MCPB Item No. 4

Date: 09-24-15

PP2015002, Little Bennett Regional Park Trail Connector: Preliminary Forest Conservation Plan and Preliminary/Final Water Quality Plan

WOR

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Completed: 9/14/15

Description

A. Little Bennett Regional Park Trail Connector:
Preliminary Forest Conservation Plan No. PP2015002

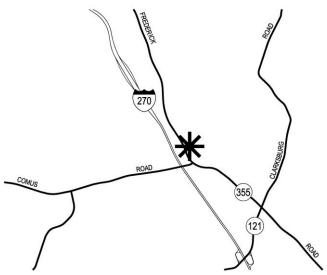
B. Little Bennett Regional Park Trail Connector:
Preliminary/Final Water Quality Plan No. PP2015002

Construction of an 8-12-foot-wide hard surface trail along the east side of Frederick Road (MD 355) and stream stabilization measures for the Sopers Branch tributary. The trail will be located along a one mile stretch on the east side of MD 355 from its intersection with Snowden Farm Parkway north to just south of the entrance to the Little Bennett Regional Park Day Use Area, Clarksburg; Clarksburg East Environmental Overlay Zone; Ten Mile Creek Special Protection Area; Clarksburg Master Plan & Hyattstown Special Study Area Master Plan

Application Accepted: May 22, 2015

Applicant: Montgomery County Department of Parks Summary A. Staff Recommendation: Approval of Preliminary Forest Conservation Plan with conditions

- B. Staff Recommendation: Approval of Preliminary/Final Water Quality Plan with conditions
 The Montgomery County Department of Parks proposes to construct an 8 to12-foot-wide, hard-surface, multi-
- The Montgomery County Department of Parks proposes to construct an 8 to12-foot-wide, hard-surface, multi-use trail on the east side of MD 355, connecting an existing asphalt trail from Snowden Farm Parkway to the south entry of the future Little Bennett Regional Park Day Use Area. The project includes stream restoration improvements within Sopers Branch tributary and stormwater management mitigation for MD 355.
- There are three items for Planning Board review for the Little Bennett Regional Park Trail Connector project: The Preliminary Forest Conservation Plan, the Preliminary/Final Water Quality Plan for the Ten Mile Creek Special Protection Area (SPA) and the Park Facility Plan. This memorandum covers Staff review and recommendations for the Forest Conservation Plan and the SPA Water Quality Plan. The review and recommendations for the Park Facility Plan are covered in a separate memorandum prepared by the Montgomery County Department of Parks.
- At the time of posting of this staff report, staff had not received the MCDPS approval for their portion of the water quality plan review. Staff anticipates that the MCDPS approval letter will be available for the Planning Board hearing and will introduce the MCDPS approval into the record at that time.



RECOMMENDATION

- A. Approval of the Preliminary Forest Conservation Plan, subject to the following conditions:
 - 1. Prior to any clearing, grading or demolition necessary to construct the project, the Applicant must obtain Planning Department approval of a Final Forest Conservation Plan consistent with the approved Preliminary Forest Conservation Plan.
 - 2. The Applicant must plant 1.25 acres of forest on the Subject Property outside of any right-of-way, or utility easements, including stormwater management easements within one year of construction completion.
 - 3. The Applicant must provide mitigation for the loss of trees requiring a variance in the form of three (3) native canopy trees with a minimum size of three (3) caliper inches. The trees must be planted on the Subject Property outside of any right-of-way, or utility easements, including stormwater management easements within one year of construction completion.
 - 4. The limits of disturbance shown on the final Sediment Control Plan must be consistent with the limits of disturbance shown on the Final Forest Conservation Plan.
 - The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector.
- B. Approval of the Preliminary/Final Water Quality Plan. Subject to the following condition:
 - 1. The Applicant must receive written approval of the Water Quality Plan from the Montgomery County Department of Permitting Services prior to the Planning Board approval of the Water Quality Plan.
 - 2. The Applicant must comply with the conditions of the Montgomery County Department of Permitting Services Water Quality Plan approval letter.

SITE DESCRIPTION

The 3.77 acre study area for this linear project ("Property" or "Subject Property") includes portions of nine separate parcels of land. The Property is located on the east side of Frederick Road (MD 355) near Little Bennett Regional Park and the intersection of MD 355 and Comus Road (Figure 1). The Property is within the 1994 Clarksburg Master Plan & Hyattstown Special Study Area Master Plan and 2014 Ten mile Creek Area Limited Amendment to the Clarksburg Master Plan & Hyattstown Special Study Area Master Plan area. The southern portion of the project is located within the Ten Mile Creek Special Protection Area (SPA) and Clarksburg East Environmental Overlay Zone (Figure 2). This portion of the Property is within the Little Seneca Creek watershed, which is classified by the State of Maryland as Use Class I-P waters. The northern portion of the Property is located within the Little Bennett Creek watershed, which is classified by the State of Maryland as Use Class III-P waters. The Property contains approximately 1.90 acres of forest. There is one stream, associated wetlands and environmental buffer located on the Property. The stream enters the Property from an existing culvert under MD355 and flows in a northern direction, perpendicular to MD 355. There is no mapped 100-year floodplain and a floodplain delineation has not been required by the Montgomery County Department of Permitting Services (MCDPS). There are seventeen (17) trees greater than or equal to 24" Diameter at Breast Height (DBH) and seven (7) trees greater than or equal to 30"DBH located throughout the Property.



Figure 1. Property Location and Surrounding Area

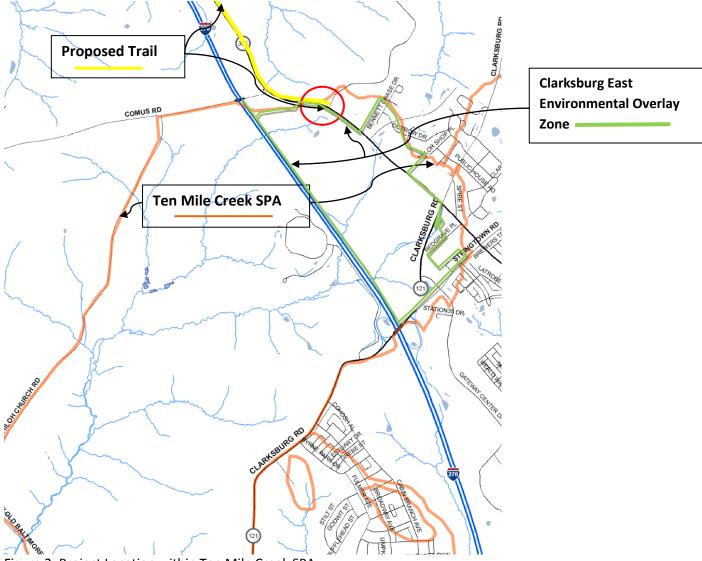


Figure 2. Project Location within Ten Mile Creek SPA

PROJECT DESCRIPTION

The project includes the construction of a new, approximately one mile in length, 8 to 12-foot wide hard-surface trail on the east side of MD Route 355. The trail is planned to connect the existing 8-foot wide asphalt trail from Snowden Farm Parkway near Little Bennett Regional Park Maintenance Yard, to the southern entrance of the future Day Use Area of Little Bennett Regional Park, per the approved 2011 Little Bennett Regional Park Day Use Area Facility Plan. The ADA accessible, multi-use trail will provide safe passage for recreational purposes and serve as a public sidewalk in conjunction with the future transportation bikeway (SP-72/B-3) planned on the west side of MD Route 355 (Figure 1). The project also includes stream restoration improvements within the Sopers Branch tributary and stormwater management mitigation measures for MD Route 355, where possible.

Along with the Park Facility Plan, the Application includes a Preliminary Forest Conservation Plan (FCP) and a Preliminary/Final Water Quality Plan (WQP), which are the subject of this staff report.

A. FOREST CONSERVATION PLAN ANALYSIS AND FINDINGS

As conditioned, the Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

Environmental Guidelines

The Property contains a stream, wetlands, and environmental buffers. The Application proposes 1.63 acres of forest removal, including 0.17 acres within the SPA. The project will impact approximately 150 linear feet of stream channel, 0.24 acres of wetlands, and 1.36 acres of environmental buffer within the Little Bennett Creek watershed, which is not located within an SPA. The majority of the impacts to the stream, wetlands and environmental buffer are temporary in order to restore and stabilize the currently eroded stream channel. Additionally, stormwater management features will be installed as part of this project to manage existing uncontrolled runoff from MD 355 that has resulted in the erosive condition of the stream. The portion of the proposed trail that traverses the forest and wetland habitats in the environmental buffer will be constructed on elevated piers. This elevated boardwalk will allow the existing drainage patterns to be maintained and minimize loss of habitat. The environmental impacts are necessary and unavoidable to achieve the design standards of creating the new pathway and to restore and stabilize the stream; the impacts have been minimized to the greatest extent possible.

