



Date: September 27, 2012

MEMORANDUM

DATE: September 20, 2012

TO: Montgomery County Planning Board

VIA: Mary Bradford, Director of Parks
Michael F. Riley, Deputy Director, Administration *MR*
Dr. John E. Hench, Ph.D., Chief, Park Planning and Stewardship Division (PPSD) *J. Hench*
Doug Redmond, Natural Resources Manager, Park Planning and Stewardship Division *D. Redmond*

FROM: Jai Cole, Principal Natural Resources Specialist, Park Planning and Stewardship Division *J. Cole*

PROJECT: Upper Northwest Branch Package 2 Projects
Sherwood Forest I, Batchellors Run I & II, and Woodlawn

REVIEW TYPE: Mandatory Referral No. MR2013008

APPLICANT: Montgomery County Department of Environmental Protection (MCDEP)

APPLYING FOR: Plan Approval

Recommended:

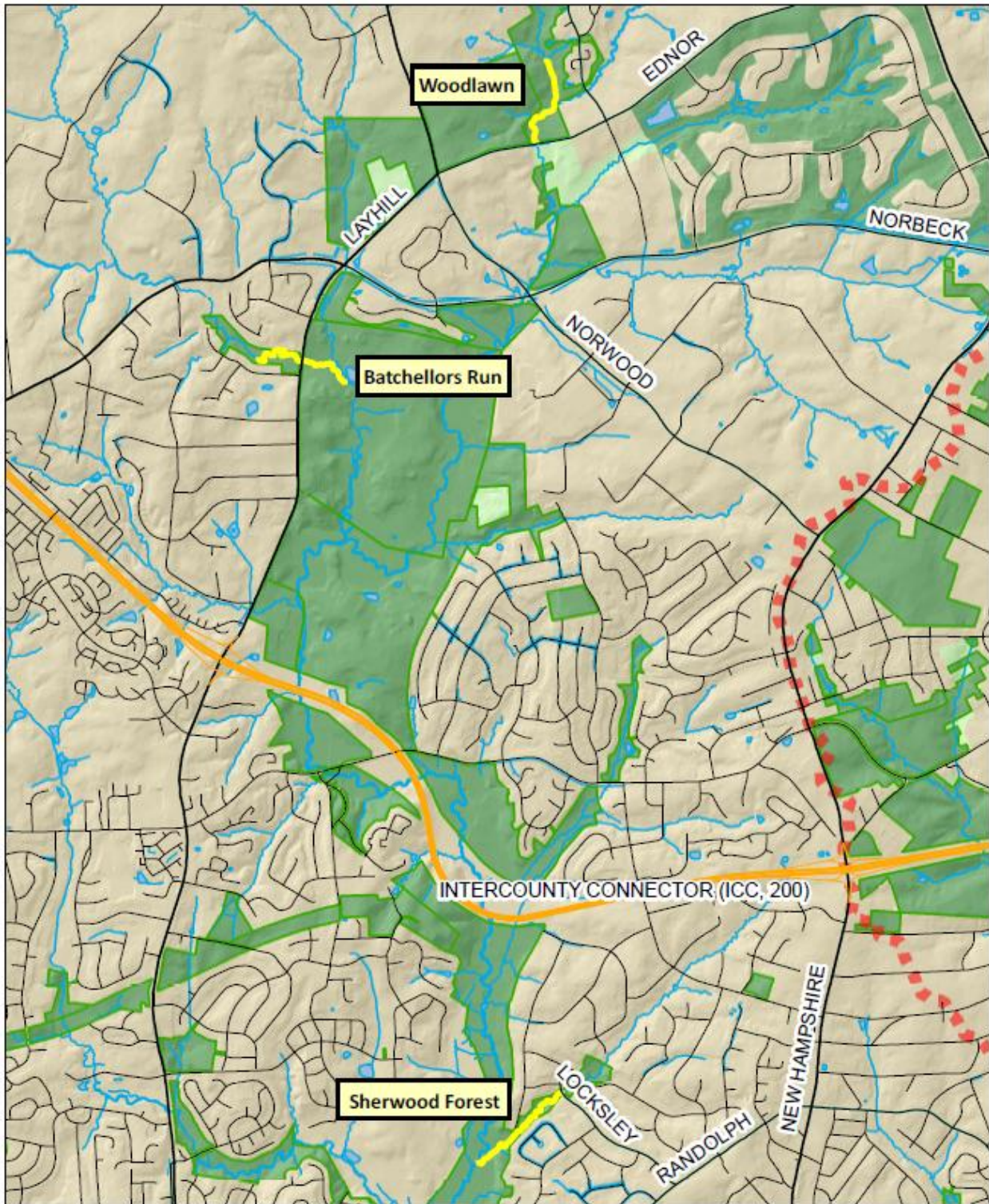
Approve the construction of three stream restoration projects in the Upper Northwest Branch, located on Parkland, Board of Education property, and/or on Private Property.

Background

The Montgomery County Department of Environmental Protection (DEP), in coordination with the U.S. Army Corps of Engineers (USACE) and Maryland-National Capital Park and Planning Commission (M-NCPPC) are proposing three stream restoration projects in the upper Northwest Branch watershed. The proposed projects, originally identified as priority restoration projects in the Anacostia River and Tributaries District of Columbia and Maryland Northwest Branch Watershed, Montgomery County Final Ecosystem Restoration Report and Integrated Environmental Assessment (Army Corps of Engineers, 2000), are designed to enhance aquatic and terrestrial habitat in the upper Northwest Branch. The three projects include: Sherwood Forest I, Batchellors Run I & II, and Woodlawn. A vicinity map of the three restoration sites is below (Figure 1).

Figure 1. Upper Northwest Branch Stream Restoration Projects Vicinity Map

Upper Northwest Branch



Map compiled by Amanda Matheny.
Information from M-NCPPC
GIS-- intended for general
planning purposes only.



Design

Sherwood Forest I (Site 58)

The Sherwood Forest I project is located north of Randolph Rd and South of the ICC (Figure 1). This stream restoration project is located on County Parkland and goes from Locksley Lane downstream approximately 2,500 feet to where the stream intersects with the mainstem of Northwest Branch (Figure 2). Westover Elementary School is located just to the east of the project location. This portion of the Sherwood Forest tributary is characterized by eroded streambanks, unstable sand and gravel channel materials, bar formation (especially around present or former debris jams), low flow conditions, minimal access to floodplain and interaction with wetlands, and a general lack of instream cover for fish. Restoration actions include installing instream structures (e.g. cross vanes), log and wood habitat features, streambank grading and stone toe protection to provide a stable channel for maintaining sediment transport, increasing floodplain access, creating wetlands, and enhancing aquatic habitat. Riparian plantings will aid in expanding the buffer, stabilizing streambanks, increasing shade and providing valuable wildlife habitat. Vernal pool wetlands and floodplain access will be created to further enhance the riparian zone alongside the stream. Surrounding land uses include deciduous forest, medium density residential, and institutional.

Batchellors Run I (Site 161) & Batchellors Run II (Sites 159, 160, & 162)

The Batchellors Run I & II project is located south of Norbeck Rd. and north of the ICC. (Figure 1). These stream restoration projects are located just north of Chapel Hill Drive, for about 1,000 feet on either side of the Layhill Road crossing (Figure 3). The Batchellors Run I site is located on the east side of Layhill Road, on the Northwest Park Golf Course, and Batchellors Run II extends upstream of Layhill Road to the west, into the Norwood Village neighborhood. Both phases of the project are on County Parkland, with a small portion of Batchellors Run II on County Board of Education property. The Batchellors Run tributary, within the project area, is characterized by eroded streambanks, unstable channel materials, low flow conditions, minimal access to floodplain and interaction with wetlands, and a general lack of instream cover for fish. Instream habitat, overhanging vegetative cover, and riparian canopy is particularly lacking on the golf course site. The area upstream of Layhill Road is completely forested with adequate vegetative cover, but lacks instream habitat for fish. Stone toe protection with plantings will help provide streambank stability and shade for instream habitat. Instream structures will include log and rock vanes which direct water away from unstable stream banks, form downstream scour pools, and provide good habitat for fish. Riffle grade controls will prevent stream incision while providing aquatic habitat. Trees will be planted and vernal pool wetlands and floodplain access will be created to enhance the riparian zone alongside the stream.

Woodlawn (Sites 78, 79, & 82)

The Woodlawn restoration project is located east of Norbeck Rd. within County Parkland, on an unnamed tributary to the right fork of the Northwest Branch that is unofficially called the Sandy Spring tributary (Figure 1). The project area extends above Ednor Road for approximately 2,000 feet, in between Snowden Woods Lane and Alexander Manor Drive (Figure 4). The stream throughout the reach is characterized by eroded streambanks, aggraded channel materials, side channel bar formation (especially around present or former debris jams), low flow conditions, minimal access to floodplain and interaction with wetlands, and a general lack of instream cover for fish. The site is generally well forested with adequate canopy cover. The restoration plans address these problems by integrating instream structures (e.g. cross vanes), log and wood habitat features and streambank grading to provide a stable channel for maintaining sediment transport, increasing floodplain access, and enhancing aquatic habitat. Riparian plantings will aid in expanding the buffer, stabilizing streambanks, increasing shade and providing valuable wildlife habitat. Vernal pool wetlands and floodplain access will be created to further enhance the riparian zone alongside the stream.

Access

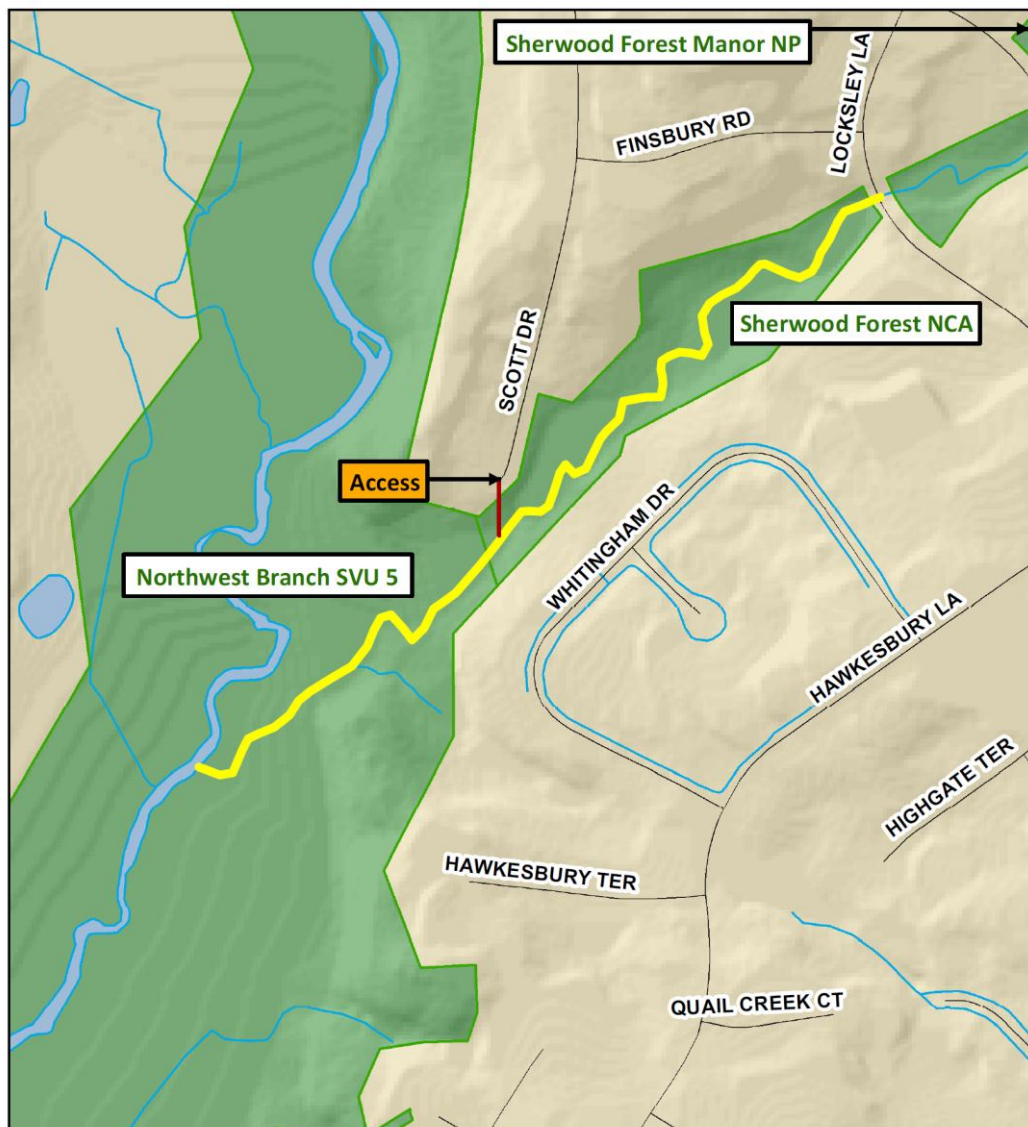
Access to the stream restoration projects will require specialized access routes that are designed to protect forest resources while providing the minimum space required for constructing the proposed improvements. Access for these three projects has been closely coordinated with M-NCPPC staff to minimize forest impacts.

Sherwood Forest I

Access to the Sherwood Forest I project for construction is anticipated from the end of Scott Drive (Figure 2). Staging for the construction areas and culvert replacement are located in open areas within parkland to ensure driveways will not be blocked and deliveries of materials can be made safely with minimal impact to local traffic. Construction entrances will be clearly marked according to the Maintenance of Traffic Plan for the safety of workers and the general public.

Figure 2. Sherwood Forest Stream Restoration and Construction Access Locations

Sherwood Forest



Map compiled by Amanda Matheny.
Information from M-NCPPC
GIS-- intended for general
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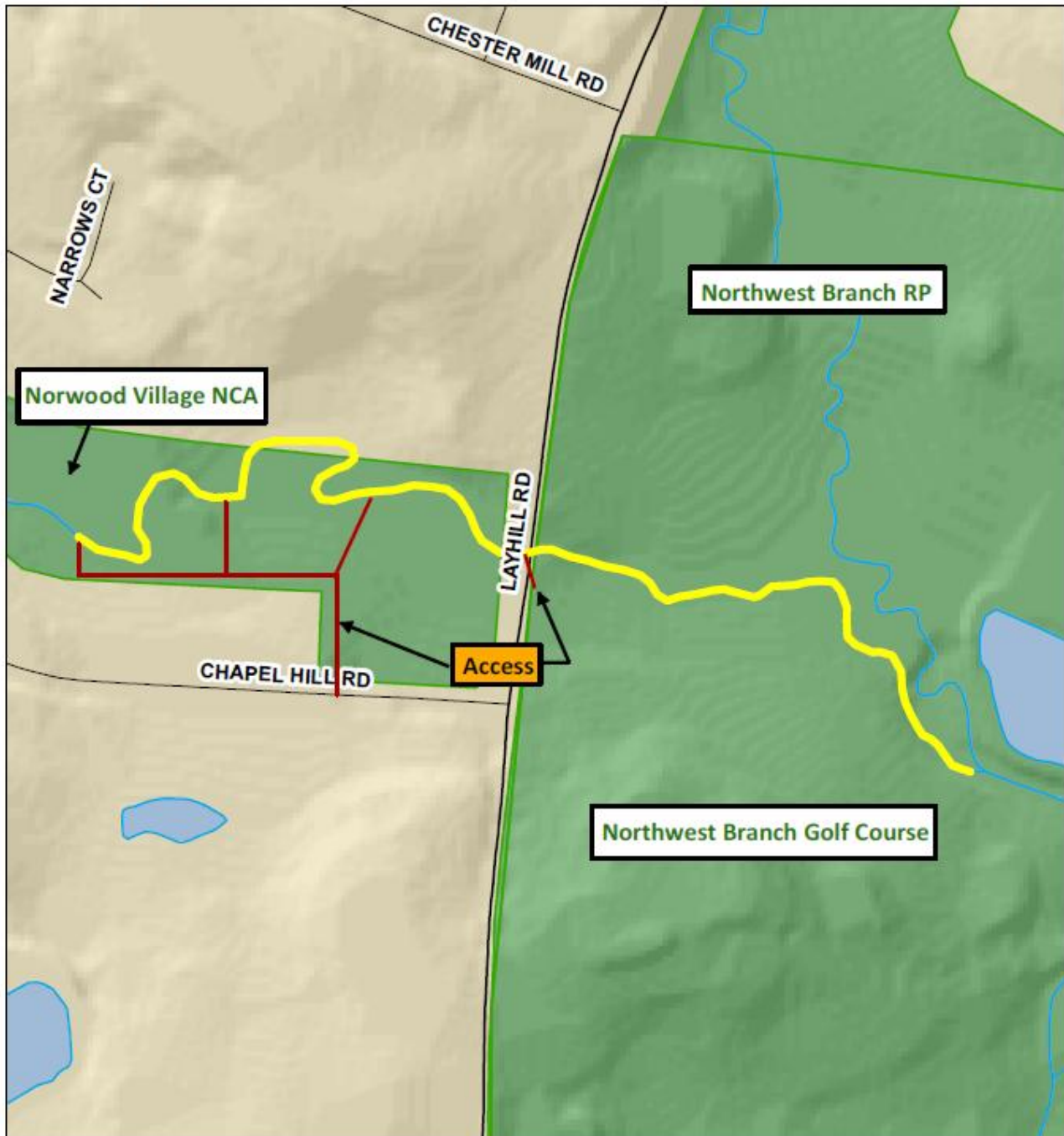
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Batchellors Run I & II

Entrance to the Batchellors Run I & II site for construction is anticipated from Layhill Road and Chapel Hill Road (Figure 3). The Department of Environmental Protection has a signed Right of Entry Agreement with MCPS to access their undeveloped parcel west of Layhill Rd and has coordinated with the Revenue Authority and the Department of Parks regarding access and construction on Northwest Branch Golf Course.

Figure 3. Batchellors Run I & II Stream Restoration and Construction Access Locations

Batchellors Run



Map compiled by Amanda Matheny.
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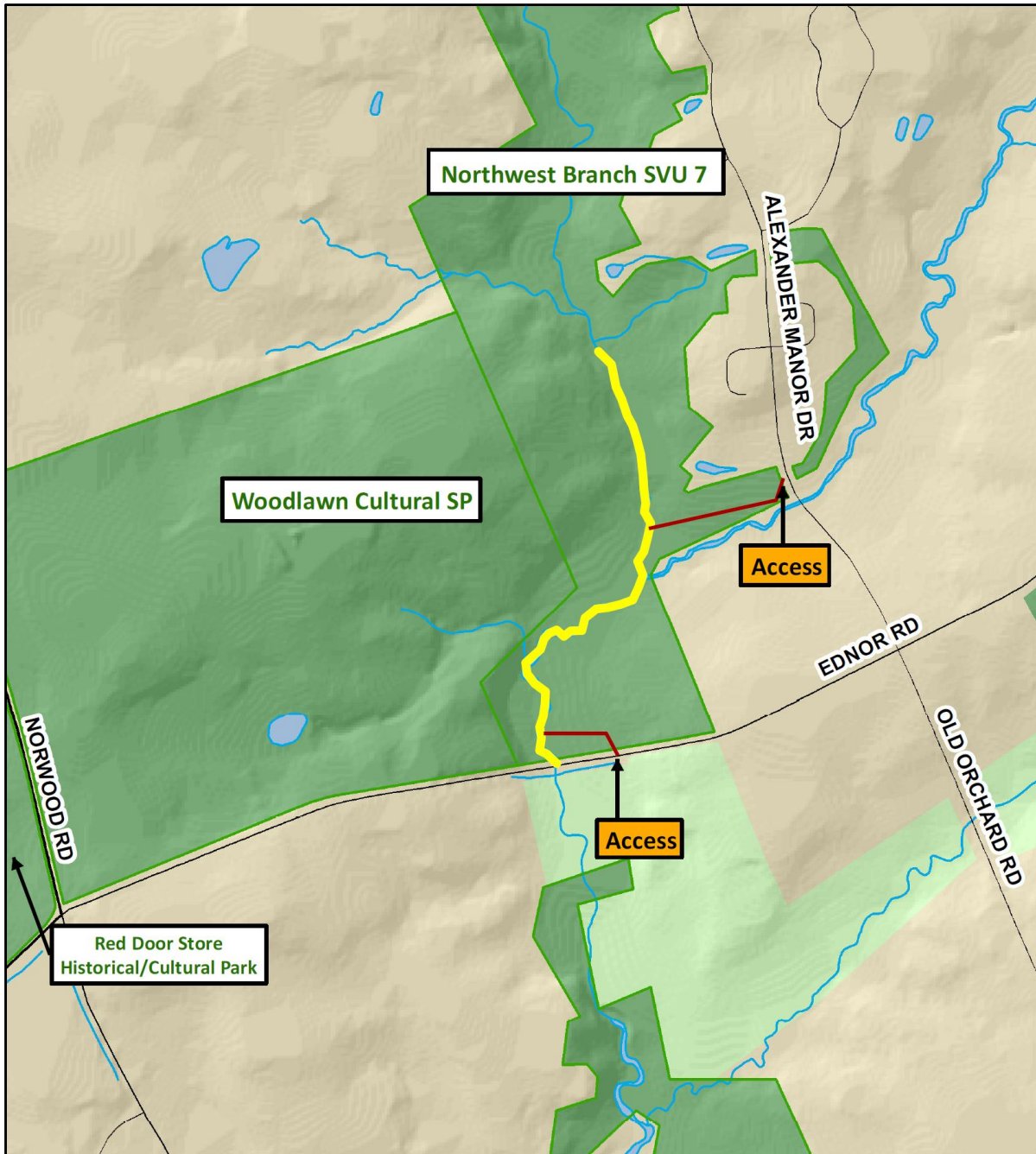
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Woodlawn

Entrance to the site for construction is anticipated from Ednor Road and Alexander Manor Drive (Figure 4). The access from Alexander Manor Drive is through a very small (20' x40') parcel of the Ashton Preserve Homeowners Association, Inc. for which the County has obtained a temporary easement. The other access areas utilize existing storm drain easements or M-NCPPC parkland.

Figure 4. Woodlawn Stream Restoration and Construction Access Locations

Woodlawn Stream Restoration



Map compiled by Amanda Matheny.
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Traffic Control

DEP has applied for right of way permits from the Montgomery County Department of Permitting Services (DPS). Maintenance of Traffic (MOT) signage is needed for the Batchellors Run project to access off of Layhill Road, and the Woodlawn project to access off of Ednor Road. A traffic analysis is not anticipated for the Sherwood Forest project, because access is off of a residential street.

Implementation

Construction is expected to begin October 2012 following the award of the contract under the USACE advertisement process. It is anticipated that the Batchellors Run I & II project will be constructed first, during the fall/winter 2012 to minimize construction impacts to the Northwest Park golf course golfing season. Construction of the other two projects (Sherwood Forest I and Woodlawn) will occur through summer 2013.

Wetland and Stream Impacts

USACE, MCDEP, and the Department of Parks have coordinated efforts to ensure that natural resources impacts are avoided or minimized to every extent possible while still meeting the goals of the restoration. Numerous field reviews have taken place to ensure that access, stream work, and landscaping do not unduly impact natural resources.

Temporary impacts will occur in the stream channels due to access and construction of the proposed stabilization structures. In-stream construction will cause temporary impacts to the streambed, which is expected to naturally re-stabilize over time. Disturbed stream banks will be regraded, stabilized, and planted. The approximate amount of temporary stream impacts is 2,324 linear feet (lf) of perennial stream for Sherwood Forest, 2,250 lf of perennial stream for Batchellors Run I & II, and 1,983 lf of perennial stream for Woodlawn.

Stream impacts are being coordinated as required with the Maryland Department of Environment (MDE) and the USACE. Access areas will be protected with mulch and hardwood mats to minimize compaction of the forest floor.

Maryland Historical Trust

Cultural or Historic Architectural Resources: The Maryland Historical Trust has reviewed the projects and determined that no historical properties are impacted by the project.

Natural Resource Inventory and Forest Stand Delineation (NRI/FSD)

Disturbance to the forest floor and the impact and subsequent removal of trees within the immediate riparian buffer and along the stream banks will be unavoidable due to the construction access and stream restoration work. An extensive reforestation/planting plan has been developed as part of this project and impacts are being coordinated with the Maryland Department of Natural Resources as required in accordance with the Forest Conservation Act.

MCDEP, USACE, and the Department of Parks have coordinated efforts to ensure that natural resource impacts are avoided or minimized to every extent possible while still meeting the goals of the restorations. Strategies for protecting trees adjacent to and within some work areas will include root pruning, avoidance of critical root zones, and tree protection fencing. Numerous field reviews have taken place to ensure that access, stream work, and landscaping do not unduly impact natural resources. Wherever possible, access will be coordinated with access routes for municipal utilities. Disturbed and impacted areas will be stabilized and replanted once construction is complete. The approximate amount of forest impacts is 1.58 acres for Sherwood, 1.57 acres for Batchellors Run I & II, and 2.03 acres for Woodlawn. State NRI/FSD approval (No. C10-23) was granted on 4/28/2010 for all three projects.

Air and Noise

All construction activities will be performed in accordance to Section 31 (b) of the County code.

Public Meetings

The following public meetings and correspondence have occurred:

- April 11, 2000 – Anacostia River and Tributaries District of Columbia and Maryland Northwest Branch Watershed, Montgomery County Final Ecosystem Restoration Report and Integrated Environmental Assessment (Northwest Branch Feasibility Study) public meeting for residents to learn more about the concept restoration designs.
- May 18, 2000 – Anacostia Restoration Project, Phase II Mandatory Referral approval received for participation in the final steps of the project plans specifications and construction.
- March 2012 - Article in the Greater Colesville Citizens Association newsletter.
- March 7, 2012 – Public Outreach meeting for Sherwood Forest I project.
- March 20, 2012 – Public Outreach meeting for Batchellors Run I & II and Woodlawn projects.
- Personal meetings and phone conversations with the Ashton Preserve Homeowners Association (Woodlawn project). Email correspondence with the Norwood Village Homeowners Association (Batchellors Run I & II project), and distribution of information through their neighborhood listserv. Advertisement for the Sherwood Forest public outreach meeting in the Greater Colesville Citizens Association Newsletter in March 2012, and distribution of information through the Sherwood Forest neighborhood listserv.

Funding

Restoration activities are funded through a cost sharing program between the USACE and non-federal sponsors (DEP and M-NCPPC). Total implementation cost is estimated at \$3 million dollars, which includes a 65% Federal cost share from USACE and 35% non-federal cost share from DEP's Montgomery County Capital Improvements Program (providing cash and in-kind services) and M-NCPPC (providing in-kind services).

Maintenance

MCDEP budgets for maintenance of their restoration projects. If any maintenance is required, it will be coordinated with M-NCPPC and the private property owners.

PC:

Steve Chandlee, Acting Chief, Southern Region, Department of Parks

Mike Horrigan, Chief, Northern Region, Department of Parks

Jim Humerick, Operations Manager, Southern Region, Department of Parks

Mike Little, Park Manager, Olney Manor, Department of Parks

Dave McGrady, Park Manager, Wheaton, Department of Parks

Mitra Pedoeem, Chief, Park Development, Department of Parks

Andy Frank, Environmental Engineering Section Leader, Park Development, Department of Parks

Steve Reid, Engineer, Park Development, Department of Parks

Keith Miller, Executive Director, Montgomery County Revenue Authority