

MCPB Consent Agenda Date: 9-15-16

Connecticut Avenue Culvert Replacement, Amended Forest Conservation Plan, 11993048A

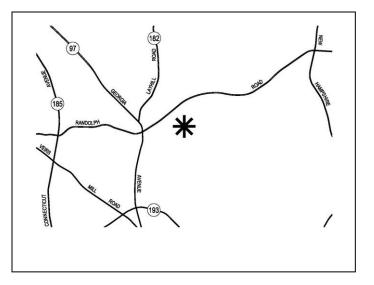
Amy Lindsey, Planner Coordinator, Area 2 Division, <u>amy.lindsey@montgomeryplanning.org</u>, 301.495.2189

- Khalid Afzal, Supervisor, Area 2 Division, <u>khalid.afzal@montgomeryplanning.org</u>, 301.495.4650
- **仏K** Glenn Kreger, Chief, Area 2 Division, <u>glenn.kreger@montgomeryplanning.org</u>, 301.495.4653

Completed: 9/1/16

Description

- Request to Amend Final Forest Conservation Plan to allow disturbance within a Category I Conservation Easement for the replacement of the existing culvert under Connecticut Avenue;
- 13801 Georgia Avenue, Silver Spring, Maryland 20906;
- 127.47 acres, RE-2 Zone;
- 1994 Aspen Hill Master Plan;
- Applicant: Montgomery County Department of Transportation;
- Filing date: 6/21/2016.



Summary

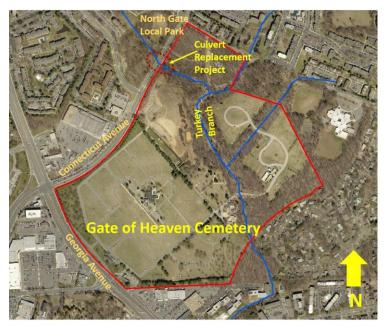
- Staff recommends approval with conditions.
- Pursuant to Chapter 22A of the County Code, the Board's actions on Forest Conservation Plans are regulatory and binding.

Conditions

1. The Final Sediment Control Plan must be consistent with the final limits of disturbance shown on the approved Final Forest Conservation Plan.

OVERVIEW

The Montgomery County Department of Transportation (DOT) proposes to replace an undersized culvert carrying a tributary of the Turkey Branch of **Rock Creek under Connecticut** Avenue. The culvert replacement will require temporary construction impacts on the east and west side of Connecticut Avenue. The disturbance on the east side of Connecticut Avenue occurs on the Gate of Heaven cemetery property, within a Category I Conservation Easement. Planning Board approval is required for any disturbance within a conservation easement and the proposed amendment covers the disturbance on the Gate of Heaven property only. The remainder of the disturbance



associated with the culvert replacement will be handled through the sediment control process.

ANALYSIS

Forest Conservation

This Property is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code). The Planning Board approved a Preliminary Plan (Attachment 1) on December 2, 1993, showing an overall plan with conservation easements. Staff approved a Final Forest Conservation Plan (FFCP) (Attachment 2) that included limits of disturbance and construction details. The submitted FFCP amendment (Attachment 3) includes temporary disturbance on the Gate of Heaven property only. The culvert replacement disturbance will occur within a Category I Conservation Easement protecting stream valley buffer and existing forest. It will require the clearing of 0.03 acres of forest, which will be replanted.

Forest Conservation Variance

Section 22A-12(b) (3) of the County Code provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance for any impact, including removal or disturbance within the tree's critical root zone (CRZ), to trees that are: 30 inches or greater Diameter at Breast Height (DBH); part of a historic site or designated with a historic structure; designated as national, State, or County champion trees; at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs and plants that are designated as Federal or State rare, threatened, or endangered species. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law.

The Applicant submitted a variance request for impacts to one high priority tree on June 21, 2016 that is considered high priority for retention under Section 22A-12 (b) (3) of the County Forest Conservation Law (Attachment 4). Tree S1 is a 34" diameter at breast height (DBH) green ash, which will be impacted, but retained.