Preliminary Forest Conservation Plan

The Application is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) under Section 22A-4. A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420131910 was approved by Staff on November 3, 2014. The NRI/FSD included a larger study area for this linear project that encompassed 26.66 acres of land (area within and 100 feet from the proposed limits of disturbance (LOD)). A Preliminary Forest Conservation Plan encompassing 3.77 acres of land within the proposed LOD was submitted for the Property as part of the Park Facility Plan (Attachment A). The Property contains approximately 1.90 acres of forest. The Application proposes to remove approximately 1.63 acres of forest and retain 0.27 acres, which results in a forest planting requirement of 1.25 acres. Although the 1.63 acres of forest removal includes trees that will remain, due to adjacent forest clearing, these areas will no longer meet the definition of forest and must be counted as cleared for forest conservation purposes.

Forest Conservation Variance

Section 22A-12(b) (3) of the Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires no impact to trees that: measure 30 inches or greater, DBH; are part of an historic site or designated with an historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species ("Protected Trees"). Any impact to a Protected Tree, including removal or disturbance within the Tree's critical root zone (CRZ) requires a variance.

<u>Variance Request</u> - The Applicant submitted a variance request to the M-NCPPC Planning Department on July 17, 2015 for the impacts to/removal of trees (Attachment B). The Application proposes to remove one (1) tree that is 30 inches and greater, DBH, and to impact, but not remove, four (4) other Protected

Trees that are considered high priority for retention under Section 22A-12(b) (3) of the County Forest Conservation Law. Details of the Protected Trees to be removed or affected but retained are described below and depicted in Figures 3, 4, and 5.

Tree to be removed:

• 30367 – 34" DBH tulip tree, poor condition, undercut – stream restoration and grading along the right bank of Sopers Branch Tributary

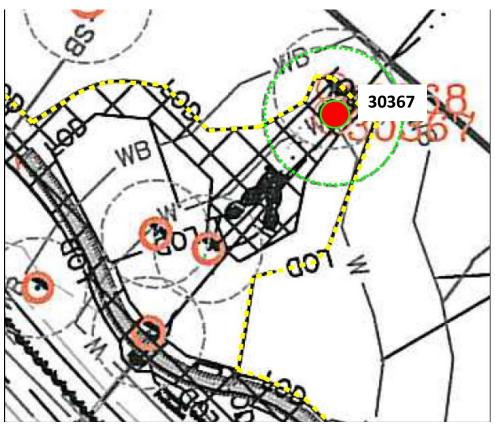


Figure 3. Tree 30367 to be removed (Sheet 4 of FCP)

Trees to be affected but retained:

- 10021 30" DBH red oak, fair condition grading, trail; 32% critical root zone (CRZ) impact
- 10810 30" DBH silver maple, good condition grading, trail; 4% CRZ impact
- 10811 31" DBH silver maple, good condition grading, trail; 1% CRZ impact
- 11179 31" DBH white oak, good condition trail; 1.3% CRZ impact

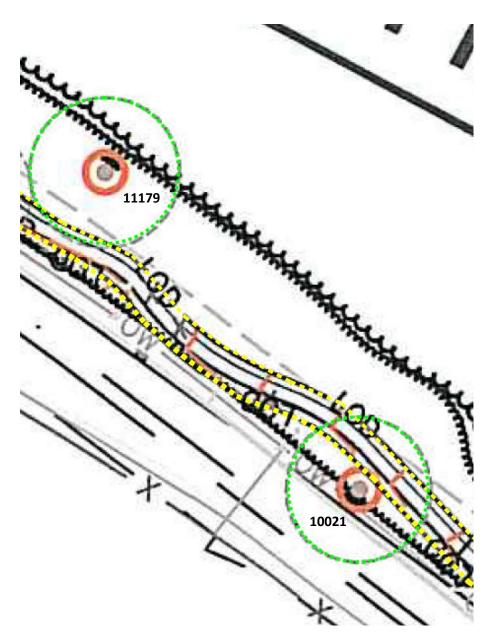


Figure 4. Trees 10121 and 11179 Impacts (Sheet 2 of FCP)

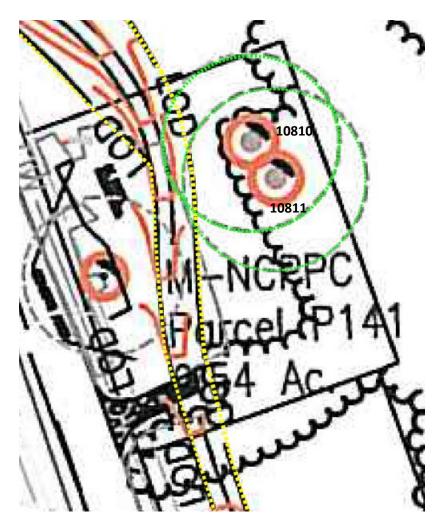


Figure 5. Trees 10810 and 10811 Impacts (Sheet 5 of FCP)

<u>Unwarranted Hardship Basis</u> —Section 22A-21 states that a variance may only be considered if the Planning Board finds that leaving the Protected Trees in an undisturbed state would result in an unwarranted hardship, denying an applicant reasonable and significant use of a property. As outlined in the *2007 Little Bennett Regional Park Master Plan* and per the *2011 Little Bennett Regional Park Day Use Area Facility Plan*, the Applicant proposes to construct a trail connection to provide pedestrian access from the existing asphalt trail from Snowden Farm Parkway near Little Bennett Regional Park Maintenance Yard to the southern entrance of the future Day Use Area of Little Bennett Regional Park. Additionally, the Applicant proposes to stabilize and restore a stream channel in the vicinity. The Application notes that an unwarranted hardship would be created due to the specific location and requirements of the trail connection to connect the existing trail to the recreation area, existing conditions on and adjacent to the Property including the existing MD 355 and the number and location of Protected Trees on the site, and maintaining the accepted design standards for constructing the trail connection. There are Protected Trees located throughout the Property. The one tree proposed for removal is in poor condition, and undercut by the eroding stream bank. It will not be possible to restore and stabilize the stream bank without removing this tree.

The four Protected Trees proposed to be affected but retained, will be minimally impacted due to grading and trail construction. Measures taken to minimize impacts to the trees include constructing the trails on grade or elevated on piers, where feasible. Where the trail traverses the forest and wetlands near the stream, over 900 feet of trail will be elevated on piers. All of the affected trees will receive tree protection measures during construction. Staff finds that an unwarranted hardship would be created if a variance were not considered.

<u>Variance Findings</u> – Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board or Planning Director, as appropriate, in order for a variance to be granted. Staff has made the following determinations in the review of the variance request and the proposed forest conservation plan:

Granting the requested variance:

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

Granting the variance will not confer a special privilege on the Applicant, as removal and disturbance to the Protected Trees is due to the need for the construction of a trail connection in this area as identified in the 2007 Little Bennett Regional Park Master Plan and the 2011 Little Bennett Regional Park Day Use Area Facility Plan. The Protected Tree proposed for removal is in poor condition and undercut by the existing eroded stream bank. The removal of the tree is necessary to restore the stream to a stable condition. The Application proposes to impact the critical root zones of four additional Protected Trees. There are Protected Trees located throughout the Property, and Staff has determined that the Applicant has demonstrated efforts of avoidance and minimization to the greatest extent possible while meeting the goals of the applicable Master Plan and Facility Plan and the acceptable design standards for the trail. The requested variance is based on existing site conditions, the goal to connect to an existing trail and an existing park use, and the number and locations of the Protected Trees.

2. Is not based on conditions or circumstances which are the result of the actions by the applicant.

The need for the variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based on existing site conditions, including the existing trail from which this one will connect and the existing Little Bennett Park Day Use recreational area which this trail will benefit, the existing eroded condition of the stream, the number and locations of Protected Trees, and the recommendations outlined in the approved 2007 Little Bennett Regional Park Master Plan and the 2011 Little Bennett Regional Park Day Use Area Facility Plan.

3. Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.

The need for a variance is a result of the Master Plan and Facility Plan recommendations, existing site conditions, the proposed design standards, and not a result of land or building use on a neighboring property.

4. Will not violate State water quality standards or cause measurable degradation in water quality.

The variance will not violate State water quality standards or cause measurable degradation in water quality. The four trees that will be affected, but retained are not located within a stream buffer or wetland. Tree #11179 is located within a Special Protection Area, but this tree will have minimal impact to its CRZ, and the functions currently provided by this tree will continue. The tree proposed to be removed is located within a stream buffer, but outside of a Special Protection Area. This tree is in fair condition, located along an eroded stream bank that will be restored and stabilized, and the Application proposes to mitigate for the loss of this trees by planting additional trees on the Property.

