

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Court House Drive

Ellicott City, Maryland 21043

410-313-2350

Voice/Relay

Amy Gowan, Director

FAX 410-313-3467

March 16, 2023

Mr. Brian Cleary
Howard County Department of Public Works
Storm Water Management Division
9801 Broken Land Parkway

RE: WP-23-058 Autumn Harvest Stream Restoration, Capital Project D-1158 EP-20-005

Dear Mr. Cleary:

Columbia, MD 21046

This letter is to inform you that your request for alternative compliance to the Howard County Subdivision and Land Development Regulations for the subject project was reviewed.

The Division of Land Development recommends **NO ACTION** for alternative compliance of **Section 16.115(c)(2)** of the Subdivision and Land Development Regulations. The Regulations allow DPZ, upon the advice of the Department of Inspections, Licenses and Permits, the Department of Public Works, the Department of Recreation and Parks, the Soil Conservation District, or the Maryland Department of the Environment, to permit clearing, excavating, filling, altering drainage, or impervious paving to occur on land located in a floodplain. Any proposed construction of a structure located within a floodplain shall be subject to the requirements of the Howard County Building Code. This request is being sought by the Department of Public Works and DPZ has received advice from the Department of Recreation and Parks and Soil Conservation District, as well as OCS, MDOT, and OOT in support of the request. A separate approval through the alternative compliance process is not necessary.

On March 16, 2023 and pursuant to Section 16.116(d), the Director of the Department of Planning and Zoning and Administrator of the Office of Community Sustainability (the Director of the Department of Public Works recused) considered and **approved** your request for alternative compliance with respect to **Sections 16.116(a)(1) and 16.116(a)(2)** of the Subdivision and Land Development Regulations to provide outfall stabilization and stream restoration along an unnamed tributary of the Red Hill Branch within the Little Patuxent River Watershed. The project begins at the outfall of a culvert under Autumn Harvest and extends 496 feet downstream. The project goals are to stabilize the stream and address ongoing erosion which will reduce ongoing loss of property to lateral erosion, improve stream riparian habitat, provide coverage for sewer line crossing, and generate TMDL and impervious area credits. Please see the attached Final Decision Action Report for more information.

On March 16, 2023 and pursuant to Section 16.1216, the Director of the Department of Planning and Zoning, Director of the Recreation and Parks and Administrator of the Office of Community Sustainability considered and approved your request for a variance with respect to Sections 16.1201(v) and 16.1205(a)(3) of the Subdivision and Land Development Regulations to remove four of the five specimen trees and mitigate at 2:1 with planting of 8 native trees

with a DBH of 3" in addition to the plantings associated with stabilizing and restoring the disturbed areas. Please see the attached Final Decision Action Report for more information.

On March 14, 2023, and pursuant to Section 16.104, the Director of the Department of Planning and Zoning, considered and **approved** your request for alternative compliance with respect to **Section 16.155(a)(1)(ii)** of the Subdivision and Land Development Regulations to permit the alternative compliance plan exhibit to serve as a substitute site development plan.

The Department of Planning and Zoning hereby determines that you have demonstrated to its satisfaction that strict enforcement of **Section 16.155(a)(1)(ii)** would result in an unreasonable hardship or practical difficulty. This determination is made with consideration of your alternative compliance application and the (1) you were required to address, pursuant to Section 16.104(a)(1):

1. Unreasonable hardship or practical difficulties may result from strict compliance with the regulations.

The primary purpose of the project is maintenance to provide outfall stabilization and to repair the stream channel to prevent further erosion. Due to the potential for property loss and the severity of the erosion, the project needs to be competed expeditiously. Swift completion of the project will protect adjacent residential properties and public infrastructure and decrease sediment and nutrient loading in downstream properties. Requiring a Site Development Plan for the project would result in an unreasonable hardship since the alternative compliance plan exhibit contains all necessary information for permitting and construction. The project is also subject to additional review by federal, state and local agencies. Approval of the alternative compliance promotes efficiency of the plan review process as the alternative compliance drawings include all relevant information needed for this project's stream restoration and wetland creation.

Approval of Alternative Compliance to Section 16.155(a)(1)(ii) is subject to the following conditions:

- 1. The alternative compliance plan exhibit shall serve as the substitute for a site development plan for development. No disturbance is permitted beyond the 0.8-acre limit of disturbance as shown on the alternative compliance exhibit titled Forest Conservation Plan and Alternative Compliance Application WP-23-058 Plan Exhibit and dated February 14, 2023, unless it can be sufficiently demonstrated by the applicant to be justified.
- 2. The applicant shall comply with all grading permit requirements from the Department of Inspections, Licenses & Permits and Howard Soil Conservation District.

Indicate this alternative compliance petition file number, request, section of the regulations, action, conditions of approval, and date on all related plats, and site development plans, and building permits. This alternative compliance approval will remain valid for one year from the date of this letter or as long as a subdivision or site development plan is being actively processed in accordance with the processing provisions of the Regulations.

If you have any questions, please contact Donna Despres at (410) 313-3429 or email at ddespres@howardcountymd.gov.

Anthony Cataldo, AICP, Chief Division of Land Development

AC/DD

cc: Research

DLD - Julia Sauer Real Estate Services

Anne Gilbert- DNR anne.gilbert@maryland.gov

Staughanenvironmental.com (Lauren Wirth, LWirth@straughanenvironmental.com)



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ALTERNATIVE COMPLIANCE FINAL DECISION ACTION REPORT

DEPARTMENT OF PLANNING AND ZONING
DEPARTMENT OF PUBLIC WORKS
DEPARTMENT OF RECREATION AND PARKS
OFFICE OF COMMUNITY SUSTAINABILITY

RE: WP-23-058 Autumn Harvest Stream Restoration, Capital Project D-1158 EP-20-005

Request for an alternative compliance to Sections 16.116(a)(1) and 16.116(a)(2), 16.1201(v) and

16.1205(a)(3) of the Subdivision and Land Development Regulations.

Applicant: Mr. Brian Cleary

Howard County Department of Public Works

Storm Water Management Division

9801 Broken Land Parkway Columbia, MD 21046

Pursuant to Section 16.116(d), the Director of the Department of Planning Zoning and the Administrator of the Office of Community Sustainability considered and **approved** the applicants request for an alternative compliance with respect to **Sections 16.116(a)(1)** and **16.116(a)(2)** of the Subdivision and Land Development Regulations. The purpose is to provide outfall stabilization and stream restoration along an unnamed tributary of the Red Hill Branch within the Little Patuxent River Watershed. The project begins at the outfall of a culvert under Autumn Harvest and extends 496 feet downstream. The project goals are to stabilize the stream and address ongoing erosion which will reduce ongoing loss of property to lateral erosion, improve stream riparian habitat, provide coverage for sewer line crossing, and generate TMDL and impervious area credits. The Directors deliberated the application in a meeting on March 16, 2023.

Each Department hereby determines that the applicant has demonstrated to its satisfaction that strict enforcement of the above-cited regulation would result in unreasonable hardship or practical difficulty. This determination is made with consideration of the alternative compliance application and the seven (7) items the applicant was required to address, pursuant to Section 16.104(a)(1) and Section 16.116(d):

1. Strict conformance with the requirements will deprive the applicant of rights commonly enjoyed by others in similar areas;

The primary purpose of the project is maintenance to provide outfall stabilization and to repair the stream channel to prevent further erosion. Strict conformance with the requirements would result in further erosion that may result in property loss for adjacent residential properties and risk damage to existing sewer lines. It would also inhibit Howard County DPW's ability to decrease sediment and nutrient loading in downstream properties. Additionally, strict conformance with the requirements would not allow the County to protect both private and public property from further damage.

2. Uniqueness of the property or topographical conditions would result in practical difficulty; other than economic, or unreasonable hardship from strict adherence to the regulations;

The stream is located within a confined stream valley and bordered by residential properties. Restoring the degraded outfall and stream would reduce or eliminate lateral erosion and protect adjacent residential properties and reduce sedimentation into the Little Patuxent River. In order to repair the current condition, impacts within the stream and stream buffer are required. Upon completion of the work, all impacted areas will be restored to a more stable condition.

- 3. The Variance will not confer to the applicant a special privilege that would be denied to other applicants and; No buildings or impervious area is proposed. Approval will protect the existing sewer lines. Restoration of a degraded stream channel to protect public infrastructure and private property would not be considered a special privilege.
- 4. The modification is not detrimental to the public health; safety or welfare, or injurious to other properties.

