PASSIVE TREATMENT SYSTEM O&M INSPECTION REPORT

Rev 5/2006

Inspection Date:		Project Name:	**Harbison Walker Restoration Effort – Phase II**
Inspected by:		Municipality:	**Stewart Township**
Organization:		County:	**Fayette** State: **PA**
Time Start:	End:	Project Coordinates:	**39 50' 39''** Lat **79 29' 30''** Long
Receiving Stream:	**Laurel Run**	Subwatershed:	**Meadow Run** Watershed: **Youghiogheny River**

Weather (circle one): Snow Heavy Rain Rain Light Rain Overcast Fair/Sunny **Temp (°F):** ≤32 33-40 41-50 51-60 60+

Is maintenance required? Yes/No If yes, provide explanation:_____

_____

INSPECTION SUMMARY

A. Site Vegetation (Uplands and Associated Slopes)

Overall condition of vegetation on site: 0 1 2 3 4 5 (0=poor, 5=excellent, circle one) (See instructions.)

Is any reseeding required? Yes/No If yes, describe area size and identify location on Site Schematic:_____

_____

_____

B. Site Access, Gate and Parking

Are the access roads passable for operation and monitoring? Yes/No?
Do the access roads or gate need maintenance? Yes/No?
Describe maintenance performed and remaining (Identify location on Site Schematic.): _____

_____

C. Vandalism and "Housekeeping"

Is there litter around or in the passive system? ? Yes/No? If Yes, was the litter picked up? Yes/No?
Is there litter that may be considered hazardous or dangerous that requires special disposal? ? Yes/No?
Is there evidence of vandalism to the passive system? Yes/No?
Additional comments: _____

D. Ditches, Channels, Spillways

Channel Identification	Erosion Rills (Y/N)	Debris Present (Y/N)	Maintenance Performed (Y/N)	Maintenance Performed and Remaining (Indicate ditch by number i.e. 2c = B3A Collection Channel)
1. Diversion Ditch				
2. Collection Channels				
a. B1 (above B1RAW)				
b. B3				
c. B3A				
3. Rock-Lined Spillways				
a. ACVFP (below ACVFPN)				
b. ACSPWL				
c. ACWL to Laurel Run				
d. B1VFP				
e. B1FP				
f. B1SP				
g. B1WL1				
h. B1WL2				
i. B1WL3				
j. B1B3VFP				
k. B1B3SPWL				
l. B1B3 HFLB to Laurel Run				

Channel Identification	Erosion Rills (Y/N)	Debris Present (Y/N)	Maintenance Performed (Y/N)	Maintenance Performed and Remaining (Indicate ditch by number i.e. 2c = B3A Collection Channel)
4. Emergency Spillways				
a. ACVFPS to ACVFPN				
b. ACFP to Trib C				
c. B1FP to ACWL				
d. B1B3FP to Laurel Run				
e. B3ASP				
f. B3SP				
5. Flushing/Primary Spillways				
a. ACVFPN				
b. ACFFPS				
c. B1VFP				

E. Passive Treatment System Components

Component	Erosion Rills (Y/N)	Berms Stable (Y/N)	Vegetation Successful (Y/N)	Siltation Significant (Y/N)	Water Level Change (Y/N)	Valves Operable (Y/N)	Maintenance Performed and Remaining Indicate which component i.e. ACWL
ACVFPN							
ACVFPS							
ACFP							
B1VFP							
ACSPWL							
ACWL							
B1FP							
B1SP							
B1WL1							
B1WL2							
B1WL3							
B1B3VFP							
B1B3FP							
B1B3SPWL							
B1B3HFLB							
B3ASP							
B3SP							

F. Diversion Well (DW)

Is the Diversion Well effluent pipe flowing? Yes/No? If no, describe why and maintenance required.
(Determine level of stone in the Diversion Well with the marked rod. Lower rod into well. If mark on the rod is below the grate, add stone.)
Is there limestone in the Diversion Well? Yes/No? If no, was it recharged during this inspection? Yes/No?
Does #10 limestone aggregate need to be ordered? Yes/No?
Describe maintenance performed and remaining: _____

