Appendix E. Federal-Aid Highway Program ESA-MSA Programmatic Notification Review and Verification

## K19071 I-5 Rose Quarter Improvement Project Version 10/2020 FAHP Notification Strategy

Figure 1. Project Area I-5 Rose Quarter Improvement Project



# KN19071 I-5 Rose Quarter Improvement Project Design, Construction, Impacts, and Mitigation Reporting Strategy

### 10/7/2020

- Introduction
- Project Design and Delivery (CMGC)
  - o CMGC
  - o CMGC and the FAHP
  - o Commitment Tracking
- Continued Design and Interagency Coordination:
  - o Stormwater Management
    - Define the project's ISA and CIA
    - Establish future reporting parameters and requirements relative to design updates and BMP selections
    - Overview Figure 6 from the 2018 EA
  - o Agency Updates, Review and Decision Making, and Record Keeping

#### Introduction

The project must complete its ESA consultation requirements prior to completion of the Environmental Assessment (EA) process. The project is currently preparing its responses to comments received as part of the 45-day public comment period. This and a FHWA/NMFS approved FAHP notification is required prior to finalizing the anticipated *Finding of No Significant Impact* (FONSI) in fall/winter of 2020. The EA presented the project with a low level of design and addresses this through continued use of the *Construction Manager/General Contractor* (CM/GC) after the NEPA process. Therefore, continued interagency ESA coordination will be integrated into the CMGC process to ensure that the project's phased design, BMPs, avoidance and minimization measures, enhancements, and mitigation meet the intent of the 2012 FAHP ESA-programmatic Biological Opinion.

### **CMGC**

The CMGC employs a phased approach of design and construction management that relays on separate Contractors to provide design, management, and owner's representation (ODOT). ODOT, as the owner will be informed and can influence the design throughout the process. Key points in the process are reserved for ODOT's approval. When ODOT considers the design to be complete, the construction manager then has an opportunity to bid on the project based on the completed design and schedule. If the owner, designer and independent cost estimator agree that the contractor has submitted a fair price, ODOT will issue a construction contract and the construction manager then becomes the general contractor. An advantage to the process is that the contractor acts as the consultant during the design process and can offer constructability and pricing feedback on design options and can identify risks based on the contractor's established means and methods. This process also allows the owner to be an active participant during the design process and make informed decisions on design options based on the contractor's expertise. A more extensive presentation of the process is available at:

https://www.fhwa.dot.gov/construction/contracts/acm/cmgc.cfm

#### CMGC and the FAHP

An environmental sub-team will be integrated into the CMGC that includes regular coordination and representation by ODOT Region 1 Environmental staff (e.g. REC). Through this process and as the owner ODOT will strategically identify, in collaboration with NMFS and FHWA, when to convey project design change information and seek input and when to submit project change requests. This relationship will ensure FAHP-ESA compliance through inclusion of the following FAHP elements (1.3.2 Conservation Measures): Stormwater treatment deficit (on-site). ODOT Region 1 Environmental will use the project's standing placeholder within the established monthly ODOT Region 1/FHWA/NMFS Environmental Coordination Meeting (ODOT) to provide updates to the agencies, seek guidance to ensure compliance with the FAHP and the approved Notification, and present and seek advisement regarding decision points (e.g. the use of off-site surplus stormwater credits). The Consultant will track and manage these elements within the project's ODOT ProjectWise database folder.

### **Commitment Tracking**

### At minimum, the tracking database folders will contain:

- Diagrams that include the project's
  - Pre and post project ISA and CIA, any CIA lacking treatment, and areas off-site treatment
- Tracking spreadsheet that
  - Enumerates and quantifies the stormwater management basin areas (onsite and off-site)
  - Stormwater treatment BMPs
- Documentation of interagency QA/QC and decision documents between ODOT and third parties Including NMFS, ODFW, DSL, DEQ, USACE, and FHWA.
- FHWA and NMFS approved ODOT *Project Change Forms* that comply with the FAHP and memorialize significant levels of design. See the individual element sections below for more detail.