 The proposed project goals are to improve the existing outfall and eroded channel and prevent property loss of adjacent properties. The proposal will protect existing sewer lines, provide additional cover and a safe crossing. The modification is not detrimental to the public health, safety, or welfare or injurious to other properties.
- 5. Disturbance is returned to its natural condition to the greatest extent possible:

 Impacts to 496 linear feet of a perennial steam associated with stream restoration are anticipated. Anticipated wetland impacts are 34 square feet of permanent impacts and 46 square feet of temporary impacts. Buffer impacts include 156 square feet of permanent wetland buffer impacts and 126 square feet of temporary wetland buffer impacts. The intent of the project is to stabilize the stream and improve stream and riparian habitat. The site will be seeded with native seed mixes and planted with a variety of native trees. The current understory has limited diversity, composed of predominantly red maple and boxelder with a few shrub species such as spicebush. The landscape plan proposes a more diverse understory with serviceberry, redbud, holly, sassafras and shrub species including spicebush. The existing herbaceous layer will also be improved replacing the current invasives such as Japanese stilt grass and multiflora rose with wet meadow and upland meadow native seed mixes.
- 6. Mitigation is provided to minimize adverse impacts to water quality and fish, wildlife, and vegetative habitat; and
 - The project is also reviewed by the Howard Soil Conservation District (EP-20-005), MDE and the USACE (joint application Al# 129676). These agencies consider natural resources and best management practices for project implementation. These includes use of required sediment and erosion control methods and devices, timing of activities outside stream closure periods, and monitoring post construction. The project is self-mitigating as the repair will improve water quality, reduce runoff and create additional wetlands. Water quality will be improved by increasing the plant diversity tailored to the environmental conditions. Temporary seeding will include ryegrass and millet for stabilization.
- 7. Grading, removal of vegetative cover and trees, or construction shall only be the minimum necessary to afford relief and to the extent required to accommodate the necessary improvements. In these cases, the least damaging designs shall be required, such as bridges, bottomless culverts or retaining walls, as well as environmental remediation, including the planting of the areas where grading or removal of vegetative cover or trees has taken place, utilizing best practices for ecological restoration and water quality enhancement projects.

The project is undergoing County erosion and sediment control review and MDE review. All necessary measures were taken to reduce or eliminate impacts to the wetland, buffer, stream and floodplain by minimizing the size of the LOD to the area necessary for construction. The proposed design and associated impacts are the minimum necessary to achieve the project goals. The project is also reviewed by the Howard Soil Conservation

District (EP-20-005), MDE and the USACE (joint application Al# 129676). These agencies consider natural resources and best management practices for project implementation.

Directors Action: Approval of alternative compliance of Section 16.116(a)(1) and (a)(2) is subject to the following conditions:

- 1. All disturbed areas within the stream, stream buffer and 100-year floodplain shall be stabilized and seeded or planted with native vegetation after construction is complete, in accordance with the alternative compliance plan exhibit.
- 2. The applicant shall obtain all required authorizations and permits from the Maryland Department of the Environment and the U.S. Army Corps of Engineers for disturbances within the stream and floodplain. Provide approval letters from MDE and/or USACE with the grading permit application.

DocuSigned by: Amy Gonan Amy Gowan, Director Department of Planning and Zoning

(Recused)

John Seefried, Acting Director Department of Public Works

Joshua Feldmark, Administrator

Office of Community Sustainability

Pursuant to Section 16.1216, the Director of the Department of Planning Zoning, Director of the Department of Recreation and Parks and the Administrator of the Office of Community Sustainability considered and approved the applicants request for a variance with respect to Sections 16.1201(v) and 16.1205(a)(3) of the Forest Conservation Regulations. The purpose is to remove four of the five specimen trees and mitigate at 2:1 with planting of 8 native trees with a DBH of 3" in addition to the plantings associated with stabilizing and restoring the disturbed areas. The Directors deliberated the application in a meeting on March 16, 2023.

Each Department hereby determines that the applicant has demonstrated to its satisfaction that strict enforcement of the above-cited regulation would result in an unwarranted hardship. This determination is made with consideration of the alternative compliance application and the six (6) items the applicant was required to address, pursuant to Section 16.1216:

1. Describe the special conditions peculiar to the property which would cause the unwarranted hardship; The application requests to allow the Limit of Disturbance (0.8 acres) to be used as the Net Tract Area for forest conservation calculations instead of the entirety of the parcels (2.6 acres). A portion of the project is located within the 100-year floodplain (0.2 acres) which would provide net tract area of 0.6 acres. The applicant proposes to pay a fee-in-lieu to satisfy the forest conservation obligation. Requiring the entire parcel to be included as the net tract area would represent an unwarranted hardship for temporary disturbance necessary to improve an eroding stream bank.

At total of five specimen trees were identified in the study area. In order to stabilize the area and repair the eroding stream bank, it is necessary to remove four of the specimen trees. The trees are located adjacent to the stream and must be removed for the project to succeed. Native tree species will be planted in all suitable areas within the project limits after construction is complete. A total of 8 native shade trees with a diameter of 3"+ are proposed to be planted onsite which will serve as mitigation for the removal of the specimen tree.

2. Describe how enforcement of the regulations would deprive the landowner of rights commonly enjoyed by others in similar areas;

Strict compliance with the regulations would deprive HCDPW of restoration opportunities that would benefit the residents of Howard County, and which are commonly enjoyed by others in similar areas. Permitting the LOD to be used as the Net Track Area allows the forest conservation regulations to be applied to the portions of property that are physically impacted by this work. Similar projects to repair existing conditions haves used the LOD as the net tract area when impacts are temporary, necessary and the work returns the project area to an improved natural condition. Approval does not confer special privileges that other similar projects enjoy. The specimen tree impacted needs to be removed to stabilize the stream bank. Other landowners are permitted to remove trees that are hazardous or would become hazardous when the CRZ is compromised by construction activities.

3. Verify that the granting of a variance will not adversely affect water quality;

The project is self-mitigating as the repair will improve water quality by eliminating a source of excess sediment and nutrients that are entering the waterway now. Stream habitat is improved by the planting of additional trees.

4. Verify that the granting of a variance will not confer on the applicant a special privilege that would be denied to other applicants;

Approval of the request will not grant the applicant a special privilege since the capital project is designed to provide outfall and stream stabilization, and decrease sediment and nutrients loading downstream in the Little Patuxent River Watershed in order to protect public infrastructure and private property.

5. Verify that the variance request is not based on conditions or circumstances which are the result of actions by the applicant;

The request is not based on conditions or circumstances which are results of actions by the applicant.

6. Verify that the condition did not arise from a condition relating to land or building use, either permitted or nonconforming on a neighboring property; and

There is no evidence that the conditions arose from a condition relating to land or building use, either permitted or nonconforming on a neighboring property.

<u>Directors Action:</u> Approval of alternative compliance of Sections 16.1201(v) and 16.1205(a)(3) is subject to the following conditions:

1. Once the proposed project is complete, the Limit of Disturbance shall be stabilized, seeded and planted in accordance with the alternative compliance plan exhibit.

- 2. Only the four Specimen Trees (SP-2, SP-3, SP-4, and SP-5) are to be removed and shall be mitigated with the plating of 8 native trees with a DBH of 3" as shown on the plan exhibit.
- 3. A fee-in-lieu payment of \$38,115.00 shall be paid to satisfy the 0.7 AC afforestation obligation. The payment shall be made through the transfer of funds to SAP Account 2060000000-3000-3000000000-PWPZ0000000000000-432521. A copy of the transfer receipt shall be submitted to DPZ- Division of Land Development once completed. Please note, the applicant shall be responsible for any modifications to the FIL rate should it increase at the time of payment.
- 4. The applicant shall obtain all required authorizations and permits from the Maryland Department of the Environment and U.S. Army Corps of Engineers for disturbances within the floodplain, wetlands, streams and their buffers. Reference the applicable MDE or USACOE permits or tracking numbers on the alternative compliance plan exhibit and any County permits.

Amy Gowan, Director Department of Planning and Zoning

DocuSigned by:

Raul Delerme

Raul Delerme, Director

Department of Recreation and Parks

DocuSigned by:

Joshua Feldmark, Administrator
Office of Community Sustainability

cc: Research
OCS, Joshua Feldmark
DRP, Raul Delerme
DPW, John Seefried



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Amy Gowan, Director

FAX 410-313-3467

January 9, 2023

Mr. Brian Cleary Howard County Department of Public Works Storm Water Management Division 9801 Broken Land Parkway Columbia, MD 21046

> RE: WP-23-058 Autumn Harvest Stream Restoration, CP D-1158 Revised Exhibit and Justification Requested

Dear Mr. Cleary:

This letter is to inform you that your request for alternative compliance to the Howard County Subdivision and Land Development Regulations for the subject property was reviewed and no action can be taken until the enclosed comments have been addressed, and revised exhibits and justification is provided.

