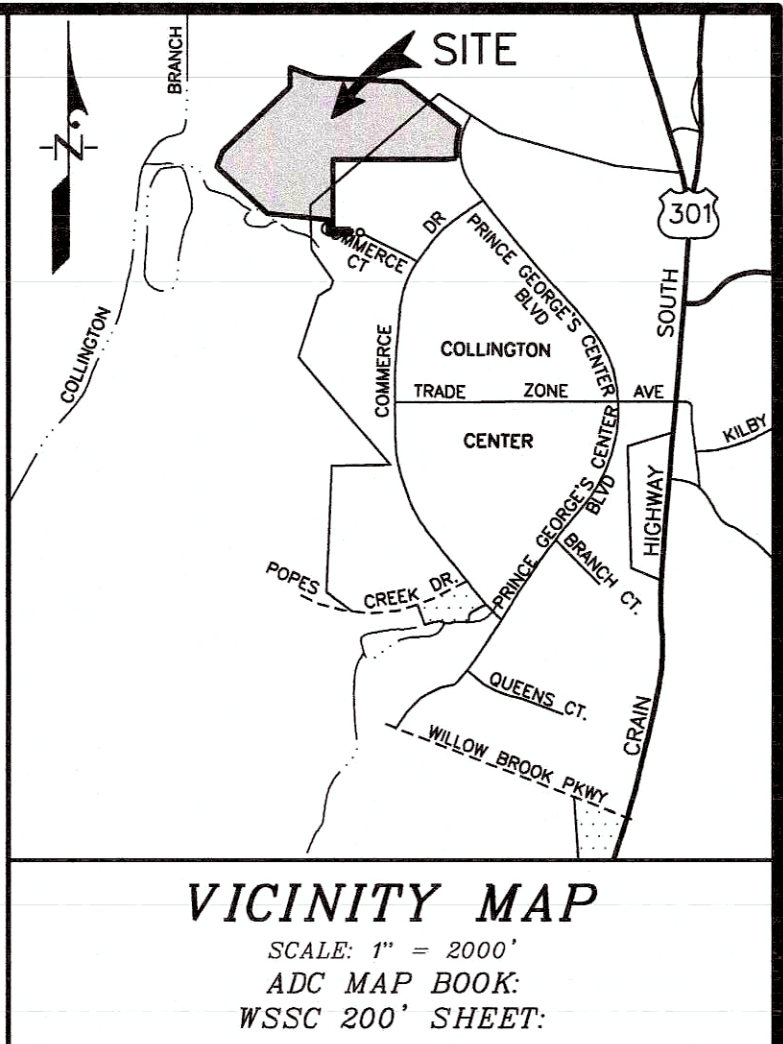


SHEET 2

SHEET 3

SHEET 4



LEGEND	
PROPERTY BOUNDARY	---
EX. CONTOUR (2)	125
EX. CONTOUR (10)	120
PROP. CONTOUR (2)	125
PROP. CONTOUR (10)	120
EX. WATERLINE	W
PROP. WATERLINE	W
EX. SEWER	S
PROP. SEWER	S
EX. STORM DRAIN	SD
PROP. STORM DRAIN	SD
EX. CURB & GUTTER	CG
PROP. CURB & GUTTER	CG
PROP. WOOD SCREEN FENCE	WSF
EX. TREELINE	TL
LIMIT OF DISTURBANCE	LOD
PRIMARY MANAGEMENT AREA (PMA)	PMA
EX. FLOODPLAIN	FP
REGULATED STREAM (CENTERLINE)	RS
REGULATED STREAM (TOP OF BANK)	T.O.B.
STREAM BUFFER (50')	SB
NONTIDAL WETLAND	W
WETLAND BUFFER (25')	WB
TREE PROTECTION FENCE (TEMPORARY)	TPF
TREE PROTECTION FENCE (PERMANENT)	PPF
MITIGATED 1.3/1.5 MARLBORO CLAY SAFETY FACTOR LINE	MSF
MARLBORO CLAY OUTCROPPING	MC
CLEARED FLOODPLAIN AREA (C-FP) = 0.01 Ac	C-FP
WOODLAND PRESERVATION AREA (WPA)	WPA
NATURAL WOODLAND REFORESTATION AREA (NRA)	NRA
STEEP SLOPES (15% AND GREATER)	SS
WOODLAND PRESERVATION SIGN	WPS
WOODLAND REFORESTATION SIGN	WRS

NOTE: The location of Tree Protection Devices (TPDs) are offset from the LOD and woodland preservation areas on the plan for graphical clarity. The location of all TPDs shall be flagged and staked in the field. (see general note 5 on sheet 5)

Individual TCP2 with Previously Approved TCP2
Woodland Conservation Worksheet for Prince George's County

SECTION I - Establishing Site Information (Enter acres for each zone)

1. Zone	E-I-A		
2. Gross Tract	53.73		
3. Floodplain	2.76		
4. Previously Dedicated Land	0.00		
5. Wet Tract (NTA)	50.97	0.00	0.00
6. Property Description or Subdivision Name	Liberty Sports Complex		
7. Current TCP Number	Rev #	0	
8. Previous TCP Number			

SECTION II - Determining Woodland Conservation Requirements (Enter acres in corresponding column)

	Net Tract	Floodplain
9. Woodland Conservation Calculations:		
11. Acreage of Existing Woodland	49.51	2.33
12. Woodland Conservation Required for per TCP1 or TCP2	7.73%	3.86
13. Area of Woodland Cleared per previous TCP1 or TCP2	30.80	0.00
14. Area of Woodland Cleared per current TCP2	37.05	0.01
15. Area of Woodland above WCT not cleared by TCP1 or TCP2	0.00	0.00
16. Additional Woodland Cleared by current TCP2	7.15	0.01
17. Does the TCP show 2:1 replacement?	N	
18. Clearing above WCT (1:4:1 Replacement)	0.00	Additional Replacement required = 0.00
19. Clearing below WCT (2:1 Replacement)	7.15	Additional Replacement required = 14.30
20. Total Woodland Conservation Required:	18.25	

SECTION III - Meeting the Requirement (Enter acres in corresponding column)

	(acres)	Bond amount:	Fee amount:
21. Woodland Conservation Provided:	11.58	\$ 52,925.40	
22. Woodland Preservation	0.00		
23. Reforestation / Afforestation	4.05		
24. Natural Regeneration	0.00		
25. Landscape Credits	0.00		
26. Area approved for fee-in-lieu	0.00		\$0.00
27. Credits Received for Off-site Mitigation on another property	2.64		
28. Off-site Mitigation provided on this property	0.00		
29. Total Woodland Conservation Provided:	18.25		

29. Area of net tract woodland not cleared 11.58 acres
30. Woodland retained not part of requirements: 0.00 acres

31. Prepared by: Mike Petrakis Date: 4-Feb-20
32. Qualifications: Qualified Professional COMAR 08.19.06.01

WOODLAND PRESERVATION AREAS (WPA)	
AREA	ACRES
WPA-1	7.83
WPA-2	3.73
TOTAL:	11.58

NATURAL WOODLAND REFORESTATION AREAS (NRA)	
AREA	ACRES
NRA-1	1.37
NRA-2	1.28
NRA-3	1.42
TOTAL:	4.05

GENERAL INFORMATION TABLE		
LAYER CATALOG	LAYER NAME	VALUE
ZONE	ZONING (ZONE)	E-I-A
ZONE	AVIATION POLICY AREA (APA)	N/A
ADMINISTRATION	TAX GRID (TMG)	77/B1
ADMINISTRATION	WSSC GRID (SHEET 20)	201SE14
ADMINISTRATION	PLANNING AREA (PLAN AREA)	3-74A
ADMINISTRATION	ELECTION DISTRICT (ED)	7
ADMINISTRATION	COUNCILMANIC DISTRICT (CD)	4
ADMINISTRATION	GENERAL PLAN 2002 TIER (TIER)	DEVELOPING
ADMINISTRATION	TRAFFIC ANALYSIS ZONE (COG)	1230
ADMINISTRATION	TRAFFIC ANALYSIS ZONE (PG)	2467

SITE STATISTIC TABLE	
SITE STATISTIC	TOTAL
GROSS TRACT AREA	53.73
EXISTING 100-YEAR FLOODPLAIN	2.76
NET TRACT AREA	50.97
EXISTING WOODLAND IN THE FLOODPLAIN	2.33
EXISTING WOODLAND NET TRACT	48.51
EXISTING WOODLAND TOTAL	51.84
EXISTING PMA	11.58
REGULATED STREAMS (LINEAR FEET OF CENTERLINE)	1874

We Green Branch Management Group hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2.