_____

G. Culvert Condition

Culvert	Functioning Properly (Y/N)	Siltation/ Plugging Significant (Y/N)	Damaged, Crushed or Broken (Y/N)	Maintenace Performed and Remaining Indicate which culvert
Culvert 1				
Culvert 2				
Culvert 3				

H. Wildlife Utilization

Animal sighted or tracks observed _____

Invasive plants observed _____

Describe any damage caused to treatment system by wildlife (especially muskrats) and required maintenance:_____

_____

I. Flow Measurements for VFP – Use Bucket and Stopwatch method (Indicate no flow by entering "0" in Gallons Measured)

[A maximum of 8 pipes will be discharging for ACVFPN, ACVFPS, and B1B3VFP. A maximum of 4 pipes will be discharging for B1VFP.]

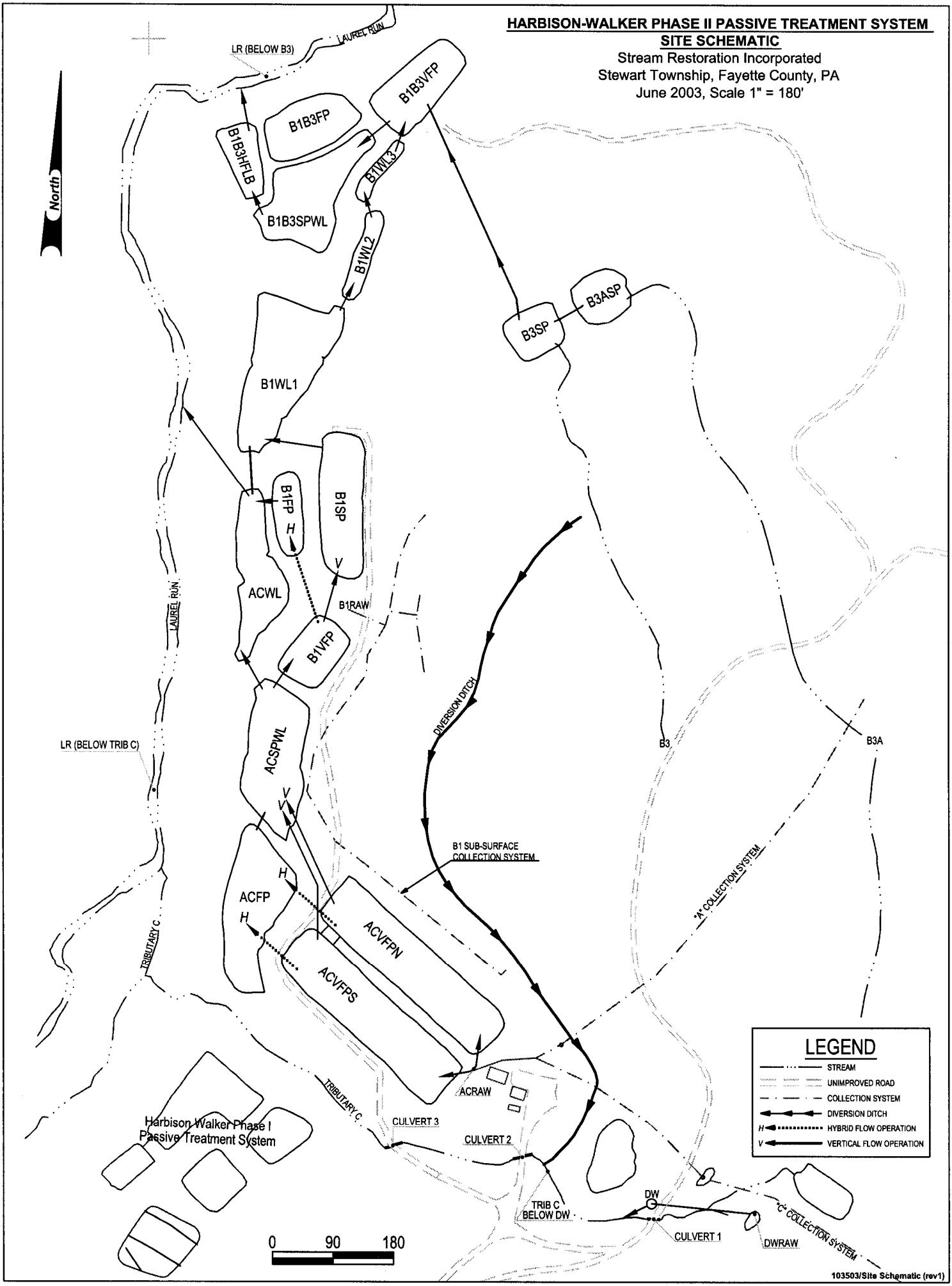
ACVFPN					ACVPS					B1VFP					B1B3VFP				
Pipe #	pH	Alk.	Flow		Pipe #	pH	Alk.	Flow		Pipe #	pH	Alk.	Flow		Pipe #	pH	Alk.	Flow	
			gals.	sec.				gals.	sec.				gals.	sec.				gals.	sec.
1V					9V					17V					21V				
1H					9H					17H					22V				
2V					10V					18V					23V				
2H					10H					18H					24V				
3H					11V					19V					25V				
3V					11H					19H					26V				
4V					12V					20V					27V				
4H					12H					20H					28V				
5V					13V					Identify by number any broken, plugged, or leaking pipes.									
5H					13H														
6V					14V														
6H					14H														
7V					15V														
7H					15H														
8V					16V														
8H					16H														

