

FLH CULVERT ASSESSMENT FORM

Overall Rating

Good

Fair

Poor

Critical

Unknown

Performance Problems

Notes by: _____ Date: _____ Project: _____

Measurements by: _____ Time: _____

Site Information:

Facility Location: _____ Lat/Long _____

Milepost: _____ Project Station: _____ GPS Road CL Waypoint No. _____

Named waterway: _____ Direction of Flow: _____

Culvert Information:

No. of Barrels: _____ Barrel Length (approx): _____ Barrel Slope: Mild / Steep / _____

Skew (0 degrees = perpendicular to road): _____ Approx Cover: Upstream _____ Downstream _____

Barrel Shape (circle one) Circular Box Elliptical Pipe Arch Arch

Diameter: _____ / Span _____ x Rise _____

Pipe Material (circle one): Metal - Concrete / RCP - Corrugated Plastic - Smooth Plastic - Timber - Masonry

Appurtenances (circle one):

Upstream : Projecting / Mitered / Headwall / Headwall & Wingwalls / Flared End Section / _____

Downstream : Projecting / Mitered / Headwall / Headwall & Wingwalls / Flared End Section / _____

Flowing or standing water? N / Y Depth: _____ (ft) Est. Flow Velocity: _____ (ft/s) Possible AOP/fish passage? Y / N

Utilities Present (list)? Y / N _____ Possible historic features? Y / N Open Bottom? Y / N

Culvert Condition and Performance (circle / check all that apply and provide appropriate explanations below)

Category	Rating					
Invert deterioration	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Joints & Seams	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Corrosion / Chemical	Good	Fair	Poor	Crit	<u>Unk</u>	N/A
Cross-Section Deform	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Cracking	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Liner / Wall	Good	Fair	<u>Poor</u>	Crit	Unk	N/A
Mortar and Masonry	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Rot and Marine Borers	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Headwall/Wingwall	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Apron	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Flared End Section	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Pipe End	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Scour Protection	Good	<u>Fair</u>	Poor	Crit	Unk	N/A

Performance Problems Requiring Level 1 Action

- Debris/Veg Blockage > 1/3 of rise at inlet or outlet ☐
- Sediment Blockage 1/3 to 3/4 of rise at inlet/outlet ☐
- Buoyancy or Crushing-Related Inlet Failure ☐
- Poor Channel Alignment ☐
- Previous and/or Frequent Overtopping ☐
- Local Outlet Scour ☐

Performance Problems Requiring Level 2 Action

- Embankment Piping ☐
- Channel Degradation / Headcut (circle one) ☐
- Embankment Slope Instability ☐
- Sediment Blockage > 3/4 Rise at Inlet or Outlet ☐
- Sediment Blockage > 1/3 Rise Throughout Barrel ☐

Other Problems Requiring Level 2 Action

- No Access / Ends Totally Buried / Submerged ☐
- Aggressive Abrasion/Corrosion/Chemical (circle) ☐
- Exposed Footing (Open-Bottom Culvert Only) ☐

Photos (number): _____ Inlet _____ Outlet _____ Roadway (ahead) _____ Roadway (back) _____ View downstream

_____ View upstream Others: _____

Notes / Recommendations:



Bravo Environmental
 6705 NE 175th St
 Kenmore, Wa 98028
 Tel: 425-424-9000
 Fax: 425-424-9002
 E-mail:

Inspection Report / Inspection: 1

Date 5/18/2011	P/O. No.	Weather Dry	Surveyor's Name JOEL vASEY	Pipe Segment Reference	Section No. 9
Certificate No. u-304-1198	Survey Customer	System Owner	Date Cleaned	Pre-Cleaning No Pre-Cleaning	Sewer Category

Street 191+29	Use of Sewer Stormwater	Upstream MH INLET-W
City Port Angeles	Drainage Area	Downstream MH OUTLET
Loc. details	Flow Control	Dir. of Survey Downstream
Location Code	Length surveyed 62.75 ft	Section Length 62.75 ft

Purpose of Survey Maintenance Related	Joint Length	24 inch
Year Laid	Dia./Height	Corrugated Metal Pipe
Year Rehabilitated	Material	
Tape / Media No. 1	Lining Method	

Add. Information :

1:165	Position	Observation	MPEG	Photo			
	0.00	S1 Surface Roughness Increased, from 05 to 07 o'clock, within 8 inches of joint: YES, Start					
	0.00	End of Pipe / INLET-W	00:00:29				
	0.00	Water Level, 5 %of cross sectional area	00:00:41				
	4.97	Crack Circumferential, from 12 to 01 o'clock, within 8 inches of joint: NO	00:02:47				
	20.06	Deformed, 5 % / DENT@10:00	00:07:06				
	62.75	F1 Surface Roughness Increased, from 05 to 07 o'clock, within 8 inches of joint: YES, Finish					
	62.75	End of Pipe / OUTLET	00:14:03				
QSR 4113	QMR 0000	SPR 7	MPR 0	OPR 7	SPRI 1.75	MPRI 0	OPRI 1.75