Letter of Transmittal

RECEIVED
JAN 21 2016
PW Utilities

Snohomish County Public Works
Engineering Services

3000 Rockefeller Ave, MS 607
Everett, WA 98201
Phone: 425-388-3488
Fax: 425-388-6670

Date: 12/28/2015
Attn: James Kelly, P.E.
Public Works Director
Re: 2015 Inspection Reports
Job #:

ARL-01

To: City of Arlington
238 N Olympic Ave.
Arlington, WA 98223-1337

We are sending you:

[x]	Attached	[ ]	Plans
[ ]	Under Separate Cover	[ ]	Specifications
[ ]	Change Order	[ ]	Copy of Letter
[ ]	Other	[ ]	Prints

COPIES	DATE	DESCRIPTION
1	2015	Arl-01 (South Slough #91) Bridge Inspection Report

These are Transmitted as Checked:

[x] For Your Use
[ ] For Review & Use
[ ] As Requested
[ ] Returned for Correction
[ ] Approved as Noted
[ ] Other _____

REMARKS
Please retain report in your bridge files.
For questions call Darrell Ash, P.E. 425-388-6688, or Mike Zitkovich 425-754-9937.

Signed Mike Zitkovich

BRIDGE INSPECTION REPORT

Ver Date: 09/28/2015 Agency: ARLINGTON

Status: Released Printed On: 12/21/20 Program Mgr: Roman G. Peralta

Bridge No. ARL-01 Page: 1/2 **Structure Type**

Bridge Name SOUTH SLOUGH #91 **Route** 96855 **Location** .3 S JCT SR 530

Structure ID 08084500 **MilePost** 9.40 **Intersecting** SOUTH SLOUGH

Inspector's Signature MPZ IDent# G1331 Co-Inspector's Signature MMA

4		Structural Adqcy	(657)	N		Pier/Abut/Protect	(679)	1918	Year Built	(332)	
4		Deck Geometry	(658)	8		Scour	(680)	2007	Year Rebuilt	(336)	
9		Underclearance	(659)	9		Retaining Walls	(682)	28	Oper Rating	(551)	
5		Operating Level	(660)	9		Pier Protection	(683)	17	Inv Rating	(554)	
8		Alignment Adqcy	(661)	1		Bridge Rails	(684)	A	Open Close	(293)	
8		WaterwayAdqcy	(662)	1		Transition	(685)	9999	Vert Over Deck	(360)	
8	7	Deck Overall	(663)	1		Guardrails	(686)	0000	Vert Under	(374)	
9		Drains Condition	(664)	1		Terminals	(687)	N	Vert Und Code	(378)	
8	5	Superstructure	(671)	Y		Revise Rating	(688)	3.00	Asphalt Depth		
0		Number Utilities	(675)			Photos Flag	(691)	40	Speed Limit		
5		Substructure	(676)			Soundings Flag	(693)				
6		Chan/Protection	(677)			Measure Clearance	(694)				
9		Culvert	(678)								

Inspections Performed

IT	NT	HRS	Date	Rep Type
Y	24	2.0	09/15/2015	Routine
				Fract Crit
				Underwater
				Special
				Interim
				Equipment
				Damage
				Safety
				Short Span

Total: 2.0

Suff Rating: 43.43 43.40

BMS Elements

Element	Element Description	Total	Units	State 1	State 2	State 3	State 4
26	Concrete Deck w/Coated Bars	7168	SF	7168	0	0	0
35	Concrete Deck Soffit	7168	SF	7166	0	2	0
145	Earth Filled Concrete Arch	256	LF	226	0	30	0
330	Metal Bridge Railing	512	LF	512	0	0	0
340	Metal Pedestrian Railing	512	LF	512	0	0	0
361	Scour	0	EA	0	0	0	0
800	Asphaltic Concrete (AC) Overlay	7168	SF	7168	0	0	0

Notes

0	Oriented south to north.
11	Administrative load rating should be reviewed (see Sno. Co. BR-650 file for example).
26	Deck: 32 precast concrete panels x 8' wide x 31' long 1' thick with epoxy-coated rebar (2007). Not visible for inspection due to ACP overlay.