Was ACFPN flushed? Yes/No Was ACFPS flushed? Yes/No Was B1VFP flushed? Yes/No Was B1B3 flushed? Yes/No

I. Field Water Monitoring and Sample Collection - Raw water sample locations as marked on plan. For passive components sample effluent.

☐ **-** Not monitored

Sampling Point	Flow		pH	Temp (°C)	Alkalinity (mg/L)	DO (mg/L)	Iron (mg/L)	Comments	Bottle #	Bottle # (total metals)	Bottle # (diss. metals)
	gals	sec.									
ACRAW											
ACVFPN(composite)											
ACVFPS(composite)											
ACFP											
ACSPWL											
ACWL											
B1RAW											
B1VFP(composite)											
B1FP											
B1SP											
B1WL3											
B3ASP											
B3SP											
B1B3VFP(composite)											
B1B3SPWL											
B1B3HFLB											
DW RAW											
DW out											
LR BELOW TRIB C											
LR BELOW B3											
Trib. C (below DW)											


HARBISON-WALKER PHASE II PASSIVE TREATMENT SYSTEM
SITE SCHEMATIC
Stream Restoration Incorporated
Stewart Township, Fayette County, PA
June 2003, Scale 1" = 180'
North
LR (BELOW B3)
LAUREL RUN
B1B3VFP
B1B3FP
B1B3HFLB
B1WL3
B1B3SPWL
B1WL2
B3ASP
B3SP
B1WL1
B1FP
H
B1SP
V
ACWL
B1RAW
B1VFP
LAUREL RUN
DIVERSION DITCH
B3
B3A
LR (BELOW TRIB C)
ACSPWL
V
V
B1 SUB-SURFACE
COLLECTION SYSTEM
H
ACFP
H
ACVFPN
ACVFPS
"A" COLLECTION SYSTEM
TRIBUTARY C
TRIBUTARY C
ACRAW
Harbison Walker Phase I
Passive Treatment System
CULVERT 3
CULVERT 2
TRIB C
BELOW DW
DW
CULVERT 1
DWRAW
"C" COLLECTION SYSTEM
0
90
180
LEGEND
STREAM
UNIMPROVED ROAD
COLLECTION SYSTEM
DIVERSION DITCH
H HYBRID FLOW OPERATION
V VERTICAL FLOW OPERATION
103503/Site Schematic (rev1)