UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 1 -- Catchment Information

Subwatershed: **Unnamed Tributary**

Location of Catchment Centroid on ADC Map: Year: **2000**  Page: **17**  Grid: **J8**

State Plane Coordinates of Outfall Location: X: **1397847**  Y: **482054**

Closest Road Intersection to Outfall: **Priest Bridge Drive and Espey Court**

Outfall SDI ID or Outfall Description: **Drains to storm drain system that runs along Baldwin Avenue**

Objective: **Demonstration / Impairment(s) (Sheet 1)**

Drainage Area (ac): **5.5**  Impervious Area (ac): **4.6**

Percent Impervious: **84%**  Soil Recharge Factor (S): **0.38**

WQ_v (required): **0.37**  Re_v (required): **0.14**

Predominant Land Use: **commercial**  Mean Depth to Ground Water: **Unknown**

Sanitary System: □ Septic  [✓] Municipal Sewer  Water Supply: □ On Site Well  [✓] Public Water

Storm Drainage System Within Catchment

Piped: **100%**  Open Channels: **0%**

Area Drained by System: **100%**

Location in Catchment: □ Headwaters  □ Middle  □ Lower  [✓] All

Open Channel Lining- Vegetation: **0%**  Riprap: **0%**  Concrete: **0%**  Other: **0%**

Existing IMP(s) / BMP(s)

SDI ID: **_______**  Type (number from Sheets 4 & 5): **_______**  Age: **_______**

Closest Road Intersection to IMP / BMP: **______________**

Catchment Area Treated (ac) : **__________**  Percentage Catchment Treated: **__________**

WQ_v Provided: □ YES  □ NO  Re_v Provided: □ YES  □ NO  C_p Provided: □ YES  □ NO

SDI ID: **_______**  Type (number from Sheets 4 & 5): **_______**  Age: **_______**

Closest Road Intersection to IMP / BMP: **______________**

Catchment Area Treated (ac) : **__________**  Percentage Catchment Treated: **__________**

WQ_v Provided: □ YES  □ NO  Re_v Provided: □ YES  □ NO  C_p Provided: □ YES  □ NO

SDI ID: **_______**  Type (number from Sheets 4 & 5): **_______**  Age: **_______**

Closest Road Intersection to IMP / BMP: **______________**

Catchment Area Treated (ac) : **__________**  Percentage Catchment Treated: **__________**

WQ_v Provided: □ YES  □ NO  Re_v Provided: □ YES  □ NO  C_p Provided: □ YES  □ NO

Page 2 of 19
## CATCHMENT SUMMARY

<table>
<thead>
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<th>WQ_v (provided)</th>
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<tr>
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<tr>
<td>55%</td>
<td>54%</td>
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Comments

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Site Name: ________________________________ Address: 2128 Espey Court

Site Owner: ___________________________________________

State Plane Coordinates of Site Centroid: X: 1397725 Y: 481895 Date: 5/13/03

Personnel: PM Weather: cloudy, 70F deg

Area (ac): 1.0 Impervious Area (ac): 0.6
Percent Impervious: 66% Soil Recharge Factor (S): 0.38
WQv (required): 0.05 Rev (required): 0.02

Property Area (ac): 1.0 Property Area Included in Site: 100%
Amount of Catchment Occupied by Site: 18%

Storm Drainage System Within Site
Piped: 100% Open Channels: 0% Area Drained by System: 100%
Open Channel Lining - Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

Existing IMP(s) / BMP(s) (Identified on Page 1, FORM 1, Catchment Information)

SDI ID: ______________ Condition: ☐ Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor
SDI ID: ______________ Condition: ☐ Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor
SDI ID: ______________ Condition: ☐ Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor

Site Information
Type of Pavement: ☑ Bituminous ☐ Concrete ☐ Gravel ☐ Grid Pavers ☐ Other ______________
Pavement Condition: ☐ Excellent ☑ Good ☐ Average ☐ Fair ☐ Poor
Underdrains can be easily directed to existing storm drains or daylighted: ☑ YES ☐ NO
Gutter/Exterior Downspouts Present: ☑ YES ☐ NO
Roof Connected Directly to Storm Drain: ☑ YES ☐ NO
Roof Drains onto Impervious Surface: ☐ YES ☐ NO
Obvious Existing Drainage Problems: ☐ Extensive ☐ Moderate ☐ Average ☑ Limited ☐ None
Steep Slopes Present: ☐ Extensive ☐ Moderate ☐ Average ☐ Limited ☑ None
Existing Landscaping: ☐ Extensive ☐ Moderate ☑ Average ☐ Limited ☐ None
Mature / Specimen Trees: ☐ Extensive ☐ Moderate ☐ Average ☑ Limited ☐ None
Area Available for Aboveground BMPs: ☐ Extensive ☐ Moderate ☑ Average ☐ Limited ☐ None
Existing Cover of Potential Aboveground BMP Locations: ☑ Grass ☐ Landscaped ☐ Gravel ☐ Other Pervious
☐ Pavement ☐ Other Impervious
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information (concluded)

Commercial / Institutional
Islands Present: ☑ YES ☐ NO Curb Present Around Island: ☑ YES ☐ NO
Ground Level of Island Relative to Pavement: ☑ Above ☐ Equal ☐ Below
Island Landscaping: ☑ Impervious ☐ Bare Earth ☐ Gravel ☑ Grass ☑ Mulch ☐ Herbaceous Plants ☑ Shrubs
☐ Trees (<2 in. DBH) ☐ Trees (2 - 6 in. DBH) ☑ Trees (>6 in. DBH)
Trees have sufficient spacing to allow IMPs ☑ YES ☐ NO Parking area that can be directed to potential treatment area with little grading: 90%

SITE SUMMARY

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<tr>
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Photographs

No. 789 Description: looking west along north side of site
No. 790 Description: looking south along east side of site
No. 791 Description: looking west along south side of site
No. 792 Description: looking north along east side of site
No. 793 Description: looking east along south side of site
No. 794 Description: looking north along west side of site
No. 795 Description: looking east along north side of site
No. 796 Description: looking south along west side of site
No. Description: looking west along north side of site
No. Description: looking south along east side of site
No. Description: looking west along south side of site
No. Description: looking north along east side of site
No. Description: looking east along south side of site
No. Description: looking north along west side of site
No. Description: looking east along north side of site
No. Description: looking south along west side of site

Comments The northeast portion of the property drains offsite (to site 46). Roof downspouts that drain small portion of metal roof drains onto impervious surface (landscaping).
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP ☑️ SWM BMP Retrofit ☐ New SWM BMP ☐ Type (Sheets 4 & 5): 7

State Plane Coordinates of IMP / BMP Centroid: X: 1397720 Y: 481893

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 4, 7, 16

Treatment Area Ownership: ☐ Transportation ROW ☑️ Utility ROW ☐ County ☐ Other Government ☑️ Private

Infrastructure / Structures / Buildings Impacted: ☑️ YES ☐ NO

Limited Impact to Adjacent Properties: ☑️ YES ☐ NO

Area Accessible for Construction: ☑️ YES ☐ NO

Area Accessible for Maintenance: ☑️ YES ☐ NO

Limited Permitting Issues: ☑️ YES ☐ NO

Jurisdictional Wetlands Impacted: ☑️ YES ☐ NO

Forest Retention Area Impacted: ☑️ YES ☐ NO

Conservation Easement Impacted: ☐ YES ☑️ NO

Utilities Present: ☑️ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other

Utilities Impacted: ☑️ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other

Impacted Utilities: ☐ Above Ground ☐ Underground

Critical Area Impacted: ☐ YES ☑️ NO

Mature / Specimen Trees Impacted: ☑️ YES ☐ NO

Existing Landscaping Impacted: ☑️ YES ☐ NO

Underdrain Needed: ☑️ YES ☐ NO Underdrains Can Discharge: ☐ YES ☑️ NO

Soils are Suitable: ☐ YES ☑️ NO Ground Water Table Level Suitable: ☑️ YES ☐ NO

Estimate IMP / BMP drainage area included on site: 0.22 ac 100%

Retrofit of Existing SWM BMP

SDI ID: ________________ Add Forebay: ☐ YES ☐ NO
Modify Outlet Structure: ☑️ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO
Grade Bottom of Facility: ☑️ YES ☐ NO Plant Native Vegetation: ☑️ YES ☐ NO
Provide Additional Storage Volume: ☑️ YES ☐ NO
Excavation / Raise the Embankment: ☑️ YES ☐ NO
**IMP / BMP SUMMARY**

| WQ, (provided): | undetermined | Re, (provided): | 0 |
| Area Treated (ac): | 0.22 | Impervious Area Treated (ac): | 0.22 |

