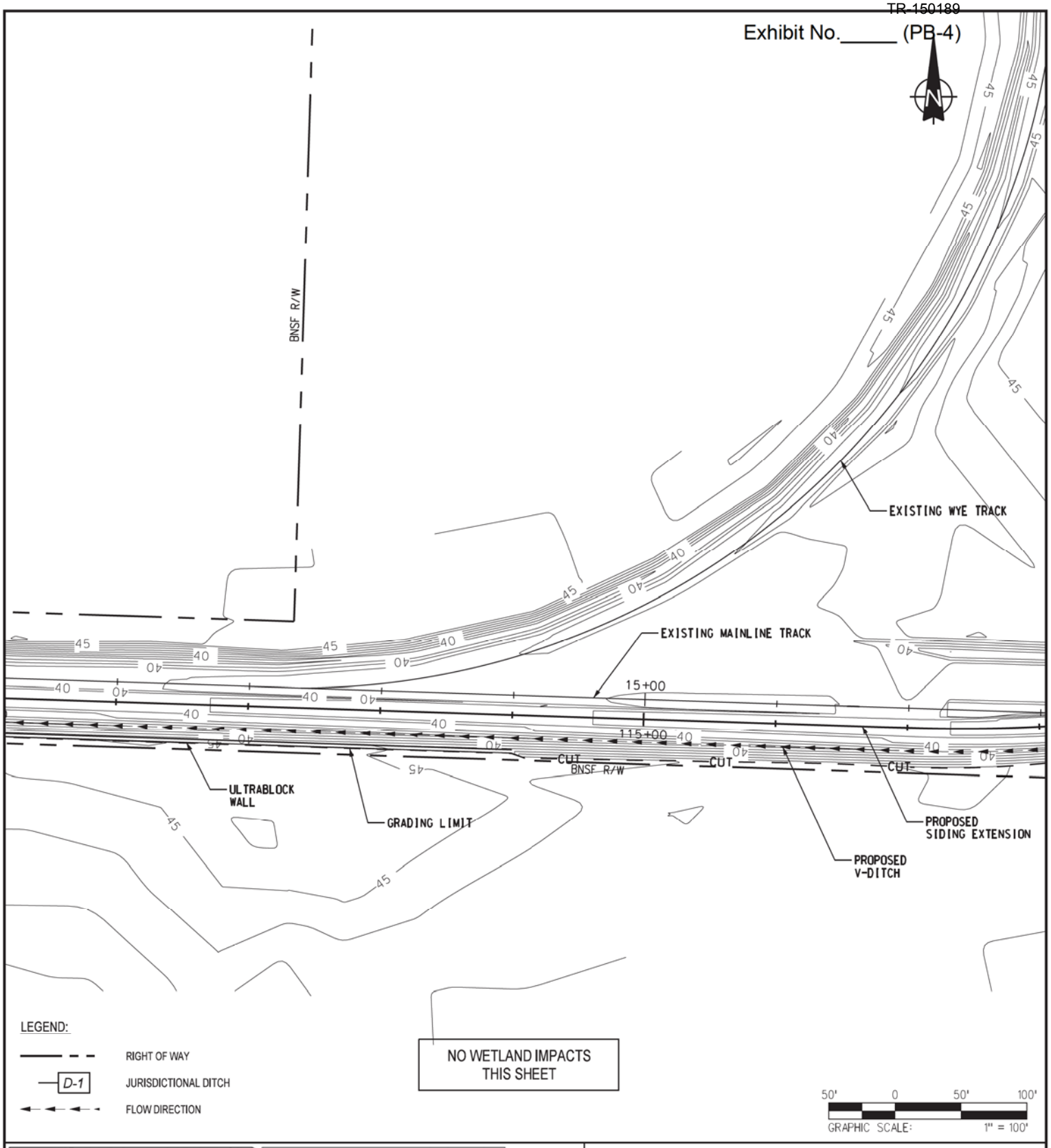
PROPOSED CONDITIONS - DETAIL 1

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-01	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



LEGEND:

- RIGHT OF WAY
- D-1 JURISDICTIONAL DITCH
- FLOW DIRECTION

NO WETLAND IMPACTS THIS SHEET

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

PROPOSED CONDITIONS - DETAIL 2

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
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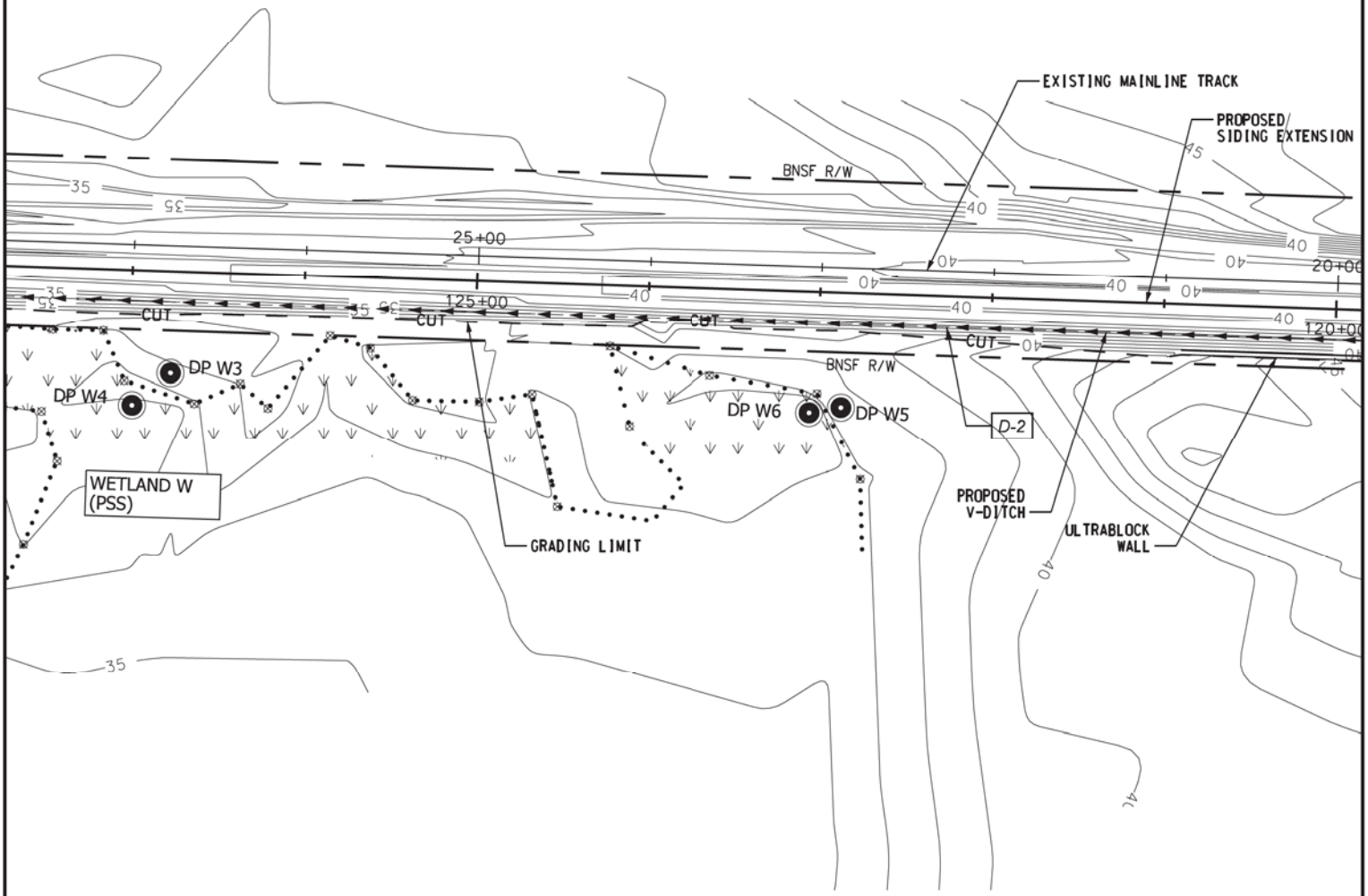
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-02	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



