



US Army Corps
of Engineers
Seattle District



Joint Public Notice

Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

US Army Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755
Telephone (306) 734-3156
Attn: Randel Perry, Project Manager

WA Department of Ecology
SEA Program
Post Office Box 47600
Olympia, WA 98504-7600
Telephone (360) 407-6068
Attn: SEA Program, Federal Permit
Coordinator

Public Notice Date: April 29, 2016
Expiration Date: May 29, 2016

Reference No.: NWS-2016-124
Name: Whatcom County Public Works

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the United States as described below and shown on the enclosed drawings dated December 2015. The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws and the Coastal Zone Management Act.

APPLICANT: Whatcom County Public Works
Attention: James Karcher
322 North Commercial Street, Suite 301
Bellingham, Washington 98225
Telephone: (360) 778-6271

AGENT: Whatcom County Public Works
Attention: Atina Casas
322 North Commercial Street, Suite 301
Bellingham, Washington 98225
Telephone: (360) 778-6281

LOCATION: In Birch Bay and tributaries near Blaine, Whatcom County, Washington.

WORK: Place fill to construct a 1.6 mile long berm, replace and install outfalls, and construct a pedestrian trail.

PURPOSE: Protect infrastructure, improve pedestrian safety, and enhance beach habitat.

ADDITIONAL INFORMATION: Berm construction involves placing 69,000 cubic yards of fill in an area of 13.75 acres along 1.6 linear miles of shoreline. The berm will extend to about 90 feet waterward from the mean higher high water (MHHW) line. The top of berm (storm crest) will be between 1 to 3 feet above the existing elevation of Birch Bay Drive. The backshore portion of the berm will be planted with native herbs, forbs, and beach grasses. The beach nourishment material will be delivered by truck and trailer, either directly to the beach nourishment berm site, or to temporary staging areas in the project vicinity. Equipment to be used to construct the berm will include tracked backhoes or excavators, wheel loaders and graders, and dump trucks.

Construction of the beach nourishment berm will require repair, replacement and/or extension of 12 existing stream and stormwater outfall pipes that currently outfall onto the beach, and an additional two outfall pipes will be constructed to discharge stormwater flows. With the exception of the Golf Course Creek culvert, the replacement pipes will be HDPE pipe and be either the same or larger diameter than the existing pipes. The Golf Course Creek culvert will be replaced with a 10-foot diameter fish-passable box culvert with gravel with sand bedding in the pipe.

Ancillary to the work in waters of the U.S., the applicant proposes to construct a new pedestrian trail and install stormwater treatment facilities, both to be installed after the berm is constructed. The path will be on the berm storm crest or landward of the storm crest, depending upon location. Vegetated stormwater bioswales will be installed between the berm and Birch Bay Drive to collect and treat the sheet flow runoff, and convey the runoff to new and/or replaced stormwater outfalls.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at <http://www.nws.usace.army.mil/> and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently-issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

MITIGATION: No mitigation proposed. The project includes restoring a degraded beach area

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. The Federal Highways Administration, as the lead agency for ESA consultation, will consult with the NMFS and/or the USFWS as required under Section 7 of the ESA.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. The Federal Highways Administration, as the lead agency for a determination regarding EFH, will consult with the National Marine Fisheries Services if necessary.

CULTURAL RESOURCES: The Federal Highways Administration, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act, will consult with the State Historic Preservation Officer and Native American Tribes as appropriate.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

EVALUATION – CORPS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

NWS-2016-124, Whatcom County Public Works

The Corps is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

SOURCE OF FILL MATERIAL: The source of the fill material will be local commercial gravel pits.

EVALUATION – ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

ADDITIONAL EVALUATION: This proposal is the subject of Shorelines Substantial Development Permit being processed by Whatcom County.

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentator's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

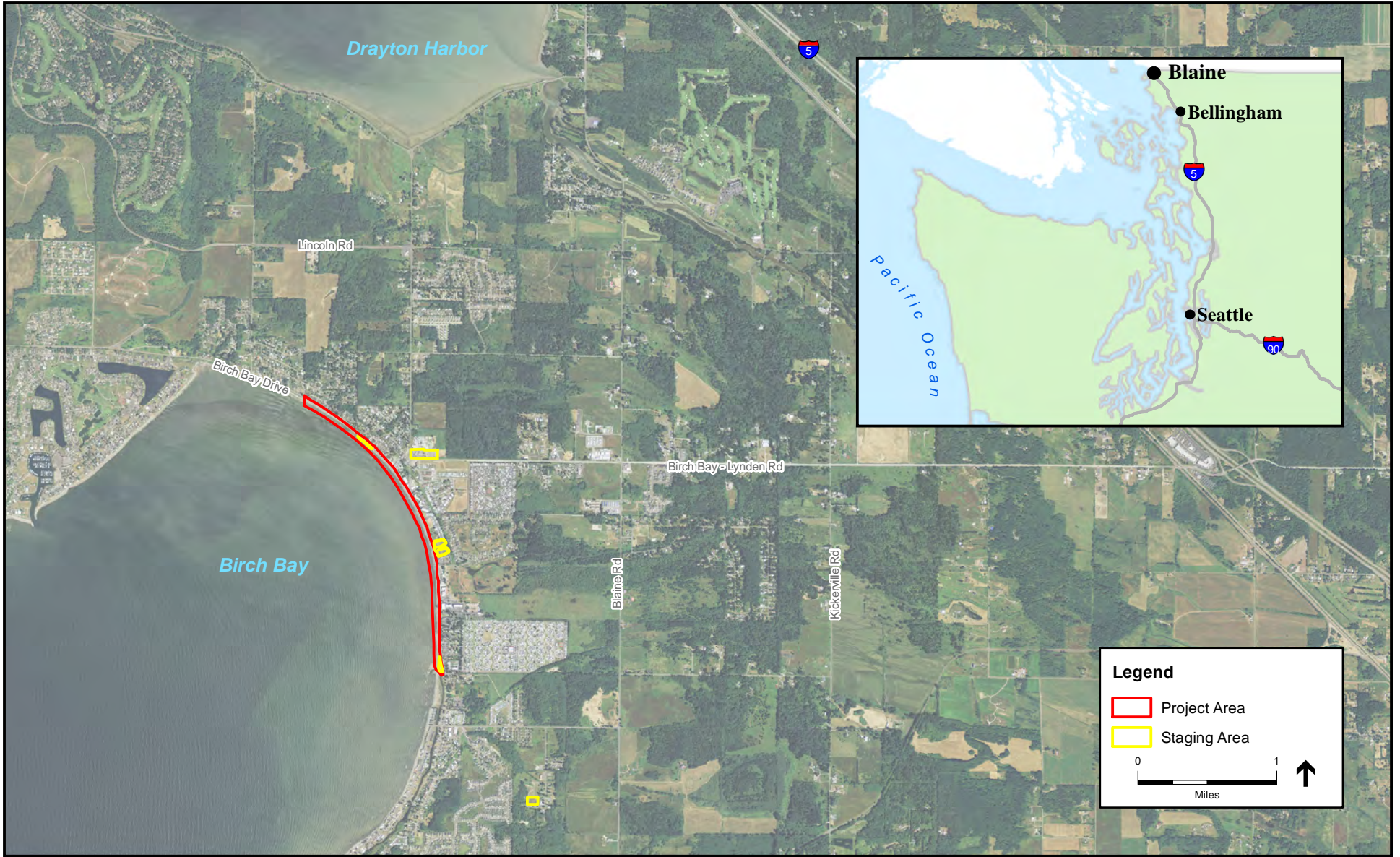
CORPS COMMENTS: All e-mail comments should be sent to randel.j.perry@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Mr. Randel Perry, P.O. Box 3755, Seattle, Washington 98124-3755. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses.

ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: SEA program – Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington 98504-7600, or e-mail to ecyrefedpermits@ecy.wa.gov.

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: NWS-2016-124, Whatcom County Public Works

Encl: Figures (11)

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PROPOSED PROJECT: Birch Bay Drive and Pedestrian Facility (CRP No. 907001)

REFERENCE #: NWS-2016-124

ADJACENT PROPERTY OWNERS: 1. Multiple

VICINITY MAP

APPLICANT: Whatcom County

LOCATION: Birch Bay Drive (between Lora Lane and Cedar Avenue), Blaine, WA 98230

LATITUDE / LONGITUDE: 48.9304N / -122.7462W

SHEET: 1 of 11

NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

Date: December 2015



PROPOSED PROJECT: Birch Bay Drive and Pedestrian Facility (CRP No. 907001)

REFERENCE #: NWS-2016-124

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PROJECT OVERVIEW

APPLICANT: Whatcom County

LOCATION: Birch Bay Drive (between Lora Lane and Cedar Avenue), Blaine, WA 98230

LATITUDE / LONGITUDE:
48.9304N / -122.7462W

SHEET: 2 of 11


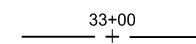


NEAR/AT: Blaine

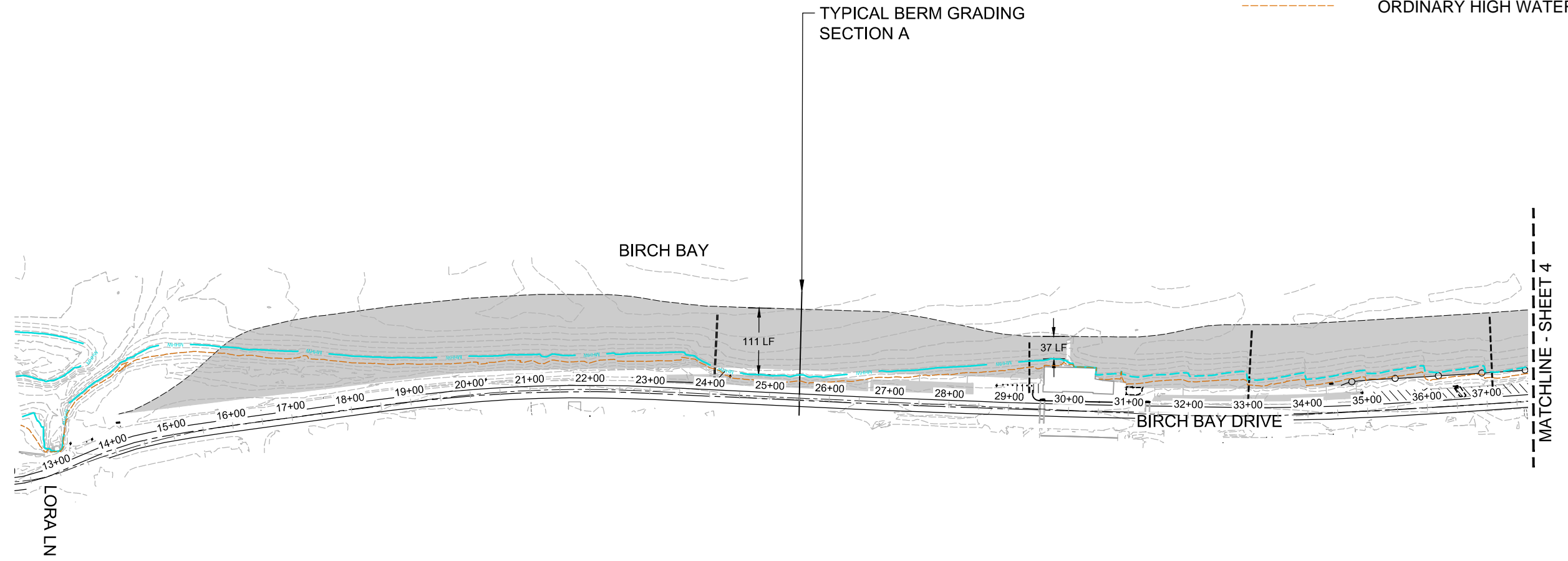
COUNTY: Whatcom County

STATE: Washington

Date: December 2015

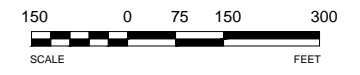
LEGEND

-  BEACH NOURISHMENT BERM
-  CONTROL LINE - ROW CENTERLINE
-  MEAN HIGHER HIGH WATER
-  ORDINARY HIGH WATER



FILL AREA (BELOW MHHW): 3.97 ACRES

PLAN VIEW - SOUTH



PRELIMINARY NOT FOR CONSTRUCTION

PROPOSED PROJECT: Birch Bay Drive and Pedestrian Facility (CRP No. 907001)

