

March 30, 2016

Ms. Gail Terzi
US Army Corps of Engineers Seattle District
Regulatory Branch CENWS OD RG
PO Box 3755
Seattle, WA 98124-3755

RE: I-5, SR 501 Ridgefield Interchange (McCormick Creek)
Mitigation Site
USACE NWP (23) NWS-2008-1303

Dear Ms. Terzi:

The Washington State Department of Transportation completed qualitative monitoring of the I-5 McCormick Creek mitigation site on March 9, March 25, April 6, and September 17, in 2015, to address Year-3 (2016) performance standards. Monitoring activities included hydrology monitoring, vegetation observations, and photo documentation. This Year-2 report is being issued for compliance with the reporting requirements of the US Army Corps of Engineers NWP 23 Number NWS-2008-1303.

General Site Information	
USACE NWP (23) Number	NWS-2008-1303
Mitigation Location	One mile east of I-5 on NW 289 th St. Clark County
LLID Number	1226747458305
Construction Date	1998
Monitoring Period	2014-2023
Year of Monitoring	2 of 10
Area of Project Impact	1.78 acres
Type of Mitigation	Wetland Establishment
Area of Mitigation¹	2.70 acres

¹ Area of project impact taken from USACE 2008. Planned area of mitigation taken from Final Critical Area Mitigation Report I-5/SR 501 Ridgefield Interchange Replacement Project April, 2009.

Performance Standards (Year-3)	2015 Results	Management Activities
Wetland hydrology present.	See results below	
400 living native trees/acre in the forested wetland	Not measured; no forested wetland area planned	
4,000 living native shrubs/acre (9.18 plants/100 ft ²) in the forested and scrub-shrub wetlands	North Wetland: 6 plants/100ft ² , 2613 plants/acre , 5% cover South Wetland: 21 plants/100ft ² , 9147 plants/acre , 20% cover	1,000 redosier dogwood (<i>Cornus alba</i>), 500 hardhack (<i>Spiraea douglasii</i>), and 1,500 snowberry (<i>Symphoricarpos albus</i>) planted on 1/14, 1/15, 1/21, and 1/22 in 2015
At least two species of native trees and four species of native shrubs in the forested wetland; no single species will provide more than 60% cover	Two species of native trees and four species of native shrubs present in the wooded wetland area; none provide more than 60% cover	
At least four species of native shrubs in the scrub-shrub wetland; no single species will provide more than 60% cover	Four species of native shrubs present; none provide more than 60% cover	
400 living native trees/acre (0.918 plants/100 ft ²) in the buffer	23 plants/100ft ² , 10,018 plants/acre, 25% cover trees and shrubs combined	
4,000 living native shrubs/acre (9.18 plants/100 ft ²) in the buffer	23 plants/100ft ² , 10,018 plants/acre 25% cover trees and shrubs combined	
At least two species of native trees and four species of native shrubs in the buffer; no single species will provide more than 60% cover	Six tree species and eight shrub species present; no single species provides more than 60% cover	
50% cover native facultative wet and wetter species in the emergent wetland	80% cover	
At least five native herbaceous facultative wet and wetter species present in the emergent wetland; no single species will provide more than 70% cover	More than seven species present; no single species provides more than 70% cover	
Less than 15% cover blackberry (<i>Rubus</i> species) and Class A noxious weeds across the site	3% cover blackberry; no Class A noxious weeds observed	Weed control activity occurred on 3/25, 4/27, 4/28, 6/9, 7/30, 9/10, 10/20, and 11/2 in 2015
Reed canarygrass (<i>Phalaris arundinacea</i>) less than 10% of baseline conditions	1% cover; well below baseline conditions	
Japanese knotweed (<i>Reynoutria japonica</i>) not present in any amount across the site	None observed	

Site development:

In general, the site is developing well and should meet the Year 3 performance standards in 2016. The northern wetland is developing at a slower rate than the southern wetland and contains less woody vegetation.

