STX EE WATERSHEDS SBR-01 **RETROFITS**

Site Name/ID: Fire Station **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Corporal Michael Henry - 643-8012 (D shift)
Fire Chief for DEMO project

Land Use: ☒ Public ☐ Private ☐ Unknown:

☐ Single Family Residential ☐ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☐ Road
☐ Commercial/Industrial ☐ Resort ☐ Marina ☒ Other: municipal facilities

Is the site a hotspot? ☐ Yes ☐ No ☒ Unknown: Could be some floor drain issues
Sources/pollutants observed? ☒ No ☐ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown:

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:
- Noted rec facility - Bball on site, want to do a community center
- Police Substation to be constructed?
- very flat area at bottom of watershed. Gut directly adjacent to property

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☐ existing BMP upgrade ☒ new BMP

☒ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☒ disconnection ☐ Other (describe):

Area Draining to Retrofit
☐ Hotspot ☐ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☒ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☒ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☐ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☐ Adjacent Land Use ☐ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts:
None - very willing fire corporal D-Shift

NEXT STEPS

Candidate for pilot project ☒ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☐ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☐ Obtain utility mapping
☐ Confirm soil types

☒ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

Combine with Community center concept - demonstration area with signage. Island bios for road runoff + some fire station / bus stop runoff.

Sketch and/or Sizing Calcs:

see aerial

Existing Head Available/Where Measured:

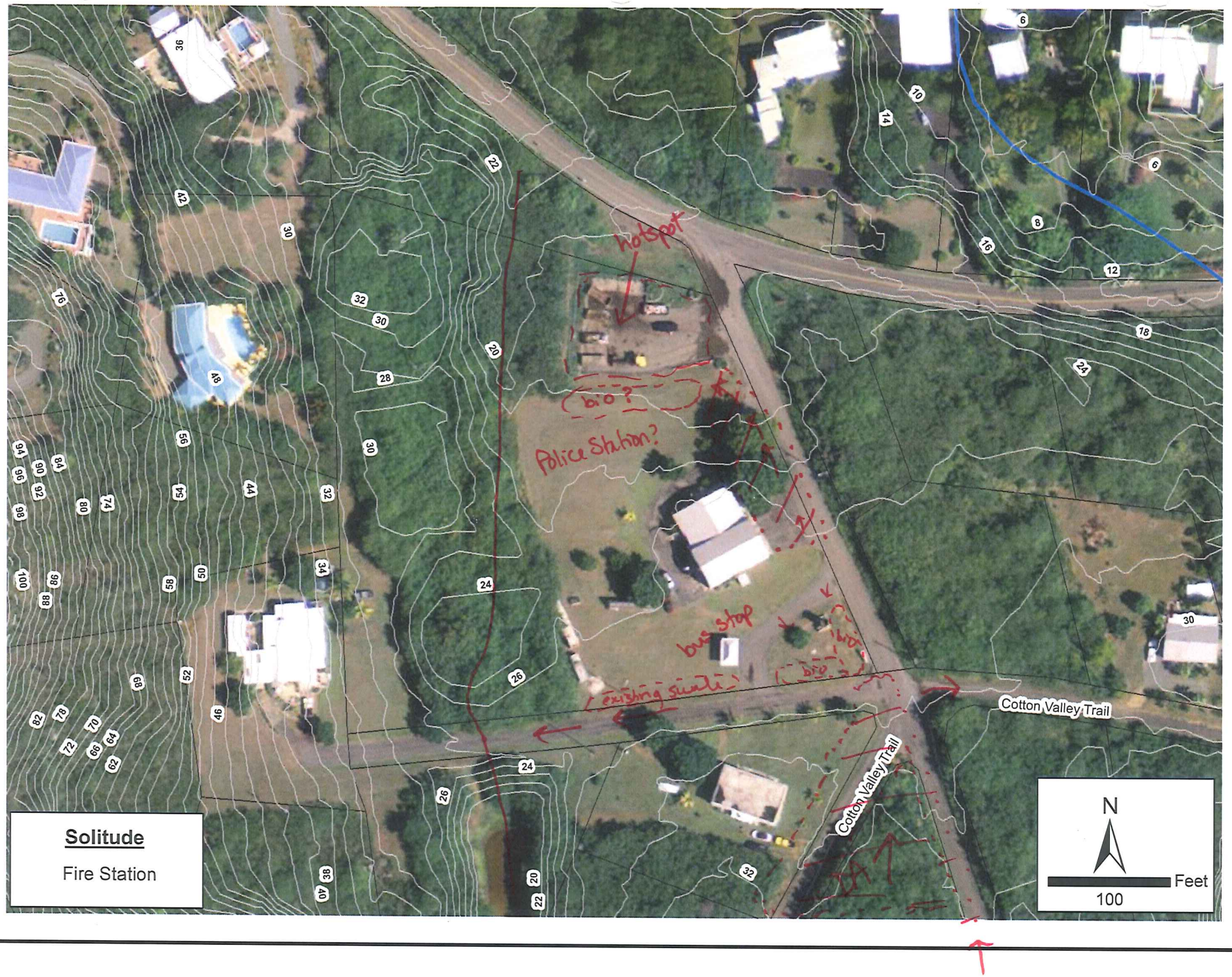
very shallow grades

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☒ Low ☐ Medium ☐ High

fire guys looking for things to do!

Site ID_____


hotspot
bio?
Police Station?
bus stop
bio
existing shelter
Cotton Valley Trail
Cotton Valley Trail
Solitude
Fire Station
N
Feet
100

STX EE WATERSHEDS **RETROFITS**

Site Name/ID: SBR-02 Blue Water Terrace **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW / KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Stephanie
340 642-692-2583
or Laune / Paulie - owners

Land Use: ☒ Public ☐ Private ☐ Unknown:

☐ Single Family Residential ☐ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☐ Road
☒ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____ Restaurant

Is the site a hotspot? ☒ Yes ☐ No ☐ Unknown:
Sources/pollutants observed? ☐ No ☒ Sediment ☐ Nutrients/organics ☒ Oil/grease ☒ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown: cisterns

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

- unpaved parking lot at restaurant. No gullying yet → new site. High-end restaurant with good education potential. Hotspot issues with cleaning products/location and dumpster juice. A lot of space for BIOS. Riparian buffer encroachment. 2 separate bio locations.

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☐ existing BMP upgrade ☒ new BMP

☒ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☐ Other (describe):

Area Draining to Retrofit
☒ Hotspot ☐ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☐ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ 2 acres/sq ft
Imperviousness ≈ 60 %
Impervious Area ≈ 1.2 acres/sq ft

Benefits of Retrofit (primary & secondary): ☐ Storage ☒ Water Quality ☐ Recharge ☒ Gut Protection ☒
Demonstration / Education ☐ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☐ Adjacent Land Use ☐ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts: None - perfect location

NEXT STEPS

Candidate for pilot project ☒ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☒ Obtain existing as-builts/site plans
☒ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☐ Obtain utility mapping
☒ Confirm soil types

Site ID _____

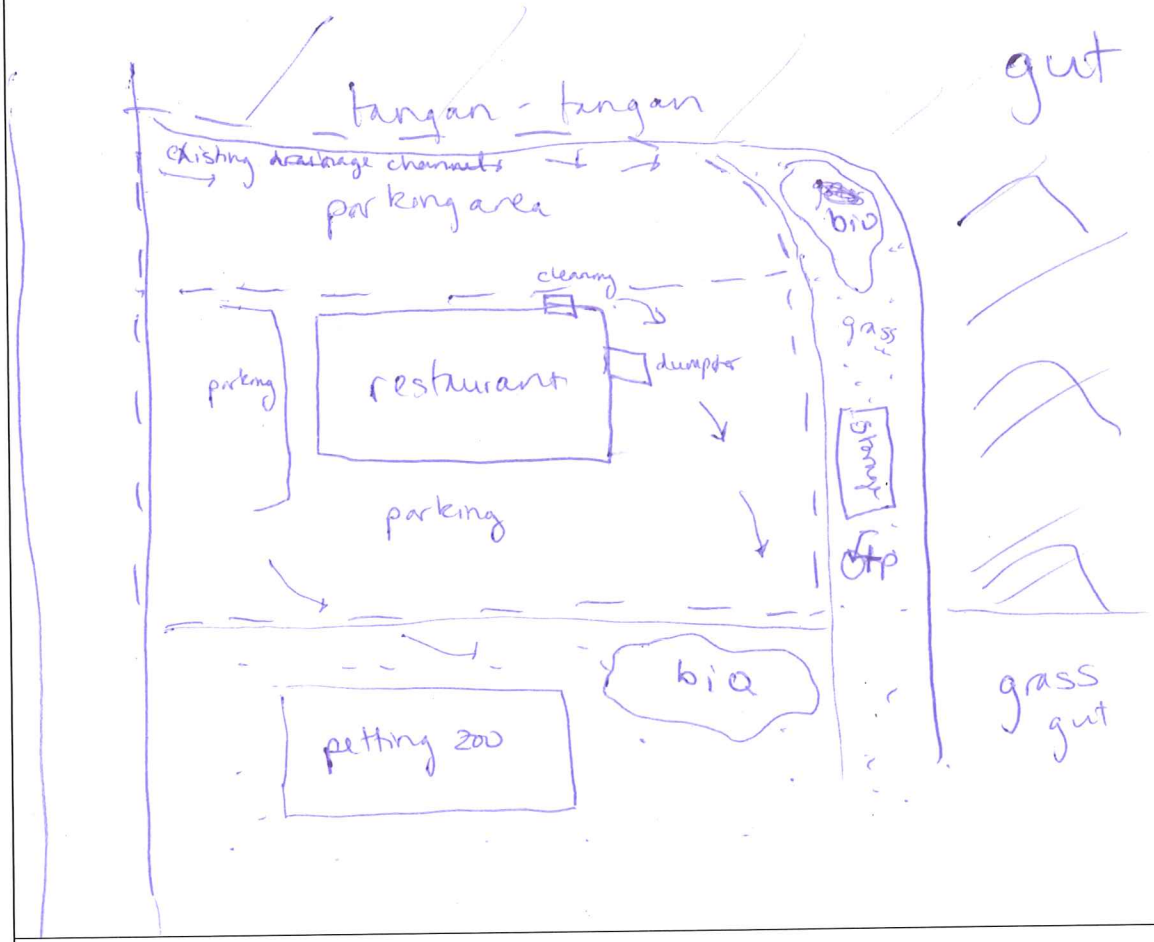
☐ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

two island bios

Sketch and/or Sizing Calcs:



Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site ID_____

STX EE WATERSHEDS SB-R-03 **RETROFITS**

Site Name/ID: Seven Flaggs Rd **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info:

Land Use: ☒ Public ☒ Private ☐ Unknown: Private residences / public Road

☒ Single Family Residential ☐ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☒ Road
☒ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____

Is the site a hotspot? ☐ Yes ☒ No ☐ Unknown:
Sources/pollutants observed? ☐ No ☒ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown:

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Gut follows along road → major erosion, road is threatened
Blocked culverts at downstream end, convergence of 2 guts
Potential area behind new upstream lets for storage

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☒ existing BMP upgrade ☒ new BMP

☐ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☒ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☐ Other (describe):

Area Draining to Retrofit
☐ Hotspot ☐ Individual rooftop
☒ Parking Lot ☒ other small impervious area
☒ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☒ Storage ☒ Water Quality ☐ Recharge ☒ Gut Protection ☒
Demonstration / Education ☒ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☒ Access
☒ Adjacent Land Use ☐ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts:

NEXT STEPS

Candidate for pilot project ☒ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☐ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☐ Obtain utility mapping
☐ Confirm soil types

☒ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

Desperately need to pave road and put in stormwater infrastructure along road. Possibility for on-lot storage retrofits to help slow/reduce quantity. New houses added to issue!
- Divert some of road drainage behind houses - pot. treat in series

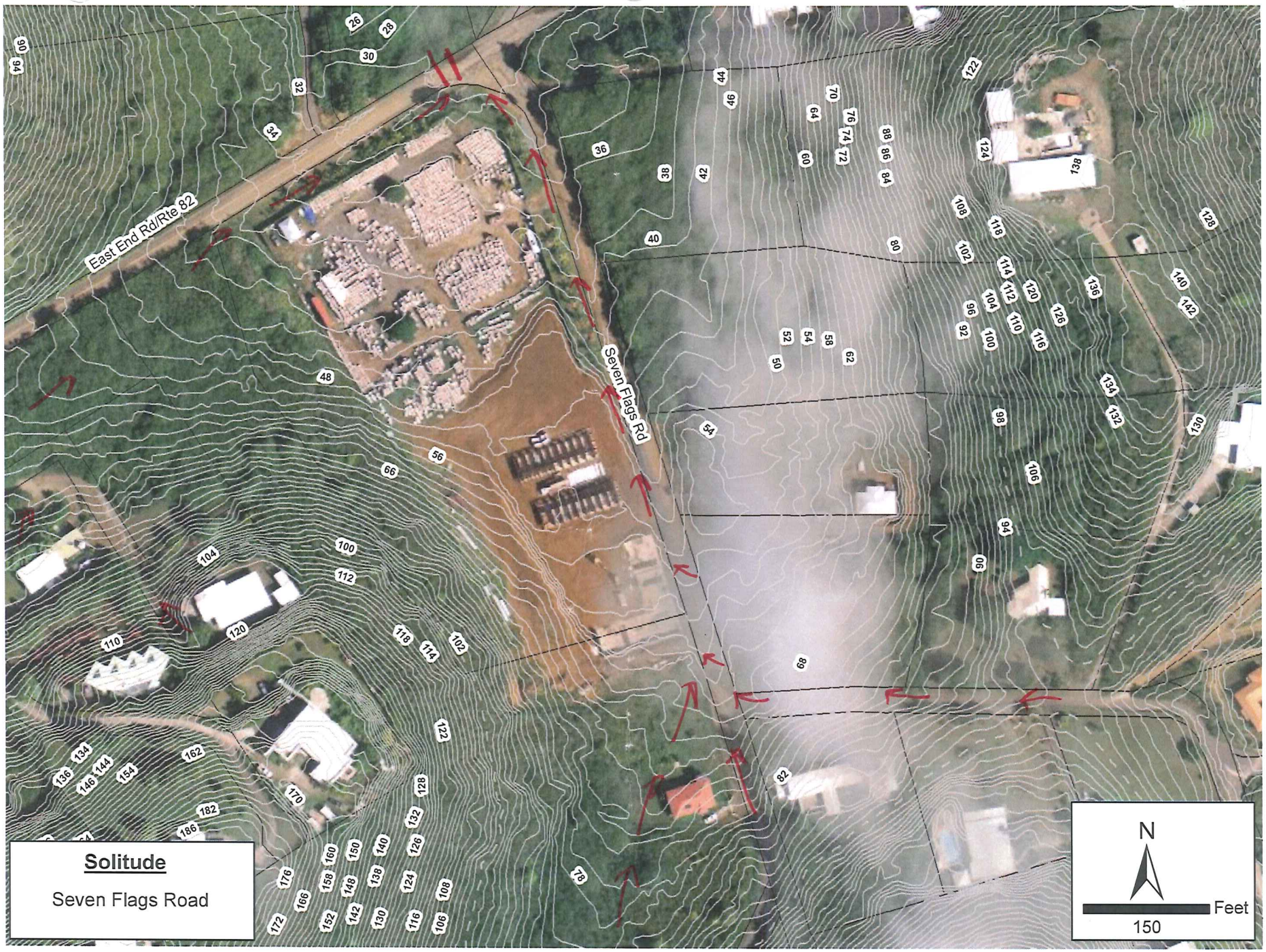
Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site ID_____


East End Rd/Rte 82
Seven Flags Rd
Solitude
Seven Flags Road
N
Feet
150

STX EE WATERSHEDS **RETROFITS**

Site Name/ID: SB-R-04 Gas-Rob **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Mike Ziegler 773-8382

Land Use: ☐ Public ☒ Private ☐ Unknown:

☐ Single Family Residential ☐ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☐ Road
☒ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____ Gas Station

Is the site a hotspot? ☒ Yes ☐ No ☐ Unknown:
Sources/pollutants observed? ☐ No ☒ Sediment ☐ Nutrients/organics ☒ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown: catch basin

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Catchbasin - 30 in pipe discharges to Coakley Bay via 48" pipe through Ruban Roebuck's property

(*) Downstream 48" culvert - sinkholes around manholes - hazard, corroded - need to fix whole system
- DPW has been contacted - est. # $42,400
- capacity fine - no observed flooding

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☐ existing BMP upgrade ☒ new BMP

☐ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☒ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☐ Other (describe):

Area Draining to Retrofit
☒ Hotspot ☐ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☒ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft
Imperviousness ≈ _____% GIS
Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☐ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☐ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☐ Adjacent Land Use ☐ Existing Utilities - Maybe
☒ Contamination ☐ High water table
☐ Limited access to water ☒ Other: Pavement

Describe conflicts: Existing parking lot

NEXT STEPS

Candidate for pilot project ☐ yep, love it ☒ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☒ Obtain detailed topography
☒ Confirm storm drain invert elevations
☐ Other:
☒ Obtain utility mapping
☐ Confirm soil types

Site ID _____

☒ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

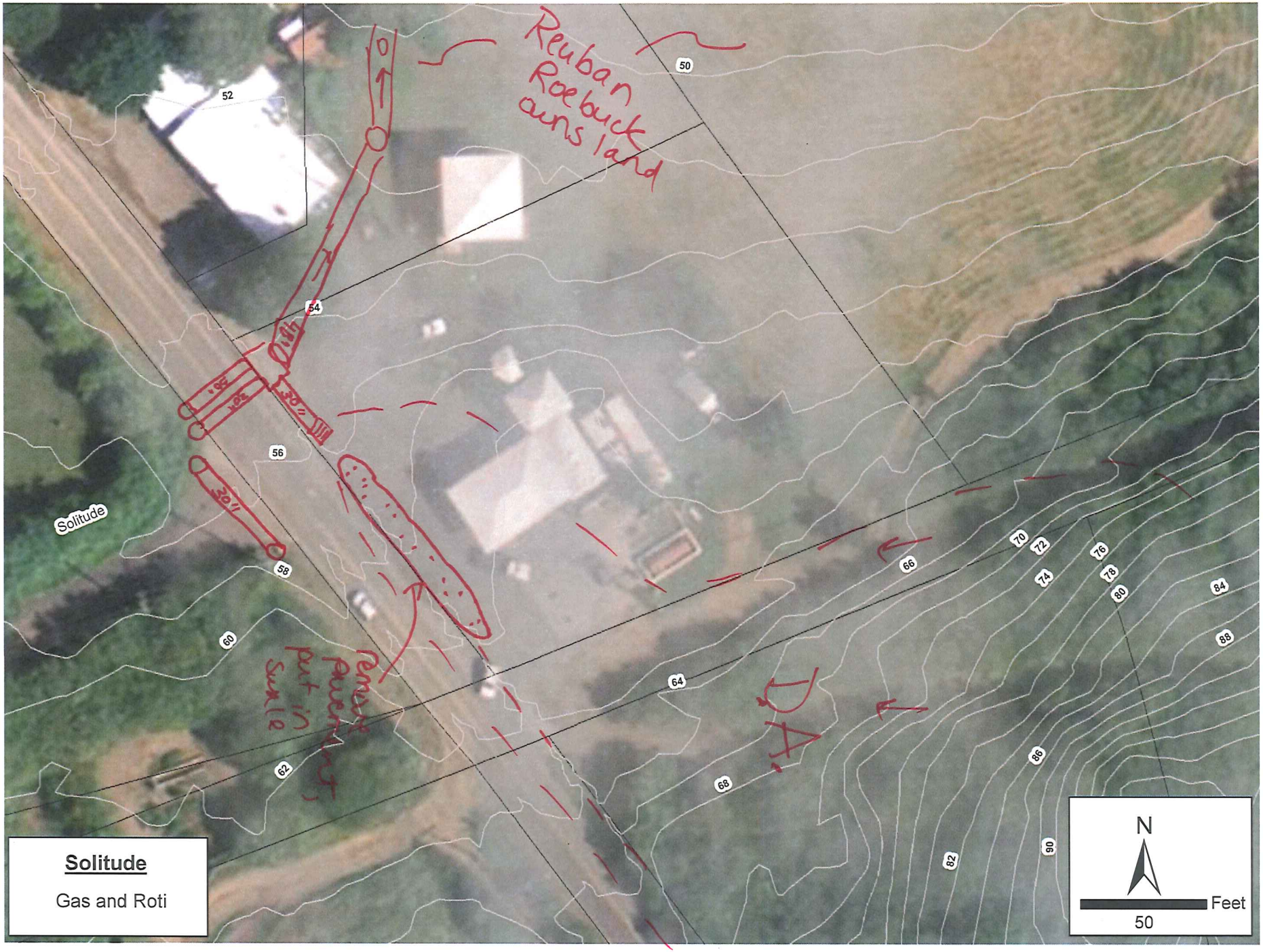
Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site ID_____


Reuban
Roebuck
owns land
Solitude
Remove pavement, put in Swale
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
86
88
90
Solitude
Gas and Roti
N
Feet
50

STX EE WATERSHEDS **RETROFITS**

Site Name/ID: SB-R-05 Coakley Bay Condos **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW/KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Eric Zolner - General Manager
generalmanager@coakleybay.org
340-773-9600
Pam Leach office manager

Land Use: ☐ Public ☒ Private ☐ Unknown:

☐ Single Family Residential ☒ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☐ Road
☐ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____

Is the site a hotspot? ☐ Yes ☒ No ☐ Unknown:
Sources/pollutants observed? ☒ No ☐ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☒ Yes ☐ No ☐ Unknown: concrete channels

Soils: ☐ Unknown ☐ poor infiltration ☐ good infiltration B/C

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Steep site with a lot of parking/driveway. Runoff directed around property in a series of concrete ditches/channels. One area where ponding has occurred and condo ass. putting in curb/pvc drains.

