



**Washington State**  
**Department of Transportation**  
 Paula Hammond  
 Secretary of Transportation

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March 25, 2009

Mr. Pat Chapman  
 Washington State Department of Fish and Wildlife  
 Habitat Program  
 600 N. Capitol Way  
 Olympia, WA 98501-1091

RE: SR 9 Nooksack Road Vicinity to Cherry Street All Weather Reconstruction (MP 93.00 to MP 97.18) (Easterbrook Creek Culvert Replacement) Mitigation Site  
 WDFW HPA Permit **100355-4**

Dear Mr. Chapman:

The Washington State Department of Transportation completed monitoring of the site on July 9, 2008 to determine survival of planted species for compliance with the above-listed HPA.

General Site Information	
<b>WDFW HPA Permit Number</b>	100355-4
<b>LLID Number</b>	1222727489713
<b>Restoration Location</b>	Along Easterbrook Creek, near Sumas, Whatcom County.
<b>Construction Date</b>	2006-2007
<b>Monitoring Period</b>	2007-2009
<b>Year of Monitoring</b>	2 of 3
<b>Type of Project Impact</b>	Stream                      Stream Buffer
<b>Area of Project Impact</b>	0.073 acre                      0.440 acre
<b>Type of Restoration</b>	Riparian Buffer
<b>Area of Restoration</b>	0.53 acre

**Site development:**

Permit Requirement	2008 Results	Management Activities
80% or greater survival of woody species along streambanks	92% survival overall	Ongoing weed control

Survival of planted woody species is 92 percent. Dominant species include *Rosa* species (roses) and *Symphoricarpos albus* (snowberry).

Invasive cover was qualitatively estimated at 5 percent across the site. Most invasives were found along the stream and in the stream channel, with higher cover on the east side of SR 9 than on the west. Invasive species do not appear to be hindering growth of planted species.

The stream channel or ditch crossing the east planting area appears to be blocked by fill. No culvert was visible during summer monitoring, but it is possible the culvert was hidden due to high water levels. The fill creates a bridge allowing access to adjacent farm fields. Wheel tracks leading to the bridge cross the east planting area. Some plantings have been driven over. Continued traffic over the site may affect plant survival in the future. Fill in the creek may affect water levels.

We welcome your questions or comments. Please contact me at 360/570-6640 or by e-mail at [busht@wsdot.wa.gov](mailto:busht@wsdot.wa.gov) for questions about these mitigation sites.

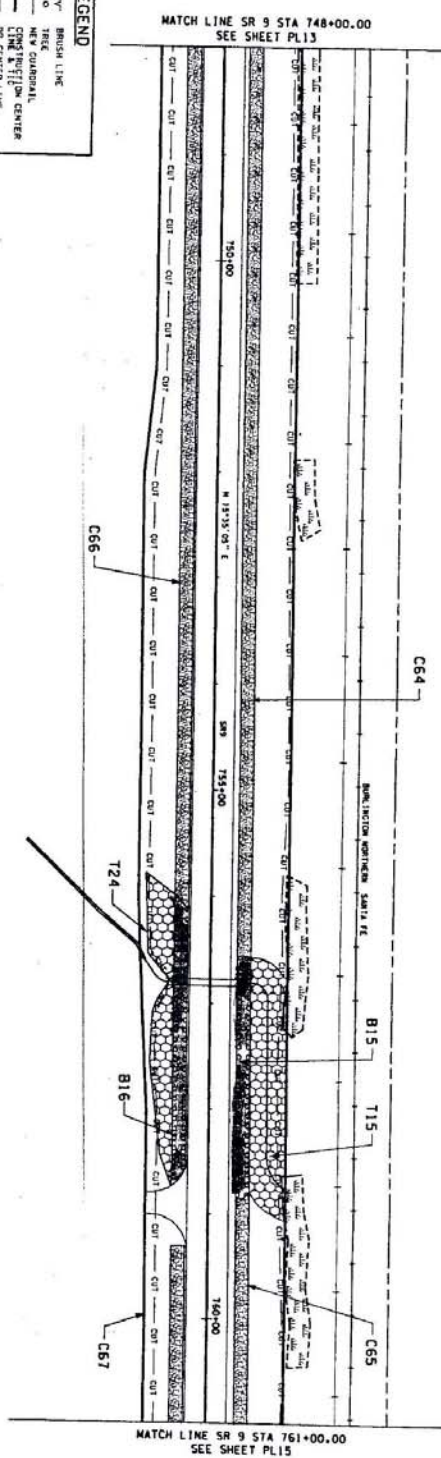
Sincerely,

Tony Bush  
Wetland Assessment and Monitoring Program

T.40N. R.4E. W.M.

- NOTES
1. EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING. 2.3 ACRES THIS SHEET ONLY.
  2. SEEDING SHALL OCCUR OVER ALL DISTURBED GROUND BEGINNING 2' BEYOND EDGE OF PAVEMENT, FERTILIZING AND MULCHING.
  3. APPLY AND INCORPORATE SOIL AMENDMENT TO ALL PLANTING AREAS PRIOR TO EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING.
  4. STAKE PLANT LOCATIONS @ 10' O.C., TRIANGULAR SPACING.
    - a. CLEAR 2' RADIUS AROUND EACH PLANT LOCATION.
    - b. PLANT WESTERN RED CEDAR, SCOLLER'S WILLOW AND WESTERN CRAB APPLE IN CLUSTERS OF 5 TO 12 PLANTS.
  5. PLACE COMPOST AND BARK OR WOOD CHIP MULCH AROUND EACH PLANT OVER BARE SOIL. EROSION CONTROL GRASSES SHALL REMAIN BETWEEN MULCH RINGS.
  6. COVER ENTIRE PLANTING AREA WITH COMPOST AND BARK OR WOOD CHIP MULCH.

SYMBOL	ITEM	QUANTITY
115	PLANT SPACING 3' O.C.	115
116	SCOLLER'S WILLOW	40
117	WESTERN CRABAPPLE	45
118	WESTERN RED CEDAR	30
119	SPONGEWEED	35
120	TRIANGULAR SPACING	35
121	SOIL AMENDMENT (ACT)	17
122	FINE COMPOST (CTV)	26
123	BARK OR WOOD CHIP MULCH (CTV)	3.6
124	COARSE COMPOST (CTV)	1.6
125	COARSE COMPOST (CTV)	1.6
126	COARSE COMPOST (CTV)	1.6
127	COARSE COMPOST (CTV)	1.6
128	COARSE COMPOST (CTV)	1.6
129	COARSE COMPOST (CTV)	1.6



**LEGEND**

- BRUSH LINE
- NEW COURSE/AL
- EXISTING CENTER
- RIGHT OF WAY
- NO RIGHT OF WAY
- EXISTING FENCE
- EDGE OF PAVEMENT
- CUT LIMIT
- FILL LIMIT
- SKIN AND PROTECT
- WETLAND BUFFER
- STREAM BUFFER

**COMPOST AMENDED FILTER STRIP - THIS SHEET ONLY**

TOPSOIL TYPE A (CTV)	TOPSOIL TYPE B (CTV)	COARSE COMPOST (CTV)
64	65	66
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**REVISION**

NO.	DATE	BY	DESCRIPTION
1	12/5/2008	BT	ISSUE FOR PERMITS
2	12/5/2008	BT	ISSUE FOR PERMITS
3	12/5/2008	BT	ISSUE FOR PERMITS
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5	12/5/2008	BT	ISSUE FOR PERMITS
6	12/5/2008	BT	ISSUE FOR PERMITS
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