Stream Visual Assessment Protocol

(Modified by the Rutgers Cooperative Extension Water Resources Program, www.water.rutgers.edu)

28

PROJECT:

Evaluators Name Robbi / Petrus Date 2 JUL 07 Time 10:50

Property Owners Name (if applicable) _____

Stream Name Neshanic Grid ID A2-28

Reach Location upstream from Haines Rd

Applicable Reference Site N 4026.240 / W 074 54.064

GPS Coordinates (in degrees, minutes, and seconds): N 4026.235 W 074 54.062

Weather conditions today clear, sunny Past 2-5 days clear sunny w/ t-storm

Active channel width 3 ft *Dominant* substrate (*circle one*): boulder (cobble) gravel sand silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

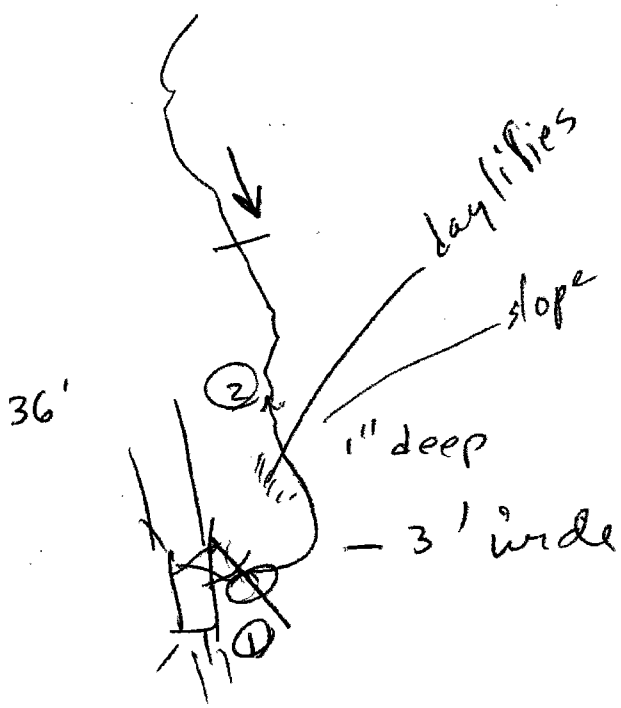

Photo Notes: 1. pool at bridge 2. downstream at end of run

3. entire run, downstream 4. _____

5. _____ 6. _____

7. _____ 8. _____

9. _____ 10. _____

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	8	Pools	3
Hydrologic Alteration (Score only if Applicable)	5	Invertebrate habitat	3
Riparian Zone Left:	3	Right: 3	
Bank Stability Left:	7	Right: 7	
Water Appearance	9		
Nutrient Enrichment	8		
Barriers to fish movement	9		
Instream fish cover	1		

Score only if applicable

Canopy Cover (use Manual for guidance)	8
Manure presence	
Salinity	
Riffle embeddedness (look in riffles)	
Macroinvertebrates Observed (optional)	

Overall Score 59 (69 ÷ 12 = 5.75)
(Total divided by number scored)
Left: 5 (5.9) Right: 5 (5.9) Average: 5 (5.9)

<6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
>9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest		
Pasture		
Cultivated Field		
Nursery		
Residential	✓	✓
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other no flow

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Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach? so short, not worth effort

Given dry weather, is there any running water in nearby stormwater structures? No

Access to this site...how far off of road is it? Accessible for large equipment, if necessary? Yes

Debris, trash, litter? No

Additional comments:

HAINES RD 28

Stream Visual Assessment Protocol

(Modified by the Rutgers Cooperative Extension Water Resources Program, www.water.rutgers.edu)

PROJECT:

Evaluators Name Cronan Bishop Date August 2, 2008 Time 11:30

Property Owners Name (if applicable)

Stream Name Headquarters Trib Grid ID **A2 - 28**

Reach Location Haines Rd

Applicable Reference Site

GPS Coordinates (in degrees, minutes, and seconds): on record separately

Weather conditions today clear, cool - hazy, wide clouds Past 2-5 days hot and muggy; rain 3-4 days

Active channel width 10 ft *Dominant* substrate (*circle one*): boulder (cobble) gravel sand silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

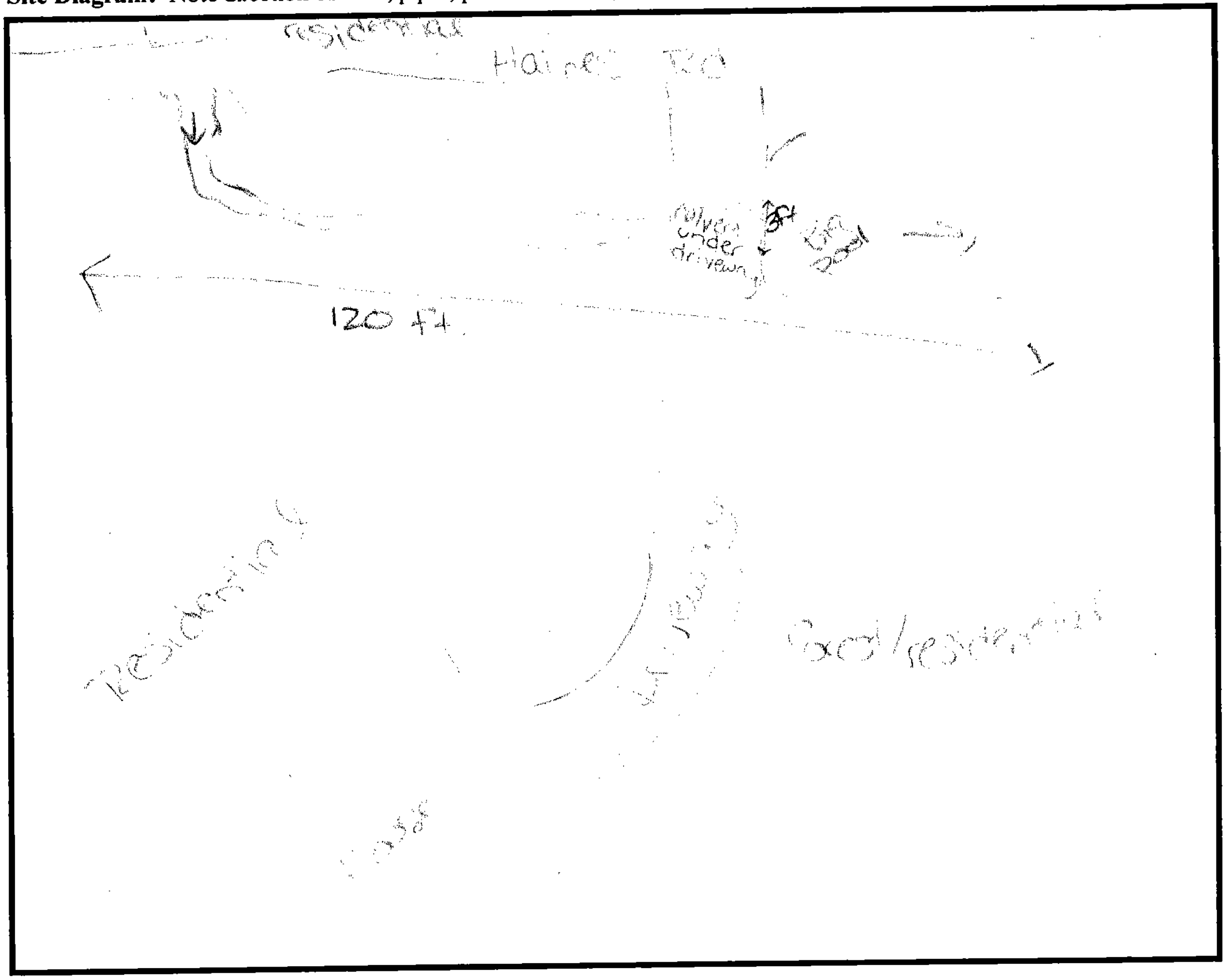

Photo Notes: 1. downstream from Haines Rd 2. downstream from culvert under driveway

3. upstream from end of reach 4.

5. 6.

7. 8.

9. 10.

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	2	Pools	7
Hydrologic Alteration (Score only if Applicable)	2	Invertebrate habitat	10
Riparian Zone Left:	4	Right: 2	
Bank Stability Left:	6	Right: 4	
Water Appearance	10		
Nutrient Enrichment	8		
Barriers to fish movement	5		
Instream fish cover	7		

Score only if applicable

Canopy Cover (use Manual for guidance)	10
Manure presence	—
Salinity	—
Riffle embeddedness (look in riffles)	10
Macroinvertebrates Observed (optional)	—

Overall Score 12
(Total divided by number scored)
Left: 6.75 (81) Right: 6.42 (77) Average: 6.6

< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest		
Pasture		
Cultivated Field		
Nursery		
Residential	100%	50%
Commercial		
Industrial		
Other Road		50%

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?

- protect banks
- planting
- remove invasives

Given dry weather, is there any running water in nearby stormwater structures?

no

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?

close yes

Debris, trash, litter?

no

Additional comments:

DUNKARD CHURCH #92

Stream Visual Assessment Protocol

(Modified by the Rutgers Cooperative Extension Water Resources Program, www.water.rutgers.edu)

PROJECT:

Evaluators Name KELLOGG / HINESLEY Date Sep 25 2007 Time 9AM

Property Owners Name (if applicable) DUNKARD CHURCH ?

Stream Name HEADWATERS TRIB Grid ID B2-92

Reach Location Bet. Lambert Rd. culvert & Dunkard Church culvert

Applicable Reference Site

GPS Coordinates (in degrees, minutes, and seconds):

Weather conditions today Sunny Past 2-5 days Light rain 3days ago 1/3"

Active channel width 12 ft *Dominant* substrate (*circle one*): boulder (cobble) (gravel) (sand) silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