Copies of the exhibit/plan and the supplemental information and a response letter to the comments for each agency should be submitted to this Division for distribution in the following manner:

Agency: DLD

#Copies: 1

Agency: HCSCD

#Copies: 1

The requested information and revised plans must be submitted within 45 days of the date of this letter (on or before February 23, 2023*), or this Division will recommend that the Planning Director or Director Committee deny this alternative compliance petition.

Once the requested information has been received and reviewed, this office will coordinate agency comments and will prepare a recommendation for the Director's action. If you have any questions regarding a specific comment, please contact the review agency prior to preparing the revised plans and information. Compliance with all items indicated above is required before the revised plans and information will be accepted.

In accordance with adopted Council Bill 51-2016, effective 10/05/16, if the deadline date is a Saturday, Sunday or holiday or if the County offices are not open, the deadline shall be extended to the end of the next open County office business day.

Submissions can be mailed to Howard County Planning and Zoning, 3430 Court House Drive, Ellicott City, MD 20143 or dropped in the bin labeled 'DLD' at the Department of Planning and Zoning Public Service Counter located on the first floor of the George Howard Building. Submission materials can also be emailed to planning@howardcountymd.gov for processing. Please include a copy of this letter as it will serve as the checklist for the original submission.

If you have any questions, please contact Donna Despres at (410) 313-3429 or email at ddespres@howardcountymd.gov.

Sincerely. BocuSigned by:

Anthony Cataldo, AICP, Chief Division of Land Development

AC/DD

Attachments: (2), comment DLD, HCSCD

Research DLD - Julia Sauer Real Estate Services

Straughan Environmental



Site Description:

Location of property:

Existing Use:

Zoning District:

Tax Map:

Subdivision Name/Property Identification:

Grid:

brief history of the site and related information to the request:

DPZ Office Use only: File No.

Date Filed

ALTERNATIVE COMPLIANCE APPLICATION

Proposed Use:

Total site area:

Please list all previously submitted or currently active plans on file with the County (subdivision plans, Board of Appeals petitions, alternative compliance petitions, etc.). If no previous plans have been submitted, please provide a

Parcel No:

(410) 313-2350

Election District:

In the area below, the petitioner shall enumerate the specific numerical section(s) from the Subdivision and Land Development Regulations for which an alternative compliance is being requested and provide a brief summary of the request. Please use the additional page if needed.					
Section Reference No.	Brief Summary of Request				

Section Reference No.	Brief Summary of Request
Signature of Property Owne	er: Date:
Signature of Property Owne	er: Date:
Signature of Property Owne Signature of Petitioner Prep	
Signature of Petitioner Prep	arer: Date:
Signature of Petitioner Prep Name of Property Owner:	arer: Date: Name of Petition Preparer:
Signature of Petitioner Prep	arer: Date:
Signature of Petitioner Prep Name of Property Owner:	arer: Date: Name of Petition Preparer:
Signature of Petitioner Prep Name of Property Owner: Address:	arer: Date: Name of Petition Preparer: Address:
Signature of Petitioner Prep Name of Property Owner:	arer: Date: Name of Petition Preparer:
Signature of Petitioner Prep Name of Property Owner: Address:	arer: Date: Name of Petition Preparer: Address:
Signature of Petitioner Prep Name of Property Owner: Address: City, State, Zip:	arer: Name of Petition Preparer: Address: City, State, Zip:
Signature of Petitioner Prep Name of Property Owner: Address: City, State, Zip:	arer: Name of Petition Preparer: Address: City, State, Zip:
Signature of Petitioner Prep Name of Property Owner: Address: City, State, Zip: E-Mail: Phone No.:	narer: Name of Petition Preparer: Address: City, State, Zip: E-Mail: Phone No.:
Signature of Petitioner Prep Name of Property Owner: Address: City, State, Zip: E-Mail:	narer: Name of Petition Preparer: Address: City, State, Zip: E-Mail:

Section Reference No.	Brief Summary of Request

HOWARD COUNTY

Capital Project #D-1158

Autumn Harvest Stream Restoration

FOREST CONSERVATION PLAN

THE JOINT VENTURE OF STANTEC CONSULTING SERVICES INC. AND STRAUGHAN ENVIRONMENTAL IS UNDERTAKING A COMBINED OUTFAL STABILIZATION AND STREAM RESTORATION PROJECT ALONG AN UNNAMED TRIBUTARY OF RED HILL BRANCH (LOCATED WITHIN THE LITTLE PATUXENT RIVER WATERSHED). THE PROPOSED STABILIZATION AND RESTORATION BEGINS AT THE OUTFALL OF THE CULVERT UNDER AUTUMN HARVEST AND EXTENDS 496 FEET DOWNSTREAM. THE PROJECT GOALS ARE TO STABILIZE THE STREAM AND ADDRESS ONGOING EROSION WHICH WILL REDUCE ONGOING LOSS OF PROPERTY TO LATERAL EROSION, IMPROVE STREAM AND RIPARIAN HABITAT, PROVIDE COVERAGE FOR A SEWER LINE CROSSING, AND GENERATE TMDL AND IMPERVIOUS AREA CREDITS.

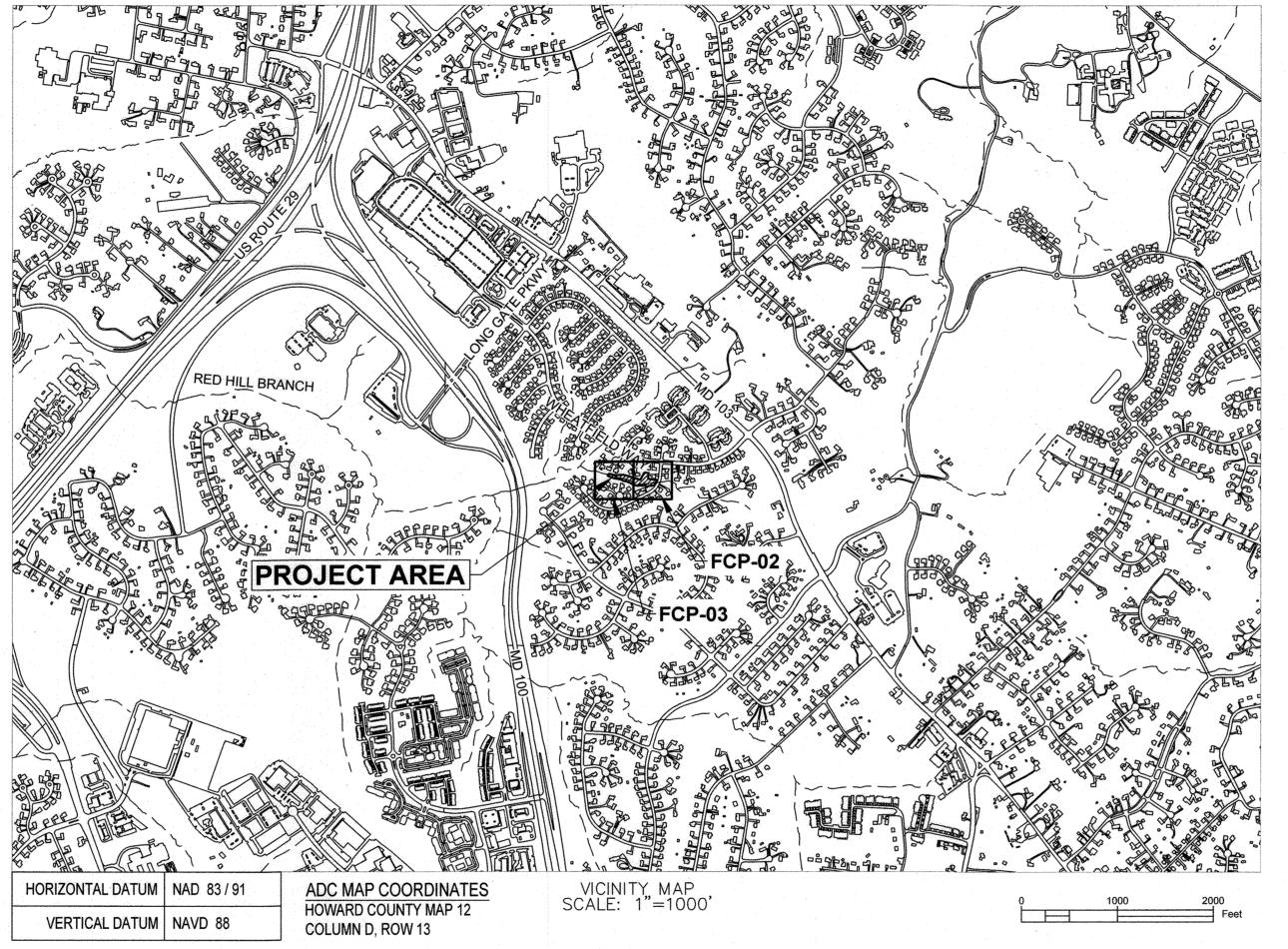
PERFORM THE NECESSARY STREAM WORK INCLUDING EXCAVATION/GRADING AND INSTALLATION OF STREAM STRUCTURES TO RESTORE THE

