US Army Corps of Engineers
Seattle District

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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 (206) 764-6912
Attn: Rebecca McAndrew, Project Manager

WA Department of Ecology
SEA Program
3190 160th Ave SE
Bellevue, WA 98008-5452
Telephone (425) 649-7181
Attn: Katie Chamberlin,
Federal Permit Coordinator

Public Notice Date: February 14, 2008
Expiration Date: March 15 2008

Reference No.: NWS-2007-1926-SOD
Name: WA State Dept of Transportation

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.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA). 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: Washington State Dept. of Transportation
Mr. Ben Brown
Post Office Box 330310
Mail Stop NB82-138
Seattle, Washington 98133-9710
Telephone: (206) 440-4528

LOCATION: In wetlands at Redmond, King County, Washington.

WORK: The proposed project would widen approximately 1.43 miles of State Route (SR) 520 from four to eight lanes between West Lake Sammamish Parkway and SR 202. The work would fill or excavate 0.85 acre in four wetlands within the project corridor. The wetland impacts are to forested (0.49 acre) and emergent (0.36 acre) habitat. Category II, riverine impacts are 0.04 acre, while Category III, depressional impacts total 0.81 acre. Permanent buffer impacts to wetlands, Bear Creek, and the Sammamish River total 2.23 acres and temporary buffer impacts are 1.35 acres. The buffer impacts are to forested, shrub, and herbaceous vegetation. If issued, this permit would be valid for five years.

The principle functions provided by the impacted wetlands include flood storage, water quality improvement, erosion control and shoreline stabilization, organic matter production and export, general habitat suitability, aquatic invertebrate habitat, wetland-associated mammal habitat, and general fish habitat. Other impacted functions include amphibian habitat, wetland-associated bird habitat, and native plant richness.

PURPOSE: The purpose of the proposed work is to improve safety, add capacity, and relieve congestion.

ADDITIONAL INFORMATION – 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 scroll down the alphabetical listing of District elements, and click on "Regulatory" and then "Regulatory – Permits" for the Seattle District's Regulatory homepage. Select the prominently displayed "Public Notices" heading and a list of recently-issued public notices will appear, in chronological order of the date of issuance. Select and view the listing for this project.

MITIGATION: WSDOT avoided impacts to wetlands by shifting the alignment to the south and east, and avoided impacts to the Sammamish River by fully spanning the river channel. WSDOT minimized impacts to wetlands by using ecology embankments for stormwater treatment and retaining walls. This reduced the proposed wetland impacts by 0.62 acre. To compensate for the permanent loss of 0.85 acre of wetlands, WSDOT would utilize 1.74 acres of previously constructed wetland mitigation adjacent to Evans Creek. The proposed mitigation site, which consists of a total 5.43 acres of created wetland and 5.76 acres of buffer, was graded in summer 2005 and planted in fall 2006 and 2007 as part of the SR 202 SR 520 to Sahalee Way project contract. The plant community consists of forested, shrub, and emergent wetland vegetation. The Happy Valley mitigation site is located just over two miles southeast from the project corridor.

The mitigation site expanded an existing riverine wetland from existing herbaceous upland with a large stand of mature Douglas fir trees and emergent wetland. The mitigation site would improve the flood storage, water quality, erosion and shoreline stabilization, organic matter production and export, general habitat suitability, general fish habitat, amphibian habitat, aquatic invertebrate habitat, wetland-associated mammal habitat, wetland-associated bird habitat, and native plant richness functions compared to the impacted functions. All of impacted functions would be mitigated for at the Happy Valley mitigation site.

To compensate for the permanent stream buffer loss of 1.38 acres, WSDOT would enhance 2.99 acres of stream buffer along the Sammamish River and Bear Creek in the project corridor.

Enhanced water quality treatment would be provided for all new impervious surface and a portion of the existing. This would improve water quality in the Sammamish River and Bear Creek. The Sammamish River is flow control exempt and the stormwater that does not infiltrate would reach the Sammamish River via the existing outfall. Ecology embankments have been demonstrated to infiltrate approximately 62 percent of the stormwater that flows into them. During the summer months when temperature is of most concern, most of the stormwater is expected to infiltrate rather than discharge to the Sammamish River. Approximately 1500 feet of the ecology embankment will have an underdrain pipe that will collect treated stormwater that does not infiltrate. The process of the stormwater seeping through the gravels in the ecology embankment and through the pipe should help the water cool before it is discharged into the Sammamish River. Stormwater draining to Bear Creek would be sent to previously constructed infiltration facilities then through the riparian buffer between the roadway and Bear Creek.

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 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.

WSDOT, as the designated lead agency for ESA consultation, has consulted with the NMFS and the USFWS as required under Section 7 of the ESA. The Corps agrees with their determination that the project may affect, not likely to adversely affect listed species.

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.

WSDOT, as the designated lead agency for a determination regarding EFH, is consulting with the NMFS. The Corps agrees with their determination that the project will not adversely affect EFH species.

CULTURAL RESOURCES: The District Engineer has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible and other sources of information. The permit area is likely to yield resources eligible for inclusion in the National Register. An investigation for the presence of potentially eligible historic properties is being conducted. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area. This public notice initiates consultation under Section 106 of the National Historic Preservation Act with any Tribe that has information or concerns with historic properties in the proposed permit area.

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.

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.

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.

This proposal is the subject of Shorelines Substantial Development Permit No. L070501, being processed by the City of Redmond.

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 commentor'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 rebecca.e.mcandrew@usace.army.mil. Conventional mail comments should be sent to U.S. Army Corps of Engineers, Regulatory Branch, Attn: Ms. Rebecca McAndrew, Post Office Box 3755, Seattle, Washington, 98124-3755.

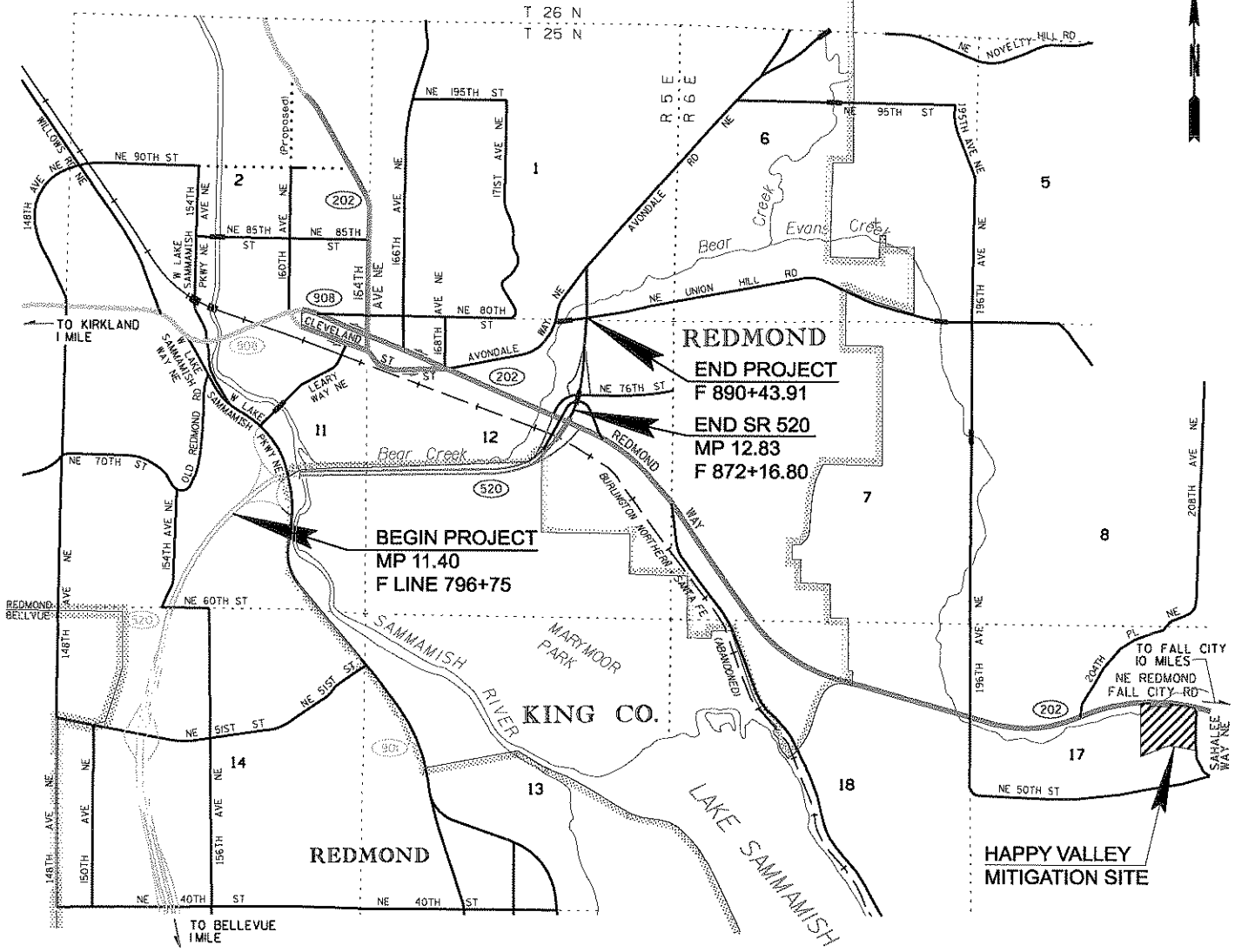
Ecology Comments: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Department of Ecology, SEA program – Federal Permit Coordinator, Attn: Ms. Katie Chamberlin, 3190 160th Ave Southeast, Bellevue, Washington 98008-5452, or e-mail to kach461@ecy.wa.gov

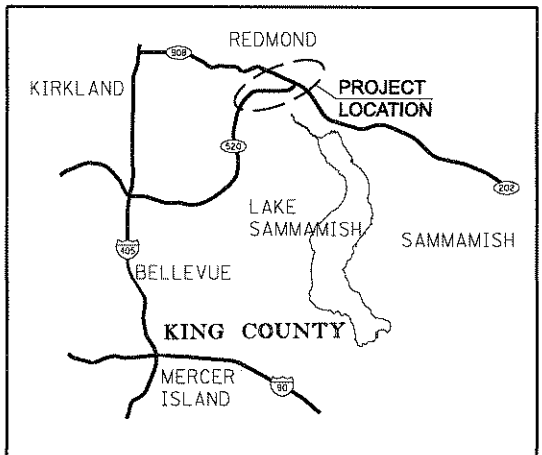
To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments:

Washington State Dept. of Transportation, NWS-2007-1926-SOD

Encl: Figures (19)

T. 25N. R. 5E. W.M.

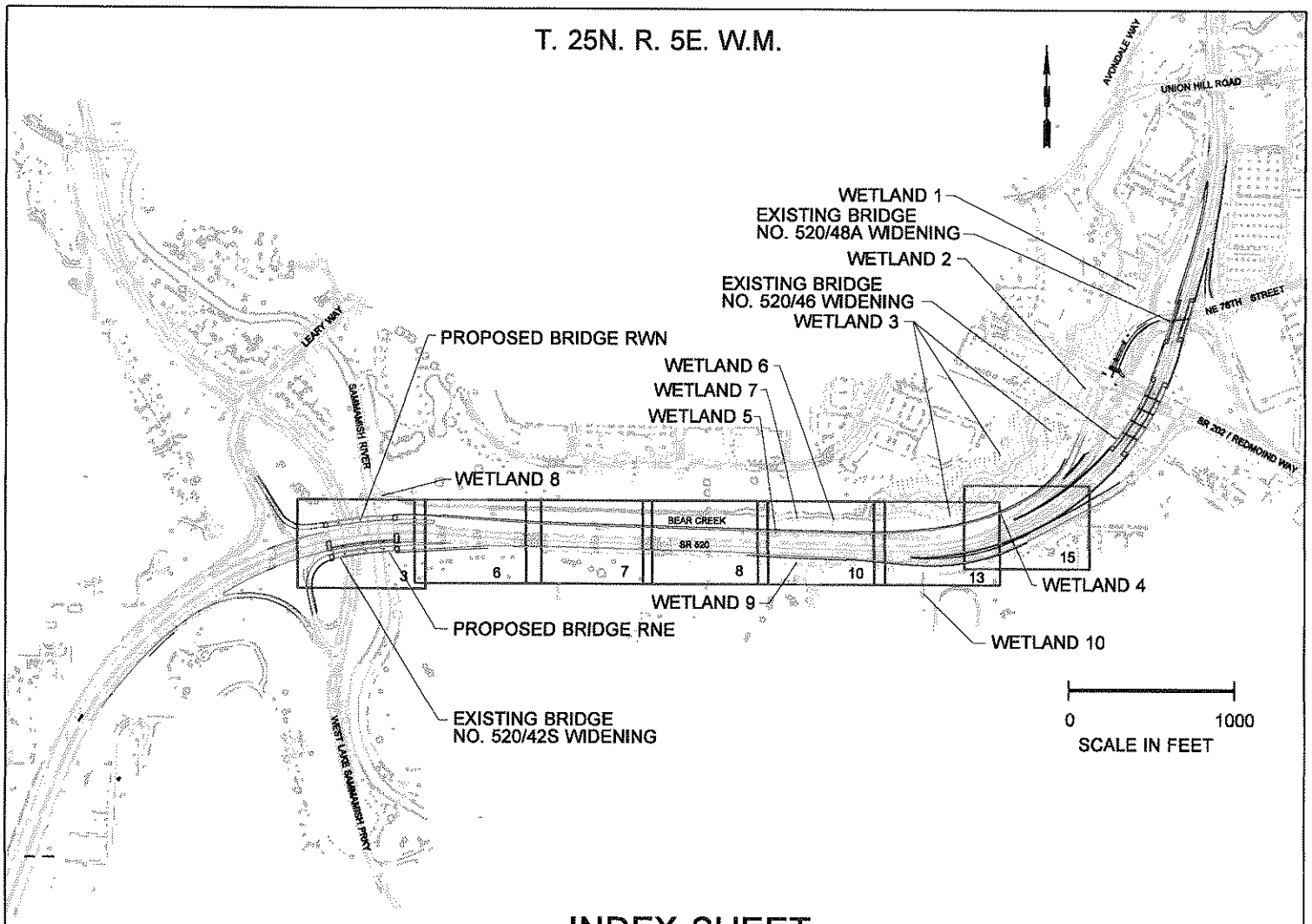




REGIONAL VICINITY MAP

PURPOSE: IMPROVE MOBILITY AND INCREASE SAFETY ON SR 520	APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
DATUM: NAVD 88	USACE REFERENCE NUMBER: NWS-2007-1926-SOD	NEAR: REDMOND, KING CO., WA
LATITUDE: 47°40'02" LONGITUDE: 122°06'54"	LOCATION ADDRESS: REDMOND, KING CO., WA	DATE: 1/7/08 SHEET 1 OF 19

T. 25N. R. 5E. W.M.



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WETLAND 6	10
WETLAND 7	10
WETLAND 8	3
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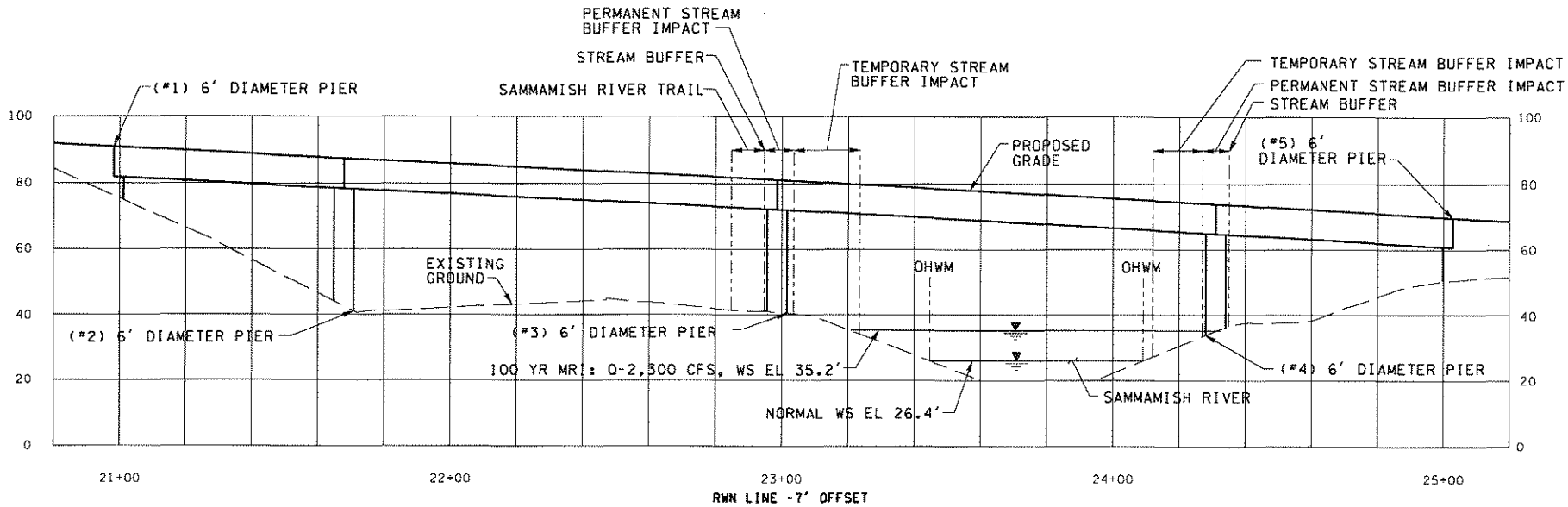
WETLAND 10	10,13
CROSS CULVERTS	10

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1/ 7 / 08	SHEET 2 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD



SECTION 1

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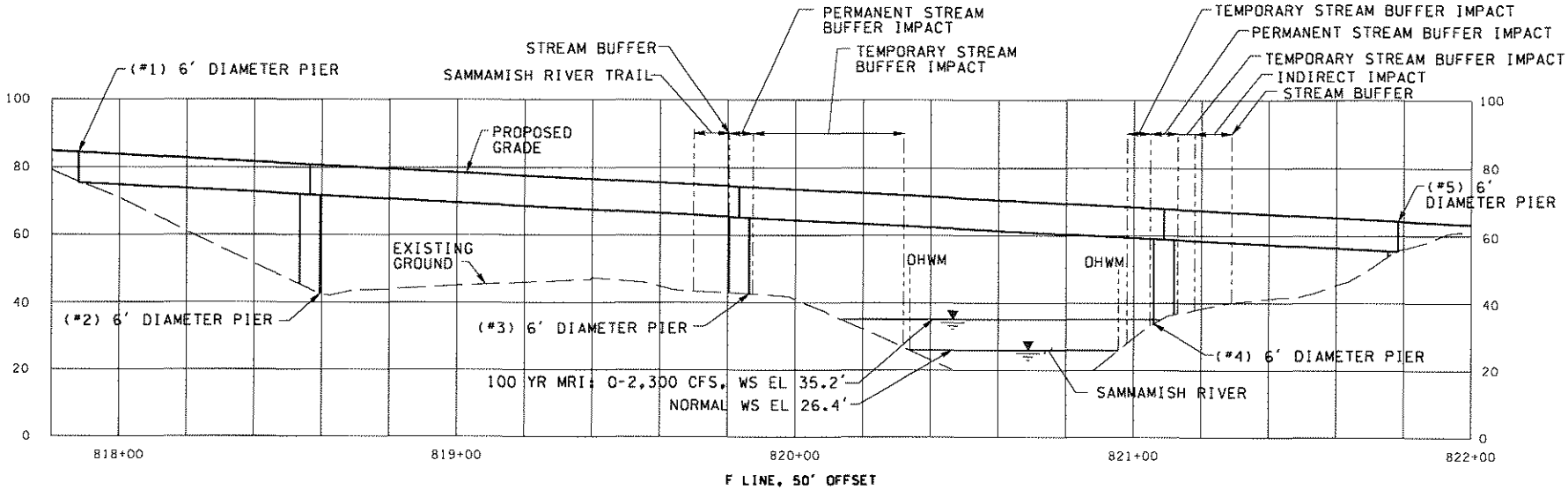


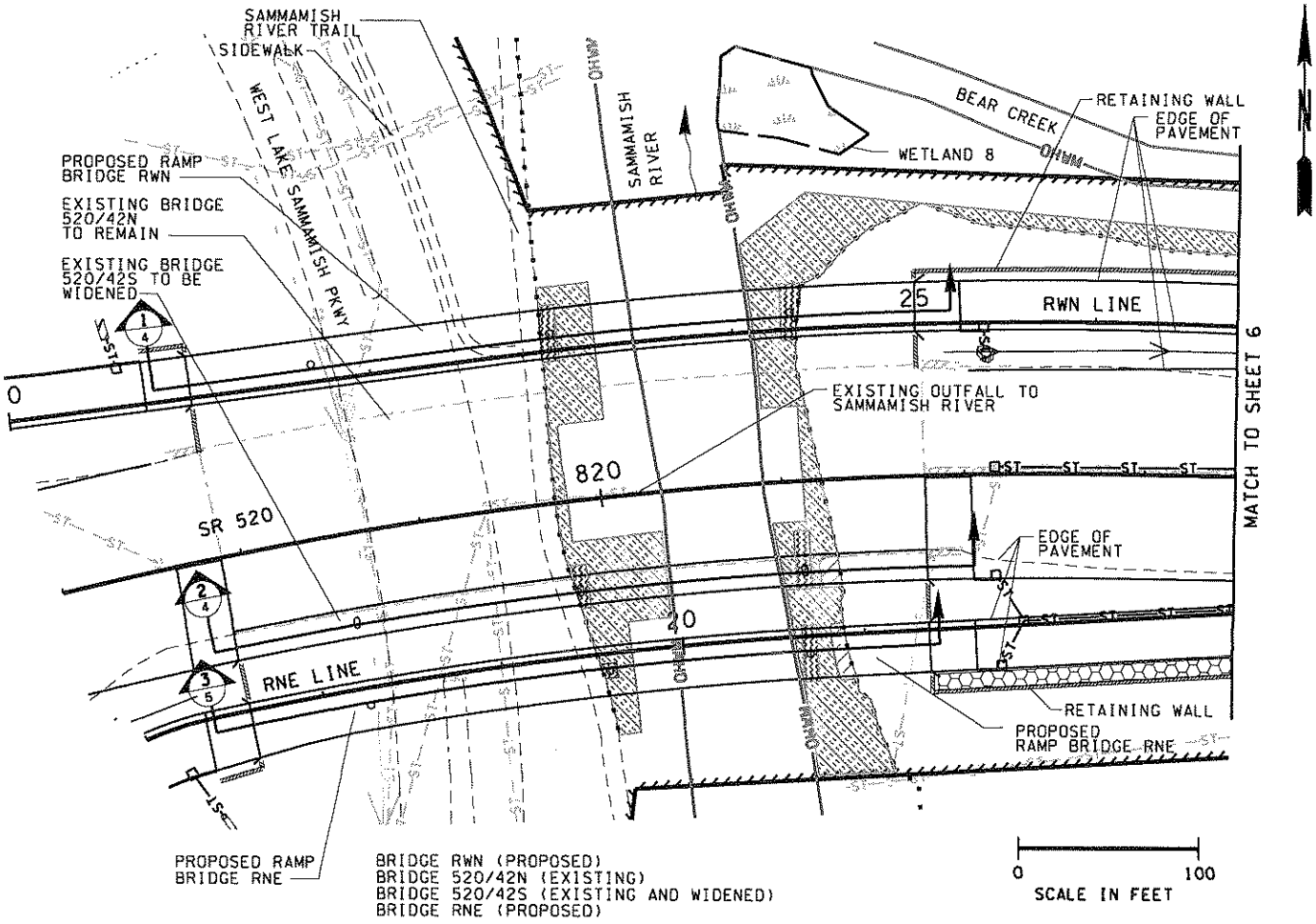
SECTION 2

NOT TO SCALE
DATUM: NAVD 88

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 4 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

T.25N. R.5E. W.M. SEC. 11



PLAN

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTOAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTALTEMPORARY BUFFER IMPACT
8	III	0.04 ACRE	0.00 ACRE	0.00 ACRE	0.00 ACRE

LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
- WETLAND
- OHWM — ORDINARY HIGH WATER
- STREAM BUFFER
- TEMPORARY WETLAND BUFFER IMPACT
- TEMPORARY STREAM BUFFER IMPACT
- PERMANENT STREAM BUFFER IMPACT
- INDIRECT IMPACT
- WETLAND BUFFER
- RETAINING WALL
- PROPOSED EDGE OF SHOULDER
- EXISTING EDGE OF PAVEMENT
- PROPOSED DITCH
- EXISTING DITCH
- 840 ALIGNMENT & STATION
- EXISTING CULVERT OR STORM SEWER PIPE
- PROPOSED CULVERT OR STORM SEWER PIPE
- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE
SAMMAMISH RIVER	0.00 ACRE	0.04 ACRES	0.31 ACRE

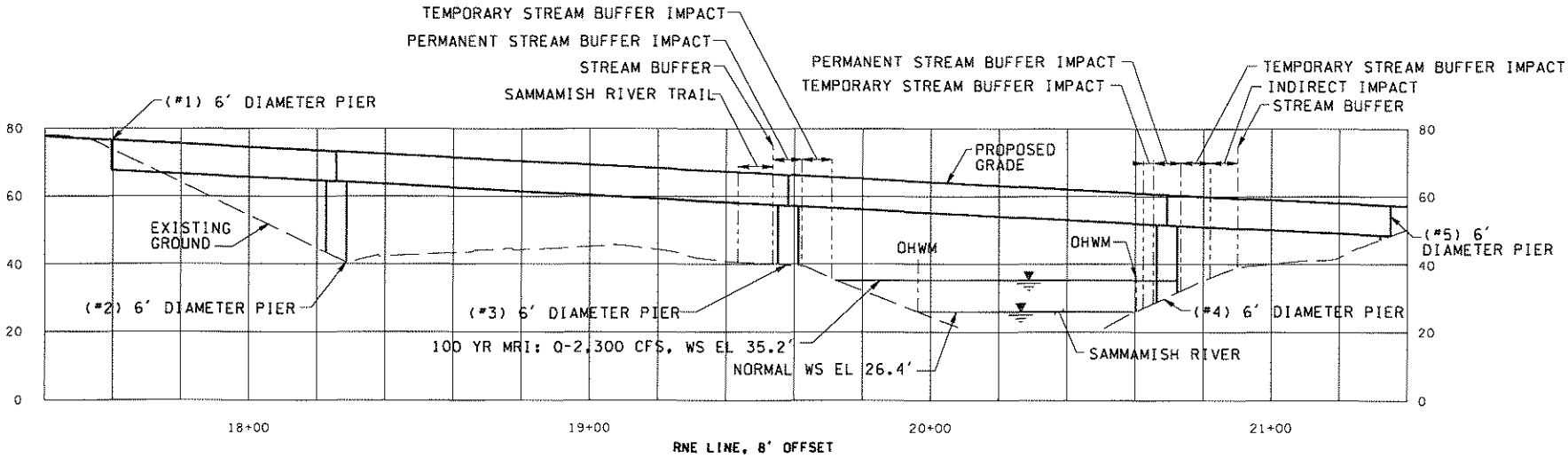
REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION

LOCATION ADDRESS: REDMOND, KING CO., WA

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

DATE: 1/7/08



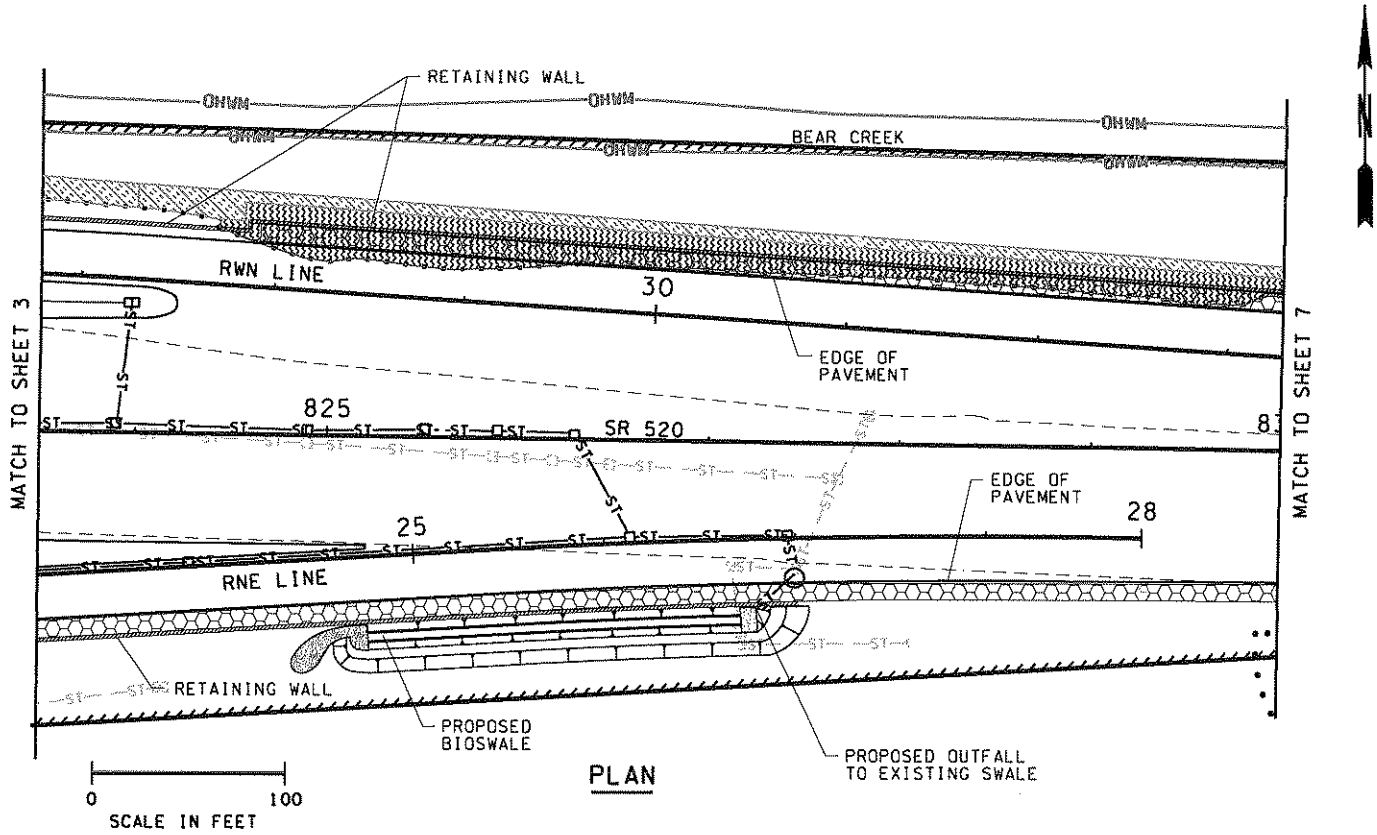
SECTION 3

NOT TO SCALE
DATUM: NAVD 88

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 5 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

********DESIGNER ENAME******



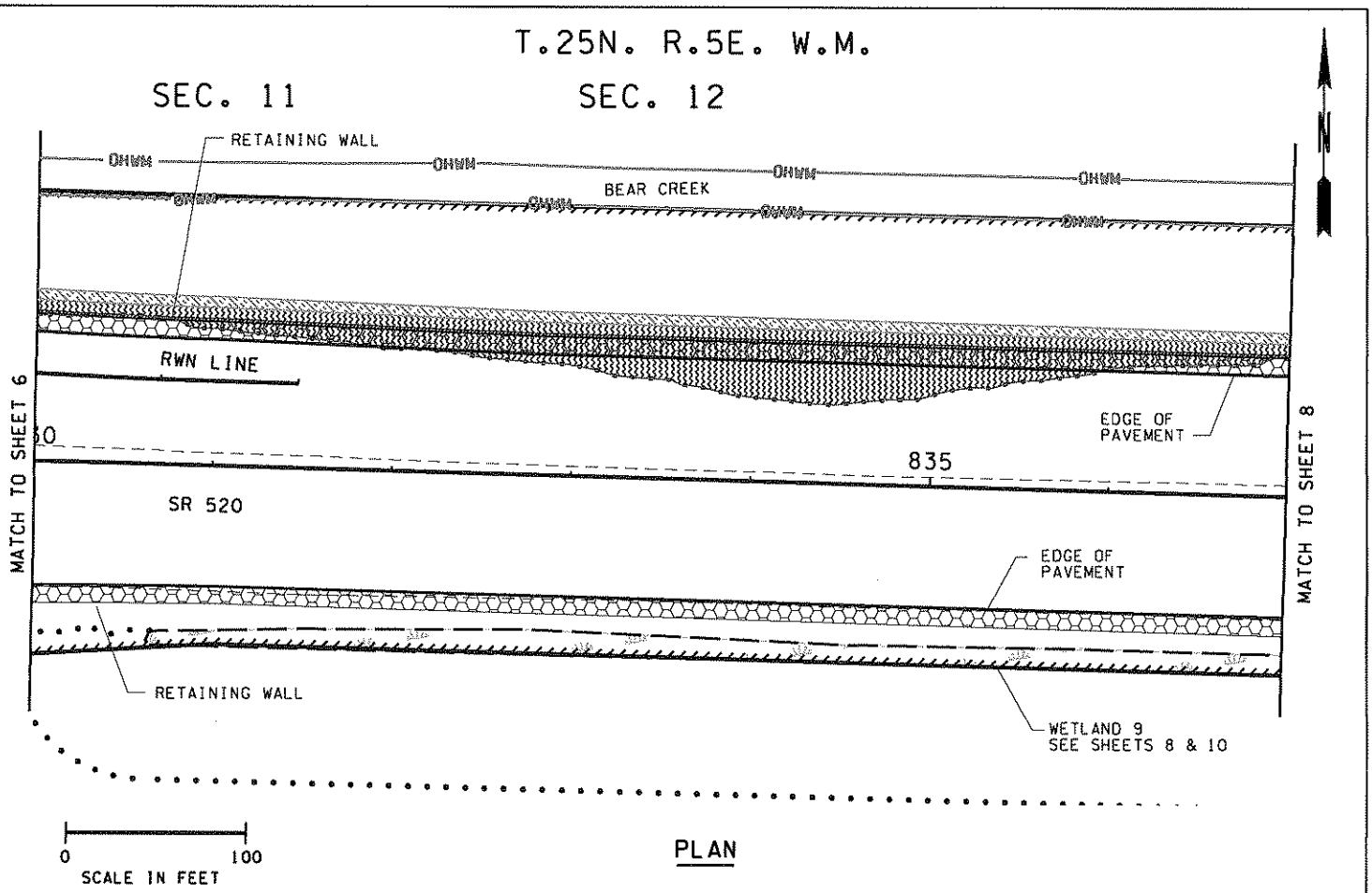
LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
- WETLAND
- OHWM — ORDINARY HIGH WATER
- STREAM BUFFER
- TEMPORARY WETLAND BUFFER IMPACT
- TEMPORARY STREAM BUFFER IMPACT
- PERMANENT STREAM BUFFER IMPACT
- INDIRECT IMPACT
- WETLAND BUFFER
- RETAINING WALL
- PROPOSED EDGE OF SHOULDER
- EXISTING EDGE OF PAVEMENT
- PROPOSED DITCH
- EXISTING DITCH
- 840 — ALIGNMENT & STATION
- ST — ST — EXISTING CULVERT OR STORM SEWER PIPE
- ST — ST — PROPOSED CULVERT OR STORM SEWER PIPE
- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1/7/08	SHEET 6 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD



PLAN

LEGEND

PERMANENT WETLAND BUFFER IMPACT	TEMPORARY WETLAND BUFFER IMPACT	RETAINING WALL	EXISTING CULVERT OR STORM SEWER PIPE
PERMANENT WETLAND IMPACT	TEMPORARY STREAM BUFFER IMPACT	PROPOSED EDGE OF SHOULDER	PROPOSED CULVERT OR STORM SEWER PIPE
WETLAND	PERMANENT STREAM BUFFER IMPACT	EXISTING EDGE OF PAVEMENT	PROPOSED ECOLOGY EMBANKMENT
OHWM ORDINARY HIGH WATER	INDIRECT IMPACT	PROPOSED DITCH	RIGHT OF WAY
STREAM BUFFER	WETLAND BUFFER	EXISTING DITCH	
		840 ALIGNMENT & STATION	

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTAL TEMPORARY BUFFER IMPACT
9	III	2.92 ACRE	0.21 ACRE	0.02 ACRE	0.00 ACRE

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

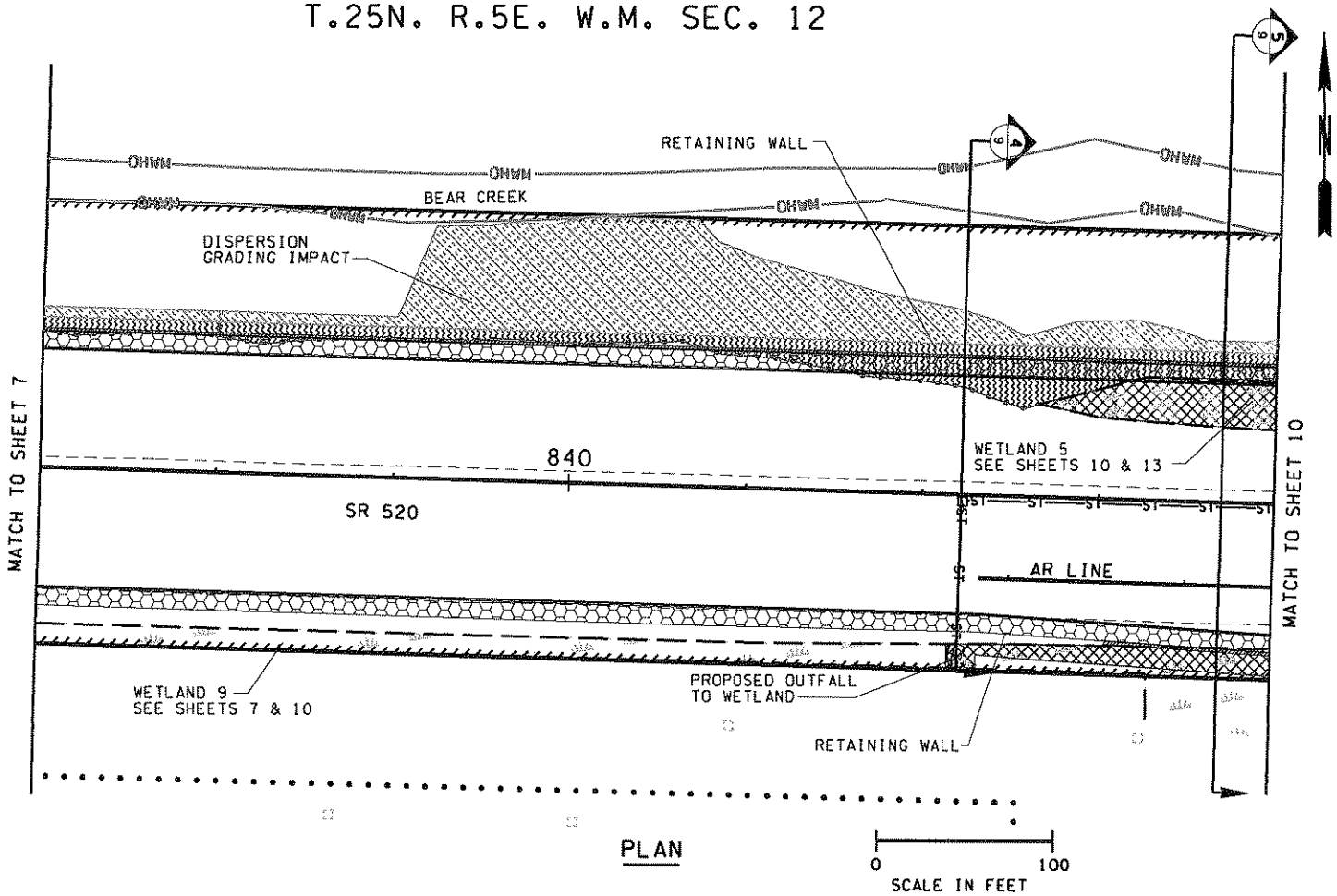
APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION

LOCATION ADDRESS: REDMOND, KING CO., WA

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

DATE: 1/7/08

T.25N. R.5E. W.M. SEC. 12



LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
- WETLAND
- OHWM — ORDINARY HIGH WATER
- STREAM BUFFER
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- ST — EXISTING CULVERT OR STORM SEWER PIPE
- ST — PROPOSED CULVERT OR STORM SEWER PIPE
- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTAL TEMPORARY BUFFER IMPACT
5	III	0.59 ACRE	0.59 ACRE	0.00 ACRE	0.00 ACRE
9	III	2.92 ACRES	0.21 ACRE	0.02 ACRE	0.00 ACRE

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

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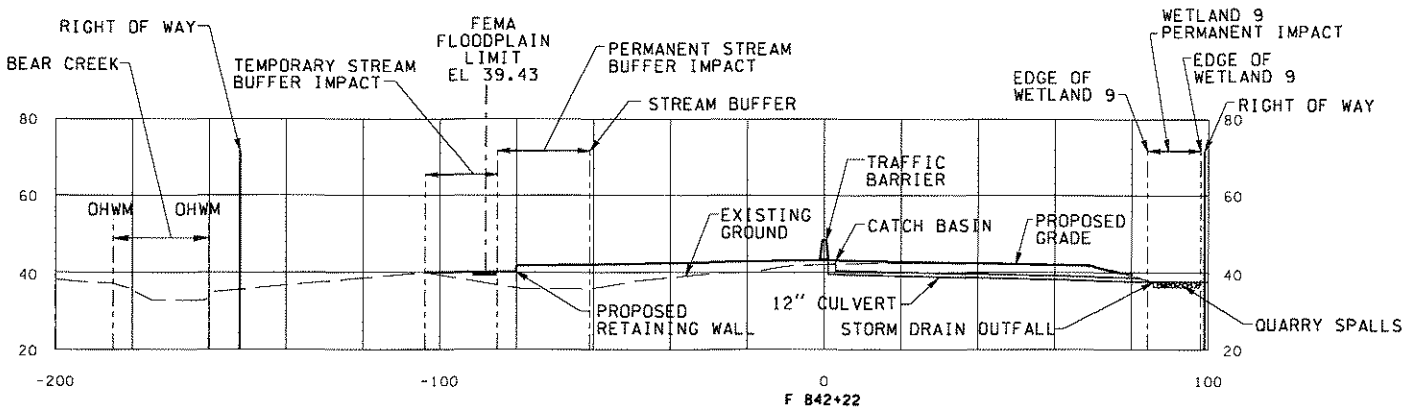

SECTION 4

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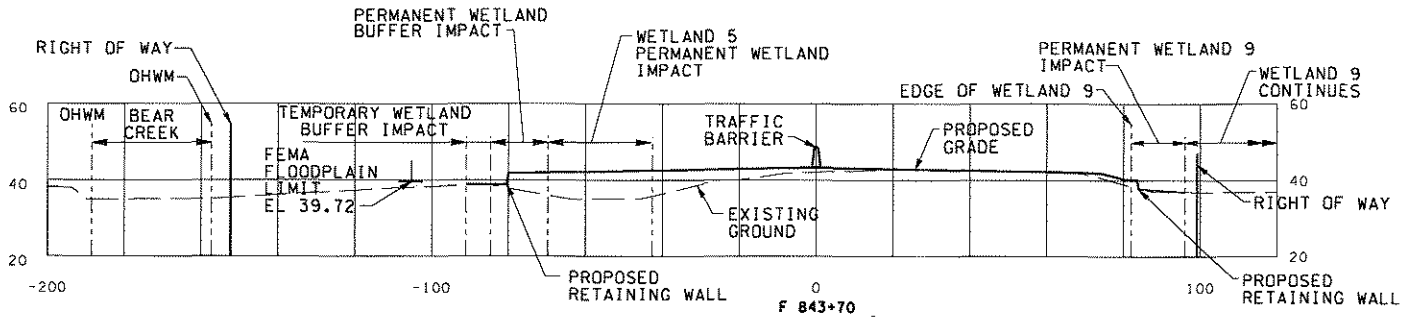
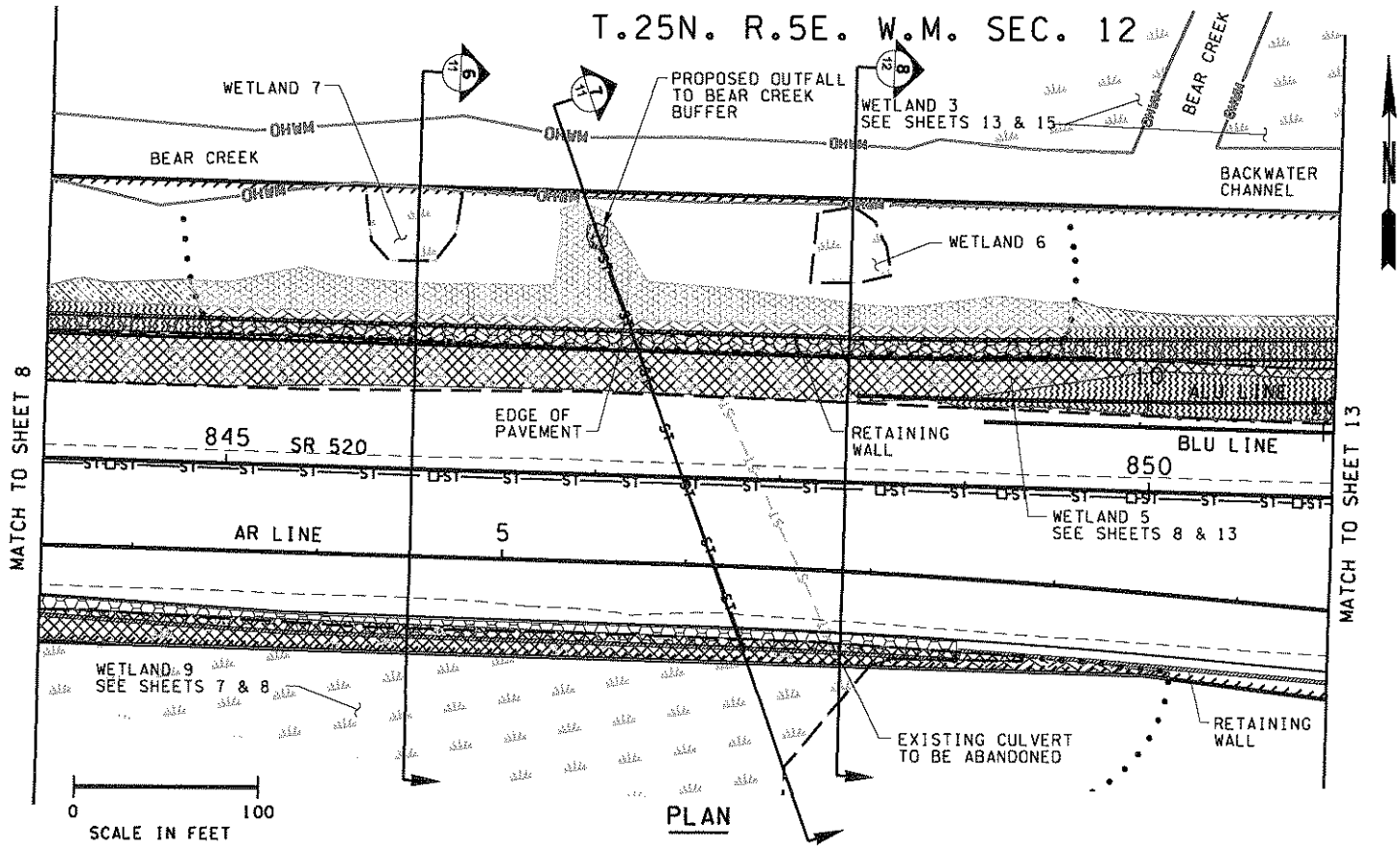


SECTION 5

NOT TO SCALE
DATUM: NAVD 88

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 9 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD



LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
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- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTAL TEMPORARY BUFFER IMPACT
3	II	5.22 ACRES	0.04 ACRE	0.65 ACRE	0.03 ACRE
5	III	0.59 ACRE	0.59 ACRE	0.00 ACRE	0.00 ACRE
6	II	0.03 ACRE	0.00 ACRE	0.09 ACRE	0.09 ACRE
7	II	0.04 ACRE	0.00 ACRE	0.08 ACRE	0.13 ACRE
9	III	2.92 ACRES	0.21 ACRE	0.02 ACRE	0.00 ACRE

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION

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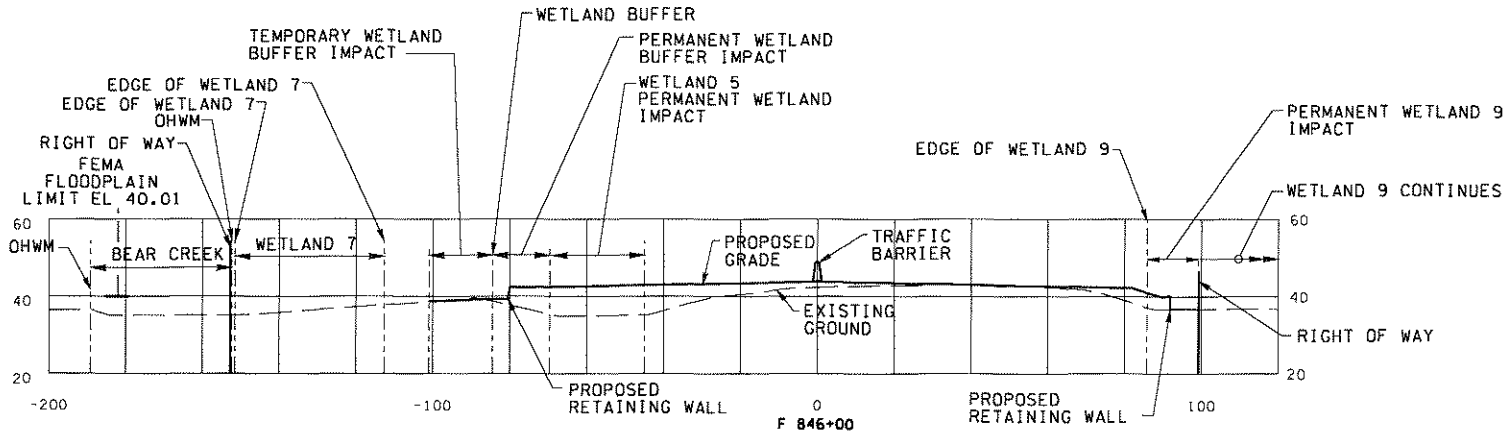

SECTION 6

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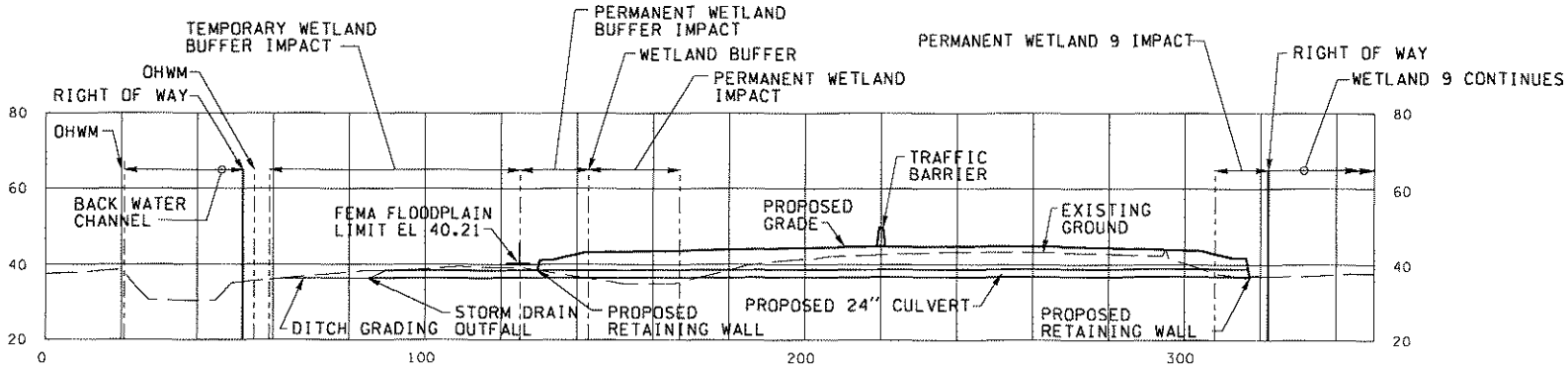

(SEE PLAN VIEW FOR ALIGNMENT)

SECTION 7

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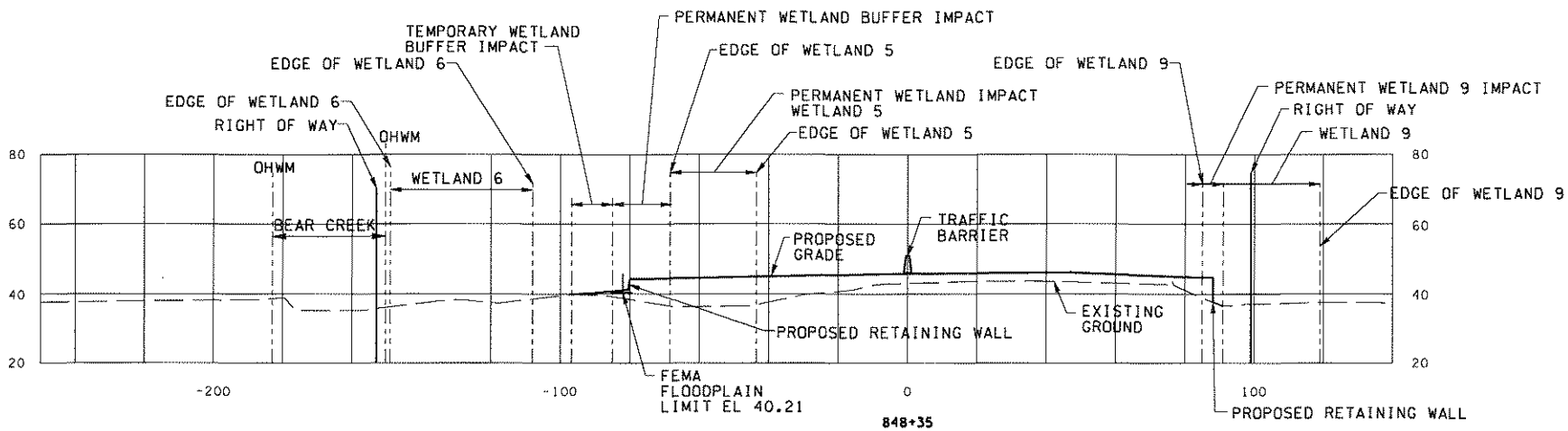
REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 11 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD



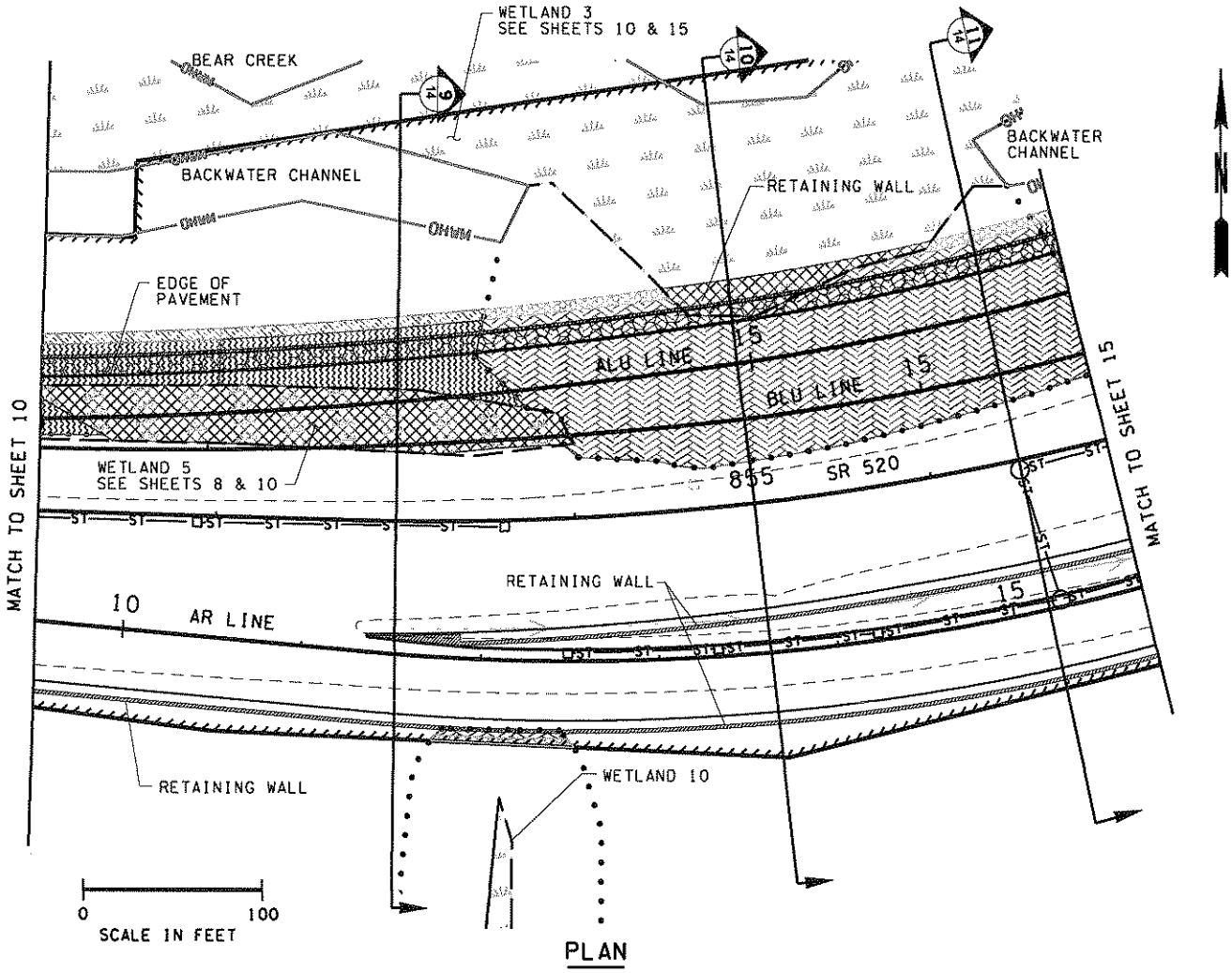
SECTION 8

NOT TO SCALE
DATUM: NAVD 88

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 12 OF 19

T.25N. R.5E. W.M. SEC. 12



PLAN

LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
- WETLAND
- OHWM — ORDINARY HIGH WATER
- STREAM BUFFER
- TEMPORARY WETLAND BUFFER IMPACT
- TEMPORARY STREAM BUFFER IMPACT
- PERMANENT STREAM BUFFER IMPACT
- INDIRECT IMPACT
- WETLAND BUFFER
- RETAINING WALL
- PROPOSED EDGE OF SHOULDER
- EXISTING EDGE OF PAVEMENT
- PROPOSED DITCH
- EXISTING DITCH
- 840 — ALIGNMENT & STATION
- ST — ST — EXISTING CULVERT OR STORM SEWER PIPE
- ST — ST — PROPOSED CULVERT OR STORM SEWER PIPE
- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTAL TEMPORARY BUFFER IMPACT
3	II	5.22 ACRES	0.04 ACRE	0.65 ACRE	0.03 ACRE
5	III	0.59 ACRE	0.59 ACRE	0.00 ACRE	0.00 ACRE
10	IV	0.04 ACRE	0.00 ACRE	0.01 ACRE	0.01 ACRE

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

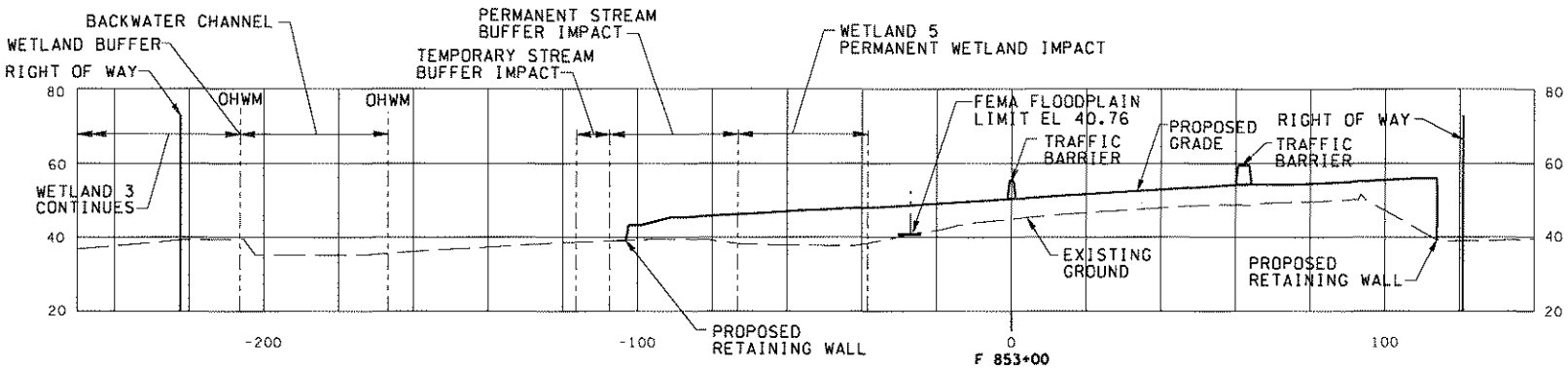
REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION

LOCATION ADDRESS: REDMOND, KING CO., WA

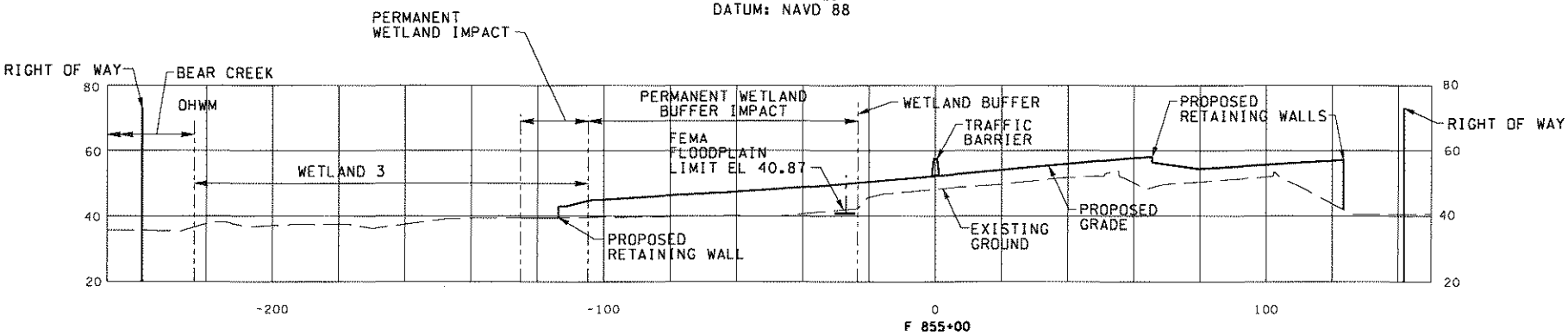
USACE REFERENCE NUMBER: NWS-2007-1926-SOD

DATE: 1/7/08



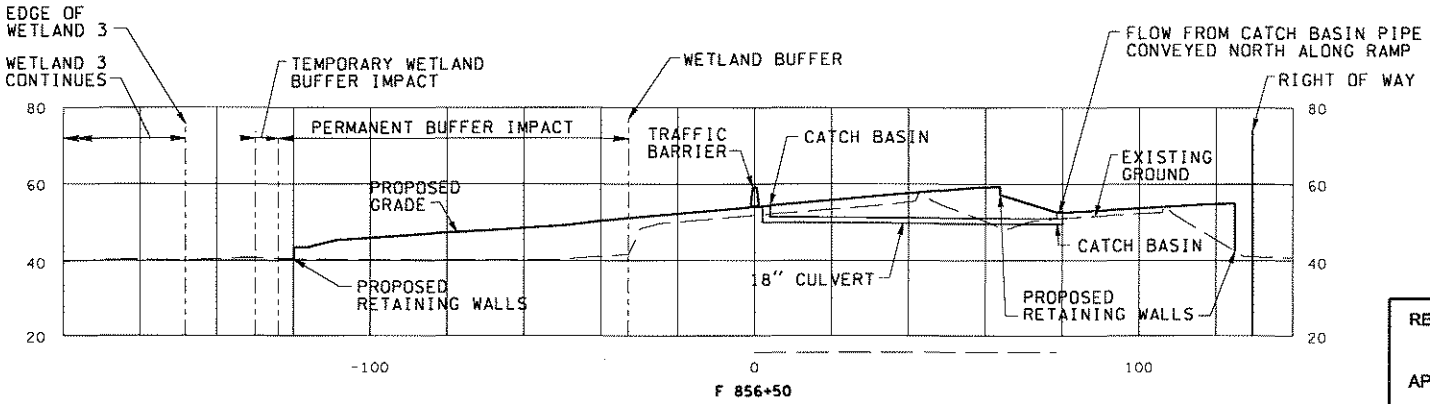
SECTION 9

NOT TO SCALE
DATUM: NAVD 88



SECTION 10

NOT TO SCALE
DATUM: NAVD 88



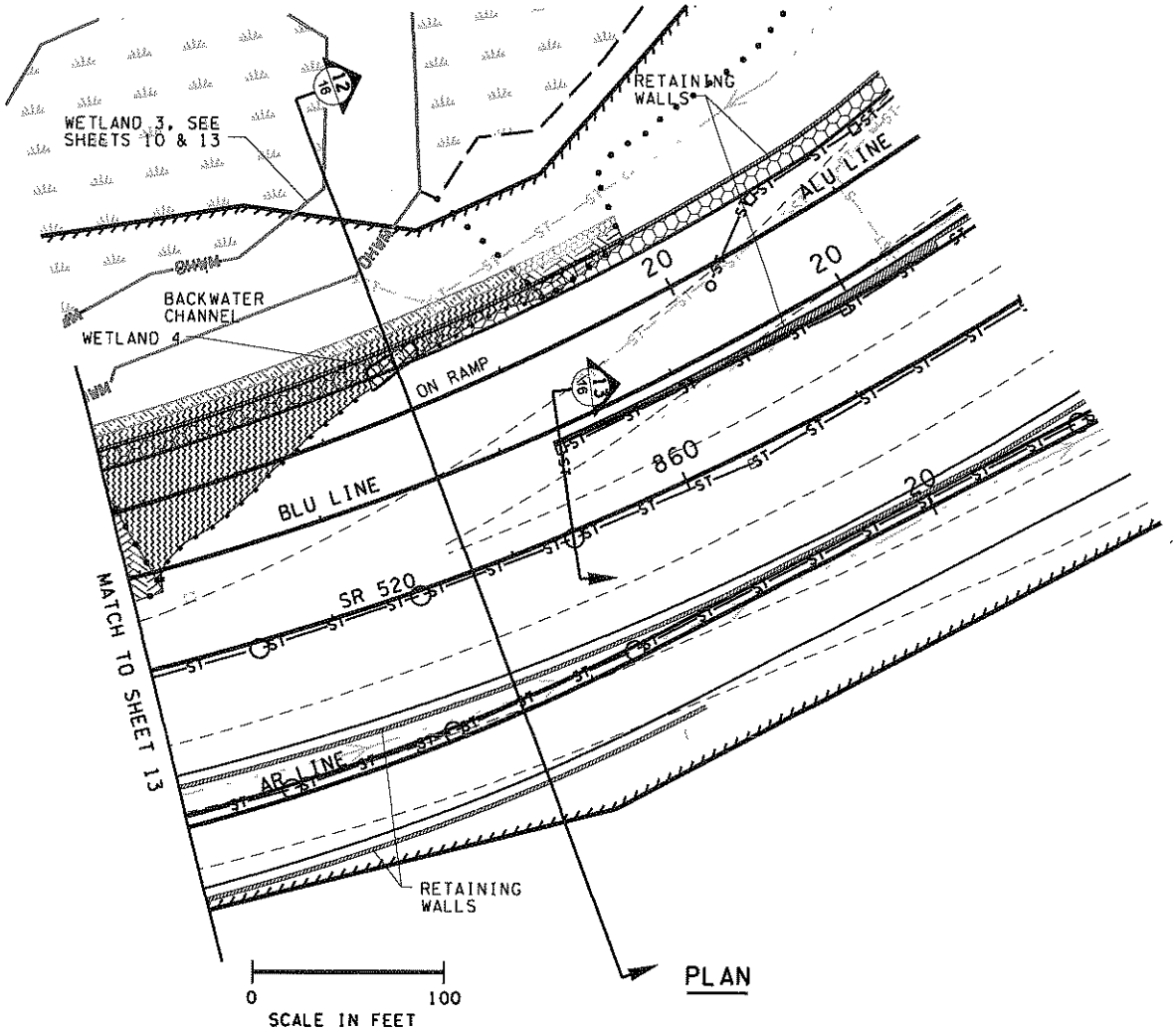
SECTION 11

NOT TO SCALE
DATUM: NAVD 88

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 14 OF 19

T.25N. R.5E. W.M. SEC. 12



LEGEND

- PERMANENT WETLAND BUFFER IMPACT
- PERMANENT WETLAND IMPACT
- WETLAND
- OHWM — ORDINARY HIGH WATER
- STREAM BUFFER
- TEMPORARY WETLAND BUFFER IMPACT
- TEMPORARY STREAM BUFFER IMPACT
- PERMANENT STREAM BUFFER IMPACT
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- PROPOSED EDGE OF SHOULDER
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- PROPOSED DITCH
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- 840 ALIGNMENT & STATION
- ST — ST — EXISTING CULVERT OR STORM SEWER PIPE
- ST — ST — PROPOSED CULVERT OR STORM SEWER PIPE
- PROPOSED ECOLOGY EMBANKMENT
- RIGHT OF WAY

WETLAND NUMBER	WETLAND CATEGORY ECOLOGY	WETLAND SIZE	TOTAL WETLAND IMPACT	TOTAL WETLAND BUFFER IMPACT	TOTAL TEMPORARY BUFFER IMPACT
3	II	5.22 ACRES	0.04 ACRE	0.65 ACRE	0.03 ACRE
4	III	0.01 ACRE	0.01 ACRE	0.00 ACRE	0.00 ACRE

STREAM	TOTAL STREAM IMPACT	TOTAL STREAM BUFFER IMPACT	TOTAL TEMPORARY STREAM BUFFER IMPACT
BEAR CREEK	0.00 ACRE	1.34 ACRES	0.78 ACRE

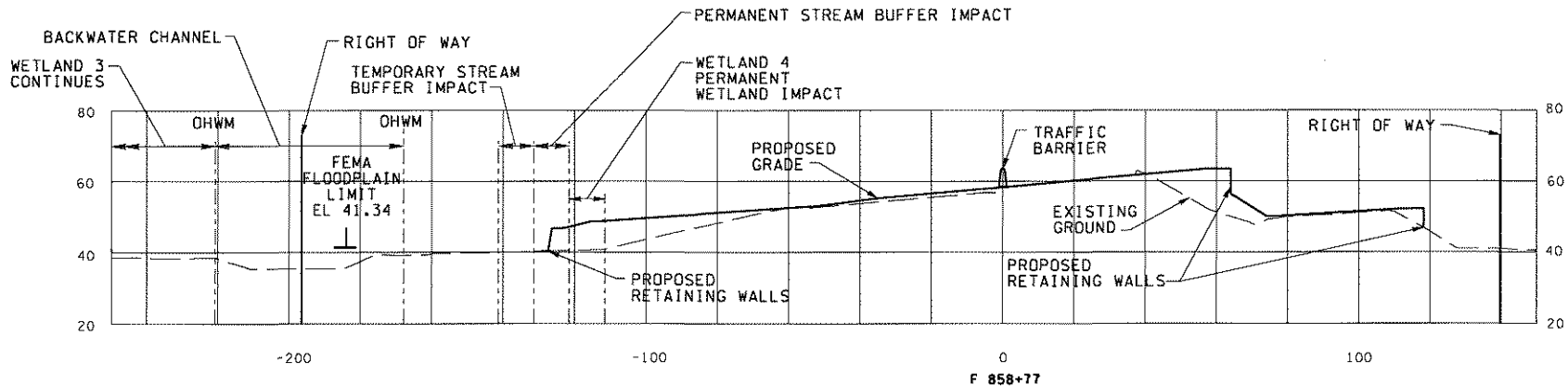
REFERENCE NO: SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE

APPLICATION BY: WASHINGTON STATE DEPT. OF TRANSPORTATION

LOCATION ADDRESS: REDMOND, KING CO., WA

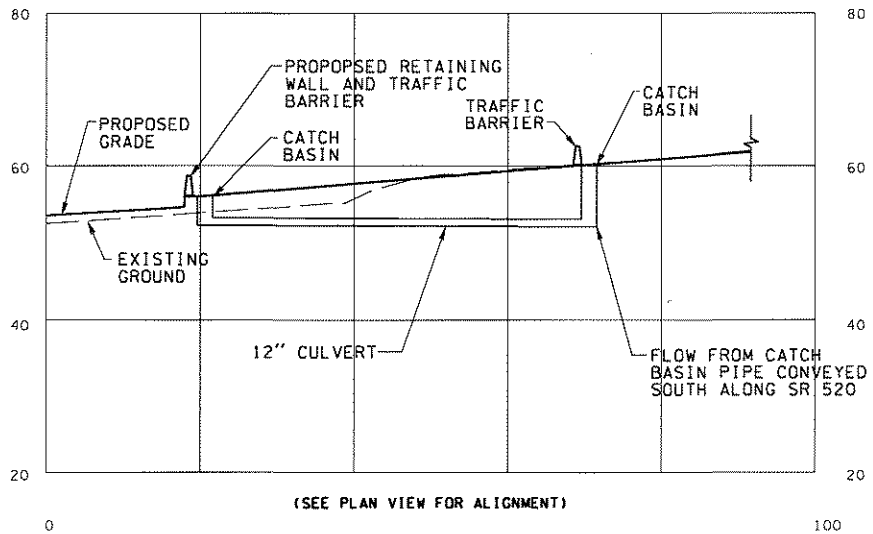
USACE REFERENCE NUMBER: NWS-2007-1926-SOD

DATE: 1/7/08



SECTION 12

NOT TO SCALE
DATUM: NAVD 88



SECTION 13

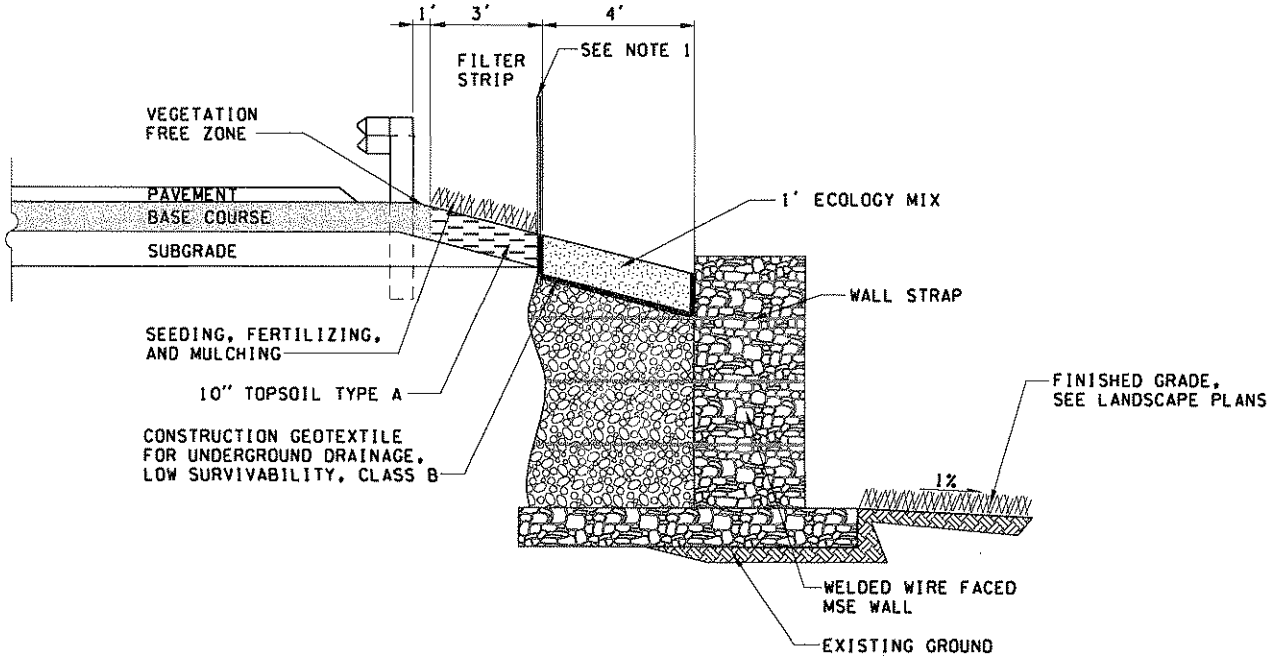
NOT TO SCALE
DATUM: NAVD 88

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1 / 7 / 08	SHEET 16 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

NOTES:

1. FLEXIBLE GUIDE POSTS SHALL BE BROWN IN COLOR WITHOUT REFLECTIVE SHEETING AND BE INSTALLED AT A HEIGHT OF 3' (+/- 3") ABOVE GROUND LEVEL. FLEXIBLE GUIDE POSTS SHALL BE PLACED AT EACH END OF ECOLOGY EMBANKMENT.
2. REFER TO ROADWAY SECTIONS FOR PAVING DETAILS.
3. REFER TO WALL PLANS FOR WALL DESIGN AND BACKFILL MATERIAL.

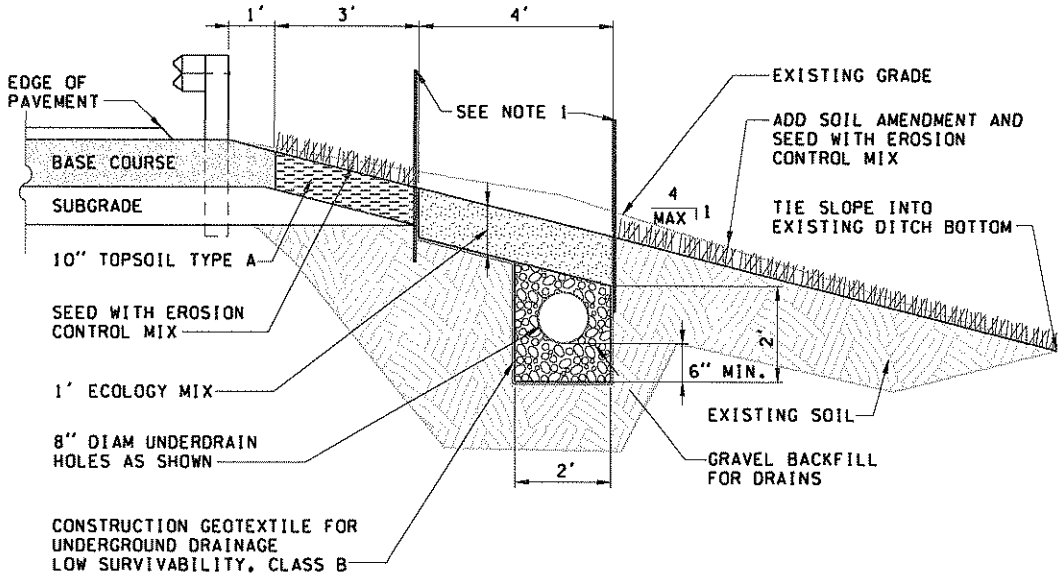


ECOLOGY EMBANKMENT (A)

RWN 27+91 LT TO RWN 34+76 LT
F 831+46 LT TO F 848+41 LT
ALU 8+42 LT TO ALU 24+02 LT
RNE 21+74 RT TO RNE 26+99 RT
AR 1+55 RT TO AR 7+49 RT
F 877+12 LT TO F 884+03 LT

NOT TO SCALE

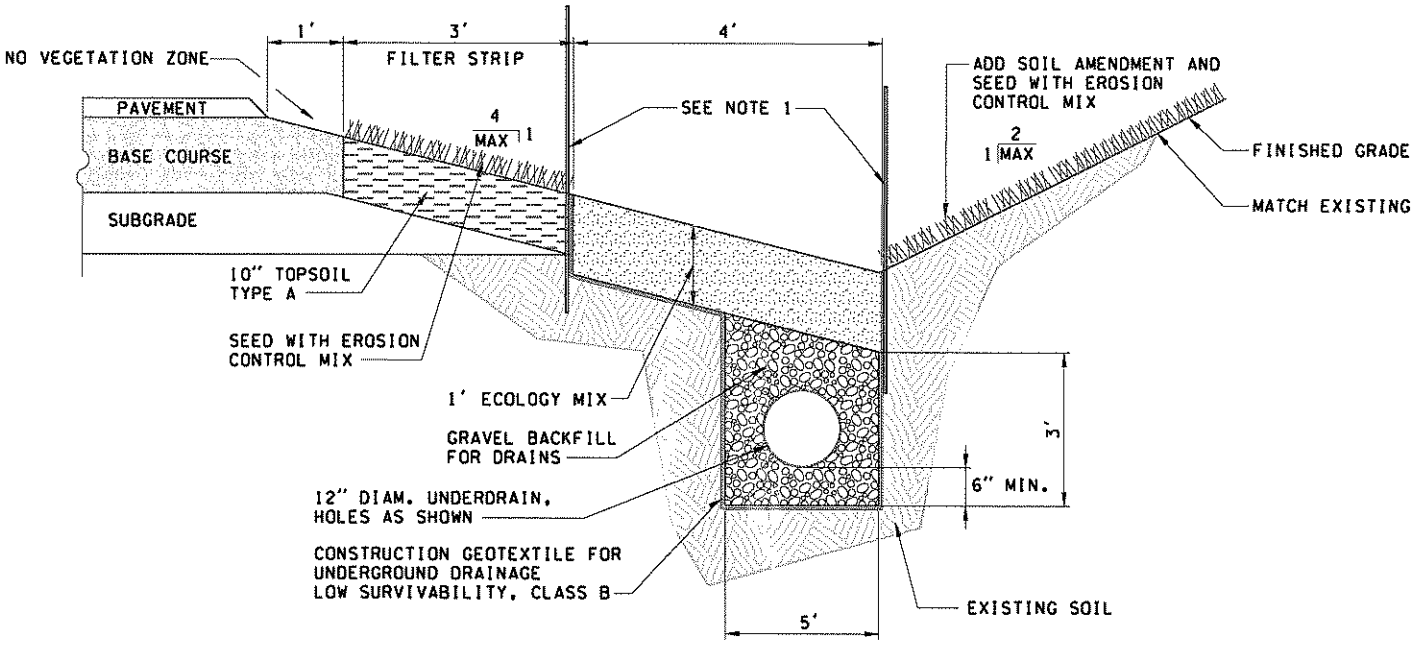
REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1/7/08	SHEET 17 OF 19



ECOLOGY EMBANKMENT (B)

RNE 26+99 RT TO RNE 28+81 RT
F 829+27 RT TO F 842+33 RT
AR 0+83 RT TO AR 1+55 RT

NOT TO SCALE



ECOLOGY EMBANKMENT (C)

F 876+32 LT TO F 878+36 LT
NOT TO SCALE

REFERENCE NO:	SR 520/W LAKE SAMMAMISH PKWY TO SR 202 - HOV AND SR 202 INTERCHANGE
APPLICATION BY:	WASHINGTON STATE DEPT. OF TRANSPORTATION
LOCATION ADDRESS:	REDMOND, KING CO., WA
DATE: 1/7/08	SHEET 18 OF 19

USACE REFERENCE NUMBER: NWS-2007-1926-SOD

STREAM SUMMARY TABLE			
STREAM	IMPACT (ACRE)	BUFFER IMPACT (ACRE)	TEMPORARY BUFFER IMPACT (ACRE)
BEAR CREEK	0.00	1.34	0.78
SAMMAMISH RIVER	0.00	0.04	0.31
TOTAL	0.00	1.38	1.10

WETLAND SUMMARY TABLE										
					PERMANENT WETLAND IMPACTS					
					EXCAVATION IMPACTS					
WETLAND	MILEPOST	USFWS CLASS.	CATEGORY (ECOLOGY 2004)	SIZE (ACRE)	IMPACT AREA (AC)	IMPACT VOLUME (CY)	FILL IMPACT (AC)	TOTAL IMPACT AREA (ACRE)	PERMANENT BUFFER IMPACT (ACRE)	TEMPORARY BUFFER IMPACT (ACRE)
1	12.83	PEM	III	2.57	0.00	0.00	0.00	0.00	0.00	0.00
2	12.76	PSS/PEM	II	0.31	0.00	0.00	0.00	0.00	0.00	0.00
3	12.51	PFO/PSS	II	5.22	0.04	166.02	0.00	0.04	0.65	0.03
4	12.58	PEM	III	0.01	0.00	0.00	0.01	0.01	0.00	0.00
5	12.28	PFO	III	0.59	0.00	0.00	0.59	0.59	0.00	0.00
6	12.38	PEM	II	0.03	0.00	0.00	0.00	0.00	0.09	0.09
7	12.33	PSS/PEM	II	0.04	0.00	0.00	0.00	0.00	0.08	0.13
8	11.86	PEM	III	0.04	0.00	0.00	0.00	0.00	0.00	0.00
9	12.32	PSS/PEM	III	2.92	0.21	837.89	0.00	0.21	0.02	0.00
10	12.48	PEM	IV	0.04	0.00	0.00	0.00	0.00	0.01	0.01
TOTAL				11.78	0.25	1003.92	0.60	0.85	0.85	0.25

PSS Palustrine Scrub-Shrub
PEM Palustrine Emergent
PFO Palustrine Forested

PROPOSED DRAINAGE FEATURES SUMMARY TABLE		
SHEET	LOCATION	FEATURE
6	F Sta. 827+25 Rt.	Pipe Outfall to Bioswale
8	F Sta. 842+22 Rt.	Pipe Outfall to Wetland, Outfall Protection
10	F Sta. 847+00 Rt.	Pipe Outfall to Bear Creek Buffer