

# THE CITY OF SOUTHSIDE PLACE



## STORM WATER MANAGEMENT PLAN

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**PART I**  
**CITY BACKGROUND**

# **THE CITY OF SOUTHSIDE PLACE, TEXAS**

## **SETTING**

The City of Southside Place was incorporated in 1931. It is located at 29° 42' 35"N and 95° 26' 8" W. The City has a total area of approximately 0.2 square miles. It is surrounded by the cities of Bellaire, Houston, and West University Place. Average temperature is 70 degrees Fahrenheit and the average annual rainfall is approximately 50 inches. The regional topography is flat. According to the 2010 Census, the City of Southside Place has a population of approximately 1,715.

The City's drainage system is composed of grass lined ditches, slope paved drainage ditches and enclosed storm sewers. Drainage and street maintenance are handled by the City of Southside Place Public Works Department. The City is located in Harris County, Texas and is under the jurisdiction of the Harris County Flood Control District (HCFCD).

## **ORGANIZATION**

The City is operated by a City Council/ City Manager structure. The elected officials include a Mayor and five (5) City Council Members.

## **ORDINANCES AND GUIDANCE**

Key City of Southside Place ordinance and guidance that may be affected by the Storm Water Management Program is the Planning and Zoning Ordinance, City ordinances, and construction permit and plan review criteria.

## **LEGAL AUTHORITY**

The City of Southside Place currently has drainage and erosion control criteria to provide proper authority for the Public Works Department and the City of West University site inspectors to manage storm water quality runoff at residential and capital improvement project construction sites in the City.

## **INSPECTION / ENFORCEMENT**

Contract engineering personnel assist the Building Official to observe construction of municipal infrastructure. The City Volunteer Fire Department and City Public Works Department responds to chemical and hazardous material spills. If a responsible party does not respond and clean up a spill, the Fire Marshall investigates and enforces cases of illegal dumping and illicit discharges.

## **INFRASTRUCTURE / MUNICIPAL OPERATIONS**

The City's Public Works Department handles storm water runoff management, drainage system maintenance, and street maintenance. The City and HCFCD maintain major drainage ditches. The City also maintains the sanitary sewer and water system.

## **CONSTRUCTION AND DEVELOPMENT**

The City Council, and the Planning and Zoning Commission regulate development. The City contracts its neighboring city, the City of West University Place, which conducts a plan review of proposed residential permanent drainage systems and temporary drainage plans that include storm water pollution prevention plans (SWPPP). The City of West University Place also makes periodic construction inspection visits. All plans for capital improvements projects are reviewed by the City Engineer. At minimum, capital improvements projects are inspected periodically by the City Engineer. Inspections may also be supplemented by additional City personnel. Site Work Permits and Building Permits are issued by the Building Official. The City works closely with The City of West University Place and the HCFCFCD.

## **PROGRAM FUNDING**

The City of Southside Place pays for the maintenance of its storm water system infrastructure out of its operating budget, as these are some of the City personnel's regular duties. Capital improvements related to the drainage system are paid for with funds from property taxes.

## **OUTREACH / TRAINING**

The City provides public education to residents on the subject of storm water pollution prevention. Employees are educated on storm water pollution prevention procedures of the City and instructed to follow the established good housekeeping measures in maintenance operations.

## **IMPAIRED WATERS**

As part of this SWMP, the City of Southside Place has identified the bodies of water that, directly or indirectly, receive runoff from the City's drainage system outfalls. The sources for this effort were the EPA website and the TCEQ 303(d) List of Impaired Waters. The results are as follows (see Figure 1).

