

DEPARTMENT OF PLANNING & ZONING COMPREHENSIVE PLANNING | LAND PRESERVATION | FOREST CONSERVATION | GIS

AGENDA

WASHINGTON COUNTY PLANNING COMMISSION REGULAR MEETING

May 6, 2019, 7:00 PM
WASHINGTON COUNTY ADMINISTRATIVE COMPLEX
100 WEST WASHINGTON STREET
2ND FLOOR, PUBLIC MEETING ROOM #2000

CALL TO ORDER AND ROLL CALL

OLD BUSINESS

- 1. <u>RZ-19-001</u> Recommendation for the Alcohol Manufacturing Facilities Text Amendment Proposed amendment to Articles 3.3, 11.3, 12.1, 14.1 and 28A of the Washington County Zoning Ordinance; Planner: Jill Baker
- 2. <u>RZ-19-002</u> Recommendation for Text Amendment for Mineral Extraction Proposed amendment to Articles 3, 4.14, 11, 12, 13, 14, 21A, 21B, and 21C of the Washington County Zoning Ordinance; Planner: Travis Allen
- 3. Rosewood Commons Shared Parking Request Planner: Cody Shaw *

NEW BUSINESS

MINUTES

1. April 1, 2019 Planning Commission regular meeting minutes *

SUBDIVISIONS

 Perini Industrial Land LLC [S-19-003] – Preliminary/final plat for Lot 3 for Perini Industrial Land LLC located along the south side of Showalter Road; Zoning: HI (Highway Interchange) with AP/HW (Airport Overlay/Hazardous Wildlife Attractant Management); Planner: Cody Shaw *

SITE PLANS

- Project Snowman [SP-19-012] Site plan for a proposed manufacturing warehouse located at 100 Tandy Drive; Zoning: IG – Industrial General; Planner: Cody Shaw *
- Hub City Vineyards [SP-19-009] Site plan for a proposed addition to an existing church located along the south side
 of Oak Ridge Drive, just east of its intersection with Halfway Boulevard; Zoning: RU (Residential Urban); Planner: Lisa
 Kelly *

FOREST CONSERVATION

- Bowman Truck Terminal [FP-19-007; GP-18-008] Request to utilize offsite retention to satisfy .87 acre planting requirement for the grading of three lots adjacent to the existing truck terminal at 10038 Governor Lane Boulevard; Zoning: EC (Environmental Conservation); Planner: Travis Allen *
- 2. <u>Fountainhead Properties Management</u> [FP-19-009] Request to move a disturbed portion of an existing forest conservation easement at 13716 Crayton Boulevard offsite into the Andrew Michael forest mitigation bank recently established near Cearfoss; Zoning: RS (Residential Suburban); Planner: Travis Allen *

100 West Washington Street, Suite 2600 | Hagerstown, MD 21740 | P: 240.313.2430 | F: 240.313.2431 | TDD: 7-1-1

OTHER BUSINESS

1. <u>Update of Staff Approvals</u> – Ashley Holloway

ADJOURNMENT

UPCOMING MEETINGS

1. Monday, May 6, 2019, 7:00 p.m., Washington County Planning Commission public rezoning meeting and regular meeting, Washington County Administrative Complex, 100 W. Washington Street, 2nd Floor, Public Meeting Room #2000, Hagerstown, Maryland

*attachments

The Planning Commission reserves the right to vary the order in which the cases are called. Individuals requiring special accommodations are requested to contact the Washington County Planning Department at 240-313-2430, to make arrangements no later than ten (10) days prior to the meeting. Notice is given that the Planning Commission agenda may be amended at any time up to and including the Planning Commission meeting.



DIVISION OF PLAN REVIEW & PERMITTING

MEMORANDUM

TO:

Washington County Planning Commission

FROM:

Cody Shaw, Chief of Plan Review

DATE:

March 19, 2019

SUBJECT:

Shared Parking Request for Rosewood Village PUD Phase IIA (PSP-07-001)

Attached you will find for your review a request to allow shared parking for Rosewood Commons within the Rosewood Village PUD.

Rosewood Commons (shopping center) was approved as part of PSP-07-001, Rosewood, Phase IIA. The functional description reflected "retail and office" and the minimum requirements for parking was based on retail use at 5.5 spaces per 1,000 sq. ft. of gross floor area which equated to 122 spaces with 125 spaces provided – 5 being designated as handicapped.

The building consists of 16 tenant spaces. Early tenants consisted of mainly retail sales, as approved on the site plan, including a liquor store, a party supply store, a dry cleaning business and a fitness center. There were also two restaurants approved including Schula's.

Over the years, the occupancy has changed from mainly retail to food service establishments. Currently, there are 7 restaurants, 2 retail businesses, both of which occupy two tenant spaces, and 5 vacant units.

Per the parking matrix provided by the Applicant, there is 11,102 sq. ft. of restaurant space which requires 1 space per 75 sq. ft. of gross floor area or 148 spaces. This well exceeds the number of spaces currently existing at the shopping center.

The parking issue was brought to light with the application for a building permit for Schula's to expand into a third tenant space. The Applicant was advised of the inadequate parking and spoke with staff and presented a resolution. However, since the property is within a PUD, the Planning Commission is charged with reviewing and approving shared or off-site parking requests.

80 West Baltimore Street | Hagerstown, MD 21740-6003 | P: 240.313.2460 | TDD: 711

It is important to note, the Applicant has been advised that no new building permit applications or zoning certifications will be processed until the parking issue has been resolved.

If you have comments regarding the proposed modification and/or the applicant's request, please call or e-mail me at: (240) 313-2442 or cshaw@washco-md.net.

Cody L. Shaw

Chief of Plan Review



72 W Washington St., Hagerstown, MD 21740 Phone (301) 791-4882 Fax (301) 791-4883

April 5, 2019

Mr. Cody Shaw Chief of Plan Review Division of Plan Review and Permitting Washington County

RE Rosewood Shared Parking

Attached please find response to the Planning Commissions comments from our shared parking submittal.

- 1- How will the share parking affect the rest of the PUD?

 The shared parking, we are proposing is in Phase I and Phase IIA.

 The shared parking proposal will not affect the remaining PUD since each Phase is self-sufficient in parking. The next approved Phase IIB has its own dedicated parking.
- 2- Provide an evaluation of the hours of operations of the tenants in Rosewood Commons and how they are staggered (meaning if some are only open in the mornings, some only open for lunch/dinner hours, etc)

Attached find chart that uses percentages of parking requirements per time of day and use.

3- How will you account for parking for future tenants for the vacant units?

Attached is a chart that projects the parking for the vacant spaces. In our request we are including these spaces.

4- Employee parking: approximately 50 employee parking spaces will be moved to the overflow areas

Please let us know if you need any additional information

ROSEWODD PARKING

EXISTING ROSEWOOD 614
EXISTING ROSEWOOD COMMONS 122

TOTAL EXISTING 736

REQUIRED ROSEWOOD 459
REQUIRED ROSEWOOD COMMONS 243

TOTAL REQUIRED 702

TOTAL EXCESS PARKING 34

ROSEWOOD COMMONS PARKING MATRIX

SUITE	CURRENT TENANT	USE	TOTAL SQ FT	PARKING REQUIRED
101	SAFRON BAKERY	RESTAURANT	1,605	21
102	VACANT	RESTAURANT	1,525	20
103	VACANT	RETAURANT	1,525	20
104	ROYAL PAWN	DETAIL	3,050	15
105	ROTAL PAVVIN		3,030	13
106	ROSEWOOD	DETAIL	3,090	15
107	LIQUORS	NETAIL	3,050	17
108	HUMMUS GRILL	RESTAURANT	1,640	22
201	MANGO GRILL	RESTAURANT	1,602	21
202	ZHEST	RETAIL	3,090	15
203	DRYCLEANERS	RETAIL	3,030	±.,
204	VACANT	RETAURANT	1,563	8
205	FUJI	RESTAURANT	1,545	21
206				
207	SCHULA'S	RESTAURANT	4,710	63
208	1			
TOTA	L		24,945	243

MAXIMUM PROJECTED

USE		WE	EKDAY	WE	EKEND
	TOTAL REQUIRED	6AM TO 6PM	6PM TO MIDNIGHT	6AM TO 6PM	6PM TO MIDNIGHT
CCNCDAL DETAIL		60%	90%	100%	70%
GENERAL RETAIL	46	28	42	46	32
DECTALIDANT		50%	100%	100%	100%
RESTAURANT	197	98	197	197	197
REQURIED	243				
ACTUAL USED		126	238	243	229

CURRENT TENANTS

USE	· · · · ·	WE	EKDAY	WE	EKEND
	TOTAL REQUIRED	6AM TO 6PM	6PM TO MIDNIGHT	6AM TO 6PM	6PM TO MIDNIGHT
CENEDAL DETAIL		60%	90%	100%	70%
GENERAL RETAIL	46	28	42	46	32
DECTALIDANT		50%	100%	100%	100%
RESTAURANT	148	74	148	148	148
REQURIED	194				
ACTUAL USED		102	190	194	180



DIVISION OF PLAN REVIEW & PERMITTING

MEMORANDUM

TO: Washington County Planning Commission

FROM: Cody Shaw, Chief of Plan Review

DATE: April 23, 2019

SUBJECT: Preliminary/Final Plat for Perini Industrial Land, LLC – Lot 3 (S-19-003)

Attached you will find for your review a subdivision request for Lot 3 of Perini Industrial Land LLC. Since this plat is a commercial subdivision, it requires Planning Commission approval. The property is a 10.18 acre parcel located on the west side of Crayton Blvd (Tax Map 24, Parcel 470). The zoning for this site is HI – Highway Interchange. This plat is a result of the associated grading plan (GP-19-002 Vista Business Park – Perini Ave Extension). The associated grading plan is for the extension of Perini Avenue, which is to be connected to Crayton Blvd. In doing this, it creates a subdivision, which required this plat to be submitted for approval.

The proposed subdivision was reviewed by Plan Review (Land Use & Engineering), Addressing, City Water, City Sewer, Forest Conservation, Soil Conservation, Maryland SHA, Water Quality, and the Health Department.

Staff is requesting that the Planning Commission grant Staff the authority to approve this plat once all agency approvals have been obtained. Approvals have been obtained from every agency except Plan Review Land Use, City Sewer, and Health Department.

If you have comments regarding the proposed subdivision, please call or e-mail me at: (240) 313-2442 or cshaw@washco-md.net.

Cody L. Shaw

Chief of Plan Review

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THIS PLAN IS CORRECT, THAT IT IS A SUBDIVISION OF THE PART OF THE LANDS DESCRIBED IN A DEED FROM LABAN R. SHOWALTER, ET. AL. TO PERINI INDUSTRIAL LAND, LLC, DATED JUNE 10, 2004 AND RECORDED AMONG THE LAND RECORDS OF WASHINGTON COUNTY, MARYLAND IN LIBER 2396 AT FOLIO 346; AND FURTHER THAT THIS PLAN WAS PERSONALLY PREPARED BY ME, OR THAT I WAS IN RESPONSIBLE CHARGE OVER ITS PREPARATION AND THE SURVEYING WORK REFLECTED HEREON, ALL IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN COMAR 09.13.06.12 IN EFFECT AT THE TIME THIS SURVEY WAS PERFORMED.

DATE

PROFESSIONAL LAND SURVEYOR MARYLAND REGISTRATION No. 21052 EXPIRATION/RENEW DATE: 08/24/2020

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	28.25'	445.00'	3°38'15"	S 87"50'43" E	28.25
	151.27'	540.00'	16°03'00"	S 81'38'20" E	150.77
C3	128.86'	460.00	16'03'00"	N 81°38'20" W	128.44
	33.33'	525.00	3'38'15"	N 87°50'43" W	33.32'
C5	643.83'	445.00'	82'53'44"	N 44°34'43" W	589.12
	29.28'	1704.88	0.59'02"		29.28'
	62.59'	39.77	90'09'44"	N 41°27'30" E	56.33'
	180.28	445.00'	23°12'41"	S 04'46'50" W	179.05
C9	103.23	1540.00'	3°50'26"	S 14'27'57" W	103.21

SOIL TYPES

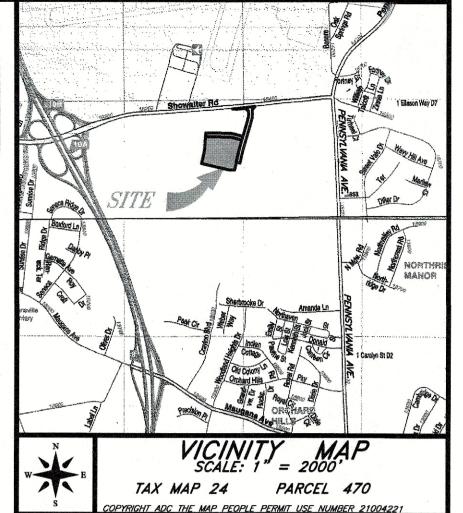
HAGERSTOWN SILT LOAM, O TO 3 PERCENT SLOPES - 71% HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES - 29%

LEGEND:

O REBAR AND CAP FOUND

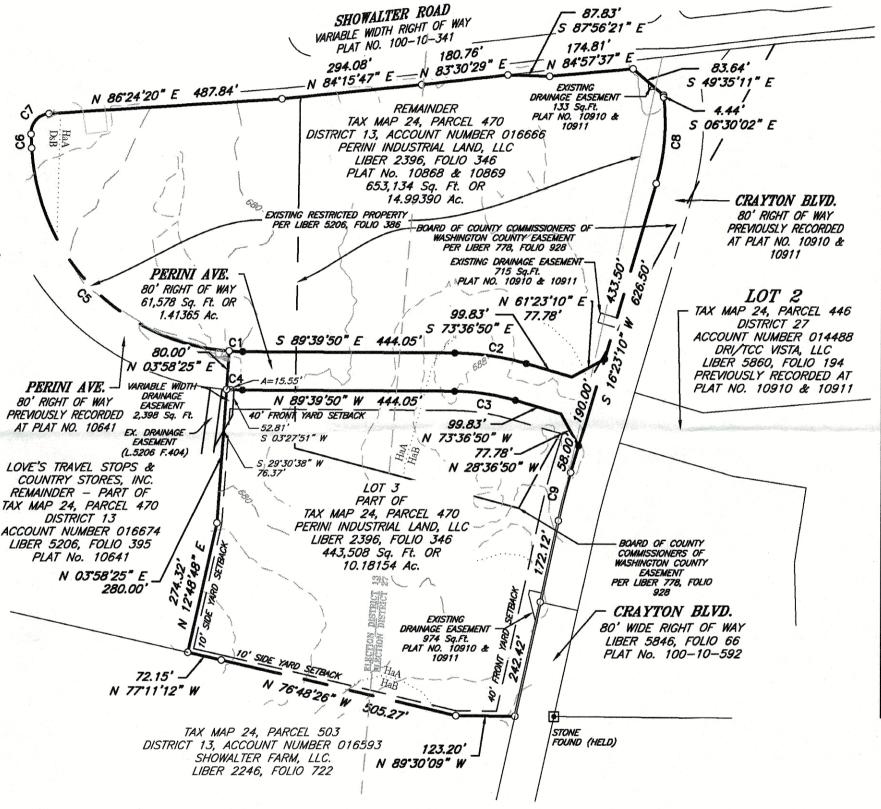
BE SET

REBAR AND CAP TO



NOTES:

- BEARINGS ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD83(2011).
- 2. CONTOURS ARE BASED ON AERIAL PHOTOGRAMMETRY PROVIDED BY MCKENZIE SNYDER, INC. DATE OF SURVEY IS MARCH 19, 2018.
- 3. THE PROPERTY SHOWN HEREON IS ZONED HI HIGHWAY INTERCHANGE DISTRICT.
- THE PROPERTY DELINEATED ON THIS PLAT IS SHOWN ON WASHINGTON COUNTY TAX MAP 24 AS PARCEL 470. BEING ALL THE LAND CONVEYED TO PERINI INDUSTRIAL LAND, LLC, A MARYLAND LIMITED LIABILITY COMPANY, BY DEED DATED JUNE 10, 2004 AND RECORDED IN LIBER 2396, FOLIO 346, OF THE LAND RECORDS OF WASHINGTON COUNTY, MARYLAND.
- 5. THE PROPERTY IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS PER FEMA FLOOD INSURANCE RATE MAP NO. 24043C0128D, DATED AUGUST 15, 2017.
- THERE ARE NO FLOODPLAINS, STEEP SLOPES, STREAMS AND RELATED BUFFERS, OR HABITAT OF THREATENED OR ENDANGERED SPECIES IDENTIFIED BY THE U.S. FISH AND WILDLIFE SERVICE PER 50 CFR 17 AS REQUIRED TO BE SHOWN BY SECTION 318 OF THE SUBDIVISION ORDINANCE AND SECTION 4.21 OF THE ZONING ORDINANCE.
- THE SITE IS NOT LOCATED WITHIN ANY SPECIAL PLANNING AREAS AS DEFINED BY ARTICLE IV, SECTION 411 OF THE WASHINGTON COUNTY
- 8. THE DRAINAGE AREA TO THIS SITE IS LESS THAN 40 ACRES.
- 9. THIS PLAT IS REVIEWED/APPROVED PER THE HI ZONING DISTRICT, ANY DEVELOPMENT/CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WASHINGTON COUNTY ZONING ORDINANCE CURRENTLY BEING
- 10. THERE ARE NO HOUSES, WELLS OR SEWAGE DISPOSAL SYSTEMS VITHIN 100 FEET OF THE SUBDIVISION BOUNDARY, UNLESS SHOWN.
- 11. SHOWALTER ROAD IS CLASSIFIED AS A MINOR ARTERIAL. PENNSYLVANIA AVENUE IS CLASSIFIED AS OTHER PRINCIPAL ARTERIAL.
- 12. ACCESSORY STRUCTURES MAY BE CONSTRUCTED IN ACCORDANCE WITH SECTION 318.1 OF THE SUBDIVISION ORDINANCE.
- 13. THIS PLAT IS NOT INTENDED TO SHOW EVERY MATTER AFFECTING THE OWNERSHIP AND USE NOR EVERY MATTER RESTRICTING THE OWNERSHIP AND USE OF THIS PROPERTY. THIS PLAT IS NOT INTENDED TO REPLACE AN EXAMINATION OF TITLE OR TO DEPICT OR NOTE ALL MATTERS AFFECTING TITLE.
- 14. ADDRESS TO BE ADDRESSED AT TIME OF PERMITTING.
- 15. LOT 3 IS PART OF THE REMAINDER OF PARCEL 1 AS SHOWN ON A SIMPLIFIED PLAT RECORDED AS PLAT No. 10868 & 10869 AMONG THE LAND RECORDS OF WASHINGTON COUNTY, MD.
- 16. THERE IS A 10 FT. WIDE DRAINAGE AND UTILITIES EASEMENT ALONG ALL FRONT LOT LINES AND AN 8 FT. WIDE DRAINAGE AND UTILITIES EASEMENT ALONG ALL SIDE AND REAR LOT LINES HEREBY RESERVED UNLESS OTHERWISE SHOWN HEREON.
- 17. FOREST CONSERVATION HAS BEEN SATISFIED FOR PORTIONS OF LOT 3 AND THE EXTENSION OF PERINI AVENUE BY PAYMENT-IN-LIEU ON COUNTY FILES FP-18-003 AND FP-19-005. ALL ACREAGE ON LOT 3 AND THE REMAINING LANDS SHOWN ON THIS PLAT NOT MITIGATED FOR FOREST CONSERVATION UNDER THE ABOVE REFERENCED PLANS MUST BE MITIGATED WHEN A PLAN IS SUBMITTED FOR THEIR



OWNER'S DEDICATION

WE DO HEREBY CERTIFY, FOR OURSELVES AND OUR PERSONAL REPRESENTATIVES HEIRS AND ASSIGNS, THAT WE ARE THE LEGAL AND TRUE OWNERS OF THE PROPERTY SHOWN AND DESCRIBED ON THIS PLAT AND THAT WE HEREBY ADOPT THE PLAN OF SUBDIVISION SHOWN HEREON, HEREBY DEDICATE TO PUBLIC USE ALL UTILITY AND DRAINAGE EASEMENT AREAS AND ALL ALLEY, STREET, AND ROAD RIGHTS-OF-WAY DESIGNATED ON THIS PLAT, HEREBY AGREE TO KEEP OPEN ALL SPACES AND RECREATION AREAS SHOWN HEREON AND HEREBY AGREE THAT SAID DEDICATIONS SHALL NOT IMPOSE ANY RESPONSIBILITY ON THE BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY REGARDING THE SUBJECTS OF SUCH DEDICATIONS UNTIL LEGAL ACCEPTANCE THEREOF BY SAID BOARD, AND WE HEREBY RESERVE THE FEE SIMPLE TITLE TO THE LAND UNDERLYING SAID EASEMENTS, RIGHTS-OF-WAY, OPEN SPACES AND RECREATION AREAS, AND WITH REGARD TO SAID EASEMENTS AND RIGHTS-OF-WAY, HEREBY AGREE TO CONVEY THE SAME TO SAID BOARD, FOR THE USED OF SAID WASHINGTON COUNTY, WITHOUT CONSIDERATION, UPON THE LEGAL ACCEPTANCE OF SAID EASEMENTS AND/OR RIGHTS-OF-WAY BY SAID BOARD.

THIS DEED AND AGREEMENT OF DEDICATION SHALL BE BINDING UPON OUR GRANTEES, ASSIGNS, SUCCESSORS, HEIRS AND PERSONAL REPRESENTATIVES.

THERE ARE NO SUITS, ACTIONS AT LAW, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS OR RIGHTS-OF-WAY AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION EXCEPT THE FOLLOWING:

AND ALL PARTIES HAVING AN INTEREST TO SIGNATURES INDICATING THEIR ASSENT TO WE DO HEREBY ASSENT TO THIS PLAN OF	THIS PLAN OF SUBDIVISION.
WITNESS OUR HANDS AND SEALS THIS	, DAY OF, 2019.
WITNESS	PERINI INDUSTRIAL LAND LLC
WITNESS	LOVE'S TRAVEL STOPS & COUNTRY STORES, INC.

CERTIFICATE	OF	APP	ROVA	7
CERTIFICATE	Ur	AFF.	$\pi U Y A J$	L

APPROVAL GRANTED: APPROVAL GOOD FOR 6 MONTHS FROM ABOVE DATE

RECEIVED

APR 23 2019

WASHINGTON COUNTY PLAN REVIEW DEPARTMENT

PRELIMINARY/FINAL PLAT PERINI INDUSTRIAL LAND, LLC

PLAT No. DATE **WASHINGTON COUNTY**

SITUATE SOUTH OF SHOWALTER RD. AND WEST OF PENNNSYLVANIA AVE. WASHINGTON COUNTY, MARYLAND

FILE No. S-19-003

PERINI INDUSTRIAL LAND LLC 13725 MARSH PIKE HAGERSTOWN, MD 21742 PAUL A. PERINI, MEMBER

GRAPHIC SCALE

01-04-19 HECKED BY: DATE: 01-04-19 G.E.N.

981 MT. AETNA ROAD

& ASSOCIATES INC

13 24 C-03561 DWG. No. _

CERTIFICATE OF APPROVAL OF COMMUNITY WATER AND/OR SEWERAGE SYSTEM

THIS PLAN/PLAT HAS BEEN REVIEWED BY THE WASHINGTON COUNTY DEPARTMENT OF WATER QUALITY FOR INCLUSION INTO THE COUNTY CAPACITY MANAGEMENT PLAN FOR SYSTEMS

TRIBUTARY TO THE CITY OF HAGERSTOWN WASTEWATER TREATMENT PLANT. ALLOCATION GRANTED

FOR CONSTRUCTION SHOWN ON THIS PLAN/PLAT SHALL BE IN ACCORDANCE WITH THE CAPACITY MANAGEMENT PLAN DEVELOPED FOR THIS SYSTEM BASED ON AVAILABILITY OF ALLOCATION REMAINING IN OTHER JURISDICTIONS FACILITIES THAT MAY BE GRANTED TO THE COUNTY.

I HEREBY CERTIFY THAT THE USE OF THE COMMUNITY WATER AND/OR COMMUNITY SEWERAGE SYSTEM FOR THIS SUBDIVISION IS IN CONFORMANCE WITH THE COUNTY WATER AND SEWERAGE PLAN.

COUNTY HEALTH OFFICER

WASHINGTON COUNTY DEPARTMENT OF WATER QUALITY

OWNER

SCALE: 1" = 200'

FOX & ASSOCIATES, INC. ENGINEERS • SURVEYORS • PLANNERS 82 WORMAN'S MILL CT. STE. 'G'

FREDERICK, MARYLAND 21701 PHONE: (301)695-0880 FAX: (301)293-6009

HAGERSTOWN, MARYLAND 21740 PHONE: (301)733-8503 FAX: (301)733-1853



DIVISION OF PLAN REVIEW & PERMITTING

MEMORANDUM

TO:

Washington County Planning Commission

FROM:

Cody Shaw, Chief of Plan Review

DATE:

April 23, 2019

SUBJECT:

Project Snowman Site Plan (SP-19-012)

A site plan has been submitted for review and approval for Project Snowman on a parcel located at 100 Tandy Drive. The property is located in the IG – Industrial General Zoning District.

The description for this site is for manufacturing of roofing membranes and polyisocyanurate insulation material (PIR) and storage/distribution of roofing materials. The site is located on a 20.5 acre parcel, and the applicant is looking to redevelop the site.

The proposed improvements are shown on the site plan can be summarized as follows:

- Functional description is for manufacturing, storage and distribution of roofing materials
- Hours of operation 24 hrs a day, 7 days a week (Day shift 6 am 6 pm; night shift 6 pm 6 am)
- Total required parking spaces is 40; total parking provided is 126 spaces
- Proposed impervious of the 9.75 acre site area is 6.5 acres (82% of site area)
- Site is served by proposed City Water and City Sewer
- SWM for this site is being handled via underground treatment facilities and regional pond facility
- Forest Conservation is handled via the payment in lieu

The site plan was routed to Plan Review Land use, Plan Review Engineering, Addressing, City Water, City Sewer, Health Department, Forest Conservation, and Soil Conservation. Approvals have been obtained by Addressing. This project has been closely working with the Division of Business Development and has requested to be presented to the Planning Commission. Staff is asking the Planning Commission to grant the Staff authority to approve the plan once all agency approvals have been received.

A copy of the site plan is attached.

80 West Baltimore Street | Hagerstown, MD 21740-6003 | P: 240.313.2460 | TDD: 711

Approvals MD-ENG-6A "I/We certify all/any parties responsible for clearing, grading, construction and/or development will; be done pursuant to this plan and responsible personnel involved in the construction project will have a Certificate of The Soil Conservation District makes no representation as to the existence Training at a Maryland Dept. of the Environment approved training program or nonexistence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure David Koschitzky themselves that no hazard exists or damage will occur to utilities. It is DISTURBED AREA QUANTITY THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE OWNER / DEVELOPERS CERTIFICATION PLANS HAS BEEN DETERMINED TO BE APPROXIMATELY 'I/we hereby certify that all clearing, grading, construction and/or **EXCAVATION AND FILL AS SHOWN ON THESE PLANS** development will be done pursuant to this plan and in accordance with the Stormwater Management Ordinance of Washington County and the policy 13,350 CU. YDS. OF EXCAVATION AND APPROXIMATELY on construction of subdivision infrastructure for acceptance and ownership by Washington County (S-3)." WASHINGTON COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL David Koschitzky (PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL) I hereby certify this plan for soil erosion and sediment control has been designed in accordance with local ordinances, ColivaR 26/17/01.07, and Maryland Standards and Specifications for Soil Erbsion and Sediment I verify and affirm that the Construction for the Stormwater Managemen Facilities as performed either meets or exceeds the requirements and design intent of this plan, including all specifications and referenced standards, and has been completed in accordance with good, construction practices. I also verify and affirm that I have reviewed the construction inspection documentation and the as-built information; that it has been done in accordance with Washington County requirements and at a level I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the deemed necessary to assure the Verification made herein; and all State of Maryland, License No. 20945, Expiration Date: 2019-08-23. discrepancies between the as-built information and approved plans have been noted and are considered acceptable to the Consultant."

