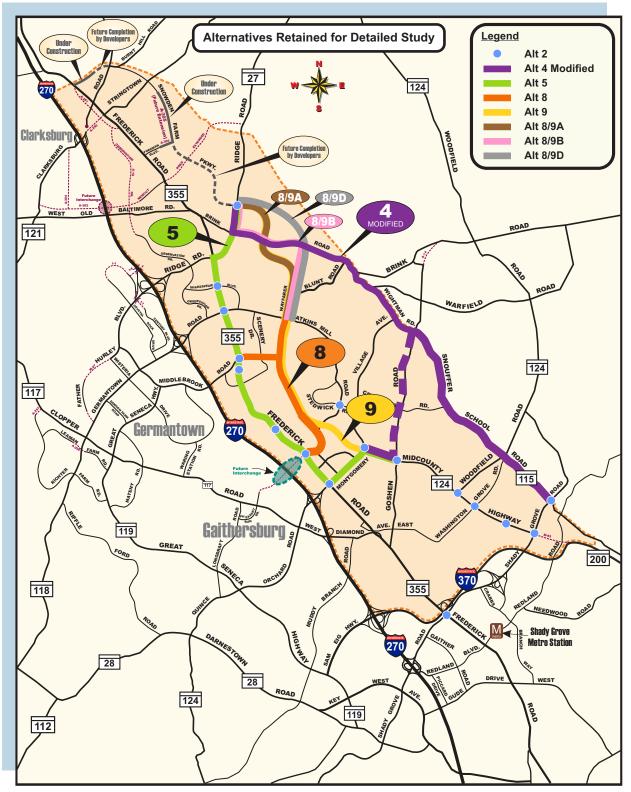




WETLANDS/STREAMS MITIGATION SITES





Montgomery County Department of Transportation 101 Monroe Street 10th Floor Rockville, MD 20850

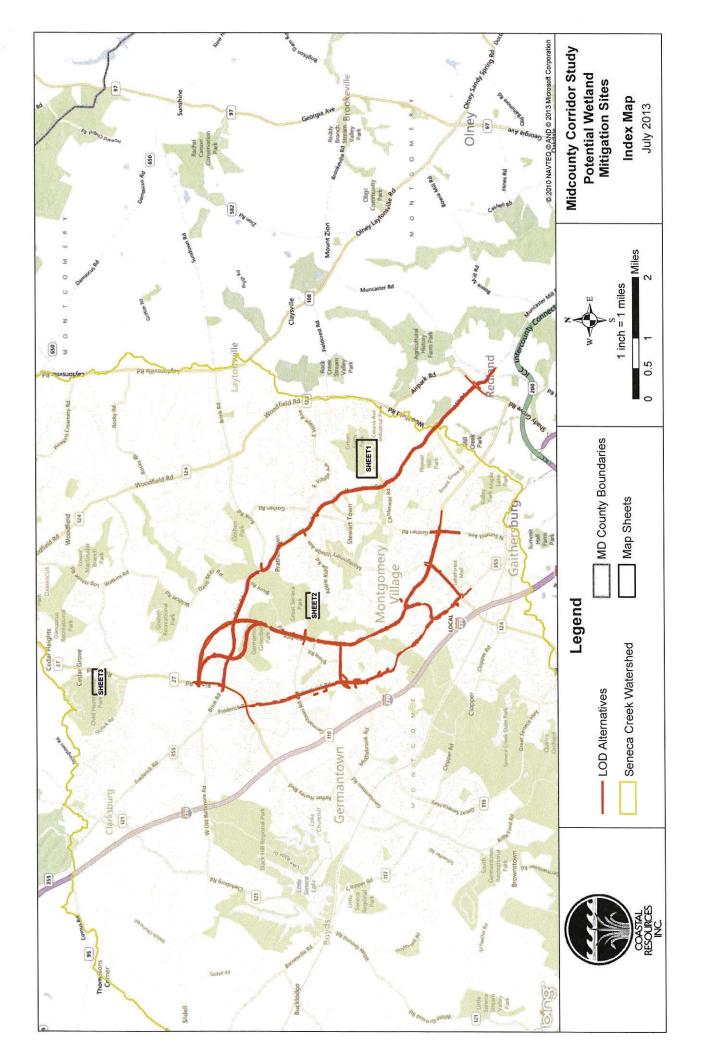
Midcounty Corridor Study Potential Wetland Mitigation Sites Agency Field Review

Agenda

Meeting Objective: To provide an overview of potential wetland sites.

July 23, 2013

- > Meet at Lois Y. Green Conservation Park on Snouffer School Road at 9:00 AM
 - Review of Agenda
 - Project Status
- 1. LY Green 4.30-acre Potential Wetland Mitigation Site
- 2. <u>MC-SC-017</u> 1.10-acre Potential Wetland Mitigation Site
- 3. MC-SC-007 2.73-acre Potential Wetland Mitigation Site
- > Wrap-up and Discussion of Midcounty Corridor Study Mitigation Sites for Conceptual Package



Midcounty Corridor Study Potential Wetland Mitigation Site at Green Farm Park (LY Green)

Existing Conditions Summary

Location Information			
County:	Montgomery		
Watershed:	Seneca Creek		
Coordinates:	39°10'30.73"N / 77°10'05.50	<u></u>	
USGS Quad:	<u>Gaithersburg</u>		
Location:	Southeast of the terminus o	<u>f Fessenden Lane, Gaithersburg, MD</u>	
Property Ownership:	M-NCPPC		
Constraints:	Sewer line along stream		
Site Conditions			
Parcel Area:	219.76 acres	Existing Land Use: Field, Forest	
Landscape Position:	Floodplain	Adjacent Land Use: Commercial, Forest	
Drainage Area:	832 acres		
Depth to Water Table:	<u>Test Plot 1: 41", Test Plot 2: 30"</u>		
Habitat Location:	Contiguous to wetland/upland forest <25 acres		
Mapped Soils:	Gaila silt loam, Brinklow-Blocktown channery silt loams, and Hatboro silt		
	loam		
Mapped Wetlands:	<u>NWI / DNR wetlands mapped on site</u>		
Green Infrastructure:	Located within Green Infrastructure Gap		

This wetland site is located southeast of the terminus of Fessenden Lane, in Gaithersburg, MD. A cleared field extends from the toe of slope to the tree line along the north bank of Cabin Branch. This area is situated on a slope that is slightly higher than the elevation of the adjacent stream. The area may be suitable for the creation of a groundwater slope wetland or an offline stream flow/groundwater interception wetland. Loamy soils underlie the field and moderate grading will be necessary to intercept groundwater in order to create wetlands.