Walter Green Date: 1/22/2020

I/we _____ hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2.

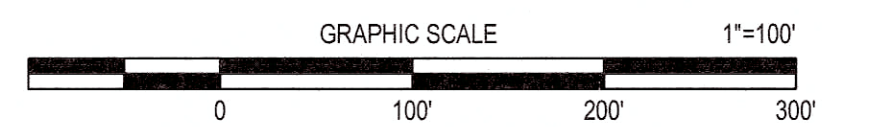
Contract Purchaser _____ Date _____

ALL TURF FIELD CONSTRUCTION, FENCING, LIGHTING & UNDER DRAINS BY OTHERS

Prince George's County Planning Department, M-NCPPC
Environmental Planning Section
TREE CONSERVATION PLAN APPROVAL
TCP II - 041 - 2019

Approved by	Date	DRD #	Reason for Revision
Megan Kruse	3/5/2020	NA	
01			
02			
03			
04			
05			

TREE CONSERVATION PLAN - TYPE II
COLLINGTON CENTER
LOTS 5 & 9, BLOCK 'E' & PART OF PARCELS 'A' & 'B'
LIBERTY SPORTS PARK
QUEEN ANNE DISTRICT No. 7
PRINCE GEORGE'S COUNTY, MARYLAND



CALL MISS UTILITY
1-800-257-7777
48 hrs, Before Excavation

APPLICANT
GREEN BRANCH MANAGEMENT GROUP
7309 BALTIMORE AVE, SUITE 115
COLLEGE PARK, MD 20740
ATTN: WALTER GREEN
PH: (301) 927-3100
WG@GREENSLAW.COM

OWNER
PRINCE GEORGE'S COUNTY
OFFICE OF THE COUNTY EXECUTIVE
1301 MCCORMICK DR.
LARGO, MD 20774
ATTN: FLOYD HOLT
PH: (301) 952-4131
FHO@PG.COG.MD.US

SHEET 1 OF 5

March 5, 2020
DATE

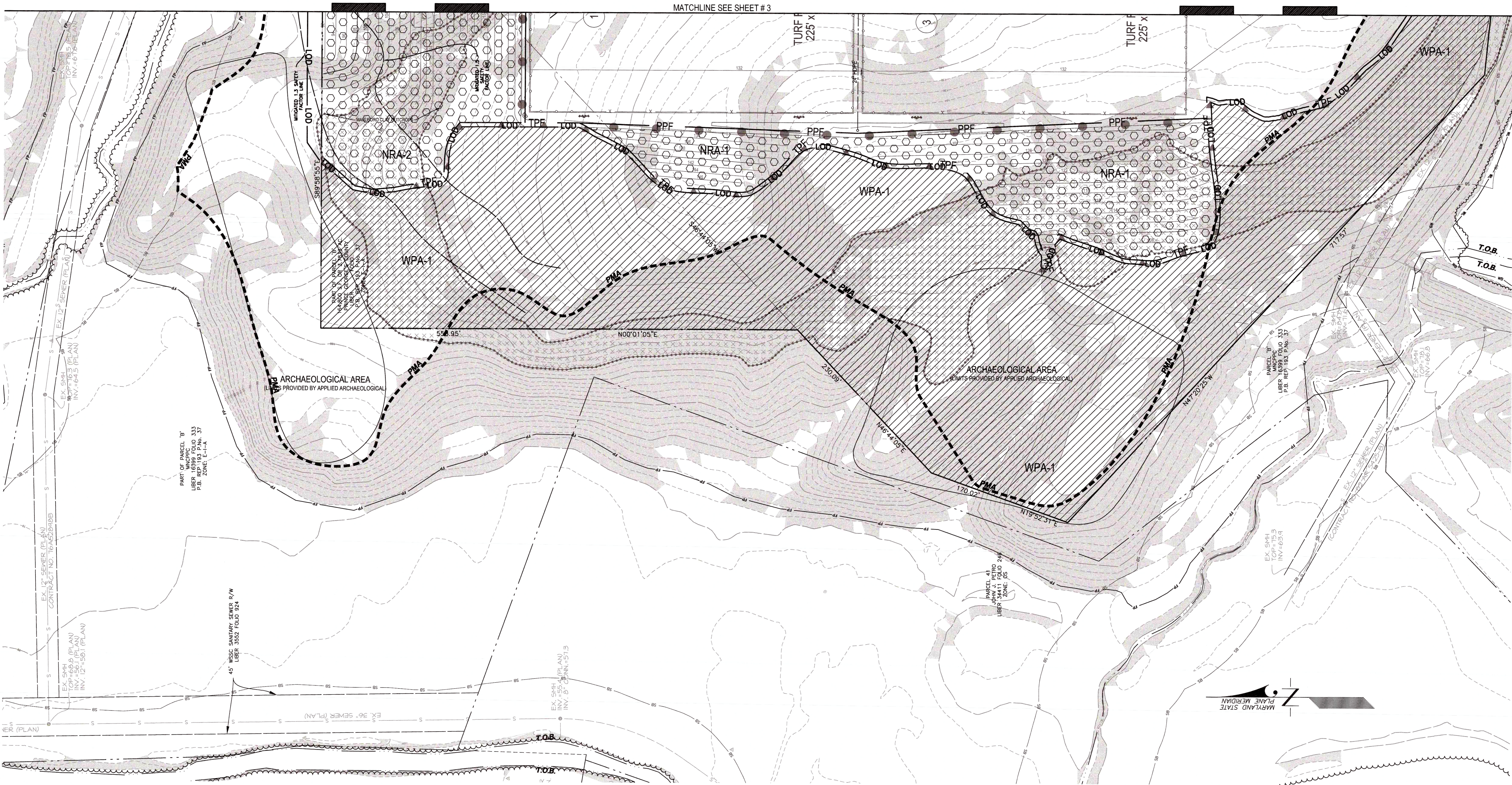
Mike Petrakis
Qualified Professional
COMAR 08.19.06.01

11721 WOODBROOK ROAD, SUITE 200
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Engineers / Surveyors / Planners
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DATE	DESCRIPTION	BY	DATE
	REVISIONS <td></td> <td></td>		

DATE: AUGUST 2019
REVISIONS: 11*100'
J-A94137
54.031-Z

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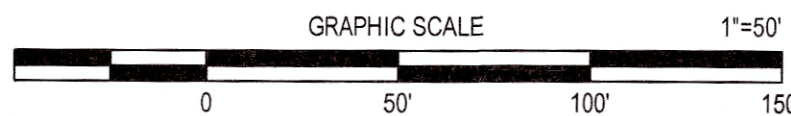