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35	Only visible at overhangs. Counting from the south: panels 7, 9, & 24 on the west side, and panels 16, 18, & 23 on the east side all with minor amounts of random hairline leaching cracks visible from below. Panel 23 - east (midspan on north arch) also has a spall/delam of 2 sf but no exposed rebar. Continue to monitor for more delamination/spalling.
145	(2) Luten arches end-to-end (1918 and 1920). Fill was removed during 2007 rehabilitation and replaced with low density fill concrete. Heavy leaching from longitudinal joints on undersides of both arches with stalactites up to 2' max. The west side of both arches at pier 2 has a heavy concentration of leaching horizontal cracks. Other misc. leaching cracks scattered throughout both arches. Approx. 30 lf of exposed corroded rebar with probable section loss on underside of north arch, and minor amounts on south arch. There are some areas of honeycombed concrete on both arches.
330	Rail: Snohomish County standard square tube steel railing , curb-mounted (2007) with light corrosion in places.
340	Steel tube pedestrian and bike railing mounted above bridge railing with light corrosion starting.
361	Channel mostly serves as flood relief. May be muddy with puddled water in winter. No signs of scour.
672	Fair condition - cracking/spalling at precast curb edges at 20+ varied locations. Curbs out of alignment vertically in many places due to rehab sawcutting.
673	Had a timber sidewalk @ east side originally - only anchor bolts remain.
677	Channel overgrown with brush and small trees. Normally muddy but dry during 2015 inspection.
680	No history of scour. Very low velocity flows during flooding.
686	Approach rail added at all four corners of the bridge as part of deck rehabilitation project in 2007, with ET-Plus terminals at two leading ends.
687	All four delineators are missing.
800	ACP overlay (2007). minor transverse cracks at approaches and a few scattered throughout deck - most with sealant in them.

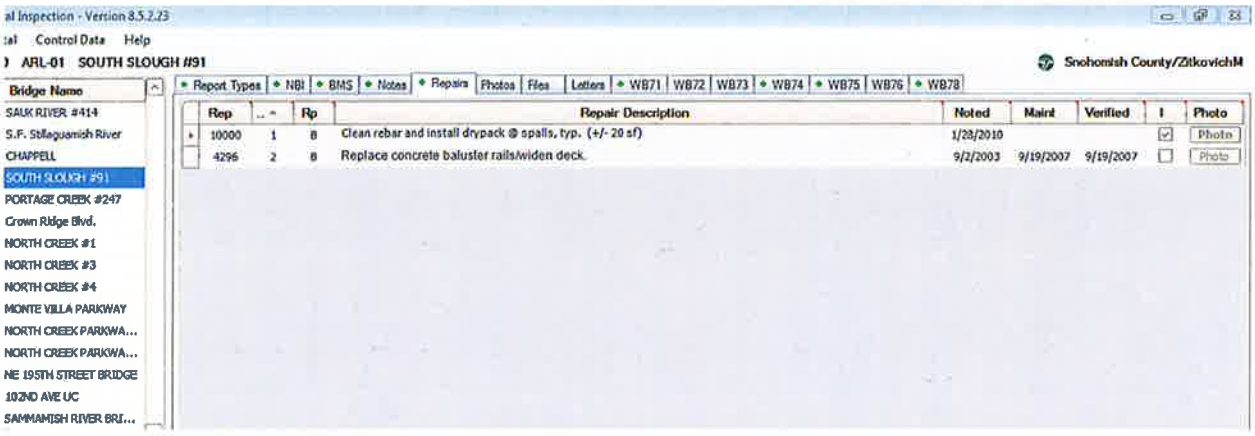
Repairs

Repair No	Pr	R	Repair Description	Noted	Maint	Verified
10000	1	B		01/28/10		

Inspections Performed and Resources Required

Report Type	Date	IT	Frq	Hrs	Insp	CertNo	Coinsp	Note
Routine	09/15/15		24	2.0	MPZ	G1331	MMA	Bridge annexed by City of Arlington in 2009.Deck widened from 22.4' to 31' during 2007 rehab.

Resources	Use	Hour	Min	Req	Max	Notes


al Inspection - Version 8.5.2.23
al Control Data Help
ARL-01 SOUTH SLOUGH #91
Snohomish County/ZitkovichM
Bridge Name
SAUK RIVER #414
S.F. Stillaguamish River
CHAPPELL
SOUTH SLOUGH #91
PORTAGE CREEK #247
Crown Ridge Blvd.
NORTH CREEK #1
NORTH CREEK #3
NORTH CREEK #4
MONTE VILLA PARKWAY
NORTH CREEK PARKWA...
NORTH CREEK PARKWA...
NE 195TH STREET BRIDGE
102ND AVE UC
SAMMAMISH RIVER BRI...
Report Types
NBI
BMS
Notes
Repairs
Photos
Files
Letters
WB71
WB72
WB73
WB74
WB75
WB76
WB78
Rep
Rp
Repair Description
Noted
Maint
Verified
I
Photo
10000 1 8 Clean rebar and install drypack @ spalls, typ. (+/- 20 sf) 1/28/2010 Photo
4296 2 8 Replace concrete baluster rails/widen deck. 9/2/2003 9/19/2007 9/19/2007 Photo

Washington State Department of Transportation

WSBIS Inventory Report

12/21/2015

Structure Identifier	Bridge Number	Owner Code	County Number	City Number	Update
08084500	ARL-01	04	31	0045	0

WB71	Bridge Name	Location	Section	Township	Range	Latitude	Longtitude
	SOUTH SLOUGH #91	.3 S JCT SR 530	08	31	05E	48°11'06.00"	122°11'36.00"