Note: To provide clarity through the CMGC process, one folder will contain all current relative design and BMPs agreed upon by the Project and the Environmental sub-team including relative agreement summaries. Another folder will include all other previous design elements and summaries relative to the FAHP notification and the FAHP ESA-programmatic.

### **Strategy Elements:** Stormwater Management

#### Pre and Post ISA and CIA

#### PBOT ROW

- The project assumes that the PBOT CIA portion will be captured and treated via use of stormwater
  planters per Portland Bureau of Environmental Services design. This design standard meets the 2014
  ODOT Hydraulics Manual for infiltration style BMPs (e.g. infiltration swale). It is also assumed that the
  design storm will be infiltrated. Flows in excess of the design storm if not infiltrated will be conveyed to
  the City's Columbia Blvd Wastewater Treatment Plant. These flows will receive additional treatment
  that meets EPA standards via permit (DEQ) will then be discharged to the Columbia River. This second
  level of treatment is not known and is not available to compare to the FAHP standards.
- Due to a lack of survey and design all PBOT CIAs have been combined into into one 'basin' since all non-infiltrated flows are assumed to be conveyed as now to the City's Columbia Blvd. Wastewater treatment Facility.
- Flows that cannot be then fully infiltrated to the design storm and or flows in excess of the facilities'
  capacity are assumed to then be conveyed to the City's Columbia Blvd Wastewater Treatment Plant.
  Additional treatment that meets EPA standards via permit (DEQ) will then be discharged to the
  Columbia River. This second level of treatment is not known and is not available to compare to the
  FAHP standards.

#### ODOT ROW

• Record BMPs in the Notification that are most relevant to the existing conditions within each sub-basin though design and BMP siting changes are likely. This is more relevant than "TBD". The project at this time is unable to account for 3-acres (Basin #4). It is assumed that design refinement will either eliminate this need, discover off-site treatment locations within the project corridor, and or use surplus treatment generated via previously constructed STIP projects (e.g. 18806 US-26 Cornelies Pass-185th.

Note: PBOT and ODOT CIA and ISA boundaries and acreages have been interpreted from GIS, roadway imaging, and preliminary design since survey has not been completed.

### **Documenting Future Changes in Conveyance and Treatment (PROJCHG versus PCR)**

- FAHP Project Change Forms (FAHPCHG) requiring FHWA & NMFS approval will include: Off-site treatment; and use of Proprietary technology not yet approved for *Enhanced, General Use,* under the WADOE TAPE Program.
- Project Completion Report (PCR)
  - All changes documented in FAHPCHG forms
  - Any changes in TAPE approve BMPs classified for "Enhanced", "General Use".
  - Contiguous expansion, contraction, or refinement of the CIA (based on FAHP 'triggers') of 'on-site' CIA and ISA
- A KMZ or other approved graphics, and a spreadsheet will be kept up-to-date on the project's ftp folder through design and construction to demonstrate ISA, CIA, and treatment.

### **Known Assumptions**

### **ODOT ROW**

- The CIA and if need be a minor equivalent portion will be captured and treated for water quality treatment per the 2014 ODOT Hydraulics Manual. This will reduce or eliminate the current direct discharge into the Willamette River.
- The at grade portion of I-5 will be reconstructed to full depth and connect the existing auxiliary lanes to upgrade the corridor from a continuous bi-directional 4-lane thoroughfare to 6-lanes. This will occur in current ROW.
- New auxiliary lanes and full shoulders will be added to I-5 NB and SB between I-84 and I-405 to reduce frequent crashes and improve operations.