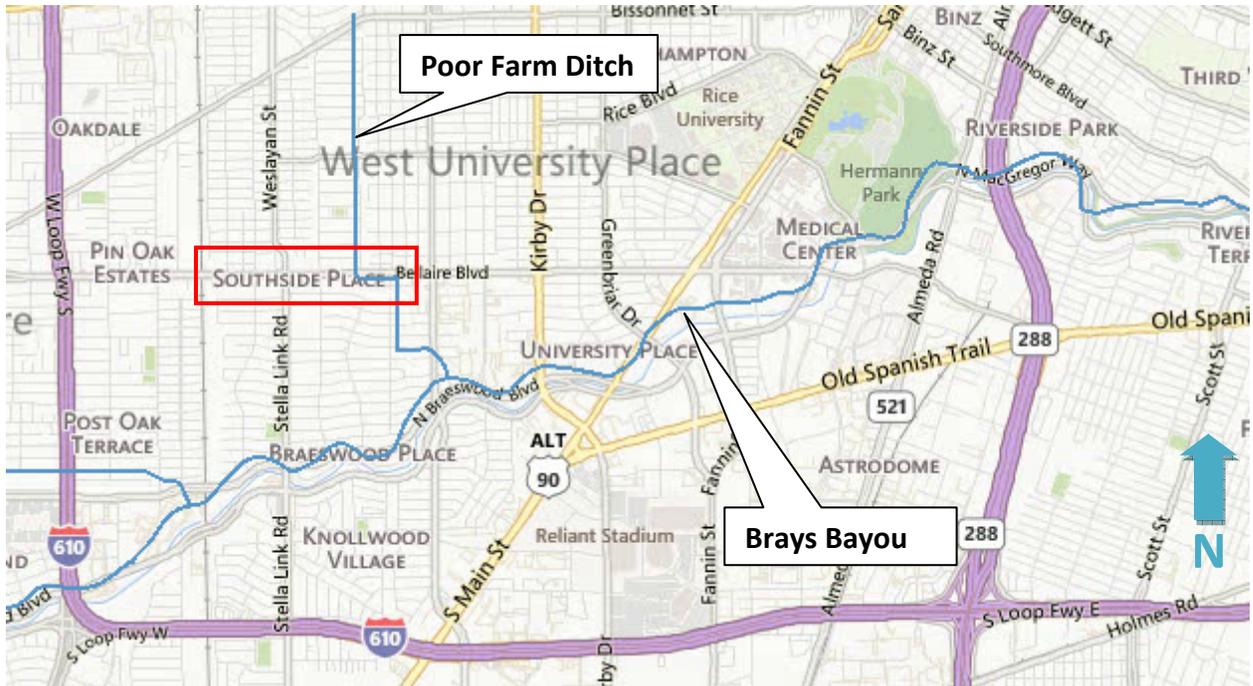
The stream that receives storm water from Southside Place outfalls is Poor Farm Ditch (TX-1007S\_01), an impaired stream with bacteria. Poor Farm Ditch empties into Brays Bayou (TX-1007B\_01), which is an impaired stream with Dioxin and PCBs in edible tissue.

Brays Bayou empties into the Houston Ship Channel and it is tidally influenced by Galveston Bay. Brays Bayou Tidal (TX-1007\_04) and Houston Ship Channel (TX-1007\_01) are on the list of impaired waters because of Dioxin and PCBs found in edible tissue.

To address the pollutant Bacteria, the City will follow obligations as included in the "Implementation Plan for Seventy-Two Total Maximum Daily Loads for Bacteria in the Houston-Galveston Region" written and approved by the TCEQ on January 30, 2013 and the "Addendum One to Five Total Maximum Daily Loads for Indicator Bacteria in Brays Bayou Above Tidal and Tributaries" approved by the EPA August 28, 2013 which includes measures to achieve pollutant reduction levels to meet the TMDL on 1007S\_01 (Poor Farm Ditch) SWMP.

Further, the City has reviewed the best management practices of these bodies of water and incorporated them into this Storm Water Management plan. Additional efforts to reduce sources of bacteria in illicit discharges have been included in a BMP in Section 2.3.5 below. Residential

education regarding sources of bacteria in runoff are address in a BMP in Section 1.3.1 below. Sources of bacteria such as on-site sewage facilities (septic tanks, etc.) and animal sources such as zoos and stables have not been addressed in the BMPs below as the City of Southside Place is a fully developed high-end residential community and does not have any of these sources within its city limits. The sanitary sewer collection system consist of two (2) lift stations off site of the wastewater treatment plant and one (1) lift station at the wastewater treatment plant which are all of adequate capacity. The system is continuously monitored by City staff who has reported zero overflow incidents. The entire sanitary sewer piping network is PVC piping or High Density Polyethylene piping recently updated by rehabilitation projects.