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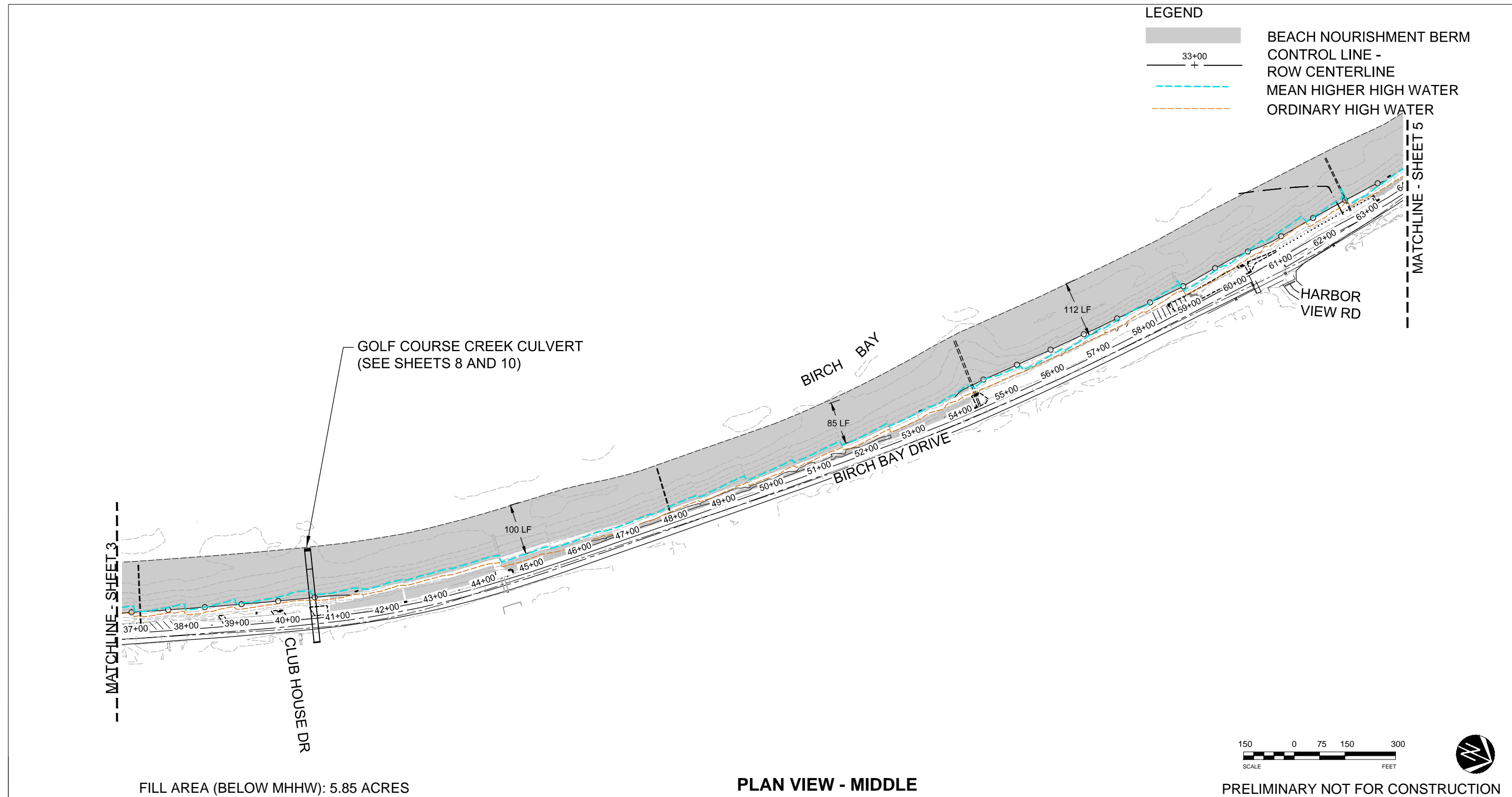
SHEET: 3 of 11

NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

DATE: December 2015



FILL AREA (BELOW MHHW): 5.85 ACRES

PROPOSED PROJECT: Birch Bay Drive and Pedestrian Facility (CRP No. 907001)

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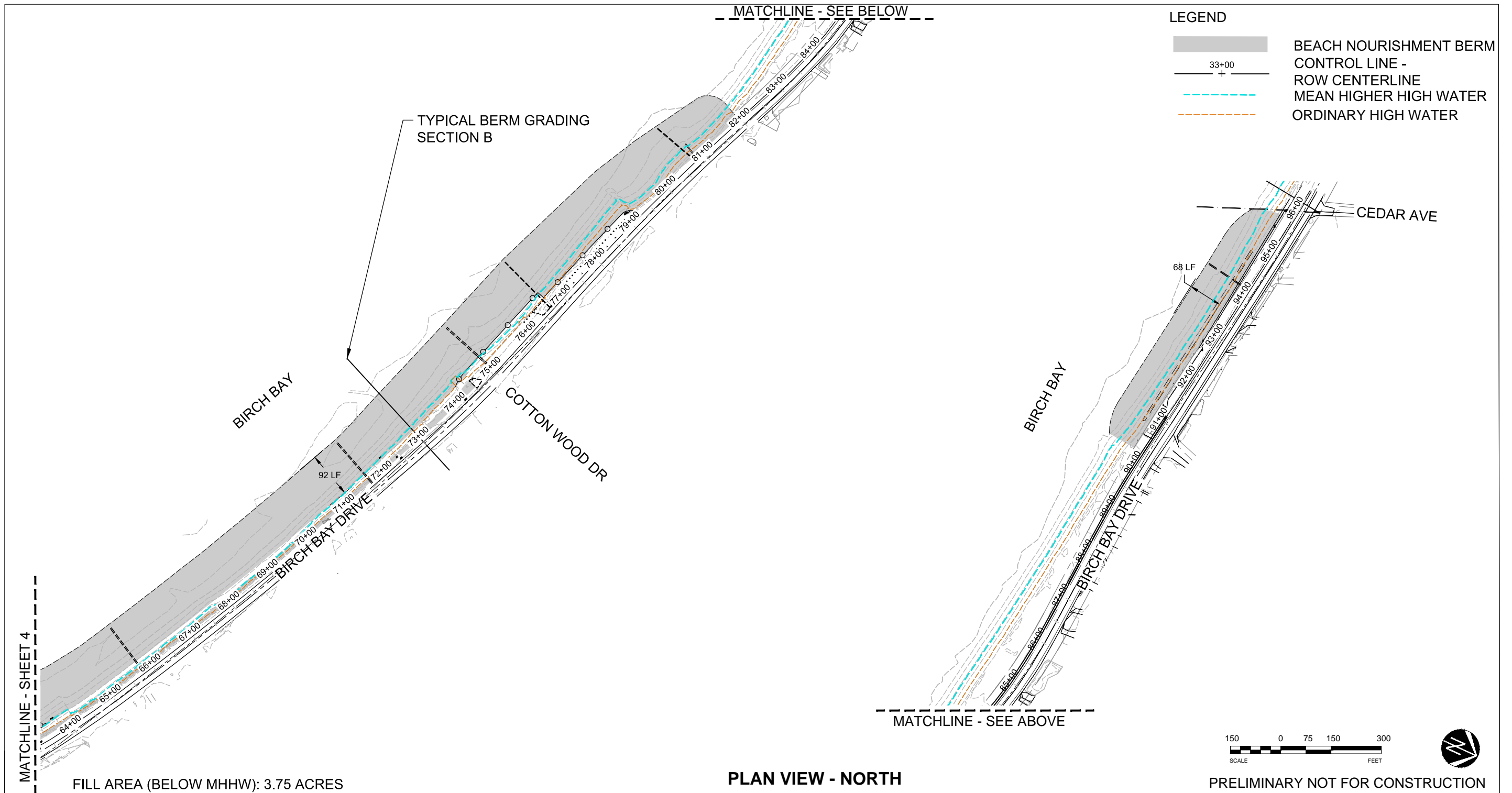
SHEET: 4 of 11

NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

DATE: December 2015



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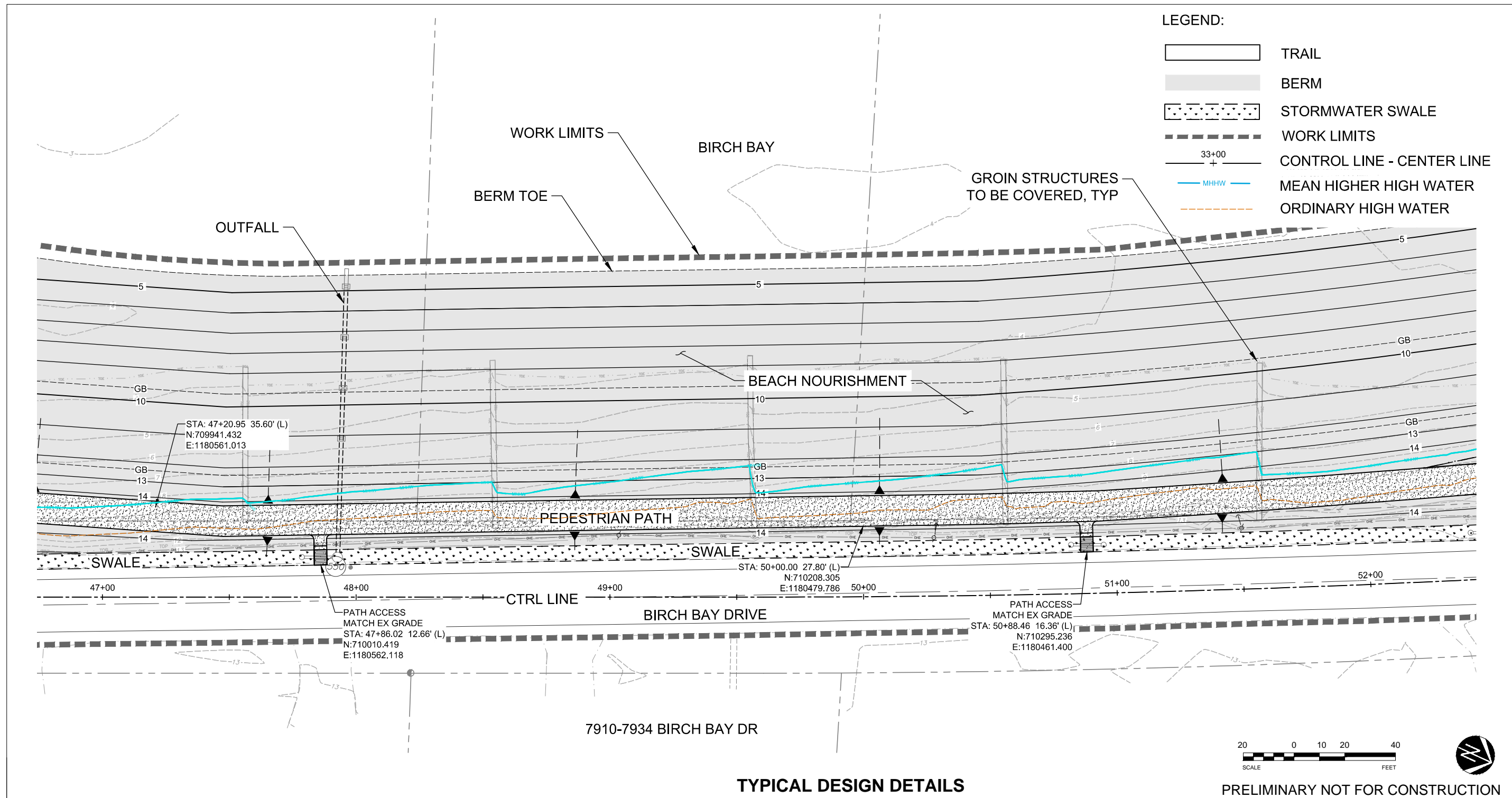
SHEET: 5 of 11

NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

DATE: December 2015



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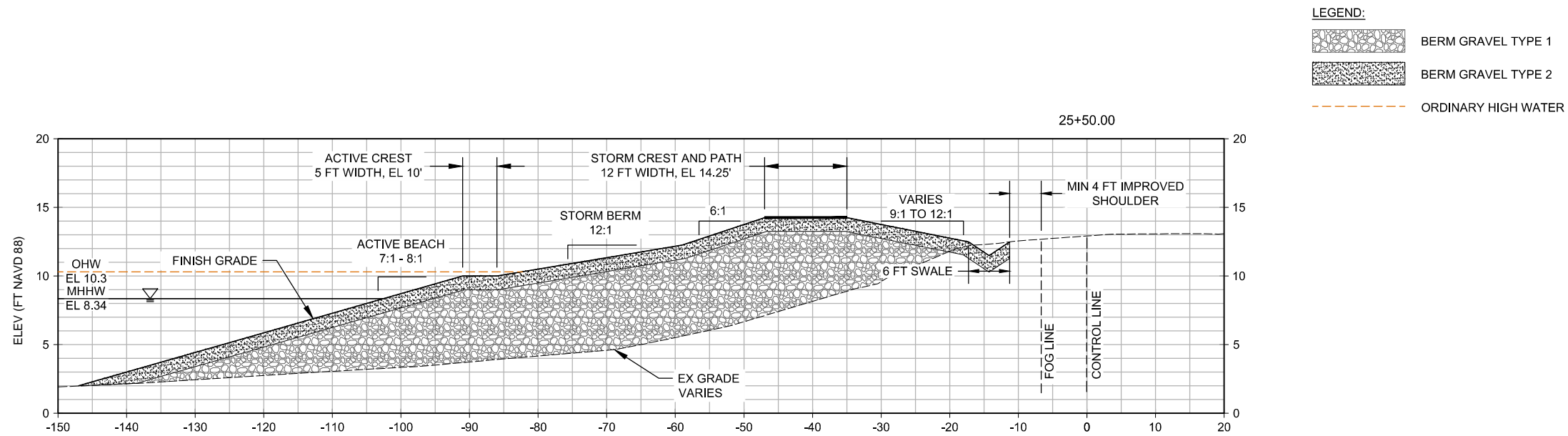
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NEAR/AT: Blaine

