### Reach S-A105 (Timber Mat Crossing) Ephemeral Spread B Harrison County, West Virginia

Data	Included
Photos	$\checkmark$
SWVM Form	$\checkmark$
FCI Calculator and HGM Form	N/A – Slope <4%
RBP Physical Characteristics Form	$\checkmark$
Water Quality Data	N/A - No Flow
RBP Habitat Form	$\checkmark$
RBP Benthic Form	$\checkmark$
Benthic Identification Sheet	N/A - No Flow
Wolman Pebble Count	$\checkmark$
Reference Reach Software Pebble Count Data	$\checkmark$
Longitudinal Profile and Cross Sections	$\checkmark$

### Spread B Stream S-A105 (Timber Mat Crossing) Harrison County



Photo Type: DS, US View

Location, Orientation, Photographer Initials: Downstream Edge of ROW, Upstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815



Photo Type: DS, DS View Location, Orientation, Photographer Initials: Downstream Edge of ROW, Downstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815

#### Spread B Stream S-A105 (Timber Mat Crossing) Harrison County



Photo Type: US View at Center Location, Orientation, Photographer Initials: Center ROW, Upstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815



Photo Type: DS View at Center Location, Orientation, Photographer Initials: Center ROW, Downtstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815

#### Spread B Stream S-A105 (Timber Mat Crossing) Harrison County



Photo Type: US, US View

Location, Orientation, Photographer Initials: Upstream Edge of ROW, Upstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815



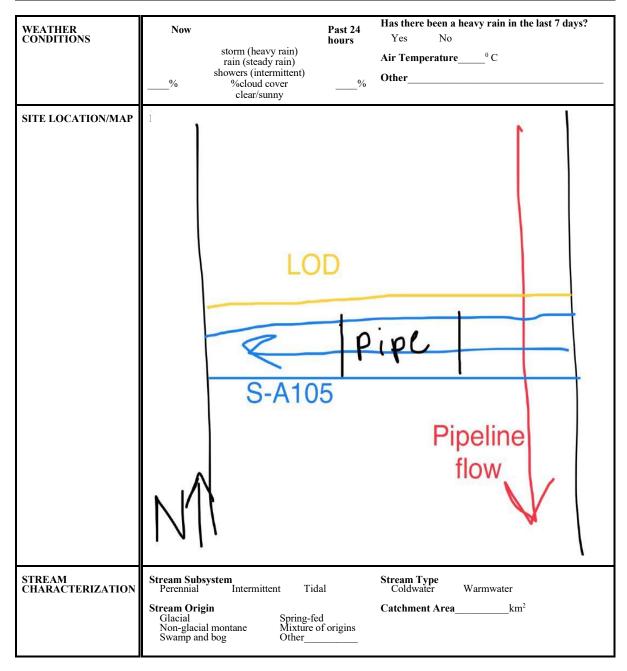
Photo Type: US, DS View Location, Orientation, Photographer Initials: Upstream Edge of ROW, Downstream View, DP, HK, VM Lat: 39.168266 Long: -80.577815

