

# **Municipal Separate Storm Sewer System Annual Report**

Chesapeake, Norfolk, Portsmouth & Virginia Beach Campuses

Reporting Period: July 1, 2022 to June 30, 2023

#### Prepared for:

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Due date: October 1, 2023



#### **Annual Report Certification**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name: Heather Hardiman
Signature: Heather Hardinan
Title: Vice President for Administration & Chief Financial Officer
Date: September 25, 2023

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#### **Background and Purpose**

Tidewater Community College (TCC) owns and operates a municipal separate storm sewer system (MS4). The college's MS4 consists of features such as curb and gutter, drop inlets, ditches, and stormwater management facilities to convey, treat, and ultimately discharge stormwater runoff to surface waters. The discharge of runoff from the MS4 is regulated under the Clean Water Act, as amended and pursuant to the State Water Control Law and Regulations adopted pursuant thereto. TCC is authorized to discharge stormwater runoff from the Chesapeake, Norfolk, Portsmouth, and Virginia Beach campuses' MS4s under the Virginia Stormwater Management Program Regulations, Virginia Pollutant Discharge Elimination System Regulations (VPDES), and the Virginia State Water Control Law.

TCC is authorized to discharge stormwater in accordance with the General VPDES Permit for Discharges of Stormwater from Small MS4s (General Permit). As required by the General Permit, TCC has developed an MS4 Program Plan that describes the best management practices (BMPs) the college will implement to maintain compliance with the permit. The General Permit also requires TCC to submit an annual report to the Virginia Department of Environmental Quality (DEQ) no later than October 1st of each year that reports on program implementation from July 1st of the previous year to June 30th of the current year. Consistent with the requirements of the General Permit, this annual report is annually completed as summarized in Table 1.

Table 1. General information required for annual reporting.

Required Information	Location in Report
Permittee, system name, and permit number	Cover Page
Reporting period	Cover Page
Signed Certification	Page 'i'
Annual Reporting item(s) specified for each MCM	Provided for each BMP within the section entitled "Minimum Control Measure Annual Reporting."
Evaluation of the program implementation, effectiveness, and necessary modifications	Provided for each BMP within the section entitled "Minimum Control Measure Annual Reporting." Concerns regarding effectiveness are in Table 2 of the following Section.

#### **Compliance Summary**

Reported information is consistent with the specific annual reporting required in the General Permit and the TCC MS4 Program Plan, including supplemental information described in the Program Plan to measure effectiveness of each BMP. For use in reference to this annual report, the MS4 Program Plan is provided at the TCC stormwater management webpage. The Program Plan may be updated or revised from time to time as part of an iterative process to reduce pollutant loadings and protect water quality to the maximum extent practicable (MEP). TCC has evaluated the effectiveness of each program BMP, as described in the Program Plan. Table 2 summarizes the evaluation to determine if any modifications to the Program Plan are necessary for the subsequent reporting year. If deemed ineffective, please see the reporting for the specific BMP for intended modifications.

Table 2. Evaluation summary for each BMP for the reporting year.

BMP # 1	Description Summary <sup>1</sup>	Effective
1A	Public Education & Outreach	⊠Yes / □No
2A	Maintain dedicated webpage	⊠Yes / □No
2B	Receive/respond to public reports/input	$\boxtimes Yes / \square No$
2C	Public Participation Activities	$\boxtimes Yes / \square No$
3A	MS4 Map and Information Table	⊠Yes / □No
3B	Prohibition of non-stormwater discharges	$\boxtimes Yes / \square No$
3C	Perform dry weather outfall screenings	$\boxtimes Yes / \square No$
4A	Implement VCCS Stnds. & Specs for ESC & SWM	⊠Yes / □No
4B	Control Non-stormwater discharges (construction)	$\boxtimes Yes / \square No$
5A	Implement VCCS Stnds. & Specs for ESC & SWM	⊠Yes / □No
5B	Conduct annual SWM Facility Inspections	$\boxtimes Yes / \square No$
5C	Update SWM Facility Spreadsheet	$\boxtimes Yes / \square No$
5D	Report to DEQ Construction Stormwater Database	⊠Yes / □No
6A	Implement Good Housekeeping Procedures	⊠Yes / □No
6B	Conduct annual campus-wide SWPPP Evaluation	$\boxtimes Yes / \square No$
6C	Maintain Current Nutrient Management Plan	$\boxtimes Yes / \square No$
6D	Ensure contract language for controls	$\boxtimes Yes / \square No$
6E	Conduct MS4 employee training	⊠Yes / □No
SC1	Chesapeake Bay TMDL Action Plan	⊠Yes / □No
	Local TMDL Action Plans	N/A <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Refer to BMP section within this program plan for full description and requirements for each BMP.

<sup>&</sup>lt;sup>2</sup> TCC has not been assigned a waste load allocation from a local TMDL; and therefore, is not required to implement a TMDL Action Plan specific to any local TMDLs.

#### **Minimum Control Measure Annual Reporting**

Reporting provided for each BMP described in the TCC MS4 Program Plan to address each MCM is provided below. Information provided is only that explicitly required by the General Permit and the TCC MS4 Program Plan. Please refer to the Program Plan for additional information for each BMP.

#### MCM 1: Public Education and Outreach

Annual reporting required for each BMP to address MCM 1, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 1A - Public Education & Outreach Plan

Annual reporting associated with this BMP requires:

- ✓ A list of the high-priority stormwater issues addressed during the reporting year (Table 1A-1).
- ✓ A list of the strategies used to communicate each high-priority stormwater issue (Table 1A-1).
- ✓ The public survey results described for use as a measure of effectiveness (Table 1A-2).

Table 1A-1. Reporting for high priority stormwater issues addressed during the reporting year.

High Priority Stormwater Issue	Strategy
1. General public education on: (1) stormwater impacts to	Traditional Written Materials
surface waters and (2) steps to reduce pollution.	(brochure)
2. Illicit discharge prohibition/enforcement on the TCC campus	Media Materials
disciplinary implications, hazards and proper waste disposal.	(Closed circuit TV slides)
3. Increase applicable staff's knowledge regarding pollutants of	Traditional Written Materials
concern for the Chesapeake Bay TMDL.	(brochure)

Table 1A-2. Public survey results used for measure of effectiveness.