LEGEND:

- WETLAND FLAG
- WETLAND
- RIGHT OF WAY
- DATA PLOT
- D-1 JURISDICTIONAL DITCH
- FLOW DIRECTION
- WETLAND BOUNDARY OUTSIDE RIGHT OF WAY

NO WETLAND IMPACTS THIS SHEET

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

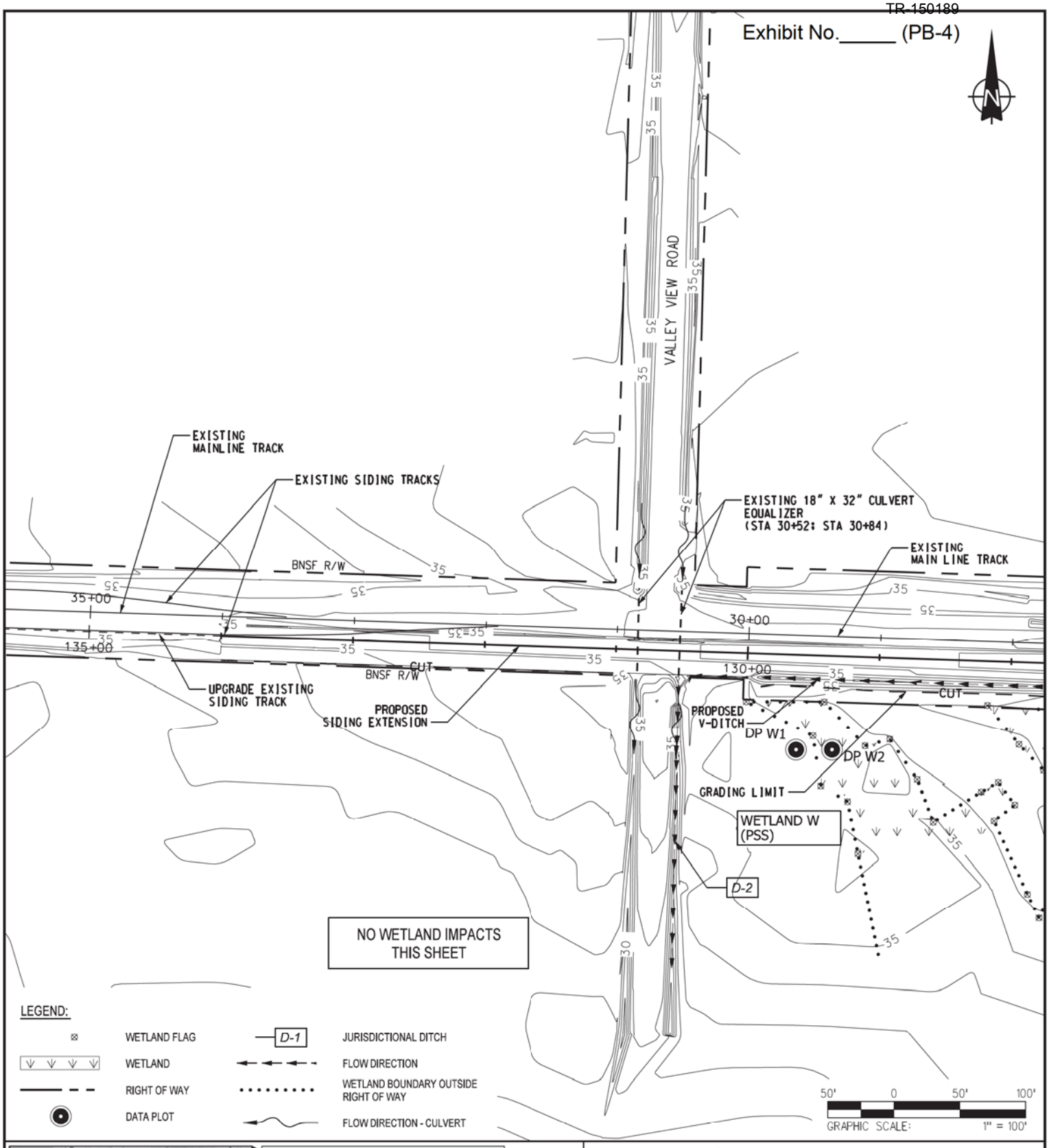
PROPOSED CONDITIONS - DETAIL 3

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-03	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