#### West Virginia Stream and Wetland Valuation Metric (SWVM) Version 2.1, September 2017

USACE FILE NO./ Project Name: (v2.1, Sept 2015)	Mountain V	Valley Pipeline	IMPACT COORDINATES: (in Decimal Degrees)	Lat.	39.168266 Lon.	-80.577815	WEATHER:	Rain	DATE:	August 31, 2021
IMPACT STREAM/SITE ID A (watershed size (acreage), u	AND SITE DESCRIPTION: analtered or impairments)	S-A105	i		MITIGATION STREAM CLASS./SITE II (watershed size (acreage), unalter				Comments:	
STREAM IMPACT LENGTH:	20 FORM OF MITIGATION:	RESTORATION (Levels I-III)	MIT COORDINATES: (in Decimal Degrees)	Lat.	Lon.	•	PRECIPITATION PAST 48 HRS:		Mitigation Length:	
Column No. 1- Impact Existing	Condition (Debit)	Column No. 2- Mitigation Existing Cond	tion - Baseline (Credit)		Column No. 3- Mitigation Projected Post Completion (Cred		Column No. 4- Mitigation Pr Post Completion	rojected at Ten Years n (Credit)	Column No. 5- Mitigation Project	ted at Maturity (Credit)
Stream Classification:	Ephemeral	Stream Classification:			Stream Classification:	0	Stream Classification:	0	Stream Classification:	0
Percent Stream Channel Slo	pe 2.2	Percent Stream Channel Slope			Percent Stream Channel Slope	0	Percent Stream Channel	Slope 0	Percent Stream Channel S	lope 0
HGM Score (attach dat	ta forms):	HGM Score (attach data	forms):		HGM Score (attach data fo	forms):	HGM Score (attach	data forms):	HGM Score (attach d	lata forms):
	Average		Average			Average		Average		Average
Hydrology Biogeochemical Cycling	0	Hydrology Biogeochemical Cycling	0		Hydrology Biogeochemical Cycling	0	Hydrology Biogeochemical Cycling	0	Hydrology Biogeochemical Cycling	0
Habitat PART I - Physical, Chemical and B	Biological Indicators	Habitat PART I - Physical, Chemical and Bio	logical Indicators		Habitat PART I - Physical, Chemical and Biology	ogical Indicators	Habitat PART I - Physical, Chemical ar	nd Biological Indicators	Habitat PART I - Physical, Chemical and	Biological Indicators
That To Thysical, one mean and B	-		x Scale Range Sile Score		Part 1 - 1 Hysical, one include and broke	-		Points Scale Range Site Score		Points Scale Range Site Score
PHYSICAL INDICATOR (Applies to all streams of	classifications)	PHYSICAL INDICATOR (Applies to all streams class	fications)		PHYSICAL INDICATOR (Applies to all streams classific	cations)	PHYSICAL INDICATOR (Applies to all stream	ms classifications)	PHYSICAL INDICATOR (Applies to all streams	s classifications)
USEPA RBP (High Gradient Data Sheet) 1. Epifaunal Substrate/Available Cover	0-20 0	USEPA RBP (Low Gradient Data Sheet) 1. Epifaunal Substrate/Available Cover	-20		USEPA RBP (High Gradient Data Sheet) 1. Epifaunal Substrate/Available Cover 0.20	20	USEPA RBP (High Gradient Data Sheet) 1. Epifaunal Substrate/Available Cover	0-20	USEPA RBP (High Gradient Data Sheet) 1. Epifaunal Substrate/Available Cover	0-20
2. Embeddedness	0-20 3		-20		2. Embeddedness 0-20		2. Embeddedness	0-20	2. Embeddedness	0-20
3. Velocity/ Depth Regime	0-20 0		-20		3. Velocity/ Depth Regime 0-20		3. Velocity/ Depth Regime	0-20	3. Velocity/ Depth Regime	0-20
4. Sediment Deposition	0-20 3		-20		4. Sediment Deposition 0-20		4. Sediment Deposition	0-20	4. Sediment Deposition	0-20