Summary of Opportunities

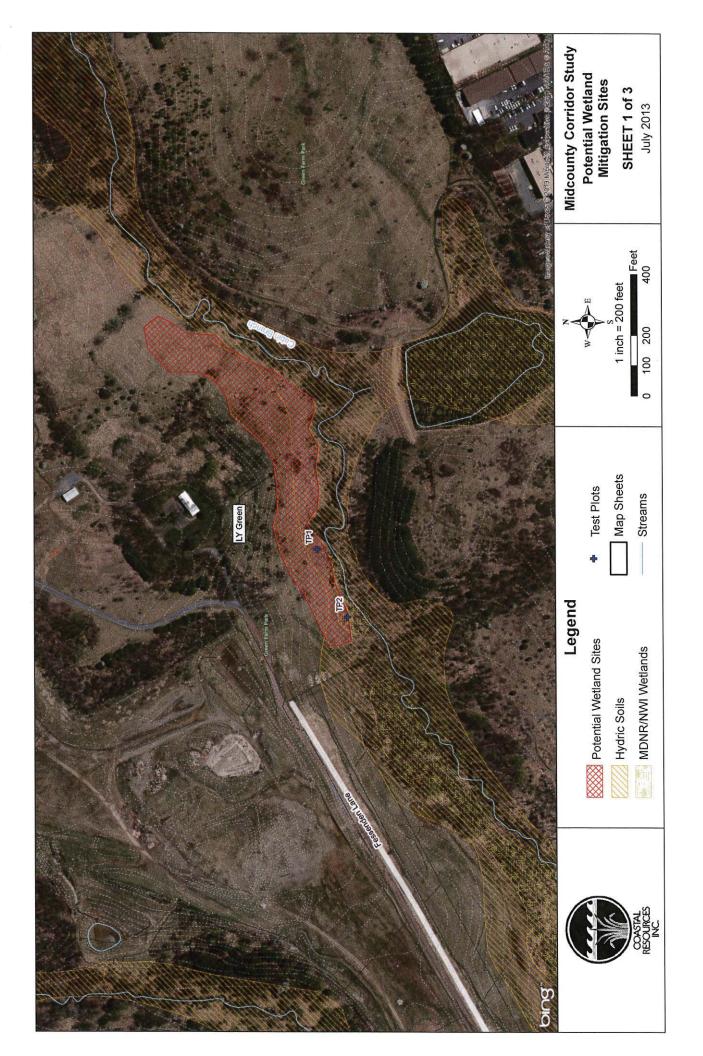
• Wetland Creation - Approximately 4.30 acres

Restoration Objectives

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration

Restoration Concept

• Moderate grading to intercept groundwater and create a groundwater slope wetland



Midcounty Corridor Study Potential Wetland Mitigation Site at Great Seneca Park (MC-SC-017)

Existing Conditions Summary

Location Information		
County:	Montgomery	
Watershed:	Seneca Creek	
Coordinates:	<u>39°11'18.85"N / 77°12'52.82</u>	<u></u>
USGS Quad:	Gaithersburg	
Location:	North of Watkins Mill Road, Gaithersburg, MD	
Property Ownership:	M-NCPPC	
Constraints:	None	
Site Conditions		
Parcel Area:	<u>28.71 acres</u>	Existing Land Use: Forest, Field
Landscape Position:	Stream valley	Adjacent Land Use: Residential, Forest
Drainage Area:	2,944 acres	
Depth to Water Table:	<u>44"</u>	
Habitat Location:	Contiguous to wetland/upland forest >100 acres	
Mapped Soils:	Hatboro silt loam	
Mapped Wetlands:	<u>NWI / DNR wetlands mapped on site</u>	
Green Infrastructure:	Located within Green Infrastructure Hub	

This wetland site is located north of Watkins Mill Road within Great Seneca Park. A field within the stream valley at the confluence of Great Seneca Creek and North Creek may be suitable for wetland creation. The area is situated in a topographic low and is slightly higher than the elevation of the adjacent stream. Loamy soils underlie the field and moderate grading will be necessary to intercept groundwater in order to create wetlands.