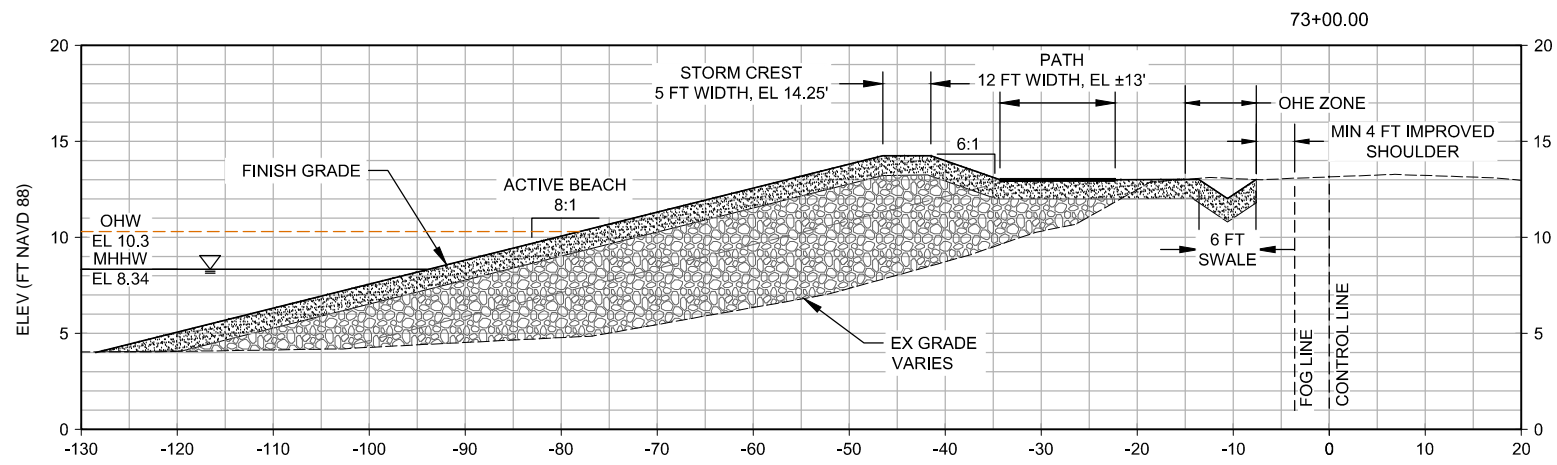
COUNTY: Whatcom County

STATE: Washington




DATE: December 2015



A
TYPICAL BERM GRADING - STA 24+20 TO 28+00



B
TYPICAL BERM GRADING - STA 72+50 TO 74+50

- LEGEND:**
-  BERM GRAVEL TYPE 1
 -  BERM GRAVEL TYPE 2
 -  ORDINARY HIGH WATER

TYPICAL CROSS SECTIONS

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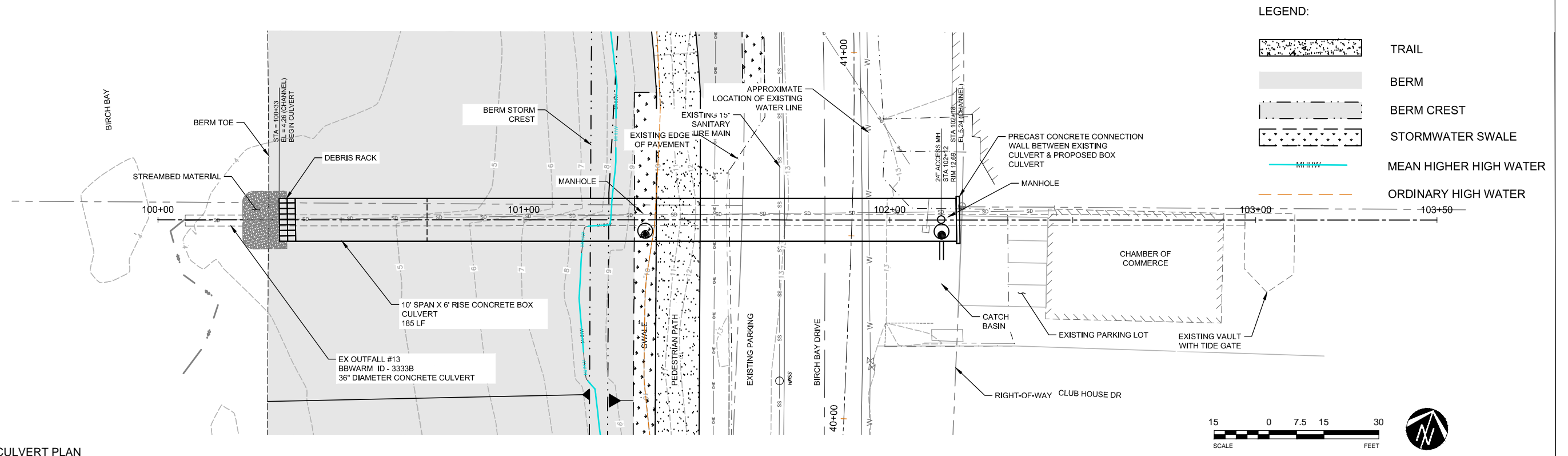
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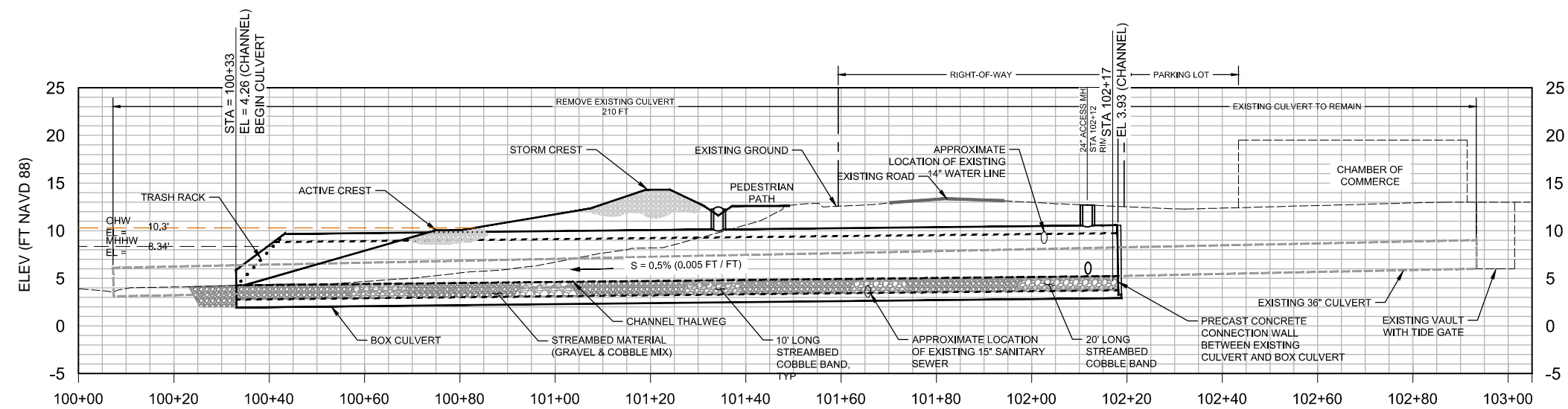
COUNTY: Whatcom County