**Photographs**

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**Comments**

IMP size = 9,580 sq ft
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP ☑ SWM BMP Retrofit ☐ New SWM BMP ☐ Type (Sheets 4 & 5): 60

State Plane Coordinates of IMP / BMP Centroid: X: 1397633 Y: 481893

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 3, 7, 16

Treatment Area Ownership: ☑ Transportation ROW ☐ Utility ROW ☐ County ☐ Other Government ☑ Private

Infrastructure / Structures / Buildings Impacted: ☑ YES ☐ NO

Limited Impact to Adjacent Properties: ☑ YES ☐ NO

Area Accessible for Construction: ☑ YES ☐ NO

Area Accessible for Maintenance: ☑ YES ☐ NO

Limited Permitting Issues: ☑ YES ☐ NO

Jurisdictional Wetlands Impacted: ☑ YES ☐ NO

Forest Retention Area Impacted: ☑ YES ☐ NO

Conservation Easement Impacted: ☑ YES ☐ NO

Utilities Present: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other

Utilities Impacted: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other

Impacted Utilities: ☐ Above Ground ☐ Underground

Critical Area Impacted: ☑ YES ☐ NO

Mature / Specimen Trees Impacted: ☑ YES ☐ NO

Existing Landscaping Impacted: ☑ YES ☐ NO

Underdrain Needed: ☑ YES ☐ NO Underdrains Can Discharge: ☑ YES ☐ NO

Soils are Suitable: ☑ YES ☐ NO Ground Water Table Level Suitable: ☑ YES ☐ NO

Estimate IMP / BMP drainage area included on site: 0.03 ac 100%

Retrofit of Existing SWM BMP

SDI ID: ______________ Add Forebay: ☑ YES ☐ NO
Modify Outlet Structure: ☑ YES ☐ NO Add Aquatic Bench: ☑ YES ☐ NO
Grade Bottom of Facility: ☑ YES ☐ NO Plant Native Vegetation: ☑ YES ☐ NO
Provide Additional Storage Volume: ☑ YES ☐ NO
Excavation / Raise the Embankment: ☑ YES ☐ NO
### IMP / BMP SUMMARY

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### Comments

IMP size = 1,300 sq ft
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP ☑  SWM BMP Retrofit ☐  New SWM BMP ☐  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid:  X: 1397620   Y: 481931

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership: ☐ Transportation ROW   ☐ Utility ROW   ☐ County   ☐ Other Government   ☑ Private

Infrastructure / Structures / Buildings Impacted:  ☐ YES  ☑ NO

Limited Impact to Adjacent Properties:  ☑ YES  ☐ NO

Area Accessible for Construction:  ☑ YES  ☐ NO

Area Accessible for Maintenance:  ☑ YES  ☐ NO

Limited Permitting Issues:  ☑ YES  ☐ NO

Jurisdictional Wetlands Impacted:  ☐ YES  ☑ NO

Forest Retention Area Impacted:  ☐ YES  ☑ NO

Conservation Easement Impacted:  ☐ YES  ☑ NO

Utilities Present:  ☐ None  ☑ Natural Gas  ☐ Electric  ☐ Telephone  ☐ Cable  ☐ Water  ☐ Sewer  ☐ Other

Utilities Impacted:  ☐ None  ☑ Natural Gas  ☑ Electric  ☑ Telephone  ☐ Cable  ☐ Water  ☐ Sewer  ☐ Other