**Figure 1 Bodies of Water Local to Southside Place that Receive Runoff from Southside Place**

**PART II**  
**MINIMUM CONTROL MEASURES**

# MINIMUM CONTROL MEASURES

## 1. PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

### 1.1 *Regulatory Requirement*

*40 CFR 122.34 (b)(1-2) – Implement a public education program to distribute educational materials to the community of contact, equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff. At a minimum comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program. EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups.*

### 1.2 *Current Programs*

The City of Southside Place provides for general public education by participating in the “Clean Water Clear Choice” (CWCC) program which is under the direction of the Storm Water Management Joint Task Force led by HCPID Watershed Protection Group. This program promotes the education and involvement of the public in the reduction of pollutants entering the State’s waterways. Members of the Joint Task Force include the Texas Department of Transportation, the City of Houston, Harris County, and the HCFCD.

### 1.3 *Selected Best Management Practices (BMPs) for Public Education and Outreach*

#### **Public Education and Outreach**

The City shall supplement the existing programs with community-wide efforts to enhance public awareness and involvement in storm water pollution prevention.

#### 1.3.1 *BMP #1 – Storm Water Quality Multi-Media Outreach through Clean Water Clear Choice*

The City shall continue to participate in the CWCC program. The program provides the City with a multi-media public education campaign that includes brochures, booklets, promotional items, television commercials, radio spots, newsletters, newspaper inserts, etc. that provide education and public involvement in the reduction of pollutants entering the State’s waterways. Included in educational materials distributed by the CWCC program is residential education guiding residents to practices aimed to reduce bacteria discharging from residential sites from decorative ponds, pet waste, and other sources of bacteria. Also included in educational materials is information on proper disposal of fats, oils, and grease.

**1.3.1.1 Measurable Goals**

The measurable goal for implementation of this BMP is to participate in the CWCC program for the duration of the permit term. This includes participation in the HCPID’s multi-media outreach program the same length of time.

**1.3.1.2 Schedule**

Program	BMP	Activity	Date Due
1. Public Education, Outreach and Involvement	Storm Water Quality Multi-Media Outreach through Clean Water Clear Choice	1. Participate in the Clean Water Clear Choice program and pay appropriate dues	Year 1-5
		2. Participate in the HCPID’s multi-media outreach program	Year 1-5

**1.3.1.3 Responsible Persons**

The City Manager shall coordinate with the Watershed Protection Group to develop a plan of action and begin distribution of educational information to the residents of Southside Place in order to meet Measurable Goal 1.3.1.1.

**1.3.2 BMP #2 – Utilize Municipal Website for Public Education and Outreach**

The City of Southside Place presently has a direct link to the CWCC program on the municipal website. The City shall use the municipal website more directly to inform the public about the storm water management program and policies as they develop in the local community; this shall include uploading a PDF format of the SWMP.

Additionally, the City shall provide general storm water quality information as well as topics tailored to specific areas of pollution concern. Most importantly, the website shall allow the public to submit comments and complaints concerning the program or possible violations i.e. illicit discharge/ dumping of waste. This allows the City to consolidate efforts concerning public education, outreach, and involvement under one link on the City’s website to be easily accessible to the public.

In the prior SWMP, the City printed and distributed anti-littering and dumping brochures; the municipal website shall be used to supplement or replace the brochures.

**1.3.2.1 Measurable Goals**

The measurable goal for implementation of this BMP #2 is to upgrade the website with a link to SWMP and its policies in Permit Year 2.

**1.3.2.2 Schedule**

Program	BMP	Activity	Date Due
1. Public Education, Outreach and Involvement	Utilize Municipal Website for Public Education and Outreach	1. Include storm water quality information and links on City website	Year 2
		2. Monitor and update annually	Year 3-5

**1.3.2.3 Responsible Persons**

The City Manager is responsible for implementation of this BMP #2 to meet Measurable Goal 1.3.2.1.

**Public Involvement**

The City shall submit the draft SWMP and an NOI to the executive director of TCEQ for review.

After the City receives written instruction from TCEQ, it shall publish notice of the executive director’s preliminary decision on the NOI and SWMP. The public comment period begins on the first date the notice is published and lasts for at least 30 days.

If significant public interest exists, the executive director will direct the City to publish a notice of the public meeting and to hold the public meeting. If a public meeting is held, the City shall describe the contents of the NOI and SWMP. The City shall provide a sign in sheet for attendees to register their names and addresses and furnish the sheet to the executive director.

**1.3.3 BMP #3 – Storm Water Inlet Marking (SWIM) Program**

The City of Southside Place in conjunction with Harris County participated in the SWIM Program as a further step to keep waterways healthy and clean. The SWIM Program is an environmental public education program with a goal to encourage residents to protect water resources.

As part of this SWMP, the City shall develop a plan to revisit and replace any damaged or missing inlet markings. The City shall check and remark inlets in four (4) phases; the program shall be executed by volunteers but guided by the City staff to ensure success.

**1.3.3.1 Measurable Goal**

The measurable goal for this BMP is to develop a plan of action by the end of permit year 1. The plan shall be executed in four (4) phases in permit years 2 through 5.

**1.3.3.2 Schedule**

Program	BMP	Activity	Date Due
1. Public Education, Outreach and Involvement	Storm Water Inlet Marking (SWIM) Program	1. Develop a plan of action	Year 1
		2. Execute Phase I	Year 2
		3. Execute Phase II	Year 3
		4. Execute Phase III	Year 4
		5. Execute Phase IV	Year 5

**1.3.3.3 Responsible Persons**

The City Manager is responsible for implementation of BMP #3 to meet Measurable Goal 1.3.3.1.

## **2. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)**

### **2.1 Regulatory Requirement**

*40 CFR 122.34 (b)(3) – Develop, implement, and enforce a program to detect and eliminate illicit discharges into your small MS4. Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all water of the U.S. that receive discharges from those outfalls. To the extent allowable under state, tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a plan to detect and address non-storm water discharges including illegal dumping to your system. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Address categories listed in 122.34(b)(3)(D)(iii) if you determine they are significant contributors of pollutants to MS4.*

### **2.2 Current Programs**

The City of Southside Place currently provides illicit discharge detection and elimination through multiple practices including, monitoring of construction, periodic inspection of storm sewer outfalls, and public education on illegal discharges and improper waste disposal.

The City Manager, Southside Place Volunteer Fire Marshall, Public Works Department, and Chief of Police investigate reported or discovered illicit discharges, spills, and illegal dumping, and work with the responsible party to get the situation remedied.

The City of Southside Place contracts with the City of West University Place for reviews of residential construction plans to ensure all construction in the City has storm water pollution prevention measures. Review of plans for capital improvement projects is conducted by the City Engineer who ensures all construction plans include storm water pollution prevention measures.

### **2.3 Selected BMPs for Illicit Discharge Detection and Elimination (IDDE)**

#### **Program Evaluation and Development**

##### **2.3.1 BMP #1 – Review and Update MS4 Map (Part III.B.2(c)(1))**

The City maintains storm sewer system records in shapefile format for Geographic Information System (GIS).

As in the previous permit term, an overall review of the existing records shall be completed and updated as necessary to reflect changes due to construction and repairs in permit year 1. The storm sewer system records shall then be periodically reviewed and updated each year. The City shall update the map with names and locations of all outfalls and names and locations of all bodies of water that receive discharge from those outfalls by the end of permit year 2.

**2.3.1.1 Measurable Goal**

The measurable goal for implementation of BMP #2 is to complete and update the storm sewer system records and produce a map, paper copy or digital, in permit year 1.

**2.3.1.2 Schedule**

Program	BMP	Activity	Date Due
2. IDDE	Review and Update MS4 Map	1. Update storm sewer system records	Year 1 - 5
		2. Produce a map, paper copy or digital	Year 1
		3. Update the map with locations and names of all outfalls in the City as well as bodies of water that receive discharge from those outfalls	Year 2

**2.3.1.3 Responsible Persons**

The City Engineer is responsible for implementation of BMP #2 to meet Measurable Goal 2.3.2.1.

**2.3.2 BMP #2 – City Staff Education and Training (Part III.B.2(c)(2))**

The City shall develop a formal training program to include all existing and proposed training elements to meet the following criteria.

- The existing illicit discharge detection and course of action training program shall be evaluated and updated as necessary by the City Engineer.
- The training program shall educate and prepare the City field staff to identify various sources of storm water pollution, to detect illicit discharge, and to be prepared to respond and remove illicit discharge from the MS4 upon detection.
- Training shall include instructions for field inspection of storm sewer system inlets, manholes, and other controls to identify illicit discharges or deficiencies in the system.
- The training program shall include observation of construction sites for storm water pollution prevention measures, erosion protection, and sediment control.

The training program shall be administered to all current and new City field employees.

**Training materials and training completion records shall be maintained and readily available for review by the TCEQ, if requested.**

Following review, the City Council shall hold a Public Meeting to consider adoption of any significant revisions to the existing training program, if any. The Public Meeting shall be a part of regularly scheduled City Council meeting.

**The training program shall continue to be updated as necessary for the duration of the permit term. Records of any revisions to the training program shall be maintained and readily available for review by the TCEQ, if requested. Any significant revisions and updates to the training program shall be brought before the City Council at a regularly scheduled Public Meeting in permit year 1.**

**2.3.3.1 Measurable Goals**

The measurable goal for BMP #3 shall be to evaluate and update the training program. The implementation of the program shall occur over a five-year period as scheduled below.

**2.3.3.2 Schedule**

Program	BMP	Activity	Date Due
2. IDDE	City Staff Education and Training	1. The City Engineer shall review the training program and revise as necessary	Year 1
		2. All current field staff shall complete training	Year 1
		3. New staff shall complete training as part of the new-hire process	Year 1 - 5

**2.3.3.3 Responsible Persons**

The City Engineer is responsible for implementation of BMP #3 to meet Measurable Goal 2.3.2.1.

**2.3.3 BMP #3 – Public Reporting of Illicit Discharges and Spills**

Similar to the previous permit term, the City shall provide the residents with the tool to report any observed illicit discharges in the community.

The City shall designate the Public Works director as the central contact person for management of and response to the incoming illicit discharge reports. A link for email and phone number shall be posted on the City website for the public to access and report any illicit discharges into the MS4.

**2.3.4.1 Measurable Goals**

The measurable goal for BMP #3 shall be to provide contact information for individuals designated to receive and respond to illicit discharge reports.

**2.3.4.2 Schedule**

Program	BMP	Activity	Date Due
2. IDDE	Public Reporting of Illicit	1. Designate Public Works	Year 1

	Discharges and Spills	Director as a central contact person for illicit discharge reports	
		2. Monitor and respond to public illicit discharge reports. Take appropriate action to eliminate illicit discharges into the MS4	Year 1-5

**2.3.4.3 Responsible Persons**

The City Manager is responsible for implementation of BMP #4 to meet Measurable Goal 2.3.3.1.

**2.3.4 BMP #4 – Procedures for Tracing and Removing the Source of Illicit Discharge (Part III.2.(c)(5))**

The City of Southside Place shall evaluate existing procedures and develop additional means and resource needs to detect and address non-storm water discharges including illegal dumping in the storm sewer system. The program shall be a report or complaint driven program along with periodic inspection of storm sewer outfalls by the Department of Public Works and Building Official. A portion of periodic inspection of storm sewer outfalls will be conducted during periods of extended dry weather. As part of their periodic inspections, the Public Works Department shall inspect storm sewer systems, inlets, manholes, and other controls to identify deficiencies. Those deficiencies shall be addressed in a timely fashion.

In summary, the City shall use the following means for tracing and removing of any potential sources of illicit discharge.

- **Reporting.** The City shall upgrade the method for reporting of illicit discharge and illegal dumping of waste by redeveloping the municipal website. The City shall designate employees under the Public Works Department to manage and respond to the reports.
- **Staff Training.** The City shall follow a training program that shall be evaluated and updated as necessary by the City Engineer. The program shall train the City staff to detect and properly respond to storm water contamination.
- **Regularly-Scheduled Evaluations of Outfalls.** The field employees shall complete regularly scheduled outfall inspections.
- **Updated MS4 Map.** The existing storm sewer system information shall be updated and an official storm sewer system map shall be developed and maintained.