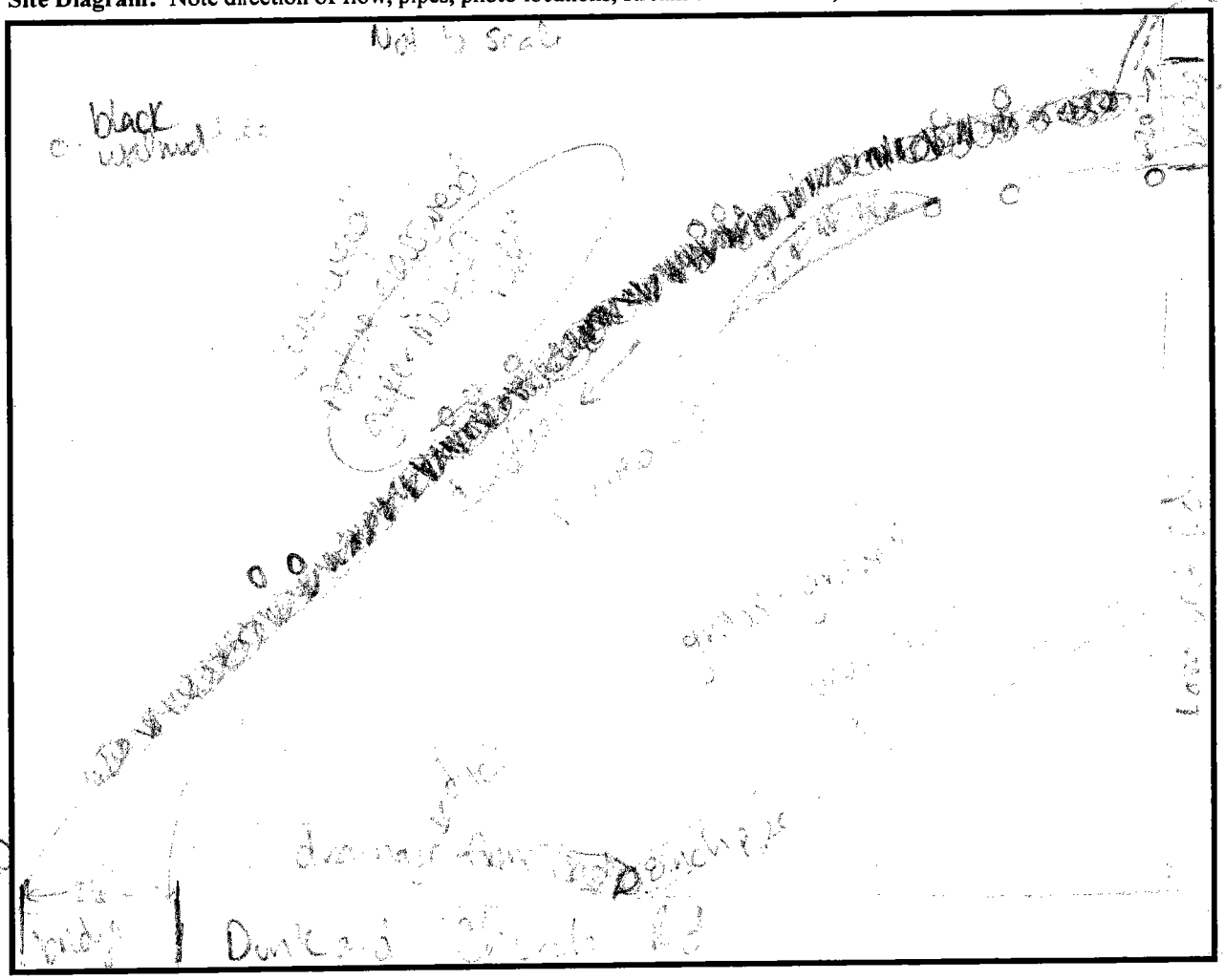

Photo Notes: 1. 2.

3. 4.

5. 6.

7. 8.

9. 10.

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	3	Pools	
Hydrologic Alteration (Score only if Applicable)	4	Invertebrate habitat	7
Riparian Zone Left:	7	Right:	1
Bank Stability Left:	8	Right:	3
Water Appearance	8		
Nutrient Enrichment	10		
Barriers to fish movement	10		
Instream fish cover	8		

Score only if applicable

Canopy Cover (use Manual for guidance)	10
Manure presence	—
Salinity	
Riffle embeddedness (look in riffles)	
Macroinvertebrates Observed (optional)	

Overall Score (Total divided by number scored)
Left: 7.5 / 75 Right: 6.4 / 64 Average: 7.0

< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest		
Pasture		
Cultivated Field		
Nursery		
Residential		
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?

Given dry weather, is there any running water in nearby stormwater structures?

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?

Debris, trash, litter?

Additional comments:

#110

97

Stream Visual Assessment Protocol

(Customized for Rutgers Cooperative Extension Water Resources Program)

ROJECT:

Evaluators Name Rossi / Peters Date 8/13/07 Time 135

Property Owners Name (if applicable)

Stream Name HEADQUARTERS TRIB Grid ID (A3)?

Reach Location

Applicable Reference Site

GPS Coordinates: N 40/26.287 W 074/52.838 // N 40/26.798 W 074/52.794

Weather conditions today partly sunny Past 2-5 days sunny

Active channel width 27 ft *Dominant* substrate (*circle one*): boulder cobble (gravel) sand (silt) mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