#### **Results from Public Survey**

As two-year colleges, biennial public surveys to measure the impact of the public education and outreach programs are conducted by 8 VCCS colleges with similar programs (> 1,000 participants). During the permit cycle, results have showed a slight increase in average survey scores that measure program knowledge every two years: 73.2% (2019), 73.2% (2021), 75.8% (2023).

Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	Yes V No	

#### MCM 2: Public Involvement and Participation

Annual reporting required for each BMP to address MCM 2, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 2A – Dedicated MS4 Webpage

Annual reporting associated with this BMP requires:

- ✓ The current TCC MS4 Program and stormwater pollution prevention webpage address and a description of updates implemented within the reporting year. A description of updates implemented to the webpage within the reporting year; and
- ✓ Indication of the completion of an annual review of the webpage to ensure the required information to be posted is maintained and up to date.

Table 2A-1. Reporting for high priority stormwater issues addressed during the reporting year.

Dedicated Stormwater Webpage Reporting			
Link to current MS4 Program and Stormwater pollution prevention webpage: <a href="https://www.tcc.edu/about-tcc/leadership-governance/stormwater-management/">https://www.tcc.edu/about-tcc/leadership-governance/stormwater-management/</a>			
An annual review of the website conducted to ensure all information required to be posted on the website has continued to be maintained?	✓ Yes	No	
Description of updates implemented during the reporting year:  TCC added the latest MS4 annual report, as required by the General Permit, during the reporting year.			
Summary of BMP Effectiveness based on Program Plan Measurable Goal			
Does the measure of BMP effectiveness require Program Plan modification?		Yes V No	

#### BMP 2B - Procedures for Receipt/ Response to Public Reports/Input

- ✓ Each potential illicit discharge report and percentage of reports closed;
- ✓ Each instance of public input and percent for which TCC provided response; and
- ✓ Assessment if all illicit discharges were not closed or all input did not receive response.

Illicit Discharge Reports <sup>1</sup>			
Number of instances:	Number of instances closed:	Percent of instances closed:	
0	0	N/A	
Were 100% of instances of illicit discharge reports closed?		N/A	
Public Input on Program Plan <sup>2</sup>			
Number of instances:	Number of responses:	Percent of instances responded	
0	0	to: <i>N/A</i>	
Was a response provided to all instance of public input?		N/A	

Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	Yes V No	

<sup>&</sup>lt;sup>1</sup> Illicit discharge reports are provided in Appendices, if > zero instances.

<sup>&</sup>lt;sup>2</sup> Public input and response documentation is in Appendices, if > zero instances.

#### BMP 2C - Public Involvement/Participation Activities

- ✓ A description of the activities;
- ✓ A report of the metric to measure the benefit to water quality; and
- ✓ An evaluation as to whether or not the activity is beneficial to improving water quality.

Public Involvement/Participation Activities			
Involvement Type <sup>1</sup>	Description of activity <sup>2</sup>	Report on the Metric to measure benefit to water quality	Beneficial to Improving water quality?
Pollution prevention	Install/maintain cigarette butt stations with stormwater message displayed on them.	50 stations inspected and maintained	✓ Yes No
Educational Events	Maintained demonstration of a SWM control project — educational signage at bioretention (BMP P-11) at Portsmouth Campus.	Inherent as a benefit to college public walking by and observing the signage.	▼ Yes  No
Pollution prevention	Implementation and maintenance of storm drain marker program.	All inlets marked. A minimum of 20% of markers inspected and maintained annually.	✓ Yes No
Disposal or collection events	Custodial Services Recycling Program for paper, glass, and plastics	80.64 tons of recycled material collected during the reporting period	✓ Yes □ No

<sup>&</sup>lt;sup>1</sup> A minimum of two involvement types must be used annually.

<sup>&</sup>lt;sup>2</sup> TCC did not collaborate with any other MS4 permittees for any of the listed activities.

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes <b>☑</b> No

#### MCM 3: Illicit Discharge Detection and Elimination

Annual reporting required for each BMP to address MCM 3, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 3A - Maintain MS4 Map and Information Table

Annual reporting associated with this BMP requires:

✓ A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30<sup>th</sup> of the reporting year;

Certification Statement: MS4 Map & Information Table Updates		
"In accordance with the General Permit and the TCC Program Plan, TCC confirms as part of this annual report that the MS4 map and information table have been update, as needed and applicable, to reflect any changes to the MS4 occurring during the reporting year."	✓ Yes  No	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	Yes V No

#### BMP 3B - Prohibition of Unauthorized Non-stormwater Discharges

Annual reporting associated with this BMP includes reporting requirements for BMP 3C, in addition to the following:

- ✓ The number of illicit discharges purposefully caused by a member of the TCC public;
- ✓ An assessment, when applicable, of any disciplinary action in context to the protection of water quality.

Illicit Discharge Prohibition Enforcement		
(If applicable, instances are added below of illicit discharges purposefully caused by the TCC Public)		ully caused by the TCC Public)
No. Add Instance	Disciplinary action taken? (Yes / No)	Description of action taken
Total number of instances for cur	rrent reporting year.	0
Total number of instances for las	t reporting year.	0
Total number of instances two ye	ears previous.	0
Total number of instances three y	year prior.	0
Does trend indicate the BMP is in	neffective?	☐ Yes ☑ No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	Yes V No

#### BMP 3C - Maintain, Implement, Enforce IDDE Written Procedures (Includes Screening)

- ✓ The total number of outfalls screened during the reporting period as part of the dry weather screening program; and
- ✓ A list of illicit discharges to the MS4 including spills reaching the MS4. Each instance of illicit discharge will be documented using the "IDDE Tracking Form" in the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* to include the following information:
  - The source of illicit discharge;
  - The dates that the discharge was observed, reported, or both;
  - Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);
  - How the investigation was resolved;
  - A description of any follow-up activities; and
  - The date the investigation was closed.
- ✓ An annual assessment of the percentage of detected illicit discharges that are eliminated, including any necessary modification(s) needed for the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* for cases where a detected illicit discharge was not eliminated. A schedule for completing any modification will also be provided.

Outfall Screening & IDDE Procedure Effectiveness	
Total number of outfalls screened as part of dry weather screening program.	9
Total number of TCC outfalls.	9
Were 100% of outfalls screened during the reporting year?	✓ Yes No

Effectiveness Assessment for Addressing Illicit Discharges	
Were all instances of identified illicit discharge listed in Appendices closed?	None identified.

#### MCM 4: Construction Site Stormwater Runoff Control

Annual reporting required for each BMP to address MCM 4, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 4A – Address Discharge from Regulated Construction Site Stormwater Runoff

Annual reporting associated with this BMP requires:

✓ A confirmation statement, as a result of the annual assessment for effectiveness, that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current DEQ-approved standards and specifications for ESC.

Certification Statement: Adherence to the VCCS Standards & Specifications for ESC

- If one or more of the land disturbing projects were not conducted with the DEQapproved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.
- ✓ Total number of ESC inspections conducted; and
- ✓ The total number and type of enforcement actions taken.

Confirmation Statement: "In accordance with the General Permit and the TCC Program Plan, TCC confirms that land disturbing projects that occurred during the reporting period have been conducted in accordance with the latest DEQ-approved standards and specifications for Erosion and Sediment Control."	☐ Yes ☐ No ☐ N/A	
ESC Inspections & Enforcement Summary		
Total number of ESC inspections conducted: $N/A - No$ projects during the reporting year.		
Were any enforcement actions taken during the reporting year?	Yes No	
Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes ☑ No	

#### BMP 4B -Controls to Prevent Non-stormwater Discharges during Land Disturbance

- ✓ The total number of illicit discharge originating from land disturbance activity of the total illicit discharges reports listed in Appendices (if applicable); and
- ✓ Any potential changes to the subsequent annual standards and specifications to prevent future occurrences.

Illicit Discharge from Land Disturbance Activity	
Were there any instances during the reporting period of illicit discharges originating from land disturbance activity?	Yes V No
Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes 🔽 No

#### MCM 5: Post-construction SWM for Development

Annual reporting required for each BMP to address MCM 5, as described in the General Permit and MS4 Program Plan, is provided below. Please refer to the TCC MS4 Program Plan for specific BMP information.

#### BMP 5A - Address Post-construction Stormwater Runoff

Annual reporting associated with this BMP requires:

✓ A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current DEQ-approved standards and specifications for SWM.

Certification Statement: Adherence to the VCCS Standards & Specifications for SWM	
Confirmation Statement: "In accordance with the General Permit and the TCC Program Plan, TCC confirms that applicable land disturbing projects that occurred during the reporting period, if any, have been conducted in accordance with the latest DEQ-approved standards and specifications for Stormwater Management."	☐ Yes ☐ No ☐ N/A

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	Yes Vo

<sup>&</sup>lt;sup>1</sup> Not applicable since no projects were completed during the reporting year that required coverage; or if an applicable project was completed, a stormwater management facility was not installed as part of the project. See following certification statement.

#### BMP 5B - Implement Inspection & Maintenance Program for SWM Facilities

Annual reporting associated with this BMP requires:

- ✓ The total number of inspections (completed forms) conducted on each of TCC's SWM facilities;
- ✓ A description of the significant maintenance, repair, or retrofit activities performed on each SWM facility, if any, to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection; and
- ✓ Summary of timelines for addressing any significant maintenance identified during inspections.

SWM Facility Inspections and Maintenance	
Total number of inspections conducted on SWM facilities for the reporting y	vear is: 27
Was at least one inspection performed on each TCC SWM facility during the reporting year?	▼ Yes  No
Was any significant maintenance, repair, or retrofit activities necessary as a result of inspection?	▼ Yes  No
If yes, provide the BMP ID and a description of significant maintenance need performance per design, including an assessment of the timeliness of the need	
<ul> <li>Significant maintenance repairs:</li> <li>BMP VB-2, a bioretention facility at the VB campus. TCC has implemented intermediate maintenance to address immediate concerns regarding ponding potentially due to "matting" vegetation on the filter surface. Further investigation of the BMP will be performed in the 2023-2024 reporting period and corrections made.</li> <li>BMP C-3, a retention pond at the Chesapeake campus. A subsidence occurring along the outlet pipe needs repair. The maintenance item will be addressed the 2023-2024 reporting period.</li> </ul>	
All other identified maintenance items were generally consistent with routin associated with thinning vegetation for providing better access. Inspection upon request.	•

#### BMP 5C - Maintain SWM Facilities Spreadsheet

No annual reporting necessary (see reporting for BMP 5D)

#### BMP 5D -SWM Facilities Reporting to DEQ

- ✓ A confirmation statement that either: (1) TCC submitted SWM facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities was required or (2) TCC did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.
  - If information was not submitted, an explanation as to why with a schedule for submission of the required information.
- ✓ A confirmation statement that TCC electronically reported, no later than the submission date of this annual report, SWM facilities and BMPs implemented between July 1 and June 30 using the DEQ BMP Warehouse that were installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required and the date on which the information was submitted.
  - If information was not submitted, an explanation as to why with a schedule for submission of the required information.

Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)	
Confirmation Statement: "TCC submitted SWM facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities was required in accordance with the VCCS Standards and Specifications for ESC and SWM."	✓ Yes ✓ No

<sup>&</sup>lt;sup>1</sup> Not applicable since no projects were completed during the reporting year that required coverage; or if an applicable project was completed, a stormwater management facility was not installed as part of the project. See following certification statement.

#### BMP 5D -SWM Facilities Reporting to DEQ (continued)

Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)	
Confirmation Statement: "TCC either did not complete any projects during the reporting period requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; or, if a project was completed, a stormwater management facility was not installed as part of the project."	Marked box below is confirmation
Certification Statement: Reporting to the DEQ BMP Warehouse	
Confirmation Statement: "TCC reported, prior to submission of this annual report,	

Certification Statement: Reporting to the DEQ BMP Warehouse		
Confirmation Statement: "TCC reported, prior to submission of this annual report, stormwater management facilities and BMPs implemented between July 1 and June 30 of the reporting period using the DEQ BMP Warehouse that were installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required."	Yes No ✓ N/A	
Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)		
Confirmation Statement: "TCC did not install SWM facilities and BMPs to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required"	Marked box below is confirmation ⊠	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes ☑ No

#### MCM 6: Pollution Prevention & Good Housekeeping for Facilities

Annual reporting required for each BMP to address MCM 6, as described in the General Permit and MS4 Program Plan, is provided below. Please refer to the TCC MS4 Program Plan for specific BMP information.

#### BMP 6A -Written Procedures for Pollution Prevention/Good Housekeeping

- ✓ A description of any illicit discharges originating from campus operations and maintenance activities, provided in reporting for BMP 3C; and
- ✓ A summary of any modifications to operational procedures in the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* to prevent future occurrences of illicit discharge(s), if applicable.

Effectiveness of Program to Prevent Illicit Discharges from Campus Operations		
Were there any illicit discharges from BMP 3C reporting that originated from campus operations of maintenance activities?	Yes No	
Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes ☑ No	

#### BMP 6B -SWPPPs for High Priority/ High Potential Facilities for Discharging Pollutants

Annual reporting for this BMP requires a summary of the annual campus assessment to determine if a SWPPP is required based on the criteria described in the General Permit that defines high priority facilities that have high potential of discharging pollutants.

Annual Campus SWPPP Assessment Results		
Was an annual evaluation performed to determine if a SWPPP is required?	▼ Yes  No	
If yes, is a SWPPP required?	☐ Yes ☑ No	
Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes <b>☑</b> No	

#### BMP 6C - Maintain/Implement Nutrient Management Plans and Deicing Policy

Annual reporting for this BMP will include a summary of any new NMPs developed, including

- ✓ Locations and total acreage for where the NMP applies; and the
- ✓ Date of the latest DCR approval for the NMP.

Nutrient Management		
Did TCC apply nutrients during the reporting year?	✓ Yes No	
TCC implements a Nutrient Management Plan that applies to the TCC MS4 regulated campuses of Chesapeake, Portsmouth, Norfolk and Virginia Beach and covers 8.0, 5.0, 0.1, and 32.5 acres of fertilized turf, respectively. The Nutrient Management Plan is approved by the Department of Conservation and Recreation and is valid through July 1, 2024.		

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes ☑ No

#### BMP 6D - Contractor Requirements to Utilize Controls to Minimize Pollutant Discharges

Annual reporting for this BMP requires:

- ✓ The number of illicit discharges originating from contractor activities.
- ✓ Summary of assessment to modify procurement procedures or the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* to prevent future instances.

BMP 6A Annual Reporting Form		
Were there any illicit discharges during the reporting period that originated from contractor activities?	☐ Yes ☑ No	
Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	☐ Yes ☑ No	

#### BMP 6E - Training Plan for Applicable Employees

- ✓ The date of the most recent training event;
- ✓ The date of the prior training event (to ensure within 24 months);
- ✓ The number of employees who attended the most recent training event;
- ✓ The objective of the training event; and
- ✓ The average quiz scores from the training event. If quiz scores average less than 80%, a summary will be report of the assessment of the training event with any necessary modifications to be incorporated into future training to improve teaching of the materials.

Good Housekeeping/Pollution Prevention Training		
Date of latest training event:	September/October 2022. Training was provided with a training video specifically developed for TCC. After watching the video, staff took an online quiz as a measure of effectiveness and for documentation. Quiz results are available upon request.	
Number of employees that attended the	32	
Number of employees identified to be required to participate in training (as defined by the general permit and program plan).		32
Percent of those identified that attended training.  100%		100%
Did the % of those identified to be required to attend training attend?		✓ Yes No
Description of the objective of the latest training event:  Familiarize staff with the MS4 program, recognition and reporting of illicit discharges, the Staff  Handbook for Good Housekeeping and Pollution Prevention, and priority areas on campus.		
Average quiz score from latest training event.  84%		
Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?		☐ Yes <b>☑</b> No

#### **Special Conditions for Total Maximum Daily Load Waste Load Allocations**

Annual reporting required for each BMP to address Special Conditions for TMDLs, as described in the General Permit, is provided below.

#### BMP SC1 - Chesapeake Bay TMDL Action Plan

Annual reporting associated with this BMP requires the following:

- ✓ BMPs implemented during the reporting period (street sweeping);
- ✓ Progress towards meeting the required cumulative reductions in the Action Plan;
- ✓ A list of BMPs to be implemented the following reporting year (street sweeping); and
- ✓ Any revisions made to the Action Plan during the reporting year.

#### **Chesapeake Bay TMDL Action Plan Annual Reporting**

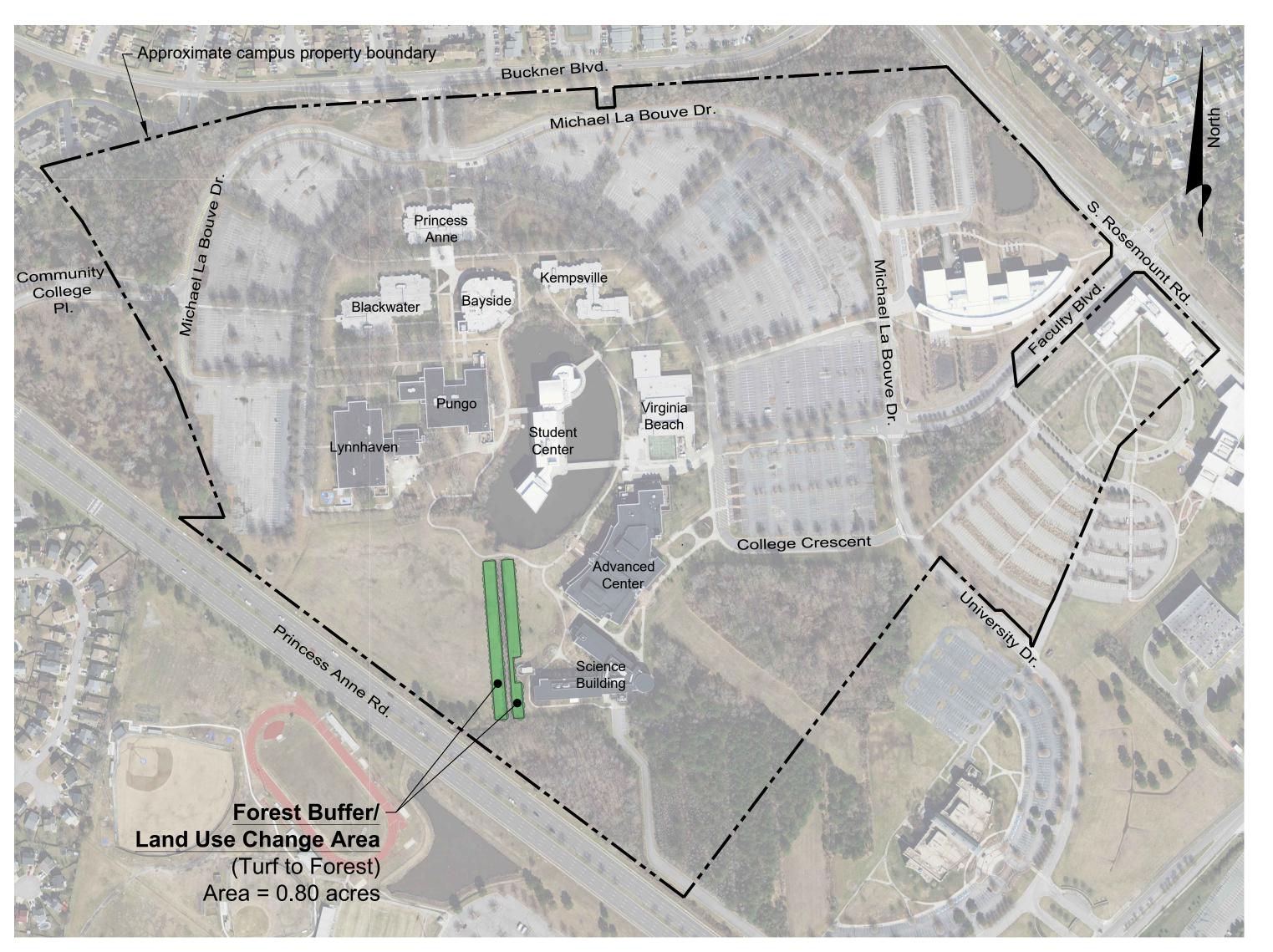
As shown in the tabulations below, a majority portion of the required pollutant reductions is achieved with surplus credit from existing SWM facilities. During the current permit cycle, TCC had supplemented achieving the remaining annual pollutant reductions with street sweeping. However, due to annual sweeping not consistently providing the remaining reductions, along with new DEQ Guidance for quantifying reductions that greatly reduces pollutant reductions previous credited, TCC contracted H2R Engineering to provide a compliance reassessment to identify alternative means and methods to achieve remaining reductions. The assessment identified forest buffers as a BMP opportunity for the college at the Virginia Beach and Chesapeake campuses. The forest buffer BMPs are being implemented and reductions are tabulated below (also see Appendix A). Remaining reductions were to be achieved with street sweeping this reporting period, but were unable to be accomplished partially due to mechanical and operational issues with the college's street sweeper. To avoid potential shortfall in future annual reductions, TCC has initiated the process for purchasing nutrient credits to achieve the required remaining reductions. Remaining reductions to be achieved with nutrient credits are equivalent to 1.96 lbs./year of TP.

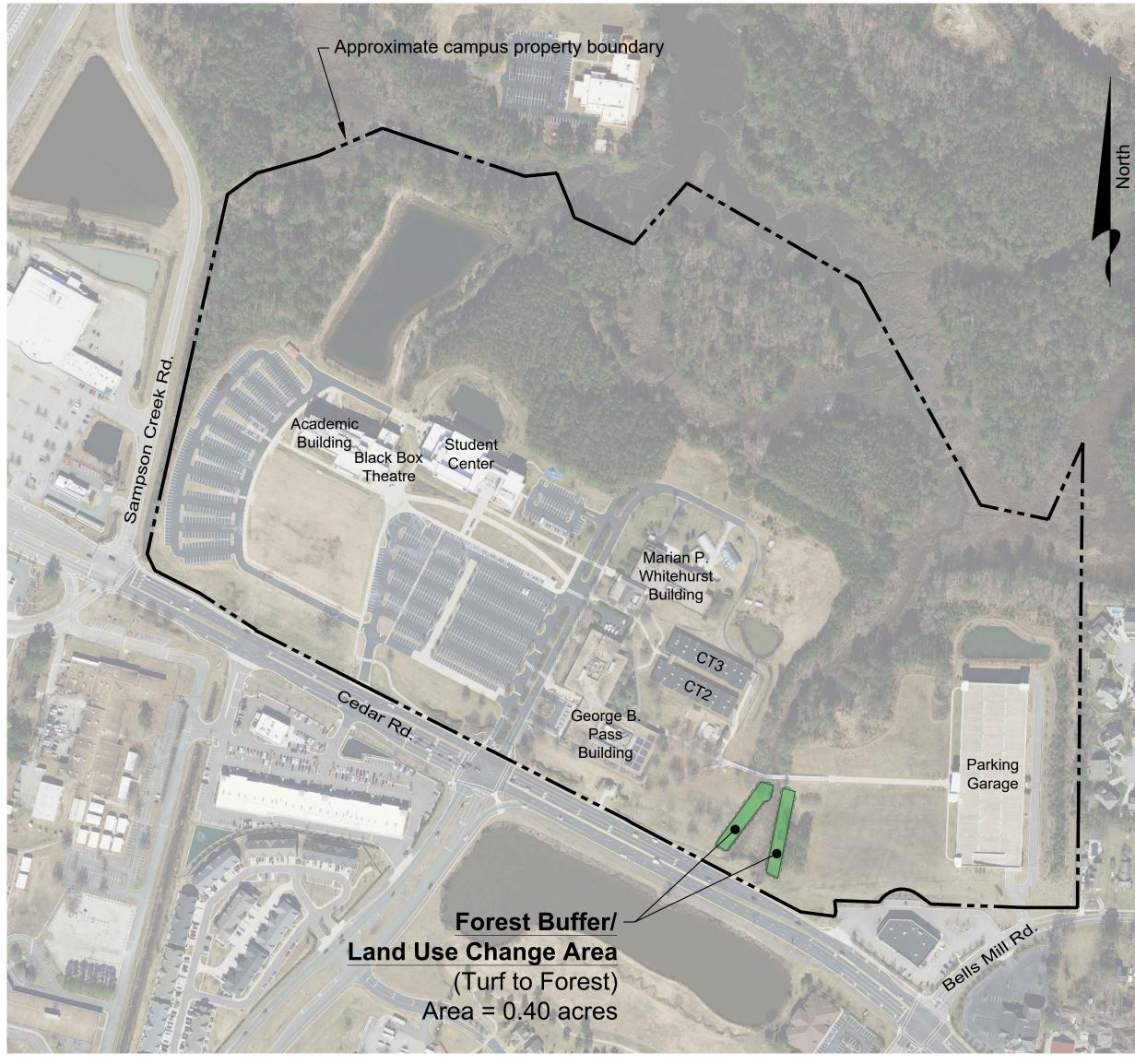
	Reductions	Reductions from existing	Reductions from	Total reductions
Pollutant	Required by	SWM facilities (lbs/yr)	Forest Buffers	2022-2023
	2023 (lbs/yr)	(2013-2018 Action Plan)	(lbs./yr.)*	(lbs./yr.)
TN	49.0	40.51	11.73	52.24
TP	12.0	7.79	2.25	10.04
TSS	5,508	3,278.82	673.00	3,951.82

<sup>\*</sup> Buffers have been staked and landscaping contractor has been contracted to have trees at required types/size/densities planted at the Virginia Beach and Chesapeake campuses prior to October 15, 2023.

Have pollutant reductions achieved required targets?	TN: Yes; TP: No, TSS: No	
Plan to achieve remaining reductions required: See discussion above.		
Were any modifications made to the action plan?	Yes, as descried above.	



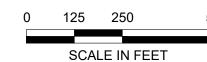




**Virginia Beach Campus - Location Map** 



**Chesapeake Campus - Location Map** 



# MAINTENANCE NOTES (For TCC)

- 1. After planting, TCC shall periodically check the planted areas for:
  - Invasive species. If present, promptly remove.
  - Replace broken stakes. Hammer in loose stakes.
  - Remove wasp nest or vegetation within tubes (shelters).
  - Remove netting before the seedling reaches top of tube (shelter).
- 2. Leave the tubing (shelter) in place until seedling is 2-3-inches in diameter.





# **Chesapeake Bay TMDL Compliance Summary**

# Pollutant reductions required by October 2023:

- Total Nitrogen (TN) = 49.0 lbs/yr
- Total Phosphorus (TP) = 12.0 lbs/yr
- Total Suspended Solids (TSS) = 5,508.0 lbs/yr

# Pollutant reduction surplus credited from existing stormwater management facilities: \*

- Total from surplus
- +TN = 40.51 lbs/yr
- + TP = 7.79 lbs/yr
- + TSS = 3,278.82 lbs/yr

## Pollutant reduction from annual street sweeping:

- Sweeping 6 times annually \*\*
- +TN = 3.68 lbs/yr
- + TP = 1.97 lbs/yr
- + TSS = 1,516.35 lbs/yr

# Pollutant Reduction from Forest Buffering (shown hereon):

- (Based on total ±740 LF and a ±70' buffer) \*\*
  - +TN = 11.73 lbs/yr
  - + TP = 2.25 lbs/yr
  - + TSS = 673.0 lbs/yr

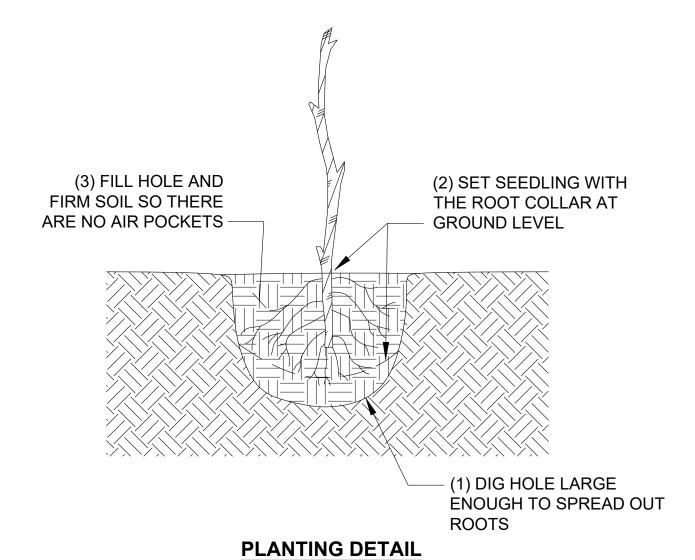
# Total pollutant reductions provided:

TN = 16.24 lbs/yr

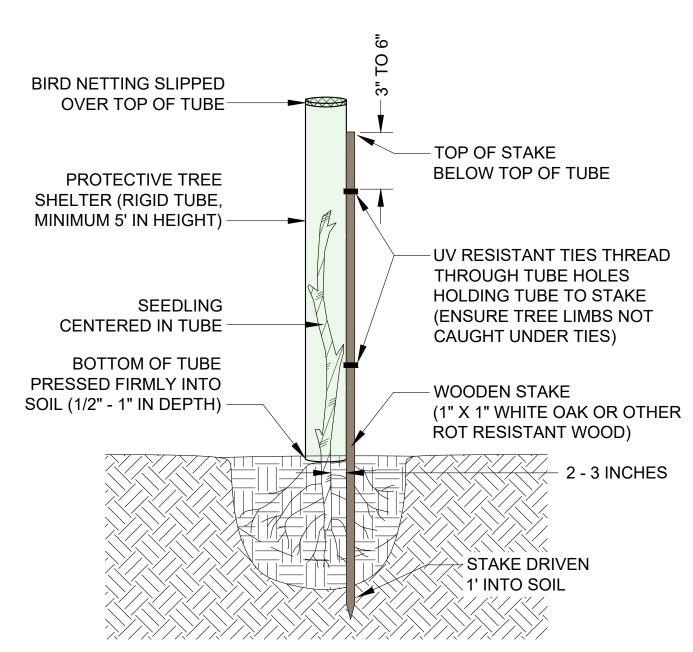
- TP = 3.49 lbs/yr TSS = 1,243.13 lbs/y
- \* See the TCC Chesapeake Bay TMDL Action Plan, dated October 1, 2015, for supporting computations.
- \*\* See the TCC preliminary Engineering Report for the Chesapeake bay TMDL Action plan, Phase II Compliance Reassessment, dated July 2022.

# NOTES:

- 1. The purpose of this mapping is to:
  - Illustrate locations for Forest Buffer and Land Use Change from turf to forest towards achieving pollutant reductions required for the Chesapeake Bay TMDL by October 31, 2023, per conditions of TCC's MS4 General Permit coverage;
  - Provide seedling planting instruction to the Landscaping Contractor; and
  - Serve as a compliance summary for the Chesapeake Bay TMDL reductions required by TCC by October 2023.
- 2. As available, and as selected and procured by TCC, seedling tree types shall Include a mixture of River Birch, Bald Cypress, Pin Oak, Shortleaf Pine, Sycamore, Black Gum, Black Willow, Eastern Redbud, and Sweetbay Magnolia. Seedlings shall be 1/4" diameter where the stem joins the root and a minimum of 18-inches tall.
- 3. This map was developed using readily available information and is not based on a field survey. Information shown is approximate.
- To guide the Landscaping Contractor, iron rods (as shown on sheet 2 of 2) and on-line wooden stakes will be provided in the field delineating area to be planted.
- 5. TCC has indicated no underground utilities exist within the areas for planting.
  However, as a precaution, TCC shall have areas for planting marked for underground utilities by a private utility locator.
- 6. Preparation techniques for Forest Buffer areas to be proposed by Contractor and approved by TCC and VCCS prior to commencement of planting. Preparation shall minimize land disturbance and use of herbicides.



(NOT TO SCALE)



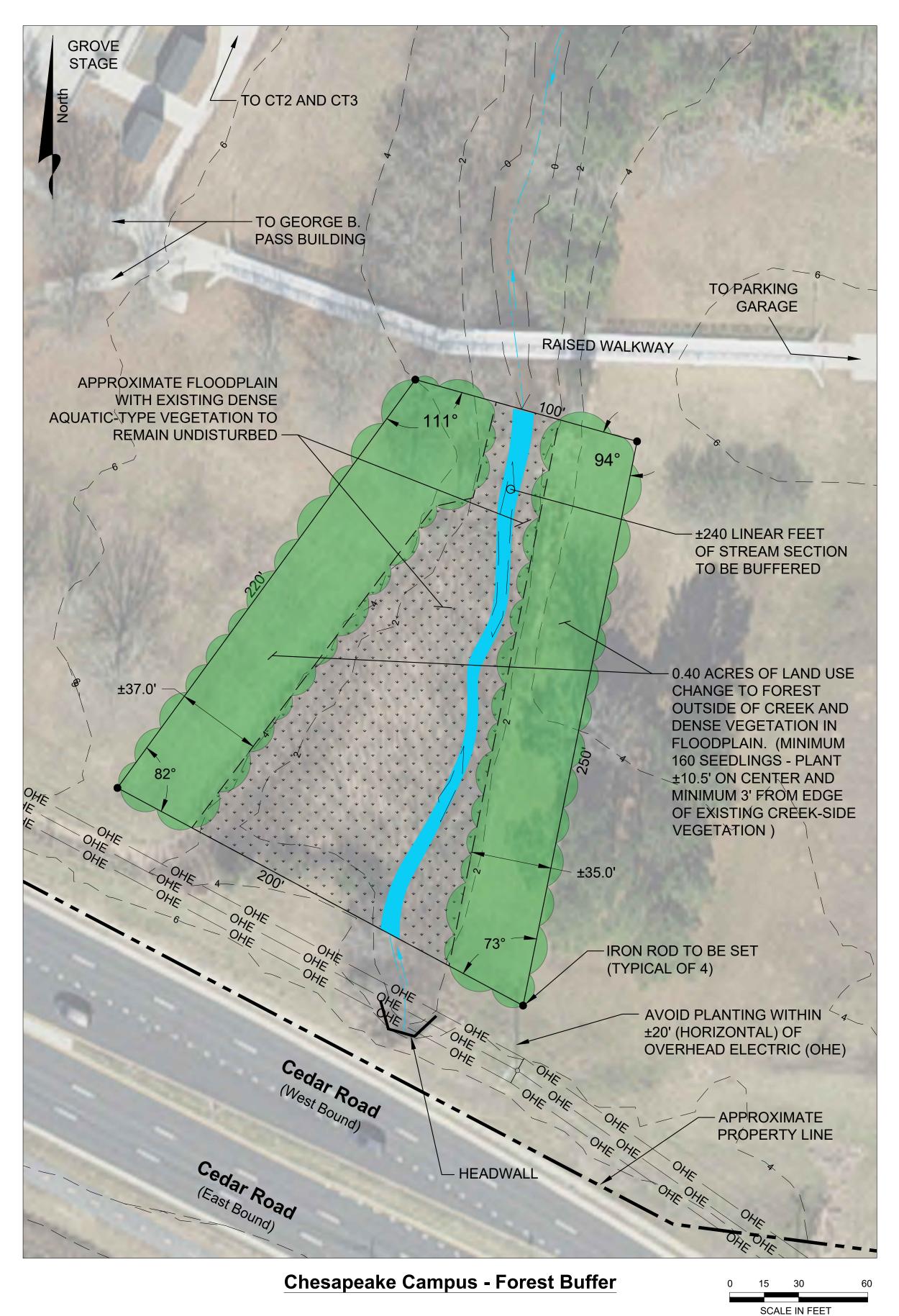
# NOTES

- 1. TREE SHELTERS SHALL BE WARRANTED BY THE MANUFACTURER FOR AT LEAST 5 YEARS AND, WHEN PROPERLY INSTALLED, TO NOT ABRADE THE TREE ONCE IT GROWS FROM TUBE. TIES SHALL ALSO BE WARRANTED FOR A MINIMUM OF 5 YEARS.
- 2. ALTERNATIVE TREE SHELTERS AND STAKES MAY BE USED ONLY WITH WRITTEN APPROVAL FROM TCC.
- 3. TREE SHELTER NEEDED FOR HARDWOODS ONLY.
- 4. TO PREVENT PVC FROM FLEXING WHILE DRIVING INTO HARD GROUND, SLIP A CAPPED SLEEVE (1½' SHORTER THAN THE PVC STAKE) OF STEEL CONDUIT OR PIPE, OVER THE PVC AND POUND ON THE STEEL CAP.
- 5. TO PREVENT CHANCES OF WINTER DIEBACK, PROVIDE PERFORATIONS ( $^1_4$  INCH) IN MIDDLE QUARTER OF PROTECTIVE TREE SHELTER (MINIMUM 6 AT 180° APART).

TREE SHELTER DETAIL (NOT TO SCALE)

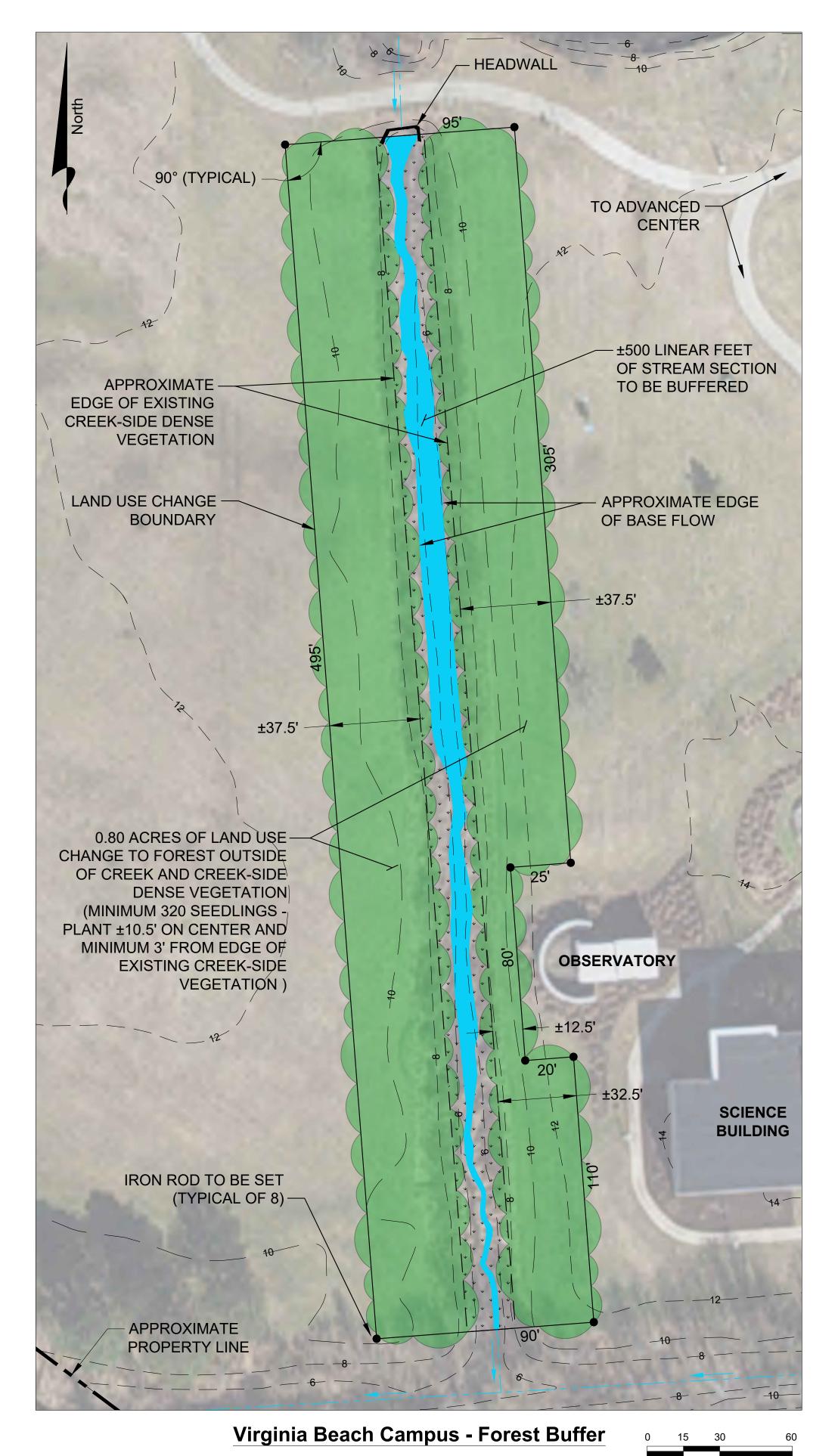






# VERIFICATION

Virginia Department of Forestry will provide post-installation field review of plantings in accordance with standards described hereon.



SCALE IN FEET