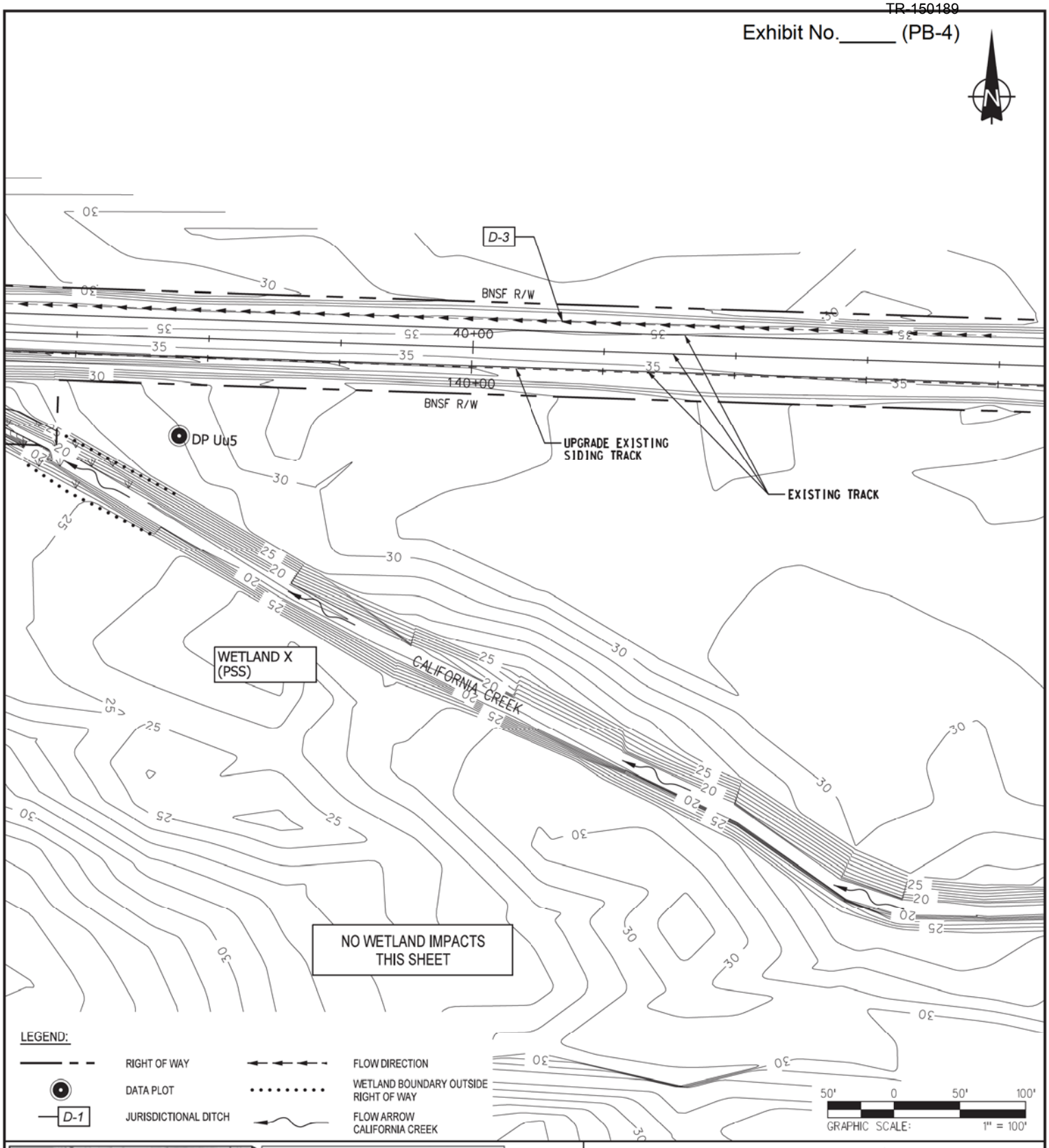
PROPOSED CONDITIONS - DETAIL 4

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-04	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



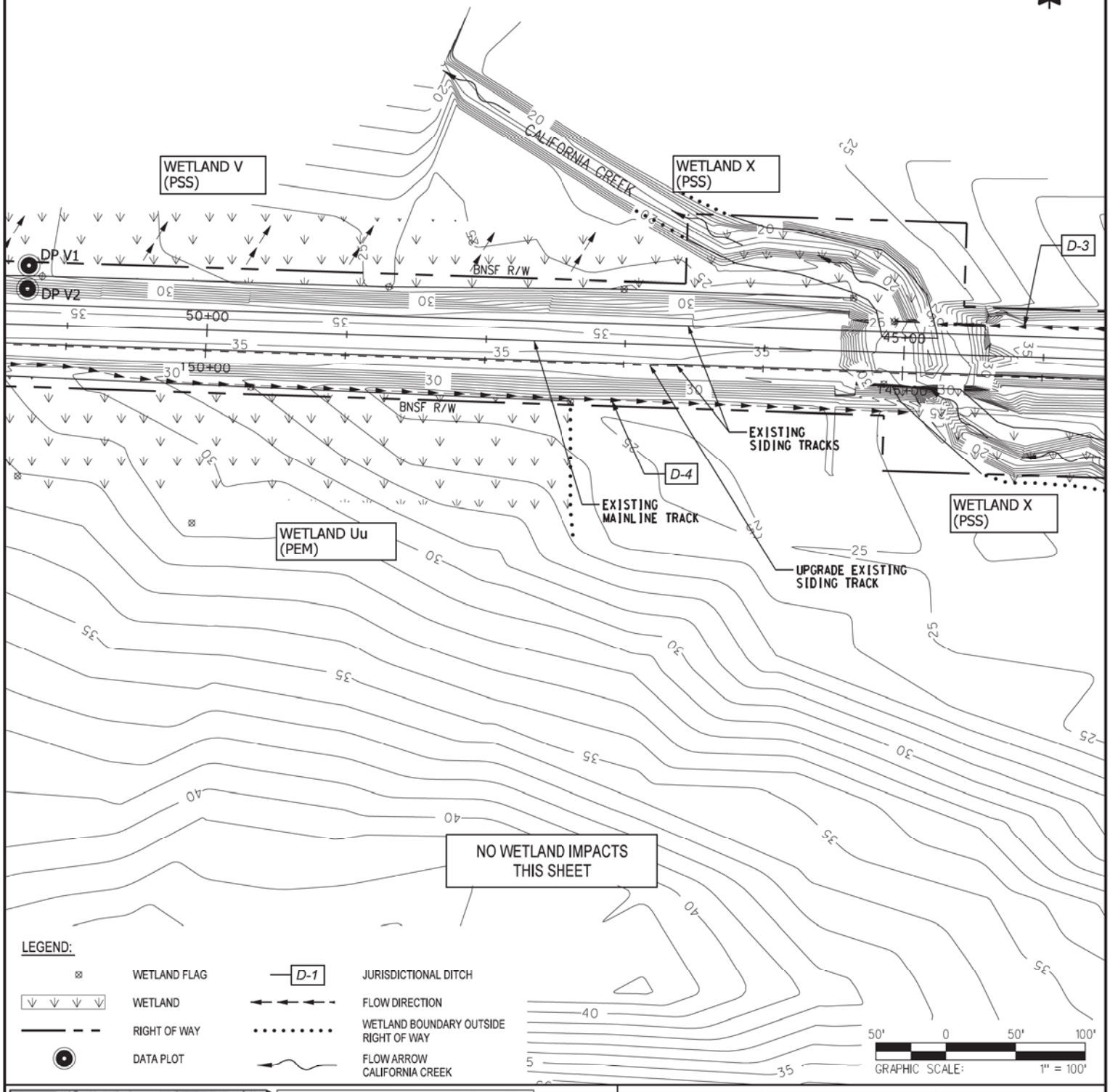
PROPOSED CONDITIONS - DETAIL 5

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-05	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



LEGEND:

⊠	WETLAND FLAG	D-1	JURISDICTIONAL DITCH
	WETLAND		FLOW DIRECTION
	RIGHT OF WAY		WETLAND BOUNDARY OUTSIDE RIGHT OF WAY
	DATA PLOT		FLOW ARROW CALIFORNIA CREEK