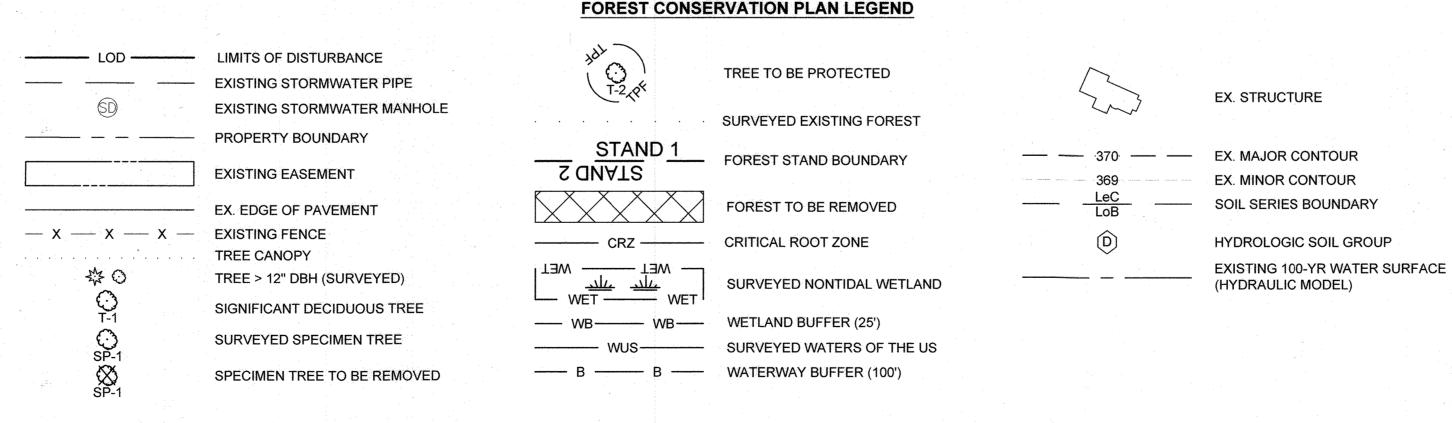
PROTECTIVE MEASURES ARE PROPOSED TO MINIMIZE IMPACTS TO THE EXISTING RESOURCES. A MULCH ACCESS ROAD IS PROPOSED TO LIMIT GROUND DISTURBANCE AND PROTECT ROOT SYSTEMS. TREE PROTECTION FENCING AND ROOT PRUNING WILL BE USED TO PROTECT IMPACTED SIGNIFICANT TREES. THE PROJECT DESIGN ALSO INCLUDES A LANDSCAPE PLAN TO REESTABLISH RIPARIAN COVER FOLLOWING CONSTRUCTION

FOREST CONSERVATION WORKSHEET FOR:		lutumn Harve	est Stream F	Rest	oration	
Net Tract Area A. Total (Gross) Tract Area B. Area within 100-year Floodplain C. Other Deductions (Identify: Affected lot D. Net Tract Area Land Use Category Insert the number "1" under the appropriate land us				_)	A = B = C = D =	2.6 * 0.2 * 1.8 0.6
Resid. Resid. Resid. Rural LD Rural MD Suburban 0 0 0	Inst./ Linear 1	Retail/Ind./ Office 0	Mixed Use/ PUD 0			
	(Net Tract A (Net Tract A		15% 20%)))	E= F=	0.1
Existing Forest Cover G. Existing Forest Cover within the Net Tract Are H. Area of Forest above Afforestation Threshold I. Area of Forest above Reforestation Threshold	d				G = H = I =	0.5 0.4 0.4
Break Even Point J. Break Even Point K. Forest Clearing Permitted without Mitigation					J = K =	0.2
Proposed Forest Clearing L. Total Area of Forest to be Cleared M. Total Area of Forest to be Retained					L = M =	0.5 0.0
Planting Requirements Inside Watershed N. Reforestation for Clearing above the Reforest P Reforestation for Clearing below the Reforest Q. Credit for Retention above the Reforestation R. Total Reforestation Required S. Total Afforestation Required T Total Reforestation and Afforestation Required U 75% of Total Obligation (Retention + Planting V Planting Required Onsite to meet 75% Obligation	tation Thres Threshold ement				N = P = Q = R = S = T = U = V =	0.2 0.2 0.0 0.4 0.0 0.4 0.3 0.3
Planting Requirements Outside Watershed W. Total Planting within Development Site Water X. Total Afforestation Required Y. Remaining Planting within Watershed for Refe Z. Reforestation for Clearing above the Refores AA. Reforestation for Clearing below the Refores BB. Credit for Retention above the Reforestation CC. Total Reforestation Required DD. Total Afforestation and Reforestation Require	orestation Co station Thres station Thres Threshold	hold			W= X= Y= Z= AA= BB= CC= DD=	0.0 0.0 0.0 0.4 0.3 0.0 0.7

*See 'Affected Property Ownership' table below. **Area of floodplain with LOD.

Α	ffected Prop	erty Ownership)
Owner	Lot Number	Total Property Area, ac	LOD Impacts on Property, ac
Howard County	328	0.54	0.49
Howard County	59	0.12	0.12
Howard County	60	0.75	0.12
He, Yihua	22	0.25	0.02
Arrington, Bran & Barry, Margaret	23	0.26	0.01
Bowers, Jeffrey & Linda	27	0.18	0.01
Raker, Jason & Katherine	113	0.18	0.01
Chengleng, Ren & Zhou, Yin	101	0.18	0.01
Larry Scott Phillips Rev. Trust	327	0.14	0.01
Total	, f	2.6	0.8





FOREST CONSERVATION PLAN (FCP) NOTES

- APPLICANT/OWNER IS: BRIAN CLEARY, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THIS PROPOSAL COMPLIES WITH SECTION 16.1200, FOREST CONSERVATION, OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THIS PROJECT PROPOSES TO SATISFY THE FOREST CONSERVATION OBLIGATION OF 0.7 ACRES OF REFORESTATION WITH A FEE-IN-LIEU PAYMENT OF \$38,115 PRIOR TO FINAL APPROVAL OF WP-23-058.
- WP-23-058 WAS REVIEWED AND APPROVED AS FOLLOWS: ON MARCH 14, 2023 THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, CONSIDERED AND APPROVED THE APPLICANT'S REQUEST FOR ALTERNATIVE COMPLIANCE WITH RESPECT TO SECTION 16.155(A)(1)(II) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO PERMIT THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT TO SERVE AS A SUBSTITUTE SITE

COMMUNITY SUSTAINABILITY CONSIDERED AND APPROVED THE APPLICANTS REQUEST FOR AN ALTERNATIVE COMPLIANCE WITH RESPECT TO SECTIONS 16.116(A)(1) AND 16.116(A)(2) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO PROVIDE OUTFALL STABILIZATION AND STREAM RESTORATION ALONG AN UNNAMED TRIBUTARY OF THE RED HILL BRANCH. THE

RECREATION AND PARKS AND THE ADMINISTRATOR OF THE OFFICE OF COMMUNITY SUSTAINABILITY CONSIDERED AND APPROVED THE APPLICANTS REQUEST FOR A VARIANCE WITH RESPECT TO SECTIONS 16.1201(V) AND 16.1205(A)(3) OF THE FOREST CONSERVATION REGULATIONS TO REMOVE FOUR OF THE FIVE SPECIMEN TREES AND MITIGATE AT 2:1 WITH PLANTING

THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT SHALL SERVE AS THE SUBSTITUTE FOR A SITE DEVELOPMENT PLAN FOR DEVELOPMENT. NO DISTURBANCE IS PERMITTED BEYOND THE 0.8-ACRE LIMIT OF DISTURBANCE AS SHOWN ON THE ALTERNATIVE COMPLIANCE EXHIBIT TITLED FOREST CONSERVATION PLAN AND ALTERNATIVE COMPLIANCE APPLICATION

THE APPLICANT SHALL COMPLY WITH ALL GRADING PERMIT REQUIREMENTS FROM THE DEPARTMENT OF INSPECTIONS LICENSES & PERMITS AND HOWARD SOIL CONSERVATION DISTRICT.

CONDITIONS FOR APPROVAL OF SECTION 16.116(A)(1) AND (A)(2):

a. ALL DISTURBED AREAS WITHIN THE STREAM, STREAM BUFFER AND 100-YEAR FLOODPLAIN SHALL BE STABILIZED AND

b. THE APPLICANT SHALL OBTAIN ALL REQUIRED AUTHORIZATIONS AND PERMITS FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE U.S. ARMY CORPS OF ENGINEERS FOR DISTURBANCES WITHIN THE STREAM AND FLOODPLAIN. PROVIDE APPROVAL LETTERS FROM MDE AND/OR USACE WITH THE GRADING PERMIT APPLICATION.

CONDITIONS FOR APPROVAL OF SECTIONS 16.1201(V) AND 16.1205(A)(3):

ONCE THE PROPOSED PROJECT IS COMPLETE, THE LIMIT OF DISTURBANCE SHALL BE STABILIZED, SEEDED AND PLANTED IN ACCORDANCE WITH THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT.

ONLY THE FOUR SPECIMEN TREES (SP-2, SP-3, SP-4, AND SP-5) ARE TO BE REMOVED AND SHALL BE MITIGATED WITH THE PLANTING OF 8 NATIVE TREES WITH A DBH OF 3" AS SHOWN ON THE PLAN EXHIBIT.

2060000000-3000-3000000000-PWPZ000000000000-432521. A COPY OF THE TRANSFER RECEIPT SHALL BE SUBMITTED TO DPZ-DIVISION OF LAND DEVELOPMENT ONCE COMPLETED. PLEASE NOTE, THE APPLICANT SHALL BE RESPONSIBLE FOR ANY

THE APPLICANT SHALL OBTAIN ALL REQUIRED AUTHORIZATIONS AND PERMITS FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND U.S. ARMY CORPS OF ENGINEERS FOR DISTURBANCES WITHIN THE FLOODPLAIN, WETLANDS, STREAMS AND THEIR BUFFERS. REFERENCE THE APPLICABLE MDE OR USACE PERMITS OR TRACKING NUMBERS ON THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT AND ANY COUNTY PERMITS.

- 4. THE TOTAL TRACT AREA IS 0.76 ACRES. TOTAL TRACT AREA IS DEFINED AS THE LOD OF THE PROJECT.
- 5. THIS NRI/FSD WAS PREPARED FOR THE OUTFALL STABILIZATION AND STREAM RESTORATION OF AN UNNAMED TRIBUTARY TO
- 6. THE TOTAL TRACT AREA IS PRIMARILY LOCATED ON HOWARD COUNTY DEPARTMENT OF PARKS AND RECREATION PROPERTY AND PUBLIC WORKS PROPERTY.
- 7. THE TOTAL TRACT AREA IS WITHIN THE LITTLE PATUXENT RIVER WATERSHED, DNR 12-DIGIT 021311050956.
- 8. LOD DOES NOT INTERSECT THE GREEN INFRASTRUCTURE NETWORK. 9. THE STREAM IS DESIGNATED AS MD USE CLASS IV-P: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH
- 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.
- 10. THE TOTAL TRACT AREA IS NOT LOCATED WITHIN A SENSITIVE SPECIES REVIEW AREA. 11. THE APPROVED COUNTY 100-YR FLOODPLAIN BOUNDARY IS SHOWN ON THE NRI/FSD PLAN.
- 12. THE TOTAL TRACT AREA IS PARTIALLY WITHIN THE ZONE X FLOOD ZONE ON MAP PANEL 24027C0160D (500-YR FLOODPLAIN).
- 13. THE W.U.S. AND WETLAND BOUNDARIES WERE DELINEATED BY STRAUGHAN ON APRIL 9, 2019. 14. IN MAY 2019, MD DNR REPORTED THERE ARE NO OFFICIAL STATE OR FEDERAL RECORDS FOR LISTED PLANT OR ANIMAL SPECIES
- WITHIN THE PROJECT AREA. NO LISTED SPECIES WERE OBSERVED ON THE SITE.
- 15. IN A RESPONSE DATED 5/6/19, MARYLAND HISTORICAL TRUST FOUND THAT THE LOD WILL HAVE NO ADVERSE EFFECT ON
- 16. THERE ARE NO NATIONAL STATE, OR COUNTY CHAMPION TREES ON THE TOTAL TRACT. 17. THERE ARE NO TREES THAT ARE AT LEAST 75% OF THE CURRENT STATE CHAMPION.
- 18. TREES WERE MEASURED USING A FORESTRY DIAMETER TAPE.
- 19. NRI/FSD FIELD WORK AND TREE SURVEY WAS CONDUCTED BY STRAUGHAN ON JULY 27, 2022.
- 20. PLANTING PLANS ARE INDICATED ON THE ATTACHED LANDSCAPE PLAN SHEETS (LD-01 TO LD-03). REMOVAL OF ALL SPECIMEN TREES WILL BE MITIGATED THROUGH PLANTING TWO (2) 3" CALIPER TREES PER REMOVED SPECIMEN TREE. REMOVAL OF FOREST WILL BE SATISFIED VIA FEE IN-LIEU.
- 21. THERE ARE NO FOREST CONSERVATION EASEMENTS (FCE) IN THE TOTAL TRACT AREA.
- 22. THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS ARE LOCATED ON THE PROJECT SITE:
- 22.1. FLOODPLAIN: 0.21 AC
- 22.2. STREAMS: 0.13 AC 22.3. STREAM BUFFER: 0.61 AC
- 22.4. WETLANDS: 0.0 AC 22.5. WETLAND BUFFER: 0.01 AC
- 22.6. STEEP SLOPES: 0.18 AC.

APPROVED: DEPARTMENT OF PLANNING &	ZONING
PH PH NY	4.10.23
Chief, Development Engineering Division	Dote
	4/zolz3
Chief, Division of Land Development	Date
Bur	4/27/23
Director	Date

FCP-01

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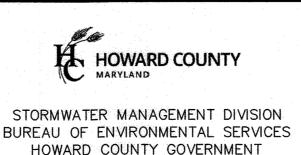


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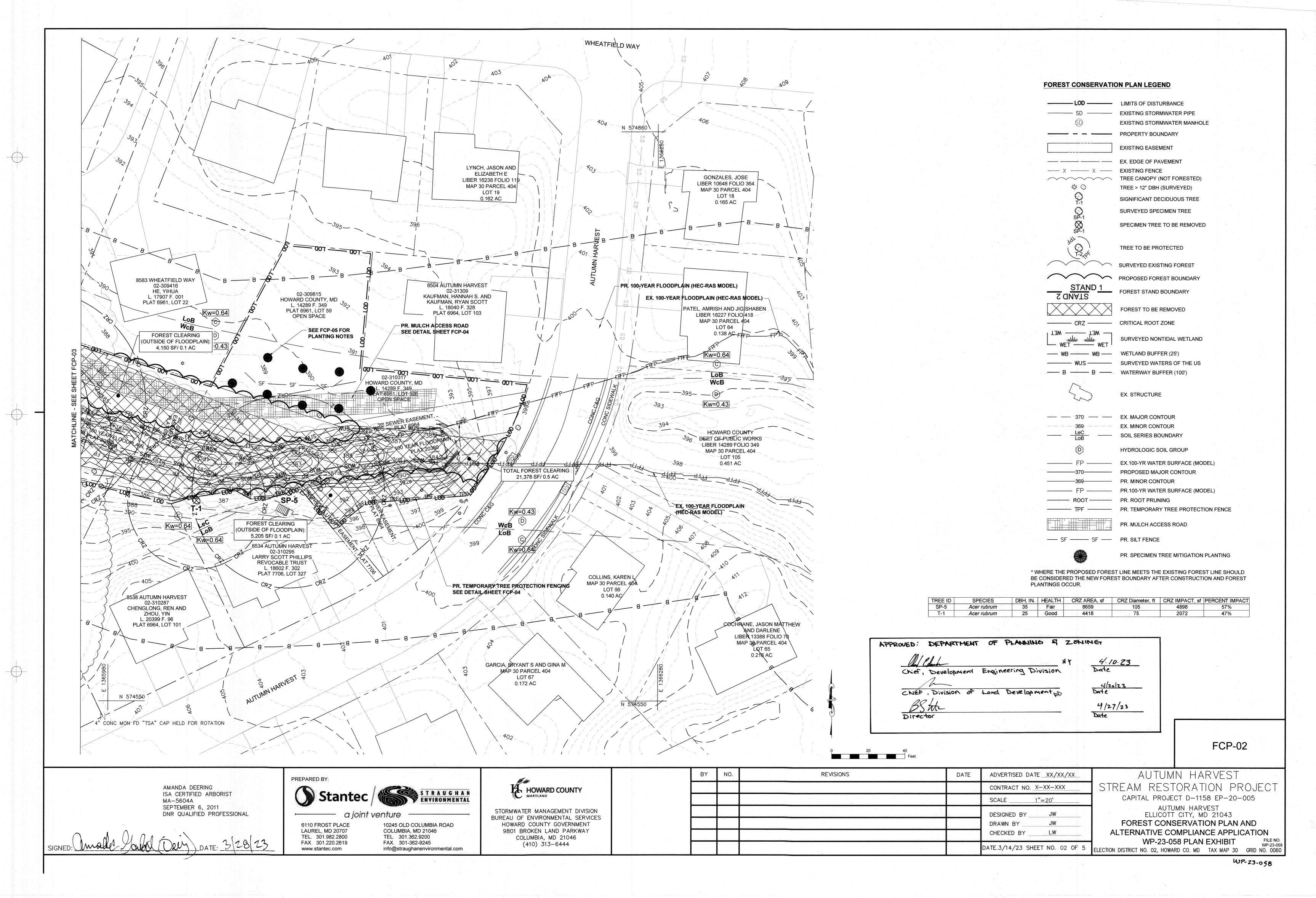
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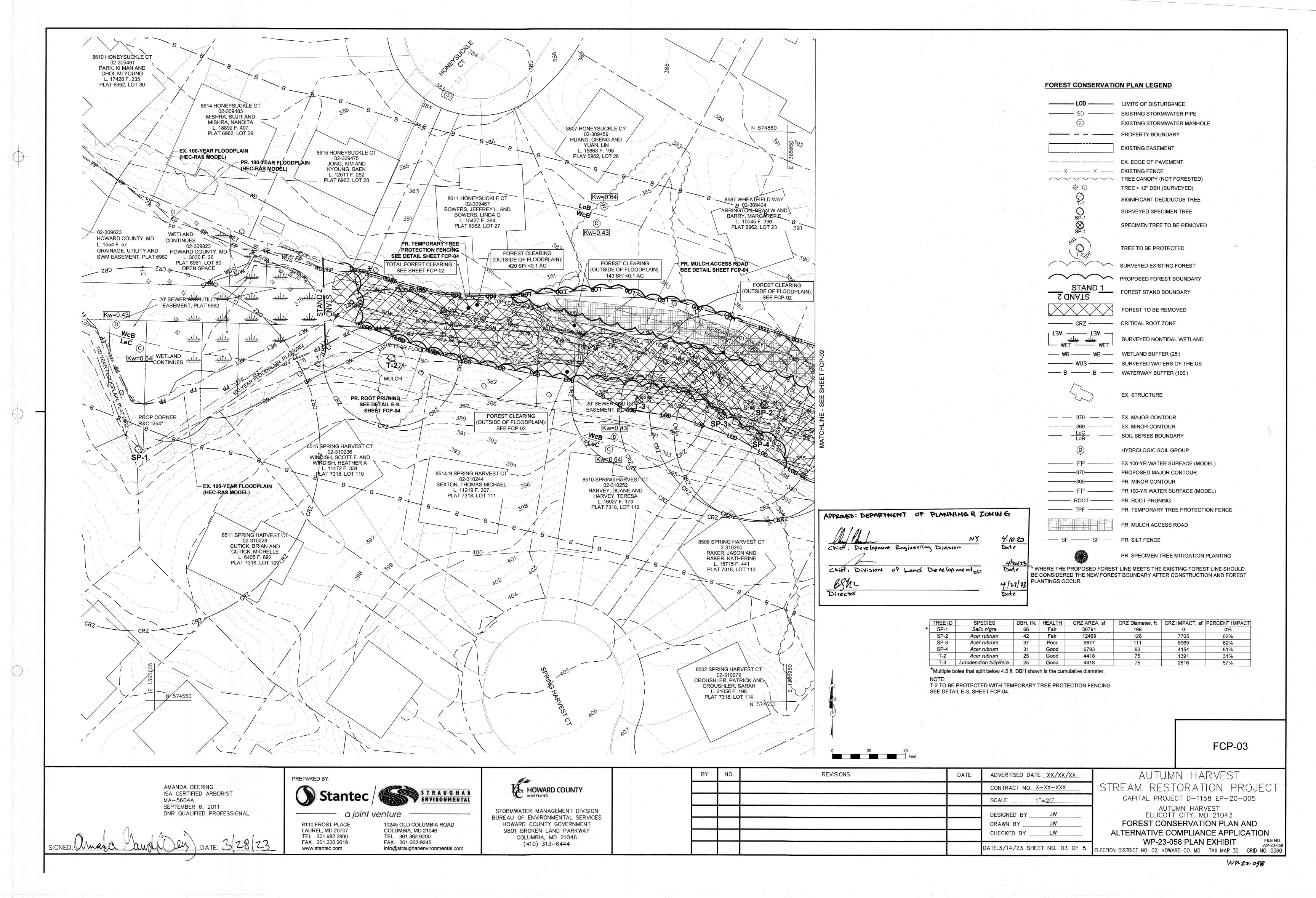
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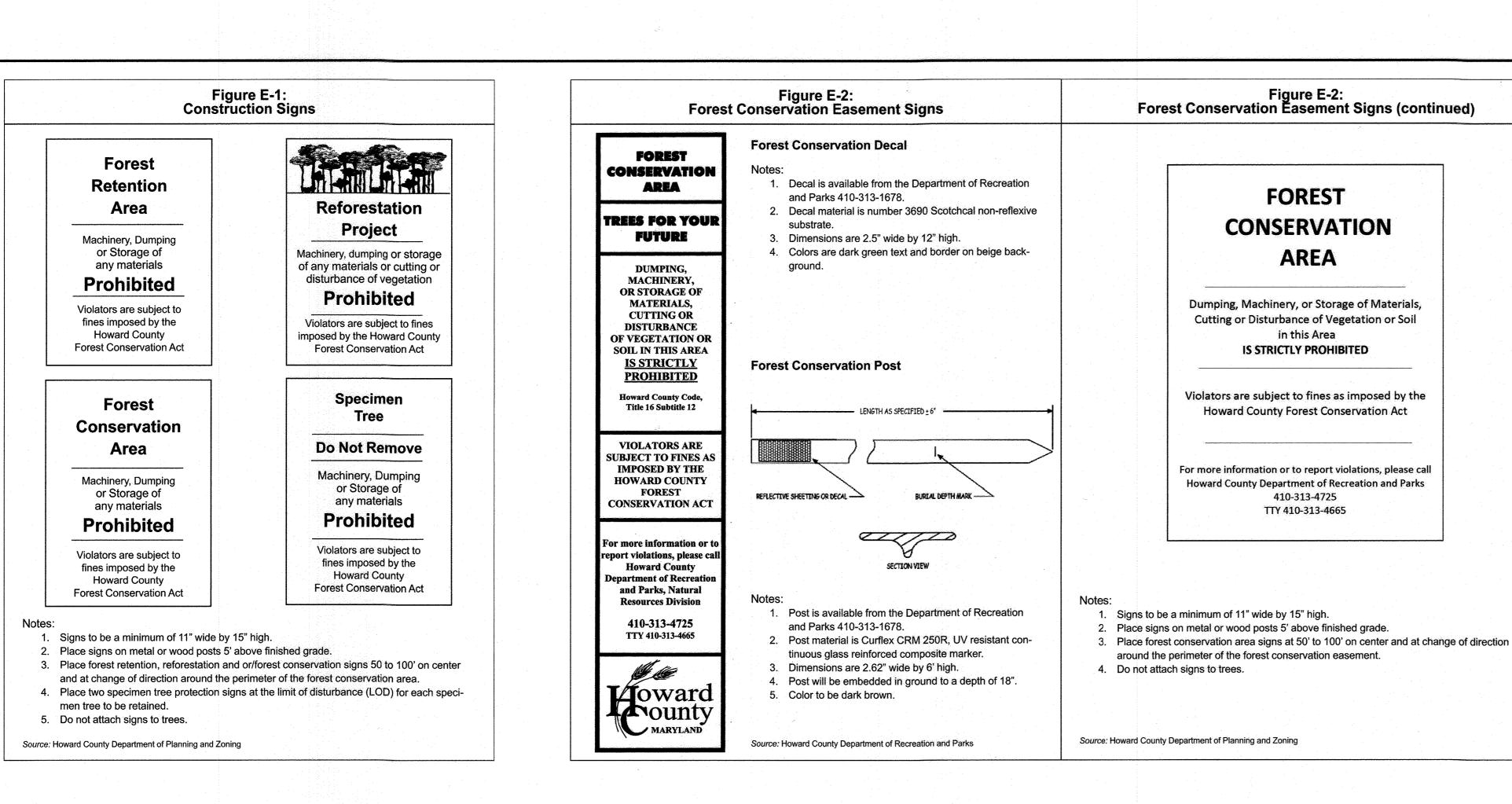
AUTUMN HARVEST STREAM RESTORATION PROJECT CAPITAL PROJECT D-1158 EP-20-005 AUTUMN HARVEST ELLICOTT CITY, MD 21043

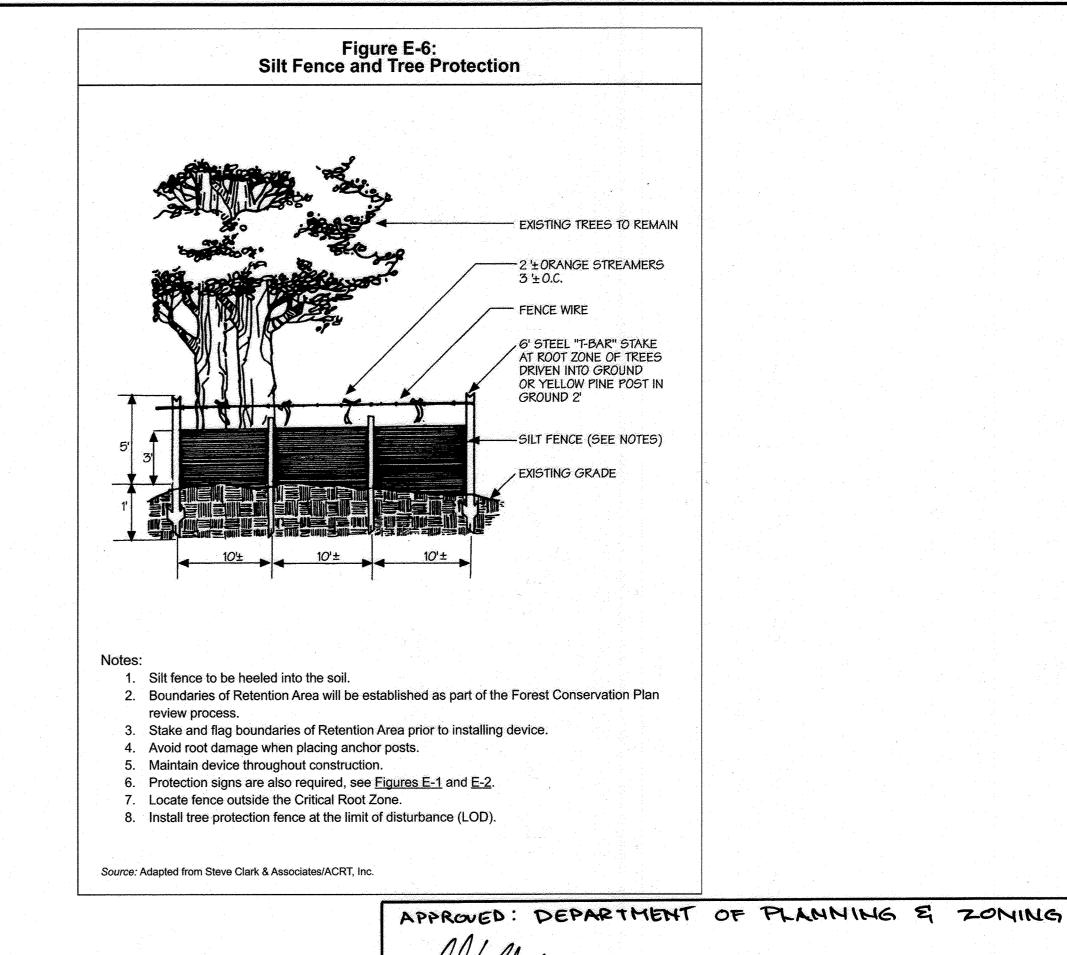
FOREST CONSERVATION PLAN AND ALTERNATIVE COMPLIANCE APPLICATION WP-23-058 PLAN EXHIBIT

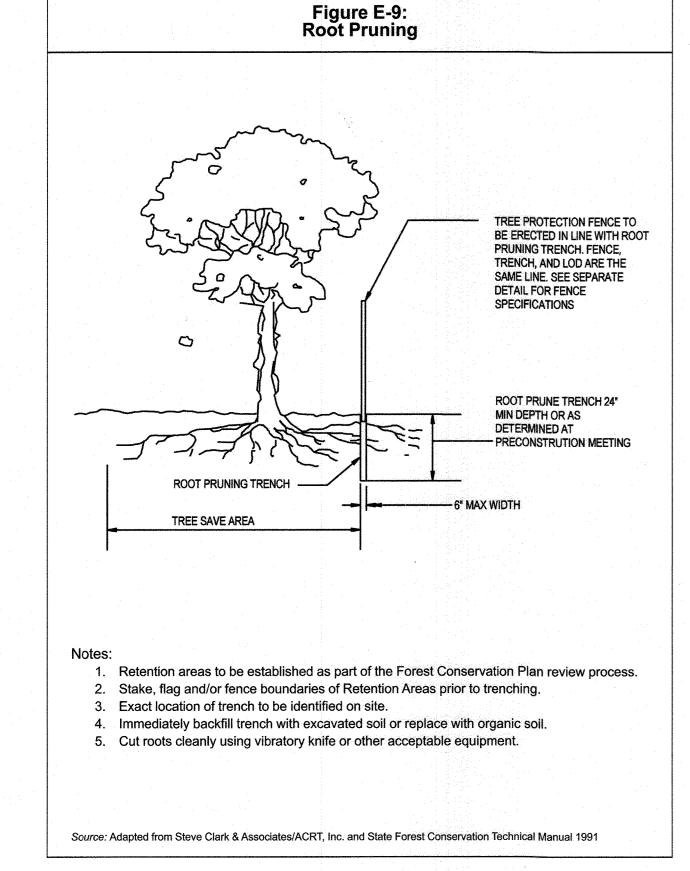
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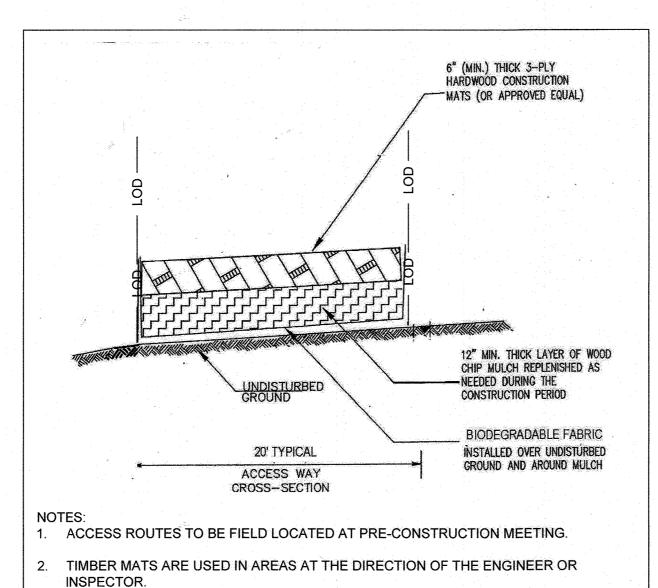












CONTRACTOR SHALL SEQUENCE CONSTRUCTION SUCH THAT NO EQUIPMENT IMPACTS AREA TO BE PROTECTED PRIOR TO TIMBER MAT PLACEMENT.

4. FILTER FABRIC SHALL BE A SINGLE PIECE ACROSS WIDTH. OVERLAP FABRIC BY 18" MIN. ALONG LENGTH OF ROUTE.

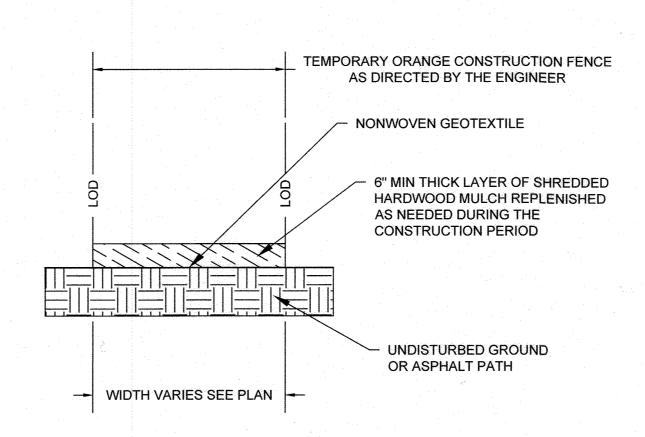
5. FILTER FABRIC MAY BE ELIMINATED AT DIRECTION OF PROJECT ENGINEER.

CONTRACTOR SHALL MAINTAIN TIMBER MAT THROUGHOUT THE CONSTRUCTION

TIMBER MAT SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE APPROVED. WHERE MULCH IS TO REMAIN, FILTER FABRIC SHALL BE AN APPROVED BIODEGRADABLE TYPE.

NOT TO SCALE

NOT TO SCALE TIMBER MAT DETAIL

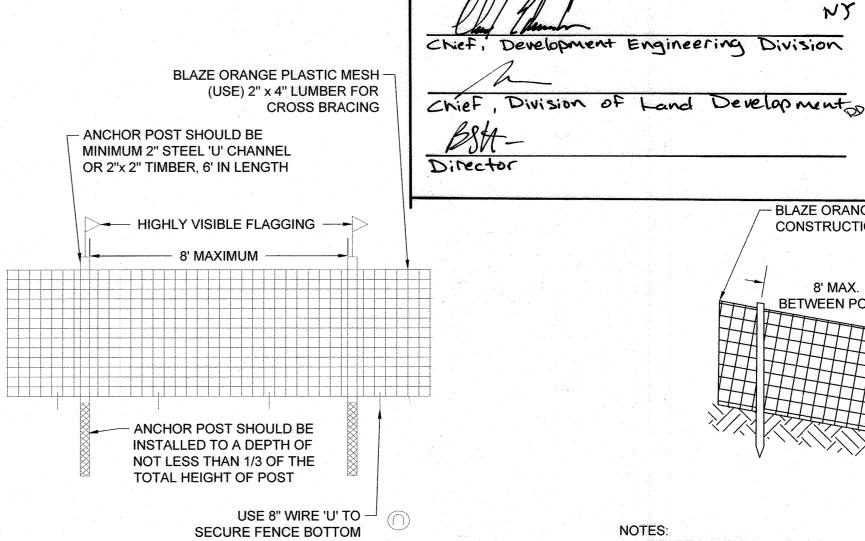


1. MULCH ACCESS ROUTES TO BE VERIFIED BY ENGINEER AT EROSION AND SEDIMENT CONTROL MEETING. REVISIONS TO THE ALIGNMENT THAT MINIMIZE TREE DISTURBANCE ARE ENCOURAGED AND REQUIRE REVIEW AND APPROVAL BY THE ENGINEER.

2. NONWOVEN GEOTEXTILE SHALL BE PLACED WITH SEAMS PARALLEL TO THE FLOW OF TRAFFIC AND SHALL OVERLAP BY 18" MINIMUM AT SEAMS.

3. CONTRACTOR SHALL MAINTAIN MULCH ACCESS THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF PROJECT, MULCH AND NONWOVEN GEOTEXTILE SHALL BE FULLY REMOVED IN ALL PLANTING ZONES.

MULCH ACCESS DETAIL



1. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING. 2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH

3. BOUNDARIES OF PROTECTION AREA SHALL BE STAKED PRIOR TO INSTALLING

PROTECTIVE DEVICE. 4. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

- BLAZE ORANGE

8' MAX.

BETWEEN POSTS

CONSTRUCTION FENCE

5. ROOT DAMAGE SHALL BE AVOIDED.

ORANGE CONSTRUCTION FENCE DETAIL NOT TO SCALE

TEMPORARY TREE PROTECTION FENCE NOT TO SCALE

6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION

2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.

3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED,

FCP-04

4/27/23

4' HEIGHT

6' MIN. METAL "T" FENCE

POSTS DRIVEN 2' INTO

THE GROUND

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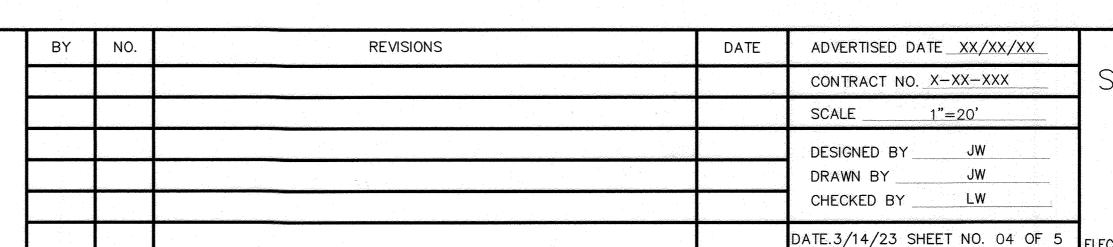
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a joint venture



STORMWATER MANAGEMENT DIVISION BUREAU OF ENVIRONMENTAL SERVICES HOWARD COUNTY GOVERNMENT 9801 BROKEN LAND PARKWAY COLUMBIA, MD 21046 (410) 313-6444



NOTES:

1. FOREST PROTECTION DEVICE ONLY.

4. ROOT DAMAGE SHOULD BE AVOIDED

5. PROTECTIVE SIGNAGE MAY ALSO BE USED.

PRIOR TO INSTALLING DEVICE.

AUTUMN HARVEST STREAM RESTORATION PROJECT CAPITAL PROJECT D-1158 EP-20-005 AUTUMN HARVEST ELLICOTT CITY, MD 21043 FOREST CONSERVATION PLAN AND

ALTERNATIVE COMPLIANCE APPLICATION WP-23-058 PLAN EXHIBIT WP-23-050 FLAN EXHIBIT WP-23-050 ELECTION DISTRICT NO. 02, HOWARD CO. MD TAX MAP 30 GRID NO. 0060 DO NOT CUT LEADER -

BLACK RUBBER -HOSES

6' MAX. HT.

¹/₂ TREE HT. (MIN.) 2" TO 6"

-2 STRANDS 12 OR 14 GAUGE GALV. WIRE, TWISTED UNTIL TAUT. AVOID GIRDLING STEM WHEN CONNECTING TO STAKE.

PLACE TWO 2" SQUARE HARDWOOD STAKES, (MIN. 6' LONG) INTO PREVAILING WIND. EXTEND STAKES TO FIRM BEARING AS NEEDED.

TREE PIT TO BE SEEDED WITH PERMANENT SEED. SEE LANDSCAPE

FINISHED GRADE

SET ON FIRMLY PACKED TIMES **SOIL TO PREVENT** - WIDER -SETTLING THAN

BACKFILL MIX CUT AND REMOVE CONTAINER COMPLETELY. LOOSEN ROOTS ON **OUTER EDGE OF ROOTBALL.** SCARIFY SUBSOIL TO 6" MIN. DEPTH BELOW

ROOTBALL

NOTES:

1. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING STAKES.

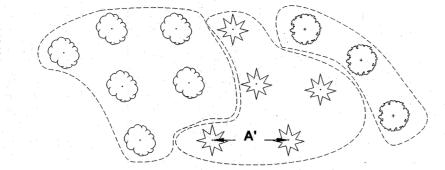
ROOTBALL

2. WATER THOROUGHLY AFTER INSTALLATION. 3. REMOVE ALL HOSE, WIRE, AND STAKES AT THE END OF PERIOD. DECIDUOUS TREE PLANTING

NOT TO SCALE

MITIGATION TREE PLANTING SCHEDULE

MITIGATION TREE PLANTING SCHEDULE							
SPECIES		CONDITION	DIAMETER	SDACING.			
BOTANICAL NAME	COMMON NAME	CONDITION	DIAIVIETER	SPACING	QUANTITY		
Acer rubrum	Red Maple	B & B	3"	20' o.c.	4		
Quercus palustris	Pin Oak	B&B	3"	20' o.c.	4		
			النابات سنته والباران بكسماك		<u> </u>		



- CANOPY/UNDERSTORY

A' - TREE SPACING PER PLANT SCHEDULE

NOTES:

- 1. THIS PLANTING IS TO MIMIC NATURAL SEED DISPERSAL
- 2. EACH SPECIES IS TO BE PLANTED IN A GROUP OF COMMON **VEGETATION SPECIES.**
- 3. THE MINIMUM CLUSTER IS A GROUP OF 3 TREES OF THE SAME
- 4. THE MAXIMUM CLUSTER IS A GROUP OF 15 TREES OF THE SAME SPECIES.

CLUSTER PLANTING DETAIL

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING Chief, Development Engineering Division Chief, Division of Land Developmenton Director

FCP-05

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STORMWATER MANAGEMENT DIVISION BUREAU OF ENVIRONMENTAL SERVICES HOWARD COUNTY GOVERNMENT 9801 BROKEN LAND PARKWAY
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AUTUMN HARVEST STREAM RESTORATION PROJECT CAPITAL PROJECT D-1158 EP-20-005 AUTUMN HARVEST ELLICOTT CITY, MD 21043 FOREST CONSERVATION PLAN AND

ALTERNATIVE COMPLIANCE APPLICATION WP-23-058 PLAN EXHIBIT ELECTION DISTRICT NO. 02, HOWARD CO. MD TAX MAP 30 GRID NO. 0060

WP-23-058

STRAUGHAN ENVIRONMENTAL