Results for Performance Standard 1
(Wetland hydrology present):

Water was not present within 12 inches of the soil surface in every well on two of the three visits. On the first visit, March 9, water was present in wells 2 and 4. On the second visit, March 25, water was present in all four wells. On the third visit, April 6, water was present in wells 2-4. (Photo 1)

Results for Performance Standard 2
(400 living, native trees/acre in the forested wetland):

The planting plan only shows a scrub-shrub wetland at the site. Therefore, the entire area that contained woody species plantings was observed for the scrub-shrub and forested wetland performance standards. Black cottonwood (*Populus balsamifera*) and Oregon ash (*Fraxinus latifolia*) were observed throughout the woody wetland community.

Results for Performance Standard 3
(4,000 living, native shrubs/acre in the wooded wetlands):

Density of living, native shrubs is qualitatively estimated a six plants/100ft² or 2,613 plants/acre (with five percent cover) in the north wetland and 21 plants/100ft² or 9147 plants/acre (with 20 percent cover) in the south wetland. The value for the north wetland is below the performance standard target and the value for the south wetland is above the performance standard target.

Results for Performance Standard 4
(At least two species native trees and four species native shrubs in the wooded wetlands; no single species will provide more than 60% cover):

Two species of native trees and four species of native shrubs were observed. No single species provides more than 60 percent cover.

Performance Standard 5
(At least four species native shrubs in the scrub-shrub wetlands; no single species will provide more than 60% cover):

See results for performance standard 4.



Photo 1 – Inundation at SR 3 McCormick Creek (April 2015)

Performance Standard 6
(400 native, living trees/acre in the buffer):

Density of living, native trees and shrubs combined in the buffer is qualitatively estimated at 23 plants/100ft² or 10,018 plants/acre (with 25 percent cover). This value exceeds the performance standard target.

Performance Standard 7
(4,000 native, living shrubs/acre in the buffer):

See results for Performance Standard 6.

Performance Standard 8
(At least two species native trees and four species native shrubs in the buffer; no single species will provide more than 60% cover):

Six tree species and eight shrub species were observed throughout the buffer. No single species provides more than 60 percent cover.

Performance Standard 9

(50% cover native, facultative wet and wetter species in the emergent wetland):

Cover of native, facultative wet and wetter species in the emergent wetland is qualitatively estimated at 80 percent. This value exceeds the performance standard target. (Photo 2)

Performance Standard 10

(At least five species of native, herbaceous, facultative wet and wetter species in the emergent wetland; no single species will provide more than 70% cover):

More than seven species of native, facultative wet and wetter species were present in the emergent wetland. No single species provides more than 70 percent cover.

Performance Standard 11

(Less than 15% blackberry and Class A noxious weeds across the site):

Cover of blackberries is qualitatively estimated at three percent. This value is below the performance standard threshold. No Class A noxious weeds were observed at the time of monitoring.

Performance Standard 12

(Reed canarygrass managed at a threshold 10% less than baseline conditions):

According to the Final Critical Areas Mitigation Report, the existing wetland was dominated by reed canarygrass. Currently, reed canarygrass is qualitatively estimated to provide one percent cover across the site. This is below the performance standard threshold.

Performance Standard 13

(Japanese knotweed not present in any amount within the site):

No Japanese knotweed was observed at the time of monitoring.