Combined ESD Stormwater Concept & Site Plan for

Project Snowman

Situated at: 100 Tandy Drive Hagerstown, MD 21740

OWNER

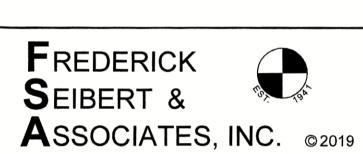
RS Hagers c/o SK Realty
Management
100 Tandy Drive
Hagerstown, MD 21740

ATTN: Kenneth Litoff PHONE: 779-801-4506

DEVELOPER:

Conewago Enterprises, Inc. 660 Edgegrove Road P.O. Box 407 Hanover, PA 17331

ATTN: Andy Feeser PHONE: 717-632-8240 ext. 3168 EMail: afeeser@conewago.com

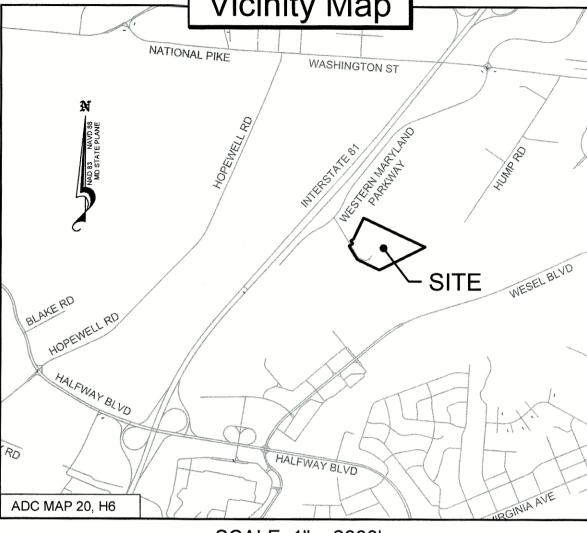


CIVIL ENGINEERS ■ SURVEYORS ■ LANDSCAPE ARCHITECTS ■ LAND PLANNERS
128 SOUTH POTOMAC STREET, HAGERSTOWN, MARYLAND 21740
20 WEST BALTIMORE STREET, GREENCASTLE, PENNSYLVANIA 17225

(301) 791-3650

301) 416-7478

FAX (301) 739-4956



SCALE: 1" = 2000'

Sheet Index

		Officer fridox
TYPE	NUMBER	TITLE
G-001 G-002 V-101 V-102 C-101 C-102 C-103 C-104 C-105	Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Sheet 7 Sheet 8 Sheet 9	Cover Sheet General Notes Environmental Resource Map Demo Plan Erosion & Sediment Control Plan Grading Plan Site & Dimension Plan Utility Plan Stormwater Management Plan
C-201 C-202 C-501 C-502 C-503 C-504 L-101 C-106	Sheet 10 Sheet 11 Sheet 12 Sheet 13 Sheet 14 Sheet 15 Sheet 16 Sheet 17	Stormwater Management Profiles Utility Profiles Erosion & Sediment Control Details & Notes Site Details & Notes Utility Details Stormdrain Details & Notes Landscape Plan Photometric Plan (By Others)

SWM Narrative

The purpose of this project is to construct two building additions, loading areas and truck circulation areas next to an existing building on a previously developed lot located at 100 Tandy Drive which is located east of the Western Maryland Parkway and Tandy Drive intersection in Hagerstown, Maryland. The work area covers 9.75 acres, 3.60 acres (45%) of which is existing impervious coverage. The proposed building area is 126,375 S.F. with a 4,300 S.F. proposed truck circulation area addition. The total proposed new impervious area is 3.00 acres (31%).

The existing site is a previously developed site with impervious coverage greater than 40% and so it is considered redevelopment for SWM purposes. Since the existing impervious area is currently controlled for quantity and quality within a regional facility, this site is not required to treat 50% of the existing impervious area under the redevelopment section of the Ordinance. This site will treat 100% of all new impervious area.

This site qualifies as a redevelopment site per the Washington County, Grading, SWM, and SEC ordinance. For this project, the site area within the LOD is 9.75 acres of which 3.50 acres are existing impervious area and 3.00 acres are proposed impervious. This equates to 21,100 CF of ESD treatment volume required, treating 100% of the new impervious area for ESD to the MEP. The ordinance also states that 50% of existing impervious area must be treated for WQv under redevelopment but as mentioned above, since the existing impervious area inside the LOD (3.60 acres) has already been treated for WQv it will not be treated again within underground system. An ESD treatment volume of 21,108 CF has been provided to return the site into woods in good condition.

The proposed rear access drive, between the building and northern property line, will not be controlled in the proposed underground facility. Instead a portion of the existing building area, that equals the proposed access drive impervious area, will be routed to and handled within the proposed underground facility

Non-structural practices were initially looked at for treating the water quality volume. The steeper slopes, restricted site, and shallow depth to rock do not allow for non-structural methods to be implemented. Bio-retention areas were also considered but not chosen due to the restricted site and the required area for truck movements. The total ESD, CPv (Channel Protection Volume), Qp (Overbank Flood Protection), and Qf (Extreme Flooding) is managed in two underground treatment facilities, one a flow based treatment chamber and one a storage based treatment chamber.

		GRADING CHK BY:	DATE:	PROJECT NUMBER: 7619.1
		KDM	2019	0
		SEC CHK BY:	DATE:	Cover
		DST	2019	Sheet
Resubmittal Set	04-17-19	SWM CHK BY: KDM	DATE: 2019	G-001
Initial Submittal Set	03-08-19			SHEET 1 OF 17
DESCRIPTION:	DATE:	PLAN CHK BY: DST	DATE: 2019	SP-19-012/SWCP19-009

General Notes

- G.1 Any damage to adjoining public roads, utilities, etc. during construction will be repaired in kind by the contractor.
 G.2 No subsurface investigation has been performed by Frederick, Seibert and Associates, Inc. to determine ground water, rock, sinkholes or any other natural or man-made existing features.
- G.3 FSA, Inc. assumes no liability for the location of any above ground and below ground utilities. Existing utilities are shown from the best available information. Contractor to field verify location and depth of all above and below ground utilities prior to construction.
 G.4 The contractor shall locate existing utilities in advance of construction operations in the vicinity of proposed utilities.
 G.5 The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any
- caution in areas where low hanging wires exist.

 G.6 All utilities shall be cleared by a minimum of 1'-0". All utility poles shall be cleared by a minimum of 2'-0" or tunneled if required.

damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense. Contractor to use

G.6 All utilities shall be cleared by a minimum of 1'-0". All utility poles shall be cleared by a minimum of 2'-0" or tunneled if required.
 G.7 The Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these drawings:

Miss Utility Washington County

Washington County
Washington County Engineering & Construction Management
Washington County Soil Conservation District
City of Hagerstown Water Division
City of Hagerstown Wastewater Division

(240) 313-2460 (301) 797-6821 Ext. 3 (301) 739-8577 Ext. 650 (301) 739-8577 Ext. 650

1-800-257-7777

(301) 313-2400

- G. 8 The contractor shall be responsible for coordination of his construction with the construction of other contractors.
 G. 9 Benchmark shown is shown on sheet V-102. The contractor shall have Frederick Seibert & Associates verify location and elevation of benckmark before any construction activity begins.
- G. 10 The contractor shall notify the Architect/Engineer, before construction, of any conflicts between the plans and actual field conditions.
- G. 11 The contractor shall protect all utilities and culvert pipes during construction by insuring proper cover, increasing cover, or constructing roadway and parking through base course before loading site with heavy vehicles.
- G. 12 Job site safety is the sole responsibility of the contractor. The Contractor shall perform all excavation in accordance with
- O.S.H.A. Regulations for trench safety.

 G. 13 The contractor shall perform his own field inspection and surveys (if necessary) to determine the limit of earthwork needed to complete this project. Any earthwork quantities that may be shown hereon are preliminary estimates only, and are intended for Soil Erosion Control plan review, if required. There has been no correction made to the earthwork quantities shown hereon due to the
- compaction of fill.

 G. 14 The contractor shall be aware that in the event of discrepancy between scaled and figured dimensions shown on the plan, the figured dimensions shall govern.
- G. 15 Sediment erosion control measures shall be installed per sediment erosion control plans, details and specifications.
 G. 16 Minimum Load bearing fills (Class 1) proposed for support of buildings, walls, and other structures whose function thereof would
- be especially impaired by the settlement shall be compacted at optimum moisture content to a 95% density.

 G. 17 Minimum Load bearing fills (Class 2) proposed for support of roadways, pavement, and structures which would not be
- especially impaired by moderate settlement shall be compacted at optimum moisture content to a 90% density.

 G. 18. All fills shall be placed in approximately horizontal layers each layer having a loose thickness of not more than eight (8) inches
- G. 18 All fills shall be placed in approximately horizontal layers each layer having a loose thickness of not more than eight (8) inches for class 1 and twelve (12) inches for class 2.
 G. 19 The entire area included within the proposed limits of cut and fill shall be stripped of all root material, trash and other organic
- and otherwise objectionable, non-complying and unsuitable soils and materials.

 G. 20 It shall be distinctly understood that failure to mention specifically any work which would naturally be required to complete the
- project shall not relieve the contractor of his responsibility to complete such work.

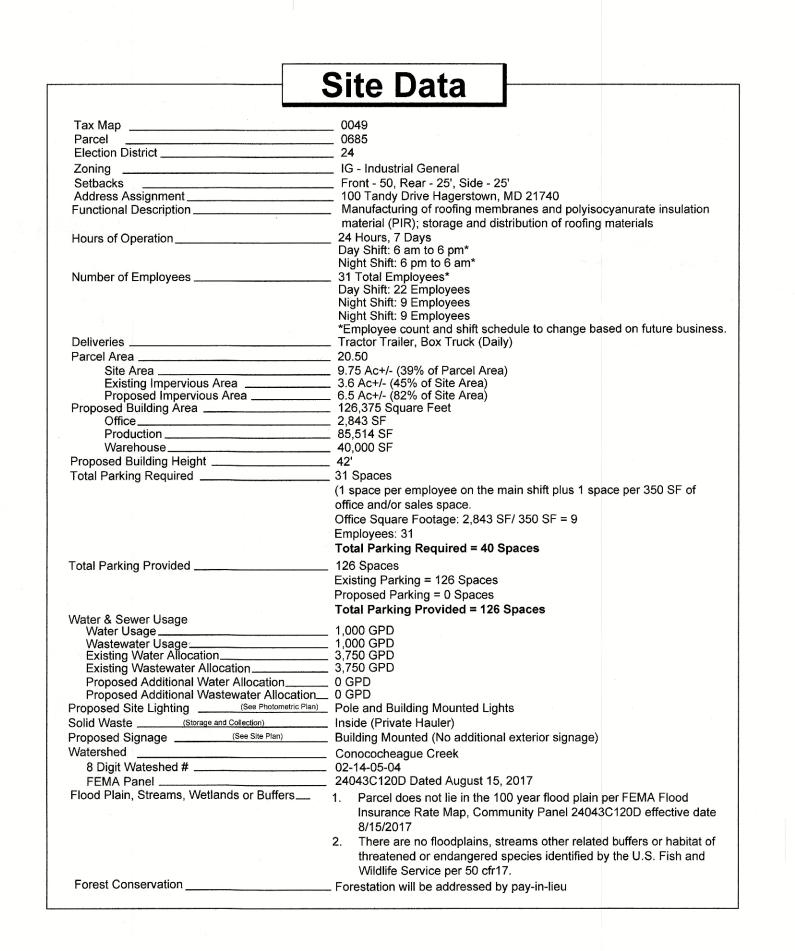
 G. 21 All handicapped parking spaces shall be designed, ramped and signed to meet the minimum requirements of the Maryland code
- for the handicapped.
 G. 22 The existing site contours shown hereon were obtained from a field survey completed and field verified by FSA in January 2019
- (Contour accuracy is to plus or minus one half the contour interval).
 G. 23 Limit of disturbed areas are to be the limit of property ownership, unless otherwise noted.
- G. 24 All road regulatory signing and pavement marking shall comply with the latest MD SHA version of the MUTCD.
- G. 25 The USDA Soil Survey of Washington County shows the soils on this project as being "Karst Landscape" soils. There is a potential for sinkhole formation.
- G. 26 A building permit is required for walls greater than three feet in height.
- G. 27 In conformance with the Stormwater Management Ordinance of Washington County, a performance security and executed maintenance agreement shall be required from the developer prior to issuance of any building or grading permit for construction per these plans.

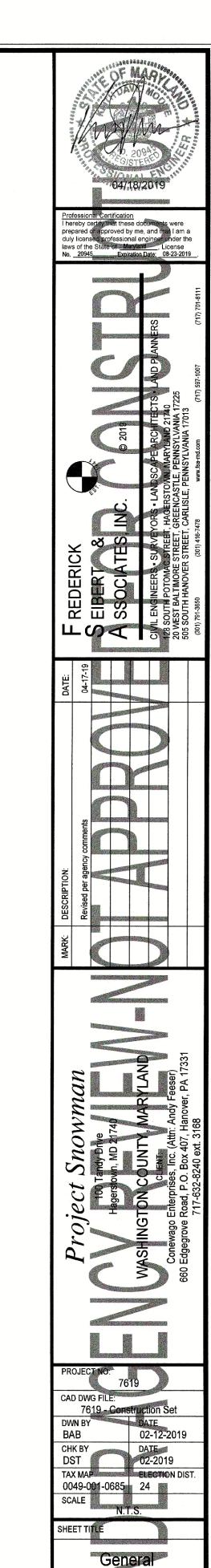
Legend

SYMBOL **FEATURE** EXISTING PROPERTY LINE, CORNER CENTERLINE 98 — CONTOURS TREE LINE — EDGE OF PAVEMENT — CONCRETE CURB STREAM OR DITCH FLOW LINE WATERLINE S/S — SANITARY SEWER LINE, STUB GAS — GAS LINE F/M — FORCE MAIN — STORM DRAIN, END SECTION — ROOF DRAIN PIPE → WATER CAP, REDUCER, BEND γ γ FIRE HYDRANT, METER OVERHEAD ELECTRIC LINE GUARDRAII +++++++++++ +++++++++++++ — RAILROAD TRACKS ---- BUILDINGS.HOUSES, GARAGES — SANITARY SEWER MANHOLE ---- STORM DRAIN INLET -0----- UTILITY POLE ---- HANDICAP PARKING ---- POLE LIGHT — ROAD SIGN + 470.50 + 470.50 — SPOT ELEVATION DOUBLE WATER METER w-SINGLE WATER METER ss----SINGLE SEWER CLEANOUT DOUBLE SEWER CLEANOUT DETAIL# 1 SHEET# ____ ----- DETAIL REFERENCE P.I. ——— POINT OF INTERSECTION P.C. ——— POINT OF CURVATURE B.C. BOTTOM OF CURB P.T. ——— POINT OF TANGENCY T.C. TOP OF CURB

Abbreviation Legend

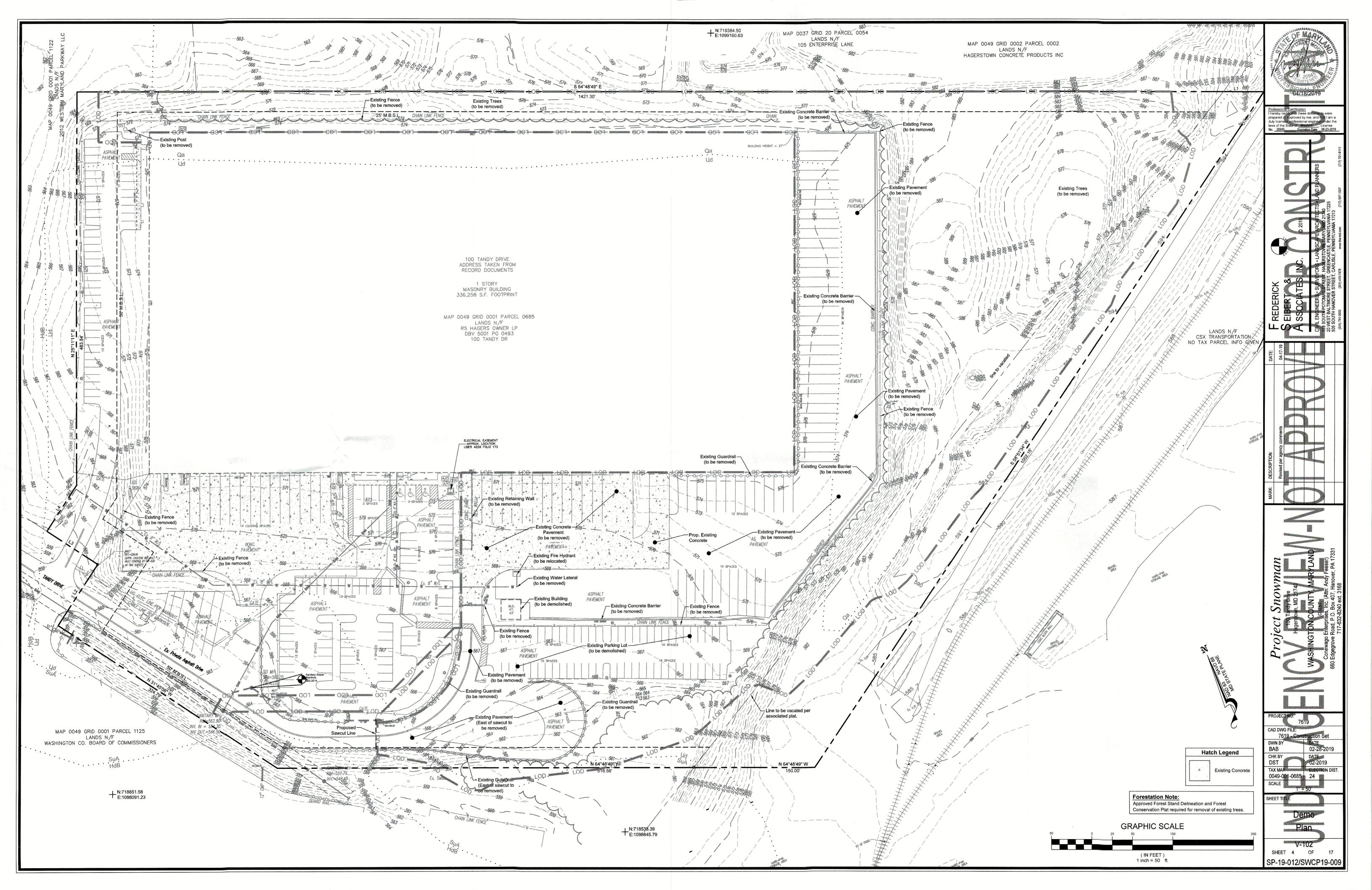
AASHTO	=	American Association OF State Highway and Transportation Officials	N.T.S.	=	Not To Scale
ADS	=	Advanced Drainage System	O.A.E.	=	Or Approved Equal
ASTM	=	American Society for Testing & Material	O.C.	=	
AWWA	=	American Water Works Association	PC	=	Point of Curvature
BLDG	=	Building	PCC	=	Point of Compound Curve
вот	=	Bottom	PGL	=	Proposed Grade Line
CIP	=	Cast Iron Pipe	PRC	=	Point of Reverse Curve
CL	=	Centerline	PT	=	Point of Tangent
CMP	=	Corrugated Metal Pipe	PVC	=	Point of Vertical Curve
СО	=	Sanitary Sewer Plan	PVI	=	Point of Vertical Intersection
CONC	=	Concrete	PVT	=	Point of Vertical Tangent
DA	=	Drainage Area	R/W	=	Right-of-Way
DIA	=	Diameter	SAN	=	Sanitary
EGL	=	Exising Grade Line	SCE	=	Stabilized Construction Entrance
EX	=	Existing	SDR	=	Standard Dimension Ratio
FH	=	Fire Hydrant	SDMH	=	Stormdrain Manhole
GV	=	Gate Valve	SF	=	Square Feet
HGL	=	Hydraulic Grade Line	SSMH	=	Sanitary Sewer Manhole
HDPE	=	High Density Polyethylene	STA.	=	Station
INV	=	Invert	STD	=	Standard
LF	=	Linear Feet	SY	=	Square Yard
MAX	=	Maximum	T.A.N.	=	Type As Noted
MB	=	Mail Box	TEMP	=	Temporary
MIN	=	Minimum	TG	=	Top of Grate
MJ	=	Mechanical Joint	TYP	=	Typical
NO	=	Number	VIF	=	Verify in Field
N.T.C.	=	Not This Contract	WM	=	Water Valve
14.1.0.		THE THE COMMON			

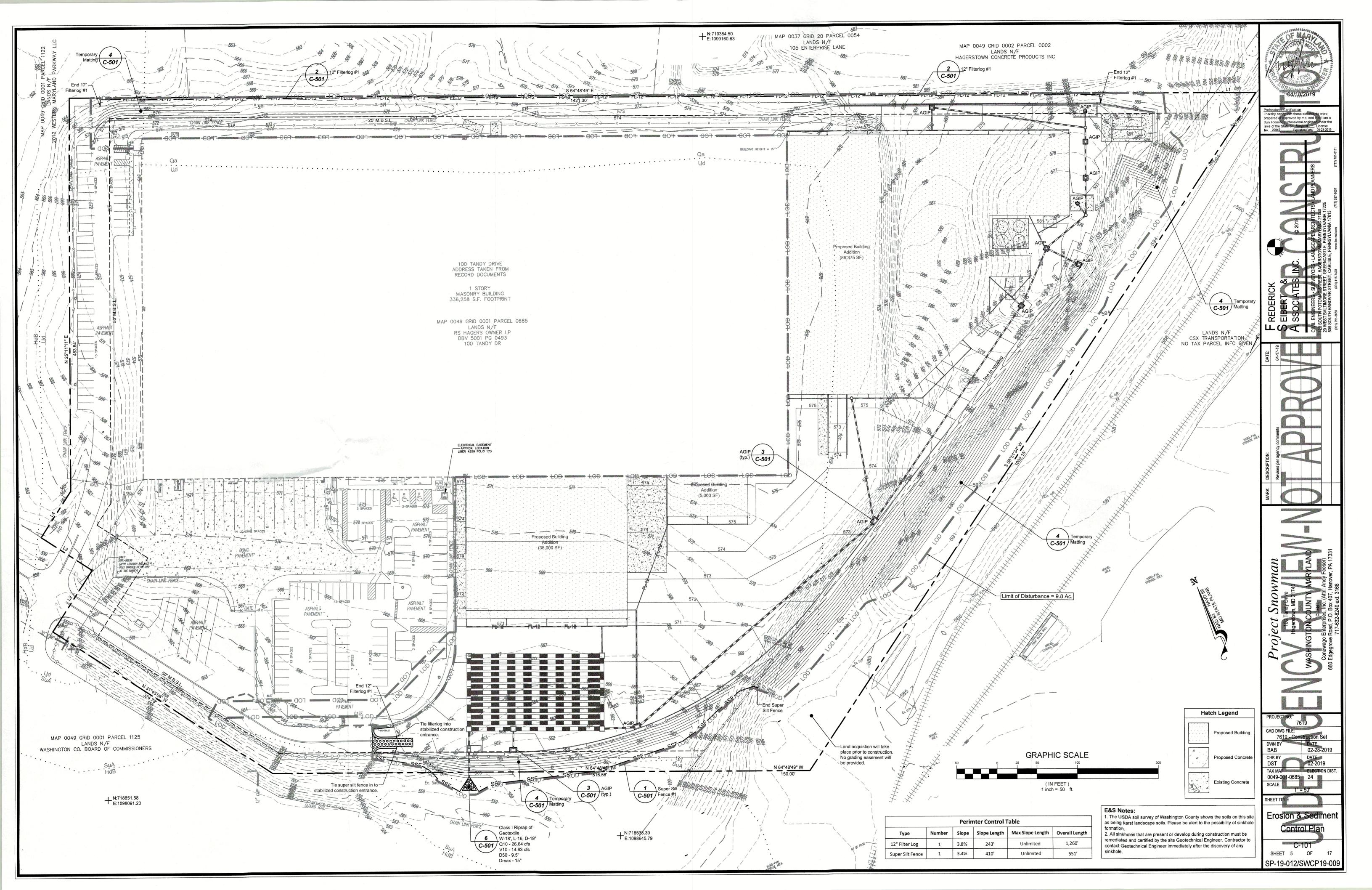


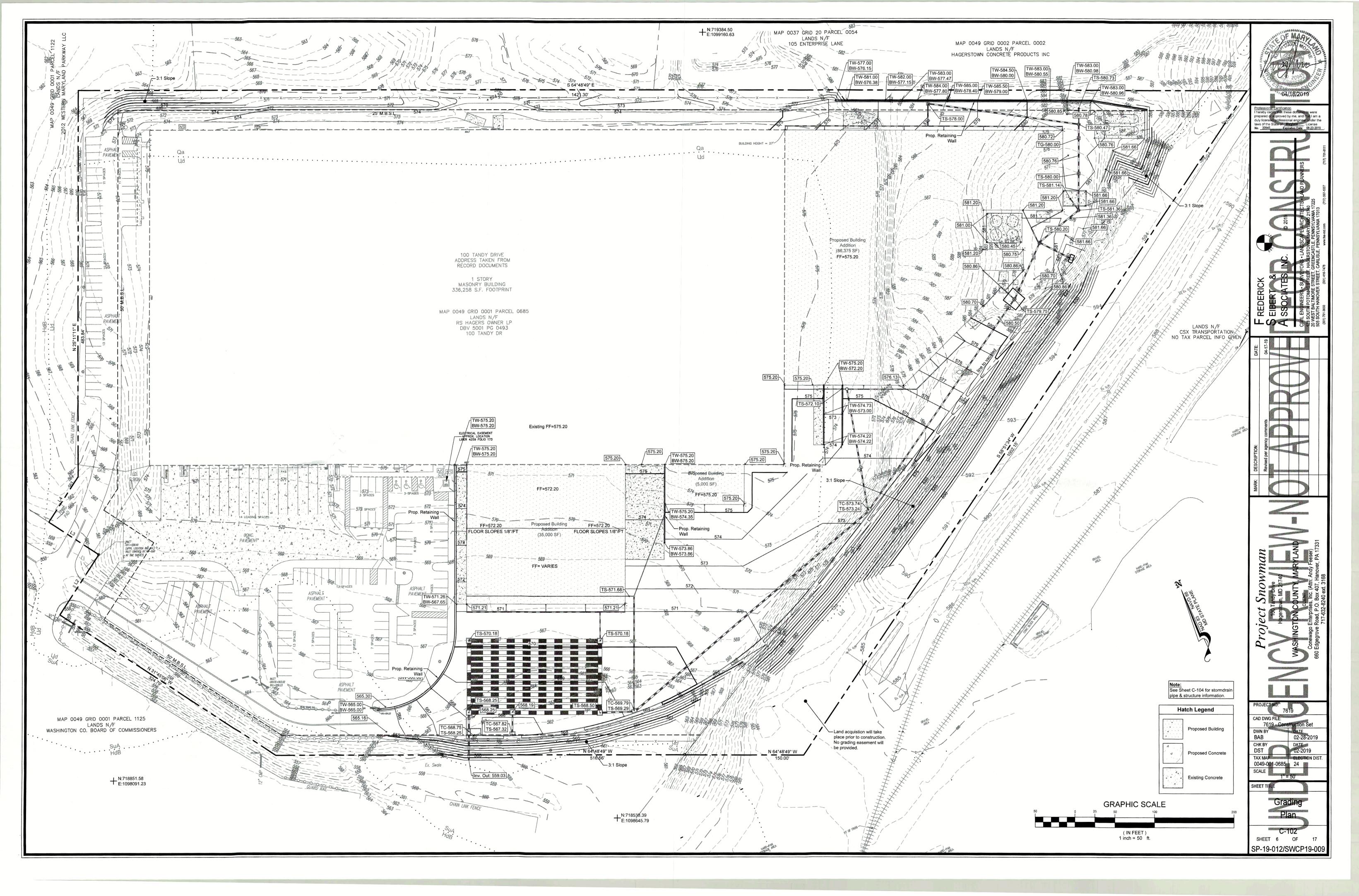


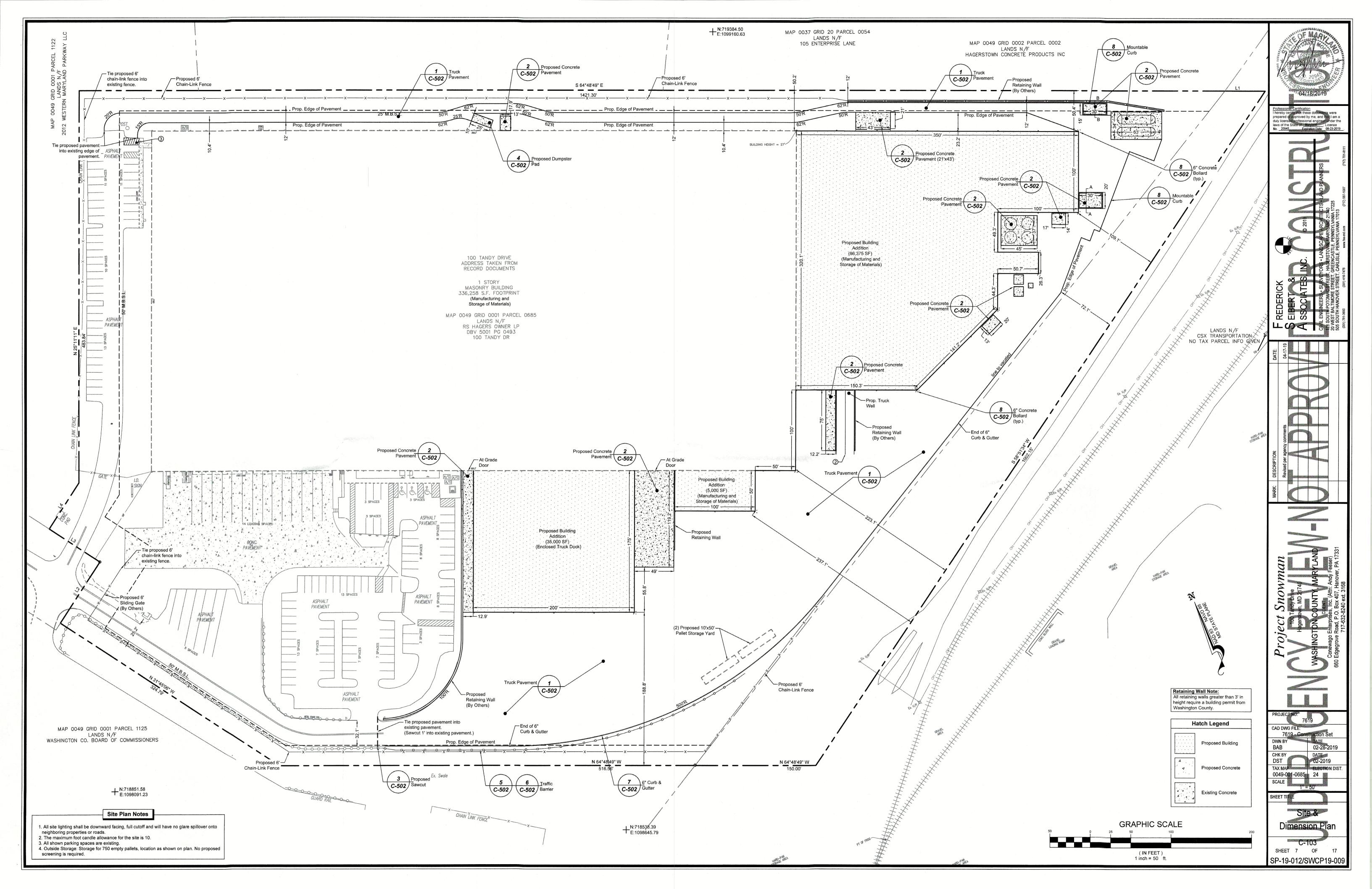
SHEET 2 OF

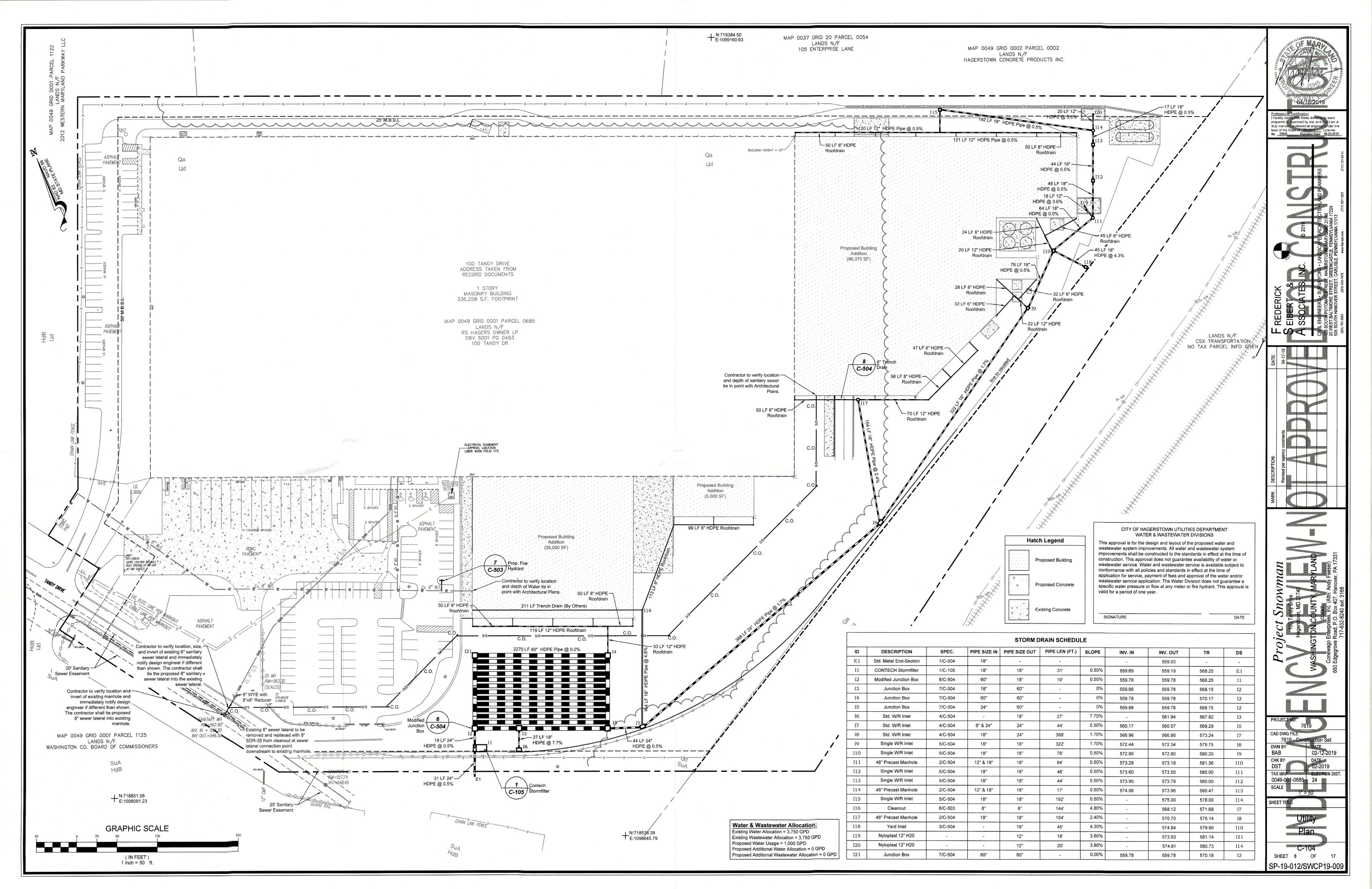
SP-19-012/SWCP19-009

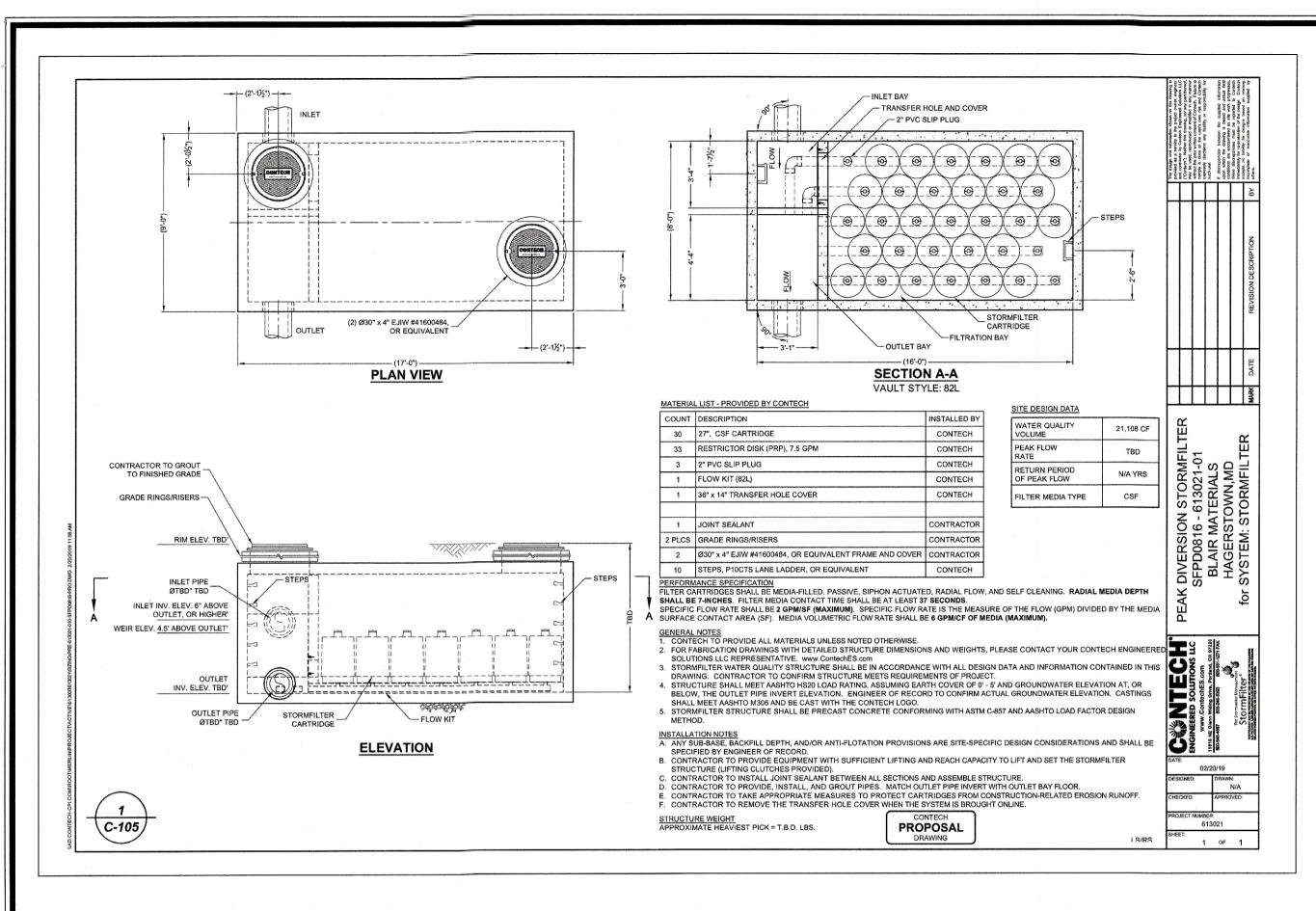


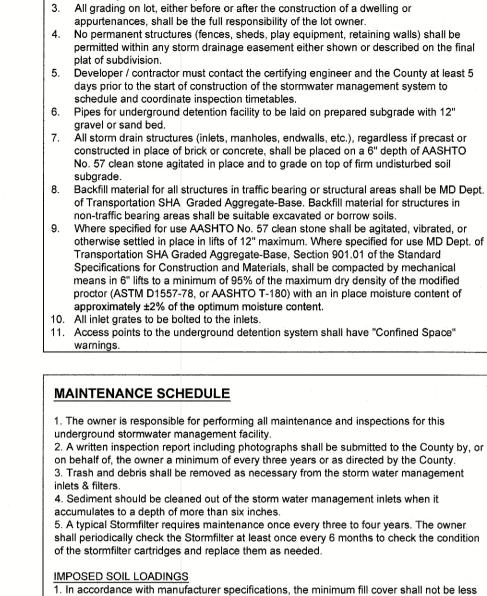












than 1 foot and the maximum fill shall be no more than 55 feet.

All pipe joints shall be watertight.

The contractor is to contact Miss Utility a minimum of 2 days prior to any digging on

NOTICE OF REQUIRED STORMWATER MANAGEMENT INSPECTIONS UNDERGROUND SWM STRUCTURE

The following inspections are required to be performed by the Qualified Professional for the construction of any Public Road. Additional inspections may be needed based on professional engineering judgment. Each inspection is required at the start of each stage.

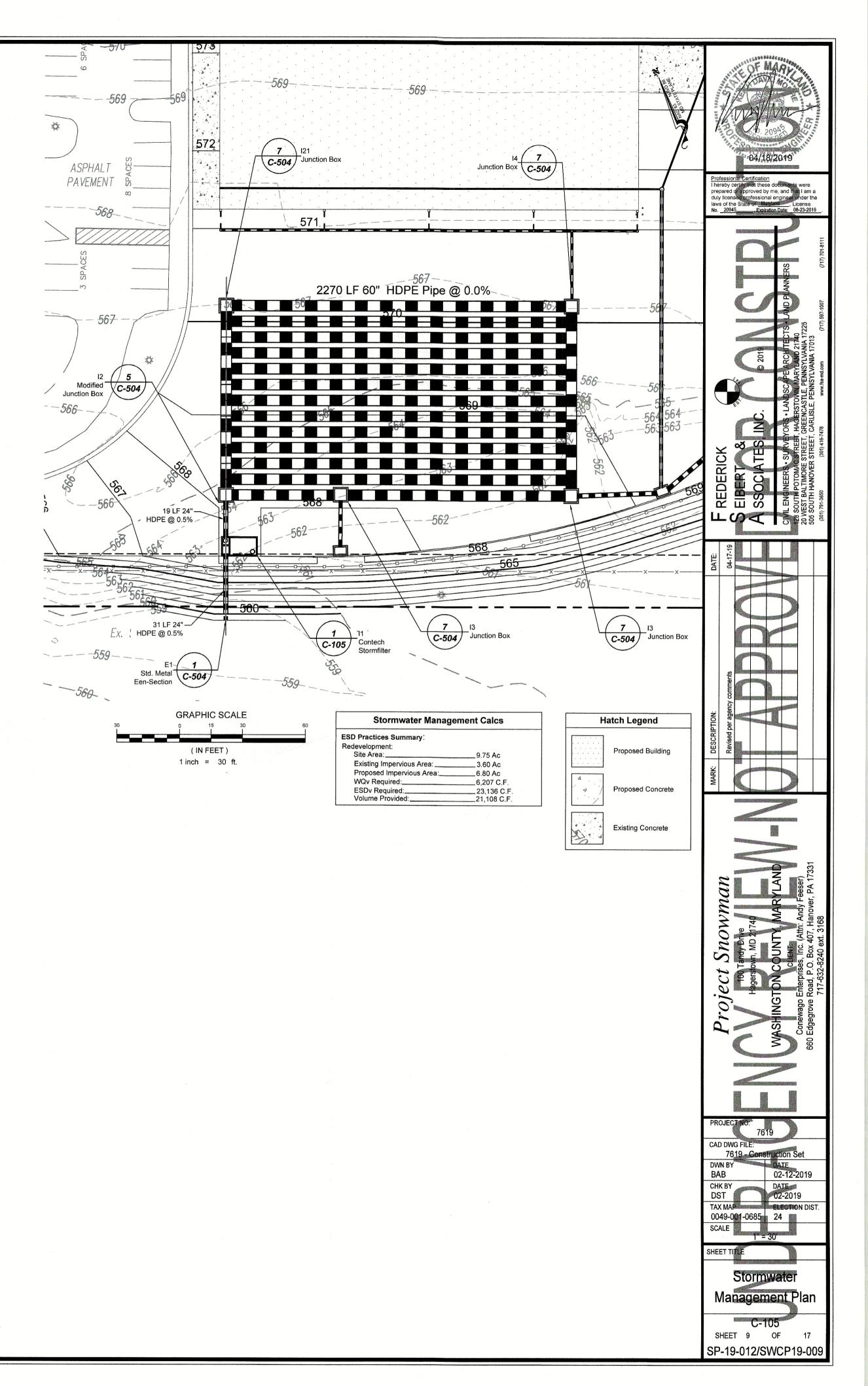
* MANDATORY NOTIFICATION: Inspection and approval by the parties indicated is required at these points prior to proceeding with construction. The permittee is required to give the required inspection parties twenty-four (24) hours notice. The county inspector may waive an inspection, provided the design engineer and/or geotechnical engineer makes the required inspection per a prior scheduled arrangement which has been confirmed with the county inspector. Work completed without the necessary party's approval may result in the permittee having to remove and reconstruct the unapproved work. The

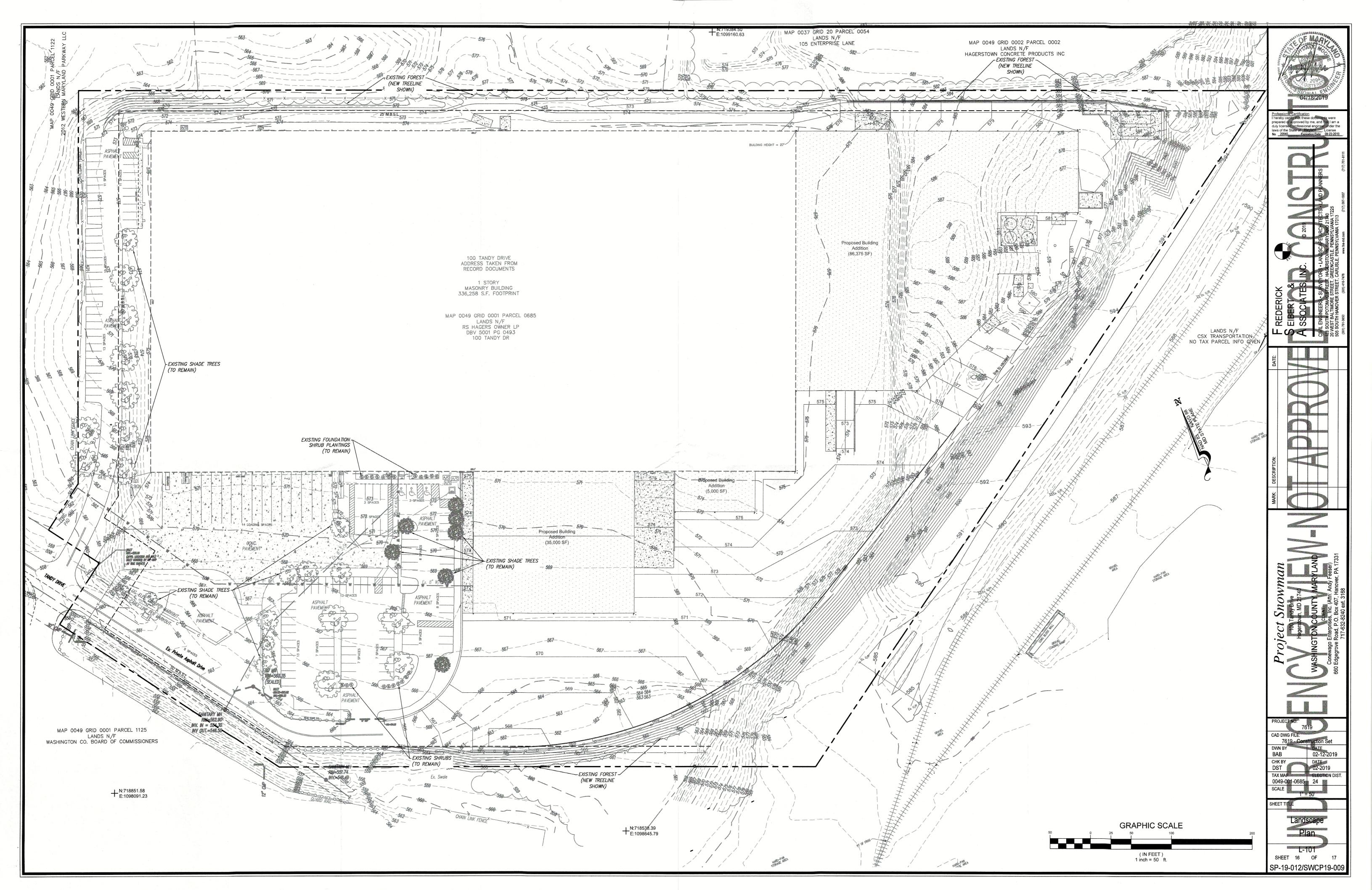
Inspection Item	Certifying Engineer	Date	County Inspector	Date
Sediment control installation			5	
Excavation for stormwater management structure (GEO)			5	
nstall stormwater management control structure/storage structure and associated storm drainage; a. Footing subgrade, prior to pouring (GEO)				
Forms set and rebar placed for walls/slabs prior to pouring (DE)				
Pipe assembled in place (DE) on acceptable subgrade (GEO)				
Any required storm drain pipe installed to structure and temporarily plugged shut (DE)			The second secon	
nternal components installed, if any (DE)				
Backfilling of drainage structure (GEO)				
nstallation of storm drain inlet protection or blocking on all inlets draining to structure which may receive silt-laden unoff			- 44 - 45 - 45 - 45 - 45 - 45 - 45 - 45	
nstallation of final compacted cover and grade - Lifts, compaction, soil material (GEO) - Location, dimensions (DE)				
Stabilize drainage area to stormwater management structure				
Removal of sediment and construction debris from structure				
Remove temporary blocking (DE) and (GEO)				
Submit record drawing and documentation (DE)				
inal Inspection				

The Qualified Professional may request the presence of a County Construction Standards Inspector at least 24 hours in advance by calling 240-313-2400.

Stormwater Management Facilities Construction Inspection Requirements

- The developer/contractor shall notify the Division of Public Works ("DPW") at least five (5) days before commencing any work in conjunction with the approved
- final stormwater management plan and upon completion of the project when a final inspection will be conducted. Regular inspections shall be made and documented for each structural ESD planning technique and practice and structural stormwater measures every 2
- weeks and at the required critical inspection stages identified in the attached checklists and the Washington County SWM, Grading, Soil Erosion and Sediment . All non-structural practices shall be inspected, at a minimum, upon completion of final grading, the establishment of permanent stabilization, and before
- issuance of use and occupancy permit. I. Inspections shall be conducted by DPW, the MDE (as applicable), and by the Verifying Professional. Inspections performed by the DPW are not to be
- considered a substitute for those inspections required by the Verifying Professional. Written inspection reports shall be prepared by the Verifying Professional during construction of ESD planning techniques and practices plans. Copies of all inspection reports shall be provided to DPW by the person performing the inspection and kept on file with DPW.
- . Written inspection reports are required and shall be submitted in a manner consistent with the Public Works Agreement and this Article and in a format
- approved by DPW, and shall include, at a minimum: 5.a. The date and location of the inspection;
- 5.b. Work observed;
- 5.c. Photos: 5.d. Tests performed;
- 5.e. Whether construction was in compliance with the approved stormwater management plan;
- 5.f. Any variations from the approved construction specifications;
- 5.g. Any violations that exist;
- 5.h. Signature and date of Verifying Professional. 6. Failure to comply with these inspection requirements and/or obtain approval from the Verifying Professional or DPW at the required construction stages will
- result in disapproval of the facility, delays of final acceptance and permit release.
- The developer, DPW, the MDE, Verifying Professional, and on-site personnel shall be notified in writing when violations are observed. Written notification shall be made by the person discovering the violation and shall describe the nature of the violation and the required corrective action. No further work affected by the violation shall proceed until the corrective action is inspected and approved in writing by the Verifying Professional, the Division, MDE (as applicable), and
- the District (as applicable). B. DPW may require adjustments to address items overlooked or inappropriately addressed by the plans. Such adjustments may be required during construction or at the final inspection.
- The County may require a revision to the approved construction drawings or site plans be submitted and approved by the DPW, the Division of Planning and Community Development (as applicable), the MDE (as applicable) and the District prior to continuation of construction activity. 10.No work shall proceed beyond the construction stages specified in attached Checklists and the Washington County SWM, Grading, Soil Erosion and Sediment
- Control Ordinance until DPW and the Verifying Professional inspect and approve the work previously completed and the Verifying Professional furnishes the DPW and developer with the results of the inspection reports as soon as possible after completion of each required inspection.







WASHINGTON COUNTY DIVISION OF PLAN REVIEW & PERMITTING

80 West Baltimore Street | Hagerstown, MD 21740-6003 | P: 240.313.2460 | F: 240.313.2461 | Hearing Impaired: 7-1-1

SITE PLAN STAFF REPORT

BASE INFORMATION SITE NAME..... **Hub City Vineyard** NUMBER....: SP-19-009 OWNER....: HUB CITY VINEYARD INC LOCATION....: southeast side of Oak Ridge Drive DESCRIPTION....: Site plan for addition to existing church ZONING....: Residential, Urban COMP PLAN LU....: Low Density Residential PARCEL....: 26037859 PLANNING SECTOR....: 1 ELECTION DISTRICT....: 26 TYPE.....: Institutional GROSS ACRES....: 4.01 DWELLING UNITS..... TOTAL LOTS.....: DENSITY....: 0 Units Per Acre PLANNER..... Lisa A Kelly ENGINEER....: FREDERICK SEIBERT & ASSOCIATES RECEIVED....: February 15, 2019

SITE ENGINEERING

HYDROGRAPHY, SENSITIVE & ENVIRONMENTAL INFORMATION

WETLANDS.....:

WATERSHED....:

ENDANGERED SPECIES...:

None

STEEP SLOPES...:

No

STREAM BUFFER...:

No

FLOOD ZONE.....:

HISTORIC INVENTORY...... No Resources Present

No

EASEMENTS PRESENT...... None

Staff Comments:

Not Applicable



WASHINGTON COUNTY DIVISION OF PLAN REVIEW & PERMITTING

80 West Baltimore Street | Hagerstown, MD 21740-6003 | P: 240.313.2460 | F: 240.313.2461 | Hearing Impaired: 7-1-1

	SITE DESIGN		
Impervious Area Plan	Impervious Maximum	Allowed	Open Space Area Planned
61			
Open Space Minimum Required	Residential Amenity	Plans	Solid Waste Disposal Plans
	n/a		Inside trash can
Materials Stored on Site	Buffer Design Meets Req	uirements	Landscaping Meets Requirements
No	Yes		Yes
Lighting Plan Meets Requirements	Pedestrian Access is Ac	dequate	Bus Stop is Within Walking Distance
Yes			
Loading Area Meets Requirements			
			Not Fast Track
Parking Spaces - Total Planned	Parking Spaces - Per Dwe	elling Unit	
164			
Parking Spaces - Minimum Required	Recreational Parking P	rovided	
152	No		
ACCESS SPACING VARIANCE NEEDED:	No		
	SCHOOL INFORMA	TION	
	ELEMENTARY	MIDDLE	HIGH
SCHOOL DISTRICT	Lincolnshire	Springfiel	d Williamsport
PUPIL YIELD			
CURRENT ENROLLMENT			
MAXIMUM CAPACITY			
	PUBLIC FACILITIES INFO	RMATION	
FIRE DISTRICT:	HALFWAY		
AMBULANCE DISTRICT:	HALFWAY		
	WATER & SEWER INFOR	RMATION	
	WATER		SEWER
METHOD:	City		County
SERVICE AREA:	City		County
PRIORITY:	1-Existing Service	e	1-Existing Service
NEW HYDRANTS:			
GALLONS PER DAY SEWAGE:			
PLANT INFO:			Conococheague

Site Plan for Hub City Vineyard

Presented is a site plan for Hub City Vineyard Church at the site of the Church of the Holy Trinity.

The subject site is located along the south side of Oak Ridge Drive, just east of its intersection with Halfway Boulevard. Zoning is Residential Urban.

The congregation of Hub City Vineyard is proposing to construct a 13,007 square foot addition to the existing 14,600 square footage of the existing Church of the Holy Trinity. Both congregations will use the enlarged 27,700 square foot church for services. During the week, Hub City Vineyard will also run a child daycare facility. Church offices are currently located in a separate building located behind the church. This will remain as an office for both churches. An existing child play area and pavilion will remain. Total parcel area is 4.01 acres.

Building height of the church will be 30 feet.

The site will have two entrances – the existing combined entrance and the addition of an exit only access onto Oak Ridge Drive.

Public water and sewer will service the site.

Church services will be on Sunday mornings. The daycare will occur Monday thru Friday 6:00 am to 6:00 p.m.

Parking required is 152 spaces with 164 spaces being provided.

A screened dumpster will provide for solid waste.

Site lighting will be building mounted and pole mounted in the parking lot.

Site signage will be building mounted.

Forest requirements will be met by a proposal to pay the fee in lieu of \$5,096.52.

Landscaping is located around the church and throughout the parking lot.

SITE PLAN for HUB CITY VINEYARD

Situate at: 17805 Oak Ridge Drive Washington County, Maryland

OWNER/DEVELOPER:

Hub City Vineyard, Inc. 11000 Bower Ave. #12 Hagerstown, MD 21740

ATTN: Christy Thompson PHONE: (301)-582-3344 EMail: Christy@hcv.church

Approvals OWNER / DEVELOPERS CERTIFICATION MD-ENG-6A SCS "I/We certify all/any parties responsible for clearing, grading, construction and/or development will; be done pursuant to this plan and responsible personnel involved in the construction project will have a Certificate of Training at a Maryland Dept. of the Environment approved training program or nonexistence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities. It is DISTURBED AREA QUANTITY THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE OWNER / DEVELOPERS CERTIFICATION PLANS HAS BEEN DETERMINED TO BE APPROXIMATELY 2.6 ACRES AND THE TOTAL AMOUNT OF "I/we hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and in accordance with the EXCAVATION AND FILL AS SHOWN ON THESE PLANS Stormwater Management Ordinance of Washington County and the policy HAS BEEN COMPUTED TO BE APPROXIMATELY 2400 CU. YDS. OF EXCAVATION AND APPROXIMATELY 2023 CU. YDS. OF FILL. on construction of subdivision infrastructure for acceptance and ownership by Washington County (S-3)." WASHINGTON COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL (PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL) WASHINGTON COUNTY DIVISION OF PLAN REVIEW AND PERMITTING ENGINEER / ARCHITECT DESIGN CERTIFICATION hereby certify this plan for soil erosion and sediment control has been designed in accordance with local ordinances, COMAR 26.17.01.07, and SIGNATURE Maryland Standards and Specifications for Soil Erosion and Sediment ENGINEER'S STORMWATER MANAGEMENT CERTIFICATION "I verify and affirm that the Construction for the Stormwater Management Facilities as performed either meets or exceeds the requirements and design intent of this plan, including all specifications and referenced REG. NO. standards, and has been completed in accordance with good construction practices. I also verify and affirm that I have reviewed the construction inspection documentation and the as-built information; that it has been I hereby certify that these documents were prepared or approved by me, done in accordance with Washington County requirements and at a level and that I am a duly licensed professional engineer under the laws of the deemed necessary to assure the Verification made herein; and all State of Maryland, License No. 49808, Expiration Date: 08/24/2020. discrepancies between the as-built information and approved plans have been noted and are considered acceptable to the Consultant." MASHINGTON COUNTY DEPARTMENT OF WATER QUALITY This plan/plat has been reviewed by the Washington County Department of Water Quality for inclusion into the county capacity management plan for the system that serves this project. Allocation granted for construction shown on this plan/plat shall be in accordance with the capacity management plan developed for this system based on availability of allocation remaining in the facility.

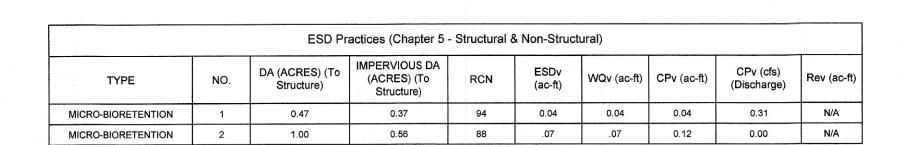
DATE

SIGNATURE

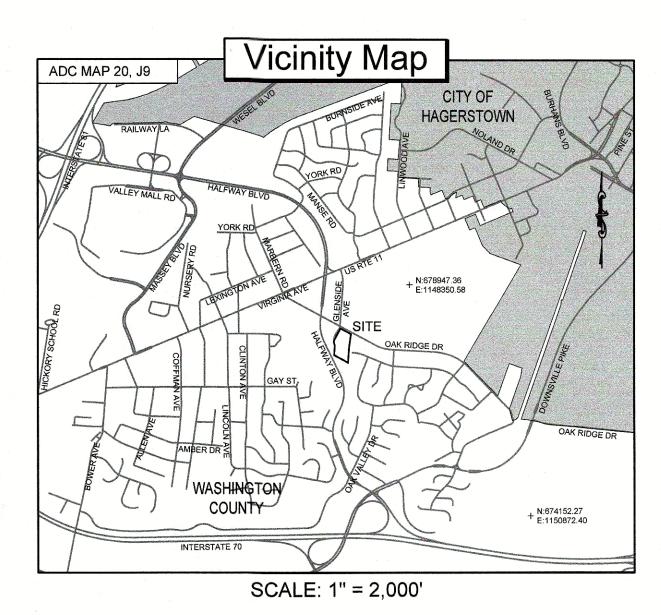
P:\Shared Folders\Projects\5230\5230.1\dwgs\Construction Set\01-C-001-Cover Sheet.dwg, 4/18/2019 4:29:35 PM



CIVIL ENGINEERS ■ SURVEYORS ■ LANDSCAPE ARCHITECTS ■ LAND PLANNERS 128 SOUTH POTOMAC STREET, HAGERSTOWN, MARYLAND 21740 FAX (301) 739-4956







Sheet Index

TYPE	NUMBER	TITLE	
C-001	SHEET 1	COVER SHEET	
C-001	SHEET 2	GENERAL NOTES	
V-101	SHEET 3	EXISTING CONDITIONS PLAN	
V-102	SHEET 4	SITE DEMOLITION PLAN	
C-101	SHEET 5	SITE & DIMENSIONING PLAN	
C-102	SHEET 6	GRADING AND SEDIMENT EROSION CONTROL PLAN	
C-103	SHEET 7	STORMWATER MANAGEMENT PLAN	
C-501	SHEET 8	STORMWATER MANAGEMENT DETAILS AND NOTES	
C-502	SHEET 9	SEDIMENT EROSION CONTROL DETAILS AND NOTES	
C-503	SHEET 10	SITE DETAILS AND NOTES	
C-504	SHEET 11	UTILITY PROFILES, DETAILS AND NOTES	
L-101	SHEET 12	LANDSCAPE PLAN, DETAILS & NOTES	

SWM Narrative

Stormwater Management Requirements

This project was designed in accordance with Washington County's Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance, which was adopted February 26, 2013 and current MDE SWM regulations. Sections 3.5.1 and 3.6.2 of the Wash. Co. ordinance specifies the minimum SWM control requirements. These requirements are ESD to MEP, Channel Protection volume, CPv, and 2-yr and 10-yr peak flows.

The plan is designed to minimize the extent and duration of earth disturbance, protect existing drainage channels, and minimize soil compaction to the maximum extent practical. The site is proposing 1.3 acres of new impervious coverage across 2.6 acres of disturbed area. The Water Quality, WQv, and Environmental Site Design volume, ESDv generated is 4,719 CF and 8494 CF respectively. This site proposes to address the entire ESDv through micro-scale practices. There is no room for non-structural practices within the drainage area. The ESDv will be treated through micro bio-retentions. Together the proposed BMPs provide 8,781 CF of treatment volume.

		GRADING CHK BY:	DATE:	PROJECT NUMBER: 5230.1	
		TMF		COVED	
		SEC CHK BY:	DATE:	COVER	
		TMF		SHEET	
		SWM CHK BY: TMF	DATE:	C-001	
Revised per Wash. County Water Quality comments	3/27/2019	I IVII			
DESCRIPTION:	DATE:	PLAN CHK BY: TMF	DATE:	SHEET 1 OF 12 SP-19-009	

2.6000

GENERAL NOTES G.1 Any damage to adjoining public roads, utilities, etc. during construction will be repaired in kind by the contractor. G.2 No subsurface investigation has been performed by Frederick, Seibert and Associates, Inc. to determine ground water, rock, sinkholes or any other natural or man-made existing features. Refer to the Geotechnical Report for this site prepared by Hillis-Carnes & Associates. G.3 FSA, Inc. assumes no liability for the location of any above ground and below ground utilities. Existing utilities are shown from the best available information. Contractor to field verify location and depth of all above and below ground utilities prior G.4 The contractor shall verify the existence and location of all the utilities, shown hereon or otherwise, and verify existing conditions before beginning construction. It is the responsibility of the contractors to assure themselves that no hazard exists or damage will occur to the utilities. It is required that "miss utility" (1-800-257-7777) and all applicable utility companies be contacted at least one week prior to commencement of work. G.5 The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense.

	Triff damage meaned due to the contractor of operation of the partor minimalisticity at the contractor of expense.
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G.6	All utilities shall be cleared by a minimum of 1'-0". All utility poles shall be cleared by a minimum of 2'-0" or tunneled if
	required.
G.7	The Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these
	drowings

Miss Utility	(800) 257-7777
Potomac Edison	(800) 255-3443
Columbia Gas	(888) 460-4332
Maryland Department of the Environment	(301) 665-2850
Washington County Department of Water Quality	(240) 313-2600
Washington County Division of Construction	(240) 313-2400
Washington County Soil Conservation District	(301)-797-6821 Ext. 3

- G.9 Benchmark as shown, See Sheets V-101 and V102.
- G.10 The contractor shall be responsible for notifying the Architect/Engineer, before construction, of any discrepancies in the plans, actual field conditions and/or in the relationship of finished grades to existing prior to beginning work.
- G.11 The contractor shall protect all utilities and culvert pipes during construction by insuring proper cover, increasing cover, or constructing roadway and parking through base course before loading site with heavy vehicles.
- G.12 Job site safety is the sole responsibility of the contractor. The Contractor shall perform all excavation in accordance with O.S.H.A. Regulations for trench safety.
- G.13 The contractor shall perform his own field inspection and surveys (if necessary) to determine the limit of earthwork needed to complete this project. Any earthwork quantities that may be shown hereon are preliminary estimates only, and are intended for Soil Erosion Control plan review, if required. There has been no correction made to the earthwork quantities
- shown hereon due to the compaction of fill. G.14 The contractor shall be aware that in the event of discrepancy between scaled and figured dimensions shown on the plan, the figured dimensions shall govern.
- G.15 Erosion & Sediment control measures shall be installed per erosion and sediment control plans, details and specifications.
- G.16 Fills shall be placed in accordance with the geotechnical engineers specifications. G.17 The entire area included within the proposed limits of cut and fill shall be stripped of all root material, trash and other
- organic and otherwise objectionable, non-complying and unsuitable soils and materials. Unless otherwise directed by the geotechnical engineer.
- G.18 It shall be distinctly understood that failure to mention specifically any work which would naturally be required to complete the project shall not relieve the contractor of his responsibility to complete such work.
- G.19 Stormwater management is being provided by two proposed bioretention areas.
- G.20 Fill brought to this site and/or excavation/sediment exported from this site shall be imported/exported from a site with an approved and up-to-date erosion and sediment control plan and N.P.D.E.S. Permit, where applicable.
- G.21 The site shall comply with the Maryland Accessibility Code and the Americans with Disabilities Act.
- G.22 This project has a projected start date of August 2019 and a completion date of August 2020.
- G.23 A complete set of approved plans and a copy of the grading permit must be on site and available for use by the inspector, or other representative of Washington County Division of Public Works.
- G.24 All grading on lot, either before or after the construction of a dwelling or appurtenances, shall be the full responsibility of the
- G.25 No permanent structures (fences, sheds, play equipment, retaining walls) shall be permitted within any storm drainage easement either shown or described on the final plat of subdivision.
- G.26 There are 49 existing parking spaces on this site that is being increased to 164 spaces. G.27 The purpose of this site plan is for the building addition to an existing church. The existing church tenants (Church of the Holy Trinity) will continue to use a portion of the existing building while the new owners (Hub City Vineyard) the remaining

building. An agreement has been recorded between the two church in Washington County Liber 5892 Folio 395

SITE DATA
0049-0020-1003
26
RU - Residential Urban
25'
20'
40'
4.01 Ac.±
1.13 Ac.± (28%)
2.43 Ac.± (61%)
2.40 / 10.12 (0170)
14,693 S.F.
13,007 S.F.
30'
Church
Box Truck Weekly
F0 000 0 F
56,928 S.F.
1 space per 5 seats provided in the main religious assembly auditorium
760
152 Spaces
157 Spaces
7 Space
164 Spaces
Public Water (City of Hagerstown)
Public Sewer (Washington County)
Dumpster
Internal Collection & Storage with Private Hauler
Building Mounted
Pole and Building Mounted
3' x 7', 21 S.F., 6' High (to be removed)
Building Mounted
#17805
None
FS-19-003
Required - 16,988.4 S.F. (0.39 Ac.) - Express Procedure Pay-in-Lieu (\$5,096.52)
10,000.4 0.1 . (0.00 / 0.) - Express 1 100cddic 1 dy 111-Eled (\$\psi_000.02\)
Marsh Run
02140503
24043C0282D
There are no floodplains, or habitat of threatened or endangered species
identified by the U.S. Fish & Wildlife Service per 50 CFR 17 as required to be
shown by sections 306, 307 & 314 of the Washington County Subdivision
SHOWE BY SECTIONS SOO. SOT & STA OF THE MASHINGTON CONTINUOUS SUBDIVISION
Ordinance & section 4.21 (C&D) of the Washington County Zoning Ordinance.

⚠SITE DATA (Church of the Holy Trinity)

Number of Seats Available in Main Worship Area

Function description

Hours of Operation

Freight / Delivery_

Parking required

lotal Spaces	_ 8 Spaces
Parking provided	8 Spaces
Site Signage:	
Existing	3' x 7', 21 S.F., 6' High (to be removed)
Proposed	None
SITE DATA (Daycare for Hub City Vineyard)	
-unction description	_ Children's Daycare Service
lours of Operation	Mon Fri. 6am - 6pm
Freight / Delivery	None
Parking required	
Number of children attend	
day care service	_21
Total Spaces	5 Spaces
Parking provided_	5 Spaces
Site Signage:	
Existing	None
Proposed	None

Church

Sunday 8am-2pm

ABBREVIATION LEGEND

AMERICAN ASSOCIATION OF STATE AASHTO = HIGHWAY AND TRANSPORTATION OFFICIALS ADS = ADVANCED DRAINAGE SYSTEM ASTM = AMERICAN SOCIETY FOR TESTING & MATERIAL AWWA = AMERICAN WATER WORKS ASSOCIATION BLDG = BUILDING BOT = BOTTOM CIP = CAST IRON PIPE CL = CENTERLINE CMP = CORRUGATED METAL PIPE

CO = SANITARY SEWER CLEAN-OUT CONC = CONCRETE

DIA = DIAMETER EGL = EXISTING GRADE LINE EX = EXISTING

FH = FIRE HYDRANT GV = GATE VALVE

DA = DRAINAGE AREA

HGL = HYDRAULIC GRADE LINE HDPE = HIGH DENSITY POLYETHYLENE INV = INVERT

LF = LINEAR FEET MAX = MAXIMUM MB = MAIL BOX

MIN = MINIMUMMJ = MECHANICAL JOINT

NO = NUMBER N.T.C. = NOT THIS CONTRACT N.T.S. = NOT TO SCALE

O.A.E. = OR APPROVED EQUAL O.C. = ON CENTER

PC = POINT OF CURVE

PCC = POINT OF COMPOUND CURVE PGL = PROPOSED GRADE LINE PRC = POINT OF REVERSE CURVE

PT = POINT OF TANGENT

PVC = POINT OF VERTICAL CURVE PVI = POINT OF VERTICAL INTERSECTION

PVT = POINT OF VERTICAL TANGENT R/W = RIGHT-OF-WAY

SAN = SANITARY

SCE = STABILIZED CONSTRUCTION ENTRANCE

SDR = STANDARD DIMENSION RATIO SDMH = STORM DRAIN MANHOLE

SF = SQUARE FEET

SSMH = SANITARY SEWER MANHOLE STA. = STATION STND = STANDARD

SY = SQUARE YARDS

T.A.N. = TYPE AS NOTED TEMP = TEMPORARY

TG = TOP OF GRATE TYP = TYPICAL

VIF = VERIFY IN FIELD WM = WATER VALVE

Legend

SYMBOL **FEATURE** PROPERTY LINE, CORNER — — PERMANENT EASEMENT ———————— CENTERLINE 98 — CONTOURS TREE LINE — EDGE OF PAVEMENT — CONCRETE CURB —X——X——X——X—— FENCE LINE STREAM OR DITCH E S/S — SANITARY SEWER LINE, STUB GAS - GAS LINE F/M — FORCE MAIN — STORM DRAIN, END SECTION — ROOF DRAIN PIPE ₩ WATER CAP, REDUCER, BEND — FIRE HYDRANT, METER OVERHEAD ELECTRIC LINE +++++++++++++ — RAILROAD TRACKS --- BUILDINGS.HOUSES, GARAGES --- SANITARY SEWER MANHOLE --- STORM DRAIN INLET - UTILITY POLE --- HANDICAP PARKING --- POLE LIGHT — ROAD SIGN + 470.50 — SPOT ELEVATION DOUBLE WATER METER w-----SINGLE WATER METER ss----SINGLE SEWER CLEANOUT DOUBLE SEWER CLEANOUT DETAIL # 1 SHEET # ----

> SENSITIVE AREA NOTICE The stream buffers shown hereon are established pursuant to the requirements of the Washington County Subdivision Ordinance Article IV, Section 409. In an effort to preserve or improve water quality, the property owner is required to establish and thereafter maintain in perpetuity vegetative ground cover in accordance with urban best management practices recommended by the Washington County Soil Conservation District. No permanent structures or construction are permitted within the stream buffer except those designed to improve water quality or flow as approved by the Washington County Planning Commission in accordance with all applicable regulations, laws, and policies. No septic systems shall be constructed within the buffer nor shall any reserve area be established within the buffer.

B.C. BOTTOM OF CURB

T.C. TOP OF CURB

P.I. ——— POINT OF INTERSECTION

P.C. ——— POINT OF CURVATURE

P.T. ——— POINT OF TANGENCY

pared or approved by me, and that I am a HUBTMF 49-20-1003 SCALE

SHEET TITLE

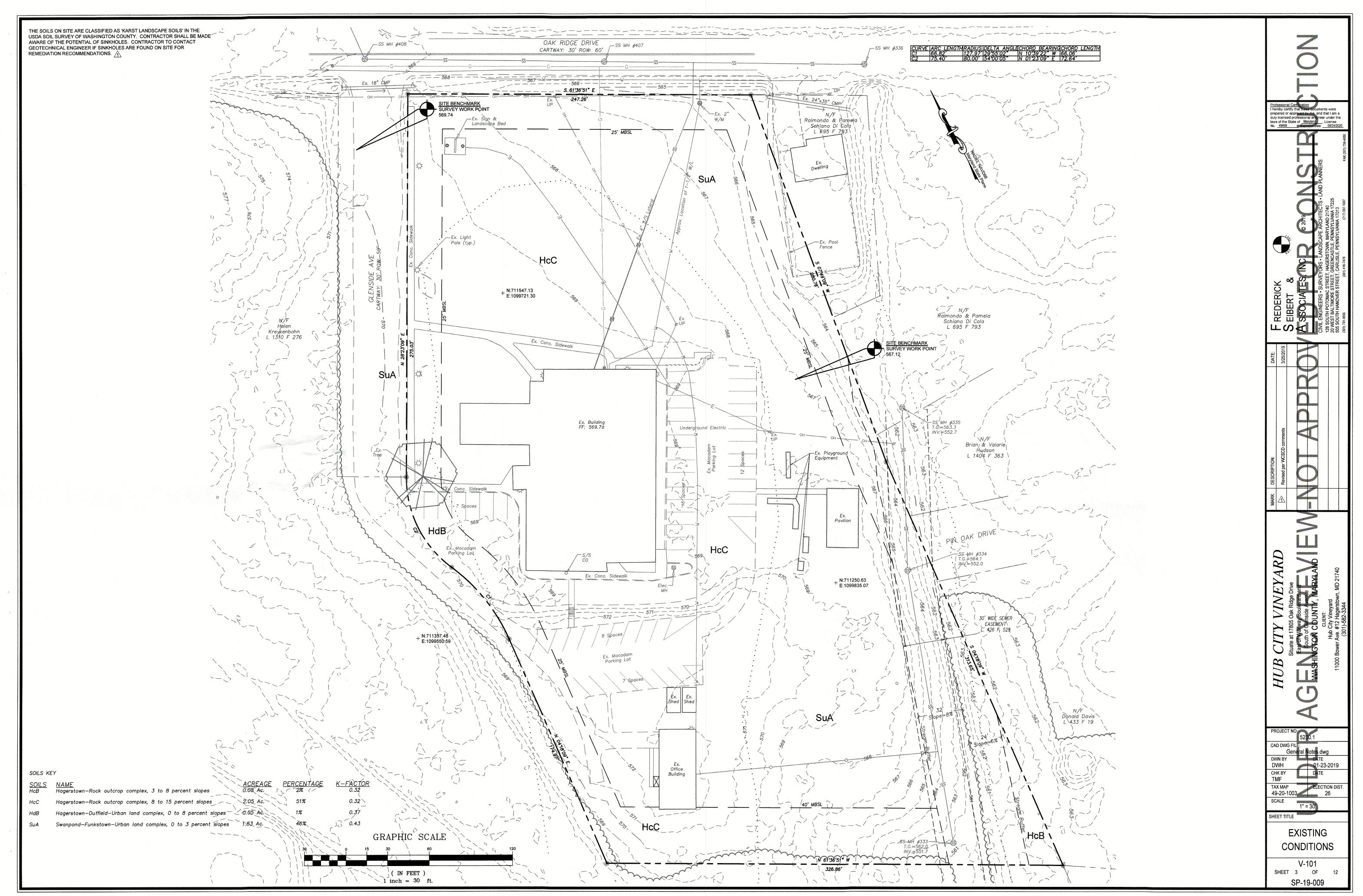
GENERAL NOTES

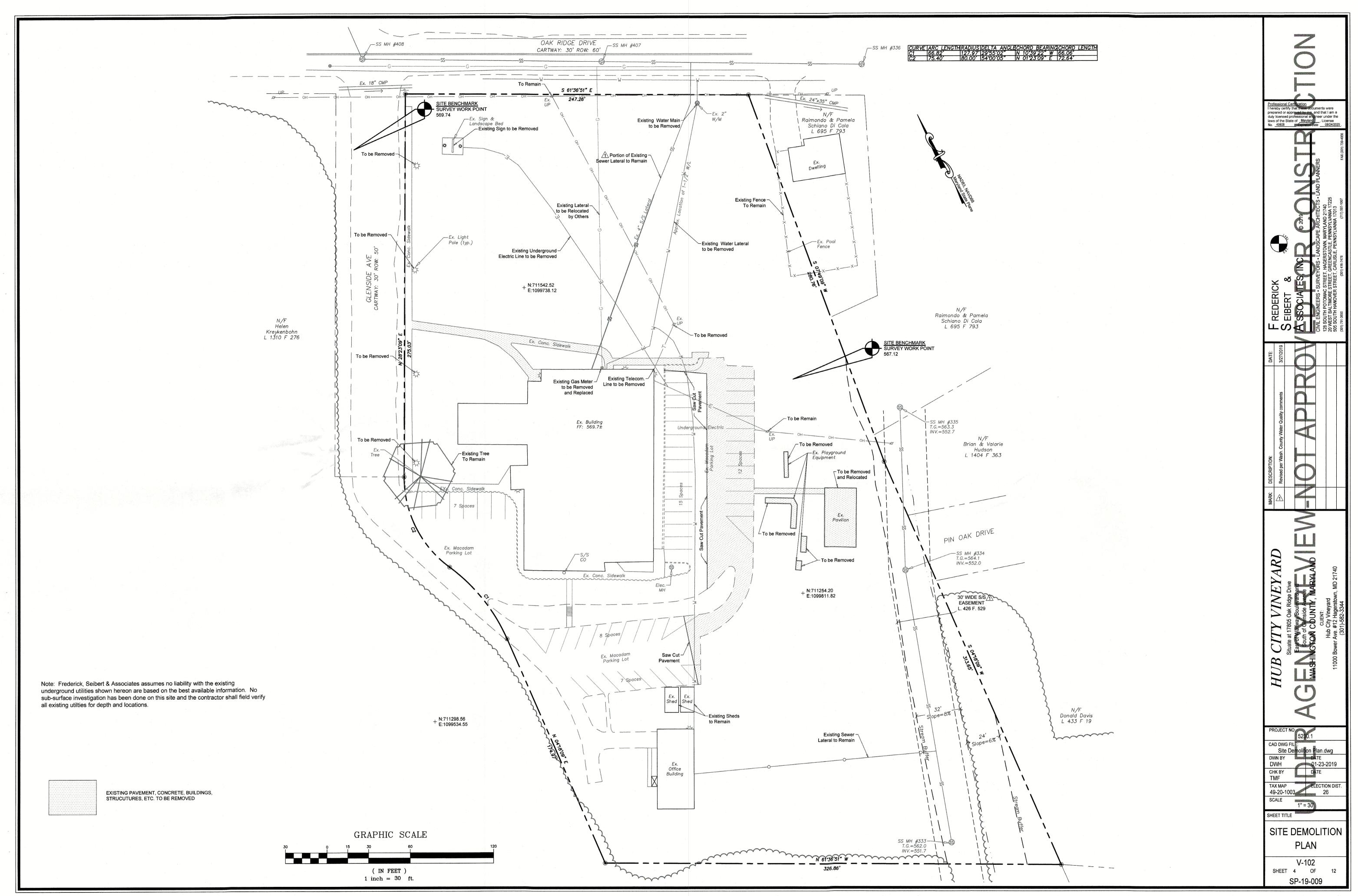
C-002

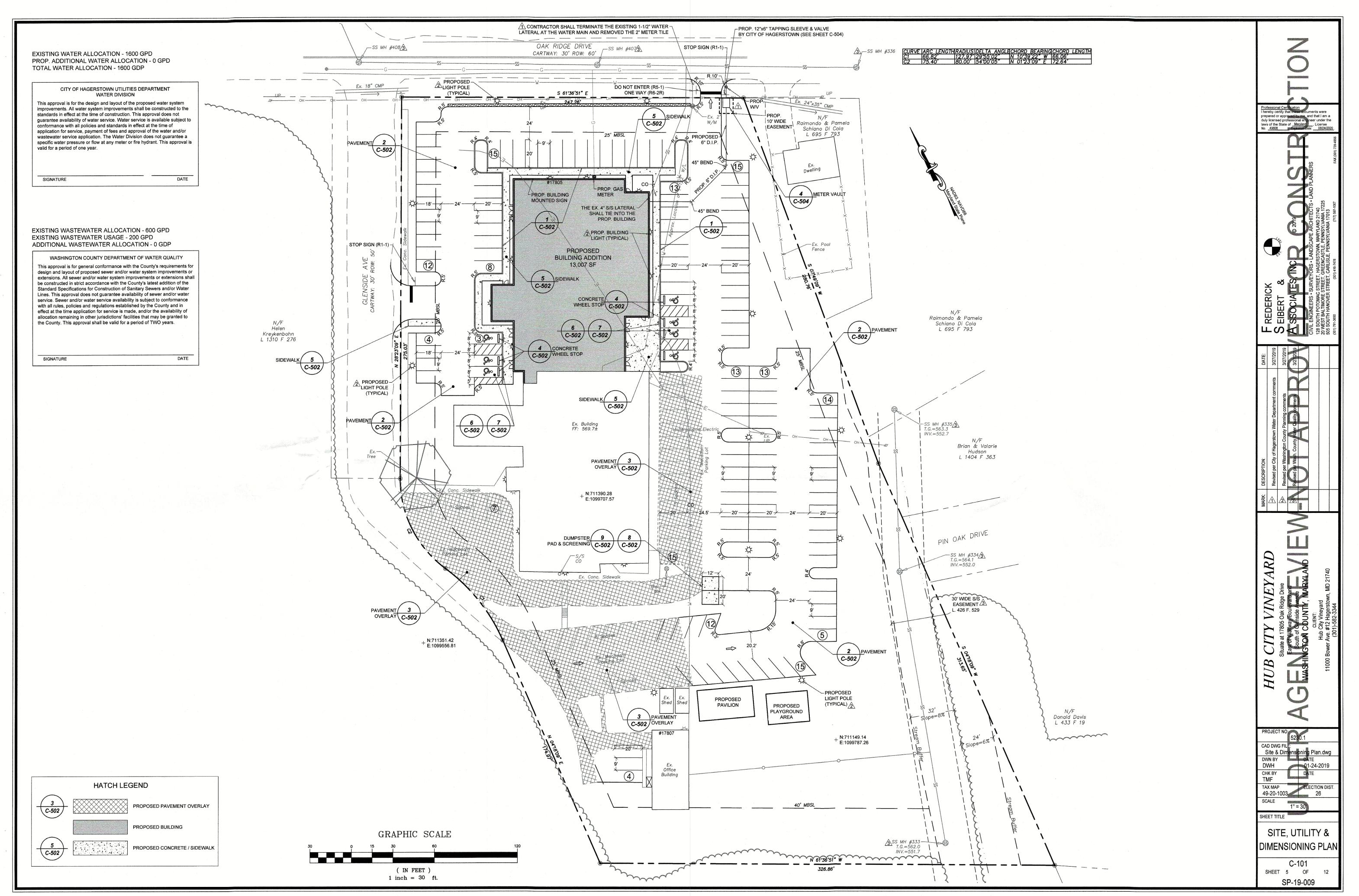
SP-19-009

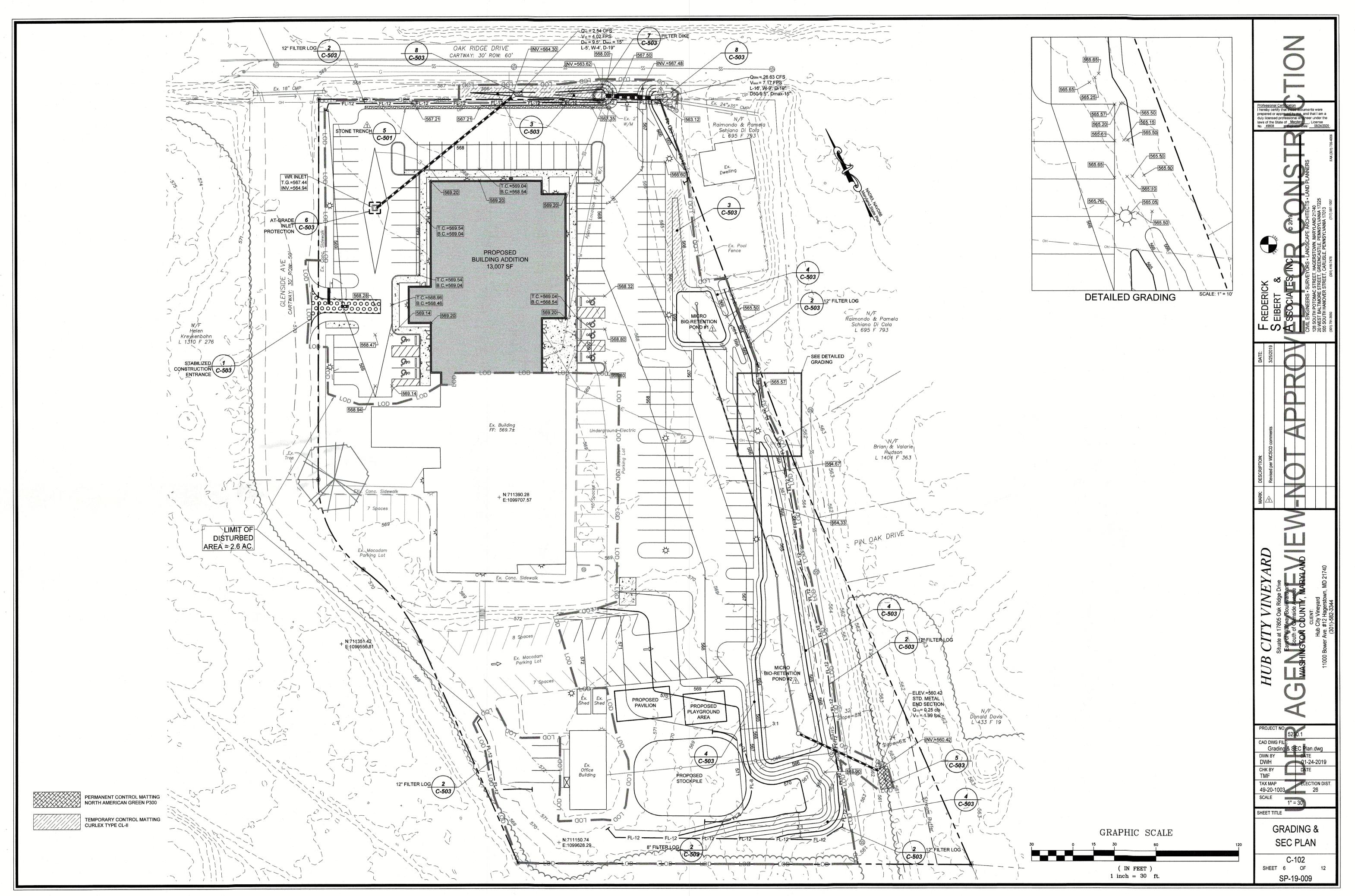
SHEET 2 OF

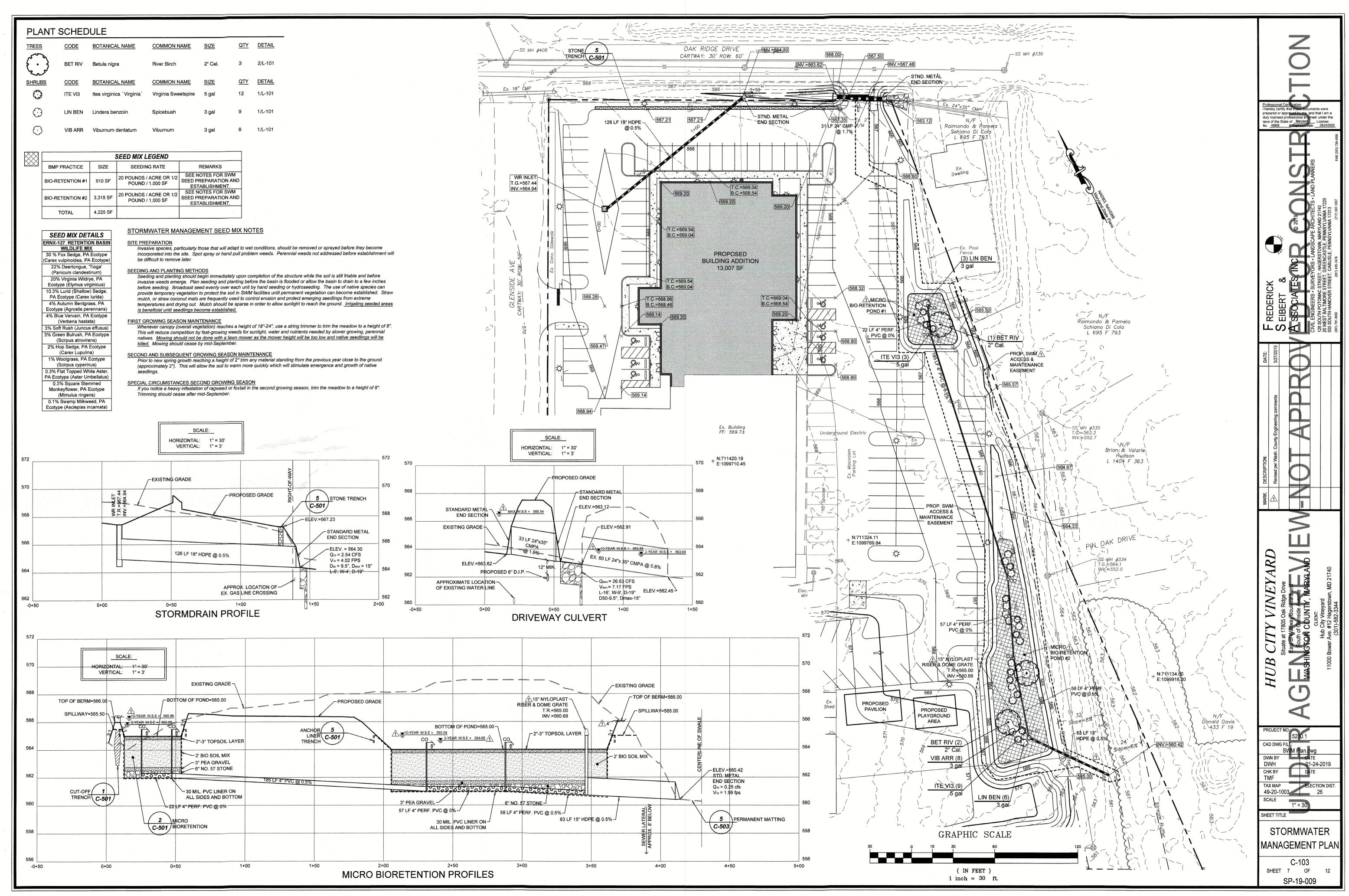
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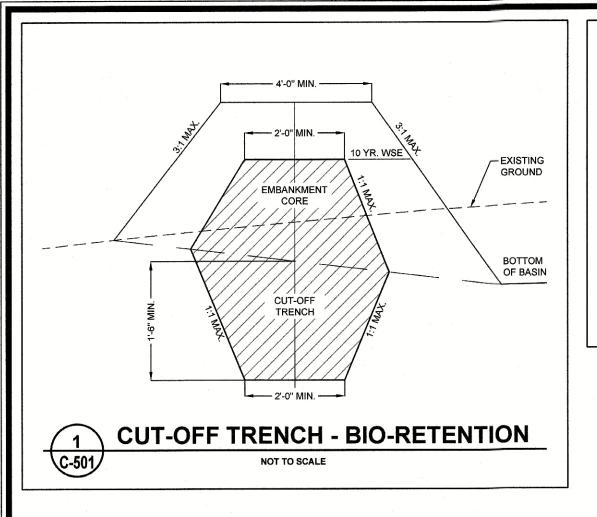


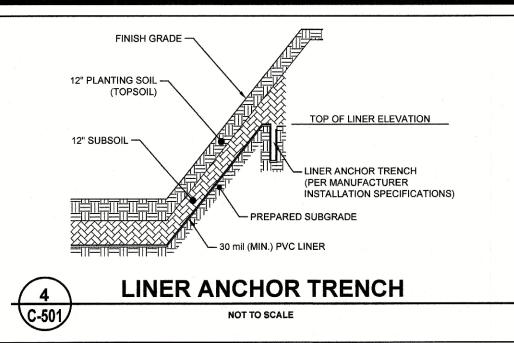












CLAY LINER NOTES: REMOVE 2 FEET OF THE SWM FACILITIES SUBGRADE.

- PLACE SOIL MATERIALS THAT MEET THE MINIMUM REQUIREMENTS. 2.1. THE MATERIALS SHALL HAVE A MAXIMUM DRY DENSITY OF AT LEAST 100 PCF AS PER ASTM D-698
- 2.2. ACCEPTABLE MATERIALS SHALL BE CL OR CH WITH NO ROCK GREATER THAN 1-INCH IN DIAMETER AND CONSTITUTING NO MORE THAN 15% OF THE MATRIX. THE SAND CONTENT MUST BE LESS THAN 20% 2.3. MATERIALS ARE TO BE PLACED IN 8-INCH LIFTS AND PROPERLY COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY VALUE AS DETERMINED BY ASTM D-698.

AN EXPERIENCED ENGINEERING TECHNICIAN TO VERIFY THAT THE PROPER

A SUFFICIENT NUMBER OF IN-PLACE DENSITY TESTS SHOULD BE PERFORMED BY

(1, 2) INTEGRATED DUCTILE IRON

(3) VARIABLE INVERT HEIGHTS

PLANS/TAKE OFF)

AVAILABLE (ACCORDING TO

(4) VARIOUS TYPES OF INLET & OUTLET ADAPTERS

AVAILABLE: 4" - 30" FOR CORRUGATED HDPE

PVC DWV (EX: SCH 40), PVC C900/C905,

CORRUGATED & RIBBED PVC

(CORRUGATED HDPE SHOWN)

WATERTIGHT JOINT

(ADS N-12/HANCOR DUAL WALL, ADS/HANCOR

SINGLE WALL), N-12 HP, PVC SEWER (EX: SDR 35),

1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536

OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045. 3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN

RESTRICTIONS. SEE DRAWING NO. 7001-110-065.

6 - 8" - 30" DOME GRATES HAVE NO LOAD RATING.

N-12 HP, & PVC SEWER (4" - 24").

2 - 8" & 10" DOME GRATES FIT ONTO THE DRAIN BASINS WITH THE USE

DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING

4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO

ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL),

5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE

MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

GRADE 70-50-05.

GRATE TO MATCH BASIN O.D.

MINIMUM PIPE BURIAL DEPTH PER PIPE

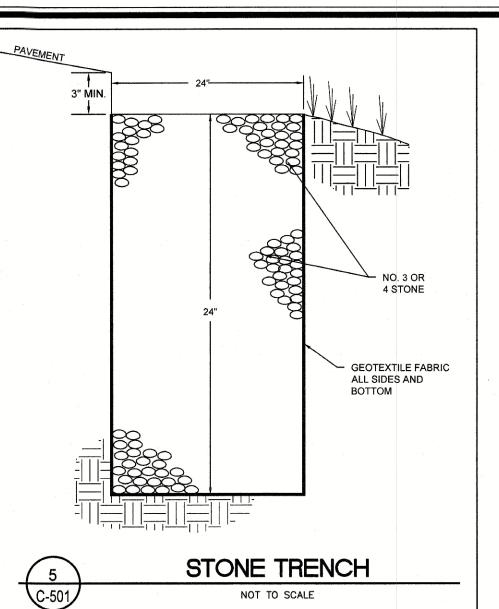
MANUFACTURER

RECOMMENDATION

(MIN. MANUFACTURING

REQ. SAME AS MIN. SUMP)

DEGREE OF COMPACTION IS BEING OBTAINED. THE LINER MATERIAL SHOULD HAVE A PERMEABILITY OF LESS THAN OR EQUAL TO 1



NYLOPLAST DRAIN BASIN WITH DOME GRATE

(5) ADAPTER ANGLES VARIABLE

(3) VARIABLE SUMP DEPTH

ACCORDING TO PLANS

(6" MIN. ON 8" - 24", 10" MIN. ON 30"

BASED ON MANUFACTURING REQ.)

3130 VERONA AVE

BUFORD, GA 30518

PHN (770) 932-2443

FAX (770) 932-2490

DRAIN BASIN WITH DOME GRATE

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER

GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II

SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED

UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR

0° - 360° ACCORDING TO PLANS

4" MIN ON 8" - 24"

6" MIN ON 30"

Material	Specification	Size	Notes		
Plantings	see planting list	n/a	plantings are site-specific		
Planting Soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%		
Organic content	Min. 10% by dry weight (ASTM D 2974)				
Mulch	shredded hardwood	n/a	aged 6 months, minimum; no pine or wood chips		
Pea gravel diaphragm	pea gravel: ASTM-D-448	No. 8 or No. 9 (1/8" to 3/8")			
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"			
Geotextile		n/a	PE Type 1 nonwoven		
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")			
Underdrain piping F 758, Type PS 28 or AASHTO M-278		4"-6" rigid sch. 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" o/c, 4 holes/row; min. 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4 inch galvanized hardware cloth		
Poured in place concrete (if required)	MSHA Mix No. 3; fc = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R/89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking		
Sand	AASHTO M-6 or ASTM C-33	0.02" to 0.04"	Sand substitution such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.		
Compost	MSHA Standard Specifications for Construction and Materials, July 2008 920.02.05 Compost	Uniform particle size of 0.5" or less	Source - Separated Compost (Type B). Type B Compost shall be tree leaf compost or non-tree leaf compost. Type B Compost produced from lawn clippings shall be tested for contaminants in conformance with		

CATEGORY 300 DRAINAGE PVC LINED PONDS

DESCRIPTION. Furnish, place, and anchor a 30-mil PVC liner along designated ditch or swale areas, and in SWM facilities as shown and as directed.

MATERIALS. Furnished Topsoil 920.01.02 Furnished Subsoil 920.01.04 Type B Soil Stabilization Matting 920.05.01 Staples Select Borrow 920.05.02 916.01 PVC Liner Material As below

The minimum physical properties for the PVC liner are as follows:

PROPERTY	TEST METHOD	REQUIREMENT
Thickness	D 1599	+/- 5%
Specific Gravity (min.)	D 792	1.20
100% Modulus (psi. min.) (1 b. force/in. width, min.)	D 882	100 30
Tensile (psi, min.) (Lb. force/ in. width, min.)	D 882	2300 73
Elongation at Break (%, min.)	D 882	380
Graves Tear (lb./in., min.) (1b. force/in. width, min.)	D 1004	325 8
Resistance to Soil Burial (% change max.)	G 160	
(a) Breaking Factor (b) Elongation At Break (c) Modulus at 100% Elongation		5 20 20
Impact Cold Crack (/F)	D 1790	-20
Dimensional Stability (% change/max.)	D 120 (212/f/15 min.)	3
Water Extraction (%, max.)	D 1239	0.3
Volatile Loss (%, max.)	D 1203	0.70
Hydrostatic Resistance (psi,min.)	D 751	100

PVC LINER CERTIFICATION.

Submit certification per TC 1.03 that the PVC liner material conforms to the physical properties. Include the following: (a) Polymer and composition of the PVC Liner, including additive composition of any coating

- (b) Manufacturer's Quality Control plan including properties, test methods, frequency of testing,
- tolerances and method of resolution for out-of-specification material. (c) Laboratory test results documenting the physical properties.

STORAGE AND HANDLING.
Store the PVC liner in a dry area in its original container. Protect the liner from puncture, dirt, grease, water, mud, mechanical abrasions, or other damage. Document any damage to the PVC liner. Remove and replaced damaged PVC liners that cannot be repaired to comply with the specification at no additional cost.

CONSTRUCTION.
Construct PVC Lined Ditches in conformance with the details as shown, as directed, and as follows:

subgrade to provide a firm, unyielding foundation for the liner; with no sudden or abrupt changes or break in grade. Completely remove standing water, mud, snow, or excess moisture prior to placement. Do not place the liner on frozen subgrade; or on subgrade that has been softened by water or overly dried until it has been properl Take special care in maintaining the prepared soil surfaces. The soil surface will be monitored daily to evaluate the

ANCHOR TRENCH. Excavate the anchor trench to the line, grade, and width shown.

edges of the trench are smooth and even.

- (a) Excavate the anchor trench to a minimum of 1.5 ft wide and 2.5 ft high. (b) Excavate trench located in clay susceptible to desiccation to no more than the amount of trench required for anchoring the liner in one day.

- LINER PLACEMENT.

 (a) Place the liner down gradient (upstream to downstream) to facilitate overlapping and prevent run-off from entering under the placed liner. (b) Use methods to place the liner panels that avoid excessive wrinkling (especially differential wrinkles between
- that prevent dragging or elongating the panels. (d) Provide a seam overlap of a minimum of 3 ft. and a maximum of 4 ft.
- (e) Place adequate ballast (e.g., cover soil, or similar measures that will not damage the liner) on the liner to preven uplift by wind. Continuous loading is recommended along the edges of panels (if high winds are anticipated) to prevent wind flow under the panels.
- (f) Only equipment necessary for installation and testing of the liner is permitted to come in contact with the liner Use rubber-tired equipment with a ground pressure not exceeding 5 psi; and a total weight not exceeding 750 lb.

the liner is not allowed.

- (b) Provide a means of storing the liner in an area that maintains the liner temperature above 60 F, if liner placement is required at ambient temperatures below 60 F.
- UNPACKING THE LINER.

Notify the Engineer to witness the liner unpacking. Mark liners that are damaged or have suspect areas for testing and/or repair. Replace liners that are damaged when unpacked and that cannot be adequately repaired at no additional cost.

BACKFILLING THE ANCHOR TRENCH. Backfill the anchor trench and compact as directed. Place backfill in 8 in. thick loose lifts and compact by wheel rolling with light, rubber_tired or other light compaction equipment.

BACKFILLING THE PVC LINER.

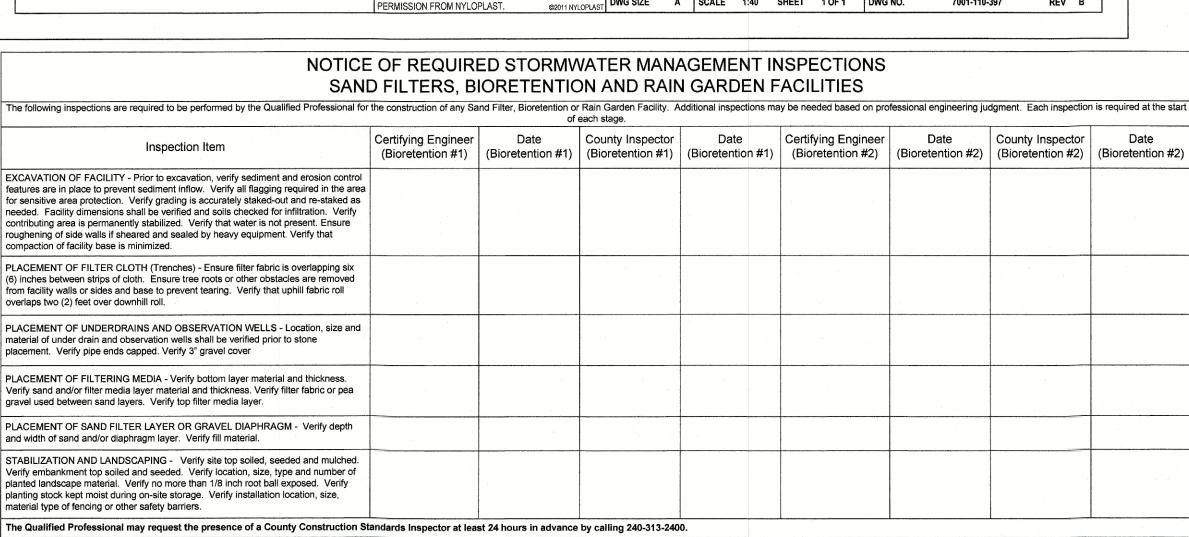
Cover the liner with a 1 foot layer of soil. Use soil conforming to 920.01.04 as backfill for the first 8 inches. Use soil

conforming to 920.01.02 as backfill for the top 4 inches. Tamp the backfill in place as directed. Place Type B Soil Stabilization Matting conforming to 920.05 over the topsoil in conjunction with permanent vegetation, as specified. Do not allow heavy construction equipment to come into contact with the liner or to traverse the trench until adequately

backfilled. Repair equipment damage as directed and at no additional cost.

- compensation for the PVC liner, backfill, furnished subsoil and topsoil, and for all other material, labor, equipment, tools and incidentals necessary to complete the work. (a) Type B Soil Stabilization Matting and Turfgrass Establishment will be measured and paid for at the Contract unit price per square yard.
- (b) PVC liner overlap shall not be measured and paid for as a separate item. PVC liner overlap shall be incidental to the cost of PVC liner installation.
- (c) Excavation will be measured and paid for at the Contract unit price per cubic yard for Class 2 Excavation.

7001-110-397 REV B	ECTION ITE tenance Ac
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Main	eneral
Ge	
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Pretr	eatment
Date County Inspector Date G	rass filter str
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Filter	Bed
De	ewatering
Se	ediment
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ex	ceeding the



DATE 3-25-10

DATE 2-25-1

REVISED BY EBC PROJECT NO NAME

T DWG SIZE A SCALE 1:40 SHEET 1 OF 1 DWG NO.

