

**US ARMY GARRISON FORT LEE  
ANNUAL MS4 REPORT**

**30 September 2022**

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## 1.0 Background Information

- **Name and Permit Number of Program:** US Army Garrison – Fort Lee VAR040007
- **Reporting Year:** 1 July 2021 – 30 June 2022
- **Modifications to any operator’s department’s roles and responsibilities:** None
- **Number of new MS4 outfalls added:** 53 New outfalls are added after ERG Survey
- **Signed Certification:** See Appendix A.

## 2.0 Status of Compliance with Permit Conditions

During the reporting year 1 July 2021 through 30 June 2022, Fort Lee maintained compliance with its six identified Minimum Control Measures (MCM) and associated Best Management Practices (BMPs) – in the manner described below:

### 2.1 MCM 1 - Public Education and Outreach on Stormwater Impacts:

#### 2.1.1 Permit Part I.E.1.g (1) – High Priority Stormwater Issues

**Provide a list of at least three high-priority stormwater issues addressed in the public education and outreach plan.**

- i. Illicit Discharge Detection and Elimination
- ii. Elimination of releases of Petroleum, Oil and Lubricants (POL) and Hazardous Materials to the environment
- iii. Elimination of discharges to the storm sewer system from carwash operations
- iv. Elimination of Fats, Oils and Greases (FOGs) from entering the storm water system

#### 2.1.2 Provide a list of strategies used to communicate each high-priority stormwater issue

Fort Lee has implemented two strategies listed in Table 1 of the MS4 General Permit including 1) traditional written materials in the form of informational brochures, guides, and fact sheets, 2) media materials disseminated through informational articles in Fort Lee Facebook. These strategies were used in order to educate the public to the high priority water quality issues listed above. Six articles were posted to the U.S Army Garrison Fort Lee Facebook page, 17 Illicit Discharge brochures were distributed to the High Priority Facility Managers at Fort Lee. Table 1 below summarizes the outreach material used during this reporting period. Supporting documentation (newspaper articles, Facebook posts, etc.) are available upon request.

**Table 1: Education and Outreach Activities (July 1, 2021 – June 30, 2022)**

<b>Date Published</b>	<b>Strategy</b>	<b>Media</b>	<b>Focus</b>	<b>Article Title/Information</b>	<b>Audiences</b>	<b>Metric/Circulation</b>
12/3/2021	Media Materials	Facebook Article	Illicit Discharge	Leaf Recycling Article	Fort Lee's Total Population	71,000/71,000=100%
3/17/2022	Media Materials	Newspaper/Facebook Article	Pollution Prevention, Illicit Discharge	A Avenue improvement project begins next week	Fort Lee's Total Population	71,000/71,000=100%
3/17/2022	Media Materials	Facebook Article	Illicit Discharge, Car Maintenance	"Chesapeake Bay takes brunt of harmful storm drain runoff"	Fort Lee's Total Population	71,000/71,000=100%
3/23/2022	Media Materials	Facebook Article	Pollution Prevention, Air Quality,...etc.	Did you know Fort Lee has set limits on the amount of time vehicles can sit idling?	Fort Lee's Total Population	71,000/71,000=100%
4/7/2022	Media Materials	Facebook Article	Earth Day	Fort Lee EMD Biologists Hand Out 300 Native Trees	Fort Lee's Total Population	71,000/71,000=100%
4/16/2022	Media Materials	Facebook Article	Illicit Discharge, Bacteria	Prince George Clean Community Day	Fort Lee's Total Population	71,000/71,000=100%
April/2022	Tree Handout/Traditional Written Materials	Earth Day/Face to face	Pollution Prevention/Restoration	Earth Day Event	Fort Lee Public	300 indigenous trees=100%

**2.1.3. Review of MCM 1 Program Effectiveness**

For the reporting period, July 1, 2021 – June 30, 2022, Fort Lee Environmental Management Division (EMD) completed the following actions to maintain compliance with permit conditions.

- Four (4) high priority water quality issues have been identified and why they are

important. For the following reporting year, Fort Lee will include new high priority stormwater issues if any as they are identified. During this reporting period one new issue included is the elimination of discharges to the storm sewer system associated with fats, oil, and grease (FOG) from dining facilities.

- Provided methods for the public to contact the MS4 program for information, comments, or to report illicit discharge on the Fort Lee Environmental Management Division page.
- Utilized two strategies listed in Permit Part I.E.1.d to educate the public on the issues and what can be done to reduce stormwater pollution, meeting the required 2 strategies by using traditional and electronic media materials.
- All the BMPs (1-6) of MCM 1 from the MS4 Program Plan were executed to educate Fort Lee..civilians, contractors, residents, and military personnel on high priority issues.

## **2.2 MCM 2- Public Involvement/Participation:**

### **2.2.1 Part I.E.2.f (1) – Public Input**

**Provide a summary of any public input on the MS4 Program received (including stormwater complaints) and the permit holder responses.**

The MS4 Stormwater Program did not receive any comments on the MS4 Program Plan. All stormwater complaints received from the public are managed under the IDDE program discussed in MCM #3. Four stormwater complaints were reported to Environmental Management Division staff during the reporting period. A detailed summary of each illicit discharge incident reported can be found in Part I.E.3.e (3) (a-f).

### **2.2.2 Part I.E.2.f (2) – Webpage**

**Provide a webpage address to the MS4 Program Plan and Stormwater Website. The MS4 Program Plan and the Annual Report can be found at:**

A copy of the MS4 Program Plan and Annual Report can be found on the Fort Lee website: <https://home.army.mil/lee/index.php/about/Garrison/directorate-public-works/environmental-management/documents-review>.

### **2.2.3 Part I.E.2.f (3) – Public Involvement Activities:**

**Provide a Description of the Public Involvement Activities implemented during the reporting period. A minimum of four activities per year from two or more categories listed in Table 2 of the MS4 General Permit.**

A total of 5 public involvement activities were conducted during the reporting period July 1, 2021 – June 30, 2022. Four different categories were implemented from Table 2 of the MS4 General Permit: restoration, education, and collection and disposal. Three clean-up activities occurred during the reporting period. Fall and spring clean-ups occurred in which civilian and military personnel participated installation- wide. A housing clean-up event was sponsored by both DPW-EMD and Hunt Housing Inc. where residents of Fort Lee participated to clean-up Jackson Circle Neighborhood, Harrison Villa Neighborhood and Monroe Manor Neighborhood. Table 2 below shows the activities and metrics.

**Table 2: Public Participation Events (July 1, 2021 – June 30, 2022)**

**Public Participation (min. 4 activities)**

<b>Date(s)</b>	<b>Activity (from Table)</b>	<b>Event</b>	<b>High Priority Issue Addressed</b>	<b>Metric</b>
29 Nov. 2021–03 Dec, 2022	Restoration	Fall 2021 Clean-up	Pollution Prevention/Illicit Discharge	3836 Participants/280 Tons of leaves, sticks, and tree trimmings, ...etc.
8 Feb 2022	Educational Event	2022 Hazardous Waste Standard Operating Procedures	Stormwater/Illicit Discharges/ Pollution Prevention	34 Participants
April 2022	Educational Event	Earth Day Tree hand out	Pollution Prevention/Illicit Discharge Management.	300 trees were handed out to community members
21 May 2022	Educational Event	Life at Lee	Stormwater/Illicit Discharges/ Pollution Prevention	1100 participants
7/1/2021-6/30/2022	Pollution Prevention	Street Sweeping	Pollution Prevention/Illicit Discharge	133 Miles of Roads/887 Acres of Parking Lot
June 2022	Restoration	Spring 2022 Clean-up	Pollution Prevention/Illicit Discharge	3836 Participants/364.9 Tons of leaves, sticks, and tree trimmings, ...etc.

#### **2.2.4 Part I.E.2.f (4) – Report of Metric for each Activity:**

**Provide a report of the metrics used to define effectiveness for each activity and an evaluation as to whether or not the activities is beneficial to improving water quality.**

All cleanup events returned immediate results through the removal of trash already affecting water quality in streams. Community Cleanup Competition and Earth Day Poster Competition both provided a passive and active methods of communication and education to the general public concerning issues related to illicit discharge elimination. The table above shows some of the activities and metrics used in determining effectiveness for the public involvement activities that were conducted.

#### **2.2.5 Part I.E.2.f (4) – Name of Collaborators:**

**Provide the names of other MS4 permittees with whom collaboration with public involvement activities occurred within the reporting period.**

Fort Lee collaborates with Crater Planning District Commission (CPDC) in many areas of environmental management including storm water quality and community outreach issues by attending bimonthly planning meetings. Bimonthly discussions include Stormwater quality concerns, training scheduling in the region, and community outreach activities planning. CPDC region comprises of the cities of Petersburg, Hopewell, Colonial Heights, Emporia and the counties of Charles City, Chesterfield, Prince George, Sussex, Dinwiddie, Surry and Greenville.

#### **2.2.6 Review of MCM 2 Program Effectiveness:**

For the reporting period, July 1, 2021 – June 30, 2022, Fort Lee completed the following actions to maintain compliance with permit conditions.

Conducted six public involvement events from four different activities categories listed in Table 2 of the permit and are all list in Table 2 of this report above. This meets the minimum requirements of the permit.

Annual Report will be posted on the Fort Lee website on October 1, 2022.

Fort Lee will attempt to implement more social-distant and virtual events to ensure that Fort Lee will continue to stay in compliance with the MS4 General Permit and incorporate COVID-19 safety measures. The Program Plan will be updated to reflect these implementations to adapt with current conditions as required.

All other BMPs (2-5) of MCM 2 were executed where feasible.

### **2.3 MCM 3 - Illicit Discharge Detection and Elimination**

#### **2.3.1 Part I.E.3.e (1) – Map and Information Table:**

**Provide 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 of the reporting cycle.**

The MS4 Map and Outfall Information Table is currently being updated before June 30 of this reporting year and the final deliverables and updates will be reflected to account for all updates in the next year's reporting cycle. The table attached in Appendix C is the current outfall table that includes the required information per Part I.E.3.a (2) (a-h).

### **2.3.2 Part I.E.3.e (2) – Outfall Screening:**

**Provide the total number of outfalls screened during the reporting period.**

Thirty-three of the 85 outfalls were screened for illicit discharges and no illicit discharges detected during screening. Since the number of outfalls this reporting year increased from 32 to 85 which are more than 50, a total of 39% of the outfalls were screened for dry weather flow during the reporting period. The 52 new outfalls identified will be screened prior to the end of the current permit cycle.

### **2.3.3 Part I.E.3.e (3) (a-f) – Illicit Discharge Summary:**

**Provide a list of illicit discharges to the MS4, to include spills reaching the MS4. Description must include the source of the illicit discharge, the date or 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, how the investigation was resolved, a description of any follow-up activities, and the date the investigation was closed.**

Four incidents of potential illicit discharges occurred at Fort Lee during the current reporting period summarized below. None of the spills entered the waters of United States and details are displayed in the table in Appendix B.

### **2.3.4 Review of MCM 3 Program Effectiveness**

For the reporting period, July 1, 2021 – June 30, 2022, Fort Lee completed the following actions to maintain compliance with permit conditions.

- 33 of 85 (39%) outfalls are inspected and screened for dry weather flow and illicit discharges.
- Illicit discharges were investigated and tracked to completion. There are no unresolved investigations. No significant environmental impacts occurred from all discharges detected. See Appendix B.
- For the following reporting year, Fort Lee will continue to implement the weekly windshield inspection to ensure there is more surveillance on potential pollutants. More information will be found in the Fort Lee MS4 Program Plan.
- BMPs (1-6) of MCM 3 from the MS4 Program Plan were executed to ensure illicit discharge detection and elimination.
- BMP 1 consists of the MS4 Illicit Discharge Policy. This current Fort Lee MS4 policy has been rescinded and added to the Fort Lee Environmental Policy. The new policy continues to emphasize the prohibition of illicit non-stormwater discharges and dumping into storm drains.

## **2.4 MCM 4- Construction Site Storm Water Runoff Control:**

### **2.4.1 Part I.E.4.a – Construction Stormwater Implementation:**

**Please indicate if the construction site stormwater runoff program is implemented in accordance with either Part I.E.4.a (1), (2), (3) or (4) of the MS4**



## **General Permit, as recommended.**

USAG Fort Lee has implemented a construction site stormwater runoff program in accordance with Part I.E.4.a (3). Our current ESC, SWM, and EISA LID requirements are listed in our Environmental Special Conditions which must be followed by all personnel performing ground disturbing activities on post. These requirements mirror the Virginia Erosion and Sediment Control Law and Virginia Erosion and Sediment Control Regulations. All Erosion and Sediment Control (ESC) Plans are reviewed and approved by the VADEQ and a Construction General Permit is required for any project over an acre.

USAG Fort Lee had five permitted active construction projects during the reporting period under the Construction General Permit approved by DEQ: Dominion Energy Main Distribution Substation, DEQ Permit# VAR10N325; Dominion Energy Substation (Transmission), DEQ Permit# VAR10O368; Dominion Energy Substation (Sisisky), DEQ Permit# VAR10P164; A Avenue Repair Project DEQ Permit Number# VAR10P772; and Seaport of Embarkation (SPOE) DEQ Permit# VAR10Q539.

### **2.4.2.1 Part I.E.4.d (1) (a) – Confirmation Statement:**

**Provide a confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved E&S specifications.**

All land disturbing projects conducted during the reporting period were conducted in accordance with approved E&SC plans where required. All land disturbing projects are reviewed by EMD and records of those reviews are maintained online in EMD's NEPA Manager System. Per the Fort Lee Environmental Special Conditions (included in all contracts for work on Fort Lee), all land disturbing projects are required to conform to department approved E&SC specifications and storm water management and permitting requirements. The DEQ reviews and approves all VSMP permits for projects on Fort Lee and conducts routine compliance inspections.

### **2.4.3 Part I.E.4.d (1) (b) – Explanation of Non-conformance:**

**If land-disturbing project (s) were not conducted with the department approved standards and specifications, provide an explanation as to why they did not conform to the approved standards and specifications.**

N/A.

#### **2.4.4 Part I.E.4.d (2) – Number of Inspections:**

**Provide the total number of inspections conducted.**

The five major active major construction projects at Fort Lee are the Dominion Energy Main Distribution Substation, Dominion Energy Transmission Substation and Dominion Energy Distribution (Sisisky). All of the three Dominion Energy projects Dominion Energy Substation project conducted a total number of 70 inspections. (Dominion Energy Main Distribution=29, Dominion Energy Transmission=15, Dominion Energy Distribution (Sisisky) =40, A Avenue improvement Project =12, SPOE=8

#### **2.4.5 Part I.E.4.d (3) – Number of Enforcement Actions:**

**Provide the total number and type of enforcement actions implemented.**

No enforcement actions from the VDEQ were issued against Dominion Energy Main Substation (Distribution), Dominion Energy Main Substation (Transmission), Dominion Energy Substation (Sisisky), A Avenue Improvement, or SPOE Project.

#### **2.4.6 Review of MCM 4 Program Effectiveness:**

For the reporting period, July 1, 2021– June 30, 2022, Fort Lee completed the following actions to maintain compliance with permit conditions.

Erosion and sediment control inspections were conducted on the permitted construction projects upon initial installation of erosion and sediment controls, at least once during every two-week period, within 48 hours of any runoff-producing storm event and upon completion of the project. Erosion and sediment control inspections were also conducted for the utility projects by Dominion Energy. Fort Lee DPW-EMD Stormwater Program reviewed all proposed projects through NEPA manager and provided stormwater feedback for all submissions. All BMPs (1-5) for MCM 4 of the Fort Lee MS4 Program Plan were implemented to meet ESC and SWM requirements as set by Virginia Department of Environmental Quality.

## **2.5 MCM 5 - Post Construction Stormwater Management:**

### **2.5.1 Part I.E.5.i (1) – VSMP Implementation:**

**If you are a Virginia Stormwater Management Program (VSMP) authority or have privately-owned stormwater management facilities (SMFs) associated with the MS4 permit, report the two requirements listed below.**

### **2.5.2 Part I.E.5.i (1) (a) – Private SMF Inspections:**

**State the number of privately owned SMF inspections conducted.**

There are no privately owned BMP/SMF on Fort Lee, therefore no privately owned SMF inspections were conducted.

### **2.5.3 Part I.E.5.i (1) (b) – Enforcement Actions:**

**State the number of enforcement actions and the type of enforcement action initiated to ensure long-term maintenance of privately owned SMFs.**

N/A

### **2.5.4 Part I.E.5.i (2) – Public SMF Inspections:**

**State the number of inspections conducted on publicly owned SMFs.**

Fort Lee inspected and maintained all 101 permanent stormwater management facilities during the reporting period. Permanent stormwater management facilities inspections were conducted by operations and maintenance contractor, Skookum, Inc., are as follows: 45 Detention Ponds, 30 Retention Ponds, and 3 Underground Storage systems were inspected on an annual basis. 15 Filterra Systems and 6 Porous Pavement areas were inspected on a semi-annual basis. 5 Culverts were inspected on weekly basis. All permanent stormwater management facilities inspected during the reporting period are listed in Appendix D.

**2.5.5 Part I.E.5.i (4) – Construction Database Submittal Confirmation:**

**Provide a confirmation statement that SMF information was submitted through the Virginia Construction Stormwater General Permit (CGP) database for land disturbing activities for which coverage under the General VDPES Permit for Discharges of Stormwater was obtained in accordance with Part I.E.5.f of the MS4 General Permit). If no projects requiring coverage under the CGP were completed, please indicate such.**

All Construction projects on Fort Lee are completed by outside contractors and it is Fort Lee's policy that the contractors performing the work acquire their own VPDES CGP for their construction projects. Therefore, Fort Lee does not hold any CGPs. All CGP Holders are required to submit as-built plans to DPW when submitting their Notice of Termination Form to VADEQ.

Fort Lee hereby certifies that to the best of our knowledge, all SMFs have been entered into the CGP database by the contractors holding CGPs under our established Standard Operating Procedures. Fort Lee requires that all projects greater than one acre are required to submit for and a Construction General Permit with VADEQ and assume that a CGP cannot be closed until all requirements are met. There were five active construction projects that held the following permits during this reporting period: Dominion Energy Distribution (Sisisky)-Permit #VAR10P164, Dominion Energy Main Distribution Substation-Permit# VAR10N325, Dominion Energy Main Transmission-Permit#VAR10O368 ,A Avenue Improvements-Permit# VAR10P772, and SPOE-Permit# VAR10Q539.

**2.5.6 Part I.E.5.i (5) – BMP Warehouse Submittal:**

**Provide a confirmation statement that best management practices (BMPs) (all practices not reported in accordance with Part I.E.5.f of the MS4 General Permit) were reported into the DEQ BMP Warehouse per Part I.E.5.g of the MS4 General Permit.**

Fort Lee confirms that all BMP information was updated and submitted into the DEQ BMP Warehouse by a spreadsheet provided by the DEQ. That spreadsheet will be submitted to the DEQ by 1 October 2022. Currently all BMP information list is being updated by a contractor and will be submitted to Virginia DEQ BMP Warehouse as soon as it is delivered to Fort Lee's DPW.

**2.5.7 Review of MCM 5 Program Effectiveness**

For the reporting period, July 1, 2021 – June 30, 2022, Fort Lee completed the following actions to maintain compliance with permit conditions.

All stormwater BMPs and permanent structures were inspected and maintained and BMPs were all reported to the DEQ BMP Warehouse.

All BMPs (1-4) for MCM 5 of the Fort Lee MS4 Program Plan were implemented to ensure BMPs are properly maintained and tracked for compliance.

**2.6 MCM 6 - Pollution Prevention/Good Housekeeping for Municipal Operations:**

**2.6.1 Part I.E.6.q (1) – Operation Procedures Summary:**

**Provide a summary of operational procedures developed or modified per Part I.E.6.a during the reported fiscal year.**

The Fort Lee Oil & Hazardous Substance Integrated Contingency Plan (Spill Plan) was revised 15 April 2020. The spill poster and spill report portion of the Spill Plan was updated this reporting period to be more concise and user friendly. The reporting chain of command was revised for tenants to report spills to the Installation Operations Center first. The Installation Operations Center will then notify the correct proponent (EMD, 911, etc.). A spill report was also developed to attach to the back of the spill poster. This report contains pertinent information of the spill which includes, the source of the illicit discharge, the date or dates that the discharge was observed, reported, or both. These spill posters were distributed to all facilities that has the potential to pollute and posted on the FortLee Environmental Management Division website.

An EMD follow-up report was developed to include whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method, how the investigation was resolved, a description of any follow-up activities, and the date the investigation was closed.

Fort Lee Policy No. 05-13 MS4 Illicit Discharge Policy  
This policy has been redacted and combined with the Fort Lee Environmental Policy. The new policy continues to emphasize the prohibition of illicit non-stormwater discharges and dumping into storm drains.

The Nutrient Management Plan was updated in June 2022.

**2.6.2 Part I.E.6.q (2) – New SWPPP Summary:**

**Provide a summary of new SWPPPs developed in the fiscal year per Part I.E.6.c of the MS4 General Permit. Inclusion of SWPPPs developed per I.E.6.e of the MS4 General Permit is recommended. If none were developed, please state so.**

USAG Fort Lee Integrated Storm Water Pollution Prevention Plan (ISWPPP) is current as of May 2020.

The ISWPPP will be updated the follow reporting year to reflect the new SWPPPs being developed as a result of the High Priority Facility Assessment completed by DPW-EMD 4 January 2022. More details on this assessment can be found in Par I.E.6.q (3). A copy of the ISWPPP is available upon request.

**2.6.3 Part I.E.6.g (3) – SWPPP Modification or Removal of High-Priority Facilities:**

**Provide a summary of any SWPPPs modified per Part I.E.6.f of the MS4 General Permit or the rationale for delisting high-priority facilities per Part I.E.6.h of the MS4 General Permit.**

A High Priority Facility Assessment was completed by DPW-EMD on 4 January 2022. Table 3 displays the facilities that were evaluated or re-evaluated to determine if these facilities meet conditions as stated in Part I.E.6.c. New individual SWPPPs will be developed for the added high priority facilities. As tenants and soldiers change frequently, SWPPPs must be updated and changed to meet proper potential pollutant conditions. One new high priority issue that will be included in the Program Plan and the ISWPPP for the following reporting period which will include Fats, Oil, and Grease (FOG) tanks.

<b>Table 3: High Priority Facility Assessment</b>						
<b>Bldg.</b>	<b>Tenant</b>	<b>Purpose</b>	<b>Observation</b>	<b>HPF Risk</b>	<b>Status</b>	<b>Inspection Cycle</b>
1630	AAFES	GAS STATION	Tire storage in back; all underground tanks; Spills occur from users.	MED	Active	At least Monthly
4200	QM	LABORATORY INSTR BLDG	Lab, cooking, dehydrator and digester; two used grease tanks; Heavy spillage and grease stains; No storm drain close by.	HIGH	Active	At least Monthly
4309	AAFES	FAST FOOD/ SNACK BAR	Two used grease containers on site; Evidence of previous spills.	HIGH	Active	At least Monthly
6210	DPW	ENGINEERING/ HOUSING MAINT SHOP	O&M Laydown yard; Heavily used mulch pile. Fuel tanks for lawn equipment present	HIGH	Active	At least Monthly
6210	DPW	SALT AND SAND DOME	Signs of dragout ; BMP treat runoff from site.	HIGH	Active	At least Monthly
6274	TACOM	VEH MAINT SHOP	Motor pool; No drip pans present; Double wall used oil tank is next to storm drain; Wash rack with OWS present in parking lot	HIGH	Active	At least Monthly
6275	TACOM	VEH MAINT SHOP	Motor pool; No drip pans present; Double wall used oil tank is next to storm drain; Wash rack with OWS present in parking lot.	HIGH	Active	At least Monthly
6295	LRC	FUELING FACILITY	All underground tanks	LOW	Active	At least Monthly
Continued...						

Bldg.	Tenant	Purpose	Observation	HPF Risk	Status	Inspection Cycle
6298	TACOM	VEH MAINT SHOP	Motor pool; There are double wall used oil and anti-freeze tank outside of building. Drip pans are used underneath all vehicles; Fuel tank truck is in secondary containment	LOW	Active	At least Monthly
7148	7TB	VEH MAINT SHOP	Motor pool; There are double wall used anti-freeze and oil tank outside of building. Drip pans are used underneath all vehicles. Historically, has had many issues with facility	HIGH	Active	At least Monthly
9025	AAFES	EXCHANGE CAFETERIA	P-Xtra; Used grease container on site, evidence of previous spills.	MED	Active	At least Monthly
11040	QM	ACCESS CTRL FAC P (PTF)	PTF; Soldiers practice moving petroleum from one tank to another	LOW	Active	At least Monthly
12246	QM	ACCESS CTRL FAC	MIF; Vehicles that require drip pans, paints, fuel storage tanks, and fuel "pods" are scattered on site. Fuel training has previously had spill reports	HIGH	Active	At least Monthly
12402	USAR	USAR MOTOR POOL	Motor pool; There are parked motor vehicles; No drip pans recently.	HIGH	Active	At least Monthly
17501/3	TACOM	MAINT SHOP, GEN PURP	North Range Motor pool; Double wall used oil and antifreeze tank located outside. Used material is discharged from inside using an automatic system to discharge into tank. Empty drums outside need to be labeled	LOW	Active	At least Monthly
18028	LRC	DINING FAC.	Dumpsters on site sometimes leaks, Tenants have previously dumped into storm drain at loading dock	HIGH	Active	At least Monthly
11812/11814		RECREATIONAL SHELTER	Pesticide/herbicide storage and mixing area	HIGH	Active	At least Monthly

**2.6.4 Part I.E.6.q (4) – Summary of Approved NMPs:**

**Provide a summary of new turf and landscape nutrient management plans (NMPs) developed to include the information listed below.**

Fort Lee does not regularly apply nutrients to turf and landscape areas as part of its annual roads and grounds maintenance program. Limited amounts of nutrients may be applied, however, on an area where turf is being restored after disturbance. Contractors, in accordance with the provisions of Fort Lee's Environmental Special Conditions package, may apply nutrients to help establish lawns and cover crop after they complete construction (rates based on the results of soil sampling), but that practice ends once the site is turned over to the installation. The Fort Lee Cardinal Golf Course (approximately 60 acres treated) limits their nutrient applications due to the cost involved, instead they make use of hardy, lower maintenance turf grasses such as Bermuda and other warm season species. Fort Lee has a facility-wide Nutrient Management Plan that focuses primarily on operations at the Cardinal Golf Course, but also addresses nutrient application during construction and during municipal operations that has been in place since 26 June 2016. The NMP was update in June 2022.

**Table 4. Golf Course Nutrient Management Information**

<b>Permit Part I.E.6.q (4) (a) – Location and Acreage of Each Land Area</b>	<b>Permit Part I.E.6.q (4) (b) – Dates of Approved NMPs</b>	<b>Permit Part I.E.6.q (5) (a) – Dates of Training Events</b>	<b>Permit Part I.E.6.q (5) (b) – Number of Employees Trained</b>	<b>Permit Part I.E.6.q (4) (c) – Objective of the Training</b>
Cardinal Golf Course, Approx.60 Acres	1 July 2016	20 October 2020	One Golf Course Superintendent (Every 3 Years per Federal regulations)	Chesapeake Bay Nutrients Management/Federal certification to apply pesticides and herbicides

**2.6.5 Part I.E.6.q (5) – Training Events:**

**A list of training events conducted in accordance with Part I.E.6.m of the MS4 General Permit to include the information listed below.**

A total of 99 civilians, military, and contractor employees were trained during the reporting period. Table 5 below shows a summary of all training events conducted. Training materials and sign-in sheets are available upon request. All new soldiers and civilians coming to Fort Lee are required to report to the earliest Newcomer’s Brief feasible. During this Newcomer’s Brief, the MS4 Illicit Discharge Policy is reviewed. All Environmental Compliance Officers of each organization is required to attend ECO Training provided by Fort Lee’s Hazardous Waste Program Manager. This training includes prohibition of illicit discharge, spill response, proper satellite accumulation areas, and pollution prevention practices for petroleum and hazardous waste. All new employees are also required to take the Fort Lee Newcomers Environmental



General Awareness Training (NEGAT) online. The operations and maintenance stormwater training occurs every 24 months as required by their contract.

**2.6.5.1. Part I.E.6.g (5) (a - c)**

**Provide the date of the training event, the number of employees who attended the training event, and the objective of the training event.**

<b>Table 5. Newcomers Briefings and ECO Training</b>			
<b>Date</b>	<b>Training Event</b>	<b>Objective</b>	<b>Attendance</b>
2-Aug-21	Newcomers Brief	Illicit Discharge/Spill Prevention	15
4-Oct-21	Newcomers Brief	Illicit Discharge/Spill Prevention	18
1-Nov-21	Newcomers Brief	Illicit Discharge/Spill Prevention	13
3-Jan-22	Newcomers Brief	Illicit Discharge/Spill Prevention	15
7-Feb-22	HPFs/MS4/P2 BMPs	Illicit Discharge/Pollution Prevention	17
7-Mar-22	Newcomers Brief	Illicit Discharge/Spill Prevention	3
4-April-22	Newcomers Brief	Illicit Discharge/Pollution Prevention	6
2-May-22	Newcomers Brief	Illicit Discharge/Pollution Prevention	5
6-Jun-22	Newcomers Brief	Illicit Discharge/Pollution Prevention	7

A total of 99 employees/soldiers were trained in a classroom setting. Above is the attendance table.

### **2.6.5.2. Review of MCM 6 Program Effectiveness**

For the reporting period, July 1, 2021– June 30, 2022, Fort Lee completed the following actions to maintain compliance with permit conditions.

- HPFs Assessments were completed to identify facility changes and upgrades. 9 new facilities identified as having the potential to impact stormwater quality were added. New SWPPPs will be developed for these 9 facilities and kept alongside the Integrated SWPPP.
- Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping training was conducted and over 99 individuals were trained throughout the reporting period.
- All BMPs were executed to ensure pollution prevention and good housekeeping practices occur for municipal operations.

## **3.0 Chesapeake Bay TMDL Information:**

### **3.1 Part II.A.13.a – BMPs not Reported to the BMP Warehouse**

**Provide a list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I.E.5.g of the MS4 General Permit and the estimated reduction of pollutants of concern achieved by each reported in pounds per year.**

A comprehensive list of BMPs implemented during the reporting period was submitted to the DEQ BMP Warehouse via DEQ-provided spreadsheet on 1 October 2021 to Mr. William Keeling. There were no BMPs installed during the reporting period that were not reported. A new comprehensive BMPs list will be submitted by the next deadline if any addition to the BMPs occurred.

There are no BMPs that are planned for implementation during the next reporting period because Fort Lee currently met the 2017 5% reduction goal and the next 35% reduction goal is not due until 2022 this has already been met. 2027 Reduction goal had already been achieved also. See Table 6 below for the percentages and associated pounds reduction achieved relative to the target goals to be achieved to date.

### **3.2 Part II.A.13.b – Credits Acquired:**

**If credits were acquired during the reporting period to meet all or of the portion of the required reductions in Part II.A.3, A.4, or A.5 of the MS4 General Permit, provide a statement of that credits were acquired.**

During this reporting cycle, no credits were acquired.

### **3.3 Part II.A.13.c – Progress towards meeting Reduction Goals:**

**Provide the progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids.**

All reduction goals are met and exceeded through 2027. See Table 6 for data.

<b>Table 6. TMDL Reduction Goals Progress</b>									
<b>TMDL Reduction Goals/ Achieved</b>									
<b>Reduction Goals To be Achieved</b>				<b>Reduction Goals Achieved To Date</b>					
<b>Nitrogen</b>	<b>Phosphorus</b>	<b>TSS</b>	<b>TMDL Goals</b>	<b>Nitrogen</b>		<b>Phosphorus</b>		<b>Total Suspended Solids</b>	
(lbs.)	(lbs.)	(lbs.)	(%)	(lbs.)	(%)	(lbs.)	(%)	(lbs.)	(%)
64.99	13.62	5881.77	5% of 2017 Goal	1132.92	1743.22	442.35	3247.77	147473.46	2507.28
454.93	95.34	4117.239	35% of 2022 Goal	1132.92	249.03	442.35	463.97	147473.46	358.18
1299.8	272.41	1176.35.41	100% of 2027 Goal	1132.92	87.16	442.35	162.38	147473.46	125.36

**3.4 Part II.A.13.d – BMPs Planned for the next reporting period:**

**Provide a list of BMPs that are planned for implementation during the next reporting period.** A Avenue Improvement Project and Seaport of Embarkation Project (SPOE): These areas are designed to reduce peak flow events by increasing both storage time and infiltration on site. The result is a reduction in stormwater discharge into Bailey Creek, lowering the volume and velocity of stormwater, helping to minimize the erosion potential from storm events. The BMPs are designed to meet the requirements of the VSMP Construction Permit program and will help Fort Lee’s goals toward reducing nutrient levels under EPA’s Total Maximum Daily Load (TMDL) Program.

**4.0 Local TMDL Information:**

**4.1 Part II.B.9 – Summary of Actions**

**The annual report shall include a summary of actions conducted to implement each local TMDL action plan for the corresponding reporting period.**

Fort Lee currently do not have local TMDL Action Plan during this reporting cycle. No TMDLs exist for the water bodies that the MS4 discharges to, therefore no sampling or monitoring of any MS4 discharges were conducted. Quarterly visual monitoring and semiannual sampling of seven industrial discharges is conducted IAW the requirements of VAR050594. Monthly sampling and analysis of two (2) VPDES outfalls is conducted IAW the requirements of VA0059161. Fort Lee began using electronic Discharge Monitoring Report (eDMR) system in June 2011 with the submission of the May 2011 DMR.

**5.0 Summary of Storm Water Activities the Operator Plans to Undertake During the Next Reporting Cycle**

During the next reporting year (1 July 2022– 30 June 2023) Fort Lee intends to continue plan review and construction site monitoring for projects requiring VSMP permits and those that do not, but may involve ground disturbance. Environmental staff will continue to review all Service Orders and Work Orders performed by the Directorate of Public Works for environmental impact, and will continue to implement, review, and improve Best Management Practices outlined in its permit.

**6.0 Describe any Changes in BMPs or Measurable Goals for any MCMs Including Actions Taken to Address Deficiencies**

MCM 3 - BMP 1 consists of the MS4 Illicit Discharge Policy. This policy had been rescinded and added to the Fort Lee Environmental Policy. The new policy continues to emphasize the prohibition of illicit non-stormwater discharges and dumping into storm drains.

As part of the Chesapeake Bay Program TMDL implementation plan Fort Lee constructed 6 Low Impact Development BMPs that included bio-retention basins, infiltration practices and perimeter sand filters during the reporting period.

**7.0 Notice that Operator is relying on Another Government Entity to Satisfy Some Permit Obligations (If Applicable)**

Not Applicable

**8.0 Approval Status of any Programs Pursuant to Section II C of the General Permit**

Not Applicable

**9.0 Information Required for any Applicable TMDL Special Conditions**

Fort Lee’s Chesapeake Bay TMDL Action Plan was submitted to the DEQ on 1 October 2015 along with the 2015 MS4 Annual Report. Work began in November 2015 on the BMPs designed to meet the Action Plan Goals. The TMDL BMPs construction is complete.

**10.0 Appendices**

Appendix A: Delegation of Signature Authority

Appendix B: Illicit Discharge Summary

Appendix C: MS4 Outfalls

Appendix D: MS4 Stormwater Management Facilities

# **APPENDIX A**

## **Delegation of Signature Authority**

**CERTIFICATION STATEMENT AND SIGNATORY REQUIREMENTS  
FOR MS4 PERMIT APPLICATIONS AND REPORTS**

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board, shall be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
3. The written authorization is submitted to the department.

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**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.

Responsible Official Signature

Date

VAR040007                      US Army Garrison Fort Lee  
Permit Number                      MS4 Name

# **APPENDIX B**

## **Illicit Discharge Summary**

**Table 7. Illicit Discharge Summary (1 July 2021 - 30 June 2022)**

Date Reported	Location	MS4 Outfalls Affected	Estimate Gallons Spilled	Short Summary (incl. source of illicit discharge, date discharge was observed, who discharge was discovered by (permittee during dry weather, reported by public, etc),	Resolution	Follow-Up Date	Investigation Close Date
2/17/2022	Wash rack by Auto craft shop	N/A	2-3	SFC Ekwoke was cleaning out a HEMTT and some fuel came out of the manifolds. SFC Ekwoke reported that the wash rack was not draining well and it caused the water to overflow the containment allowing some of the water with the fuel to exit containment.	Kitty litter was applied to absorb free liquid. Then the contaminated soil was removed and taken to the soil roll-off at the MIF. A work order request will be placed with service order desk to evaluate/clean/repair the oil/water separator.	2/17/2022	2/17/2022
10/2/2021	Building 18028, Ordnance Dining Facility	N/A	10.0	An illicit discharge in the form of foaming detergent-laden wash water is discharge into the storm drain. The incident occurred on October 1, 2021 1nd observed on October 2, 2021.	Facility operator is instructed to desist from discharging detergent and food waste laden wash water from dining facility into storm drain. The facility manager is provided with the recent Fort Lee MS4 Policy banning illicit discharges into Fort Lee's MS4 on October 5, 2021.	10/2/2021	10/2/2021
11/17/2021	Holiday Inn Express Parking lot	N/A	1.0 Gallon	Subcontractor (Taylor Services) completed remediation of the spill area. Absorbent material was placed on spill area. All contaminated cleaning agents were removed and transported to proper waste disposal site. Initial remediation was completed and area will be further mediated when structures are removed around it and a deeper cleaning can be performed using a commercial powered street cleaner.	Subcontractor (Taylor Services) completed remediation of the spill area. Absorbent material was placed on spill area. All contaminated cleaning agents were removed and	11/17/2021	11/17/2021



					transported to proper waste disposal site. Initial remediation was completed and area will be further mediated when structures are removed around it and a deeper cleaning can be performed using a commercial powered street cleaner.		
11/22/2021	Front of BLDG. 12010	N/A	1-2 Gallons	Cleaning Contractor emptied residual mop bucket in stormwater structure.	<ol style="list-style-type: none"> <li>1. COR notified to address contractual deficiencies.</li> <li>2. Cleaning contractor will complete spill report.</li> <li>3. Company will complete Environmental Awareness Training</li> </ol>	11/22/2021	11/22/2021

# **APPENDIX C**

## **MS4 Outfalls Information**

Feature Name	Latitude	Longitude	Drainage Acreage Estimate	Receiving Water	HUC12	Land Use	TMDL Wasteload Allocations (WLA)	Feature Description
Outfall 001	37.255734	77.348632	47.45	Harrison Branch	20802071001	Industrial	Bacterial; N, P, TSS; PCBs	Located north of Edgewood Road, outfall for RP22.
Outfall 002	37.255031	77.349741	7.47	Harrison Branch	20802071001	Industrial	Bacterial; N, P, TSS; PCBs	Located north of Edgewood Road, outfall for RP21.
Outfall 003	37.257339	77.348492	1.48	Harrison Branch	20802071001	Parking lots/Water	Bacterial; N, P, TSS; PCBs	Located south of Temple Avenue, associated with RP25.
Outfall 005 (I-005)	37.221563	77.339458	33.77	Bailey Creek	20802060201	Industrial/Parking Lots	Bacterial; N, P, TSS; PCBs	North of RP170 along PWD TA-23 TA-01 Access Trail.
Outfall 007	37.247396	77.323739	0.63	Bailey Creek	20802060201	Parking Lot/Forested	Bacterial; N, P, TSS; PCBs	Located adjacent to C Avenue, southwest of RP68. Outfall for RP68.
Outfall 010 (I-010)	37.253679	77.336053	96.17	Bailey Creek	20802060201	Industrial/Parking Lots	Bacterial; N, P, TSS; PCBs	Located 130 ft. south of Oaklawn Blvd. and 170 ft. west of Bldg. 7023
Outfall 011 (I-011)	37.246719	77.326231	18.00	Bailey Creek	20802060201	Industrial	Bacterial; N, P, TSS; PCBs	Located west of 5th Street, 288

								feet west of Building 15030
Outfall 013	37.250184	77.344394	5.91	Harrison Branch	20802071001	Roadway/Water	Bacterial; N, P, TSS; PCBs	Located west of RP16, south of Redstone Drive near Ordnance Circle
Outfall 015	37.255005	77.336545	1.69	Cabin Creek	20802071002	Parking lots/Industrial/Water	Bacterial; N, P, TSS; PCBs	Located north of Oaklawn Blvd. (Hwy 36) between Temple Ave. (SR 144) and exit ramp
Outfall 017	37.285033	77.355826	3.33	Appomattox River	20802071001	Forested	Bacterial; N, P, TSS; PCBs	Located on banks of Appomattox River, 46 feet west of Building 20017
Outfall 021	37.226582	77.342537	16.55	Bailey Creek	20802060201	Parking Lots/Roads	Bacterial; N, P, TSS; PCBs	South of 34th St. and 429 feet southeast of Building 12015.
Outfall 024	37.229793	-77.3269	4.84	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located along southern edge of Battle Dr., 336 ft west of its intersection with Sisisky Blvd.
Outfall 025	37.230144	77.326246	2.18	Bailey Creek	20802060201	Industrial	Bacterial; N, P, TSS; PCBs	North of Battle Drive, 288 feet west of Building 10620.

Outfall 027	37.214307	77.330525	0.42	Blackwater Swamp	30102020102	Forested	Bacterial; N, P, TSS; PCBs	East of RP166 and TA-04 Access Trail. Outfall into Blackwater Swamp
Outfall 032	37.257312	77.340844	1.81	Cabin Creek	20802071002	Roadway/Water	Bacterial; N, P, TSS; PCBs	Located east of Edgewood Drive, associated with RP27
Outfall 040	37.244867	77.349787	1.62	Appomattox River	20802071001	Roadways/Forested	Bacterial; N, P, TSS; PCBs	Located outside fence, northeast of the intersection of Oaklawn Blvd and Lee Avenue
Outfall 041	37.253647	77.346888	44.60	Harrison Branch	20802071001	Industrial/Water	Bacterial; N, P, TSS; PCBs	Located west of Building 18028 and south of Aberdeen Avenue, opposite RP19
Outfall 042	37.249205	77.322141	1.19	Bailey Creek	20802060201	Industrial/Parking Lot	Bacterial; N, P, TSS; PCBs	Located along C Avenue, south of Building 1303
Outfall 043	37.249438	77.321665	0.84	Bailey Creek	20802060201	Industrial/Parking Lot	Bacterial; N, P, TSS; PCBs	Located along C Avenue, south of Building 1303
Outfall 045	37.243318	77.334153	8.91	Bailey Creek	20802060201	Roadways	Bacterial; N, P, TSS; PCBs	Located south of C Avenue, along and east of TA-18 Confidence Course Trail

Outfall 046	37.225609	77.341657	10.06	Bailey Creek	20802060201	Parking lots/Water	Bacterial; N, P, TSS; PCBs	Located east of RP137 and 632 ft northeast of Quarters Road
Outfall 048	37.241724	77.336397	43.31	Bailey Creek	20802060201	Roadways and parking lots	Bacterial; N, P, TSS; PCBs	Located south of building 3650 ~165' of the southeast corner of building 3650.
Outfall 061	37.217828	77.330301	5.74	Blackwater Swamp	30102020102	Landfill	Bacterial; N, P, TSS; PCBs	Located on edge of closed landfill that lies west of the golf course, southern most outfall in group of 5
Outfall 062	37.218026	77.329647	1.79	Blackwater Swamp	30102020102	Landfill	Bacterial; N, P, TSS; PCBs	Located on edge of closed landfill that lies west of the golf course, outfall 4 in group of 5
Outfall 063	37.218329	-77.32943	6.42	Blackwater Swamp	30102020102	Landfill	Bacterial; N, P, TSS; PCBs	Located on edge of closed landfill that lies west of the golf course, outfall 3 in group of 5
Outfall 064	37.218952	77.329221	5.71	Blackwater Swamp	30102020102	Landfill	Bacterial; N, P, TSS; PCBs	Located on edge of closed landfill that lies west of the golf course, outfall 2 in group of 5

Outfall 065	37.219476	77.329831	3.41	Blackwater Swamp	30102020102	Landfill	Bacterial; N, P, TSS; PCBs	Located on edge of closed landfill that lies west of the golf course, northern most outfall in group of 5
Outfall 066	37.222646	77.351361	4.84	Harrison Branch	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located along west side of Gerow Reserve Ctr., 79 ft. west of Bldg. 12402
Outfall 067	37.221911	77.351483	2.03	Harrison Branch	20802071001	Parking Lots	Bacterial; N, P, TSS; PCBs	Located at north end of parking lot, 240 ft west southwest of Bldg. 12402
Outfall 068	37.221287	77.351069	3.18	Harrison Branch	20802071001	Parking Lots	Bacterial; N, P, TSS; PCBs	Located at south end of parking lot, 317 ft southwest of Bldg. 12402
Outfall 070	37.22302	77.344076	9.64	Bailey Creek	20802060201	Parking Lots/Roads	Bacterial; N, P, TSS; PCBs	Located immediately southwest of Bldg. 12505
Outfall 071	37.223014	77.343701	13.63	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located east of Quarters Rd., south of Bldg. 12504 and east of Bldg. 12505
Outfall 073	37.224307	77.343016	3.33	Bailey Creek	20802060201	Parking Lots/Roads	Bacterial; N, P, TSS; PCBs	Located west of Quarters Rd., 144 ft. north of Bldg. 12504

Outfall 076	37.221447	77.337963	-	1.61	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 115 ft. north of Bldg. 11025, 194 ft. west of 38th St.
Outfall 088	37.225838	77.337123	-	11.23	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 50 ft. south of A Ave., 531 ft. east of Bldg. 12020
Outfall 089	37.226148	77.337922	-	21.76	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 60 ft south of A Ave, 580 ft west of 37th St., 276 ft east of Bldg. 12020
Outfall 090	37.226223	77.337929	-	114.06	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located along edge of A Ave., 261 ft east of Bldg. 12020
Outfall 091	37.226169	77.338139	-	1.05	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located along southern edge of A Ave., 218 ft. east of Bldg. 12020
Outfall 092	37.226314	77.338476	-	3.00	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located south of A Ave., 108 ft. west of Bldg. 12020
Outfall 097	37.220516	77.324606	-	34.91	Blackwater Swamp	30102020102	Golf Course	Bacterial; N, P, TSS; PCBs	Located 832 ft east southeast of Bldg. 11810, at head of drainage into Blackwater swamp
Outfall 098	37.22535	77.326514	-	32.40	Bailey Creek	20802060201	Golf Course	Bacterial; N, P, TSS; PCBs	Located on golf course, approximately 1700 ft east northeast of



								the intersection of A Ave. and Sisisky Blvd.
Outfall 099	37.222983	77.316536	0.56	Blackwater Swamp	30102020102	Golf Course	Bacterial; N, P, TSS; PCBs	Located 750 ft south of A Ave., 570 ft. south of Bldg. 700
Outfall 103	37.227906	77.340568	0.04	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 47 ft north of A Ave., 104 ft. east of Bldg. 9600
Outfall 104	37.228214	77.334543	172.51	Bailey Creek	20802060201	Golf Course	Bacterial; N, P, TSS; PCBs	Located west of 37th Street, north of B Avenue
Outfall 105	37.246896	77.346755	1.14	Appomattox River	20802071001	Parking Lots/Roads	Bacterial; N, P, TSS; PCBs	Located along Oaklawn Blvd (Hwy 36), 60 m northwest of Bldg. 7121
Outfall 106	37.227648	77.331642	2.52	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 54 ft. north of Bldg. 10201, 124 ft west of Bldg. 10000
Outfall 107	37.22759	77.331696	1.11	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 60 ft. north of Bldg. 10201, 120 ft west of Bldg. 10000
Outfall 110	37.257693	77.343605	11.51	Harrison Branch	20802071001	Industrial	Bacterial; N, P, TSS; PCBs	Located between Temple and Edgewood Avenue, associated with RP26.

Outfall 111	37.230705	-77.34002	0.37	Bailey Creek	20802060201	Roadway/Forested	Bacterial; N, P, TSS; PCBs	Northeast corner of the intersection of B Avenue and Marine Drive
Outfall 113	37.232466	77.340433	13.93	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	North of the intersection between 32nd Street and C Avenue approximately 330 ft.
Outfall 114	37.232995	77.340969	1.14	Bailey Creek	20802060201	Parking Lots/Roads	Bacterial; N, P, TSS; PCBs	Located 53 ft. north of Bldg. 9100, 115 ft. southwest of Bldg. 9056
Outfall 115	37.249881	77.346262	0.03	Appomattox River	20802071001	Athletic Field	Bacterial; N, P, TSS; PCBs	Located west of athletic field, 230 ft south of Redstone Drive
Outfall 116	37.249042	77.346735	0.07	Appomattox River	20802071001	Athletic Field	Bacterial; N, P, TSS; PCBs	Located west of athletic field, 525 ft south of Redstone Drive
Outfall 117	37.25152	77.352884	0.24	Appomattox River	20802071001	Industrial/Forested/Water	Bacterial; N, P, TSS; PCBs	Located north of RP20, 439 feet west of Building 18021.
Outfall 118	37.248979	77.347541	18.36	Harrison Branch	20802071001	Residential	Bacterial; N, P, TSS; PCBs	Associated with RP11, 118 feet south of 18016.
Outfall 119	37.234533	77.334867	1.08	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 42 ft. east of Battle Dr., 117 ft. northwest of the Battle Dr. bridge over Bailey Creek

Outfall 127	37.23528	77.338578	3.09	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 196ft. southwest of Lee Club Dr., 139 ft. northeast of Bldg. 9057
Outfall 128	37.234935	77.337718	0.17	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located along south edge of parking lot, 142 ft. south of Bldg. 9009
Outfall 129	37.235067	77.335266	0.97	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located immediately east of Battle Dr., 343 ft. northwest of the Battle Dr. bridge over Bailey Creek
Outfall 130	37.236085	77.335415	0.74	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located immediately east of Battle Dr., 201 ft. southeast of Bldg. 9027
Outfall 131	37.23645	77.335556	0.34	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located immediately east of DMWR Automation Rd., 67 ft. southeast of Bldg. 9027
Outfall 132	37.23688	77.335271	2.72	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located immediately east of DMWR Automation Rd., 90 ft. northeast of Bldg. 9027

Outfall 133	37.237689	77.335309	0.00	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located immediately east of DMWR Automation Rd., 225 ft. northeast of Bldg. 9040
Outfall 138	37.240432	77.335901	58.81	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 407 ft. east of Bldg. 9023, 224 ft. northwest of Bldg. 9035
Outfall 139	37.239628	77.335917	0.22	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 112 ft. west of Bldg. 9035
Outfall 140	37.239429	77.336013	1.10	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 108 ft. west of Bldg. 9035
Outfall 142	37.244531	77.330866	3.97	Cabin Creek	20802071002	Urban/Roads/Parking Lots	Bacterial; N, P, TSS; PCBs	Located 240ft south of C Ave. and 520 ft east of 11th Street
Outfall 154	37.247188	77.347092	74.94	Appomattox River	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located along northern edge of Oaklawn Blvd., inside fence and 308 ft. southeast of Bldg. 19526
Outfall 156	37.247419	77.347388	0.49	Appomattox River	20802071001	Residential	Bacterial; N, P, TSS; PCBs	Located 153 ft. north of Oaklawn Blvd., 185 ft. southeast of Bldg. 19526
Outfall 174	37.243248	77.333445	9.23	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 285 ft. south of C. Ave., 360 ft. west of 11th St.

Outfall 182	37.24519	77.329109	29.18	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 291 ft. south of C. Ave., 218 ft. southwest of Bldg. 2609
Outfall 183	37.245787	77.326646	1.68	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located west of Sisisky Blvd., 302 ft. south of Bldg. 2607
Outfall 192	37.25057	77.346908	0.01	Appomattox River	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located along northern edge of Redstone Dr. at bridge, 278 ft. northeast of Bldg. 18016ct
Outfall 193	37.250427	77.346829	2.62	Appomattox River	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located along southern edge of Redstone Dr. at bridge, 263 ft. northeast of Bldg. 18016ct
Outfall 194	37.253266	77.347981	8.39	Appomattox River	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located 213 ft. east of Bldg. 18023 along south edge of pedestrian bridge
Outfall 195	37.253354	77.348089	17.84	Appomattox River	20802071001	Roads	Bacterial; N, P, TSS; PCBs	Located 180 ft. east of Bldg. 18023 along north edge of pedestrian bridge
Outfall 196	37.251383	77.345895	50.47	Appomattox River	20802071001	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 93 ft. south of Bldg. 18027, discharges water from adjacent BMP

Outfall 197	37.249378	77.343808	0.36	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located along northern edge of Oaklawn Blvd., 504 ft. south of Redstone Dr.
Outfall 211	37.254867	77.335576	10.55	Cabin Creek	20802071002	Roads	Bacterial; N, P, TSS; PCBs	Located at northwest corner of intersection of Oaklawn Blvd. and Temple Ave.
Outfall 225	37.252192	77.322005	3.37	Bailey Creek	20802060201	Roads	Bacterial; N, P, TSS; PCBs	Located 82 ft. south of Bldg. 1109, 76 ft. northeast of Bldg. 1108
Outfall 231	37.251799	77.320391	0.03	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 289 ft. east of Bldg. 1111, 156 ft. northeast of Bldg. 1110
Outfall 232	37.252747	77.321267	0.02	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located east of Bldg. 1109, on slope to floodplain, southern most in a series of 4
Outfall 234	37.253003	77.321457	0.03	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located east of Bldg. 1109, on slope to floodplain, second from north in a series of 4

Outfall 235	37.253217	77.321608	1.48	Bailey Creek	20802060201	Parking Lots	Bacterial; N, P, TSS; PCBs	Located east of Bldg. 1109, on slope to floodplain, northern most in a series of 4
Outfall 241	37.256795	-77.3378	6.03	Cabin Creek	20802071002	Parking Lots	Bacterial; N, P, TSS; PCBs	Located 103 ft. north of Bldg. 18041, adjacent to security fence

# **APPENDIX D**

## **Permanent Stormwater Management Facilities Maintenance**





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Retention/Detention Pond Maintenance

Identifier	Location	Frequency	Type (Retention/Detention)	Date Of Last Service	Inspect Pond	Clean Pond	Cut Pond	Functioning	Other Work Required	Remarks
PND001	POND 001 - ALONG A AVE / AAFES CAR WASH 1631 (SMALLER WITH RIP RA	ANNUALLY	DETENTION	11/08/21	Ü	Ü	Ü	Ü		
PND002	POND 002 - BETWEEN 1630 AND COMMISSARY PARKING, NE OF 1630 LOADI	ANNUALLY	RETENTION	11/08/21	Ü	Ü	Ü	Ü		
PND003	POND 003 - SW OF WATER TOWER, BETWEEN 2ND AND 3RD ST ON A AVE	ANNUALLY	DETENTION	11/08/21	Ü	Ü	Ü	Ü		
PND004	POND 004 - BEHIND PX / HELICOPTER PAD, IN SHARP CURVE CLOSEST TO P COMM. BREEZEWAY	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND005	POND 005 - SISISKY BLVD & B AVE - NE OF INTERSECTION	ANNUALLY	DETENTION	11/10/21	Ü	Ü	Ü	Ü		
PND006	POND 006 - SISISKY BLVD BEHIND 2607	ANNUALLY	DETENTION	11/15/21	Ü	Ü	Ü	Ü		
PND007	POND 007 - SISISKY BLVD OUTBOUND PAST GUARD SHACK ON RIGHT	ANNUALLY	DETENTION	11/10/21	Ü	Ü	Ü	Ü		
PND009	POND 009 - ALONG C AVE BETWEEN 3RD AND 5TH ST. SOUTHEAST OF OVE	ANNUALLY	DETENTION	11/12/21	Ü	Ü	Ü	Ü		
PND010	POND 010 - ENE OF 1540	ANNUALLY	DETENTION	11/12/21	Ü	Ü	Ü	Ü		
PND011	POND 011 - SE OF 3002 DFAC PARKING	ANNUALLY	RETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND012	POND 012 - 2ND ST NEAR C AVE - 100FT NW OF INTERSECTION	ANNUALLY	DETENTION	11/10/21	Ü	Ü	Ü	Ü		
PND013	POND 013 - ALONG 2ND ST - NW OF B AVE INTERSECTION, EASTERN SIDE OF 2ND ST	ANNUALLY	DETENTION	11/12/21	Ü	Ü	Ü	Ü		
PND014	POND 014 - BETWEEN 6298 AND 6295 AND QUARTERMASTER ROAD	ANNUALLY	RETENTION	11/15/21	Ü	Ü	Ü	Ü		
PND015	POND 015 - 49TH GRP STORAGE ON QUARTERMASTER ROAD, SW OF LIGHT	ANNUALLY	DETENTION	11/15/21	Ü	Ü	Ü	Ü		
PND016	POND 016 - 49TH GRP STORAGE ON QM , SW OF BRIDGE, AT BASE OF BRIDG	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND017	POND 017 - ALONG C AVE - SOUTH OF C AVE AT 13TH STREET INTERSECTION	ANNUALLY	RETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND018	POND 018 - BETWEEN 4225 AND 4210	ANNUALLY	RETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND019	POND 019 - AT THE CORNER OF LEE AVE AND B AVE, NORTH OF INTERSECT	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND020	POND 020 - INSIDE NEC SERVER FARM ADDITION / ARMY RD	ANNUALLY	DETENTION	11/24/21	Ü	Ü	Ü	Ü		
PND021	POND 021 - ALONG C AVE BEHIND LIBERTY CHAPEL	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND022	POND 022 - BETWEEN 10600 AND 10620	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND023	POND 023 - 34TH ST AND EVACUATION, DUE EAST OF ALU PARKING LOT #2	ANNUALLY	RETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND024	POND 024 - INTERSECTION OF 38TH ST AND F AVE	ANNUALLY	RETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND025	POND 025 - FOOT OF FLYOVER BRIDGE, NORTHEAST OF TRAFFIC CIRCLE	ANNUALLY	DETENTION	11/23/21	Ü	Ü	Ü	Ü		
PND026	POND 026 - FOOT OF FLYOVER BRIDGE, SOUTHWEST OF TRAFFIC CIRCLE	ANNUALLY	RETENTION	11/23/21	Ü	Ü	Ü	Ü		
PND027	POND 027 - LARGE POND SOUTH OF TSED	ANNUALLY	RETENTION	11/23/21	Ü	Ü	Ü	Ü		
PND028	POND 028 - CENTRAL CAMPUS POND EAST OF RR, NORTH OF SUBSTATION	ANNUALLY	RETENTION	11/18/21	Ü	Ü	Ü	Ü		
PND029	POND 029 - CENTRAL CAMPUS LARGE POND WEST OF RR, N/ NW OF 18037	ANNUALLY	RETENTION	11/23/21	Ü	Ü	Ü	Ü		



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Retention/Detention Pond Maintenance

Identifier	Location	Frequency	Type (Retention/Detention)	Date Of Last Service	Inspect Pond	Clean Pond	Cut Pond	Functioning	Other Work Required	Remarks
PND030	POND 030 - THE FIRST POND NEXT TO THE CLINIC ON EDGEWOOD RD	ANNUALLY	RETENTION	11/24/21	Ü	Ü	Ü	Ü		
PND031	POND 031 - EAST OF TEMPLE AVE GATE	ANNUALLY	RETENTION	11/23/21	Ü	Ü	Ü	Ü		
PND032	POND 032 - WEST OF TEMPLE AVE GATE	ANNUALLY	RETENTION	11/30/21	Ü	Ü	Ü	Ü		
PND033	POND 033 - ON EDGEWOOD EAST OF NORTH BRIDGE	ANNUALLY	DETENTION	11/30/21	Ü	Ü	Ü	Ü		
PND034	POND 034 - ON EDGEWOOD WEST OF NORTH BRIDGE	ANNUALLY	RETENTION	12/01/21	Ü	Ü	Ü	Ü		
PND035	POND 035 - BEHIND OD STORE, LARGE, N OF TRACK, W OF STORE	ANNUALLY	RETENTION	12/03/21	Ü	Ü	Ü	Ü		
PND036	POND 036 - BEHIND THE EOD / MUNITIONS BUILDING 18016	ANNUALLY	RETENTION	12/06/21	Ü	Ü	Ü	Ü		
PND037	POND 037 - FIRST AT DFAC 18027 NEAREST TO PEDESTRIAN BRIDGE	ANNUALLY	RETENTION	11/30/21	Ü	Ü	Ü	Ü		
PND038	POND 038 - 18027, NE OF LOADING DOCK BESIDE ABERDEEN	ANNUALLY	RETENTION	11/30/21	Ü	Ü	Ü	Ü		
PND039	POND 039 - NE OF 18027, BETWEEN 18027 AND 18032	ANNUALLY	DETENTION	11/30/21	Ü	Ü	Ü	Ü		
PND040	POND 040 - SOUTH OF TASP ALONG I-295	ANNUALLY	RETENTION	12/09/21	Ü	Ü	Ü	Ü		
PND041	POND 041 - INSIDE THE VEHICLE RECOVERY TRAINING AREA - WEST OF STEEP HILL	ANNUALLY	RETENTION	12/13/21	Ü	Ü	Ü	Ü		
PND042	POND 042 - CLOSEST TO RIVER RD., PARALLEL TO RIVER WHEN HEADING N	ANNUALLY	RETENTION	12/09/21	Ü	Ü	Ü	Ü		
PND043	POND 043 - LONG NARROW POND CLOSEST TO DROP ZONE, SOUTH OF ALL	ANNUALLY	RETENTION	12/10/21	Ü	Ü	Ü	Ü		
PND044	POND 044 - ALONG ENTRANCE TO RIVER TRAINING SITE OFF RIVER RD	ANNUALLY	DETENTION	12/06/21	Ü	Ü	Ü	Ü		
PND045	POND 045 - ON LEFT ALONG ENTRANCE ROAD TO MIF	ANNUALLY	RETENTION	11/24/21	Ü	Ü	Ü	Ü		
PND046	POND 046 - MIF POND	ANNUALLY	RETENTION	11/24/21	Ü	Ü	Ü	Ü		
PND047	POND 047 - PTF POND	ANNUALLY	RETENTION	11/24/21	Ü	Ü	Ü	Ü		
PND048	POND 048 - IN WOODS BEHIND RIBS SITE ALONG PERIMETER FENCE	ANNUALLY	DETENTION	11/22/21	Ü	Ü	Ü	Ü		
PND050	POND 050 - BESIDE CREDIT UNION DRIVE-THRU	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND051	POND 051 - BEHIND MEPS CENTER	ANNUALLY	DETENTION	11/18/21	Ü	Ü	Ü	Ü		
PND059	POND 059 - 49TH GRP STORAGE, BETWEEN 7146 AND 7143	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND061	POND 061 - BEHIND BLDG 1530	ANNUALLY	DETENTION	11/10/21	Ü	Ü	Ü	Ü		
PND062	POND 062 - CORNER OF 41ST ST. AND E AVE, BEHIND 11105	ANNUALLY	DETENTION	11/18/21	Ü	Ü	Ü	Ü		
PND063	POND 063 - FRONT OF 11105 NEAR THE SE END OF THE RUNNING TRACK	ANNUALLY	DETENTION	11/18/21	Ü	Ü	Ü	Ü		
PND064	POND 064 - NORTH CORNER OF 11107	ANNUALLY	DETENTION	11/18/21	Ü	Ü	Ü	Ü		
PND065	POND 065 - SE OF LARKIN HALL BETWEEN 11102 AND 40TH ST	ANNUALLY	DETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND066	POND 066 - BEHIND BLDG 1110, BEHIND LOADING DOCK OF 1111	ANNUALLY	DETENTION	11/10/21	Ü	Ü	Ü	Ü		
PND067	POND 067 - SOUTH OF 1603, WITHIN BUS LOOP	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND068	POND 068 - SW CORNER OF 1603, ALONG QUARTERMASTER ROAD, CLOSES	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND069	POND 069 - NE OF SISISKY GUARD SHACK, BTWN GUARD SHACK, COMMISS LARGE	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND070	POND 070 - DIRECTLY BEHIND 1603, CLOSEST TO TREES - MIDDLE OF 3 ADJACENT PONDS	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		



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Identifier	Location	Frequency	Type (Retention/Detention)	Date Of Last Service	Inspect Pond	Clean Pond	Cut Pond	Functioning	Other Work Required	Remarks
PND071	POND 071 - NW OF 1603 - TOWARD SALT DOME	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND080	POND 080 - LANDFILL 1 - ROAD TO TRAILER PARK OFF END OF 38TH ST TO LEFT	ANNUALLY	DETENTION	11/26/21	Ü	Ü	Ü	Ü		
PND081	POND 081 - LANDFILL 2 - ROAD TO TRAILER PARK OFF END OF 38TH ST RIGHT SIDE	ANNUALLY	DETENTION	12/15/21	Ü	Ü	Ü	Ü		
PND082	POND 082 - ALONG 16TH STREET BETWEEN 3800 AND 4200 #1	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND083	POND 083 - ALONG 16TH STREET BETWEEN 3800 AND 4200 #2	ANNUALLY	DETENTION	11/16/21	Ü	Ü	Ü	Ü		
PND085	POND 085 - 2ND ON RIGHT SIDE OF ENTRANCE TO WATER TRAINING SITE	ANNUALLY	RETENTION	12/07/21	Ü	Ü	Ü	Ü		
PND086	POND 086 - 3RD ON RIGHT, CLOSEST TO ACTUAL RIVER, RIP RAP INCLUDED IN POND.	ANNUALLY	RETENTION	12/08/21	Ü	Ü	Ü	Ü		
PND087	POND 087 - FAR NORTHEAST CORNER OF DROP ZONE, AGAINST TASP FENCE, SEPARATION OF 28/29	ANNUALLY	RETENTION	12/13/21	Ü	Ü	Ü	Ü		
PND088	POND 088 - WEST OF 11108, SE CORNER OF INTERSECTION OF 40TH AND A AVENUE	ANNUALLY	DETENTION	11/17/21	Ü	Ü	Ü	Ü		
PND089	POND 089 - ALONG G AVENUE BEHIND 11031	ANNUALLY	DETENTION	11/22/21	Ü	Ü	Ü	Ü		
PND090	POND 090 - SOUTH OF 4225 MECHANICAL AREA ALONG 19TH ST	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		
PND091	POND 091 - BEHIND SISISKY WELCOME CENTER BESIDE TENNIS COURTS	ANNUALLY	DETENTION	11/26/21	Ü	Ü	Ü	Ü		
PND092	POND 092 - CENTRAL AVENUE BETWEEN 18031 AND 18032	ANNUALLY	DETENTION	11/26/21	Ü	Ü	Ü	Ü		
PND093	POND 093 - FENCED IN BETWEEN SECLEE AND 1599	ANNUALLY	DETENTION	11/09/21	Ü	Ü	Ü	Ü		



### Culvert Maintenance

Identifier	Location	Frequency	Remarks
CUL001	CULVERT AREA 001 - A AVE	WEEKLY	Culverts were inspected every week by Skookum personnel and documented in daily reports.
CUL002	CULVERT AREA 002 - B AVE	WEEKLY	Culverts were inspected every week by Skookum personnel and documented in daily reports.
CUL003	CULVERT AREA 003 - BATTLE DRIVE	WEEKLY	Culverts were inspected every week by Skookum personnel and documented in daily reports.
CUL004	CULVERT AREA 004 - 5TH STREET	WEEKLY	Culverts were inspected every week by Skookum personnel and documented in daily reports.
CUL005	CULVERT AREA 005 - SISISKY BLVD	WEEKLY	Culverts were inspected every week by Skookum personnel and documented in daily reports.



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Filterra System Maintenance

Identifier	Location	Frequency	Date Of Service	Inspect System (1)	Clean System (2)	Mulch & Erosion (3)	Plant Health (4)	Other Work Required	Remarks
FRA001	FILTERRA SYSTEM AREA 001 - SYSTEM 1 @ BUILDING 03024	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA002	FILTERRA SYSTEM AREA 002 - SYSTEM 2 @ BUILDING 03024	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA003	FILTERRA SYSTEM AREA 003 - SYSTEM 3 @ BUILDING 03024	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA004	FILTERRA SYSTEM AREA 004 - SYSTEM 1 @ BUILDING 03400	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA005	FILTERRA SYSTEM AREA 005 - SYSTEM 2 @ BUILDING 03400	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA006	FILTERRA SYSTEM AREA 006 - SYSTEM 3 @ BUILDING 03400	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA008	FILTERRA SYSTEM AREA 008 - SYSTEM 1 @ BUILDING 06242	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA009	FILTERRA SYSTEM AREA 009 - SYSTEM 2 @ BUILDING 06242	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA010	FILTERRA SYSTEM AREA 010 - SYSTEM 1 @ BUILDING 10624	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA011	FILTERRA SYSTEM AREA 011 - SYSTEM 2 @ BUILDING 10624	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA012	FILTERRA SYSTEM AREA 012 - SYSTEM 3 @ BUILDING 10624	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA013	FILTERRA SYSTEM AREA 013 - SYSTEM 1 @ BUILDING 03020	SEMI-ANNUALLY	05/25/21	Ü	Ü	Ü	Ü		
FRA014	FILTERRA SYSTEM AREA 014 - SYSTEM 4 @ BUILDING 10624	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA015	FILTERRA SYSTEM AREA 015 - SYSTEM 5 @ BUILDING 10624	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		
FRA016	FILTERRA SYSTEM AREA 016 - SYSTEM 4 @ BUILDING 03400	SEMI-ANNUALLY	05/26/21	Ü	Ü	Ü	Ü		

- (1) Inspect System: Inspection includes checks for standing water, box damage, grate damage, clearing the bypass, cleaning the area around the filterra system and cleaning the drop inlet.
- (2) Clean System: Cleaning includes removal of silt, mulch and soil, trash and leaves.
- (3) Mulch & Erosion: Mulch & Erosion includes adding mulch to required height, repositioning erosion control stones and replacing filterra grates.
- (4) Plant Health: Plant health includes making sure plants are alive and healthy and making sure the plants are adequate for usage.



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Porous Pavement Maintenance

Identifier	Location	Frequency	Type (Concrete/Asphalt/ Pavers)	Date Of Service	Standing Water Removed	Debris Removed	Vacuumed	Leveled Surface	Other Work Required	Remarks
POR001	POROUS PAVEMENT AREA 001 - POROUS CONCRETE @ BUILDING 1406	SEMI-ANNUALLY	Concrete	06/01/21	Ü	Ü	Ü			
POR002	POROUS PAVEMENT AREA 002 - POROUS CONCRETE @ BUILDING 11200	SEMI-ANNUALLY	Concrete	06/01/21	Ü	Ü	Ü			
POR003	POROUS PAVEMENT AREA 003 - POROUS CONCRETE @ BUILDING 11810	SEMI-ANNUALLY	Concrete	06/02/21	Ü	Ü	Ü			
POR004	POROUS PAVEMENT AREA 004 - POROUS ASPHALT @ BUILDING 1303	SEMI-ANNUALLY	Asphalt	06/01/21	Ü	Ü	Ü			
POR005	POROUS PAVEMENT AREA 005 - POROUS PAVERS @ BUILDING 1111	SEMI-ANNUALLY	Pavers	07/02/21	Ü	Ü	Ü	Ü		
POR006	POROUS PAVEMENT AREA 006 - POROUS PAVERS @ BUILDING 6242	SEMI-ANNUALLY	Pavers	07/02/21	Ü	Ü	Ü	Ü		