CONSTRUCTION PLAN AGREEMENT

THE UNDERSIGNED CONSULTING FIRM AGREES THAT JAMES CITY COUNTY AND ITS REPRESENTATIVES SHALL HAVE THE RIGHT TO USE THESE PLANS TO COMPLETE ANY PHYSICAL IMPROVEMENTS THE CITY DEEMS NECESSARY IN THE EVENT THE DEVELOPER DEFAULTS IN HIS/HER OBLIGATIONS TO COMPLETE THESE FACILITIES AS REQUIRED BY CITY CODE. THE UNDERSIGNED DESIGN PROFESSIONAL ALSO AGREES THAT THE CITY MAY USE THESE PLANS FOR ANY PURPOSE THE CITY FEELS NECESSARY IN ORDER TO COMPLETE THE PROJECT. THE DESIGN PROFESSIONAL CONSULTING FIRM FURTHER AGREES THAT THE RIGHTS TO USE THESE PLANS SHALL BE PROVIDED WITHOUT COST TO THE CITY.

NAME OF ENTITY (CONSULTING FIRM): BLAKEWAY CORPORATION

BY: [illegible] DATE: 06/26/18
(AUTHORIZED SIGNATURE)

TITLE: STEPHEN M. BLEVINS, PE

SIGNATURE OF DESIGN PROFESSIONAL: [illegible] DATE: 06/26/18

JAMES CITY COUNTY GENERAL NOTES:

1. ALL NEW UTILITIES SHALL BE PLACED UNDERGROUND.
2. ALL NEW SIGNS SHALL BE IN ACCORDANCE WITH ARTICLE II, DIVISION 3 OF THE JAMES CITY COUNTY ZONING ORDINANCE.
3. ALL ROADS SHALL BE PRIVATE RIGHT-OF-WAYS AND SHALL NOT BE MAINTAINED BY JAMES CITY COUNTY OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).

SITE DEVELOPMENT PLANS
for
POCAHONTAS TRAIL 7-ELEVEN
7337 Pocahontas Trail
James City County, VA

ADEQUATE PUBLIC FACILITIES

STORM WATER MANAGEMENT AND WATER QUALITY IMPACTS:

THE PROPOSED DEVELOPMENT IS SUBJECT TO THE DEQ PART IIB TECHNICAL CRITERIA FOR STORMWATER MANAGEMENT. THE MAJORITY OF THE STORMWATER RUNOFF WILL BE COLLECTED ON-SITE. STORMWATER THAT SHEET FLOWS INTO THE PROPOSED GUTTER PAN WILL BE COLLECTED BY ON-SITE STORM STURCURES WHICH WILL IN TURN CONNECT TO EXISTING INFRASTRUCTURE WITHIN THE RIGHT OF WAY. THE PROPOSED CONDITIONS WILL INCREASE THE TOTAL ABOUT OF IMPERVIOUS COVER BY APPROXIMATELY 24%. THE INCREASE IN IMPERVIOUS AREA WILL REQUIRE ON-SITE STORMWATER QUALITY AND QUANTITY MITIGATION. ADDITIONAL STORMWATER RUN-OFF VOLUME STORAGE WILL BE PROVIDED THROUGH THE USE OF ON-SITE UNDERGROUND STORAGE. THE POLLUTANT REMOVAL REQUIREMENT WILL BE PROVIDED THROUGH THE PURCHASE OF NUTRIENT CREDITS.

DFU AND AWWA FIXTURE COUNTS:

PROPOSED TOTAL WATER RESOURCE RECOVERY FEE DRAINAGE FIXTURE UNITS ARE 21. PROPOSED TOTAL AWWA TOTAL FIXTURE DEMAND TOTAL IS 35.2 WHICH EQUATES TO 42 GPM.

ISO FIRE FLOW CALCULATIONS:

FIRE FLOW REQUIREMENT = 1250 GPM

PROPOSED SEWER DEMAND:

THE PROPOSED SANITARY SEWER DEMAND IS 0.55 G.P.M. BASED ON AVERAGE USE COMPUTATIONS. THE PEAK FLOW DEMANDS ARE 1.65 G.P.M. BASED ON 3.0 TIMES THE AVERAGE. THESE CALCULATIONS ARE AS FOLLOWS:

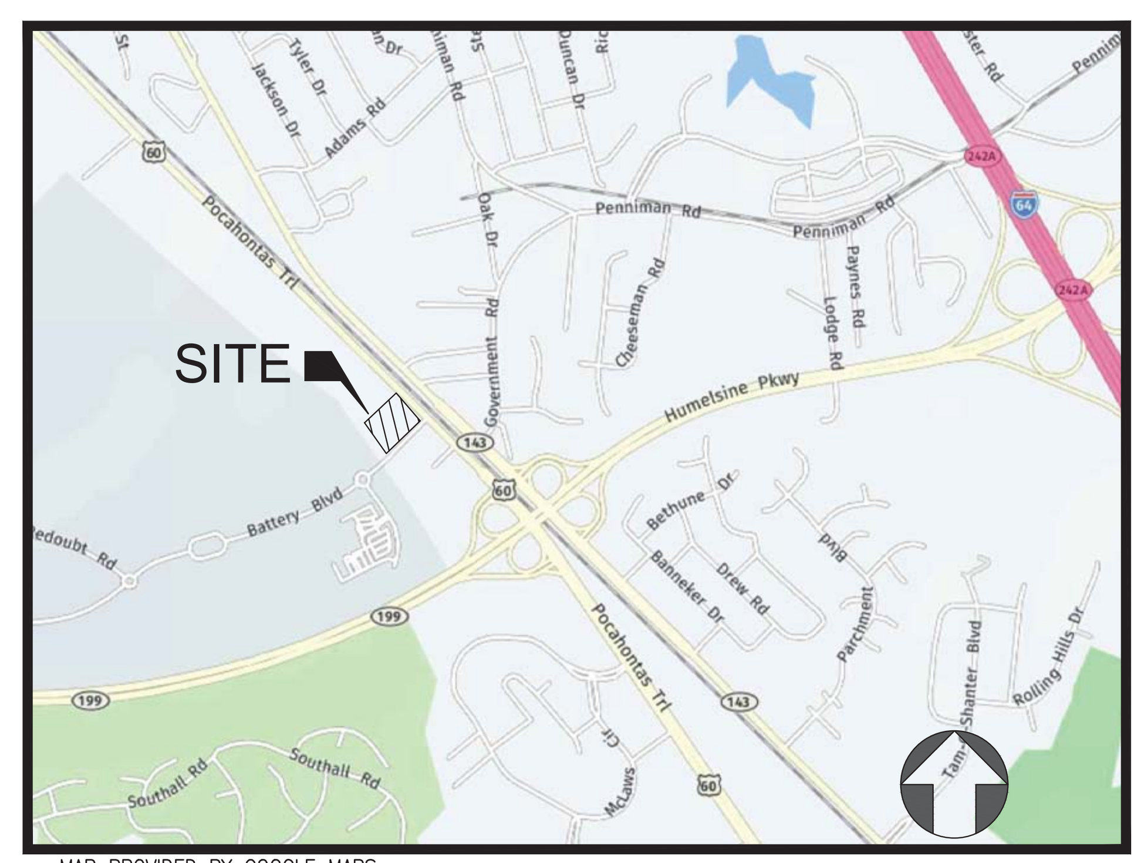
2,940 SQ. FT. x 0.3 GPD/SQ. FT. = 882 G.P.D.

882 G.P.D. / 1,440 MIN./DAY = 0.61 G.P.M. AVERAGE

0.61 G.P.M. AVERAGE X 3.0 = 1.84 G.P.M. PEAK

PUBLIC WATER AUTHORITY: NEWPORT NEWS WATERWORKS

PUBLIC SANITARY SEWER AUTHORITY: JAMES CITY SERVICE AUTHORITY



MAP PROVIDED BY GOOGLE MAPS

VICINITY MAP

SCALE: 1" =2,000'

THIS PLAN IS DESIGNED TO THE HRPDC REGIONAL CONSTRUCTION STANDARDS 6TH EDITION AND THE JCSA DESIGN AND ACCEPTANCE CRITERIA DATED APRIL 2017.

A RIGHT-OF-WAY PERMIT APPLICATION AND SURETY MUST BE SUBMITTED TO THE CITY OF WILLIAMSBURG DEPARTMENT OF PUBLIC WORKS PRIOR TO PERFORMING WORK WITHIN THE RIGHT-OF-WAY OF BATTERY BLVD. SURETY WILL BE RELEASED AT THE END OF A 1-YEAR (AFTER ACCEPTANCE) WARRANTY PERIOD OR AFTER 5-YEARS FOR TRENCHES.

A SPECIAL USE PERMIT (SUP-0016-2016) FOR THIS SITE WAS ADOPTED BY JAMES CITY COUNCIL ON OCTOBER 10, 2017.

SITE INFORMATION

OWNER: [redacted]

DEVELOPER: VERTICAL CONSTRUCTION.
1211 SOUTH WHITE CHAPEL BLVD.
SOUTHLAKE, TX 76092
CONTACT: MS. ASHLEY BALLARD
PHONE: 817.912.5872
EMAIL: ABALLARD@VERTICALCM.COM

DESIGNER: BLAKEWAY CORPORATION
630 N. WITCHDUCK RD.
VIRGINIA BEACH, VIRGINIA 23462
CONTACT: MR. GARY FRANKS
PHONE: 757.226.0081
EMAIL: GARY_FRANKS@BLAKEWAYCORP.COM

LOCATION: THE PROPERTY AFFECTED IS LOCATED AT 7337 POCAHONTAS TRAIL, JAMES CITY COUNTY, VA

CURRENT ZONING: B-1 COMMERCIAL

GPIN(S): 5020100075A
5020700004B
5020100030A
5020100030

ADJACENT ZONING:
NORTH B-1 COMMERCIAL
SOUTH RIGHT-OF-WAY (POCAHONTAS TRAIL)
EAST B-1 COMMERCIAL
WEST B-1 COMMERCIAL

EXISTING LAND USE: THE CURRENT USE ON THE PROPERTY IS A CONVENIENCE STORE WITH GAS

PROPOSED LAND USE: THE SITE IS PROPOSED AS A 7-ELEVEN CONVENIENCE STORE WITH GAS

SOIL TYPE: 0-5' SAND FILL (SM, SC) AND CLAY FILL (CL)
5-20' SILTY AND CLAYEY SAND (SM AND SC) AND CLAY (CL)

FLOOD INFORMATION: THE PROPERTY SHOWN APPEARS TO FALL WITHIN FLOOD ZONE(S) "X", ACCORDING TO F.E.M.A.'S FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR JAMES CITY COUNTY, VIRGINIA. MAP NUMBER 51095C0143D, MAP REVISED: DECEMBER 16, 2015.

BUILDING HEIGHT: 20'-4" FEET (1 STORY BUILDING)

CONSTRUCTION TYPE: TYPE IIIA (IBC)

PARCEL AREA: 81,734 SQ. FT. OR 1.88 ACRES ±

DISTURBED AREA (ON-SITE): 70,478 SQ. FT. OR 1.62 ACRES ±

DISTURBED AREA (ROW): 13,200 SQ. FT. OR 0.30 ACRES ±

DISTURBED AREA (TOTAL): 83,678 SQ. FT. OR 1.92 ACRES ±

SITE IMPERVIOUS COVERAGE: 36,224 SQ. FT. OR 0.83 ACRES± (44%)

HYDROLOGIC UNIT CODE: 02080206

RECEIVING WATERS: LOWER JAMES RIVER

SITE TABULATIONS

NOTE: ALL QUANTITIES BASED ON TOTAL DISTURBED AREA

EXISTING CONDITIONS:

ITEM:	AREA (SQ. FT.)	% USE
IMPERVIOUS		
BUILDING	2,572	3.1%
PAVEMENT	5,642	6.7%
CONCRETE	21,070	25.2%
SUB-TOTAL	28,284	35.0%
PERVIOUS		
OPEN SPACE	54,394	65.0%
TOTAL	83,678 SQ.FT.	100.0%

PROPOSED CONDITIONS (TOTAL):

ITEM:	AREA (SQ. FT.)	% USE
IMPERVIOUS		
BUILDING	2,940	3.5%
PAVEMENT	29,703	35.5%
CONCRETE	16,753	22.0%
SUB-TOTAL	49,396 SQ.FT.	59.0%
PERVIOUS		
OPEN SPACE	34,282	41.0%
TOTAL	83,678 SQ.FT.	100.0%

TOTAL INCREASE IN IMPERVIOUS AREA = 20,112 SF/24%

NOTE: ALL QUANTITIES AREA ON-SITE TOTALS ONLY

PROPOSED CONDITIONS (ON-SITE):

ITEM:	AREA (SQ. FT.)	% USE
IMPERVIOUS		
BUILDING	2,940	3.6%
PAVEMENT	20,402	25.0%
CONCRETE	12,882	15.8%
SUB-TOTAL	36,224 SQ.FT.	44.4%
PERVIOUS		
OPEN SPACE	34,282	55.6%
TOTAL	47,452 SQ.FT.	100.0%

BUILDING SETBACKS:

FRONT	30'	SIDE (R/W)	30'
REAR	20'	SIDE (B-1)	0'

PARKING REQUIREMENTS:

LOADING SPACES	1/1	REQ./PRO.	PARKING SPACES	15	REQUIRED MIN (1 PER 200 SF)
HANDICAP SPACES	1/1	REQ./PRO.	PARKING SPACES	17	PROVIDED

RESPONSIBLE LAND DISTURBER

THE FOLLOWING PERSON STEVE BLEVINS, PE (PRINT),

[illegible] (SIGN), IS IDENTIFIED AS THE RESPONSIBLE LAND DISTURBER WHO WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. THIS PERSON MEETS THE APPLICABLE REQUIREMENTS OF VIRGINIA CODE SECTION 10.1-563 AND 10.1-566 BY VIRTUE OF THE FOLLOWING (CHECK THE CATEGORY THAT APPLIES):

______ RESPONSIBLE LAND DISTURBER CERTIFICATE

______ DCR CERTIFICATION FOR COMBINED ADMINISTRATOR, ADMINISTRATOR, PLAN REVIEWER, INSPECTOR, OR CONTRACTOR

__X__ VA PROFESSIONAL ENGINEER, LAND SURVEYOR, LANDSCAPE ARCHITECT, OR ARCHITECT.

UPON AWARD OF THE CONTRACT AND BEFORE ANY LAND DISTURBING ACTIVITY CAN BEGIN, THE CONTRACTOR SHALL EXECUTE AND SUBMIT A RESPONSIBLE LAND DISTURBER NOTIFICATION FORM TO THE DEPARTMENT OF PLANNING, DEVELOPMENT SERVICES CENTER, 2405 COURTHOUSE DRIVE, BUILDING 2, VIRGINIA BEACH, VA 23456 TEL: (757) 385-8277. AWARD OF THE CONTRACT WILL RELIEVE THE ABOVE SIGNER OF ALL RESPONSIBILITY.

SHEET INDEX

COMMONWEALTH OF VIRGINIA
STEPHEN M. BLEVINS
Lic. No. 32265
06-28-18
PROFESSIONAL ENGINEER

BLAKEWAY
surveying + engineering + environmental
630 N. WITCHDUCK ROAD - VA BEACH, VIRGINIA 23462
P757.226.0081 - F757.226.8765
www.blakewaycorp.com

REV	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: COVER SHEET AND INDEX
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

SHEET NO. CV-1.0
COVER

QUARTERPATH
QUARTERPATH
QUARTERPATH

FILE NAME: P:\6160-Verdad\6160.54-Quaterpath\Cad\1-CV-1.0 Cover.dwg LAYOUT NAME: COVER SHEET PLOTTED: Thursday, June 28, 2018 - 8:23am

RESOLUTION

CASE NO. SUP-0016-2016. 7-ELEVEN CONVENIENCE STORE WITH GAS PUMPS

AND DRIVE-THROUGH RESTAURANT AT QUARTERPATH

WHEREAS, the Board of Supervisors of James City County, Virginia (the "Board") has adopted by Ordinance specific land uses that shall be subjected to a Special Use Permit (SUP) process; and

WHEREAS, Southland Corporation and Quarterpath Williamsburg, LLC (the "Owners") own property located at 7327, 7337, 7341 Pocahontas Trail and 3000 Battery Boulevard, further identified as James City County Real Estate Tax Map Parcel Nos. 5020100030, 5020100030A, 5020700004B and 5020100075A, respectively (together, the "Property"); and

WHEREAS, on behalf of the Owners, Mr. Mark Richardson of Timmons Group (the "Applicant") has applied for an SUP to allow a convenience store with gas pumps and a drive-through restaurant, as shown on the exhibit titled "7-11 Convenience Store with Gas and Drive-Thru Restaurant Conceptual Master Plan" prepared by Timmons Group, dated August 25, 2017; and

WHEREAS, a public hearing was advertised, adjoining property owners notified and a hearing conducted on Case No. SUP-0016-2016; and

WHEREAS, the Planning Commission, following its public hearing on September 6, 2017, recommended approval of the application by a vote of 7-0.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, after consideration of the factors in Section 24-9 of the James City County Code, does hereby approve the issuance of Case No. SUP-0016-2016 as described herein with the following conditions:

1. *Master Plan:* This Special Use Permit ("SUP") shall apply to that certain properties located at 3000 Battery Boulevard and 7327, 7337 and 7341 Pocahontas Trail, which are further identified as James City County Real Estate Tax Map Parcel Nos. 5020100075A, 5020100030, 5020100030A, and 5020700004B, respectively (the "Property"). The SUP shall be valid for a convenience store of up to 2,940 square feet that sells and dispenses fuel (the "Convenience Store"), and a drive-through fast food restaurant of up to 4,000 square feet (the "Restaurant"). All final development plans shall be consistent with the Master Plan entitled, "7-11 Convenience Store with Gas and Drive-Thru Restaurant Conceptual Master Plan" prepared by Timmons Group, dated August 25, 2017 (the "Master Plan") as determined by the Director of Planning with any deviations considered per Section 24-23(a)(2) of the Zoning Ordinance, as amended.

2. *Gas Pumps:* There shall be no more than six fueling islands on the Property as shown on the Master Plan.

3. *Archaeological Study:* A Phase I historic and archaeological study for the Property shall be submitted to the Director of Planning, or his designee, for review and approval prior to land disturbance. A treatment plan shall be submitted and approved by the Director of Planning for all sites in the Phase I study that are recommended for a Phase II evaluation and/or identified as eligible for inclusion on the National Register of Historic Places. If a Phase II study is undertaken, such a study shall be approved by the Director of Planning and a treatment plan for said sites shall be submitted to, and approved by, the Director of Planning for sites that are determined to be eligible for inclusion on the National Register of Historic Places and/or those sites that require a Phase III study. If in the Phase III study, a site is determined eligible for nomination to the National Register of Historic Places and said site is to be preserved in place, the treatment plan shall include nomination of the site to the National Register of Historic Places. If a Phase III study is undertaken for said sites, such studies shall be approved by the Director of Planning prior to land disturbance within the study areas. All Phase I, II and III studies shall meet the Virginia Department of Historic Resources' *Guidelines for Preparing Archaeological Resource Management Reports* and the Secretary of the Interior's *Standards and Guidelines for Archaeological Documentation*, as applicable, and shall be conducted under the supervision of a qualified archaeologist who meets the qualifications set forth in the Secretary of the Interior's *Professional Qualification Standards.* All approved treatment plans shall be incorporated into the plan of development for the Property and the clearing, grading or construction activities thereon.

4. *Phasing of Improvements Between the Different Principal Uses:* Prior to the issuance of any site plan approvals for the Restaurant, all shared improvements (including but not limited to all entrance improvements to/from Pocahontas Trail and Battery Boulevard, shared parking, shared stormwater management features and internal circulation improvements) shall be constructed and completed. Should development of the Restaurant precede development of the Convenience Store, the Director of Planning may approve an alternative phasing plan to ensure compliance and consistency with the Master Plan.

5. *Phasing of the Convenience Store and Gas Pumps:* Redevelopment of the gas pump canopy (the "Canopy") and gas pumps in a manner consistent with the Master Plan and these conditions shall occur prior to the issuance of any Certificate of Occupancy for the Convenience Store. The intent of this condition is to ensure that the existing gas pumps and existing canopy are not left in their existing location and condition.

6. *Existing Fueling Islands:* Prior to the issuance of a Certificate of Occupancy for the Convenience Store, all unused gasoline and diesel pumps, canopies and underground fuel tanks shall be removed from the Property.

7. *Spill Prevention, Control and Countermeasures (SPCC) Plan:* Prior to the issuance of a Land Disturbing Permit, an SPCC Plan shall be reviewed and approved by the Director of Stormwater and Resource Protection.

8. *Stormwater Management:* Unless otherwise approved by the Director of Stormwater and Resource Protection, development of the Property shall comply with the City of Williamsburg-approved *Stormwater Management Master Plan* (revised January 28, 2013) and *Best Management Practices Land Bay Design Guidelines* (January 7, 2013) reports for Quarterpath at Williamsburg.

9. *Internal Pedestrian Accommodations:* The owner of each property shall provide internal pedestrian connections to include, but not limited to, wherever sidewalk enters the parking area or crosses any entrance to the Property or drive-through lane and shall provide safe connections from the existing Williamsburg Area Transit Authority (WATA) bus stop. The connections shall be clearly delineated by use of a different color of pavement, brick pavers or some other method determined to be acceptable by the Director of Planning.

10. *Pedestrian and Bicycle Accommodations:* In accordance with the Regional Bikeway Map, a bike lane shall be provided along the Property's Pocahontas Trail frontage. In accordance with the adopted Pedestrian Accommodations Master Plan, a sidewalk shall be provided along the Property's Pocahontas Trail frontage. In lieu of a sidewalk, the Owners shall have the option of installing a multi-use trail to be consistent with other multi-use trails that may be a part of the larger Quarterpath at Williamsburg master plan; however, should the Owners elect to install a multi-use trail, a bike lane must still be provided. Pedestrian and bike accommodations shall be installed or bonded prior to the issuance of a Certificate of Occupancy for any building on the Property.

11. *Traffic Improvements:* Until a traffic signal is operational at the intersection of Pocahontas Trail and Battery Boulevard (the "Intersection"), access to the Property shall be limited to one ingress/egress entrance on Pocahontas Trail and one ingress/egress entrance on Battery Boulevard, as more specifically shown on the Master Plan. "Operational" is defined as electrified and controlling the movement of traffic at the Intersection. At such time that a traffic signal at the Intersection is operational, a second egress-only exit may be constructed on Pocahontas Trail, as more specifically shown on the Master Plan. Prior to the first Certificate of Occupancy for the Property, a raised landscape median on Pocahontas Trail across the Pocahontas Trail frontage of the Property as shown on the Master Plan shall be constructed or guaranteed by the owners of the Property in a manner acceptable to the County Attorney. The design of the raised landscape median shall be shown on the initial site plan. If the traffic light is not warranted within ten years from approval of this SUP, the raised landscape median referenced above shall not be required.

12. *Architectural Review:* Prior to issuance of a Building Permit for each structure shown on the Master Plan (specifically including the Canopy), the Director of Planning, or his designee, shall review and approve the final building elevations and architectural design for such structure. Exterior building materials and colors for all structures shall be generally consistent with the drawing entitled "Riverside Doctors' Hospital Williamsburg Exterior Mock-up 03-09-2012" as contained within the Community Impact Statement. Determination of substantial architectural consistency shall be determined by the Director of Planning or his designee. In the event the Director of Planning disapproves the architectural elevations, the applicant may appeal the decision to the Development Review Committee which shall forward a recommendation to the Planning Commission. Samples of such building materials and colors shall be approved by the Director of Planning prior to final site plan approval.

13. *Architectural Review – Gas Pump Canopy:* The architecture of the Canopy, including any columns, shall match the design and exterior building materials of the Convenience Store. The Canopy shall have a maximum height of 15 feet measured from the finished grade to the underside of the Canopy. No more than two signs shall be allowed on the Canopy. The Canopy shall not include gas pricing signs.

14. *Screening of Site Features:* All dumpsters and ground-mounted HVAC and mechanical units shall be screened by an enclosure composed of masonry, closed cell PVC, prefinished metal or cementitious panels in detail and colors to blend with adjacent building materials. Where present, such features shall be shown on the site plan for the adjacent building and shall be reviewed and approved by the Director of Planning for consistency with this condition.

15. *Outside Display, Sale or Storage:* Unless otherwise stated in this condition, no outside display, sale or storage of merchandise shall be permitted at the Property. As used for this condition, the term "merchandise" shall include but not be limited to ice, soda, candy and/or snack machines. For the Convenience Store, only one outside vending machine and one outside ice chest shall be permitted and, if used, shall be situated against the exterior wall that faces the Restaurant and both shall be screened with building materials similar in type and color with the site architecture to minimize visual impacts from adjacent road rights-of-way. Final screening design shall be approved by the Director of Planning.

16. *Intercom and Speaker Noise:* All intercom and other speaker systems on the Property shall operate in such a manner that they shall not be audible from adjacent properties.

17. *Lighting:* There shall be no light trespass, defined as light intensity measured at 0.1 foot candle or higher extending beyond the boundaries of the Property or into the public right-of-way unless lighting the pedestrian accommodations. All lights, including any lighting on the Canopy, shall have recessed fixtures with no bulb, lens or globe extending below the casing or the Canopy ceiling. Light poles in the parking lot shall not exceed 20 feet in height. The lighting for the Property, to include the Canopy lighting, shall be reviewed and approved by the Director of Planning prior to final site plan approval.

18. *WATA Facilities:* Any change or relocation of existing WATA facilities shall be subject to approval by the Director of Planning prior to final site plan approval.

19. *Signage:* All building face signage shall be externally illuminated or use back-lit or channeled lettered lighting as defined in Section 24-67 of the Zoning Ordinance. For any back-lit or channeled lettered signs the sign shall meet the criteria listed in Section 24-72 of the Zoning Ordinance, or successor section. In addition to any building face signage as permitted by the Zoning Ordinance, the Convenience Store and the Restaurant may each have one exterior freestanding sign. Freestanding signs shall be externally illuminated monument style signs not to exceed 8 feet in height and the base of the signs shall be brick or shall use materials similar in type and color with the site architecture.

20. *Sustainable Design Initiatives:*

a. Sustainable design initiatives shall be implemented during development of the Property as shown on the Master Plan to achieve the equivalent of 36 points from the Leadership in Energy and Environmental Design (LEED) for New Construction and Major Renovations (based on 2017 guidelines) (the "Credits"). Prerequisite items in the LEED 2017 guidelines shall not be required to be completed in addition to the Credits. In addition, documentation of the building energy performance shall be provided by a mechanical engineer to the Director of Planning before the Certificate of Occupancy for the initial building to demonstrate an improvement in efficiency of the building's thermal envelope, mechanical systems and electrical systems over code-required baseline performance.

b. The strategies to achieve the Credits will be incorporated into the construction documents either as part of the design or as requirements for the contractor to substantiate during the course of construction. Compliance with the Credit requirements will be validated in a straightforward way through things like, but not limited to, review of contractor submittals, submission of design calculations and letters certifying that requirements have been met. This validation will be overseen by a LEED-accredited professional and approved by the Director of Planning or his designee with Credits related to the design of the project approved prior to issuance of the final site plan approval, and Credits related to the construction of the project approved prior to issuance any Certificate of Occupancy.

21. *Commencement for Convenience Store and Gas Pumps*: Construction on the Convenience Store and the Canopy shall commence within 36 months from the date of approval of this SUP or this permit shall be void. Construction shall be defined as obtaining building permits and an approved footing inspection and/or foundation inspection.

22. *Commencement for Drive-Through Restaurant:* Construction on the Restaurant shall commence within 36 months from the date of approval of this SUP. Construction shall be defined as obtaining building permits and an approved footing inspection and/or foundation inspection.

23. *Severance Clause:* This SUP is not severable. Invalidation of any word, phrase, clause, sentence or paragraph shall invalidate the remainder.

BE IT FURTHER RESOLVED that SUP-0016-2016 shall amend, replace and supersede SUP-21-1991, and SUP-21-1991 shall no longer have any force or effect.

Kevin D. Onizuk
Chairman, Board of Supervisors

ATTEST:

Bryan J. Hill
Clerk to the Board

VOTES

	AYE	NAY	ABSTAIN
MCGLENNON	✓		
SADLER	Absent		
HIPPLE	✓		
LARSON	✓		
ONIZUK	✓		

Adopted by the Board of Supervisors of James City County, Virginia, this 10th day of October, 2017.