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

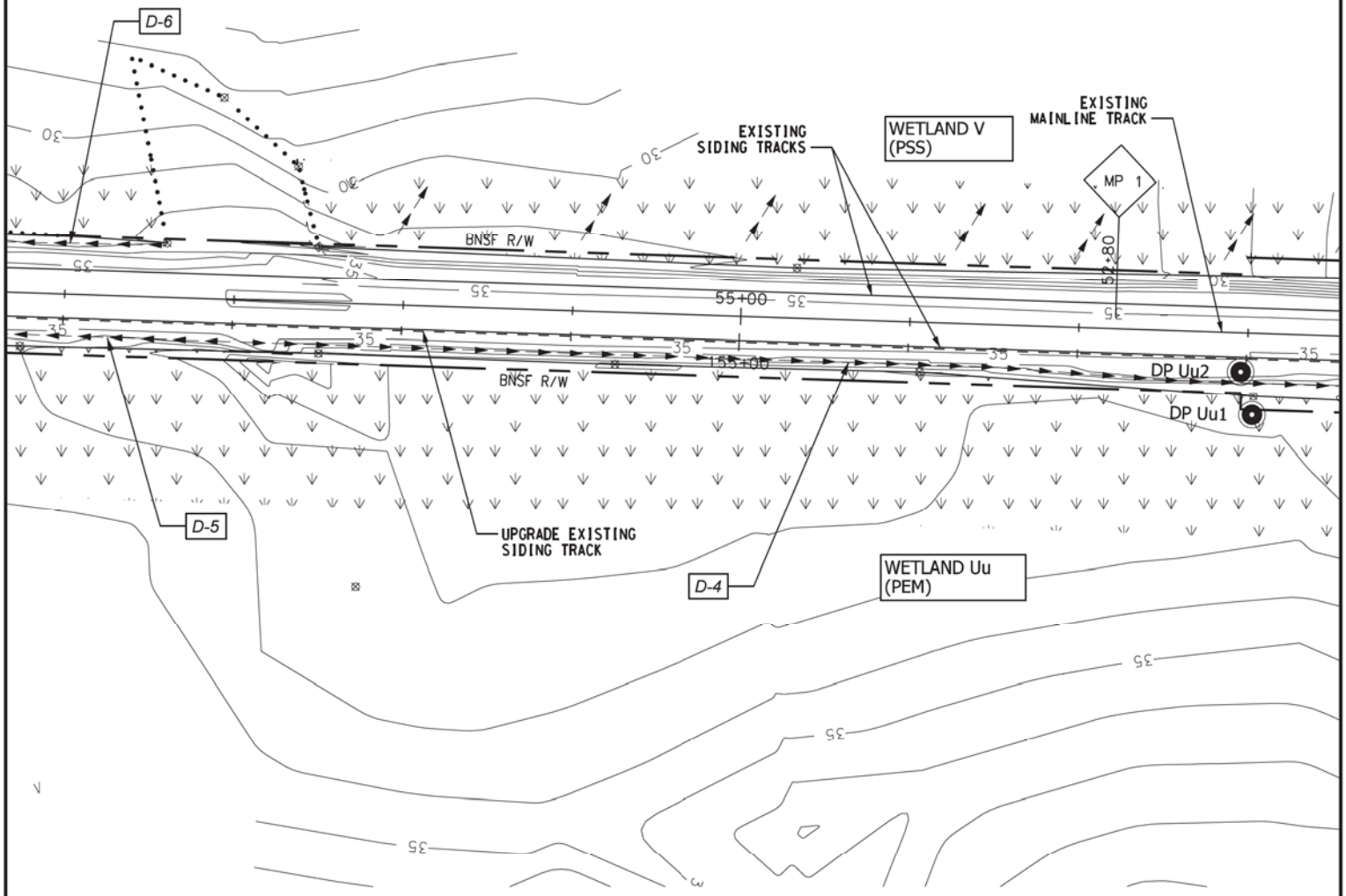
PROPOSED CONDITIONS - DETAIL 6

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-06	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



NO WETLAND IMPACTS THIS SHEET

LEGEND:

⊠	WETLAND FLAG	D-1	JURISDICTIONAL DITCH
	WETLAND		FLOW DIRECTION
	RIGHT OF WAY		WETLAND BOUNDARY OUTSIDE RIGHT OF WAY
	DATA PLOT		

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

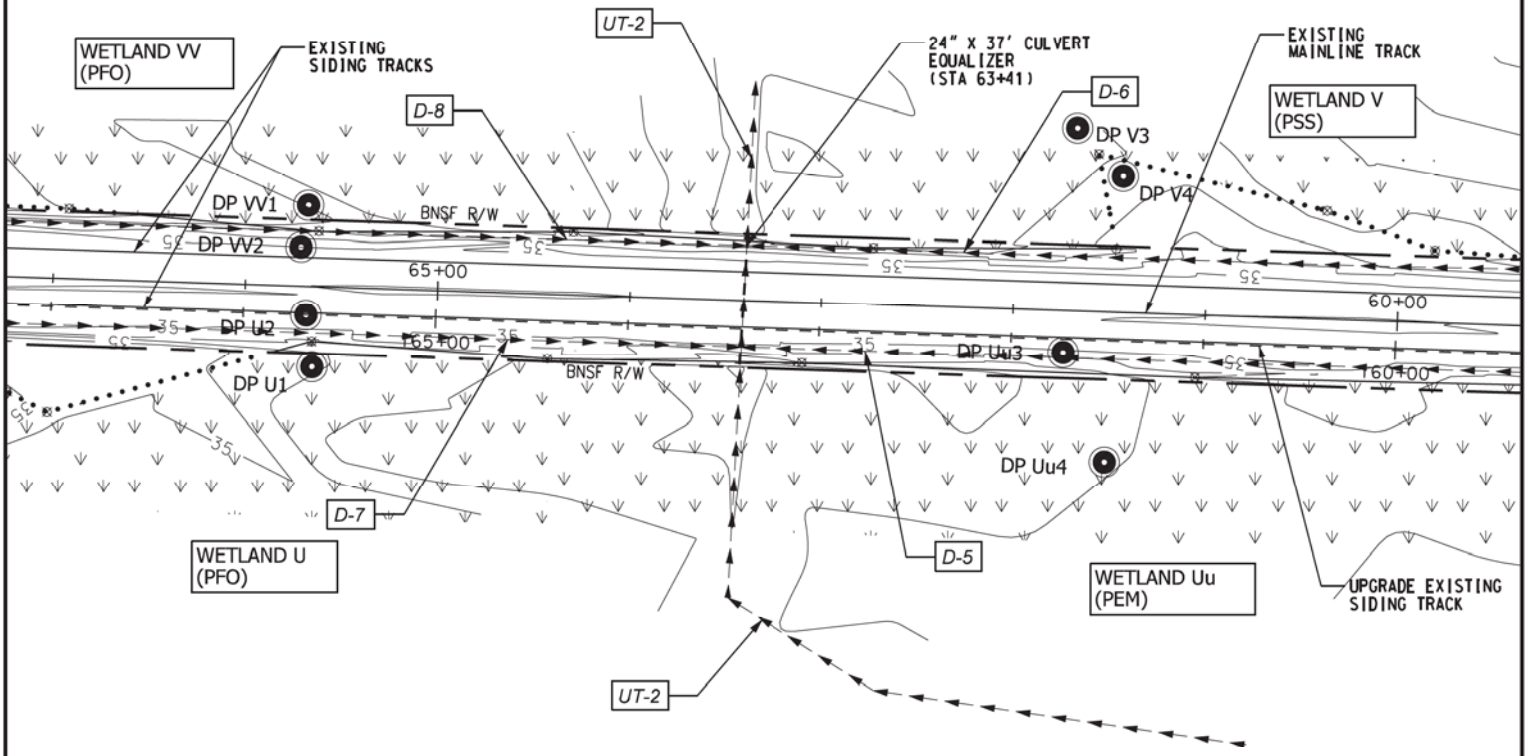
PROPOSED CONDITIONS - DETAIL 7

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-07	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)



