

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: May 15, 2018

DPZ File No. WP-18-123

Department of Planning and Zoning

- 1 Research
1 Resource Conservation (Historic/Ag Pres)
Public Service and Zoning Administration
Address Coordinator

- 1 Comprehensive & Community Planning
2 Development Engineering Division
Other
1 File

See: Attached

Agencies

- 1 Soil Conservation District
1 Department of Inspections, Licenses & Permits
1 Department of Fire and Rescue Services
1 State Highway Administration
1 Health Department
1 Public School System
1 Recreation and Parks
1 Office of Transportation
MD Aviation Administration
WSSC (Non-Residential Only)

- Tax Assessment
Verizon
BGE
Cable TV
Police
MTA
Finance
1 DPW, Real Estate Services
DPW, Construction and Inspection
DPW, Bureau of Utilities

RE: Heritage Woods SWM Pond Retrofit – Capital Project D-1160

ENCLOSED FOR YOUR = Signature Approval [checked] Review & Comments Files

THE ENCLOSED = Original Pre-Packaged Plan Set

Table with 3 columns: Plans, # of Plans, Supplemental Documents. Lists various documents like Sketch Plan, Wetlands Report, etc.

WAS: [checked] Received Tentatively Approved Recorded
Received and Revised Approved On May 15, 2018

COMMENTS: Due- 17 Working Days: 6/8/18

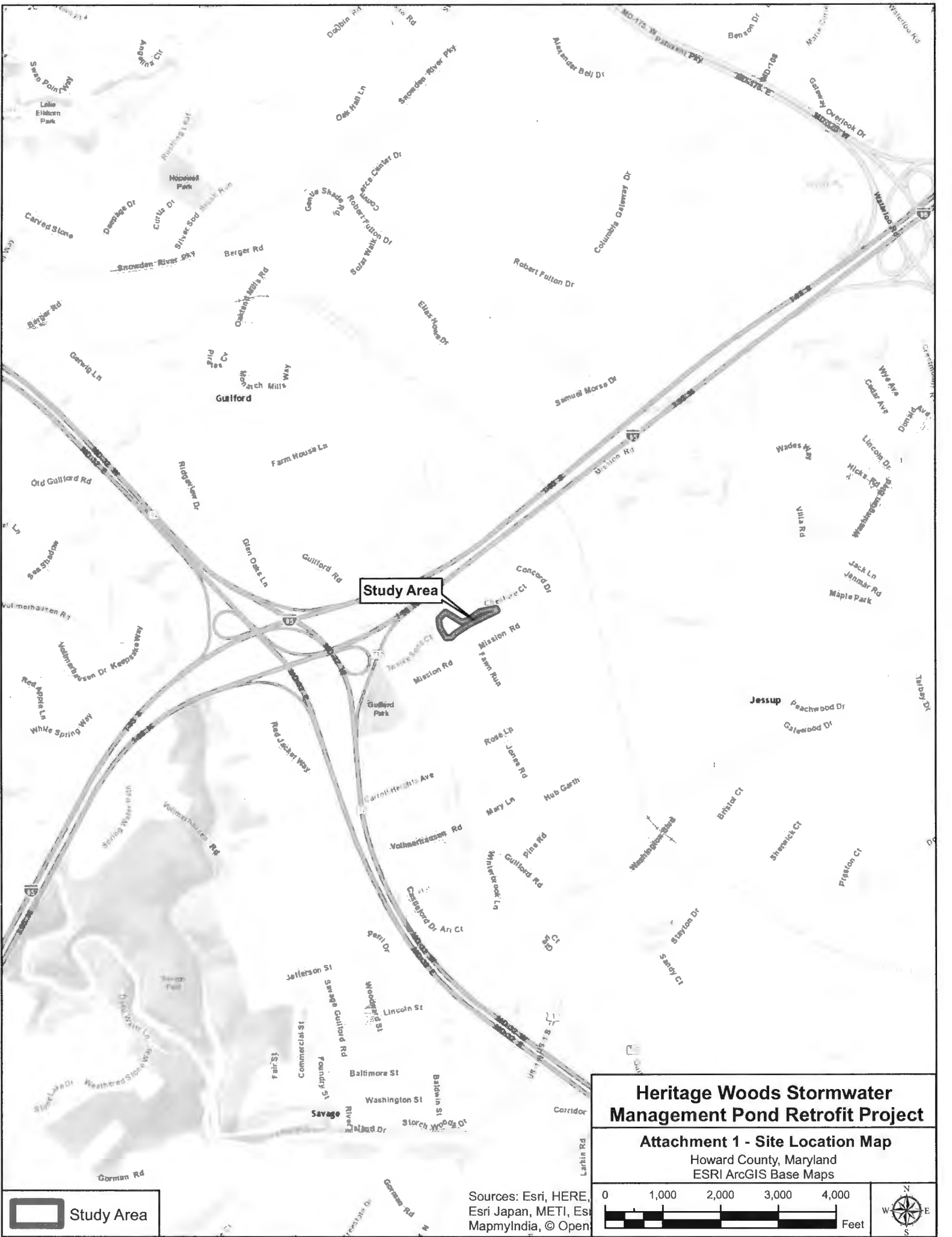
Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