- Mitigation for Protected Trees Subject to the Variance Provision The one Protected Tree proposed to be removed is located outside of existing forest and Staff recommends mitigation for the loss of this tree. Staff recommends the Applicants plant three (3) three-inch caliper native canopy trees as mitigation for the loss of the one Protected Tree.
- County Arborist's Recommendation on the Variance In accordance with the 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. The request was forwarded to the County Arborist. On August 14, 2015, the County Arborist issued recommendations on the variance request and recommended the variance be approved with mitigation (Attachment C).

<u>Variance Recommendation</u> – Staff recommends that the variance be granted to permit the removal of one Protected Tree, and impacts to four Protected Trees, with mitigation provided in the form of planting three, 3-inch caliper native canopy trees on the Property.

B. TEN MILE CREEK SPECIAL PROTECTION AREA WATER QUALITY PLAN ANALYSIS AND FINDINGS

The Application meets the Water Quality Plan requirements of Chapter 19 of the Montgomery County Code and the Clarksburg East Environmental Overlay Zone requirements of Chapter 59 of the Montgomery County Code.

Review for Conformance to the Special Protection Area and Environmental Overlay Zone Requirements A portion of this project is located within the Ten Mile Creek SPA and on publicly owned property. It is required to obtain approval of a water quality plan under Section 19-62(c) of the Montgomery County Code. This section of the code states:

Publicly owned property. Before engaging in any land-disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.

Under Section 19-65 of the Special Protection Area law, the Montgomery County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of a Water Quality Plan. MCDPS has reviewed and conditionally approved the elements of the water quality plan under its purview. The Planning Board's responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and limits on impervious surfaces have been satisfied.

County MCDPS Special Protection Area Review Elements

At the time this staff report was due to be posted, MCDPS had not issued a letter of approval for their portion of the Water Quality Plan review. MCDPS staff has indicated that the approval letter would be issued prior to the scheduled Planning Board hearing. MCDPS' review elements are separate from Staff's review elements; however, MCDPS' approval memo documenting their required findings is necessary prior to the Planning Board's approval of the Water Quality Plan. MCDPS' findings on compliance with Chapter 19 include: 1) stormwater management concept, 2) erosion and sediment control concept, and 3) best management practices/stream monitoring. As conditioned, MCDPS's approval memo is required prior to approval of the Water Quality Plan and Staff will include MCDPS' findings at the Planning Board hearing for the record. Introduction of the MCDPS approval letter into the record will be made at the hearing for this project.

Planning Board Special Protection Area Review Elements

Staff recommends Planning Board approval of the elements of the SPA Water Quality Plan under its purview.

Environmental Buffer Protection

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420131910 was approved by Staff on November 3, 2014. Although the Property contains streams, wetlands, and environmental buffers, none of these features are located within the Ten Mile Creek SPA.

Forest Conservation

The Applicant submitted a Preliminary Forest Conservation Plan for review in conjunction with the Park Facility Plan. The Forest Conservation Plan shows the removal of 1.63 acres of forest, of which approximately 0.17 acres is located within the SPA. The impacts to the forest have been minimized to the extent practical while still achieving the goals and design standards for creating the new pathway. Mitigation for forest removal in the form of forest planting will be provided on the Property.

Impervious Surfaces

The Clarksburg East Environmental Overlay Zone includes an impervious surface limitation of 15%; however, per Chapter 59, Section 4.9.4(B)(4) of the County Code, the numerical impervious surface limit does not apply to this publicly funded bikeway project. This section of the Code states:

Impervious surface for any publicly funded road or bikeway identified by the Ten Mile Creek Area Limited Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area is exempt from this Overlay zone's impervious surface restriction.

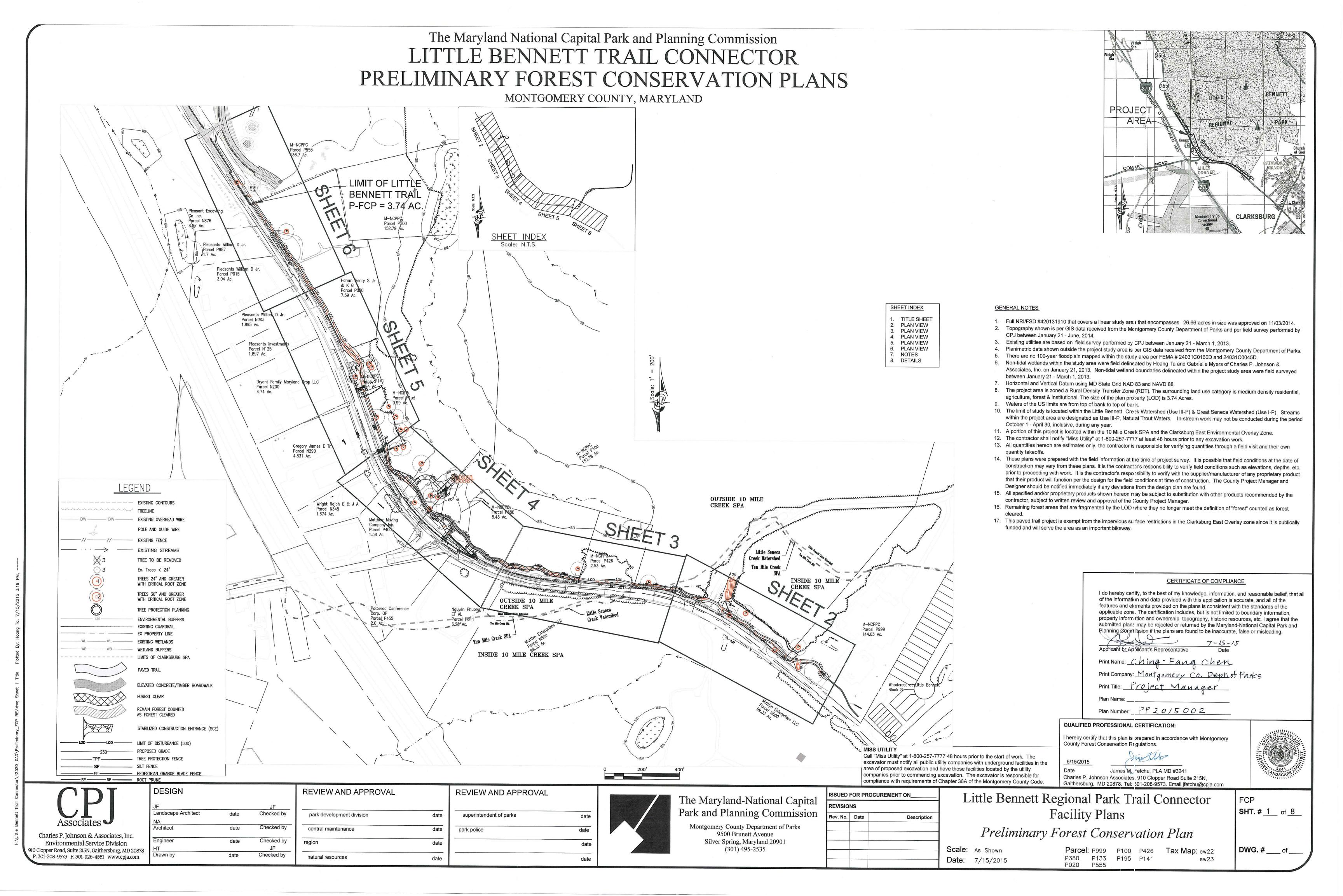
Although the specific numerical impervious limit does not apply, a main goal for development in all SPAs is to reduce the amount of impervious surfaces. The project, by nature, creates some impervious surfaces; however, this has been minimized to the extent possible while maintaining the goals of the project and applicable design standards. The path will be 8 feet wide along the approximately 1,000 feet of trail that is located within the SPA. The portion of the path located outside of the SPA will maintain the 8 foot width, with expansion to 12 feet for the elevated boardwalk portion. The 12 foot width is necessary in this area to allow for adequate clearance, turning radii, and guardrails along this elevated portion of the trail.

