Stormwater Pollution Prevention & Erosion and Sediment Control Plan for:

Owner(s):

MIH1, LLC
401 County Street
New Bedford, MA 02740

Contractor(s):

Farland Corp.
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3479 Fax: (508) 717-3481

SWPPP Contact(s):

Matthew J. White
Farland Corp.
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3479 Fax: (508) 717-3481

SWPPP Preparation Date:

January 2018

Estimated Project Dates:
Project Start Date: January 29, 2018
Project Completion Date: May 31, 2018

Prepared by:

FARLAND CORP.
ENGINEERING A BETTER TOMORROW
ENGINEERING | SITE WORK | LAND SURVEYING

(MAIN OFFICE) 401 COUNTY STREET, NEW BEDFORD, MA 02740 **P** 508.717.3479 **F** 508.717.3481 WWW.FARLANDCORP.COM
ADDITIONAL OFFICES IN: TAUNTON ● MARLBOROUGH ● WARWICK, RI

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SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Farland Estates I

Project Street/Location: Map 130D Lots 388-406 & 412-419 Phillips Road

City: New Bedford State: MA ZIP Code: 02745

County or Similar Subdivision: Bristol County

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
1. 41 º 69 ' 91'' N (degrees, minutes, seconds)	1. 70 º 93 ' 39'' W (degrees, minutes, seconds)
2. _ _ º _ _ . _ _ ' N (degrees, minutes, decimal)	2. _ _ º _ _ . _ _ ' W (degrees, minutes, decimal)
3. _ _ . _ _ _ _ º N (decimal)	3. _ _ . _ _ _ _ º W (decimal)

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____) ☒ EPA Web site ☐ GPS

☐ Other (please specify): _____

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." _____

Is this project considered a federal facility? ☐ Yes ☒ No

NPDES project or permit tracking number*: MAR100138

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit.)*

1.2 Contact Information/Responsable Parties

CONSTRUCTION PHASE (ALL AREAS)

Project Manager(s):

Christian A. Farland, P.E.
Vice President & Principal Engineer
Farland Corp.
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3479
Fax: (508) 717-3481

Site Supervisor(s):

Michael Atkinson
Director of Field Operations
Farland Corp.
Phone: (401) 318-1184

SWPPP Contact(s):

Christian Farland, P.E.
Vice President & Principal Engineer
Farland Corp.
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3479
Fax: (508) 717-3481
Email: cfarland@farlandcorp.com

Matthew White, E.I.T.
Project Manager
Farland Corp.
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3479
Email: mwhite@farlandcorp.com

Emergency 24-Hour Contact:
Christian Farland
Farland Corp.
Phone: (508) 717-3480

Responsibilities:
Farland Corp. will have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications. Farland Corp. will also have the responsibility of day-to-day operational control of the activities at a project that are necessary to ensure compliance with the permit conditions. Farland Corp., as the general contractor of the project, will be the sole operator of the site throughout the entire construction phase.

POST-CONSTRUCTION (ALL AREAS)

Owner(s) / Operators(s):

Right of Way (ROW) Layout and Improvements:
City of New Bedford
Department of Public Infrastructure
1105 Shawmut Avenue
New Bedford, MA 02746
Phone: (508) 979-1550
Fax: (508) 961-3054

Responsibilities:
City of New Bedford, DPI (NBDPI) shall be responsible for all post-construction BMP's that fall within the ROW layout, as well as all terminal structures that service the BMP's within the ROW. Per Section 1.1.1 Eligibility Conditions of the 2017 Construction General Permit, NBDPI does not meet either criteria listed to qualify as an "operator" associated with the proposed construction activity. Due to the classification of "non-operator" NBDPI is not required to obtain permit coverage through a Notice of Intent filing with the EPA.

Individual Residential Lots (prior to execution of P&S):
MIH1, LLC
401 County Street
New Bedford, MA 02740
Phone: (508) 717-3480
Fax: (508) 717-3481
Email: cfarland@farlandcorp.com

Responsibilities:

MIH1, LLC shall be responsible for all post-construction BMP's that are located on any and all residential lots once construction is complete. Per Section 1.1.1 Eligibility Conditions of the 2017 Construction General Permit, MIH1, LLC does not meet either criteria listed to qualify as an "operator" associated with the proposed construction activity. Due to the classification of "non-operator" MIH1, LLC is not required to obtain permit coverage through a Notice of Intent filing with the EPA.

Individual Residential Lots (after execution of P&S):

All residential lots shall be maintained by the private ownership that has purchased the individual lots. Once the P&S agreement has been executed and agreed upon for an individual residential lot, MIH1, LLC shall be relieved of all responsibilities on said lot.

1.3 Nature and Sequence of Construction Activity

General Description:

The property currently consists of a large undeveloped area with moderate tree coverage including a bordering vegetated wetland (BVW) to the eastern portion of the property.

Farland Corp. is contracted to provide construction services for the proposed 27-Lot subdivision to be called "Farland Estates I". These services include the installation of a 1,496-Ft roadway that will incorporate drainage, sewer, water and other typical utilities below the paved surface. Running the length of the roadway will also be a concrete walkway on either side of the road to allow foot traffic to circulate the subdivision. Farland Corp. will also provide the necessary clearing and grading services for the construction of the roadway as well as for the proposed foundation on each of the residential lots. The western portion of the subdivision falls within a buffer zone, so other services required of Farland Corp. will be to install and maintain erosion controls as well as protecting as much of the existing vegetation around the site as possible.

In order to attenuate the increased stormwater runoff generated by the proposed impervious site coverage and to provide the appropriate level of water quality treatment, additional stormwater management practices will be constructed. One such practice will be a large on-site stormwater infiltration basin with an associated sediment forebay, and final discharge points leading to the existing BVW located at the southeast corner of the property. Another form of stormwater management will be a water quality structure that has been designed and located to treat a portion of the stormwater runoff before it reaches the existing subsurface recharge system located at the western boundary of the site. Final stormwater management practices will include an extensive subsurface drain pipe system that will feed either one of the two previously mentioned treatment items.

Construction Support Activities:

The contractor shall be responsible for keeping supporting construction activities within the rules and guidelines outlined within the Construction General Permit of 2017 (CGP). These activities will be limited to the following:

On-site Activities:

- Stockpile Areas for Fill, Loam, Gravel and demolition debris
    - Areas will be located adjacent to proposed grading to minimize movement
    - Material to be screened for contaminated and/or hazardous elements
    - Stockpiles will be surrounded by erosion control practices
- Stockpile Areas for Construction Materials to be used for improvements
    - Areas to be concentrated to a central location on the site
    - Materials stored in these areas will be used in a timely manner
- Equipment storage areas
    - Equipment currently being used for construction will be stored during the non-operational hours within a central location on site
    - No additional equipment to what is currently being used will be stored on site

Off-site Activities:

- Stockpile and Equipment Storage Area
    - There are no off-site activities planned for this project.
    - All stockpile and equipment storage areas will be located within the construction site.

Construction Sequence:

The contractor shall ensure specified erosion and sedimentation controls are in place and functional prior to commencement of anticipated work associated with construction of the pavement, drainage improvements and utilities as shown on the approved plans. Similar erosion and sedimentation control measures shall be deployed prior to commencement of all incidental and unanticipated tasks to complete the work.

Minimum erosion and sedimentation control standards for the work shall be as outlined in the Massachusetts Erosion and Sedimentation Control Guidelines for urban and suburban areas, this document, and the approved Site Plans.

At a minimum, the contractors construction schedule shall meet the following constraints and other measures listed in this document:

1. Install erosion control measures as specified on the Site Plans prior to earth disturbance.
2. Clear and grub, strip top soil and subsoil, and install Construction Entrance prior to clearing and grubbing beyond the Construction Entrance limits. Clear and Grub and construct temporary stockpiling areas, contractor parking, equipment storage, and

construction staging thereafter.

3. Install temporary sediment traps, and temporary swales as soon as possible in the construction sequence. All sediment trap and swale side slopes must be stabilized prior to the introduction of stormwater runoff. Do not introduce any stormwater runoff to the infiltration basin without pre-treatment in-place to remove suspended solids.
4. Install catch basin haybale dikes and silt sacks as soon as possible.
5. Maintain construction entrance, haybale dikes, and silt sacks until binder pavement is placed and site is stabilized.
6. Installation of stabilization measures must be installed immediately in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days.
7. Stabilization measures must be completely installed as soon as practicable, but no later than seven calendar days after stabilization has been initiated.
8. Maintain erosion control measures until project is complete.

What is the function of the construction activity?

☒ Residential ☐ Commercial ☐ Industrial ☒ Road Construction ☐ Linear Utility

☐ Other (please specify): _____

Estimated Project Start Date: 1/29/2017

Estimated Project Completion Date: 5/31/2018

Estimated Project Hours of Operation: Mon-Sat 6AM-4PM

❖ *For full Construction Sequence Schedule, including hours of operation, see Appendix A*

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s):

According to the USDA Soil Survey of Bristol County, MA and on-site soil examinations, site soils consist of Whitman fine sandy loam (73A), Paxton fine sandy loam (305B), Woodbridge fine sandy loam (310A), and Urban Land (602). Per on-site soil evaluations performed by Brendan Sullivan, S.E. in May of 2005 and in July of 2006, the subsurface conditions at the proposed infiltration basin locations generally consist of a sandy substrate, overlain by naturally occurring sandy loam. Estimated seasonal high groundwater was generally encountered between 4-6 feet below the surface.

Slopes:

The land covering much of the undeveloped area is generally flat, sloping gently (1-3%) toward existing BVW at the eastern side of the property. The outer boundaries of the property abut previously developed areas, both residential and commercial. Due to the presence of the

residential and commercial abutters, sloped were kept as they existed at the property lines of said developments.

Soil Stabilization:

In accordance with Section 2.2.9 of the CGP all areas where final vegetative stabilization will occur, or where infiltration practices will be installed the soil compaction will be minimized to allow for proper function and stormwater runoff. Once final grading has been completed there will be no vehicle or heavy equipment access that would increase the compaction within the soils to an unacceptable range. In addition, before any seeding or plantings will occur in these areas, techniques will be performed to enhance the condition of the soils as well as to improve support of vegetative growth.

Drainage Patterns:

Pre –development Watershed Analysis

The site, consisting of mostly undeveloped wooded areas, does not have any stormwater management practices in place other than natural infiltration through the existing soils. Additional stormwater runoff that does not have the adequate time to infiltrate the soils will flow with the gradual slopes towards the existing BVW. As stated above, many of the abutting properties have been previously developed and are designed to handle runoff on their respective properties while minimizing any runoff onto the site covered by this permit.

Post-Development Watershed Analysis

As the pre-development conditions state the property is vastly wooded and undeveloped, so by developing the majority of usable land it was crucial to mitigate the stormwater runoff by implementing efficient management practices. The largest area of newly proposed impervious area is the roadway and associated concrete walkways that run the length of said road, so it was vital to treat this area with both efficient sheet flow as well as water quality treatment practices before it infiltrated any soils. There is a large infiltration basin proposed to the southeast corner of the property that will direct the majority of stormwater within the roadway to the sediment forebay, and finally through drainage pipes to the existing BVW. The remaining area within the roadway will be treated via a smaller network of drainage pipes and catch basins that terminate at an existing subsurface recharge system after entering a 3,000-gal water quality structure.

All of the proposed residential lots will be graded to allow for typical infiltration within the permeable areas on their respective lots. All proposed dwellings will also be designed to incorporate subsurface roof recharge systems to minimize off-site runoff.

The proposed infiltration basins have been designed in accordance with the DEP Stormwater Handbook. In accordance with the Stormwater Handbook, the rate mitigation facilities have been engineered to reduce post-development runoff rates from pre-development conditions.

1.5 Construction Site Estimates

The following are estimates of the construction site:

Total project area:	10.99 acres
Total Construction site area to be disturbed:	9.69 acres
Percentage impervious area before construction:	<5%
Percentage impervious area after construction:	19.6%

1.6 Receiving Waters

Description of receiving waters:
The majority of the treated stormwater will discharge toward the BVW located at the southeasterly corner of the property, eventually discharging toward un-named tributaries of the Acushnet Cedar Swamp. The remainder of the treated stormwater will infiltrate via subsurface recharge systems, and enter the water table of the receiving watershed.

Description of natural buffers and erosion controls:
The site currently consists of a large, wooded and undeveloped area that is surrounded by heavy tree cover and the vegetated areas beyond that are mentioned above. As part of the proposed conditions there will be a disturbance within the natural 50-Ft buffer that exists within the property. In accordance with Compliance Alternative 2 of Section 2.1 in Appendix G within the 2017 CGP, an undisturbed natural buffer of less than 50 Ft supplemented by erosion and sediment controls shall be maintained to achieve an acceptable sediment load reduction that would be equivalent to a 50-Ft undisturbed natural buffer. The following measures have been proposed and will be carried out before, during and after construction as a means of treating stormwater discharge before release:

- The width of the natural buffer that will be maintained between earth disturbance and the waters of the U.S. will be 30 Feet.
- All areas of previously existing natural vegetation will be left alone if they do not fall within any proposed work to ensure the natural flow and infiltration qualities remain.
- The borders of the above named BVW have been flagged for easy location, and will be re-flagged should the status of said flags be deemed unusable or unreadable.
- For erosion and sediment control at the edge of the limit of work, a staked straw wattle w/ silt fence will be implemented along the entire length of disturbance. If the performance of the erosion and sediment control is ever in question it will be replaced immediately to avoid any unwanted contamination.
- All areas that will include erosion and sediment controls mentioned above have been graded to allow the appropriate velocity of stormwater flow prior to reaching the buffer.

The Compliance Alternative chosen for this site requires the Sediment Removal Efficiency to match that of an undisturbed 50-Ft Buffer. By using a buffer width of 30 Ft, and given the Site's

Sediment Risk Level of Low, we are able to provide an erosion control measure, in this case a staked straw wattle w/ silt fence that is double the necessary requirements. According to Table G-9 in Attachment 1 of Appendix G for a soil profile consisting predominantly of loamy sand, and a buffer vegetation type of mostly Tall Fescue Grass and Medium-Density Weeds, the sediment removal percentage can be approximated as 80%. With the addition of the staked straw wattle w/ silt fence, we believe the percent removal of sediment will exceed the required 90% that a true undisturbed 50-Ft natural buffer would provide.

Description of storm sewer systems:
During construction stormwater runoff will be directed to staked straw wattles w/ silt fences via sheet flow, or into temporary sediment traps by concentrated overland flow or through temporary swales prior to discharge from the site. Once constructed, the drainage system will consist of a permanent infiltration basin with sediment forebay as well as subsurface recharge systems.

Description of impaired waters or waters subject to TMDLs:
The unnamed tributaries of the Acushnet Cedar Swamp are not impaired waters subject to TMDL according to the DEP Massachusetts Year 2014 Integrated List of Waters. Regardless, construction activities fully and properly implementing the requirements of the CGP shall be deemed to be meeting the requirements and assumptions of any TMDL.

1.7 Site Features and Sensitive Areas to be Protected

Description of unique features that are to be preserved:
No disturbance is permitted beyond the proposed erosion control measures to be installed prior to construction. These barriers represent the limit of work permitted within the buffer zone to the surrounding BVW.

Describe measures to protect these features:
Straw wattle with Silt Fence and/or straw bale barriers will be installed at locations shown on the plans. Dedicated construction entrances are to be utilized during construction. The existing on-site drainage system will be protected by the appropriate erosion controls throughout construction.

1.8 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

- Grading and site excavation operations
- Vehicle tracking
- Topsoil stripping and stockpiling
- Landscape operations

Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Areas – small fueling activities, minor equipment maintenance, sanitary facilities and hazardous waste storage.
- Materials Storage Areas – general construction materials, solvents, adhesives, paving materials, paints, aggregates, trash, etc….
- Construction Activity – paving, curb/gutter installation, concrete pouring/mortar, etc…
- Concrete Washout Area (if necessary).

Aside from the above mentioned potential pollutants, there will be no treatment chemicals used for the means of reducing or treating stormwater runoff. The procedures outlined in the erosion control and natural buffers section above will sufficiently handle the stormwater runoff produced by this project, so no additional chemicals will be needed at this time. All other chemicals that may be encountered on site are listed below, and all have been chosen to be as minimally harmful as possible given the site conditions and soils.

Trade Name Material	Stormwater Pollutants	Location
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic	Herbicides used for noxious weed control
Fertilizer	Nitrogen, phosphorous	Newly seeded areas
Cleaning solvents	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	No equipment cleaning allowed in project limits
Asphalt	Oil, petroleum distillates	Parking area
Concrete	Limestone, sand, pH, chromium	Curb and gutter
Glue, adhesives	Polymers, epoxies	Drainage construction
Paints	Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic	Parking striping
Curing compounds	Naphtha	Curb and gutter
Hydraulic oil/fluids	Mineral oil	Leaks or broken hoses from equipment
Gasoline	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment/staging area
Diesel fuel	Petroleum, distillate, oil & grease, naphthalene, xxylenes	Secondary containment/staging area

Kerosene	Coal oil, petroleum distillates	Secondary containment/staging area
Antifreeze/coolant	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment
Sanitary toilets	Bacteria, parasites, and viruses	Staging area

1.9 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☒ Yes ☐ No

Describe how this determination was made:

Farland Corp. has reviewed the potential for endangered or threatened species and critical habitats by using the Fish and Wildlife Services On-line mapping tool (iPaC) located at https://ecos.fws.gov/ipac/ (accessed on 12/22/17) to determine if any exist on or around the project site, and that they might be affected by any construction activities. It was determined that there is one (1) species of threated wildlife that may be affected by said construction activities.

If yes, describe the species and/or critical habitat:

The species found on the above referenced database is the Northern Long-Eared Bat. This species is classified as "threatened", and does not have a designated critical habitat.

- *For a copy of the above referenced findings, see Appendix F.*

If yes, describe or refer to documentation that determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (Note, if species are on or near your project site, EPA strongly recommends that the site operator work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. For concerns related to state or tribal listing of species, please contact a state or tribal official.)

Due to the previously developed nature of the project site and surrounding area, a visual inspection has been conducted to determine the potential presences of the species as well as any potential impacts to its natural habitat. This site inspection was performed by Matthew White of Farland Corp. on January 22, 2017. Upon the completion of the inspection no specimens of the stated threatened species were encountered, and the proposed work to take place for this project will be mostly contained to the previously developed commercial areas of the site. In addition, there will be minimal to no impact on the existing wooded areas surrounding the project site.

1.10 Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

Describe how this determination was made:

Farland Corp. has reviewed the Massachusetts State Register of Historic Places available from the Division of Tourism – Massachusetts Historic Sites at http://www.mass.gov/portal/visiting-recreation/tourism/massachusetts-historic-sites.html (accessed on 11/28/17) to determine if any historic sites are on or near the Farland Estates I site in New Bedford, Massachusetts. No historic sites were identified from this review. Additionally, Farland Corp. has contacted The City of New Bedford's Historical Commission to verify that no historical sites or areas exist at the proposed work site. Farland Corp. described the location and nature of the work, and it was verified that there are no historic sites on or near the project area.

If yes, describe or refer to documentation that determines the likelihood of an impact on this historic site and the steps taken to address that impact.

N/A

1.11 Safe Water Drinking Act – Underground Injection Control (UIC)

Described use of Underground Injection Wells or Stormwater Controls:

Generally considered, there are three classifications of Class V UIC wells within the 2017 CGP and this project does not proposed the use of any of the three during any phase covered under this permit. Each infiltration trench to be implemented in the project will have a surface width much greater than the depth of the basin itself, by definition excluding them from these regulations. Additionally, there are no proposed subsurface fluid distribution system that will remain post-construction that has a depth larger than the operational surface width. Because of these considerations, under Section 7.2.9.c Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls in the 2017 CGP, Farland Corp. is not required to contact state or federal agencies that would regulate such practices.

1.12 Applicable Federal, Tribal, State or Local Programs

N/A

1.13 Maps *(See Appendix B)*

- Attachment 1 - General Locus Map
- Attachment 2 - Construction Phasing Map
- Attachment 3 - Waters of the U.S. & Critical Habitat Map

SECTION 2: EROSION AND SEDIMENT CONTROL BMP'S

❖ *All stabilization requirements within this section and throughout this pollution prevention plan shall supersede any general notes (specifically notes #17 and #18) pertaining to such activities within the notes section of the proposed Site Plans.*

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Topsoil

BMP Description: Top soil stripped from the immediate construction area will be stockpiled on-site. The stockpile will be in an area that will not interfere with construction and will be at least 15 feet away from areas of concentrated flows or pavement, and will be located within the limit of work as shown on Site Plans. Where possible, stockpile areas are to be located outside of the 100 ft buffer zone to the BVW, and in no case shall be closer located within 50 feet of the BVW. The slopes of the stockpile will not exceed 2:1 to prevent erosion. A silt fence will be installed around the perimeter of the stockpile, in accordance with the Site Plans. The stockpiles will be temporarily stabilized with erosion controls as described in Section 2, Part 2.4.

Installation Schedule:	Topsoil stockpiles will be established during grading activities. Temporary stabilization will be applied immediately after the slopes of the stockpile have been graded and construction equipment transverses the slopes.
Maintenance and Inspection	The area will be inspected weekly for erosion and immediately after storm events that produce 0.25" of precipitation or more. Areas on or around the stockpile that have eroded will be stabilized immediately with erosion controls. Maintenance and inspection procedures for the silt fence are described in Section 2, Part 2.7
Responsible Staff:	General Contractor

2.2 Phase Construction Activity

BMP Description:

This will include installation of all proposed erosion control measures as shown on the site plans. The contractor shall install the construction entrance prior to earth moving operations beyond the construction entrance limits. Next, the contractor shall install the temporary sediment traps, temporary swales, and the infiltration systems as soon as possible. Untreated stormwater shall not be discharged into the sub-surface infiltration chamber system. After that, the contractor shall install the necessary utilities and provide haybale dikes and silt sacks as soon as possible.

Other pertinent information:

To minimize erosion during grading activities, grading and site work should take place during periods of predicted dry weather. The areas of the site that will remain vegetated after construction will be graded lastly right before construction activities are complete. All other areas of the construction site will be stabilized if site work is not planned for more than 14 days, or if construction activities have permanently ceased. Installation of stabilization measures shall be completed as soon as practicable, but no later than seven calendar days after stabilization has been initiated.

Installation Schedule:	For a construction sequence, see Section 1.3 and/or Appendix A
Responsible Staff:	General Contractor

2.3 Control Stormwater Flowing onto and through the Project

Temporary Swales

BMP Description: Stabilized swales (either stoned or grassed) shall be used along the perimeter of the proposed work where the contractor deems necessary. The swales will have positive pitch to convey stormwater to a temporary sediment trap. All side slopes shall be no steeper than 2:1 and shall be stabilized with rip rap, mulch, or grass. The bottom of the swales and sediment trap shall be two above the water table or sealed with 6” clay if the separation is less.

BMP Description: Temporary Swales	
Installation Schedule:	The temporary swales will be installed on an as needed basis as determined by the general contractor.

Maintenance and Inspection:	The swales will be inspected for erosion and structural failures weekly and immediately after storm events that produce 0.25" of precipitation or more. Remove debris, sediment, and repair erosion embankments immediately.
Responsible Staff:	General Contractor

2.4 Stabilize Soils

Temporary Stabilization

BMP Description: For slopes less than 2:1, straw mulch will provide immediate protection to exposed soils where construction will cease for more than 14 days and over the winter months if the project is not completed before then. Straw mulch and wood fiber will be applied by hand with an application rate of 90-100 pounds (2-3 bales) per 1,000 square feet. If necessary, winter stabilization will occur between November 15 and March 15. See Section 2.5 for slopes greater than 2:1.

☐ **Permanent**	☒ **Temporary**
Installation Schedule:	Portions of the site where construction will cease for more than 14 days will be stabilized with straw mulch. Winter stabilization will occur between November 15 and March 15.
Maintenance and Inspection:	Mulched areas will be inspected weekly and after storm events that produce 0.25" of precipitation or more to check for movement of mulch or erosion. If washout, breakage, or erosion occurs, the surface will be repaired, and new mulch will be applied to the damage area.
Responsible Staff:	General Contractor

Permanent Stabilization

BMP Description: Permanent stabilization will occur immediately after the final design grades are achieved but no later than 7 days after construction ceases. Native species of plants will be used to establish vegetative cover on exposed soils along with grass planting. Permanent stabilization will be completed in accordance with the final stabilization procedures in Section 2.2.14.a.ii in the 2017 CGP for Land Disturbance of more than 5 Acres.

☒ **Permanent**	☐ **Temporary**
Installation Schedule:	Portions of the site where construction activities have permanently ceased will be stabilized as soon as possible but no later than 14 days after construction ceases.
Maintenance and Inspection:	All seeded areas will be inspected weekly during construction activities for failure and after storm events that produce 0.25" of precipitation or more until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area will be reseeded, fertilized, and mulched immediately. After construction is completed at the site, permanently stabilized areas will be monitored until final stabilization is achieved.
Responsible Staff:	General Contractor

Dust Control

BMP Description: Dust from the site will controlled by using a mobile pressure-type distributor truck to apply potable water to disturbed areas. The mobile unit will apply water at a rate of 300 gallons per acre and minimized as necessary to prevent runoff and ponding.

☐ **Permanent**	☒ **Temporary**
Installation Schedule:	Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of potable water will be performed no more than three times a day during the months of May- September and once per day during the months of October-April or whenever the dryness of the soil warrants it.
Maintenance and Inspection:	At least one mobile unit will be available at all times to distribute potable water to control dust on the project area. Each mobile unit will be equipped with a positive shutoff valve to prevent over watering of the disturbed area. For vehicle and equipment maintenance practices, see Section 3, Part 3.4.
Responsible Staff:	General Contractor

2.5 Protect Slopes

BMP Description: Grassed, rip rap slopes, and geotextile erosion control mats shall be installed as required according to the Site Plans (see Appendix C). All slopes on site shall be stabilized with grass.

Where slopes exceed 2:1 or greater, erosion control mats shall be used to provide stabilization for the slopes. Erosion control mats should be used for the side slopes of any temporary side slopes to the sediment traps, swales, and the detention basin. The blanket will cover the entire area of the graded slope and bottom channel. The bottom and side slopes will be seeded and mulched before the blanket is applied. The blanket will be installed by the manufactures' specifications but at a minimum by digging a small trench on the upside of the slope, 12" wide by 6" deep, and stapling the leading edge of the blanket in the trench. The blanket shall be rolled down the slope slowly to maintain soil contact and stapled in 12" intervals. If the blanket cannot cover the entire slope, the blankets will be overlapped 2" and stapled at the overlapped edge. The erosion control mat proposed in this design for all application is Curlex 11 for slopes up to 1:5 to 1. "Approved equal" mats can be presented to the engineer and city for approval.

Installation Schedule:	Grassed slopes will be installed immediately after final design grades are achieved. Erosion control mats shall be installed immediately after construction of a slope which equals 2:1 or greater.

Maintenance and Inspection:	All grassed slopes will be inspected weekly during construction activities for failure and after storm events that produce 0.25" of precipitation or more until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area will be reseeded, fertilized, and mulched immediately. After construction is completed at the site, permanently stabilized areas will be monitored until final stabilization is achieved. Rip rap areas shall be replaced when sediment is 1' deep. All rip rap areas that are utilized in post construction shall be replaced with clean rip rap after construction and installed per the Site Plans.
Responsible Staff:	General Contractor

2.6 Protect Storm Drain Inlets

BMP Description: Storm drain inlets will be protected from sediment by commercially available silt sack inserts. The catch basin silt sack inlets will be removed once the construction site has been permanently stabilized or per manufacturers specifications.

Installation Schedule:	Catch basin silt sack inserts will be installed in existing as needed and in all new drainage structures installed on-site.
Maintenance and Inspection:	The catch basin silt sack inserts will be inspected weekly and after storm events that produce 0.25" of precipitation or more. If the insert becomes clogged with sediment, the insert will be removed and cleaned or replaced per manufacturer's recommendations.
Responsible Staff:	General Contractor

BMP Description: Hay bale dikes shall be installed, in addition to the silt sacks, around all catch basin grates. The dikes shall be constructed of hay bales to create a closed barrier around the structure covers.

Installation Schedule:	Hay bale dikes will be installed against existing inlets and around all new drainage structures installed on-site.
Maintenance and Inspection:	The hay bale dikes will be inspected weekly and after storm events that produce 0.25" of precipitation or more. If the dike becomes clogged, damaged or significant sediment builds up obstructing flow, the hay bales will be removed and replaced with new ones.
Responsible Staff:	General Contractor

2.7 Establish Perimeter Controls and Sediment Barriers

Straw Wattle w/ Silt Fence

BMP Description: Straw wattle w/ silt fence will be installed along all topsoil stockpiles and at the down-gradient extents of earth disturbance. Silt fences will be installed by excavating a 6-inch deep trench along the line of proposed installation. Wooden posts supporting the silt fence will be spaced 4 to 6 feet apart and driven securely into the ground. The silt fence will be fastened securely to the wooden posts with wire ties spaced every 24 inches at the top, mid section, and bottom of the wooden posts. The bottom edge of the silt fence will extend across the bottom of the trench and the trench will be backfilled and compacted to prevent stormwater and sediment from discharging underneath the silt fence. For design specifications see the Detail Plan located in the Site Plans.

Installation Schedule:	The straw wattle w/ silt fence will be installed before construction begins at the site and around topsoil stockpiles once they have been established. Silt fence barrier shall be installed along the perimeter of all the proposed site work.
Maintenance and Inspection:	Silt fences and Erosion Control measures will be inspected weekly and immediately after storm events that produce 0.25" of precipitation or more to insure it is intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If gaps or tears are found during the inspection, the fabric will be repaired or replaced immediately. Accumulated sediment will be removed from the Erosion Control Measure base if it reaches one half the height of the straw wattle or silt fence and hauled off-site. If accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event, the sediment will be removed more frequently. Before the fence is removed from the project area, the sediment will be removed. The anticipated life span of the fence is 6 months and will likely need to be replaced after this period.
Responsible Staff:	General Contractor

2.8 Establish Stabilized Construction Exits

Stabilized Construction Exits

BMP Description: Anti-tracking pads consisting of crushed stone will be installed at the exit of the site located off of Phillips Road, to prevent the off-site transport of sediment by construction vehicles. The anti-tracking pads will be at least 75 feet long, a minimum of 24' feet wide, flared at the end closest to the paved road and will consist of an 8-inch thick layer of

crushed stone (2 inches in diameter). The crushed stone will be placed over a layer of geotextile filter fabric to reduce the mitigation of sediment from the underlying soil. Orange colored plastic mesh fence will be installed along the length of the construction exit to keep construction vehicles and equipment on the anti-tracking pads.

Installation Schedule:	The stabilized exits will be installed before construction begins on the site. The stone will remain in place until the subgrade of pavement is installed at the site.
Maintenance and Inspection:	The exits will be inspected weekly, after storm events that produce 0.25" of precipitation or more or heavy use. The exits will be maintained in a condition that will prevent tracking or flowing of sediment. This could require adding additional crushed stone to the exit. All sediment tracked, spilled, dropped or washed onto adjacent streets will be swept up immediately and hauled off-site. Sediment will be swept from the tracking pad at least weekly, or more often if necessary. If excess sediment has clogged the pad, the exit will be topdressed with new crushed stone. Replacement of the entire pad might be necessary when the pad becomes completely filled with sediment. The pad will be reshaped as needed for drainage and runoff control. Broken road pavement as a result of construction activities on roadways immediately adjacent to the project site will be repaired immediately. The stone anti-tracking pad will be removed before the subgrade of pavement is applied to the parking lot. The removed stone and sediment from the pad will be hauled off-site and disposed of.
Responsible Staff:	General Contractor

SECTION 3: GOOD HOUSEKEEPING BMP'S

3.1 Material Handling and Waste Management

Construction & Domestic Waste Materials

BMP Description: All waste materials will be collected and disposed of into metal trash dumpsters in the materials storage area. Dumpsters will have a secure water tight lid, be placed away from stormwater conveyances and drains and meet all federal, state and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster. No construction materials will be buried on-site. All personnel will be instructed regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the individual who manages day-to-day site operations will be

responsible for seeing that these practices are followed.	
Installation Schedule:	Trash dumpsters will be installed once the materials storage area has been established. Install where feasible and outside the 100' buffer zone to the BVW.
Maintenance and Inspection:	The dumpsters will be inspected weekly and immediately after storm events that produce 0.25" or precipitation or more. The dumpsters will be emptied weekly. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently. Waste container lids will be kept closed when not in use and lids are to be closed at the end of the business day for those containers that are actively used throughout the day. For waste containers that do not have lids, provide either 1.) A cover such as a tarp, plastic sheeting or temporary roof to minimize exposure of wastes to precipitation OR 2.) A similarly effective means designed to minimize the discharge of pollutants. On business days, clean up and dispose of waste in designated waste containers, and clean up immediately if containers overflow.
Responsible Staff:	General Contractor

Hazardous Waste Materials

BMP Description: All hazardous waste materials such as oil filters, petroleum products, and paint and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers, within the hazardous materials storage area. Hazardous waste materials will be stored in appropriate and clearly marked containers and segregated from other non-waste materials. Secondary containment will be provided for all waste materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous waste materials will be disposed of in accordance with federal, state and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed regarding proper procedures for hazardous waste disposal. Notices that state these practices will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.	
Installation Schedule:	Shipping containers used to store hazardous waste materials will be installed once the site materials storage area has been installed.
Maintenance and Inspection:	The hazardous waste material storage areas will be inspected weekly and after storm events that produce 0.25" of precipitation or more. The storage areas will be kept clean, well organized and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data

	sheets, material inventory and emergency contact numbers will be maintained in the office trailer.
Responsible Staff:	General Contractor

Sanitary Waste

BMP Description: Two temporary sanitary facilities (portable toilets) will be provided at the site throughout the construction phase. The toilets will be in the staging area. The portable toilets will be located away from a concentrated flow path and traffic flow and will have collection pans underneath as secondary containment.

Installation Schedule:	The portable toilets will be brought to the site once the staging area has been established.
Maintenance and Inspection:	All sanitary waste will be collected from the portable facilities a minimum of three times per week. The portable toilets will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site and replaced with new portable toilets.
Responsible Staff:	General Contractor

Recycling

BMP Description: Wood pallets, cardboard boxes and other recycleable construction scraps will be disposed of in a designated dumpster for recycling. The dumpster will have a secure watertight lid, be placed away from stormwater conveyances and drains and meet all local and state soild-waste management regulations. Only solid recycleable construction scraps from the site will be disposed in the dumpster. All personnel will be instructed regarding the correct procedure for disposal of recycleable construction scraps. Notices that state these practices will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

Installation Schedule:	Designated recycling dumpsters will be installed once the combined staging area has been established.
Maintenance and Inspection:	The recycling dumpster will be inspected weekly and immediately after storm events that produce 0.25” of precipitation or more. The recycling dumpster will be emptied weekly and taken to an approved recycling center. If recycleable construction wastes are exceeding the dumpster’s capacity, the dumpsters will be emptied more frequently.
Responsible Staff:	General Contractor

3.2 Designate Washout Areas

Concrete Washout

BMP Description: If necessary, a designated temporary, above-grade concrete washout area will be constructed outside any proposed locations of stormwater management areas. The temporary concrete washout area will be constructed with a recommended minimum length and width of 10 feet but with significant quantity and volume to contain all liquid and concrete waste generated by washout operations. The washout area will be lined with plastic sheeting at least 10 mils thick and free of any holes or tears. Signs will be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility. Concrete pours will not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes will be washed in the designated area or concrete wastes will be disposed of off-site. When the temporary washout area is no longer needed for the construction project, the hardened concrete and materials used to construct the area will be removed and disposed of according to the maintenance schedule below and the area will be stabilized.

Installation Schedule:	The washout area will be constructed before concrete pours occur at the site.
Maintenance and Inspection:	The washout area will be inspected daily to ensure that all concrete washing is being discharged into the washout area, no leaks or tears are present and to identify when concrete wastes need to be removed. The washout areas will be cleaned out when once the area is filled to 75 percent of the holding capacity. Once the area's holding capacity has been reached, the concrete wastes will be allowed to harden, the concrete will be broken up, removed and disposed of off-site. The plastic sheeting will be replaced if tears occur during removal of concrete wastes from the washout area.
Responsible Staff:	General Contractor

3.3 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

BMP Description: Several types of vehicles and equipment will be used on-site throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, and forklifts. All major equipment/ vehicle fueling and maintenance will be performed off-site. A small, 20 gallon pickup bed fuel tank can be kept on-site in the staging area. Only minor equipment maintenance will occur on-site. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets. Absorbent, spill cleanup materials and spill kits will be available at the combined staging and materials storage area. Drip pans will be placed under all equipment receiving maintenance and vehicles and equipment parked overnight.

Installation Schedule:	BMP's implemented for equipment and vehicle maintenance and fueling activities will begin at the start of the project.
Maintenance and Inspection:	Inspect equipment/ vehicle storage areas and fuel tank weekly and after storm events that produce 0.25" of precipitation or more. Vehicles and equipment will be inspected on each day of use. Leaks will be repaired immediately, or the problem vehicle will be removed from the site. Keep ample supply of spill-clean up materials on-site and immediately clean up spills and dispose of materials properly.
Responsible Staff:	General Contractor

3.4 Control Equipment/ Vehicle Washing

BMP Description: All equipment and vehicle washing will be performed off-site.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	General Contractor

3.5 Spill Prevention and Control Plan

Spill Prevention and Control Procedures:

1. Employee training: all employees will be trained via biweekly tailgate sessions, as detailed in Section 6, part 6.3.

2. Vehicle Maintenance: Vehicles and equipment will be maintained off-site. All vehicles and equipment including subcontractor vehicles will be checked for leaking oil and fluids. Vehicle leaking fluids will not be allowed on-site. Drip pans will be placed under all vehicles and equipment that are parked overnight.

3. Hazardous Material Storage: Hazardous materials will be stored in accordance with Section 3, part 1 and federal and state requirements.

4. Spill Kits: Spill kits will be within the materials storage area and concrete washout areas.

5. Spills: All spills will be cleaned up immediately upon discovery. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal at the local landfill. Spills large enough to discharge to surface water will be reported to the National Response Center at 1-800-424-8802.

6. Material safety sheets, a material inventory, and emergency contact information will be maintained at the on-site project trailer.

7. If a spill occurs and the drainage system is constructed, there shall be steel plates larger than the catch basin grates placed over the catch basin grates or drain basin immediately. The plates shall be kept on site at all times. Additionally, the spill prevention device on the detention basin outlet shall be closed immediately.

Installation Schedule:	The spill prevention and control procedures will be implemented once construction begins on-site.
Maintenance and Inspection:	All personnel will be instructed, during tailgate training sessions, regarding the correct procedures for spill prevention and control. Notices that state these practices will be posted in the office trailer and the individual who manages day to day site operations will be responsible for seeing that these procedures are followed.
Responsible Staff:	General Contractor

3.6 Allowable Non-Stormwater Discharge Management

Any changes in construction activities that produce other allowable non-stormwater discharges will be identified and the SWPPP will be amended and the appropriate erosion and sediment control will be implemented.

Water Used to Control Dust

BMP Description: Dust control will be implemented as needed once site grading has begun and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of potable water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May-September and once per day during the months of October-April or whenever the dryness of the soil warrants it.

Responsible Staff:	General Contractor

Uncontaminated Excavation Dewatering

BMP Description: Because construction for this site is being conducted during the dry season, dewatering activities are not expected to occur at the project site. If dewatering is necessary, the SWPPP will be revised to address the need for appropriate BMP's.

Responsible Staff:	General Contractor

Landscape Irrigation

BMP Description: Irrigation waters will not be sprayed onto impermeable surfaces such as paved parking areas or roads. Waters will be directed onto soil and lawns by using hoses and correctly sized sprinklers with adjustable spray patterns. To avoid discharge of irrigation waters,

the sprinklers will have low-flow rates and increased watering time. The irrigated area will be inspected for excess watering and to adjust watering times and schedules.	
Responsible Staff:	General Contractor

SECTION 4: POST-CONSTRUCTION BMP'S

See the attached *Overall Long Term Operation & Maintenance Program for Stormwater Management Areas in Appendix M*

SECTION 5: INSPECTIONS

5.1 Inspections

1. **Inspection Personnel:** Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:

   - ___Michael Atkinson____ is the stormwater compliance officer for Farland Corp., and is responsible for the day-to-day site compliance with the SWPPP and EPA's Construction General Permit. ____Matthew J. White, E.I.T.____ will conduct inspections for all areas of the site disturbed by construction activities, areas used for storage of materials that are exposed to precipitation, discharge points and construction exits.

     In absence of ___Matthew J. White, E.I.T.____ Associate Compliance Officer for _____Farland Corp._____ will conduct inspections.

   - As directed by the General Contractor, the local Conservation Agent will be notified of any erosion or sediment issues which occur on-site, as well as conducting erosion control inspections after storm events that produce 0.25" of precipitation or more.

   - For all storm event information, rather than have a mounted rain gauge, observations will be taken from the following weather station:

     Station Name – Surrey Heights

     Station ID – KMANEWBE22

     Latitude & Longitude – N 41° 41' 27" ; W -70° 55' 35"

     Elevation – 60 Ft from Sea Level

     City & State – New Bedford, MA 02745

2. **Inspection Schedule and Procedures:**

   - Inspections of the site will be performed once every 7 days and within 24 hours of the end of a storm event of one-quarter inch or greater. The inspections will verify that all BMP's required in Sections 2 and 3 are implemented, maintained and effectively minimizing erosion and preventing stormwater contamination from construction materials. For detailed inspection procedures, see Sections 2 and 3.

   - All inspections will be coordinated with the General Contractor.

For any corrective action triggering conditions while performing inspections outlined above, all reasonable steps must immediately be undertaken to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the problem does not require a new or replacement control or significant repair, the corrective action must be completed by the close of the next business day. When the problem requires a new or replacement control or significant repair, install the new or modified control and make it operational, or complete the repair, by no later than seven calendar days. You must document in your records why is it infeasible to complete the installation or repair within the 7-day timeframe, and document your schedule for installing the stormwater control(s) and making it operational as soon as feasible after the 7-day timeframe. Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within seven calendar days of completing this work.

For a copy of the inspection report see Appendix G.

5.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s) (to be complete by General Contractor):

Insert Company or Organization Name: **Farland Corp.**

Insert Name: **Christian A. Farland, P.E.; Michael Atkinson; Matthew J. White, E.I.T.**

Insert Position: **CAF – Vice President & Principal Engineer; MA – Director of Field Operations; MJW - Project Engineer**

Insert Address: **401 County Street**

Insert City, State, Zip Code: **New Bedford, MA 02745**

Insert Telephone Number: **(508) 717-3479**

Insert Fax/Email: **cfarland@farlandcorp.com; matkinson@farlandcorp.com; mwhite@farlandcorp.com**

****All corrective actions will be carried out by the General Contractor(s) listed above, and overseen by Director of Field Operations, Michael Atkinson or an approved officer****

Attach a copy of the signed delegation of authority form in Appendix L.

5.3 Corrective Action Log

Corrective Action Log:
See Appendix G

SECTION 6: RECORDKEEPING AND TRAINING

6.1 Recordkeeping

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

Date(s) when major grading activities occur:
See Appendix J
Date(s) when construction activities temporarily or permanently cease on a portion of the site:
See Appendix J
Date(s) when an area is either temporarily or permanently stabilized:
See Appendix J

6.2 Log of Changes to the SWPPP

Log of changes and updates to the SWPPP

See Appendix H-SWPPP Amendment Log

6.3 Training

Individual(s) Responsible for Training:

General Contractor

Describe Training Conducted:

- General stormwater and BMP awareness training for staff and subcontractors:

  The General Contractor will conduct informal training for all staff, including subcontractors, on the site. The training will be conducted primarily via tailgate sessions and will focus on avoiding damage to stormwater BMP's and preventing illicit discharges. The tailgate sessions will be conducted biweekly and address the following topics: Erosion Control BMP's, Sediment Control BMP's, Non-Stormwater BMP's, Waste Management and Materials Storage BMP's, and Emergency Procedures specific to the construction site. (see Appendix K-SWPPP Training Log)

- Detailed training for staff and subcontractors with specific stormwater responsibilities:

  The General Contractor will provide formal training to all staff and subcontractors with

specific stormwater responsibilities, such as installing and maintaining BMP's. The formal training will cover all design and construction specifications for installing the BMP's and proper procedures for maintaining each BMP. Formal training will occur before any BMP's are installed on the site. (see Appendix K-SWPPP Training Log)

SECTION 7: FINAL STABILIZATION

Permanent Seeding

BMP Description: Permanent seeding will be applied immediately after the design grades are achieved on portions of the site but no later than 14 days after construction activities have permanently ceased. After the entire site is stabilized, any sediment that has accumulated will be removed and hauled off-site for disposal. Construction debris, trash and temporary BMP's (including silt fences, material storage areas, sanitary toilets and inlet protection) will also be removed and any areas disturbed during removal will be seeded immediately.

- **Seedbed Preparation**
    a. In areas where disturbance results in subsoil being the final grade surface, topsoil will be spread over the finished area at a minimum depth of 4-6 inches.
    b. The seedbed will be free of large clods, rocks, woody debris and other objectionable material.
    c. Fertilizer and lime will be applied to the seedbed according to the manufacturer's recommendations.
    d. The top layer of soil will be loosened to a depth of 3-5 inches by raking, tilling, disking or other suitable means.

- **Grass Application**
    a. Seed will be applied uniformly by hydroseeding or broadcasting. Where broadcasting is used, the seed will be covered with .25 inch of soil or less, by cultipacking or raking.

Installation Schedule:	Portions of the site where construction activities have permanently ceased will be stabilized, as soon as possible, but no later than 14 days after construction ceases.
Maintenance and Inspection:	All seeded areas will be inspected weekly during construction activities for failure and after storm events that produce 0.25" of precipitation or more until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area will be reseeded and fertilized immediately. After construction is completed at the site, permanently stabilized areas will be monitored until final stabilization is reached.
Responsible Staff:	General Contractor

SECTION 8: CERTIFICATION AND NOTIFICATION

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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

Name: Christian A. Farland, P.E. Title: Vice President - Farland Corp.

Signature: _____ Date: 1/24/18

SECTION 8: CERTIFICATION AND NOTIFICATION

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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

Name: CHRISTIAN A. FARLAND Title: MANAGER – MIHI, LLC

Signature: _____ Date: 1/24/18

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A – Construction Sequence Schedule

Appendix B – General Location Maps

Appendix C – Site Plans

Appendix D – Construction General Permit

Appendix E – NOI and Acknowledgement Letter from EPA/State

Appendix F – USFWS iPAC Resource List

Appendix G – Inspection & Corrective Action Reports

Appendix H – Corrective Action Log

Appendix I – SWPPP Amendment Log

Appendix J – Subcontractor Certifications/Agreements

Appendix K – Grading and Stabilization Activities Log (or in Part 6.1)

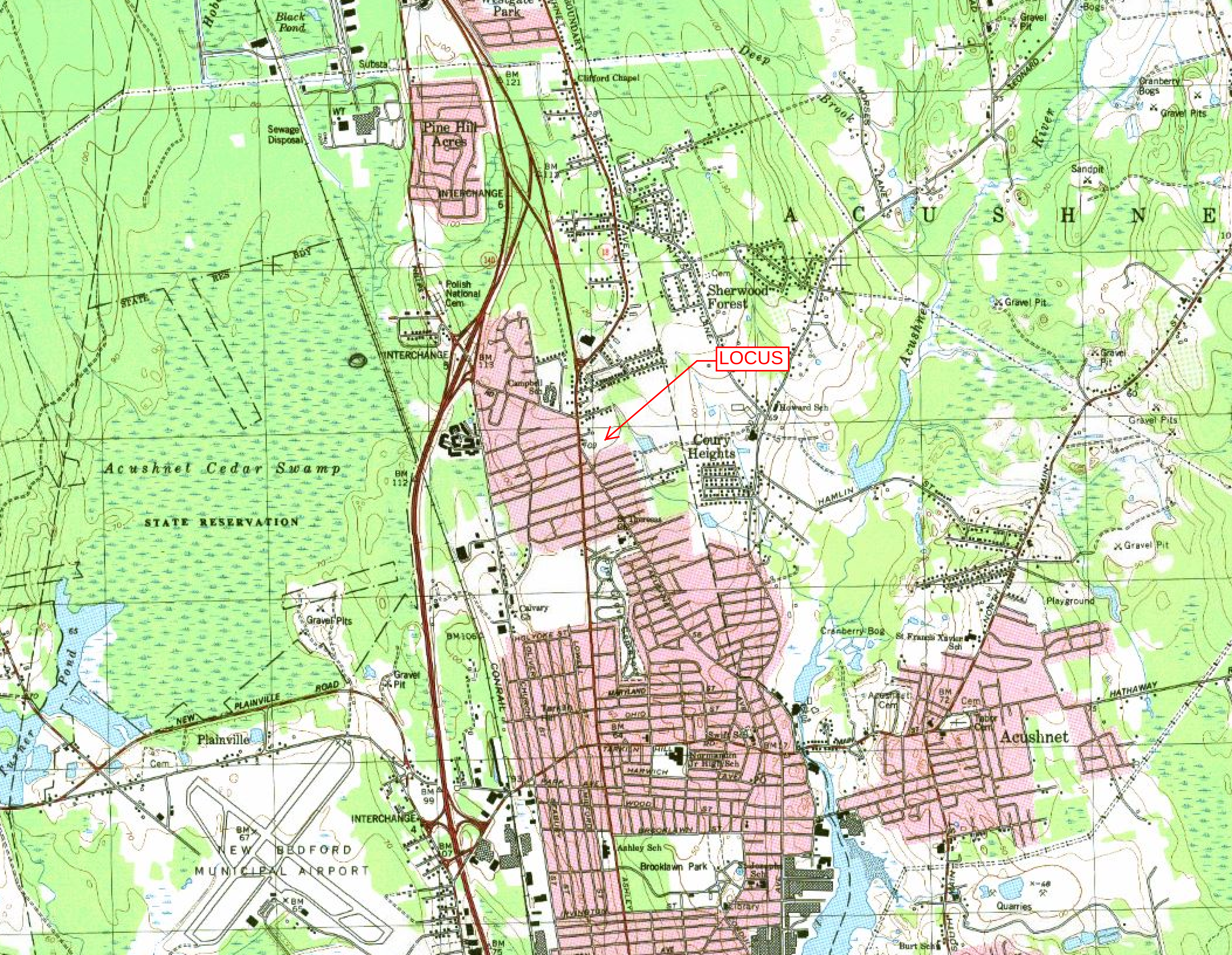
Appendix L – Training Log

Appendix M – Delegation of Authority

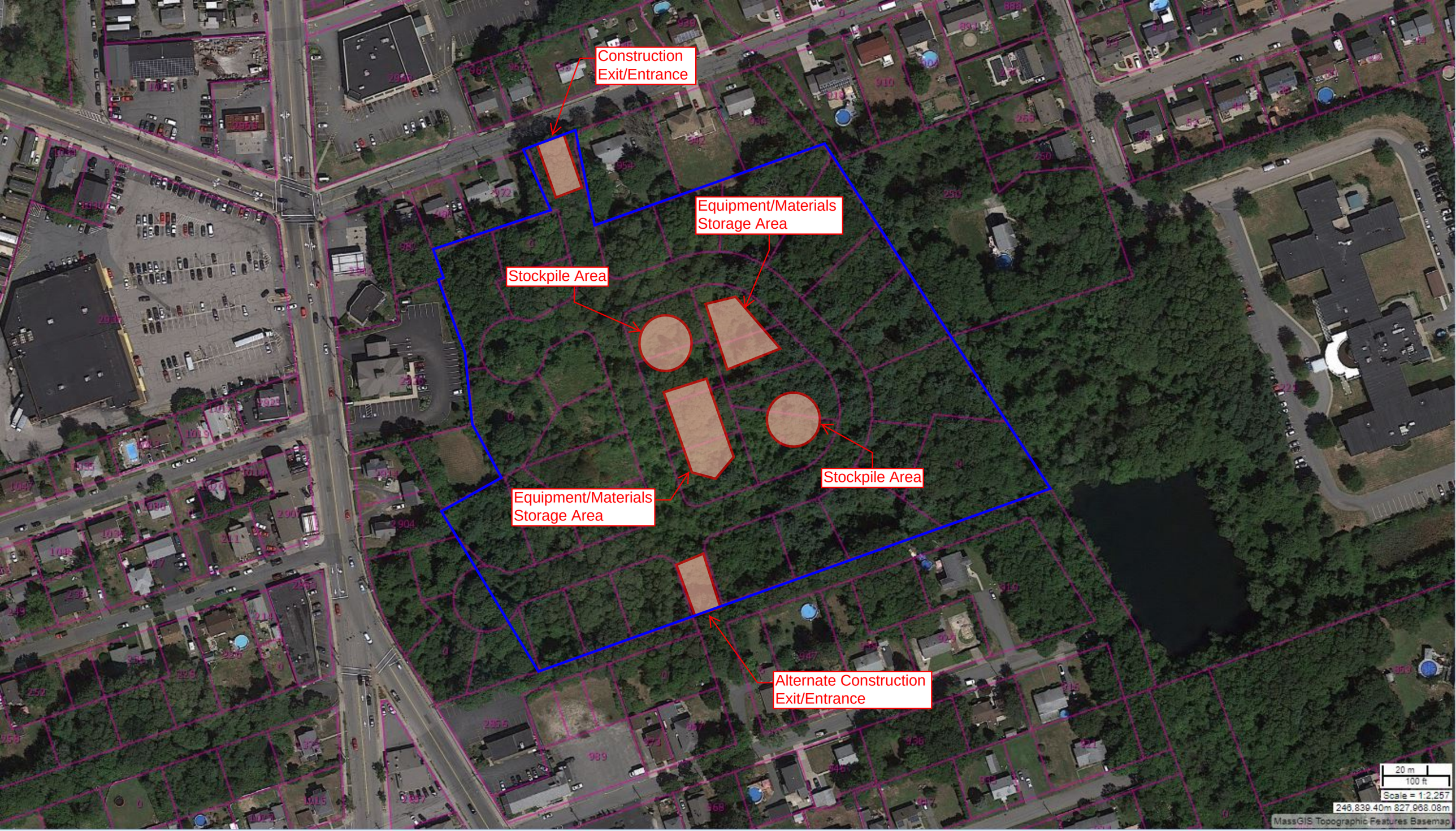
Appendix N – Overall Long Term Operations & Maintenance Plan

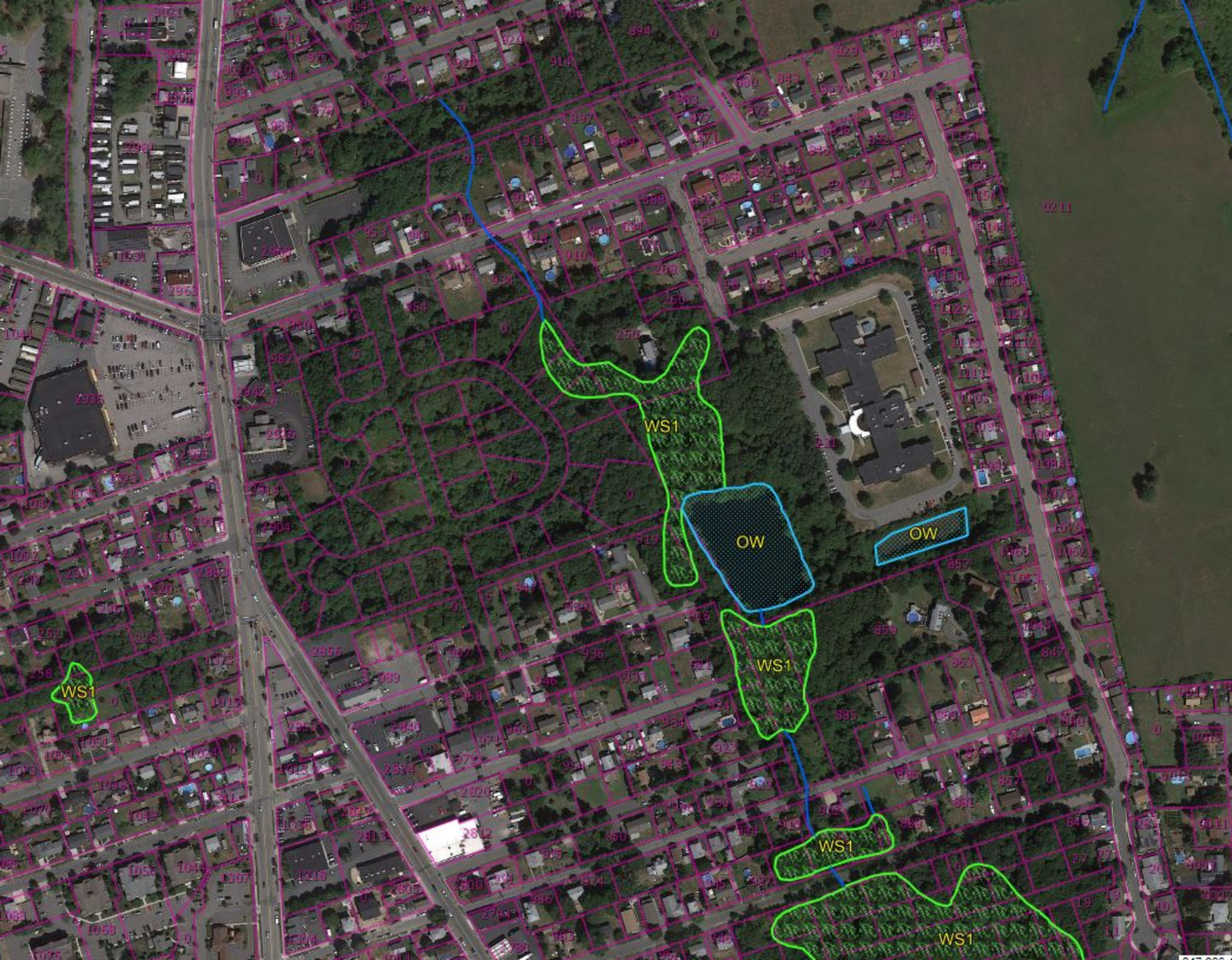
Appendix A – Construction Sequence Schedule

Appendix B – General Location Maps



LOCUS
Black Pond
Substa
Sewage Disposal
WT
Clifford Chapel
Deep Brook
River
Cranberry Bogs
Gravel Pits
Sandpit
Pine Hill Acres
INTERCHANGE 6
A C U S H N E T
Polish National Cem
Sherwood Forest
Cem
Gravel Pit
INTERCHANGE 5
Acushnet
Campbell Sch
Howard Sch
Coury Heights
Acushnet Cedar Swamp
STATE RESERVATION
HAMLIN
Calvary
Playground
Gravel Pits
Cranberry Bog
St Francis Xavier Sch
CONRAIL
Gravel Pit
PLAINVILLE ROAD
NEW
Plainville
Acushnet Cem
Tabor Cem
Acushnet
HATHAWAY
Normandin Jr High Sch
Swift Sch
INTERCHANGE 4
NEW BEDFORD MUNICIPAL AIRPORT
Ashley Sch
Brooklawn Park
Quarries
Burt Sch


Construction Exit/Entrance
Equipment/Materials Storage Area
Stockpile Area
Stockpile Area
Equipment/Materials Storage Area
Alternate Construction Exit/Entrance
20 m
100 ft
Scale = 1:2,257
246,839.40m 827,968.08m
MassGIS Topographic Features Basemap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Appendix C - Site Plans
(see attached plans)

Appendix D- Construction General Permit (attach prior to construction)

Appendix E – NOI and Acknowledgement Letter from EPA/ State

NPDES FORM 3510-9	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR THE 2017 NPDES CONSTRUCTION PERMIT	FORM Approved OMB No. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section III of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section II of this form. Submission of this NOI also constitutes notice that the operator identified in Section III of this form meets the eligibility requirements of Part 1.1 CGP for the project identified in Section IV of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

Permit Information

NPDES ID: MAR100138

State where your construction site is located: MA

Is your construction site located on Indian Country Lands? ☐ YES ☑ NO

Are you requesting coverage under this NOI as a *"Federal Operator"* as defined in Appendix A (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_a_-_definitions_508.pdf)?
☐ YES ☑ NO

Have stormwater discharges from your current construction site been covered previously under an NPDES permit? ☐ YES ☑ NO

Will you use polymers, flocculants, or other treatment chemicals at your construction site? ☐ YES ☑ NO

Has a Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filling this NOI, as required? ☑ YES ☐ NO

Are you able to demonstrate that you meet one of the criteria listed in Appendix D (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_d_-_endangered_species_reqs_508.pdf) with respect to protection of threatened or endangered species listed under the Endangered Species Act (ESA) and federally designated critical habitat?
☑ YES ☐ NO

Have you completed the screening process in Appendix E (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_e_-_historic_properties_reqs_508.pdf) relating to the protection of historic properties?
☑ YES ☐ NO

Indicating "Yes" below, I confirm that I understand that CGP only authorized the allowable stormwater discharges in Part 1.2.1 and the allowable non-stormwater discharges listed in Part 1.2.2. Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state or local authorities after issuance of this permit via any means, Including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), during an Inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.2.1 and 1.2.2 will be discharged, they must be covered under another NPDES permit.
☑ YES ☐ NO

Operator Information

Operator Information

Operator Name: Farland Corp.

Mailing Address:

Street/Location: 401 County Street

City: New Bedford **State:** MA **Zip Code:** 02740

County or Similar Government Subdivision: BRISTOL

Operator Point of Contact Information

First Name, Middle Initial, LastName: Matthew J White

Title: Project Engineer

Phone: 508-717-3479 **Ext.**

Email: mwhite@farlandcorp.com

Project/Site Information

Project/Site Name: Farland Estates I - Phillips Road

Project/Site Address

Street/Location: SS Phillips Road

City: New Bedford **State:** MA **Zip Code:** 02745

County or Similar Government Subdivision: BRISTOL

Latitude/Longitude: 41.6991°N, 70.9339°W

Latitude/Longitude Data Source: Map **Horizontal Reference Datum:** WGS 84

Project Start Date: 01/02/2018 **Project End Date:** 06/01/2018 **Estimated Area to be Disturbed:** 10.25

Types of Construction Sites:

- Single-Family Residential
- Highway or Road

Will there be demolition of any structure built or renovated before January 1, 1980? ☐ YES ☑ NO

Was the pre-development land use used for agriculture? ☐ YES ☑ NO

Have earth-disturbing activities commenced on your project/site? ☐ YES ☑ NO

Is your project located on a property of religious or cultural significance to an Indian tribe? ☐ YES ☑ NO

Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ YES ☑ NO

Are there any waters of the U.S. within 50 feet of your project's earth disturbances? ☑ YES ☐ NO

Are any of the waters of the U.S. to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding National Resource Water)? See Appendix F (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_f_-_tier_3_tier_2_and_tier_2.5_waters_508.pdf)

☐ YES ☑ NO

001: Bordering Vegetated Wetlands BVW bordering un-named tributary of Acushnet Cedar Swamp

Tier Designation: N/A

Is this receiving water impaired (on the CWA 303(d) list)? ☐ YES ☑ NO

Has a TMDL been completed for this receiving waterbody? ☐ YES ☑ NO

Stormwater Pollution Prevention Plan (SWPPP)

First Name, Middle Initial, LastName: Matthew J White

Title: Project Engineer

Phone: 508-717-3479 **Ext.**

Email: mwhite@farlandcorp.com

Endangered Species Protection

Using the Instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit? Criterion A

Provide a brief summary of the basis for criterion selection listed above (the necessary content for a supportive basis statement is provided under the criterion you selected.):

Oliver MassGIS Mapping system used to identify possible areas that may fall under the Natural Heritage and Endangered Species Program as Priority or Estimated Habitats. No areas were found within the "action area". Additionally, a previous CGP Permit was obtained in December 2017 for an property in the vicinity which the USFWS were contacted to verify the absence of any such area. They confirmed that the GIS representation was accurate. Are

Historic Preservation

Are you installing any stormwater controls as described in Appendix E (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_e_-_historic_properties_reqs_508.pdf) that require subsurface earth disturbances? (Appendix E (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_e_-_historic_properties_reqs_508.pdf), Step 1)

☑ YES ☐ NO

Have prior surveys or evaluations conducted on the site already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix (https://www.epa.gov/sites/production/files/2017-02/documents/2017_cgp_final_appendix_e_-_historic_properties_reqs_508.pdf), Step 2):

☑ YES ☐ NO

Certification Information

Certified By: Matthew J. White (MATT5WHITE)

Certified On: 12/29/2017 11:07 AM

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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Matthew J. White

From:	donotreply@epa.gov
Sent:	Friday, January 12, 2018 12:06 PM
To:	mwhite@farlandcorp.com
Cc:	warner.suzanne@epa.gov
Subject:	EPA Construction General Permit (CGP) Authorization is Active – Farland Estates I - Phillips Road, NPDES ID: MAR100138
Attachments:	MAR100138CopyOfRecord.pdf

2018-01-12

Your Notice of Intent (NOI) requesting coverage for Farland Estates I - Phillips Road, SS Phillips Road under EPA's Construction General Permit (CGP) has been accepted and authorization to discharge under the CGP became effective on 2018-01-12.

For tracking purposes, the following NPDES ID has been assigned to your NOI: MAR100138. To access your NOI in NeT, please visit: https://cdxnodengn.epa.gov/oeca-cgp-web.

As you know, the CGP requires you to have developed a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting your NOI. The CGP also includes specific requirements for erosion and sediment controls, pollution prevention controls, conducting self-inspections, taking corrective actions, and conducting staff training. You must comply with any state, tribal, or territory-specific requirements in Part 9 (see https://www.epa.gov/npdes/stormwater-discharges-construction-activities#cgp).

Please note that this email does not represent a determination by EPA regarding the validity of the information you provided in your NOI. Your eligibility for coverage under this permit is based on the validity of the certification you provided. Your electronic signature on the NOI form certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you have correctly determined whether you are eligible for coverage under this permit.

The 2017 CGP and additional information are available at: https://www.epa.gov/npdes/stormwater-discharges-construction-activities#cgp.

If you have questions about this email or about NeT CGP, please refer to the NeT Help Center at https://epanet.zendesk.com/hc/en-us or e-mail NPDESereporting@epa.gov for assistance. If you have questions regarding the permit requirements of EPA's CGP, please contact EPA at warner.suzanne@epa.gov.

This is an automated notification; please do not reply to this email.

Appendix F – USFWS iPAC Resource List

IPaC **U.S. Fish & Wildlife Service**

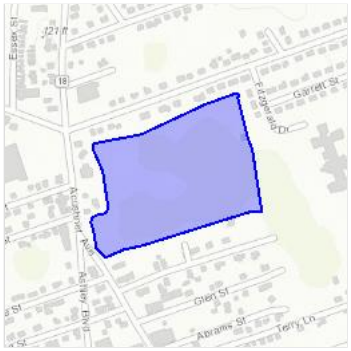
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Bristol County, Massachusetts



Local office

New England Ecological Services Field Office

(603) 223-2541
(603) 223-0104

70 Commercial Street, Suite 300
Concord, NH 03301-5094

http://www.fws.gov/newengland

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php

- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or are known to have particular vulnerabilities in your project location. To learn more about the levels of concern for birds on your list, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your specific project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the E-bird data mapping tool (search for the scientific name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain time-frame) and the E-bird Explore Data Tool (perform a query to see a list of all birds sighted in your county or region and within a certain time-frame). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found below.

NAME	BREEDING SEASON
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC), but is of concern in this area either because of the Eagle Act, or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Mar 20 to Sep 15
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Eastern Whip-poor-will Antrostomus vociferus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Evening Grosbeak Coccothraustes vespertinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC), but is of concern in this area either because of the Eagle Act, or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
King Rail Rallus elegans This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Long-eared Owl asio otus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds elsewhere
Nelson's Sparrow Ammodramus nelsoni This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Sep 5

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Purple Sandpiper Calidris maritima — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-throated Loon Gavia stellata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Rusty Blackbird Euphagus carolinus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Saltmarsh Sparrow Ammodramus caudacutus — Breeds May 15 to Sep 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Seaside Sparrow Ammodramus maritimus — Breeds May 10 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Semipalmated Sandpiper Calidris pusilla — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Snowy Owl Bubo scandiacus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wood Thrush Hylocichla mustelina — Breeds May 10 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

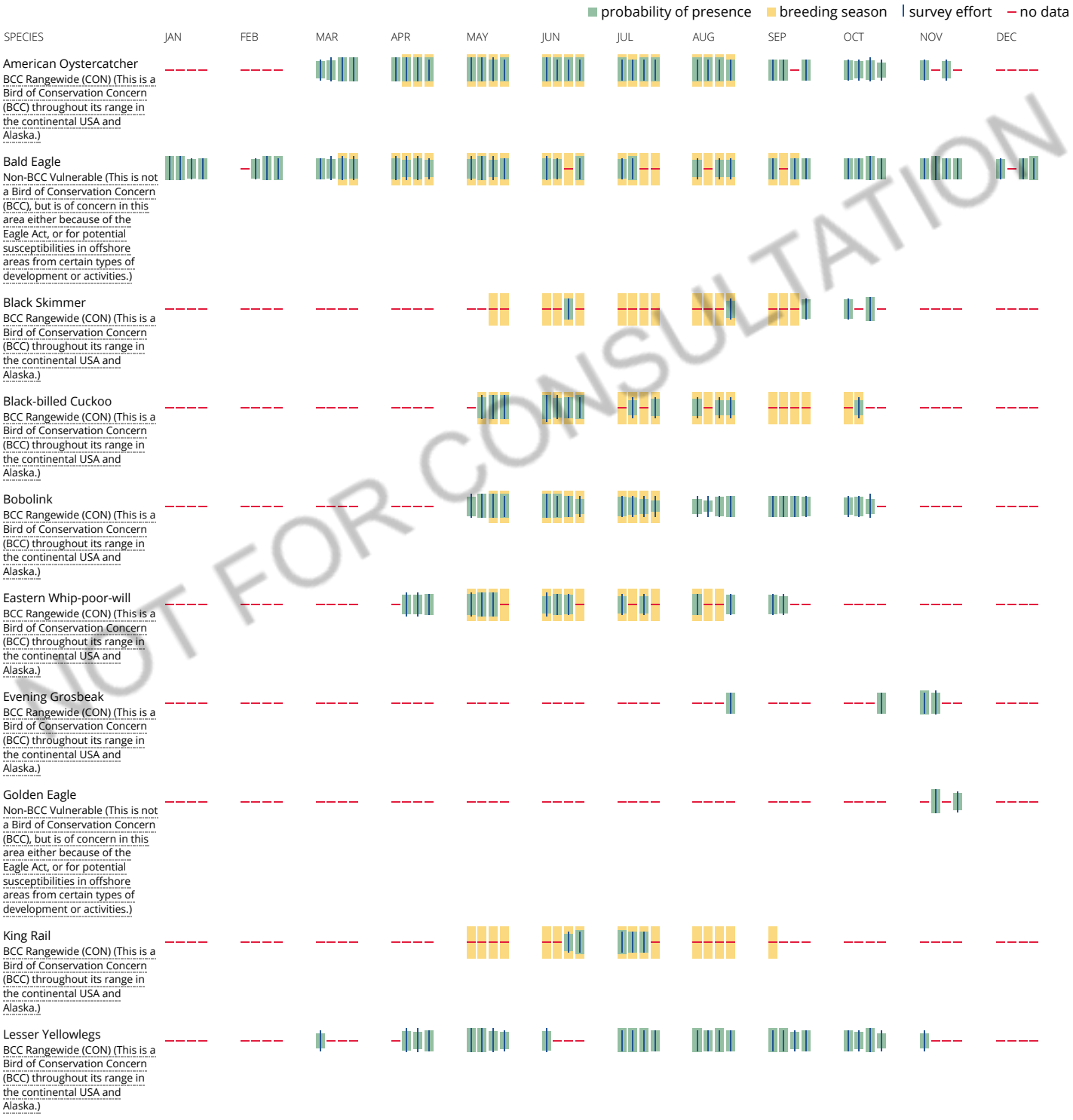
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

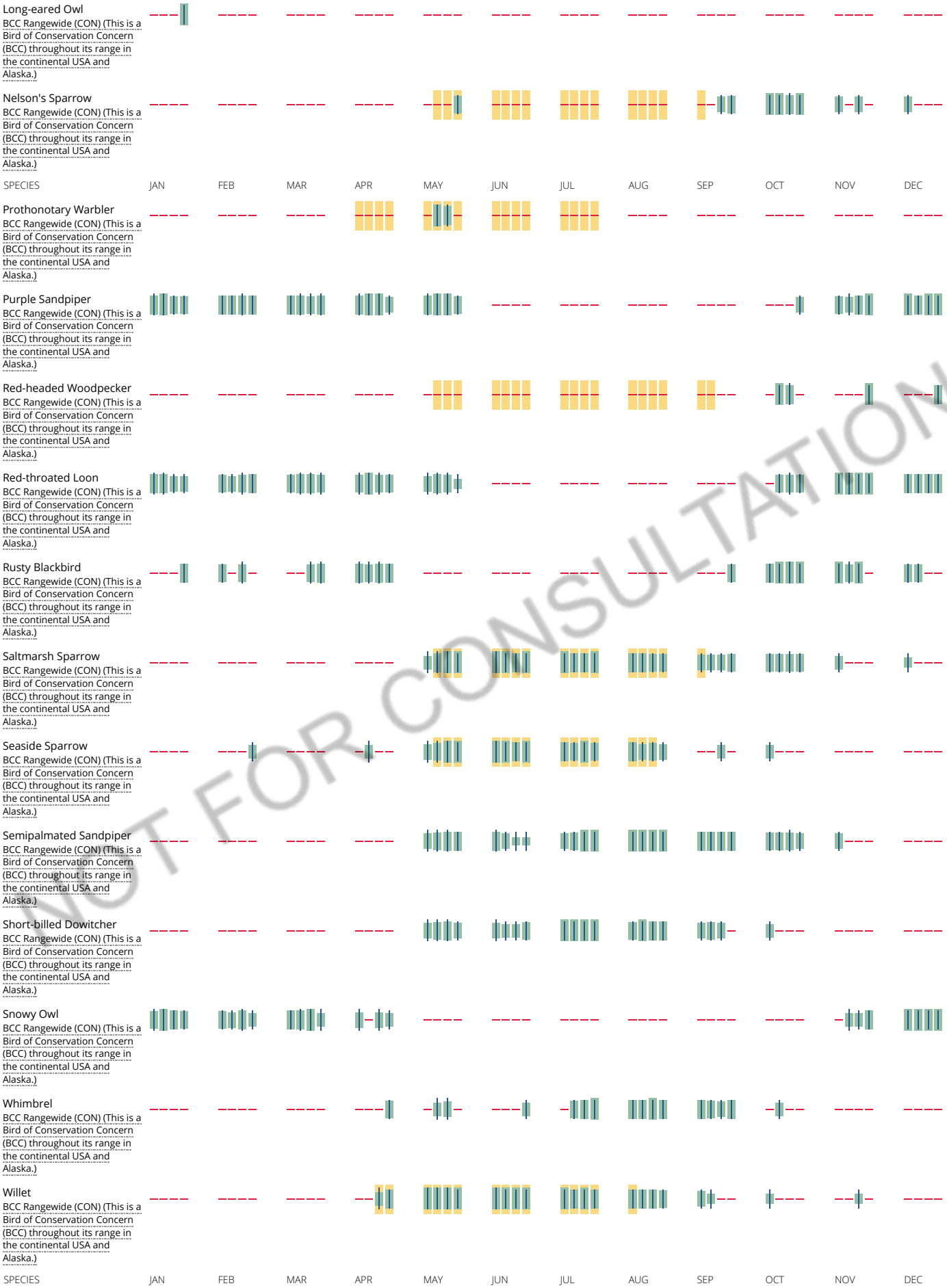
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Wood Thrush
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in Birds of North America (BNA) Online under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a subscription. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the Endangered Species Act (ESA).

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Avoidance and minimization measures should be implemented to reduce impacts to birds on your list, and all other birds that may occur in your project area. Nationwide Standard Conservation Measures can be applied for any project, regardless of project type or location.

If measures exist that are specific to your activity or to any of the species on your list that are confirmed to exist at your project area, these should also be considered for implementation in addition to the Nationwide Standard Conservation Measures. Implementation of avoidance and minimization measures is particularly important for BCC birds of rangewide concern.

If your project has the potential to disturb or kill eagles, you will need to obtain a permit to avoid violating the BGEPA should such impacts occur.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

PFO1E

FRESHWATER POND

PUBHh

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix G – Site Inspection Reports

1.) General Inspection Report

2.) Corrective Action Report

2017 Construction General Permit
Inspection Report Template – Field Version

Purpose
This Inspection Report Template (or "template") is to assist you in preparing inspection reports for EPA's 2017 Construction General Permit (CGP). If you are covered under the 2017 CGP, you can use this template to create an inspection report form that is customized to the specific circumstances of your site and that complies with the minimum reporting requirements of Part 4.7 of the permit. Note that the use of this form is optional; you may use your own inspection report form provided it includes the minimum information required in Part 4.7 of the CGP.

If you are covered under a state CGP, this template may be helpful in developing a form that can be used for that permit; however, it will need to be modified to meet the specific requirements of that permit. If your permitting authority requires you to use a specific inspection report form, you should not use this form.

Notes:
While EPA has made every effort to ensure the accuracy of all instructions contained in the Inspection Report Template, it is the permit, not the template, that determines the actual obligations of regulated construction stormwater discharges. In the event of a conflict between the Inspection Report Template and any corresponding provision of the 2017 CGP, you must abide by the requirements in the permit. EPA welcomes comments on the Inspection Report Template at any time and will consider those comments in any future revision of this document. You may contact EPA for CGP-related inquiries at cgp@epa.gov.

Overview of Inspection Requirements (see CGP Part 4)
Construction operators covered under the 2017 CGP are subject to the following inspection requirements:

Person(s) Responsible for Inspecting the Site (see Part 4.1)
The person(s) inspecting your site must be a "qualified person" who may be either on your staff or a third party you hire to conduct such inspections.

- A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

Inspection Frequency (see Part 4.2)
You are required to conduct inspections either:

- Once every 7 calendar days; or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater or the occurrence of runoff from snowmelt sufficient to cause a discharge.

Your inspection frequency is increased if the site discharges to a sensitive water. See Part 4.3. Your inspection frequency may be decreased to account for stabilized areas, or for arid, semi-arid, or drought-stricken conditions, or for frozen conditions. See Part 4.4.

Areas That Need to Be Inspected (see Part 4.5)
During each inspection, you must inspect the following areas of your site:

- Cleared, graded, or excavated areas of the site;
- Stormwater controls (e.g., perimeter controls, sediment basins, inlets, exit points etc.) and pollution prevention practices (e.g., pollution prevention practices for vehicle fueling/maintenance and washing, construction product storage, handling, and disposal, etc.) at the site;
- Material, waste, or borrow areas covered by the permit, and equipment storage and maintenance areas;
- Areas where stormwater flows within the site;
- Stormwater discharge points; and
- Areas where stabilization has been implemented.

What to Check For During Your Inspection (see Part 4.6)
During your site inspection, you are required to check:

- Whether stormwater controls or pollution prevention practices are properly installed, require maintenance or corrective action, or whether new or modified controls are required;
- For the presence of conditions that could lead to spills, leaks, or other pollutant accumulations and discharges;
- For locations where new or modified stormwater controls are necessary to meet requirements of the permit;

- Whether there are visible signs of erosion and sediment accumulation at points of discharge and to the channels and streambanks that are in the immediate vicinity of the discharge;
- If a stormwater discharge is occurring at the time of the inspection, whether there are obvious, visual signs of pollutant discharges; and
- If any permit violations have occurred on the site.

Inspection Reports (see Part 4.7)
Within 24 hours of completing each inspection, you are required to complete an inspection report that includes:

- Date of inspection;
- Names and titles of person(s) conducting the inspection;
- Summary of inspection findings;
- Rain gauge or weather station readings if your inspection is triggered by the 0.25-inch storm threshold; and
- If you determine that a portion of your site is unsafe to access for the inspection, documentation of what conditions prevented the inspection and where these conditions occurred on the site

Instructions for Using This Template
This Field Version of the Inspection Report Template is intended to be used in the field and filled out by hand. If you will be filling out the Inspection Report Template electronically (i.e., you will be typing in your findings), please use the Electronic Version of the Inspection Report Template available at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. The Electronic Version includes text fields with instructions for what to enter.

Keep in mind that this document is a template and not an "off-the-shelf" inspection report that is ready to use without some modification. You must first customize this form to include the specifics of your project in order for it to be useable for your inspection reports. Once you have entered all of your site-specific information into these fields, you may print out this form for use in the field to complete inspection reports.

The following tips for using this template will help you ensure that the minimum permit requirements are met:

- **Review the inspection requirements.** Before you start developing your inspection report form, read the CGP's Part 4 inspection requirements. This will ensure that you have a working understanding of the permit's underlying inspection requirements.
- **Complete all required text fields.** Fill out all text fields. Only by filling out all fields will the template be compliant with the requirements of the permit. (Note: Where you do not need the number of rows provided in the template form for your inspection, you may leave those rows blank. Or, if you need more space to document your findings, you may add an additional sheet.)
- **Use your site map to document inspection findings.** In several places in the template, you are directed to specify the location of certain features of your site, including where stormwater controls are installed and where you will be stabilizing exposed soil. You are also asked to fill in location information for unsafe conditions and the locations of any discharges occurring during your inspections. Where you are asked for location information, EPA encourages you to reference the point on your SWPPP site map that corresponds to the requested location on the inspection form. Using the site map as a tool in this way will help you conduct efficient inspections, will assist you in evaluating problems found, and will ensure proper documentation.
- **Sign and certify each inspection report.** The operator or a duly authorized representative (see Appendix I, Part I.11.2) must sign and certify each inspection report for it to be considered complete. Where a contractor or subcontractor carries out your inspections, it is recommended that you also have the inspector sign and certify the form, in addition to the signature and certification required of the permitted operator. The template includes a signature block for both parties.
- **Include the inspection form with your SWPPP.** Once your form is complete, make sure to include a copy of the inspection form in your SWPPP in accordance with Part 7.2.7.e of the CGP.
- **Retain copies of all inspection reports with your records.** You must also retain in your records copies of all inspection reports in accordance with the requirements in Part 4.7.3 of the 2017 CGP. These reports must be retained for at least 3 years from the date your permit coverage expires or is terminated.

Section-by-Section Instructions
You will find specific instructions corresponding to each section of the report form on the reverse side of each page. These instructions provide you with more details in terms of what EPA expects to be documented in these reports.

General Information
(see reverse for instructions)

Name of Project		**NPDES ID No.**		**Inspection Date**	
Weather conditions during inspection		**Inspection start time**		**Inspection end time**	
Inspector Name, Title & Contact Information					
Present Phase of Construction					
Inspection Location (if multiple inspections are required, specify location where this inspection is being conducted)					

Inspection Frequency *(Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply)*

Standard Frequency:

☐ Every 7 days

☐ Every 14 days and within 24 hours of a 0.25" rain or the occurrence of runoff from snowmelt sufficient to cause a discharge

Increased Frequency:

☐ Every 7 days and within 24 hours of a 0.25" rain (for areas of sites discharging to sediment or nutrient-impaired waters or to waters designated as Tier 2, Tier 2.5, or Tier 3)

Reduced Frequency:

☐ Twice during first month, no more than 14 calendar days apart; then once per month after first month; (for stabilized areas)

☐ Twice during first month, no more than 14 calendar days apart; then once more within 24 hours of a 0.25" rain (for stabilized areas on "linear construction sites")

☐ Once per month and within 24 hours of a 0.25" rain (for arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought)

☐ Once per month (for frozen conditions where earth-disturbing activities are being conducted)

Was this inspection triggered by a 0.25" storm event? ☐ Yes ☐ No

If yes, how did you determined whether a 0.25" storm event has occurred?

☐ Rain gauge on site ☐ Weather station representative of site. Specify weather station source:

Total rainfall amount that triggered the inspection (in inches)**:**

Was this inspection triggered by the occurrence of runoff from snowmelt sufficient to cause a discharge? ☐ Yes ☐ No

Unsafe Conditions for Inspection

Did you determine that any portion of your site was unsafe for inspection per CGP Part 4.5? ☐ Yes ☐ No

If "yes", complete the following:

- Describe the conditions that prevented you from conducting the inspection in this location:

- Location(s) where conditions were found:

Instructions for Filling Out "General Information" Section

Name of Project
Enter the name for the project.

NPDES ID No.
Enter the NPDES ID number that was assigned to your NOI for permit coverage.

Inspection Date
Enter the date you conducted the inspection.

Weather Conditions During Inspection
Enter the weather conditions occurring during the inspection, e.g., sunny, overcast, light rain, heavy rain, snowing, icy, windy.

Inspection start and end times
Enter the time you started and ended the inspection.

Inspector Name, Title & Contact Information
Provide the name of the person(s) (either a member of your company's staff or a contractor or subcontractor) that conducted this inspection. Provide the inspector's name, title, and contact information as directed in the form.

Present Phase of Construction
If this project is being completed in more than one phase, indicate which phase it is currently in.

Inspection Location
If your project has multiple locations where you conduct separate inspections, specify the location where this inspection is being conducted. If only one inspection is conducted for your entire project, enter "Entire Site." If necessary, complete additional inspection report forms for each separate inspection location.

Inspection Frequency
Check the box that describes the inspection frequency that applies to you. Note that you may be subject to different inspection frequencies in different areas of your site. If your project does not discharge to a "sensitive water" (i.e., a water impaired for sediment or nutrients, or listed as Tier 2, 2.5, or 3 by your state or tribe) and you are not affected by any of the circumstances described in CGP Part 4.4, then you can choose your frequency based on CGP Part 4.2 – either every 7 calendar days, or every 14 calendar days and within 24 hours of a 0.25-inch storm event. For any portion of your site that discharges to a sensitive water, your inspection frequency for that area is fixed under CGP Part 4.3 at every 7calendar days and within 24 hours of a 0.25-inch storm event. If portions of your site are stabilized, are located in arid, semi-arid, or drought-stricken areas, or are subject to frozen conditions, consult CGP Part 4.4 for the applicable inspection frequency. Check all the inspection frequencies that apply to your project.

Was This Inspection Triggered by a 0.25 Inch Storm Event or the occurrence of runoff from snowmelt sufficient to cause a discharge?
If you were required to conduct this inspection because of a 0.25-inch (or greater) rain event, indicate whether you relied on an on-site rain gauge or a nearby weather station (and where the weather station is located). Also, specify the total amount of rainfall for this specific storm event. If you were required to conduct this inspection because of the occurrence of runoff from snowmelt, then check the appropriate box.

Unsafe Conditions for Inspection
Inspections are not required where a portion of the site or the entire site is subject to unsafe conditions. See CGP Part 4.5. These conditions should not regularly occur, and should not be consistently present on a site. Generally, unsafe conditions are those that render the site (or a portion of it) inaccessible or that would pose a significant probability of injury to applicable personnel. Examples could include severe storm or flood conditions, high winds, and downed electrical wires.

If your site, or a portion of it, is affected by unsafe conditions during the time of your inspection, provide a description of the conditions that prevented you from conducting the inspection and what parts of the site were affected. If the entire site was considered unsafe, specify the location as "Entire site"

Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2) (see reverse for instructions)				
Type/Location of E&S Control [Add an additional sheet if necessary]	**Maintenance Needed?***	**Corrective Action Required?***	**Date on Which Maintenance or Corrective Action First Identified?**	**Notes**
1.	☐Yes ☐No	☐Yes ☐No		
2.	☐Yes ☐No	☐Yes ☐No		
3.	☐Yes ☐No	☐Yes ☐No		
4.	☐Yes ☐No	☐Yes ☐No		
5.	☐Yes ☐No	☐Yes ☐No		
6.	☐Yes ☐No	☐Yes ☐No		
7.	☐Yes ☐No	☐Yes ☐No		
8.	☐Yes ☐No	☐Yes ☐No		
9.	☐Yes ☐No	☐Yes ☐No		
10.	☐Yes ☐No	☐Yes ☐No		

*** Note:** The permit differentiates between conditions requiring routine maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition. Corrective actions are triggered only for specific conditions, which include: 1) A stormwater control needs repair or replacement (beyond routine maintenance) if it is not operating as intended; 2) A stormwater control necessary to comply with the permit was never installed or was installed incorrectly; 3) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1; 4) One of the prohibited discharges in Part 1.3 is occurring or has occurred; or 5) EPA requires corrective actions as a result of a permit violation found during an inspection carried out under Part 4.8. If a condition on your site requires a corrective action, you must also fill out a corrective action form found at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. See Part 5 of the permit for more information.

Instructions for Filling Out the "Erosion and Sediment Control" Table

Type and Location of E&S Controls
Provide a list of all erosion and sediment (E&S) controls that your SWPPP indicates will be installed and implemented at your site. This list must include at a minimum all E&S controls required by CGP Part 2.2. Include also any natural buffers established under CGP Part 2.2.1. Buffer requirements apply if your project's earth-disturbing activities will occur within 50 feet of a water of the U.S. You may group your E&S controls on your form if you have several of the same type of controls (e.g., you may group "Inlet Protection Measures", "Perimeter Controls", and "Stockpile Controls" together on one line), but if there are any problems with a specific control, you must separately identify the location of the control, whether maintenance or corrective action is necessary, and in the notes section you must describe the specifics about the problem you observed.

Maintenance Needed?
Answer "yes" if the E&S control requires maintenance due to normal wear and tear in order for the control to continue operating effectively. At a minimum, maintenance is required in the following specific instances: (1) for perimeter controls, whenever sediment has accumulated to half or more the above-ground height of the control (CGP Part 2.2.3.a); (2) where sediment has been tracked-out onto the surface of off-site streets or other paved areas (CGP Part 2.2.4); (3) for inlet protection measures, when sediment accumulates, the filter becomes clogged, and/or performance is compromised (CGP Part 2.2.10); and (4) for sediment basins, as necessary to maintain at least half of the design capacity of the basin (CGP Part 2.2.12.f). Note: In many cases, "yes" answers are expected and indicate a project with an active operation and maintenance program. You should also answer "yes" if work to fix the problem is still ongoing from the previous inspection.

Corrective Action Needed?
Answer "yes" if during your inspection you found any of the following conditions to be present (CGP, Part 5.1): (1) a required E&S control needs repair or replacement (beyond routine maintenance required under Part 2.1.4); (2) a require E&S control was never installed or was installed incorrectly; (3) you become aware that the inadequacy of the E&S control has led to an exceedance of an applicable water quality standard; (4) one of the prohibited discharges in Part 1.3 is occurring or has occurred; or (5) EPA requires corrective action for an E&S control as a result of a permit violation found during an inspection carried out under Part 4.8. If you answer "yes", you must take corrective action and complete a corrective action report, found at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources.. Note: You should answer "yes" if work to fix the problem from a previous inspection is still ongoing.

Date on Which Maintenance or Corrective Action First Identified?
Provide the date on which the condition that triggered the need for maintenance or corrective action was first identified. If the condition was just discovered during this inspection, enter the inspection date. If the condition is a carryover from a previous inspection, enter the original date of the condition's discovery.

Notes
For each E&S control and the area immediately surrounding it, note whether the control is properly installed and whether it appears to be working to minimize sediment discharge. Describe any problem conditions you observed such as the following, and why you think they occurred as well as actions (e.g., maintenance or corrective action) you will take or have taken to fix the problem:

1. Failure to install or to properly install a required E&S control
2. Damage or destruction to an E&S control caused by vehicles, equipment, or personnel, a storm event, or other event
3. Mud or sediment deposits found downslope from E&S controls
4. Sediment tracked out onto paved areas by vehicles leaving construction site
5. Noticeable erosion at discharge outlets or at adjacent streambanks or channels
6. Erosion of the site's sloped areas (e.g., formation of rills or gullies)
7. E&S control is no longer working due to lack of maintenance

For buffer areas, make note of whether they are marked off as required, whether there are signs of construction disturbance within the buffer, which is prohibited under the CGP, and whether there are visible signs of erosion resulting from discharges through the area.

If maintenance or corrective action is required, briefly note the reason. If maintenance or corrective action have been completed, make a note of the date it was completed and what was done. *If corrective action is required, note that you will need to complete a separate corrective action report describing the condition and your work to fix the problem*.

Condition and Effectiveness of Pollution Prevention (P2) Practices (CGP Part 2.3) (see reverse for instructions)				
Type/Location of P2 Practices [Add an additional sheet if necessary]	**Maintenance Needed?***	**Corrective Action Required?***	**Date on Which Maintenance or Corrective Action First Identified?**	**Notes**
1.	☐Yes ☐No	☐Yes ☐No		
2.	☐Yes ☐No	☐Yes ☐No		
3.	☐Yes ☐No	☐Yes ☐No		
4.	☐Yes ☐No	☐Yes ☐No		
5.	☐Yes ☐No	☐Yes ☐No		
6.	☐Yes ☐No	☐Yes ☐No		
7.	☐Yes ☐No	☐Yes ☐No		
8.	☐Yes ☐No	☐Yes ☐No		
9.	☐Yes ☐No	☐Yes ☐No		
10.	☐Yes ☐No	☐Yes ☐No		

*** Note:** The permit differentiates between conditions requiring routine maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition. Corrective actions are triggered only for specific conditions, which include: 1) A stormwater control needs repair or replacement (beyond routine maintenance) if it is not operating as intended; 2) A stormwater control necessary to comply with the permit was never installed or was installed incorrectly; 3) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1; 4) One of the prohibited discharges in Part 1.3 is occurring or has occurred; or 5) EPA requires corrective actions as a result of a permit violation found during an inspection carried out under Part 4.8. If a condition on your site requires a corrective action, you must also fill out a corrective action form found at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. See Part 5 of the permit for more information.

Instructions for Filling Out the "Pollution Prevention (P2) Practice" Table

Type and Location of P2 Controls
Provide a list of all pollution prevention (P2) practices that are implemented at your site. This list must include all P2 practices required by Part 2.3, and those that are described in your SWPPP.

Maintenance Needed?
Answer "yes" if the P2 practice requires maintenance due to normal wear and tear in order for the control to continue operating effectively. Note: In many cases, "yes" answers are expected and indicate a project with an active operation and maintenance program.

Corrective Action Needed?
Answer "yes" if during your inspection you found any of the following conditions to be present (CGP, Part 5.1): (1) a required P2 practice needs repair or replacement (beyond routine maintenance required under Part 2.1.4); (2) a require P2 practice was never installed or was installed incorrectly; (3) you become aware that the inadequacy of the P2 practice has led to an exceedance of an applicable water quality standard; (4) one of the "prohibited discharges" listed in CGP Part 1.3 is occurring or has occurred, or (5) EPA requires corrective action for a P2 practice as a result of a permit violation found during an inspection carried out under Part 4.8. If you answer "yes", you must take corrective action and complete a corrective action report (see https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources). Note: You should answer "yes" if work to fix the problem from a previous inspection is still ongoing.

Date on Which Maintenance or Corrective Action First Identified?
Provide the date on which the condition that triggered the need for maintenance or corrective action was first identified. If the condition was just discovered during this inspection, enter the inspection date. If the condition is a carryover from a previous inspection, enter the original date of the condition's discovery.

Notes
For each P2 control and the area immediately surrounding it, note whether the control is properly installed, whether it appears to be working to minimize or eliminate pollutant discharges, and whether maintenance or corrective action is required. Describe problem conditions you observed such as the following, and why you think they occurred, as well as actions you will take or have taken to fix the problem:

1. Failure to install or to properly install a required P2 control
2. Damage or destruction to a P2 control caused by vehicles, equipment, or personnel, or a storm event
3. Evidence of a spill, leak, or other type of pollutant discharge, or failure to have properly cleaned up a previous spill, leak, or other type of pollutant discharge
4. Spill response supplies are absent, insufficient, or not where they are supposed to be located
5. Improper storage, handling, or disposal of chemicals, building materials or products, fuels, or wastes
6. P2 practice is no longer working due to lack of maintenance

If maintenance or corrective action is required, briefly note the reason. If maintenance or corrective action have been completed, make a note of the date it was completed and what was done. *If corrective action is required, note that you will need to complete a separate corrective action report describing the condition and your work to fix the problem*.

Stabilization of Exposed Soil (CGP Part 2.2.14) (see reverse for instructions)			
Stabilization Area **[Add an additional sheet if necessary]**	**Stabilization Method**	**Have You Initiated Stabilization?**	**Notes**
1.		☐ YES ☐ NO If yes, provide date:	
2.		☐ YES ☐ NO If yes, provide date:	
3.		☐ YES ☐ NO If yes, provide date:	
4.		☐ YES ☐ NO If yes, provide date:	
5.		☐ YES ☐ NO If yes, provide date:	

Description of Discharges (CGP Part 4.6.6) (see reverse for instructions)	
Was a stormwater discharge or other discharge occurring from any part of your site at the time of the inspection? ☐ Yes ☐ No **If "yes", provide the following information for each point of discharge:**	
Discharge Location **[Add an additional sheet if necessary]**	**Observations**
1.	Describe the discharge: At points of discharge and the channels and banks of waters of the U.S. in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
2.	Describe the discharge: At points of discharge and the channels and banks of waters of the U.S. in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:

Instructions for Filling Out the "Stabilization of Exposed Soil" Table

Stabilization Area
List all areas where soil stabilization is required to begin because construction work in that area has permanently stopped or temporarily stopped (i.e., work will stop for 14 or more days), and all areas where stabilization has been implemented.

Stabilization Method
For each area, specify the method of stabilization (e.g., hydroseed, sod, planted vegetation, erosion control blanket, mulch, rock).

Have You Initiated Stabilization
For each area, indicate whether stabilization has been initiated.

Notes
For each area where stabilization has been initiated, describe the progress that has been made, and what additional actions are necessary to complete stabilization. Note the effectiveness of stabilization in preventing erosion. If stabilization has been initiated but not completed, make a note of the date it is to be completed. If stabilization has been completed, make a note of the date it was completed. If stabilization has not yet been initiated, make a note of the date it is to be initiated, and the date it is to be completed.

Instructions for Filling Out the "Description of Discharges" Table

You are only required to complete this section if a discharge is occurring at the time of the inspection.

Was a Stormwater Discharge Occurring From Any Part of Your Site At The Time of the Inspection?
During your inspection, examine all points of discharge from your site, and determine whether a discharge is occurring. If there is a discharge, answer "yes" and complete the questions below regarding the specific discharge. If there is not a discharge, answer "no" and skip to the next page.

Discharge Location (repeat as necessary if there are multiple points of discharge)
Location of discharge. Specify the location on your site where the discharge is occurring. The location may be an outlet from a stormwater control or constructed stormwater channel, a discharge into a storm sewer inlet, or a specific point on the site. Be as specific as possible; it is recommended that you refer to a precise point on your site map.

Describe the discharge. Include a specific description of any noteworthy characteristics of the discharge such as color; odor; floating, settled, or suspended solids; foam; oil sheen; and other obvious pollution indicators.

Are there visible signs of erosion or sediment accumulation? At each point of discharge and the channel and streambank in the immediate vicinity, visually assess whether there are any obvious signs of erosion and/or sediment accumulation that can be attributed to your discharge. If you answer "yes", include a description in the space provided of the erosion and sediment deposition that you have found, specify where on the site or in the water of the U.S. it is found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue.

Contractor or Subcontractor Signature and Certification
(see reverse for instructions)

"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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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."

Signature of Contractor or Subcontractor: _____ **Date:**

Printed Name and Affiliation: _____

Operator Signature and Certification
(see reverse for instructions)

"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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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."

Signature of Operator or "Duly Authorized Representative": _____ **Date:**

Printed Name and Affiliation: _____

Instructions for Signature/Certification

Each inspection report must be signed and certified to be considered complete.

Contractor or Subcontractor Signature and Certification
Where you rely on a contractor or subcontractor to carry out the inspection and complete the inspection report, you should require the inspector to sign and certify each report. Note that this does not relieve you, the permitted operator, of the requirement to sign and certify the inspection report as well.

Operator Signature and Certification
At a minimum, the inspection report must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply to scenarios (1) and (2):

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: A responsible corporate officer. For the purpose of this subsection, 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- 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 which 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 permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: A general partner or the proprietor, respectively.
- *For a municipality, state, federal, or other public agency*: Either a principal executive officer or ranking elected official. For purposes of this subsection, 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 (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- 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
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

2017 Construction General Permit
Corrective Action Report Form – Field Version

Purpose
This Corrective Action Report Form is to assist you in preparing corrective action reports for EPA's 2017 Construction General Permit (CGP). If you are covered under EPA's 2017 CGP, you can use this form to create a corrective action report that complies with the minimum reporting requirements of Part 5.4 of the permit.

You are only required to fill out this form if one of the conditions triggering corrective action in Part 5.1 or 5.3 occurs on your site. Routine maintenance is generally not considered to trigger corrective action. Corrective actions are triggered only for specific conditions that are identified below in the "Overview of Corrective Action Requirements."

If you are covered under a state CGP, this form may be helpful in developing a report that can be used for that permit; however, it will need to be modified to meet the specific requirements of the permit. If your permitting authority requires you to use a specific corrective action report form, you should not use this form.

Notes
While EPA has made every effort to ensure the accuracy of all instructions contained in the Corrective Action Report Form, it is the permit, not the form, that determines the actual obligations of regulated construction stormwater discharges. In the event of a conflict between the Corrective Action Report Form and any corresponding provision of the 2017 CGP, you must abide by the requirements in the permit. EPA welcomes comments on the Corrective Action Report Form at any time and will consider those comments in any future revision of this document. You may contact EPA for CGP-related inquiries at cgp@epa.gov.

Overview of Corrective Action Requirements
Construction operators covered under the 2017 CGP are required to conduct corrective actions and report on progress made in correcting the problem condition(s) in accordance with the following requirements:

Conditions Triggering Corrective Action (Parts 5.1 and 5.3)
Corrective action is required whenever any of the following conditions occur at your site:

- A stormwater control needs repair or replacement (beyond routine maintenance required under Part 2.1.4); or
- A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
- Discharges are causing an exceedance of applicable water quality standards; or
- A Part 1.3 prohibited discharge has occurred; or
- EPA requires corrective action as a result of permit violations found during an inspection carried out under Part 4.8.

Deadlines for Completing Corrective Actions (Part 5.2)
For any condition triggering corrective action:

- You must immediately take all reasonable steps to address the condition (e.g. cleaning up contaminated surfaces so the material(s) is not discharged in subsequent storm events);
- If the problem does not require a new or replacement control or significant repair, you must complete the corrective action by the close of the next business day
- If the problem does require a new or replacement control or significant repair, you must complete corrective action (e.g., installing and making operational any new or modified control, completing repairs) by no later than 7 calendar days from the time of discovery of the condition. If infeasible to complete the installation or repair within 7 calendar days, you must document why it is infeasible and document your schedule for completing the corrective action as soon as practicable. If any of these actions result in changes to the stormwater controls documented in your SWPPP, you must modify your SWPPP within 7 calendar days.

Deadlines for Documenting Corrective Actions in a Report (Part 5.4)
You are required to complete a corrective action report for each corrective action you take in accordance with the following deadlines.

- Within 24 hours of *identifying* the corrective action condition, you must document the following:
  - The condition identified at your site; and
  - The date and time you identified the condition

- Within 24 hours of completing the corrective action, you must document the following:
  - The actions you took to address the condition, and
  - Whether any SWPPP modifications are required.

Instructions for Using This Report Form
This Field Version of the Corrective Action Report Form is intended to be used in the field and filled out by hand. If you will be filling out the Corrective Action Report Form electronically (i.e., you will be typing in your findings), please use the Electronic Version of the Corrective Action Report Form available at https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources. The Electronic Version includes text fields with instructions for what to enter.

The following tips for using this form will help you ensure that the minimum permit requirements are met:

- **Review the corrective action requirements.** Before you fill out this corrective action report form, read the CGP's Part 5 corrective action requirements. This will ensure that you have a working understanding of the permit's underlying corrective action requirements.

- **Complete a separate report for each condition that triggers corrective action.** For each triggering condition on your site, you will need to fill out a separate corrective action report form.

- **Complete all required text fields.** Fill out all text fields. Only by filling out all fields will the form be compliant with the requirements of the permit. (Note: Where you do not need the number of rows provided in the corrective action report form, you may leave those rows blank. Or, if you need more space to document your findings, you may add an additional sheet.)
- **Sign and certify each corrective action report.** The operator or a duly authorized representative (see Appendix I, Part I.11.2) must sign and certify each corrective action report form for it to be considered complete. Where a contractor or subcontractor carries out your corrective actions, it is recommended that you also have that individual sign and certify the form, in addition to the signature and certification required of the permitted operator. The form includes a signature block for both parties.
- **Include the corrective action report form with your SWPPP.** Once your form is complete, make sure to include a copy of the corrective action report form in your SWPPP in accordance with Part 7.2.7.e of the CGP.
- **Retain copies of all corrective action reports with your records.** You must retain copies of your corrective action reports in your records in accordance with the requirements in Part 5.4.4 of the 2017 CGP. These reports must be retained for at least 3 years from the date your permit coverage expires or is terminated.

Section-by-Section Instructions
You will find specific instructions corresponding to each section of the report form on the reverse side of each page. These instructions were written in order to provide you with more details in terms of what EPA expects to be documented in these reports

Section A – Initial Report (CGP Part 5.4.1) (Complete this section within 24 hours of identifying the condition that triggered corrective action)					
Name of Project		**NPDES ID No.**		**Today's Date**	
Date Problem First Discovered		**Time Problem First Discovered**			
Name and Contact Information of Individual Completing this Form					

What site conditions triggered the requirement to conduct corrective action *(check the box that applies)*:

- ☐ A stormwater control needs repair or replacement (beyond routine maintenance required under Part 2.1.4)
- ☐ A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly
- ☐ A discharge is causing an exceedance of applicable water quality standards
- ☐ A Part 1.3 prohibited discharge has occurred
- ☐ EPA requires corrective action as a result of permit violations found during an EPA inspection carried out under Part 4.8

Provide a description of the problem:

Deadline for completing corrective action *(check the box that applies)*:

- ☐ Immediately take all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events
- ☐ Complete by close of the next business day when problem does not require a new or replacement control or significant repair
- ☐ No later than 7 calendar days from the time of discovery for problems that require a new or replacement control or significant repair
- ☐ Infeasible to complete the installation or repair within 7 calendar days. Explain why it is infeasible and document schedule for installing control:

Enter date of corrective action completion: _____

Section B – Corrective Action Completion (CGP Part 5.4.2)

(Complete this section no later than 24 hours after completing the corrective action)

Section B.1 – Why the Problem Occurred

Cause(s) of Problem (Add an additional sheet if necessary)	**How You Determined the Cause and the Date You Determined the Cause**
1.	**1.**
2.	**2.**

Section B.2 – Stormwater Control Modifications Implemented to Correct the Problem

List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	**Date of Completion**	**SWPPP Update Necessary?**	**Notes**
1.		☐Yes ☐No If yes, provide date SWPPP modified:	
2.		☐Yes ☐No If yes, provide date SWPPP modified:	

Instructions for Filling Out the Initial Report (Section A)

You must complete Section A of the report form within 24 hours of discovering the condition that triggered corrective action

Name of Project
Enter the name for the project.

NPDES ID No.
Enter the NPDES ID number that was assigned to your NOI for permit coverage.

Today's Date
Enter the date you completed this form.

Date/Time Problem First Discovered
Specify the date on which the triggering condition was first discovered. Also specify the time of the discovery.

Name/Contact Information
Provide the individual's name, title, and contact information as directed in the form.

Site Condition That Triggered Corrective Action
Under the CGP, corrective action is required when one of 4 triggering conditions occurs at your site or when EPA requires a corrective action as a result of a permit violation found during an EPA inspection. See CGP Parts 5.1 and 5.3. Check the box that corresponds to the condition that triggered this corrective action.

Description of the Site Condition
Provide a summary description of the condition you found that triggered corrective action under CGP Part 5.1 and the specific location where it was found. Be as specific as possible about the location; it is recommended that you refer to a precise point on your site map. If you have already provided this explanation in an inspection report, you can refer to that report.

Deadline for Completing Corrective Action
This deadline is fixed in CGP Part 5.2. For all projects, the deadlines are: (1) immediately take all reasonable steps; (2) by the close of the next business day when the problem does not require significant repair or replacement; (3) no more than 7 calendar days after the date you discovered the problem when the problem does require significant repair or replacement, or (4) if it is infeasible to complete work within the first 7 days, as soon as practicable following the 7th day. If your estimated date of completion falls after the 7-day deadline consistent with (3), above, explain (a) why you believe it is infeasible to complete work within 7 days, and (b) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe.

Instructions for Filling Out the Corrective Action Completion Table (Section B)

You must complete Section B of the report form no later than 24 hours after completing the correction action.

Section B.1 – Why the Problem Occurred
After you have had the opportunity to examine the problem more closely, provide details as to what you believe to be the cause of the problem, and specify the follow-up actions you took (along with the dates of such actions) to diagnose the problem. This is consistent with CGP Part 5.4.2.

Section B.2 – Stormwater Control Modifications Implemented
Provide a list of modifications you made to your stormwater controls to correct the problem and the date you completed such work. Keep in mind that your work must be completed within the timeline specified in Section A for the completion of corrective action work.

Also, if a SWPPP modification is necessary consistent with Part 7.4.1.a in order to reflect changes implemented at your site, indicate the date you modified your SWPPP. Keep in mind that SWPPP changes must be made within 7 days of discovering the problem that triggered this corrective action.

Space is provided for you to include additional notes or observations regarding the change that you implemented at your site to correct the problem.

Section C –Signature and Certification (CGP Part 5.4.3)

Section C.1 – Contractor or Subcontractor Signature and 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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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."

Signature of Contractor or Subcontractor: _____

Date:

Printed Name and Affiliation: _____

Section C.2 – Operator Signature and 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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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."

Signature of Operator or "Duly Authorized Representative": _____

Date:

Printed Name and Affiliation: _____

Instructions for Signature and Certification (Section C)

Each corrective action report must be signed and certified to be considered complete.

Section C.1 – Contractor or Subcontractor Signature and Certification
Where you rely on a contractor or subcontractor to complete this report and the associated corrective action, you should require the individual(s) to sign and certify each report. Note that this does not relieve you, the permitted operator, of the requirement to sign and certify the report as well.

Section C.2 – Operator Signature and Certification
At a minimum, the corrective action report form must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply to scenarios (1) and (2):

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: A responsible corporate officer. For the purpose of this subsection, 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- 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 which 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 permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: A general partner or the proprietor, respectively.
- *For a municipality, state, federal, or other public agency*: Either a principal executive officer or ranking elected official. For purposes of this subsection, 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 (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- 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
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

Appendix H – Corrective Action Log

Project Name:
SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix I – SWPPP Amendment Log

Project Name:
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix J – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Appendix K – Grading and Stabilization Activities Log

Project Name:
SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Appendix L – SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Erosion Control BMPs**
- ❑ **Emergency Procedures**
- ❑ **Sediment Control BMPs**
- ❑ **Good Housekeeping BMPs**
- ❑ **Non-Stormwater BMPs**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix M – Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix G, Subsection 11.A of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix G, Subsection 11.B (1-3).

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Delegation of Authority

I, Christian A. Farland, P.E. (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the Farland Estates I - New Bedford, MA construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Matthew J. White, E.I.T. (name of person or position)
Farland Corp. (company)
401 County Street (address)
New Bedford, MA 02740 (city, state, zip)
(508) 717-3479 (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix G, Subsection 11.A of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix G, Subsection 11.B (1-3).

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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.

Name: Christian A. Farland, P.E.

Company: Farland Corp.

Title: Vice President & Principal Engineer

Signature:

Date: 1/24/18

Appendix N – Overall Long Term Operation and Maintenance Plan

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

Long Term Operation and Maintenance Plan

Farland Estates I
Map 130D Lots 388-406 & 412-419
New Bedford, MA 02745

January 24, 2018

Owner:

MIH1, LLC
401 County Street
New Bedford, MA 02740
508-717-3480
(During Construction)

City of New Bedford
Department of Public Infrastructure
1105 Shawmut Avenue
New Bedford, MA 02746
(508) 979-1550
(Post Construction upon Acceptance of Public Right-of-Way)

Prepared For:

MIH1, LLC
401 County Street
New Bedford, MA 02740
508-717-3480

Prepared By:

Farland Corp.
401 County Street
New Bedford, MA 02740
(508) 717-3479

Street Sweeping

The roadway will be inspected and maintained by Farland Corp. (During Construction) and The City of New Bedford (After Acceptance).

It shall be the responsibility of the owner to:

Inspections:

Inspect sediment deposit accumulations on the roadway quarterly.

Maintenance:

Sweep roadway at least annually.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Deep Sump Catch Basins

The owner of the catch basins and manholes shall be Farland Corp. (During Construction) and The City of New Bedford (After Acceptance).

The catch basins and manholes are to be inspected and maintained by the owner. It shall be the responsibility of the owner to:

Inspections:

Inspect the catch basins and manholes quarterly.

Maintenance:

Remove accumulated sediment, trash, leaves and debris when the depth of deposits is greater than or equal to one half the depth from the bottom invert of the lowest pipe in the basin and/or manhole to the bottom elevation of the basin or manhole.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Stone/ Rip Rap Areas

The owner of the rip rap areas shall be Farland Corp. (During Construction) and The City of New Bedford (After Acceptance).

The rip rap areas are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the rip rapped areas quarterly.

Maintenance:

Remove accumulated sediment, trash, leaves and debris at least annually.

Check for signs of erosion and repair as need. Replace any damaged areas with new rip rap of the same size.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Bio-retention Areas

The owner of the basins shall be Farland Corp. (During Construction) and The City of New Bedford (After Acceptance).

The basins are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the basins quarterly.

Ensure that the basins are operating as designed and meeting the expected detention times.

Inspect basins for subsidence, erosion, cracking or tree growth on the embankment; sediment accumulation around the outlet; and erosion within the basin and banks.

Inspect overflow basins for evidence of clogging, sediment deposits or outflow release velocities that are greater than the design flow.

Maintenance:

When mowing basin bottom, keep the grass height no greater than 6 inches. Set mower blades no lower than 3 inches. Mow 2-12 times per year.

Remove accumulated trash, leaves, debris at least monthly.

Mulch areas once per year.

Fertilize area once per year.

Remove dead vegetation twice per year.

Prune once per year.

Do not snow store in basin area.

Check for signs of erosion and repair as need. After removing sediment, replace any vegetation damaged during clean-out by either reseeding or re-sodding.

Oil/Grit Separation Units

The owner of the units shall be Farland Corp. (During Construction) and The City of New Bedford (After Acceptance).

The units are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the units monthly and after every major storm event.

Prepare inspection reports as part of each inspection and include the following information:

1. Date of inspection
2. Maintenance personnel
3. Location of unit (GPS coordinates if possible)
4. Time since last rainfall
5. Installation deficiencies (missing parts, incorrect installation of parts)
6. Structural Deficiencies (concrete cracks, broken parts)
7. Operational deficiencies (leaks, blockages)
8. Presence of oil sheen of depth of oil layer
9. Estimate of depth/ volume of floatables (trash, leaves) captured
10. Sediment depth measured
11. Recommendations for any repairs and/ or maintenance for the units
12. Estimation of time before maintenance is required if not required at time of inspection.

Maintenance:

Typically, the unit is maintained using a vaccuum truck or clam shell bucket.

The Oil/Grit Separation Unit shall be cleaned once the sediment depth reaches 15% of the storage capacity.

To remove oil and other hydrocarbons that accumulate, it may be preferable to use adsorbent pads.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Drain Lines

After construction, the drain lines shall be inspected after every major storm for the first few months to ensure proper functions. Presence of accumulated sand and silt would indicate more frequent maintenance of the pre-treatment devices is required. Thereafter, the drain lines shall be inspected at least once per year. Accumulated silt shall be removed by a vactor truck or other method preferred.