Summary of Opportunities

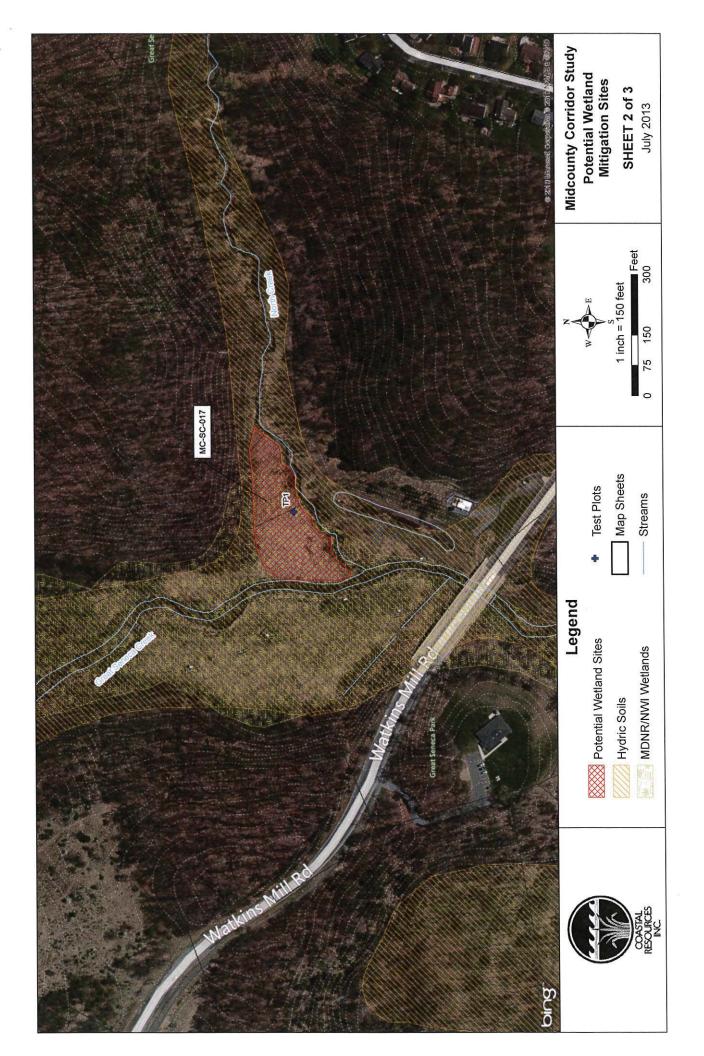
Wetland Creation - Approximately 1.10 acres

Restoration Objectives

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration

Restoration Concept

· Moderate grading to intercept groundwater and create wetlands



Midcounty Corridor Study Potential Wetland Mitigation Site at Ovid Hazen Wells Park (MC-SC-007)

Existing Conditions Summary

Location Information		
County:	Montgomery	
Watershed:	Seneca Creek	
Coordinates:	39°14'27.32"N / 77°14'27.11	<u>"W</u>
USGS Quad:	Germantown	
Location:	West of Ridge Road and Davis Mill Road, Clarksburg, MD	
Property Ownership:	M-NCPPC	
Constraints:	None	
Site Conditions		
Parcel Area:	<u>292.08 acres</u>	Existing Land Use: Fallow Field
Landscape Position:	Stream valley	Adjacent Land Use: Agriculture, Forest
Drainage Area:	<u>128 acres</u>	
Depth to Water Table:	Likely within 30"-38", need to install wells to assess hydrology	
Habitat Location:	Contiguous to wetland/upland forest <25 acres	
Mapped Soils:	Baile silt loam and Occoquan loam	

NWI / DNR wetlands mapped on site

This wetland site is located west of Ridge Road within Ovid Hazen Wells Park, in Clarksburg, MD. A field, containing a swale, situated just east of the adjacent stream may be suitable for wetland creation. The area is situated on a gentle slope and is slightly higher than the elevation of the adjacent stream. During the site investigation, standing water was observed above an old road bed on the west side of the site. Loamy soils underlie the field and minimal to moderate grading will be necessary to intercept groundwater in order to create wetlands.

Located within Green Infrastructure Gap and Corridor

Summary of Opportunities

• Wetland Creation - Approximately 2.73 acres

Restoration Objectives

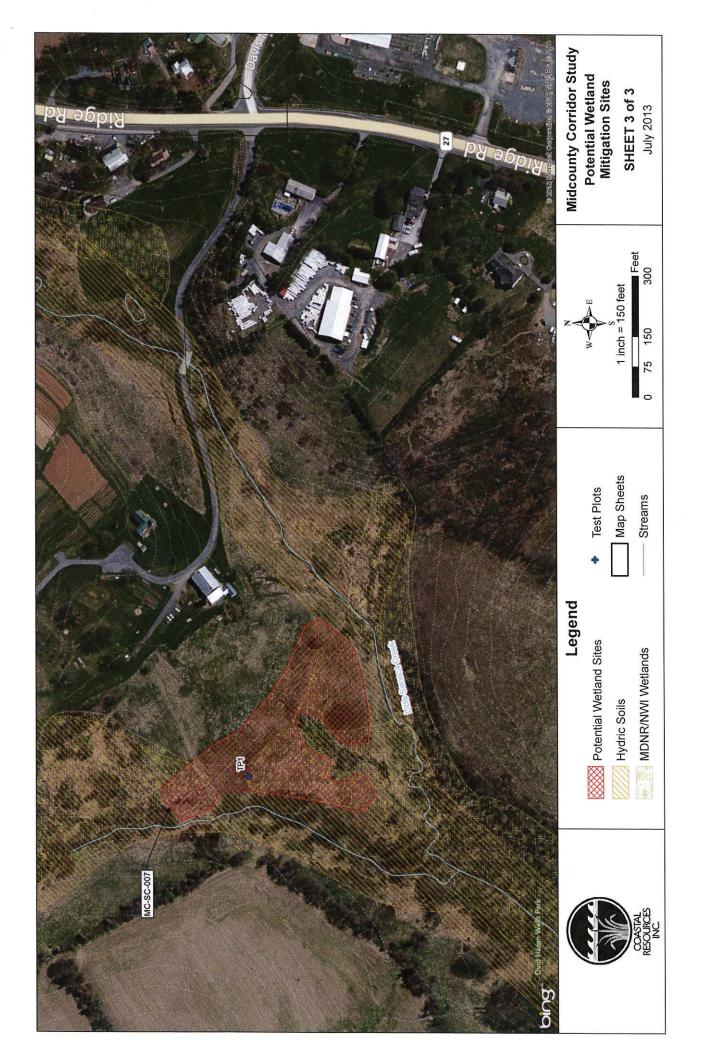
Mapped Wetlands:

Green Infrastructure:

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration

Restoration Concept

• Minimal to moderate grading to intercept groundwater and create wetlands



http://www2.montgomerycountymd.gov/DOT-DTE/FacilityPlanning/FPHome.aspx



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Division of Transportation Engineering

Meeting:

Midcounty Corridor Study – Potential Wetland Mitigation Site Field Review Meeting Date: July 23, 2013

100 Edison Park Dr., 4th Floor Gaithersburg, MD 20878 Phone: 240-777-7223 Location: Fax: 240-777-7277

Purpose:

Bruce Johnston, P.E. **Division Chief**

Holger Serrano, P.E. Division Deputy Chief

Sogand Seirafi, P.E. Planning & Design Chief

Tom M. Reise Property Acquisition Chief

Girum Awoke, Ph.D., P.E. **Construction Chief**

Project Name: Midcounty Corridor Study (MCS)

Limits: Midcounty Highway to Future Snowden Farm Parkway (A-305)

Length: 6.2 Miles

Location: Gaithersburg/ Germantown

Project Overview This project provides for Facility Planning, Phase I and NEPA services to evaluate providing congestion relief and improve vehicular, pedestrian and bicycle mobility for the north-south corridor east of I-270 between Gaithersburg and Clarksburg.