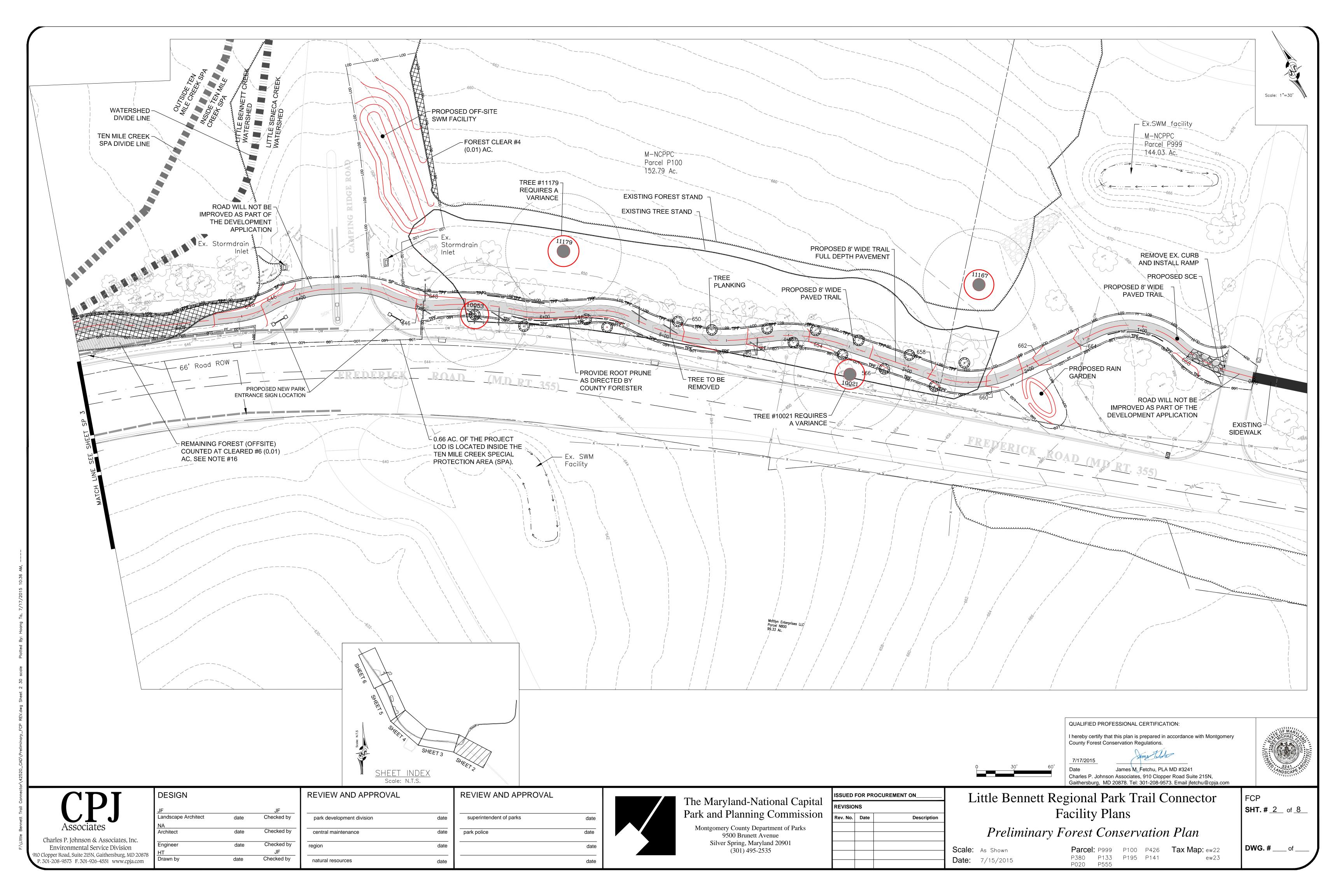
CONCLUSION

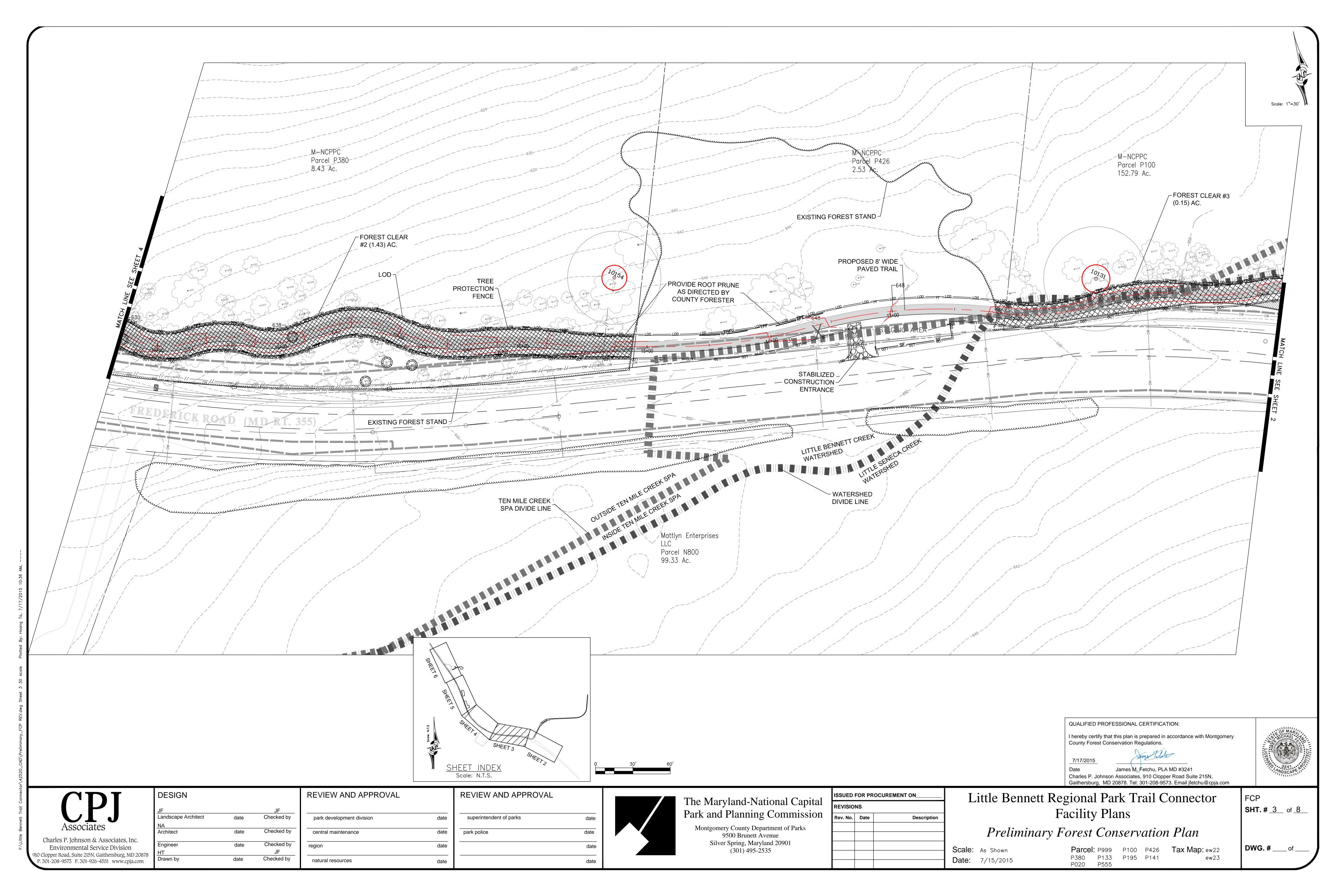
Staff recommends the Planning Board approve the Preliminary Forest Conservation Plan and the Preliminary/Final Water Quality Plan with conditions specified above.