SUP-16-16PocTr7-11-res

FILE NAME: P:\6160-Verdoh\6160.54-Quarterpath\Cad\2-CV-1.1 CUP Conditions.dwg LAYOUT NAME: COVER SHEET PLOTTED: Thursday, June 28, 2018 - 8:23am

ELEVEN®

COMMONWEALTH OF VIRGINIA
06-28-18
STEPHEN M. BLEVINS
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REV	DESCRIPTION	DATE

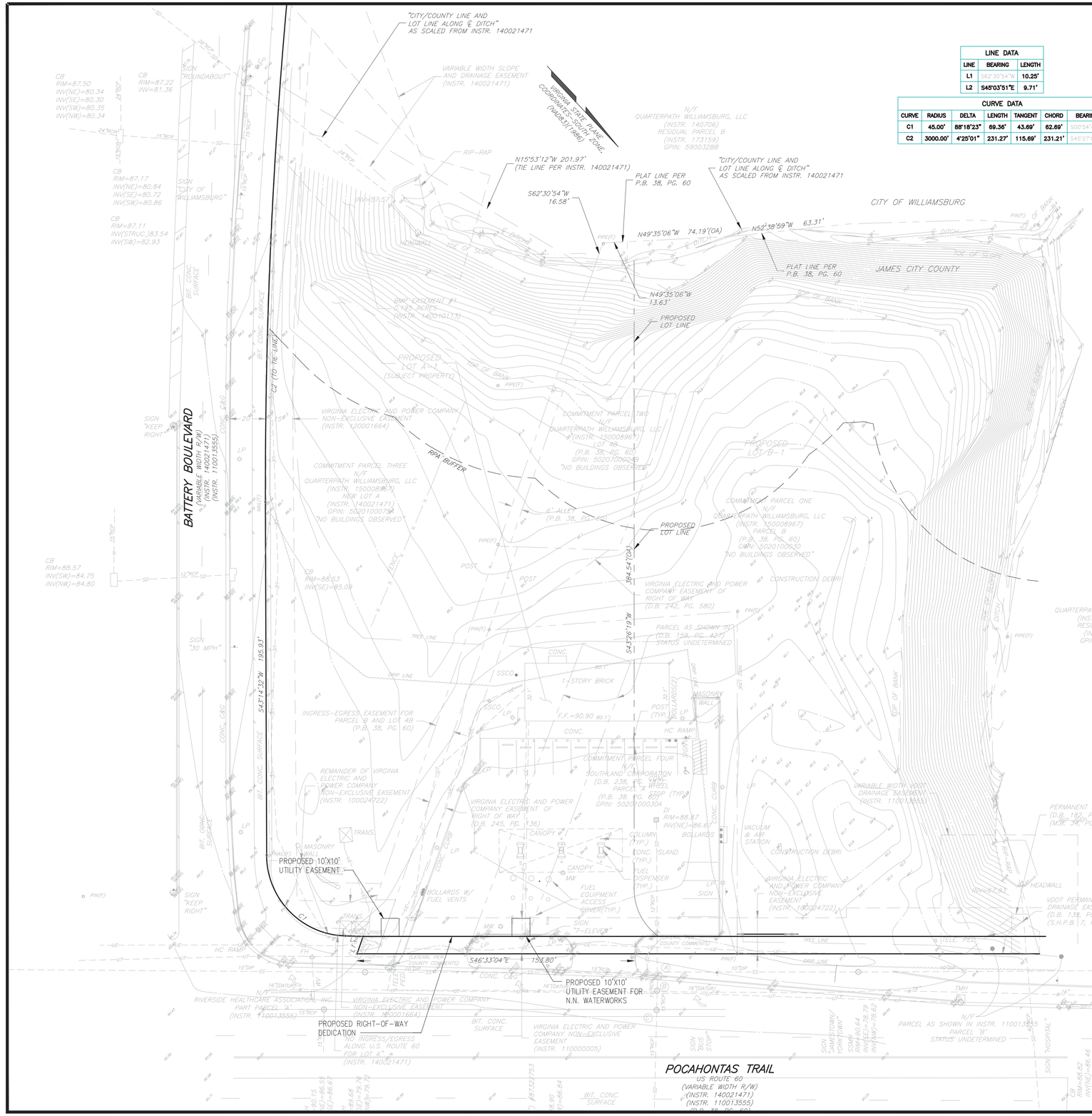
DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: SUP CONDITIONS
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

SHEET NO: CV-1.1
COVER

QUARTERPATH

QUARTERPATH



LINE DATA		
LINE	BEARING	LENGTH
L1	S62°30'54"W	10.25'
L2	S45°03'51"E	9.71'

CURVE DATA						
CURVE	RADIUS	DELTA	LENGTH	TANGENT	CHORD	BEARING
C1	45.00'	88°18'23"	69.36'	43.69'	62.69'	S00°54'40"E
C2	3000.00'	4°25'01"	231.27'	115.69'	231.21'	S45°27'02"W

SURVEY LEGEND

SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	AC.	ACRES		MW	MONITORING WELL
	AATUR	ABANDONED ACCORDING TO UTILITY RECORDS		N/F	NOW OR FORMERLY
	BIT.	BITUMINOUS		(OA)	OVERALL
●		BOLLARD	⊠ ⊗	PED.	PEDESTAL
⧓		BORING	⊏		PLUG/STUB
~~		BRUSH OR DRIPLINE		P.O.B.	POINT OF BEGINNING
— — —	SBL	BUILDING SETBACK LINE		P.C.	POINT OF CURVE
	CATV	CABLE TELEVISION		PVC	POLYVINYL CHLORIDE
	CI	CAST IRON		RR	RAILROAD
	℄	CENTERLINE		RCP	REINFORCED CONCRETE PIPE
— · · —	CLD	CENTERLINE OF DITCH	———	R/W, ROW	RIGHT-OF-WAY
—OHW—	OHW	CENTERLINE OVERHEAD WIRES	⊡	RDCO	ROOF DRAIN CLEANOUT
	C&G	CONCRETE CURB & GUTTER	⊛	SFMV	SANITARY FORCE MAIN VALVE
	CMP	CORRUGATED METAL PIPE	—SFM—		SANITARY FORCEMAIN
	CB	CURB BASIN	—SS—		SANITARY SEWER LINE
	DATUR	DEPICTED ACCORDING TO UTILITY RECORDS	⊡	SSCO	SANITARY SEWER CLEANOUT
	DI	DROP INLET	Ⓢ	SSMH	SANITARY SEWER MANHOLE
— — —		EASEMENT LINE		(S)	SET MONUMENT
	EP	EDGE OF PAVEMENT			SIGN
— · · —	EW	EDGE OF WATER	123.45		SPOT ELEVATION
	ELEC.	ELECTRIC		S.F.	SQUARE FEET
Ⓔ	EMH	ELECTRIC MANHOLE		S.H.P.B.	STATE HIGHWAY PLAT BOOK
	ELEV, EL	ELEVATION	Ⓓ	SDMH	STORM DRAIN MANHOLE
○		EMERGENCY PUMP CONNECTION	—SD—	SD	STORM DRAIN PIPE
⟆	EOI	END OF INFORMATION		STRUC.	STRUCTURE
△1		EXCEPTION ITEM DESIGNATOR	△1		SURVEY CONTROL
—X—		FENCE	○ ⍞	MON.	SURVEY MONUMENT
	FF	FINISHED FLOOR ELEVATION		TELE.	TELEPHONE
	FH	FIRE HYDRANT	Ⓣ	TMH	TELEPHONE MANHOLE
	FP	FLAG POLE		TBM	TEMPORARY BENCHMARK
◁	FES	FLARED END SECTION	— · · —		TOE OF SLOPE/BANK
	FIRM	FLOOD INSURANCE RATE MAP	- - — - -		TOP OF SLOPE/BANK
	FL	FLOW LINE		TC	TOP OF CURB
	(F)	FOUND MONUMENT		RIM	TOP OF STRUCTURE ELEVATION
⊠	GM	GAS METER		TRAF.	TRAFFIC
⋈	GV	GAS VALVE		TSP	TRAFFIC SIGNAL POLE
	GPIN	GEOGRAPHIC PARCEL IDENTIFICATION NUMBER	⊠	TRANS.	TRANSFORMER
—<		GUY WIRE			TREE TRUNK
	HC	HANDICAP	—CATV—	CATV	UNDERGROUND CABLE TELEVISION
	HVAC	HEATING VENTILATION & AIR CONDITIONING	—UE—	UE	UNDERGROUND ELECTRIC
	HDPE	HIGH DENSITY POLYETHYLENE	—G—	G	UNDERGROUND NATURAL GAS
	INSTR.	INSTRUMENT	—UT—	UT	UNDERGROUND TELEPHONE
	INV	INVERT ELEVATION	—UTC—	UTC	UNDERGROUND TRAFFIC CONTROL
⊟	JBOX	JUNCTION BOX	⊄	UP	UTILITY POLE
- - - - - -		LANDSCAPED AREA	⊄ ☼		UTILITY POLE W/LAMP
☼	LP	LIGHT POLE	⋈	WV	WATER VALVE
— — —		LOT LINE	▣		VAULT
⊟	MB	MAIL BOX	—W—	W	WATER LINE
◯	MH	MANHOLE	⊙	WM	WATER METER
⩩		MARSH	⚐	WF	WETLANDS FLAG

SURVEY NOTES:

S-1. THE MERIDIAN SOURCE FOR THIS SURVEY/PLAT IS BASED ON JAMES CITY COUNTY GEODETIC CONTROL NETWORK WHICH REFERS TO VIRGINIA STATE PLANE COORDINATES-SOUTH ZONE (NAD83)(1986).

S-2. THIS SURVEY/PLAT WAS PERFORMED/PREPARED WITH THE BENEFIT OF THE FOLLOWING TITLE REPORT: BRIDGETRUST TITLE GROUP AGENT FOR FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO: 091051292, COMMITMENT DATE: SEPTEMBER 08, 2017, 08:00 AM, ISSUE DATE: SEPTEMBER 15, 2017, 10:51 AM.

S-3. THIS SURVEY/PLAT DOES NOT INTEND TO DEPICT ANY WETLANDS, HAZARDOUS WASTE, AND OTHER ENVIRONMENTAL CONDITIONS UNLESS OTHERWISE NOTED AND/OR SHOWN.

S-4. THE UNDERGROUND UTILITY INFORMATION IS DEPICTED BASED ON A COMBINATION OF EXISTING DESIGNATIONS/MARKINGS BY OTHERS, FIELD LOCATED STRUCTURES, AND PLAN INFORMATION. THEREFORE, THE UTILITY INFORMATION SHOWN MAY NOT ACCURATELY REPRESENT THAT OF WHICH IS ACTUALLY IN PLACE IN THE FIELD. THIS SURVEY/PLAT MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITY INFORMATION SHOWN COMPRISES ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

S-5. THE PROPERTY SHOWN APPEARS TO FALL WITHIN FLOOD ZONE(S) "X", ACCORDING TO F.E.M.A.'S FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR JAMES CITY COUNTY, VIRGINIA. MAP NUMBER 51095C0143D, MAP REVISED: DECEMBER 16, 2015.

S-6. AREA:
COMMITMENT PARCEL ONE: 83,319 S.F. OR 1.913 AC. (PER M.B. 38, PG. 60)
COMMITMENT PARCEL TWO: 5,602 S.F. OR 0.129 AC. (PER M.B. 38, PG. 60)
COMMITMENT PARCEL THREE: 50,268± S.F. OR 1.154± AC. (PER INSTR. 140021471)
COMMITMENT PARCEL FOUR: 31,054 S.F. OR 0.713 AC. (PER M.B. 38, PG. 60)
COMMITMENT PARCELS TOTAL AREA: 170,243± S.F. OR 3.909± AC.
SUBJECT PROPERTY AREA: 81,734± S.F. OR 1.876± AC. (PROPOSED LOT A-1)

S-7. ADDRESS DESIGNATIONS:
COMMITMENT PARCEL ONE: 7327 POCAHONTAS TRAIL
COMMITMENT PARCEL TWO: 7341 POCAHONTAS TRAIL
COMMITMENT PARCEL THREE: 3000 BATTERY BOULEVARD
COMMITMENT PARCEL FOUR: 7337 POCAHONTAS TRAIL

S-8. PARKING SPACES COMMITMENT PARCEL FOUR: REGULAR = 15
PIN(F) HANDICAP = 1
TOTAL = 16
(COUNTS ARE BASED ON EXISTING STRIPING AND DO NOT INTEND TO REPRESENT PARKING SPACES IN CONFORMANCE WITH THE ZONING ORDINANCE).

S-9. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

S-10. THERE WAS EVIDENCE OF BROKEN CONCRETE, ASPHALT, AND TIRES DUMPED ON SITE.

S-11. WETLAND AND RPA BUFFER DESIGNATION WAS COMPLETED BY STANTEC CONSULTING SERVICES INC. ON 02/23/2016

BEFORE YOU DIG, TO MISS UTILITIES CALL 'MISS UTILITY' OF VIRGINIA. TOLL FREE 811

GRAPHIC SCALE
30 15 0 30 60
scale SCALE 1"=30' feet

ELEVEN

COMMONWEALTH OF VIRGINIA
06-28-18
STEPHEN M. BLEVINS
Lic. No. 32265
PROFESSIONAL ENGINEER

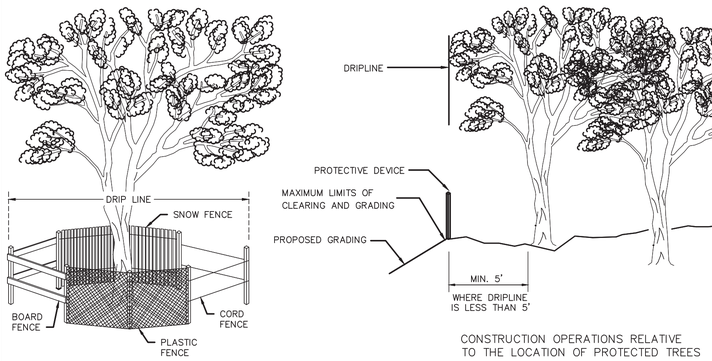
BLAKEWAY
surveying + engineering + environmental
630 N. WITCHDUCK ROAD - VA BEACH, VIRGINIA 23462
P757.226.0081 - F757.226.8765
www.blakewaycorp.com

REV	DATE	DESCRIPTION

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE EXISTING CONDITIONS
STORE NUMBER 38064
SITE ADDRESS 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

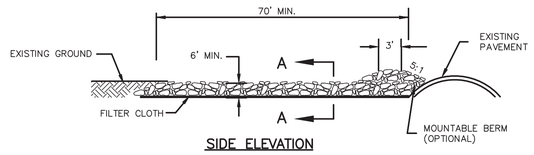
SHEET NO. CX-2.0



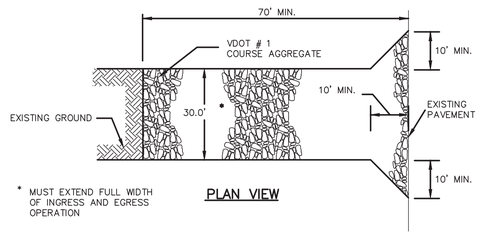
CONSTRUCTION OPERATIONS RELATIVE TO THE LOCATION OF PROTECTED TREES

TREE PROTECTION BARRIER (TP)

NOT TO SCALE

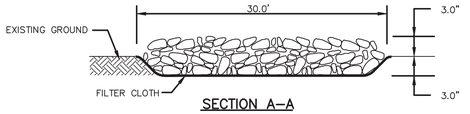


SIDE ELEVATION



* MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION

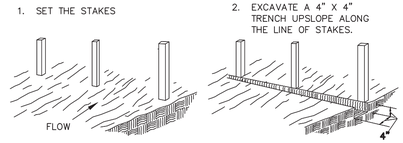
PLAN VIEW

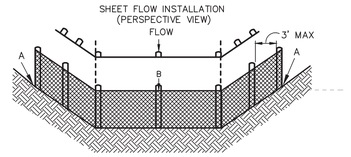


SECTION A–A

STONE CONSTRUCTION ENTRANCE (CE)

NOT TO SCALE





NOTE: ALL SILT FENCE SHALL BE 36" IN HEIGHT, STAKED WITH 2"X2" OAK STAKES 5 FEET IN LENGTH ON 6' CENTERS.

CONSTRUCTION OF A FILTER BARRIER

SILT FENCE DETAIL (SF)

NOT TO SCALE

TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

SEED		
APPLICATION DATES	**SPECIES**	**APPLICATION RATES**
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (WINter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

FERTILIZER & LIME

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.32-E
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA

SEED[1]		
LAND USE	**SPECIES**	**APPLICATION RATES**
Minimum Care Lawn (Commercial or Residential)	Tall Fescue[1] **or** Bermudagrass[1]	175 - 200 lbs. 75 lbs.
High-Maintenance Lawn	Tall Fescue[1] **or** Bermudagrass[1] (seed) **or** Bermudagrass[1] (by other vegetative establishment method, see Std. & Spec. 3.34)	200-250 lbs. 40 lbs. (unhulled) 30 lbs. (hulled)
General Slope (3:1 or less)	Tall Fescue[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2]	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue[1] Bermudagrass[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2] Sericea Lespedeza[3]	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 20 lbs. TOTAL: 150 lbs.

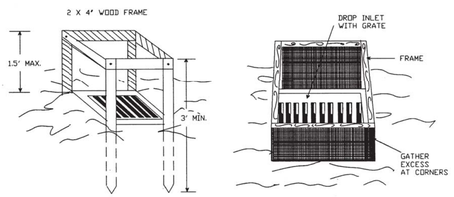
1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turfpublications/publications2.html
2 - Use seasonal nurse crop in accordance with seeding dates as stated below:
February, March - April ..... Annual Rye
May 1st - August ..... Foxtail Millet
September, October - November 15th ..... Annual Rye
November 16th - January ..... Winter Rye
3 - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40 lbs/acre.

FERTILIZER & LIME

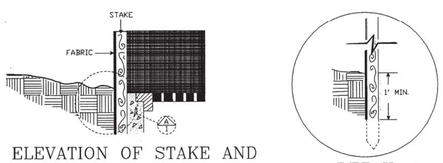
- Apply 10-20-10 **fertilizer** at a rate of **500** lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

SILT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS



ELEVATION OF STAKE AND FABRIC ORIENTATION

DETAIL A

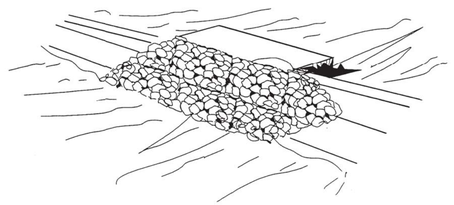
SPECIFIC APPLICATION

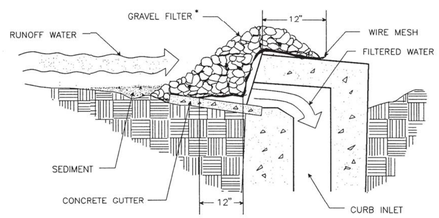
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

Source: N.C. Erosion and Sediment Control Planning and Design Manual, 1988

Plate 3.07-1

GRAVEL CURB INLET SEDIMENT FILTER





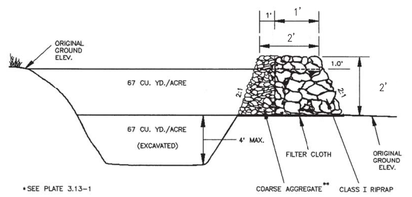
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

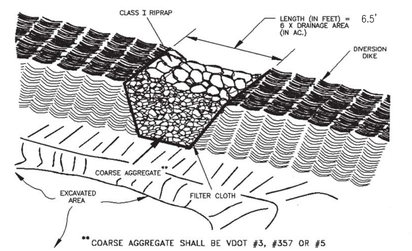
* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

1992 3.13

TEMPORARY SEDIMENT TRAP



CROSS SECTION OF OUTLET



OUTLET (PERSPECTIVE VIEW)

Source: Va. DSWC

Plate 3.13-2

ELEVEN
COMMONWEALTH OF VIRGINIA 06-28-18 STEPHEN M. BLEVINS Lic. No. 32265 PROFESSIONAL ENGINEER
BLAKEWAY surveying + engineering + environmental
630 N. WITCHDUCK ROAD - VA BEACH, VIRGINIA 23462
P757.226.0081 - F757.226.8765
www.blakewaycorp.com

REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: E&S DETAILS & NOTES
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
SHEET NO.: CES-3.1 E&S DETAILS

QUARTERPATH

STANDARD COUNTY STORMWATER POLLUTION PREVENTION PLAN NOTES:

1. ALL THE PROVISIONS OF VIRGINIA EROSION AND SEDIMENT CONTROL (E&SC) LAW AND REGULATIONS, THE VIRGINIA STORMWATER MANAGEMENT ACT AND REGULATIONS (VSMP), THE VIRGINIA BMP CLEARINGHOUSE WEBSITE, STATE EROSIONAND SEDIMENT CONTROL AND STORMWATER MANAGEMENT HANDBOOKS, AND ANY ASSOCIATED TECHNICAL BULLETINS ANDGUIDANCE DOCUMENTS AS PUBLISHED BY THE STATE WATER CONTROL BOARD, THE VIRGINIA DEPARTMENT OF ENVIRONMENTALQUALITY (DEQ), AND THE LOCAL VESCP AND VSMP AUTHORITY SHALL APPLY TO THE PROJECT.

2. MINIMUM STANDARDS NO. 1 THROUGH NO. 19 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS 9VAC25-840 ET SEQ. SHALL APPLY TO THE PROJECT.

3. THE OWNER, APPLICANT, OPERATOR, OR PERMITTEE SHALL BE RESPONSIBLE TO REGISTER FOR CONSTRUCTION GENERAL PERMIT (CGP) COVERAGE, AS APPLICABLE, IN ACCORDANCE WITH THE GENERAL VPDES PERMIT FOR DISCHARGE OF STORMWATER FROM CONSTRUCTION ACTIVITIES (VAR10) CHAPTER 880; THE VIRGINIA STORMWATER MANAGEMENT PROGRAM REGULATIONS CHAPTER 870; AND IN ACCORDANCE WITH CURRENT REQUIREMENTS OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP), THE STATE WATER CONTROL BOARD, THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 8 OF THE COUNTY CODE AND THE LOCAL VESCP/VSMP AUTHORITY.

4. THE OWNER, APPLICANT, OPERATOR OR PERMITTEE SHALL PROVIDE THE NAME OF AN INDIVIDUAL HOLDING A VALID RESPONSIBLE LAND DISTURBER (RLD) CERTIFICATE OF COMPETENCE WHO WILL BE RESPONSIBLE FOR THE LAND DISTURBING ACTIVITY PRIOR TO ENGAGING IN THE LAND DISTURBING ACTIVITY. THIS WILL BE NECESSARY PRIOR TO ISSUANCE OF A LOCAL LAND DISTURBING AND/OR STORMWATER CONSTRUCTION PERMIT FOR THE PROJECT. THE RLD IS REQUIRED TO ATTEND THE PRECONSTRUCTION CONFERENCE FOR THE PROJECT.

5. THE CONTRACTOR IS RESPONSIBLE TO CONTACT MISS UTILITY (DIAL 811 IN VA OR 1-800-552-7001) PRIOR TO ANY UTILITY OR SITE WORK EXCAVATIONS.

6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLANNED, DESIGNED, IMPLEMENTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). THE CONTRACTOR SHALL MAINTAIN, INSPECT, AND REPAIR ALL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED THROUGHOUT THE LIFE OF THE PROJECT TO ENSURE CONTINUED ACCEPTABLE PERFORMANCE.

7. A PRECONSTRUCTION CONFERENCE (MEETING) SHALL BE HELD ON SITE AND INCLUDE REPRESENTATIVES FROM THE LOCALVESCP/VSMP AUTHORITY, THE OWNER/APPLICANT/OPERATOR/PERMITTEE, THE RESPONSIBLE LAND-DISTURBER (RLD), AND THE CONTRACTOR, ENGINEER, AND OTHER RESPONSIBLE AGENCIES, AS APPLICABLE, PRIOR TO AUTHORIZATION AND ISSUANCE OF A LOCAL LAND DISTURBING OR STORMWATER CONSTRUCTION PERMIT. THE OWNER, APPLICANT, OPERATOR OR PERMITTEE IS REQUIRED TO COORDINATE SCHEDULING OF THE PRECONSTRUCTION CONFERENCE BETWEEN ALL APPLICABLE PARTIES. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION AND A REVISED POLLUTION PREVENTION PLAN (P2 PLAN OR PPP), IF APPLICABLE, TO THE LOCAL VESCP/VSMP AUTHORITY FOR REVIEW AND APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING.

8. A POLLUTION PREVENTION PLAN (P2 PLAN OR PPP), IF REQUIRED, SHALL BE DEVELOPED, IMPLEMENTED AND UPDATED AS NECESSARY AND MUST DETAIL THE DESIGN, INSTALLATION, IMPLEMENTATION, AND MAINTENANCE OF EFFECTIVE POLLUTION PREVENTION MEASURES TO: MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS; MINIMIZE THE EXPOSURE OF ALL MATERIALS ON THE SITE (SUCH AS BUILDING MATERIALS AND PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE, ETC.) TO PRECIPITATION AND STORMWATER; MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS; IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND RESPONSE PROCEDURES; AND INCLUDE EFFECTIVE BEST MANAGEMENT PRACTICES TO PROHIBIT THE DISCHARGE OF WASTEWATER FROM: CONCRETE WASHOUT AREAS, DISCHARGE OF WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; DISCHARGE OF FUELS, OILS, OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE ACTIVITIES; AND THE DISCHARGE OF SOAPS AND SOLVENTS USED FOR VEHICLE AND EQUIPMENT WASHING. THIS PLAN SHALL BE AVAILABLE ONSITE FOR REVIEW AT REASONABLE TIMES BY THE LOCAL VESCP/VSMP AUTHORITY WHEN REQUESTED.

9. THE OWNER, APPLICANT, OPERATOR, OR PERMITTEE IS RESPONSIBLE FOR ALL OPERATOR SELF-INSPECTIONS AS REQUIRED IN THE POLLUTION PREVENTION PLAN (P2 PLAN OR PPP) OR AS REQUIRED AS PART OF A DEVELOPED STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THESE INSPECTIONS SHALL BE MADE AVAILABLE, UPON REQUEST, BY THE LOCAL VESCP/VSMP AUTHORITY.

10. ALL PERIMETER EROSION AND SEDIMENT CONTROL (E&SC) MEASURES SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE ACTIVITY TAKES PLACE.

11. ADDITIONAL SAFETY FENCE OR DUST CONTROL MEASURES, IN ACCORDANCE WITH THE PROVISIONS OF MINIMUM STANDARDS & SPECS. 3.01 AND 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), MAY BE REQUIRED TO BE IMPLEMENTED ON THE SITE IN ADDITION TO THAT SHOWN ON THE APPROVED PLAN AND SPECIFICATIONS IN ORDER TO ENSURE ADEQUATE PROTECTION OF THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC OR IF SITE CONDITIONS CHANGE, BECOME APPARENT OR ALTER SIGNIFICANTLY FOLLOWING THE DATE OF PLAN APPROVAL.

12. EROSION AND SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT OR FOLLOWING TIME OF CONSTRUCTION TO ENSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED, TO ENSURE ADEQUATE PROTECTION OF THE HEALTH, SAFETY, AND WELFARE OF THE PUBLIC, OR IF SITE CONDITIONS CHANGE, BECOME APPARENT OR ALTER SIGNIFICANTLY FOLLOWNG THE DATE OF PLAN APPROVAL. LOCAL VESCP/VSMP AUTHORITY APPROVAL SHALL BE REQUIRED FOR ANY DEVIATION OF EROSION AND SEDIMENT CONTROL MEASURES FROM THE APPROVED PLAN.

13. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE LOCAL VESCP/VSMP AUTHORITY PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.

14. TEMPORARY SOIL STOCKPILES SHALL COMPLY WITH THE PROVISIONS OF SECTION 24-46 OF THE COUNTY CODE.

15. CULVERT AND STORM DRAIN INLET PROTECTIONS, IN ACCORDANCE WITH THE PROVISIONS OF MINIMUM STANDARDS & SPECS. 3.07AND 3.08 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), MAY BE REMOVED AT THE DISCRETION OF THE ASSIGNED LOCAL VESCP/VSMP AUTHORITY COMPLIANCE INSPECTOR, SHOULD PLACEMENT OF THE MEASURE RESULT IN EXCESSIVE ROAD FLOODING, TRAFFIC OR SAFETY HAZARD, OR RESULT IN THE REDIRECTION OF DRAINAGE ONTO OR TOWARD EXISTING LOTS, HOMES, DRIVEWAYS, GARAGES OR OTHER STRUCTURES. DECISIONS SHALL BE MADE BY THE VESCP/VSMP AUTHORITY ON A CASE-BY-CASE BASIS BASED ON FIELD SITUATIONS ENCOUNTERED.

16. DRAINAGE FACILITIES SHALL BE INSTALLED AND FUNCTIONAL WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT.

17. NO MORE THAN 300 FEET OF TRENCH MAY BE OPEN AT ONE TIME FOR UNDERGROUND UTILITY LINES, INCLUDING STORM WATER CONVEYANCES. ALL OTHER PROVISIONS OF MINIMUM STANDARD NO. 16 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS APPLY.

18. PERMANENT OR TEMPORARY STABILIZATION OF DISTURBED SOIL AREAS SHALL COMPLY WITH MINIMUM STANDARD # 1 AND # 3 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS.

19. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION ON THE APPROVED PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED, IN ACCORDANCE WITH MINIMUM STANDARD # 1 AND # 3 FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, MINIMUM STANDARDS & SPECS. 3.29 THROUGH 3.37 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), AND ANY TECHNICAL BULLETINS ISSUED BY THE STATE WATER CONTROL BOARD OR VIRGINIA DEQ, AS APPLICABLE. IRRIGATION, IF NECESSARY, SHALL COMPLY WITH ALL APPLICABLE SEASONAL OUTDOOR WATER USE RESTRICTIONS OF THE JAMES CITY SERVICE AUTHORITY.

20. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING IN ACCORDANCE WITH MINIMUM STANDARD & SPEC. 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.

21. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. REMOVAL SHALL NOT OCCUR WITHOUT AUTHORIZATION BY THE LOCAL VESCP/VSMP AUTHORITY. DISTURBANCES ASSOCIATED WITH THE REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY STABILIZED.

22. NO SEDIMENT TRAP OR SEDIMENT BASIN SHALL BE REMOVED UNTIL A) AT LEAST 75 PERCENT OF THE SINGLE-FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN SOLD TO A THIRD PARTY FOR THE CONSTRUCTION OF HOMES (UNRELATED TO THE DEVELOPER); AND/OR, B) 60 PERCENT OF THE SINGLE-FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN ARE COMPLETED AND STABILIZED. A BULK SALE OF THE LOTS TO ANOTHER BUILDER DOES NOT SATISFY THIS PROVISION. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL NOT BE REMOVED WITHOUT AUTHORIZATION OF THE LOCAL VESCP/VSMP AUTHORITY.

23. DESIGN AND CONSTRUCTION OF PRIVATE-TYPE STORM DRAINAGE SYSTEMS, OUTSIDE VDOT RIGHT-OF-WAY, SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY, ENGINEERING AND RESOURCE PROTECTION DIVISION, STORMWATER DRAINAGE CONVEYANCE SYSTEMS (NON-BMP RELATED), GENERAL DESIGN AND CONSTRUCTION GUIDELINES (IE. COUNTY DRAINAGE STANDARDS).

24. RECORD DRAWINGS (ASBUILTS) AND CONSTRUCTION CERTIFICATIONS ARE REQUIRED FOR ALL STORMWATER FACILITIES INCLUDING STORMWATER MANAGEMENT/BMP FACILITIES AND STORM DRAINAGE CONVEYANCE SYSTEMS. THE CERTIFICATION PROCESS SHALL INCLUDE AN INTERNAL CLOSED-CIRCUIT TELEVISION CAMERA (CCTV) POST INSTALLATION INSPECTION PERFORMED BY THE OWNER IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS DEVELOPED BY THE VSMP AUTHORITY. RECORD DRAWINGS AND CONSTRUCTION CERTIFICATIONS MUST MEET ESTABLISHED PROGRAM REQUIREMENTS OF THE COUNTY'S CHAPTER 8 EROSION AND SEDIMENT CONTROL AND VSMP ORDINANCE AND THE LOCAL VESCP/VSMP AUTHORITY.

25. ALL STORMWATER FACILITIES INCLUDING BMPS, STORM DRAINAGE PIPES, STORMWATER CONVEYANCES, INLETS, MANHOLES, OUTFALLS AND ROADSIDE AND OTHER OPEN CHANNELS SHALL BE INSPECTED BY THE LOCAL VESCP/VSMP AUTHORITY, THE OWNER, AND THE APPLICANT/OPERATOR/PERMITTEE DESIGNATED GEOTECHNICAL ENGINEER FOR THE PROJECT IN ACCORDANCE WITH ESTABLISHED COUNTY STORMWATER FACILITY INSPECTION PROGRAM REQUIREMENTS.

EROSION AND SEDIMENT CONTROL GENERAL NOTES:

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL AND TREE PROTECTION PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS (4VAC50-30 et seq), CHAPTER 30 AND APPENDIX E (TREE PLANTING, PRESERVATION AND REPLACEMENT) AND ANYOTHER APPLICABLE SECTIONS OF THE CODE OF THE CITY OF VIRGINIA BEACH AND THE PLANNING DEPARTMENT'S LANDSCAPING GUIDE.

2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION, INCLUDING THE APPLICATION OF TEMPORARY AND/OR PERMANENT MEASURES DEEMED NECESSARY BEFORE, DURING, AND AFTER CONSTRUCTION TO CONTROL EROSION AND PREVENT OR MINIMIZE SEDIMENT RUNOFF AND PROTECT TREES AND VEGETATION.

3. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY PLANNING DEPARTMENT/DEVELOPMENT SERVICES CENTER (DSC) SHALL BE KEPT AT THE SITE AT ALL TIMES.

4. AFTER OBTAINING THE LAND DISTURBING PERMIT AND AT LEAST 48-HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT JAMES CITY COUNTY TO SCHEDULE A PRE-CONSTRUCTION MEETING.

5. ALL EROSION AND SEDIMENT CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED WITH THE FIRST STAGE OF CONSTRUCTION AND WILL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. THE MEASURES SHOWN ON THE PLAN ARE THE MINIMUM NECESSARY. THE ADDITION, DELETION OR MODIFICATION OF EROSION AND SEDIMENT CONTROL AND TREE PROTECTION MEASURES WILL BE AT THE DIRECTION OF THE COUNTY INSPECTOR.

6. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF EROSION AND SEDIMENT CONTROL AND TREE PROTECTION MEASURES AT THE END OF CONSTRUCTION SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. THE ORIGINAL SOIL GRADE WITHIN ANY PROTECTED TREE'S DRIP LINE SHALL BE PRESERVED AND MAINTAINED AND SHALL NOT BE DISTURBED BY REGRADING.

9. THE RESPONSIBLE LAND DISTURBER (RLD) SHALL INSPECT:
   a. DURING OR IMMEDIATELY FOLLOWING INITIAL INSTALLATION OF EROSION AND SEDIMENT CONTROLS,
   b. AT LEAST ONCE IN EVERY TWO-WEEK PERIOD,
   c. WITHIN 48 HOURS FOLLOWING ANY RUNOFF PRODUCING STORM EVENT, AND
   d. AT THE COMPLETION OF THE PROJECT.

10. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES DAMS, DIKES, DIVERSIONS, SIDE SLOPES OF SEDIMENT TRAPS AND BASINS IMMEDIATELY AFTER INSTALLATION.

11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

12. SEDIMENT BASINS SHALL BE MAINTAINED AS SPECIFIED AND NOT CONVERTED TO PERMANENT STORMWATER MANAGEMENT FACILITIES DURING LAND DISTURBANCE. CONVERSION TO A PERMANENT STORMWATER MANAGEMENT FACILITY SHOULD ONLY OCCUR AFTER PERMANENT STABILIZATION OF DISTURBED AREAS DRAINING TO THE BASIN HAS OCCURRED.

13. ALL BORROW MATERIAL SHALL BE EXCAVATED FROM A LAWFULLY PERMITTED SITE AND ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT A LAWFULLY PERMITTED SITE. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS A SEPARATE EROSION AND SEDIMENT CONTROL PLAN APPROVAL AND PERMIT WILL BE REQUIRED FOR THESE OFF-SITE AREAS, IF NOT ALREADY APPROVED AND PERMITTED.

14. DEWATERING AND WELL POINT DISCHARGE SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE THAT PROVIDES APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES. THE MEASURES MUST BE APPROVED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF DISCHARGE OPERATIONS. FAILURE TO COMPLY MAY RESULT IN A NOTICE TO COMPLY, STOP WORK ORDER OR OTHER LEGAL ACTION.

15. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN A TEMPORARY CONSTRUCTION ENTRANCE AT EACH POINT OF INGRESS/EGRESS PER VESCH STD & SPEC 3.02. SITES WITH SIGNIFICANT CONSTRUCTION TRAFFIC MAY BE REQUIRED TO INSTALL A LARGER WIDTH AND/OR LONGER LENGTH CONSTRUCTION ENTRANCE AS DEEMED NECESSARY BY THE DSC ENGINEER OR THE CIVIL INSPECTOR. A WASH RACK MAY BE DEEMED NECESSARY AND REQUIRED BY THE CIVIL INSPECTOR.

16. THE CONTRACTOR SHALL CONSTRUCT, INSTALL, AND MAINTAIN SUFFICIENT EROSION AND SEDIMENT CONTROL DEVICES TO PREVENT SOIL FROM BEING ERODED AND PLACED ON STREETS, IN DRAINAGE SYSTEMS AND WATERCOURSES. DEVICES WILL BE CLEAR OF MUD, DEBRIS, AND ERODED MATERIAL DURING ALL STAGES OF CONSTRUCTION. DEVICES ARE SUBJECT TO INSPECTIONS AFTER A STORM EVENT AND AS REQUIRED BY THE CIVIL INSPECTOR.

17. ANY AND ALL MATERIAL OR DEBRIS TRACKED ONTO A PUBLIC OR PRIVATE ROAD SURFACE SHALL BE REMOVED THOROUGHLY AT THE END OF EACH DAY OR AS DIRECTED BY THE CIVIL INSPECTOR. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A LEGALLY PERMITTED DISPOSAL FACILITY.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOILS WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS, OR HARM ANIMAL OR PLANT LIFE. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST, BY, INCLUDING BUT NOT LIMITED TO, THE USE OF WATER OR CHEMICAL DUST PALLIATIVE, BY LIMITING THE NUMBER OF VEHICLES ALLOWED ON-SITE, AND MINIMIZING THE OPERATING SPEED OF ALL VEHICLES.

19. SILT FENCE FABRIC SHALL BE CONSTRUCTED OF STANDARD 36"FILTER FABRIC, STAKED WITH 2"X 2"HARDWOOD STAKES PLACED A MAXIMUM OF 6-FOOT ON CENTER AND ENTRENCHED IN ACCORDANCE WITH THE VESCH STD & SPEC 3.05.

20. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION, TREE PROTECTION SHALL BE PLACED AROUND ALL TREES TO BE RETAINED. THE TREE PROTECTION SHALL BE IN ACCORDANCE WITH THE VESCH STD & SPEC 3.38 AND THE PLANNING DEPARTMENT LANDSCAPING GUIDE. TREE PROTECTION SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE APPROVED PLAN.

21. NO ITEMS, INCLUDING BUT NOT LIMITED TO, BOARDS, WIRES, OR SIGNAGE, SHALL BE NAILED OR ATTACHED TO TREES TO BE RETAINED.

22. NO STOCKPILING, PLACEMENT OF MATERIALS OR EQUIPMENT, OR PARKING OF VEHICLES SHALL OCCUR WITHIN THE TREE PROTECTION AREA.

23. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY ARBORIST OF DAMAGE TO TREES LOCATED IN CITY RIGHTS OF WAY AND PUBLIC EASEMENTS. DAMAGED TREE LIMBS SHALL BE CUT BACK TO THE NEXT LATERAL BRANCH OR PARENT STEM AT THE BRANCH COLLAR. CARE FOR SERIOUS INJURY SHOULD BE PRESCRIBED BY THE COUNTY ARBORIST.

24. TREES LOCATED IN RIGHTS OF WAY AND PUBLIC EASEMENTS THAT ARE TO BE RETAINED, BUT ARE DESTROYED DURING CONSTRUCTION SHALL BE REPLACED WITH SPECIES, SIZES AND QUANTITIES TO BE DETERMINED UPON TREE VALUE ASSESSMENT BY THE CITY ARBORIST. REPLACEMENT TREES SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

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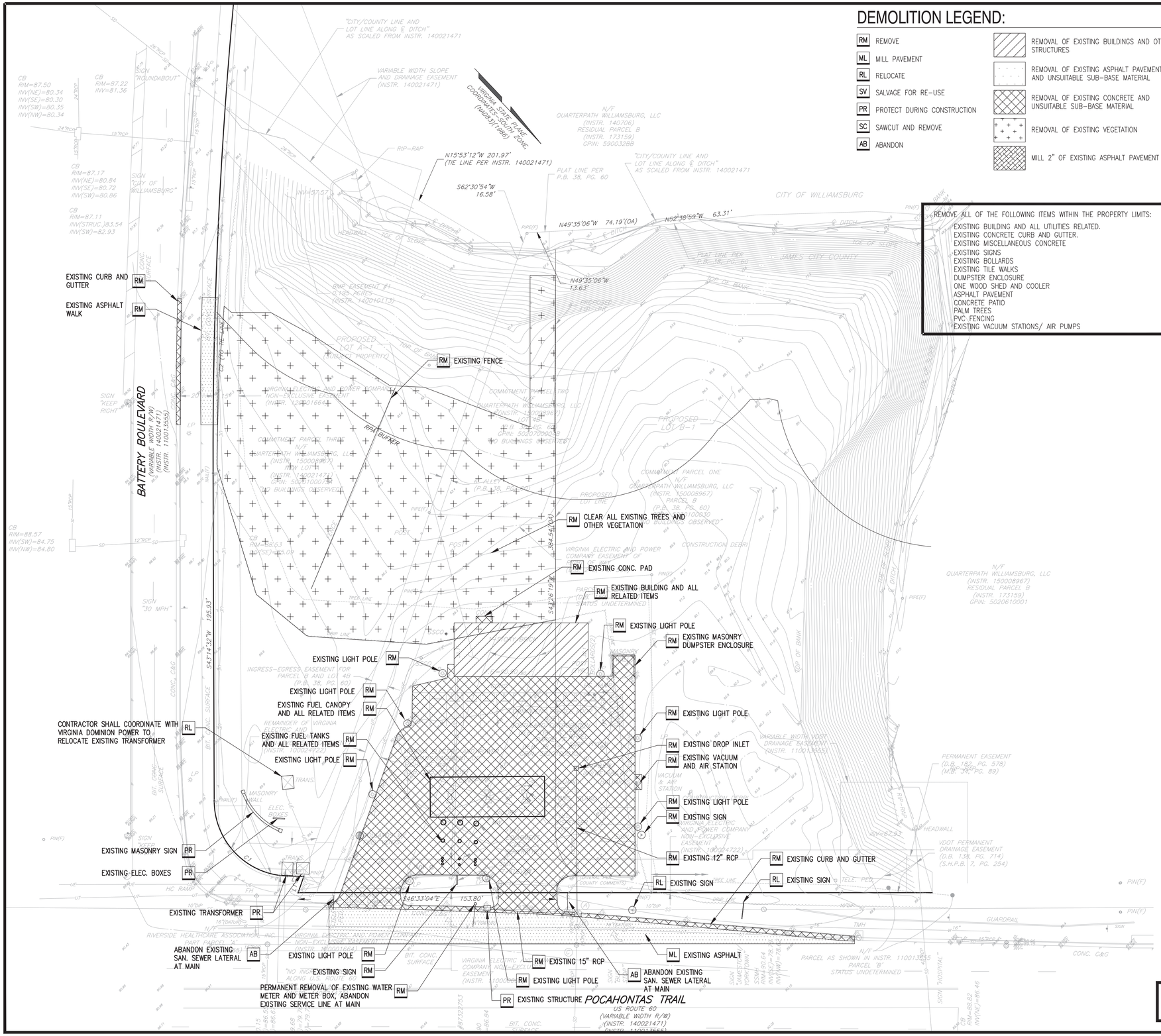
DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

SHEET NO. CES-3.2
E&S DETAILS

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: E&S DETAILS & NOTES
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER: 38064

QUARTERPATH



DEMOLITION LEGEND:

RM	REMOVE		REMOVAL OF EXISTING BUILDINGS AND OTHER STRUCTURES
ML	MILL PAVEMENT		REMOVAL OF EXISTING ASPHALT PAVEMENT AND UNSUITABLE SUB-BASE MATERIAL
RL	RELOCATE		REMOVAL OF EXISTING CONCRETE AND UNSUITABLE SUB-BASE MATERIAL
SV	SALVAGE FOR RE-USE		REMOVAL OF EXISTING VEGETATION
PR	PROTECT DURING CONSTRUCTION		MILL 2" OF EXISTING ASPHALT PAVEMENT
SC	SAWCUT AND REMOVE		
AB	ABANDON		

REMOVE ALL OF THE FOLLOWING ITEMS WITHIN THE PROPERTY LIMITS:
- EXISTING BUILDING AND ALL UTILITIES RELATED.
- EXISTING CONCRETE CURB AND GUTTER.
- EXISTING MISCELLANEOUS CONCRETE
- EXISTING SIGNS
- EXISTING BOLLARDS
- EXISTING TILE WALKS
- DUMPSTER ENCLOSURE
- ONE WOOD SHED AND COOLER
- ASPHALT PAVEMENT
- CONCRETE PATIO
- PALM TREES
- PVC FENCING
- EXISTING VACUUM STATIONS/ AIR PUMPS

EXISTING UTILITY NOTE:

THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE, SIZE TYPE, LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO BLAKEWAY CORPORATION AT 757-226-0081.

FIRE PREVENTION NOTES:

1. DURING CONSTRUCTION, AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE.
2. APPROVED EMERGENCY VEHICLE ACCESS SHALL BE PROVIDED DURING CONSTRUCTION BY EITHER PERMANENT OR TEMPORARY ROADS CAPABLE OF SUPPORTING 80,000 POUNDS, AND SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.
3. AN UST CLOSURE PERMIT SHALL BE ISSUED FROM THE FIRE MARSHALL'S OFFICE PRIOR TO THE REMOVAL OF THE UNDERGROUND STORAGE TANKS. A COPY OF THE SOIL SAMPLE REPORT SHALL BE FORWARDED TO THE FIRE MARSHAL.

DEMOLITION NOTES:

1. INSTALL EROSION CONTROL MEASURES SHOWN AT THE INITIAL PHASE OF DEMOLITION. THESE EROSION CONTROL MEASURES SHALL REMAIN IN PLACE THROUGHOUT SITE CONSTRUCTION AND UNTIL FINAL SITE STABILIZATION AND DENUDED AREAS ARE ESTABLISHED.
2. WHEREVER DEMOLITION WORK IS BEING PERFORMED, THE CONTRACTOR SHALL MEET ALL CODES AND REQUIREMENTS FOR PROVIDING WARNINGS AND BARRIERS TO PROTECT THE PERSONNEL. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING SURFACES.
3. ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO LIKE OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
4. CONCRETE WALK, DRIVEWAYS, CURBS AND PAVEMENT TO BE DEMOLISHED SHALL BE SAW CUT ALONG PERPENDICULAR OR RADIAL TO THE EDGES OF CONCRETE OR PAVEMENT. ALL CONCRETE REMOVED IN THE CITY RIGHT-OF-WAY SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.
5. THE CONTRACTOR SHALL CONTACT DIRECTLY WITH VIRGINIA POWER FOR THE REMOVAL OR RELOCATION OF INDICATED POLES, GUYS AND OVERHEAD CABLE POWER FACILITIES.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYORS MAKE NO GUARANTEE THE UNDERGROUND AREA, EITHER IS IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
6. ALL CONSTRUCTION TRAFFIC SHALL ENTER & EXIT THE SITES AT THE STONE CONSTRUCTION ENTRANCE AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
7. ANY EXISTING CLEANOUTS AND SANITARY SEWER LATERALS NO LONGER IN USE SHALL BE CUT 2" FROM THE FACTORY WYE AND CAPPED ON THE LATERAL STUB. A MINIMUM OF A ONE FOOT SECTION OF LATERAL IS TO BE REMOVED. THE LOW END OF THE ABANDONED LATERAL SHALL HAVE A GROUT PLUG. THE STANDPIPE END OF THE ABANDONED LATERAL SHALL BE CUT DOWN TO A MINIMUM OF 3' BELOW GRADE AND CAPPED. THE ABANDONED LATERAL SECTION SHALL BE FILLED WITH FLOWABLE FILL. A JCSA INSPECTOR IS TO INSPECT.
8. DEMOLITION DEBRIS TO BE DISPOSED OF OFF-SITE AT SITE PROCURED BY CONSTRUCTION/DEMOLITION CONTRACTOR.
9. EXISTING STORM DRAIN SYSTEM TO REMAIN INTACT AND IN FUNCTIONAL STATE UNLESS OTHER WISE SPECIFIED.
10. ANY DISTURBED AREAS OF THE SITE TO BE GRADED TO DRAIN TO EXISTING/PROPOSED STORM INLETS AND SODDED OR SEEDED.
11. UPON COMPLETION OF DEMOLITION AND FINAL GRADING ACTIVITIES CONTRACTOR TO EXAMINE STORM DRAIN LINES WITHIN DEMOLITION'S LIMITS AND CLEAN/ROD/JET OUT ACCUMULATED SEDIMENTS.
12. ALL PITS, EXCAVATIONS, TRENCHES CAUSED BY DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH SELECT MATERIAL AND COMPACTED PER SPECS.
13. PRIOR TO THE ISSUANCE OF THE DEMOLITION PERMIT FOR EACH STRUCTURE TO BE REMOVED, AN ASBESTOS CERTIFICATION FOR EACH STRUCTURE SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. THE BUILDING PERMIT FOR THE NEW STRUCTURE SHALL NOT BE ISSUED UNTIL THE DEMOLITION PERMIT HAS HAD FINAL INSPECTION.
14. FOR INSTALLATION OF THE PROPOSED ENTRANCES, ALL REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK AND CURB/GUTTER WITHIN THE R/W SHALL BE TO THE NEAREST CONSTRUCTION JOINT.
15. ANY MILLING AND OVERLAYING REQUIRED TO OBTAIN A SMOOTH PAVEMENT TRANSITION IN THE AREA OF ANY OPEN CUTS SHALL BE AT THE DIRECTION AND DISCRETION OF THE PLANNING/CIVIL INSPECTOR.
16. IF OFF-SITE HAULING IS REQUIRED THE CONTRACTOR MUST COORDINATE THE HAUL ROUTE WITH THE CITY'S CIVIL INSPECTOR.
17. CONTRACTOR MUST NOTIFY PUBLIC UTILITIES CONSTRUCTION REPRESENTATIVE SEVEN (7) CALENDAR DAYS PRIOR TO ANY NIGHT TIME SHUT DOWN OF THE WATER MAIN.
18. WATER SERVICE LINES SHALL BE ABANDONED AT THE CITY MAIN. THE WATER SERVICE LINE SHALL BE DETACHED FROM THE CORPORATION STOP BY REMOVING A THREE (3) FT. SECTION OF PIPE AT THE CITY MAIN. THE CORPORATION STOP IS TO BE TURNED OFF AND CAPPED. THE EXISTING WATER METER AND BOX SHALL BE REMOVED AND DELIVERED TO PUBLIC UTILITIES/OPERATIONS, 3500 DAM NECK ROAD, VIRGINIA BEACH, VA 23456.
19. REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK AND CURB AND GUTTER WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED TO THE NEAREST CONSTRUCTION JOINT.
20. ANY TREES SHOWN TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPLACED.
21. CURB AND GUTTER SHALL BE REMOVED TO THE ADJACENT JOINT AND REPLACED IN FULL SECTIONS.

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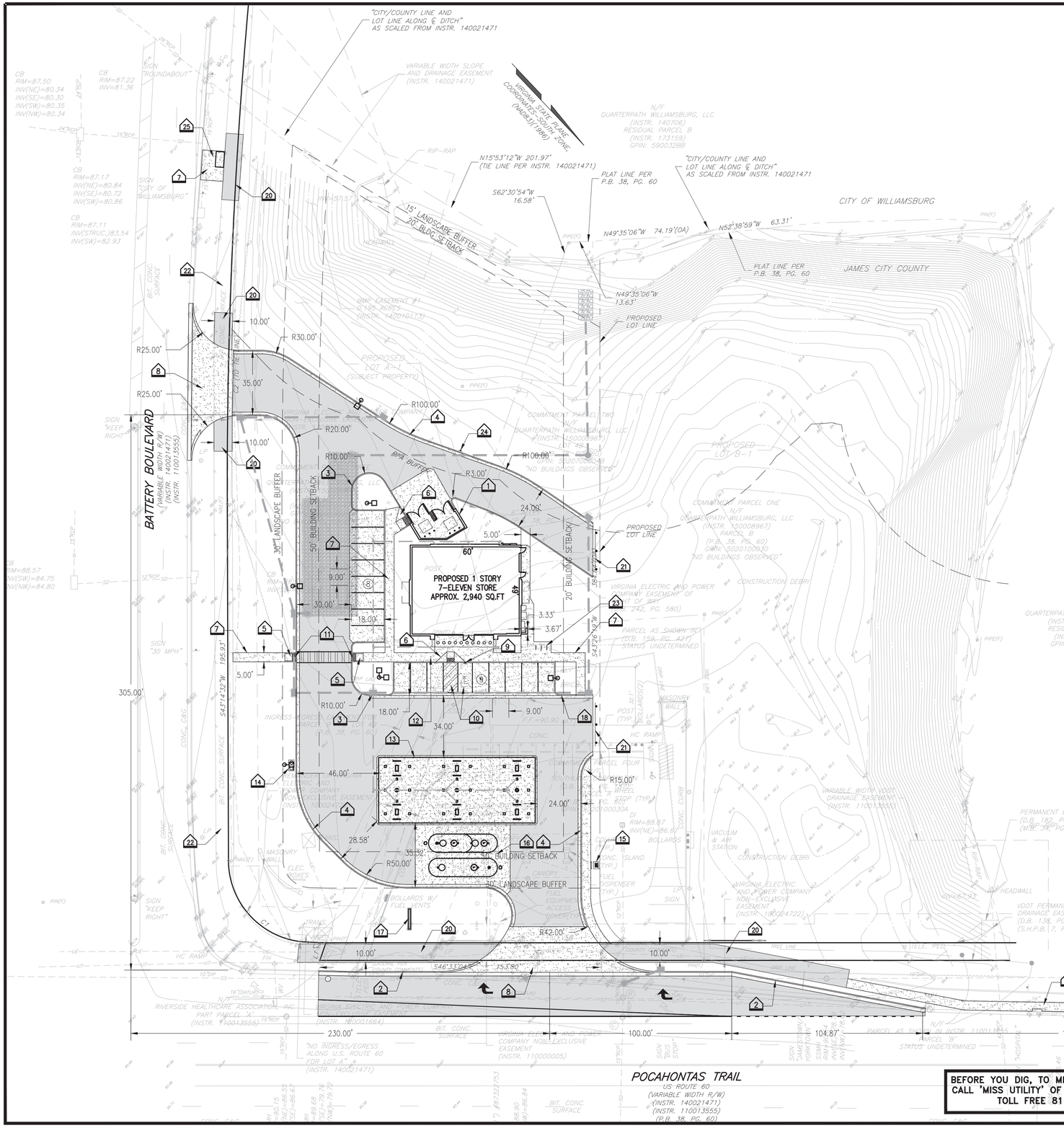
REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18 | DRAWN BY GAF | REVIEWED BY SMB | DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: DEMOLITION PLAN
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER: 38064
SHEET NO. CD-4.0



LAYOUT PLAN LEGEND

1. PROPOSED DUMPSTER ENCLOSURE, SEE ARCHITECTURAL PLANS FOR DETAILS.
2. 30" CONCRETE CURB AND GUTTER, SEE SHEET CDT-10.0 FOR DETAILS.
3. MEDIAN CURB, SEE SHEET CDT-10.0 FOR DETAILS.
4. 24" CONCRETE CURB AND GUTTER, SEE SHEET CDT-10.0 FOR DETAILS.
5. MODIFIED HANDICAPPED CURB RAMP. SEE SHEET CDT-10.1 FOR DETAILS.
6. PERPENDICULAR HANDICAPPED CURB RAMP, SEE SHEET CDT-10.1 FOR DETAIL
7. CONCRETE SIDEWALK, SEE DETAIL SHEET CDT-10.0
8. VDOT CG-13 COMMERCIAL ENTRANCE, SEE SHEET CDT-10.1 FOR DETAIL
9. VAN ACCESSIBLE "ADA" SIGN WITH BOLLARD. SEE SHEET CDT-10.0 FOR DETAILS.
10. VAN ACCESSIBLE "ADA" PAVEMENT MARKINGS. PARKING SPACE DIMENSIONS 8'X18' SEE DETAIL SHEET CDT-10.0.
11. DETECTABLE WARNING SURFACE (TYP.) SEE SHEET CDT-10.1 FOR DETAILS. BRICK PAVERS WITH TRUNCATED DOMES SHALL BE USED IN THE RIGHT-OF-WAY.
12. CONCRETE SIDEWALK AT BUILDING, SEE SHEET CDT-10.0 FOR DETAILS.
13. OVERHEAD FUEL CANOPY
14. AIR COMPRESSOR UNIT
15. FUEL VENT
16. UNDERGROUND STORAGE TANKS
17. MONUMENT SIGN, SEE ARCH PLANS FOR DETAILS
18. CONCRETE VALLEY GUTTER, SEE SHEET CDT-10.0 FOR DETAIL
19. 6" CONCRETE BOLLARD, SEE SHEET CDT-10.0 FOR DETAIL
20. PROPOSED 10' ASPHALT WALK, SEE SHEET CDT-10.0 FOR DETAIL
21. TEMPORARY TRAFFIC BARRICADE
22. EXISTING ASPHALT WALK TO REMAIN
23. PROPOSED BICYCLE RACK (TYP. OF 3), SEE SHEET CDT-10.1 FOR DETAIL
24. PROPOSED RPA SIGNAGE, SEE SHEET CDT-10.3 FOR DETAIL
25. PROPOSED CONCRETE PAD FOR FUTURE BUS STOP SHELTER, SEE SHEET CDT-10.0 FOR DETAIL

LAYOUT GENERAL NOTES:

1. BUILDING DIMENSIONS – CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR ALL BUILDING DETAILS AND DIMENSIONS.
2. CONSTRUCTION STAKEOUT – ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY A SURVEYOR LICENSED IN THE STATE OF VIRGINIA.
3. PRIVATE UTILITY COORDINATION – CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REMOVAL/RELOCATING OF ANY PRIVATE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
4. CONSTRUCTION MATERIALS AND METHODS – ALL CONSTRUCTION AND MATERIALS SHALL BE AS PER THE HAMPTON ROADS PLANNING DISTRICT COMMISSION (HRPDC) REGULATIONS CONSTRUCTION STANDARDS.
5. EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LAWFUL MANNER.
6. LOCATION OF EXISTING UTILITIES – LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO BLAKEWAY CORPORATION AT 226-0081.
7. HVAC – ALL HVAC AND OTHER EQUIPMENT WILL BE LOCATED ON THE ROOF OF THE PROPOSED BUILDING AND SCREENED FROM PUBLIC VIEW.
8. GAS CANOPY/ FUEL PAD DIMENSIONS – CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS AND GAS PLANS FOR ALL GAS CANOPY AND FUEL PAD DETAILS AND DIMENSIONS.
9. LINE STRIPING – ALL ON-SITE LINE STRIPING SHALL USE 3M ALL WEATHER PAINT OR APPROVED EQUAL. SEE RIGHT-OF-WAY STRIPING NOTES FOR PROPOSED STRIPPING WITHIN THE RIGHT-OF-WAY.
10. RIGHT-OF-WAY PAVEMENT SECTION – THE PAVEMENT SECTION FOR THE PROPOSED TURN LANE SHALL MATCH THE EXISTING ASPHALT PAVEMENT SECTION
11. BUILDING MATERIALS – THE PROPOSED BUILDING, DUMPSTER ENCLOSURE, AND CANOPY COLUMNS SHALL BE CONSTRUCTED OF LIKE MATERIALS AS SHOWN ON THE ARCHITECTURAL RENDERINGS APPROVED BY THE PLANNING DIRECTOR.

CONSTRUCTION GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REMOVAL/RELOCATING OF ANY PRIVATE UTILIITES WITH THE APPROPRIATE UTILITY COMPANY.
2. ALL CRACKED CONCRETE WITHIN THE RIGHT OF WAY SHALL BE REMOVED TO THE NEAREST JOINT AND REPLACED. PATCHING IS NOT ACCEPTABLE.
3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO CITY STANDARDS.
4. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LAWFUL MANNER.
5. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE, SIZE TYPE, LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO BLAKEWAY CORPORATION AT 226-0081.
6. NEW CONCRETE SHALL BE DOWLED INTO EXISTING CONCRETE AS REQUIRED TO PREVENT DIFFERENTIAL SETTLEMENT.

R/W PAVEMENT MARKING NOTES:

1. MATERIALS AND WORKMANSHIP WILL CONFORM TO CITY SPECIFICATIONS.
2. PAVEMENT MARKINGS WILL BE INSTALLED ACCORDING TO THE REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF ALL OFFICIAL TRAFFIC SIGNS, SIGNALS, AND MARKINGS ON AND ALONG HIGHWAYS WITHIN THE COMMONWEALTH OF VIRGINIA.
3. ALL PAVEMENT MARKING WILL BE REFLECTORIZED ACCORDING TO VDOT ROAD AND BRIDGE SPECIFICATIONS, (LATEST VERSION) SECTION 246.
4. THE CONTRACTOR WILL PREPARE THE PAVEMENT SURFACE FOR PROPER ADHESION. ANY SWEEPING OR REMOVAL OR DEBRIS, GRAVEL, DIRT, OR OTHER FOREIGN MATERIALS WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION. NO SEPARATE PAYMENT WILL BE MADE FOR THIS.
5. THE CONTRACTOR WILL COMPLETELY REMOVE ALL PREVIOUS MARKINGS THAT COULD CONFLICT WITH THE NEW PAVEMENT MARKINGS.
6. THE CONTRACTOR WILL NOTE ALL SPECIAL PROVISIONS OF THE CONTRACT ON THE PLANS, SUCH AS THE RATE OF APPLICATION, MAINTENANCE OF TRAFFIC, RESTRICTED WORKING HOURS, AND/OR RESTRICTED WEATHER CONDITIONS. NO DEVIATIONS FROM THIS WILL BE PERMITTED.
7. UNLESS OTHERWISE SPECIFIED, THE BASIS OF THE MEASUREMENT WILL BE ALONG THE LONGITUDINAL CENTERLINE OF THE PAVEMENT MARKINGS. MEASUREMENT FOR LEGENDS WILL BE ACCORDING TO THE MESSAGE; COMPLETE, AND IN PLACE.
8. BEFORE THE APPLICATION, THE CONTRACTOR WILL "FIELD CHECK" AND PLACE ALL PAVEMENT MARKINGS, TO THE SATISFACTION OF THE ENGINEER.
9. ALL MARKINGS IMPROPERLY APPLIED OR LOCATED WILL BE COMPLETELY REMOVED AND CORRECTLY REAPPLIED AT THE EXPENSE OF THE CONTRACTOR.
10. WHERE BITUMINOUS SEALANTS PREVENT OR MAKE IT IMPRACTIAL TO EXTEND THE LINE TO EDGE OF THE PAVEMENT, THE CONTRACTOR WILL EXTEND THE LINES TO END OF THE SEALED AREA OR WITHIN ONE (1) FOOT OF THE EDGE OF THE PAVEMENT.
11. THERMOPLASTIC PAVEMENT MARKINGS OR PREFORMED POLYMER MARKINGS WILL NOT BE INSTALLED WITHIN 48-HOUR PERIOD FOLLOWING A RAINFALL.
12. THE COLORS WILL NOT CHANGE THROUHOUT THE EXPECTED LIFE OF THE FILM.
13. MARKING MATERIAL WILL BE APPLIED AT SPECIFIED DIMENSIONS AT A RATE RESULTING IN A MARKING THICKNESS OF 90 mils ± 5 mils, NOT INCLUDING GLASS BEAD TOP DRESSING.
14. THE MARKINGS WILL BE PROVIDED IN SPECIFIED WIDTHS AND SHAPES. PREFORMED WORDS AND SYMBOLS WILL CONFORM TO THE APPLICABLE SHAPES AND SIZES AS OUTLINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, (LATEST EDITION).

BEFORE YOU DIG, TO MISS UTILITIES CALL 'MISS UTILITY' OF VIRGINIA. TOLL FREE 811

GRAPHIC SCALE
30 15 0 30 60
scale 1" = 30' feet

ELEVEN

COMMONWEALTH OF VIRGINIA 06-28-18 STEPHEN M. BLEVINS Lic. No. 32245 PROFESSIONAL ENGINEER

BLAKEWAY
surveying + engineering + environmental
630 N. WITCHDUCK ROAD - VA BEACH, VIRGINIA 23462
P757.226.0081 - F757.226.8765
www.blakewaycorp.com

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DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: LAYOUT PLAN
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER: 38064
SHEET NO: CL-5.0

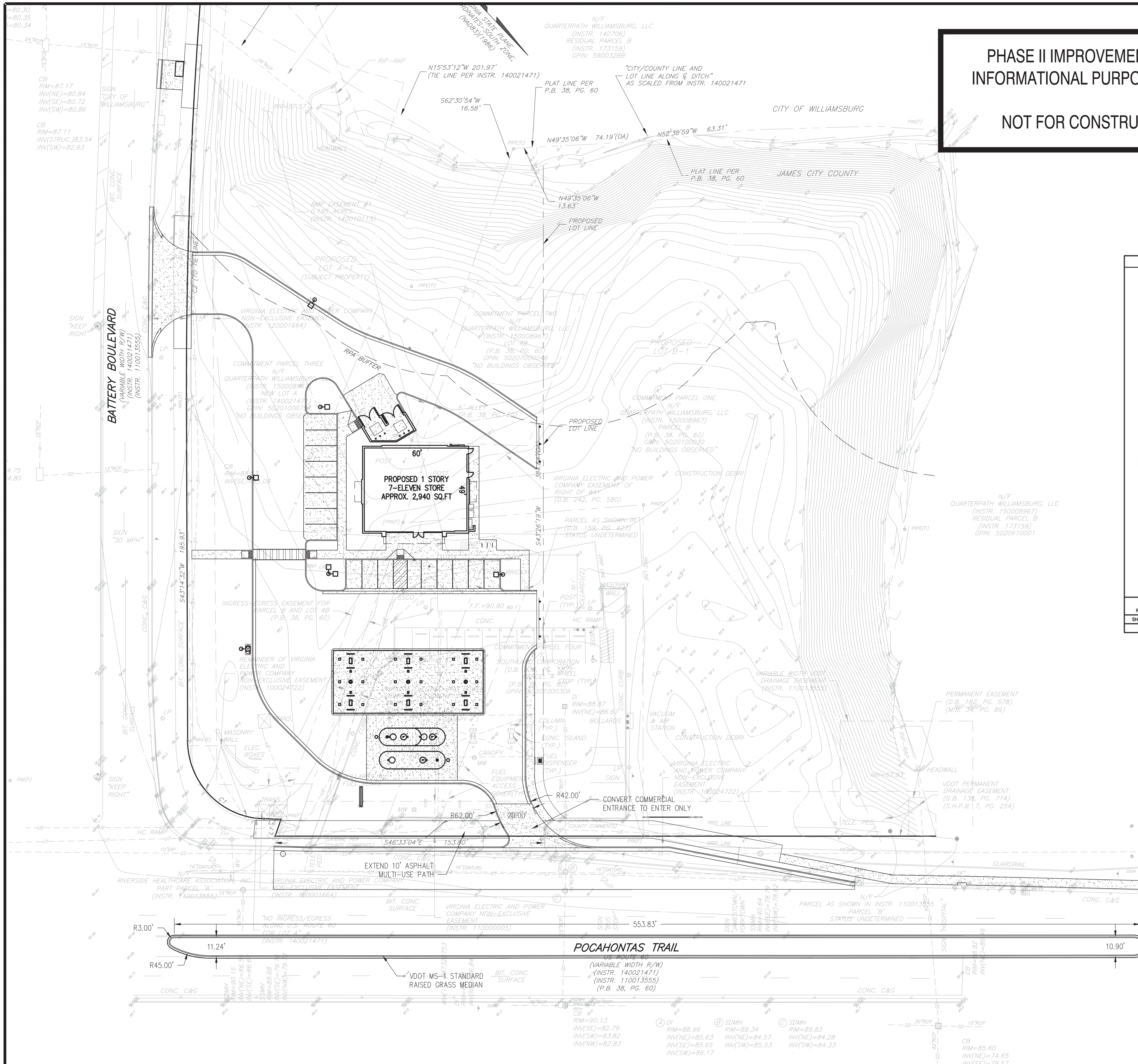
FILE NAME: P:\6160-Veroad\6160.54-Quaterpath\Cad\8-CL-5.0 Layout.dwg LAYOUT NAME: COVER SHEET PLOTTED: Thursday, June 28, 2018 - 8:27am

QUARTERPATH
QUARTERPATH

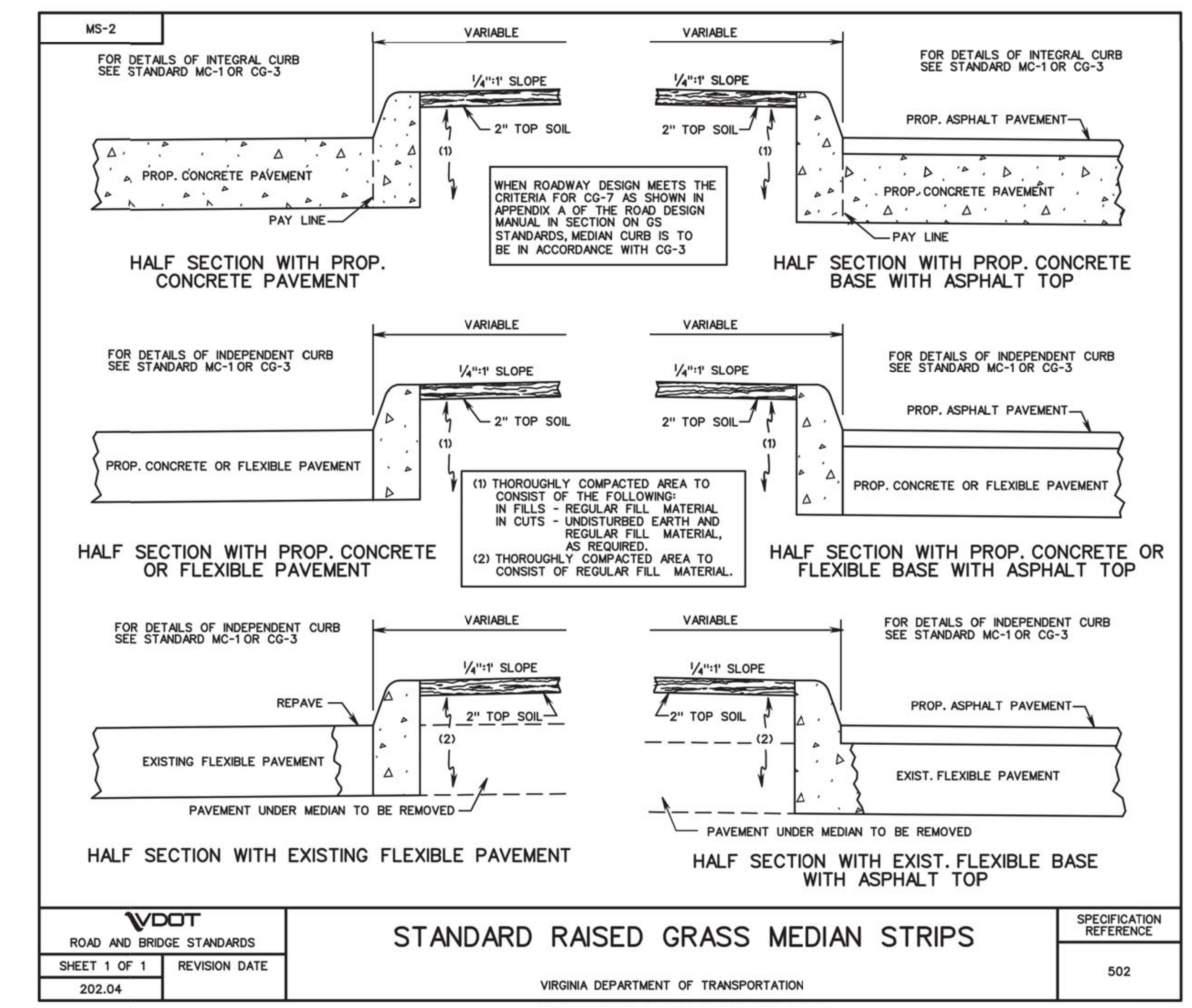
PHASE II IMPROVEMENTS FOR INFORMATIONAL PURPOSES ONLY

NOT FOR CONSTRUCTION

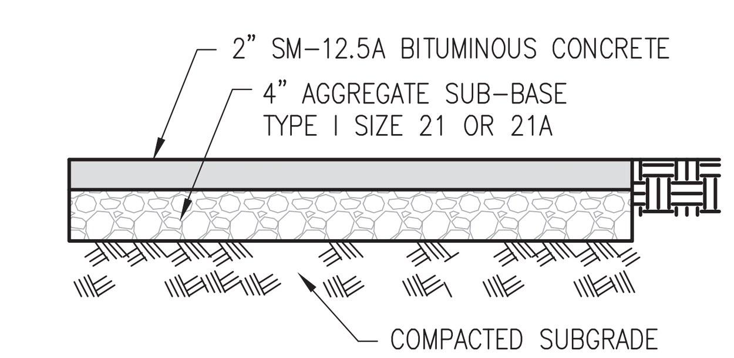
FULL CONSTRUCTION DRAWINGS FOR THE PHASE II IMPROVEMENTS WILL BE COMPLETED BY OTHERS WHEN AND IF TRAFFIC SIGNALIZATION IS WARRANTED

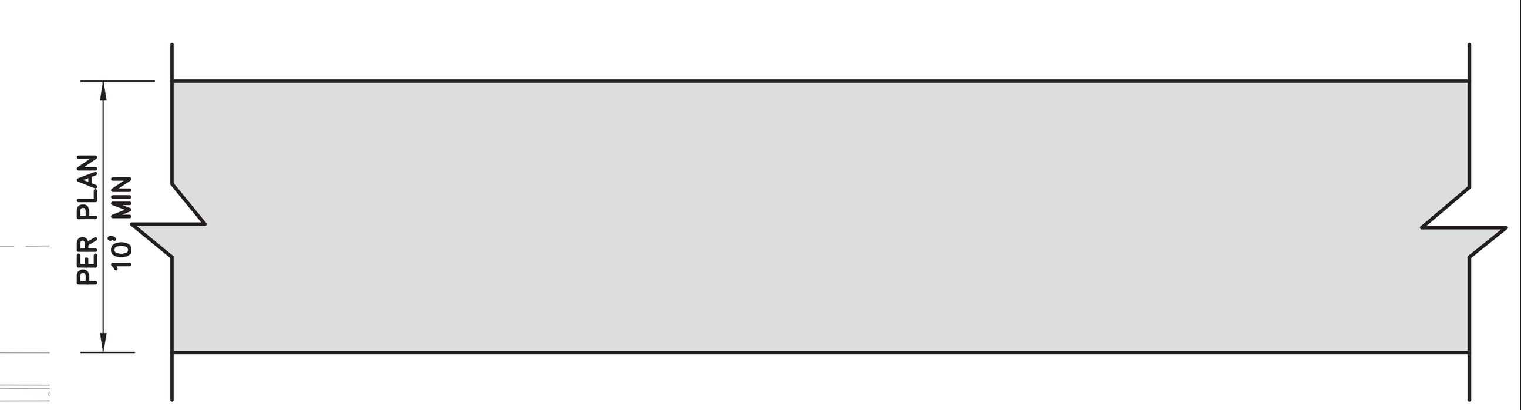


2016 ROAD & BRIDGE STANDARDS



2016 ROAD & BRIDGE STANDARDS





PLAN VIEW

TYPICAL ASPHALT SIDEWALK DETAIL

NOT TO SCALE

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GRAPHIC SCALE
30 15 0 30 60
scale 1" = 30' feet

QUARTERPATH

COMMONWEALTH OF VIRGINIA
06-28-18
STEPHEN M. BLEVINS
Lic. No. 32265
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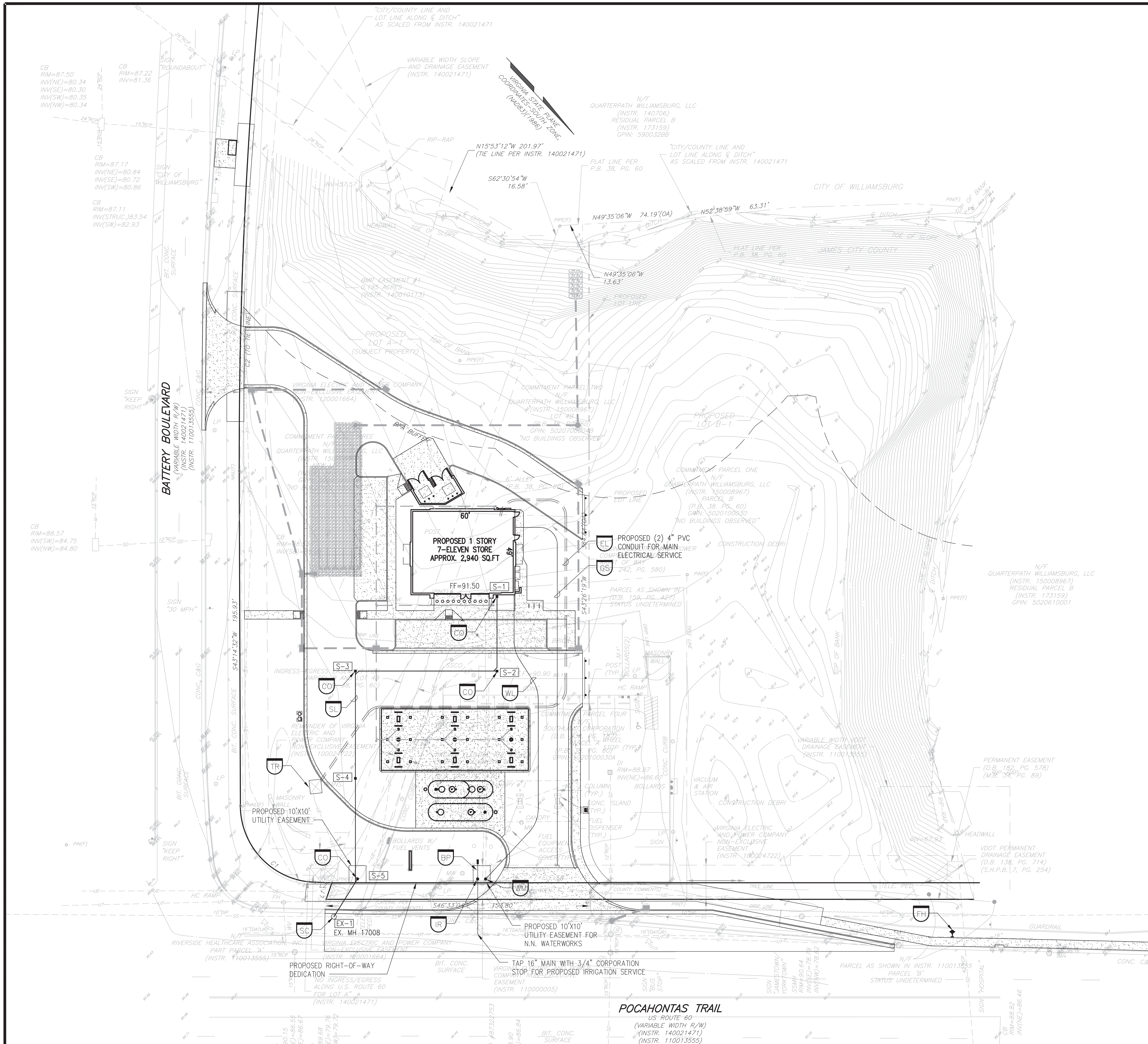
LOCATION POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE PHASE II IMPROVEMENTS
STORE NUMBER 38064
SITE ADDRESS 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
SHEET NO. CL-5.1

QUARTERPATH

FILE NAME: P:\6160-Verdad\6160.54-Quaterpath\Cad\9-CL-5.1 Layout.dwg LAYOUT NAME: COVER SHEET PLOTTED: Thursday, June 28, 2018 - 8:27am



UTILITY NOTES:

1. CONTRACTOR MUST NOTIFY PUBLIC UTILITIES – DISRUPTION TO SERVICE CONSTRUCTION REPRESENTATIVE SEVEN (7) CALENDAR DAYS PRIOR TO ANY NIGHT TIME SHUTDOWN OF THE WATER LINE.
2. LOCATION OF EXISTING UTILITIES – LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO BLAKEWAY CORPORATION AT 226–0081.
3. BRASS FITTINGS – BRASS FITTINGS TO MEET CDA NO. C89520 WITH NO MORE THAN ONE–FORTH OF ONE PERCENT (0.25% OR LESS) TOTAL LEAD CONTENT BY WEIGHT FOR CORPORATION STOPS, METER VALVES AND SERVICES COUPLINGS.
4. UTILITY VERIFICATION – CONTRACTOR SHALL VERIFY THE LOCATION AND INVERTS OF ALL UTILITIES BEFORE INSTALLATION. IF THE LOCATION OR INVERT OF ANY UTILITY DIFFERS FROM THE SITE PLAN, THE CONTRACTOR SHALL CONTACT BLAKEWAY CORPORATION (757–226–0081) BEFORE PROCEEDING WITH INSTALLATION.
5. WATER SERVICE LINES SHALL BE ABANDONED AT THE CITY MAIN. THE WATER SERVICE LINE SHALL BE DETACHED FROM THE CORPORATION STOP BY REMOVING A THREE (3) FT. SECTION OF PIPE AT THE CITY MAIN. THE CORPORATION STOP IS TO BE TURNED OFF AND CAPPED. THE EXISTING WATER METER AND BOX SHALL BE REMOVED AND DELIVERED TO PUBLIC UTILITIES/OPERATIONS (3500 DAM NECK ROAD, VIRGINIA BEACH, VA 23456).
6. IF ANY METER THAT SERVICES AN IRRIGATION SYSTEM OR YARD HYDRANT IS REMOVED IN THE FUTURE, THE WATER SERVICE LINE MUST BE ABANDONED AS PER DSC NOTICE #179, "ABANDONMENT OF A PUBLIC UTILITY SERVICE LINE OR MAIN".
7. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES MUST BE CORE DRILLED AND RUBBER BOOT ADDED.

SANITARY SEWER LEGEND:

PROPOSED 7–ELEVEN BUILDING
FF=91.50
INV=88.50
BUILDING TO S–1 5' OF 4" PVC PIPE @ 1.0% SLOPE

S–1 SANITARY SEWER CLEANOUT
RIM=91.40
INV=88.45
S–1 TO S–2 47' OF 4" PVC PIPE @ 1.7% SLOPE

S–2 SANITARY SEWER CLEANOUT
RIM=90.50
INV=87.65
S–2 TO S–3 81' OF 4" PVC PIPE @ 2.0% SLOPE

S–3 SANITARY SEWER CLEANOUT
RIM=90.30
INV=86.00
S–3 TO S–4 61' OF 4" PVC PIPE @ 2.0% SLOPE

S–4 SANITARY SEWER CLEANOUT
RIM=90.30
INV=84.80
S–4 TO S–5 61' OF 4" PVC PIPE @ 2.0% SLOPE

S–5 SANITARY SEWER CLEANOUT
RIM=90.00
INV=83.50
S–5 TO EX–1 24' OF 4" PVC PIPE @ 10.0% SLOPE

EX–1 EXISTING SANITARY SEWER MANHOLE (EX. MH 17008)
(END OF COUNTY MAINTENANCE)
RIM=89.68
INV(PROPOSED)=81.00
INV(SE)=79.76
INV(NW)=79.72

UTILITY LEGEND:

- WM — NEW 1" WATER METER AND BOX
- WL — PROPOSED 1–1/2" TYPE K COPPER WATER SERVICE LINE
- SL — PROPOSED PVC (SDR 26) SANITARY SEWER LATERAL
- CO — PROPOSED SANITARY CLEANOUT, TYP. SEE SHEET CDT–10.3 FOR DETAILS
- SC — CONNECT TO EXISTING SANITARY SEWER MANHOLE
- EL — PROPOSED UNDERGROUND ELECTRICAL. COORDINATE WITH POWER COMPANY FOR ACTUAL LOCATION OF SERVICE TO BUILDING
- BP — PROPOSED BACKFLOW PREVENTER WITH HOTBOX, SEE SHEET LA–8.1 FOR MORE INFORMATION
- IR — PROPOSED 3/4" TYPE K COPPER IRRIGATION SERVICE LINE AND 5/8" IRRIGATION METER. TIE TO EXISTING WATER MAIN WITH 3/4" CORPORATION STOP

BEFORE YOU DIG, TO MISS UTILITIES CALL 'MISS UTILITY' OF VIRGINIA. TOLL FREE 811

GRAPHIC SCALE
30 15 0 30 60
scale feet
SCALE 1"=30'

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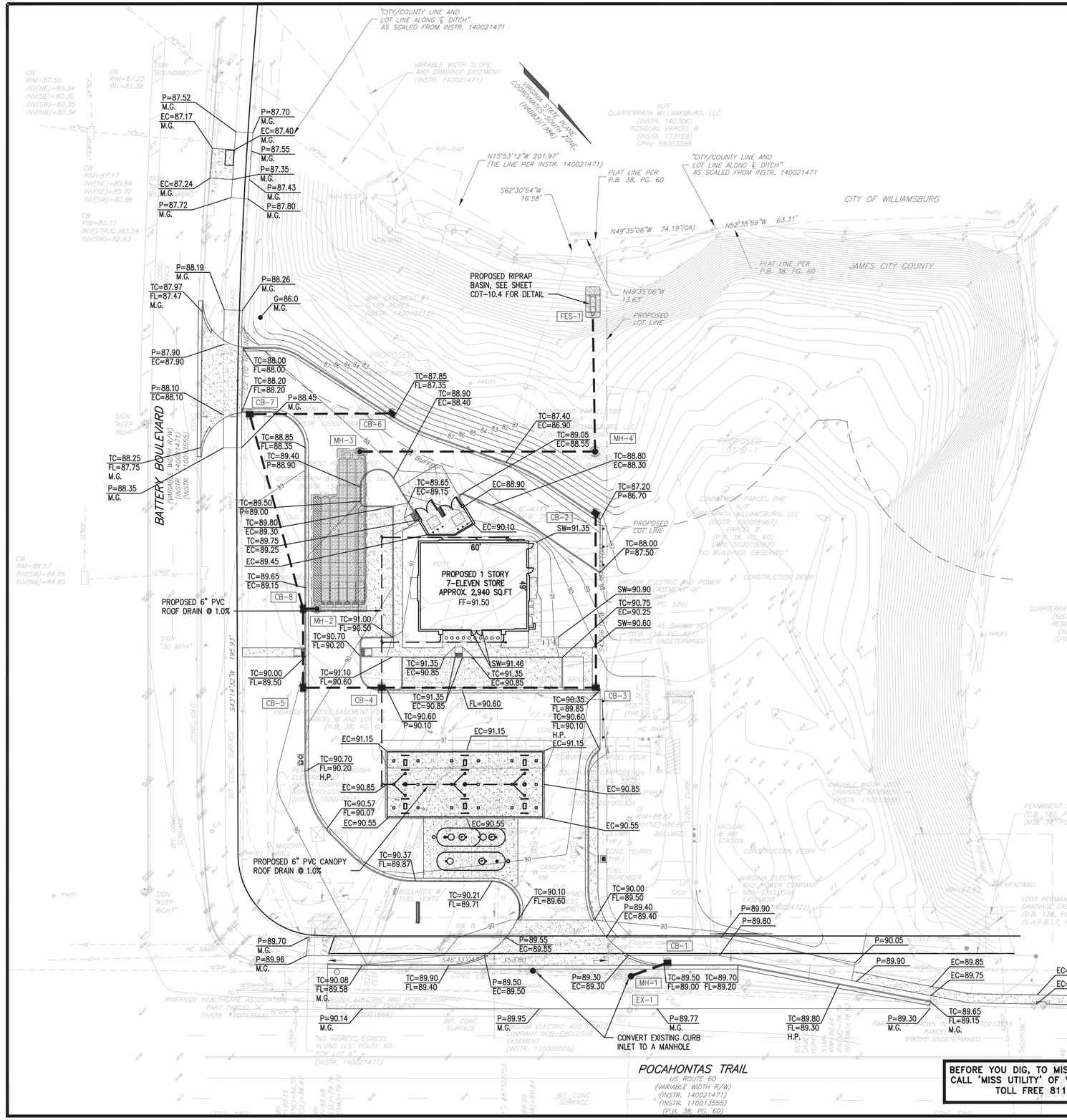
DATE ISSUED 01/17/18 · DRAWN BY GAF · REVIEWED BY SMB · DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: UTILITY PLAN
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
SHEET NO. CU-6.0



STORM SEWER LEGEND DA-A

CB-1 VDOT DI-3A CURB INLET
RIM=89.50
INV=85.75

CB-1 TO MH-1 22' OF 15" RCP @ 0.5%

MH-1 CONVERT EXISTING CURB INLET TO MANHOLE
RIM=89.30
INV=85.65

MH-1 TO EX-1 8' OF EXISTING 15" RCP @ 13.5%

STORM SEWER LEGEND DA-B

CB-2 VDOT DI-3A CURB INLET
RIM=87.20
INV=84.20

CB-2 TO CB-3 96' OF 15" RCP PIPE @ 0.3%

CB-3 VDOT DI-3A CURB INLET
RIM=90.35
INV=83.90

CB-3 TO CB-4 117' OF 15" RCP PIPE @ 0.3%

CB-4 VDOT DI-3A CURB INLET
RIM=90.60
INV=83.55

CB-4 TO CB-5 45' OF 15" RCP @ 0.3%

CB-5 VDOT DI-3A CURB INLET
RIM=90.15
INV=83.40

CB-5 TO CB-8 44' OF 15" RCP @ 2.6%

CB-6 VDOT DI-3A CURB INLET
RIM=87.85
INV=84.85

CB-6 TO CB-7 79' OF 15" RCP @ 0.5%

CB-7 VDOT DI-3A CURB INLET
RIM=88.25
INV=84.45

CB-7 TO CB-8 112' OF 15" RCP @ 2.0%

CB-8 VDOT DI-3A CURB INLET
RIM=89.75
INV=82.27

CB-8 TO MH-2 8' OF 15" RCP @ 0.4%

MH-2 VDOT MH-1 MANHOLE
RIM=89.30
INV(IN)=82.24
INV(STRUCTURE)=80.24

MH-3 VDOT MH-1 MANHOLE
RIM=88.00
INV=80.74

MH-3 TO MH-4 130' OF 18" RCP @ 6.3%

MH-4 VDOT MH-1 MANHOLE
RIM=80.50
INV(A)=72.50
INV(B)=65.00

MH-4 TO FES-1 73' OF 18" RCP @ 5.5%

FES-1 VDOT ES-1 FLARED END SECTION
RIM=57.50
INV=61.00

LEGEND OF GRADE NOTATIONS:

TC	=	TOP OF CURB
FL	=	FLOW LINE OF GUTTER
P	=	ASPHALT OR CONCRETE PAVEMENT SURFACE
SW	=	SIDEWALK SURFACE
EC	=	EDGE OF CONCRETE
G	=	GROUND SURFACE
M.G.	=	MATCH EXISTING GRADE
H.P.	=	HIGH POINT OF GRADED SURFACE
W.D.	=	WIPE TOP OF CURB DOWN TO MATCH EXISTING

GRADING NOTES:

1. ALL CROSS AND LONGITUDINAL SLOPES ALONG ALL ACCESSIBLE ROUTES SHALL BE INSTALLED IN ACCORDANCE WITH ICC/ANSI A117.1, 2003 EDITION
2. ALL STORM STRUCTURES SHALL MEET JAMES CITY COUNTY STANDARDS. ALL STRUCTURES WITHIN THE RIGHT-OF-WAY SHALL MEET VDOT STANDARDS. ALL PIPE LENGTHS ARE FROM CENTER OF STRUCTURE.
3. ALL CONCRETE PIPE WITHIN THE RIGHT-OF-WAY OR SUBJECT TO TRAFFIC MUST BE CLASS III UNLESS OTHERWISE SPECIFIED.
4. THE PIPE CONNECTION ON JAMES CITY COUNTY RIGHT-OF-WAY SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. ANY MILLING AND OVERLAYING REQUIRED TO OBTAIN A SMOOTH PAVEMENT TRANSITION IN THE PAVEMENT PATCH AREA SHALL BE AT THE DIRECTION AND DISCRETION OF THE JAMES CITY COUNTY INSPECTOR.

ELEVEN®

COMMONWEALTH OF VIRGINIA
06-28-18
STEPHEN M. BLEVINS
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PROFESSIONAL ENGINEER

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DESCRIPTION	DATE	REV

DATE ISSUED 01/17/18
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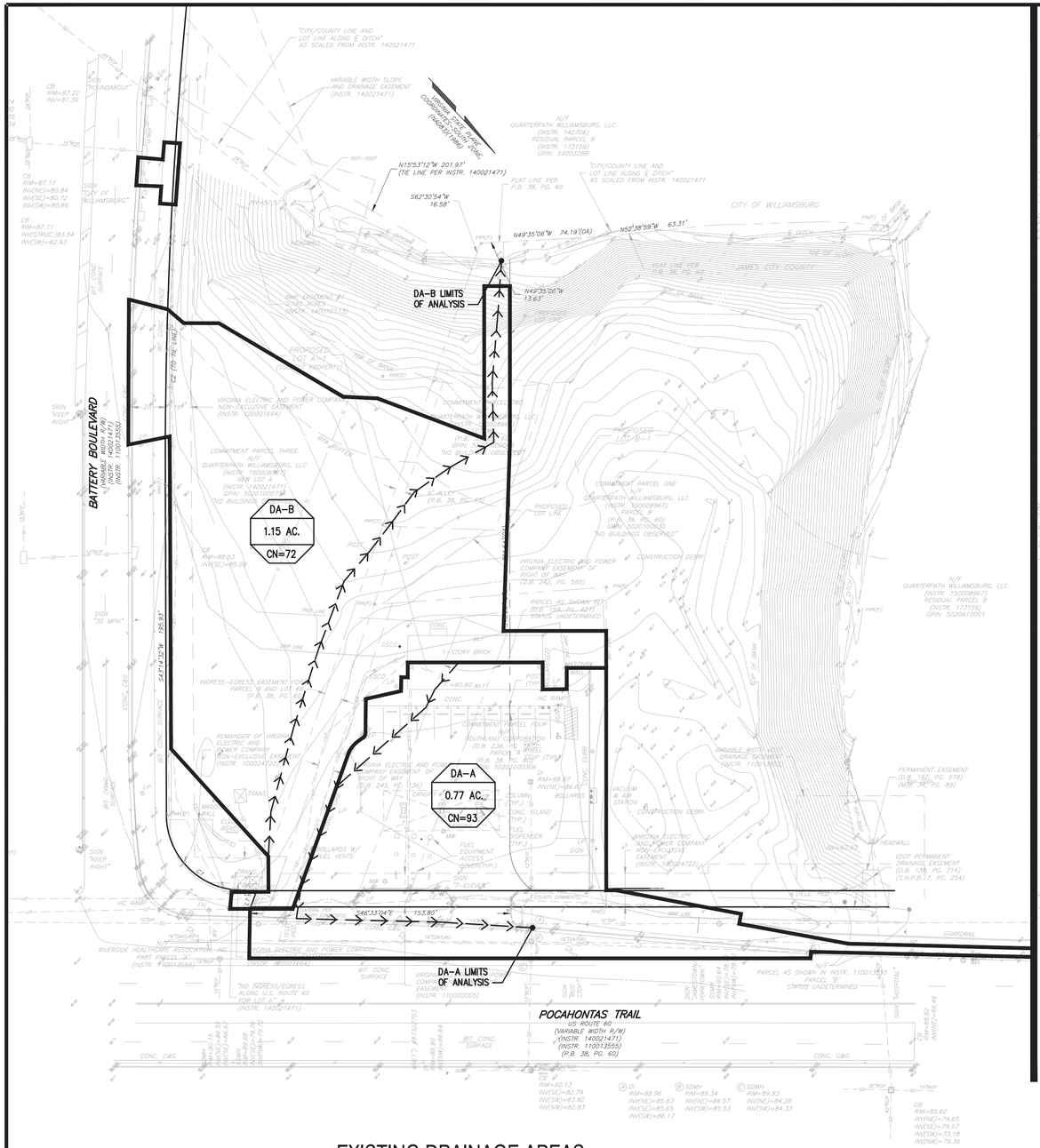
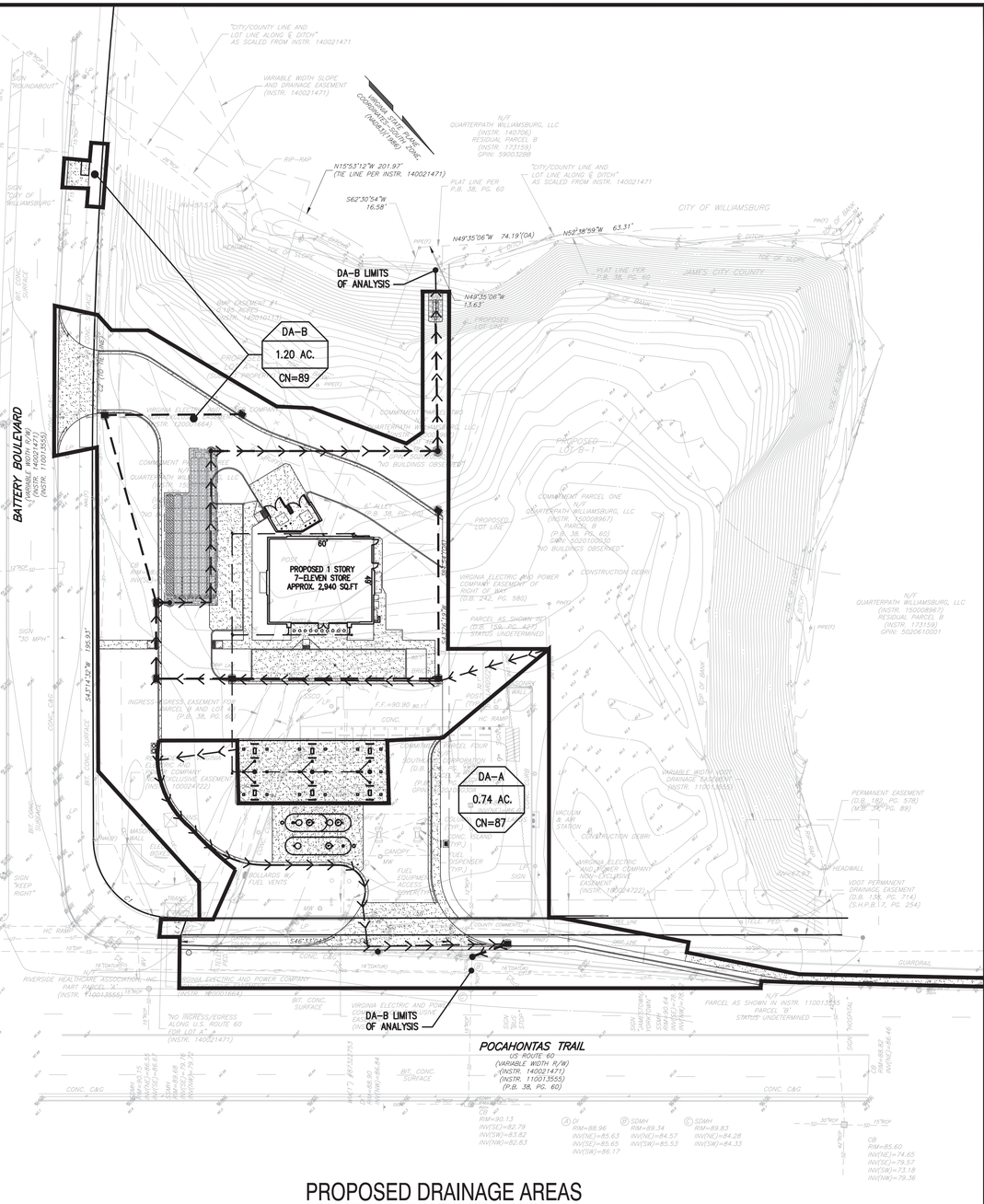
LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: GRADING PLAN
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER: 38064
SHEET NO: CG-7.0



EXISTING DRAINAGE AREAS



PROPOSED DRAINAGE AREAS

GRAPHIC SCALE
40 20 0 40 80
scale feet
SCALE 1"=40'

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NO.	DESCRIPTION	DATE

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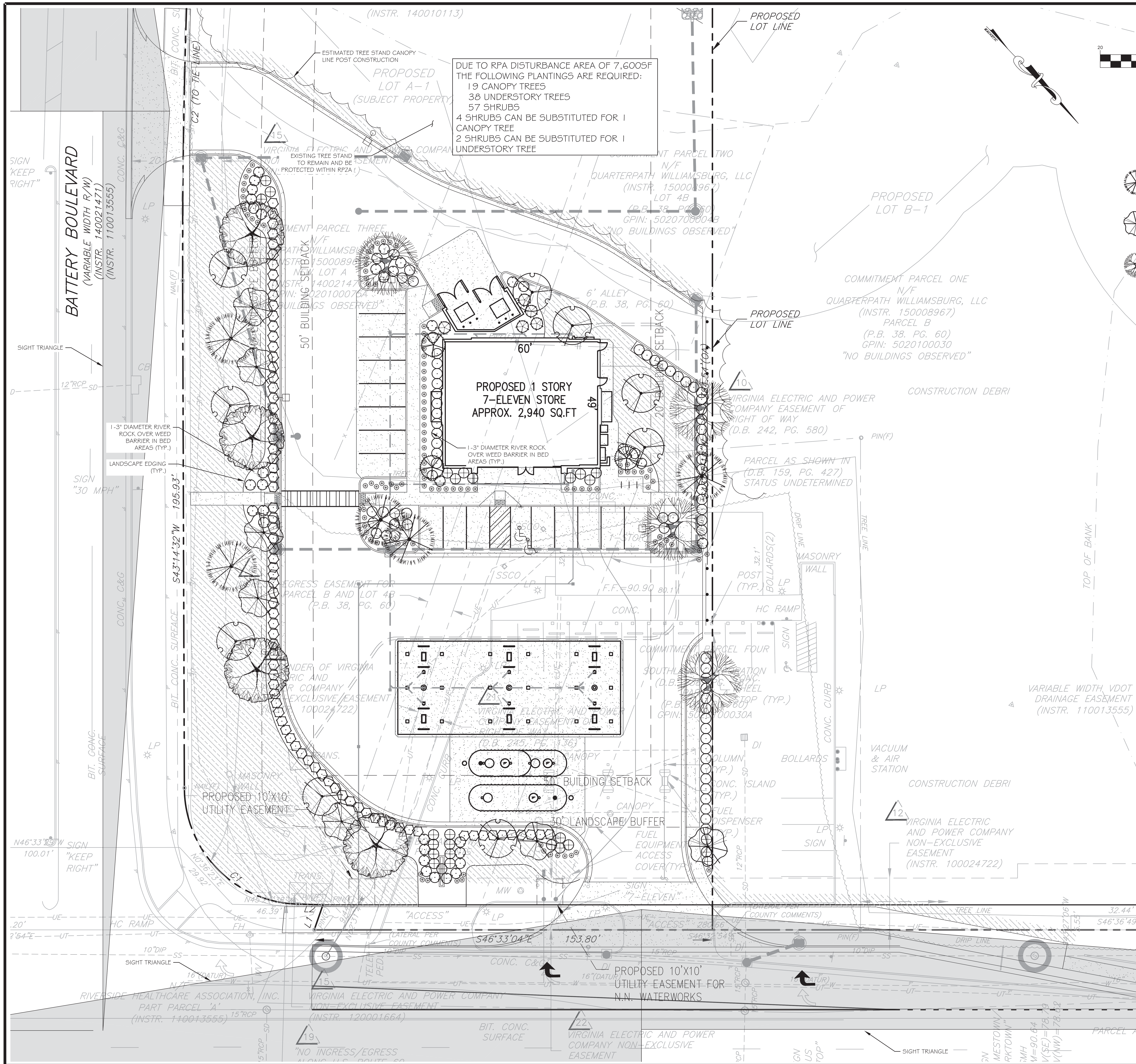
LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: DRAINAGE AREA PLAN
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

SHEET NO. CG-7.1

QUARTERPATH


DUE TO RPA DISTURBANCE AREA OF 7,600SF
THE FOLLOWING PLANTINGS ARE REQUIRED:
19 CANOPY TREES
38 UNDERSTORY TREES
57 SHRUBS
4 SHRUBS CAN BE SUBSTITUTED FOR 1 CANOPY TREE
2 SHRUBS CAN BE SUBSTITUTED FOR 1 UNDERSTORY TREE
ESTIMATED TREE STAND CANOPY LINE POST CONSTRUCTION
EXISTING TREE STAND TO REMAIN AND BE PROTECTED WITHIN RPZA
PROPOSED LOT A-1 (SUBJECT PROPERTY)
PROPOSED LOT LINE
PROPOSED LOT B-1
BATTERY BOULEVARD (VARIABLE WIDTH R/W) (INSTR. 140021471) (INSTR. 110013555)
SIGHT TRIANGLE
1-3" DIAMETER RIVER ROCK OVER WEED BARRIER IN BED AREAS (TYP.)
LANDSCAPE EDGING (TYP.)
50' BUILDING SETBACK
PROPOSED 1 STORY 7-ELEVEN STORE APPROX. 2,940 SQ.FT
60'
49'
6' ALLEY (P.B. 38, PG. 60)
COMMITMENT PARCEL ONE N/F QUARTERPATH WILLIAMSBURG, LLC (INSTR. 150008967) PARCEL B (P.B. 38. PG. 60) GPIN: 5020100030 "NO BUILDINGS OBSERVED"
COMMITMENT PARCEL TWO N/F QUARTERPATH WILLIAMSBURG, LLC (INSTR. 150008967) LOT 4B (P.B. 38, PG. 60) GPIN: 502070004B "NO BUILDINGS OBSERVED"
CONSTRUCTION DEBRI
VIRGINIA ELECTRIC AND POWER COMPANY EASEMENT OF RIGHT OF WAY (D.B. 242, PG. 580)
PARCEL AS SHOWN IN (D.B. 159, PG. 427) STATUS UNDETERMINED
INGRESS/EGRESS EASEMENT FOR PARCEL B AND LOT 4B (P.B. 38, PG. 60)
PROPOSED 10'X10' UTILITY EASEMENT
50' BUILDING SETBACK
30' LANDSCAPE BUFFER
VARIABLE WIDTH VDOT DRAINAGE EASEMENT (INSTR. 110013555)
VIRGINIA ELECTRIC AND POWER COMPANY NON-EXCLUSIVE EASEMENT (INSTR. 100024722)
VACUUM & AIR STATION
PROPOSED 10'X10' UTILITY EASEMENT FOR N.N. WATERWORKS
RIVERSIDE HEALTHCARE ASSOCIATION, INC. PART PARCEL 'A' (INSTR. 110013555)
VIRGINIA ELECTRIC AND POWER COMPANY NON-EXCLUSIVE EASEMENT (INSTR. 120001664)
S43°14'32"W 195.93'
S46°33'04"E 153.80'
S46°36'49"E 32.44'
GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

G. I. Joseph Vaughn
480 Cloud View Ct
Prosper, TX 75078
t 972-827-5677

PLANT SCHEDULE

TREES	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	9	Eastern Redbud / Cercis canadensis	B & B	2"Cal	8-10`H
	5	Atlantic White Cedar / Chamaecyparis thyoides	B & B		8-10`H
	3	Dahoon Holly / Ilex cassine	25 gal	2"Cal	8-10`H
	7	Dwarf Southern Magnolia / Magnolia grandiflora `Little Gem`	B & B	2.5"Cal	8-10`H
	4	Willow Oak / Quercus phellos	B & B	4"Cal	10-12` H
	4	Autumn Glow Japanese Zelkova / Zelkova serrata `Autumn Glow`	B & B	2.5"Cal	8-10`H

SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	CONT
⊙	42	Glossy Abelia / Abelia x grandiflora `Kaleidoscope` Min. 22" height at planting	5 gal
⊕	27	Autumn Embers Azalea / Azalea Encore `Autumn Embers` TM Min. 22" height at planting	5 gal
⬡	81	Carissa Holly / Ilex cornuta `Carissa` Min. 18" height at planting	5 gal
⊙	66	Dwarf Yaupon / Ilex vomitoria `Nana` Min. 18" height at planting	3 gal
⊛	5	Sea Green Juniper / Juniperus x pfitzeriana `Sea Green` Min. 24" height at planting	7 gal
⚙	111	Little Bunny Fountain Grass / Pennisetum alopecuroides `Little Bunny`	1 gal

GROUND COVERS	QTY	COMMON NAME / BOTANICAL NAME	CONT	SPACING
▨	13,755 sf	Bermuda Grass / Cynodon dactylon `Tif 419`	sod	

CITY REQUIREMENTS:

		REQ.	PROV.
LANDSCAPE AREA	30% OF THE SITE SHALL BE LANDSCAPE AREA 81,734SF X 0.30 = 24,520SF	24,520	44,966
	SIDE YARD: 15' WIDE LANDSCAPE AREA WITH 1 TREE PER 400SF 395LF X 15' / 400SF = 15 TREES & 45 SHRUBS	15 / 45	*15 / 45
	REAR YARD: 15' WIDE LANDSCAPE AREA WITH 1 TREE PER 400SF 232LF X 15' / 400SF = 9 TREES & 27 SHRUBS	9 / 27	*9 / *27
	STREET YARD: 30' WIDE LANDSCAPE AREA WITH 1 TREE PER 400SF 666LF X 30' / 400SF = 50 TREES & 150 SHRUBS	50 / 150	*50 / 150
	BUILDING AREA: 10' WIDE AROUND 1/2 BUILDING FACADE FACING STREET WITH 1 ORN. TREE OR 5 SHRUBS PER 200SF (NOTED AS PLANT UNITS BELOW) 218LF X 10' X 0.5 / 200SF = 11 UNITS	11	12
PARKING AREA LANDSCAPE	10% OF THE TOTAL PARKING AREA MUST BE LANDSCAPED 18,357SF X 0.10 = 1,838SF	1,838	1,859
	1 TREE AND 2 SHRUBS PER 5 PARKING SPACES 19 SPACES / 5 = 4 TREES 19 SPACES / 5 X 2 = 8 SHRUBS	4 8	4 28
	PARKING AREAS SHALL BE SCREENED WITH EVERGREEN SHRUBS AND/OR BERMS		PROVIDED
TREE PRESERVATION		TBD	TBD

*EXISTING TREES IN RPZA TREE STAND TO REMAIN COUNTED TOWARD LANDSCAPE REQUIREMENT.

GENERAL LANDSCAPE NOTES:

1. CONTRACTORS SHALL HAVE UNDERGROUND UTILITIES LOCATED, LEGIBLY MARKED, AND SHALL REPAIR ANY AND ALL DAMAGE WHICH MAY OCCUR AS A RESULT OF LANDSCAPE INSTALLATION. UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATED, AND SHOULD BE VERIFIED ON THE CIVIL UTILITY PLAN AND IN THE FIELD.
2. UNDER NO CIRCUMSTANCES WILL LANDSCAPE WORK BE APPROVED FOR PAYMENT IF PLANT SIZE AND GENERAL HEALTH ARE NOT AS REQUIRED ON PLAN.
3. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON PLANT LIST.
4. ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS AS SPECIFIED. LARGE CANOPY STREET TREES AND THOSE TREES LOCATED NEAR GROUND SIGNAGE SHALL BE LIMBED UP TO A HEIGHT OF 8' ABOVE GRADE TO ENSURE SAFE SIGHT LINES ARE ACHIEVED FOR VEHICULAR NAVIGATION TO AND FROM THE SITE.
5. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AND THE OWNER BEFORE, DURING AND AFTER INSTALLATION.
6. THE LANDSCAPE ARCHITECT MUST APPROVE ANY ALTERATIONS OR REVISIONS TO THE LANDSCAPE PLAN.
7. THE LANDSCAPE ARCHITECT MUST APPROVE THE STAKED LOCATION OF ALL PLANT MATERIAL BEFORE INSTALLATION.
8. THE CONTRACTOR SHALL PROTECT EXISTING FEATURES ON SITE.
9. ALL PLANTING AREAS, AND UNPAVED AREAS ON SITE NOT SPECIFIED FOR BED AREAS, MUST BE COMPLETELY SODDED, SEEDED, OR HYDROSEEDED. ANY PERMEABLE AREAS (ON SITE, OFF SITE, OR IN RIGHT-OF-WAY, DAMAGED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND SODDED, SEEDED OR HYDROSEEDED. ALL SLOPES THAT EXCEED 3:1 SHALL BE TREATED WITH SOD UNLESS SPECIFIED OTHERWISE ON PLAN.
10. ALL BEDS AREAS SHALL BE PREPARED FOR PLANTING BY REMOVING GRASS AND WEEDS FROM THE AREA, ROTO TILLING TO A MINIMUM DEPTH OF 6", AND MIXING BED AMENDMENT INTO THE PREPARED BED AREA TO A DEPTH OF 4". AMOUNT AND TYPE OF AMENDMENT TO BE LOCALLY SOURCED BED MIX AND/OR COMPOST FREE OF DEBRI, ROOTS, AND SEED.
11. ALL BED AREAS SHALL RECEIVE A MINIMUM 3" DEPTH OF 1-3" DIAMETER RIVER ROCK GRAVEL OVER WEED BARRIER FABRIC UNLESS SPECIFIED ON PLAN DIFFERENTLY. BED AREAS ADJACENT TO TURF GRASS LAWN AREAS SHALL BE SEPARATED FROM THE LAWN WITH LANDSCAPE EDGING.
12. ALL PARKING LOT ISLANDS, PENINSULAS, AND PLANTING AREAS SHALL BE EXCAVATED TO REMOVE ALL CRUSHER RUN OR PARKING LOT BASE MATERIAL AND BACK FILLED WITH QUALITY TOPSOIL, EXCEPT THOSE AREAS WHERE EXISTING VEGETATION IS TO BE PRESERVED. THE TOPSOIL SHALL BE HIGH IN ORGANIC MATTER AND SHALL ALLOW WATER TO PERCOLATE READILY. THE EXCAVATION OF THESE PLANTING AREAS SHALL BE TO A MINIMUM OF 24" AND WILL FREELY ALLOW PENETRATION OF A HAND-HELD PROBE TO A MINIMUM OF 24". INSPECTION OF THESE PLANTING AREAS SHALL BE CONDUCTED BY ENGINEERING AND RESOURCE PROTECTION INSPECTORS DURING THE CONSTRUCTION PROCESS.
13. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THESE PLANS, BEFORE PRICING THE WORK.
14. THE LANDSCAPE CONTRACTOR SHALL FULLY MAINTAIN ALL PLANTING (INCLUDING BUT NOT LIMITED TO WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF PLANTING AREAS AND LAWNS FOR 90 DAYS AFTER SUBSTANTIAL COMPLETION.
15. THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR ONE (1) YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION. THE LANDSCAPE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE THE END OF THE GUARANTEE PERIOD (AS PER DIRECTION OF THE OWNER).
16. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
17. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUMS QUALITY REQUIREMENTS FOR PLANT MATERIAL.
18. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FINISHED GRADING ALL LANDSCAPE PARKING ISLANDS. FINISHED GRADE IN ISLANDS IS TO BE CROWNED APPROXIMATELY 12"-18" ABOVE THE TOP OF CURB. SOIL IN ISLANDS IS TO BE FREE OF UNSUITABLE MATERIAL AND DEBRIS I.E. GRAVEL OR ASPHALT.
19. IF CONTRACTOR IS UNABLE TO DIG PLANT PITS TO A DEPTH THAT WILL PROVIDE THE AREA OF SOIL AROUND THE ROOT BALL DUE TO ROCK, CONTACT ARCHITECT, CIVIL ENGINEER, AND CITY HORTICULTURIST IMMEDIATELY.
20. THE TOP EDGE OF ALL LANDSCAPE EDGING SHALL BE A MINIMUM OF 5" BELOW FINISHED FLOOR ELEVATION.
21. THE LANDSCAPE CONTRACTOR SHALL PROVIDE AND INSTALL SITE IRRIGATION SYSTEM AFTER DESIGN IS SUBMITTED FOR APPROVAL.

COMMONWEALTH OF VIRGINIA
GEX JOSEPH VAUGHN
Cert. No. 1859
LANDSCAPE ARCHITECT
05-11-18

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surveying + engineering + environmental
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P757.226.0081 - F757.226.8765
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REV	DATE	DESCRIPTION
1		
2		
3		
4		
5		
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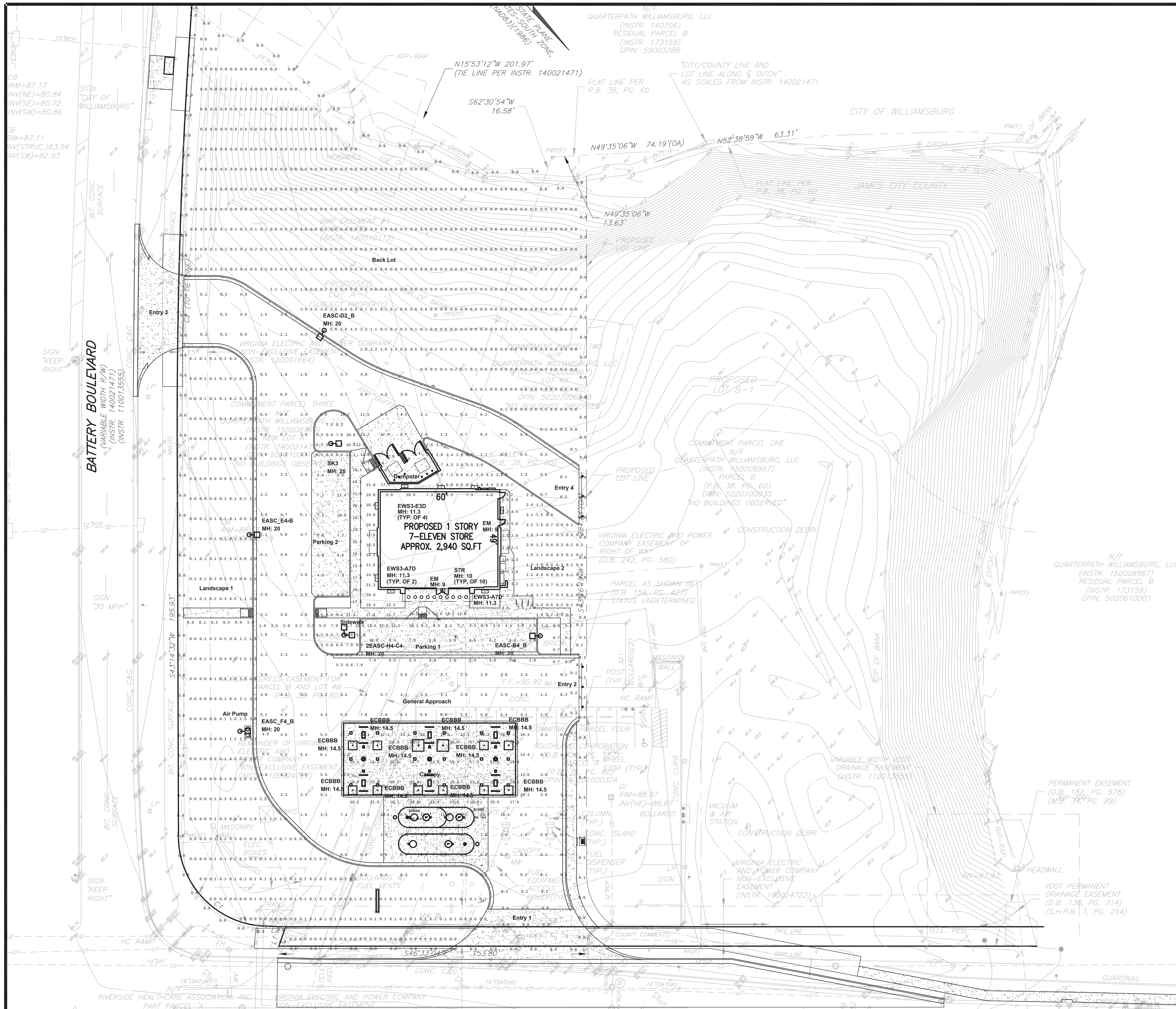
7		

DATE ISSUED 01-12-18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

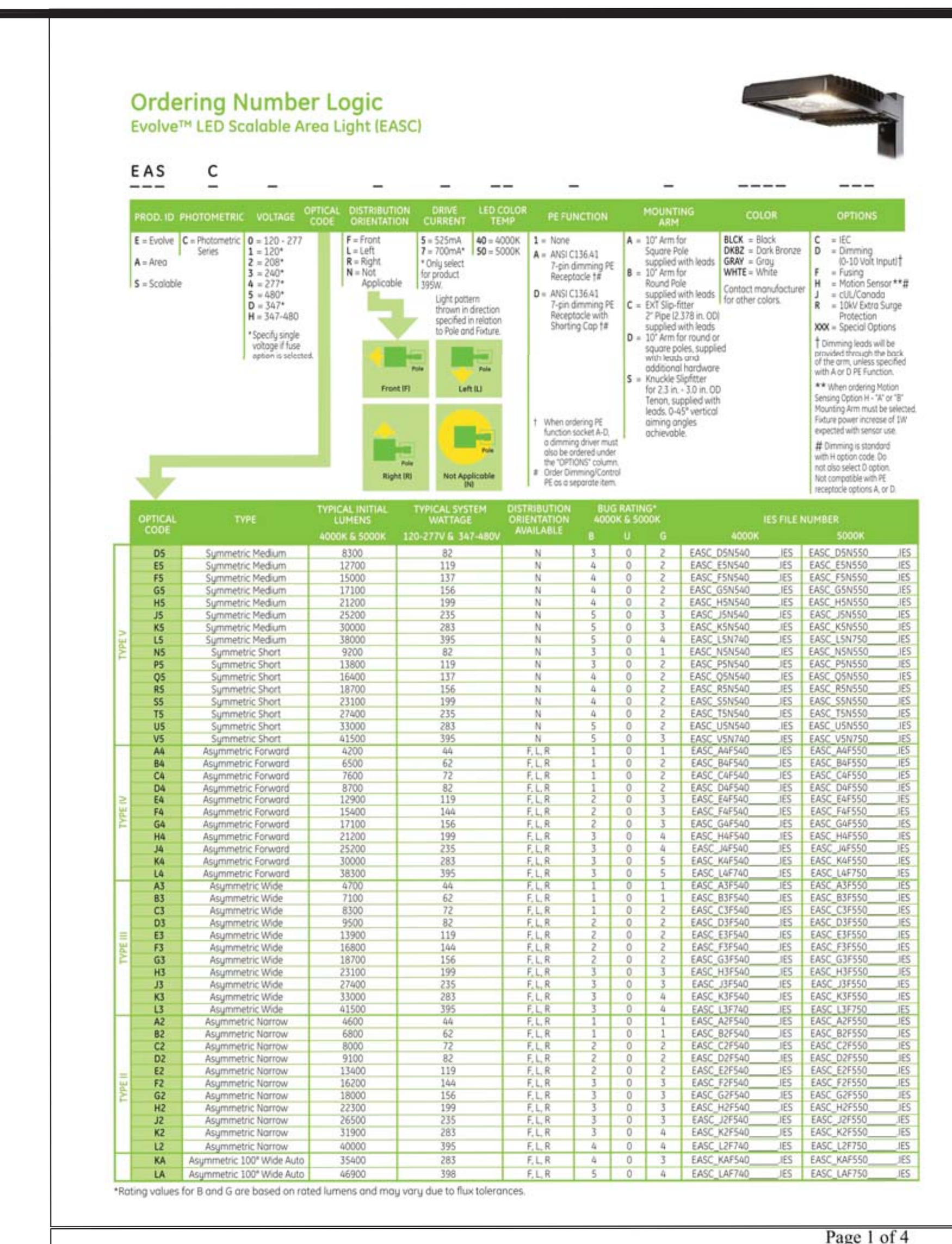
LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: LANDSCAPE PLAN
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
SHEET NO. LA-8.0

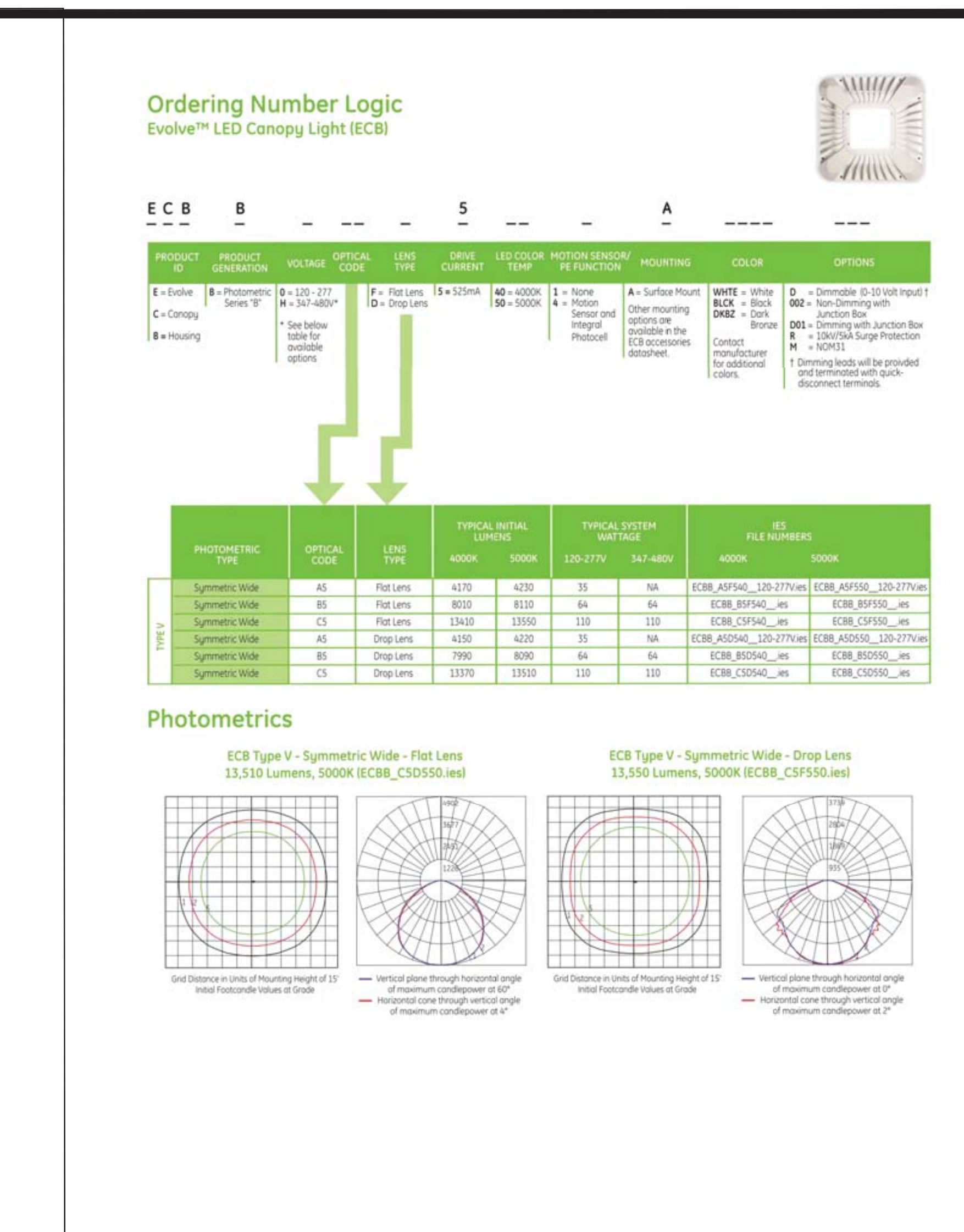

BATTERY BOULEVARD
(VARIABLE WIDTH R/W)
(INSTR. 140021471)
(INSTR. 110013555)
CITY OF WILLIAMSBURG
JAMES CITY COUNTY
PROPOSED 1 STORY
7-ELEVEN STORE
APPROX. 2,940 SQ.FT
Back Lot
Entry 1
Entry 2
Entry 3
Entry 4
General Approach
Canopy
Dumpster
Air Pump
Landscape 1
Landscape 2
Parking 1
Parking 2
Sidewalk
EASC-D2_B MH: 20
EASC_E4-B MH: 20
EASC_F4_B MH: 20
EASC-B4_B MH: 20
2EASC-H4-C4 MH: 20
SK3 MH: 20
EWS3-E3D MH: 11.3 (TYP. OF 4)
EWS3-A7D MH: 11.3 (TYP. OF 2)
S7R MH: 10 (TYP. OF 10)
EM MH: 9
ECBBB MH: 14.5
PROPOSED LOT A-1 (SUBJECT PROPERTY)
PROPOSED LOT B-1
COMMITMENT PARCEL ONE
COMMITMENT PARCEL TWO
COMMITMENT PARCEL THREE
COMMITMENT PARCEL FOUR
QUARTERPATH WILLIAMSBURG, LLC
N15°53'12"W 201.97' (TIE LINE PER INSTR. 140021471)
S62°30'54"W 16.58'
N49°35'06"W 74.19'(OA)
N52°38'59"W 63.31'
N49°35'06"W 13.63'
S43°14'32"W 195.93'
S46°33'04"E 153.80'
RIVERSIDE HEALTHCARE ASSOCIATION, INC. PART PARCEL 'A' (INSTR. 110013555)
VIRGINIA ELECTRIC AND POWER COMPANY NON-EXCLUSIVE EASEMENT (INSTR. 100024722)

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Air Pump	Illuminance	Fc	5.0	5.1	4.9	1.0	1.0
Back Lot	Illuminance	Fc	0.1	6.1	0.0	N.A.	N.A.
Canopy	Illuminance	Fc	19.9	24.0	15.8	1.3	1.5
Dumpster	Illuminance	Fc	10.5	17.6	4.4	2.4	4.0
Entry 1	Illuminance	Fc	0.1	0.1	0.1	1.0	1.0
Entry 2	Illuminance	Fc	0.3	0.5	0.1	2.8	5.0
Entry 3	Illuminance	Fc	0.1	0.1	0.1	1.0	1.0
Entry 4	Illuminance	Fc	0.2	0.2	0.1	1.5	2.0
General Approach	Illuminance	Fc	3.9	18.2	0.1	39.2	182.0
Landscape 1	Illuminance	Fc	0.4	4.5	0.0	N.A.	N.A.
Landscape 2	Illuminance	Fc	5.3	23.8	0.0	N.A.	N.A.
Parking 1	Illuminance	Fc	4.9	10.6	1.8	2.7	5.9
Parking 2	Illuminance	Fc	7.5	12.4	4.9	1.5	2.5
Property Line	Illuminance	Fc	0.0	0.4	0.0	N.A.	N.A.
Sidewalk	Illuminance	Fc	7.3	21.1	0.0	N.A.	N.A.

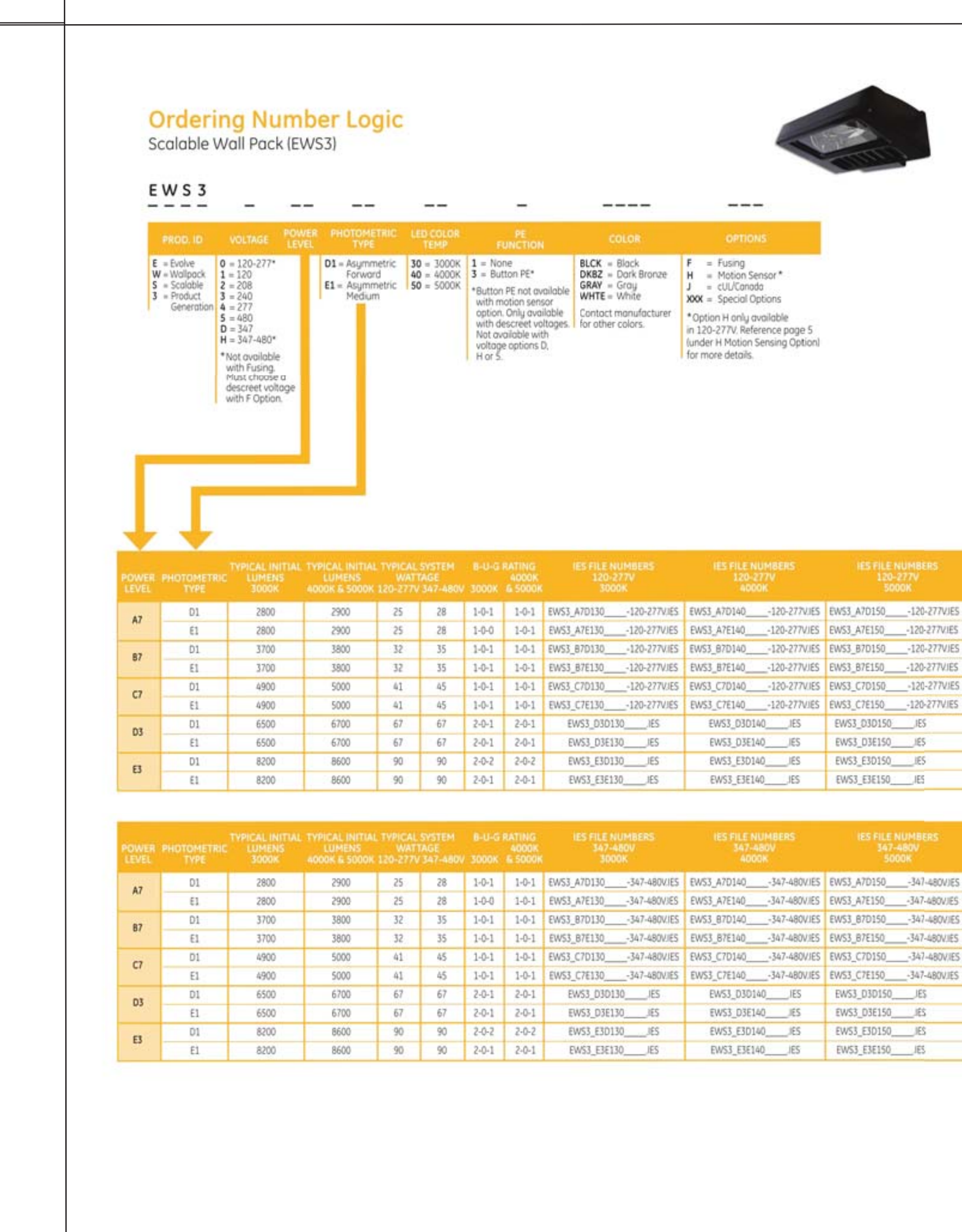
LIGHTING NOTES:
1. ALL PROPOSED LIGHT FIXTURES SHALL BE FULL CUT-OFF FULLY SHIELDED FIXTURES
2. PROPOSED CANOPY MOUNTED LIGHTS SHALL BE FULL CUT OFF FIXTURES AND RECESSED INTO THE CANOPY. SEE CANOPY CONSTRUCTION PLANS FOR DETAILS.

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lum. Watts	LLF	Description
	2	EM	SINGLE	18	0.010	WPLED18/EC
○	10	SR7	SINGLE	10	1.000	P7R-8-35K-10-WH (Phillips)
	2	EWS3-E3D	SINGLE	90	1.000	EWS3_E3D150_____
	6	EWS3-A7D	SINGLE	25	1.000	EWS3_A7D150_____-120-277V
	12	ECBBB	SINGLE	64	1.000	ECBB0B5F5501AWHTE
	1	EASC_F4_B	SINGLE	144	1.000	EASC_F4F550______ WITH ELS-EASX-RBL-BLCK
	1	EASC_E4-B	SINGLE	119	1.000	EASC_E4F550______ WITH ELS-EASX-RBL-BLCK
	1	EASC-D2_B	SINGLE	82	1.000	EASC_D2F550______ WITH ELS-EASX-ABL-BLCK
	1	EASC-B4_B	SINGLE	62	1.000	EASC_B4F550______ WITH ELS-EASX-RBL-BLCK
	1	SK3	SINGLE	283	1.000	1-EASC0K3F5509C Color
	1	2EASC-H4-C4	GROUP	N.A.	1.000	EASC_H4F550______ WITH ELS-EASX-FBN-BLCK + EASC_C4F550______ WITH ELS-EASX-RBL-BLCK






WPLED18/EC
RAB
Ultra-high efficiency LED 18 Watt wallpack. Patent Pending thermal management system. 100,000 hour L70 lifespan. 5-year, no-compromise warranty.
Color: Bronze
Weight: 14.9 lbs
Project: 7-Eleven
Type: N
Prepared By: Graybar
Date: 6-22-18
Driver Info
Type: Constant Current
120V: 0.17A
208V: 0.11A
240V: 0.09A
277V: 0.08A
Input Watts: 20W
Efficiency: 89%
LED Info
Watts: 18W
Color Temp: 5000K
Color Accuracy: 73 CRI
L70 Lifespan: 100000
Lumens: 2508
Efficacy: 124 LPW
https://www.rabweb.com/specSheet.php?product=WPLED18/EC
6/22/2018




PHILIPS
LIGHTOLIER
Downlighting
SlimSurface LED
5" and 7" round aperture surface mount downlight
SlimSurface LED is a 5/8" thick surface mounted luminaire with the appearance of a recessed downlight. Easy to install into most standard j-boxes, the SlimSurface LED round apertures are available as a 5" 650lm & 7" 1000lm fixture.
Ordering guide
Features
Electrical
Labels
SlimSurfaceLED-5in-7in-Round-S5R-S7R 09/17 page 1 of 7

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STEPHEN M. BLEVINS
Lic. No. 32265
06-28-18
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION
1		
2		
3		
4		
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7		

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION
POCAHONTAS TRL. AND BATTERY BLVD.

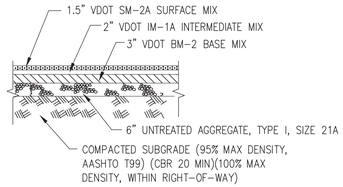
SHEET TITLE
LIGHTING PLAN

SITE ADDRESS
7337 POCAHONTAS TRAIL
JAMES CITY COUNTY, VA

STORE NUMBER
38064

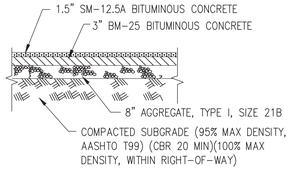
SHEET NO.
LT-9.0

FILE NAME: P:\6160-Verdad\6160.54-Quaterpath\Cad\14-LT-9.0 Lighting.dwg LAYOUT NAME: COVER SHEET PLOTTED: Thursday, June 28, 2018 - 8:30am



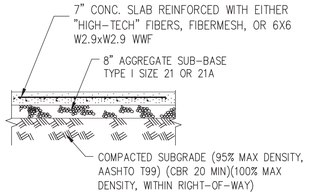
TYPICAL BITUMINOUS PAVEMENT SECTION

ROW



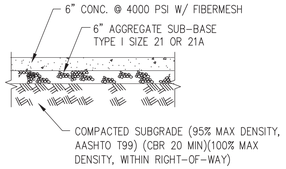
TYPICAL BITUMINOUS PAVEMENT SECTION

ON-SITE DRIVE AISLES



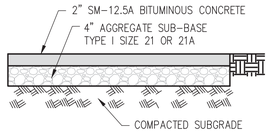
TYPICAL 7" CONCRETE PAVEMENT SECTION

FOR APPROACH PAD/ DUMPSTER ENCLOSURE



TYPICAL 6" PLAIN CONCRETE PAVEMENT SECTION

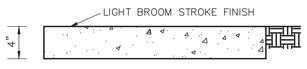
ON-SITE PARKING SPACES/ BUS STOP PAD

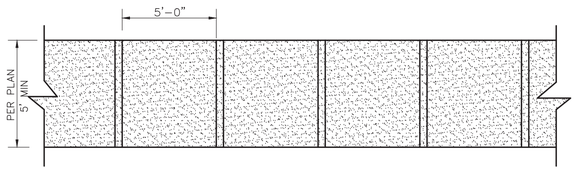


PLAN VIEW

TYPICAL ASPHALT SIDEWALK DETAIL

NOT TO SCALE

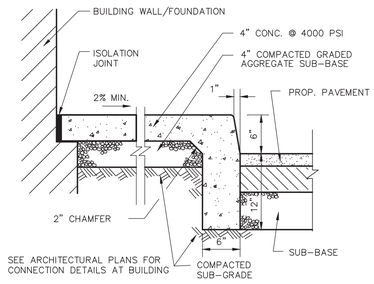




PLAN VIEW

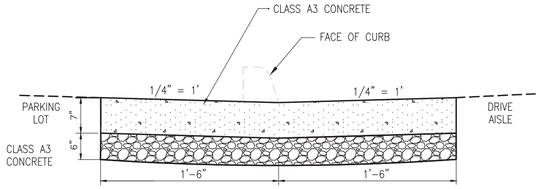
TYPICAL CONCRETE SIDEWALK DETAIL

NOT TO SCALE



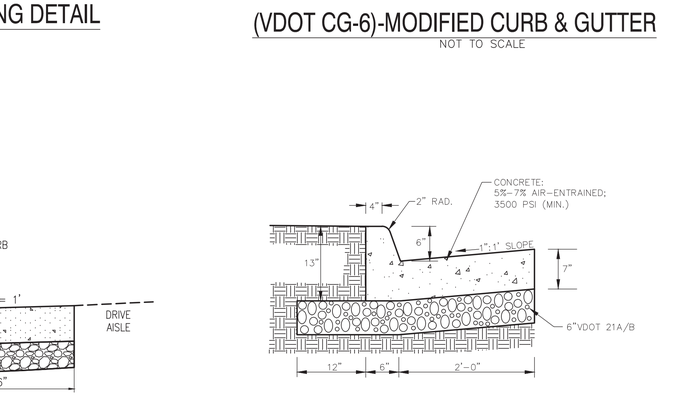
TYPICAL SIDEWALK AT BUILDING DETAIL

NOT TO SCALE



VALLEY GUTTER DETAIL

NOT TO SCALE

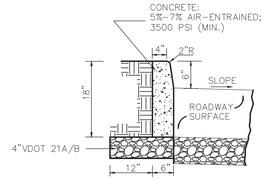


(VDOT CG-6)-MODIFIED CURB & GUTTER

NOT TO SCALE

(VDOT CG-6) CURB & GUTTER

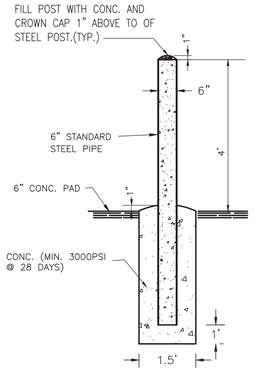
NOT TO SCALE



NOTE: THERE SHALL BE A ONE-HALF INCH PREMOLDED EXPANSION JOINT EVERY 50' (MAXIMUM) AND EVERY TEN FEET THERE SHOULD BE A SCORING CRACK CONTROL JOINT.

(VDOT CG-2)-STANDARD CURB

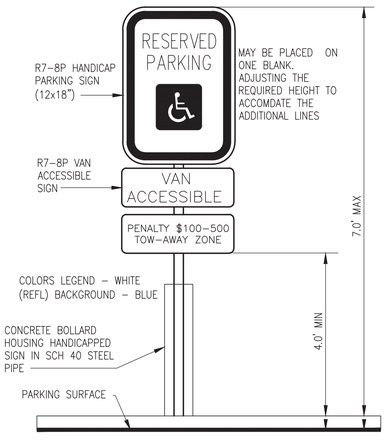
NOT TO SCALE



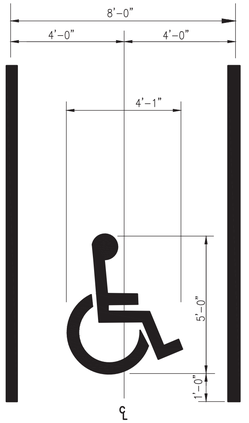
SEE PLAN VIEW FOR LOCATIONS

6" CONCRETE BOLLARD

NOT TO SCALE



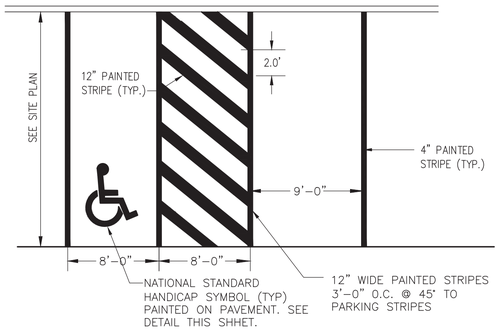
VAN ACCESSIBLE HANDICAP SIGN DETAIL



NOTE:
ALL HANDICAPPED STRIPING SHALL BE 4" WIDE PAINTED LINES AS PER ADA STANDARDS.

SYMBOL STRIPING DETAIL ACCESSIBLE PARKING SYMBOL

NOTE:
PARKING STALL DIMENSIONS TO BE IN ACCORDANCE WITH A.D.A. OR APPROPRIATE GOVERNING AUTHORITY'S STANDARDS, WHICHEVER IS MORE RESTRICTIVE. SEE DETAIL THIS SHEET FOR ADDITIONAL STRIPPING INFORMATION.



ACCESSIBLE PARKING

ACCESSIBLE PARKING STALL DETAILS

NOT TO SCALE

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REV	DATE	DESCRIPTION

DATE ISSUED: 01/17/18
DRAWN BY: GAF
REVIEWED BY: SMB
DESIGNED BY: GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: MISCELLANEOUS DETAILS
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

SHEET NO.: CDT-10.0
DETAILS

QUARTERPATH

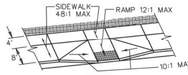
2016 ROAD & BRIDGE STANDARDS

CG-12

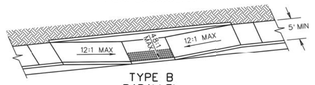
GENERAL NOTES:

1. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.
2. DETECTABLE WARNING SHALL BE FROM THE MATERIALS APPROVED LIST FOR DETECTABLE WARNING SURFACES. PRODUCTS NOT LISTED SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION FOR CG-12 DETECTABLE WARNING SURFACE AND SHALL BE SUBMITTED TO THE STANDARDS AND SPECIAL DESIGN SECTION FOR APPROVAL.
3. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
4. IF RAMP FLOOR IS PRECAST, HOLES MUST BE PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4.
5. REQUIRED BARS ARE TO BE NO. 5 X 8' PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1½".
6. CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER.
7. CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES, EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.
8. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
9. TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN THE ENTRANCE RADII CANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, REFER TO STANDARD CG-13, COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC) FOR CONCRETE DEPTH.
10. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.
11. WHEN ONLY ONE CURB RAMP IS PROVIDED FOR TWO CROSSINGS (DIAGONAL), A 4' x 4' LANDING AREA SHALL BE PROVIDED TO MANEUVER A WHEELCHAIR INTO THE CROSSWALK WITHOUT GOING INTO THE TRAVELWAY. THIS 4' x 4' LANDING AREA MAY INCLUDE THE GUTTER PAN.
12. ALL CASES WHERE CURB RAMPS INTERSECT A RADIAL SECTION OF CURB AT ENTRANCES OR STREET CONNECTIONS THE DETECTABLE WARNING SURFACE SHALL HAVE A FACTORY RADIUS OR BE FIELD MODIFIED AS RECOMMENDED BY THE MANUFACTURER TO MATCH THE BACK OF CURB.

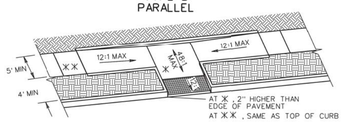
NOTE: COMPONENTS OF CURB RAMPS CONSIST OF THE FOLLOWING: HYDRAULIC CEMENT SIDEWALK (DEPTH IN INCHES, AREA IN SQUARE YARDS) CURB WHEN REQUIRED (CG-2 OR CG-3 IN LINEAR FEET) DETECTABLE WARNING SURFACE (AREA IN SQUARE YARDS) EACH OF THE ABOVE ITEMS IS A SEPARATE PAY ITEM AND SHOULD BE SUMMARIZED FOR EACH CURB CUT RAMP.



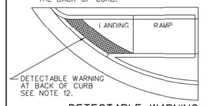
TYPE A
PERPENDICULAR



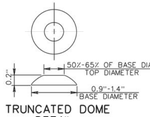
TYPE B
PARALLEL



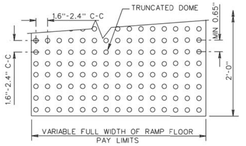
TYPE C
PARALLEL & PERPENDICULAR



DETECTABLE WARNING
INSTALLED ON A RADIUS



TRUNCATED DOME
DETAIL



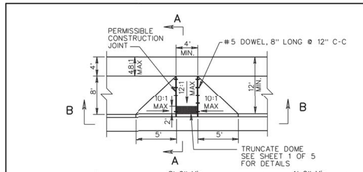
DETECTABLE WARNING
DETAIL

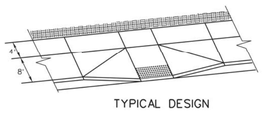
VDOT ROAD AND BRIDGE STANDARDS		CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES) VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 5	REVISION DATE 07/15		105 502
203.05			

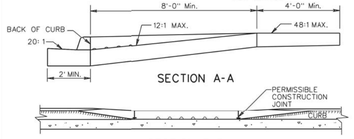
2016 ROAD & BRIDGE STANDARDS

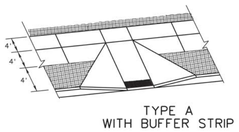
2016 ROAD & BRIDGE STANDARDS

CG-12





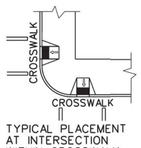


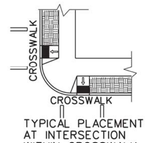


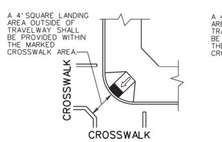
NOTES:

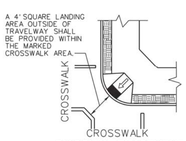
FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.

THIS DESIGN TO BE USED FOR CONSTRUCTION THAT INCORPORATES WIDER SIDEWALK, LANDING (4' WIDE) REQUIRED AT TOP OF CURB RAMP. MINIMUM CURB RAMP LENGTH 8 FEET FOR NEW CONSTRUCTION.







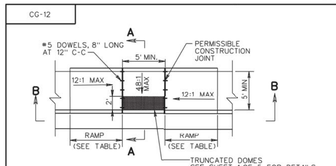


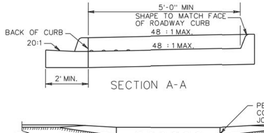
SPECIFICATION REFERENCE	CG-12 DETECTABLE WARNING SURFACE TYPE A (PERPENDICULAR) APPLICATION VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
105 502		REVISION DATE 07/15 / SHEET 2 OF 5 / 203.06

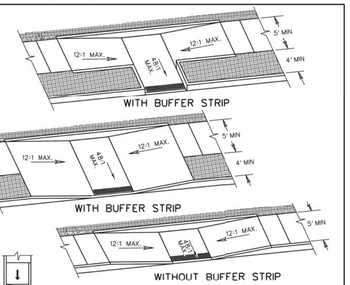
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-12





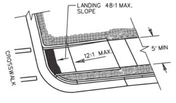


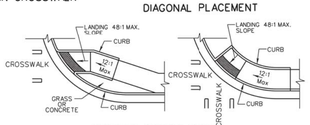
NOTES: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.

THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

TYPE B PARALLEL APPLICATION

ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15



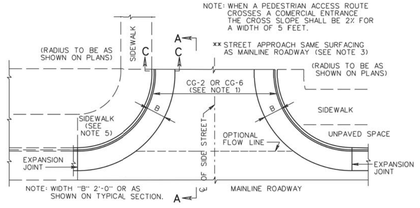


VDOT ROAD AND BRIDGE STANDARDS	CG-12 DETECTABLE WARNING SURFACE TYPE B (PARALLEL) APPLICATION VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 3 OF 5 / REVISION DATE 07/16 / 203.07		105 502

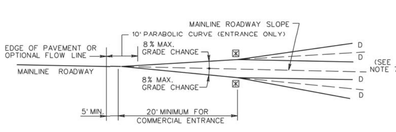
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-11

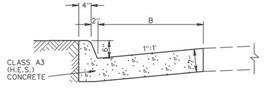


PLAN VIEW



☒ CONSTRUCT GRADE CHANGES WITH A PARABOLIC CURVE.

SECTION A - A



SECTION C-C

GENERAL NOTES

1. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.
2. SEE STANDARD CG-12 FOR CURB RAMP DESIGN TO BE USED WITH THIS STANDARD.
3. PROPOSED ENTRANCE SHALL BE CONSTRUCTED ENTIRELY OF CONCRETE, EXTENDING FROM THE EXISTING EDGE OF PAVEMENT IN THE ROADWAY TO THE R/W LINE. CONCRETE SECTION SHALL MATCH THE SECTION PROPOSED FOR THE CG-13 COMMERCIAL ENTRANCE.
4. RADIAL CURB OR COMBINATION CURB AND GUTTER SHALL NOT BE CONSTRUCTED BEYOND THE R/W LINE EXCEPT FOR REPLACEMENT PURPOSES.

ENTRANCE NOTES

5. WHEN THE ENTRANCE RADII CANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, THE DEPTH FOR SIDEWALK & CURB RAMPS WITHIN THE LIMITS OF THE RADII SHOULD BE INCREASED TO 7". (SEE CG-13)
6. PLANS ARE TO INDICATE WHEN CONSTRUCTION OF A FLOW LINE IS REQUIRED TO PROVIDE POSITIVE DRAINAGE ACROSS THE ENTRANCE.
7. THE DESIRABLE AND MAXIMUM ENTRANCE GRADE CHANGES "D" ARE LISTED IN THE ALLOWABLE ENTRANCE GRADE TABLE. THESE VALUES ARE NOT APPLICABLE TO STREET CONNECTIONS.

INTERSECTION NOTES

8. WHEN CG-11 IS USED FOR STREET CONNECTIONS, THE CONNECTION MUST BE DESIGNED IN ACCORDANCE WITH AASHTO POLICY AND THE APPLICABLE REQUIREMENTS OF THE VDOT ROAD DESIGN MANUAL, INCLUDING STOPPING SIGHT DISTANCE AND K VALUE REQUIREMENTS.
9. OPTIONAL FLOWLINE MAY REQUIRE WARPING OF A PORTION OF GUTTER TO PROVIDE POSITIVE DRAINAGE ACROSS THE INTERSECTION.

ALLOWABLE ENTRANCE GRADE CHANGES

ENTRANCE VOLUME		GRADE CHANGE "D"	
		DESIRABLE	MAXIMUM
HIGH	MORE THAN 1500 VPD	0 %	3 %
MEDIUM	500-1500 VPD	≤ 3 %	6 %
LOW	LESS THAN 500 VPD	≤ 6 %	8 %

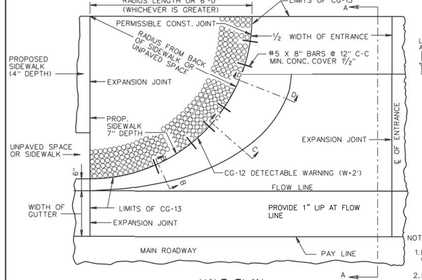
NOTE: ALLOWABLE ENTRANCE GRADE TABLE IS NOT APPLICABLE TO STREET CONNECTIONS

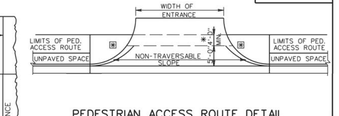
SPECIFICATION REFERENCE	METHOD OF TREATMENT (CONNECTION FOR STREET INTERSECTIONS AND COMMERCIAL ENTRANCES) VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
502		REVISION DATE 07/15 / SHEET 1 OF 1 / 203.04

2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-13



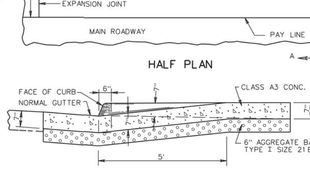


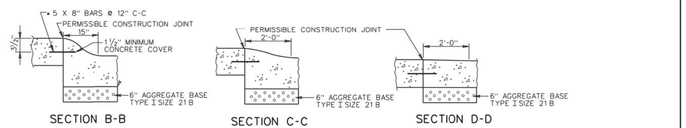
PEDESTRIAN ACCESS ROUTE DETAIL

ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE ☒ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF WAY.

☒ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS. IF ACCESS ROUTE IS ADJACENT TO BACK OF CURB, MINIMUM WIDTH SHOULD BE 6'.

☒ IF PEDESTRIAN ACCESS ROUTES ☒ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH MAX. 2% CROSS SLOPE.





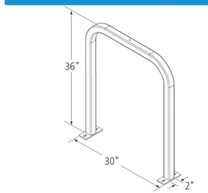
NOTES:

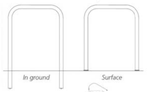
1. PROPOSED 7" SIDEWALK IS TO BE POURED MONOLITHICALLY WITH ENTRANCE OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
2. PROPOSED 7" SIDEWALK TO BE CLASS A-3 CONCRETE.
3. REQUIRED BARS ARE TO BE NO. 5X8" PLACED 1' CENTER TO CENTER ALONG BACK OF CURB, MID-DEPTH OF SIDEWALK. MINIMUM CONCRETE COVER 1½".
4. ALL DETAILS AND DIMENSIONS NOT SHOWN ARE THE SAME AS STANDARD CG-9D.
5. THIS DESIGN MAY ALSO BE APPLIED TO OTHER ENTRANCE STANDARDS AS THE NEED ARISES.
6. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.
7. SEE STANDARD CG-12 FOR DETECTABLE WARNING DETAILS.

SPECIFICATION REFERENCE	COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC ANTICIPATED) VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
502		REVISION DATE / SHEET 1 OF 1 / 203.10

2016 ROAD & BRIDGE STANDARDS

Downtown Rack





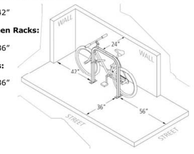

Example of rack in use

Product	Downtown Rack
Capacity	2 Bikes
Materials	2" x 2" x 3/16" square tube - mild steel 2" x 2" x 11g square tube - stainless steel
Finishes	Standard options: Galvanized Or Powder Coated

RAL 9005	Flat Black	RAL 9003	RAL 2004	RAL 1023	Bright Yellow
RAL 6016	RAL 6018	RAL 6005	RAL 5005	RAL 5015	Purple
RAL 7011	RAL 7042	RAL 9007	RAL 1001	RAL 8014	Bronze
RAL 3003	RAL 3005				

Also available in PVC, Thermoplastic, or Stainless steel.

Installation Methods	**In ground mount** is embedded into concrete base. Specify in ground mount for this option. **Foot Mount** has two 2.5"x6"x.25" feet with two anchors per foot. Specify foot mount for this option. **Rail Mounted** Hoops are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3"x1.4"x3/16" thick galvanized mounting rails. Specify rail mount for this option.
Space Use & Setbacks	**Wall Setbacks:** For racks set parallel to a wall: Minimum: 24" Recommended: 36" **For racks set perpendicular to a wall:** Minimum: 28" Recommended: 42" **Distance Between Racks:** Minimum: 24" Recommended: 36" **Street Setbacks:** Minimum: 24" Recommended: 36"



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Fax: (805) 933-1865
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Email: turtle@ameribike.com

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www.blakewaycorp.com

REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: MISCELLANEOUS DETAILS
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER: 38064
SHEET NO: CDT-10.1 DETAILS

QUARTERPATH

UTILITY NOTES:

1. DOMESTIC WATER SERVICE IS TO BE EQUIPPED WITH, AS A MINIMUM, A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER. ALL BACKFLOW PREVENTERS ARE TO BE INSTALLED BEFORE ANY TAKEOFFS ARE MADE.
2. THE BACKFLOW PREVENTER SHALL BE INSTALLED BEFORE ANY TAKEOFFS ARE MADE AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND THE INTERNATIONAL PLUMBING CODE REQUIREMENTS. THE BACKFLOW PRESENTERS MUST BE INSTALLED IN EASILY ACCESSIBLE LOCATIONS FOR TESTING AND REPAIRS.
3. ALL SANITARY CLEAN OUTS SHALL BE HRPD STANDARD CLEAN OUT FRAME AND COVER. SEE HRPDC DETAILS, SS-11 SANITARY SERVICE LATERAL CLEANOUT FRAME AND COVER, OR SS-12 SANITARY SERVICE LATERAL CLEAN OUT FRAME AND COVER FOR HEAVY LOADS.
4. ALL WATER SERVICE LINES SHALL BE TYPE K COPPER.
5. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE NEWPORT NEWS WATERWORKS AND JAMES CITY SERVICE AUTHORITY (JCSA).
6. ALL CAST IN PLACE CONCRETE TO BE "A-3" AIR ENTRAINED (3,000 P.S.I.)
7. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY ARE TO BE TOPSOILED AND SODDED AS DIRECTED BY JAMES CITY SERVICE AUTHORITY.
8. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN SILT TRAPS SUFFICIENT TO PREVENT SOIL FROM BEING ERODED FROM THE SITE INTO ANY ADJACENT DRAINAGE SYSTEM, DITCHES OR WATERCOURSES. ANY MATERIAL THAT IS SO ERODED SHALL BE PROMPTLY REMOVED.
9. BEFORE ANY WORK OF ANY NATURE IS STARTED WITHIN THE LIMITS OF CITY STREETS RIGHT-OF-WAY, A PERMIT MUST BE OBTAINED FROM JAMES CITY SERVICE AUTHORITY.
10. ALL BUILDING DIMENSIONS ARE TO EXTERIOR FACE OF BUILDING. REFER TO ARCHITECTURAL PLANS FOR ACTUAL BUILDING DIMENSIONS, FOOTINGS, ETC. FOR THE BUILDING.
11. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED BY BUILDING OR PAVED AREAS SHALL BE TOPSOILED AND SODDED.
12. ALL PERMANENT ELECTRICAL LINES CARRYING LESS THAN 50,000 VOLTS AND PERMANENT TELEPHONE, CABLE TV, SEWER AND GAS SHALL BE INSTALLED UNDERGROUND.
13. THE CONTRACTOR SHALL RELOCATE UTILITIES IN THE RIGHT-OF-WAY AND GIVE NEWPORT NEWS WATERWORKS AND THE JAMES CITY SERVICE AUTHORITY (JCSA) 48 HOURS NOTICE PRIOR TO RELOCATION.
14. WATER METERS AND SEWER CLEANOUTS MUST BE PLACED AT THE RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT LINES.
15. DEFLECTION, OFFSETTING, OR RELOCATING EXISTING UTILITY MAINS SHALL NOT BE ALLOWED EXCEPT UNDER EXTREME CIRCUMSTANCES; SUCH EXEMPTIONS SHALL BE SUBMITTED TO PUBLIC UTILITIES ENGINEERING FOR APPROVAL.
16. ALL MATERIALS AND METHODS OF CONSTRUCTION FOR UNDERGROUND UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS AND STANDARDS, MANUFACTURER'S RECOMMENDATION AND THESE SPECIFICATIONS. IF CONFLICT IN STANDARDS EXISTS, THE MORE STRINGENT REGULATION OR STANDARD SHALL APPLY.
17. INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE UTILITIES BY DIGGING TEST PITS AT ALL UTILITY CROSSINGS, AND AT CONNECTIONS TO EXISTING UTILITIES, IN ADVANCE OF TRENCHING. IF CLEARANCE IS LESS THAN SPECIFIED ON THE PLAN OR LESS THAN 12" WHEN NOT SPECIFIED, CONTACT THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.
18. PROVIDE SELECT FILL MATERIAL COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 OR AASHTO T99.
19. TRENCHING, PIPE BEDDING, AND BACKFILL SHALL COMPLY WITH THE FOLLOWING MINIMUM STANDARDS.

A) TRENCHING. EXCAVATE TRENCH TO THE LINES AND GRADES SHOWN ON THE PLANS. THE SLOPES OF THE EXCAVATION SHALL BE KEPT AS NEARLY VERTICAL AS POSSIBLE FOR THE SOIL CONDITIONS AND IN ACCORDANCE TO THE OSHA REGULATIONS. THE CONTRACTOR SHALL PROVIDE SHEETING, BRACING, AND SHORING AS NECESSARY TO PROTECT EXISTING STRUCTURES AND MAINTAIN SAFE EXCAVATION. THE MINIMUM TRENCH WIDTH SHALL BE 18" TO 24" WIDER THAN THE OUTSIDE PIPE DIAMETER. WHERE THE SOILS ENCOUNTERED AT THE TRENCH BOTTOM ARE INCAPABLE OF ADEQUATELY SUPPORTING THE PIPE, THE TRENCH SHALL BE EXCAVATED TO A STABLE FOUNDATION AND BACKFILLED WITH A SELECT GRANULAR MATERIAL. PLACE BACKFILL IN 6-INCH LIFTS AND COMPACT TO DENSITIES SPECIFIED ABOVE. TRENCH SHALL BE DEWATERED AS NECESSARY BEFORE PLACING BEDDING AND PIPE.

B) BEDDING-RIGID PIPE (RCP& DIP) THE BOTTOM OF THE TRENCH SHALL BE ACCURATELY GRADED TO PROVIDE UNIFORM BEARING AND SUPPORT FOR EACH SECTION OF PIPE. BELL HOLES AND JOINT DEPRESSIONS SHALL BE SHAPED TO CONFORM TO PIPE DIMENSIONS AND BACKFILLED WITH GRANULAR MATERIAL. SUBGRADE SURFACES MUST BE FREE OF ROCKS THAT ARE 1" IN DIAMETER OR LARGER.

C) BEDDING-FLEXIBLE PIPE-PVC7CMP PROVIDE MINIMUM OF 6" OF COMPACTED GRANULAR MATERIAL. COMPACT TO DENSITIES SPECIFIED ABOVE.

D) PIPE INSTALLATION INSTALL PIPE PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL REQUIREMENTS.

E) INITIAL BACKFILL INITIAL BACKFILL EXTENDS FROM THE PIPE BEDDING TO MINIMUM OF 12" ABOVE THE PIPE. INITIAL BACKFILL MATERIAL SHALL BE SELECT GRANULAR MATERIAL, FREE OF ROCK PIECES LARGER THAN 1-INCH IN ANY DIMENSION. PLACE BACKFILL IN 4-INCH LAYERS AND COMPACT BY HAND TAMPERS UP TO THE PIPE SPRING LINE (HORIZONTAL CENTER). ABOVE THE SPRING LINE, PLACE BACKFILL IN LIFTS NOT GREATER THAN 8-INCHES THICK. COMPACT EACH LAYER TO 95% OF THE MAXIMUM DRY DENSITY AS PER ASTM D698, OR AASHTO T99. DO NOT USE WATER TAMPING OR WATER JETTING AS THE METHOD FOR COMPACTION.

F) FINAL BACKFILL COMPLETE TRENCH BACKFILL USING SOIL MATERIALS FREE OR ORGANICS, DEBRIS, FROZEN CLODS, OR HIGHLY PLASTIC SOILS. COMPACT BACKFILL TO THE DENSITIES SPECIFIED ABOVE.

20. ALL CONNECTIONS OF THE EXISTING SANITARY SEWER MANHOLES MUST BE CORE DRILLED AND PROVIDE KOR-N-SEAL BOOT OR APPROVED EQUAL.
21. ALL SANITARY SEWER MANHOLES SHALL HAVE INVERT SHAPING AS PER JAMES CITY SERVICE AUTHORITY STANDARDS.
22. BACKFLOW PREVENTERS SHALL BE TESTED BY A CERTIFIED TESTER.
23. ALL ON-SITE UTILITIES ARE PRIVATE, NOT MAINTAINED BY NEWPORT NEWS WATERWORKS OR JAMES CITY SERVICE AUTHORITY.
24. CONTRACTOR SHALL INSTALL PROPOSED SANITARY SEWER SYSTEM FROM THE DOWNSTREAM END TO THE UPSTREAM END.
25. INSTALL MANHOLE INSERTS IN NEWLY CONSTRUCTED PUBLIC OR PRIVATE MANHOLES. ACCEPTABLE INSERTS INCLUDE "22-INCH MODEL C-WH RAINSTOPPER" MANUFACTURED BY SOUTHWESTERN PACKING & SEALS, INC. OR "22-INCH LOCKDRY" MANUFACTURED BY BARTON SOUTHERN COMPANY, OR APPROVED EQUAL.
26. PROPOSED SANITARY SEWER MANHOLES MUST BE PROTECTED WITH COATING APPROVED BY THE JAMES CITY SERVICE AUTHORITY.

JCSA GENERAL NOTES FOR WATER DISTRIBUTION: AND SANITARY SEWER SYSTEMS

1. ALL COMPONENTS OF THE WATER DISTRIBUTION AND SANITARY SEWER SYSTEM SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE JCSA DESIGN AND ACCEPTANCE CRITERIA FOR WATER DISTRIBUTION AND SANITARY SEWER SYSTEMS, THE HRPDC REGIONAL CONSTRUCTION STANDARDS (SIXTH EDITION WITH AMENDMENTS DATED JUNE 2016), AND THE COMMONWEALTH OF VIRGINIA DEPARTMENT OF HEALTH WATERWORKS AND SANITARY SEWERAGE REGULATIONS. THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS ON ALL PROJECTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE WORK. A COPY OF THE JCSA DESIGN AND ACCEPTANCE CRITERIA AND HRPDC REGIONAL CONSTRUCTION STANDARDS MUST BE KEPT ON-SITE BY THE CONTRACTOR DURING TIME OF INSTALLING, TESTING, AND CONVEYING FACILITIES TO JCSA.
2. THE CONTRACTOR/DEVELOPER SHALL ACQUIRE A CERTIFICATE TO CONSTRUCT WATER AND SANITARY SEWER FACILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ANY WATER OR SANITARY SEWER FACILITIES.
3. A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN JCSA, THE DEVELOPER, AND THE CONTRACTOR INCLUDING RELEVANT SUBCONTRACTORS, AND THE PROJECT ENGINEER PRIOR TO ISSUANCE OF A JCSA CERTIFICATE TO CONSTRUCT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE THIS MEETING WITH JCSA AND COORDINATE WITH THE OTHER ATTENDEES.
4. THE DEVELOPER'S REPRESENTATIVE SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIALS AND RECEIVE JCSA APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL MATERIALS ORDERED AND INSTALLED PRIOR TO JCSA'S REVIEW AND ACCEPTANCE WILL BE AT THE CONTRACTOR'S/DEVELOPER'S RISK. A SHOP DRAWING SUMMARY SHEET (FORM PROVIDED IN APPENDIX G) SHALL BE COMPLETED FOR ALL PIPES, VALVES, AND APPURTENANCES WITH THE SHOP DRAWING SUBMITTAL.
5. MAINS AND SERVICE PIPES SHALL BE INSTALLED AFTER GRADING TO WITHIN 6-INCHES OF FINAL GRADE AND PRIOR TO PLACEMENT OF BASE MATERIAL.
6. ALL WATER MAINS SHALL BE FULLY FLUSHED, PRESSURE TESTED, AND DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLES OBTAINED, IN ACCORDANCE WITH JCSA DESIGN AND ACCEPTANCE CRITERIA. FLUSHING OF WATER MAINS SHALL BE SCHEDULED WITH THE JCSA INSPECTOR MINIMUM 3 BUSINESS DAYS PRIOR TO THE FLUSHING. CONTRACTOR SHALL PROVIDE THE REQUIRED DURATION AND VOLUME TO THE INSPECTOR. FLUSHING WILL BE SCHEDULED ONLY ON MONDAYS, UNLESS AUTHORIZED OTHERWISE BY JCSA, AND WILL BE ON A FIRST COME-FIRST SERVE BASIS.
7. ROUTINE PERIODIC INSPECTIONS DURING CONSTRUCTION WILL BE PROVIDED BY JCSA. THESE INSPECTIONS DO NOT RELIEVE THE DEVELOPER/CONTRACTOR/OWNER FROM HIS OBLIGATION AND RESPONSIBILITY FOR CONSTRUCTING A WATER DISTRIBUTION AND SANITARY SEWER SYSTEM IN STRICT ACCORDANCE WITH THE JCSA DESIGN AND ACCEPTANCE CRITERIA.
8. ANY FIELD MODIFICATIONS OR CHANGES TO THE APPROVED PLANS SHALL BE VERIFIED AND CHECKED BY THE ENGINEER OF RECORD AND APPROVED BY JCSA PRIOR TO ANY FIELD MODIFICATIONS OR CHANGES. ALL APPROVED CHANGES AND FIELD MODIFICATIONS SHALL BE ACCURATELY INDICATED ON THE RECORD DRAWINGS.
9. ALL LOTS SHALL BE PROVIDED WITH WATER SERVICE AND SANITARY SEWER CONNECTIONS. THE CONNECTIONS SHALL BE EXTENDED FROM THE MAIN TO THE PROPERTY LINE OR EASEMENT LINE, AND SHALL TERMINATE WITH A YOKE IN A METER BOX, OR AT THE CLEAN OUT, SET AT FINAL FINISHED GRADE. METERS FOR ALL LOTS (UNITS) SHALL BE PAID FOR BY THE DEVELOPER OR BUILDER AND INSTALLED BY JCSA.
10. ANY REQUIRED EASEMENTS, PERMITS, AND APPROVALS SHALL BE ACQUIRED BY THE DEVELOPER PRIOR TO COMMENCEMENT OF WATER MAIN AND/OR SANITARY SEWER CONSTRUCTION.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION. THE CONTRACTOR SHALL ALSO NOTIFY "MISS UTILITY" AT 1-800-552-7001 OR 811 PRIOR TO PERFORMING ANY UNDERGROUND EXCAVATION.
12. WATER METER BOX INSTALLATION SHALL MAINTAIN A MINIMUM 18-INCH HORIZONTAL EDGE-TOEDGE CLEARANCE FROM DRIVEWAYS AND/OR DRIVE PATHS, SIDEWALKS, BIKE PATHS, CURBING AND ADJACENT WATER METER BOXES.
13. ONLY JCSA PERSONNEL ARE AUTHORIZED TO OPERATE VALVES ON EXISTING JCSA WATER MAINS AND SANITARY FORCE MAINS. ONCE A SYSTEM HAS BEEN HYDRAULICALLY ENERGIZED, JCSA WILL BE RESPONSIBLE FOR OPERATING THE VALVES. THE CONTRACTOR SHALL CONTACT JCSA OPERATIONS AT 757-229-7421 IF THERE IS AN EMERGENCY OR NEED TO OPEN/CLOSE A VALVE.
14. ANY EXISTING UNUSED WELL(S) SHALL BE ABANDONED IN ACCORDANCE WITH STATE PRIVATE WELL REGULATIONS AND JAMES CITY COUNTY CODE.
15. BEDDING OF JCSA UTILITIES SHALL BE IN ACCORDANCE WITH HRPDC DETAIL EW_01, TYPE III FOR RIGID PIPE AND TYPE IV FOR PVC PIPE.
16. NO TREES, SHRUBS, STRUCTURES, FENCES, IRRIGATION MAINS, INVISIBLE PET FENCES OR OTHER OBSTACLES SHALL BE PLACED WITHIN AN EASEMENT WHICH WOULD RENDER THE EASEMENT INACCESSIBLE BY EQUIPMENT. SHRUBS SHALL BE A MINIMUM OF 5 FEET, AND TREES A MINIMUM OF 10 FEET, FROM THE CENTER OF WATER AND SANITARY SEWER MAINS.
17. JOINT RESTRAINT SHALL BE PROVIDED IN ACCORDANCE WITH MINIMUM REQUIREMENTS OF JCSA DETAIL JR1.0, UNLESS SHOWN OTHERWISE ON THE PLANS. ALL PRESSURE MAINS SHALL HAVE JOINT RESTRAINT. FIRE HYDRANTS SHALL BE RESTRAINED AT LEAST ONE FULL JOINT OF PIPE IN EACH DIRECTION ON THE MAIN.
18. PROPOSED WATER AND SANITARY SEWER SYSTEMS SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 5-FEET FROM OTHER UTILITIES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO STORM SEWERS, STREET LIGHTS, ETC. WATER AND SANITARY SEWER FACILITIES SHALL HAVE A MINIMUM 10-FOOT HORIZONTAL EDGE-TO-EDGE SEPARATION.
19. ANY PROPOSED BACKFLOW PREVENTION DEVICE AND/OR GREASE TRAP MUST BE INSPECTED BY THE JCSA UTILITY SPECIAL PROJECTS COORDINATOR AT (757) 259-4138.
20. THE CONTRACTOR/DEVELOPER SHALL ACQUIRE A CERTIFICATE TO CONSTRUCT WATER AND SANITARY SEWER FACILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ANY WATER OR SANITARY SEWER FACILITIES. PLUMBING INSIDE OF PROPOSED BUILDINGS MUST BE INSPECTED BY JCSA'S UTILITY SPECIAL PROJECTS COORDINATOR AT (757) 259-4138, FOR POTENTIAL CROSS CONNECTIONS. ANY CROSS CONNECTIONS MUST BE PROTECTED BY THE APPROPRIATE BACKFLOW PREVENTION DEVICE(S)".
21. EASEMENTS DENOTED AS "JCSA UTILITY EASEMENTS" ARE FOR THE EXCLUSIVE USE OF THE JAMES CITY SERVICE AUTHORITY AND THE PROPERTY OWNER. OTHER UTILITY SERVICE PROVIDERS DESIRING TO USE THESE EASEMENTS WITH THE EXCEPTION OF PERPENDICULAR UTILITY CROSSINGS MUST OBTAIN AUTHORIZATION FOR ACCESS AND USE FROM JCSA AND THE PROPERTY OWNER. ADDITIONALLY, JCSA SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO IMPROVEMENTS WITHIN THIS EASEMENT, FROM ANY CAUSE.
22. JCSA SHALL NOT BE HELD RESPONSIBLE FOR ANY PAVEMENT SETTLEMENT DUE TO PIPE BEDDING, BACKFILLING, BACKFILL MATERIALS, OR COMPACTION FOR WATER OR SANITARY SEWER FACILITIES FOR THIS PROJECT.
23. PRIVATELY OWNED UTILITIES, (E.G., WATER AND SEWER MAINS AND PRIVATE FIRE SERVICE MAINS), SHOWN ON THIS PLAN ARE REGULATED BY THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, AND ENFORCED BY THE JAMES CITY COUNTY BUILDING SAFETY AND PERMITS DIVISION. THESE PRIVATELY OWNED UTILITIES MUST COMPLY FULLY WITH THE INTERNATIONAL PLUMBING CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 24, AND THE VIRGINIA STATEWIDE FIRE PREVENTION CODE. CONTRACTORS WORKING FROM THIS SITE PLAN ARE CAUTIONED NOT TO INSTALL OR CONCEAL PRIVATELY OWNED SITE UTILITIES WITHOUT FIRST OBTAINING THE REQUIRED PERMITS AND INSPECTIONS.
24. SANITARY SEWER LATERALS SHALL NOT CONNECT TO THE MAIN WITHIN 5-FEET OF A MANHOLE. LATERALS UPSTREAM AND WITHIN 5-FEET OF THE MANHOLE SHALL CONNECT DIRECTLY INTO THE MANHOLE WHERE NECESSARY.
25. ALL PRIVATE UNDERGROUND FUEL STORAGE TANKS SHALL HAVE LEAK MONITORS AND SECONDARY CONTAINMENT IN ACCORDANCE WITH VIRGINIA STATE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS.

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STEPHEN M. BLEVINS
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06-28-18

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REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

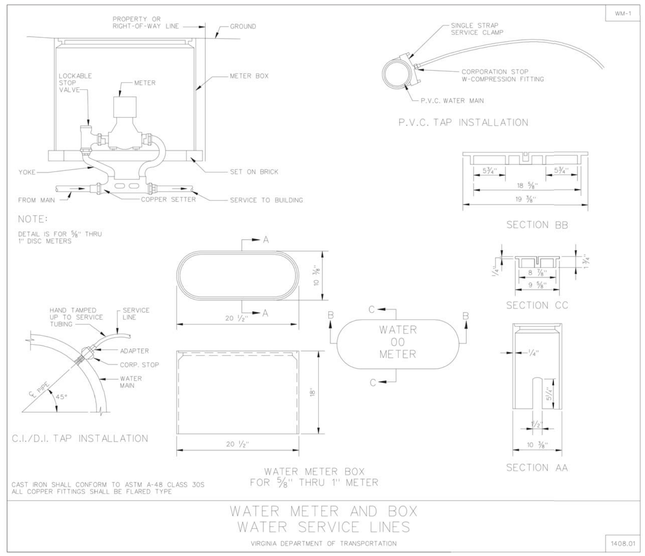
LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: MISCELLANEOUS DETAILS
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

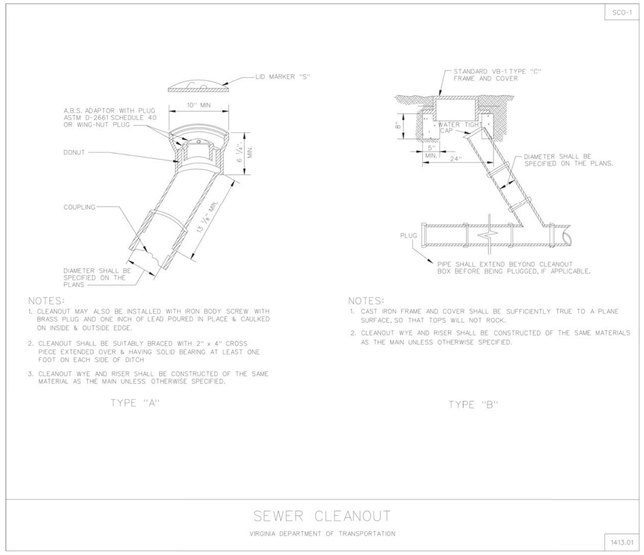
SHEET NO. CDT-10.2
DETAILS

QUARTERPATH

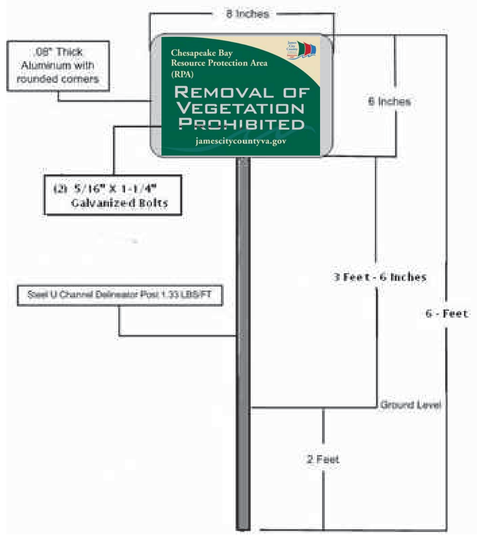
QUARTERPATH

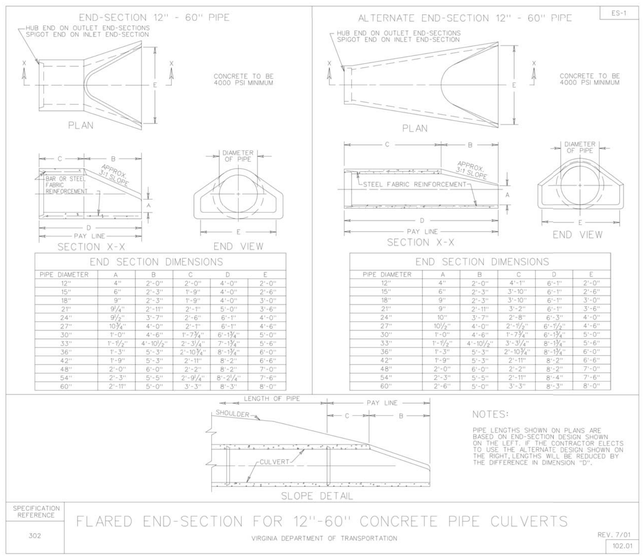
FILE NAME: P:\6160-Verdad\6160.54-Quarterpath\Cad\17-CDT-10.2.dwg LAYOUT NAME: Layout1 PLOTTED: Thursday, June 28, 2018 - 8:33am

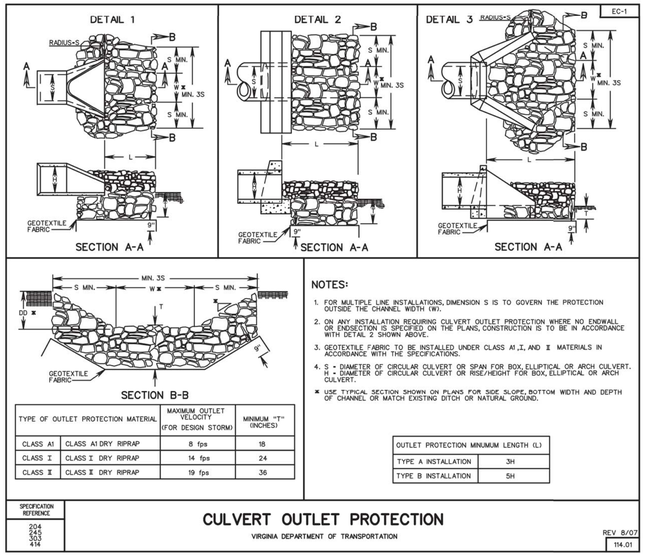




James City County
RPA/CONSERVATION EASEMENT SIGN INSTALLATION GUIDELINES
(8 Inches X 6 Inches)







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REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18
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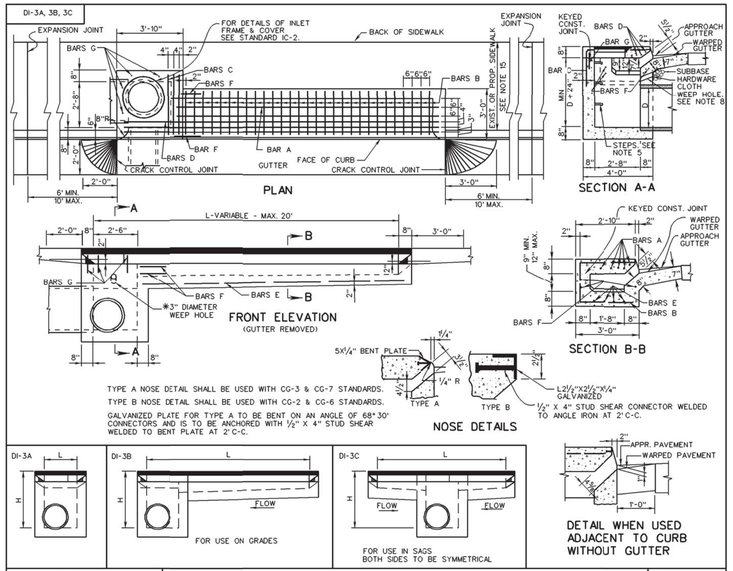
LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: MISCELLANEOUS DETAILS
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

SHEET NO: CDT-10.3
DETAILS

2016 ROAD & BRIDGE STANDARDS

DI-3A, 3B, 3C



TYPE A NOSE DETAIL SHALL BE USED WITH CG-3 & CG-7 STANDARDS.
TYPE B NOSE DETAIL SHALL BE USED WITH CG-2 & CG-6 STANDARDS.
GALVANIZED PLATE FOR TYPE A TO BE BENT ON AN ANGLE OF 68°30' CONNECTORS AND IS TO BE ANCHORED WITH ½" x 4" STUD SHEAR WELDED TO BENT PLATE AT 2'-0" C.

DETAIL WHEN USED ADJACENT TO CURB WITHOUT GUTTER

VDOT ROAD AND BRIDGE STANDARDS	STANDARD CURB DROP INLET 12" - 30" PIPE: MAXIMUM DEPTH (H) = 8' VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 2 / REVISION DATE 08/10		233 302
104.09		

2016 ROAD & BRIDGE STANDARDS

MH-1

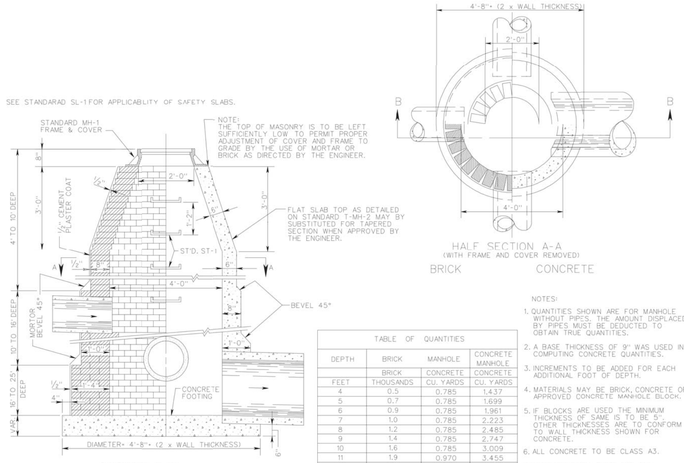


TABLE OF QUANTITIES				
DEPTH	BRICK	MANHOLE	CONCRETE MANHOLE	
FEET	BRICK THOUSANDS	CONCRETE CU. YARDS	CONCRETE CU. YARDS	
4	0.5	0.785	1.437	
5	0.7	0.785	1.699	
6	0.9	0.785	1.961	
7	1.0	0.785	2.223	
8	1.2	0.785	2.485	
9	1.4	0.785	2.747	
10	1.6	0.785	3.009	
11	1.9	0.970	3.455	
12	2.2	0.970	3.817	
13	2.5	0.970	4.179	
14	2.8	0.970	4.541	
15	3.1	0.970	4.903	
16	3.4	0.970	5.265	
17	4.0	1.173	6.032	
INCREMENT	0.45	-	0.582	

NOTES:
1. QUANTITIES SHOWN ARE FOR MANHOLE WITHOUT PIPES. THE AMOUNT DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES.
2. A BASE THICKNESS OF 9" WAS USED IN COMPUTING CONCRETE QUANTITIES.
3. INCREMENTS TO BE ADDED FOR EACH ADDITIONAL FOOT OF DEPTH.
4. MATERIALS MAY BE BRICK, CONCRETE OR APPROVED CONCRETE MANHOLE BLOCK.
5. IF BLOCKS ARE USED THE MINIMUM THICKNESS OF SAME IS TO BE 5". OTHER THICKNESSES ARE TO CONFORM TO WALL THICKNESS SHOWN FOR CONCRETE.
6. ALL CONCRETE TO BE CLASS A3.
7. WHEN SPECIFIED ON PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.

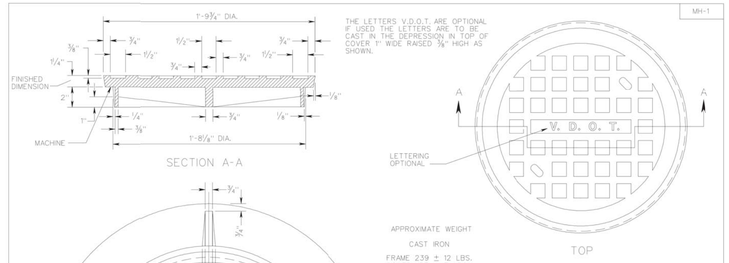
SHEET 1 OF 5

REV. 7/01 106.01

MANHOLE FOR 12" - 48" PIPE CULVERTS
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 302

MH-1



SHEET 2 OF 5

SPECIFICATION REFERENCE 224 302

STANDARD MANHOLE FRAME AND COVER
VIRGINIA DEPARTMENT OF TRANSPORTATION

106.02

PB-1

GENERAL

1. METHOD "A" PIPE BEDDING SHALL BE USED FOR ALL TYPES OF PIPE CULVERTS WITHIN THE APPLICABLE HEIGHT OF COVER RANGE NOTED IN THE STANDARD PC-1 TABLES UNLESS OTHERWISE NOTED ON THE PLANS.
2. H = HEIGHT OF COVER MEASURED FROM TOP OF CULVERT TO FINISHED GRADE.
3. b = EXCAVATION DEPTH AS SHOWN ON PLANS OR TO FIRM BEARING SOIL.

CIRCULAR PIPE

1. D = OUTSIDE DIAMETER OF PIPE.
2. d = INSIDE DIAMETER OF PIPE.
3. X = WIDTH OF CLASS I BACKFILL MATERIAL BEYOND THE EXTREMITY OF THE PIPE.
   X = 12" WHERE d IS LESS THAN 36".
   X = 18" WHERE d IS 36" AND GREATER.
4. WHERE DIRECTED BY THE ENGINEER, BEDDING MATERIAL MAY BE ELIMINATED FOR NORMAL EARTH FOUNDATIONS UNDER ROUTINE ENTRANCE PIPE (EXCEPT PLASTIC PIPE) 30" AND LESS IN DIAMETER WITH HEIGHT OF COVER 15' OR LESS.
5. REGULAR BACKFILL MATERIAL MAY BE USED IN LIEU OF CLASS I BACKFILL MATERIAL FOR ALL FOUNDATION TYPES FOR ROUTINE ENTRANCE PIPE (EXCEPT PLASTIC PIPE) 30" AND LESS IN DIAMETER WITH HEIGHT OF COVER 15' OR LESS.
6. BEDDING MATERIAL AND CLASS I BACKFILL MATERIAL MAY BE ELIMINATED FOR SHOULDER SLOT INLET (DI-13) OUTLET PIPES INSTALLATIONS.

ELLIPTICAL PIPE

1. S_1 = OUTSIDE SPAN DIMENSION OF PIPE.
2. S_2 = INSIDE SPAN DIMENSION OF PIPE.
3. R = OUTSIDE RISE DIMENSION OF PIPE.
4. X = WIDTH OF CLASS I BACKFILL MATERIAL BEYOND THE EXTREMITY OF THE PIPE.
   X = 12" WHERE S_2 IS LESS THAN 36".
   X = 18" WHERE S_2 IS 36" AND GREATER
5. WHERE DIRECTED BY THE ENGINEER, BEDDING MATERIAL MAY BE ELIMINATED FOR NORMAL EARTH FOUNDATIONS UNDER ROUTINE ENTRANCE PIPE WHERE S_2 IS 38" OR LESS AND HEIGHT OF COVER 15' OR LESS.
6. REGULAR BACKFILL MATERIAL MAY BE USED IN LIEU OF CLASS I BACKFILL MATERIAL FOR ALL FOUNDATION TYPES FOR ROUTINE ENTRANCE PIPE WHERE S_2 IS 38" OR LESS AND HEIGHT OF COVER 15' OR LESS.

PIPE ARCH

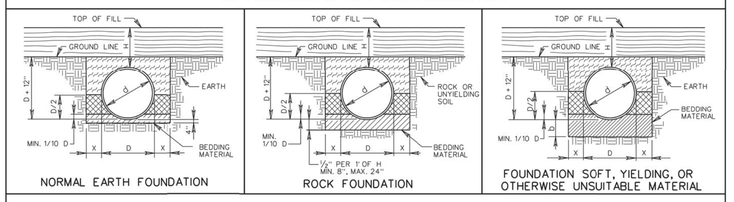
1. S = SPAN DIMENSION OF PIPE.
2. R = RISE DIMENSION OF PIPE.
3. D = SEE PC-1 TABLE FOR APPLICABLE PIPE MATERIAL
4. x = WIDTH OF CLASS I BACKFILL MATERIAL BEYOND THE EXTREMITY OF THE PIPE.
   x = 12" WHERE S_2 IS LESS THAN 36".
   x = 18" WHERE S_2 IS 36" AND GREATER
5. WHERE DIRECTED BY THE ENGINEER, BEDDING MATERIAL MAY BE ELIMINATED FOR NORMAL EARTH FOUNDATIONS UNDER ROUTINE ENTRANCE PIPE WHERE S_2 IS 35" OR LESS AND HEIGHT OF COVER 15' OR LESS.
6. REGULAR BACKFILL MATERIAL MAY BE USED IN LIEU OF CLASS I BACKFILL MATERIAL FOR ALL FOUNDATION TYPES FOR ROUTINE ENTRANCE PIPE WHERE S IS 35" OR LESS AND HEIGHT OF COVER 15' OR LESS.

SPECIFICATION REFERENCE	INSTALLATION OF PIPE CULVERTS & STORM SEWERS GENERAL NOTES VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
302 303		REVISION DATE / SHEET 1 OF 1
		107.00

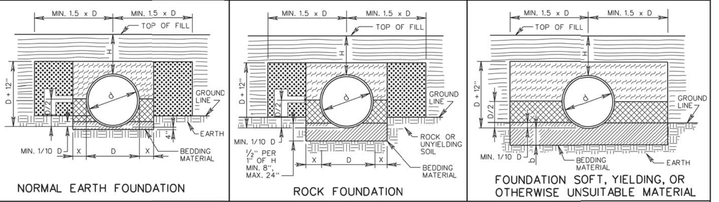
2016 ROAD & BRIDGE STANDARDS

PB-1

NO PROJECTION OF PIPE ABOVE GROUND LINE



PIPE PROJECTION ABOVE GROUND LINE

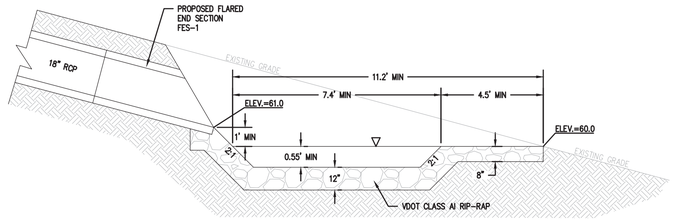


BEDDING MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
FOR PLASTIC PIPE CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
FOR ALL OTHER PIPE REGULAR BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.
EMBANKMENT
REGULAR BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.

NOTES:
FOR GENERAL NOTES ON PIPE BEDDING, SEE INSTALLATION OF PIPE CULVERTS AND STORM SEWERS GENERAL NOTES ON SHEET 107.00.
CRUSHED GLASS CONFORMING TO THE SIZE REQUIREMENTS FOR CRUSHER RUN AGGREGATE SIZE 25 AND 26 MAY BE USED IN PLACE OF CLASS I BACKFILL.

VDOT ROAD AND BRIDGE STANDARDS	INSTALL. OF PIPE CULVERTS AND STORM SEWERS CIRC. PIPE BEDDING AND BACKFILL - METHOD "A" VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 4 / REVISION DATE 07/12		302 303
107.01		

2016 ROAD & BRIDGE STANDARDS



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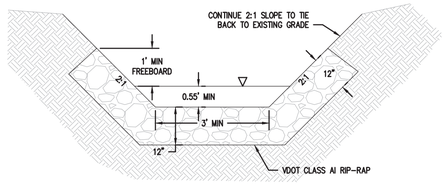


CROSS SECTION

RIPRAP STILLING BASIN

NOT TO SCALE

ELEVEN®

COMMONWEALTH OF VIRGINIA
STEPHEN M. BLEVINS
No. 32245
PROFESSIONAL ENGINEER
06-28-18

BLAKEWAY
surveying + engineering + environmental
630 N. WITCHDUCK ROAD - VA BEACH, VIRGINIA 23462
P757.226.0081 - F757.226.8765
www.blakewaycorp.com

REV	DESCRIPTION	DATE

DATE ISSUED 01/17/18
DRAWN BY GAF
REVIEWED BY SMB
DESIGNED BY GAF

LOCATION: POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE: MISCELLANEOUS DETAILS
STORE NUMBER: 38064
SITE ADDRESS: 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA

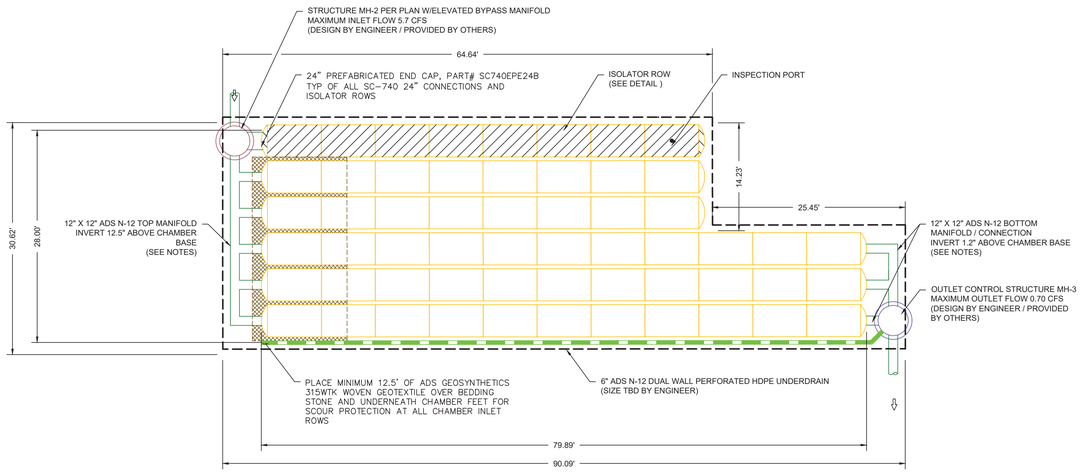
SHEET NO: CDT-10.4
DETAILS

QUARTERPATH

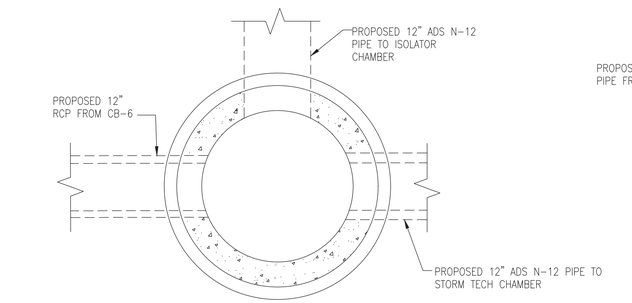
QUARTERPATH

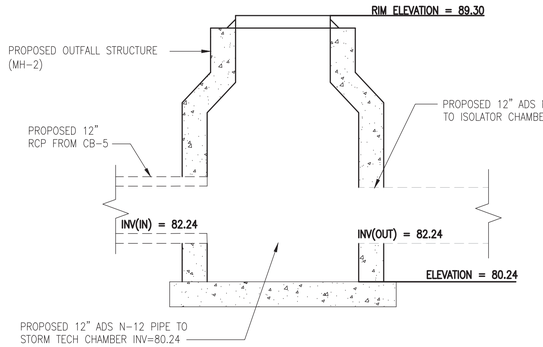
NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

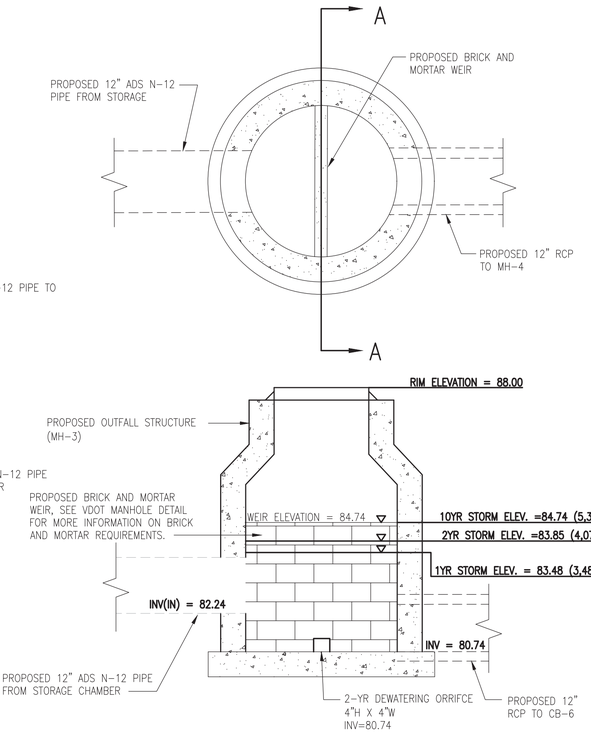


UNDERGROUND STORAGE SYSTEM - PLAN VIEW
NTS





STRUCTURE MH-2
NTS



STRUCTURE MH-3 W/ WEIR
NTS

PROPOSED LAYOUT	
57	STORMTECH SC-740 CHAMBERS
12	STORMTECH SC-740 END CAPS
6	STONE ABOVE (in)
18	STONE BELOW (in)
40	% STONE VOID
5,401	**INSTALLED SYSTEM VOLUME (CF) BELOW ELEV. 84.74 (PERIMETER STONE INCLUDED)**
2,394	SYSTEM AREA (ft²)
241	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	92.74
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	86.74
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	86.24
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	86.24
MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):	86.24
TOP OF STONE:	85.24
TOP OF SC-740 CHAMBER:	84.74
12" TOP MANIFOLD INVERT:	83.28
12" BOTTOM MANIFOLD / CONNECTION INVERT:	82.34
24" ISOLATOR ROW INVERT:	82.25
BOTTOM OF SC-740 CHAMBER:	82.24
UNDERDRAIN INVERT:	80.74
BOTTOM OF STONE:	80.74

STORMTECH CHAMBER SPECIFICATIONS

(SC-310 TO BE USED ON THIS PROJECT, REFERENCES TO SC-740 CAN BE IGNORED)

1. CHAMBERS SHALL BE STORMTECH SC-740 OR SC-310.
2. CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPYLENE OR POLYETHYLENE RESINS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET ASTM F2922 (POLYETHYLENE) OR ASTM F2418-16 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
   a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
   b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 OR ASTM F2922 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
   c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310/SC-740 SYSTEM

(SC-310 TO BE USED ON THIS PROJECT, REFERENCES TO SC-740 CAN BE IGNORED)

1. STORMTECH SC-310 & SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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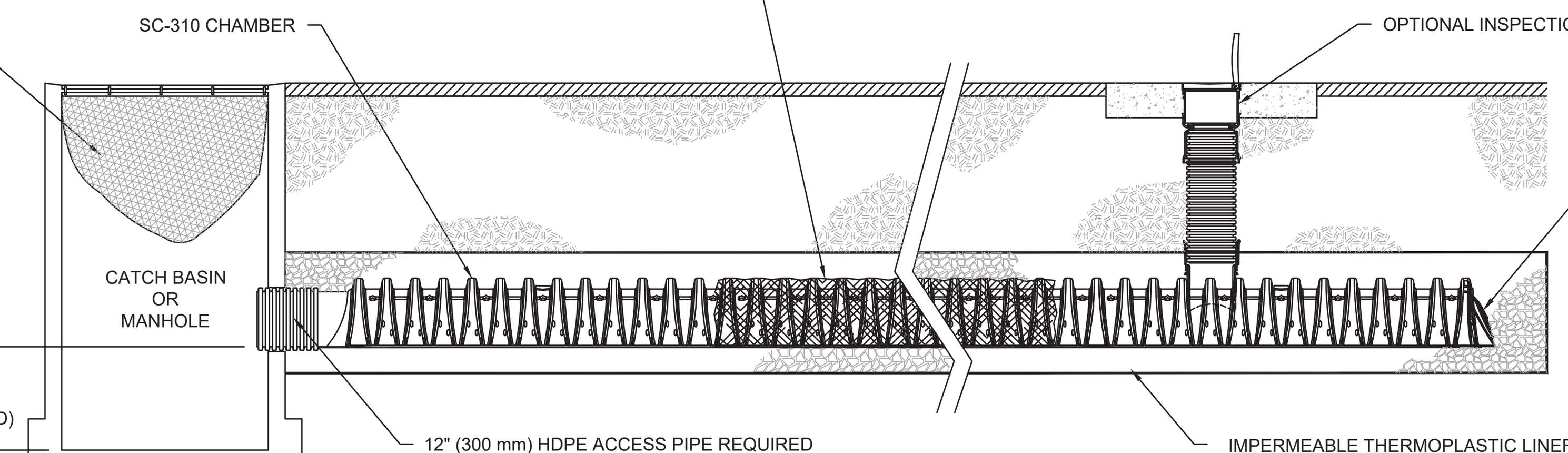
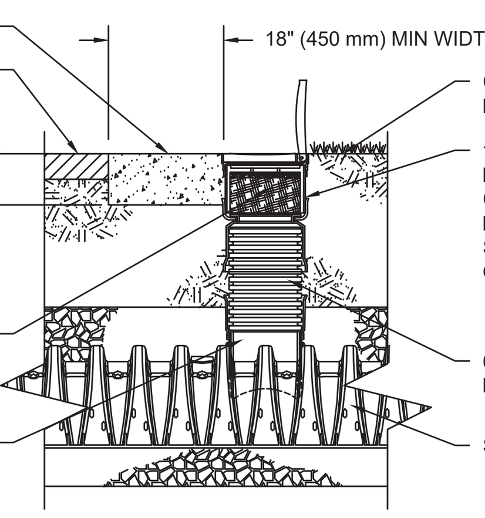
DETAILS



SC-310 ISOLATOR ROW DETAIL
NTS

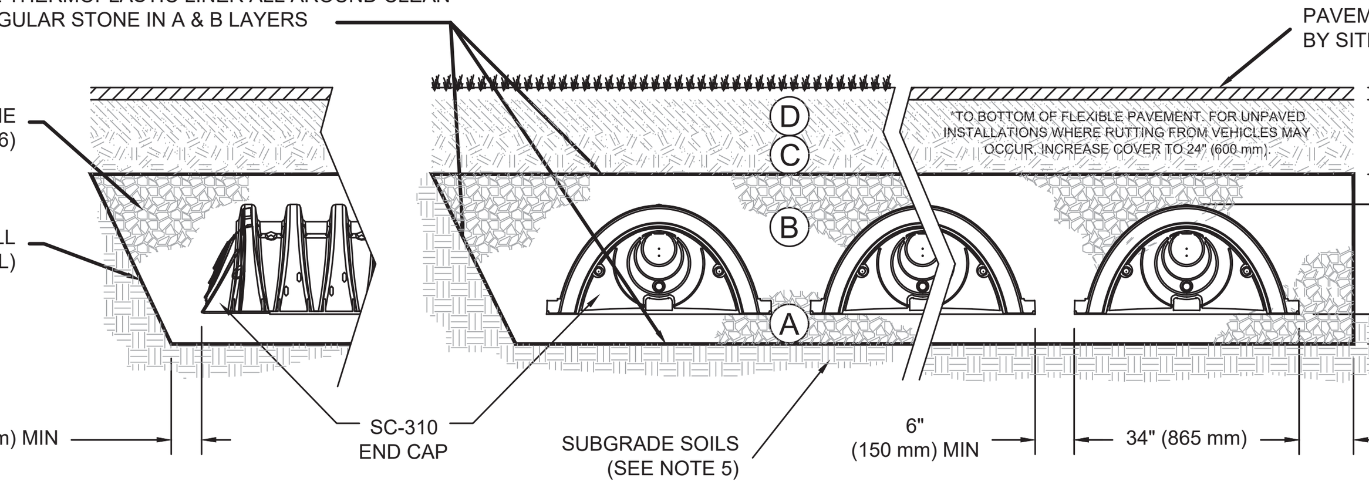


SC-310 6" INSPECTION PORT DETAIL
NTS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2 3]

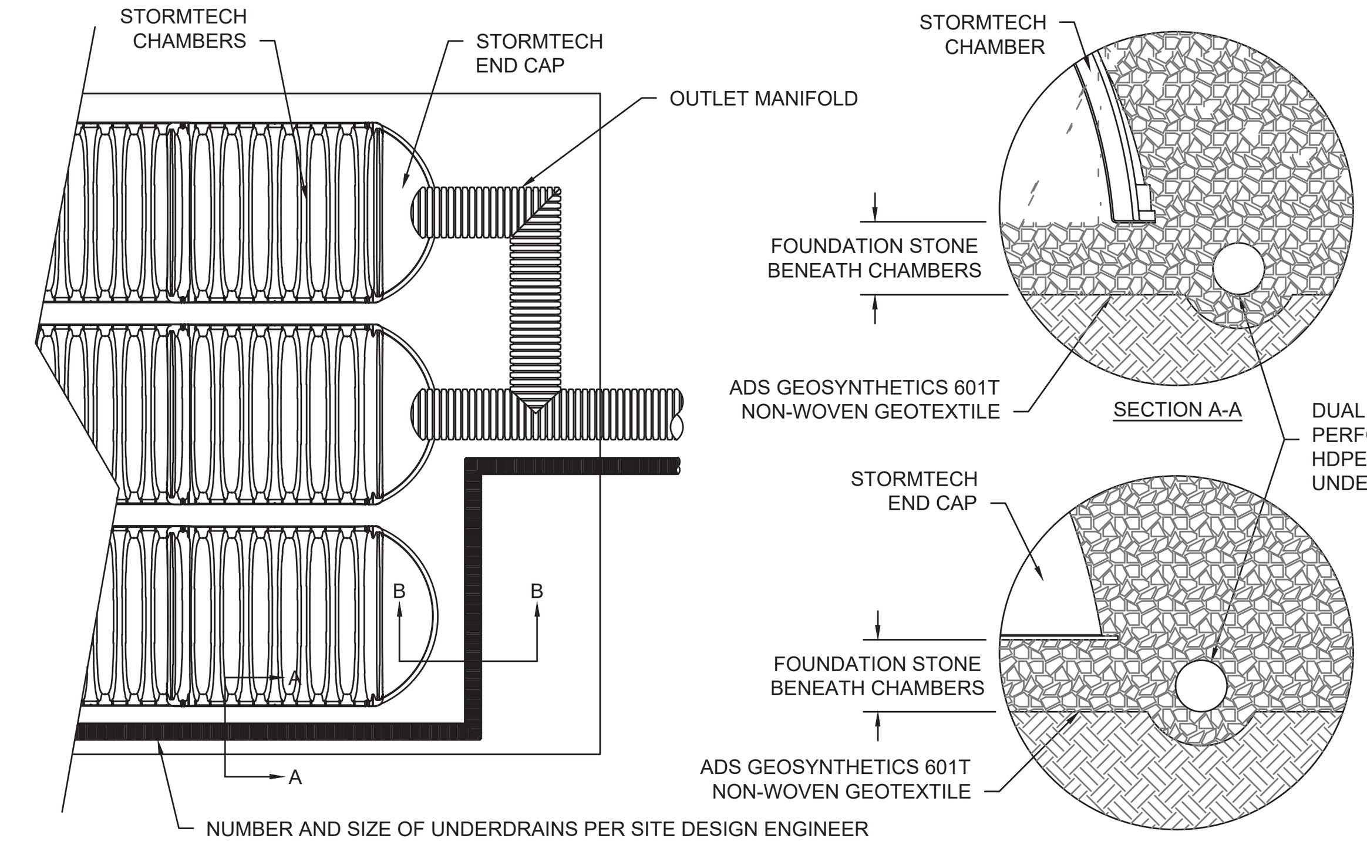
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



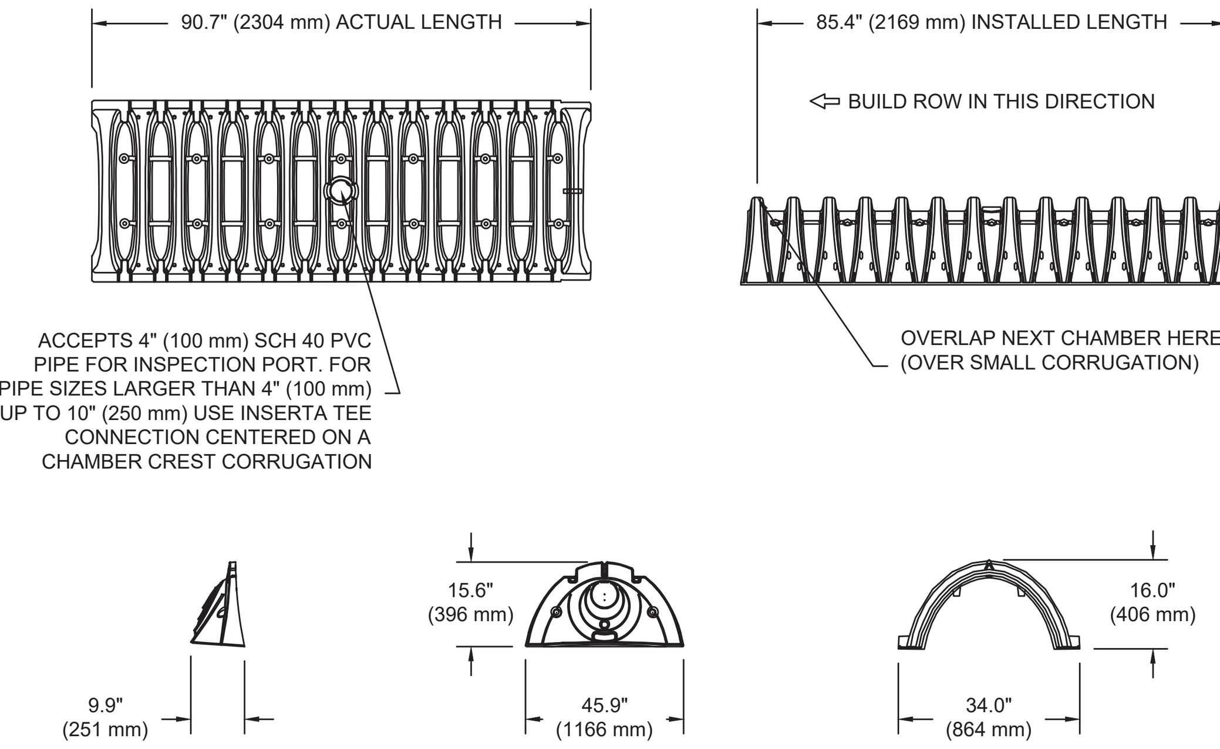
NOTES:

1. SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 ^J"STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".^J
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".^J
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.^J
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.^J
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.^J
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

UNDERDRAIN DETAIL
NTS



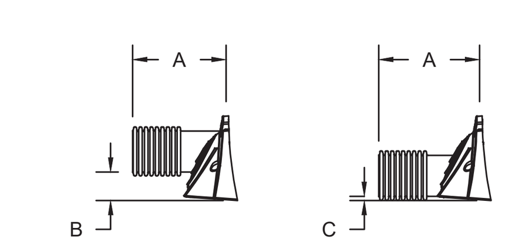
SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

INSPECTION SCHEDULE

1. ENSURE THAT THE CONTRIBUTING DRAINAGE AREA AND INLETS ARE CLEAR OF DEBRIS. (QUARTERLY)
2. ENSURE THE CONTRIBUTING DRAINAGE ARE IS STABILIZED. (QUARTERLY)
3. REMOVE SEDIMENT AND OIL/GREASE FROM PRETREATMENT DEVICES, AS WELL AS FROM OVERFLOW STRUCTURES (QUARTERLY)
4. CHECK OBSERVATION WELLS 3 DAYS AFTER A STORM EVENT IN EXCESS OF $\frac{1}{2}$ INCH IN DEPTH. STANDING WATER OBSERVED IN THE WELL AFTER 3 DAYS IS A CLEAR INDICATION OF CLOGGING. (SEMI-ANNUAL)
5. THE MAINTENANCE PORTS SHOULD BE CHECKED EVERY SIX MONTHS FOR CONTAMINATION, WITH MAINTENANCE SCHEDULED AT A MINIMUM 12-MONTH INTERVALS.
6. INSPECT PRE-TREATMENT DEVICES AND DIVERSION STRUCTURES FOR SEDIMENT BUILD-UP AND STRUCTURAL DAMAGE. (SEMI-ANNUAL)
7. THE OWNER/DEVELOPER SHALL KEEP A LOG OF THESE INSPECTIONS ON LOCATION FOR REVIEW BY THE CITY OF VIRGINIA BEACH INSPECTIONS, AS REQUIRED.
8. THE OWNER/DEVELOPER IS RESPONSIBLE FOR RECONSTRUCTING THE STORM WATER MANAGEMENT FACILITY SHOULD IT MALFUNCTION OR CEASE TO OPERATE AT THEIR OWN COST.

TYPICAL INSPECTION AND MAINTENANCE PROCEDURE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE^Ji) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY^Jii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

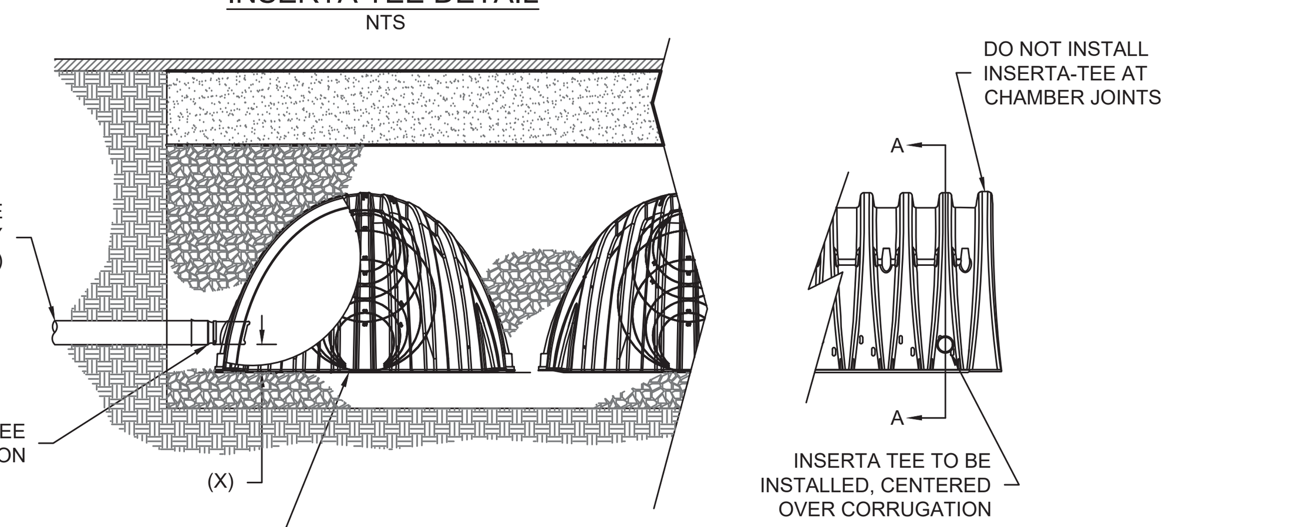
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.^J
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

INSERTA TEE DETAIL
NTS



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

QUARTERPATH

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REVIEWED BY SMB
DESIGNED BY GAF

LOCATION POCAHONTAS TRL. AND BATTERY BLVD.
SHEET TITLE MISCELLANEOUS DETAILS
SITE ADDRESS 7337 POCAHONTAS TRAIL JAMES CITY COUNTY, VA
STORE NUMBER 38064

SHEET NO. CDT-10.6
DETAILS

QUARTERPATH

FILE NAME: P:\6160-Verdad\6160.54-Quaterpath\Cad\21-CDT-10.6.dwg LAYOUT NAME: Viewport PLOTTED: Thursday, June 28, 2018 - 8:35am