NO WETLAND IMPACTS
THIS SHEET

LEGEND:

⊠	WETLAND FLAG	UT-1	UNNAMED TRIBUTARY
	WETLAND	D-1	JURISDICTIONAL DITCH
	RIGHT OF WAY		FLOW DIRECTION
	DATA PLOT		WETLAND BOUNDARY OUTSIDE RIGHT OF WAY

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'

PROPOSED CONDITIONS - DETAIL 8

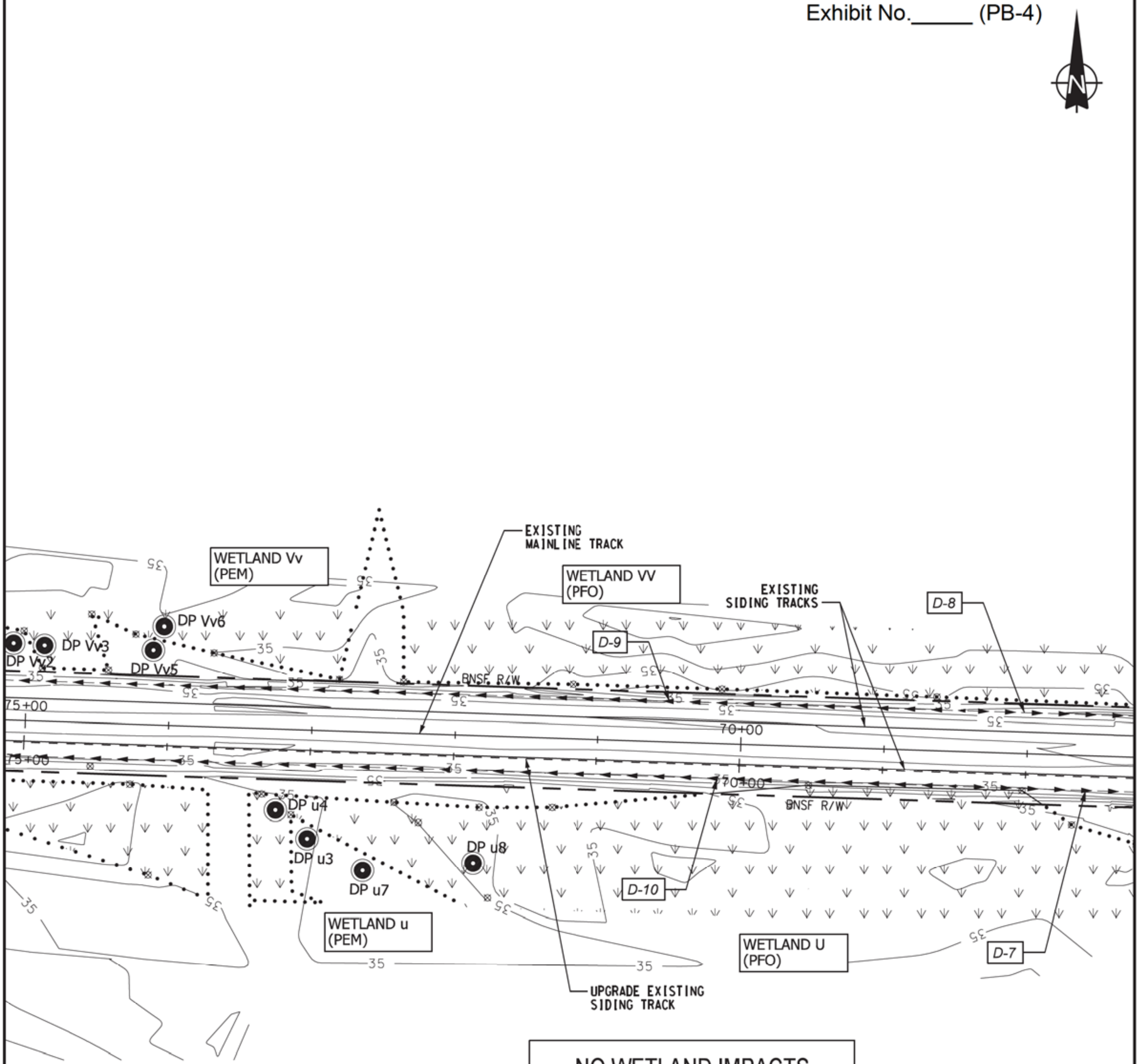
USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-08	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No. RM-___CX
~~TR-150189~~

Exhibit No._____ (PB-4)

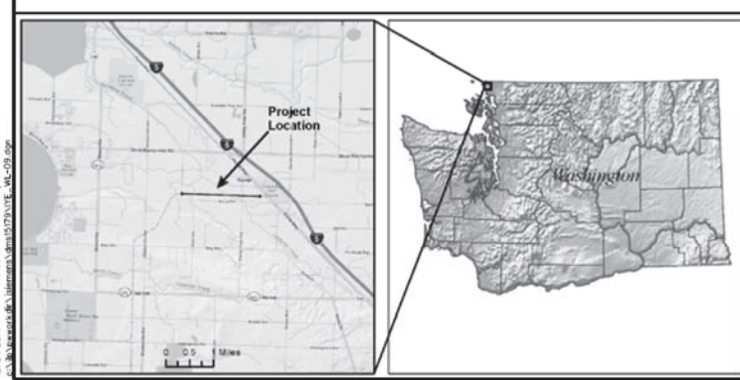


NO WETLAND IMPACTS THIS SHEET

LEGEND:

⊠	WETLAND FLAG	D-1	JURISDICTIONAL DITCH
ѱ ѱ ѱ ѱ	WETLAND	← ← ←	FLOW DIRECTION
— —	RIGHT OF WAY	•••••••	WETLAND BOUNDARY OUTSIDE RIGHT OF WAY
⊙	DATA PLOT		

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'



PROPOSED CONDITIONS - DETAIL 9

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-09	OF	AS SHOWN

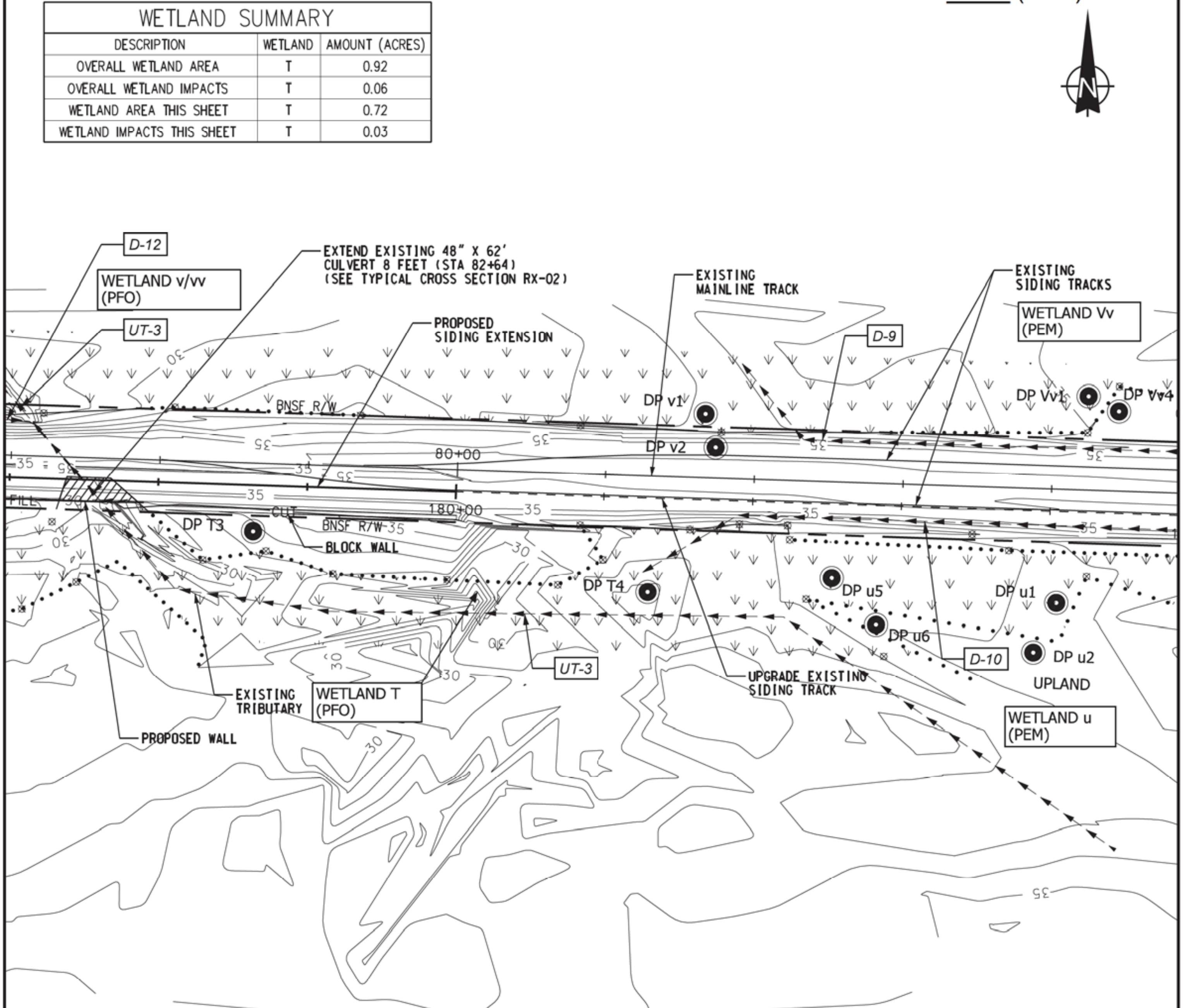
BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No. RM-___CX
TR-150189

Exhibit No.______ (PB-4)

WETLAND SUMMARY

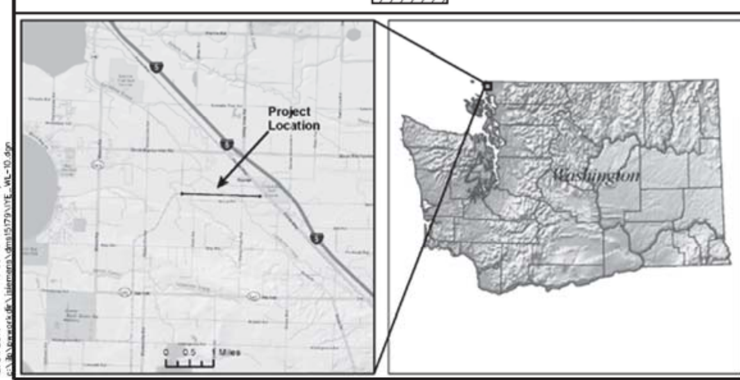
DESCRIPTION	WETLAND	AMOUNT (ACRES)
OVERALL WETLAND AREA	T	0.92
OVERALL WETLAND IMPACTS	T	0.06
WETLAND AREA THIS SHEET	T	0.72
WETLAND IMPACTS THIS SHEET	T	0.03



LEGEND:

⊠	WETLAND FLAG	UT-1	UNNAMED TRIBUTARY
∨ ∨ ∨ ∨	WETLAND	D-1	JURISDICTIONAL DITCH
— —	RIGHT OF WAY	← ← ←	FLOW DIRECTION
◉	DATA PLOT	·········	WETLAND BOUNDARY OUTSIDE RIGHT OF WAY
		▨	WETLAND IMPACT AREA

50' 0 50' 100'
GRAPHIC SCALE: 1" = 100'



PROPOSED CONDITIONS - DETAIL 10

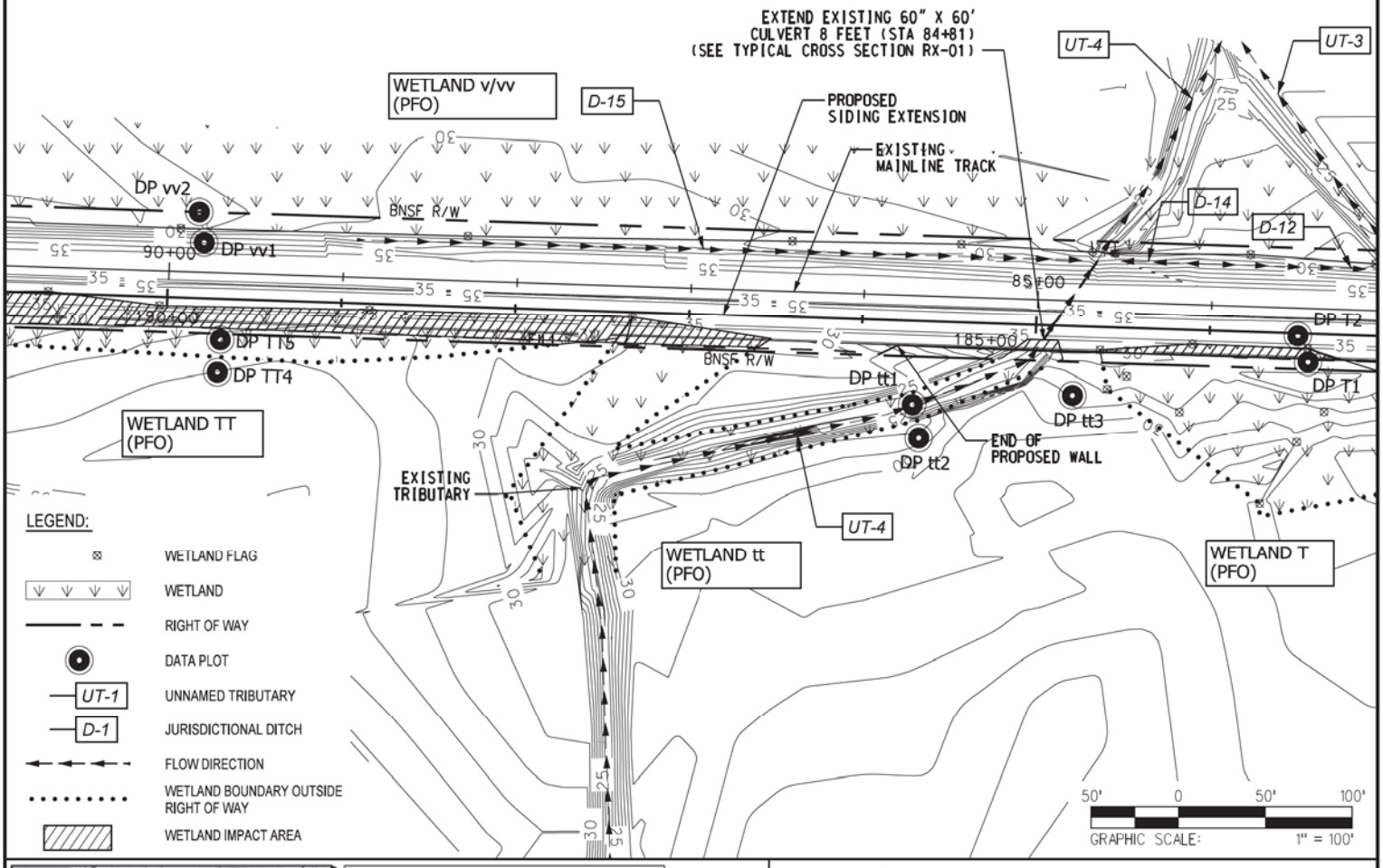
USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-10	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)