### **PBOT ROW**

- Construction of the I-5 mainline improvements will require the replacement of the N/NE Weidler, N/NE Broadway, N Williams, and N Vancouver structures over I-5. They will be rebuilt as two highway covers.
- The N Flint Ave I-5 crossing will be removed.
- Construct a new span across I-5 between Hancock and Dixon and Center St and N Vancouver Ave.
- Construct a new bike/pedestrian span across I-5 between N Winning Way (Ramsay Way) and N Clackamas. This does not trigger *stormwater management* per the FAHP.
- Construct that fully span I-5 and connect the following PBOT ROW's.
  - NE Broadway and NE Weidler
  - N Vancouver

The following page includes Figure 6 from the EA demonstrating the above improvements. A KMZ package available in the project's FAHP ftp folder and eventually the ProjectWise database to view the project's entire stormwater management are and proposed northern I-5 mitigation area (Fremont Bridge to N. Going Ave. Interchange).

Figure 6. Broadway/Weidler Interchange Area Improvements



Photo Source: Google Earth 2017



### ODOT Federal-Aid Highway Program ESA-MSA Programmatic **Notification**

Key Number
19071
Last Modified
Oct 13, 2020

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P	ro	iect	Info	rm	atin	r

NMFS Approval	USFW A	pproval	Select Predor	ninant f	Project Type				Prop	onent	Agency	,	
Approval Needed	N/A		Moderniza	ation/l	New Alignmer	nt/Bypass			OD	OT			
Project Name				Rou	ıte				Beg MP	End	MP_	Other Road / Path N	lame
I-5 Rose Quarter Impro	ovemen	t Project (Revi	sed 9/2020)	I-5	- Pacific - 1				301.5	303	.4	Interstate 5	
Latitude (e.g. 45.4591° N)	L	ongitude (e.g123	s.8442° W)	ODOT	Region	County			Anticip	ated Co	onstruct	tion Start Year	End Year
45.53788	-	122.66919		Reg	ion 1	Multnon	nah		2023				2027
Biologist	Pho	one	E-mail			ODC	T Region	Environmen	tal Coordina	ator	E-mail		
Devin Simmons	50	3-731-8266	devin.l.sir	nmon	s@odot.state.c	r.us Ma	ry Your	ıg			Mary	.E.Young@odot.	state.or.us
FHWA Contact	Pho	one	E-mail										
Shaneka Owens	(50	03) 316-2553	shaneka.d	wens	@dot.gov							Additional 6th F	Field HUCs
6th Field HUC					6th Field HUC (if	applicable)						Check if ac	lditional HUCs
170900120302 - Will	amette	River-Columb	ia River									are listed b	oelow in Project n.
ODFW In-Water Work Windo	<u>w</u>				ODFW In-Water	Work Windo	N				_		
July 1	to	October 31					to						
	to						to						
Brief Project Description:											_		

This Notification supplants the previous the 9/13/19 approved Notification. The current Project Description eliminates the previously included and approved inwater work and associated infrastructure proposed to occur within the General Scour Prism / Functional Floodplain of the Willamette River. Barge use has been retained to support potential support activities such as geotechnical drilling, material transport, etc. Further details are included within the attached narrative and strategy. The current project converts MP 301.5-301.79 (approx.) from construction (reconstruction and addition) to pavement re-striping.

\*Modernize a section of the I-5 corridor between I-405 and I-84, including interstate ramp connections, I-5 ramp terminals to the local roadways, and all I-5 overhead local access bridges. This will increase safety, access, and operations.

\*Modify I-5 to create new auxiliary lanes and full shoulders in NB and SB directions (between I-84 and I-405) to reduce frequent crashes and improve operational efficiency; Relocate the I-5 SB on-ramp from Wheeler/Winning Way/Williams to Weidler/Williams to improve local traffic flow and facilitate construction of a new overhead bicycle and pedestrian bridge (Clackamas bicycle and pedestrian bridge).

\*Seismically upgrade the local street crossings of I-5 through removal and replacement of the Broadway, Weidler, Vancouver and Williams St Bridges as two highway covers. Remove the N Flint Ave Bridge and add a new roadway connection across I-5 at Hancock-Dixon.