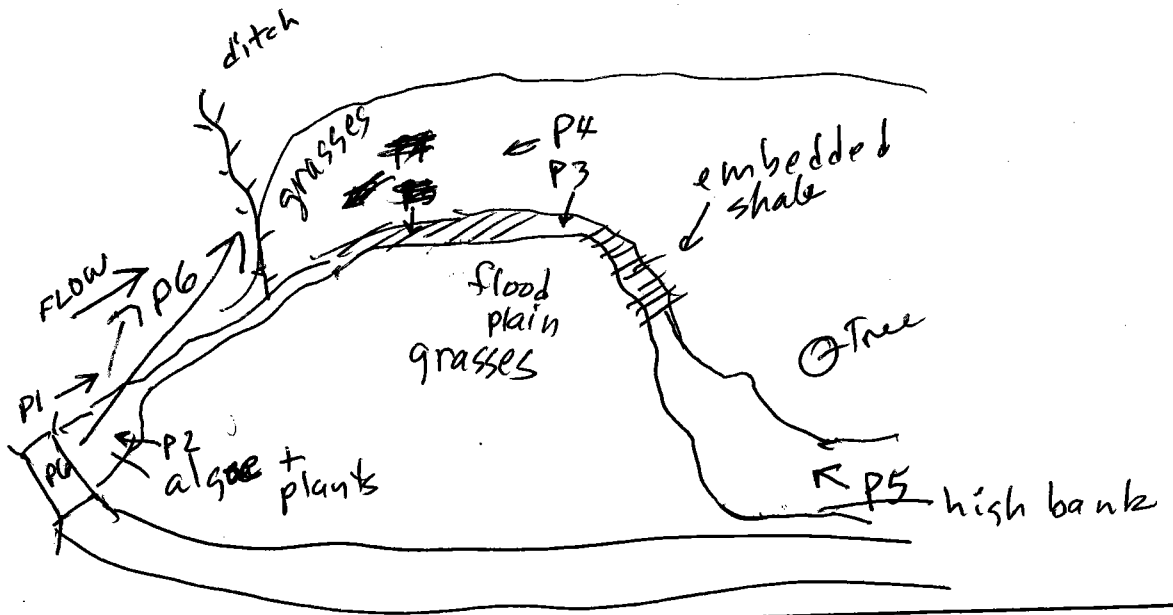

Photo Notes: 1. DS from bridge 2. US toward bridge
3. Dead fish 4. US from dead fish
5. end of run / US 6. bridge showing farm
7. 8.
9. 10.

SH 4

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	8 5	Pools	11
Hydrologic Alteration (Score only if Applicable)	8 5	Invertebrate habitat	5
Riparian Zone Left:	9	Right:	9
Bank Stability Left:	8	Right:	9
Water Appearance	7		
Nutrient Enrichment	7		
Barriers to fish movement	9		
Instream fish cover	4		

67

Score only if applicable

Canopy Cover (use Manual for guidance)	2
Manure presence	-
Salinity	
Riffle embeddedness (look in riffles)	3
Macroinvertebrates Observed (optional)	6

not included in Overall Score

mussel dragonflies fish water bugs

Overall Score 66
(Total divided by number scored)
Left: 6.6 Right: 6.7 Average: 6.65

< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest		
Pasture		
Cultivated Field		✓
Nursery		
Residential		
Commercial		
Industrial		
Other	floodplain	

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?
Extend buffer by bridge

Given dry weather, is there any running water in nearby stormwater structures?

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?
Accessible

Debris, trash, litter?
some—

Additional comments:

#103

Stream Visual Assessment Protocol

(Customized for Rutgers Cooperative Extension Water Resources Program)

PROJECT:

Evaluators Name ROBBI / PETRUS Date 8/13/07 Time 1:00 PM

Property Owners Name (if applicable) Frank Klesney (also ~~South/Midway~~) Sally/Ed Perkovic

Stream Name HEADQUARTERS TRIB Grid ID A3

Reach Location

Applicable Reference Site

GPS Coordinates: N 40/26.649 W 074/53.378 N 40/26.668 W 074/53.322

Weather conditions today [redacted] sunny/clear Past 2-5 days same

Active channel width 24 ft *Dominant* substrate (*circle one*): boulder cobble gravel sand silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