- LEGEND**
- PROPERTY BOUNDARY
 - EX. CONTOUR (2')
 - EX. CONTOUR (10')
 - PROP. CONTOUR (2')
 - PROP. CONTOUR (10')
 - EX. WATERLINE
 - PROP. WATERLINE
 - EX. SEWER
 - PROP. SEWER
 - EX. STORM DRAIN
 - PROP. STORM DRAIN
 - EX. CURB & GUTTER
 - PROP. CURB & GUTTER
 - PROP. WOOD SCREEN FENCE
 - EX. TREELINE
 - LIMIT OF DISTURBANCE
 - PRIMARY MANAGEMENT AREA (PMA)
 - EX. FLOODPLAIN
 - REGULATED STREAM (CENTERLINE)
 - REGULATED STREAM (TOP OF BANK)
 - STREAM BUFFER (50')
 - NONTIDAL WETLAND
 - WETLAND WETLAND
 - TREE PROTECTION FENCE (TEMPORARY)
 - TREE PROTECTION FENCE (PERMANENT)
 - MITIGATED 13/115 MARLBORO CLAY SAFETY FACTOR LINE
 - MARLBORO CLAY OUTCROPPING
 - CLEARED FLOODPLAIN AREA (C-FP) = 0.01 AC
 - WOODLAND PRESERVATION AREA (WPA)
 - NATURAL WOODLAND REFORESTATION AREA (NRA)
 - STEEP SLOPES (15% AND GREATER)
 - WOODLAND PRESERVATION SIGN
 - WOODLAND REFORESTATION SIGN

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Prince George's County Planning Department, M-NCPPC Environmental Planning Section TREE CONSERVATION PLAN APPROVAL TCP II - 041 - 2019			
Approved by	Date	DRD #	Reason for Revision
00 <i>Wagner Kuehn</i>	3/5/2020	NA	
01			
02			
03			
04			
05			

TREE CONSERVATION PLAN - TYPE II
COLLINGTON CENTER
LOTS 5 & 9, BLOCK 'E' & PART OF PARCELS 'A' & 'B'
LIBERTY SPORTS PARK
QUEEN ANNE DISTRICT No. 7
PRINCE GEORGE'S COUNTY, MARYLAND

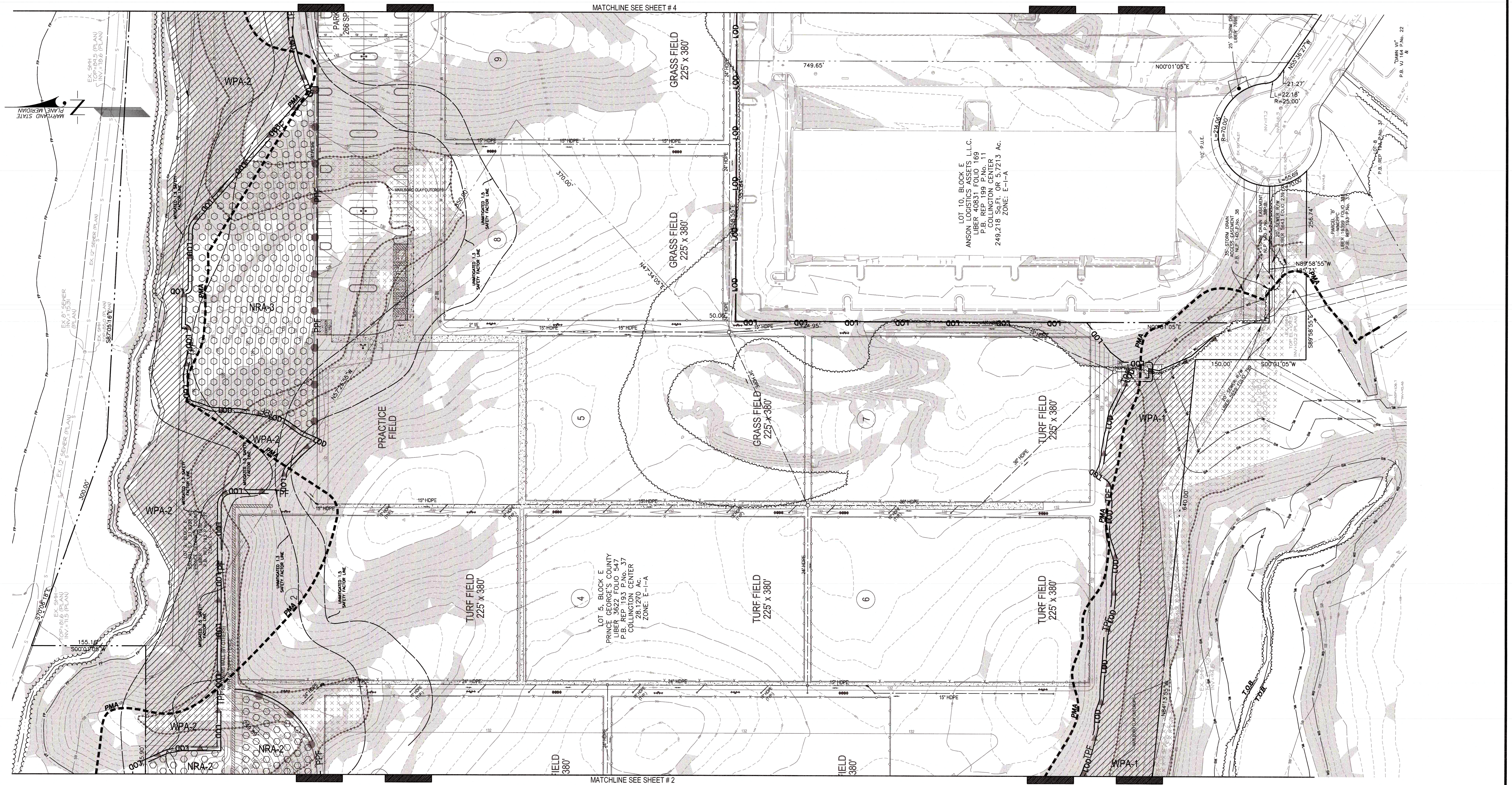


CALL MISS UTILITY
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48 hrs. Before Excavation

ALL TURF FIELD CONSTRUCTION, FENCING, LIGHTING & UNDER DRAINS BY OTHERS

SHEET 2 OF 5

March 5, 2020 DATE		17741 WOODHURST ROAD, SUITE 200 MITCHELLVILLE, MARYLAND 20721	
<i>Mike Petrows</i> Mike Petrows Qualified Professional COMAR 08.19.06.01		BEN DYER ASSOCIATES, INC. Engineers / Surveyors / Planners TELEPHONE (301) 430-2000 COPYRIGHT © 2019 BEN DYER ASSOCIATES, INC.	
DATE	DESCRIPTION	BY	J-A94137
08/19/2019	REVISIONS	MP	54.032-Z
AUGUST 2019		54.032-Z	



LEGEND

PROPERTY BOUNDARY	---
EX. CONTOUR (2')	---
EX. CONTOUR (10')	---
PROP. CONTOUR (2')	---
PROP. CONTOUR (10')	---
EX. WATERLINE	W
PROP. WATERLINE	W
EX. SEWER	S
PROP. SEWER	S
EX. STORM DRAIN	SD
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EX. CURB & GUTTER	CG
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WOODLAND PRESERVATION SIGN	WPS
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ALL TURF FIELD CONSTRUCTION, FENCING, LIGHTING & UNDER DRAINS BY OTHERS

Prince George's County Planning Department, M-NCPPC
TREE CONSERVATION PLAN APPROVAL
TCP II - 041 - 2019

Approved by	Date	DRD #	Reason for Revision
00 Wagon Review	3/5/2020	NA	
01			
02			
03			
04			
05			

TREE CONSERVATION PLAN - TYPE II
COLLINGTON CENTER
LOTS 5 & 9, BLOCK 'E' & PART OF PARCELS 'A' & 'B'
LIBERTY SPORTS PARK
QUEEN ANNE DISTRICT No. 7
PRINCE GEORGE'S COUNTY, MARYLAND