DPZ STAFF INITIALS: JS


RECEIVED

MAY 16 2018

HOUSTON COUNTY HEALTH DEPT.
BUREAU OF ENVIRONMENTAL HEALTH



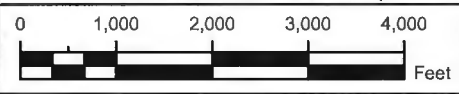
Study Area

 Study Area

Heritage Woods Stormwater Management Pond Retrofit Project

Attachment 1 - Site Location Map
 Howard County, Maryland
 ESRI ArcGIS Base Maps

Sources: Esri, HERE, Esri Japan, METI, Esri MapmyIndia, © Open



RECEIVED

MAY 16 2018

HEALTH AND HUMAN SERVICES DEPT.
BUREAU OF ENVIRONMENTAL HEALTH



HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

6751 Columbia Gateway Drive, Suite 514 ■ Columbia Maryland 21046 ■ 410-313-6444

Mark DeLuca, P.E., Deputy Director
Chief, Bureau of Environmental Services
mdeluca@howardcountymd.gov

FAX 410-313-6490
TDD 410-313-2323

May 14, 2018

Mr. Kent Sheubrooks, Chief
Howard County Department of Planning and Zoning
Division of Land Development
3430 Courthouse Drive
Ellicott City, MD 21043

Subject: **Waiver Petition Submittal**
Heritage Woods SWM Pond Retrofit Project
(Waiver of SDP and On-site Retention of Specimen Trees)
Capital Project D-1160

Dear Mr. Sheubrooks:

The Howard County Department of Public Works (DPW) Stormwater Management Division (SWMD) is performing a task under Capital Project D-1160 to retrofit a stormwater management (SWM) pond and associated storm drain. The proposed improvements include replacing the failing riser and principal spillway and incorporating water quality enhancements within the pond. The location of the project is shown on the enclosed mapping.

The proposed work is on the following parcel:

- Heritage Woods Association, Map 42, Parcel 467, Lot 16, Plat 5314, Liber 1372, Folio 750 – 6.42 acres
- Signal Hill Neighborhood Association, Inc., Map 42, Parcel 76, Liber 2100, Folio 351 – 6.63 acres
- RW Dorsey Property, Map 42, Parcel 534, Lots 1-10, Howard County Plat 12795 – 3.6 acres

Two waivers are being requested for this project as follows:

1. Section 16.155(a)(1)(ii) – Waiver of site plan: The proposed project is retrofit of a SWM pond, including replacement of the failing riser and principal spillway, while incorporating water quality enhancements.
2. Section 16.1205(a)(7) – Removal of a specimen tree: There are two specimen trees in the vicinity of the proposed pond improvements. In order to retrofit the pond and improve water quality it is necessary to remove one specimen tree: SP-1, a 33-inch white oak in good condition. Improvements to the pond, including grading, trenching, and pipe installation necessitate the removal of this tree.

Approval of the waivers noted above would allow the SWMD to repair the pond quickly and efficiently, while still meeting the intent of the development and forest conservation regulations.