Project Manager Greg Hwang Phone: 240-777-7279 greg.hwang@ montgomerycountymd.gov Meeting convened at Lois Y. Green Conservation Park on **Snouffer School Road Review of Intiial Wetland Mitigation Sites**

MEETING MINUTES

DATE OF MEETING MINUTES: July 30, 2013 **ATTENDEES:**

<u>Name</u>	Agency	<u>Telephone</u>	<u>E-mail</u>
Jai Cole	M-NCPPC Parks	240-876-3326	jai.cole@montgomeryparks.org
Joseph DaVia	USACE	410-962-5691	joseph.davia@usace.army.mil
Don Dorsey	MCDEP	240-777-7712	donald.dorsey@montgomerycountymd.gov
Jim Eisenhardt	RK&K	302-382-5812	<u>jeisenhardt@rkk.com</u>
Steve Findley	M-NCPPC Planning	301-495-4727	steve.findley@montgomeryplanning.org
Rob Gibbs	M-NCPPC Parks	301-962-1341	<u>rob.gibbs@montgomeryparks.org</u>
Greg Hwang	MCDOT	240-777-7279	greg.hwang@montgomerycountymd.gov
Doug Marshall	MCDEP	240-777-7767	douglas.marshall@montgomerycountymd.gov
Amanda Matheny	M-NCPPC Parks	301-460-2723	amanda.methany@montgomeryparks.org
Alexis Morris	RK&K	410-462-9349	amorris@rkk.com
Kelly Neff	MDE	410-537-4018	<u>kelly.neff@maryland.gov</u>
Nick Ozborn	USACE	410-962	nicholas.r.ozborn@usace.army.mil
John Policarpo	USACE	410-962-4522	john.n.policari@usace.army.mil
Hira Shrestha	MDE	410-537-4247	Hira.shrestha@maryland.gov
David Smith	CRI	443-995-4108	davids@coastal-resources.net
Adam Tatone	CRI	443-837-2149	adamt@coastal-resources.net

HANDOUTS: A handout was provided

MINUTES: The group convened at Lois Y. Green Conservation Park on Snouffer School Road. Jim Eisenhardt (RK&K) provided a brief overview, outlining the purpose of the field review. The project team has identified three potential sites for the mitigation of Wetland impacts of the proposed Midcounty Corridor. The project team has not yet identified a preferred alternative but conceptual impact analysis indicates that wetland impacts under the worst case scenario would include nearly 0.9 acres of wetland fill and 1.7 acres of wetland conversion. As a result of preliminary agency coordination, the project team is looking to identify adequate area for up to five (5) acres of wetland mitigation.

Adam Tatone (CRI) explained that the field review would cover three sites, each located on M-NCPPC Parks property. The project team indicated that property owner authorization had not yet been received to survey potential sites held by private property owners. Meeting attendees were provided with an agenda and one-page summary of existing conditions at each site with accompanying mapping.

LY Green: Located southeast of the terminus of Fessenden lane, the site could provide up to 4.30 acres of wetland creation. Agency comments included:

- Sewer line constraint adjacent to stream for 2/3 of site
- Multi-Agency Facility is planned for the property. Montgomery County indicated that a
 portion of this site may be designated for reforestation or conservation in conjunction
 with the development of the facility and may limit site size/availability. Additionally, it
 would be necessary to know the stormwater management plan for the proposed
 development. This could affect hydrology of the site. M-NCPPC Planning to provide
 additional info.
- Joseph Davia (USACE) questioned whether there may be restrictions because of nearby Montgomery Airpark and FAA regulations
- Nick Ozburn (USACE) mentioned the sewer line may have a rock lining that could drain the wetland creation site. May need core lining to back water up in to site
- Rob Gibbs (M-NCPPC Parks) mentioned that EQR once speculated that drain tiles may be present on site.
- Jai Cole (M-NCPPC Parks) noted that there is a historic home on the property that may have a historic view shed, may not be able to change view shed (forest the site). M-NCPPC Parks to forward GIS files.
- USACE would not want the existing seep wetland to be disturbed and would need to avoid drying this area out

MC-SC-007: Located west of Ridge Road and Davis mill Road, the site could provide up to 2.73 acres of wetland creation. Agency comments included:

- Kelly Neff (MDE) would like the old stream crossing removed as part of the project.
- Site appears to require less cut, but has more existing wetlands
- MDE would be okay with the enhancement of existing marginal wetland edges, just not in the wettest areas. This would help reduce fescue, thistle, small carp grass
- Possible view shed issues associated with historic farm
- The majority of attendees are interested in the site as a stream/wetland creation combo

Minutes – July 23, 2013 – Potential Mitigation Site Field Review

MC-SC-017: Located north of Watkins Mill Road, the site could provide up to 1.10 acres of wetland creation. Agency comments included:

- Site is dominated by non-native plant species including Asiatic tearthumb and reed canary grass
- Small site adjacent to unstable incised stream
- Guy wires from cell towers within site
- The majority of attendees do not think the site is worth pursuing unless combined with stream restoration and may not be worth it because of the small potential creation. *This site has been retained as the proposed stream mitigation site.*

The agencies agree to provide MCDOT and RK&K with consolidated written comments for their own agency on the three sites by the week of August 12, 2013.



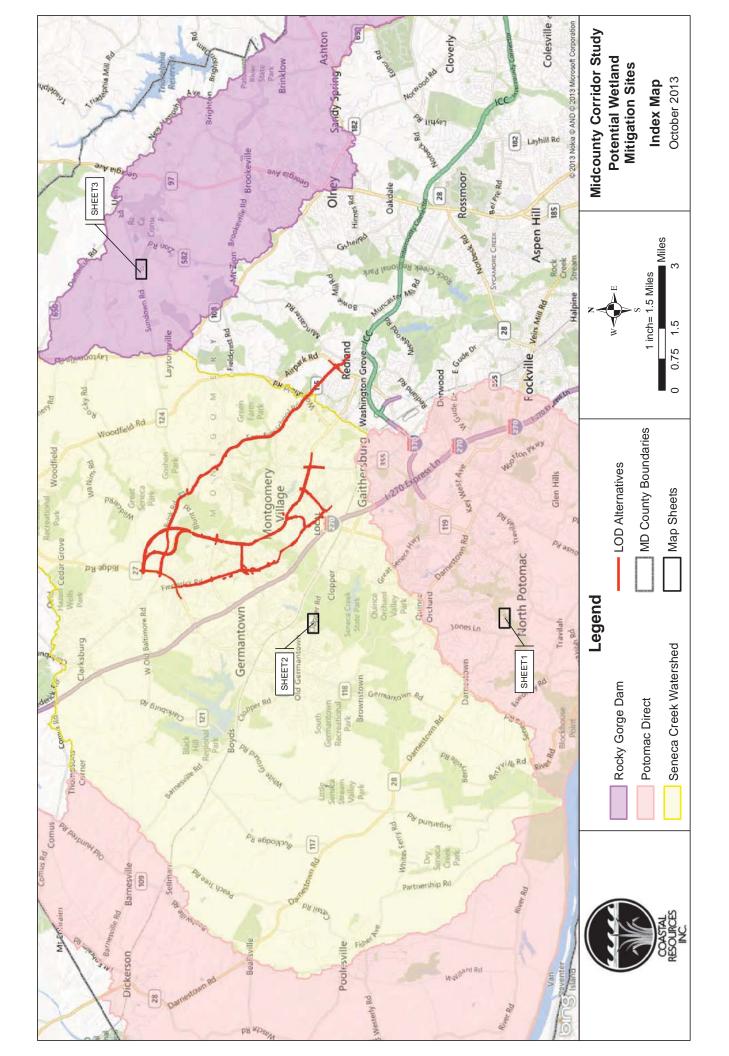
Midcounty Corridor Study Potential Wetland Mitigation Sites Agency Field Review

<u>Agenda</u>

Meeting Objective: To provide an overview of potential wetland sites.

October 30, 2013

- > Meet at Park and Ride lot located in the northeast corner of I-270 and MD 117 at 8:30 AM
 - Review of Agenda
 - Project Status
- 1. <u>High Meadow</u> 3.89-acre Potential Wetland Mitigation Site
- 2. <u>Cinnamon</u> 3.55-acre Potential Wetland Mitigation Site
- 3. <u>Sundown</u> 4.79-acre Potential Wetland Mitigation Site
- > Wrap-up and Discussion of Midcounty Corridor Study Mitigation Sites for Conceptual Package



Midcounty Corridor Study Potential Wetland Mitigation Site at High Meadow Road (High Meadow)

Existing Conditions Summary

Location Information			
County:	<u>Montgomery</u>		
Watershed:	Potomac Direct		
Coordinates:	<u>39°5'20.865"N / 77°15'34.20</u>	<u>W"00</u>	
USGS Quad:	<u>Seneca</u>		
Location:	South of High Meadow Road	d, North Potomac, MD	
Property Ownership:	Montgomery County		
Constraints:	Sewerline runs along stream and perpendicular through site		
Site Conditions			
Parcel Area:	<u>17.69 acres</u>	Existing Land Use: Meadow/ Field	
Landscape Position:	Floodplain/Slope	Adjacent Land Use: Residential, Forested	
Drainage Area:	<u>7,552 acres</u>		
Depth to Water Table:	Test Plot 1: N/A		
Habitat Location:	Contiguous to wetland/upland forest >100 acres		
Mapped Soils:	Hatboro silt loam, 0 to 3 percent slopes, frequently flooded		
Mapped Wetlands:	NWI / DNR wetlands mapped on site		

This wetland site is located south of High Meadow Road in North Potomac, MD. This area is located between a residential neighborhood (Potomac Chase) and Muddy Branch, which flows to the Potomac River. The site is dominated by small carpgrass (*Arthraxon hispidus*), arrow-leaf tearthumb (*Persicaria sagittata*), and Japanese stiltgrass (Microstegium vimineum). The water table was not observed within 4.5 feet of the surface. Due to the topographic location of this area, it may be suitable for the creation of a surface water runoff wetland. Loamy soils with a low percentage of clay underlie the field and minimal grading and perhaps soil compaction will be necessary to collect runoff.

Located within Green Infrastructure Gap and Hub

Summary of Opportunities

• Wetland Creation - Approximately 3.89 acres

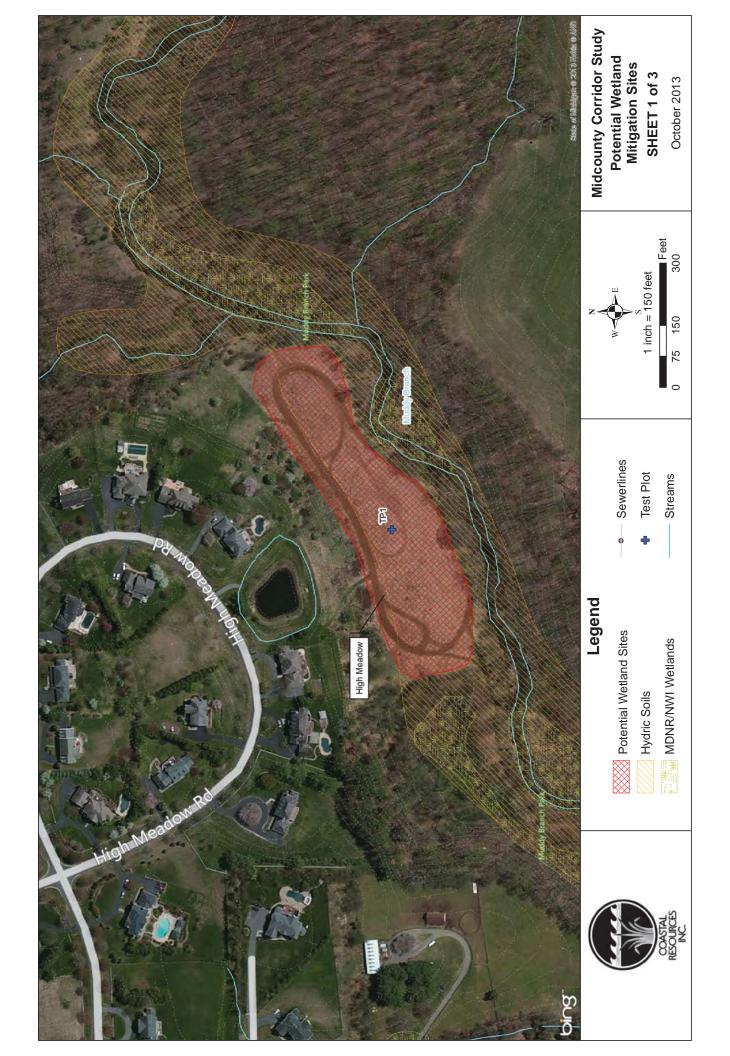
Restoration Objectives

Green Infrastructure:

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration
- Invasive Species Control
- Riparian Enhancement

Restoration Concept

• Grading of site to create a basin that will retain surface water runoff



Mid-county Corridor Study Potential Wetland Mitigation Site at Cinnamon Drive (Cinnamon)

Existing Conditions Summary

Site Conditions

Location Information	
County:	Montgomery
Watershed:	Seneca Creek
Coordinates:	<u>39°9'23.123"N / 77°15'43.776"W</u>
USGS Quad:	Germantown
Location:	East of the intersection at Cinnamon Dr. and Clopper Rd., Germantown, MD
Property Ownership:	Montgomery County
Constraints:	Sewerline runs along eastern and northern portion of site, powerline runs
	adjacent to site along Clopper Rd.

Sile Conditions		
Parcel Area:	<u>9.89 acres</u>	Existing Land Use: Meadow, Field
Landscape Position:	Floodplain/Slope	Adjacent Land Use: Residential, Forested
Drainage Area:	<u>1,856 acres</u>	
Depth to Water Table:	Test Plot 1: N/A, Test Plot 2: 36"	
Habitat Location:	Contiguous to wetland/upland forest >100 acres	
Mapped Soils:	Hatboro silt loam, 0 to 3 percent slopes, frequently flooded	
Mapped Wetlands:	No NWI / DNR wetlands mapped on site	
Green Infrastructure:	Located within Green Infrastructure Gap and Hub	

This wetland site is located east of the intersection at Clopper Road and Cinnamon Drive, in Germantown, MD. This area is located between a residential neighborhood (Germantown Park) and Gunners Branch, which flows south into Great Seneca Creek. The site is dominated by reed canary grass (*Phalaris arundinacea*) and arrow-leaf tearthumb (*Persicaria sagittata*), and is bisected by a drainage ditch running perpendicular to the adjacent stream. Aerial imagery suggests a history of mowing. The water table was not observed at test plot 1, due to the presence of a rock layer at 19 inches, but the water table was observed within test plot 2 at 36 inches. Loamy soils with a low percentage of clay underlie the field. The area may be suitable for the creation of a groundwater intercept or backwater offline stream flow wetland. Moderate grading would be necessary and the existing drainage ditch could be utilized to divert high flow from Gunners Branch to the creation area.

Summary of Opportunities

• Wetland Creation - Approximately 3.55 acres

Restoration Objectives

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration
- Invasive Species Control
- Riparian Enhancement

Restoration Concept

- Moderate grading to intercept groundwater
- Alteration of existing drainage ditch to divert high water from stream to wetland creation area



Midcounty Corridor Study Potential Wetland Mitigation Site at Sundown Road (Sundown)

Existing Conditions Summary

Location Information			
County:	<u>Montgomery</u>		
Watershed:	Rocky Gorge Dam		
Coordinates:	<u>39°13'0.510"N / 77°6'11.307</u>	<u>"W</u>	
USGS Quad:	Sandy Spring		
Location:	Southeast of the Sundown F	Road crossing of Hawlings River, Gaithersburg,	
	MD		
Property Ownership:	Montgomery County		
Constraints:	<u>Plantings</u>		
Site Conditions			
Parcel Area:	<u>19.99 acres</u>	Existing Land Use: Planting Area	
Landscape Position:	Floodplain/Slope	Adjacent Land Use: Agricultural, Forested	
Drainage Area:	<u>768 acres</u>		
Depth to Water Table:	Test Plot 1: N/A, Test Plot 2: 35"		
Habitat Location:	Contiguous to wetland/upland forest >100 acres		
Mapped Soils:	Codorous silt loam, 0 to 3 percent slopes; Gaila silt loam, 8 to 15 percent		
	<u>slopes</u>		
Mapped Wetlands:	No NWI / DNR wetlands mapped on site		
Green Infrastructure:	Located within Green Infrastructure Gap and Hub		

This wetland site is located southeast of the Sundown Road crossing of Hawlings River, in Gaithersburg, MD. This area was planted within the past few years; however, the greater part of the tree plantings have failed or are failing. With exception to the tree plantings, the entire area is regularly mowed. Areas surrounding the tree cages are dominated by Asiatic tearthumb (*Persicaria perfoliata*). Although the water table was not observed, within test plot 1, at the time of investigation, it is likely that it resides within the gravelly layer that begins approximately 29 inches below the surface. The area may be suitable for the creation of a groundwater wetland/floodplain wetland creation. Loamy soils with a low percentage of clay underlie the field and moderate grading will be necessary to intercept groundwater in order to create wetlands.

Summary of Opportunities

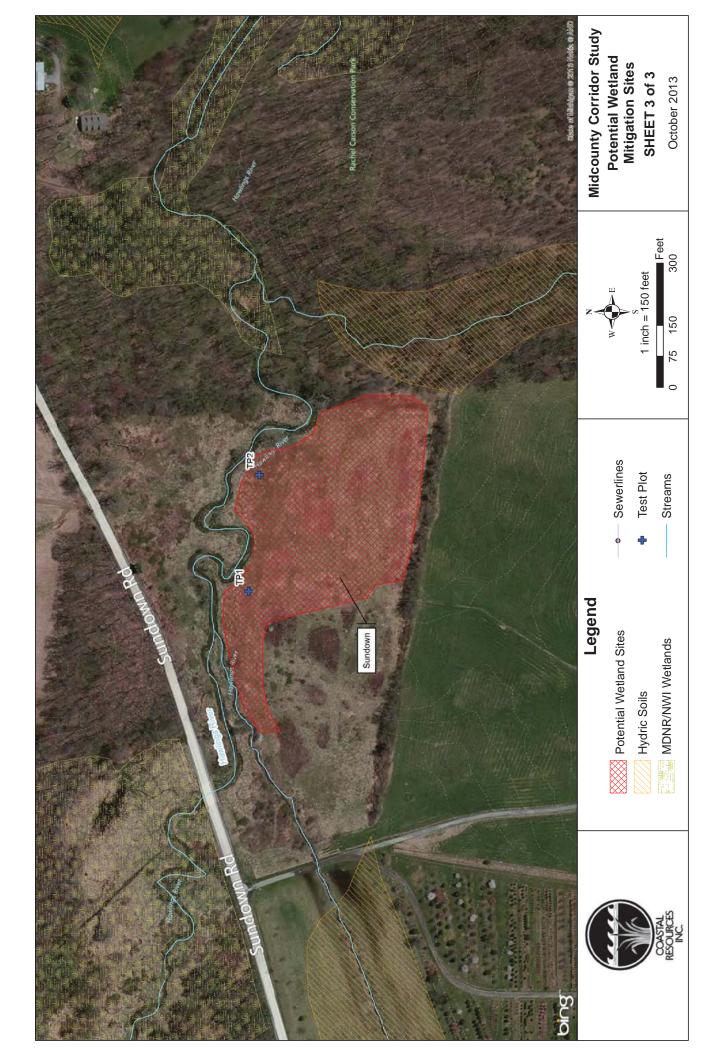
• Wetland Creation - Approximately 4.79 acres

Restoration Objectives

- Wetland Creation
- Nutrient Uptake
- Carbon Sequestration
- Invasive Species Control
- Riparian Enhancement

Restoration Concept

• Minimal grading to intercept groundwater



http://www2.acutgomerycountynad.gov/DOT-DTE/FacilityPlanning/FPHase.cspx













Montgomery County Department of Transportation



on of Transportation Engineering

Division of Transportation Engineering

100 Edison Park Dr., 4th Floor Gaithersburg, MD 20878 Phone: 240-777-7223 Fax: 240-777-7277

> Bruce Johnston, P.E. **Division Chief**

Holger Serrano, P.E. **Division Deputy Chief**

Sogand Seirafi, P.E. Planning & Design Chief

Tom M. Reise **Property Acquisition Chief**

Girum Awoke, Ph.D., P.E. **Construction Chief**

Project Name: Midcounty Corridor Study (MCS)

Limits: Midcounty Highway to **Future Snowden Farm** Parkway (A-305)

Length: 6.2 Miles

Location: Gaithersburg/ Germantown

Project Overview

This project provides for Facility Planning, Phase I and NEPA services to evaluate providing congestion relief and improve vehicular, pedestrian and bicycle mobility for the north-south corridor east of I-270 between Gaithersburg and Clarksburg.

Project Manager Greg Hwang Phone: 240-777-7279 greg.hwang@ montgomerycountymd.gov Meeting: Midcounty Corridor Study - Potential Wetland Mitigation Site Field Review October 30, 2013 Meeting Date: Meeting convened at I-270 and West Diamond Ave Park & Location: Ride Purpose: **Review of Additional Wetland Mitigation Sites**

MEETING MINUTES

DATE OF MEETING MINUTES: November 1, 2013 ATTENDEES:

<u>Name</u>	Agency	Telephone	<u>E-mail</u>
Paul Bogle	MCDEP	240-777-7757	Paul.bogle@montgomerycountymd.gov
Jack Dinne	USACE	410-962-5691	John.j.dinner@usace.mil
Jim Eisenhardt	RK&K	302-382-5812	jeisenhardt@rkk.com
Rob Gibbs	M-NCPPC Parks	301-962-1341	<u>rob.gibbs@montgomeryparks.org</u>
Greg Hwang	MCDOT	240-777-7279	greg.hwang@montgomerycountymd.gov
Doug Marshall	MCDEP	240-777-7767	douglas.marshall@montgomerycountymd.gov
Amanda Matheny	M-NCPPC Parks	301-460-2723	amanda.methany@montgomeryparks.org
Alexis Morris	RK&K	410-462-9349	amorris@rkk.com
Kelly Neff	MDE	410-537-4018	<u>kelly.neff@maryland.gov</u>
Megan Niehaus	CRI	443-610-9630	megann@coastal-resources.net
Hira Shrestha	MDE	410-537-4247	Hira.shrestha@maryland.gov
Adam Tatone	CRI	443-837-2149	adamt@coastal-resources.net

HANDOUTS: A handout was provided that included a map of site locations, aerial photograph with resources noted for each site and a one page summary of key site information for each site.

MINUTES: The group convened at the I-270/West Diamond Ave Park & Ride. Alexis Morris (RK&K) and Adam Tatone (CRI) provided a brief overview, outlining the purpose of the field review. The project team has identified three additional potential sites for the mitigation of Wetland impacts of the proposed Midcounty Corridor in addition to those visited by the team July 2013. The MC DOT project team has not yet identified a preferred alternative but conceptual impact analysis

Minutes - October 30, 2013 - Potential Mitigation Site Field Review

indicates that wetland impacts under the worst case scenario would include nearly 0.9 acres of wetland fill and 1.7 acres of wetland conversion. As a result of preliminary agency coordination, the project team is looking to identify adequate area for up to five (5) acres of wetland mitigation.

Adam Tatone (CRI) explained that the field review would cover three sites, each located on M-NCPPC Parks property. Meeting attendees were provided with an agenda and one-page summary of existing conditions at each site with accompanying mapping.

The three sites are named:

High Meadow Road, Cinnamon, and Sundown.

A brief summary of each site follows.

High Meadow Road: Located south of High Meadow Road in North Potomac, MD, the site could provide up to 3.89 acres of wetland creation. General discussion included:

- Sewer line runs adjacent to Muddy Branch at southern edge of site
- A surface hydrology study would need to be completed to fully assess the feasibility of the site
- The Hydrologic source for the site is likely surface water runoff (a redesign of the stormwater management system (the basins) could be beneficial if pursued)
- May also be able to allow for high or more frequent event overflow from Muddy Branch onto the site
- Dependent on soils, clay may need to be brought in, or compaction may create desired result if the surface water option is pursued. May not be necessary if can excavate to groundwater
- Existing site vegetation is largely FAC-neutral and maintained through mowing
- Adam explained to MCDEP representatives that the DNR wetlands shown on the site map have not been delineated, but are estimated based on soils data and infra-red survey data
- Muddy Branch is significantly downcut within the site
- Jim Eisenhardt (RK&K) suggested that the stream may have historically been better connected to the floodplain, and was likely relocated to the valley wall. Restoration of this connection could improve function of the system as a whole and relocation could avoid challenges with the sewer line.
- Project team confirmed that this site is within the North Potomac Watershed (discharges to the same receiving watershed as the area of impacts)
- It was noted that this site has frequent ATV use which is also noted on the aerial photographs.
- It would appear that the site would not have view shed or other cultural resource impacts however if the site is to move forward the team will confirm if there are any other restrictions placed on the site.
- General consensus was that the site has potential for both stream and wetland restoration pending favorable findings for the considerations noted.

Cinnamon: Located east of the intersection of Cinnamon Drive and Clopper Road, Germantown, MD. The site could provide up to 3.55 acres of wetland creation. Onsite discussion included:

Minutes – October 30, 2013 – Potential Mitigation Site Field Review

- Identifying the full potential for wetland creation/enhancement would be dependent on a delineation
- The site is transected by a ditch, which would need to be incorporated into site design
- MCDEP representatives indicated there are plans to complete stormwater retrofits for water quality improvement on the adjacent site. It was suggested that expanding the wetland creation to proposed gravel wetland facilities could also result in additional credit for the treatment of impervious surface
- It is likely that the surface layer of soils would need to be removed entirely to facilitate removal of reed canary grass (*Phalaris arundinacea*), the dominant species currently populating the site
- WSSC flagging was noted throughout the site
- The site is bisected by WSSC sewer line
- Coordination with WSSC would be required if the site were selected for mitigation
- This site could also be reconnected with the stream to improve floodplain and groundwater function, though this stream is also downcut
- This site is located within the Seneca watershed
- General consensus that this site has potential should the indicated considerations be favorable.

Sundown: Located southeast of the Sundown Road crossing of Hawlings River in Gaithersburg, MD, the site could provide up to 4.79 acres of wetland creation. Agency comments included:

- Site is currently part of prior county reforestation activities
- Rob Gibbs (M-NCPPC Parks) provided that this site was reforested with Fee-in-Lieu funds
- This site has not been largely successful (invasive species management has been challenging), though replanting plans exist and an expansion of the plantings is under consideration.
- Jim Eisenhardt suggested that stream buffer and floodplain function would be better enhanced through wetland creation at this site.
- Additional area for reforestation exists, if needed to supplement existing plantings or replace/relocate their removal
- Site is close to, but outside of Seneca Watershed
- Has significant potential as a successful wetland creation site with stream restoration potential
- There are no known MSSC sewer lines in this floodplain.
- Rob to discuss with Parks and determine if they might be amenable to discussing further/refined enhancement of the site.

MCDOT inquired of both MDE and USACE if the attendees had any history with the MCDOT Leishear Farms mitigation site. Both Kelly and Jack indicated they did not. Jack will check back at the office to determine the point of contact. Kelly indicated that USACE would take lead on the applicability of this site for potential credits – whether they are available and if so how many and what the process would be to assign credits to this project.

The agencies agreed to provide MCDOT and RK&K with consolidated written comments for their own agency on the three sites by the week of November 13, 2013. As an alternative,

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agency representatives were offered the option of adding additional comments to the MCDOT minutes.

In summary, all attendees indicated that each site had potential and the extent of mitigation opportunities for both streams and wetlands on each site would be dependent on additional study and information. While the attendees agreed that mitigation in the immediate watershed (Seneca) is preferred, the sites reviewed located in the immediate drainages may also be amenable. The primary goal is to develop mitigation on sites that will be successful and the group discussed the benefits of completing mitigation on sites that would complement other stewardship activities on the site or surrounding sites.

All parties indicated that for preparation of the PACM report, that detailed designs were not needed for the sites at this stage. The PACM can include a general mitigation plan identifying the potential sites as "equal" options for providing the mitigation ultimately required. Once the preferred alternative is selected, final jurisdictional determination made on the selected corridor and final impacts calculated, additional level of design will be needed for mitigation plan to obtain final approvals for the project.

END