- \*Capture and treat the ODOT CIA that currently direct-discharges without treatment into the Willamette River.
- \*Modernize the surface street connections that service the I-5 corridor, and the approaches and thoroughfares that bridge across I-5.
- \*Capture and treat the Project's CIA within the City of Portland ROW. This will increase treatment of the area through "Raingardens", infiltration, and the City's Columbia Blvd Wastewater Treatment Plant. This will further decrease direct discharge into the Willamette River.

Significant construction actions assessed and proposed as "Not Likely to Affect" and "No Effect" to NMFS trust resources include:

\*Construction of the Clackamas Bicycle and Pedestrian Bridge over I-5 and its west-end trail. The trail does not trigger stormwater management per the FAHP \*Construct 'open space' by expanding bridge decks to support non-vehicular open areas. I.e. "freeway lids".

Barges may be used for geotechnical drilling and material transport. Barge anchoring and or geotechnical drilling will be restricted to the In-Water Work Window.

#### **Affected Species**

Species	Critical Habitat*
Columbia River Chum	X
Eulachon	X
Green Sturgeon	X
Lower Columbia River Chinook	×
Lower Columbia River Coho	X
Lower Columbia River Steelhead	X
Snake River Fall Chinook	×
Snake River Basin Steelhead	X
Snake River Sockeye	×
Snake River Spring / Summer Chinook	X
Upper Columbia River Chinook	×
Upper Columbia River Steelhead	X

	I
Species	Critical Habitat*
Upper Willamette River Chinook	X
Upper Willamette River Chinook	X
Upper Willamette River Steelhead	X
Select Species	

1 of 4

\*Or proposed Critical Habitat if relevant.

May	Fffect	FEH

Level 2 - Limited

X Chinook Salmon Form # 734-2898

roj	ect Activities						
	k boxes to indicate project activities that may affect covered species or supporting hab	itat.					
	General Heavy Construction	Slope Stabilization and Drainage					
X	Geotechnical Drilling	Streambank Stabilization and Scour Pro	tection				
Н	Material Sources	Culvert and Bridge Removal					
Н	Mobilization, Staging and Disposal Erosion, Sedimentation and Pollution Control	Bridge Repair and Rehabilitation (As Relevant, Attach Bridge Supplement)					
Н	Temporary Access Roads	Bridge Construction (Attach Bridge Supplemer Pile Driving and Pile Removal (Attach Bridge					
Y	Barges	Culvert Extension, Repair and/or Installa					
	Temporary Bridges and Treated Materials (Attach Bridge Supplement if Aquatic)	Painting and Coating	NION .				
Н	Work Area Isolation	Asphalt and Concrete Paving					
П	Clearing, Grubbing and Earthwork	Other Permanent Roadway Structures					
	Weed Removal	Site Restoration and Enhancement Plan	tings				
	Trees and Down Timber Removal	Channel Modification and Waterway En	hancements (Attach Relevant Plans)				
	Blasting	▼ Stormwater Management					
∆cti	vities Requiring Approval from Services (check which apply; ex	Other:	Not Applicable				
1011		piani / justify below/	Attachments Needed:				
<b>1</b>	On although a strong and the strong						
X	On-site stormwater treatment deficit		Relevant plans				
	Net increase in artificial fill or abandoned fill in the functional floodplain		Relevant plans				
	Unvegetated streambank riprap; any streambank riprap above OHW, or in-stream	flow control structures	Relevant plans				
	In-water work extension		IWW Variance/Project Change				
	Fish passage structure or fishway (including ladder, culvert retrofit, pool-riffle struc	ture, roughened chute)	Fish passage plan or plans				
	Weed control that doesn't meet treatment standards		Relevant plans				
$\overline{\Box}$	Blasting in or near aquatic habitat		Blasting plan				
Ħ	Bridge replacement that doesn't meet fluvial performance standards		Bridge Supplement				
H	Stream channel modification or waterway enhancement that does not meet desig	Relevant plans					
$\frac{\square}{\square}$	· · · · · · · · · · · · · · · · · · ·	Drawing or plans					
	Stormwater flow management (when required) in watershed less than 100 mi <sup>2</sup>	3 .					
<u> </u>	Other modifications to FAHP design standards in the FAHP that may result in direct	Relevant plans					
	Removal of Kincaid's lupine, Bradshaw's lomatium, or Fender's blue butterfly habit	Relevant plans					
$\underline{\sqcup}$	High noise producing work within 300ft of Marbled Murrelet habitat between Apri	Relevant plans					
Ш	Removal of mature conifer trees (18" or larger DBH) in Northern Spotted Owl or Ma	arbled Murrelet habitat	Relevant plans				
хр	anation of Activities That Require Approval or Modifications:		Not Applicable				
See	the project's FAHP Attachment: Sharedrive (ftp) files to review the following ad	aptive management and commitment trac	king strategies:				
need comr	ee the attached 'strategy' summary and Stormwater Management section. The s for off-site treatment as the CMGC process develops. FHWA and NMFS apprixements, treatment strategy and BMPs, and if needed the use of off-site treatment strategy are being reserved for their potential use by the project. E.g. KN in the contraction of the strategy are served for their potential use by the project.	proval will be required to finalize the project nent and or surplus credits generated by p	ct's stormwater management previous FAHP projects. Current and				
	er modifications to FAHP design standards" may require NMFS approval as de oved for "General Use" for "Enhanced Treatment" under the Washington DOE		atment technologies not yet				
	ogy.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-penples form previous FAHP projects include cartridge media filters and media.	ermittee-guidance-resources/Emerging-sto	rmwater-treatment-technologies				