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	OPERATION AND MAINTENANCE	E PLAN
	BIORETENTION	
INSPECTION ITEM	INSPECTION REQUIREMENTS	REMEDIAL ACTION
Maintenance Access		
General	Check for accessibility to facility; excessive vegetation; surface stability	Repair erosion and maintain access surface in good condition
Pretreatment		
Grass filter strip or sand layer	Check for sediment accumulation	Remove sediment as needed
Optional sand layer	Check sand for staining and sediment accumulation	If contaminated, replace first three inches of sand layer
Gravel diaphragm	Check for sediment accumulation and evidence of erosion	Remove sediment and replace gravel as needed
Mulch layer	Check for a 2-3 inch mulch layer	Remove mulch and replace as needed
Filter Bed		
Dewatering	Check for dewatering within 48 hours of rainfall; noticeable odors; water stains on the filter surface or at the outlet; presence of algae or aquatic vegetation	Remove mulch and the top 3-6 inches of soil/sediment and replace with suitable materials per plan specifications; follow up inspection shall confirm adequate dewatering; contact the plan approval authority if the facility does not function as intended
Sediment	Check for sediment accumulation	Remove sediment as needed
Mulch layer	Check for adequate cover; sediment accumulation; discoloration	Remove and replace mulch and excess sediment as needed
Vegetation		
Plant composition and health	Check for plant composition according to approved plans; invasive species, weeds, and dead or dying vegetation	Remove and replace plants as necessary
Vegetative cover/erosion	Check for erosion, runoff channelizing, or bare spots	Repair/grade and stabilize as needed
Outlets		
Underdrain system	Check outlet end to ensure that discharge is not obstructed; check for erosion	Remove any flow obstructions; grade and stabilize any eroded areas to provide stable conveyance
Overflow spillway	Check for displacement of rip-rap, stable conveyance, and erosion below the outlet	Repair and replace as needed
Conveyance Systems		
General	Check for erosion, flow blockages or bypass, and stable conveyance	Repair/replace and stabilize as needed
Flow diversion	Check flow splitter for proper functioning	Repair as necessary
Trash and Debris		
	Check for trash and debris accumulation	Trash and debris shall be disposed of in an acceptable manner
Structural Components		The state of the s
	Check for structural deterioration, spalling or cracking	Repair according to specifications on the approved plans
		ended design function. The plan approval authority should be

ofessional Certification ereby certify that these docur ws of the State of Maryland License
o. 49808 Expiration Date: 08/24/20 <u>SUBGRADE PREPARATION.</u>
Ensure subgrades to be lined are smooth and free of rocks, stones, sticks, sharp objects, or other debris. Prepare the surface condition. Repair any damage to the surface caused by weather conditions, as directed. (c) Provide slightly rounded corners in the trench to avoid introducing sharp bends in the liner. Ensure the leading adjacent panels). Minimum wrinkling is allowed to insure the liner is installed in a relaxed condition. Stretching (c) Panels may be repositioned after placement to conform to the overlap requirements. Use repositioning methods WEATHER CONDITIONS.

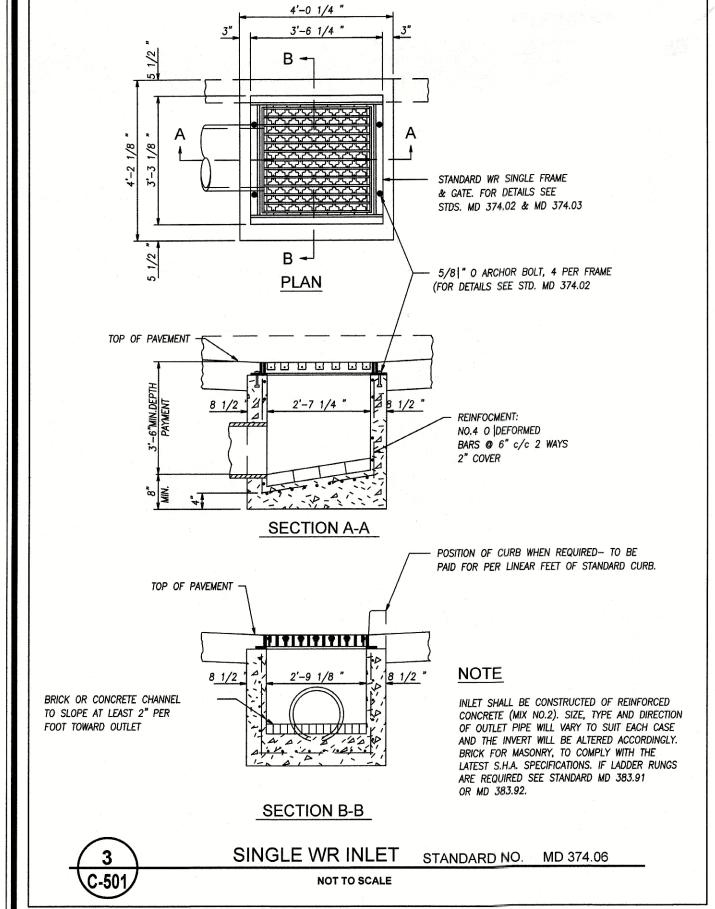
Proceed with liner placement when the ambient temperature and material sheet temperature are between 60 and 105 F. Measure the sheet temperature of the liner surface with an infrared thermometer or a surface thermometer. (a) Do not place the liner during periods of precipitation, in the presence of excessive moisture (i.e., fog, dew, mud) Take care to prevent damage to the liner while backfilling the trench. Construction equipment is not allowed to come into direct contact with the liner at any time. Repair any damage to the liner that occurs while backfilling at no additional MEASUREMENT AND PAYMENT.

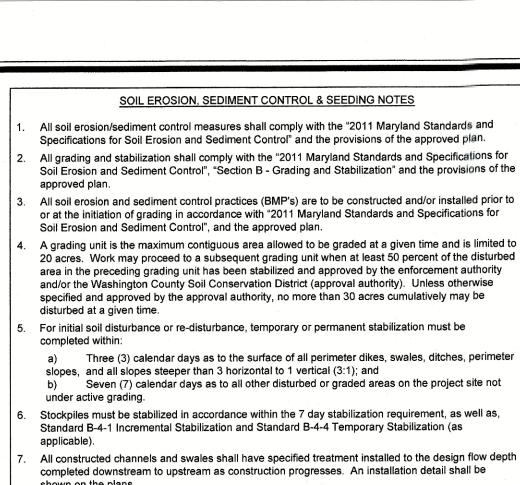
PVC Ditch Liner will be measured and paid for at the Contract unit price per square yard. Payment will be full CAD DWG FII SWM Details & Notes.dwg DWN BY DWH CHK BY TMF NTS SWM DETAILS & NOTES C-501

SHEET 8 OF

SP-19-009

EXISTING GROUND WHERE -APPLICABLE LINER, AS SPECIFIED -3" TOPSOIL LAYER C.O. _ 4" PVC NON-PERF. F.G. ELEV. **CUT-OFF** RENCH WHERE APPLICABLE 2.0' PLANTING SOIL SEE DETAIL FOR-- 3" PEA GRAVEL OR EQUIVALENT **DIMENSIONS &** 4" PERFORATED PIPE IN 6" GRAVEL (AASHTO M43) **SPECIFICATIONS** 4" PERFORATED PVC @ 0.5% MIN. SEE STORM DRAIN PROFILES -INCREASE DEPTH OF STONE FOR UNDERDRAIN SLOPE, AS APPLICABLE MAINTAIN MINIMUM OF 3" STONE M-6 MICRO-BIORETENTION (TYP.) NOT TO SCALE





All constructed channels and swales shall have specified treatment installed to the design flow depth

shown on the plans. All storm drain and sanitary sewer lines not in paved areas are to be mulched and seeded within 3 days of initial backfill unless otherwise specified on plans.

Electric Power, telephone, and gas lines are to be compacted, seeded, and mulched within 3 days after initial backfill unless otherwise specified on plans.

No slope shall be greater than 2:1 As required by Section B, of the Maryland Standards and Specifications for Soil Erosion and Sediment Control, "Adequate Vegetative Stabilization", is defined as 95 percent ground cover. The Washington County Soil Conservation District requires the project adhere to this for scheduling of

the Final Site Closeout Review, and/or release of the site for soil erosion and sediment control.

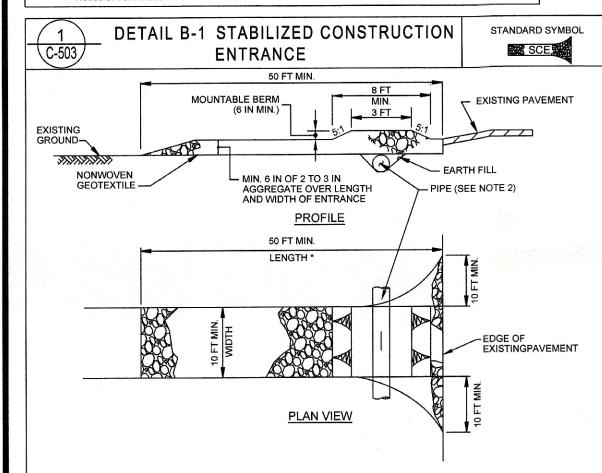
For sites 1.0 acre or more, the following are required:

A. Maryland Department of the Environment, General Permit for Stormwater Associated with a Construction Activity, NPDES Permit Number MDRC, State Discharge Permit Number 14GP, or an Individual Permit.

B. The Maryland Department of the Environment (General/Individual Permit - Notice of Intent- NOI) application and permit shall be posted and/or available

C. During construction, all soil erosion and sediment control practices (BMP's) shall be inspected and recorded on the "Standard Inspection Form", "General Permit for Stormwater Associated with Construction Activity" per the Maryland Department of the Environment (General/Individual Permit - Notice of

. Following construction and release of the site for soil erosion and sediment control by the Washington County Soil Conservation District, i.e., all portions of a site have been permanently stabilized, and all stormwater discharges from construction sites that are authorized by the permit are eliminated, the authorized permittee shall submit the Maryland Department of the Environment, General/Individual Permit Notice of Termination-NOT.



CONSTRUCTION SPECIFICATIONS

PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

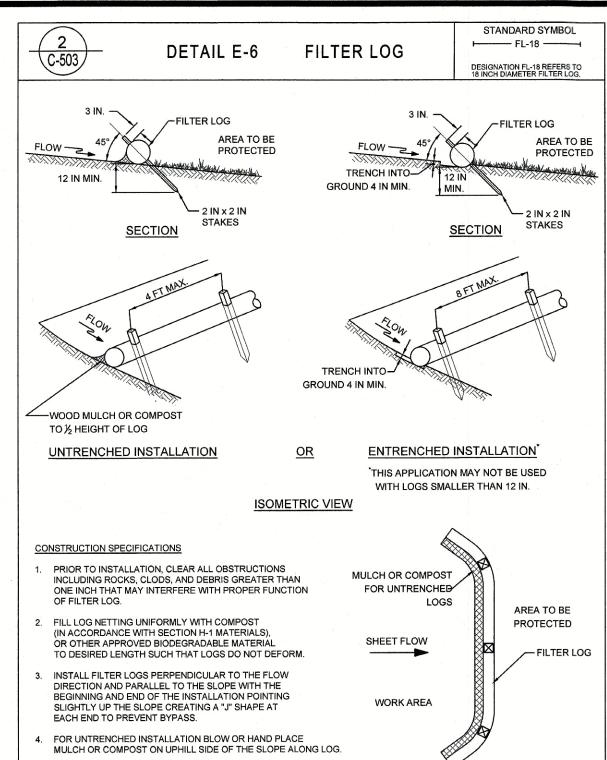
PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIF	EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

			TEMPORARY SEEDING SUMI	MARY		
			S ZONE (FIGURE B.3): 6a &@b D MIXTURE (TABLE B.1)		FERTILIZER RATE	LIME RATE
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	LIME IVATE
1	Barley	96	Zone 6a: Mar 15-May 31/ Aug 1-Sept 30 (Zone 6b: Mar 15-May 31/ Aug 1-Sept 30)	1"	436 lb/ac. (10 lb/1000 s.f.)	2 tons/ac. (90 lb/1000 s.t

			PERMANENT	SEEDING	SUMMARY			
	HARI		(FIGURE B.3): 6a &6b) RE (TABLE B.1)		FERTI	LIZER RATE (10	-20-20)	LIME RATE
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTH	N	P205	K20	LIME RATE
	Tall Fescue	40	Zone 6a:				00 11 4	
6	Perennial Ryegrass	25	Mar 15-May 31/Aug 1-Sep 30 Zone 6b: Mar 15-May 31/Aug 1-Sep 30	1/4"-1/2"	45 lb/ac. (1 lb/1000 s.f.)	90 lb/ac. (2 lb/1000 s.f.)	90 lb/ac. (2 lb/1000 s.f.)	2 tons/ac. (90 lb/1000 s.f.
	White Clover	5						



OF 4 INCHES AND STAKE LOG EVERY 8 FEET OR CLOSER. DETAIL B-4-6-C PERMANENT SOIL USE STAKES WITH A MINIMUM NOMINAL CROSS SECTION OF 2X2 INCH AND OF SUFFICIENT LENGTH TO ATTAIN A MINIMUM OF 12 INCHES INTO THE GROUND AND 3 INCHES PROTRUDING ABOVE LOG. CHANNEL APPLICATION | WHEN MORE THAN ONE LOG IS NEEDED, OVERLAP ENDS 12 INCHES MINIMUM AND STAKE. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO A DEPTH OF ½ THE EXPOSED HEIGHT OF LOG AND REPLACE MULCH. REPLACE FILTER LOG IF TORN. REINSTALL FILTER LOG IF UNDERMINING OR DISLODGING OCCURS. REPLACE CLOGGED FILTER LOGS, FOR PERMANENT APPLICATIONS, ESTABLISH AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. UPPER OVERLAP OR ABUT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL EDGES (TYP.) FILL MAT VOIDS U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION NATURAL RESOURCES CONSERVATION SERVICE 6 IN MIN. OVERLAP DETAIL B-4-6-A TEMPORARY SOIL STANDARD SYMBOL AT ROLL END (TYP.) STABILIZATION MATTING TSSMC - * lb/ft²

CHANNEL APPLICATION (* INCLUDE SHEAR STRESS) OVERLAP OR ABUT KEY TRENCH FOR ROLL 6 IN MIN OVERLAP AT--6 IN MIN. DEPTH KEY TRENCH R UPPER END OF DOWNSLOPE SEED IN PLACE ISOMETRIC VIEW

STAKE FILTER LOG EVERY 4 FEET OR CLOSER ALONG ENTIRE

LENGTH OF LOG OR TRENCH LOG INTO GROUND A MINIMUM

USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS

USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT, CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS

ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL

SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1% INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE, WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.

KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL AND TAMPING TO SECURE THE MAT END.

OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.

STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL				
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION		

DETAIL B-4-6-B TEMPORARY SOIL STABILIZATION MATTING | TSSMS - * Ib/ft² SLOPE APPLICATION (* INCLUDE SHEAR STRESS) OVERLAP OR ABU ROLL EDGES (TYP.) 6 IN DEEP (MIN KEY IN TRENCH PREPARED SLOPE SEED IN PLACE

CONSTRUCTION SPECIFICATIONS

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED

ISOMETRIC VIEW

. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT, CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.

SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT, STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 6 INCHES LONG, "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.

. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.

5. UNROLL MATTING DOWNSLOPE, LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE

MATTING. 6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT

KEY IN THE LIPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND

2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS . ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE

CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

STANDARD SYMBOL STABILIZATION MATTING | PSSMC - * Ib/ft² (* INCLUDE SHEAR STRESS) 6 IN DEEP (MIN LIPPER END OF DOWN SLOPE ROLL. (TYP.) CHANNEL WITH SEED IN PLACE

CONSTRUCTION SPECIFICATIONS

ON APPROVED PLANS USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT

SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 % INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS, PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

UNROLL MATTING IN DIRECTION OF WATER FLOW. CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS, LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE

OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES

(MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN

STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED. ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT

ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

STANDARD UTILITY NOTES:

Contractor to only open up length of trench that can be constructed and backfilled in one working day in paved

Contractor to place excavated materials in a dump truck and hauled to an approved location to wasted materials to

Contractor to backfill trench with approved materials and stabilize disturbed areas the same working day. In areas where the construction takes to place outside of the existing roadbed, Contractor to install silt fence along the downhill side of the trench before beginning construction and place excavated material from the trench on the

If dewatering of the trench is required, Contractor to pump water to a filter bag to dewater. Contractor to sweep streets of any debris or sediments caused by construction operations and dispose of at an

approved location. Contractor to stabilize all disturbed areas with seed & mulch or appropriate street repair DETAIL E-9-2 AT-GRADE INLET **PROTECTION** MAXIMUM DRAINAGE AREA = 1 ACRE

L-6IN PLAN / CUT AWAY VIEW ¾ TO 1½ IN STONE NONWOVEN GEOTEXTILE OVERLAP

CONSTRUCTION SPECIFICATIONS

NONWOVEN GEOTEXTILE -

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

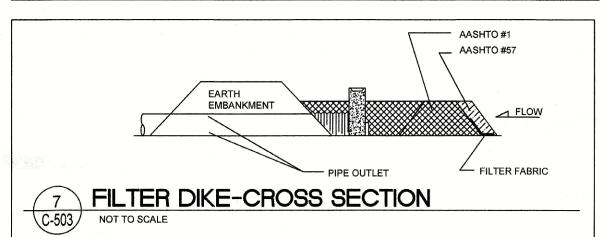
LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.

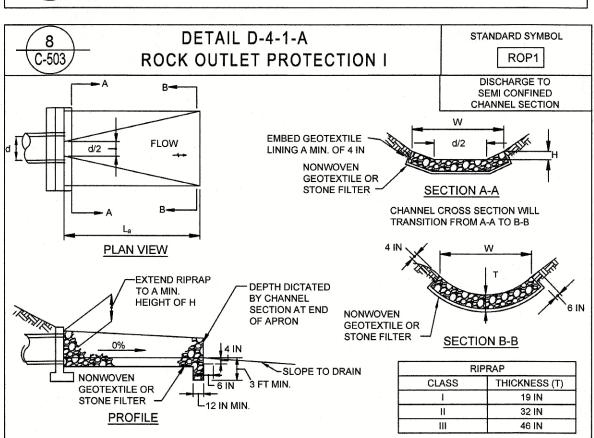
CROSS SECTION

PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.

STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT. IT IS CLOGGED, WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVIC WATER MANAGEMENT ADMINISTRATION





CONSTRUCTION SPECIFICATIONS

RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR FEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.

PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (% TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.

EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE

CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE

WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN

MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

Sequence of Construction

STANDARD SYMBOL

¾ TO 1½ IN STONI

. Contractor to contact FSA, Inc. (301) 791-3650, WCSCD (301) 797-6821 ext.3, the Washington County Division of Construction (240) 313-2400 at least five (5) days prior to the start of any earthwork to schedule a pre construction meeting.

. Contractor shall install the stabilized construction entrance. 3. Contractor shall install all filter logs.

Contractor to strip topsoil and place on stockpile with 8" filter log being installed on the down hill side and seed and mulch. Any spoil and or borrow must come from or go to a site that has a current and approved soil erosion and sediment control plan.

5. Start the demolition of the existing sidewalks, pavement, playground equipment, and 6. Contractor shall start rough grading starting with the proposed driveway culvert and roadside swale, then the proposed parking areas. After rough grading is complete, the

proposed building addition shall begin along with the stone trench. Stabilize all disturbed areas with seed and mulch after excavating operations are complete. Use temporary seeding for areas left exposed for more than seven (7) consecutive days.

8. Install the proposed stormdrain pipe and inlet starting by the roadside swale and work uphill. Install at grade inlet protection once inlet has been installed. 9. Once parking areas have been brought to grade, contractor shall begin the pavement overlay and install the proposed pavement.

10. Contact Frederick Seibert, and Assoc. (301)791-3650, 2 days prior to bio-retention areas construction. Contractor shall have the parking area stabilize and contact WCSCD (301) 797-6821 ext.3 and the Washington County Division of Construction (240) 313-2400 before excavating the bio-retention areas. After bio-retention areas have been stabilized, contact Washington County Division of Construction (240) 313-2400 for an interim inspection and approval to install the bio-materials.

11. Construct bio-retention areas, stabilize with seed, mulch and plantings upon completion. Note that construction vehicles are prohibited from traveling over bio-retention areas.

12. Contractor shall finalize grading then seed and mulch.

13. Contractor to contact WCSCD (301) 797-6821, ext. 3 and the Washington County Division of Construction at (240) 313-2400 at least 5 days prior to the removal of any sediment control features to schedule a final site close out review and meeting. Contractor to gain final approval from WCSCD prior to removal of erosion and sediment controls.

14. Remove sediment and erosion control measures, and stabilize accordingly.

pared or approved by me, and that I am a

vs of the State of Maryland 49808 Expiration D

CAD DWG F 49-20-1003 SHEET TITLE

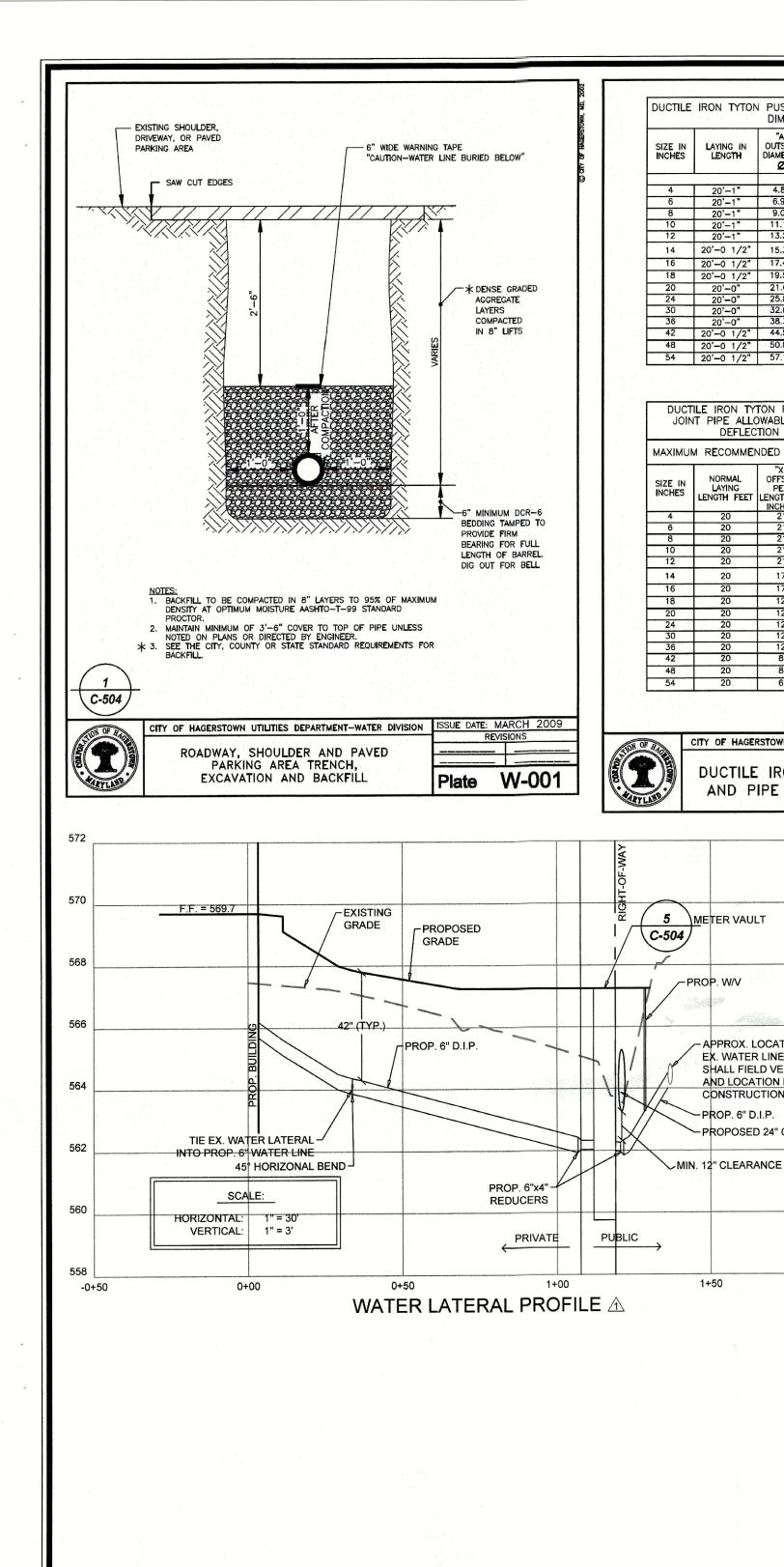
SEC DETAILS

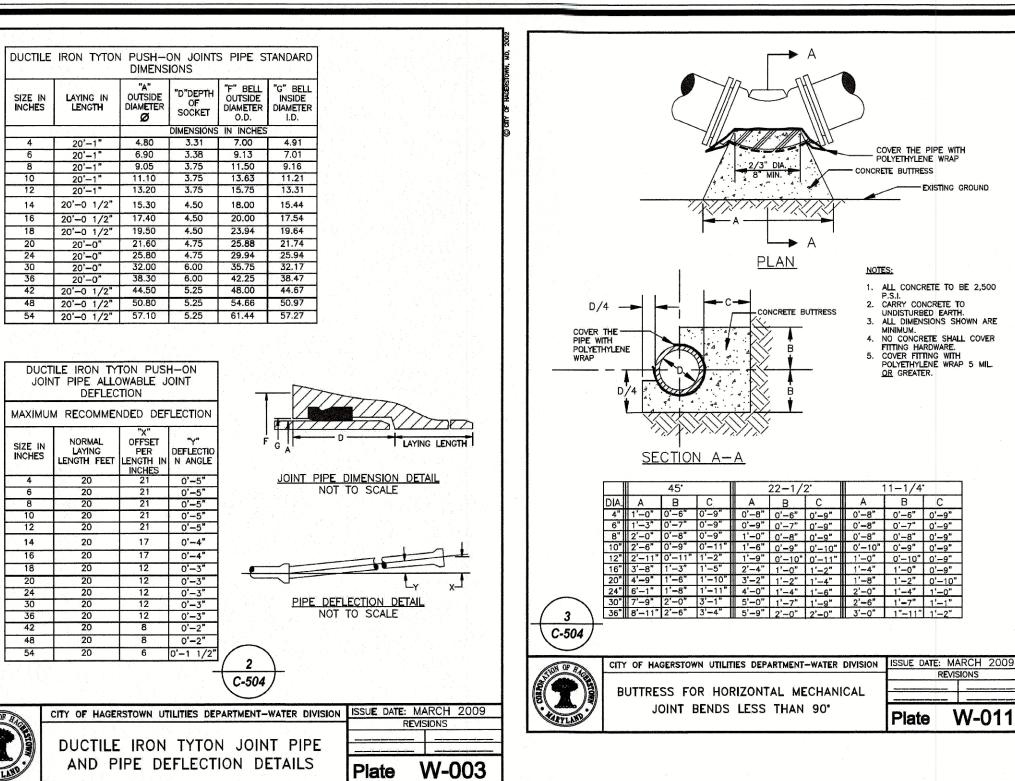
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& NOTES