5. Channel Flow Status	0-20 0-1 0	5. Channel Flow Status	-20 0-1		5. Channel Flow Status 0-20	20 0-1	5. Channel Flow Status	0-20 0-1	5. Channel Flow Status	0-20 0.1
6. Channel Alteration	0-20 10	6. Channel Alteration d	-20		6. Channel Alteration 0-20	20	6. Channel Alteration	0-20	6. Channel Alteration	0-20
7. Frequency of Riffles (or bends)	0-20 0	7. Channel Sinuosity 0	-20		7. Frequency of Riffles (or bends) 0-20	20	7. Frequency of Riffles (or bends)	0-20	7. Frequency of Riffles (or bends)	0-20
8. Bank Stability (LB & RB)	0-20 11	8. Bank Stability (LB & RB)	-20		8. Bank Stability (LB & RB) 0-20	20	8. Bank Stability (LB & RB)	0-20	8. Bank Stability (LB & RB)	0-20
9. Vegetative Protection (LB & RB)	0-20 2	9. Vegetative Protection (LB & RB)	-20		9. Vegetative Protection (LB & RB) 0-20	20	9. Vegetative Protection (LB & RB)	0-20	9. Vegetative Protection (LB & RB)	0-20
10. Riparian Vegetative Zone Width (LB & RB)	0-20 4		-20		10. Riparian Vegetative Zone Width (LB & RB) 0-20		10. Riparian Vegetative Zone Width (LB & RB)		10. Riparian Vegetative Zone Width (LB & RB)	0-20
Total RBP Score	Poor 33	Total RBP Score	Poor 0			Poor 0	Total RBP Score	Poor 0	Total RBP Score	Poor 0
Sub-Total CHEMICAL INDICATOR (Applies to Intermittent a	0.275 and Perennial Streams)	Sub-Total CHEMICAL INDICATOR (Applies to Intermittent and	O Perennial Streams)		Sub-Total CHEMICAL INDICATOR (Applies to Intermittent and Pe	erennial Streams)	Sub-Total CHEMICAL INDICATOR (Applies to Intermit	0 Itent and Perennial Streams)	Sub-Total CHEMICAL INDICATOR (Applies to Intermitter	0
WVDEP Water Quality Indicators (General)		WVDEP Water Quality Indicators (General)	cicinia orcans,		WVDEP Water Quality Indicators (General)	cicinia cicano,	WVDEP Water Quality Indicators (Gene	-	WVDEP Water Quality Indicators (General	
Specific Conductivity		Specific Conductivity			Specific Conductivity		Specific Conductivity	1017	Specific Conductivity	
	0-90	0	-90		0-90	0		0-90		0-90
100-199 - 85 points										
рн	0.1	рн			рн	. 0-1	pH	0-1	рн	0-1
5.6-5.9 = 45 points	0-80 0-1	e	-90 0-1		5-90	90		5-90		5-90
DO		DO			DO		DO		DO	
	10-30	1	0-30		10-3	30		10-30		10-30
Sub-Total		Sub-Total	0		Sub-Total		Sub-Total		Sub-Total	
BIOLOGICAL INDICATOR (Applies to Intermitter	nt and Perennial Streams)	BIOLOGICAL INDICATOR (Applies to Intermittent an	d Perennial Streams)		BIOLOGICAL INDICATOR (Applies to Intermittent an	and Perennial Streams)	BIOLOGICAL INDICATOR (Applies to Inte	ermittent and Perennial Streams)	BIOLOGICAL INDICATOR (Applies to Intern	nittent and Perennial Streams)
WV Stream Condition Index (WVSCI)		WV Stream Condition Index (WVSCI)			WV Stream Condition Index (WVSCI)		WV Stream Condition Index (WVSCI)		WV Stream Condition Index (WVSCI)	
	0-100 0-1	0	100 0-1		0-10	00 0-1		0-100 0-1		0-100 0-1
Sub-Total	0	Sub-Total	0		Sub-Total	0	Sub-Total	0	Sub-Total	0
PART II - Index and Un	nit Score	PART II - Index and Unit	Score		PART II - Index and Unit S	Score	PART II - Index and	Unit Score	PART II - Index and I	Jnit Score
Index	Linear Feet Unit Score	Index L	inear Feet Unit Score		Index Line	near Feet Unit Score	Index	Linear Feet Unit Score	Index	Linear Feet Unit Score
0.538	20 10.75	0	0 0		0	0 0	0	0 0	0	0 0
L I	A	I			μ		μ		μ	1

# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET (FRONT)

STREAM NAME	LOCATION				
STATION # RIVERMILE	STREAM CLASS				
LAT LONG	RIVER BASIN	RIVER BASIN			
STORET #	AGENCY				
INVESTIGATORS					
FORM COMPLETED BY	DATE REASON FOR SURVEY				



# PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET (BACK)

WATERSHED FEATURES RIPARIAN VEGETATION (18 meter buffer)	Predominant Surrounding Landuse       Local Watershed NPS Pollution         Forest       Commercial         Field/Pasture       Industrial         Agricultural       Other         Residential       Other         Indicate the dominant type and record the dominant species present       Herbaceous         Trees       Shrubs       Grasses         Dominant species present       Herbaceous
INSTREAM FEATURES	Dominant species present
LARGE WOODY	LWDm <sup>2</sup>
DEBRIS	Density of LWDm <sup>2</sup> /km <sup>2</sup> (LWD/ reach area)
AQUATIC	Indicate the dominant type and record the dominant species present
VEGETATION	Rooted emergent       Rooted submergent       Rooted floating       Free floating         Floating Algae       Attached Algae       Booted floating       Free floating       Free floating         Dominant species present
WATER QUALITY (DS, US)	Temperature0 C       Water Odors Normal/None       Sewage         Specific Conductance       Petroleum Fishy       Chemical Other         Dissolved Oxygen       Water Surface Oils Slick       Sheen None       Globs       Flecks         pH       Turbidity (if not measured) Clear       Slightly turbid       Turbid Turbid       Turbid Opaque       Turbid
SEDIMENT/	Odors
SUBSTRATE	Normal     Sewage     Petroleum     Deposits       Chemical     Anaerobic     None     Sludge     Sawdust     Paper fiber     Sand       Other     Other     Epoking at stones which are not deeply embedded are the undersides black in color?     How are the undersides black in color?

INC	ORGANIC SUBSTRATE (should add up to			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)						
Substrate Type			Substrate Type	Characteristic % Composition Sampling Are						
Bedrock			Detritus	sticks, wood, coarse plant						
Boulder	> 256 mm (10")			materials (CPOM)						
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic						
Gravel	2-64 mm (0.1"-2.5")			(FPOM)						
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments						
Silt	0.004-0.06 mm									
Clay	< 0.004 mm (slick)									

#### HABITAT ASSESSMENT FIELD DATA SHEET - HG - USE ON ALL STREAMS (FRONT)

STREAM NAME	LOCATION			
STATION # RIVERMILE	STREAM CLASS			
LAT LONG	RIVER BASIN			
STORET #	AGENCY			
INVESTIGATORS				
FORM COMPLETED BY	DATE TIME AM PM	REASON FOR SURVEY		

	Habitat		Condition	ı Category					
	Parameter	Optimal	Suboptimal	Marginal	Poor				
	1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.				
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
n sampling reach	2. Embeddedness	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25- 50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50- 75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.				
ted i	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
Parameters to be evaluated in sampling reach	3. Velocity/Depth Regime	All four velocity/depth regimes present (slow- deep, slow-shallow, fast- deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast- shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).				
uram	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
Pa	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	5 4 3 2 1 0 Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.				
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	channel and mostly				
	SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				

Rapid Bioassessment Protocols For Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish, Second Edition - Form 2

#### HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Habitat		Condition	ı Category				
Parameter	Optimal	Suboptimal	Marginal	Poor			
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.			
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0			
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.			
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0			
<ul> <li>SCORE</li> <li>8. Bank Stability (score each bank)</li> <li>Note: determine left or right side by facing downstream.</li> <li>SCORE (LB)</li> <li>SCORE (RB)</li> <li>9. Vegetative</li> <li>Protection (score each bank)</li> </ul>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30- 60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.			
SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0			
SCORE (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0			
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well- represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one- half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.			
SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0			
SCORE (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0			
<b>10. Riparian</b> <b>Vegetative Zone</b> <b>Width</b> (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6- 12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.			
SCORE (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0			
SCORE(RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0			

Total Score \_\_\_\_\_

#### BENTHIC MACROINVERTEBRATE FIELD DATA SHEET

STREAM NAME		LOCATION						
STATION #	_ RIVERMILE	STREAM CLASS						
LAT	LONG	RIVER BASIN						
STORET #		AGENCY						
INVESTIGATORS			LOT NUMBER					
FORM COMPLETED	BY	DATE TIME	REASON FOR SURVEY					
HABITAT TYPES	Cobble% Sn	Indicate the percentage of each habitat type present         Cobble%       Snags%       Vegetated Banks%       Sand%         Submerged Macrophytes%       Other (       )%						
SAMPLE COLLECTION	Indicate the number of jab	lected? wading fi ps/kicks taken in each habitat ty lags Vegetated B	anks Sand					
GENERAL COMMENTS								

#### QUALITATIVE LISTING OF AQUATIC BIOTA

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare, 2 = Common, 3= Abundant, 4 = Dominant

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4

#### FIELD OBSERVATIONS OF MACROBENTHOS

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare (1-3 organisms), 2 = Common (3-9 organisms), 3= Abundant (>10 organisms), 4 = Dominant (>50 organisms)

Porifera	0	1	2	3	4	Anisoptera	0	1	2	3	4	Chironomidae	0	1	2	3	4
Hydrozoa	0	1	2	3	4	Zygoptera	0	1	2	3	4	Ephemeroptera	0	1	2	3	4
Platyhelminthes	0	1	2	3	4	Hemiptera	0	1	2	3	4	Trichoptera	0	1	2	3	4
Turbellaria	0	1	2	3	4	Coleoptera	0	1	2	3	4	Other	0	1	2	3	4
Hirudinea	0	1	2	3	4	Lepidoptera	0	1	2	3	4						
Oligochaeta	0	1	2	3	4	Sialidae	0	1	2	3	4						
Isopoda	0	1	2	3	4	Corydalidae	0	1	2	3	4						
Amphipoda	0	1	2	3	4	Tipulidae	0	1	2	3	4						
Decapoda	0	1	2	3	4	Empididae	0	1	2	3	4						
Gastropoda	0	1	2	3	4	Simuliidae	0	1	2	3	4						
Bivalvia	0	1	2	3	4	Tabinidae	0	1	2	3	4						
						Culcidae	0	1	2	3	4						

#### WOLMAN PEBBLE COUNT FORM

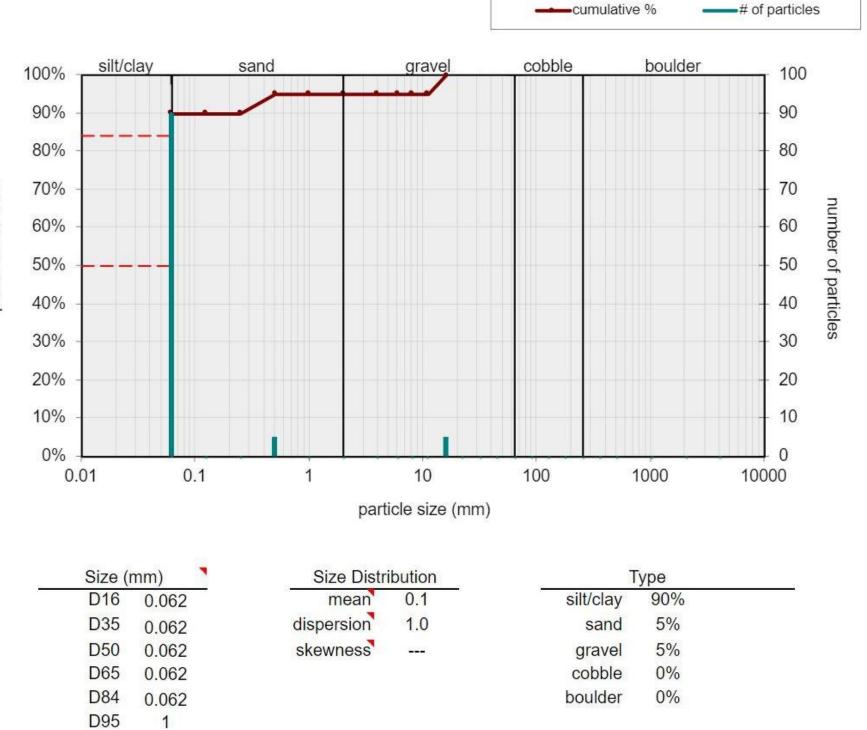
County:HarrisonStream Name:UNT to Kincheloe CreekHUC Code:05020002Survey Date:9/15/2021Surveyors:DP, VM, HKType:Bankfull Channel

Stream ID: S-A105

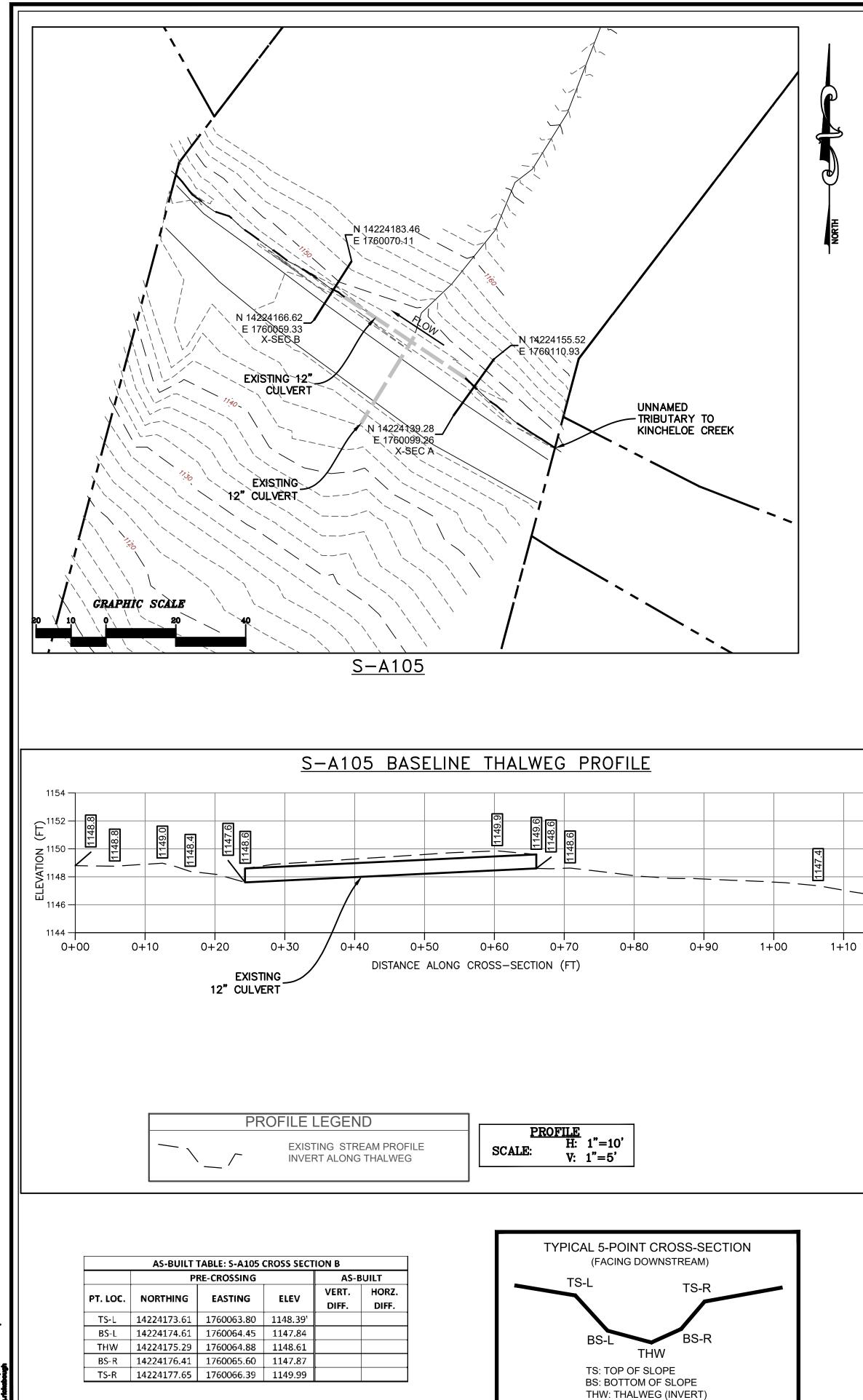
Basin: West Fork

Impact: 43.6 m

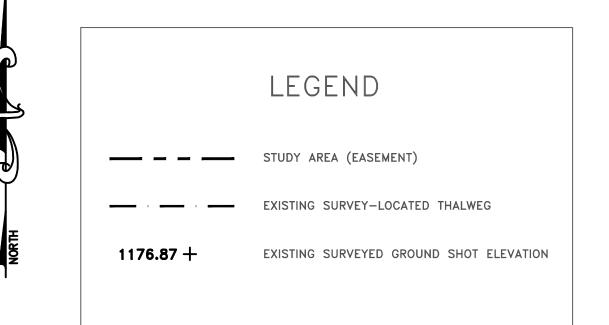
			LE COUNT				
Inches	PARTICLE	Millimeters		Particle Count	Total #	Item %	% Cum
	Silt/Clay	< .062	S/C	• •	90	90.00	90.00
	Very Fine	.062125		▲ ▼	0	0.00	90.00
	Fine	.12525		▲ ▼	0	0.00	90.00
	Medium	.255	S A N D	▲ ▼	5	5.00	95.00
	Coarse	.50-1.0		▲ ▼	0	0.00	95.00
.0408	Very Coarse	1.0-2		* *	0	0.00	95.00
.0816	Very Fine	2 -4		* *	0	0.00	95.00
.1622	Fine	4 -5.7		▲ ▼	0	0.00	95.00
.2231	Fine	5.7 - 8		▲ ▼	0	0.00	95.00
.3144	Medium	8 -11.3		▲ ▼	0	0.00	95.00
.4463	Medium	11.3 - 16	GRAVEL	* *	5	5.00	100.00
.6389	Coarse	16 -22.6		▲ ▼	0	0.00	100.00
.89 - 1.26	Coarse	22.6 - 32		▲ ▼	0	0.00	100.00
1.26 - 1.77	Vry Coarse	32 - 45		• •	0	0.00	100.00
1.77 -2.5	Vry Coarse	45 - 64		▲ ▼	0	0.00	100.00
2.5 - 3.5	Small	64 - 90		▲ ▼	0	0.00	100.00
3.5 - 5.0	Small	90 - 128	CODDIE	▲ ▼	0	0.00	100.00
5.0 - 7.1	Large	128 - 180	COBBLE	▲ ▼	0	0.00	100.00
7.1 - 10.1	Large	180 - 256		▲ ▼	0	0.00	100.00
10.1 - 14.3	Small	256 - 362		▲ ▼	0	0.00	100.00
14.3 - 20	Small	362 - 512		▲ ▼	0	0.00	100.00
20 - 40	Medium	512 - 1024	BOULDER	▲ ▼	0	0.00	100.00
40 - 80	Large	1024 -2048	1	* *	0	0.00	100.00
80 - 160	Vry Large	Vry Large 2048 -4096		▲ ▼	0	0.00	100.00
	Bedrock		BDRK	* *	0	0.00	100.00
				Totals:	100		
	Total Tally:						



Bankfull Channel Pebble Count, S-A105, UNT to Kincheloe Creek



X/CADD/ Pithburgh/EXT/7157 - MP/Growing Permits/Next Vrights WSB Growings/Growings/Growings/Completed/2021-00-31 - 3-A108\_-A108\_S-KB2\_FKB4 TOPO MP 37.45/3-A106 - MP 37.46 - De/ATTmit Oct 06\_2021 - 7.000m



SURVEY NOTES:

- 1. THIS MAP HAS BEEN ORIENTED TO NAD 1983 UTM ZONE 17N, AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), USING REAL TIME DGPS. FIELD LOCATIONS WERE COMPLETED ON AUGUST 31, 2021.
- 2. EASEMENT LINES SHOWN ON PLAN VIEW WERE PROVIDED BY MOUNTAIN VALLEY PIPELINE.

3. SURVEY POINTS FOR CROSS SECTIONS AND THALWEG PROFILES COLLECTED IN 2021 HAVE BEEN USED IN COMBINATION WITH SURVEY POINTS COLLECTED PREVIOUSLY IN 2020 IN ORDER TO GENERATE THE PRE-CROSSING SURFACE SHOWN IN PLAN. DUE TO NATURAL EROSIONAL STREAM PROCESSES THAT CAN OCCUR OVER TIME, MINOR ADJUSTMENTS TO THE PROFILE ALIGNMENTS MAY HAVE BEEN REQUIRED IN ORDER TO GENERATE A CLEAN PRE-CROSSING SURFACE.

- 4. ALL SECTION VIEWS SHOWN LEFT TO RIGHT FACING DOWNSTREAM.
- 5. POST-CROSSING SURVEY INFORMATION SHOWN IN RED. DATA PENDING.
- 6. POST-CROSSING SURVEY POINTS FOR CROSS SECTIONS AND THALWEG ARE PROJECTED ONTO PRE-CROSSING SECTION AND PROFILE VIEWS FOR COMPARISON.