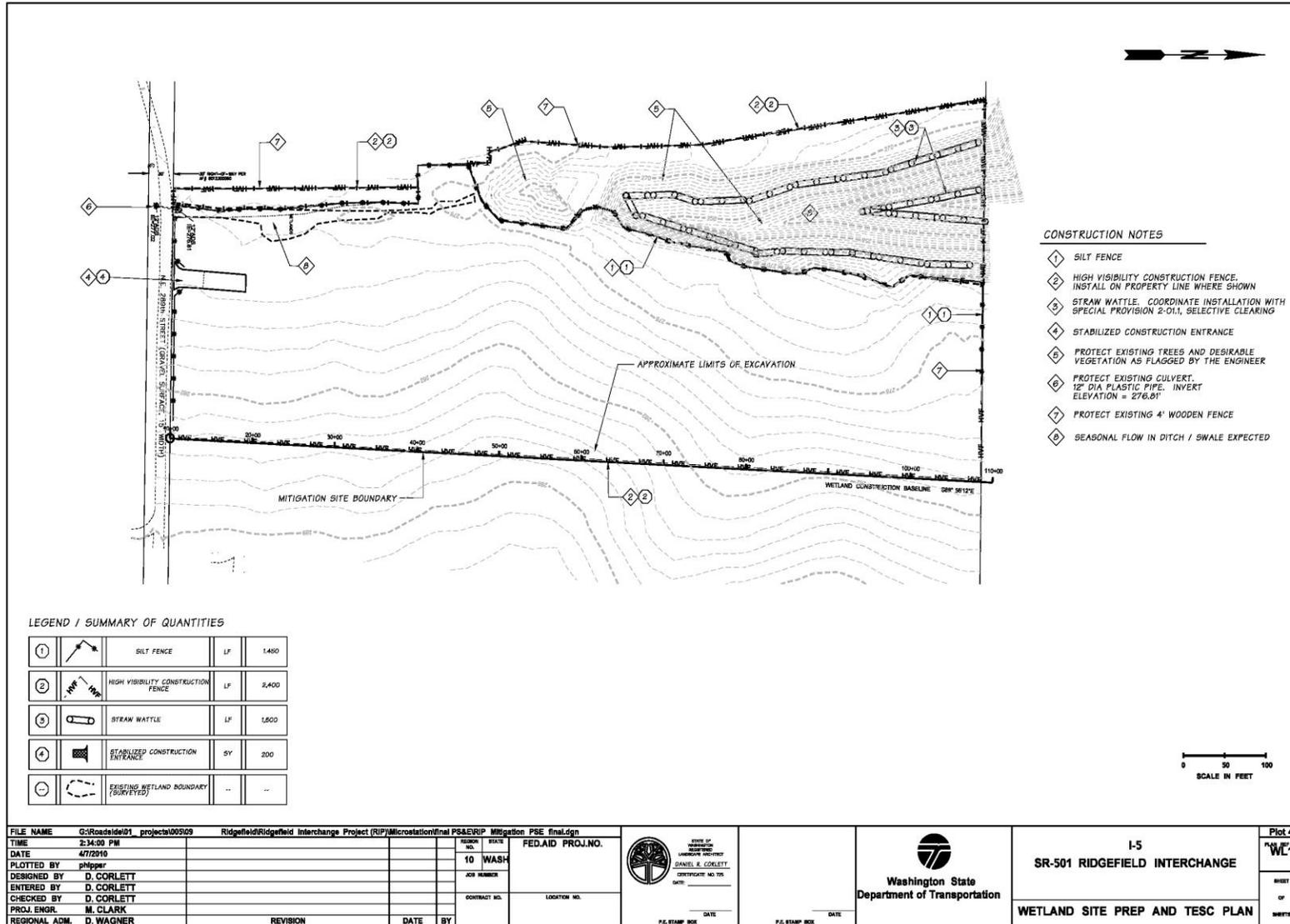


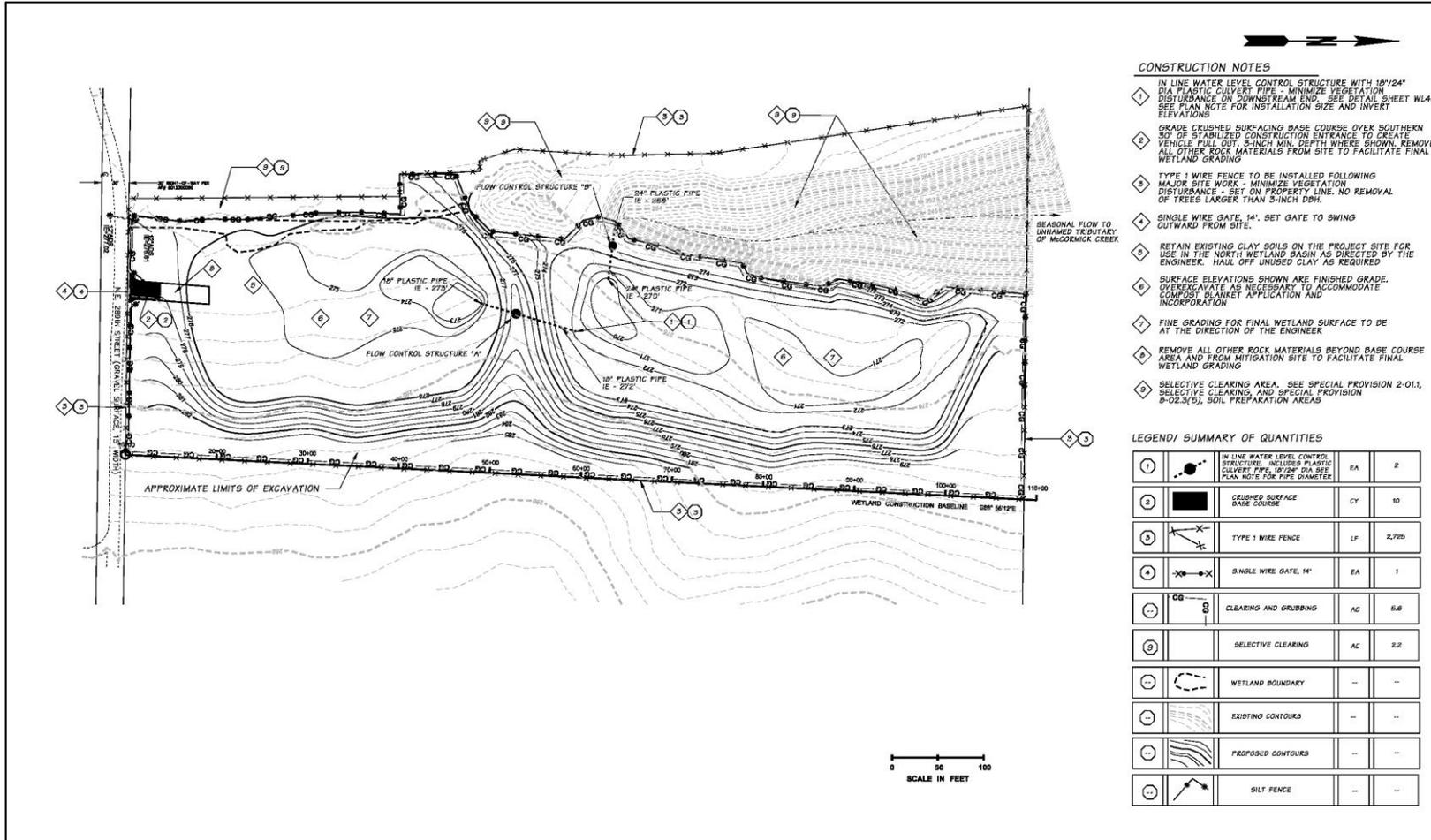
Photo 2 – Cover in the emergent area (April 2015)

We welcome your questions or comments. Please contact me at 360/570-2579 or by e-mail at littaud@wsdot.wa.gov for questions about these mitigation sites.

Sincerely,

Doug Littauer
Wetlands Program





- CONSTRUCTION NOTES**
- 1 IN LINE WATER LEVEL CONTROL STRUCTURE WITH 18" DIA PLASTIC CULVERT PIPE - MINIMIZE VEGETATION DISTURBANCE ON DOWNSTREAM END. SEE DETAIL SHEET WL4. SEE PLAN NOTE FOR INSTALLATION SIZE AND INVERT ELEVATIONS
 - 2 GRADE CRUSHED SURFACING BASE COURSE OVER SOUTHERN 50% OF STABILIZED CONSTRUCTION ENTRANCE TO CREATE VEHICLE TURN OUT. 3-INCH MIN. DEPTH WHERE SHOWN. REMOVE ALL OTHER ROCK MATERIALS FROM SITE TO FACILITATE FINAL WETLAND GRADING
 - 3 TYPE 1 WIRE FENCE TO BE INSTALLED FOLLOWING MAJOR SITE WORK - MINIMIZE VEGETATION DISTURBANCE - SET ON PROPERTY LINE. NO REMOVAL OF TREES LARGER THAN 3-INCH DBH.
 - 4 SINGLE WIRE GATE, 14'. SET GATE TO SWING OUTWARD FROM SITE.
 - 5 RETAIN EXISTING CLAY SOILS ON THE PROJECT SITE FOR USE IN THE NORTH WETLAND BASIN AS DIRECTED BY THE ENGINEER. HAUL OFF UNUSED CLAY AS REQUIRED
 - 6 SURFACE ELEVATIONS SHOWN ARE FINISHED GRADE. OVEREXCAVATE AS NECESSARY TO ACCOMMODATE COMPOST BLANKET APPLICATION AND INCORPORATION
 - 7 FINE GRADING FOR FINAL WETLAND SURFACE TO BE AT THE DIRECTION OF THE ENGINEER
 - 8 REMOVE ALL OTHER ROCK MATERIALS BEYOND BASE COURSE AREA AND FROM MITIGATION SITE TO FACILITATE FINAL WETLAND GRADING
 - 9 SELECTIVE CLEARING AREA. SEE SPECIAL PROVISION 2-011, SELECTIVE CLEARING, AND SPECIAL PROVISION 8-02.3(b), SOIL PREPARATION AREAS

LEGEND/ SUMMARY OF QUANTITIES

1		IN LINE WATER LEVEL CONTROL STRUCTURE. INCLUDES PLASTIC CULVERT PIPE. 18"/24" DIA SEE PLAN NOTE FOR PIPE DIAMETER	EA	2
2		CRUSHED SURFACE BASE COURSE	CY	10
3		TYPE 1 WIRE FENCE	LF	2,725
4		SINGLE WIRE GATE, 14'	EA	1
CG		CLEARING AND GRUBBING	AC	5.6
9		SELECTIVE CLEARING	AC	2.2
-		WETLAND BOUNDARY	--	--
-		EXISTING CONTOURS	--	--
-		PROPOSED CONTOURS	--	--
-		SILT FENCE	--	--

FILE NAME	G:\Roadside\01_projects\005109	Ridgefield\Ridgefield Interchange Project (RIP)\Microstation\final\PS&E\RP_Mitigation_PSE_final.dgn	PROJECT NO.	10	WASH	FED.AID PROJ.NO.		 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION DANIEL R. CORLETT CERTIFICATE NO. 795 DATE	 Washington State Department of Transportation	SR 501 RIDGEFIELD INTERCHANGE PROJECT WETLAND GRADING PLAN	Plot 1	
TIME	2:34:30 PM		CONTRACT NO.		LOCATION NO.		DATE				DATE	DATE
DATE	4/7/2016		DESIGNED BY	D. CORLETT								DATE
PLOTTED BY	phpaper		ENTERED BY	E. STEPHENS								DATE
DESIGNED BY	D. CORLETT		PROJ. ENGR.	M. CLARK								DATE
CHECKED BY	D. CORLETT		REGIONAL ADM.	D. WAGNER								DATE
PROJ. ENGR.	M. CLARK		REVISION									DATE
REGIONAL ADM.	D. WAGNER		DATE									DATE