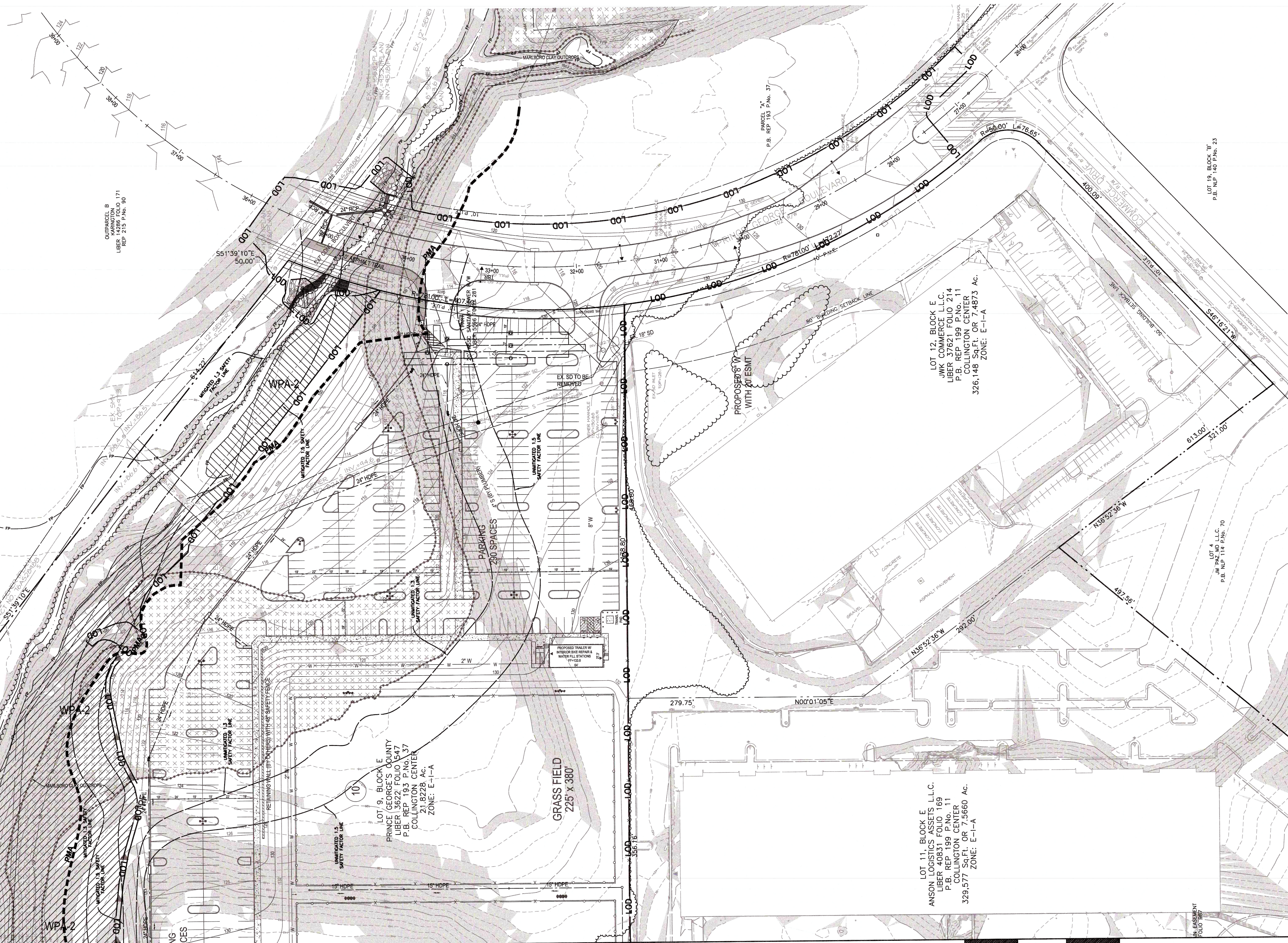
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0 50 100 150

DATE: March 5, 2020
Mike Petrakis
Qualified Professional
COMAR 08.19.06.01

11721 WOODBONE ROAD, SUITE 200
MITCHELLVILLE, MARYLAND 20711
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Engineers / Surveyors / Planners
TELEPHONE 301.430.2000
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DATE	DESCRIPTION	BY	REVISIONS

DATE: AUGUST 2019
J-A94137
54.033-Z



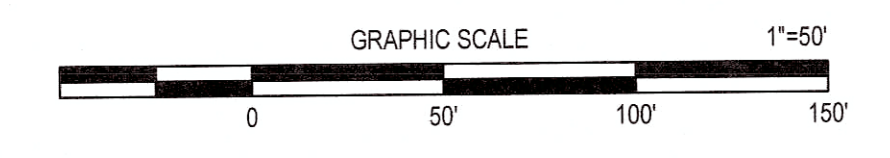
- LEGEND**
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CALL MISS UTILITY
1-800-257-7777
48 hrs, Before Excavation

Prince George's County Planning Department, M-NCPPC Environmental Planning Section TREE CONSERVATION PLAN APPROVAL TCP II - 041 - 2019			
Approved by	Date	DRP #	Reason for Revision
Megan Kruer	3/5/2020	NA	
01			
02			
03			
04			
05			

ALL TURF FIELD CONSTRUCTION, FENCING, LIGHTING & UNDER DRAINS BY OTHERS

TREE CONSERVATION PLAN - TYPE II
COLLINGTON CENTER
LOTS 5 & 9, BLOCK 'E' & PART OF PARCELS 'A' & 'B'
LIBERTY SPORTS PARK
QUEEN ANNE DISTRICT No. 7
PRINCE GEORGE'S COUNTY, MARYLAND



SHEET 4 OF 5

March 5, 2020
DATE

Mike Petroski
Qualified Professional
COMAR 08.19.06.01

DATE	DESCRIPTION	BY
	REVISIONS	

11721 WOODBINE ROAD, SUITE 200
HYDROLYSIS, MARYLAND 20721
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Engineers / Surveyors / Planners
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DATE: 11/5/20
BY: J.A.94137
REVISIONS: 54.034-Z

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GENERAL NOTES

- This plan is submitted to fulfill the woodland conservation requirements for a grading permit.
- Cutting or clearing of woodland not in conformance with this plan or without the expressed written consent of the Planning Director or designee shall be subject to a \$9.00 per square foot mitigation fee.
- A pre-construction meeting is required prior to the issuance of grading permits. The Department of Permits, Inspection and Enforcement, shall be contacted prior to the start of any work on the site to conduct a pre-construction meeting where implementation of woodland conservation measures shown on this plan will be discussed in detail.
- The developer or builder of the lots or parcels shown on this plan shall notify future buyers of any woodland conservation areas through the provision of a copy of this plan at time of contract signing. Future property owners are also subject to this requirement.
- The owners of the property subject to this tree conservation plan are solely responsible for conformance to the requirements contained herein.
- The property is within Environmental Strategy Area, ESA-2 and is zoned E-1-A.
- The site is not adjacent to a roadway designated as scenic, historic, a parkway or a scenic byway.
- The site is not adjacent to a roadway classified as arterial or greater.
- This plan is grandfathered under CB-27-2010, Section 25-177(g). When preservation or retention of existing woodlands is proposed.

WOODLAND PRESERVATION AND RETENTION NOTES

- All woodlands designated on this plan for preservation are the responsibility of the property owner. The woodland areas shall remain in a natural state. This includes the canopy trees and understory vegetation. A revised tree conservation plan is required prior to clearing woodland areas that are not specifically identified to be cleared on the approved TCP2.
- Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
- The location of all temporary tree protection fencing (TPFs) shown on this plan shall be flagged or staked in the field prior to the pre-construction meeting. Upon approval of the locations by the county inspector, installation of the TPFs may begin.
- All temporary tree protection fencing required by this plan shall be installed prior to the commencement of clearing and grading of the site and shall remain in place until the bond is released for the project. Failure to install and maintain temporary or permanent tree protective devices is a violation of this TCP2.
- Woodland preservation areas shall be posted with signage as shown on the plans at the same time as the temporary TPF installation. These signs must remain in perpetuity.

REMOVAL OF HAZARDOUS TREES OR LIMBS BY DEVELOPERS OR BUILDERS

- The developer and/or builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or part thereof designated by the county as dead, dying, or hazardous may be removed.
- A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property damage.
- During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the permittee shall remove dead trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the county inspector. Only after approval by the inspector may the tree be cut by chain saw to near the existing ground level. The stump shall not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
- If a tree or trees become hazardous prior to bond release for the project, due to storm events or other situations not resulting from an action by the permittee, prior to removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permittee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the appropriate ANSI A-300 Pruning Standards. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that is more than 35 feet from the woodland edge shall be cut up to allow contact with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

When off-site woodland conservation is proposed:

Prior to the issuance of the first permit for the development shown on this TCP2, all off-site woodland conservation required by this plan shall be identified on an approved TCP2 plan and recorded as an off-site easement in the land records of Prince George's County. Proof of recordation of the off-site conservation shall be provided to the M-NCPPC, Planning Department prior to issuance of any permit for the associated plan.

19. Prior to the issuance of the first permit for the development shown on this TCP2, all off-site woodland conservation required by this plan shall be identified on an approved TCP2 plan and recorded as an off-site easement in the land records of Prince George's County. Proof of recordation of the off-site conservation shall be provided to the M-NCPPC, Planning Department prior to issuance of any permit for the associated plan.

In accordance with Subtitle 25, Division 2, Sec. 25-122. Methods for Meeting the Woodland and Wildlife Conservation Requirements, if off-site woodland conservation is approved to meet the requirements, then the following locations shall be considered in the order listed: within the same eight-digit sub-watershed, within the same watershed, within the same river basin, within the same growth policy tier, or within Prince George's County. Applicants shall demonstrate to the Planning Director or designee due diligence in seeking out opportunities for off-site woodland conservation locations following these priorities. All woodland conservation is required to be met within Prince George's County.

PRE-CONSTRUCTION ACTIVITIES

- Prior to any disturbance of the site, the tree save lines shall be field located by surveying techniques and the appropriate tree protective devices (see detail) shall be erected along these designated lines. Only after the tree protective devices have been installed shall any tree cutting or other clearing, grubbing or grading operations begin. All protection devices shall remain in place until all construction has ceased in the immediate vicinity. Devices shall be maintained throughout construction. Attachment of signs, or any other objects, to trees is prohibited. No equipment, machinery, vehicles, materials or excessive pedestrian traffic shall be allowed within protected areas.
- After the boundaries of the retention area have been staked and flagged and before any disturbance has taken place on site, a pre-construction meeting at the construction site shall take place. The developer, contractor or project manager, and appropriate local inspectors shall attend.

NATURAL REGENERATION NOTES

All areas designated for reforestation shall be reforested by natural regeneration. The following requirements and conditions apply:

- All existing turf, ground covers, and invasive species shall be exterminated using a general broadcast herbicide such as Round-Up or equivalent. Secondary applications shall be applied as necessary.
- Care shall be taken to avoid spraying any hardwood seedlings or saplings.
- Roto-tilling of turf areas and manual removal of invasive vines shall be completed two weeks after chemical treatments are completed.
- Reforestation signs shall be installed every fifty feet or as appropriate and two strand wire fencing shall be installed along road frontages adjacent to any reforestation areas.
- Reforestation internal to the site shall be posted as required in the direction of any trails used to reach those areas.
- Natural regeneration shall be encouraged by semi-annual maintenance of the designated areas. The maintenance shall, at a minimum, require removal of competitive and invasive species from the desired indigenous hardwoods. This maintenance shall occur for a period of two years.
- After one and two years all desirable seedlings and saplings shall be counted and flagged with surveyors tape in the late fall.
- If after two years there is less than one seedling per 60 square feet and there are indications that natural regeneration is not occurring adequately then the owners shall plant those areas with container grown seedlings at a rate of one per 60 square feet. Only naturally occurring species already present within the site shall be used.

A Four-Year Management Plan for Re/Afforestation shall be added to the plan as follows:

FOUR-YEAR MANAGEMENT PLAN FOR RE/AFFORESTATION AREAS

Field check the re-afforestation area according to the following schedule:

- Year 1: Site Preparation and Tree Planting
Survival check once annually (September-November) see Note 1)
Watering is needed (2 x month)
Control of undesirable vegetation as needed (1 x in June and 1 x in September min.)
- Year 2-3: Reinforcement planting is needed (See Note 2)
Survival check once annually (September-November)
Control of undesirable vegetation if needed (1 x in May and 1 x in August min.)
- Year 4: Reinforcement planting if needed. (See Note 2)
Survival Check (September-November)

- Survival Check: Check planted stock against plant list (or as-built) by walking the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) to owner after each inspection. Remove all dead plants.
- Reinforcement Planting: Replace dead or missing plants in sufficient quantity to bring the total number of live plants to at least 75% of the number originally planted. If a particular species suffers unusually high mortality, replace with an alternative plant type.
- Miscellaneous: Fertilization or watering during years 1 through 3 will be done on an as needed basis. Special return operations or recommendations will be conducted on an as needed basis.

POST-DEVELOPMENT NOTES

- If the developer or builder no longer has an interest in the property and the new owner desires to remove a hazardous tree or portion thereof, the new owner shall obtain a written statement from a Certified Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. After property documentation has been completed per the handout "Guidance for Prince George's County Property Owners, Preservation of Woodland Conservation Areas", the arborist or tree expert may then remove the tree. The stump shall be cut as close to the ground as possible and left in place. The removal or grinding of the stumps in the woodland conservation area is not permitted.

If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permittee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

- The removal of noxious, invasive, and non-native plant species from any woodland preservation area shall be done with the use of hand-held equipment only (pruners or a chain saw). These plants may be cut near the ground and material less than two inches diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) inches diameter shall be cut to allow contact with the ground, thus encouraging decomposition.
- The use of broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done in accordance with the label instructions.
- The use of chainsaws is extremely dangerous and should not be conducted with poorly maintained equipment, without safety equipment, or by individuals not trained in the use of this equipment for the pruning and/or cutting of trees.



January 30, 2020

Mr. Hunter Michael
Ben Dyer Associates, Inc.
11721 Woodmore Road
Suite 200
Millersville, MD 20721

RE: Environmental Review for Liberty Sports Complex, Lots 5 & 9 - 18801 Commerce Court, Upper Marlboro, Prince George's County, Maryland.

Dear Mr. Michael:

The Wildlife and Heritage Service has determined that this project site is located within the drainage to Collington East Branch, which is known to support occurrences of these fish species:

Scientific Name	Common Name	Status
<i>Etheostoma vitreum</i>	Glassy Darter	Threatened
<i>Percina notogramma</i>	Striped darter	Endangered
<i>Lethenteron appendix</i>	American Brook Lamprey	Threatened

In order to reduce the likelihood of adverse impacts to these and other important aquatic species in Collington East Branch, we offer the following recommendations that could be incorporated into site plans (as applicable):

PROTECTION MEASURES FOR AQUATIC HABITATS SUPPORTING RARE, THREATENED AND ENDANGERED SPECIES

- Pursue environmentally sensitive design to address stormwater runoff by promoting the use of nonstructural best management practices to the maximum extent. The goal is to mimic natural infiltration patterns across the site in order to maintain natural hydrology.
 - Methods to pursue include the use of sheet flow to buffers, vegetated channels to convey road runoff (i.e. roadside swales), disconnection of roof and non-roof runoff, methods of bioretention such as rain gardens.
 - Reduce impervious cover as outlined in the MDE stormwater management manual section 5, which is available online at their website: <http://mda.maryland.gov/programs/Water/StormwaterManagementProgram/Documents/wm-manual.pdf>
- In addition to these methods, options to pursue include the use of shared parking/driveways and pervious materials wherever possible.
- Locate impervious surfaces as far as possible from permanent and intermittent streams and their floodplains.

Towers State Office Building - 380 Taylor Avenue - Annapolis, Maryland 21403
410-266-8288 or toll free in Maryland 877-620-8288 - dm.maryland.gov - TTY Users Call via the Maryland Relay

Page 2

- In order to minimize risk of sedimentation in the aquatic and wetland habitats and to minimize changes to the hydrology of these habitats:
 - Minimize clearing and retain forest - The limits of disturbance should be the minimum needed to build homes, allow access and provide fire protection. Conduct clearing and construction in phases in order to avoid having large areas cleared at one time. Pursue clustered development in order to allow retention of large blocks of contiguous upland forest along streams and wetlands.
 - Stabilize soil - Stabilization should occur immediately (within 24 hours). Special effort should be made to retain fine particle silt, sand and clay sediments including the incorporation of redundant/additional control measures in the sediment and erosion control plan to ensure maximum filtration of any sediment-laden runoff (e.g., accelerated stabilization, two rows of silt fence spaced 6 ft apart or more, super silt fence instead of silt fence, etc.).
 - Inspect frequently - All measures should be inspected daily to ensure that they are functional from the very initial stages through final construction, and any problems should be corrected immediately.
 - Provide a minimum 100 ft undisturbed forested upland buffer to permanent and intermittent streams and nontidal wetlands.
 - Avoid disturbing steep slopes (15% slope or greater) and areas of highly erodible soils.

Also, our remote analysis suggests that the forested area on this property contains Forest Interior Dwelling Bird habitat. Populations of many bird species which depend on this type of forested habitat are declining in Maryland and throughout the eastern United States. Interested landowners can contact us for further voluntary guidelines to help conserve this important habitat.

Please be sure to let us know if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation. Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 368-8573.

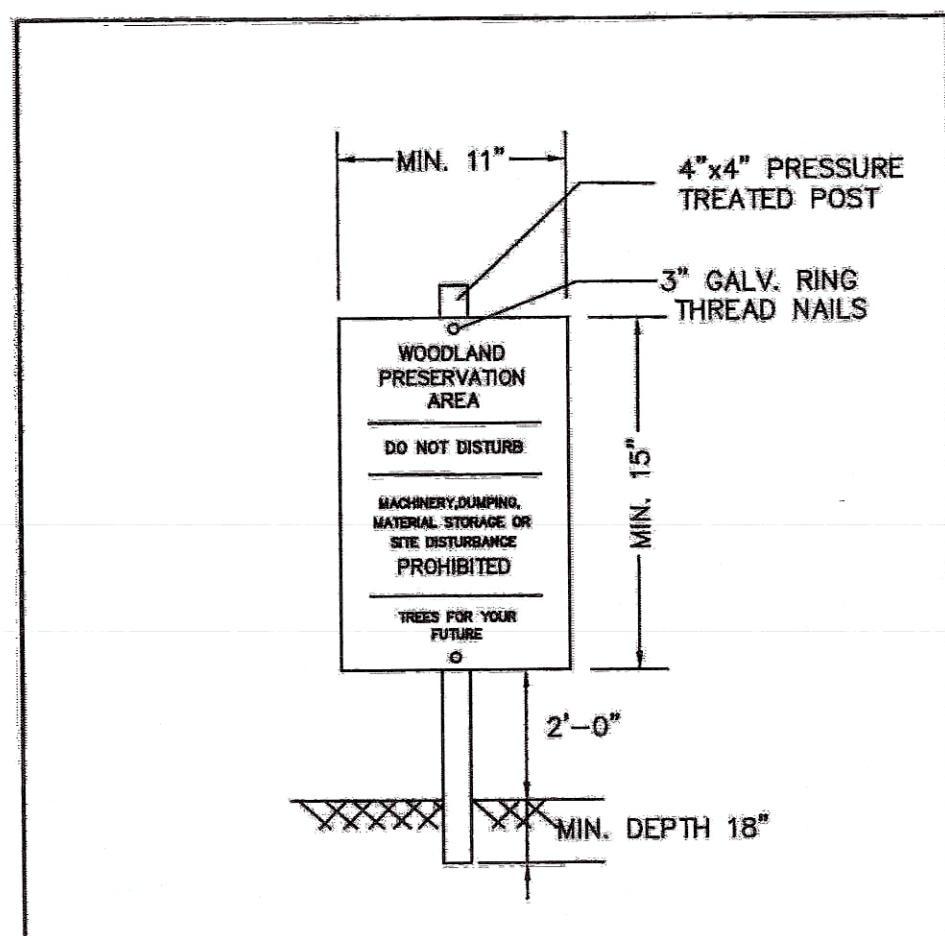
Sincerely,

Don A. Byrns

Don A. Byrns,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

EXH 2020.0033.pg

TOP-17:Woodland Preservation Area Sign



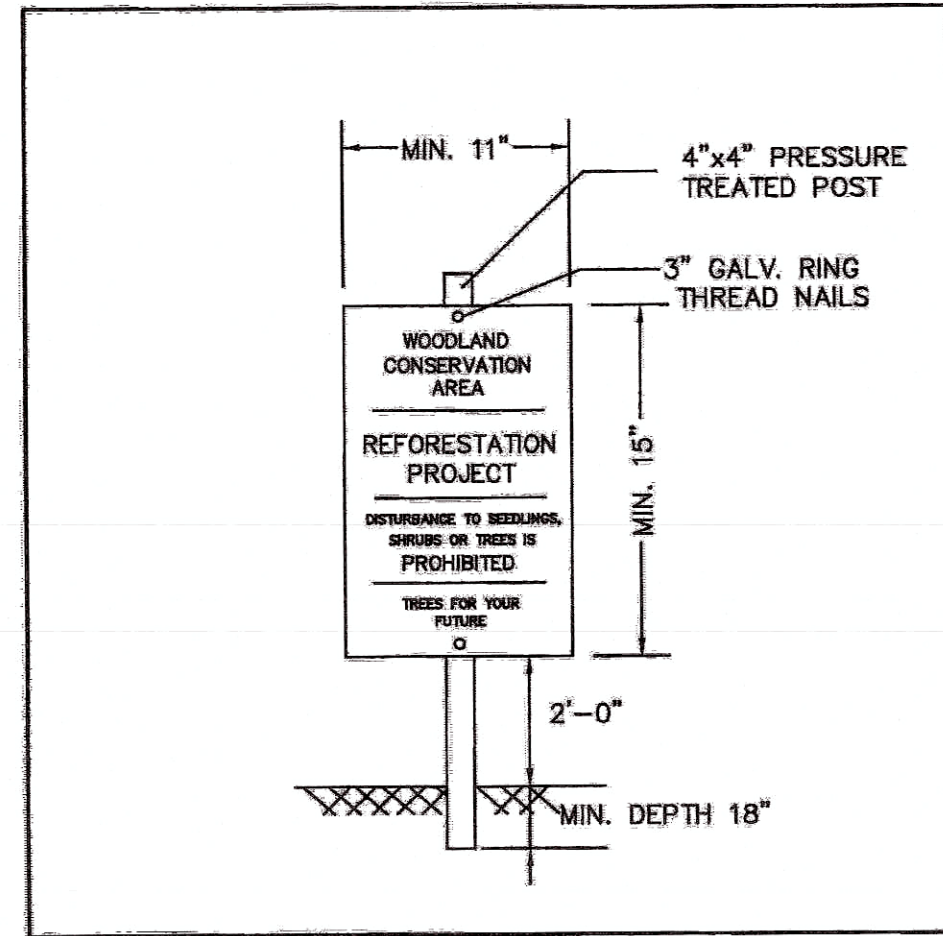
- NOTES:
- ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
 - SIGNS SHOULD BE PROPERLY MAINTAINED.
 - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
 - SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.
 - SIGNS SHOULD BE INSTALLED AT SAME TIME AS TREE PROTECTION DEVICE.
 - LOCATE SIGNS APPROXIMATELY EVERY 50 FEET ALONG FENCING.
 - SIGNS SHOULD BE IN PLACE IMMEDIATELY FOLLOWING STAKE OUT OF L.O.D., AND REMAIN IN PLACE IN PERPETUITY.