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☒ existing BMP upgrade ☒ new BMP

☒ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☒ Other (describe): Sediment forebays

Area Draining to Retrofit

☐ Hotspot ☐ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☐ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☐ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☒ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☒ Access ☒ Adjacent Land Use ☒ Existing Utilities ☐ Contamination ☐ High water table ☐ Limited access to water ☐ Other:

Describe conflicts:

NEXT STEPS

Candidate for pilot project ☐ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept

☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☒ Obtain existing as-builts/site plans
☒ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☒ Obtain utility mapping
☒ Confirm soil types

Site ID _____

☐ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site ID_____


40
30
50
60
80
110
70
90
160
130
150
170
140
120
180
200
210
100
230
220
190
250
240
260
Solitude
Coakley Bay
Condos
N
Feet
150


Solitude
Coakley Bay
Condos
N
Feet
150

STX EE WATERSHEDS **RETROFITS**

Site Name/ID: SB-R-06 East End Rd - Dirt Rd Discharge near Oakley Bay **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW/KR/ACK

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info:

Land Use: ☒ Public ☐ Private ☐ Unknown:

☐ Single Family Residential ☒ Multi-Fam. Residential ☐ School ☐ Golf Course ☒ Park ☐ Agricultural ☒ Road
☐ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____

Is the site a hotspot? ☐ Yes ☒ No ☐ Unknown:
Sources/pollutants observed? ☐ No ☒ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown:

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Stormwater flows from Oakley Bay Condos onto East End Rd. Instead of flowing in shallow swale to an 18-inch culvert (SB-RCP16), most flow crosses road and erodes an unpaved, steep beach access.

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☐ existing BMP upgrade ☐ new BMP

☐ island bio/rain garden ☒ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☒ Other (describe): access stabilization/signage

Area Draining to Retrofit
☐ Hotspot ☐ Individual rooftop
☐ Parking Lot ☐ other small impervious area
☒ Street ☐ Pervious area
☒ Other (describe): large condo development

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☐ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☒ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☒ Adjacent Land Use ☒ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts:

NEXT STEPS

Candidate for pilot project ☒ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☒ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☐ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☒ Obtain utility mapping
☐ Confirm soil types

☐ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

- construct swale to convey runoff from Coakley Bay Condos to existing culvert (SB-RC-16). Enlarge culvert as necessary.
- block access from vehicular traffic, stabilize, and create stable pedestrian trail access.
- Public Ed signage.

Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site ID_____

STX EE WATERSHEDS Carden Beach **RETROFITS**

Site Name/ID: SB-R-07 **Watershed:** Solitude

Date: 12/6/11 **Assessed by:** MW/KR/ACK

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info:

Manager: Don Sallach 778-6798

Land Use: ☐ Public ☒ Private ☐ Unknown:

☒ Single Family Residential ☒ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☒ Road
☐ Commercial/Industrial ☒ Resort ☐ Marina ☐ Other: _____

Is the site a hotspot? ☐ Yes ☒ No ☐ Unknown:
Sources/pollutants observed? ☐ No ☒ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☒ Yes ☐ No ☐ Unknown: riprap channel / sediment forebay

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Stormwater flows from eastern portion of site down into existing depression (used to be SW pond, filled in), through waterbar across cul-de-sac, and into sediment forebay/riprap channel. Some scouring of channel was observed.

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☒ existing BMP upgrade ☒ new BMP

☒ island bio/rain garden ☐ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☒ Other (describe): maintenance of forebay/channel

Area Draining to Retrofit

☐ Hotspot ☒ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☒ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☒ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☒ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☒ Adjacent Land Use ☐ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts:

existing depression should be preserved → currently, undeveloped lot(s)

NEXT STEPS

Candidate for pilot project ☐ yep, love it ☒ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept

☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☒ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☐ Obtain utility mapping
☐ Confirm soil types

☐ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

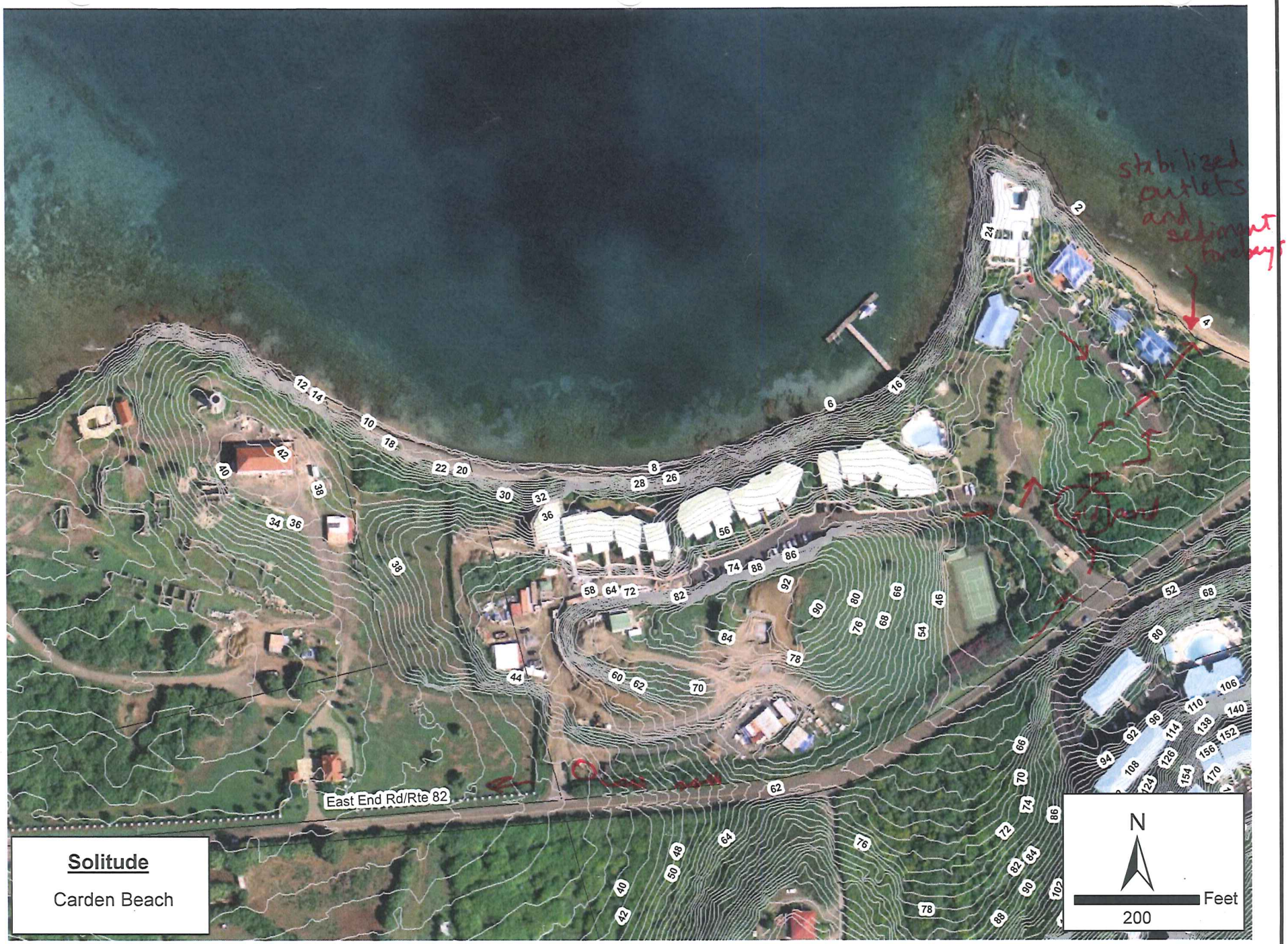
Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

access road → gov't owned



Manager: Don Sallach 778-6798

John Hebert - Contractor

Candle Reef II

STX EE WATERSHEDS **RETROFITS**

Site Name/ID: SB-R-08 **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Kay Green 718-8474

Land Use: ☐ Public ☒ Private ☐ Unknown:

☐ Single Family Residential ☒ Multi-Fam. Residential ☐ School ☐ Golf Course ☐ Park ☐ Agricultural ☐ Road
☐ Commercial/Industrial ☐ Resort ☐ Marina ☐ Other: _____

Is the site a hotspot? ☐ Yes ☒ No ☐ Unknown:
Sources/pollutants observed? ☒ No ☐ Sediment ☐ Nutrients/organics ☐ Oil/grease ☐ Trash/Floatables

Existing Stormwater BMP on site? ☐ Yes ☒ No ☐ Unknown:

Soils: ☐ Unknown ☒ poor infiltration ☐ good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Stormwater sheet flows down road/cul-de-sac to grassy area before flowing into Prune Bay

PROPOSED RETROFIT CONCEPT *(CONT. ON BACK)*

Proposed Retrofit Practice(s): ☐ existing BMP upgrade ☒ new BMP

☒ island bio/rain garden ☐ swale ☐ planter ☐ tree pits ☐ infiltration ☐ permeable paver ☐ sand filter ☐ pond
☐ constructed wetland ☐ proprietary practice ☐ soil amendments ☐ reforestation ☐ impervious cover removal
☐ rainwater harvesting ☐ disconnection ☐ Other (describe):

Area Draining to Retrofit
☐ Hotspot ☐ Individual rooftop
☒ Parking Lot ☐ other small impervious area
☒ Street ☐ Pervious area
☐ Other (describe):

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____%

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): ☐ Storage ☒ Water Quality ☐ Recharge ☐ Gut Protection ☒ Demonstration / Education ☐ Repair ☐ Other: _____

Possible Conflicts due to: ☐ Soils ☐ Access
☐ Adjacent Land Use ☐ Existing Utilities
☐ Contamination ☐ High water table
☐ Limited access to water ☐ Other:

Describe conflicts: None

NEXT STEPS

Candidate for pilot project ☒ yep, love it ☐ OK ☐ undecided ☐ no, but keep listed ☐ no way

Follow-up needed to Complete Field Concept
☐ Confirm property ownership
☒ Confirm drainage area/impervious cover
☒ Confirm volume computations
☒ Complete concept sketch
☐ Obtain existing as-builts/site plans
☒ Obtain detailed topography
☐ Confirm storm drain invert elevations
☐ Other:
☐ Obtain utility mapping
☒ Confirm soil types

☐ SITE AERIAL INCLUDED

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

Demonstration project to construct island bios in a highly visible location. Perfect for Public ed.