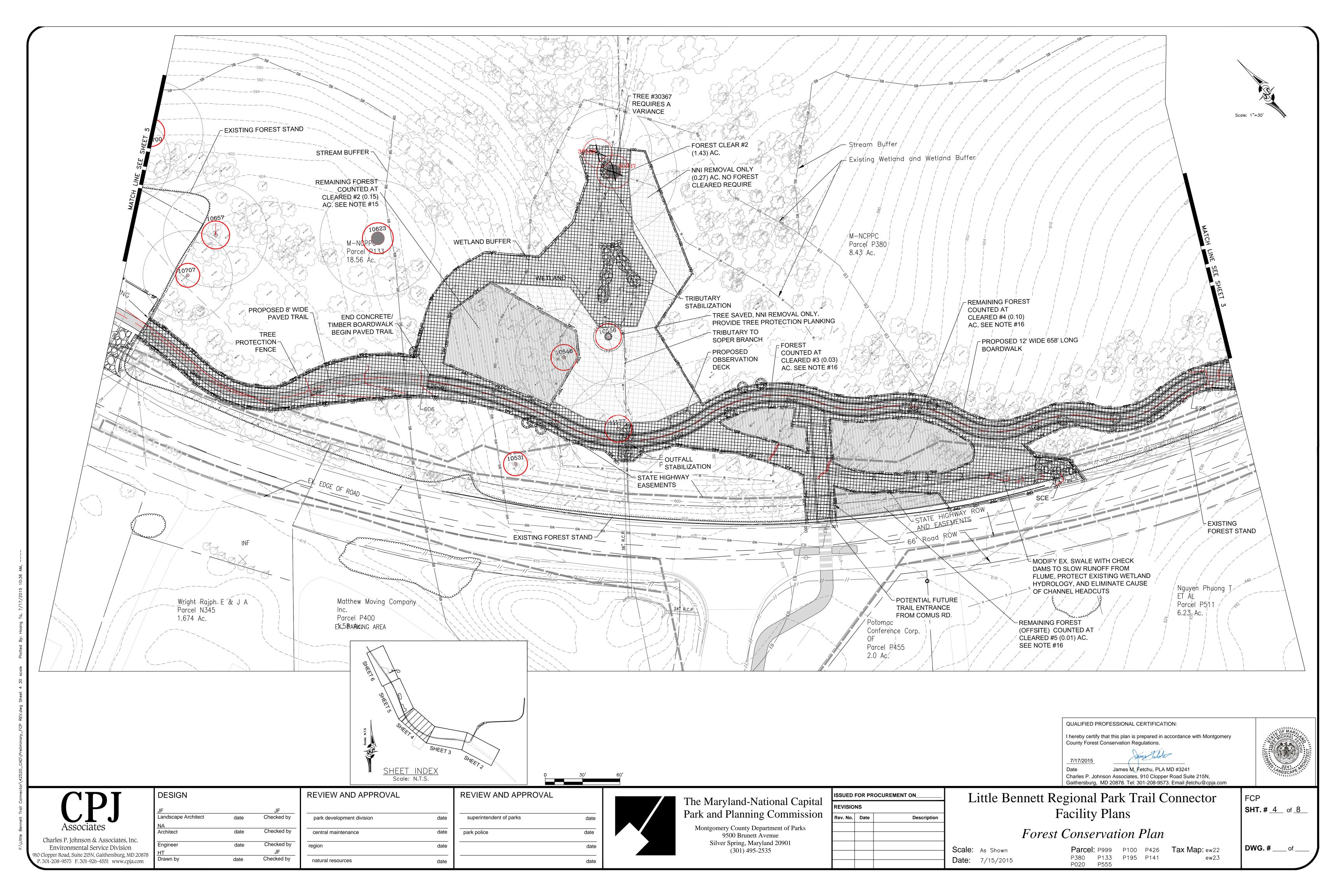
ATTACHMENTS

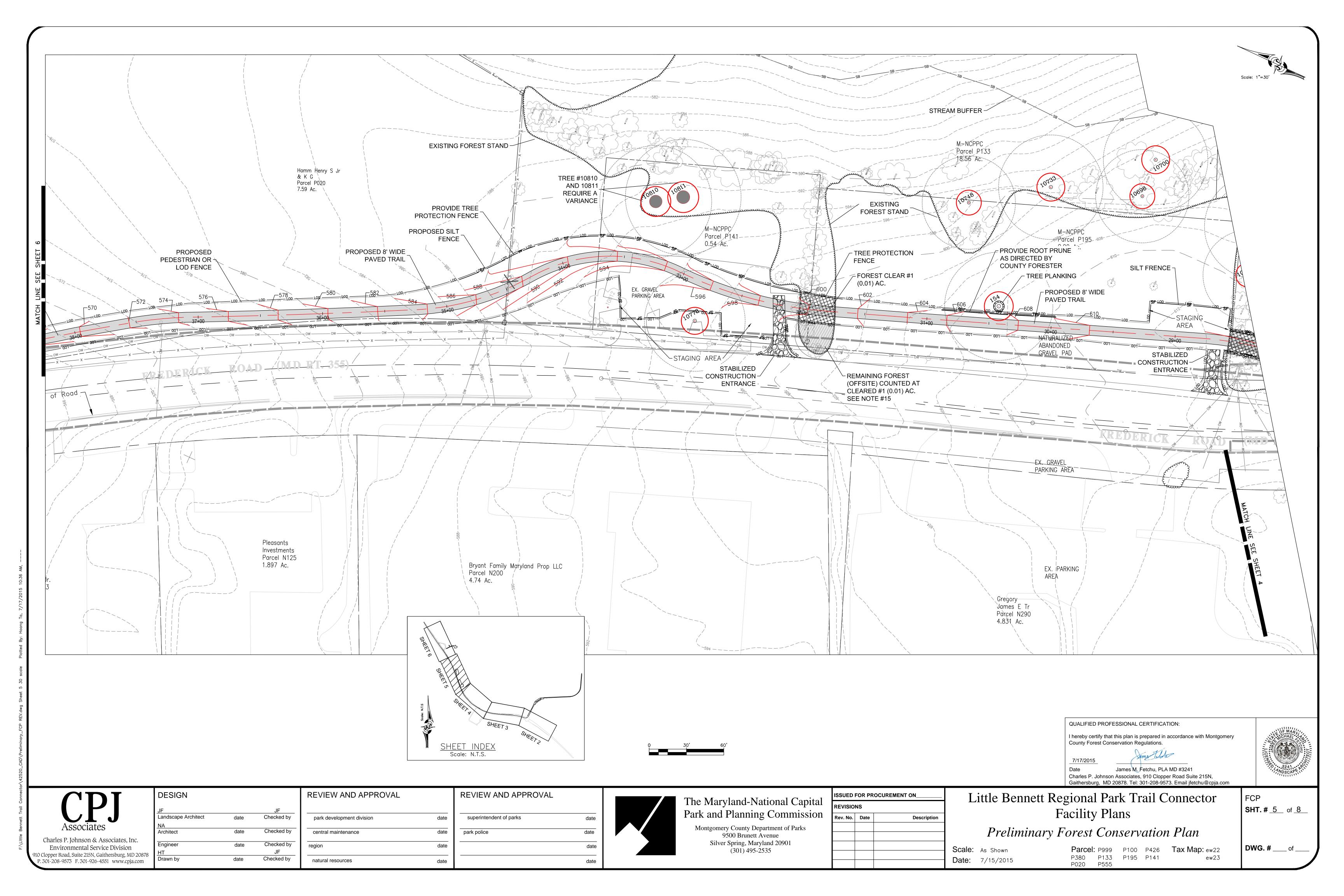
- A. Forest Conservation Plan
- B. Tree Variance Request
- C. Tree Variance Recommendation from County Arborist dated August 14, 2015

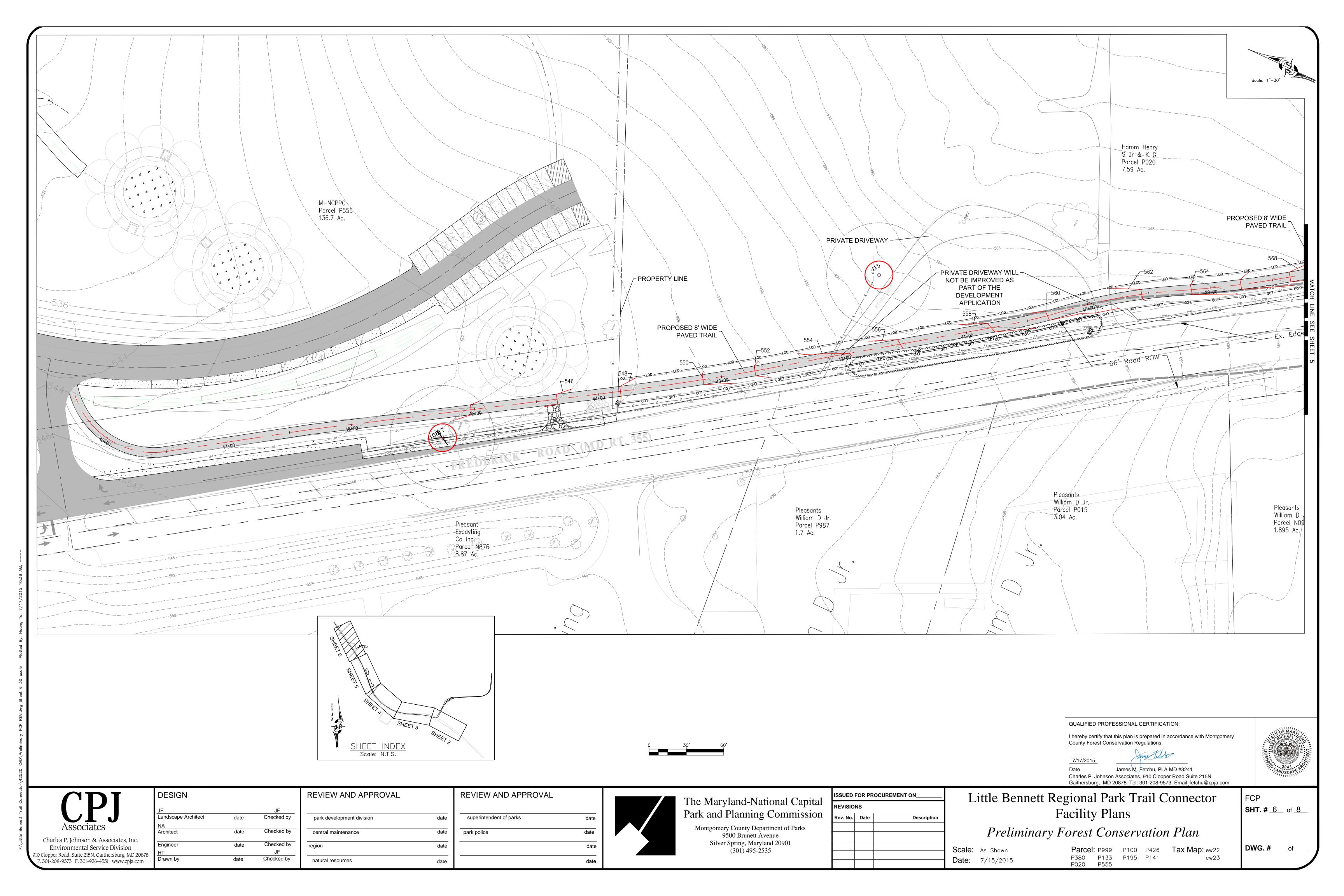












A. Total tract area ...

F. Net Tract Area ...

E. Other deductions (specify)

B. Land dedication acres (parks, county facility, etc.) ...

D. Area to remain in commercial agricultural production/use ..

C. Land dedication for roads or utilities (not being constructed by this plan) ...

Land Use & Thresholds²

	Total Channel	Average Buffer	
	Length (ft.)	Width (ft.) ³	
Stream(s)	205	150	
Acres of Forest in	Retained	Cleared	Planted
Wetlands		0.24	0.24
100-Year Floodplain	.=	į.	-

1.36

1.36

Forest Conservation Data Table

¹ Only Road or Utility ROWs not to be improved as part of development application.