WETLAND SUMMARY		
DESCRIPTION	WETLAND	AMOUNT (ACRES)
OVERALL WETLAND AREA	TT	0.88
OVERALL WETLAND IMPACTS	TT	0.27
WETLAND AREA THIS SHEET	TT	0.22
WETLAND IMPACTS THIS SHEET	TT	0.14
OVERALL WETLAND AREA	T	0.92
OVERALL WETLAND IMPACTS	T	0.06
WETLAND AREA THIS SHEET	T	0.20
WETLAND IMPACTS THIS SHEET	T	0.03
OVERALL WETLAND AREA	tt	0.25
OVERALL WETLAND IMPACTS	tt	0.034
WETLAND AREA THIS SHEET	tt	0.25
WETLAND IMPACTS THIS SHEET	tt	0.034



PROPOSED CONDITIONS - DETAIL 11

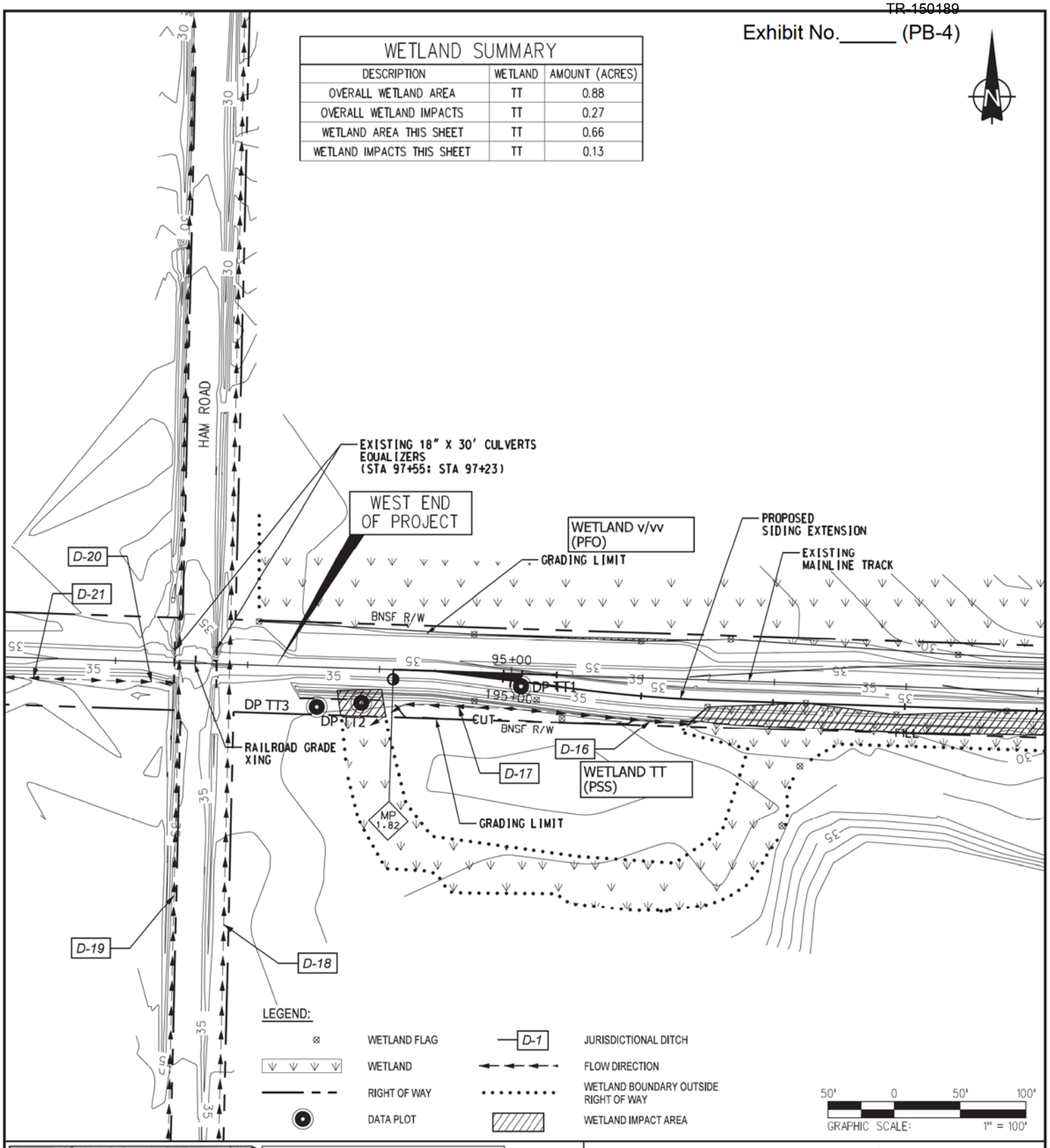
USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-11	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No._____ (PB-4)

WETLAND SUMMARY		
DESCRIPTION	WETLAND	AMOUNT (ACRES)
OVERALL WETLAND AREA	TT	0.88
OVERALL WETLAND IMPACTS	TT	0.27
WETLAND AREA THIS SHEET	TT	0.66
WETLAND IMPACTS THIS SHEET	TT	0.13



PROPOSED CONDITIONS - DETAIL 12

USACE REF. NO.: NWS-2014-285
PROJECT AREA: INTALCO YARD IMPROVEMENT PROJECT
FOR: BNSF RAILWAY COMPANY: 2454 OCCIDENTAL AVE. S. SUITE 2-D, SEATTLE, WA 98134
BNSF LOCATION: NW DIVISION, CHERRY POINT SUBDIVISION
LINE SEGMENT 418, MILE POST 0.20 - MILE POST 1.82
LEGAL: IN THE PORTIONS OF SECTIONS 26, 27, 28, T40N, R1E
EAST END LAT/LONG (MP 0.20): 48°55'21.82"N; 122°39'7.46"W
WEST END LAT/LONG (MP 1.82): 48°55'22.59"N; 122°41'16.45"W
WATERWAY: UNNAMED WETLANDS ASSOCIATED WITH CALIFORNIA CREEK
NEAREST CITY: CUSTER **COUNTY:** WHATCOM
STATE: WASHINGTON **DATE:** FEBRUARY 2014; REVISED DECEMBER 2014

DRAWING NO.	SHEET NO.	SCALE
WL-12	OF	AS SHOWN

BASEMAP: HANSON CONCEPTUAL DESIGN, 2/3/2014

Exhibit No. RM-___CX
TR-150189
Exhibit No.______(PB-4)

GRAPHIC SCALE: 200' 0 100' 200' 400' 1" = 200'

PRELIMINARY
NOT FOR CONSTRUCTION
CONCEPT

REV	DATE	DESCRIPTION	BY	SUB	APP

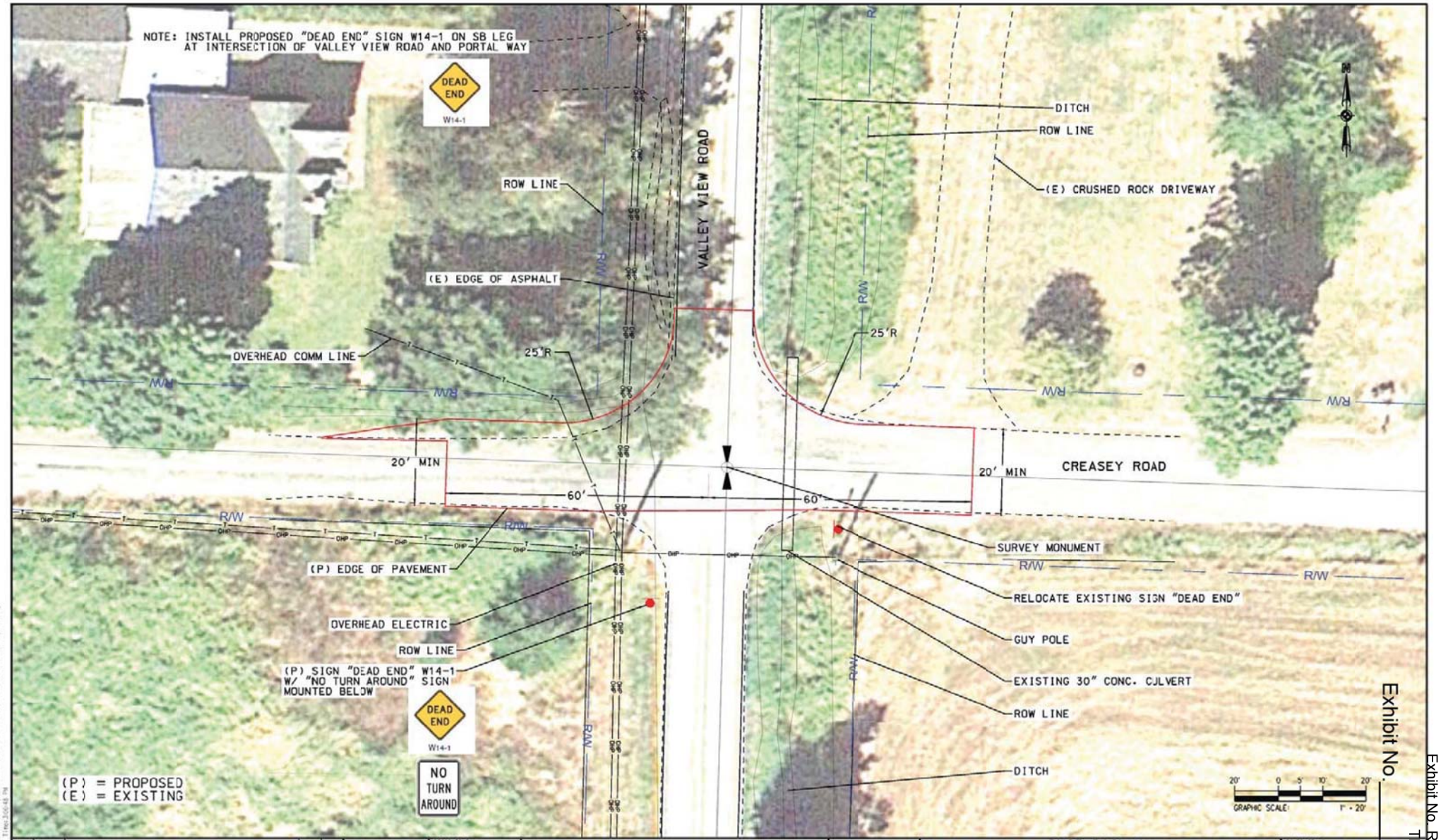
DESIGNED BY SWS
DRAWN BY JM
CHECKED BY
APPROVED BY
DATE 10/8/2014

BNSF RAILWAY

HANSON

BNSF RAILWAY
BNSF INTALCO YARD IMPROVEMENT PROJECT
VALLEY VIEW ROAD CLOSURE

CONTRACT NO. [illegible]
DRAWING NO. [illegible]
REVISION
SHEET 1
SCALE AS SHOWN



PRELIMINARY
NOT FOR CONSTRUCTION
CONCEPT

REV	DATE	DESCRIPTION	BY	CHK	APP

DESIGNED BY SWS
DRAWN BY TDP
CHECKED BY
APPROVED BY
DATE 10/8/2014

BNSF RAILWAY

HANSON

BNSF RAILWAY
BNSF INTALCO YARD IMPROVEMENT PROJECT
VALLEY VIEW ROAD CROSSING CLOSURE
CREASEY ROAD TURNAROUND

CONTRACT NO. 13R011.50
DRAWING NO. RD-01
REVISION
SHEET NO. 2 OF 6
SCALE AS SHOWN

Exhibit No. RM-__CX
TR-150189

CONCEPT

REV	DATE	DESCRIPTION	BY	CHK	APP

DESIGNED BY SWS
DRAWN BY TDP
CHECKED BY
APPROVED BY
DATE 10/8/2014

BNSF RAILWAY

HANSON

BNSF RAILWAY
BNSF INTALCO YARD IMPROVEMENT PROJECT
VALLEY VIEW AND ARNIE ROAD PLAN

CONTRACT NO. 13R011
DRAWING NO. RD-01
REVISION
SHEET NO. 3 OF 6
SCALE AS SHOWN

Exhibit No. RM-__CX
TR-150189