Unwarranted Hardship for Variance Tree Impacts - Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state would result in unwarranted hardship. In this case, the unwarranted hardship is caused by the need to work within and directly adjacent to the stream channel in order to replace the culvert.

Variatice tree cocation

Variance Tree Location

Variance Tree Table

Impacts

ID	Species	Size	Condition
S1	Green ash	34"	Good

Variance Findings - Based on the review of the variance request and the proposed Amended Forest Conservation Plan, staff makes the following findings:

1. Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.

The disturbance to the specified tree is a result of the need to remove the existing culvert and replace it with a new one. Granting this variance request is not a special privilege that would be denied to other applicants.

2. The need for the variance is not based on conditions or circumstances which are the result of the actions by the Applicant.

The requested variance is not based on conditions or circumstances which are the result of actions by the Applicant. The disturbance of the specified tree is unavoidable due to the location of the tree directly adjacent to the stream channel.

3. The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.

The requested variance is a result of the culvert replacement, and not a result of land or building use on a neighboring property.

4. Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.

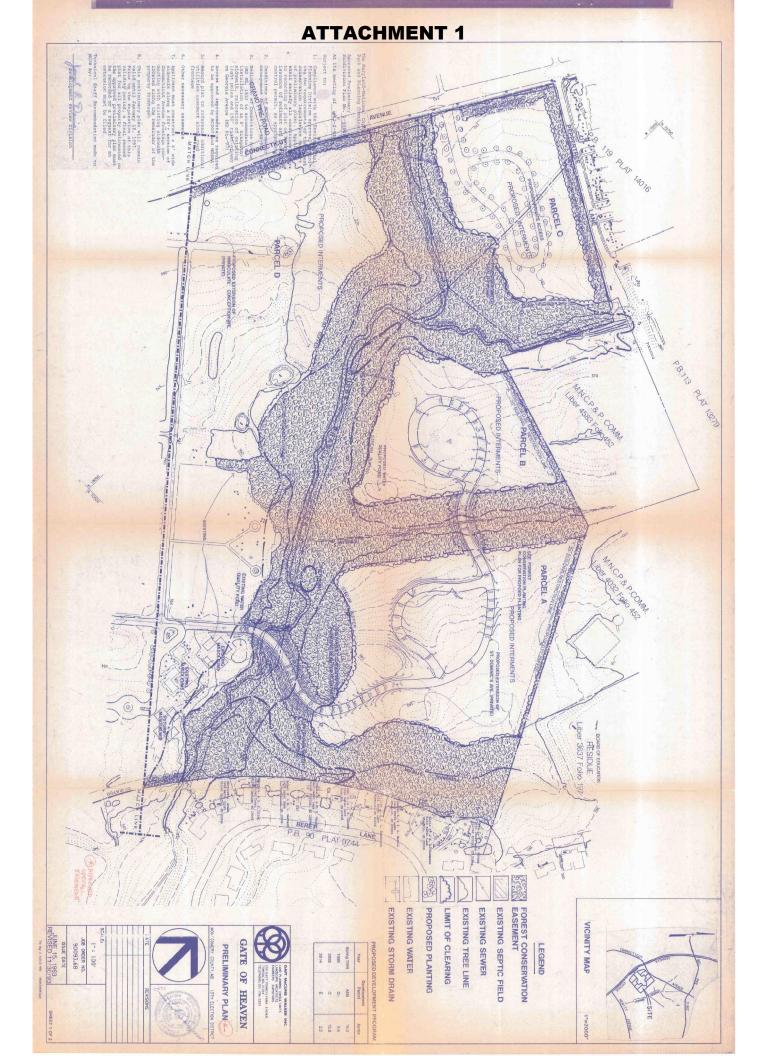
The proposed project should improve water quality by replacing an undersized culvert with a modern double box culvert.