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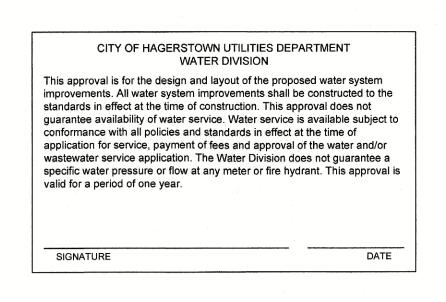
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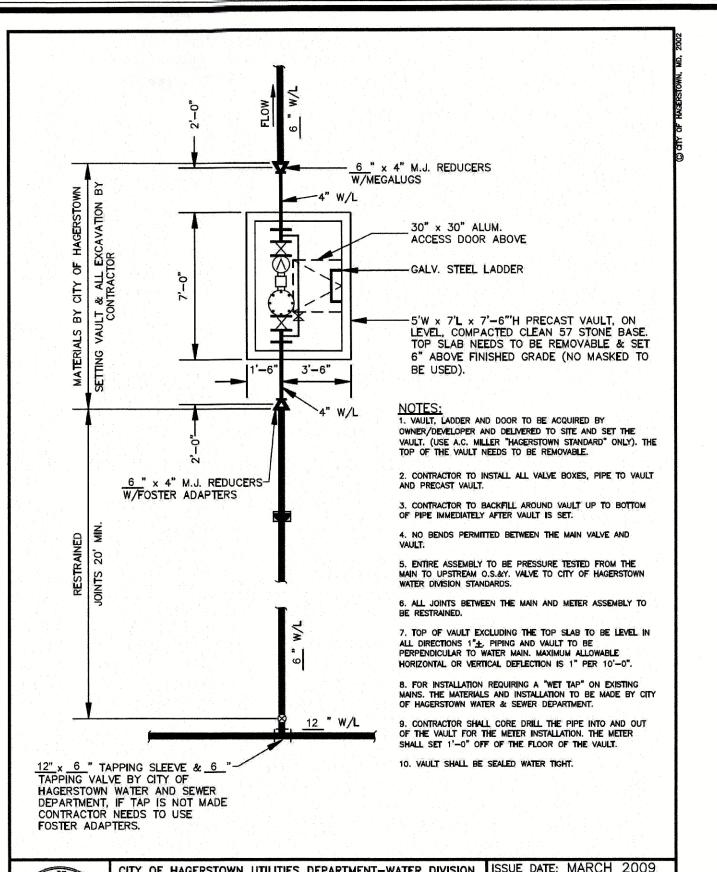
PROP. W/V

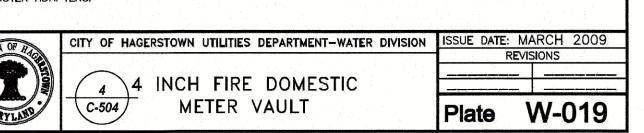
APPROX. LOCATION OF THE

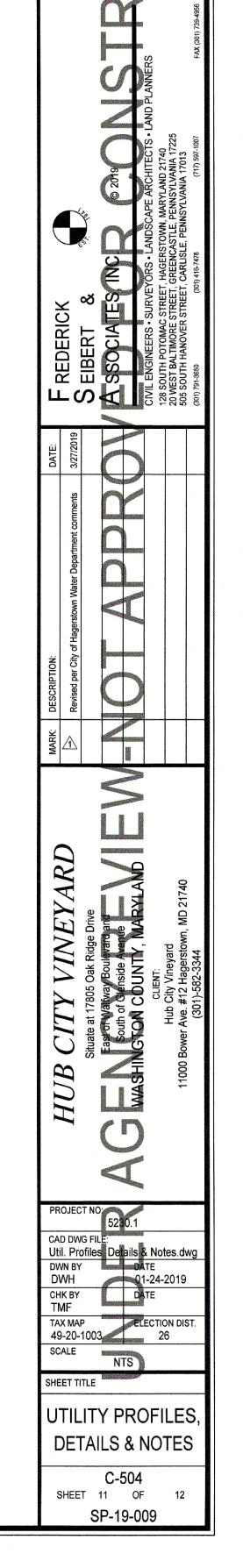
CONSTRUCTION -PROP. 6" D.I.P. PROPOSED 24" CMP

EX. WATER LINE. CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION BEFORE



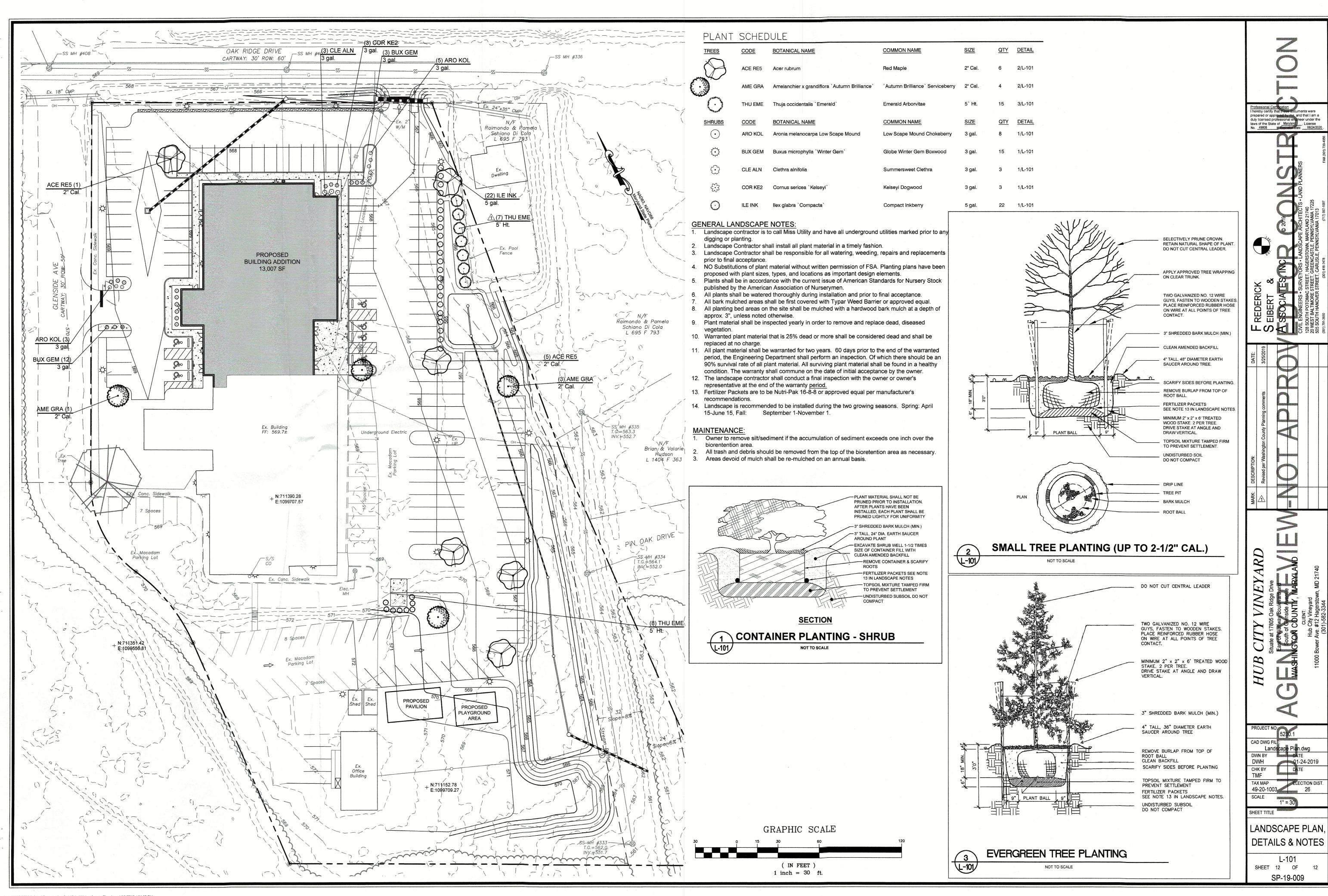






rofessional Certification nereby certify that these documents were

prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 49808 Expiration Pate: 08/24/2020



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DEPARTMENT OF PLANNING & ZONING COMPREHENSIVE PLANNING | LAND PRESERVATION | FOREST CONSERVATION | GIS

MEMORANDUM

TO:

Washington County Planning Commission

FROM:

Travis Allen, Comprehensive Planner

DATE:

April 23, 2019

RE:

Forest Conservation Mitigation Approval for Bowman Truck Terminal (GP-18-008, FP-19-007)

Attached you will find supporting documentation for a request to utilize offsite retention to satisfy the .87 acre planting requirement for the grading of three lots adjacent to the existing truck terminal at 10038 Governor Lane Blvd. Enclosed for your review are three documents in support of the applicant's request. These include copies of the onsite grading plan (GP-18-008); the offsite forest easement plat (FP-19-007) where the developer is requesting to meet their mitigation requirements for the project on property he owns near Porters Lane and Exline Road; and a justification letter from Qualified Professional Shannon Stotler.

Article 10.1 of the Washington County Forest Conservation Ordinance (FCO) describes the Preferred Sequence of Techniques for Mitigation for forest conservation plans. This list describes a hierarchy of of techniques ranging from onsite retention and planting to payment of fee in lieu. The overall intent of the FCO is to preserve or create as much forest onsite as is feasible within the constraints of each development project before meeting mitigation obligations offsite.

If you have questions or comments regarding this request, please contact me using the information provided below.

Travis Allen Comprehensive Planner (240) 313-2432 tallen@washco-md.net

100 West Washington Street, Suite 2600 | Hagerstown, MD 21740 | P: 240.313.2430 | F: 240.313.2431 | TDD: 7-1-1



Mr. Travis Allen

Comprehensive Planner

100 West Washington Street, Suite 2600

Hagerstown, MD 21740

RE:

Off-Site Mitigation for the Grading Plan for Bowman Truck Terminal

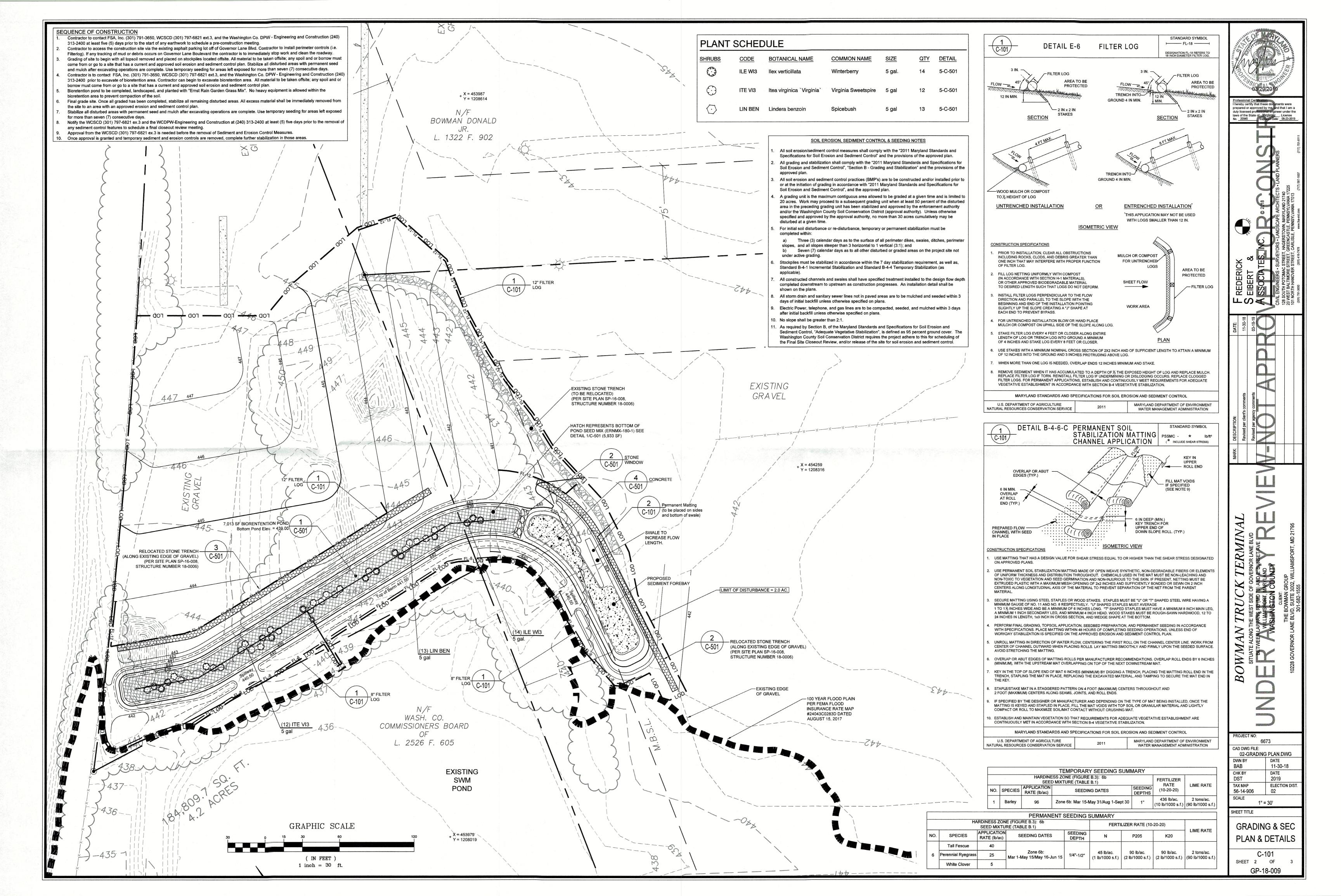
GP-18-008, FP-19-007, FSA Job #6673

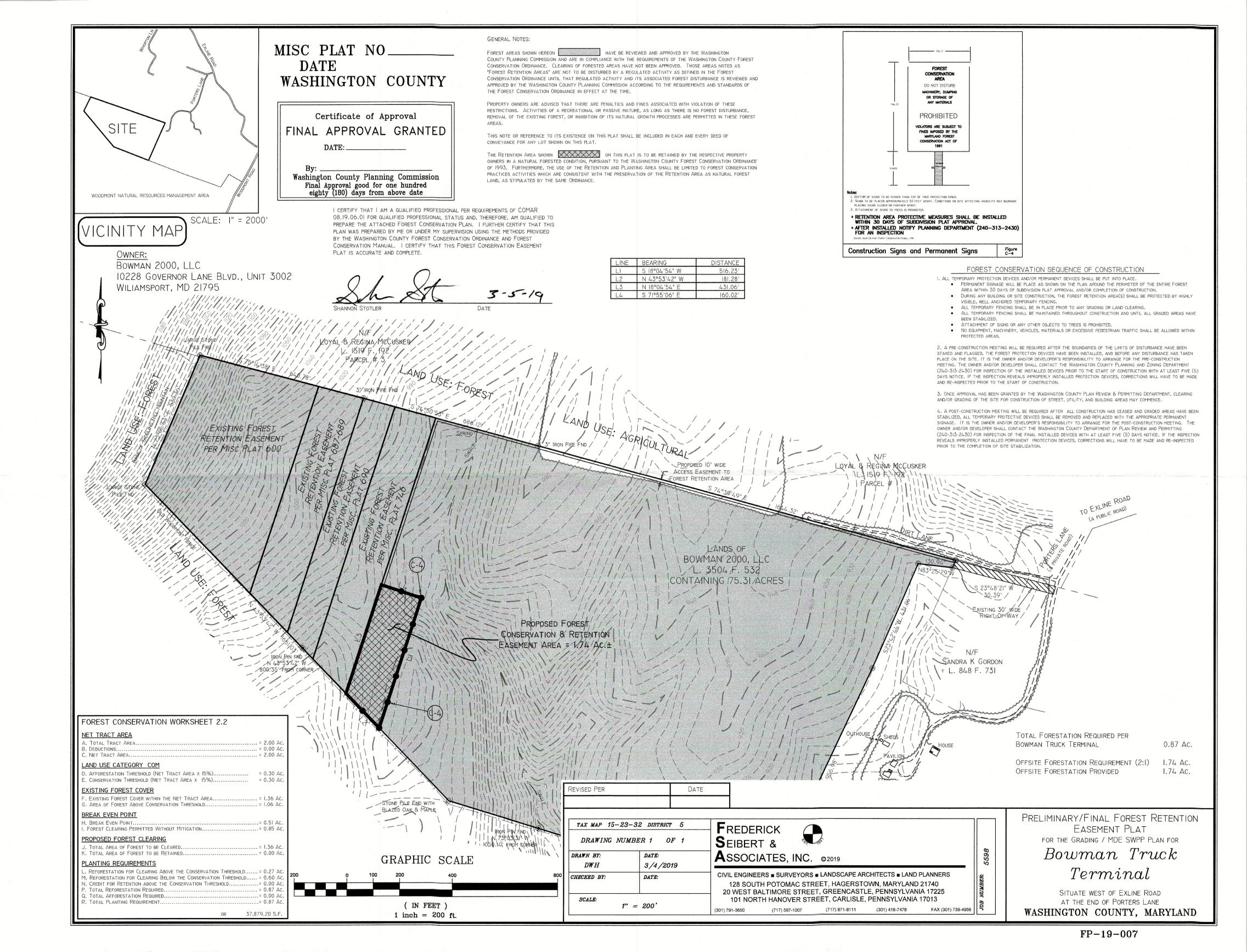
Dear Mr. Allen,

To meet the necessary requirements of forestation for the Grading Plan for Bowman Truck Terminal, the owner is requesting to provide forest mitigation off-site. The only forest on-site is in the middle of the property where that is the only remaining developable area. The existing forest is being removed for the development (stormwater pond and grading) of the site. With this property being in an industrial park, I feel it would be best to provide the forest mitigation for this development off-site at a 2:1 ratio rather than planting whips/trees onsite

Respectfully submitted.

Shannon Stotler





Approvals MD-ENG-6A "I/We certify all/any parties responsible for clearing, grading, construction and/or development will; be done pursuant to this plan and responsible personnel involved in the construction project will have a Certificate of UTILITY NOTIFICATION Training at a Maryland Dept. of the Environment approved training program The Soil Conservation District makes no representation as to the existence or nonexistence of any utilities at the construction site. Shown on these for the control of soil erosion and sediment." construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities. It is suggested that Miss Utility be contacted at: DISTURBED AREA QUANTITY THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE OWNER / DEVELOPERS CERTIFICATION PLANS HAS BEEN DETERMINED TO BE APPROXIMATELY "I/we hereby certify that all clearing, grading, construction and/or 2.0 ACRES AND THE TOTAL AMOUNT OF development will be done pursuant to this plan and in accordance with the **EXCAVATION AND FILL AS SHOWN ON THESE PLANS** Stormwater Management Ordinance of Washington County and the policy HAS BEEN COMPUTED TO BE APPROXIMATELY on construction of subdivision infrastructure for acceptance and ownership by Washington County (S-3)." WASHINGTON COUNTY SOIL CONSERVATION DISTRICT **Donald Bowman** 6/20/18 (PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL) WASHINGTON COUNTY DIVISION OF PLAN REVIEW AND PERMITTII ENGINEER'S STORMWATER MANAGEMENT CERTIFICATION "I verify and affirm that the Construction for the Stormwater Management Facilities as performed either meets or exceeds the requirements and design intent of this plan, including all specifications and referenced *Washington County stormwater management review is limited to the standards, and has been completed in accordance with good construction authority under the Washington County's Stormwater Management, practices. I also verify and affirm that I have reviewed the construction Grading, and Erosion and Sediment Control Ordinance, as well as County's inspection documentation and the as-built information; that it has been policies and standards related thereto. Approval of this plan does not imply done in accordance with Washington County requirements and at a level compliance with any requirements under Maryland General Permit No. deemed necessary to assure the Verification made herein; and all 12-SW or other requirements outside of the authority of the Division. discrepancies between the as-built information and approved plans have been noted and are considered acceptable to the Consultant." SIGNATURE ENGINEER / ARCHITECT DESIGN CERTIFICATION I hereby certify this plan for soil erosion and sediment certify has been designed in accordance with local ordinances, COMAR 29.1 .01.07, and Maryland Standards and Specifications for Son E I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 20945, Expiration Date: 2019-08-23.

General Notes

G.2 No subsurface investigation has been performed by Frederick, Seibert and Associates, Inc. to determine ground water, rock,

G.3 FSA, Inc. assumes no liability for the location of any above ground and below ground utilities. Existing utilities are shown from the best available information. Contractor to field verify location and depth of all above and below ground utilities prior to construction.

G.5 The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense. Contractor to use

G.6 All utilities shall be cleared by a minimum of 1'-0". All utility poles shall be cleared by a minimum of 2'-0" or tunneled if required.

G.7 The Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these drawings:

G. 9 Benchmarks as shown on plans. Elevations based on NAD83. Contractor must contract Frederick Seibert and Associates to

G. 10 The contractor shall notify the Architect/Engineer, before construction, of any conflicts between the plans and actual field

G. 11 The contractor shall protect all utilities and culvert pipes during construction by insuring proper cover, increasing cover, or

G. 12 Job site safety is the sole responsibility of the contractor. The Contractor shall perform all excavation in accordance with

G. 13 The contractor shall perform his own field inspection and surveys (if necessary) to determine the limit of earthwork needed to complete this project. Any earthwork quantities that may be shown hereon are preliminary estimates only, and are intended for Soil

Erosion Control plan review, if required. There has been no correction made to the earthwork quantities shown hereon due to the

G. 16 Load bearing fills (Class 1) proposed for support of buildings, walls, and other structures whose function thereof would be

G. 15 Sediment erosion control measures shall be installed per sediment erosion control plans, details and specifications.

especially impaired by the settlement shall be compacted at optimum moisture content to a 95% density.

by moderate settlement shall be compacted at optimum moisture content to a 90% density.

and otherwise objectionable, non-complying and unsuitable soils and materials.

G. 25 The contractor shall provide MOSH safety assistance for W.P.C inspector.

G. 26 Applicant to provide as built mylars at the completion of the project.

other representative of Washington County Division of Public Works.

project shall not relieve the contractor of his responsibility to complete such work.

G. 23 Limit of disturbed areas are to be the limit of property ownership, unless otherwise noted.

G. 27 This project has a projected start date of June 2019 and a completion date of September 2019.

G. 14 The contractor shall be aware that in the event of discrepancy between scaled and figured dimensions shown on the plan, the

G. 17 Load bearing fills (Class 2) proposed for support of roadways, pavement, and structures which would not be especially impaired

G. 18 All fills shall be placed in approximately horizontal layers each layer having a loose thickness of not more than eight (8) inches

G. 19 The entire area included within the proposed limits of cut and fill shall be stripped of all root material, trash and other organic

G. 20 It shall be distinctly understood that failure to mention specifically any work which would naturally be required to complete the

G. 21 All handicapped parking spaces shall be designed, ramped and signed to meet the minimum requirements of the Maryland code for the

G. 22 The existing site contours shown hereon were obtained from an aerial survey completed and field verified by FSA (Contour accuracy is

G. 24 Exterior lighting will consist of building mounted lights as shown on the architectural plans and pole mounted lights directed on site as

G. 28 A complete set of approved plans and a copy of the grading permit must be on site and available for use by the inspector, or

240-313-2460

301-797-6821, ext. 3

G.1 Any damage to adjoining public roads, utilities, etc. during construction will be repaired in kind by the contractor.

G.4 The contractor shall locate existing utilities in advance of construction operations in the vicinity of proposed utilities.

G. 8 The contractor shall be responsible for coordination of his construction with the construction of other contractors.

constructing roadway and parking through base course before loading site with heavy vehicles.

sinkholes or any other natural or man-made existing features.

Washington County Plan Review Department

Washington County Soil Conservation District

verify benchmarks before any construction activity can begin.

caution in areas where low hanging wires exist.

O.S.H.A. Regulations for trench safety.

figured dimensions shall govern.

for class 1 and twelve (12) inches for class 2.

to plus or minus one half the contour interval).

shown on the site plan and electrical plan.

GRADING/ MDE SWPPP PLAN

BOWMAN TRUCK TERMINAL

Situate along the west side of Governor Lane Blvd between Lappans Rd (MD 68) and E. Sunset Ave Williamsport, Maryland

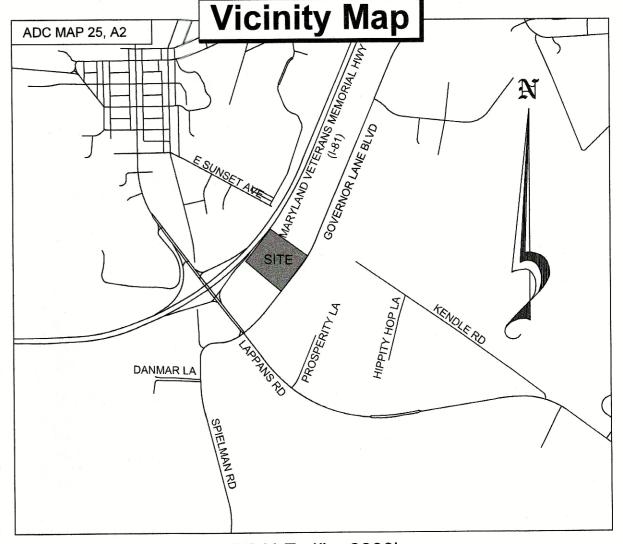
OWNER/DEVELOPER:

The Bowman Group 10228 Governor Lane Blvd, Suite 3002 Williamsport, Maryland 21795

> ATTN: Dan Hockman PHONE: 301-582-1555 FAX: 301-582-0049



CIVIL ENGINEERS ■ SURVEYORS ■ LANDSCAPE ARCHITECTS ■ LAND PLANNERS 128 SOUTH POTOMAC STREET, HAGERSTOWN, MARYLAND 21740 20 WEST BALTIMORE STREET, GREENCASTLE, PENNSYLVANIA 17225 101 NORTH HANOVER STREET, CARLISLE, PENNSYLVANIA 17013



SCALE: 1" = 2000'

Sheet Index

2	TYPE	NUMBER	TITLE
	G-001	SHEET 1	COVER SHEET
	C-101	SHEET 2	GRADING & SEC PLAN & DETAILS
	C-501	SHEET 3	STORMWATER MANAGEMENT DETAILS & NOTES

Site Data ELECTION DISTRIC PI-PLANNED INDUSTRIAL DISTRICT (INDUSTRIAL PARK) ZONING SETBACKS. REAR- 75' MAX. BUILDING HEIGHT. TRUCK TERMINAL FUNCTIONAL DESCRIPTION _ 8.44 Ac+/- (P. 906) PARCEL AREA ____ 12.431 Ac+/- (P. 007) 2.70 Ac+/- (P. 205) EXISTING BUILDING AREA 17,314 SF EXISTING BUILDING HEIGHT EXISTING PARKING AREA ___ 696,960 SF EXISTING IMPERVIOUS AREA 696,960 SF (68%) THERE ARE NO KNOWN STREAMS AND RELATED SENSITIVE AREAS _ BUFFERS, OR HABITAT OF THREATENED OR ENDANGERED SPECIES IDENTIFIED BY THE U.S. FISH AND WILDLIFE SERVICE PER CFR 17 AS REQUIRED TO BE SHOWN BY SECTION 4.21 OF THE ZONING ORDINANCE. FLOODPLAINS_ 100 YEAR FLOODPLAIN PER FEMA PANEL #24043C0283D DATED AUGUST 15, 2017. FORESTATION HAS BEEN ADDRESSED FOR THIS

SWM Narrative

Stormwater from this site must be managed for ESDv per the Manual and Ordinance. Per the Manual and Ordinance, the site meets the requirements for redevelopment. WQv must be provided for 50% of the existing impervious area within the LOD and ESDv must be provided for 100% of the new

Runoff in the post development condition will decrease from the predevelopment condition due to treatment of the WQ volume for both 20% of the existing site impervious area, 50% of the existing impervious within the LOD and 100% of all new impervious. There are no negative impacts downstream since the improvements discharge directly into the pond.