STATE: Washington

DATE: December 2015



1 CULVERT PLAN



2 TYPICAL BERM DESIGN - STA 13+75 TO 18+00

GOLF COURSE CREEK CULVERT PLAN VIEW AND CROSS SECTIONS

PRELIMINARY NOT FOR CONSTRUCTION

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SHEET: 8 of 11

NEAR/AT: Blaine

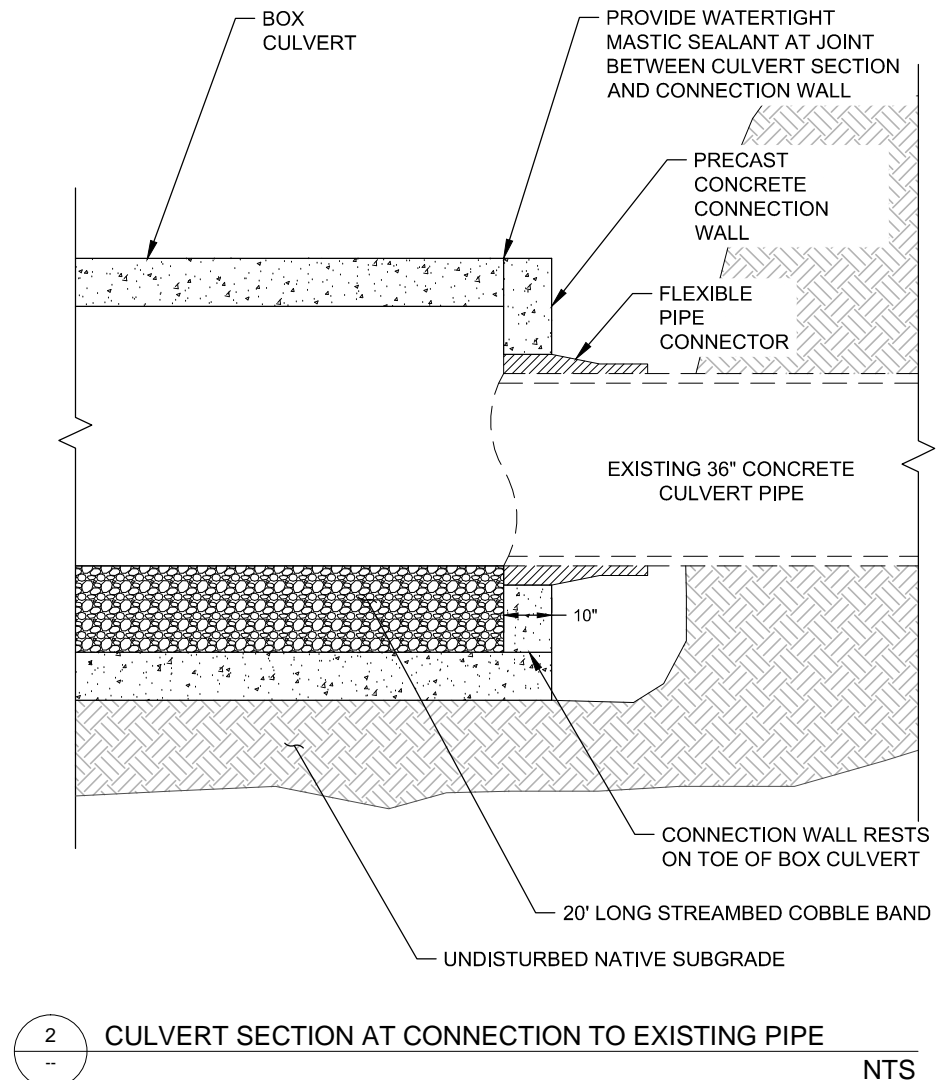
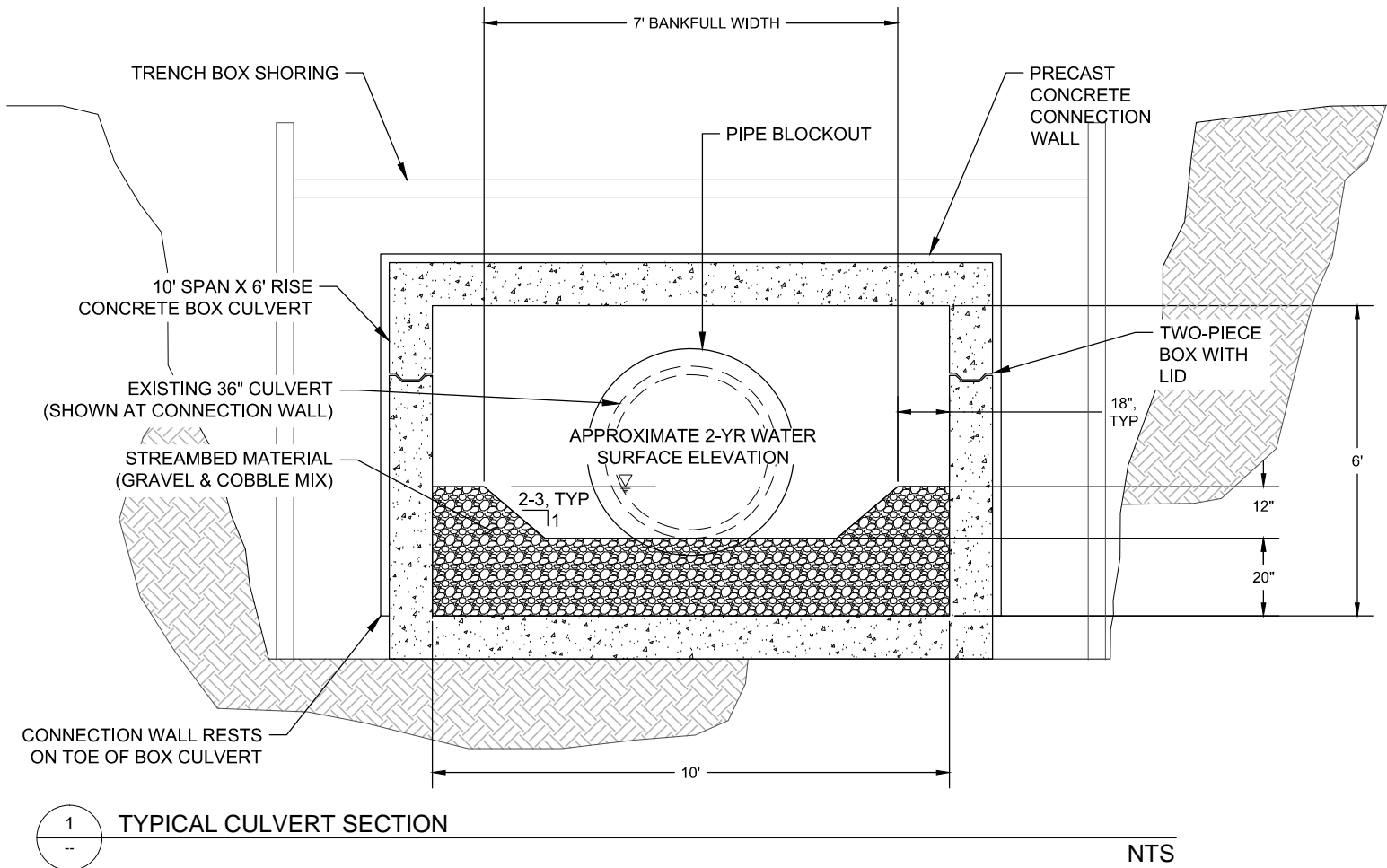
COUNTY: Whatcom County

STATE: Washington

DATE: December 2015

CULVERT STRUCTURE NOTES:

1. CULVERT DESIGN SHALL BE PRECAST CONCRETE CULVERT: 4-SIDED "BOX" WITH 10' SPAN BY 6' RISE, CLAM SHELL (LID) STYLE.
2. ASSUMED ALLOWABLE SOIL BEARING OF TBD PSF.
3. HIGHWAY DESIGN LOAD SHALL BE HL-93.
4. CONCRETE SHALL CONFORM TO WSDOT STANDARD SPECIFICATION 6-02.3.
5. REINFORCING SHALL CONFORM TO WSDOT STANDARD SPECIFICATION 9-07.
6. REMOVE UNSUITABLE FILL & BACKFILL CULVERT AS PER STRUCTURAL FILL REQUIREMENTS PER GEOTECHNICAL REPORT AND CULVERT MANUFACTURER REQUIREMENTS.
7. PRECAST UNITS SHALL INCLUDE 3" MIN REINFORCING COVER, AND EPOXY-COATED STEEL REINFORCING.
8. MANUFACTURE TO PROVIDE CULVERT UNIT JOINT GASKETS AND MASTIC JOINT WRAP (OUTSIDE ONLY).
9. FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY ENGINEER BEFORE PLACEMENT OF CULVERT AND WINGWALL FOOTING UNITS. IF NATIVE SUBGRADE IS UNDISTURBED, PLACE CULVERT AND WINGWALL FOOTINGS DIRECTLY ON NATIVE SUBGRADE. IF SUBGRADE IS DISTURBED, OVEREXCAVATE AND PLACE 6 IN THICK COMPACTED 2 IN MINUS CRUSHED AGGREGATE .
10. CULVERT THICKNESS TO BE DETERMINED BY MANUFACTURER.
11. ZONE OF CRITICAL CULVERT BACKFILL (FREE-DRAINING CRUSHED ROCK) IS TO BE PER MANUFACTURER'S RECOMMENDATIONS (NOT SHOWN).
12. FOOTING KEYWAY / CULVERT CONNECTION TO BE GROUTED (NON-SHRINK) OR AS OTHERWISE REQUIRED BY MANUFACTURER. CONCRETE SHALL BE LOW POROSITY MIX.