Sketch and/or Sizing Calcs:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Sierra Verde

STX EE WATERSHEDS **RESIDENTIAL**

Site Name/ID: S-RES-01 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? [ ] No [ ] Yes [x] Unknown If yes, name and contact information:
we think there is →

Main Road Names: Sierra Verde Rd, Buena Vista, Pelicano, Bajamar, Miramar

Approximate Neighborhood Area (acres) 85 # of lots 96 (# or % undeveloped 39/40%) 57/ 60%

[ ] Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ⅓ acre [ ] Multifamily (Apts., Condos)

[x] Single Family Detached <¼ ¼ ½ (1) >1 acre [ ] Other

Index of Infill, Redevelopment, and Remodeling [x] No Evidence [ ] <5% of existing units [ ] 5-10% [ ] >10%

Waste water Management? [ ] Public sewer [x] On-site septic [ ] Small package plant

Problems observed with septic systems? [x] No [ ] Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type [ ] All Paved [x] mixed, mostly paved [ ] mixed, mostly unpaved [ ] all unpaved

Condition [x] Good/mostly good (new, few areas requiring regrading or maintenance)
[ ] Some road sections need attention (minor erosion, pavement repair needed, limited)
[ ] Significant maintenance issues (most of road network in bad shape)

Drainage: Type [ ] Curb/gutter [ ] Mixed, mostly curbed [ ] Mixed, mostly open section [x] Open drainage

Drain Inlets/Catch basins: [ ] None [x] Clean [ ] Blocked [ ] Other:

Waterbars/dips/crossdrains: [ ] None [x] Functioning [ ] Need maintenance [ ] Other:

Ditches: [x] None [ ] Shallow [ ] Well-defined [ ] Stable [ ] Eroded [ ] Full of thick vegetation [ ] Other:

Discharge locations: [x] Stable [ ] Some erosion [ ] Eroded [ ] Other:

Existing Stormwater BMPs on site? [ ] Unknown [x] No [ ] Yes, describe:
waterbars, cisterns

Average Lot Cover: ____ %bare 30 % turf 50 %landscape(include trees) 10 % rooftop 10 %driveway

Average Driveway: [x] Impervious [ ] Pervious [ ] Eroded [x] Drain to road [ ] Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: [ ] No [x] Yes, describe:
just driveway

Evidence of residential encroachment on riparian/wetland buffer? [x] No [ ] Yes, describe:
dirt road

Evidence of Residential Pollution?

[x] Limited [ ] Likely [ ] Observed for **sediment loading**
[x] Limited [ ] Likely [ ] Observed for **oil/grease**
[x] Limited [ ] Likely [ ] Observed for **trash and yard waste**
[x] Limited [ ] Likely [ ] Observed for **nutrient loading**
[x] Limited [ ] Likely [ ] Observed for **bacteria**
[x] Limited [ ] Likely [ ] Observed for **other:**

Severity: [x] Low [ ] Medium [ ] High

Describe source:
high-end housing, many set back from road, gates

NEXT STEPS

Low priority

Site ID ____________

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☒ On-site retrofit potential individual lots?
- ☒ Street ROW retrofit
- ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☐ Other action(s):

→ mainly needs maintenance of unPaved roads

Narrative description:

one medium-level eroded dirt road with gullying at pavement/dirt transition

divert driveway runoff to keep on lots instead of road

* watershed delineation changed

Sketch

Site ID_____

STX EE WATERSHEDS **RESIDENTIAL**

Site Name/ID: Yellow Cliff North S-res-02 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☐ Yes ☒ Unknown If yes, name and contact information:
maybe grouped with Hope and Carlton

Main Road Names: Yellow Cliff Trail, Hibiscus Circle / Dusky Rhode

Approximate Neighborhood Area (acres) 20 # of lots 26 (# or % undeveloped 17/65%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ⅓ acre ☐ Multifamily (Apts., Condos)
☒ Single Family Detached <¼ ¼ ½ (1) >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☒ No Evidence ☐ <5% of existing units ☐ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant
Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☐ mixed, mostly paved ☒ mixed, mostly unpaved ☐ all unpaved

Condition ☐ Good/mostly good (new, few areas requiring regrading or maintenance)
☐ Some road sections need attention (minor erosion, pavement repair needed, limited)
☒ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:
Waterbars/dips/crossdrains: ☐ None ☐ Functioning ☒ Need maintenance ☐ Other:
Ditches: ☐ None ☒ Shallow ☐ Well-defined ☐ Stable ☒ Eroded ☐ Full of thick vegetation ☐ Other:
Discharge locations: ☐ Stable ☐ Some erosion ☐ Eroded ☐ Other:

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☒ Yes, describe:
cisterns

Average Lot Cover: ___ %bare 30 % turf 45 %landscape(include trees) 15 % rooftop 20 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☒ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☐ No ☒ Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? ☒ No ☐ Yes, describe:

Evidence of Residential Pollution?
☒ Limited ☐ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☒ Limited ☐ Likely ☐ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☐ Likely ☐ Observed for **bacteria**
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☐ Low ☒ Medium ☐ High

Describe source:
Dirt road gullying

NEXT STEPS

* Dirt road issues

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☐ On-site retrofit potential individual lots?
- ☒ ~~Street ROW retrofit~~
- ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☐ Other action(s):

Narrative description:

Consider paving roads / performing road maintenance to better manage erosion

Sketch

STX EE WATERSHEDS **RESIDENTIAL**

Site Name/ID: S-RES03 Hope + Carlton Hill **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☒ Yes ☐ Unknown If yes, name and contact information:
Josh Tate jtate@cdpri.com Randy Hillis - starr@nps.gov

Main Road Names: Coral Reef Tr, Pony Club Tr, Yellow Cliff Tr

Approximate Neighborhood Area (acres) 100 # of lots 124 (# or % undeveloped 78/60%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ⅓ acre ☐ Multifamily (Apts., Condos)
☒ Single Family Detached <¼ ¼ ½ (1) >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☐ No Evidence ☒ <5% of existing units ☐ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant
Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☐ mixed, mostly paved ☐ mixed, mostly unpaved ☒ all unpaved

Condition ☐ Good/mostly good (new, few areas requiring regrading or maintenance)
☒ Some road sections need attention (minor erosion, pavement repair needed, limited)
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:
Waterbars/dips/crossdrains: ☐ None ☐ Functioning ☒ Need maintenance ☐ Other:
Ditches: ☐ None ☒ Shallow ☐ Well-defined ☐ Stable ☒ Eroded ☐ Full of thick vegetation ☐ Other:
Discharge locations: ☐ Stable ☐ Some erosion ☐ Eroded ☐ Other:
N/A

Josh Tate said engineer said they would fix problem - H2O goes around

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☐ Yes, describe:
cisterns

Average Lot Cover: ____ %bare 50 % turf 30 %landscape(include trees) 10 % rooftop 10 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☐ Drain to road ☐ Too variable some dirt

Evidence of rooftop or driveway runoff to road/drainage network?: ☐ No ☒ Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? ☐ No ☒ Yes, describe:
horse pasture in gut → Pony Club, cotton valley

Evidence of Residential Pollution?

☐ Limited ☐ Likely ☒ Observed for **sediment loading** dirt rds
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☒ Limited ☐ Likely ☐ Observed for **trash and yard waste**
☐ Limited ☐ Likely ☐ Observed for **nutrient loading**
☐ Limited ☒ Likely ☐ Observed for **bacteria** horse farm
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☐ Low ☐ Medium ☒ High

Describe source: steep, eroding dirt roads

NEXT STEPS

Site ID _____ **Page 1 of 2**

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☒ On-site retrofit potential individual lots? (driveways)
- ☒ Street ROW retrofit
- ☐ Pond retrofit (paving/maintenance)
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☐ Other action(s): ☒ riparian buffer protection

Narrative description:

- Many undeveloped lots → opportunity to deal with drainage better for those.
- Pave steep roads
- buffer along gut

Sketch

- Spoke w/ Josh Tate, HOA president
- issues w/ collecting dues, road maint. problems. Use sediment from Pony Club Tr culvert area to regrade roads since down to bedrock
- one section of road actually ponds, others erode

STX EE WATERSHEDS (incl. Cotton Valley West) **RESIDENTIAL**

Site Name/ID: S-Res-04 Cotton Valley **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☐ Yes ☒ Unknown If yes, name and contact information:

Main Road Names: Cotton Valley Tr, Unnamed 137

Approximate Neighborhood Area (acres) ~~85~~ 140 # of lots ~~147~~ 214 (# or % undeveloped 91 / 60%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ½ acre ☐ Multifamily (Apts., Condos)

☒ Single Family Detached <¼ ¼ (½) 1 >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☐ No Evidence ☐ <5% of existing units ☒ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant

Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☒ mixed, mostly paved ☒ mixed, mostly unpaved ☐ all unpaved

Condition ☐ Good/mostly good (new, few areas requiring regrading or maintenance)
☒ Some road sections need attention (minor erosion, pavement repair needed, limited)
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:

Waterbars/dips/crossdrains: ☒ None ☒ Functioning ☐ Need maintenance ☐ Other:

Ditches: ☐ None ☐ Shallow ☐ Well-defined ☐ Stable ☐ Eroded ☐ Full of thick vegetation ☐ Other:

Discharge locations: ☐ Stable ☐ Some erosion ☐ Eroded ☐ Other:

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☐ Yes, describe:

cisterns

Average Lot Cover: ____ %bare 40 % turf 25 %landscape(include trees) 25 % rooftop 10 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☒ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☐ No ☒ Yes, describe: paved/gravel

Evidence of residential encroachment on riparian/wetland buffer? ☐ No ☒ Yes, describe:

one yard in gut, gated, mowed

Evidence of Residential Pollution?