The Waiver Petition Application requests several specific items of justification. The following addresses those items:

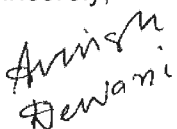
- a. The project that is the subject of this waiver request is needed to address a SWM pond with a failing riser that is negatively impacting water quality within the watershed. Full compliance with the regulations would not improve the final design or construction of the project and would take away valuable funds from the implementation of the project design and construction.
- b. A key to this project is the swift and efficient processing of the design plans and construction of the project. The regulations are meant to assure that development occurs per County requirements and that environmental criteria are met, including the protection of existing forested areas to the extent practical. The project will be designed with the forest conservation regulations in mind. The limit of disturbance will be minimized to only that area necessary for constructing the project. Furthermore, the very nature of this project is to protect the environment by improving water quality downstream. The County is also working closely with DRP to selectively remove only those trees necessary to accomplish the project, instead of simply clearing out a large area for the contractor to work.
- c. The existing pond has a failing riser and principal spillway. Doing nothing is not an option, as the problem will not fix itself and threatens the functionality of the pond. Public interests and safety will be improved by the proposed project. The waiver request is not intended to exempt the project from County regulations, but rather to more appropriately match the goals and resources of the project to the overall intent of the regulations.
- d. As stated above, approval of this waiver request will not nullify the intent of the regulations. The project is being performed to retrofit a SWM pond. It is important to public safety and the environment that the project is completed. No work being proposed by this project is in any way counter to County policy or regulation.

From the above discussion, it is very clear that something must be done to address the functionality of the SWM pond. Approval of the requested waiver will allow the project to move forward in a quick, cost effective manner to resolve the existing problem. The project will still be in keeping with the intent of the County regulations if the waiver is approved.

Based on the waiver request enclosed herein, including all exhibits referenced below, I hereby request approval of this waiver petition.

If you have any questions or desire further information, please do not hesitate to contact me.

Sincerely,



Avinash Dewani, PE
Stormwater Management Division
Project Manager
(410) 313-6417

Heritage Woods SWM Retrofit Project
Capital Project D-1158
May 14, 2018
Page 3

Enclosures:

Alternative Compliance Application
Exhibit A – Vicinity Map
Exhibit B – Simplified FSD Map
Exhibit C – Plan Sheet

Howard County Department of Planning and Zoning
 Division of Land Development
ALTERNATIVE COMPLIANCE APPLICATION
[Alternative Compliance from Subdivision and Land Development Regulations]

Date Submitted/Accepted 5/15/18 DPZ File Number WP-18-123

I. Site Description

Subdivision Name/Property Identification: Heritage Woods SWM Retrofit Project
 Location of property: Cheshire Court, Jessup, MD
(Street Address and/or Road Name)

<u>SWM facility</u>	<u>SWM facility</u>
(Existing Use)	(Proposed Use)
<u>42</u>	<u>18</u>
(Tax Map No.)	(Grid/Block No.)
<u>R-SC and R-12</u>	<u>467,76, 534</u>
(Zoning District)	(Parcel No.)
	<u>16.65 acres</u>
	(Total Site Area)

Provide a brief site history including reference to all previously submitted or currently active plans on file with the County (subdivision plans, Board of Appeals petitions, alternative compliance petitions, etc.)
A County capital project is proposed to retrofit an existing pond and associated storm drain to improve water quality.
The existing riser and principal spillway are failing and the facility is in need of repair.

II. Alternative Compliance Request

In accordance with Section 16.104 of the Howard County Subdivision and Land Development Regulations, the Department of Planning and Zoning, in conjunction with the Subdivision Review Committee **may grant alternative compliances or modifications to the minimum requirements stipulated within the Regulations if it is determined that extraordinary hardships or practical difficulties may result from strict compliance with the regulations, or if it is determined that the regulations may be served to a greater extent by an alternative proposal.**

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 regulation. Attach a separate sheet if additional information is appropriate.

<u>Section Reference No.</u>	<u>Summary of Regulation</u>
1. <u>16.155 (a)(1)(ii)</u>	<u>Requirements for site development plans</u>
2. <u>16.1205(a)(7)</u>	<u>Removal of a specimen tree</u>
3. _____	_____
4. _____	_____
5. _____	_____

III. *Justification*

All alternative compliance requests must be fully justified by the petitioner. Incomplete or inadequate justification may result in rejection of the application at the time of submission. Justification must be specific to the subject property. The justification provided by the petitioner should include all factors which rationalize or substantiate the request in accordance with the following criteria:

- a. Summarize any extraordinary hardships or practical difficulties which may result from strict compliance with the Regulations.
- b. Verify that the intent of the Regulations will be served to a greater extent through the implementation of the alternative proposal.
- c. Substantiate that approval of the alternative compliance will not be detrimental to the public interests.
- d. Confirm that approval of the alternative compliance will not nullify the intent of the Regulations.

PLEASE ATTACH A SEPARATE LETTER OF JUSTIFICATION TO SUPPORT THE ALTERNATIVE COMPLIANCE REQUESTS.