Impacted Utilities:  ☐ Above Ground  ☑ Underground

Critical Area Impacted:  ☐ YES  ☑ NO

Mature / Specimen Trees Impacted:  ☑ YES  ☐ NO

Existing Landscaping Impacted:  ☑ YES  ☐ NO

Underdrain Needed:  ☑ YES  ☐ NO  Underdrains Can Discharge:  ☐ YES  ☑ NO

Soils are Suitable:  ☑ YES  ☐ NO  Ground Water Table Level Suitable:  ☑ YES  ☐ NO

Estimate IMP / BMP drainage area included on site:  0.59 ac  90%

Retrofit of Existing SWM BMP

SDI ID: ____________  Add Forebay:  ☐ YES  ☐ NO

Modify Outlet Structure:  ☐ YES  ☐ NO  Add Aquatic Bench:  ☐ YES  ☐ NO

Grade Bottom of Facility:  ☐ YES  ☐ NO  Plant Native Vegetation:  ☐ YES  ☐ NO

Provide Additional Storage Volume:  ☐ YES  ☐ NO

Excavation / Raise the Embankment:  ☐ YES  ☐ NO
### IMP / BMP SUMMARY

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<th>Value</th>
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### Photographs

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<td>looking south</td>
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<tr>
<td>805</td>
<td>looking east</td>
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### Comments

This IMP may impact parking and access to the west side of the building, although access to building does not appear to be required. The inlet may need to be raised to direct flow to the grassed area to the west. An existing light fixture (abandoned) will need to be removed or relocated.

IMP size = 2,766 sq ft
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP ☑️ SWM BMP Retrofit ☐ New SWM BMP ☐ Type (Sheets 4 & 5): 50

State Plane Coordinates of IMP / BMP Centroid: X: 1397754  Y: 481817

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership: ☑️ Transportation ROW ☐ Utility ROW ☐ County ☐ Other Government ☐ Private

Infrastructure / Structures / Buildings Impacted: ☑️ YES ☐ NO

Limited Impact to Adjacent Properties: ☑️ YES ☐ NO

Area Accessible for Construction: ☑️ YES ☐ NO

Area Accessible for Maintenance: ☑️ YES ☐ NO

Limited Permitting Issues: ☑️ YES ☐ NO

Jurisdictional Wetlands Impacted: ☑️ YES ☐ NO

Forest Retention Area Impacted: ☐ YES ☑️ NO

Conservation Easement Impacted: ☐ YES ☑️ NO

Utilities Present: ☐ None ☑️ Natural Gas ☑️ Electric ☑️ Telephone ☐ Cable ☑️ Water ☐ Sewer ☐ Other

Utilities Impacted: ☐ None ☑️ Natural Gas ☑️ Electric ☑️ Telephone ☐ Cable ☑️ Water ☐ Sewer ☐ Other

Impacted Utilities: ☐ Above Ground ☑️ Underground

Critical Area Impacted: ☐ YES ☑️ NO

Mature / Specimen Trees Impacted: ☑️ YES ☐ NO

Existing Landscaping Impacted: ☑️ YES ☐ NO

Underdrain Needed: ☐ YES ☑️ NO Underdrains Can Discharge: ☑️ YES ☐ NO

Soils are Suitable: ☑️ YES ☐ NO Ground Water Table Level Suitable: ☑️ YES ☐ NO

Estimate IMP / BMP drainage area included on site: 0.23 ac 81%

Retrofit of Existing SWM BMP

SDI ID: _______________ Add Forebay: ☐ YES ☐ NO

Modify Outlet Structure: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO

Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☑️ YES ☐ NO

Provide Additional Storage Volume: ☐ YES ☐ NO

Excavation / Raise the Embankment: ☐ YES ☐ NO
### IMP / BMP SUMMARY

| Description | WQv (provided): 0.009 | Rev (provided): 0.009 | Area Treated (ac): 0.13 | Impervious Area Treated (ac): 0.09 |

### Photographs

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<tr>
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### Comments

Parking area will need to be diverted using "speed bump" or trench drain. Existing trees may need to be removed. The facility will be constructed between the road and the sidewalk. IMP treats 48% of drainage area as sized. IMP size = 623 sq ft
UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice