

CULVERT EVALUATION FIELD FORM (LEVEL A)

Site ID: ¹	1893	Culvert #: ²	1.1	Date: ³	3/15/20	Old ID: ⁴	
SKCO ID: ⁵		Org: ⁶	SFEG	Crew: ⁷	EM, JG, PM	Stream: ⁸	
PHOTOS TAKEN: ⁹ ☒ US Culv ☒ US Channel ☒ DS Culv ☒ DS Channel ☒ Road Right ☒ Road Left ☒ Other							

ROAD DESCRIPTION

Road Surface Type: ¹⁰	CS ☒ A GR Other	Road Width (including shoulders): ¹⁴	8.87 meters
Temporary Access Needed? ¹¹	Yes ☒ No Unknown	Road Fill Depth: ¹⁵ (B-D)	1.95 meters
In-Road Utilities: ¹²	☒ Yes No Unknown	US Road Prism Depth: ¹⁶ (A-E)	2.245 meters
Overhead Utilities/Crossings: ¹³	Yes ☒ No Unknown	DS Road Prism Depth: ¹⁷ (B-F)	2.98 meters
Road Notes: ¹⁸			

CULVERT DESCRIPTION

Culvert Shape: ¹⁹	☒ BOX ARCH SQSH ELL Other	Length of Culvert: ²⁸	18.63 meters
Culvert Material: ²⁰	PCC CPC ☒ SST SPA MRY CAL SPS PVC TMB Other	Culvert Span: ²⁹	0.85 meters
Number of Baffles: ²¹ (If > 0, fill out fishway form)	NA	Rise of Culvert: ³⁰	USE SPAN FOR RISE meters
Baffle Type: ²²	Concrete Metal Wood Plastic Rock Other	Culvert Slope: ³¹ $\left(\frac{US\ Invert^E - DS\ Invert^F}{Length^{28}} \right) \times 100$	%
Apron? ²³	US DS ☒ No	Water Depth: ³²	52.5 cm meters
Gate? ²⁴	US DS ☒ No	Hydraulic Drop: ³³	17 cm 19 cm meters
Fishway? ²⁵ (If yes, fill out fishway form)	YES ☒ No	Drop Location: ³⁴	Inlet Outlet ☒ Interior
Countersunk? ²⁶	YES ☒ No	Plunge Pool Description (N/A if no Hydraulic Drop)	
Backwatered? ²⁷	YES ☒ No	Plunge Pool Length: ³⁵	2.1 meters
		Maximum Depth: ³⁶	0.43 meters
		Scour Line Width: ³⁷	2.4 meters

Culvert Notes:³⁸ (If multiple culverts at site, indicate defining features of each)

SLIGHTLY CRUSHED AT UP STREAM END UPSTREAM DATA 17m
TOTALLY RUSTED OUT AT BOTTOM, no inverts taken

NO SURFACE ELEVATION DATA DS 19cm 1m in culvert

CHANNEL DESCRIPTION

Channel Width: ³⁹	1.17m	Culvert Span ÷ Channel Width: ⁴⁰ (29÷39)
Channel Notes: ⁴¹		

BARRIER STATUS⁴² (Circle one below)

Passable ⁴³	Barrier Reason ⁴⁴	Level B Analysis Required ⁴⁵	
	Drop > .24 M ☒ Slope >= 1%	Backwatered	Slope < 1% Culvert Width < 75%

Barrier Notes:⁴⁶

CULVERT EVALUATION FIELD FORM (LEVEL A): CALCULATIONS

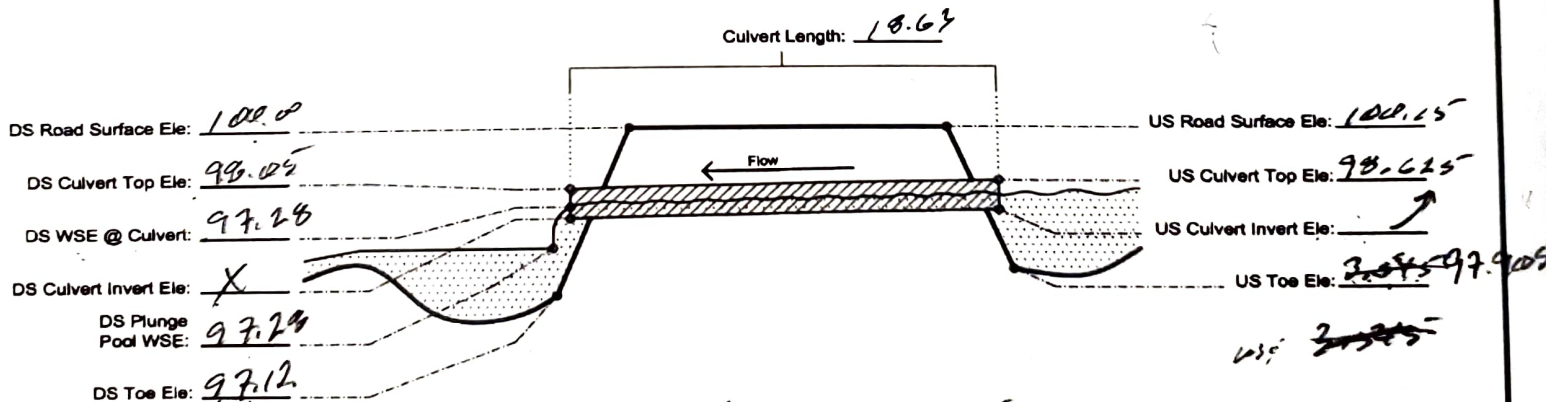
Date: 3-5-2024

FS	IH	BS	EL	NOTE
	101.45	1.45	100.00	BENCH MARK
3.325	"		96.125	US WSE
4.46	"		96.99	inlet WSE
4.17	"		97.28	DS WSE
4.23	"		97.12	DS toe
1.45	"	1.45	100.00	BS
3.545			97.905	US toe

ENTER FINAL MEASUREMENTS HERE

US Road Shoulder: ^A	1.30 / 100.12	DS Road Shoulder: ^B	1.45 / 100.22-100.23	(3M)
US Culvert Top: ^C	2.825 / 98.12	DS Culvert Top: ^D	3.40 / 98.05	
US Culvert Invert: ^E	RUSTED OUT	DS Culvert Invert: ^F	RUSTED OUT	

SCHEMATIC OF CULVERT MEASUREMENTS



$$\text{Slope} = \frac{\text{TDN}_{\text{US Invert}} - \text{TDN}_{\text{DS Invert}}}{\text{Culvert Length}} = \frac{98.625 - 98.005}{19.45} = \frac{0.62}{19.45} = 0.03 \quad 3.03\%$$

Note: If culvert is countersunk, use bed elevations to calculate slope

Hydraulic Drop = DS WSE @ Culvert — DS Plunge Pool WSE = 97.45 - 98.625 =

*Simpler to use invert in place of toe if this is representative of road prism. If toe of prism elevation is greatly different than invert elevation, use toe.

$$\text{DS Prism Depth} = \text{DS Road Surface} - \text{DS Toe} \quad 100.4 - 97.12 = 2.28$$

US Prism Depth = US Road Surface - US Toe = 100.15 - 97.905 = 2.245

1900 - 100 in SWE 1000