☐ Limited ☒ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☐ Limited ☐ Likely ☒ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☒ Likely ☐ Observed for **bacteria** horses
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☐ Low ☐ Medium ☒ High

Describe source:

NEXT STEPS

near pond + gut

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☐ On-site retrofit potential individual lots?
- ☒ Street ROW retrofit
- ☒ ~~Pond~~ Gut maintenance retrofit
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☒ Septic improvements / survey
- ☒ Other action(s): Trash pick-up

Narrative description:

- Areas of dumping
- undersized culverts
- Pond restoration? no outlet
- Pony Club Tr Culvert undersized, large scour hole. Sediment issue from Hope & Carlton Hill
- Horses on non-pasture land
- dirt rds, driveways

Sketch

- Gut in yard, culverts too small, overtops road.

STX EE WATERSHEDS (Solitude North) **RESIDENTIAL**

Site Name/ID: S-RES-05 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW / KK

EXISTING CONDITIONS

Homeowners Association? ☐ No ☐ Yes ☒ Unknown If yes, name and contact information:

Main Road Names:

Approximate Neighborhood Area (acres) 55 # of lots 45 (# or % undeveloped 31 / 70%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ½ acre ☐ Multifamily (Apts., Condos)

☒ Single Family Detached <¼ ¼ ½ 1 >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☒ No Evidence ☐ <5% of existing units ☐ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant

Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☒ mixed, mostly paved ☐ mixed, mostly unpaved ☐ all unpaved

Condition ☒ Good/mostly good (new, few areas requiring regrading or maintenance)
☐ Some road sections need attention (minor erosion, pavement repair needed, limited)
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:

Waterbars/dips/crossdrains: ☒ None ☐ Functioning ☐ Need maintenance ☐ Other:

Ditches: ☐ None ☐ Shallow ☐ Well-defined ☐ Stable ☐ Eroded ☐ Full of thick vegetation ☐ Other:

Discharge locations: ☒ Stable ☐ Some erosion ☐ Eroded ☐ Other:

Existing Stormwater BMPs on site? ☐ Unknown ☒ No ☐ Yes, describe:

cisterns

Average Lot Cover: ____%bare 30 % turf 20 %landscape(include trees) 30 % rooftop 20 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☐ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☒ No ☐ Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? ☒ No ☐ Yes, describe:

Evidence of Residential Pollution?

☒ Limited ☐ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☒ Limited ☐ Likely ☐ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☐ Likely ☐ Observed for **bacteria**
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☒ Low ☐ Medium ☐ High

Describe source:

NEXT STEPS

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☐ On-site retrofit potential individual lots?
- ☐ Street ROW retrofit ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☒ Other action(s): New construction management

Narrative description:

Most roads - great condition, 1 to shore poor condition dirt w/ concrete patch

Sketch

Site ID_____

STX EE WATERSHEDS (Seven Flags) **RESIDENTIAL**

Site Name/ID: S-RES-06 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☐ Yes ☒ Unknown If yes, name and contact information:
(Neighborhood watch signs

Main Road Names:

Approximate Neighborhood Area (acres) 120 # of lots 78 (# or % undeveloped 39/50%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ⅓ acre ☐ Multifamily (Apts., Condos)
☒ Single Family Detached <¼ ¼ ½ 1 (>1) acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☒ No Evidence ☐ <5% of existing units ☐ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant
Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☒ mixed, mostly paved ☐ mixed, mostly unpaved ☐ all unpaved

Condition ☒ Good/mostly good (new, few areas requiring regrading or maintenance)
☐ Some road sections need attention (minor erosion, pavement repair needed, limited)
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:
Waterbars/dips/crossdrains: ☒ None ☐ Functioning ☐ Need maintenance ☐ Other:
Ditches: ☐ None ☐ Shallow ☐ Well-defined ☐ Stable ☐ Eroded ☐ Full of thick vegetation ☐ Other:
Discharge locations: ☒ Stable ☐ Some erosion ☐ Eroded ☐ Other:

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☐ Yes, describe:
Cisterns Berm to keep sw on site for some driveways

Average Lot Cover: ___%bare 15 % turf 50 %landscape(include trees) 20 % rooftop 15 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☐ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☒ No ☐ Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? ☒ No ☐ Yes, describe:

Evidence of Residential Pollution?

☒ Limited ☐ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☒ Limited ☐ Likely ☐ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☐ Likely ☐ Observed for **bacteria**
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☒ Low ☐ Medium ☐ High

Describe source:

NEXT STEPS

Seven Flags Road restoration / drainage improvements

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☒ On-site retrofit potential individual lots?
- ☒ Street ROW retrofit
- ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☐ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☐ Other action(s):

Narrative description:

See retrofit forms for Seven Flags

Sketch

Site ID_____

STX EE WATERSHEDS Estates Solitude/Pleasant Valley **RESIDENTIAL**

Site Name/ID: S-Res-~~01~~07 **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☒ Yes ☐ Unknown If yes, name and contact information:
Santa Cruz

Main Road Names: Solitude Rd

Approximate Neighborhood Area (acres) 75 # of lots 98 (# or % undeveloped 58 / 60%)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ½ 1 >1 acre ☐ Multifamily (Apts., Condos)
☒ Single Family Detached <¼ ¼ ½ 1 >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☐ No Evidence ☐ <5% of existing units ☒ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant
Problems observed with septic systems? ☐ No ☒ Yes (describe):
One house w/ questionable septic - see photo

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☒ mixed, mostly paved ☐ mixed, mostly unpaved ☐ all unpaved

Condition ☒ Good/mostly good (new, few areas requiring regrading or maintenance)
☐ Some road sections need attention (minor erosion, pavement repair needed, limited)
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:
Waterbars/dips/crossdrains: ☒ None ☐ Functioning ☐ Need maintenance ☐ Other:
Ditches: ☐ None ☒ Shallow ☐ Well-defined ☒ Stable ☒ Eroded ☐ Full of thick vegetation ☐ Other:
Discharge locations: ☒ Stable ☐ Some erosion ☐ Eroded ☐ Other:
gut

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☐ Yes, describe:
cisterns

Average Lot Cover: ___ %bare 20 % turf 45 %landscape(include trees) 20 % rooftop 15 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☐ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☐ No ☒ Yes, describe:
some rooftop gravel

Evidence of residential encroachment on riparian/wetland buffer? ☐ No ☒ Yes, describe:
clearing in gut, farmland

Evidence of Residential Pollution?

☒ Limited ☐ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☐ Limited ☒ Likely ☐ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☐ Likely ☐ Observed for **bacteria**
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☒ Low ☐ Medium ☐ High

Describe source:

NEXT STEPS

- ditch/culvert issue in Pleasant Valley

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☒ On-site retrofit potential individual lots?
- ☒ Street ROW retrofit ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☒ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☒ Other action(s): new development management, riparian buffer restoration

Narrative description:

(1) high-end homes up in Estates Solitude, whole network of paved roads not on map. nice landscaping, paved drives. Little erosion issues. (Santa Cruz HOA)

(2) Pleasant Valley → lower-end, a few drainage issues since road follows headwaters of gut. Culverts here, some need repair

Sketch

STX EE WATERSHEDS (Prune Bay / Candle Reef Condos) **RESIDENTIAL**

Site Name/ID: S-RES-08 **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW / KR

EXISTING CONDITIONS

Homeowners Association? ☐ No ☐ Yes ☒ Unknown If yes, name and contact information:
Likely Candle Reef II - Kay Green 718-8474

Main Road Names: Green Cay

Approximate Neighborhood Area (acres) 100 # of lots 94 (# or % undeveloped 41/44 %)

☐ Single Family Attached (Duplexes, Row Homes) <⅛ ⅛ ¼ ⅓ ⅓ acre ☒ Multifamily (Apts., Condos)

☒ Single Family Detached <¼ ¼ ½ 1 >1 acre ☐ Other

Index of Infill, Redevelopment, and Remodeling ☐ No Evidence ☒ <5% of existing units ☐ 5-10% ☐ >10%

Waste water Management? ☐ Public sewer ☒ On-site septic ☐ Small package plant

Problems observed with septic systems? ☒ No ☐ Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type ☐ All Paved ☒ mixed, mostly paved ☐ mixed, mostly unpaved ☐ all unpaved

Condition ☐ Good/mostly good (new, few areas requiring regrading or maintenance)
☒ Some road sections need attention (minor erosion, pavement repair needed, limited) some issues w/ dirt roads
☐ Significant maintenance issues (most of road network in bad shape)

Drainage: Type ☐ Curb/gutter ☐ Mixed, mostly curbed ☐ Mixed, mostly open section ☒ Open drainage

Drain Inlets/Catch basins: ☒ None ☐ Clean ☐ Blocked ☐ Other:

Waterbars/dips/crossdrains: ☐ None ☒ Functioning ☐ Need maintenance ☐ Other:

Ditches: ☒ None ☐ Shallow ☐ Well-defined ☐ Stable ☐ Eroded ☐ Full of thick vegetation ☐ Other:

Discharge locations: ☒ Stable ☐ Some erosion ☐ Eroded ☐ Other:

Existing Stormwater BMPs on site? ☐ Unknown ☐ No ☐ Yes, describe:
cisterns

Average Lot Cover: ____ %bare 20 % turf 20 %landscape(include trees) 30 % rooftop 30 %driveway

Average Driveway: ☒ Impervious ☐ Pervious ☐ Eroded ☐ Drain to road ☐ Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: ☐ No ☒ Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? ☒ No ☐ Yes, describe:

Evidence of Residential Pollution?

☒ Limited ☐ Likely ☐ Observed for **sediment loading**
☒ Limited ☐ Likely ☐ Observed for **oil/grease**
☒ Limited ☐ Likely ☐ Observed for **trash and yard waste**
☒ Limited ☐ Likely ☐ Observed for **nutrient loading**
☒ Limited ☐ Likely ☐ Observed for **bacteria**
☒ Limited ☐ Likely ☐ Observed for **other:**

Severity: ☒ Low ☐ Medium ☐ High

Describe source:

NEXT STEPS

A few gravel spurs straight to beach are an issue, and at the condos a cul-de-sac right near water that creates an issue. Lots of landscaping, maintenance

Site ID _____

☐ SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- ☒ On-site retrofit potential individual lots?
- ☒ Street ROW retrofit
- ☐ Pond retrofit
- ☐ Parking Lot retrofit
- ☒ Better lawn/landscaping practices?
- ☐ Household hazardous waste
- ☐ Septic improvements
- ☐ Other action(s):

Narrative description:

Sketch

STX EE WATERSHEDS Blue Water Terrace **HOTSPOT/POLLUTION PREVENTION**

Site Name/ID: S-H-01 **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Contact Information/location:

See Retrofit form

Land Use: ☒ Commercial ☐ Industrial ☐ Institutional ☐ Municipal ☐ Golf Course ☐ Transport-Related ☐ Marina ☐ Animal Facility ☐ Other:

Basic Description of Operation:

Restaurant / Deli

Existing stormwater management on-site? ☐ Unknown ☒ No ☐ Yes, describe:

Condition of drain inlets on-site: ☒ None ☐ Good ☐ Need maintenance

Evidence of riparian/wetland buffer encroachment: ☐ Unknown ☐ No ☒ Yes, describe:

gut on site - Drainage overland flow from site to gut + WW potential flow

Potential pollutants associated with:

- ☐ Vehicular operations (fueling, storage, maintenance)
- ☒ Waste management (dumping)
- ☒ Outdoor material storage (uncovered, leaking, no secondary containment)
- ☐ Landscaping (over fertilizing, irrigation)
- ☒ Building/parking lot maintenance (washdowns)
- ☐ Other:

Pollutant of concern?

☒ Limited	☐ Likely	☐ Observed for	**sediment loading**
☐ Limited	☒ Likely	☒ Observed for	**oil/grease**
☐ Limited	☒ Likely	☒ Observed for	**trash**
☒ Limited	☐ Likely	☒ Observed for	**nutrient loading** - possible from WW
☒ Limited	☐ Likely	☐ Observed for	**bacteria**
☐ Limited	☐ Likely	☐ Observed for	**other:**

Severity of Problem: ☐ Low ☐ Medium ☒ High

Describe Conditions:

Dumpster juice - uncovered surrounded by toxic material storage

Cleaning Area outside

Potential septic issues

PROPOSED RESTORATION ACTIVITIES

- Education, containment, pollution Prevention

NEXT STEPS

- Discuss w/ owners

Site ID _____

☐ SITE AERIAL INCLUDED

SKETCH

See photos

Site ID_____

STX EE WATERSHEDS S-H-02 **HOTSPOT/POLLUTION PREVENTION**

Site Name/ID: Cotton Valley Dumpster Site **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING CONDITIONS

Contact Information/location: ST. Croix Foundation / VIAPCO / Fire Station

Land Use: ☐ Commercial ☐ Industrial ☐ Institutional ☒ Municipal ☐ Golf Course ☐ Transport-Related ☐ Marina ☐ Animal Facility ☐ Other: quasi

Basic Description of Operation: Dumpster site

Existing stormwater management on-site? ☐ Unknown ☒ No ☐ Yes, describe:

Condition of drain inlets on-site: ☒ None ☐ Good ☐ Need maintenance

Evidence of riparian/wetland buffer encroachment: ☐ Unknown ☐ No ☒ Yes, describe: adjacent to gut - may drain to gut

Potential pollutants associated with:

- ☒ Vehicular operations (fueling, storage, maintenance)
- ☒ Waste management (dumping)
- ☒ Outdoor material storage (uncovered, leaking, no secondary containment)
- ☐ Landscaping (over fertilizing, irrigation)
- ☐ Building/parking lot maintenance (washdowns)
- ☐ Other:

Pollutant of concern?

☒ Limited	☐ Likely	☐ Observed for	**sediment loading**
☐ Limited	☐ Likely	☒ Observed for	**oil/grease**
☐ Limited	☐ Likely	☒ Observed for	**trash**
☐ Limited	☒ Likely	☐ Observed for	**nutrient loading**
☐ Limited	☒ Likely	☐ Observed for	**bacteria**
☐ Limited	☐ Likely	☐ Observed for	**other:**

Severity of Problem: ☐ Low ☐ Medium ☒ High

Describe Conditions:

- Completely impervious paved dumping site
- uncovered dumpsters
- Very flat site - may flow directly to gut or to street, eventually to gut

PROPOSED RESTORATION ACTIVITIES

Education, maintenance

NEXT STEPS

* Contact Managers!

Site ID _____

☒ SITE AERIAL INCLUDED

SKETCH

See photos

See five station sketch

- Adjacent gut investigated
  - Culvert under Road
    - ~30"
      - Likely blocked ~~[illegible]~~ / significantly significant
      - Ponding on downstream end - Submerged (*) culvert
    - Small pipes - 8" also under road - at same level or higher than main culvert.
    - upstream end - same ponding - wide (50'+) shut in flow area
  - See photos

Ziggy's Island Market
Roti - Gas

STX EE WATERSHEDS **HOTSPOT/POLLUTION PREVENTION**

Site Name/ID: S-H-03 **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW / KR

EXISTING CONDITIONS

Contact Information/location:

Land Use: ☒ Commercial ☐ Industrial ☐ Institutional ☐ Municipal ☐ Golf Course ☐ Transport-Related ☐ Marina ☐ Animal Facility ☐ Other:

Basic Description of Operation: Gas station, Deli/sandwich shop convenience store, Restrooms - Public

Existing stormwater management on-site? ☐ Unknown ☒ No ☐ Yes, describe:

Condition of drain inlets on-site: ☐ None ☐ Good ☐ Need maintenance

Evidence of riparian/wetland buffer encroachment: ☐ Unknown ☒ No ☐ Yes, describe:

Potential pollutants associated with:

- ☐ Vehicular operations (fueling, storage, maintenance)
- ☐ Waste management (dumping)
- ☐ Outdoor material storage (uncovered, leaking, no secondary containment)
- ☐ Landscaping (over fertilizing, irrigation)
- ☐ Building/parking lot maintenance (washdowns)
- ☐ Other:

Pollutant of concern?

☒ Limited	☐ Likely	☐ Observed for	**sediment loading**
☐ Limited	☒ Likely	☐ Observed for	**oil/grease**
☒ Limited	☐ Likely	☐ Observed for	**trash**
☒ Limited	☐ Likely	☐ Observed for	**nutrient loading**
☒ Limited	☐ Likely	☐ Observed for	**bacteria**
☐ Limited	☐ Likely	☐ Observed for	**other:**

Severity of Problem: ☒ Low ☐ Medium ☐ High

Describe Conditions:

- Everything seems to be well maintained
- one uncovered diesel pump

PROPOSED RESTORATION ACTIVITIES

- See Retrofit form

NEXT STEPS

Site ID _____

☐ SITE AERIAL INCLUDED

SKETCH

Site ID_____

STX EE WATERSHEDS **ROADS & CULVERTS**

Site/Road Name/ID: S-RC-01 (off Sierra Verde-Bajamar Rd) **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITION

☐ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☐ Circular
☐ Other:

 # BARRELS:
☐ Single
☐ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☐ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: _____(ft)
Height: _____(ft)
Culvert length: _____(ft)
Width: _____(ft)
Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☐ Cracking/chipping/corrosion ☐ Downstream scour hole
☐ Sediment deposition ☐ Upstream erosion
☐ Blockage ☐ Failing embankment
☐ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE:
☐ Flat
☐ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☒ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☒ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☒ Slight (around 5:1, 20%)
☒ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☒ Private
☐ Public
☐ Unknown

Total ROW Width: 21' (ft)
Drive lane: 17' (ft)
Shoulder: 0 (ft)
Length of interest: _____ – get off GIS- total dirt portion

Surface: ☐ good condition ☒ minor maintenance needed ☐ large gullies and potholes – SM gully @ pave/dirt bound
Drain Inlets/Catch basins: ☒ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☒ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☒ eroded ☒ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☒ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☒ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☒ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

Serves as driveway to 2 homes-
upper portion paved
- water crosses at Pave/dirt bound

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☒ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name 5-RC-01

STX EE WATERSHEDS — **ROADS & CULVERTS**

Site/Road Name/ID: S-RC-02 (unnamed) **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other:

 # BARRELS:
☐ Single
☒ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☒ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know
N/A - pond outlet

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 24" (2) (ft)
Height: " (ft)
Culvert length: 25 (ft)
Width: (ft)
Roadway elevation: (ft)

CONDITION: (*Evidence of...*) ☒ In good condition
☐ Cracking/chipping/corrosion ☒ Downstream scour hole
☐ Sediment deposition ☐ Upstream erosion
☐ Blockage ☐ Failing embankment
☐ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE:
☐ Flat
☒ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☒ No ☐ Yes DM no water

BLOCKAGE SEVERITY: ☒ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☒ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☒ Yes ☐ Unknown pond

☒ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☐ Unpaved: >gravel
☒ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☒ Slight (around 5:1, 20%)
☒ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☒ Private
☐ Public
☐ Unknown
(not dead end)

Total ROW Width: 16 (ft)
Drive lane: 16 (ft)
Shoulder: 0 (ft)
Length of interest: 615

Catherine Hope + Culvert

Surface: ☐ good condition ☐ minor maintenance needed ☒ large gullies and potholes
Drain Inlets/Catch basins: ☒ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☒ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☒ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☒ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☒ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

Pony Club Trail Culvert

STX EE WATERSHEDS **ROADS & CULVERTS**

Site/Road Name/ID: S-RC-03 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KE

EXISTING CONDITION

☒ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other:

 # BARRELS:
☒ Single
☐ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☒ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 30" (ft)
Height: _____ (ft)
Culvert length: 30' (ft)
Width: _____ (ft)
Roadway elevation: _____ (ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☐ Cracking/chipping/corrosion ☒ Downstream scour hole
☐ Sediment deposition ☐ Upstream erosion
☒ Blockage ☐ Failing embankment
☐ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE:
☐ Flat
☒ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☒ No ☐ Yes

BLOCKAGE SEVERITY: ☒ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☒ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☐ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☐ Private
☐ Public
☐ Unknown

Total ROW Width: _____ (ft)
Drive lane: _____ (ft)
Shoulder: _____ (ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

note: bent from weight of road
15' deep scour / 20' wide
tire dumpers

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

Cotton Valley near pond

STX EE WATERSHEDS **ROADS & CULVERTS**

Site/Road Name/ID: S-RC-04 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MWK

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☐ Concrete
- ☒ Metal
- ☐ Other: DL

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)
- Barrel diameter: 24" (ft)
- Height: _____ (ft)
- Culvert length: 20' (ft)
- Width: _____ (ft)
- Roadway elevation: _____ (ft)

CONDITION: (*Evidence of...*) ☐ In good condition
- ☒ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☐ Blockage
- ☐ Threatened infrastructure
- ☒ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☒ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☒ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☒ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☒ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____ (ft)
Drive lane: _____ (ft)
Shoulder: _____ (ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

Cotton Valley Neighborhood - Northeast ✓

STX EE WATERSHEDS **ROADS & CULVERTS**

Site/Road Name/ID: S-RC-05 DM 05 **Watershed:** Solitude

Date: 1/24/17 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other: pipe totally bent/rusted

 # BARRELS:
☐ Single
☒ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☒ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 24" (ft)
Height: _____(ft)
Culvert length: 30' (ft)
Width: _____(ft)
Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☒ Cracking/chipping/corrosion ☒ Downstream scour hole
☒ Sediment deposition ☒ Upstream erosion
☒ Blockage ☐ Failing embankment
☒ Threatened infrastructure ☐ Other (*describe*):

probably but outside of access

1 - grated 1 - fenced gate

CULVERT SLOPE:
☐ Flat
☒ Slight (2 – 5%) prob.
☐ Steeper

IS IT FLOWING?
☒ No ☐ Yes

BLOCKAGE SEVERITY: ☒ none ☐ minor ☒ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☒ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☒ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☐ Private
☐ Public
☐ Unknown

Total ROW Width: _____(ft)
Drive lane: _____(ft)
Shoulder: _____(ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

Note: Downstream-ended channel
See photos - grated more in tact than fenced
Scouring from grated
- Pipe from block structure - discharge to ponded inflow - dry - no flow

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS Solitude North NO NUMBER ~~SEC 04~~ Not major issue **ROADS & CULVERTS**

Site/Road Name/ID: _____ **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☐ Metal
- ☐ Other:

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)
- Barrel diameter: 12" (ft)
- Height: _____ (ft)
- Culvert length: ~20' (ft)
- Width: _____ (ft)
- Roadway elevation: _____ (ft)

CONDITION: (*Evidence of...*) ☒ In good condition
- ☐ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☐ Blockage
- ☐ Threatened infrastructure
- ☐ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat ?
- ☐ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☒ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☒ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☒ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☒ Private
- ☐ Public
- ☐ Unknown

- Total ROW Width: 18 (ft)
- Drive lane: 18 (ft)
- Shoulder: 0 (ft)
- Length of interest: _____

Surface: ☒ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS S-RC-07 06 **ROADS & CULVERTS**

Site/Road Name/ID: Culvert (East) **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING CONDITION

* corroded CMP pipe retrofit w/ RCP end sections

☒ **CULVERTS**

SHAPE: ☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical ☒ Circular ☐ Other:

 # BARRELS: ☒ Single ☐ Double ☐ Triple ☐ Other:

MATERIAL: ☒ Concrete ☒ Metal ☐ Other:

ALIGNMENT: ☐ Flow-aligned ☒ Not flow-aligned ☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 30" (ft)
Height: _____ (ft)
Culvert length: ~56' (ft)
Width: _____ (ft)
Roadway elevation: 10 (ft)

CONDITION: (*Evidence of...*) ☒ In good condition
☒ Cracking/chipping/corrosion ☐ Downstream scour hole
☒ Sediment deposition ☒ Upstream erosion some
☐ Blockage ☐ Failing embankment
☒ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE: ☒ Flat ☐ Slight (2 – 5%) ☐ Steeper

IS IT FLOWING? ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☒ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☒ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☒ Yes ☐ Unknown when flowing

☐ **ROAD SEGMENTS**

SURFACE: ☒ Concrete ☐ Asphalt ☐ Unpaved: >gravel ☐ Unpaved: >dirt ☐ Other

STEEPNESS: ☐ Pretty flat ☒ Slight (around 5:1, 20%) ☐ Steep (more like 2:1, 50%) ☐ Big time steep (≥ 75%)

ACCESS/USE: ☐ Private ☒ Public ☐ Unknown

Total ROW Width: 40 (ft)
Drive lane: 24 (ft)
Shoulder: 16 (ft)
Length of interest: _____

Surface: ☒ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☒ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☒ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☒ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☒ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☒ LOW

DESCRIPTION OF EXISTING CONDITIONS:
2 existing culverts: ① South ~~North~~ side of main road (see above)
② North side of main road – on property.
– 15" single, metal circular ~10' long, somewhat submerged

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☒ LANDOWNER ☐ HOA; ☐ OTHER:

gummerson1@yahoo.com → eager to fix drainage issue

☒ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

2 issues:

(1) but: undersized culvert under main road - structural issues + sediment.
- stagnant pool downstream (result of scouring? sediment dep / settling / clogging)

(2) Road runoff: low point flows into shallow depression (2-3') on south side of road. Overflows into swale on property and/or gut. Potential that gut overflows into depression too?

Sketch:

See aerial

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

- enlarge culverts
- enlarge depression, island bio

Thoughts on Maintenance Burden: ☒ Low ☐ Medium ☐ High

Site Name_____


Solitude
East Culvert Crossing
Cotton Valley Trail
Cotton Valley Trail
Sierra Verde Rd
N
Feet
200

STX EE WATERSHEDS — **ROADS & CULVERTS**

Site/Road Name/ID: SRC-08 07 culvert near Blue Water **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW | KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☐ Metal
- ☐ Other:

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch)*

Barrel diameter: 15" (ft)

Height: _____ (ft)

Culvert length: unk (ft) to beach

Width: _____ (ft)

Roadway elevation: _____ (ft)

Can't see thru 100'+

CONDITION: (*Evidence of...*) ☒ In good condition (upstream)
- ☐ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☐ Blockage
- ☐ Threatened infrastructure
- ☐ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☒ Slight (2 – 5%) unk
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☒ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☒ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☒ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☒ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☒ Public
- ☐ Unknown

Total ROW Width: 18-20 (ft)

Drive lane: _____ (ft)

Shoulder: _____ (ft)

Length of interest: _____

Surface: ☒ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☒ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

- blc blocked, road flooding issues - conveyance directly to ocean via concrete swale over pipe from culvert.
- needs maintenance/cleaning

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☒ LANDOWNER ☐ HOA; ☐ OTHER: (will be at wed. night mtg.)

22 Cotton Valley

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS Hope & Carlton **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-0 **Watershed:** Solitude

Date: 1/24/11 **Assessed by:** MW/KR

EXISTING CONDITION

☐ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☐ Circular
☐ Other:

 # BARRELS:
☐ Single
☐ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☐ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: _____(ft)
Height: _____(ft)
Culvert length: _____(ft)
Width: _____(ft)
Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☐ Cracking/chipping/corrosion ☐ Downstream scour hole
☐ Sediment deposition ☐ Upstream erosion
☐ Blockage ☐ Failing embankment
☐ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE:
☐ Flat
☐ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☒ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☒ Unpaved: >gravel
☒ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☒ Big time steep (≥ 75%)

ACCESS/USE:
☒ Private
☒ Public
☐ Unknown

Total ROW Width: 16 (ft)
Drive lane: _____(ft)
Shoulder: 0 (ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☒ large gullies and potholes
Drain Inlets/Catch basins: ☒ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☒ need maintenance ☐ other:
Ditches: ☒ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☒ eroded ☐ other: Pony Trail Culvert

SEVERITY OF PROBLEM: ☒ High ☐ Med ☐ Low (Explain):
Major source of sediment / public safety hazard

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☒ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:
Very steep, eroded roads — poorly functioning concrete waterbars in some areas that do not carry water (runoff scours around them)

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☒ HOA; ☐ OTHER:

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS — **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-9 Rte 821 Cotton Valley Trail **Watershed:** Solitude

Date: 1/25/11 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☒ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☒ Metal
- ☐ Other:

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: *(if variable, sketch)*

Barrel diameter: 24" (ft)

Height: _____(ft)

Culvert length: _____(ft)

Width: _____(ft)

Roadway elevation: _____(ft)

CONDITION: *(Evidence of...)* ☐ In good condition
- ☒ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☒ Blockage
- ☒ Threatened infrastructure
- ☐ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☐ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☒ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)

Drive lane: _____(ft)

Shoulder: _____(ft)

Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

2 culverts

24" RCP/CMP

unk CMP

both blocked

1 culvert on Cotton Valley Trail, unknown diameter, completely blocked

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS

ROADS & CULVERTS

Site/Road Name/ID: SB-RC-10 Solitude Road Watershed: Solitude

Date: 1/25/11 Assessed by: MW KR

EXISTING CONDITION

☒ CULVERTS

2 culverts near each other

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☐ Concrete
- ☒ Metal
- ☐ Other:

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)

Barrel diameter: 30" (ft)

Height: _____(ft)

Culvert length: _____(ft)

Width: _____(ft)

Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
- ☒ Cracking/chipping/corrosion
- ☒ Sediment deposition
- ☒ Blockage
- ☒ Threatened infrastructure
- ☐ Downstream scour hole
- ☒ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☐ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☒ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)

Drive lane: _____(ft)

Shoulder: _____(ft)

Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

2 culverts - ~~each~~ both 30" CMP

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS

East End Rd. near Ziggy's

ROADS & CULVERTS

Site/Road Name/ID: SB-RC-11 Watershed: Solitude

Date: 1/25/11 Assessed by: MW | KR

EXISTING CONDITION

☒ CULVERTS

4 culverts

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other:

 # BARRELS:
☒ Single
☒ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☒ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 30" (ft)
Height: _____(ft)
Culvert length: _____(ft)
Width: _____(ft)
Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☐ Cracking/chipping/corrosion ☐ Downstream scour hole
☒ Sediment deposition ☐ Upstream erosion
☒ Blockage ☒ Failing embankment
☒ Threatened infrastructure ☒ Other (*describe*): sink hole under manhole cover threat

CULVERT SLOPE:
☐ Flat
☐ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☐ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☐ Private
☐ Public
☐ Unknown

Total ROW Width: _____(ft)
Drive lane: _____(ft)
Shoulder: _____(ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

#4 culverts - All 30" CMP
sediment + debris from Solitude road
clogging culverts - require regular maintenance

NEXT STEPS

Potential Repair Candidate? ☐ YES ☐ NO ☐ OTHER:

CONTACT ☐ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS — **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-12 (Large culvert to Cockley Bay from RR 2155) Watershed: Solitude

Date: 1/25/11 Assessed by: MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other:

 # BARRELS:
☒ Single
☐ Double
☐ Triple
☐ Other:

MATERIAL:
☐ Concrete
☒ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
Barrel diameter: 48" (ft)
Height: _____(ft)
Culvert length: _____(ft)
Width: _____(ft)
Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☐ Cracking/chipping/corrosion ☐ Downstream scour hole
☒ Sediment deposition ☐ Upstream erosion
☒ Blockage ☒ Failing embankment
☒ Threatened infrastructure ☒ Other (*describe*):
manhole covers missing

CULVERT SLOPE:
☐ Flat
☐ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☐ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☐ Private
☐ Public
☐ Unknown

Total ROW Width: _____(ft)
Drive lane: _____(ft)
Shoulder: _____(ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

48" CMP
outlet submerged
Extends from EE Road to Bay
Manhole covers missing - threat to public. Maintain.

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS

unnamed Road near fire sta.

ROADS & CULVERTS

Site/Road Name/ID: SB-RC-13 Watershed: Solitude

Date: 1/25/11 Assessed by: MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☑ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☐ Concrete
- ☒ Metal
- ☑ Other: ?

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☒ Do not know

DIMENSIONS: (*if variable, sketch*)

Barrel diameter: 24" (ft)

Height: _____(ft)

Culvert length: _____(ft)

Width: _____(ft)

Roadway elevation: _____(ft)

CONDITION: (*Evidence of…*)
- ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☒ Downstream scour hole
- ☐ Sediment deposition
- ☐ Upstream erosion
- ☒ Blockage
- ☐ Failing embankment
- ☐ Threatened infrastructure
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☐ Slight (2 – 5%)
- ☐ Steeper Unknown

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☒ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)

Drive lane: _____(ft)

Shoulder: _____(ft)

Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

24" CMP/DI
Could not locate upstream end due to veg at edge of pond. Downstream end clogged w/ veg.

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS

ROADS & CULVERTS

Site/Road Name/ID: SB-RC-14 East End Rd. near Fire Sta. Watershed: Solitude

Date: 1/25/11 Assessed by: MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☒ Metal
- ☐ Other:

ALIGNMENT:
- ☒ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)

Barrel diameter: 30" (ft)

Height: _____(ft)

Culvert length: _____(ft)

Width: _____(ft)

Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☒ Downstream scour hole
- ☐ Sediment deposition
- ☐ Upstream erosion
- ☒ Blockage
- ☐ Failing embankment
- ☒ Threatened infrastructure
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☒ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☒ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)

Drive lane: _____(ft)

Shoulder: _____(ft)

Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

30" RCP
Downstream end mostly ~~inadequately~~ submerged
scour hole, gabion baskets need repair.

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS

East End Rd. culverts - west

ROADS & CULVERTS

Site/Road Name/ID: SB-RC-15 Watershed: Solitude

Date: 1/26/11 Assessed by: MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
☐ Arch ☐ Bottomless
☐ Box ☐ Elliptical
☒ Circular
☐ Other:

 # BARRELS:
☒ Single
☐ Double
☐ Triple
☐ Other:

MATERIAL:
☒ Concrete
☐ Metal
☐ Other:

ALIGNMENT:
☐ Flow-aligned
☐ Not flow-aligned
☐ Do not know

DIMENSIONS: (*if variable, sketch*)
15-18" (see below)
Barrel diameter: ~~_____~~ (ft)
Height: _____ (ft)
Culvert length: _____ (ft)
Width: _____ (ft)
Roadway elevation: _____ (ft)

CONDITION: (*Evidence of...*) ☐ In good condition
☒ Cracking/chipping/corrosion ☒ Downstream scour hole
☒ Sediment deposition ☒ Upstream erosion
☒ Blockage ☒ Failing embankment
☒ Threatened infrastructure ☐ Other (*describe*):

CULVERT SLOPE:
☐ Flat
☐ Slight (2 – 5%)
☐ Steeper

IS IT FLOWING?
☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
☐ Concrete
☐ Asphalt
☐ Unpaved: >gravel
☐ Unpaved: >dirt
☐ Other

STEEPNESS:
☐ Pretty flat
☐ Slight (around 5:1, 20%)
☐ Steep (more like 2:1, 50%)
☐ Big time steep (≥ 75%)

ACCESS/USE:
☐ Private
☐ Public
☐ Unknown

Total ROW Width: _____ (ft)
Drive lane: _____ (ft)
Shoulder: _____ (ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

3 culverts - west - East ~~west~~

18" RCP - scour, need riprap
18" RCP - chipping, blockage
15" RCP - farmland up., block, sediment
~~18" RCP - scour hole, stabilization need.~~
~~24" RCP - scour hole, Stab needed~~

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW: ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS — East End Rd Culverts – Coakley Bay Condos — **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-16 **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☐ Metal
- ☐ Other:

ALIGNMENT:
- ☒ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch)*
- Barrel diameter: 18 (ft)
- Height: _____(ft)
- Culvert length: _____(ft)
- Width: _____(ft)
- Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☒ Downstream scour hole
- ☐ Sediment deposition
- ☐ Upstream erosion
- ☐ Blockage
- ☐ Failing embankment
- ☐ Threatened infrastructure
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☒ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☐ No ☒ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☒ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☒ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)
Drive lane: _____(ft)
Shoulder: _____(ft)
Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

Dry weather flow from black PVC pipe. See retrofit section for more on this area. Receives flow from Coakley Bay Condos.

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☒ HOA; ☐ OTHER: Condo association

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS East End Rd – East of Coakley Bay Condos **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-17 **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW/KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☒ Concrete
- ☐ Metal
- ☐ Other:

ALIGNMENT:
- ☑ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)
- Barrel diameter: 1.5 (ft)
- Height: _____(ft)
- Culvert length: _____(ft)
- Width: _____(ft)
- Roadway elevation: _____(ft)

CONDITION: (*Evidence of…*) ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☒ Downstream scour hole
- ☐ Sediment deposition
- ☐ Upstream erosion
- ☒ Blockage
- ☐ Failing embankment
- ☐ Threatened infrastructure
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☒ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☒ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☒ significant ☐ complete

Potential barrier to aquatic species? ☒ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☒ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

- Total ROW Width: _____(ft)
- Drive lane: _____(ft)
- Shoulder: _____(ft)
- Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

Upstream end is mostly blocked with vegetation. Downstream end is also clogged with vegetation and there is a large scour hole that needs to be stabilized. Larger culvert is necessary.

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☐ HOA; ☐ OTHER:

Site Name_____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

STX EE WATERSHEDS — **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-18 Seven Flags neighborhood **Watershed:** Solitude

Date: 1/28/11 **Assessed by:** MW / KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☐ Concrete
- ☒ Metal
- ☐ Other:

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: (*if variable, sketch*)
- Barrel diameter: 12" (ft)
- Height: _____(ft)
- Culvert length: _____(ft)
- Width: _____(ft)
- Roadway elevation: _____(ft)

CONDITION: (*Evidence of...*) ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☒ Blockage
- ☐ Threatened infrastructure
- ☐ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other (*describe*):

CULVERT SLOPE:
- ☐ Flat
- ☐ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☐ significant ☒ complete

Potential barrier to aquatic species? ☐ No ☒ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

- Total ROW Width: _____(ft)
- Drive lane: _____(ft)
- Shoulder: _____(ft)
- Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes
Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:
Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:
Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:
Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

12" CMP - appears completely blocked

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW; ☐ LANDOWNER ☒ HOA; ☐ OTHER:

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____

East End Rd. culverts -

STX EE WATERSHEDS **ROADS & CULVERTS**

Site/Road Name/ID: SB-RC-19 East **Watershed:** Solitude

Date: 1/26/11 **Assessed by:** MW | KR

EXISTING CONDITION

☒ CULVERTS

SHAPE:
- ☐ Arch ☐ Bottomless
- ☐ Box ☐ Elliptical
- ☒ Circular
- ☐ Other:

 # BARRELS:
- ☒ Single
- ☐ Double
- ☐ Triple
- ☐ Other:

MATERIAL:
- ☐ Concrete
- ☒ Metal
- ☒ Other: PVC

ALIGNMENT:
- ☐ Flow-aligned
- ☐ Not flow-aligned
- ☐ Do not know

DIMENSIONS: *(if variable, sketch)*

Barrel diameter: 24" (ft)

Height: _____(ft)

Culvert length: _____(ft)

Width: _____(ft)

Roadway elevation: _____(ft)

CONDITION: *(Evidence of...)* ☐ In good condition
- ☐ Cracking/chipping/corrosion
- ☐ Sediment deposition
- ☐ Blockage
- ☐ Threatened infrastructure
- ☐ Downstream scour hole
- ☐ Upstream erosion
- ☐ Failing embankment
- ☐ Other *(describe)*:

CULVERT SLOPE:
- ☐ Flat
- ☐ Slight (2 – 5%)
- ☐ Steeper

IS IT FLOWING?
- ☐ No ☐ Yes

BLOCKAGE SEVERITY: ☐ none ☐ minor ☐ partial ☐ significant ☐ complete

Potential barrier to aquatic species? ☐ No ☐ Yes ☐ Unknown

Is it acting as grade control? ☐ No ☐ Yes ☐ Unknown

☐ ROAD SEGMENTS

SURFACE:
- ☐ Concrete
- ☐ Asphalt
- ☐ Unpaved: >gravel
- ☐ Unpaved: >dirt
- ☐ Other

STEEPNESS:
- ☐ Pretty flat
- ☐ Slight (around 5:1, 20%)
- ☐ Steep (more like 2:1, 50%)
- ☐ Big time steep (≥ 75%)

ACCESS/USE:
- ☐ Private
- ☐ Public
- ☐ Unknown

Total ROW Width: _____(ft)

Drive lane: _____(ft)

Shoulder: _____(ft)

Length of interest: _____

Surface: ☐ good condition ☐ minor maintenance needed ☐ large gullies and potholes

Drain Inlets/Catch basins: ☐ None ☐ clean ☐ blocked ☐ other:

Waterbars/dips/cross drains: ☐ None ☐ functioning ☐ need maintenance ☐ other:

Ditches: ☐ none ☐ shallow ☐ well-defined ☐ stable ☐ eroded ☐ excess vegetation ☐ other:

Discharge locations: ☐ Stable ☐ some erosion ☐ eroded ☐ other:

SEVERITY OF PROBLEM: ☐ High ☐ Med ☐ Low (Explain):

POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: ☐ HIGH ☐ MED ☐ LOW

DESCRIPTION OF EXISTING CONDITIONS:

2 PVC pipes - unknown source (8")

- septic smell

NEXT STEPS

Potential Repair Candidate? ☒ YES ☐ NO ☐ OTHER:

CONTACT ☒ DPW: ☐ LANDOWNER ☒ HOA: ☐ OTHER:

Site Name _____.

☐ SITE AERIAL INCLUDED

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☐ Low ☐ Medium ☐ High

Site Name_____