IV. *Pre-Submission Meeting Requirements*

- a. **Community Meeting Requirement** - If no previous subdivision plans and/or zoning or conditional use petitions were processed, a pre-submission community meeting is required for the initial plan submittal of all new residential development and for new non-residential development located within 200 feet of a residential zoning district or an existing non-residential development which is located within 200 feet of a residential zoning district and proposed for a floor area expansion of more than 25% in accordance with Sections 16.156(a) and 16.128 of the Subdivision and Land Development Regulations for alternative compliance of the site development plan requirement. [See DPZ policy memo dated 3/22/04 for existing lots/parcels]. The property owner/developer must provide 3 weeks advance notice regarding the community meeting's date, time and location to all adjoining property owners identified in the records of the State Department of Assessments and Taxation and any community association that represents the geographic area of the subject property by first class mail; and sent electronically to any community association registered with the County for projects in a certain geographic area; the Howard County Council; and DPZ, which will place the meeting notice on the DPZ's website. The developer shall send a copy of the minutes and written responses to the meeting attendees and DPZ, either electronically or by first class mail. **A certification that meeting notices were mailed, contact information for the attendees and a copy of the minutes and a written response with a dated return mail receipt or dated email attached to all of the major comments recorded at the meeting must be submitted to DPZ along with the initial plan application. The meeting minutes, including a written response to all questions, shall be sent to all meeting attendees within 60 days of the meeting either electronically or by first class mail [Council Bill 6-2011].**

- b. **HPC Meeting Requirement** - A pre-submission advisory meeting with the Historic Preservation Commission is required for new development located within a Historic District or if the site contains a historic structure (50 years or older) in accordance with Section 16.603A of the Howard County Code. Verify this requirement by checking the Historic Sites Inventory list and maps available at the DPZ public service desk or checking with the Resource Conservation Division. The property owner/developer must contact the DPZ, Resource Conservation Division for the HPC scheduling process and procedures. **The property owner/developer must submit a copy of the minutes from the HPC Advisory Meeting to DPZ along with the initial subdivision or site development plan application.**

- c. **MAA Meeting Requirement** - For all proposed subdivisions or developments located within the BWI Airport Noise Zone or the Airport Zoning District (4 mile radius from the center of the airport), the review and approval by the Maryland Aviation Administration is required prior to signature approval of final plan road and SWM construction drawings, and/or site development plans, or alternative compliance approval of SDP. Please contact the MAA at P.O. Box 8766, BWI Airport, Maryland, 21240-0766, or (410) 859-7100. A copy of the MAA approval letter must accompany the submission of the final road/SWM construction plan original drawings, and/or site development plan original, or alternative compliance application.

- d. **Design Advisory Panel (DAP)** – A pre-submission advisory meeting with the Design Advisory Panel is required for sketch and preliminary equivalent sketch plans that are submitted on or after November 3, 2008 for new development or redevelopment projects on parcels located in the U.S. Route 1 corridor that are zoned 'CE', 'CAC' or 'TOD' or that adjoin the Route 1 right-of-way and that are subject to the Route 1 Design Manual; on parcels located within the U.S. Route 40 corridor that are zoned 'TNC' or that are subject to the Route 40 Design Manual; on parcels which age-restricted adult housing is to be constructed pursuant to a conditional use; on redevelopment parcels located in the New Town Village Centers with boundaries proposed by a property owner or established by the Zoning Board or County Council; and for revitalization and redevelopment of Downtown Columbia in accordance with Sections 16.1501 and 16.1504 of the Howard County Code. The property owner/developer must contact the DPZ, Division of Comprehensive and Community Planning to verify this requirement and for information concerning the DAP meeting scheduling process and procedures. **The property owner/developer must submit a copy of the DAP project design recommendations to DPZ along with the initial subdivision plan application.**

V. **Plan Exhibit**

A. **Number of Copies Required**

The alternative compliance application must be accompanied by copies of a detailed plot plan, subdivision plat or site development plan (**15 sets of the completed alternative compliance application and plan exhibit if the subject property adjoins a County road; 19 sets for properties adjoining a State road**).

In instances where the alternative compliance request concerns an approval extension or if an associated plan is in active processing, only 2 sets of plans are required along with 15 or 19 copies of the application form. **Plans must be folded to a size no larger than 7-1/2" x 12". The pre-packaging of plans and supplemental reports by SRC agency will be permitted by DPZ provided that each package contains a cover letter which itemizes all plans, reports and documents included in the package.**

Please be advised that all plan application submissions are ACCEPTED BY APPOINTMENT ONLY. All plan submission appointments must be scheduled with the Division of Land Development at (410) 313-2350.

Plan applications are available on the DPZ website at <https://howardcountymd.gov/Departments/Planning-and-Zoning/Land-Development>.

B. **Plan Requirement Checklist**

The detailed alternative compliance exhibit, plot plan, subdivision plan or site development plan must indicate the following required information relevant to the alternative compliance request to ensure acceptance of the alternative compliance application for processing.

Legend:	<u>X</u>	Information Provided	<u>NP</u>	Information Not Provided, Justification Attached
	<u>NA</u>	Not Applicable		

- X 1. Vicinity map scale 1" = 2,000' indicating and identifying the total boundary of the property, exact site location, vicinity roads and north arrow.
- N/A 2. Bearings and distances of property boundary lines for the entire tract and size of tract area.
- X 3. North arrow and scale of plan.
- N/A 4. Location, extent, boundary lines and area of any proposed lots.
- X 5. Any existing or proposed building(s), structures, points of access, driveways, topography, natural features and other objects and/or uses on the subject and adjacent properties which may be relevant to the petition; i.e. historic structures, cemeteries or environmentally sensitive areas.
- N/A 6. Delineation of building setback lines.
- X 7. Delineation of all existing public road and/or proposed street systems.
- X 8. Identification and location of all easements.
- X 9. Approximate delineation of floodplain, streams, wetland and forested areas, if applicable, and/or

- provide a professional certification that environmental features do not exist on the property.
- N/A 10. Road profile to evaluate sight distance, if the application includes a request for direct access to a major collector or more restrictive roadway classification.
- N/A 11. Any additional information to allow proper evaluation (e.g. for alternative compliance to wetland buffers an alternative analysis and mitigation proposal are needed; for alternative compliance to SDP requirements where there is no subdivision of land, an APFO Roads Test evaluation may be needed, for alternative compliance of final plat or SDP, a copy of property deeds to confirm legal creation or status of property is needed).
- N/A 12. Photographs, perspective sketches or cross-sections as necessary to adequately portray the alternative compliance request.
- X 13. The exhibit plans should be highlighted to accurately illustrate the requested alternative compliance(s) to allow proper evaluation (i.e. proposed grading, tree clearing or other disturbances within environmentally sensitive areas or buffers).
- N/A 14. Submit 2 sets of photographs for all existing on-site structures.
- N/A 15. Identify the location of any existing wells and/or private septic systems.

N/A 16. **Route 1 Manual**
 Compliance with the Route 1 Manual is required for new development and some alterations or enlargements located in the CE, TOD and CAC zoning districts and for other zoning districts located within the Route 1 corridor. All plan submissions, beginning with the initial subdivision or site development plan, shall show all applicable streetscape, site and building designs responding to the Route 1 Manual's requirements and recommendations. All plan submissions shall provide a written summary of how the proposed design achieves the objectives of the Route 1 Manual. Also, building design and schematic architectural elevation details must be included with the initial subdivision or site development plan submission.

N/A 17. **Route 40 Design Manual**
 Compliance with the Route 40 Design Manual is required for new development and redevelopment projects located in the Traditional Neighborhood Center (TNC) zoning districts and on parcels located within the Route 40 Corridor as defined in the Route 40 Design Manual. All plan submissions within the Route 40 corridor, beginning with the initial subdivision or site development plan, shall show all applicable streetscape, site and building designs responding to the Route 40 Design Manual's requirements and recommendations. All plan submissions within the Route 40 corridor shall provide a written summary of how the proposed design achieves the objectives of the Route 40 Design Manual. Also, building design and schematic architectural elevation details must be included with the initial subdivision or site development plan submission.

X 18. **Property Deeds** – Information to confirm the legal creation or status of the property to be improved. (Copy of deeds from Howard County Land Records Office or record plat name and recording reference number). **A complete chronological deed history is required for all deeded residential properties. Provide 2 copies of the recorded deeds for the subject property tracing its history back to 1960.**

N/A 19. Please complete the following:

A pre-submission meeting was held with DPZ on _____ with
 [date], if applicable.

 [DPZ, Director, DLD Division Chief or other SRC representatives]

VI. Fees

The Alternative Compliance application fee shall be in accordance with the adopted fee schedule. All checks shall be made payable to the *Director of Finance*. **The petition will not be accepted for processing until the fee has been paid. Incomplete, incorrect or missing information may result in the rejection of the application** and could cause additional time to be required to revise the application for resubmittal and re-review. For more information or questions, contact DPZ at (410) 313-2350.

VII. **Owner's/Petitioner's Certification**

I/WE the undersigned fee simple owner(s) hereby make application to the Howard County Department of Planning and Zoning to provide an alternative compliance request of the minimum requirements of the Howard County Subdivision and Land Development Regulations. The undersigned hereby certifies the information supplied herewith is correct and complete, confirms that the regulations and policies as referred to in the attached are understood, and authorizes periodic on-site inspections by the Howard County Subdivision Review Committee agencies. ***If the applicant is the owner's agent, written documentation from owner granting that authority is required at the time of the submission.**

Owner's authorization attached *

_____		_____		_____		_____	
(Signature of Property Owner) (Fee Simple Owner Only)		(Date)		<i>Avinash Dewani</i> (Signature of Petition Preparer) *		05/14/2018 (Date)	
_____		_____		Howard County SWM Division		_____	
(Name of Property Owner)				(Name of Petition Preparer, Surveyor/Engineering/Architect or Agent/Developer)			
_____		_____		6751 Columbia Gateway Drive, Suite 514		_____	
(Address)				Address)			
_____		_____		Columbia, MD 21046		_____	
(City, State, Zip Code)				(City, State, Zip Code)			
E-Mail _____				E-Mail adewani@howardcountymd.gov			
_____		_____		410-313-6417		_____	
(Telephone)		(Fax)		(Telephone)		(Fax)	
Contact Person: _____				Contact Person: Avinash Dewani		_____	

**Howard County Department of Planning and Zoning
Division of Land Development**

**INITIAL SUBMISSION
ALTERNATIVE COMPLIANCE WORKSHEET
(For DPZ Use Only)**

Project Name _____	DPZ File No. _____
DPZ Plan Reviewer _____	Submission Date _____
Plan Consultant Representative _____	Time _____

- I. Application Requirements** *Indicate Yes, No or N/A*
- a. Application is complete _____
 - b. Required number of plans and applications are provided..... _____
 ___ Plans (15 sets on County Road or
 ___ Applications 19 sets on State Road)
 - c. Supplemental Information is provided _____
 - d. Certification of pre-submission community meeting and summary of community comments with dated responses to all meeting attendees within 60 days is provided and three week notice given to DPZ and County Council, if applicable _____
 - e. Certification of pre-submission HPC advisory meeting for new projects in Historic District or listed in Historic Sites Inventory _____
 - f. Photographs of existing structures (for Historic Preservation Review) _____
 - g. MAA Approval Letter (if applicable) _____
 - h. Written summary of Route 1 Manual/Route 40 Design Manual compliance (if applic) _____
 - i. DAP project design recommendation for Route 1/Route 40 projects _____

- II. Fee Computation** **Fee**
- Number of alternative compliance sections requested _____
 - * Base Fee for first two alternative compliance sections (**\$450**)..... _____
 - Fee for each additional alternative compliance section (___ additional alternative compliances x **\$50** each) _____
-
- * (Maximum fee of **\$350** for Agricultural Preservation parcels)

TOTAL _____

III. Certification

Cash Receipt No. _____ Amount _____

SAP Acct 1000000000-3000-3000000000-PWPW000000000000-432530

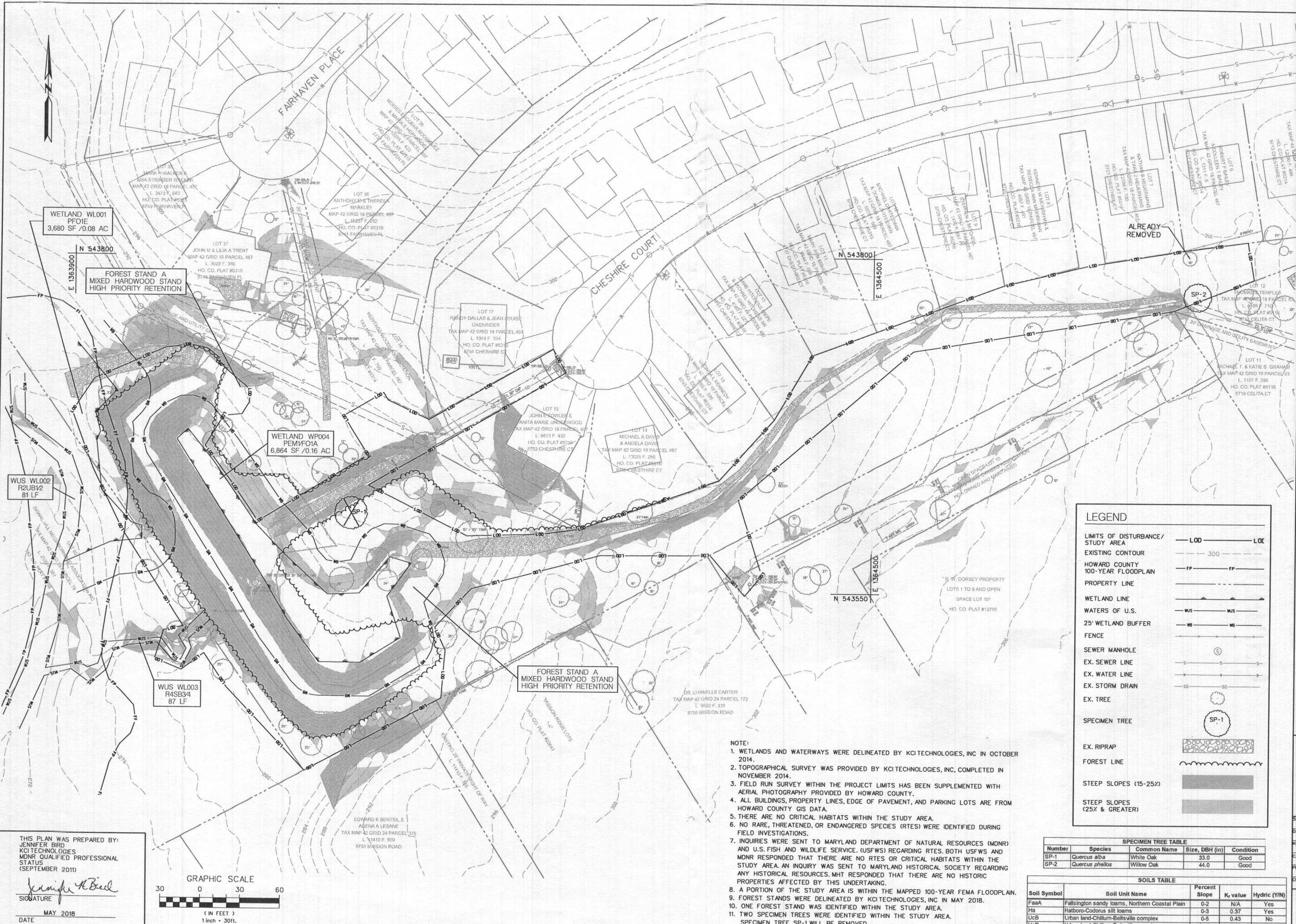
Check issued by _____

- ___ Alternative Compliance application is accepted for processing.
- ___ Scheduled SRC meeting date.
- ___ Alternative Compliance application is rejected.

Reason: _____

___ Resubmission is accepted. Date _____ Staff initials _____

Comments/Notes _____



WETLAND WL001
PFOIE
3,680 SF / 0.08 AC

FOREST STAND A
MIXED HARDWOOD STAND
HIGH PRIORITY RETENTION

WETLAND WP004
PEMFOIA
6,864 SF / 0.16 AC

WUS WL002
R2UB12
81 LF

WUS WL003
R4SB34
87 LF

FOREST STAND A
MIXED HARDWOOD STAND
HIGH PRIORITY RETENTION

LEGEND

LIMITS OF DISTURBANCE / STUDY AREA	---	L00	---	L00
EXISTING CONTOUR	---	300	---	300
HOWARD COUNTY 100-YEAR FLOODPLAIN	---	FF	---	FF
PROPERTY LINE	---	---	---	---
WETLAND LINE	---	---	---	---
WATERS OF U.S.	---	---	---	---
25' WETLAND BUFFER	---	---	---	---
FENCE	---	---	---	---
SEWER MANHOLE	(S)			
EX. SEWER LINE	---	---	---	---
EX. WATER LINE	---	---	---	---
EX. STORM DRAIN	---	---	---	---
EX. TREE	(T)			
SPECIMEN TREE	(SP-1)			
EX. RIPRAP	---	---	---	---
FOREST LINE	---	---	---	---
STEEP SLOPES (15-25%)	---	---	---	---
STEEP SLOPES (25% & GREATER)	---	---	---	---

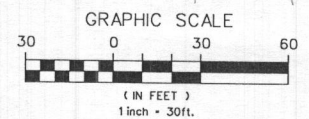
SPECIMEN TREE TABLE

Number	Species	Common Name	Size, DBH (in)	Condition
SP-1	<i>Quercus alba</i>	White Oak	33.0	Good
SP-2	<i>Quercus phellos</i>	Willow Oak	44.0	Good

SOILS TABLE

Soil Symbol	Soil Unit Name	Percent Slope	K _s value	Hydric (Y/N)
FaaA	Fallsington sandy loams, Northern Coastal Plain	0-2	N/A	Yes
Ha	Hatboro-Codorus silt loams	0-3	0.37	Yes
UcB	Urban land-Chillum-Bellsville complex	0-5	0.43	No
UcD	Urban land-Chillum-Bellsville complex	5-15	0.43	No

- NOTE:**
1. WETLANDS AND WATERWAYS WERE DELINEATED BY KCI TECHNOLOGIES, INC IN OCTOBER 2014.
 2. TOPOGRAPHICAL SURVEY WAS PROVIDED BY KCI TECHNOLOGIES, INC, COMPLETED IN NOVEMBER 2014.
 3. FIELD RUN SURVEY WITHIN THE PROJECT LIMITS HAS BEEN SUPPLEMENTED WITH AERIAL PHOTOGRAPHY PROVIDED BY HOWARD COUNTY.
 4. ALL BUILDINGS, PROPERTY LINES, EDGE OF PAVEMENT, AND PARKING LOTS ARE FROM HOWARD COUNTY GIS DATA.
 5. THERE ARE NO CRITICAL HABITATS WITHIN THE STUDY AREA.
 6. NO RARE, THREATENED, OR ENDANGERED SPECIES (RTES) WERE IDENTIFIED DURING FIELD INVESTIGATIONS.
 7. INQUIRIES WERE SENT TO MARYLAND DEPARTMENT OF NATURAL RESOURCES (MDNR) AND U.S. FISH AND WILDLIFE SERVICE (USFWS) REGARDING RTES. BOTH USFWS AND MDNR RESPONDED THAT THERE ARE NO RTES OR CRITICAL HABITATS WITHIN THE STUDY AREA. AN INQUIRY WAS SENT TO MARYLAND HISTORICAL SOCIETY REGARDING ANY HISTORICAL RESOURCES. MHT RESPONDED THAT THERE ARE NO HISTORIC PROPERTIES AFFECTED BY THIS UNDERTAKING.
 8. A PORTION OF THE STUDY AREA IS WITHIN THE MAPPED 100-YEAR FEMA FLOODPLAIN.
 9. FOREST STANDS WERE DELINEATED BY KCI TECHNOLOGIES, INC IN MAY 2018.
 10. ONE FOREST STAND WAS IDENTIFIED WITHIN THE STUDY AREA.
 11. TWO SPECIMEN TREES WERE IDENTIFIED WITHIN THE STUDY AREA. SPECIMEN TREE SP-1 WILL BE REMOVED.



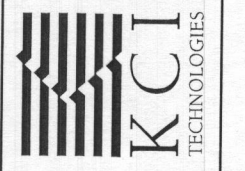
THIS PLAN WAS PREPARED BY:
JENNIFER BIRD
KCI TECHNOLOGIES
MDNR QUALIFIED PROFESSIONAL
STATUS
(SEPTEMBER 2011)

Jennifer A. Bird
SIGNATURE

MAY 2018
DATE

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
www.kci.com



HERITAGE WOODS
SWM POND RETROFIT
CAPITAL PROJECT D-1160
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
8751 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

SIMPLIFIED
FOREST STAND
DELINEATION /
NATURAL
RESOURCE
INVENTORY

SCALE: 1" = 30'
DATE: MAY 2018
KCI JOB NO.: 17133314.72
CAPITAL PROJECT NO.: D-1160
PERMIT ISSUE:
CONSTRUCTION ISSUE:
SHEET NO. 1 OF 1

PLOTTER: HPGL-2, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
 FILE: W:\2013\17133314_72\CD\17133314_72_SWM_Pond_Retrofit.dwg
 DATE: 5/15/2018 10:00 AM