WB72	Feature Intersected	Facilities Carried	Region	FIPS Place Code	Legis District (1)	Legis District (2)	Toll	Custodian	Parallel Structure	Temporary Structure	Critical Facility	Median	Hist Sig	Open Closed	Program Year
	SOUTH SLOUGH	SMOKEY POINT BLVD	NW	02585	39	0	3	04	N		X	05	A		
											X				

WB73	Year Built	Year ReBuilt	Bridge Length	NBIS Length	Maximum Span Length	Lanes On	Lanes Under	Curb to Curb Deck Width	Out to Out Deck Width	Sidewalk Curb Left	Sidewalk Curb Right	Min Vert Clearance Over Deck	Min Vert Clearance Under Bridge	Code	Min Lat UnderClr Right	Code	Min Lat UnderClr Left	Navigation Control	Navigation Vertical Clearance	Navigation Horizontal Clrnce	Vert Lift Min Clrnce	Appr Roadway Width	Skew Angle	Flare
	1918	2007	256	.	80	2	0	28.0'	31.0'	1.5'	1.5'	9999'	0'	N	0.0'	N	0.0'	0	0'	0'		26'	0°	N

WB74	On Under	Highway Class	Service Level	Route Number	Mile Post	ADT on Inventory Route	Truck ADT PCT	ADT Year	Future ADT	Future ADT Year	Linear Referencing System Route	LRS Sub Route	Fed Aid Route	Base Hwy Network	Nat Hwy System	Strahnet	Fed Lands Highway	Fed Funct Class	National Truck Net	Lane Use Direction	Horizontal Clearance Route Dir	Horizontal Clearance Reverse Dir	Max Vertical Clearance Route Dir	Detour Length
	1	4	1	96855	9.40	4725	10	2009	10000	2030			H313	0	0	0	0	07	N	2	2800			5
					.	4752		2011		2037														

WB75	Main Span Material	Main Span Design	Appr Span Material	Appr Span Design	Number of Main Spans	Number of Appr Spans	Service On	Service Under	Deck Type	Wearing Surface	Membrance	Fed Deck Protection	Design Load	Oper Rtng Method	Oper Rtng Tons	Invt Rtng Method	Invt Rtng Tons	Design Exception Date	Federal Aid Project	Border State Code	Border State PCT	Border State Structure Identifier
	1	1	0	00	2	0	1	9	1	6	0	0	0	A	28	A	17					
									2			1						/ /				

WB76	Routine Inspection: Freq	Last Inspection Date	Hours On Site	Inspector	Inspection Identification No	Co-Inspector	Structural Adequacy	Deck Geometry	Underclrnce Adequacy	Operating Level	Alignment Adequacy	Waterway Adequacy	Overall Deck	Deck Cond	Drain	Drains	Scaling Severity	Scaling Percent	Deck Rutting	Exposed Reinf Steel	Superstruct Overall	Curb	Sidewalks	Paint	Number of Utilities	Substruct Overall	Protection	Channel	Culvert	Pier Abutment	Scour	Approach Roadway	Retaining Walls	Pier Protection	Traffic Safety: Bridge Rail	Trans	Guard Rail	Term	Revise Rating	Repair Status	Card Check	Photos	Season	Soundings	Clearances	Monitor Structure
	24	09122013	2.0	JRH	G1014		4	4	9	5	8	8	8	9	0	N		0	0	0	8	9	9	9	0	5	6	9	N	8	8	9	9	1	1	1	1	Y							
		09/15/2015	2.0	MPZ	G1331	MMA	X	X	X				7								5																									

Sufficiency Rating: 43.40

WB77	Fracture Critical / UBIT Inspection: Type	Freq	Last Inspection Date	Hours On Site	Inspector	Inspection Identification No	Co-Inspector	Underwater Inspection: Type	Freq	Last Inspection Date	Hours On Site	Inspector	Inspection Identification No	Co-Inspector	Other Special Inspections: Type	Freq	Last Inspection Date	Hours On Site	Inspector	Inspection Identification No	Co-Inspector
				.							.							.			
			/ /	.						/ /	.						/ /	.			

WB78	Water Type	Flood Plain Intrusion	Flood Control	Scour History	Streambed Material	Stability	Substruct	Waterway Obstruction	Streambed	Stability	Streambed Anabranch	Streambed Water	Piers in Water	Proposed Improvements: Service On	Service Under	Work Type	Work Method	Structure Improve Length	Roadway Width	Lanes On	Lanes Under	Total Costs In Thousands	Structure Cost In Thousands	Roadway Cost In Thousands	Estimate Year	Calc	Inspecting Agency: Code	Number	Seismic Status-Superstruct: Main Biennium	Approach Biennium	Seismic Status-Substruct: Main Biennium	Approach Biennium
	F	C	N	N	7	3	N	G	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N						
							C			3																					