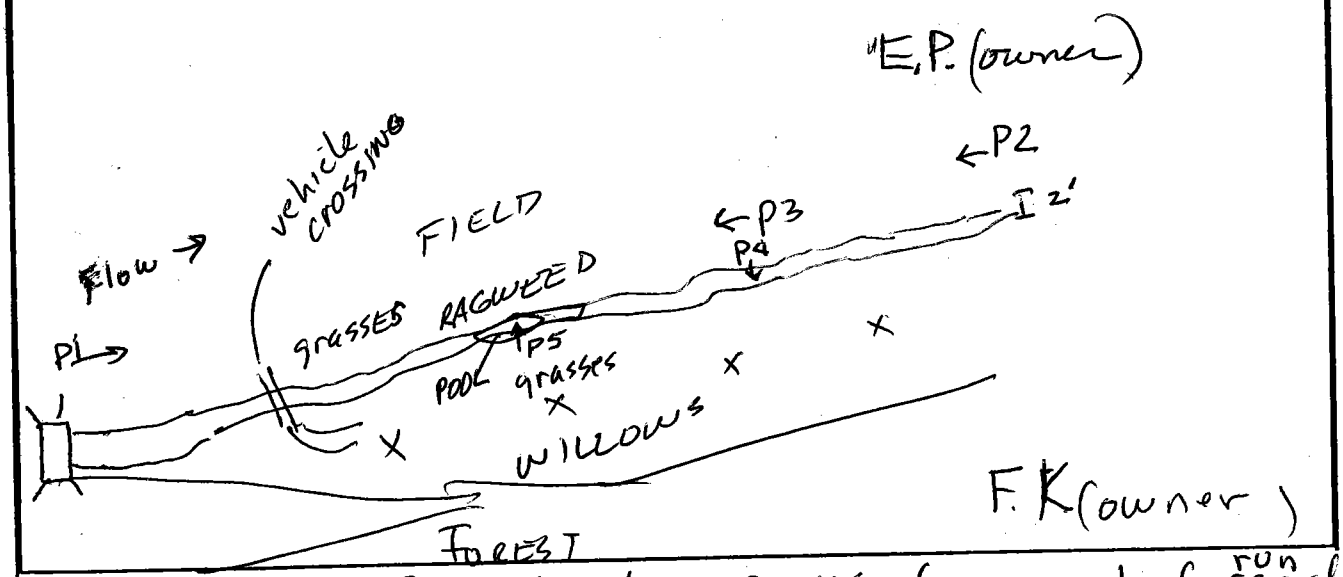

Photo Notes: 1. DS from bridge 2. US from end of run reach

3. Pool midway - upstream 4. Bottom ~~Break~~ pool

5. Bottom of pool 6.

7. 8.

9. 10.

#103

Assessment Scores (1-Poor to 10-Excellent) ***(facing upstream)***

Item	Score
Channel Condition	8
Hydrologic Alteration (Score only if Applicable)	7
Riparian Zone Left:	10
Riparian Zone Right:	4
Bank Stability Left:	10
Bank Stability Right:	2
Water Appearance	7
Nutrient Enrichment	8
Barriers to fish movement	9
Instream fish cover	1
Pools	3
Invertebrate habitat	2

Score only if applicable

Item	Score
Canopy Cover (use Manual for guidance)	6
Manure presence	
Salinity	
Riffle embeddedness (look in riffles)	
Macroinvertebrates Observed (optional)	

11 Overall Score L: 6.8 R: 5.2

(Total divided by number scored) 5.2 (5.8)

6.45 Left: [illegible] Right: [illegible] Average: [illegible]

71 [illegible] 57 6.0

Score	Rating
< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest	✓	
Pasture		✓
Cultivated Field		
Nursery		
Residential		
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates________________N
Diameter:__________in ________________W

Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO

Pipe Material: concrete steel PVC Clay Other

Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other________________

Channel downstream eroded? YES NO

Pipe gathers water from (road, yard, farm, etc.):________________________________

Flow appearance: clear turbid oily foamy colored other________

Outfall Pipe 2: (Photo #__ and mark on site diagram) GPS Coordinates________________N
Diameter:__________in ________________W

Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO

Pipe Material: concrete steel PVC Clay Other

Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other________________

Channel downstream eroded? YES NO

Pipe gathers water from (road, yard, farm, etc.):________________________________

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?
Stabilize right bank; ~~add~~ create riparian zone
Upstream; left bank,...
Remove INVASIVES
Given dry weather, is there any running water in nearby stormwater structures?

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?
by bridge; yes

Debris, trash, litter?
4x8 plywood

Additional comments:

~~W[illegible]~~ Rd 10[illegible]4
Dunkard Church

Stream Visual Assessment Protocol

(Modified by the Rutgers Cooperative Extension Water Resources Program, www.water.rutgers.edu)

PROJECT:

Evaluators Name CRONAN [illegible] Date [illegible] Time 2:15

Property Owners Name (if applicable) ____

Stream Name HCo Trib. Grid ID A[illegible]-10[illegible]

Reach Location ____

Applicable Reference Site ____

GPS Coordinates (in degrees, minutes, and seconds): ____

Weather conditions today partly [illegible] cloudy Past 2-5 days [illegible]

Active channel width 17 ft *Dominant* substrate (*circle one*): boulder cobble gravel sand silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

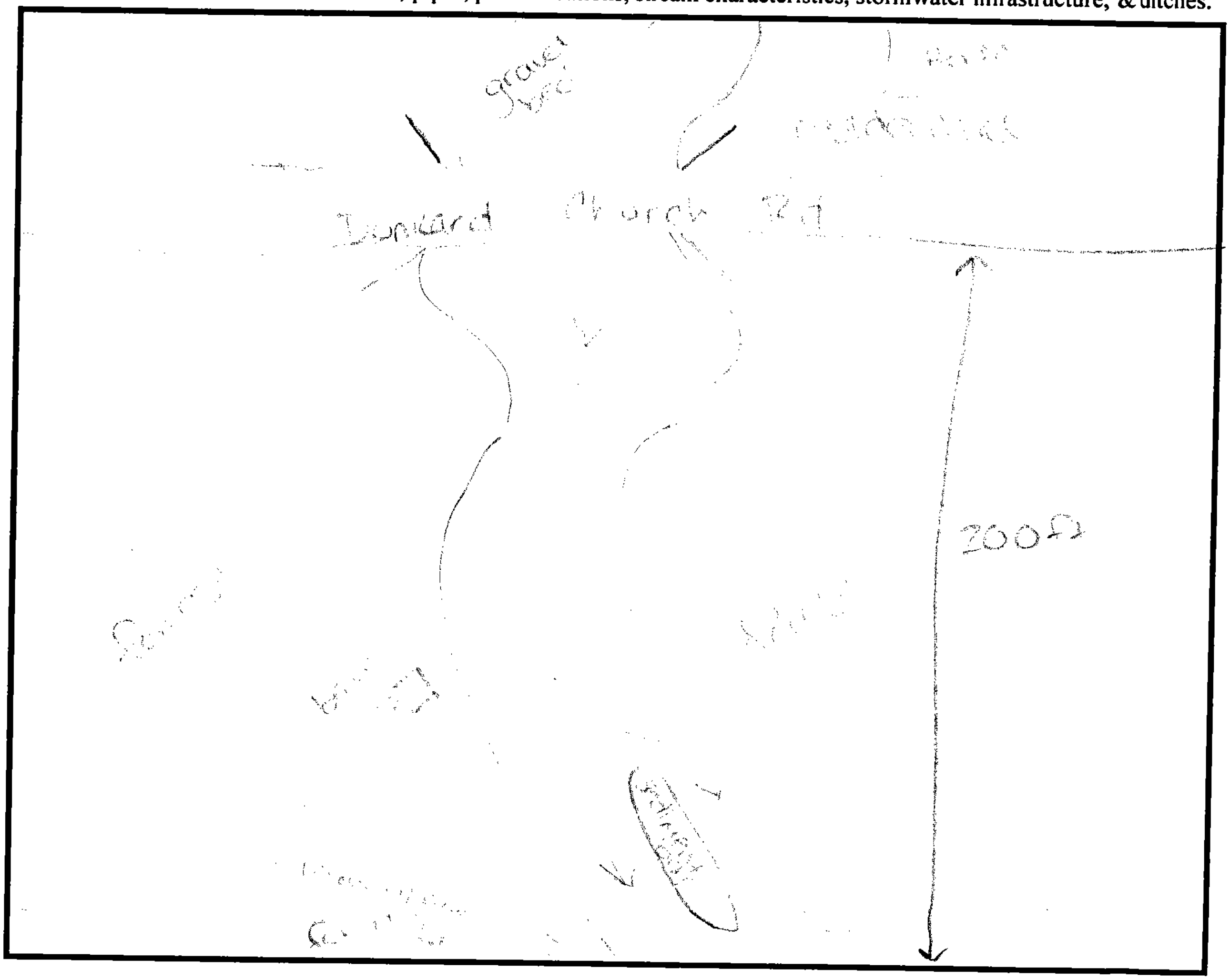

Photo Notes: 1. Bridge looking upstream 2. Snake w/ fish
3. bridge looking downstream 4. riffle in stream
5. upstream near end of reach 6. ____
7. ____ 8. ____
9. ____ 10. ____

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	6	Pools	2
Hydrologic Alteration (Score only if Applicable)	5	Invertebrate habitat	10
Riparian Zone Left:	8	Right:	9
Bank Stability Left:	5	Right:	7
Water Appearance	9		
Nutrient Enrichment	5		
Barriers to fish movement	9		
Instream fish cover	6		

Score only if applicable

Canopy Cover (use Manual for guidance)	10
Manure presence	—
Salinity	—
Riffle embeddedness (look in riffles)	10
Macroinvertebrates Observed (optional)	—

Overall Score 12
(Total divided by number scored)
Left: 7.1 (85) Right: 7.3 (88) Average: 7.2

< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest	70%	100%
Pasture		
Cultivated Field		
Nursery		
Residential	30%	
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo #__ and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch 3 ft at end of reach _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from: old farm field

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?
remove invasives
plant native trees

Given dry weather, is there any running water in nearby stormwater structures?

N/A

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?

good

Debris, trash, litter?

no

Additional comments:

SANDBROOK - HQ

#106

Stream Visual Assessment Protocol

(Modified by the Rutgers Cooperative Extension Water Resources Program, www.water.rutgers.edu)

PROJECT:

Evaluators Name [illegible] Date _____ Time 1100

Property Owners Name (if applicable) _____

Stream Name HEADQUARTERS TRIB. Grid ID A2-106

Reach Location SANDBROOK - HEADQUARTERS

Applicable Reference Site _____

GPS Coordinates (in degrees, minutes, and seconds): _____

Weather conditions today _____ Past 2-5 days _____

Active channel width 15 ft *Dominant* substrate (*circle one*): boulder (cobble) gravel sand silt mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

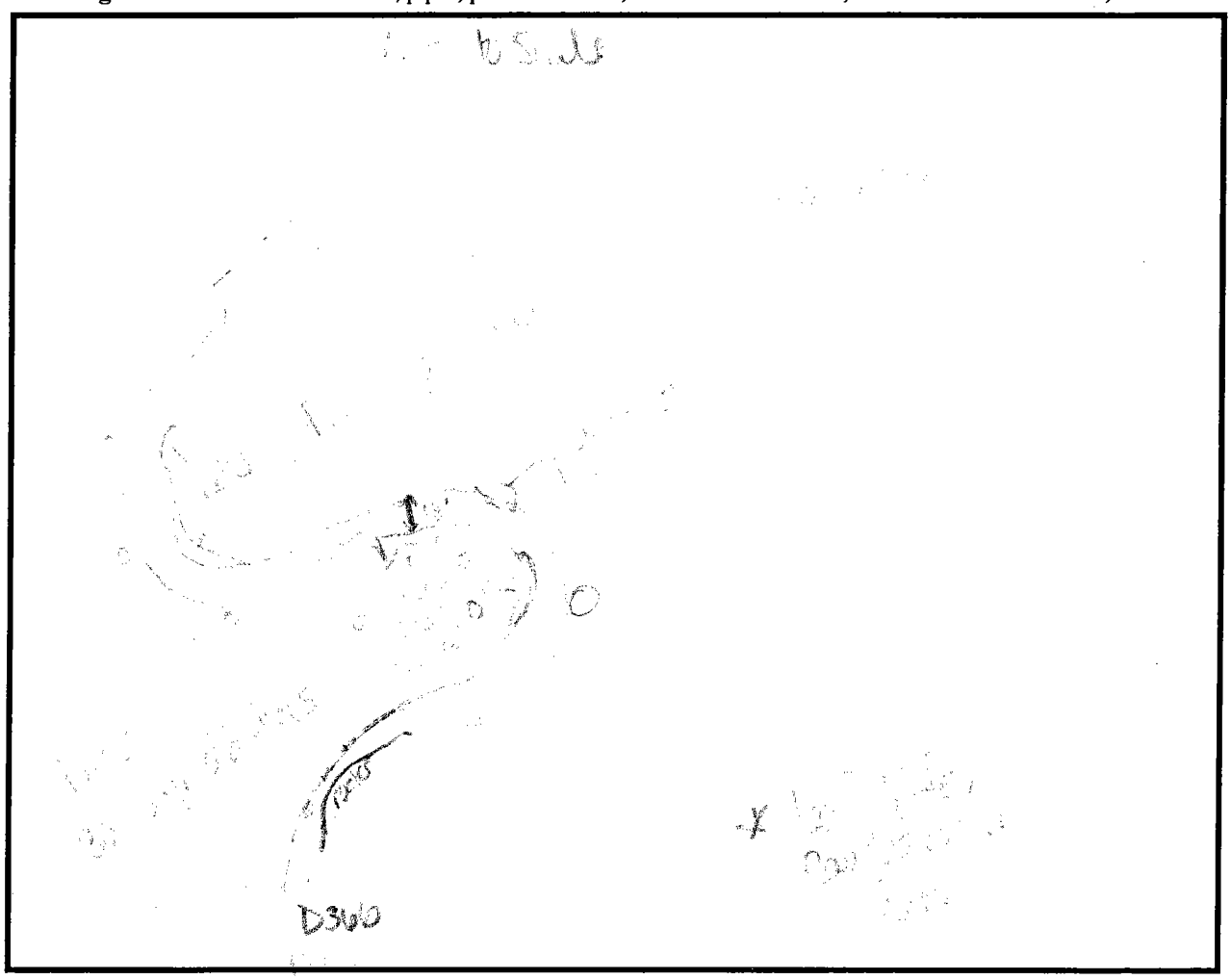

Photo Notes: 1. _____ 2. _____

3. _____ 4. _____

5. _____ 6. _____

7. _____ 8. _____

9. _____ 10. _____

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	3	Pools	
Hydrologic Alteration (Score only if Applicable)	7	Invertebrate habitat	7
Riparian Zone Left:	7	Right: 10	
Bank Stability Left:	7	Right: 3	
Water Appearance	10		
Nutrient Enrichment	7		
Barriers to fish movement	10		
Instream fish cover	7		

Score only if applicable

Canopy Cover (use Manual for guidance)	10
Manure presence	
Salinity	
Riffle embeddedness (look in riffles)	
Macroinvertebrates Observed (optional)	

Overall Score (Total divided by number scored)		
Left: 6.9 (76) Right: 6.8 (75) Average: 6.8	7.5-8.9	Good
	> 9.0	Excellent

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest	X	X
Pasture		
Cultivated Field		
Nursery		
Residential		
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo # and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____
Flow appearance: clear turbid oily foamy colored other_____

Outfall Pipe 2: (Photo # __and mark on site diagram) GPS Coordinates_____N
Diameter:_____in _____
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other_____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.):_____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
Width of ditch_____ft _____W
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?

Given dry weather, is there any running water in nearby stormwater structures?

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?

Debris, trash, litter?

Additional comments:

#97
#110

Stream Visual Assessment Protocol

(Customized for Rutgers Cooperative Extension Water Resources Program)

PROJECT:

Evaluators Name ROBBI / PETRUS Date 8/13/07 Time 2:50 pm

Property Owners Name (if applicable) Roger Everitt

Stream Name ~~HEADWATERS~~ TRIB Grid ID A3

Reach Location Dunkard Church & J. Rutgers Rd

Applicable Reference Site

GPS Coordinates: N 40/26.818 W 074/52.442 // N 40/26.840 W 074/52.920

Weather conditions today SUNNY Past 2-5 days SUNNY

Active channel width 24 ft *Dominant* substrate (*circle one*): boulder cobble (gravel) sand (silt) mud

Site Diagram: Note direction of flow, pipes, photo locations, stream characteristics, stormwater infrastructure, & ditches.

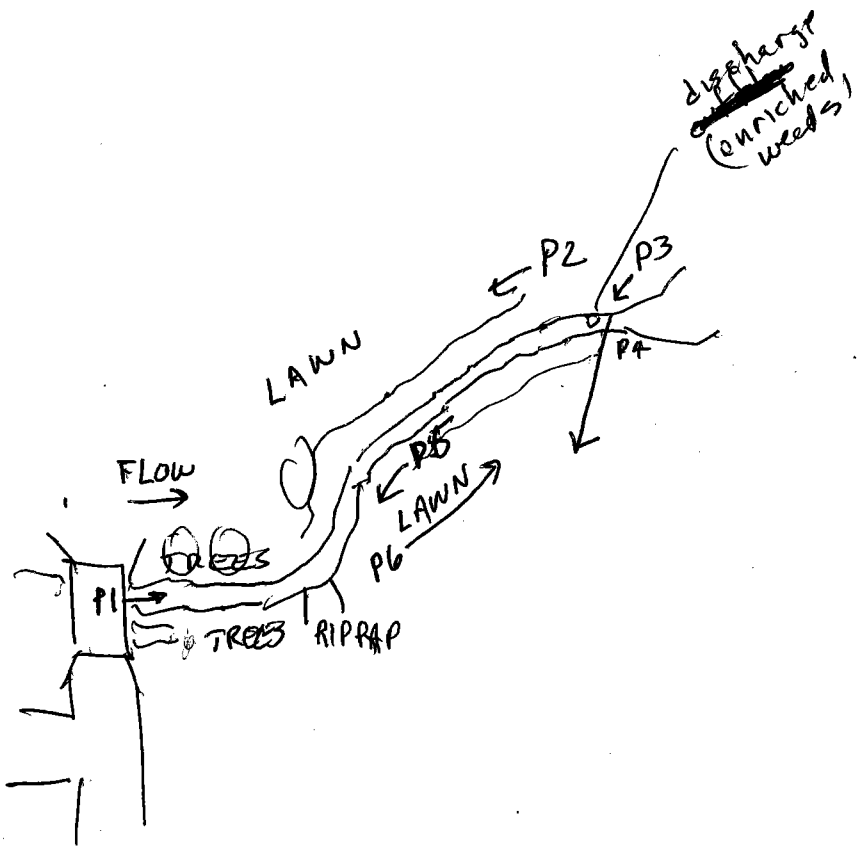

Photo Notes: 1. DS from bridge 2. US - pool with duckweed
3. discharge pipe 4. across at end of reach
5. upstream at curve 6. DS from curve w/ sign
7. 8.
9. 10.

5P6

Assessment Scores (1-Poor to 10-Excellent)

(facing upstream)

Channel Condition	9	Pools	1
Hydrologic Alteration (Score only if Applicable)	8	Invertebrate habitat	3
Riparian Zone Left:	6	Right:	4
Bank Stability Left:	7	Right:	4
Water Appearance	7		
Nutrient Enrichment	7		
Barriers to fish movement	9		
Instream fish cover	1		

Score only if applicable

Canopy Cover (use Manual for guidance)	2
Manure presence	-
Salinity	-
Riffle embeddedness (look in riffles)	
Macroinvertebrates Observed (optional)	

not included

Overall Score (Total divided by number scored)
Left: 5.8 Right: 5.3 Average: 5.5

< 6.0	Poor
6.1-7.4	Fair
7.5-8.9	Good
> 9.0	Excellent

48

Streamside Land Use:

(within 100 ft. of top of bank)
Check all that apply:

Land Use Category	While Observed in the field	
	Left Bank	Right Bank
Forest		
Pasture		
Cultivated Field	✓	
Nursery		
Residential		✓
Commercial		
Industrial		
Other		

Outfall Pipe 1: (Photo # 3 and mark on site diagram) GPS Coordinates _____N
Diameter: 6 in _____W see end of reach
Headwall? YES (NO) Double culvert? YES (NO) Streambank at outfall eroded? (YES) NO
Pipe Material: concrete steel (PVC?) Clay Other
Location of Pipe: in stream, at top of bank, (in bank,) out of/ under bridge, other _____
Channel downstream eroded? YES (NO)
Pipe gathers water from (road, (yard,) farm, etc.): _____
Flow appearance: clear turbid oily foamy colored other evid of enrichment see P3

Outfall Pipe 2: (Photo # __ and mark on site diagram) GPS Coordinates _____N
Diameter: _____ in _____W
Headwall? YES NO Double culvert? YES NO Streambank at outfall eroded? YES NO
Pipe Material: concrete steel PVC Clay Other
Location of Pipe: in stream, at top of bank, in bank, out of/ under bridge, other _____
Channel downstream eroded? YES NO
Pipe gathers water from (road, yard, farm, etc.): _____

Flow appearance: clear turbid oily foamy colored other_____

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Drainage Ditch: (Photograph #__ and mark on site diagram) GPS Coordinates _____N
_____W
Width of ditch_____ft
Begins at: _____ Ditch lining: stone, vegetation, concrete, mud, other_____
Ditch is: Stable, Eroding Ditch Flow is: none, intermittent, steady
Stream channel downstream is: stable, eroded, silted Flow is: clear, cloudy, oily, foamy, colored
Ditch comes from:

Comments & Suggestions:
Do you have suggestions for remediation along this reach?

filter outflow
enhance buffers

Given dry weather, is there any running water in nearby stormwater structures?

Access to this site...how far off of road is it? Accessible for large equipment, if necessary?

very accessible.

Debris, trash, litter?

none

Additional comments: