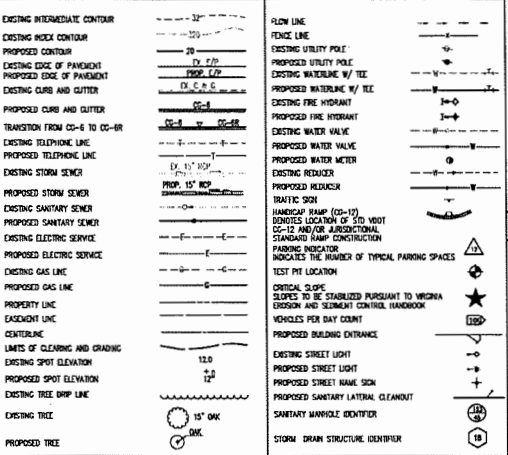


GENERAL NOTES

- 1. This site has been addressed by the Prince William County Mapping Office at 7405 CUSHING ROAD...
2. Addressed as designed or for the layout of individual buildings or dwelling units and are for reference only...
3. Methods and materials used in the construction of the improvements herein shall conform to the current County construction standards...
4. The contractor or developer is required to notify the Prince William County Department of Public Works in writing (2) days prior to the beginning of the construction...
5. Measures to control erosion and siltation, including detention ponds serving as all basins during construction, must be provided prior to issuance of the site development permit...
6. A permit must be obtained from the Office of the Resident Engineer, Virginia Department of Transportation (VDOT) Prince William County, prior to construction in existing State right-of-way...
7. Approval of this plan does not guarantee issuance of an entrance permit by VDOT when such permit is required under State law...
8. The exact location of all guard rails will be determined by VDOT personnel...
9. All utility lines shall be located and marked in accordance with the Virginia Utility Marking Law...
10. All utility lines shall be capped and piped to the nearest storm sewer manhole or curb inlet...
11. All standard street name signs, traffic control devices, and street lights shall be installed by the developer...
12. Construction details shall be coordinated in accordance with the Virginia Litter Control Act...
13. The contractor shall provide adequate means of clearing mud from trucks and/or other equipment prior to entering public streets...
14. Installation shall be done in the presence of the County (Service Authority, Virginia-Johnson Truck Company, or Site Service Corporation) prior to construction of water and/or sanitary sewer lines...
15. All sanitary sewers and water mains and appurtenances shall be constructed in accordance with the current standards and specifications of Prince William County and/or the Service Authority...
16. The developer and/or contractor shall be responsible to supply all utility companies with copies of plans that have been approved by Prince William County and advising them that all grading shall conform to the approved plans...
17. Contractors shall notify appropriate utility lines in the area of proposed excavation or boring at least two (2) working days, but not more than ten (10) working days, prior to commencement of excavation or boring...
18. * Washington Dept. of Public Safety, Virginia Power Co., Northern Virginia Electric Co., Columbia Gas of Virginia, Commonwealth of VA, Colonial Pipeline Co., Transcontinental Gas Pipe Line Corp., Service Authority 333-7900, Virginia-American Water 481-2136, Data Service Corporation 484-4161, MISS UTILITY 1-800-257-7777

LEGEND



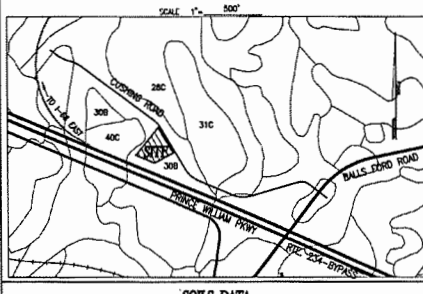
SITE TABULATION

SEE SHEET 2

SURVEY AND TOPOGRAPHIC INFORMATION

- 1. Horizontal and vertical control surveys were performed by J. BERRY in 2003.
2. All elevations must be referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).
3. Sources of topographic mapping is SCENERY dated NOVEMBER 2000.
4. Boundary survey was performed by J. BERRY in 2003.
5. The application of the professional's seal and signature is required by Section 1.14 of the STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS AND CERTIFIED LANDSCAPE ARCHITECTS RULES AND REGULATIONS and it is evident that the boundary data is correct to the best of the land surveyor's knowledge, and complies with the minimum standards and procedures of the said board. The topographic information is accurate to within one-tenth of the contour interval, as shown. Application of the seal and signature indicates acceptance of responsibility for the work shown herein.

SOILS MAP



SOILS DATA

Table with columns: SOIL NO., SOIL NAME, SOIL SURFACE CAT., SURFACE RUNOFF, EROSION HAZARD, DEPTH TO BEDROCK, SHRINK-SWELL, FLOODING, SLOPES.

DESIGNATED PLANS EXAMINER CERTIFICATE

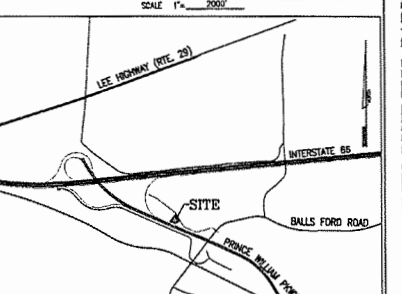
Form for Designated Plans Examiner Certificate with fields for 1st and 2nd supervisor reviewed and recommended for submission, including name, number, and date.



THESE PLANS ARE IN CONFORMANCE WITH PRINCE WILLIAM COUNTY STANDARDS AND ORDINANCES. ANY DEVIATION OR CHANGE IN THESE PLANS SHALL BE APPROVED BY THE DIRECTOR OF PLANNING PRIOR TO CONSTRUCTION.

Reviewed by: [Signature] Approved by: [Signature]
This plan has been reviewed and has been found to be in general conformance with the requirements of Prince William County. The developer is hereby authorized to obtain all necessary local development permits, subject to all design, construction, maintenance and performance being in compliance with local requirements.

VICINITY MAP



SHEET INDEX

- 1. COVER SHEET
2. CONSTRUCTION DETAILS & NOTES
3. GROUND PROFILES & PROFILES ANALYSIS - RFP22019-00039
4. GRADING PLAN
5. STORM SEWER PROFILES AND COMPUTATIONS
6. SHORT DISTANCE PROFILES
7. PCSA WATER & SANITARY SEWER INFORMATION
8. SANITARY SEWER COMPUTATIONS-AND-DETAILS (DELETED/VOID)
9. WATERMAIN PROFILES
10. SANITARY SEWER PROFILE
11. EROSION & SEDIMENT CONTROL DETAILS
12. PHASE I EROSION & SEDIMENT CONTROL PLAN AND COMPUTATIONS
13. PHASE II EROSION & SEDIMENT CONTROL PLAN
14. SWM/BMP NARRATIVE AND PACT SHEET
15. POLLUTION PREVENTION PLAN
16. BMP MAP AND COMPUTATIONS
17. PRE AND POST DEVELOPED CONDITIONS
18. ASSESSMENT BUTTAL ANALYSIS
19. HYDRAULIC COMPUTATIONS
20. SWM COMPUTATIONS AND HYDROGRAPHS
21. STORMWATER TREATMENT SYSTEM DETAILS
22. LANDSCAPE PLAN
23. LIGHTING-PROPOSED-PLAN (DELETED/VOID)
24. PERFORMANCE-BOND-ESTIMATE-0-20000000- (DELETED/VOID)
25. PERFORMANCE BOND ESTIMATE & ESCROWS (REV. #2)
26. GEOTECHNICAL RECOMMENDATIONS & DETAILS (REV. #2)
27. APPROVED-GROFFEN-PLAN-(DELETED/VOID)

PRINCE WILLIAM COUNTY

COVER SHEET

Project information form for Ashley Business Park, including project name, location, plan number, and contact information for Dewberry Engineers Inc.

- 22. The location of existing utilities shown in these plans are taken from existing records. It shall be the contractor's responsibility to verify the exact horizontal and vertical location of all existing utilities as needed prior to construction...
23. The developer shall be responsible for the relocation of any utilities which occurs as a result of his construction project within or contiguous to the existing right-of-way...
24. All utilities placed under existing streets shall be buried or jacketed...
25. When grading is proposed within easements of utilities, letters of permission from all involved companies must be provided to Prince William County Planning Office prior to issuance of grading and/or foundation permit...
26. The developer shall be responsible for the relocation of any utilities which is required as a result of his project. The relocation should be done prior to construction...
27. Before hauling, loading, transportation or storage of explosives in Prince William County, a permit shall be obtained from the Fire Marshal's Office, 792-5300...
28. Fire and Hazard Services must be notified immediately (792-4310) in the event that unusual items such as tanks, cylinders, unidentified containers, etc. which could contain potentially hazardous materials are discovered or observed...
29. Stormwater water drains shall be installed per Section 600 of the Design and Construction Standards Manual...
30. All walkways outside of the right-of-way shall be maintained by the homeowners association...
31. Maintenance of the Storm Drainage or Storm Water Management facilities located therein shall be pursuant to Section 700 of the Prince William County Design and Construction Standards Manual...
32. If any items shown on this plan are deleted in phase, a phasing plan must be approved by the engineering inspection branch prior to the issuance of any occupancy permits...
33. These plans identify the location of all known growlines. Once this plan is approved in accordance with state law in the event any grow lines are discovered during construction, the County's Planning Office must be notified immediately (792-4330). All activities must not be resumed until authorization is provided to proceed in writing by the County Planning Office...
34. Roof top mechanical equipment, if any, must be enclosed within a well or similar screening barrier, designed in harmony with the building...
35. Individual appurtenance permits will be required from the Zoning Office for all the existing and locate signs prior to installing the signs...
36. All buffer areas shall be screened according to the Design and Construction Standards Manual...
37. For further statement and profile analysis, see SHEET 2A-2B...
38. For wetters see sheet 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
39. Anticipated average flow: 3,182,050.00 cfs. DFM FLOW ANALYSIS-SUMMARY-SHEET000001
40. Anticipated the flow: 3,182,050.00 cfs. DFM FLOW ANALYSIS-SUMMARY-SHEET000001
41. Distance to nearest existing school or proposed school site: 1.2 MILES TO GEMER P. WELLS ELEMENTARY

SUPPLEMENTAL DAD GENERAL NOTES

- 1. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER, THE CONTRACTOR, OR THEIR AGENTS OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY OTHER ORDINANCE ENACTED BY PRINCE WILLIAM COUNTY.
2. THIS PLAN REVISION COMPLIES WITH THE NEW PRINCE WILLIAM COUNTY SERVICE AUTHORITY UTILITY STANDARDS MANUAL, EFFECTIVE SEPTEMBER 3, 2018. ALL UTILITY WORK AND PERMITS ISSUED AFTER THIS DATE MUST COMPLY WITH THE CONSTRUCTION CRITERIA IN THE NEW MANUAL, INCLUDING ANY REVISIONS WHICH HAVE BEEN ISSUED.
3. PARKING LOT/STREET LIGHTING DESIGN SHALL BE PERFORMED AND PROVIDED SEPARATELY BY OTHERS. ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY OTHERS AND IS INCLUDED FOR INFORMATION PURPOSES ONLY. AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS, DIMENSIONS & DIMS HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.
4. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
5. THE DEVELOPER/BUILDER SHALL CONTACT THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY TO DISCUSS UTILITY PERMIT REQUIREMENTS FOR INSTALLATION OF WATER AND SEWER MAINS AND CERTIFICATION OF WATER AND SANITARY SEWER AVAILABILITY PRIOR TO ISSUANCE OF A BUILDING PERMIT.
6. NO CEMETERIES OR HISTORIC SITES ARE KNOWN TO EXIST WITHIN THE PROJECT LIMITS SHOWN ON THIS PLAN.
7. NO RPA AND 100-YEAR FLOODPLAIN LIMITS EXIST WITHIN THE PROJECT LIMITS SHOWN ON THIS PLAN.
8. SWM/BMP NOTE: SWM AND BMP BEING SATISFIED BY AN ONSITE UNDERGROUND STORMWATER CHAMBER SYSTEM AND GRASS LINED SWALE TO BE MAINTAINED BY THE OWNER.
9. STORM DRAINAGE NOTE/SWM MAINTENANCE NOTE: SEE SHEET 12.
10. NO PROFORM ASSOCIATED WITH THIS PROJECT.
FOR ADDITIONAL NOTES SEE SHEET 2.

REVISIONS

Table with columns: DATE, DESIGNER NO., DESCRIPTION. Includes revisions for gravel storage yard and utility line.

BOND ESTIMATE NEW BOND ESTIMATES PER REVISION #1

Table with columns: ITEM, COUNTY BOND, VDOT BOND. Includes construction cost, administrative cost, inflation cost, total performance bond amount, and landscape escrow.

Subdivision/Site Plan Name: ASHLEY BUSINESS PARK
PRC File Number: SPR2020-00340S02



COUNTY OF PRINCE WILLIAM
 7000 Lee Avenue (VA-267), Manassas, Virginia 20108
 (703) 792-0000, Hours: 8:30-5:00, 48-4366, FAX: 793-4402

DEPARTMENT OF
 FIRE & RESCUE

November 14, 2006

TO: Oscar Ozman, Planning Division Chief
 FROM: Howard Counts, Engineer/Plan Reviewer
 Fire Marshal's Office
 793-793-4360

SUBJECT: Case No: WA2007-09186
 Ashley Business Park
 7404 Cushing Rd.
 Site Plan 05-05490

This office has reviewed this request for a modification waiver of sections 302.04 B of the Prince William County Design and Construction Standards Manual requiring an access road due to the length of a building exceeding 100'.

Justification has been described as follows: due to the building being very small the building code would permit the construction type to be V-B (3-B) however non-compliance with (2-B) will be provided. Due to the enhanced fire protection provided by the superior construction that office can support this request and therefore recommends approval. Should there be any questions please feel free to contact me.



PRINCE WILLIAM COUNTY
 DEPARTMENT OF PUBLIC WORKS
 3 County Center Court, Suite 179
 Prince William, VA 22182-8101
 Main: (703) 793-7079 Facsimile: (703) 793-4297

DCSM WAIVER

SECTION I - GENERAL INFORMATION

Applicant: Dewberry Date: June 8, 2006
 Address: 13075 Heathstone Blvd, Suite 130 Waiver: WA2005-00162
 GAITHERSBURG, VA 20155
 Site Location: 7404 Cushing Road Plan No.: SP20020-00340
 Project Name: Ashley Business Park

SECTION II - SPECIFIC OF WAIVER REQUEST

Section of Design and Construction Standards Manual to be waived: 302.04 (F)

Requirements:

Permanence of structures or unadorned obstructions and attachments such as fences and walls shall not be located within easements. Existing trees may remain, but new trees shall not be planted within the easements unless otherwise approved by Public Works. The location of drainage systems shall be taken into consideration in placing of subdivisions or lots to minimize the possibility of such encroachments.

Justification for Waiver: The proposed fence is made of composite post-and-rail fence around the gravel storage yard is required by the approved RZ2011-00019 GDP. With the stormwater management facility being located inside the property lines and under the gravel storage yard, the proposed perimeter fence has to cross the existing SWM easement and existing SWM access easement near the site entrance. Furthermore, the storm pipe crossing the fence has at least 8 feet of cover and no fence post shall be placed directly over the pipe.

Waiver #: WA2005-00162
 Plan #: SP20020-00340

SECTION III - RECOMMENDATION OF PUBLIC WORKS

Recommendation: Approval Denial

WHD Break Check Marked: EXD Break Check Marked:

Reason(s) for Approval: This waiver is recommended for approval with the conditions stated in section IV of this waiver application.

SECTION IV - ADDITIONAL COMMENTS OR CONDITIONS

Private William County is not responsible for maintenance of the storm, street drainage system, and the SWM access.
 Fences shall not affect the performance of the storm drainage system.
 Fee site owner is responsible for rebuilding the fence if removed by the County during maintenance of the storm drainage system, if applicable.
 Proposed fence shall not cause adverse drainage impact on adjacent lot(s)/property/structure.
 A separate approval and permit from Zoning Office and Building Division shall be obtained for the fence, when applicable.
 A hold harmless agreement shall be recorded.

For question call: Raj Thakur @ (703) 790-7070.

Director's Action: Approval of Waiver Denial of Waiver

Signature: *Tom Smith* Date: 6/11/2006
 Tom Smith, Acting Director of Public Works

CC: Land Development Division

SUPPLEMENTAL D&D GENERAL NOTES: (CONT'D)

10. \odot DENOTES TEST HOLE REQUIRED TO DETERMINE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIGGING OF ALL TEST HOLES PRIOR TO BEGINNING ANY CONSTRUCTION ON THE PROJECT. IF CONDUITS ARE DISCOVERED AS A RESULT OF THE TEST HOLE FINDINGS, NOTIFY DEWBERRY & DAVIS LLC AT 703-631-3430.
11. CONTROLLED FILLS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY METHOD "A" PER STANDARD PROCTOR AASHTO-T99, ASTM-D698, OR VTM-1 AS APPLICABLE. DENSITY SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
12. ALL FINISHED GRADING, STODING, STODING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER ON THE SITE PARTICULARLY ADJACENT TO SWALES AND STORM INLETS.
13. EXISTING MANHOLE FRAMES AND COVERS AND VALVE BOXES AND COVERS SHALL BE ADJUSTED OR RECONSTRUCTED, AS NECESSARY, TO MATCH FINISHED GRADES.
14. REFER TO THE GEOTECHNICAL ENGINEER FOR METHODS, MATERIALS AND DETAILS FOR CONSTRUCTION OF ALL EARTHWORK ACTIVITIES.
15. THE OWNER SHALL BE RESPONSIBLE FOR SECURING ANY AND ALL FLOOD HAZARD USE, WETLAND, LAND DISTURBANCE AND STORM WATER DISCHARGE PERMITS, AS APPLICABLE PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HONORING ALL CONDITIONS OF SUCH PERMITS.
17. WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED, THE CONTRACTOR SHALL CEASE WORK IN THAT AREA AND IMMEDIATELY NOTIFY THE PROPER AUTHORITY, PRINCE WILLIAM COUNTY AND/OR THE ARCHITECT/ENGINEER.
18. ALL ON-SITE UTILITY FACILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT FOR TRANSMISSION POWERLINES OF 34,500 KILOWATTS OR GREATER.
19. ALL SLOPES INCLUDING THOSE OF 3:1 MAX. SHALL BE SEEDED AND MULCHED OR SOODED AND PRECURED. ALL PROPOSED GRADES ARE 3:1 MAX. UNLESS OTHERWISE NOTED.
20. ALL SIGNS MUST COMPLY WITH THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ZONING ORDINANCE.
21. ALL UTILITY RELOCATION AND PERMANENT UTILITY EASEMENTS SHALL BE PERFORMED AND RECORDED PER THE APPROPRIATE UTILITY COMPANY.
22. NO USE SHALL BE MADE OF, NOR SHALL ANY DISTURBANCE, MODIFICATIONS OR IMPROVEMENTS BE MADE IN THE PERMANENT CONSERVATION AREAS FOR 100% BMP CREDIT (PCA) WITHOUT SPECIFIC AUTHORIZATION FROM THE DEPARTMENT OF PUBLIC WORKS.
23. PRIOR TO INITIATING GRADING OR OTHER ON-SITE ACTIVITIES ON ANY PORTION OF A LOT OR PARCEL, ALL WETLAND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS SHALL HAVE BEEN OBTAINED AND EVIDENCE OF SUCH SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS.
24. IF ROOFTOP MECHANICAL EQUIPMENT IS TO BE USED, SCREENING IS REQUIRED AND MUST COMPLY WITH HEIGHT RESTRICTIONS PER ZONING ORDINANCE SECTION 400.03.

TABULATIONS:

A. SITE AREA = 61.24 ACRES

B. SITE ZONED: M1

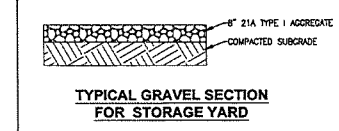
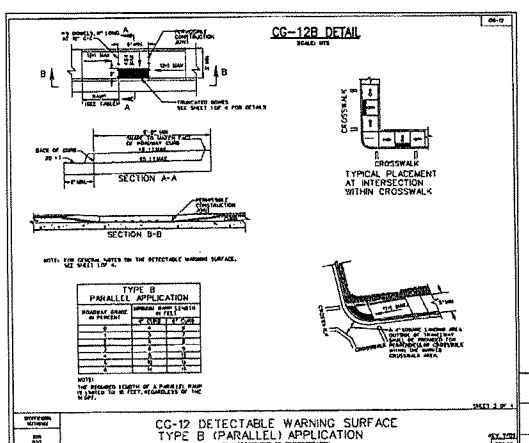
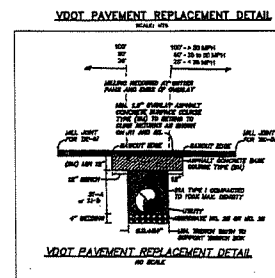
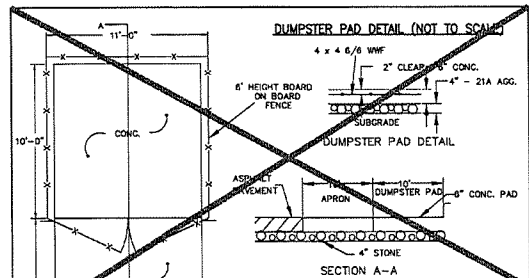
DEVELOPMENT STANDARDS	REQUIRED	PROVIDED
LOT COVERAGE:	85% MAX.	71.7% (SEE COMP. BELOW)
OPEN SPACE REQ.:	15% MIN.	28.1% (SEE COMP. BELOW)
F.A.R.:	0.5 MAX.	0.5% (SEE COMP. BELOW)
BUILDING HEIGHT:	40' MAX.	N/A

SETBACKS REQUIREMENT

- A. AT LEAST 20' FROM ALL STREET R.O.W.
- B. ANY SIDE A REAR - IF ADJUTING COMMERCIAL/OFFICE DISTRICT - 20' (N/A FOR THIS PROJECT)
- C. ANY SIDE A REAR - IF ADJUTING AGRICULTURAL/RESIDENTIAL DISTRICT - 50' (N/A FOR THIS PROJECT)

C. TOTAL PROPOSED BUILDING SQUARE FOOTAGE = N/A

- D. COMPUTATIONS
1. LOT COVERAGE = IMPERVIOUS AREA / SITE AREA = 39,300 SF / 63,821 SF = 61.7%
 2. OPEN SPACE REQ. = OPEN SPACE / SITE AREA = 16,491 SF / 63,821 SF = 25.8%
 3. FLOOR AREA RATIO = TOTAL BQ. FT. / SITE AREA = 0 SF / 63,821 SF = 0.0%



TYPE B PARALLEL APPLICATION

CC-12B	ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET
1	1.04	6'
2	1.23	8'

NO.	DATE	DESCRIPTION	BY
D&D REVISIONS			

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			



CONSTRUCTION
 DETAILS & NOTES

ASHLEY BUSINESS PARK
 Gainesville Municipal District
 Prince William County, Virginia

Plan Number: 05-040901
 Drawn By: AD
 Designed By: AD
 Checked By:
 Date: 3/09/12
 Sheet: 2 of 24
 MAN SP-499

REZONING #REZ2019-00039 PROFFERS

Re zoning #REZ2019-00039, Ashley Business Park
Approved by BOCC: 11.19.19

PROFFER STATEMENT

RE: #REZ2019-00039 Ashley Business Park, LLC
 Owner/Applicant: Ashley Business Park, LLC
 Property: 0.2143, 79942-134 (the "Property") Planning Office
 Approximately 1.26 acres (Shenandoah Magisterial District
 M.A. Light Industrial in MDT, Industrial/Transportation)

L. G. Little
Planning Office

Date: October 2, 2019

The subject property proffers that the use and development of the subject Property shall be in strict accordance with the following conditions. In the event the above-referenced zoning is not granted as applied for by the Applicant, these proffers shall be withdrawn and not used to support the proffer and shall have been prepared for consideration or reference only and shall not amount or affect the granting or be taken as an interpretation of any provisions of the proffer. Any improvements specified herein shall be provided at the time of development of the portion of the site served by the improvement, unless otherwise specified. The terms "Applicant" and "Developer" shall include all future owners and successors in interest.

For purposes of reference to this Proffer Statement, the "GDP" shall be the plan prepared by Ross-Parsons, entitled "Ashley Business Park - Generalized Development Plan" dated April 19, 2019 and revised through October 2, 2019.

USES & SITE DEVELOPMENT

- The Property, consisting of approximately 1.26 acres, shall be developed in accordance with the MDT Zoning District and in substantial accordance with the GDP, subject to minor changes approved by the County in connection with final site plan review. The proffer shall not preclude modification or amendments of the Property with use, interest, private or public, owned by the Property, the final design and location of which shall be shown on the final site plan, in accordance with the Design and Construction Standards ("DCSM").
- All uses permitted in the MDT zoning district shall be permitted on the Property, except that an asphalt/pavement plant shall be prohibited.

COMMUNITY DESIGN

- The Applicant shall construct a low-foot wall or concrete fence in the location on the Property shown on the GDP.
- The Applicant shall remove any graffiti from the building(s) on the Property. Graffiti shall be deemed any inscription or marking on walls, buildings, or vehicles not permitted by the sign regulations in Section 22-250.21 et. seq. of the Zoning Ordinance. Any graffiti to be reported to the Prince William County Police Department before removal.
- Any freestanding signs on the Property shall be along Cushing Road and shall be monument style with a maximum height of a maximum of eight feet (8') in height, with ground level landscaping at the base.
- The height of any building, or equipment stored, on the Property shall not exceed three hundred fifty-five feet above mean sea level (1155 above mean sea level). This shall not apply to any equipment used during construction on the Property.

Re zoning #REZ2019-00039, Ashley Business Park, LLC
Approved by BOCC: 11.19.19

PROFFER STATEMENT

Page 2 of 4

L. G. Little
Planning Office

- Structures stored on the Property, they shall be stored in a bonded parking. This shall not apply to any crane used during construction on the Property.
- Mixed uses shall be used for any buildings constructed on the Property. Building features including energy regional hotels, also Mansions Interlaced Park, that are within three hundred yards as identified in the Mansions Interlaced Park shall be site reflective and dark green or dark brown in color. The Planning Director may require other colors provided the applicant demonstrate the materials will facilitate the ability for the building facade to blend into the area.

TRANSPORTATION

- Access to the Property shall be provided from Cushing Road as shown on the GDP.

FIRE AND RESCUE

- The Applicant shall contribute to the Board of County Supervisors the sum of \$9.01 per square foot of gross building floor area including any structural parking facilities for fire and rescue equipment. Said contribution shall be paid prior to and as a condition of the approval of each building permit for a building, excluding any structural parking facilities, on the Property.
- In connection with the submission of a site plan for use on the Property which involves the change of landscape materials, a "Open Contemporary Plan", in accordance with Prince William County requirements, shall be submitted to the Fire Marshal for approval.

ENVIRONMENT

- Stormwater Management and/or Best Management Practices shall be provided on site, in accordance with the DCSM.
- The Applicant shall contribute to the Board of County Supervisors the sum of \$7.00 per acre for the County to conduct water quality monitoring, stream restoration projects, and/or drainage improvements. Said contribution shall be paid prior to and as a condition of the approval of the site plan.
- The Applicant shall fence clearing and grading on the Property to inhibit those areas depicted on the GDP, subject to minor variations in accordance with final engineering considerations at the time of the plan review and approval. The clearing or improvements shall be made outside of the limits of clearing and grading without County approval, with the exception of: (a) the removal of noxious vegetation, such as poison ivy, poison oak, etc., as well as dead, dying or hazardous trees; and (b) the installation and maintenance of any existing or required utilities.
- The Applicant shall provide landscaping as depicted on the GDP; provided, however:
 - The Applicant may satisfy buffer requirements in accordance with DCSM Section 802.11D.

Re zoning #REZ2019-00039, Ashley Business Park, LLC
Approved by BOCC: 11.19.19

PROFFER STATEMENT

Page 3 of 4

L. G. Little
Planning Office

WATER AND SEWER

- The Property shall be served by public water and sewer, which is at the Property. Any water and sewer infrastructure needed to serve the development of the Property shall be at the Applicant's expense.

FLOOR AREA RATIO

- The maximum Floor Area Ratio on the Property shall be 8.50.

INDICATIONS/WAIVERS

- In accordance with Section 22-250.22(a) of the Prince William County Zoning Ordinance, the following waivers are grandapproved:
 - Waiver of the Fifty-Foot (50') buffer from the Prince William Parkway required by Section 1004.01, Table 101 of the DCSM. In lieu of said 50-foot (50') buffer, the Applicant shall provide a Twenty-Foot (20') unobstructed buffer adjacent to the Prince William Parkway in accordance with the buffer standards set forth in Section 802.12 of the DCSM as shown on the GDP.
 - Waiver of the Fifteen Foot (15') buffer required between the Property and adjacent GDP-789-96-6000 required by Sections 802.10 and 802.11 of the DCSM as shown on the GDP.

MISCELLANEOUS

- In the event the necessary conditions set forth in the Proffer Statement are not met to the satisfaction of the Board of County Supervisors ("Board") within six (6) months of the approval of this rezoning, as applied for by the Applicant, said conditions shall be in the amount as stated herein. Any monetary conditions set forth in this Proffer Statement which are not paid to the Board after the date of the approval of this rezoning shall be adjusted in accordance with the Urban Consumer Price Index ("CPI-U") published by the United States Department of Labor, such that the final contribution amount paid shall be adjusted by the percentage change in the CPI-U from the date expiration (18) months after the approval of this rezoning to the most recently available CPI-U to the date the contribution is paid, subject to a cap of a percent (5%) per year, non-compounded.

INDICATIONS APPEAR ON FOLLOWING PAGES:

Re zoning #REZ2019-00039, Ashley Business Park
Approved by BOCC: 11.19.19

L. G. Little
Planning Office

Re zoning #REZ2019-00039, Ashley Business Park, LLC
Approved by BOCC: 11.19.19

PROFFER STATEMENT

Page 4 of 4

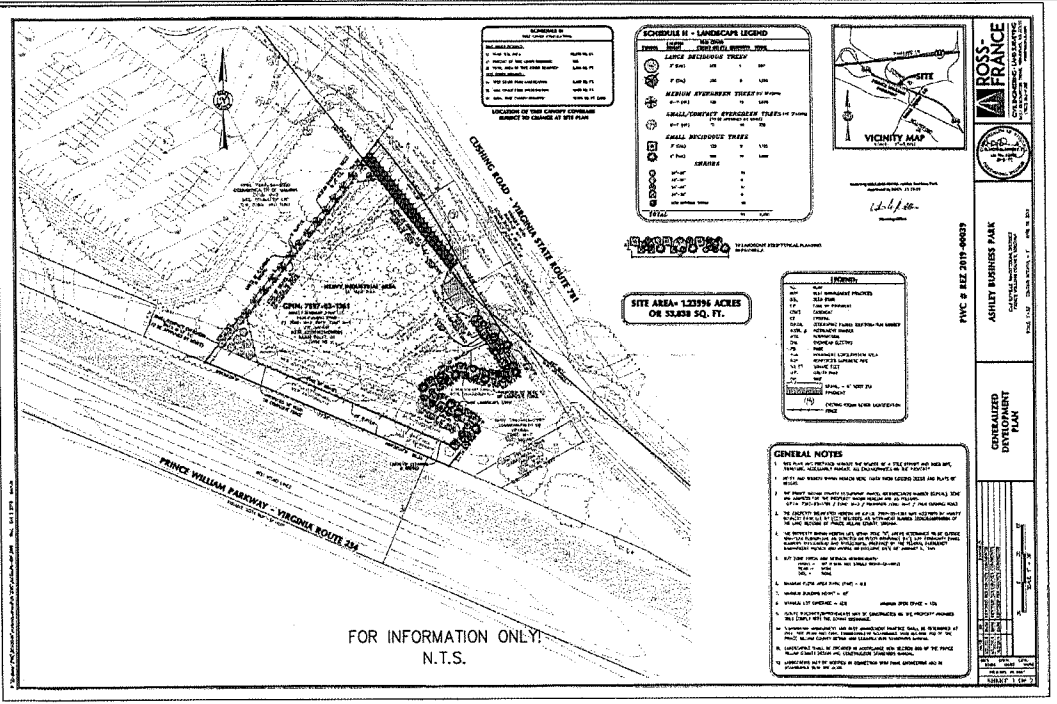
L. G. Little
Planning Office

PROFFER STATEMENT

Page 4 of 4

Re zoning #REZ2019-00039, Ashley Business Park, LLC
Approved by BOCC: 11.19.19

L. G. Little
Planning Office



FOR INFORMATION ONLY!
N.T.S.

NO.	DATE	REVISION	DESCRIPTION	BY
2	4/2/20	REUSE PER REZ2019-00039 AND NEW OVERHEAD	AD	
LINE & SHOW UTILITIES THAT HAVE BEEN INSTALLED				
COUNTRY REVISIONS				



Dewberry
1200 EAST GORRISON BLVD
DUNFRIES, VA 20149
703.750.0000

Dewberry
DUNFRIES, VA
ENGINEERS, INC.

GDP, PROFFERS & PROFFER ANALYSIS - REZ2019-00039

ASHLEY BUSINESS PARK
Shenandoah Magisterial District
Prince William County, Virginia

Plan Number: DR-0040091
 Drawn By: AD
 Designed By:
 Checked By:
 Date: 4/2/2020
 NTS
 Sheet: 20 of 24
 MAN SP-499

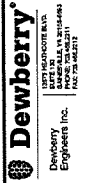
REZONING #REZ2019-00039 PROFFER ANALYSIS

07 10 20
REVISION

PROFFER ANALYSIS Proffers / Conditions Related To REZ2019-00039

Proffer / Condition Number	Condition / Proffer	Category	Notes	Plan / Proffer / Proffer	Proffer / Condition Status	Comments / Clarification	County Comments
PROZ190007-1	Use & Use Development	Use & Use Development	The proposed use shall be developed in accordance with the 1617 Zoning Ordinance and in accordance with the 2019 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The proffer is in accordance with the 2019 Zoning Ordinance.	
PROZ190007-2	Use & Use Development	Use & Use Development	All uses proposed in the 1617 Zoning Ordinance shall be permitted in the 1617 Zoning Ordinance and in accordance with the 2019 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	N/A	No applicable condition plan is proposed.	
PROZ190007-3	Primary Design	Primary Design	The Applicant shall construct a weather shed in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Active	The site plan proffer shows the shed.	
PROZ190007-4	Accessory Design	Accessory Design	The Applicant shall ensure the building height shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Accessory Plans Submitted	Active	Addressed	
PROZ190007-5	Accessory Design	Accessory Design	Any structure on the site shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Active	Addressed	
PROZ190007-6	Accessory Design	Accessory Design	The height of any building, or equipment stored on the property shall not exceed the height of the building in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Building Plans Approved	Active	Addressed	
PROZ190007-7	Accessory Design	Accessory Design	Unless otherwise noted, the proffer shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Accessory Plans Submitted	Active	Addressed	
PROZ190007-8	Accessory Design	Accessory Design	Any structure on the site shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Building Plans Approved	Active	Addressed	
PROZ190007-9	Transportation	Transportation	Access to the property shall be provided in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the access.	
PROZ190007-10	Fire and Rescue	Fire and Rescue	The applicant shall contribute to the Board of County Supervisors the cost of fire and rescue services in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	County Plan Submitted	Active	Not required building per 1617 Zoning Ordinance.	
PROZ190007-11	Use and Structure	Use and Structure	All structures shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Active	Structure materials are not proposed to be used on the site plan.	
PROZ190007-12	Lot Coverage	Lot Coverage	Maximum lot coverage shall be in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the lot coverage.	
PROZ190007-13	Lot Coverage	Lot Coverage	The Applicant shall maintain the Board of County Supervisors the cost of fire and rescue services in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	Condition 1617 Zoning Ordinance.	
PROZ190007-14	Lot Coverage	Lot Coverage	The Applicant shall maintain the Board of County Supervisors the cost of fire and rescue services in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the lot coverage.	
PROZ190007-15	Lot Coverage	Lot Coverage	The Applicant shall maintain the Board of County Supervisors the cost of fire and rescue services in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the lot coverage.	

Proffer / Condition Number	Condition / Proffer	Category	Notes	Plan / Proffer / Proffer	Proffer / Condition Status	Comments / Clarification	County Comments
PROZ190007-16	Use and Structure	Use and Structure	The property shall be used in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	Addressed	
PROZ190007-17	Use and Structure	Use and Structure	The property shall be used in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the use.	
PROZ190007-18	Use and Structure	Use and Structure	The property shall be used in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	The site plan proffer shows the use.	
PROZ190007-19	Use and Structure	Use and Structure	The property shall be used in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Addressed	Addressed	
PROZ190007-20	Use and Structure	Use and Structure	The property shall be used in accordance with the 1617 Zoning Ordinance in either change approved by the County in accordance with the 1617 Zoning Ordinance.	Final Plan Approved	Active	Addressed	



**GDP, PROFFERS & PROFFER
ANALYSIS - REZ2019-00039**

ASHLEY BUSINESS PARK
Charlottesville, Mecklenburg District
Prince William County, Virginia

Plan Number: 00-0040001
Drawn By: AD
Designed By:
Checked By:
Date: 4/2/2020
NTS
Sheet:
2B of 24
MAN SP-489

NO.	DATE	DESCRIPTION	BY
2	4/2/20	REVISE PER REZ2019-00039 AND NEW OVERHEAD	AD
LINE & SHOW UTILITIES THAT HAVE BEEN INSTALLED			
COUNTY REVISIONS			



I:\Projects\2019\REZ2019-00039\00-0040001\00-0040001-2B.dwg, 4/2/2020, 10:48:00 AM

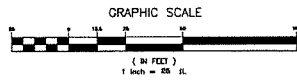
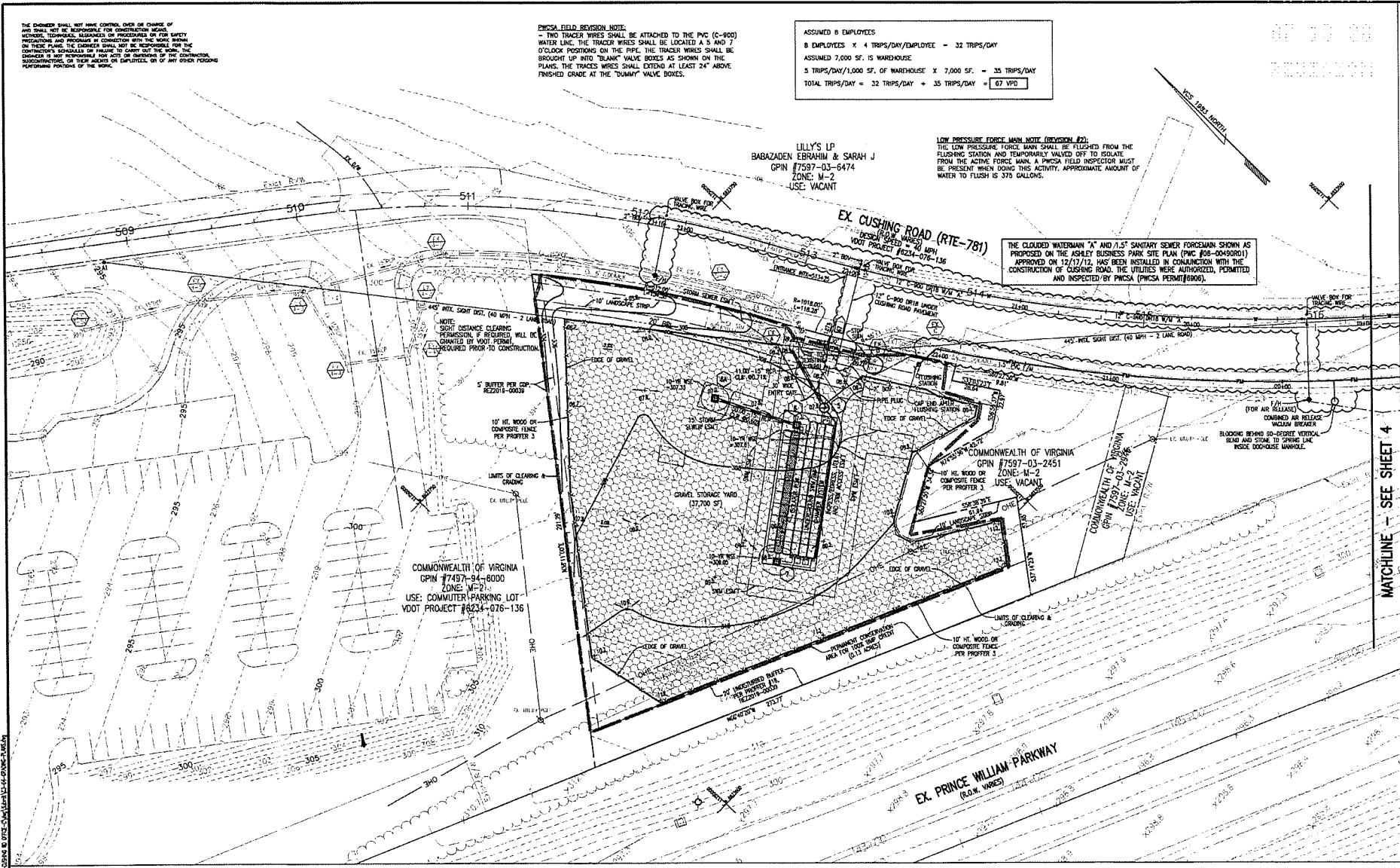
THE DESIGNER SHALL NOT HAVE CONTROL OVER OR CHANGE OF THE WORK AND BE RESPONSIBLE FOR CONSTRUCTION WORK METHODS, TEMPORAL SCHEDULES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROBLEMS BY CONSTRUCTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OF WORK OR TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

PWCSA FIELD REVISION NOTE:
 - TWO TRACER WIRES SHALL BE ATTACHED TO THE PVC (C-800) WATER LINE. THE TRACER WIRES SHALL BE LOCATED AT 5 AND 7 O'CLOCK POSITIONS ON THIS PIPE. THE TRACER WIRES SHALL BE BROUGHT UP INTO "BLANK" VALVE BOXES AS SHOWN ON THE PLANS. THE TRACER WIRES SHALL EXTEND AT LEAST 24" ABOVE FINISHED GRADE AT THE "JUNKY" VALVE BOXES.

ASSUMED 8 EMPLOYEES
 8 EMPLOYEES X 4 TRIPS/DAY/EMPLOYEE = 32 TRIPS/DAY
 ASSUMED 7,000 SF. IS WAREHOUSE
 5 TRIPS/DAY/1,000 SF. OF WAREHOUSE X 7,000 SF. = 35 TRIPS/DAY
 TOTAL TRIPS/DAY = 32 TRIPS/DAY + 35 TRIPS/DAY = 67 VPD

LOW PRESSURE FORCE MAIN NOTE (REVISION #2):
 THE LOW PRESSURE FORCE MAIN SHALL BE FLUSHED FROM THE FLUSHING STATION AND TEMPORARILY VALVED OFF TO ISOLATE FROM THE ACTIVE FORCE MAIN. A PWCSA FIELD INSPECTOR MUST BE PRESENT WHEN DOING THIS ACTIVITY. APPROXIMATE AMOUNT OF WATER TO FLUSH IS 375 GALLONS.

THE CLOUDED WATERMAIN "A" AND 4.5" SANITARY SEWER FORCEMAIN SHOWN AS PROPOSED ON THE ASHLEY BUSINESS PARK SITE PLAN (PWC #08-00490801) APPROVED ON 12/17/12, HAS BEEN INSTALLED IN CONJUNCTION WITH THE CONSTRUCTION OF CUSHING ROAD. THE UTILITIES WERE AUTHORIZED, PERMITTED, AND INSPECTED BY PWCSA (PWCSA PERMIT#8906).



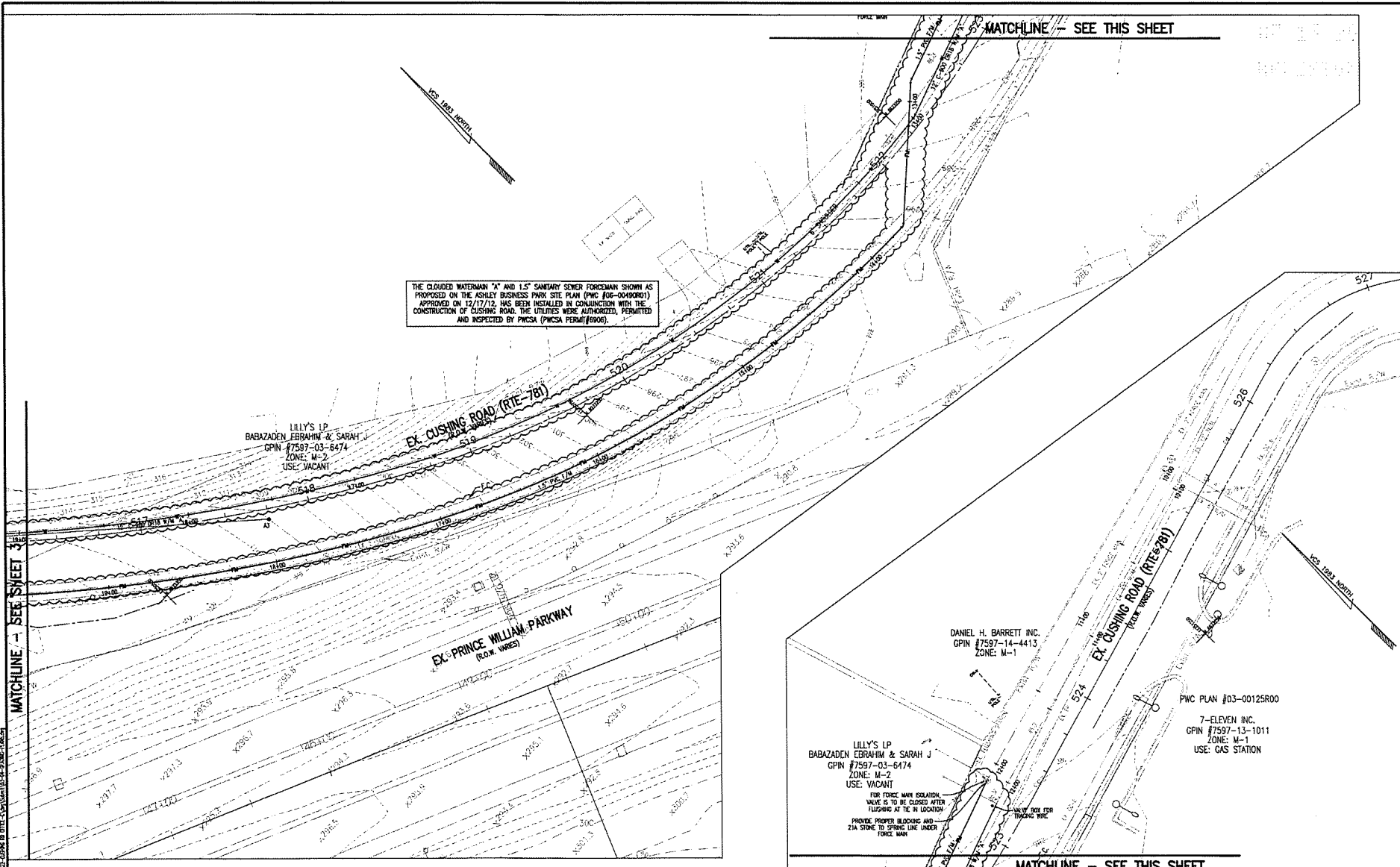
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	7/26/12	REMOVE WATER MAIN MATERIAL TO C-800	AD	2	4/2/20	REVISE PER 822018-0039 AND NEW OVERHEAD	AD
					7/14/12	LINE & SHOW UTILITIES THAT HAVE BEEN INSTALLED	AD
				1	3/29/12	REMOVE TRACER WIRE FROM 7" WATER MAIN	AD
						REMOVE ENTRANCE AND GIE THROUGH DUE TO ROOTS	AD
						ROOTS COMMUTER LOT AND CUSHING ROAD PARK	



Dewberry
 1000 W. MAIN STREET, SUITE 100
 PRINCE WILLIAM, VA 22151
 PHONE: 703.461.2200
 FAX: 703.461.2212

ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Prince William County, Virginia

Plan Number: 08-00490801
 Drawn By: AD
 Designed By: AD
 Checked By: AD
 Date: 3/28/12
 Scale: 1" = 65'
 Sheet: 3 of 24
 MAN SP-496



THE CLOUDED WATERMAN "A" AND 1.5" SANITARY SEWER FORCEMAIN SHOWN AS PROPOSED ON THE ASHLEY BUSINESS PARK SITE PLAN (PWC #03-00480RD) APPROVED ON 12/17/12, HAS BEEN INSTALLED IN CONJUNCTION WITH THE CONSTRUCTION OF CUSHING ROAD. THE UTILITIES WERE AUTHORIZED, PERMITTED AND INSPECTED BY PWCVA (PWCVA PERM#16906).

LILLY'S LP
BABAZADEN EBRAHIM & SARAH J
GPIN #7597-03-6474
ZONE: M-2
USE: VACANT

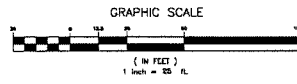
EX-PRINCE WILLIAM PARKWAY
(R.O.W. VABES)

DANIEL H. BARRETT INC.
GPIN #7597-14-4413
ZONE: M-1

LILLY'S LP
BABAZADEN EBRAHIM & SARAH J
GPIN #7597-03-6474
ZONE: M-2
USE: VACANT

PWC PLAN #03-00125R00
7-ELEVEN INC.
GPIN #7597-13-1011
ZONE: M-1
USE: GAS STATION

THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROVISIONS IN CONNECTION WITH THE WORK SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, ORDINANCES, REGULATIONS OR LAWS TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACCIDENTS OR INJURIES TO SUBCONTRACTORS OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.



NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
2	4/2/20	RENSE PER #RZ2019-00219 AND NEW OVERHEAD	AD	1	7/16/12	REMOVE EXISTING UTILITIES THAT HAVE BEEN INSTALLED	AD
						REMOVE EXISTING UTILITIES THAT HAVE BEEN INSTALLED	AD
						REMOVE EXISTING UTILITIES THAT HAVE BEEN INSTALLED	AD
1	7/16/12	RENSE WATER MAIN MATERIAL TO C-100	AD	1	3/20/12	REMOVE ENTRANCES AND SOIL FRONTAGE DUE TO	AD
						HOUS' CONSUMER LOT AND CUSHING ROAD PLAN	AD



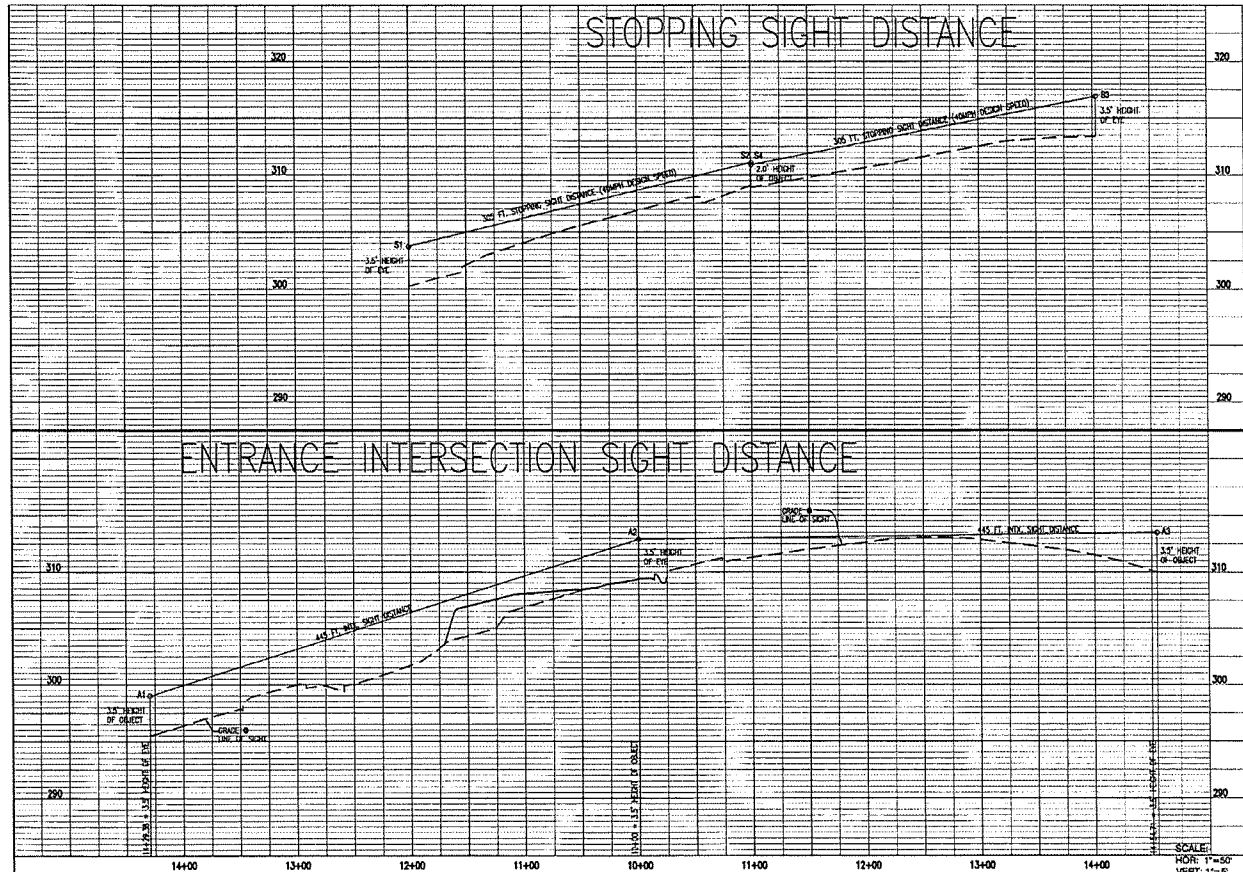
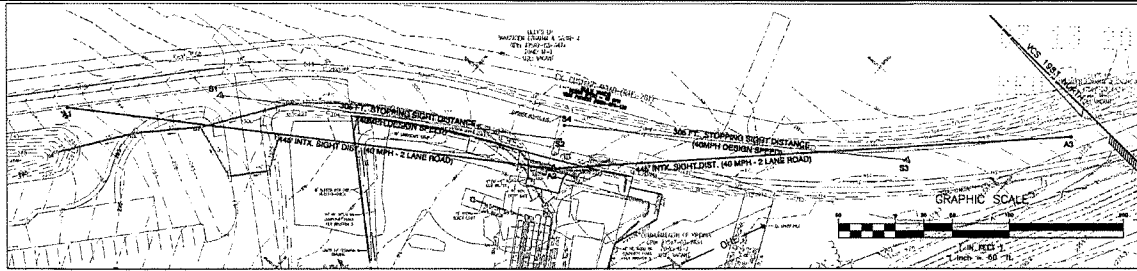
ASHLEY BUSINESS PARK

Gainesville Manassas District
Prince William County, Virginia

Grading Plan

Plan Number: 03-00480RD1
 Drawn By: AD
 Designed By: AD
 Checked By: AD
 Date: 3/29/12
 Scale: 1" = 20'
 Sheet: 4 of 24
 MAN SP-499

Dewberry
 1275 EAST FROSTEN AVENUE
 GAINESVILLE, VA 20155-4600
 PHONE: 703.752.2000
 FAX: 703.752.2001
 dewberry.com
 D. H. Barrett
 Daniel H. Barrett, Inc.
 1275 EAST FROSTEN AVENUE
 GAINESVILLE, VA 20155-4600
 PHONE: 703.752.2000
 FAX: 703.752.2001
 dewberry.com



NO.	DATE	DESCRIPTION	BY
2	4/2/20	REVISE PER 8622019-00029 AND NEW OVERHEAD	AD
		LINE & SHOW UTILITIES THAT HAVE BEEN RECALLED	
		COUNTY REVISIONS	



Dewberry
 ENGINEERS
 1000 EAST BROAD STREET
 SUITE 200
 PRINCE GEORGE, VA 22911
 P.O. BOX 10001
 PRINCE GEORGE, VA 22901

SIGHT DISTANCE
 PROFILES

ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Prince William County, Virginia

Plan Number: 86-040901
 Drawn By: AD
 Designed By: AD
 Checked By:
 Date: 6/03/2020

AS SHOWN
 Sheet
5A of 24
 MAN SP-499

Modified from original drawings for 86-040901, based on 86-040901-00029 and 86-040901-00030.

NOTES

- Methods and materials used in the construction of water mains, sanitary sewers and appurtenances shall be in conformance with the current Prince William County Service Authority Utility Standards Manual (USM) and the Virginia Department of Health Regulations.
- Approval of these plans by the Service Authority will in no way relieve the owner from complying with the methods, policies or requirements stated in the Service Authority's Utility Standards Manual (USM).
- No trees, fences or other permanent structures will be located on any waterline or sanitary sewer easement without obtaining permission in writing from the Prince William County Service Authority.
- Contractor to notify the Service Authority at least two (2) working days, but not more than ten (10) working days prior to commencement of demolition, excavation or blasting in areas with underground water and sewer lines.
- a) Water Service Level: GAINESVILLE - WELLINGTON
b) Sewer Shed: BROAD RUN
- All subdivisions will require an address listing approved by the Prince William County Mapping Office. The address listing must be presented to the Service Authority at the time the utility permit is issued. Forms are available at the Service Authority. (Fax copies are not acceptable.)
- All grinder pumps will be privately owned and maintained, unless otherwise noted.
- Low pressure sewer systems are subject to review of the State Health Department.
- The developer is responsible for all costs associated with demopos to or relocation of water or sanitary sewer mains or service lines caused by the construction of this project.
- The contractor shall coordinate all relocation of water or sanitary sewer facilities with the Service Authority's inspector. No shut offs shall be done without the prior approval of the Service Authority's inspector. The inspector may require the contractor to submit a relocation work plan for approval prior to the commencement of the relocation work. The work plan will detail how the work will be done and the manpower, materials and equipment that will be at the site to perform the work.
- Existing unused service lines shall be exposed at the corporation stop on the main and shall be cut and crimped per the direction of the PWCSA inspector.
- Existing unused laterals are to be cut and capped at the main per the direction of the PWCSA inspector.
- When an existing water service or sanitary sewer lateral will be reused as part of a new development, the Service Authority shall inspect the existing service line or lateral to insure that they are serviceable and meet current PWCSA material specifications. Any defects or out-of-date materials shall be repaired or replaced to the satisfaction of the Service Authority before the existing water service or sanitary sewer lateral is placed back in service.

THRUST RESTRAINT

MINIMUM DESIGN PARAMETERS:
 PIPE MATERIAL: DIP
 SOIL TYPE: CL
 SAFETY FACTOR: 1.5 (Min. 1.3 to 1.7)
 TRENCH TYPE: 3
 TEST PRESSURE: 200 psi (USE PIPE RATING, THE MAX. STATIC PRESSURE OR 100 PSI, WHICHEVER IS LOWER)
 BURIED DEPTH: AS SHOWN IN THE PROFILES
 *THE RESTRAINING LENGTH FOR EACH FITTING, REDUCER & DEAD END IS SHOWN AND SPECIFIED IN THE PROFILE SHEETS.

LOCAL FACILITIES CHARGE

THE PROPERTIES BEING DEVELOPED IN CONJUNCTION WITH THIS PROJECT ARE ARE NOT SUBJECT TO A LOCAL FACILITIES CHARGE. LFC Area: GAINESVILLE - WELLINGTON

MASTER PLAN UTILITY ADJUSTMENT

A MASTER PLAN UTILITY ADJUSTMENT AGREEMENT DOES DOES NOT EXIST BETWEEN THE SERVICE AUTHORITY AND THE DEVELOPER FOR DEFINED BETTERMENTS.

*DESIGN OR CONSTRUCTION CHANGES MUST CARRY THE CONSENT OF PWCSA ENGINEERING.

*THE DEVELOPER SHOULD REQUEST REIMBURSEMENT PER THE AGREEMENT AFTER BETTERMENTS ARE INSTALLED AND TESTED.

PWCSA WATER & SEWER MAIN INSPECTION FEES

	Original Qty. (Project Total)	Rev 1 Qty. (Project Total)	Rev 2 Qty. (Project Total)	Net Increase	
WATER MAIN	1,397	1,155**	1,155	0	(L.F.) x \$3.50 = \$0
SEWER MAIN	1,055	1,020	1,020	0	(L.F.) x \$5.45 = \$0
TV SEWER MAIN	0	0	0	0	(L.F.) x \$2.40 = \$0
TOTAL = \$0					

NOTE: Minimum fee of \$260 is required for water inspection service if water main is less than 100 L.F. Minimum fee of \$410 is required for sewer inspection service if sewer main is less than 100 L.F.

PWCSA AS BUILT FEES

	Original Qty. (Project Total)	Rev 1 Qty. (Project Total)	Rev 2 Qty. (Project Total)	Net Increase	
WATER MAIN	1,397	1,155	1,155	0	(L.F.) x \$1.20 = \$0
SEWER MAIN	1,055	1,020	1,020	0	(L.F.) x \$1.80 = \$0
TOTAL = \$0					(Maximum \$1,000)

NOTE: Minimum fee of \$1000 is required for all plans connecting to utilities or installing main. Fee shall be computed on a linear footage base for sign conditions that propose additional main as part of an actively developing project for which PWCSA has not yet executed its as-built.

AS BUILT RELEASE OF PLANS

THE UNDERSIGNED ENGINEER/ FIRM AGREES THAT THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY SHALL HAVE THE RIGHT TO USE THESE PLANS FOR THE PREPARATION OF AS-BUILT RECORDS, AS NECESSARY. THE ENGINEER/ FIRM FURTHER AGREES THAT THE RIGHT TO USE THE PLANS SHALL BE PROVIDED WITHOUT COST TO THE SERVICE AUTHORITY.

NAME: ALVARO DE LA VEGA, PE
 (TYPE OR PRINT)
 TITLE: PROJECT ENGINEER
 FIRM: **Dewberry**
 SIGNATURE: *[Signature]*
 DATE: 6/23/2020

LOCAL REVIEW AUTHORITY INFORMATION

PLAN TITLE: ASHLEY BUSINESS PARK
 PWC PLAN NO.: SPR2020-00340
 ENGINEER: **Dewberry**
 MAP NO.: 112

SEWER
 PROJECTED POPULATION: 0
 SEWER MAIN SIZE AND LENGTH: 1.5" - 1,000
 (Note: lines larger than 24" must be submitted to VDH for approval) 10" -
 12" -

WATER
 PIPE SIZES:
 (Note: lines larger than 18" must be submitted to VDH for approval)
 4" -
 6" -
 8" -
 12" -
 16" - 1,155
 18" -

* CONNECTIONS
 NUMBER OF WATER METERS: 0
 RESIDENTIAL METER SIZE:
 NUMBER OF FIRE HYDRANTS: 2

FIRE FLOW INFORMATION

A HYDRAULIC ANALYSIS IS REQUIRED OF ANY PROJECT EXTENDING WATER MAINS. A HYDRANT FLOW TEST CAN BE USED IN PLACE OF AN ANALYSIS TO CALCULATE AVAILABLE FIRE FLOW WHEN NO NEW WATER MAIN IS PROPOSED OR ONLY A FIRE HYDRANT IS SET.

HYDRAULIC MODEL SUMMARY: HYDRANT FLOW TEST:
 a) Minimum Pressure: 31.69 psi @ node 110 a) Static Pressure:
 b) Maximum Pressure: 106.97 psi @ node 952 b) Residual Pressure:
 c) Fire Flow: 2,500 gpm c) Flow:
 d) Available Fire Flow at 20 psi:

AS APPROVED WITH PLAN WATER DISTRIBUTION SYSTEM ANALYSIS FOR ASHLEY BUSINESS PARK DATED OCTOBER 12, 2008 APPROVED ON NOVEMBER 20, 2008

THRUST RESTRAINT
Utilizing the EBA Program

LINE	COORDINATE	DEPTH	DATE	FORM	REVISION	BY	DATE	REVISION	BY	DATE
1	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
2	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
3	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
4	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
5	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
6	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
7	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
8	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
9	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
10	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
11	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
12	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
13	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
14	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
15	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
16	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
17	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
18	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
19	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12
20	114420	10'	11/12/12	NO	1	AD	7/18/12	1	AD	7/18/12

NOTE: ALL CONNECTIONS TO UTILITIES SHALL BE MADE AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.
 ALL CONNECTIONS TO UTILITIES SHALL BE MADE AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.
 ALL CONNECTIONS TO UTILITIES SHALL BE MADE AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.

REV. #2 NOTE:

REVISION #2 REMOVED ON-SITE WATER LINE AND FIRE HYDRANT

BACKGROUND OF SITE PLAN:

- ASHLEY BUSINESS PARK #06-0040000 AND RD1 PROPOSED BOTH ON-SITE AND OFF-SITE UTILITIES.
- AN INDEPENDENT CONTRACTOR HAD A SEPARATE PLAN TO IMPROVE CUSHING ROAD WITH PRINCE WILLIAM COUNTY WITHOUT ANY UTILITY CONTRIBUTION. THE COUNTY PERMITTED THE CONTRACTOR TO PERFORM ROAD IMPROVEMENTS PER THE COUNTY APPROVED PLAN UNRELATED TO ASHLEY BUSINESS PARK.
- THE OWNER OF ASHLEY BUSINESS PARK HAD THE INDEPENDENT CONTRACTOR ACQUIRE A SERVICE AUTHORITY PERMIT FOR ASHLEY BUSINESS PARK PLAN TO INSTALL "OFF-SITE" UTILITIES IN THE ROAD. THE INDEPENDENT CONTRACTOR DID NOT PERMIT OR PLACE A BOND FOR THE UTILITIES ASSOCIATED WITH ASHLEY BUSINESS PARK #06-004000 WITH PRINCE WILLIAM COUNTY.
- THE INDEPENDENT CONTRACTOR CONSTRUCTED "OFF-SITE" UTILITIES AND PLACED THEM IN PARTIAL EASEMENT USE. THE INDEPENDENT CONTRACTOR DID NOT INSTALL THE ON-SITE UTILITIES. THE INDEPENDENT CONTRACTOR COMPLETED THE ROAD PROJECT AND DID NOT REQUEST OR PASS A BOND RELEASE INSPECTION FOR ACCEPTANCE FROM THE SERVICE AUTHORITY SINCE THEY DID NOT POST A BOND FOR UTILITY CONSTRUCTION.

THE PROPERTY WILL NOT CONNECT TO THE WATER MAIN OR LOW PRESSURE FORCE MAIN AT THIS TIME. THE PROPOSED CONNECTIONS AND ON-SITE UTILITIES HAVE BEEN ELIMINATED WITH THIS PLAN REVISION.

VALVE SCHEDULE

Qty.	Valve Size	Manufacturer (PWCSA use)
2	6 - inch	
2	8 - inch	
4	10 - inch	
4	12 - inch	
1	14 - inch	
1	16 - inch	
1	18 - inch	
1	24 - inch	

SHEET REVISED AS OF FEBRUARY, 2011

SA
Service Authority
 Prince William County
WATER AND SANITARY SEWER INFORMATION

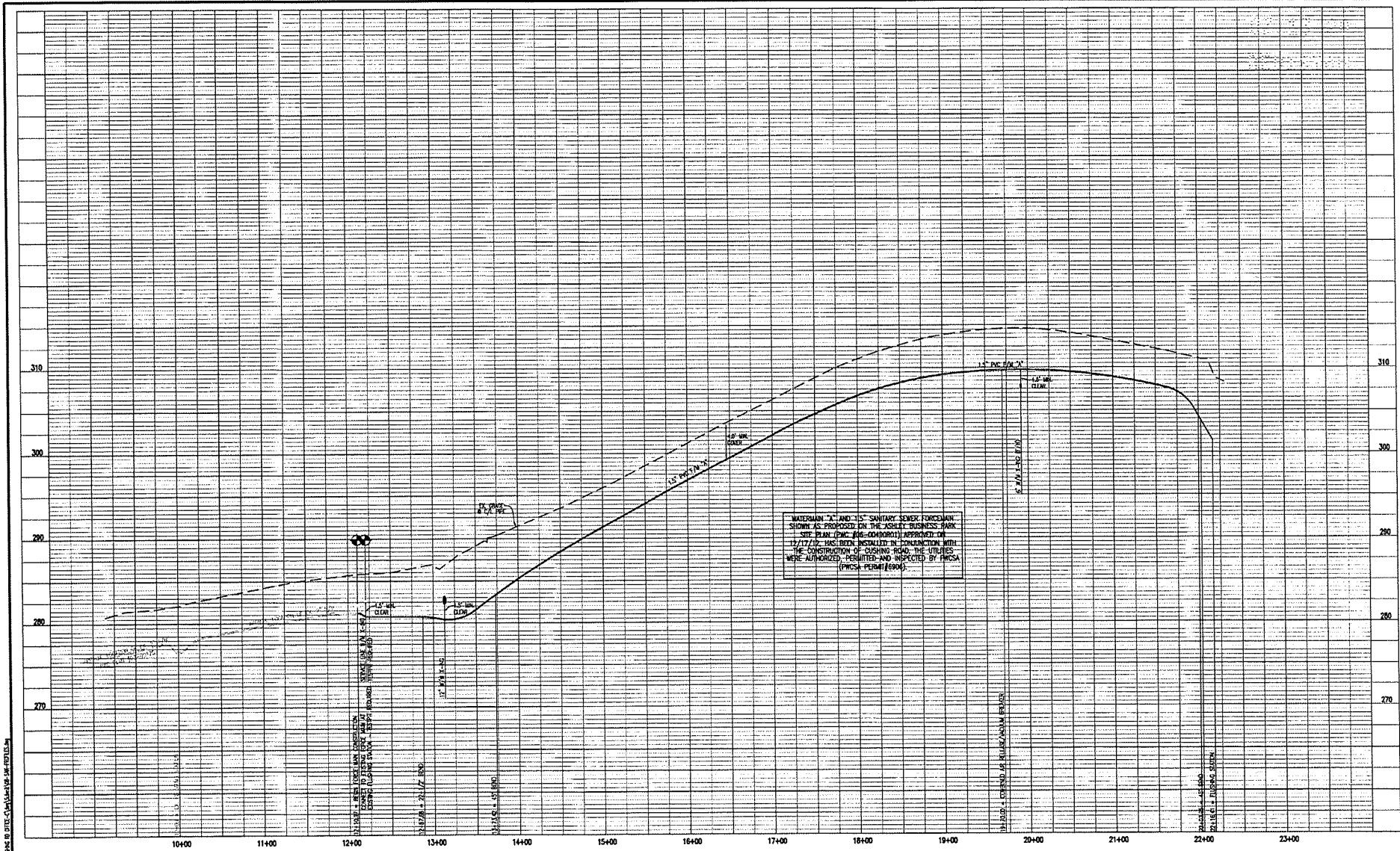


Dewberry
 ENGINEERS INC.
 10000 WOODBRIDGE BLVD
 SUITE 100
 FARMERSVILLE, VA 22029
 (703) 426-1000

PWCSA
 WATER & SANITARY
 SEWER INFORMATION

ASHLEY BUSINESS PARK
 Gainesville Managerial District
 Prince William County, Virginia

Plan Number: 06-00400001
 Drawn By: AD
 Designed By: AD
 Checked By:
 Date: 3/09/12
 N/A
 Sheet: 6 of 24
 MAN SP-499



WATERMAIN "A" AND "B" SANITARY SEWER FORCE MAIN
 SHOWN AS PROPOSED ON THE ASHLEY BUSINESS PARK
 SITE PLAN (ENC. #16-0040001) APPROVED ON
 12/17/12. HAS BEEN INSTALLED IN CONJUNCTION WITH
 THE CONSTRUCTION OF CUSHING ROAD. THE UTILITIES
 WERE AUTHORIZED, PERMITTED AND INSPECTED BY PRCSA
 (PRCSA PERMIT #0004).



SANITARY SEWER PROFILE

ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Prince William County, Virginia

Plan Number	00-0040001
Drawn By	AD
Designed By	AD
Checked by	AD
Date	3/28/12
HOR.	1"=50'
VER.	1"=5'
Sheet	8 of 24
MAN SP-489	



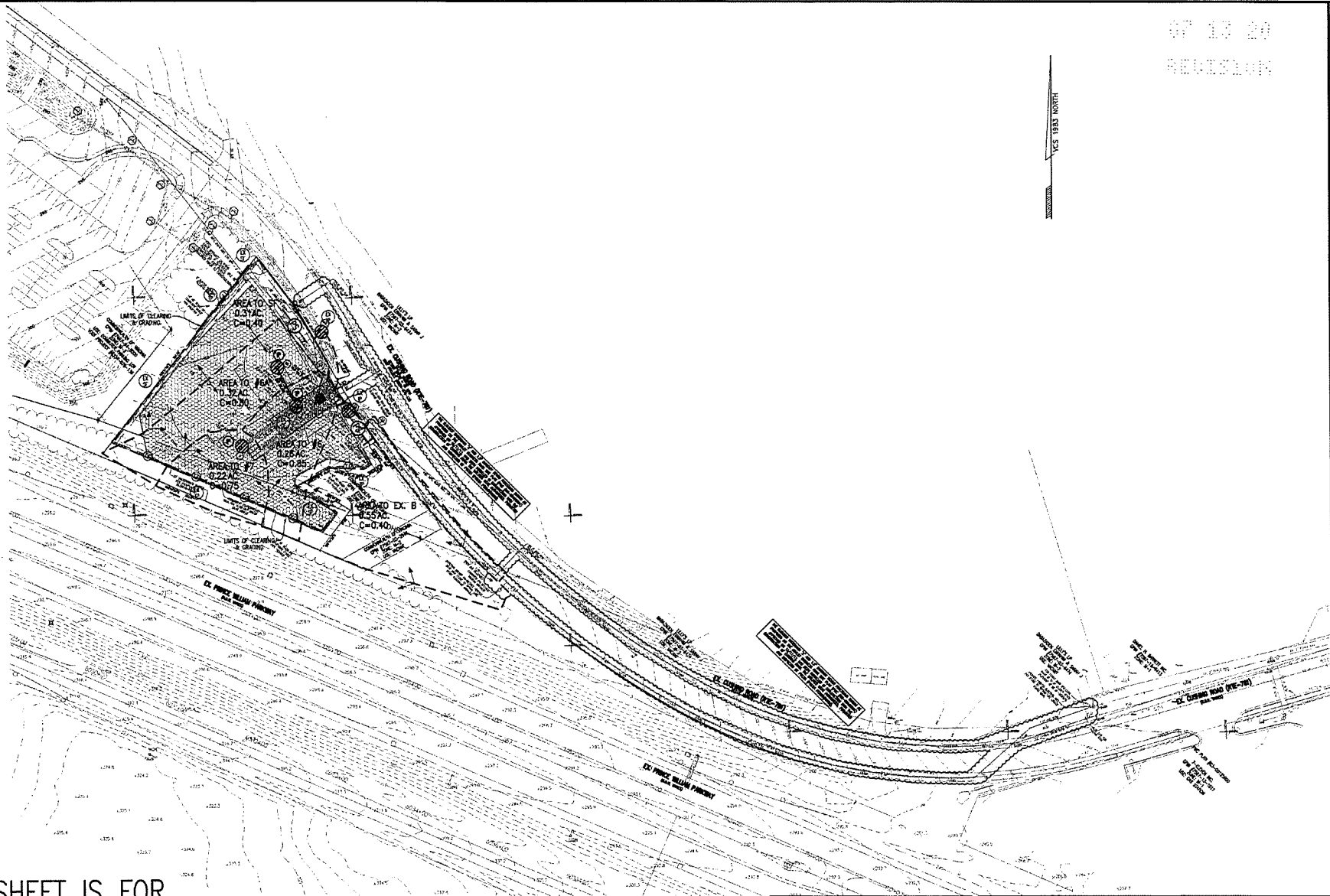
NO.	DATE	DESCRIPTION	BY
2	4/2/20	REVISE FOR REZ2019-00020 AND NEW OVERSIGHT LINE & SOME UTILITIES THAT HAVE BEEN RECALLED.	AD
1	3/28/12	REVISE DRAWING AND SITE FOOTING DUE TO POIT'S COMPUTER LOT AND CUSHING ROAD PLAN	AD

NO.	DATE	DESCRIPTION	BY
		COUNTY REVISIONS	

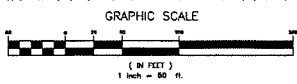
WATERMAIN AND SANITARY SEWER FORCE MAINS TO BE INSTALLED IN CONJUNCTION WITH THE CONSTRUCTION OF CUSHING ROAD.

PLACED
 07 13 20
 REVISION

YES 1983 NORTH



THIS SHEET IS FOR
 PHASE II EROSION AND
 SEDIMENT CONTROL ONLY!!



SEE EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS ON SHEET 9.

NO.	DATE	DESCRIPTION	BY
2	3/10/20	REVISE PER REFP016-0003, REDUCE BUILDING AREA & SHOW UTILITIES THAT HAVE BEEN INSTALLED.	AD
1	3/09/12	REVISE ENTRANCE AND SITE FRONTAGE DUE TO MOIT'S COMMER LOT AND CUSHING ROAD PLAN.	AD



Dewberry
 ENGINEERS
 1000 COMMONWEALTH BLVD., SUITE 200
 FARMERSBURGH, NY 11737
 PHONE: 607.549.2222
 FAX: 607.549.2221

PHASE II
 EROSION & SEDIMENT
 CONTROL PLAN

ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Prince William County, Virginia

Plan Number: 06-00459201
 Drawn By: AD
 Designed by: AD
 Checked by: AD
 Date: 3/09/12

1"=50'
 Sheet
 11 of 24
 MAN SP-499

PURPOSE

DVACS-870-54 of the Virginia Stormwater Management Program (VSMP) Permit Regulations requires that Stormwater Pollution Prevention Plans (SWPPP) be developed for all regulated discharging activities. The SWPPP must include, but not be limited to, an approved erosion and sediment control plan, an approved stormwater management plan, and this Pollution Prevention Plan (PPP) for regulated land disturbing activities, and a description of any additional control measures necessary to address a TMDL, as applicable.

The plan for implementing pollution prevention measures during construction activities developed on this sheet must be implemented and updated as necessary. Any PPP requirements not included on this sheet must be incorporated into the SWPPP required by DVACS-870-54 that must be developed before land disturbance commences. This PPP identifies potential sources of pollutants that may be available to affect the quality of stormwater discharges from the construction site (both on and off-site activities) and describes control measures that will be used to minimize pollutants in stormwater discharges from the construction site.

OTHER REFERENCED PLANS

DWPPP requirements may be fulfilled by incorporating, by reference, other plans. All plans incorporated by reference become enforceable under the VSMP Permit Regulations and General Permit VARIO for Discharges of Stormwater from Construction Activities. If a plan incorporated by reference does not contain all the required elements of the PPP, the operator must develop the missing elements and include them in the DWPPP.

Independent Plans Incorporated by Reference	Date Approved
Stormwater Management Plans (Regional or Master) SEE SHEETS 12-18	N/A
Erosion and Sediment - Control Plans SEE SHEETS 9-11	N/A
Off-Site Best Management Practices	N/A
Off-Site Stormwater	N/A

POTENTIAL POLLUTANT SOURCES

The following sources of potential pollutants must be addressed in the Pollution Prevention Plan. Various controls and/or measures designed to prevent and/or minimize pollutants in stormwater discharges from the project site must be applied to the sources found on the site. Additional information concerning the following controls and/or measures may be found in the DWPPP. Deviations from the location controls may be approved by the Public Works Site Inspector.

LEAKS, SPILLS, AND OTHER RELEASES

- The operator(s) shall ensure procedures are in place to prevent and respond to all leaks, spills, and other releases of pollutants.
- The operator(s) shall ensure all leaks, spills and other releases of pollutants are contained and cleaned immediately upon discovery. Any contaminated materials are to be disposed in accordance with federal, state, and/or local requirements.
- The operator(s) shall ensure spill containment kits containing appropriate materials (e.g., absorbent material and pads, booms, gloves, sand, etc.) are available at appropriate locations, including, but not limited to, designated areas for vehicle and equipment maintenance, vehicle and equipment fueling, storage and disposal of construction materials, products, and waste, and storage and disposal of hazardous and toxic materials, and sanitary waste facilities.
- The location of the spill containment kits are identified as described below.

Date Shown on Plan (Sheet #)	Location	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location	Operator(s) Initials

- The operator(s) shall notify the Department of Environmental Quality (DEQ) of leaks, spills, and other releases that discharge to or have the potential to discharge to surface waters immediately upon discovery of the discharge but in no case later than 24 after the discovery. Written notice of the discharge must be sent to DEQ and Prince William County Department of Public Works within five (5) days of the discovery.

Virginia Department of Environmental Quality Northern Regional Office 703-563-3800 (voice) 703-563-3821 (fax) Website: http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx For emergencies: 1-800-688-6862 (outside normal working hours)	PW County Department of Public Works 5 County Complex Office Prince William, Virginia 22192 703-792-7070 PW County Department of Fire & Rescue 1 County Complex Court Prince William, Virginia 22192 703-792-8800 703-792-6812 (outside normal working hours)
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EQUIPMENT / VEHICLE WASHING

- Washing must be conducted in a dedicated area that is located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- All wash water used in vehicles whose washing must be treated to a sediment basin.
- All vehicle washing activities other than wheel washing must have secondary containment.
- Each facility must have appropriate signage to inform users where the dedicated area(s) are located.

Activity	Location(s) of Dedicated Area(s)	Shown on Plan (Sheet #)	Water Source Location	Operator(s) Initials
Wheel Wash Area				
REVISIONS TO LOCATIONS				
Activity	Location(s) of Dedicated Area(s)	Shown on Plan (Sheet #)	Water Source Location	Operator(s) Initials

VEHICLE FUELING AND MAINTENANCE

- Conduct regular maintenance in a dedicated area that is located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- If fueling is conducted at a dedicated area, the location must be located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- The dedicated area must be designed to minimize the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities by providing secondary containment (spill berms, dikes, spill containment pallets, covering over where appropriate, and having spill kits readily available).
- Each facility must have appropriate signage to inform users where the dedicated area(s) are located.

Date Shown on Plan (Sheet #)	Location of Dedicated Area(s)	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location of Dedicated Area(s)	Operator(s) Initials

- If mobile fueling will be used, the fueling must be done in an area that is located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- Spill kits must be readily available at all mobile fueling locations.
- On-site storage tanks must have a means of secondary containment (spill berms, dikes, spill containment pallets, etc.) and must be covered where appropriate.
- All vehicles on site must be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.

DISCHARGE FROM STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTE

- Storage of construction products, materials, and waste is to be conducted in a dedicated area.
- The dedicated area must be located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- The dedicated area must be designed to minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials and waste including (i) building products such as asphalt emulsions, copper flashing, roofing materials, adhesives, concrete admixtures, (ii) pesticides, herbicides, insecticides, fertilizers, and landscape materials, and (iii) construction and domestic wastes such as building materials, waste electrical materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete and other bulk building products.
- Each facility must have appropriate signage to inform users where the dedicated area(s) are located.

Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for storage of construction products and materials	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for storage of construction products and materials	Operator(s) Initials

Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for waste from construction products and materials	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for waste from construction products and materials	Operator(s) Initials

- Follow all federal, state, and local requirements that apply to the use, handling and disposal of pesticides, herbicides, and fertilizers.
- Keep chemicals outside in small quantities and in closed, well-sealed containers.
- Clean up solid waste, including building materials, garbage, and debris on a daily basis and deposit into covered dumpsters that are properly signed.
- Schedule waste collection to prevent exceeding the capacity of onsite containers. Additional containers may be necessary depending on the phase at construction (e.g., demolition, etc.).
- Dispose of all solid waste at an authorized disposal site.
- Ensure that containers have lids or are otherwise protected from exposure to precipitation.

DISCHARGES FROM OTHER POTENTIAL POLLUTANT SOURCES

- Discharges from other pollutant sources (e.g., water flowing, storm sewer flushing, above ground storage tanks, etc.) not mentioned elsewhere must be addressed.

Other Potential Pollutant Sources	Location(s) of Potential Pollutant Sources

- Above ground oil storage tanks with a storage capacity exceeding 1,200 gallons and have a reasonable expectation of a discharge into or upon Wetlands of the United States are required to have a Spill Prevention Control and Countermeasure (SPCC) Plan.
- The discharge of contaminated tank water and material removed during flushing operations must be collected and disposed of in accordance with appropriate federal, state, and local requirements.

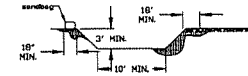
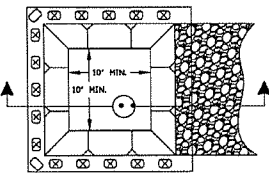
DISCHARGES FROM CONCRETE RELATED WASH ACTIVITIES

- Concrete trucks are not allowed to wash out or discharge surplus concrete or drum wash water on site except in a dedicated area(s) that is located to prevent discharge to storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- Each facility must have a dedicated access to prevent mud tracking into the street.
- Each facility must have appropriate signage to inform users where the dedicated area(s) are located.

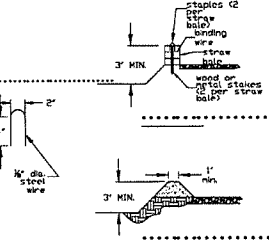
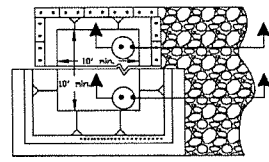
Date Shown on Plan (Sheet #)	Location of Dedicated Area(s)	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location of Dedicated Area(s)	Operator(s) Initials

- Facilities must be cleaned, or new facilities constructed, once the washout area is two-thirds (2/3) full.

BELOW GRADE CONCRETE WASHOUT AREA



ABOVE GRADE CONCRETE WASHOUT AREA



CONCRETE WASHOUT AREA NOTES

- The facility must be lined with 10 mil plastic lining that is free from holes, tears, or other defects that might compromise the material's impermeability.
- The lining must be installed with staples (2" spacing) or earthing.
- Side slopes must be 1:1 (horizontal:vertical) or flatter.
- Stone access must be provided between the street and the concrete washout area.
- A "Concrete Washout" sign must be installed within 20 feet of the washout facility. The sign must be no smaller than 2' tall by 4' wide.

DISCHARGES OF SOAPS, DETERGENTS, SOLVENTS, AND WASH WATER FROM CONSTRUCTION ACTIVITIES SUCH AS CLEANUP OF STUCK PAINT, FORM RELEASE OILS, AND CURING COMPOUNDS

- Washing activities associated with construction activities other than vehicle and equipment washing, such as clean up of sludge, paint, form release oils, and curing compounds are to be conducted in a dedicated area.
- The dedicated area must be located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- The dedicated area must be designed to prevent the discharge of soaps, detergents, solvents, and wash water.

Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s)	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s)	Operator(s) Initials

- The dedicated area must be covered (e.g., plastic sheeting, temporary roof, etc.) to prevent contact with stormwater.
- The contaminated washwater from the dedicated area must be collected for disposal by a waste hauler or discharged to the sanitary sewer.

DISCHARGES OF HAZARDOUS, TOXIC, AND SANITARY WASTE

- Storage and disposal of hazardous, toxic and sanitary wastes are to be conducted in a dedicated area.
- The dedicated area must be located to maximize the distance from storm drain inlets, ditches, watercourses or wetlands but no less than 50 feet from these features.
- The dedicated area must be designed to prevent the discharge of hazardous, toxic and sanitary waste by ensuring contact with precipitation.
- Each facility must have appropriate signage to inform users where the dedicated area(s) are located.

Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for storage and disposal of hazardous and toxic wastes	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for storage and disposal of hazardous and toxic wastes	Operator(s) Initials

Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for portable toilets	
Approved Plan		
REVISIONS TO LOCATIONS		
Date Shown on Plan (Sheet #)	Location(s) of Dedicated Area(s) for portable toilets	Operator(s) Initials

- Consult with local waste management authorities or private firms about the requirements for disposing of hazardous materials under soils that may be contaminated with hazardous materials.
- Never remove the original product label from the container. Follow the manufacturer's recommended method of disposal.
- Refuse to provide pouring of portable toilets and dispose of waste.
- Dispose of all solid waste at an authorized disposal site.

NOTES:

- CONTRACTOR SHALL INDICATE LOCATIONS OF DEDICATED AREAS ON PLAN SHEETS AND/OR NOTE THESE LOCATIONS ON THIS POLLUTION PREVENTION PLAN SHEET OR WITHIN THE STORMWATER POLLUTION PREVENTION PLAN THAT IS ON-SITE DURING CONSTRUCTION ACTIVITY.
- THE POLLUTION PREVENTION PLAN SHEET MAY BE INCORPORATED INTO THE STORMWATER POLLUTION PREVENTION PLAN BY REFERENCE.
- POLLUTION PREVENTION PLAN INFORMATION ON THIS SHEET MAY BE APPROVED BY PRINCE WILLIAM COUNTY DEPARTMENT OF PUBLIC WORKS ON FEBRUARY 4, 2015.



POLLUTION PREVENTION PLAN
 ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Prince William County, Virginia

Plan Number	06-0480R01
Drawn by	JH
Designed by	JH
Checked by	
Date	
Sheet	12A of 24
MAN SP-499	



NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
		DAD REVISIONS				COUNTY REVISIONS	

Project Name: Ashley Business Park
Date: 4/16/2020
BMP Design Specifications: Use 2011 SDC & Specs

Site Information

Post-Development Project (Treatment Volume and Loads)

Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Total
Forest/Open Space (acres) - Undisturbed, protected (except from spots or restricted herb)			0.12		0.12
Managed Turf (acres) - Disturbed, graded for yards or other turf to be retained/changed			0.20		0.20
Impervious Cover (acres)			0.88		0.88
* Forest/Open Space areas must be protected in accordance with the Virginia Runoff Reduction Method					

Constants	Runoff Coefficients (Rv)
Forest/Open Space	0.02
Managed Turf	0.25
Impervious Cover	0.95

Runoff Coefficients (Rv)	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.04	0.04	0.04
Managed Turf	0.25	0.25	0.25	0.25
Impervious Cover	0.95	0.95	0.95	0.95


Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) | 1.54

LAND COVER SUMMARY - POST DEVELOPMENT

Land Cover Summary	Treatment Volume and Nutrient Loads
Forest/Open Space Cover (acres)	Treatment Volume (acres) 0.0741
Weighted By Forest	Treatment Volume (cubic feet) 2,238
% Forest	TP Load (lb/yr) 2.03
Managed Turf Cover (acres)	TP Load (lb/yr) 14.55
Weighted By Turf	Informational Treatment Credit
% Managed Turf	
Impervious Cover (acres)	
% Impervious	
Site Area (acres)	
Site Av	

LETTER OF AVAILABILITY


OVERLAND VA


April 7, 2020

Andrew Norman
 BlueLine Conservation Incentives
 10688 Creewood Dr
 Manassas, VA 20109

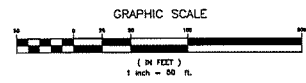
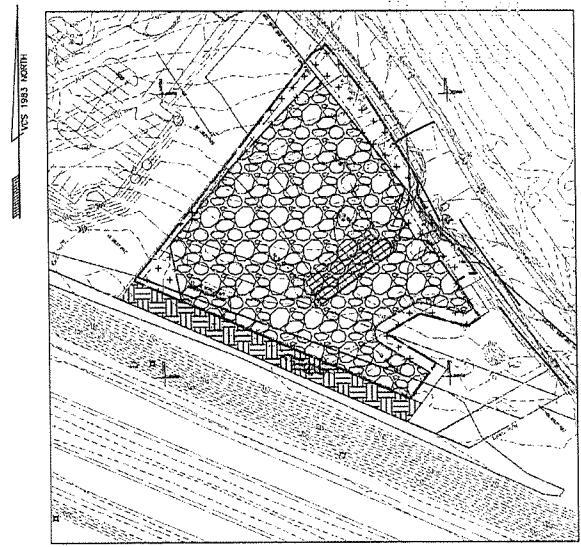
RE: Nutrient Credits Availability - Project located at 7404 Cushing Rd, Manassas, VA in HUC 02070010

Dear Andrew,

This letter is to certify that as of today, April 7, 2020, Dream Bay Nutrient Bank (Serving Hydrologic Unit Codes: 02070010 and 02070011) has 5.86 pounds of phosphorus and 28.91 pounds of nitrogen available for transfer to those entities requiring offsets in accordance with the Chesapeake Bay Watershed Nutrient Credits Exchange Program. Please feel free to reach out with any questions or concerns. I hope we have the opportunity to work together on this assignment. Best,


Harrison Hall
 804-814-5299
 hallnutrientcreditsva@gmail.com

1 | OVERLAND VA, LLC | 1801 Bayberry Court, Suite 101 | Richmond, VA 23226 | 804.814.5299

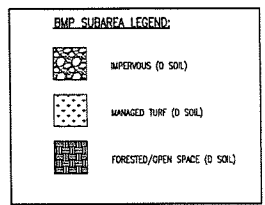


Practice	Runoff Reduction Credits (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practices (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Unsettled Phosphorus Load to Practice (lb)	Phosphorus Removed by Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
34. Manufacturing Treatment Device (no RR)													
34.a. Manufacturing Treatment Device Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
34.b. Manufacturing Treatment Device Filtering	0	0.02	0.84	0	0	2,294	2,294	40	0.00	1.44	0.58	0.86	

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Total	Land Cover Bv
Forest/Open Space (acres)				0.10	0.10	0.05
Managed Turf (acres)				0.02	0.02	0.25
Impervious Cover (acres)				0.66	0.66	0.95
Total:					0.78	

Total Phosphorus Available for Removal in D.A. A (lb/yr) | 1.44
 Post Development Treatment Volume in D.A. A (ft³) | 2,294



TOTAL IMPERVIOUS COVER TREATED (ac) | 0.66 AREA CHECK: OK
TOTAL MANAGED TURF AREA TREATED (ac) | 0.02 AREA CHECK: OK

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) | 1.54

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr) | 1.44
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) | 0.58
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) | 0.00
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr) | 0.58
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr) | 0.87

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) | 0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) | 0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr) | 0.00

Site Results (Water Quality Compliance)

Area Check	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FORESTED/OPEN SPACE	0.00	0.00	0.00	0.00	0.00	OK
IMPERVIOUS COVER (ac)	0.66	0.00	0.00	0.00	0.00	OK
IMPERVIOUS COVER TREATED (ac)	0.66	0.00	0.00	0.00	0.00	OK
MANAGED TURF AREA	0.02	0.00	0.00	0.00	0.00	OK
MANAGED TURF AREA TREATED (ac)	0.02	0.00	0.00	0.00	0.00	OK
AREA CHECK	OK	OK	OK	OK	OK	

Site Treatment Volume (ft³) | 0

Runoff Reduction Volume and TP by Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.44	0.00	0.00	0.00	0.00	1.44
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.58	0.00	0.00	0.00	0.00	0.58
TP LOAD REMAINING (lb/yr)	0.87	0.00	0.00	0.00	0.00	0.87
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	2.03
TP LOAD REDUCTION REQUIRED (lb/yr)	1.54
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.58
TP LOAD REMAINING (lb/yr)	1.45
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr)	0.97

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	14.55
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	14.55

BMP INSTITUTE

THE DEVELOPMENT PROPOSES TO REMOVE WOODED AND TURF VEGETATION AND CONSTRUCT A GRAVEL PAD. THE REQUIRED TP LOAD REDUCTION FOR THE PROPOSED DEVELOPMENT HAS BEEN DETERMINED TO BE 1.54 LB/YR. IN ORDER TO REDUCE THE TP LOAD TO THE REQUIRED RATE AS STATED BY THE WORK NEW DEVELOPMENT COMPLIANCE SPREADSHEET A STORMTRENCH SYSTEM WITH AN ISOLATOR NOW IS BEING PROPOSED. THE USE OF THE STORMTRENCH ISOLATOR NOW RESULTS IN A TP REDUCTION OF 0.58 LB/YR. THE REMAINING TP LOAD REDUCTION REQUIRED (0.97) WILL BE ACHIEVED THROUGH THE PURCHASE OF OFFSITE CREDITS. SEE THIS SHEET FOR LETTER. OFFSITE CREDITS CAN BE PURCHASED FOR THIS PLAN AS THE TOTAL DISTURBED AREA IS LESS THAN 5 ACRES. WITH THE STORMTRENCH SYSTEM AND THE OFFSITE NUTRIENT CREDIT PURCHASES, THE REQUIRED TP REMOVAL LOAD HAS BEEN ACHIEVED.

NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY



Dewberry
 ENVIRONMENTAL
 CIVIL & GEOTECHNICAL
 PROJECTS FOR MASS
 TRANSPORTATION
 INC.

BMP DIVIDES AND COMPUTATIONS

ASHLEY BUSINESS PARK
 Gainesville Magisterial District
 Gainesville, Virginia

Plan Number: 20-00490901
 Drawn by: JH
 Designed by: JH
 Checked by: JH
 Date: 4/17/2020
 1'-0" scale
 Sheet: 13 of 24
 MAN SP-499

SWM-A VOLUME

Project: Ashley Business Park

Chamber Model:	SC-740
Units:	Imperial
Number of chambers:	63
Units in the store (optional):	63
Size of STONE (Inches):	300.75
Amount of Stone Above Chambers:	15
Amount of Stone Below Chambers:	15
Area of system:	2628 sq. ft. Area = 2150 sq. ft. area

StormTech SC-740 Cumulative Storage Volumes

Height of System (Feet)	Incremental Storage Chamber (cubic feet)	Incremental Stone Chamber (cubic feet)	Incremental Stone (cubic feet)	Incremental Ch. A (cubic feet)	Incremental Ch. B (cubic feet)	Complete Chamber (cubic feet)	Deviation (Feet)
48	0.00	0.00	94.27	94.27	6301.74	304.76	
47	0.00	0.00	94.27	94.27	6167.48	304.62	
46	0.00	0.00	94.27	94.27	6033.21	304.53	
45	0.00	0.00	94.27	94.27	5898.94	304.46	
44	0.00	0.00	94.27	94.27	5764.68	304.37	
43	0.00	0.00	94.27	94.27	5630.41	304.28	
42	0.00	0.00	94.27	94.27	5496.14	304.20	
41	0.18	0.36	90.16	100.43	5361.88	304.12	
40	0.28	0.56	87.16	104.82	5227.62	304.03	
39	0.00	0.00	79.06	117.10	5093.36	303.95	
38	0.00	0.00	70.96	124.97	4959.10	303.87	
37	0.05	0.10	78.31	130.20	4824.84	303.78	
36	0.07	0.14	87.19	134.88	4690.58	303.70	
35	1.16	2.32	84.52	138.80	4556.32	303.62	
34	1.27	2.54	82.37	142.11	4422.06	303.53	
33	1.06	2.12	80.12	145.49	4287.80	303.45	
32	1.45	2.90	81.62	148.25	4153.54	303.37	
31	1.52	3.04	85.84	151.80	4019.28	303.28	
30	1.58	3.16	84.29	154.08	3885.02	303.20	
29	1.64	3.28	82.65	156.24	3750.76	303.12	
28	1.70	3.40	81.44	158.11	3616.50	303.03	
27	1.75	3.50	80.69	160.53	3482.24	302.95	
26	1.80	3.60	79.84	162.41	3347.98	302.87	
25	1.86	3.72	79.49	164.39	3213.72	302.78	
24	1.88	3.76	78.83	166.43	3079.46	302.70	
23	1.90	3.80	78.24	168.00	2945.20	302.62	
22	1.92	3.84	77.70	169.62	2810.94	302.53	
21	2.01	4.02	77.24	170.70	2676.68	302.45	
20	2.04	4.08	76.77	171.57	2542.42	302.37	
19	2.07	4.14	76.40	172.70	2408.16	302.28	
18	2.10	4.20	76.03	173.83	2273.90	302.20	
17	2.13	4.26	75.66	174.89	2139.64	302.12	
16	2.15	4.30	75.29	175.88	2005.38	302.03	
15	2.18	4.36	74.92	176.80	1871.12	301.95	
14	2.20	4.40	74.55	177.30	1736.86	301.87	
13	2.21	4.42	74.18	177.70	1602.60	301.78	
12	2.20	4.40	74.27	177.30	1468.34	301.70	
11	2.20	4.40	74.27	176.80	1334.08	301.62	
10	2.20	4.40	74.27	176.27	1200.00	301.53	
9	2.20	4.40	74.27	175.40	1066.00	301.45	
8	2.20	4.40	74.27	174.15	932.00	301.37	
7	2.20	4.40	74.27	172.50	798.00	301.28	
6	2.20	4.40	74.27	170.40	664.00	301.20	
5	2.20	4.40	74.27	167.80	530.00	301.12	
4	2.20	4.40	74.27	164.70	396.00	301.03	
3	2.20	4.40	74.27	161.10	262.00	300.95	
2	2.20	4.40	74.27	157.00	128.00	300.87	
1	2.20	4.40	74.27	152.40	0.00	300.78	

SWM-A SUMMARY

Subsection: Master Network Summary

Chickenshoe Summary

Label	Scenario	Return Event (Years)	Hydrograph Volume (ac-ft)	Time to Peak (Hours)	Peak Flow (CFS)
CHICKENSHOE DA	Pre-Development 1	1	0.011	12.000	0.18
CHICKENSHOE DA	Post-Development 1	1	0.011	12.000	1.94
CHICKENSHOE DA	Post-Development 10	10	0.206	13.000	1.14
CHICKENSHOE DA	Post-Development 10	10	0.021	12.000	0.51
CHICKENSHOE DA	Post-Development 10	10	0.006	12.000	0.08
CHICKENSHOE DA	Post-Development 10	10	0.020	12.000	0.31

Node Summary

Label	Scenario	Return Event (Years)	Hydrograph Volume (ac-ft)	Time to Peak (Hours)	Peak Flow (CFS)
OUTFALL STR	Pre-Development 1	1	0.011	12.000	0.18
OUTFALL STR	Post-Development 1	1	0.016	17.000	4.02
OUTFALL STR	Post-Development 10	10	0.126	13.000	1.26
OUTFALL STR	Post-Development 10	10	0.021	12.000	0.51

Point Summary

Label	Scenario	Return Event (Years)	Hydrograph Volume (ac-ft)	Time to Peak (Hours)	Peak Flow (CFS)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (cu-ft)
SWM-A (RP)	Post-Development 1	1	0.011	12.000	1.13	(NA)	(NA)
SWM-A (RP)	Post-Development 1	1	0.016	17.000	4.05	303.57	0.048
SWM-A (RP)	Post-Development 10	10	0.226	12.000	3.45	(NA)	(NA)
SWM-A (RP)	Post-Development 10	10	0.126	12.200	1.26	303.66	0.114

ROUTING RESULTS

STAGE-DISCHARGE

Subsection: Composite Rating Curve

Label: Composite Outlet Structure - 1

Scenario: Post-Development 1

Return Event: 1 years
Storm Event: 1 YR

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (CFS)	Turbulent Deviation (%)	Convergence Error (%)
302.70	0.00	(NA)	0.00
301.20	0.00	(NA)	0.00
301.10	0.00	(NA)	0.00
301.00	0.00	(NA)	0.00
300.90	0.00	(NA)	0.00
300.80	0.00	(NA)	0.00
300.70	0.00	(NA)	0.00
300.60	0.00	(NA)	0.00
300.50	0.00	(NA)	0.00
300.40	0.00	(NA)	0.00
300.30	0.00	(NA)	0.00
300.20	0.00	(NA)	0.00
300.10	0.00	(NA)	0.00
300.00	0.00	(NA)	0.00

Subsection: Composite Rating Curve

Label: Composite Outlet Structure - 1

Scenario: Post-Development 10

Return Event: 10 years
Storm Event: 10 YR

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (CFS)	Turbulent Deviation (%)	Convergence Error (%)
302.70	0.00	(NA)	0.00
301.20	0.00	(NA)	0.00
301.10	0.00	(NA)	0.00
301.00	0.00	(NA)	0.00
300.90	0.00	(NA)	0.00
300.80	0.00	(NA)	0.00
300.70	0.00	(NA)	0.00
300.60	0.00	(NA)	0.00
300.50	0.00	(NA)	0.00
300.40	0.00	(NA)	0.00
300.30	0.00	(NA)	0.00
300.20	0.00	(NA)	0.00
300.10	0.00	(NA)	0.00
300.00	0.00	(NA)	0.00

SWM-A INPUT DATA

Subsection: Outlet Input Data
Label: Composite Outlet Structure - 1
Scenario: Post-Development 1

Return Event: 1 years
Storm Event: 1 YR

Required Pond Water Surface Elevations	
Minimum (Headwater)	300.70 ft
Increment (Headwater)	0.01 ft
Maximum (Headwater)	304.70 ft

Outlet Connectivity						
Structure Type	Outlet ID	Direction	Outlet ID	Direction	Flow	Flow
Office-Circular	Office - 1	Forward	Outlet - 1	Forward	300.70	304.70
Office-Circular	Office - 2	Forward	Outlet - 1	Forward	302.20	304.70
Rectangular Weir	WW - 1	Forward	Outlet - 1	Forward	304.70	304.70
Culvert-Circular	Culvert - 1	Forward	Outlet - 1	Forward	300.61	304.70
Trajectory Structure	Trajectory	Forward	Outlet - 1	Forward	(NA)	(NA)

Structure ID: Office - 1	
Structure Type	Office-Circular
Number of Openings	1
Deviation	300.70 ft
Orifice Diameter	1.0 ft
Orifice Coefficient	0.600

Structure ID: WW - 1	
Structure Type	Rectangular Weir
Number of Openings	1
Deviation	304.70 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (R=1.5%)

Structure ID: Culvert - 1	
Structure Type	Culvert-Circular
Number of Openings	1
Diameter	15.0 ft
Length (Compound Barrel)	41.00 ft
Slope (Compound)	0.007 ft/ft

Structure ID: Office - 2	
Structure Type	Office-Weir
Number of Openings	1
Deviation	303.20 ft
Office Area	0.8 ft ²
Top Elevation	304.70 ft
Bottom Elevation	303.20 ft
Orifice Coefficient	0.600

Structure ID: TW Setup, DS Channel	
Table Type	Free Outlet

Convergence Tolerances	
Maximum Iterations	20
Turbulent Tolerance (Minimum)	0.01 ft
Turbulent Tolerance (Maximum)	0.01 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.01 ft
Flow Tolerance (Minimum)	0.001 ft/s
Flow Tolerance (Maximum)	10.000 ft/s

Outlet Control Data	
Equation Form	Form 1
K	0.0045
H	2.0000
C	0.0317
Y	1.6900
T1 ratio (HW/D)	1.000
T2 ratio (HW/D)	1.100
Slope Correction Factor	-0.300

Use undersized inlet control D equation below T1 elevation.
Use submerged inlet control D equation above T2 elevation.
Use transition form between undersized and submerged inlet control.
Interpolate between flow at T1 & T2.

T1 Elevation	T1 Flow	T2 Flow
302.01 ft	4.80 ft/s	5.40 ft/s
303.14 ft		



HYDRAULIC COMPUTATIONS
SWM/BMP SYSTEM

ASHLEY BUSINESS PARK
Gainesville Magisterial District
Prince William County, Virginia

Plan Number: 08-00460R01
Drawn By: JH
Designed By: JH
Checked By: JH
Date: 4/7/20
Sheet: 15 of 24
MAN SP-499



NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
2	4/7/20	REVIS: PER REVISIONS ONLY AND NEW OVERHEAD LINK & SHOW CURBS THAT HAVE BEEN INSTALLED	AI				
		DESCRIPTION				COUNTY REVISIONS	

REVISED
07 15 00
REVISED

StormTech Construction Guide

REQUIRED MATERIALS AND EQUIPMENT LIST

- StormTech cast end caps and pre-cast end caps
- Acceptable #4 rebar per Table 1
- Mason and non-mason rebar

- StormTech cast end caps and pre-cast end caps
- StormTech chambers
- StormTech manholes and traps

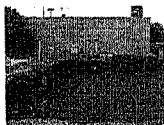
IMPORTANT NOTES:

1. This installation guide provides the minimum requirements for proper installation of chambers. Non-adherence to this guide may result in damage to chambers during installation. Replacement of damaged chambers during or after backfilling is costly and very time consuming. It is recommended that all installers are familiar with this guide and that the contractor inspects the chambers, manholes and traps before they are used.
2. Use of a clear or translucent stone between the rows of chambers may cause damage to chambers and is not an acceptable backfill method. Any chambers damaged by using the "slump and push" method are not covered under the StormTech standard warranty.
3. Care should be taken in the handling of chambers and end caps. Avoid dropping, prying or excessive force on chambers during removal from pallet and final placement.

Requirements for System Installation



Excavator bed and deeper subgrade per engineer's plan.



Place non-woven geotextile over excavator bed and up excavation walls. Input contractor if required.



Place clean, crushed, angular stone foundation 12" (305 mm) min. Compact to surface a hot surface.

Manifold, Scour Fabric and Chamber Assembly



Water manholes and end cap.



Align the first chamber and end cap of each row with the pipe. Contractor may choose to backfill above chamber and end cap and backfill below each of them upon the backfill process.



Concrete manhole chambers by overlapping chamber and connections. Chamber 12" (305 mm) min. overlap. "Overlap" may vary. The overlap is 12" (305 mm) min. and the overlap should be at least 12" (305 mm) min. spacing between rows.

Attaching the End Caps



Lift the end of the chamber a few inches off the ground. With the curved face of the end cap facing outward, shove the cap into the chamber's end opening.

Prefabricated End Caps



24" (600 mm) holes are the minimum size that can fit into a 24" (600 mm) end cap and must be prefabricated with a 24" (600 mm) hole. SC-310 (StormTech) with a 12" (305 mm) hole pipe must use a prefabricated end cap with a 12" (305 mm) hole size.

Isolator Row



Place two prefabricated rows of SC2 Isolator between the foundation stone and the initial row of chambers, making sure the backfill bed and subgrade within the width of the chamber fits. Dig up a strip of SC2 Isolator (depths may vary) from the chambers and lay them over SC-700. This is the same type of row between geotextile and a layer of stone around the angular stones of the StormTech system.

Initial Anchoring of Chambers - Embedment Stone

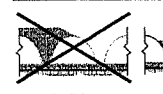


Final anchorage shall be applied along the exterior of any chamber manhole including the manhole portion of any chamber. This is best accomplished with a stone bedrock or concrete footing along the base.



No equipment shall be operated on the bed at this stage of the installation. Equipment must be located off the bed. Dump trucks shall dump stone directly on to the bed. Do not backfill until the bed is in place.

Backfill of Chambers - Embedment Stone



Uneven backfill.



Even backfill.



Perimeter net backfill.

Perimeter fully backfilled.

Call StormTech at 888.882.2694 for technical and product information or visit www.stormtech.com

Backfill - Embedment Stone & Cover Stone



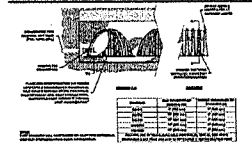
Clean, crushed, angular stone foundation 12" (305 mm) min. Compact to surface a hot surface.

Final Backfill of Chambers - Fill Material



Final backfill of chambers with approved fill material.

Inserta Tee Detail



StormTech Isolator Row Detail

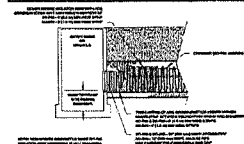


Table 1 - Chamber Dimensions

Model	Length (ft)	Length (m)	Width (ft)	Width (m)	Height (ft)	Height (m)
SC-310	10	3.05	4	1.22	4	1.22
SC-315	10	3.05	5	1.52	4	1.22
SC-320	10	3.05	6	1.83	4	1.22
SC-325	10	3.05	7	2.13	4	1.22
SC-330	10	3.05	8	2.44	4	1.22
SC-335	10	3.05	9	2.74	4	1.22
SC-340	10	3.05	10	3.05	4	1.22
SC-345	10	3.05	11	3.35	4	1.22
SC-350	10	3.05	12	3.66	4	1.22
SC-355	10	3.05	13	3.96	4	1.22
SC-360	10	3.05	14	4.27	4	1.22
SC-365	10	3.05	15	4.57	4	1.22
SC-370	10	3.05	16	4.88	4	1.22
SC-375	10	3.05	17	5.18	4	1.22
SC-380	10	3.05	18	5.49	4	1.22
SC-385	10	3.05	19	5.79	4	1.22
SC-390	10	3.05	20	6.10	4	1.22
SC-395	10	3.05	21	6.40	4	1.22
SC-400	10	3.05	22	6.71	4	1.22
SC-405	10	3.05	23	7.01	4	1.22
SC-410	10	3.05	24	7.32	4	1.22
SC-415	10	3.05	25	7.62	4	1.22
SC-420	10	3.05	26	7.93	4	1.22
SC-425	10	3.05	27	8.23	4	1.22
SC-430	10	3.05	28	8.53	4	1.22
SC-435	10	3.05	29	8.84	4	1.22
SC-440	10	3.05	30	9.14	4	1.22
SC-445	10	3.05	31	9.45	4	1.22
SC-450	10	3.05	32	9.75	4	1.22
SC-455	10	3.05	33	10.06	4	1.22
SC-460	10	3.05	34	10.36	4	1.22
SC-465	10	3.05	35	10.67	4	1.22
SC-470	10	3.05	36	10.97	4	1.22
SC-475	10	3.05	37	11.28	4	1.22
SC-480	10	3.05	38	11.58	4	1.22
SC-485	10	3.05	39	11.88	4	1.22
SC-490	10	3.05	40	12.19	4	1.22
SC-495	10	3.05	41	12.49	4	1.22
SC-500	10	3.05	42	12.79	4	1.22
SC-505	10	3.05	43	13.10	4	1.22
SC-510	10	3.05	44	13.40	4	1.22
SC-515	10	3.05	45	13.71	4	1.22
SC-520	10	3.05	46	14.01	4	1.22
SC-525	10	3.05	47	14.31	4	1.22
SC-530	10	3.05	48	14.62	4	1.22
SC-535	10	3.05	49	14.92	4	1.22
SC-540	10	3.05	50	15.23	4	1.22
SC-545	10	3.05	51	15.53	4	1.22
SC-550	10	3.05	52	15.83	4	1.22
SC-555	10	3.05	53	16.14	4	1.22
SC-560	10	3.05	54	16.44	4	1.22
SC-565	10	3.05	55	16.74	4	1.22
SC-570	10	3.05	56	17.05	4	1.22
SC-575	10	3.05	57	17.35	4	1.22
SC-580	10	3.05	58	17.65	4	1.22
SC-585	10	3.05	59	17.96	4	1.22
SC-590	10	3.05	60	18.26	4	1.22
SC-595	10	3.05	61	18.56	4	1.22
SC-600	10	3.05	62	18.87	4	1.22
SC-605	10	3.05	63	19.17	4	1.22
SC-610	10	3.05	64	19.47	4	1.22
SC-615	10	3.05	65	19.78	4	1.22
SC-620	10	3.05	66	20.08	4	1.22
SC-625	10	3.05	67	20.38	4	1.22
SC-630	10	3.05	68	20.68	4	1.22
SC-635	10	3.05	69	20.99	4	1.22
SC-640	10	3.05	70	21.29	4	1.22
SC-645	10	3.05	71	21.59	4	1.22
SC-650	10	3.05	72	21.89	4	1.22
SC-655	10	3.05	73	22.19	4	1.22
SC-660	10	3.05	74	22.50	4	1.22
SC-665	10	3.05	75	22.80	4	1.22
SC-670	10	3.05	76	23.10	4	1.22
SC-675	10	3.05	77	23.40	4	1.22
SC-680	10	3.05	78	23.71	4	1.22
SC-685	10	3.05	79	24.01	4	1.22
SC-690	10	3.05	80	24.31	4	1.22
SC-695	10	3.05	81	24.62	4	1.22
SC-700	10	3.05	82	24.92	4	1.22
SC-705	10	3.05	83	25.22	4	1.22
SC-710	10	3.05	84	25.53	4	1.22
SC-715	10	3.05	85	25.83	4	1.22
SC-720	10	3.05	86	26.13	4	1.22
SC-725	10	3.05	87	26.44	4	1.22
SC-730	10	3.05	88	26.74	4	1.22
SC-735	10	3.05	89	27.04	4	1.22
SC-740	10	3.05	90	27.35	4	1.22
SC-745	10	3.05	91	27.65	4	1.22
SC-750	10	3.05	92	27.95	4	1.22
SC-755	10	3.05	93	28.26	4	1.22
SC-760	10	3.05	94	28.56	4	1.22
SC-765	10	3.05	95	28.86	4	1.22
SC-770	10	3.05	96	29.17	4	1.22
SC-775	10	3.05	97	29.47	4	1.22
SC-780	10	3.05	98	29.77	4	1.22
SC-785	10	3.05	99	30.08	4	1.22
SC-790	10	3.05	100	30.38	4	1.22

Figure 1 - Inspection Port Detail

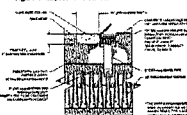


Figure 2 - Fill Material Locators

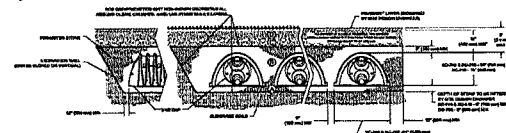


Table 2 - Placement Limits, Risks, and Drawings

Model	Length (ft)	Length (m)	Width (ft)	Width (m)	Height (ft)	Height (m)
SC-310	10	3.05	4	1.22	4	1.22
SC-315	10	3.05	5	1.52	4	1.22
SC-320	10	3.05	6	1.83	4	1.22
SC-325	10	3.05	7	2.13	4	1.22
SC-330	10	3.05	8	2.44	4	1.22
SC-335	10	3.05	9	2.74	4	1.22
SC-340	10	3.05	10	3.05	4	1.22
SC-345	10	3.05	11	3.35	4	1.22
SC-350	10	3.05	12	3.66	4	1.22
SC-355	10	3.05	13	3.96	4	1.22
SC-360	10	3.05	14	4.27	4	1.22
SC-365	10	3.05	15	4.57	4	1.22
SC-370	10	3.05	16	4.88	4	1.22
SC-375	10	3.05	17	5.18	4	1.22
SC-380	10	3.05	18	5.49	4	1.22
SC-385	10	3.05	19	5.79	4	1.22
SC-390	10	3.05	20	6.10	4	1.22
SC-395	10	3.05	21	6.40	4	1.22
SC-400	10	3.05	22	6.71	4	1.22
SC-405	10	3.05	23	7.01	4	1.22
SC-410	10	3.05	24	7.32	4	1.22
SC-415	10	3.05	25	7.62	4	1.22
SC-420	10	3.05	26	7.93	4	1.22
SC-425	10	3.05	27	8.23	4	1.22
SC-430	10	3.05	28	8.53	4	1.22
SC						

GENERAL NOTES:

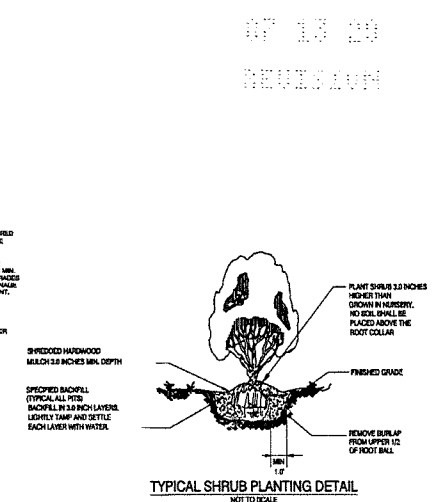
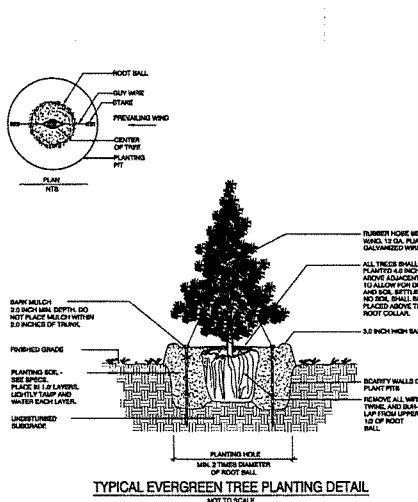
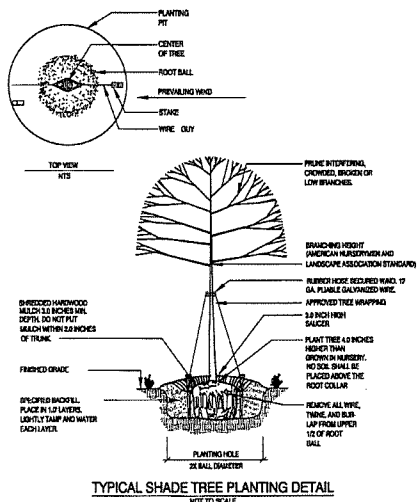
- ALL PLANT MATERIALS SHALL BE SPECIFIED TO BE EQUAL TO OR BETTER THAN THE STANDARDS FOR NURSERY STOCK, BY THE AMERICAN NURSERY AND LANDSCAPERS ASSOCIATION (ANLA).
- TREES AND SHRUBS SHALL BE NURSERY GROWN, UNLESS OTHERWISE APPROVED, AND SHALL BE HEALTHY AND VIGOROUS PLANTS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUCKERS, INJURIES, ABRASIONS OF THE BARK, PLANT DISEASES, INSECT PEST EGGS, BORERS AND ALL FORMS OF INFESTATIONS OR OBJECTIONABLE DISCOLORATIONS, AS DETERMINED BY THE DIRECTOR OF PUBLIC WORKS. PLANTS SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN NURSERY AND LANDSCAPE ASSOCIATION AND CONFORM IN GENERAL, TO REPRESENTATIVE SPECIES.
- PLANT MEASUREMENTS: ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE OF THE LANDSCAPE PLAN. ALL PLANT SIZES SPECIFIED IN THE PLANS SHALL GENERALLY BE THE MEDIAN FOR THE SIZE RANGES INDICATED IN THE ANLA STANDARDS AND, AT A MINIMUM, SHALL COMPLY WITH THE FOLLOWING.
 - CALIPER MEASUREMENTS SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) INCHES CALIPER, AND TWELVE (12) INCHES ABOVE GRADE FOR TREES FOUR (4) INCHES AND OVER.
 - MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX (6) FEET.
 - MINIMUM SIZE FOR PLANTING LARGE DECIDUOUS TREES SHALL BE TWO TO TWO AND ONE-HALF (2 1/2) INCH CALIPER, TWELVE (12) FEET TO FOURTEEN (14) FEET IN HEIGHT.
 - MINIMUM SIZE FOR PLANTING ALL OTHER DECIDUOUS TREES SHALL BE ONE TO ONE AND ONE-HALF (1 1/2) INCH CALIPER, SIX (6) FEET TO EIGHT (8) FEET IN HEIGHT.
 - MINIMUM SIZE FOR PLANTING EVERGREEN TREES SHALL BE SIX (6) FEET TO SEVEN (7) FEET IN HEIGHT.
 - MINIMUM SIZE FOR PLANTING SHRUBS SHALL BE EIGHTEEN (18) TO TWENTY-FOUR (24) INCHES IN HEIGHT OR SPREAD, EXCEPT FOR QUALITY DWARF VARIETIES.
- PLANTS SHALL BE PROTECTED DURING DELIVERY TO PREVENT DESICCATION OF LEAVES.
- INsofar AS IS PRACTICABLE, TREES AND SHRUBS SHALL BE PLANTED ON DAY OF DELIVERY. IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT UNPLANTED TREES BY WRAPPING THEM IN SHADE, WELL PROTECTED WITH MULCH OR OTHER ACCEPTABLE MATERIAL, AND SHALL KEEP TREES WELL WATERED. TREES AND SHRUBS SHALL NOT REMAIN UNPLANTED FOR MORE THAN TWO (2) WEEKS.
- ALL TREES AND SHRUBS SHALL BE PLANTED IN SUCH A MANNER AS TO ENSURE THEIR SURVIVAL. THIS SHALL INCLUDE THE PLANTING OF INTACT BALLS, PLANTING AT PROPER DEPTH, PROPERLY BACKFILLING AND WATERING, AND CONSTRUCTION OF A PLANTING SAUCER. ALL PLANTING AREAS SHALL CONTAIN SOILS SUITABLE FOR PLANTING. SOILS SHALL BE CLEAN AND FREE OF ALL CONSTRUCTION MATERIALS. (SEE PLANTING PROCEDURES FOR TREES AND PLANTING PROCEDURES FOR SHRUBS IN THE LATEST EDITION OF LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE, WASHINGTON METROPOLITAN AREA, PREPARED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS FOR ADEQUATE SPECIFICATIONS.)
- ANY ROPE OR WIRE WRAPPING THE BALL SHALL BE CUT PRIOR TO THE CONCLUSION OF BACKFILLING OPERATIONS TO PREVENT GIRDLING OF THE TREE TRUNK.
- IF A NONBIODEGRADABLE MATERIAL IS USED AROUND THE BALL, IT SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING.
- THE OWNER OF FREE TITLE TO ANY PROPERTY ON WHICH PLANT MATERIAL HAS BEEN ESTABLISHED IN ACCORDANCE WITH AN APPROVED LANDSCAPE/PLANTING PLAN SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF THE APPROVED PLANT MATERIALS AS REQUIRED BY THE ORDINANCE.
- THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL BUFFER AREAS, LANDSCAPING, AND SCREENING, INCLUDING REPLACEMENT OF DEAD OR DYING PLANT MATERIAL, AND THE UPKEEP OF ANY BERM, WALLS, OR FENCES.
- NO TREES SHALL BE LOCATED WITHIN STORM DRAIN EASEMENTS UNLESS A WAIVER OF THIS REQUIREMENT HAS BEEN APPROVED BY THE PRINCE WILLIAM COUNTY DEPARTMENT OF PUBLIC WORKS.
- IF TREE PRESERVATION AREAS ARE NOT SAVED AS SHOWN ON THE PLAN, THE COUNTY ARBORIST WILL MAKE AN ONSITE INSPECTION PRIOR TO PLANTING TO DETERMINE IF CHANGES ARE NEEDED TO THE NUMBERS AND LOCATION OF PLANTINGS REQUIRED TO MEET THE REQUIRED BUFFERING CODES.
- NO DRY UTILITIES SHALL BE LOCATED WITHIN LANDSCAPE AREAS WITH THE EXCEPTION OF PERPENDICULAR CROSSINGS.

TREE PROTECTION REQUIREMENTS:

- THE PERMITTEE SHALL BE RESPONSIBLE FOR THE PROTECTION OF TOPS, TRUNKS AND ROOTS OF ALL EXISTING TREES, AS WELL AS OTHER VEGETATION TO BE RETAINED ON THE SITE. AFTER VEGETATION HAS BEEN REMOVED WITHIN THE AREA AUTHORIZED TO BE CLEARED, PROTECTIVE DEVICES SHALL BE INSTALLED ALONG THE LIMITS OF CLEARING AND GRADING, PRIOR TO ANY CONSTRUCTION WORK BEGINNING ON SITE. PROTECTION SHALL BE MAINTAINED UNTIL ALL WORK IN THE VICINITY HAS BEEN COMPLETED AND SHALL NOT BE REMOVED WITHOUT THE CONSENT OF THE DIRECTOR OF PUBLIC WORKS. IF THE DIRECTOR OF PUBLIC WORKS FINDS THAT THE PROTECTIVE DEVICES ARE INSUFFICIENT TO PROTECT THE VEGETATION RETAINED ON THE SITE, ADDITIONAL PROTECTIVE DEVICES SHALL BE INSTALLED TO INSURE ADEQUATE PROTECTION.
- ONCE CLEARING IS COMPLETED AND PROTECTIVE DEVICES INSTALLED, AN INSPECTION SHALL BE REQUESTED TO APPROVE THESE ITEMS PRIOR TO COMMENCING FURTHER CONSTRUCTION.
- BARRICADES, IN ACCORDANCE WITH THE DETAILS IN SECTION 810 OF THE DCOMA WITH APPROPRIATE SIGNS TO IDENTIFY TREE PRESERVATION AREAS SHALL BE LOCATED ALONG THE LIMITS OF CLEARING LINE. THE LIMITS OF CLEARING AND GRADING LINE SHOULD GENERALLY BE LOCATED AT THE DRIP LINE OF THE TREES TO BE RETAINED OR SPACED FROM THE EDGE OF THE TRUNKS EQUIVALENT TO ONE FOOT FOR EVERY INCH IN THE DIAMETER OF THE TRUNK AT BREAST HEIGHT (DBH), WHICHEVER IS GREATER. THE FOLLOWING STANDARDS SHALL APPLY TO THE AREA WITHIN THE ESTABLISHED LIMITS OF CLEARING AND GRADING LINE.
 - THE SOIL SHALL NOT BE DISTURBED OR COMPACTED.
 - HEAVY EQUIPMENT, VEHICULAR TRAFFIC, STOCKPILING OR ANY MATERIALS, OR DEPOSITION OF SEDIMENT, SHALL NOT BE PERMITTED.
 - TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREES BEING RETAINED. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING IT AGAINST THE TRUNKS OF TREES TO BE RETAINED.
 - NO TOXIC MATERIALS SHALL BE STORED WITHIN FIFTY (50) FEET OF THE LIMITS OF CLEARING AND GRADING.
- BURN PITS SHALL NOT BE PERMITTED WITHIN ONE HUNDRED (100) FEET OF VEGETATED AREA RETAINED, UNLESS APPROVED BY THE DIRECTOR OF PUBLIC WORKS. THEY SHALL BE LIMITED IN SIZE SO AS TO NOT ADVERSELY AFFECT THE VEGETATION.
- NO PROTECTIVE DEVICES, SIGNS, UTILITY BOXES, OR OTHER OBJECTS SHALL BE NEEDED TO THE TREES TO BE RETAINED ON THE SITE.
- ADDITIONAL TREES MAY BE LEFT STANDING AS PROTECTION BETWEEN THE TRUNKS OF THE TREES TO BE RETAINED AND THE LIMITS OF GRADING. IF THE TRUNKS OF TREES IN THIS PRESERVATION AREA ARE MORE THAN SIX (6) FEET APART, ADDITIONAL PROTECTIVE DEVICES MAY BE REQUIRED TO PREVENT PASSAGE OF EQUIPMENT AND MATERIAL THROUGH THE AREA. WHEN ADDITIONAL TREES ARE USED AS PROTECTION, THE LIMITS OF CLEARING SHOWN ON THE APPROVED PLAN SHALL BE FLAGGED IN THE FIELD SO THAT THE ADDITIONAL PRESERVATION AREA IS DELINEATED. WHEN THIS METHOD OF PROTECTION IS USED, THESE ADDITIONAL TREES SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT IF REQUIRED BY THE DIRECTOR OF PUBLIC WORKS.
- SEDIMENT-LADEN RUNOFF SHALL BE DIVERTED AWAY FROM THE PRESERVATION AREA. WHEN THE EDGE OF A PARKING LOT ADJUTS A TREE PRESERVATION AREA, CURBS AND GUTTER ROLLED ASPHALT OR SIMILAR TYPE OF GUTTERING MATERIAL SHALL BE USED TO DIVERT CONCENTRATED RUNOFF AWAY FROM THE TREE PRESERVATION AREA.

LEGEND:

- PROP. DECIDUOUS TREE - (+)
- PROP. EVERGREEN TREE - (☀)
- PROPOSED SHRUB - (○)
- PROP. PLANT TAG - (#/RC)



PLANT LIST - SCHEDULE H									
KEY	QTY	BOTANICAL NAME	COMMON NAME	REMARKS	8/26	COVERAGE CALCULATIONS			
						CRDST	TOTAL CRDST		
PA	3	<i>Halepura x acuminata</i> <i>Ulmopanax</i>	(Indigo) London Plan	0.83	7'-3-1/2" Cal	256 S.F.	750 S.F.		
OC	3	<i>Quercus coccinea</i>	Scarlet Oak	1.81	7'-3-1/2" Cal	256 S.F.	750 S.F.		
CC	9	<i>Cornus canadensis</i>	Redstart	0.83	7'-3-1/2" Cal	128 S.F.	1125 S.F.		
CV	10	<i>Chaenactis virginica</i>	Flowering Dogwood	0.83	7'-3-1/2" Cal	128 S.F.	1000 S.F.		
PV	10	<i>Passiflora</i>	Virginia Pear	0.83	8-7" Cal	128 S.F.	1875 S.F.		
TD	10	<i>Thuja occidentalis</i> "Savoyard"	Emerald Green Arborvitae	0.83	6-7" Cal	72 S.F.	720 S.F.		
AA	32	<i>Artemisia arbuscula</i> "Erftmanns"	Erftmanns Holly	45 Cont	24-30"	0 S.F.	0 S.F.		
IG	17	<i>Ilex glabra</i> "Venosa"	Boxwood	45 Cont	24-30"	0 S.F.	0 S.F.		
JC	48	<i>Juncus comata</i> "Blue Pooler"	Blue Juniper	45 Cont	24-30"	0 S.F.	0 S.F.		
						* TOTAL =	6,250 S.F.		
						* TOTAL =	0.14 AC.		

Schedule D Tree Cover Calculations	
Tree Cover Required:	
1. Gross Site Area:	1.24 AC.
2. Percent of Tree Cover Required:	12%
3. Total Area of Tree Cover Required:	0.12 AC.
Tree Cover Provided:	
4. Tree Cover From Landscaping:	0.14 AC.
5. Tree Cover From Preservation:	0.12 AC.
6. Total Tree Cover Provided:	0.26 AC.

Schedule B NONRESIDENTIAL LANDSCAPED STRIP ALONG RIGHT-OF-WAY	
1. Linear feet of street frontage, not including driveway entrances:	426 FT
2. Total number of plant units required:	360.9 p.u.
3. Number of plants provided adjacent to property line:	
Number of large deciduous trees provided:	0 x 10 p.u. = 0 p.u.
Number of large evergreen trees:	0 x 10 p.u. = 0 p.u.
Number of medium, small, compact:	0 p.u. = 0 p.u.
Number of deciduous understory trees (medium, small, compact):	10 x 9 p.u. = 90 p.u.
Number of evergreen trees:	0 x 2 p.u. = 0 p.u.
Number of Ornamental Grasses:	1 x 9 p.u. = 9 p.u.
Number of Perennials:	0 x 2.25 p.u. = 0 p.u.
4. Total number of plant units provided:	99 p.u.

Schedule A Buffer Area Planting Per REZ2019-00039 Proffer 18 (s)	
1. Minimum required buffer area (A, B, or C):	NA
2. Minimum width of landscaped yard:	20 FT.
3. Linear feet of buffer strip required along property line and/or right-of-way:	223 FT.
4. Percentage of required buffer area occupied by existing woodland:	100 %
5. Fence or wall or berm employed in buffer area:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6. Total number of plant units required in buffer strip:	0 p.u.
7. Number of large deciduous trees provided:	0 x 10 p.u. = 0 p.u.
Number of evergreen trees:	0 x 5 p.u. = 0 p.u.
Number of deciduous understory trees (medium, small or compact):	0 x 9 p.u. = 0 p.u.
Number of shrubs:	0 x 2 p.u. = 0 p.u.
8. Total number of plant units provided in buffer strip:	0 p.u.

Schedule A 8 foot Buffer Area Planting Per REZ2019-00039	
1. Minimum required buffer area (A, B, or C):	NA
2. Minimum width of landscaped yard:	8 FT.
3. Linear feet of buffer strip required along property line and/or right-of-way:	09 FT.
4. Percentage of required buffer area occupied by existing woodland:	0 %
5. Fence or wall or berm employed in buffer area:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6. Total number of plant units required in buffer strip:	73 p.u.
7. Number of large deciduous trees provided:	0 x 10 p.u. = 0 p.u.
Number of evergreen trees:	0 x 5 p.u. = 0 p.u.
Number of deciduous understory trees (medium, small or compact):	0 x 9 p.u. = 0 p.u.
Number of shrubs:	0 x 2 p.u. = 0 p.u.
8. Total number of plant units provided in buffer strip:	0 p.u.

NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
2	4/22/20	REVISE FOR REZ2019-00039 AND NEW OWNERSHIP	AD	1	3/28/19	REVISE PERMITS AND SET PERMITS DUE TO 6075 CHAMBERLAIN AND CLEARING ROAD PLAN	AD



Dewberry
Landscape Architecture
Engineering Inc.
1000 W. MARKET BLVD.
SUITE 100
ALEXANDRIA, VA 22304
(703) 701-1234

LANDSCAPE DETAILS

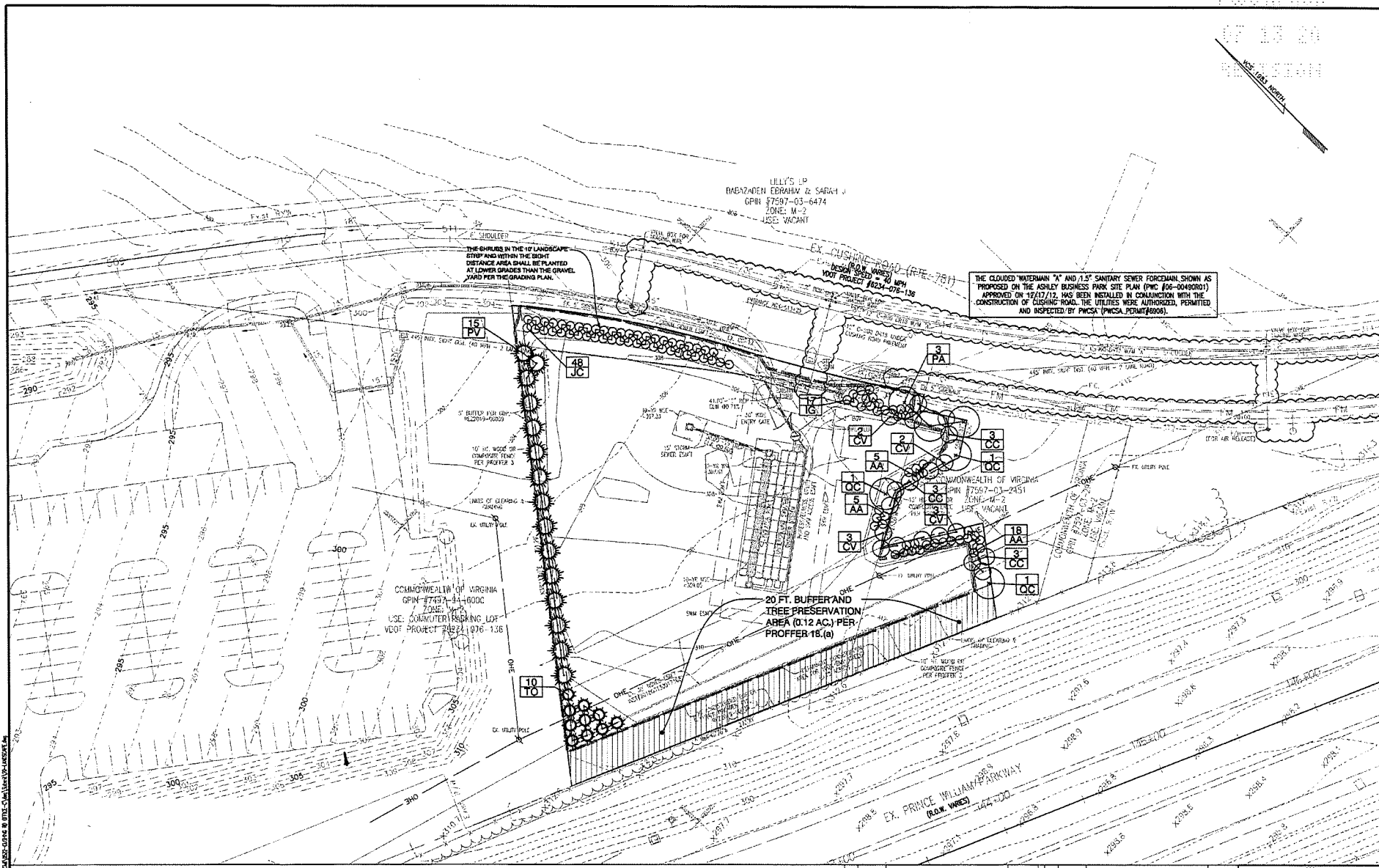
ASHLEY BUSINESS PARK
Gainesville Magisterial District
Prince William County, Virginia

Plan Number: 06-00400(R)1
Drawn By: SB
Checked By: SB
Date: 3/26/19
Sheet: 19 of 24
MAN SP-499

PLANNED

07 15 20

REVISION



JELLY'S LP
BAHAZADEN EDRAHAW & SARAH J
GPI# 97597-03-6474
ZONE: M-2
USE: W/CHMT

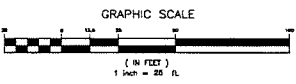
THE CLOUDED WATERMAIN "A" AND 1.5" SANITARY SEWER FORCEMAIN SHOWN AS PROPOSED ON THE ASHLEY BUSINESS PARK SITE PLAN (PWC #06-00490R01) APPROVED ON 12/17/12, HAS BEEN INSTALLED IN CONJUNCTION WITH THE CONSTRUCTION OF CUSHING ROAD. THE UTILITIES WERE AUTHORIZED, PERMITTED, AND INSPECTED BY PWCSA (PWCSA PERMIT #0606).

THE SHRUBS IN THE 10' LANDSCAPE STRIP AND WITHIN THE BUFFER DISTANCE AREA SHALL BE PLANTED AT LOWER GRADES THAN THE GRAVEL YARD FOR THE GRADING PLAN.

20 FT. BUFFER AND TREE PRESERVATION AREA (0.12 AC.) PER PROFFER 18.(a)

THIS SHEET IS FOR LANDSCAPE PURPOSES ONLY!!

FOR LANDSCAPE DETAILS SEE SHEET 19.



NO.	DATE	DESCRIPTION	BY

NO.	DATE	DESCRIPTION	BY
2	4/27/20	REVISE PER REVISIONS-0003 AND NEW OVERHEAD	AD
1	3/10/12	REVISE ENTRANCE AND SITE FENCE DUE TO HOOT'S COMPUTER LOT AND CUSHING ROAD PLAN	AD



LANDSCAPE PLAN

ASHLEY BUSINESS PARK
Gainesville Magisterial District
Prince William County, Virginia

Plan Number: 06-00490R01
Drawn By: SB
Designed By: SB
Checked By:
Date: 3/9/12
Sheet: 20 of 24
MAN SP-499

PRINCE WILLIAM COUNTY
DEPARTMENT OF DEVELOPMENT SERVICES - LAND DEVELOPMENT DIVISION
UNIT PRICE LIST

PERFORMANCE BONDS, LANDSCAPING ESCROWS, SILTATION & EROSION CONTROL, ESCROWS, AND FLOODPLAIN ITEM ESCROWS

DATE: 03/17/2020
BY: J. J. ...

NOTES: THIS UNIT PRICE LIST IS TO BE USED IN ESTIMATING THE COST OF CONSTRUCTION OF THE PROJECTS LISTED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES.

1. MISCELLANEOUS STORMWATER MANAGEMENT

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

2. STORM DRAINAGE

QUANTITY	DESCRIPTION	UNIT	PRICE
30	12" DIA. 10' LONG	LF	\$100.00
30	12" DIA. 10' LONG	LF	\$100.00
30	12" DIA. 10' LONG	LF	\$100.00

3. CONCRETE PIPE

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

4. END WALLS

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

5. END STRUCTURES (10'-1)

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

6. CORRUGATED METAL PIPES

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

7. END STRUCTURES (10'-1)

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

8. AD N - 12 (RDPS)

QUANTITY	DESCRIPTION	UNIT	PRICE
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00
15	12" DIA. 10' LONG	LF	\$100.00

9. STORMWATER MANAGEMENT/TEMP FACILITIES COST ESTIMATES PER IMPROVEMENTS

ACREAGE	DESCRIPTION	UNIT	PRICE
1	WETLANDS	AC	\$150,000.00
1	WETLANDS	AC	\$150,000.00
1	WETLANDS	AC	\$150,000.00

1. MISCELLANEOUS DRAINAGE ITEMS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

2. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

3. SANITARY SEWER & WATER LINE CONSTRUCTION

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

4. CONSTRUCTION WITHIN THE RIGHT-OF-WAY AND/OR PRIVATE

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

5. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

6. ENTRANCES AND PIPESTERS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

7. MISCELLANEOUS CONSTRUCTION ITEMS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

1. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

2. SANITARY SEWER & WATER LINE CONSTRUCTION

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

3. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

4. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

5. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

6. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

7. MISCELLANEOUS COSTS

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

1. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

2. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

3. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

4. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

5. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

6. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

7. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

8. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

1. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

2. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

3. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

4. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

5. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

6. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

7. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00

8. MISCELLANEOUS CONSTRUCTION ITEMS CONTINUED

QUANTITY	DESCRIPTION	UNIT	PRICE
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00
1	WETLANDS	CY	\$150.00



PERFORMANCE BOND
ESTIMATE & ESCROWS (REV #2)

ASHLEY BUSINESS PARK
Gainesville Manassas District
Prince William County, Virginia

Plan Number	08-004901
Drawn by	AD
Designed by	AD
Checked by	AD
Date	4/2/2020
Sheet	NA
22A of 24	
MAN SP-499	



NOTE: THE PERFORMANCE BOND AND ESCROW AMOUNTS HAVE BEEN RECALCULATED WITH THIS REVISION (SPR200-00040) DUE TO COMPLETED WORK PERFORMED WITH THE CUSHING ROAD IMPROVEMENTS. THE NEW TOTAL AMOUNTS ARE SHOWN ON SHEET.

NO.	DATE	DESCRIPTION	BY
1	4/2/20	REVISE FOR R22018-00030 AND NEW OVERHEAD	AD

NO.	DATE	DESCRIPTION	BY
1	4/2/20	REVISE FOR R22018-00030 AND NEW OVERHEAD	AD

ASHLEY BUSINESS PARK, 23A, SHEET 23A OF 24, DATE 7/23/06, PROJECT NO. 2004-2302

Ashley Business Park
O&T Project No. 2004-2302
Page 9

Based on the above specified material allowable bearing capacities and soil differential settlements are anticipated to be on the order of 1 inch and 1/4 inch, respectively.

If the vertical imposition of the subgrade material under load under recovery material prevents the imposition of soil fill, expansive clay, silty clay or silt (CH&G) type soils, or if near footing subgrade during construction, the material shall be removed and replaced with properly compacted structural fill. As an alternative method, the foundation subgrade shall be extended to a depth of at least 4 feet below finished exterior grade, or through the CH&G materials if less than 4 feet below finished exterior grade. The deeper embedment depth will extend the footings below the typical depth of seasonal maximum fluctuations in the high plasticity clay or silt soils. At the 4-foot minimum embedment depth, the footing may bear on high plasticity clays (CH&G) type soils or on non-expansive soils. Also, if footings placed at a normal embedment depth of 2.5 feet extend below the thickness of the high plasticity/clay soils, then the footings can be stressed at normal depth.

Dynamic cone penetration tests shall also be performed to verify the available soil bearing capacity. Low bearing soils, if encountered near proposed footing grade, shall be extended to the depth of a firm subgrade as approved by the Geotechnical Engineer and replaced with properly-compact structural fill as detailed in Section 3.4, "Fill Placement and Testing".

Proper construction procedures shall be followed to maintain the quality of the footing construction. Footing subgrade shall be protected from precipitation, seepage, surface run-off and frost. We recommend that footings be cast the same day of construction. If time was not possible, then the footing subgrade shall be protected by paving a 3 inch sand and joint of lean concrete in the footing trenches. The thickness of the sand and joint may not exceed 2 inches of the footing thickness.

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O&T Project No. 2004-2302
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6.6 Ground-supported slab

We anticipate that floor slabs are to be constructed in ground-supported slab bearing on approved natural soil or properly compacted structural fill with a modulus of subgrade reaction of 125 pci. If vertical imposition of the subgrade material under load under recovery prevents the imposition of soil (CH) and silt soils (MH), we recommend that the subgrade be extended to a minimum of two (2) feet and replaced with properly compacted structural fill.

We recommend that all on grade slabs be designed to be discontinuous at walls and pier footings. The slab shall rest upon a minimum of 4 inches of lean casting concrete base. In areas of the floor slab where loads are in excess of 300 psf, we recommend the granular material beneath the floor be increased to a minimum thickness of 4 inches, and additional reinforcing steel be placed in the floor slab. At a minimum, we recommend that wire mesh or fiber mesh reinforcement be included in the slab design. This reinforcement will maintain the crack width of any shrinkage cracks that may develop over the surface of the floor slab. A 6-mil polyethylene liner or similar vapor barrier shall be provided between the underside of the slab and the granular base in finish exterior applications.

7.0 Footing Subgrade Preparation

Footings at the site shall be supported on low plasticity silt soils or approved compacted structural fill. Subgrade will consist of fine-grained silt and clay type soils shall be tested to assure that the materials have a liquid limit and plasticity index value less than or equal to 45 and 15, respectively. If high plasticity silts or clays are encountered, the material shall be extended a minimum of two (2) feet below the proposed subgrade and replaced with properly compacted structural fill.

CH&G fill material, if encountered, shall be extended to the depth of three feet to ensure a ledge layer of suitable support for the permanent structure as approved by the

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Geotechnical Engineer. The embedment depth shall be replaced with properly-compact structural fill as detailed in Section 3.4, "Fill Placement and Testing".

Based on our experience with similar type soils, we estimate the actual subgrade may provide a preliminary CBR value ranging between 4 and 5. CBR testing shall be performed prior to final pavement design.

8.0 SWINGRAMP System Design

According to the general development plan prepared by Dewberry Inc., the proposed interconnector management (PDM) structure and Base Management Function (BMF) shall consist of the design and construction of an underground StormTech Chamber system in the parking lot and driveway in front of proposed attached building. According to the information provided to us by the civil engineer, the proposed finished grade of storm chamber system will be located at approximately EL. 265.0 and the bottom base of the storm chamber system is planned at elevation EL. 222.45 feet. During 2-3 performed 2004 was performed in the vicinity of the proposed storm chamber.

The underground StormTech Chamber system (chambers) will be constructed by an outlet structure, which is located a minimum and is connected to the proposed outlet storm pipe system. The outlet structure will have a 2-year control volume, a 10-year control weir and an overflow well located within a 75-inch concrete structure. The outlet structure is designed to reduce the 2-year and 10-year peak discharges to pre-development conditions.

All design specifications for the StormTech Chambers shall be in accordance with the StormTech Design Manual. The installation of the StormTech Chambers shall be in accordance with the latest StormTech Installation Instructions. The contractor is advised to review and understand the installation instructions prior to

Ashley Business Park
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beginning system installation. Chambers shall meet the design requirements and safety factors specified in Section 2.2.2 of the latest edition of the ASSESSO LEPTO Bridge Design Specifications. Please see StormTech Chambers Specifications for details on Item Sheet 17 & 18 of CD.

The backfill of the storm chamber shall be performed in accordance with manufacturer's requirements, as well as specified under Underground Box Culverts and Fill Placement and Testing in the Report. Fill material placed in the paved areas including the parking lot and driveway areas where the storm chambers are located shall be compacted to at least 95% of the maximum dry density. However, the test one that of fill shall be compacted to 100% of the maximum dry density.

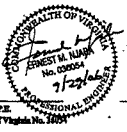
CONSTRUCTION CERTIFICATION REQUIREMENTS

- After the construction is complete, the Geotechnical Engineer of Record shall provide a written certification that the design has been constructed (including but not limited to the type of material, degree of compaction, depth and spacing of reinforcement, location, length, spacing, strength and type of grout, and ground cover to protect the slope) as specified.
- After the construction is complete, the project Civil Engineer shall provide a written certification that the design has been constructed to the design gradients as shown on the approved plans.

GEO TECHNICAL CONSULTING & TESTING, INC.
(703) 798-4100

Geotechnical Consulting & Testing, Inc., (GOCI) has reviewed the submittal plan entitled "Ashley Business Park", and find that the plan has been prepared in general accordance with the recommendations provided in GOCI's Geotechnical Report (Project No. 2004-2302) dated March 17, 2006 and Response to Owner's Comments Report dated July 24, 2006.

Ashley Business Park
O&T Project No. 2004-2302
Page 11



Robert M. Hubbs, P.E.
Commission No. 038254

Date _____

GEO TECHNICAL RECOMMENDATIONS & DETAILS

ASHLEY BUSINESS PARK
Gainesville, Magisterial District
Prince William County, Virginia

FOR INFORMATION
PURPOSES ONLY

NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

GEO TECHNICAL CONSULTING & TESTING, INC.
Professional Engineer Seal for Robert M. Hubbs, P.E., No. 038254, dated 7/23/06.

Plan Number: 20-03040
 Drawn By: MD
 Designed By:
 Checked By:
 Date: 7/23/06
 Scale:
 Sheet: 23A of 24
 File Number: MAN SP-499