GOLF COURSE CREEK CULVERT CROSS SECTIONS

PRELIMINARY NOT FOR CONSTRUCTION

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LATITUDE/LONGITUDE: 48.9304N / -122.7462W

SHEET: 9 of 11

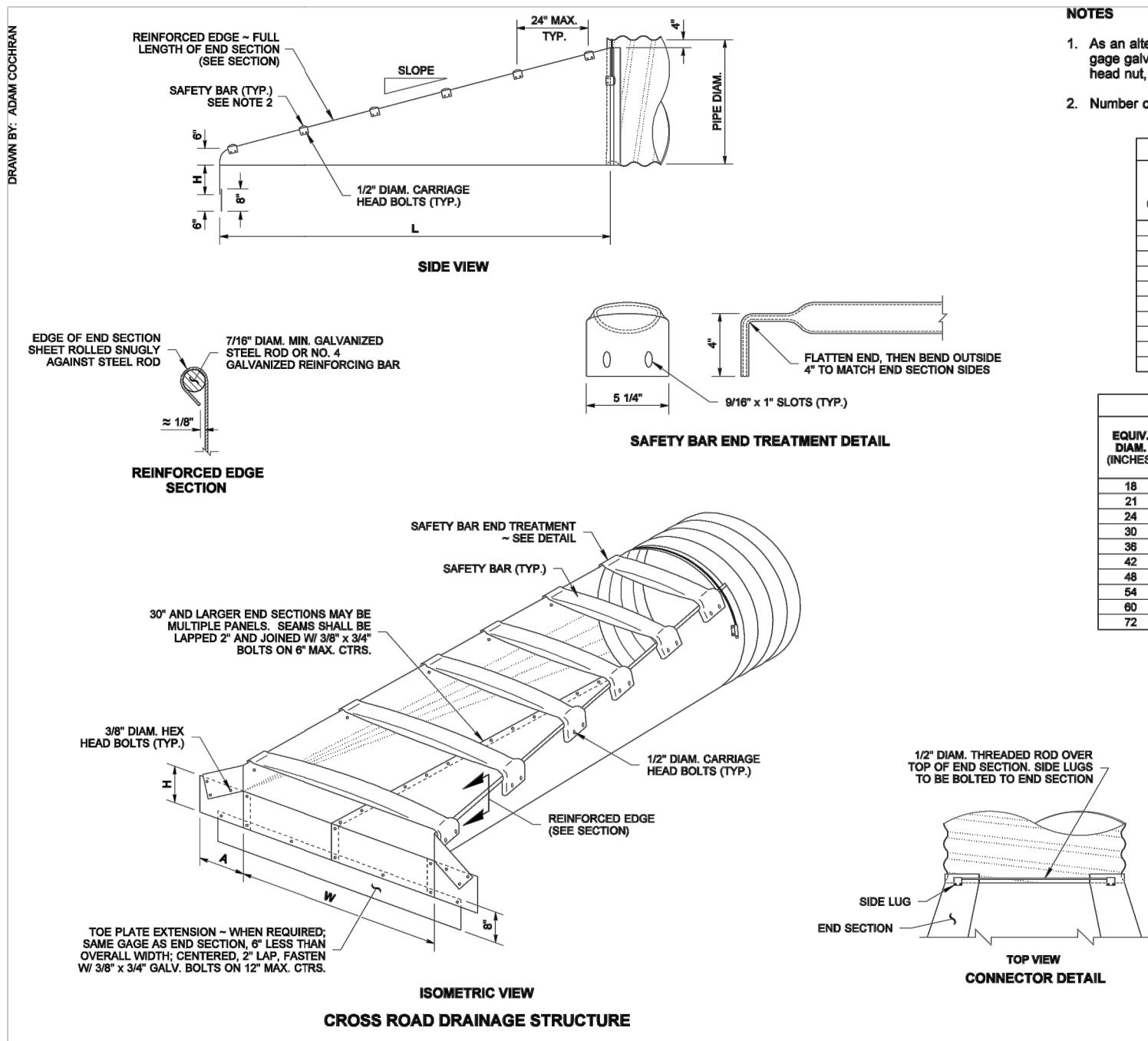
NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

DATE: December 2015

DRAWN BY: ADAM COCHRAN



- NOTES**
- As an alternative connection on 15" through 24" pipe, a 1" wide strap of 16 gage or 12 gage galvanized steel, fastened with a 1/2" diam., 6" long galvanized bolt and square head nut, may be used.
 - Number of safety bars required will vary depending upon the length of the end section.

| PIPE DIAM. (INCHES) | MINIMUM THICKNESS | | DIMENSIONS (INCHES) | | | | | |
|---------------------|-------------------|------|---------------------|----|----|-----------|-----------|-----|
| | INCHES | GAGE | OVERALL WIDTH | | | L | | |
| | | | A | H | W | SLOPE 4:1 | SLOPE 6:1 | |
| 15 | .064 | 16 | 8 | 6 | 21 | 37 | 20 | 30 |
| 18 | .064 | 16 | 8 | 6 | 24 | 40 | 32 | 48 |
| 21 | .064 | 16 | 8 | 6 | 27 | 43 | 44 | 66 |
| 24 | .064 | 16 | 8 | 6 | 30 | 46 | 56 | 84 |
| 30 | .109 | 12 | 12 | 9 | 36 | 60 | 80 | 120 |
| 36 | .109 | 12 | 12 | 9 | 42 | 66 | 104 | 156 |
| 42 | .109 | 12 | 16 | 12 | 48 | 80 | 128 | 192 |
| 48 | .109 | 12 | 16 | 12 | 54 | 86 | 152 | 228 |
| 54 | .109 | 12 | 16 | 12 | 60 | 92 | 176 | 264 |
| 60 | .109 | 12 | 16 | 12 | 66 | 98 | 200 | 300 |