² Information from FC Land Use Categories & Thresholds document.

³ Measured from stream edge to buffer edge.

Stream Buffers

Priority Areas

Significant Tree Removal

Survey Tree#	Common Name	Botanical Name	DBH (in.)	CRZ (ft.)	Condition	Notes
11177	DEAD		27	40.5	DEAD	
30368	American Elm	Ulmus americana	29	43.5	Fair	Triple, Suckers

Tree Variance Request for CRZ Impacts & Removal

Mitigation: Five (5) 3" caliper trees shall be planted on-site to mitigate for variance tree removal of tree #30367 and tree #10021 which has a CRZ impact >30%. Mitigation for tree #10021 is being calculated in case this tree does do not survive construction; even with the implementation of protection measures.

ID	Common Name	DBH (in.)	Condition	Planview %	Remove/ Retain	Tree Within LOD	FCP Sheet	MEASUF	AL PROTE RES FOR T REMAIN	REES TO		
		, , , , , , , , , , , , , , , , , , ,	Containen	CRZ Impacts	Kemeve, Kemin	Tico Wiaiii 205	No.	RP	TPF	PL	Remarks	Reason for Impact
10021	Red Oak	30	Fair	32	Retain	No	2	Yes	Yes	No	Leaning	Full Depth Trail, Grading
10810	Silver Maple	30	Good	4	Retain	No	5	Yes	Yes	No	Broken branches	Full Depth Trail, Grading
10811	Silver Maple	31	Good	1	Retain	No	5	Yes	Yes	No	Vines	Full Depth Trail, Grading
11179	White Oak	31	Good	4	Retain	No	2	Yes	Yes	No		Full Depth Trail
30367	Tulip Poplar	34	Poor	100	Remove	Yes	4	No	No	No	Twin, UC, BB, Hole, Split	Stream Bank Grading/ Step Pool

<u>Terminology:</u>

3.77

0.00

0.00

0.00

0.00

3.77

CIA

x F = 0.57

x F = 0.75

1.90

1.33

1.15

0.98

0.92

1.63

0.27

0.29

0.97

0.00

1.25

0.00

0.00

1.25

(RP) Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven

(TPF) Tree Protection Fence

(PL) Tree Protection Planking. Wooden planking is attached to trees along the access route to protect the tree trunk from passing machinery & construction equiptment.

Significant and Specimen Trees List

Survey Tree#	Common Name	Botanical Name	DBH (in.)	CRZ (ft.)	Condition	Disposition	Notes
154	Red Maple	Acer rubrum	29	43.5	Poor		1/2 tree split off
415	Red Maple	Acer rubrum	28	42	Good		Private Property
10021	Red Oak	Quercus rubra	30	45	Fair		Leaning
10053	White Oak	Quercus alba	28	42	Good	Remove	
10131	Red Maple	Acer rubrum	28	42	Fair		Dead Branches
10154	Norway Spruce	Picea abies	25	37.5	Good		
10531	Red Maple	Acer rubrum	24	36	Poor		Basal damage
10546	Tulip poplar	Liriodendron tulipifera	26	39	Fair		Vines
10556	Red Maple	Acer rubrum	26	39	Fair		Heavy vines
10623	Pin Oak	Quercus palustris	31	46.5	G		Edge of new forest to stream
10657	Black Locust	Robinia pseudoacacia	28	42	Poor		
10698	American Elm	Ulmus americana	25	37.5	Good		
10700	American Elm	Ulmus americana	28	42	Fair		Vines
10707	Black Locust	Robinia pseudoacacia	24	36	Poor		Double, almost dead
10733	Red Maple	Acer rubrum	28	42	Fair		
10748	American Sycamore	Platanus occidentalis	25	37.5	Good		Vines
10778	Silver Maple	Acer saccharinum	28	42	Poor		Broken branches
10810	Silver Maple	Acer saccharinum	30	45	Good		Broken branches
10811	Silver Maple	Acer saccharinum	31	46.5	Good		Vines
10817	White Mulberry	Morus Alba	28	42	Fair		OH wires
11167	Black Oak	Quercus velutina	30	45	Fair		Vines/Broken Branches
11177	DEAD		27	40.5	DEAD	Remove	Safety
11179	White Oak	Quercus alba	31	46.5	Good		
30367	Tulip Poplar	Liriodendron tulipifera	34	51	Poor	Remove	Twin, UC, BB, Hole, Split
30368	American Elm	Ulmus americana	29	43.5	Fair	Remove	Triple, S

QUALIFIED PROFESSIONAL CERTIFICATION:

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

James M. Fetchu, PLA MD #3241 Charles P. Johnson Associates, 910 Clopper Road Suite 215N, Gaithersburg, MD 20878. Tel: 301-208-9573. Email jfetchu@cpja.com FCP

Charles P. Johnson & Associates, Inc. Environmental Service Division 10 Clopper Road, Suite 215N, Gaithersburg, MD 20878 P. 301-208-9573 F. 301-926-4551 www.cpja.com

DESIGN Landscape Architect Checked by NA Architect Checked by Checked by Checked by

REVIEW AND APPROVAL park development division date date central maintenance date natural resources date

REVIEW AND APPROVAL superintendent of parks date date park police date date



The Maryland-National Capital Park and Planning Commission

Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535

)	FOR PR	OCUREMENT ON	
)	NS		
	Date	Description	

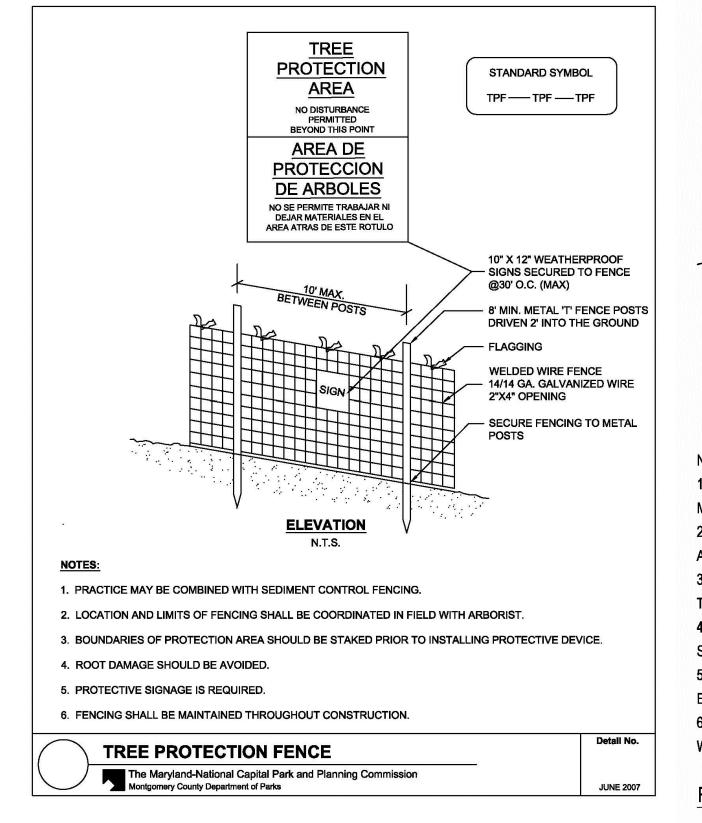
Little Bennett Regional Park Trail Connector Facility Plans

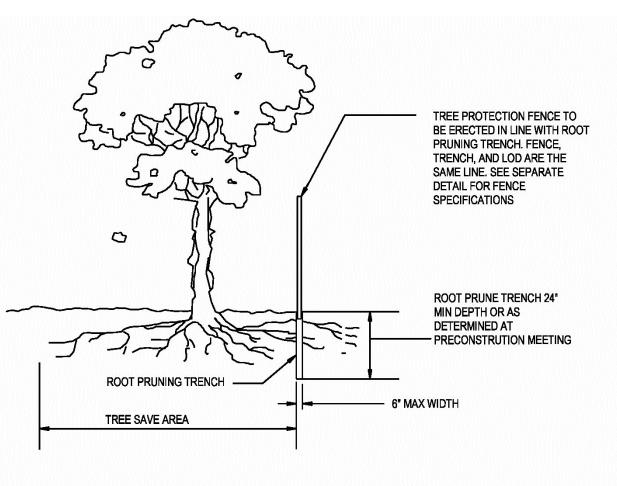
Preliminary Forest Conservation Plan

Parcel: P999 P100 P426 Tax Map: ew22 Scale: As Shown P380 P133 P195 P141 **Date:** 7/15/2015 P020 P555

SHT. # 7 of 8

DWG. # ____ of ___





1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

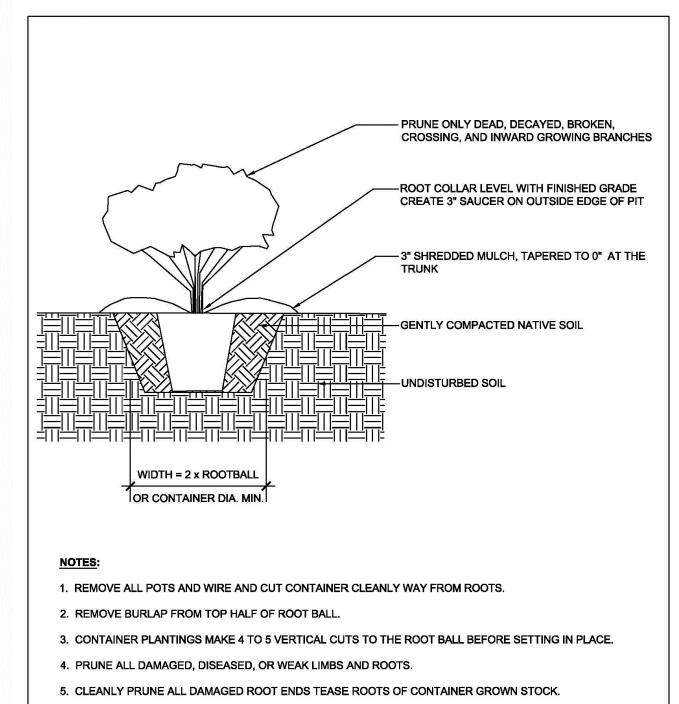
3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR.

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE

6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL



6. DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLLATION PROCESS.

The Maryland-National Capital Park and Planning Commission

7. DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB

Montgomery County Department of Parks



Tree Planking to be provided per plan. Additional tree planking may be required as directed by M-NCPPC Inspector.

*DO NOT NAIL OR STAPLE ANY PROTECTION **DEVICES TO TREE**

Use heavy gauge wire to hold planking to tree. to ensure that areas exposed to traffic will be

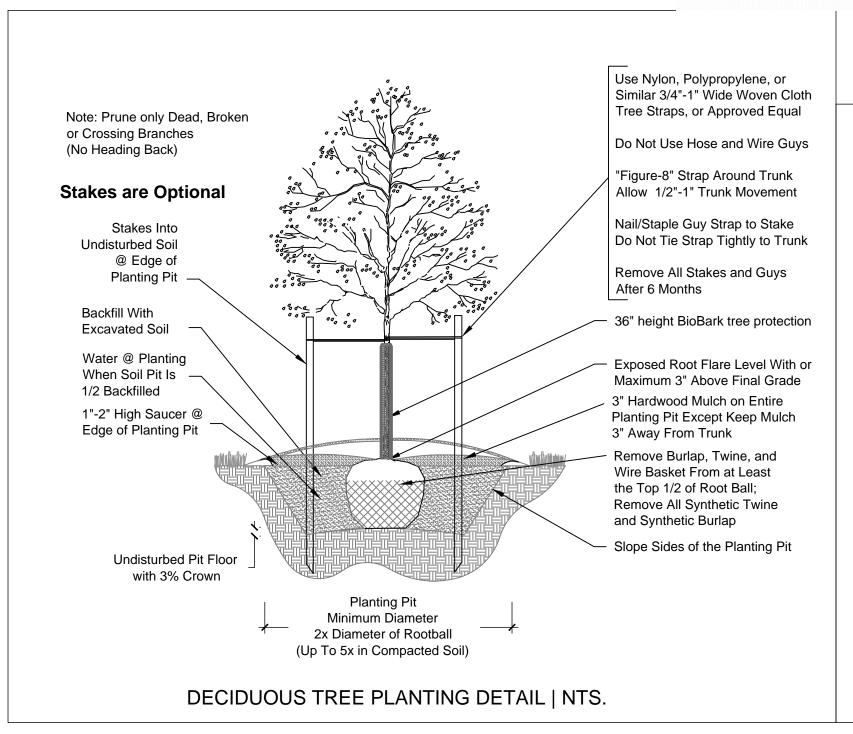
Surround tree with 2"x10"x10' planks or of suitable width and height

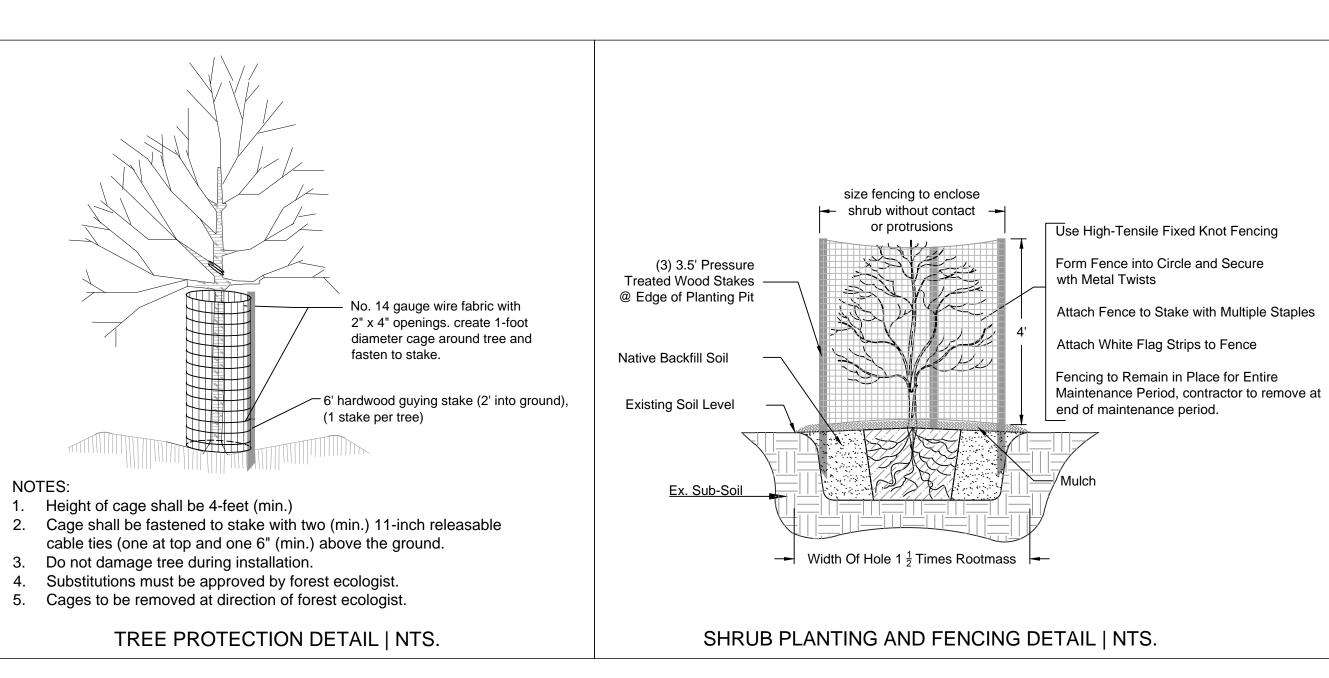
fully protected. Wrap lower portion of tree

with tree protection fence.

TREE PLANKING DETAIL

N.T.S.





QUALIFIED PROFESSIONAL CERTIFICATION:

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

James M. Fetchu, PLA MD #3241 Charles P. Johnson Associates, 910 Clopper Road Suite 215N, Gaithersburg, MD 20878. Tel: 301-208-9573. Email jfetchu@cpja.com



Charles P. Johnson & Associates, Inc. Environmental Service Division 10 Clopper Road, Suite 215N, Gaithersburg, MD 20878 P. 301-208-9573 F. 301-926-4551 www.cpja.com

DESIGN Landscape Architect Checked by Architect Checked by Checked by Checked by

REVIEW AND APPROVAL park development division date central maintenance date date natural resources date

REVIEW AND APPROVAL superintendent of parks date date park police date date



The Maryland-National Capital Park and Planning Commission Montgomery County Department of Parks

Detail No.

CTOBER 2007

9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535

REVISIO		
Rev. No.	Date	Description

ISSUED FOR PROCUREMENT ON_

Little Bennett Regional Park Trail Connector Facility Plans

P020 P555

Preliminary Forest Conservation Plan

Parcel: P999 P100 P426 Tax Map: ew22 Scale: As Shown P380 P133 P195 P141 **Date:** 7/15/2015

SHT. # <u>8</u> of <u>8</u>

DWG. # ____ of ___

Planning Director, Montgomery County Planning Department Maryland – National Capital Park and Planning Commission 8787 Georgia Ave. Silver Spring, MD 20910

RE:

Little Bennett Regional Park Trail Connector

30" DBH Tree Variance

Dear Ms. Reynolds,

The Park Development Division of the Montgomery County Department of Parks, respectfully requests a variance from Section 22A-21 of the Montgomery County Code and from Title 5, Section 5-1607 of the Maryland code for the Little Bennett Regional Park Trail Connector project and Sopers Branch tributary stabilization.

The Little Bennett Regional Park Trail Connector project is located in northern Montgomery County on the east side of Frederick Road (MD 355) in Clarksburg, MD. Guided by the 2007 Little Bennett Regional Park Master Plan, the proposed trail connector will provide pedestrian access from the Little Bennett Regional Park Maintenance Yard near Snowden Farm Parkway to the southern entrance of the future Day Use Area, located approximately one-mile north. The mostly shaded proposed trail connector travels along the northbound side of Frederick Road (MD 355). The 8-10-foot-wide trail will be a hard surface off-road trail that provides a safe and pleasant pedestrian passage for recreational purposes and serves as a public sidewalk supporting the future transportation bikeway. In concurrence with the trail construction, stream restoration improvements will occur within the Sopers Branch Tributary. These improvements promote pedestrian connectivity for the Clarksburg community and expand the recreational opportunities available to park visitors.

A number of trail alignments were carefully considered during the early stages of design. The proposed alignment addresses the accessibility and safety needs of the user while also minimizing environmental impacts. Despite every effort to limit tree impacts, a number of trees have been selected for removal. The majority of these trees are within the forested area of the project site where tree impacts are unavoidable. A number of design strategies for both the trail and stream restoration are implemented in this plan to minimize the amount of tree impacts. Where feasible, trails are on grade surface paving or elevated on piers. This reduces the need for full depth trail foundations, which in turn reduces the impact to tree root zones. Where the trail traverses the forest and wetland habitats that surround Sopers Branch, over 900' of trail has been elevated on piers. This elevated boardwalk allows for the continuation of existing drainage patterns, and the free flow of plant and animal migration.

Four (4) trees greater than or equal to 30" (dbh) will incur minor impacts to their calculated CRZ's. Tree # 10021, 30" Red Oak in fair condition will incur root impacts of 32%. Tree # 10810, 30" Silver Maple will incur root impacts of 4%. Tree # 10811, 31" Silver Maple will incur root impacts of 1%. Tree # 11179, 31" White Oak will incur root impacts of 1.3%. Each impacted tree will be protected using specific measures as shown in the attached table. Tree #30367 is situated on the right bank of the Sopers Branch Tributary. This tree is in poor condition and undercut. It will need to be removed to allow for stream

restoration and grading along the right bank. Our Forest Conservation Plan and the attached tables identify the variance trees and details information for tree protection methods that will be implemented in this project. These include root pruning, and tree protection planking where temporary construction access, grading, and paving cannot be established otherwise. In addition, no tree is impacted without consideration of environmental ethic and best management practice. We are willing to further reduce tree impacts and improve our Forest Conservation Plan at time of detail design and construction.

It is our understanding that applicants for a variance must demonstrate the following criteria. Our responses follow each point:

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

The 2007 Little Bennett Regional Park Master Plan emphasizes the concept of accessibility by different transportation modes. The Plan recommended extending the Clarksburg greenway network to the park so people can get to the park without using their car. The 1994 Clarksburg Master Plan intended the B-3, Class I (Off-Street), transportation bikeway along MD 355, Frederick Road, to be integrated with the Clarksburg Greenway Trail. The Plan recommended implementing the bikeway system as development occurs.

The Day Use Area is a major destination along MD 355 corridor. To realize the Master Plan's recommendations and to be implemented with detail design and construction of the Day Use Area, M-NCPPC requests permission to construction an off-road hard-surface trail on the east side of MD355 to serve as a park recreation trail as well as a public sidewalk to support the future transportation bikeway along MD355 on the west side. In addition M-NCPPC requests permission to stabilize a section of the Sopers Branch Tributary that flows adjacent to the trail work. The proposed trail alignment and stream work was designed to minimize tree loss to the greatest extent possible.

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

Enforcement of these rules would deprive the M-NCPPC (owner) of their right and directive to manage physical growth and plan communities, protect and steward natural, cultural and historic resources, and provide leisure and recreational experiences. The proposed trail connector and stream restoration has been carefully planned according to best management practices that allow for the preservation of as many existing trees as possible. Although unforested areas were utilized wherever possible, some tree impacts were unavoidable due to their location.

3) Verify that State water quality standards will not be avoided or that a measurable degradation in water quality will occur as a result of granting the variance.

State water quality standards will not be avoided and a measurable degradation in water quality will not occur as a result of granting this variance. In this case, the proposed project focuses on limiting impacts within the Sopers Branch stream valley by elevating the trail above the valley floor. Minor wetland impacts will occur where footings are installed, but the regular spacing between footings will not impeded stream flow or drainage patterns. In addition, the Stormwater Management Concept and a Sediment Control Plan will be submitted for review

and approval by Montgomery County Department of Permitting Services and the Maryland Department of the Environment to ensure that the proposed plans will meet the current State and County water quality standards and regulations.

4) Provide any other information appropriate to the request.

The approved NRI/FSD # 420131910 acknowledges that there are no rare, threatened or endangered species within the boundaries of the project site as delineated. Also, the Maryland Historical Trust has determined that there are no historic properties affected within the project site. Please note that efforts to retain all trees were made, however due to the accessibility and safety concerns for trail users an alternative trail alignment could not be implemented.

5) Applicants must apply for and include mitigation in their requests for variances for all trees, and other vegetation, regulated under section 5-1607 that are removed or disturbed by the applicant's activity.

The applicant proposes to mitigate for the removal of one (1) specimen tree at a rate that approximates the form and function of that tree. Mitigation is calculated at a rate of 1" DBH for every 4" DBH removed, using trees that are a minimum of 3" DBH. This means that for the 34 caliper inches of tree being removed, it will be mitigated with three (3) 3" caliper trees on the site (34"/4" = 8.5/3" = 3 trees).

It is intended that tree # 10021 with a CRZ impact of 32% will survive construction with proper protection and root pruning. However, the applicant would like to provide an additional 2 trees for mitigation, should this tree die during or as a result of construction. Mitigation is calculated at a rate of 1" DBH for every 4" DBH potentially removed, using trees that are a minimum of 3" DBH. This means that for the 30 caliper inches of tree# 10021, it will be mitigated with two (2) 3" caliper trees on the site (30"/4" = 24.5/3" = 2 trees).

Additional criteria in Section 22A-21(d) states that a variance must not be granted if granting the request:

- 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.

The purpose of the project, as proposed by the M-NCPPC is to provide a safe and accessible recreational trail that allows visitors to traverse between the Snowden Farm Parkway and the future day-use area one mile north. The existing site conditions along this stretch of Frederick Road do not currently allow for safe pedestrian or bicycle conveyance. Heavy traffic, narrow travel lanes and the absence of a sidewalk puts the safety of pedestrians and bicyclist using the road at risk.

The existing site conditions are not the result of the applicant, nor did the existing conditions arise from land or building use on a neighboring property.

In addition to the information provided above, a paper copy of the Preliminary Forest Conservation Plan set and a CD containing a digital copy of this Variance Request letter and Preliminary Forest Conservation Plan are attached for your review and comment.

If you have any other questions or need additional information, please contact me at 301.495.2557, Ching-Fang.Chen@montgomeryparks.org or my consultant, James Fetchu at 301-208-9573 or via email at: JFetchu@cpja.com

Sincerely,

Ching-Fang Chen, PLA, LEED-AP

Landscape Architect

Park Development Division



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett County Executive

Lisa Feldt Director

August 14, 2015

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

RE: Little Bennett Regional Park Trail Connector, PP 2015002, NRI/FSD application accepted on 9/29/2014

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 can be granted 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





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 can be granted 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 can be granted 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,

Laura Miller County Arborist

Mila

cc: