EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Paige @EMP

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? ☑ 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:
Surface runoff from road (paved) and parking area to trail
Water basin on trail + check dams/diversion
Silt fence
Road = 20' wide

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  ☐ Drainage Area to retrofit = _______ acres/sq ft
☑ Parking Lot  ☐ other small impervious area  ☐ Imperviousness = _______%
☐ Street  ☐ Pervious area  ☐ Impervious Area = _______ acres/sq ft
☐ Other (describe):

Benefits of Retrofit (primary & secondary): ☑ Storage  ☐ Water Quality  ☐ Recharge  ☐ Gut Protection  ☑ Demonstration / Education  ☐ Repair  ☐ Other: Protect trail from erosion

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  ☐ Obtain existing as-builts/site plans
☐ Confirm drainage area/impervious cover  ☐ Obtain detailed topography
☐ Confirm volume computations  ☐ Confirm soil types
☐ Complete concept sketch  ☐ Confirm storm drain invert elevations
☐ Other:
**Proposed Retrofit Concept (CONT.)**

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

Rain garden with xeric vegetation (e.g. cactus) in ditch to discharge down road to bypass high point possible culvert at trail head.

**Sketch and/or Sizing Calc:**

![Sketch](image)

**Existing Head Available/Where Measured:**

**Initial Feasibility and Construction Considerations/Design or Delivery Notes:**

**Thoughts on Maintenance Burden:** ✓ Low □ Medium □ High
STX EE WATERSHEDS

Site Name/ID: TH-R-2/DIVI CASINO
Watershed: TURNER HOLE
Date: 1/25/2011
Assessed by: PAG, ACS

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Divi Casino Manager/Owner

Land Use: [ ] Public [ ] Private [ ] Unknown:
[ ] Single Family Residential [ ] Multi-Fam. Residential [ ] School [ ] Golf Course [ ] Park [ ] Agricultural [ ] Road
[ ] Commercial/Industrial [ ] Resort [ ] Marina [ ] Other: Casino

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:
Detention pond

Soils: [ ] Unknown [ ] Poor infiltration [ ] Good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:
Sheet flow off parking lot to swale then directed to detention pond
Existing flow in rear parking and directs flow behind casino

PROPOSED RETROFIT CONCEPT (CONT. ON BACK)

Proposed Retrofit Practice(s): [X] 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): ED retrofit with micro-pod wetland/lens flow path/Buffer

Area Draining to Retrofit
[ ] Hotspot
[ ] Parking Lot
[ ] Street
[ ] 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 [ ] Yes, 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-buils/site plans
[ ] Obtain utility mapping
[ ] Obtain detailed topography
[ ] Confirm soil types
[ ] Confirm storm drain invert elevations
[ ] Other:
PROPOSED RETROFIT CONCEPT (CONT.)

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

Classic ED Retrofit
W/ Micro-pool Upland
Long Flow Path W/
Baffle.

Sketch and/or Sizing Cals:

Existing Head Available/Where Measured:

Lots except for swale.

Initial Feasibility and Construction Considerations/Design or Delivery Notes:

See sketch. Rain berm to get more storage.

Thoughts on Maintenance Burden: ☒ Low ☐ Medium ☐ High
**EXISTING SITE/STORMWATER MANAGEMENT**

**Site Contact Info:**  Divi Hotels & Resort

**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:**

- Existing detention basin on west end of property. Catch basin in parking lot directs to basin
- 10" PVC outlet leads beneath hotel to beach
- Gut upgrade and flows beneath road to basin via three 14" PVC

**PROPOSED RETROFIT CONCEPT (CONT. ON BACK)**

**Proposed Retrofit Practice(s):**  
- [ ] Existing BMP upgrade  
- [ ] New BMP

- [ ] Island bio/raingarden  
- [ ] Swale  
- [ ] Planter  
- [ ] Tree pits  
- [ ] Infiltration  
- [ ] Permeable paver  
- [ ] Sand filter  
- [ ] Pond  
- [ ] Constructed wetland  
- [ ] Proprietary practice  
- [ ] Soil amendments  
- [ ] Reforestation  
- [ ] Impervious cover removal

**Area Draining to Retrofit**

- [ ] Hotspot
- [ ] Parking Lot  
- [ ] Street  
- [ ] 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:**  
- [ ] Yes, 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 utility mapping  
- [ ] Obtain detailed topography  
- [ ] Confirm soil types  
- [ ] Confirm storm drain invert elevations  
- [ ] Other:
PROPOSED RETROFIT CONCEPT (CONT.)

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

- Enhance existing basin by adding new organic material to bottom of basin and install native plantings
- Rain garden in parking across road
- Rain garden at east end of hotel/INSTALL permeable pavers

Existing Head Available/Where Measured:

N/A

Initial Feasibility and Construction Considerations/Design or Delivery Notes:

Pond seems undersized. Bend on Dorchester. Expansion seems feasible.

Thoughts on Maintenance Burden: ☑️ Low ☐ Medium ☑️ High
EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Hotel Owner Unknown

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/organisms ☒ 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:
sheet flow off existing parking lot currently under renovation/restoration. Parking lot currently used for debris/dero material stockpiling

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 ≈ 75%
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: Parking limitations

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-construction plans ☐ Obtain utility mapping
☐ Obtain detailed topography ☐ Confirm soil types
☐ Confirm storm drain invert elevations
☐ Other:
PROPOSED RETROFIT CONCEPT (CONT.)

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

- Small DA - just parking lot (assum 1.5 Acre)
- Sheet flow to shallow bio

Sketch and/or Sizing Cales:

Existing Head Available/Where Measured:

No restriction w | Sheet flow to bio

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Need Parking layout #5

Thoughts on Maintenance Burden: □ Low [X] Medium □ High

Site ID: TH-R-4
STX EE WATERSHEDS

Site Name/ID: TH-R-5 Villa Madelinie
Watershed: Turner Hole

Date: 1/24/2011
Assessed by: RAC & ACS

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Condo board? Mgmt office?

Land Use: ☑️ 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/Floatable

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 primarily sheet flows from top of development south to base of hill into a bioretention area with 2 paved fringes. A swale is present along entire length of west side of main drive.

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 ☐ other small impervious area
Street ☑️ Pervious area ☐ Other (describe):

Drainage Area to retrofit ≈ _______ acres/sq ft

Imperviousness ≈ ___% Sec map

Impervious Area ≈ _______ acres/sq ft

Benefits of Retrofit (primary & secondary):
☐ Storage ☑️ Water Quality ☐ Recharge ☐ Gut Protection ☐

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

Describe conflicts:

Could increase sod/soil removal

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 existing as-buils/site plans
☐ Confirm drainage area/impervious cover (Sv
☐ Confirm volume computations ☐ Confirm storm drain invert elevations
☐ Complete concept sketch ☐ Other:

Site ID: TH-R-5
PROPOSED RETROFIT CONCEPT (CONT.)

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

Conduct maintenance on existing bio

Sketch and/or Sizing Cales:

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: ☒ Low □ Medium □ High