WOODLAND PRESERVATION AREA SIGN

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Environmental Technical Manual

TOP-18:Reforestation Area Sign



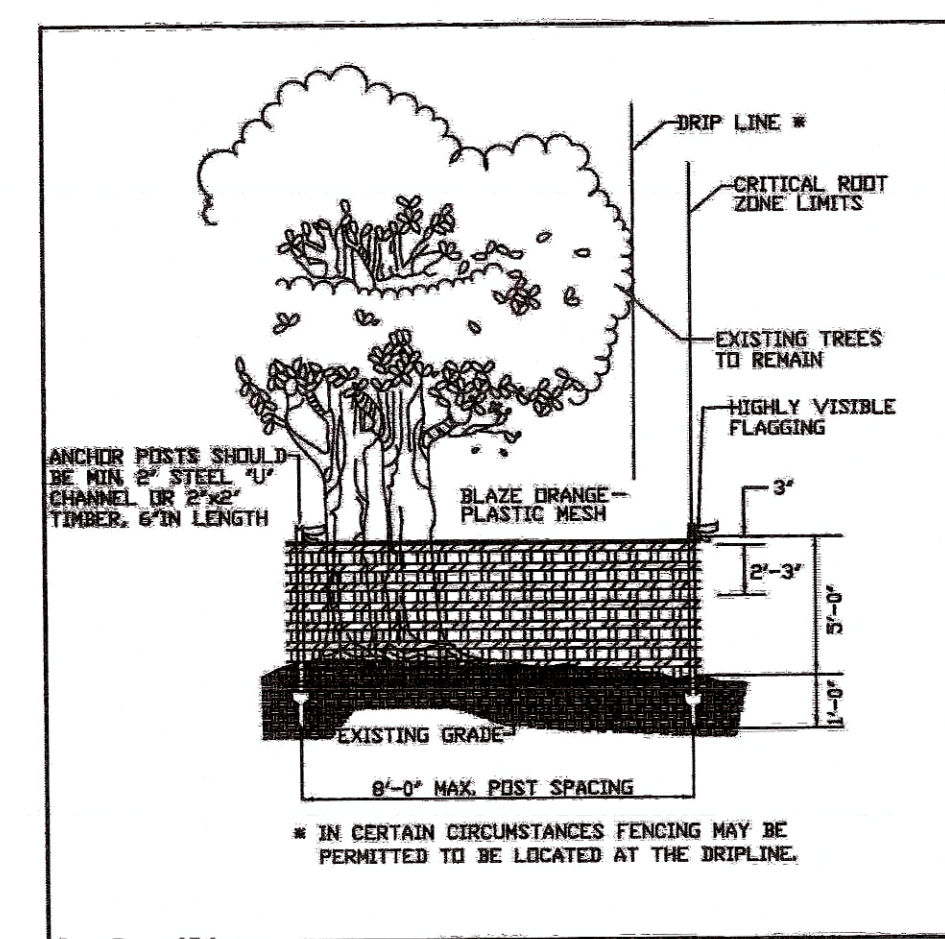
- NOTES:
- ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
 - SIGNS SHOULD BE PROPERLY MAINTAINED.
 - AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
 - SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.
 - SIGNS SHOULD BE INSTALLED AT SAME TIME AS TREE PROTECTION DEVICE.
 - LOCATE SIGNS APPROXIMATELY EVERY 50 FEET ALONG FENCING.
 - SIGNS SHOULD BE IN PLACE IMMEDIATELY FOLLOWING STAKE OUT OF L.O.D., AND REMAIN IN PLACE IN PERPETUITY.

REFORESTATION AREA SIGN

Prince George's County Planning Department

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TOP-21:Temporary Fence Protection Detail for Woodland Preservation



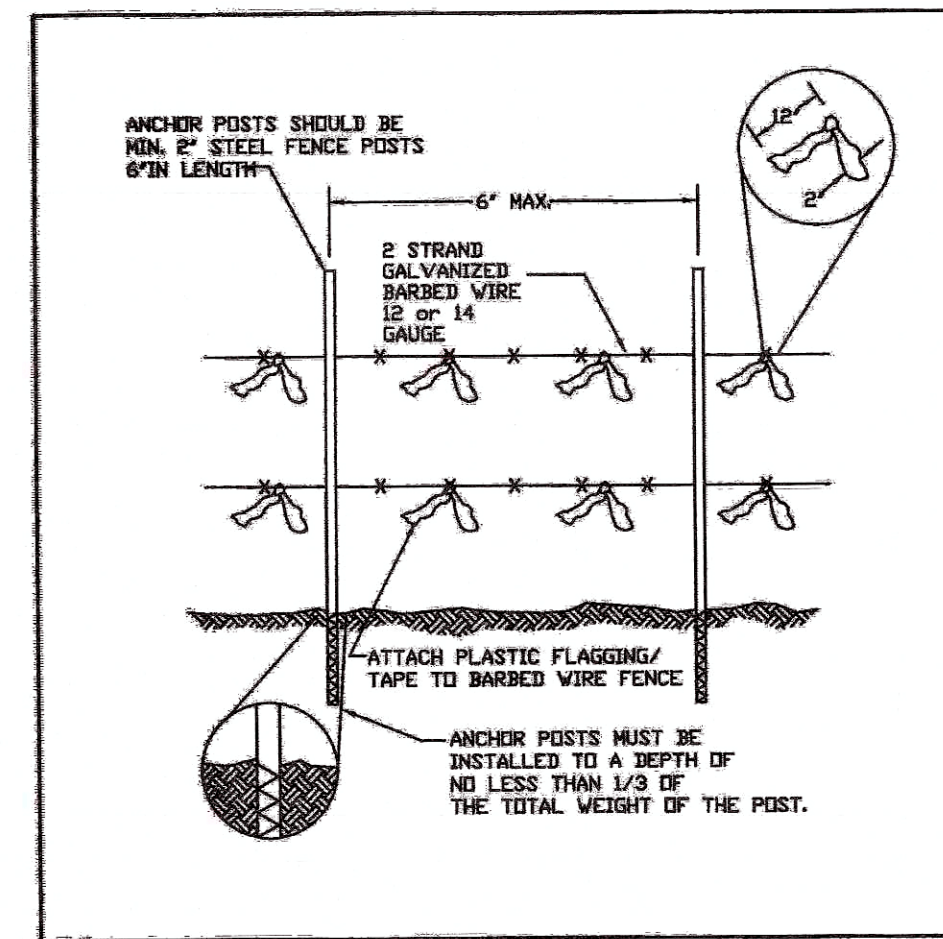
- NOTES: (MAY BE INCLUDED WITH DETAIL)
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICES.
 - WOOD POST DAMAGE WHEN PLACING ANCHOR POSTS.
 - DEVICES SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION.
 - PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TEMPORARY FENCE PROTECTION DETAIL FOR WOODLAND PRESERVATION AREAS

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Environmental Technical Manual

TOP-22:Type 2 (Temporary) Tree Protection Fence for Reforestation Areas



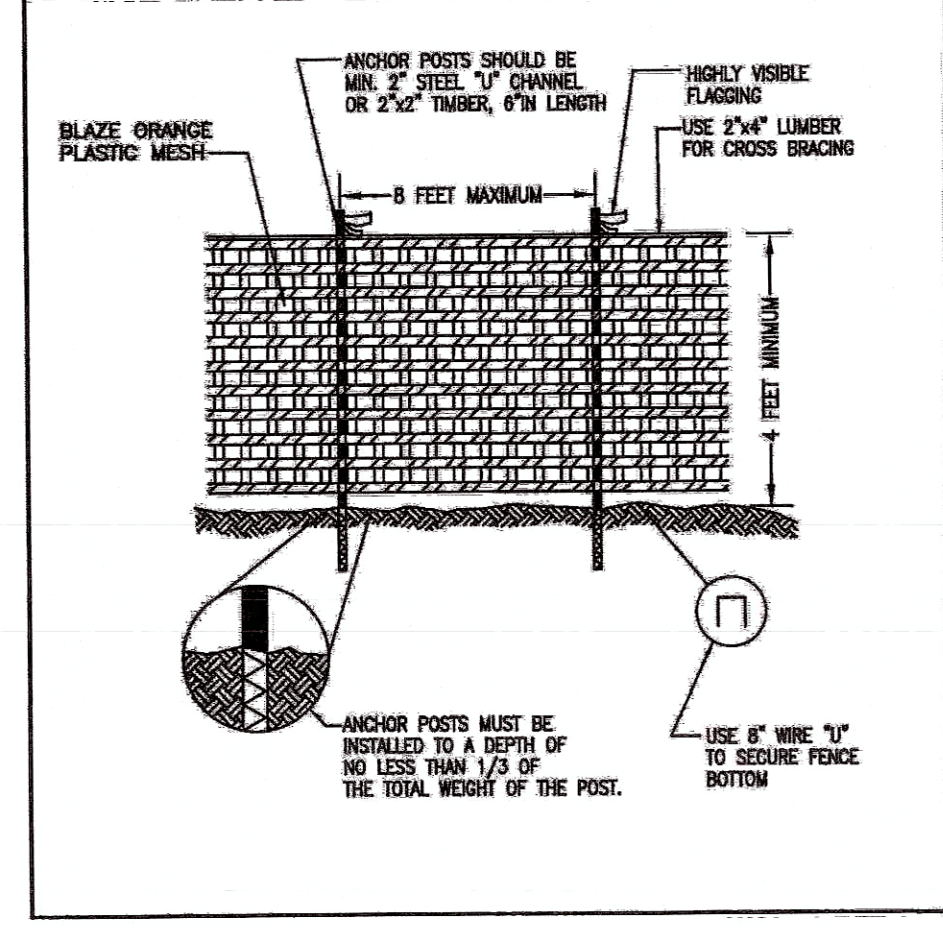
- NOTES: (MAY BE INCLUDED WITH DETAIL)
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICES.
 - WOOD POST DAMAGE WHEN PLACING ANCHOR POSTS.
 - DEVICES SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION.
 - PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TYPE 2 (TEMPORARY) TREE PROTECTION FENCE FOR REFORESTATION AREAS

Prince George's County Planning Department

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TOP-20:Type 1 (Temporary) Tree Protection Fence Detail for Woodland Preservation Areas



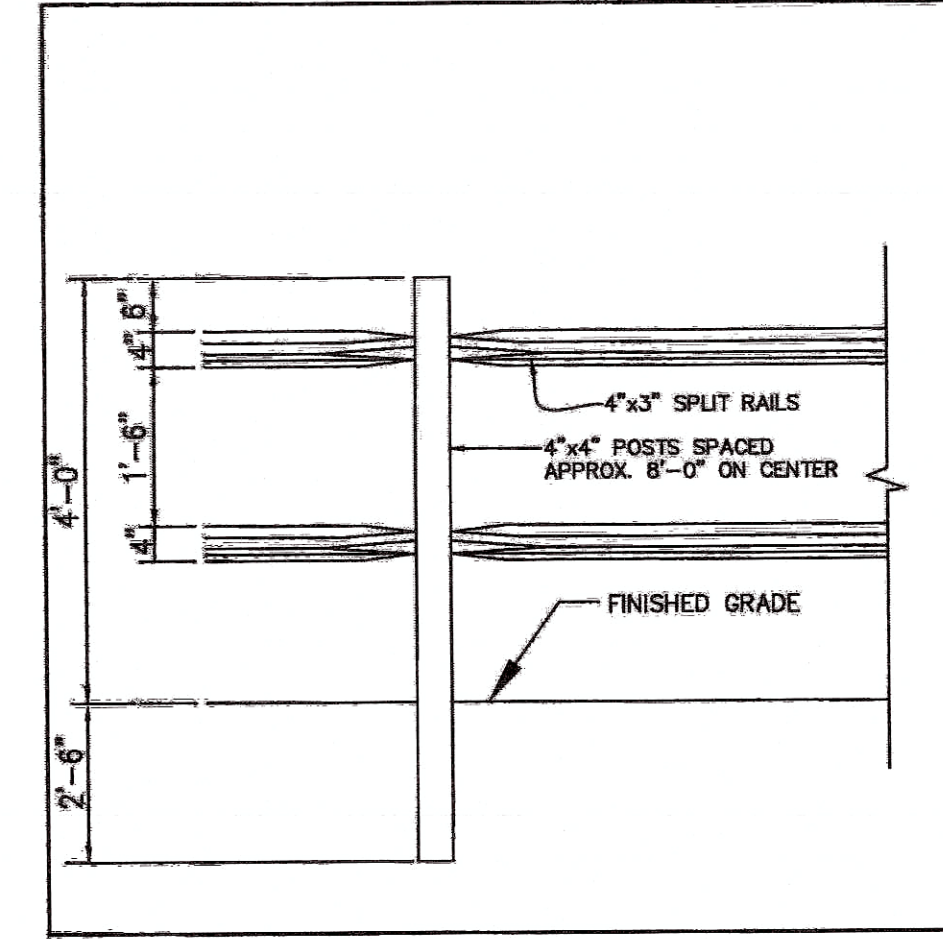
- NOTES: (MAY BE INCLUDED WITH DETAIL)
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICES.
 - WOOD POST DAMAGE WHEN PLACING ANCHOR POSTS.
 - DEVICES SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION.
 - PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TYPE 1 (TEMPORARY) TREE PROTECTION FENCE DETAIL FOR WOODLAND PRESERVATION AREAS

Prince George's County Planning Department

Appendix A-45

TOP-25:Permanent (Split Rail) Tree Protection Fence for Reforestation Areas



- NOTES:
- POSTS SHALL STAND PLUMB.
 - RAILS SHALL BE HUNG WITH UNIFORM HEIGHT AND SPACING.
 - REFORESTATION SIGNS TO BE ATTACHED TO WOOD POSTS EVERY 50 FEET.
 - TOP OF SIGN TO BE FLUSH WITH TOP OF WOOD POST.
 - SIGNS TO BE ATTACHED USING 2 GALVANIZED WOOD SCREWS EACH WITH A GALVANIZED WASHER.

PERMANENT (SPLIT RAIL) TREE PROTECTION FENCE FOR REFORESTATION AREAS

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Environmental Technical Manual

CALL MISS UTILITY

1-800-257-7777

48 hrs, Before Excavation

ALL TURF FIELD CONSTRUCTION, FENCING, LIGHTING & UNDER DRAINS BY OTHERS

SHEET 5 OF 5

Approved by		Date		DRD #		Reason for Revision	
01 Megan Russ		3/5/2020		NA			
02							
03							
04							
05							

DRAWN BY		CHECKED BY		CREATED BY		REVISION NO.	
CEJ		MP		MP		J-A94137	

DATE		DESCRIPTION		BY		DATE	
08.19.06.01		REVISIONS				54.035-Z	

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