Proposed impervious area within LOD 0.88 acres x100% Existing overall site impervious area 16.0 acres x 20% Total impervious area to be treated

Existing impervious area within LOD

FORESTATION_

0.385 acres 0.88 acres 3.20 acres

Total WQv to be provided Total ESDv to be provided (includes WQv) 12,380 cubic feet 13,327 cubic feet

PROJECT PER FOREST CONSERVATION PLAT FP-19-007.

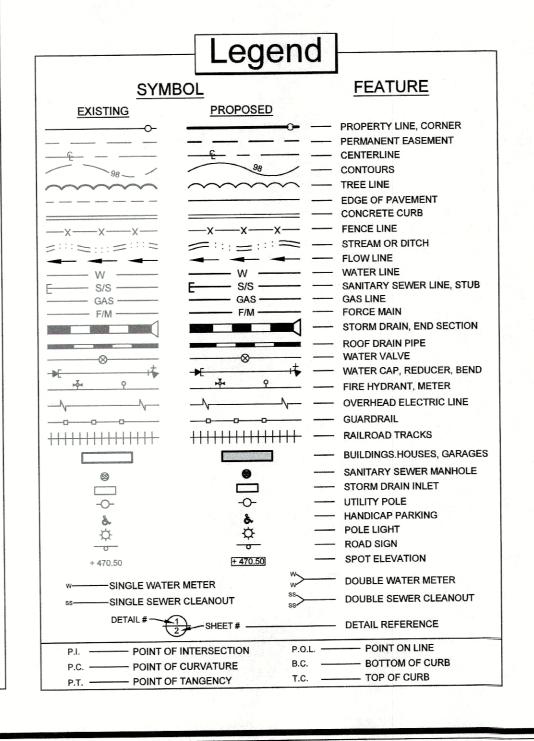
Treatment within Bioretention Treatment within Forebay Total ESDv (includes WQv) treated

9,212 cubic feet

Stormwater management for the site's disturbed area and 20% of the existing site impervious area has been provided.

0.77 acres x 50%

Construction Type (circle one) New PROJECT NUMBER: 6673 GRADING CHK BY: DATE: SEC CHK BY: DST SHEET Resubmittal Set SWM CHK BY: 01-29-19 Resubmittal Set KDM 06-13-1 SHEET 1 OF SUBMITTAL PLAN CHK BY: DATE: DESCRIPTION: KDM



. The USDA soil survey of Washington County shows the soils on this site as being karst landscape soils. please be alert to the 2. All sinkholes that are present or develop during construction must be remediated and certified by the site geotechnical engineer. Contractor to contact geotechnical engineer immediately after the discovery of any sinkhole.

Grading for this project shall be the full responsibility of the property owner. 2. If rock is encountered, undercut pond 18" and backfill with CL type soil.

n conformance with the Stormwater Management Ordinance of Washington County, a performance security and executed maintenance agreement shall be required from the developer prior to issuance of any building or grading permit for construction per these plans.



DEPARTMENT OF PLANNING & ZONING COMPREHENSIVE PLANNING | LAND PRESERVATION | FOREST CONSERVATION | GIS

MEMORANDUM

TO:

Washington County Planning Commission

FROM:

Travis Allen, Comprehensive Planner

DATE:

April 23, 2019

RE:

Forest Conservation Plan Revision for Fountainhead Properties Management (FP-19-009)

Attached you will find supporting documentation for a request to move a disturbed portion of an existing forest conservation easement at 13716 Crayton Blvd offsite into the Andrew Michael forest mitigation bank recently established near Cearfoss. Enclosed for your review are three documents in support of the applicant's request. These include copies of the preliminary forest conservation plan (FP-18-009); the intended offsite forest easement location at the Andrew Michael Forest Mitigation Bank (this will become another page in the revised forest conservation plan); and a justification letter from Qualified Professional Shannon Stotler dated April 16, 2019.

Portions of the existing 7.27 acre forest easement at Crayton Blvd have been affected by both short and long term disturbance from multiple sources. Recent short-term forest disturbance at the site due to an unapproved timber harvest will be addressed through onsite replanting and backed by a forest bond. Long term forest disturbance has also occurred, likely due to actions by adjacent residents who were previously aware that they abutted a permanent forest easement since the easement lacked the required permanent protection signage. Since existing patterns of adjacent land use have been established to a degree that would be very difficult to modify, the property owner has requested to move .78 acres offsite into the Andre Michael Forest Mitigation Bank.

If you have questions or comments regarding this request, please contact me using the information provided below.

Travis Allen Comprehensive Planner (240) 313-2432 tallen@washco-md.net

100 West Washington Street, Suite 2600 | Hagerstown, MD 21740 | P: 240.313.2430 | F: 240.313.2431 | TDD: 7-1-1

April 16, 2019

Travis Allen, Comprehensive Planner Wash Co Planning Department 100 W Washington St Hagerstown, MD 21740

RE: Fountainhead Properties Justification for Offsite Banking

Dear Travis,

Please accept this letter as analysis and justification to utilize an existing forest bank as the proposed means forest mitigation for the Fountainhead Properties project over other means of forest mitigation.

Although the applicant has selected to utilize item 10 on the preferred sequence list, which is to purchase credit from an approved Forest Mitigation Bank, we feel this method of mitigation is just as effective as others higher on the sequence. The applicant has selected to purchase credits from an "existing forest" bank. The area that was mistakenly encroached onto by the adjacent Spring Ridge Mobile Home Park is improved with Mobile Homes, playground equipment and parking for the park. By allowing offsite banking twice as much acreage will be retained due to the 2:1 ratio for any mitigation done offsite.

Higher items listed on the preferred sequence primarily consist of planting which is extremely expensive and consumes a large amount of property. Even at the Payment In Lieu of rate of 30 cents per square foot, planting would be over \$20,000. The actual price to create the afforestation area with planting, bonding and maintenance would be well over \$30,000, monies the applicants do not have to spare.

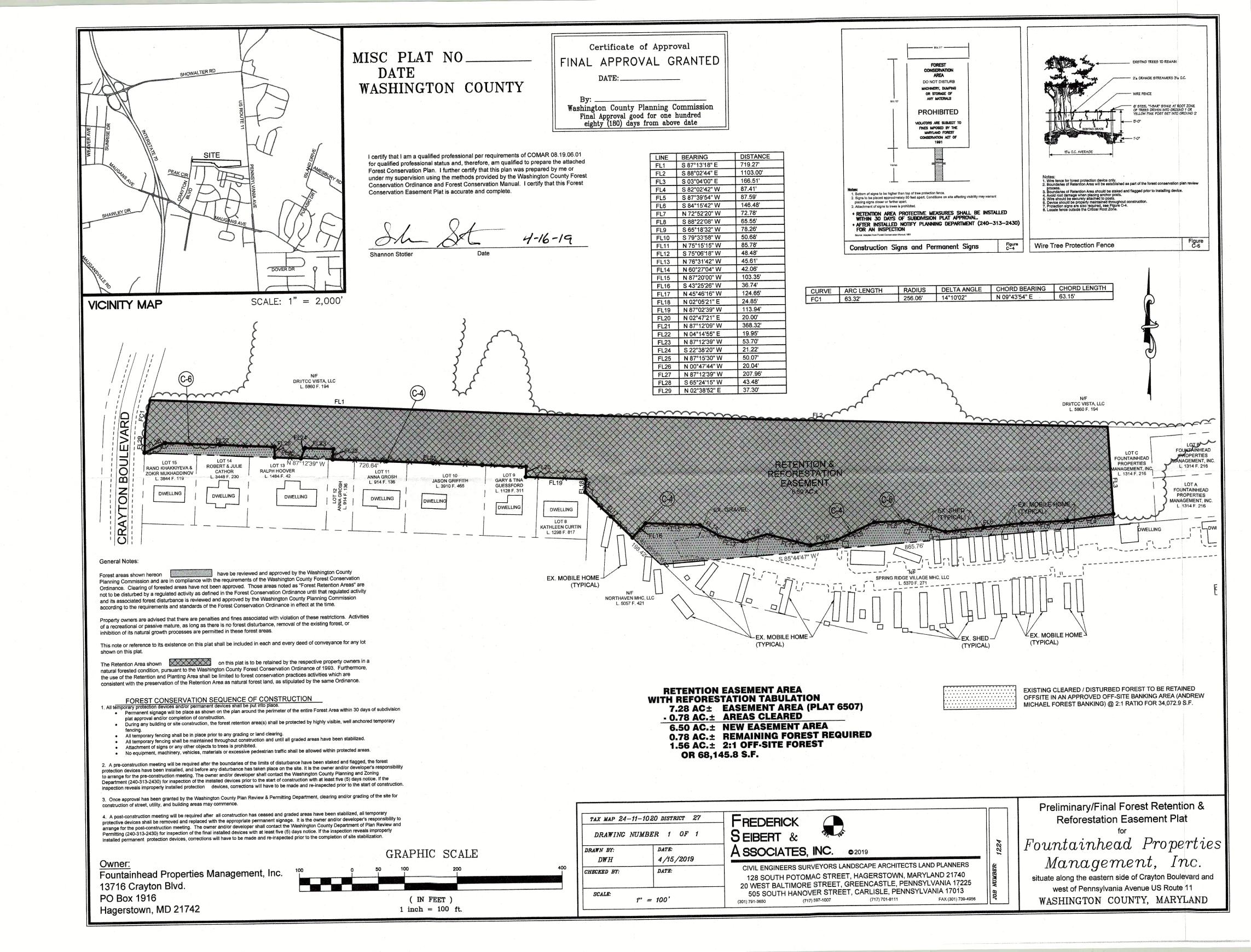
This site is specifically conducive to this method of mitigation since no additional forest is being removed in order to maintain the existing surroundings of the park and ultimately more forest will be saved.

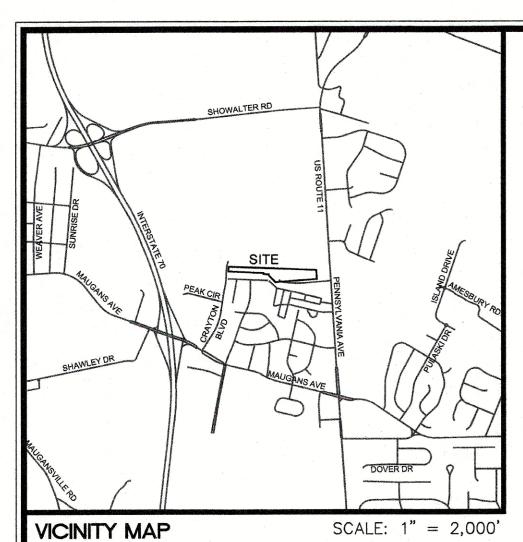
Please feel free to contact me with any questions.

Respectfully,

Shannon Stotler

Qualified Forestry Professional Frederick, Seibert & Associates





LONG TERM PROTECTION NOTES:

Long term protection for land shown hereon as Existing Forest or Reforestation Areas shall be provided by way of a perpetual conservation easement. This deed restriction, recorded with the land records of this property, limits the use of the existing forest and reforestation areas to those activities which are consistent with the conservation of forest such as recreational activities, forest management, and wildlife management. Activities of a recreational or passive nature, as long as there is no forest disturbance, removal of forest, or inhibition of its natural growth are permitted in the forest areas.

The County or its agents are authorized to inspect the Forest Conservation and Reforestation Easement Areas. A Proposed 10 foot Right-of-way from Crayton Boulevard for inspection access to the existing forest and Afforestation Areas.

PLANTING AND MAINTENANCE NOTES

- 1. Owner is to complete all planting work and preparation using his own resources and equipment.
- Plant material is to be purchased by the owner from a nursery within one hundred miles of the site. A list of three potential nursery sources is:
- A. Octoraro Wetland Nurseries P.O. Box 24 Oxford, PA 19363 (717) 529-3160
- B. Environmental Concern, Inc. 210 West Chew Avenue P.O. Box P St. Michaels, MD 21663 (410) 745-9620
- C. Sylva Native RD #2 Box 1033 New Freedom, PA 17349 (717) 227-0486
- 3. The cost estimate for bonding purposes is \$12,700.29 this is based on 30 cents per square foot of the Proposed Reforestation Area (0.97 Ac. or 42,334.3 Sq.Ft.). The reforestation area for bonding purpose is greater than required due to a revision to show a sanitary sewer easement that was over looked.
- 4. The plantings shown hereon will be planted in the Spring of 2019. The areas to be planted are presently previous forested area and will need minor preparation in the Spring of 2019. If the areas to be planted with trees are overgrown with weeds an herbicide shall be applied two weeks prior to planting.
- Undisturbed sites:
- Disturbance of soils should be limited to the planting field for each plant. As shown in Figure C-18.
- The trees are to be protected with "Tubex" tree shelters or approved equal when planted. Note a tree shelter will necessitate more frequent watering.
- Owner is to water trees and to prevent spread of invasive plants throughout the "forest" planting area
 for the two year maintenance period. Recommended type of watering is with a soaker hose to allow
 water to deeply irrigate the tree.
- 7. It is the owner or developers responsibility to notify the Washington County Planning Department when the planting and signage installation has been completed. The Washington County Planning Department will make an inspection and issue a report to the owner or developer. The two year maintenance period will begin when the Washington County Planning Department determines that the planting has been completed in accordance with the Forest Conservation Ordinance requirements.
- 8. The owner or developer shall make an effort to maintain a 65% survival of the original planting at all times. The owner or developer can replant in order to maintain the 65% survival rate during the two year period with advance notice to the Washington County Planning Department. If the final inspection determines there is less than 65% survival it will be the owner/developer's responsibility to correct the deficiencies and provide an additional maintenance period.

2'± ORANGE STREAMERS 3'± 0.0

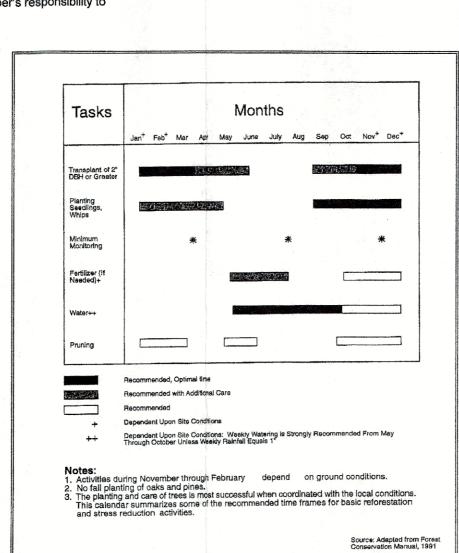
NOTES:

1. Wire fence for forest protection device only.

2. Boundaries of Retention Area will be established as part of the forest conservation plan review.

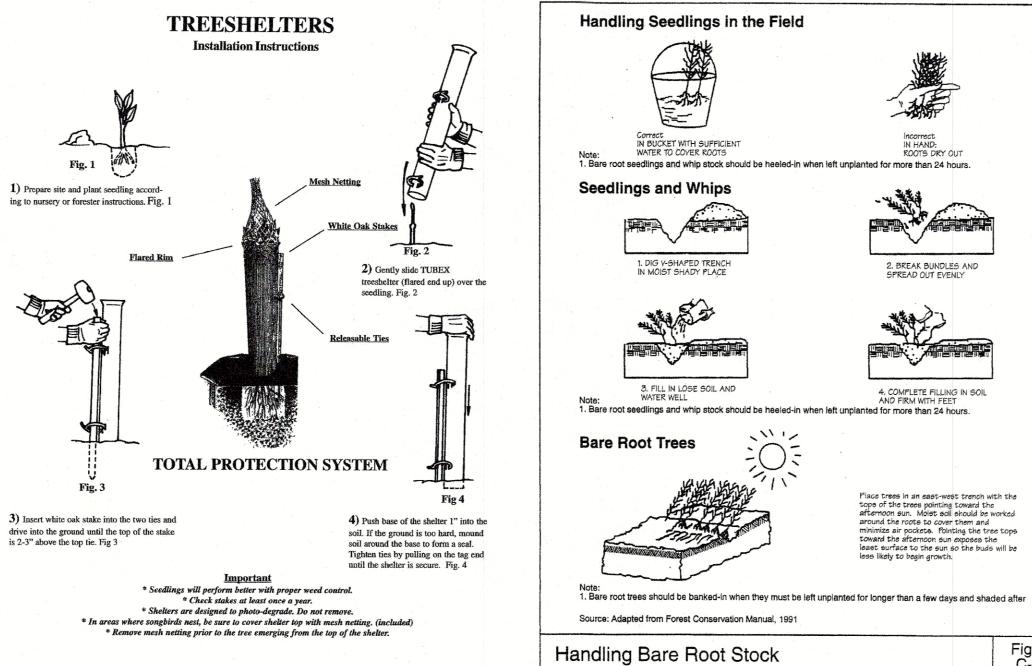
Boundaries of Retention Area should be staked and flagged prior to installing device.

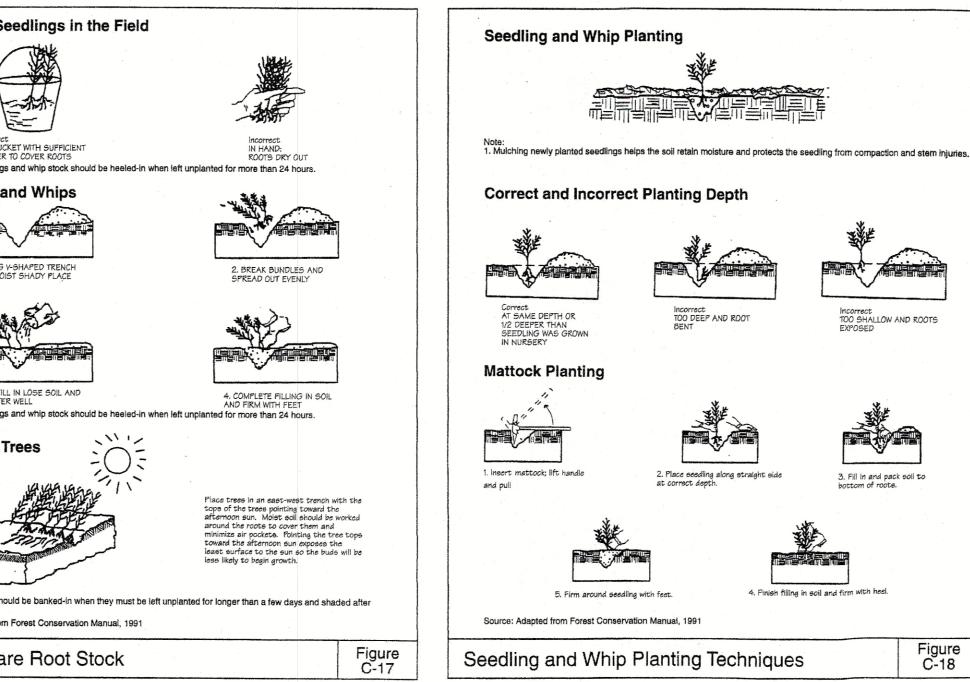
Wire Tree Protection Fence

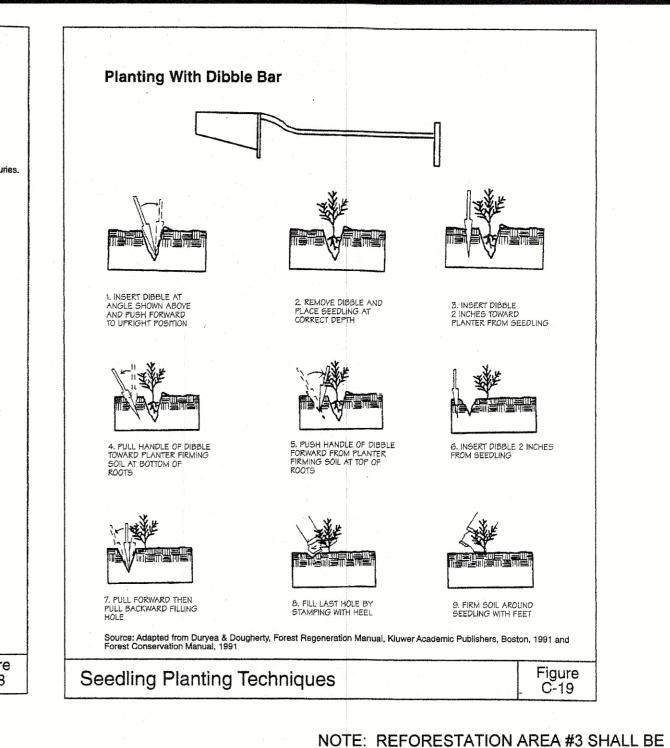


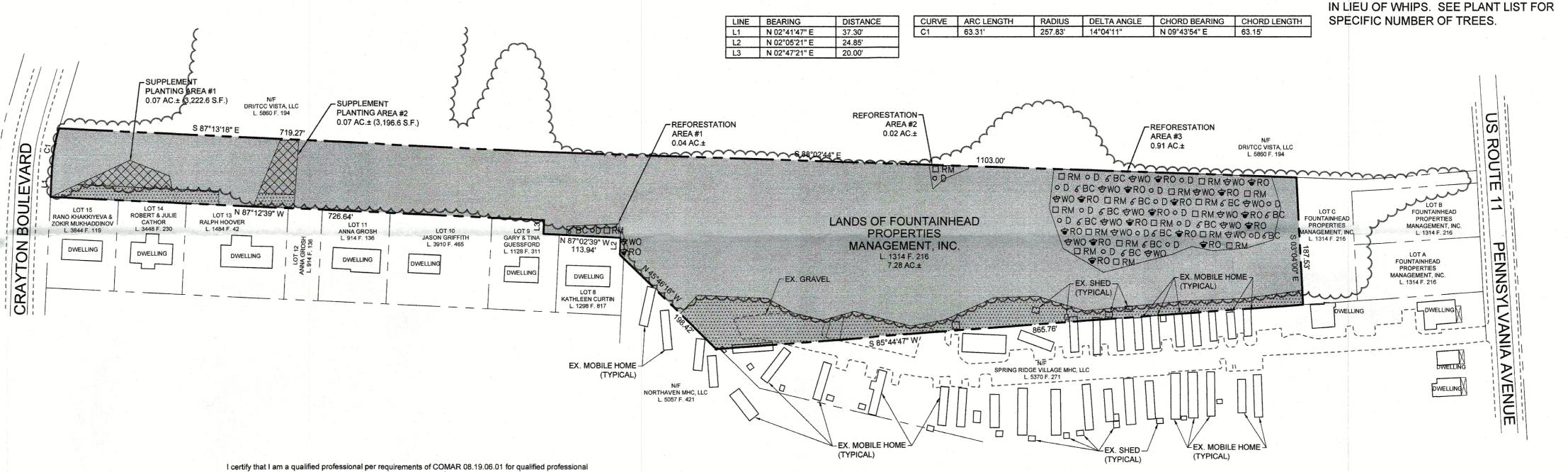
Tree Planting and Maintenance Calendar

Figure A:20









I certify that I am a qualified professional per requirements of COMAR 08.19.06.01 for qualified professional status and, therefore, am qualified to prepare the attached Forest Conservation Plan. I further certify that this plan was prepared by me or under my supervision using the methods provided by the Washington County Forest Conservation Ordinance and Forest Conservation Manual. I certify that this Forest Conservation Easement Plat is accurate and complete.



PLANT LIST (2" Caliper)						
SYMBOL	PLA	ANT	SIZE	ROOT	*PHASE QUANITY	
□RM	Acer Rubrum	Red Maple	2" to 3"	B & B	20	
• D	Cornus Flordia	White Dogwood	2" to 3"	B & B	20	
€BC	Prunus Serotina	Black Cherry	2" to 3"	B & B	12	
&MO.	Quercus Alba	White Oak	2" to 3"	B & B	20	
♥ R0	Quercus Rubra	Red Oak	2" to 3"	B & B	20	
			TOTAL FOR	0.91 AC.	92	

	PLANT LIST	T (Whips /	seedin	gs)	
SYMBOL	PLA			ROOT	*PHASE QUANITY
□RM	Acer Rubrum	Red Maple	1" to 1"	Container	15
o D	Cornus Flordia	White Dogwood	1" to 2"	Container	15
€BC	Prunus Serotina	Black Cherry	1" to 2"	Container	20
₽WO	Quercus Alba	White Oak	1" to 1"	Container	20
♥ R0	Quercus Rubra	Red Oak	1" to 2"	Container	20
TOTAL FOR 0.21 AC. (9,044.15 S.F.)				90	

* This reforestation is for a planting on 0.97 acres to be started in the Spring of 2019 and completed in the Fall of 2019.

NOTES:

1. Tree location as shown on this reforestation plan are generalized to show a random planting to give a more natural look to the forest. Actual placement of trees may vary due to field conditions. For planting the whips/seedlings, the minimum number of 450 trees per acre is required with approximate 10'x10' spacing and maintaining a 65% minimum survival rate. The planting of trees with at least a 2" caliper has a required minimum number of 100 trees per acre and maintaining a 100 % survival rate.

The tree selection used for this planting are species native to this physiographic region of the State of Maryland.
 A mix of rapid growth to slow growth trees and trees with differing height at maturity are proposed to emulate natural growth patterns.

3. The plant list has the correct quantity of trees shown. The symbols shown on sheet do not add up to the quantity noted in the plant list, but are a guide for random planting per note #1.

4. Species substitution, and quantity changes are allowed only with the approval of the Washington County Planning Department. All species must be included on the Washington County Forest Conservation Technical Manual native tree and shrub list.

5. The purpose of this plan is for the reforestation of areas that have been cleared within the retention easement area. Some of the forest clearing or disturbance shall be planted or retained off-site at a 2:1 ratio.

RETENTION EASEMENT AREA WITH REFORESTATION TABULATION 7.28 AC± EASEMENT AREA - 1.90 AC.± AREAS CLEARED

> 5.38 AC.± + 1.12 AC.± PROP. PLANTING 6.50 AC.± NET FOREST AREA 0.78 AC.± REMAINING FOREST REQUIRED 1.56 AC.± 2:1 OFF-SITE FOREST OR 68,145.8 S.F.



EXISTING FOREST RETENTION AND REFORESTATION EASEMENT PER PLAT 5749, 6043, AND 6507

PLANTED WITH AT LEAST 2" CALIPER TREES



PRO BC □ RM O D EXISTING FOREST AREA (DISTURBED BUT TO BE REGENERATED AND BONDED) 42,334.3 S.F.



TO BE PLANTED BUT NOT REQUIRED TO BE BONDED



EXISTING CLEARED / DISTURBED FOREST TO BE RETAINED OFFSITE IN AN APPROVED OFF-SITE BANKING AREA (ANDREW MICHAEL FOREST BANKING) @ 2:1 RATIO FOR 34,072.9 S.F.

C-101

SHEET 1 OF

FORESTATION SITUATE ALONG THE WESTERN SIDE O

prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of ______, License No. ______, Expiration Date: