Post-Construction Maintenance Plan
Recording Instructions:

Point of Contact:
Laura Richard, Clerk
281-341-8652
cclerk@fortbendcountytx.gov

1. Prepare and notarize recording cover letter (pg. 2).
2. Keep cover letter as page one of the post-construction maintenance plan.
3. FYI:
    a. Recordings for the Official Public Records may be filed by mail which will require the original document to be signed and notarized. The return time by mail is 5 working days.
    b. Or bring in the original document(s) already signed and notarized showing a legal description or previous recording information to FB County Office.
    c. There is a limit of documents to be filed at the counter and it will be determined by the supervisor if they have enough staff to allow up to 25 documents.
    d. **Due to the lunch hour, the staff is limited.**
    e. If the notary seal is not legible, it will be rejected for a re-stamp.
4. Filing fees due apply:
    a. 1st page- $13.00
    b. Additional pages- $4.00/each
    c. Checks payable to:
        Fort Bend County Clerk:
        Address: 301 Jackson St., Richmond TX 77469
5. Provide copy of recording confirmation to stormwater@sugarlandtx.gov
    a. Can use recording receipt or scanned image of stamped cover page.

Post-Construction Maintenance Plan
Recording in Real Property Records of Fort Bend County

Property Owner:
Site Name:
Legal Description of Property *(as available on FB County's website)*:

_____ _____

Owner Signature Date

_____
Owner Name Printed

If property is owned by a company, please complete the statement below.

_____ is authorized to sign as property owner on behalf of
Name of person signing cover sheet

_____.
Company name

State of Texas
County of _____

Sworn to and subscribed before me this ____ day of _____

_____
Notary Signature Notary Seal:

POST CONSTRUCTION MAINTENANCE PLAN

FOR

(Site Name)
Sugar Land, Texas

(Date)

Updated March 2020

Table of Contents

LIST OF APPENDICES

1.0 SITE DESCRIPTION

1.1 Site Location

Provide a description of the site location. (Street address, latitude/longitude, subdivision name if applicable, direction from intersections or landmarks, etc.)

1.2 Owner Information

1.2.1 The owner of the property is:

Company/Person name:
Point of contact:
Address:
Phone number:
Email:

1.2.2 The property is leased to: (if applicable)

Company/Person name:
Point of contact:
Address:
Phone number:
Email:

1.3 New Development or Redevelopment Description

Describe the intent and scope of the project. Include as many details as needed to completely describe the development. This may include the type of structures that will be built, types of infrastructure, types of existing development, acreage of the new development and existing development.

Example:

> This project consists of the construction of a 50-acre new development of light industrial manufacturing facilities. This will include the construction of underground utilities, streets, paving, 5 one story tilt wall buildings, landscaping and three dry detention basins.

1.4 Activities at Site

Describe all of the activities at the developed site. The description should delineate the use of the land, building, and/or structures and the general tasks or services performed by the occupant. If applicable, include the Standard Industrial Classification Codes. Possible activities may include but are not limited to the following:

- *Bulk liquid or materials storage*
- *Refuse areas*
- *Landscape/outdoor pesticide use*

- *Need for future indoor & structural pest control*
- *Interior parking garages*
- *Interior floor drains and elevator shaft sump pumps*
- *Fuel dispensing areas*
- *Vehicle and equipment cleaning*
- *Vehicle/equipment repair and maintenance*
- *Loading docks*
- *Miscellaneous drain or wash water*
- *Onsite storm drain inlets*
- *Food service*
- *Industrial activities*
- *Water and/or wastewater treatment*
- *Parking lots*

Example:

> The development is 50-acre light industrial manufacturing development consisting of 5 buildings. All activities associated with this development are typical for light industrial manufacturing. These activities generally include landscaping maintenance, facility maintenance, and commercial waste disposal. Sanitary waste is transferred via sanitary sewer lines to an offsite wastewater treatment plant, which is operated by City of Sugar Land. There is a master drainage plan for the development that includes three dry detention basins. The dry detention basins will be regularly maintained. The maintenance activities for the dry detention basin generally include vegetative management and sediment removal. The Standard Industrial Classification Code for the facilities onsite is 3261.

1.5 TPDES Permit for Stormwater Discharges from Construction Activities

Describe how the site will permit stormwater discharges from construction activities.

Example:

> A Notice of Intent (NOI) to obtain coverage under TPDES stormwater general permit for construction activities has been submitted and a permit number received. The NOI has been included into this document in *Appendix A.*

1.6 Total Site Area and Disturbed Area

Provide the total acreage of the property and the acreage that will be disturbed by this project.

Example:

> The total site area of the proposed development is 50 acres. The entire 50 areas will be disturbed by the development.
>
> *Or*
>
> The acreage of the property is 50 acres, of which 25 will be disturbed by the development.

1.7 Site and Vicinity Maps and Associated Information

1.7.1 General Location Map

Reference an Appendix for general location of the project site. Include a description of the location based on the map.

Example:

> The site location is in the southeastern part of Fort Bend County. Specifically, the site is at the corner of West Airport Blvd and Dairy Ashford Rd **(Provide street address if applicable).** The site location is identified in Appendix B, General Location Map.

1.7.2 Areas of Development

Reference an Appendix identifying areas of development. Include a description of the areas to be developed.

Example:

> The current project will develop a 50-acre light industrial manufacturing area with three dry detention basins as a stormwater quality and flood control feature. The 50-acre tract is located in the western section of the **(development name)** development. The areas of development are identified in Appendix C, Site Drainage Map.

1.7.3 Areas Not to be Developed

Reference an Appendix identifying any areas that are not to be developed. Describe any pertinent structures or land that are not to be developed. Note structures that are to remain as they exist at the present time.

Example:

> The current project will preserve a portion of the site on the southeastern boundary as undeveloped. The area not to be developed is identified as Reserve “A” in Appendix C, Site Drainage Map.

1.7.4 Drainage Areas

Reference an exhibit identifying drainage areas for the project site. Identify the acreage, patterns, and approximate slope anticipated after development.

Example:

> All impervious area is graded to drain into the street gutters, which discharge into various storm sewer inlets. The storm sewer discharges into the proposed dry detention basin, which drains east through a 60-inch corrugated steel pipe to **Name of Creek**. **Named creek** is a tributary of Oyster Creek, which is a tributary of the Brazos River. A site drainage is depicted in Appendix C.

1.7.5 Wetlands and Surface Waters

Reference an Appendix identifying the location of any known jurisdictional areas, such as waters of the United States, including wetlands. Include a description of the jurisdictional area, including wetlands and surface waters on site.

Example:

> **Named Creek** is located along the eastern boundary of the property. No jurisdictional areas, including wetlands have been identified at this project site. These water features are identified in Appendix C, Site Drainage Map.

1.7.6 Potential Pollutant Activities

Reference an Appendix identifying the location of any activities that may generate pollutants and potential discharges to the storm sewer system. These locations may include but are not limited to hazardous materials treatment, storage, or disposal facilities, parking areas, and loading/unloading areas. The activities provided in the Appendix should identify any polluting activities that may be related to those activities described in Section 1.4. Include a list of activities and a description of the location of the activities on the map.

Example:

> All activities associated with this development are typical for light industrial manufacturing. These activities include landscaping maintenance, facility maintenance, and commercial waste disposal. These activities will be located in the vicinity of each facility. Other activities will be located in and around the dry detention basin, which include vegetative maintenance and occasionally, sediment removal. Potential pollutant activities are identified in Appendix D, Potential Pollutant Activities and Minimum Control Measures Map.

1.7.7 Non-Structural Controls and Structural Controls

Reference an exhibit identifying the location of any structural controls that are identified in the plan (Section 2). If applicable, identify any specific areas where non-structural controls will be implemented. Include a description of the control and its location based on the map.

Example:

> Non-structural controls for stormwater quality in this development will include proper waste disposal, proper landscaping practices and inlet stenciling (inlet markers).
>
> The stormwater quality structural control for this development is comprised of three dry detention basins, which are separated into two sections by concrete walls. The basins are designed to store the first 0.5 inch of stormwater runoff in the 0.83 acre feet detention/sedimentation basin constructed in the northern half of the dry detention basins. Additional stormwater runoff that flows into the basins will bypass the detention/sedimentation basins through a weir that discharges into the detention basin on the northern half of the dry detention basin.
>
> Non-structural controls and structural controls are depicted in Appendix D, Potential Pollutant Activities and Minimum Control Measures Map.

1.7.8 Stormwater Discharge Locations

Reference an Appendix identifying the stormwater discharge locations to the City of Sugar Land MS4. Include a description of the locations based on the map.

Example:

> Stormwater discharges into various storm sewer inlets in the commercial area of the development. The storm sewer outfalls through a 72-inch pipe into the dry detention basins. The basins discharge through a 60-inch corrugated steel pipe to **Named Creek** on the southeastern corner of the 50-acre tract. All storm sewer inlets and outfalls are identified in Appendix C, Site Drainage Map.

2.0 CONTROLS

2.1 Non-Structural Controls

In this section, identify and describe every non-structural control that is to be implemented at the site and how it will be used. Non-structural controls are management based activities that are designed to prevent or reduce the potential of stormwater runoff contact with pollution causing activities. These controls may be subcategorized into controls for waste materials, hazardous waste, sanitary waste, landscaping practices/fertilizer and pesticide practices, and others. Refer to Section 6 of the Design Standards and Appendices for additional information on structural controls. Possible non-structural controls may include but are not limited to the following:

- *Public Education*
- *Reporting Hotline*
- *Household Hazardous Materials Storage/Disposal*
- *Pet Waste Management*
- *Litter Control*
- *Landscaping Practices*
- *Fertilizer and Pesticide Use*
- *Fueling Station Practices*
- *Vehicle/Equipment Washing and Steam Cleaning Practices*
- *Liquid Materials Loading and Unloading Practices*
- *Liquid Storage in Aboveground Tank Practices*
- *Container Storage of Liquids, Food Wastes, and Hazardous Wastes*
- *Spill Prevention Response Plan*
- *Outdoor Storage Practices*
- *Recycling*
- *Inlet Stenciling (Inlet Marker)*
- *Routine Maintenance of Septic or Sanitary System*
- *Buffer Zone*
- *Urban Forestry*
- *Narrower Streets*
- *Eliminating Curbs and Gutters*
- *Green Parking*
- *Alternative Turnarounds*
- *Alternative Pavers*
- *Plug Floor Drains*
- *Use Dry Cleanup Methods*

- *Stockpile Protection*
- *Spill Kits*
- *Secondary Containment*
- *Dispose/Remove Exposed Materials that are not intended for use*
- *Volunteer Programs (Stream Cleanup and Monitoring)*

2.1.1 Waste Materials

Address any non-structural controls for waste materials that are being implemented as a BMP for the project. These may include but are not limited to litter control and proper solid waste disposal practices.

Example:

> Tenants will be given information on proper handling of commercial solid waste. Solid waste materials must be contained within a container to prevent odors and content from escaping. The container(s) are serviced **(insert applicable pickup frequency)** by the exclusive franchisee.

2.1.2 Hazardous Waste

Address any non-structural controls for hazardous waste that are being implemented as a BMP for the project. These controls may include but are not limited to household hazardous materials storage/disposal, fueling station practices, and materials loading, unloading, and storage practices.

Example:

> Tenants will be given information on proper storage and disposal of household hazardous materials.

2.1.3 Sanitary Waste

Address any non-structural controls for sanitary materials that are being implemented as a BMP for the project. These controls may include but are not limited to connection to sanitary sewer or septic system.

Example:

> All facilities in the development are connected to a sanitary sewer that drains to City of Sugar Land treatment facilities.

2.1.4 Landscaping Practices / Fertilizer and Pesticide Practices

Address any non-structural controls for landscaping practices. These controls may include but are not limited to use of native or low maintenance vegetation, mowing practices, and proper application of fertilizers and pesticides.

Example:

> A landscaping contractor will be utilized to provide **(insert frequency)** lawn care services for each facility. Contractors will be expected to utilize good management practices for lawn and garden care.

The dry detention basins are vegetated with native species of plants. Fertilizers and herbicides will be applied only when necessary and in accordance with manufacturers specifications. The basins are mowed once every six months **(or insert applicable frequency)** or as needed.

2.1.5 Other

Address ay non-structural controls not elsewhere classified that are being implemented as a BMP for the project. These controls may include but are not limited to vehicle/equipment cleaning practices, spill prevention and response plan, and inlet stenciling (inlet marker).

Example:

Inlets in the commercial area are stenciled to identify the inlet as a storm drain that drains to **Named Creek** and to discourage dumping of waste into the inlet.

2.2 Structural Controls

In this section, identify and describe every structural control that is to be constructed at the site and how it will be used. These controls may be subcategorized into stormwater basins, infiltration/filtration facility, catchment facility, vegetative practices, low impact development, and others. Refer to Section 6 of the Design Standards and Appendices for additional information on structural controls. Possible structural controls may include but are not limited to the following:

- *Dry Basins*
- *Wet Ponds*
- *Dual Use Flood Control/Water Quality Basin*
- *Constructed Wetlands*
- *Infiltration/Filtration Facilities*
- *Oil/Grit Separators*
- *Grass Swales*
- *Vegetated Filter Strips*
- *Low Impact Development*
- *Porous Pavement*
- *Bioretention*
- *Catchment Basin*

2.2.1 Stormwater Quality Basin

Address any dry basins, wet ponds, dual use flood control/water quality basins, or constructed wetlands used for stormwater quality treatment.

Example:

Dry Detention Basin

This project incorporates 3 dual use flood control/water quality basins to treat the stormwater runoff from the 50-acre commercial area. The dry detention basins for water quality enhancements is designed to divert the first 0.5 inches of stormwater

runoff. The stormwater quality basins discharge into the detention basins via a 2-inch PVC pipe in the concrete wall that separates the two. A trash rack is used to prevent the PVC pipe from being clogged with trash and debris. During high frequency events, stormwater runoff flows over a weir into the detention basin, which discharges into **Named Creek.** The bottom and side slopes of the basins will be vegetated to prevent or reduce resuspension of sediment. A pilot channel is included to reduce erosion of the basin.

2.2.2 Infiltration/Filtration Facility

Address any infiltration or filtration facilities used for stormwater quality treatment.

Example:

Catch Basin

Catch Basins will be installed in the storm sewers located on the curb surrounding the project site. The catch basin will prevent trapped solids from clogging the sewer or being washed into receiving waters.

Oil/Grit Separators

An oil/grip separator will be utilized in areas behind the restaurant mentioned in the project plans. The separator will remove sediment and hydrocarbons before the pollutants are conveyed to storm sewers.

2.2.3 Vegetative Practices

Address any grass swales or vegetated filter strips used for stormwater quality treatment.

Example:

Vegetated Filter Strips

Vegetated Filter Strips will be planted at the outfalls of the three basins. They will treat the overland flow through infiltration and biological uptake of sediments and particulate pollutants.

2.2.4 Low Impact Development

Address any low impact development used for stormwater quality treatment.

Example:

- Pre-development drainage patterns will be maintained to maximum extent practicable.
- The project grading will be designed to minimize land clearing. Mass grading will be avoided and selective clearing of existing vegetation will be applied.

2.2.5 Other

Address structural controls not elsewhere classified that are being implemented as a BMP for the project.

Example:

Litter Control

A litter control net will be placed on the inlet pipe of the detention basin to collect trash and debris. The net detaches from the pipe once it is filled and is anchored to the ground until the litter can be removed. Additional trash pickup will be performed as needed. These control measures will help to prevent litter from becoming a source of floatables. The litter control net will be inspected once a month **(or insert applicable frequency)** for litter removal. Any litter collected is brought to an approved landfill for disposal.

3.0 MAINTAINANCE PLAN

Describe procedures and qualified personnel to assure the timely maintenance of the control measures identified in Section 2. Refer to Section 11-28 of the City of Sugar Land Development Code for additional information on maintenance of controls. Maintenance requirements must be discussed for each control individually. Reference a table that schedules all maintenance activities for all BMPs being utilized.

Example:

The following maintenance and inspection requirements will be performed for the identified BMPs used on the property. Appendix E includes the schedule of all maintenance activities on the site and will be used to ensure regular and timely maintenance for structural measures.

3.1 Non-Structural Controls

Example:

Litter Control

1. Tenants will be responsible for maintaining any trash receptacles or other materials that are needed for proper management of commercial waste materials. The trash will be picked up twice a week by the exclusive franchisee. Packets of information on proper storage and handling of waste materials will be provided by **(Name)** to tenants. The packets of information will include:

    - Control litter from becoming floatables
    - Secure lids on trash receptacles or place them under cover
    - Only dispose of permitted materials in trash receptacles
    - Recycling

Household Hazardous Materials Storage/Disposal

1. Tenants will be given information on proper storage and disposal of household hazardous materials. These packets of information will be provided by **(Name)**. The packets of information will include:

    - Keep products in their original containers with original labels
    - Store in a cool and dry place
    - Keep products out of reach of visitors
    - Regularly check containers; place a leaky container inside another container and label accordingly
    - Store incompatible chemical products separately
    - Secure lids tightly

Routine Maintenance of Septic or Sanitary System

1. All facilities in the development are connected to a sanitary sewer that drains to City of Sugar Land treatment facilities.

Landscaping Practices / Fertilizer and Pesticide Practices

1. A landscaping contractor will be utilized to provide **(insert frequency)** lawn care services for each facility. Contractors will be expected to utilize good management practices for lawn and garden care. Packets of information on proper landscaping fertilizer and pesticide practices will be provided by **(Name).**

    The dry detention basin is vegetated with native species of plants in order to reduce maintenance. Fertilizers and herbicides will be applied by a contract service provider only when necessary and in accordance with manufactures specifications. The basin is mowed by a contract service provider once every 6 months or as needed.

    The contract service provider will not cut the grass any lower than 6 inches when mowing the dry detention basin.

    Refer to Section 32 01 90.13 Fertilizing of the Construction Details (Standard Specifications) for addition guidance for landscaping and fertilizer practices.

Inlet Stenciling (Inlet Marker)

1. All inlets in the commercial area will be stenciled or marked to identify the inlet as a storm drain that drains to **Named Creek** and to discourage dumping of waste into the inlet. The stenciling will be performed and maintained by a contract service provider. Inspection of the stenciled inlets will be performed once a year by **(Name)** if necessary.

3.2 Structural Controls

Example:

Dry Detention Basin

1. This project incorporates 3 dual use flood control/water quality basins to treat the stormwater runoff from the 50-acre commercial area. The basin will be visually

inspected by **(Name)** once a month to assess any additional maintenance or repairs that may be required. Additional planning considerations and guidance are listed below:

- Structural integrity protection to include sealing existing cracks in concrete; repairing eroded inlet channels and outlet pipes; replacing or repairing rip-rap at inlet channels or emergency spillways; replacing pipes, inlets and headwalls; repairing holes, depressions, and/or cracks; repairing leaking and/or damaged concrete spillways; repairing leaking and/or damaged riser/barrel; and
- Repair and replacement of pumps, electrical systems, and all appurtenances;
- Bank erosion repair;
- Vegetation management to include removing trees and woody vegetation from spillways, earthen dams or retaining walls; re-seeding and repairing bare areas or gullies; mowing and regularly maintaining vegetation; and
- Removal of trash and debris to include removing obstructions from spillways and outlet pipes; and clearing debris from intake or outfall areas, pond areas, and spillway trash racks;
- Sediment removal to restore intended capacity and function of the stormwater management facility;
- Replacement and/or unclogging filter of gravel around spillway risers; and
- Repairing any seepage, leaking, and/or piping of earthen dams or retaining walls.

2. Trash pickup will be performed as needed. This control measure will help to prevent litter from becoming a source of floatables. The litter pickup will be performed as needed but at least once a month **(or insert applicable frequency).** Any litter collected will be brought to an approved landfill for disposal. Additional planning considerations and guidance are listed below:
    - Additional visits for litter removal may be needed if trash accumulation becomes excessive.
    - Litter will be removed from the dry detention basin and the litter control nets will be inspected before rain events to prevent floatables from continuing downstream of the basin.

4.0 INSPECTION PLAN

Describe procedures and qualified personnel to assure the timely inspection of the control measures identified in Section 2. Refer to Section 11-28 and 11-29 of the City of Sugar Land

Development Code for additional information on Inspection requirements. Inspection requirements must be discussed for each control individually.

Example:

The following inspection requirements will be performed for the identified control measures used on the property.

4.1 Non-Structural Controls

Example:

Visual inspections of the commercial area will be performed by **(Name)** every **(frequency).** The form will include the inspector's name, address, and qualifications. The commercial area will be inspected for the following:

- Proper litter control (e.g., trash receptacles have secure lids or under cover)
- Proper landscaping, fertilizer, and pesticide practices
- Inlet stenciling (inlet marker) repair

The inspector will note the date that any maintenance or repairs have been performed since the last inspection.

4.2 Structural Controls

Example:

Monthly Inspections

Visual inspections of the dry detention basins and litter control net will be performed by **(Name)** once a month and after rainfall events of 1 inch or more in a 24-hour period. An inspection form will be filled out by the person(s) performing the inspection. The form will include the following information:

- Inspector's name, address, and qualifications.
- Status of proper litter control (trash receptacles have secure lids or under cover)
- Status of proper landscaping, fertilizer, and pesticide practices
- Status of inlet stenciling (inlet marker) repair
- Status of the basins for litter, debris, vegetation needs, integrity of any structural components, erosion problems, and sediment accumulation
- Whether the current BMPs, non-structural and structural, are effectively controlling floatables, suspended solids, and other pollutants.
- The date that any maintenance or repairs were performed since the last annual inspection, whether there is any standing water in the basin, the amount of rain produced in the last rainfall event, and the period of time since that event.

The Inspection Requirements from Section 11-29 of the City of Sugar Land Development Code state:

A. At a minimum, the stormwater management facility must be inspected annually to evaluate the primary function of the stormwater management facility and to ensure that all post-construction stormwater control measures are operating correctly and are being maintained consistent with the maintenance plan.

B. Persons responsible for the operation and maintenance of a stormwater management facility must make records of the installation and of all maintenance and repairs. Records of the inspection, maintenance and repairs must be completed, signed by the responsible person, and retained for a minimum of 5 years, for review upon City request. As-built plans of the stormwater management facility must be retained for the duration of the existence of the stormwater management facility. Copies of the as-built plans and records of all self-inspections, maintenance, and repairs shall be kept on-site and shall be made available to the City during inspection of the stormwater management facility and at other reasonable times upon City's request.

C. Person(s) responsible for the operation and maintenance of a stormwater management facility must inspect and evaluate the following, if present, at each stormwater management facility:
    1. Dams, berms, levees;
    2. Spillways;
    3. Inlets;
    4. Pipes, culverts, and appurtenances;
    5. Outlets;
    6. Bank erosion;
    7. Sedimentation;
    8. Vegetation;
    9. Trash and debris;
    10. Water quality impairments; and
    11. Any other stormwater management facility.

D. Deficiencies identified in the inspection must be noted in the inspection report and recommended corrective actions must be documented and maintained with the report.

E. Deficiencies must be addressed within 90 days from the date identified unless additional time is approved by the Director. The person responsible for the inspection must document the resolution of each deficiency identified in the inspection report.

F. The first inspection report and inspection reports every 5 years afterwards shall be submitted and sealed by a licensed professional engineer in the State of Texas. Inspections by the professional engineer are not required to be extended beyond visual field observations and review of as-built plans unless deficiencies are identified that, in the opinion of the professional engineer or Director indicate the need for a more detailed investigation.

G. The first inspection report shall be submitted to the City upon completion of construction of the stormwater management facility, along with the as-built plans. Subsequently, inspection reports shall be submitted annually by January 31 for the preceding calendar year inspection or 180 calendar days from the adoption of this Article, whichever is later. Additional inspection reports may be required by the City in the event of a natural disaster or after a large storm event, upon the Director's request to evaluate the structural integrity and function of the stormwater management facility.