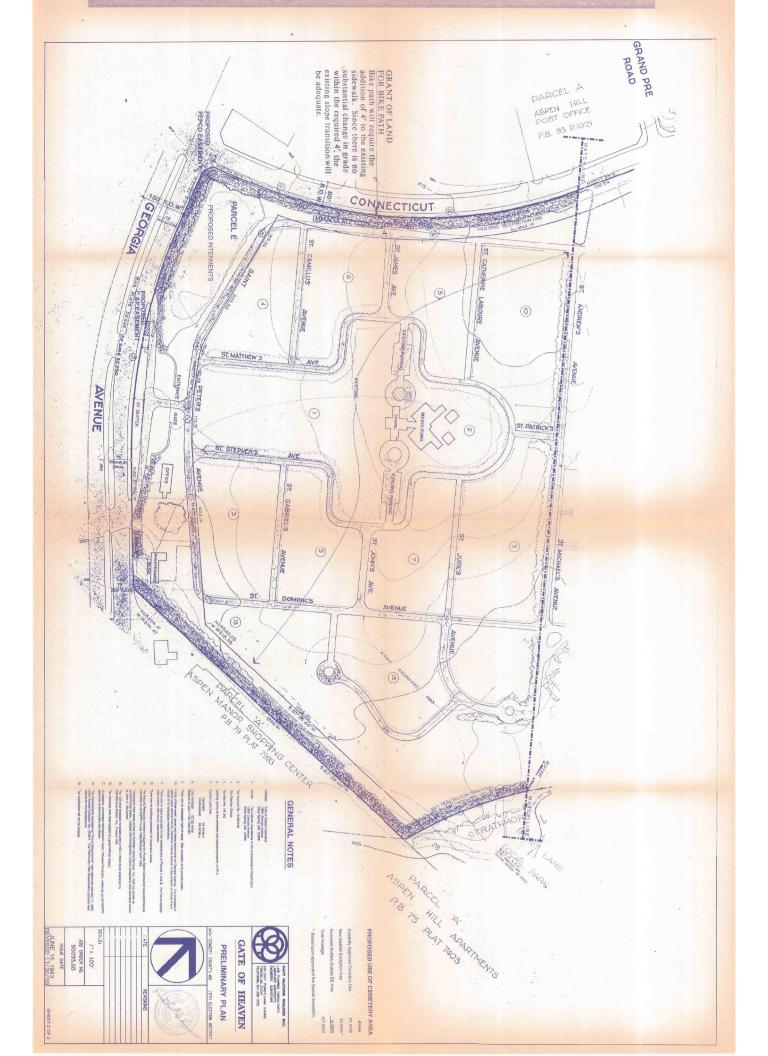
County Arborist's Recommendation on the Variance - In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. A letter from the County Arborist (Attachment 5) has been received, recommending approval.

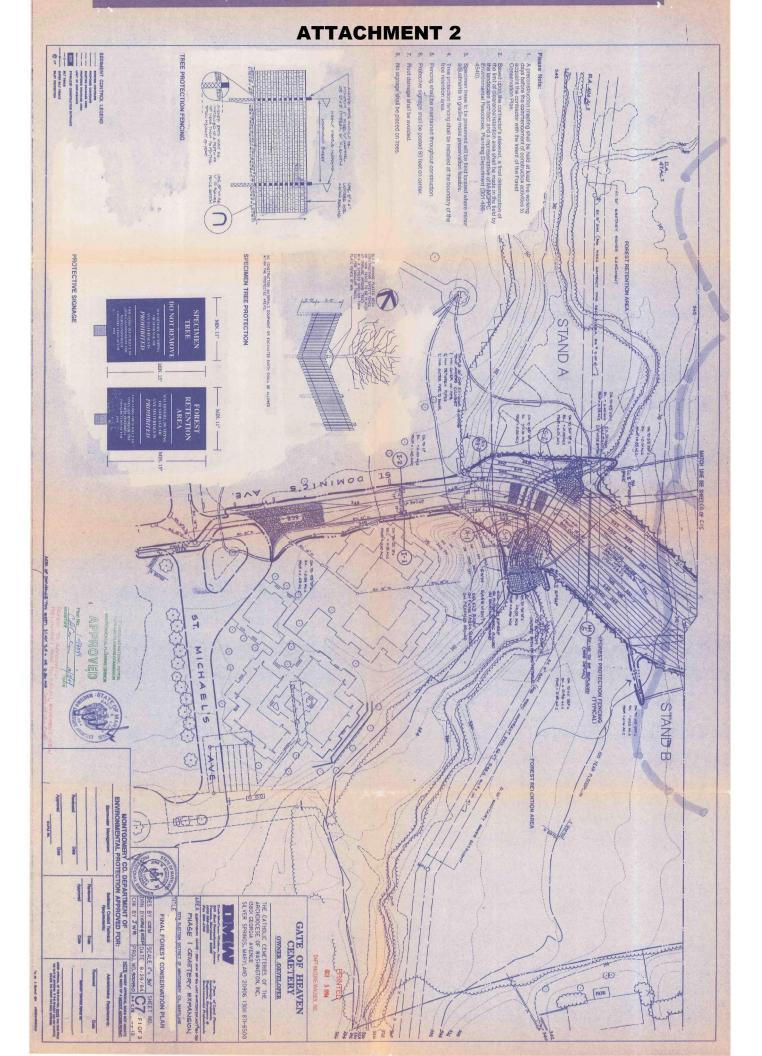
Variance Recommendation – Staff recommends the variance be granted.

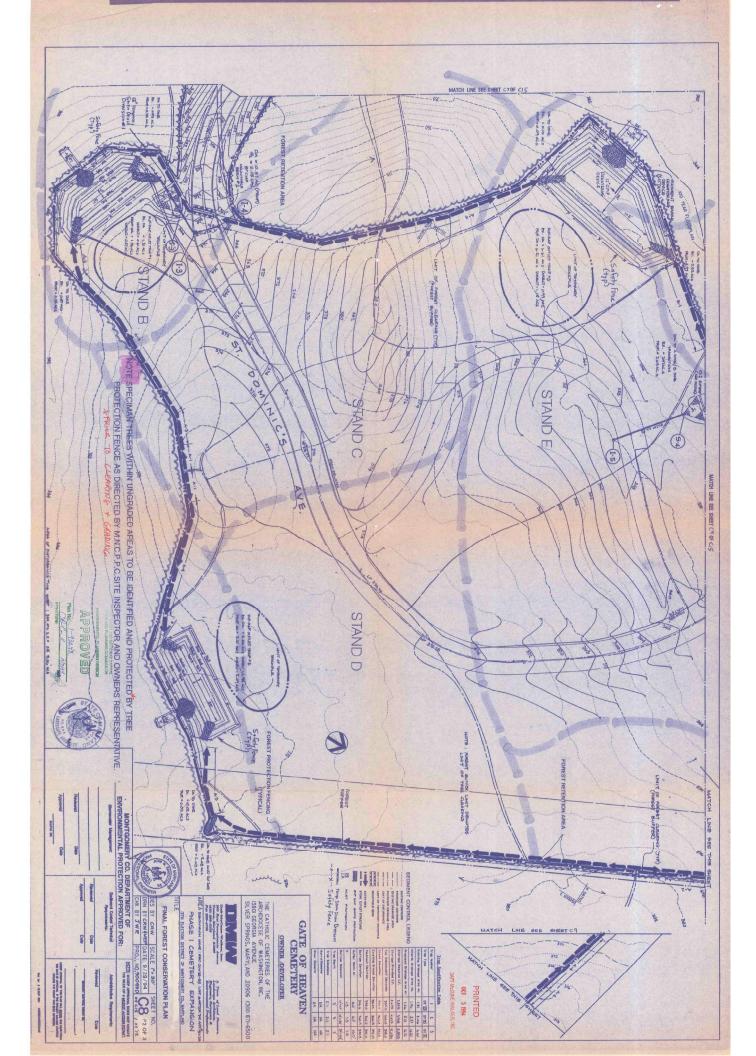
ATTACHMENTS:

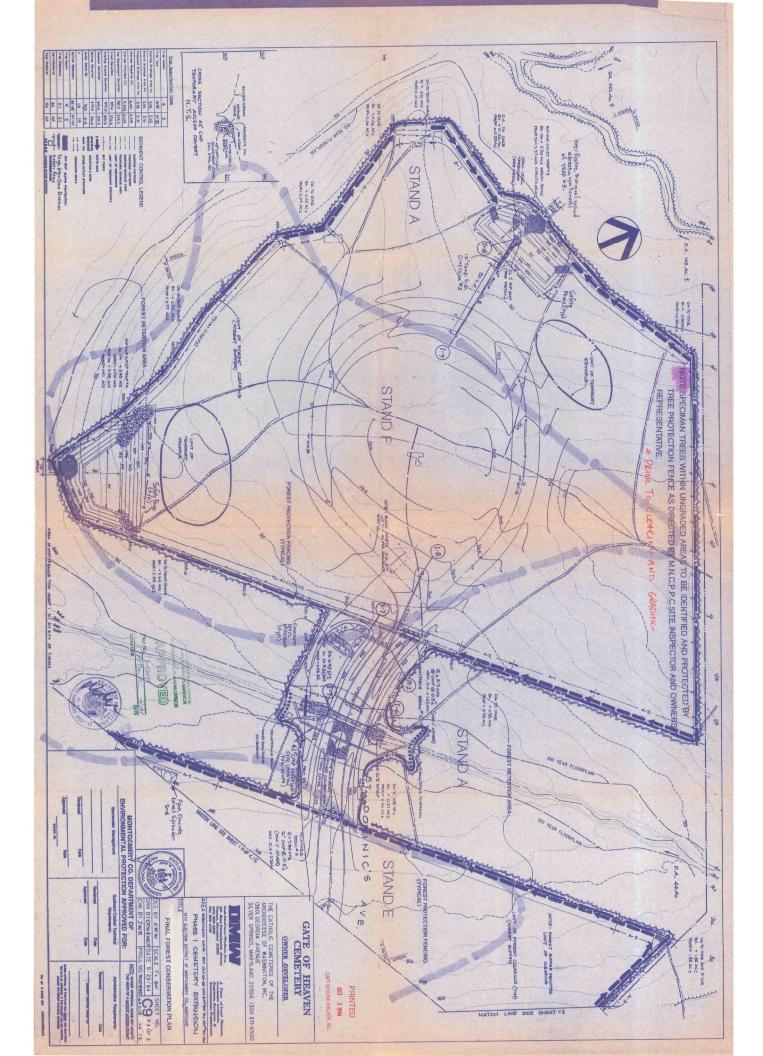
- 1. Preliminary Plan 119930480
- 2. Final Forest Conservation Plan 119930480
- 3. Proposed Amended Final Forest Conservation Plan
- 4. Variance Request
- 5. County Arborist letter







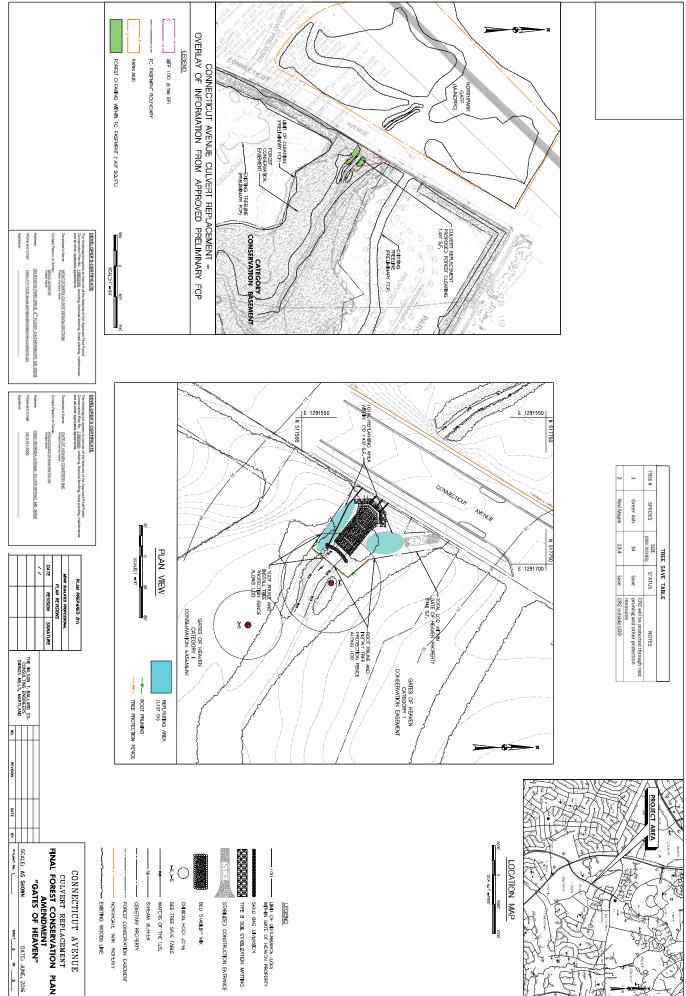






ATTACHMENT 3

(0,1) . (nonline) we do not be a large to the second se



c) c	In cost wan de river and way pain and reproduct ordinalization d'une of manager in the present conservation. Sequence of pre-constant in the bit of earliers that of durations they been shall all all digits of the pre-constant in the bit of durations of durations of the pre-constant in	NOTE Uncert zorby of the property E-field for the Gate of Hearen controls, Lindse E-field and Commulty Ford A. An include of the property E-field for the Gate of Hearen controls, Lindse E-field and Commulty Ford A. An include of the property E-field for the Gate of Hearen controls, Lindse E-field and Commulty Ford A. An include of the property E-field for the Gate of Hearen controls, Lindse E-field for the Gate A. The Mathematic Trad Bateria is the Lindse of the Mathematic Trade of the Trade Source of the Source A. The Mathematic Trad Bateria is the Lindse of the Mathematic Trade of the Source of the Lindse of the Lindse of the Source of the Lindse of
Description Description Signiful Constructions Encoder Instructions Encode		 Part construction I. A construction I. protection source must excluse a facility result of the protection in the protection of th
PLAN PREVARED 811 NUME OLAL ED PREVSIONU PLAN RECISION <u>ALTE REVSION SOMATIVE</u> /// REVSION OTHER STATUS	Control of the second sec	NOT IF WIG DEFA Win or and Unit or an
Referencies Total data Additional Proposed Gening Additional Proposed Gening Referencies Represention Required (i:i) 0.03 AC. (100 trees per acre = 3 trees required) CONNECTICUT CONNECTICUT AVENUE CULVERT REPLACEMENT FINAL FOREST CONSERVATION PLAN SCALE: AS SHOW DATE: JUNE: 2016 SCALE: AS SHOW DATE: JUNE: 2016	Sti exocut a prerin sti exocu	Numerical and the second se

ATTACHMENT 4

WILSON T. BALLARD - 1968 RONALD W. RYE, PRESIDENT ROBERT N. BOND, SENIOR VICE PRESIDENT GLENN R. DETTER, VICE PRESIDENT MARK D. LOTZ, VICE PRESIDENT E. RICHARD FEUSTLE, JR., VICE PRESIDENT MARYANN BROWER, SECY-TREAS. SERINA M. WEBSTER, ASST. SECY-TREAS.

THE WILSON T. BALLARD COMPANY CONSULTING ENGINEERS 17 GWYNNS MILL COURT OWINGS MILLS, MARYLAND 21117

> TELEPHONE 410-363-0150 FAX 410-363-7811

SHAWN T. BURNETT, SENIOR ASSOCIATE DALE F. TOPPER, JR, SENIOR ASSOCIATE JOHN J. WEBSTER, SENIOR ASSOCIATE JEFFREY S. ZIEGENFUSS, SENIOR ASSOCIATE BRYAN C. DUSZA, ASSOCIATE JONATHAN E. MARTIN, ASSOCIATE JENNIFER L. ROHRER, ASSOCIATE TIMOTHY M. RYE, ASSOCIATE KRISTA M. ZIEGENFUSS, ASSOCIATE

June 14, 2016

Ms. Amy Lindsey Maryland National Capital Park and Planning Commission (M-NCPPC) Area 2 Planning Division 8787 Georgia Avenue Silver Spring, MD 20910-3760

Attn: Ms. Lindsey Senior Planner Re: Connecticut Culvert Replacement Request for Specimen Tree Variance File: 100-274.07

Dear Ms. Lindsey:

On behalf of the Montgomery County Department of Transportation (MC DOT), the Wilson T. Ballard Company is preparing plans to comply with the Montgomery County Forest Conservation Law for the Connecticut Avenue Culvert Replacement project.

Pursuant to Section 22A-21 *Variance provisions* of the Montgomery County Forest Conservation Ordinance, we are writing to request a variance to impact the Critical Root Zone of S1, a 34-inch DBH Green Ash specimen tree identified on the Amended Final Forest Conservation Plan (FFCP) for the above-named MC DOT construction project.

Project Description:

The proposed culvert replacement project located at the 14100 Block of Connecticut Avenue, in Aspen Hill, 0.4 miles East of Georgia Avenue (MD 97). The project lies within County Rights-of-way and within a Category I Forest Conservation Easement in the Gate of Heaven cemetery property (Approved FFCP 119930480).

The Limit of Disturbance within the Category I Conservation Easement is approximately 0.17 acres. The site contains an existing culvert with a concrete apron with displaced riprap below it, and an incised channel. The adjacent floodplain of Turkey Branch contains forest canopy (elm, red maple and green ash) with an open understory. The project will replace a structural plate pipe arch culvert running under Connecticut Avenue. The existing 121" x 85" structural plate pipe arch culvert will be replaced by a double box culvert, one being 6'x5' and the other 5.25'x 5.' The cells will not be depressed due to existing utilities running under the culvert. Riprap will be installed in the upstream and downstream channel, endwall hand rails will be replaced, the roadway approaches will be resurfaced, and the roadway over the culvert will be reconstructed to a full depth paving section.

The Limit of Disturbance (LOD) includes the Critical Root Zone (CRZ) of the specimen tree, with the center of the tree located approximately 85 feet downstream of the existing culvert headwall. Protection of the tree during construction will include stress reduction measures (root pruning) and tree protection fence and signage.

Maryland National Capital Park and Planning Commission (M-NCPPC) Area 2 Planning Division June 8, 2016 Page 2

Requirements for Justification of Variance:

Section 22A-21(b) Application requirements states that the applicant must:

(1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship;

(2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;

(3) Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance; and

(4) Provide any other information appropriate to support the request.

Justification of Variance:

(1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship;

Response: The project is to replace the existing culvert which is failing; a culvert failure would endanger motorist and pedestrian safety on Connecticut Avenue. A variance is needed for construction access to the culvert, equipment movement, installation of erosion and sediment control (E&SC) measures, and stream channel stabilization which lies within the CRZ of a 34-inch specimen tree located on the south side of Connecticut Avenue. The majority of the work within the CRZ will be for E&SC measures and stream stabilization work. The erosion measures are required to meet MCDPS and MDE standards. The stream stabilization will repair the channel degradation at the outfall and minimize future embankment erosion that is encroaching on the 34-inch specimen tree.

(2) <u>Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by</u> <u>others in similar areas;</u>

Response: If the County were required to keep all construction operations outside the Critical Root Zone of the specimen tree, the roadway culvert will not be replaced and roadway failure at this location may result. The LOD shown on the plans is required to install the erosion and sediment control measures in the downstream channel, the project could not be constructed without installation of proper E&SC measures.

(3) <u>Verify that State water quality standards will not be violated or that a measurable degradation in water</u> guality will not occur as a result of the granting of the variance;

Response: Water quality standards will not be violated, as this project will comply with the water quality standards required through Clean Water Act Section 401 water quality certification as part of the permit requirements for impacts to Waters of the U.S. The U.S. Army Corps of Engineers and the Maryland Department of the Environment issued a permit to the Montgomery County Department of Transportation (MC DOT) for these impacts on February 5, 2016, Authorization # 201561732/15-NT-3319.

In addition, water quality standards will not be violated because the proposed tree replacement will occur at a higher standard than is required. Larger stock (2-inch caliper rather than 0.75 to 1-inch caliper) will be used for the replanting. The replanting will be conducted within the remaining area of the limit of disturbance (6,048 SF) after the proposed culvert replacement.

Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.

Maryland National Capital Park and Planning Commission (M-NCPPC) Area 2 Planning Division June 8, 2016 Page 3

(4) Provide any other information appropriate to support the request.

Response:

The specimen tree will not be removed and all precautions will be taken to protect the health of the tree.

Conclusion:

For the above reasons, the applicant respectfully requests that the county arborist approve this request for a variance from the provisions of Section 22A of the Montgomery County Forest Conservation Ordinance, and thereby, GRANTS permission to work within the critical root zone of the specimen trees to allow the construction of this County DOT culvert replacement project.

Very truly yours,

THE WILSON T. BALLARD COMPANY

By Jennifer Powers

JCP/eb

cc: Mr. Michael Mitchell, Montgomery County Department of Transportation File

ATTACHMENT 5



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett County Executive Lisa Feldt Director

August 2, 2016

Casey Anderson, Chair Montgomery County Planning Board Maryland National Capital Park & Planning Commission 8787 Georgia Avenue Silver Spring, Maryland 20910

RE: Connecticut Avenue Culvert, ePlan 11993048A, revised application to amend FFCP received on 7/27/2016

Dear Mr. Anderson:

All applications for a variance from the requirements of Chapter 22A of the County Code submitted after October 1, 2009 are subject to Section 22A-12(b)(3). Accordingly, given that the application for the above referenced request was submitted after that date and must comply with Chapter 22A, and the Montgomery County Planning Department ("Planning Department") has completed all review required under applicable law, I am providing the following recommendation pertaining to this request for a variance.

Section 22A-21(d) of the Forest Conservation Law states that a variance must not be granted if granting the request:

- 1. Will confer on the applicant a special privilege that would be denied to other applicants;
- 2. Is based on conditions or circumstances which are the result of the actions by the applicant;
- 3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
- 4. Will violate State water quality standards or cause measurable degradation in water quality.

Applying the above conditions to the plan submitted by the applicant, I make the following findings as the result of my review:

- 1. The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance <u>can be granted</u> under this criterion.
- 2. Based on a discussion on March 19, 2010 between representatives of the County, the Planning Department, and the Maryland Department of Natural Resources Forest Service, the disturbance of trees, or other vegetation, as a result of development activity is not, in and of itself, interpreted as a condition or circumstance that is the result of the actions by the applicant. Therefore, the

255 Rockville Pike, Suite 120 • Rockville, Maryland 20850 • 240-777-7770 • 240-777-7765 FAX www.montgomerycountymd.gov/dep



Casey Anderson August 2, 2016 Page 2

variance <u>can be granted</u> under this criterion, as long as appropriate mitigation is provided for the resources disturbed.

- 3. The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance <u>can be granted</u> under this criterion.
- 4. The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance <u>can be granted</u> under this criterion.

Therefore, I recommend a finding by the Planning Board that this applicant qualifies for a variance conditioned upon the applicant mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law based on the limits of disturbance (LOD) recommended during the review by the Planning Department. In the case of removal, the entire area of the critical root zone (CRZ) should be included in mitigation calculations regardless of the location of the CRZ (i.e., even that portion of the CRZ located on an adjacent property). When trees are disturbed, any area within the CRZ where the roots are severed, compacted, etc., such that the roots are not functioning as they were before the disturbance must be mitigated. Exceptions should not be allowed for trees in poor or hazardous condition because the loss of CRZ eliminates the future potential of the area to support a tree or provide stormwater management. Tree protection techniques implemented according to industry standards, such as trimming branches or installing temporary mulch mats to limit soil compaction during construction without permanently reducing the critical root zone, are acceptable mitigation to limit disturbance. Techniques such as root pruning should be used to improve survival rates of impacted trees but they should not be considered mitigation for the permanent loss of critical root zone. I recommend requiring mitigation based on the number of square feet of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

In the event that minor revisions to the impacts to trees subject to variance provisions are approved by the Planning Department, the mitigation requirements outlined above should apply to the removal or disturbance to the CRZ of all trees subject to the law as a result of the revised LOD.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

- Mille

Laura Miller County Arborist

cc: Amy Lindsey, Planner Coordinator