Stormwater Management Not Applicable

Stormwater Feature	Pre-Project	Anticipated Post Project
Project Impervious Surface Area (ISA)	33.500Acres	39.500Acres
Net New ISA (=Pre-Project-Actual Post Project)		6.000Acres
Contributing Impervious Area (CIA)	33.500Acres	39.500Acres
Total ISA Treated On-site		20.500Acres
Total ISA Treated Off-site		16.000Acres
Stormwater Credits Used*		3.000Acres
Total Managed ISA (on- and off-site and credits)		39.500Acres
Net Water Quality Treatment (=Total Managed ISA-Post Project CIA)		0.000Acres
Excess Stormwater Area Treated for Credit*		0.000Acres

* Stormwater Credit discussion	s still unc	derway, please	consult with N	NMFS before using a	ny sort of credit.				
Average Daily Traffic** Project	ct Area	1,000-121,0	00	Off-	Site Treatment	Area 2,500-1	46,700		
**Provide range if variable. If off-site i	s less than	on-site (per AD	T Range table, se	e User's Guide), a grea	er amount of ISA mu	ıst be treated and	describe belo	ow.	
Water Quality Design Storm		1.2inches	Is Flow C	ontrol Provided?	Not Required	d			
If Not Required, Why?	Receivin	g water is a	large waterb	oody					
Flow Control Design Range:									
Lower End Point Design S	torm	Not Req	uired L	Jpper End Point I	Design Storm	Not Requi	ired		
Stormwater Manual Cited:	DOT H	ydraulic Mar	nual 2014	Responsible A	gency for Storn	nwater BMPs:		ODOT	and City of Portland
Stormwater Designer Name,	Phone	#, E-mail:							

#### 💢 Attached Aerial Photo/Site Drawing That Show: The CIA, Sub-Basins, Drainage Flow Paths, Receiving Waters and BMP Locations.

Drainage Area	Treatment Method	RMD	Maint. Table***	ISA Treated (Acres)	Receiving Water
1	Off-Site Treatment by Surface Discharge BMPs	Bioswale	ODOT T3	16.0Acre(s)	Willamette River
2	On-Site Treatment by Surface Discharge BMPs	Attached stormwater narrative	Other: Narrative	4.00Acre(s)	Willamette River
3	On-Site Treatment by Surface Discharge BMPs	Attached stormwater narrative	Other: Narrative	5.50 acre(s)	Willamette River
4	Off-Site Treatment by Surface Discharge BMPs	Various locales: See Comment Box	ODOT T3	3.00Acre(s)	Columbia River
A	PBOT: Attached stormwater narrative	Attached stormwater narrative	Other	11.00Acre(s)	Willamette River
				Acre(s)	

For additional rows, please attach the <u>Stormwater Management Data Page</u>.

#### Comments:

The project will trigger an estimated 39.5-acres of contributing impervious area requiring storm-water treatment and disposal. Of that, ODOT ROW comprises approximately 28.5 -acres, and PBOT ROW approximately 11-acres. Existing water quality infrastructure per FAHP standards is nominal, with 0.17 acres of ODOT ROW and 0.68 City of Portland ROW receiving water quality treatment per current FAHP standards. The rest of the pre-project CIA currently discharges directly into the Willamette River without treatment.

ODOT (Off-site and within the project limits, and 3-acres via other STIP Projects [existing and future credit])

The three proposed ODOT water quality facility locations within the project limits will satisfy the majority the project's post-project CIA commitments: Basin #1 on N Mississippi Ave. will treat 16-acres (off-site treatment within the I-5 corridor); Area 2= 4-acres; and Area 3= 8-acres. Up to 3- acres of off-site treatment may be required due to site constraints. Continued survey and design will refine the CIA and locate additional opportunities solely or in combination as follows:

#### PBOT

Within City of Portland ROW, the addition of two basin / swales at N Center Court St. and NE Wheeler Ave. will treat 1 and 2-acres, respectively. The addition of stormwater planters in City ROW will treat an additional 8-acres of impervious area. Any stormwater not infiltrated will be directed to Portland's Bureau of Environmental Service's (BES) for additional treatment.

#### Other STIP Projects / Off-site Treatment Opportunities (Basin #4)

Up to 3-acres of off site treatment may be required. The need for and degree of mitigation will be verified as design progresses and include continued coordination with FHWA and NMFS will occur to finalize the CIA and if needed, the appropriate mitigation (see attached 'strategy document). Off-site treatment will likely originate from previously constructed FAHP / STIP projects E.g. KN18806 US26\_CorneliusPass-NW185th Project completed in 2019. It may also use the I-205 Regional Stormwater Facility. However, to date this site has yet to conduct adequate testing and data gathering to release credits..

Notes: A) For the purposes of this document, stormwater management areas have been rounded to the next higher whole acreage. This applies a conservative approach and is most relative given the minor level of design, lack of survey, and use of GIS rather than engineering / drafting software; B) The project and construction limits are assumed to be commensurate excluding the northern I-5 off-site stormwater management area. All impervious areas within this area are assumed to be reconstructed. Therefore, the pre-construction CIA and ISA have been recorded as equal; C) Given the current level of design and metadata ODOT has assumed an accuracy within +/- 10%

<sup>\*\*\*</sup> ODOT Stormwater Facility Maintenance Tables ( http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/omm.aspx) or other (attach).

#### **Electronic Signatures & Authorizations:**

The following individuals have reviewed the Notification for accuracy & compliance with the FAHP ESA Consultation (NMFS Ref(2011/02095)) and/or (USFW Cons #01EOFW00-2012-F-0020) approve implementation of the project as described here in. A Biologist Qualified by ODOT under its ESA Effects Determination Program must review this document and ensure its quality before it is submitted to the FHWA. Please sign this document electronically & forward appropriately.

Devin Simmons, ODOT Region 1 Biologist

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Megan Channell, ODOT RQ Proj. Director

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Only if "approval from services required"

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