| EQUIV. DIAM. (INCHES) | PIPE ARCH DIMENSIONS | | MINIMUM THICKNESS | | DIMENSIONS (INCHES) | | | | | |
|-----------------------|----------------------|------------|-------------------|------|---------------------|----|----|-----------|-----------|-----|
| | SPAN (IN.) | RISE (IN.) | INCHES | GAGE | OVERALL WIDTH | | | L | | |
| | | | | | A | H | W | SLOPE 4:1 | SLOPE 6:1 | |
| 18 | 21 | 15 | .064 | 16 | 8 | 6 | 27 | 43 | 20 | 30 |
| 21 | 24 | 18 | .064 | 16 | 8 | 6 | 30 | 46 | 32 | 48 |
| 24 | 28 | 20 | .064 | 16 | 8 | 6 | 34 | 50 | 40 | 60 |
| 30 | 35 | 24 | .079 | 14 | 12 | 9 | 41 | 65 | 56 | 84 |
| 36 | 42 | 29 | .109 | 12 | 12 | 9 | 48 | 72 | 76 | 114 |
| 42 | 49 | 33 | .109 | 12 | 16 | 12 | 55 | 87 | 92 | 138 |
| 48 | 57 | 38 | .109 | 12 | 16 | 12 | 63 | 95 | 112 | 168 |
| 54 | 64 | 43 | .109 | 12 | 16 | 12 | 70 | 102 | 132 | 198 |
| 60 | 71 | 47 | .109 | 12 | 16 | 12 | 77 | 109 | 148 | 222 |
| 72 | 83 | 57 | .109 | 12 | 16 | 12 | 89 | 121 | 188 | 282 |



TAPERED END SECTION WITH TYPE 4 SAFETY BARS (ON CROSS ROAD) STANDARD PLAN B-80.40-00

SHEET 1 OF 1 SHEET
 APPROVED FOR PUBLICATION
Harold J. Peterfeso 06-01-06
 STATE DESIGN ENGINEER DATE
 Washington State Department of Transportation

GOLF COURSE CREEK CULVERT TRASH RACK TYPICAL DESIGN DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

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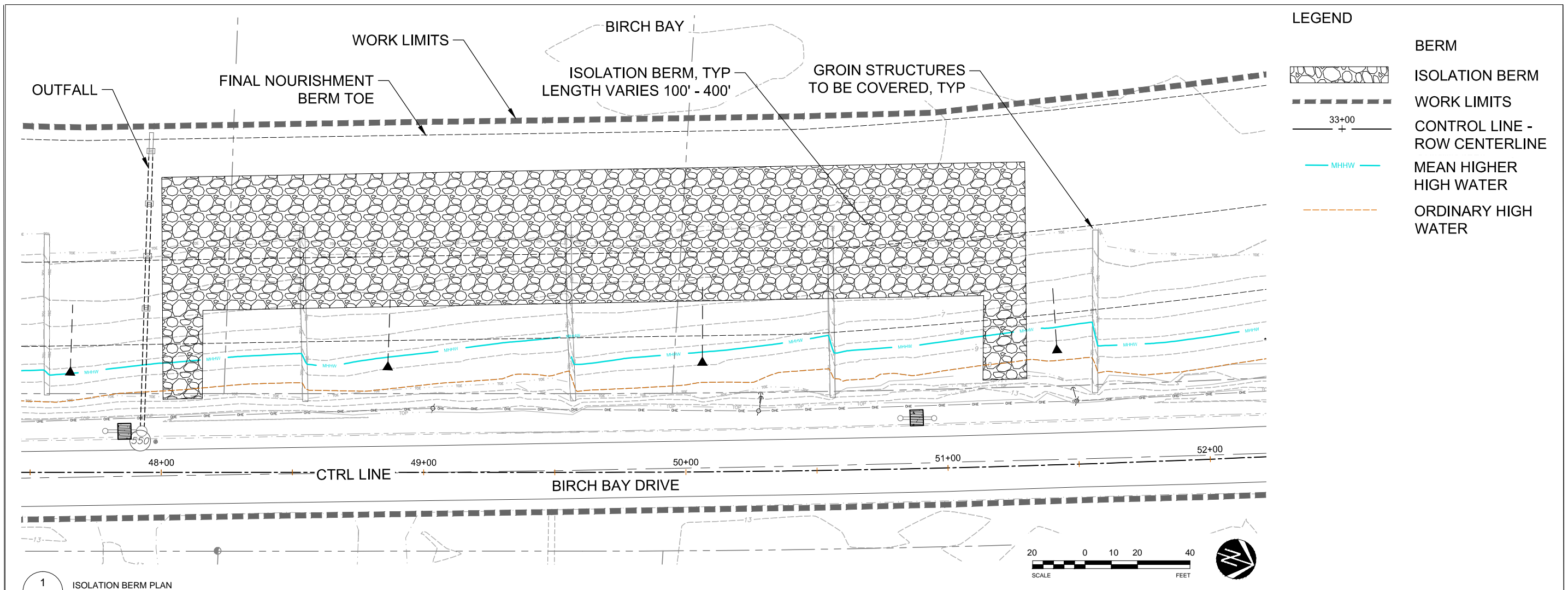
SHEET: 10 of 11



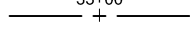



NEAR/AT: Blaine

COUNTY: Whatcom County

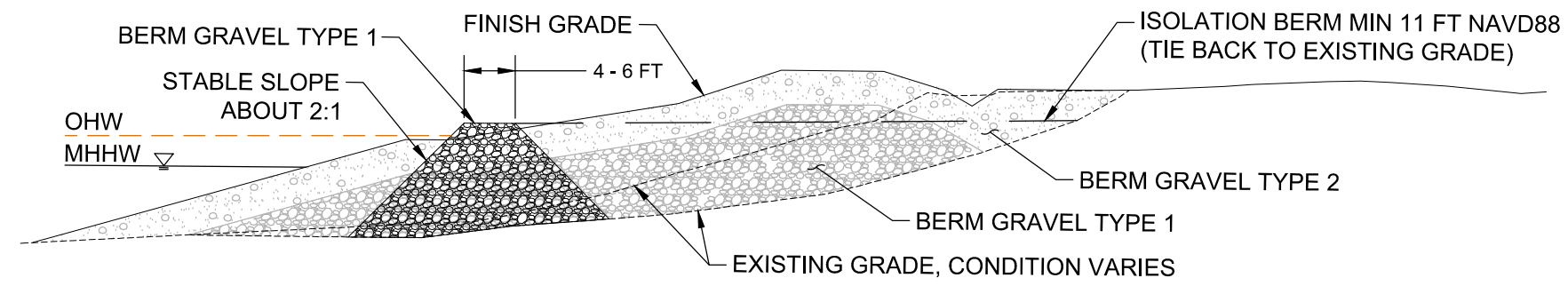
STATE: Washington

DATE: December 2015



- LEGEND**
-  BERM
 -  ISOLATION BERM
 -  WORK LIMITS
 -  CONTROL LINE - ROW CENTERLINE
 -  MEAN HIGHER HIGH WATER
 -  ORDINARY HIGH WATER

1 ISOLATION BERM PLAN



2 TYPICAL TEMPORARY ISOLATION BERM DESIGN CROSS SECTION
NTS

TEMPORARY ISOLATION/TURBIDITY BERM CELL CROSS SECTION AND PROFILE

PRELIMINARY NOT FOR CONSTRUCTION

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SHEET: 11 of 11

NEAR/AT: Blaine

COUNTY: Whatcom County

STATE: Washington

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