The following non-stormwater discharges from construction sites authorized under this general permit are also eligible for authorization under this MCM:

- Discharges from emergency fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);

- Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);
- Water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;
- Uncontaminated water used to control dust;
- Potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
- Uncontaminated air conditioning condensate; and
- Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

**2.3.4.1 Measurable Goals**

The measurable goal of this BMP is to implement all current and proposed preventive and corrective measures to trace and eliminate illicit discharges from the storm sewer systems. The existing measures shall be updated as necessary.

**2.3.4.2 Schedule**

Program	BMP	Activity	Date Due
2. IDDE	Procedures for Tracing and Removing the Source of the Illicit Discharge	1. Implement existing procedures for tracing and removing of storm water pollution sources	Year 1
		2. Update existing measures as necessary	Year 1
		3. Implement updated procedures for tracing and removing of storm water pollution sources	Year 2 - 5

**2.3.4.3 Responsible Persons**

The City Manager and the City Engineer are mutually responsible for implementation of BMP #4 to meet Measurable Goal 2.3.4.1.

### **2.3.5 BMP #5 – Illicit Discharge Ordinance**

The City of Southside Place will develop an ordinance (or other regulatory mechanism) to effectively prohibit non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions.

The ordinance shall contain the following provisions. Illicit discharges shall be terminated immediately upon notification by a City Official. Any illicit discharge may be subject under this ordinance to a fine and/or suspension of the utility account, subject to the discretion of the City Official. Subsequent continued illicit discharge shall bring additional penalties as well as automatic suspension of the utility account. Fines and penalties shall be delineated in the ordinance.

Upon identification of an illicit discharge, the City Official shall take action with the responsible party to immediately cease the illegal discharge and utilize enforcement actions as necessary. The following non-storm water discharges shall not be considered illicit:

- discharges from firefighting activities, fire hydrant flushing, or potable water sources (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life)
- lawn watering and similar irrigation drainage
- water from routine external washing of buildings, conducted without the use of detergents or other chemicals
- water from the routine washing of pavement conducted without the use of detergents or other chemicals, and where spills and leaks of toxic or hazardous materials have not occurred (unless all contaminated materials have been abated)
- air conditioner condensate, compressor condensate, and condensate that externally forms on steam lines
- water from foundation or footing drains where flows are not contaminated with pollutants (e.g. process materials, solvents, and other pollutants)
- springs and other uncontaminated and unchlorinated ground water
- discharges described in Part V of the permit that are subject to effluent guidelines and effluent limitations.
- pet waste and other sources of bacteria

#### **2.3.5.1 Measurable Goals**

The measurable goal for implementation of this BMP2 is to develop a draft ordinance in Year 1 of the permit period and finalize and implement the ordinance in Year 1 of the permit period.

### **2.3.5.2 Schedule**

Program	BMP	Activity	Date Due
2. IDDE	Ordinance for Illicit Discharge Detection and Elimination	1. Develop a draft ordinance	Year 1
		2. Finalize ordinance	Year 1
		3. Implement ordinance	Year 1 - 5

### **2.3.5.3 Responsible Persons**

The City Manager is responsible for development and implementation of the illicit discharge ordinance. The Fire Chief and Public Works Department shall investigate illicit discharges and shall take enforcement action as necessary.

### **3. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL**

#### **3.1 *Regulatory Requirement***

*40 CFR 122.43(b)(4) – Develop, implement and enforce a program to reduce pollutants in any storms water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Program must include: the development and implementation of (at a minimum) an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as: sanctions to ensure compliance, requirements for construction site operators to implement appropriated erosion and sediment control BMPs, requirements for construction site operators to control waste at the construction site, procedures for site plan review which incorporate consideration of potential water quality impacts, procedures for receipt and consideration of information submitted by the public.*

#### **3.2 *Current Programs***

The City of Southside Place requires all eligible construction sites to comply with the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit Number TXR 150000.

The City Drainage Criteria requires that storm water controls are included in all project inspections. A complete set of SWMP details is included in all plans and specifications as a minimum standard for use by a contractor. Noncompliance can be cause for the City to stop inspections and red-tag the development, thereby halting construction until the situation is remedied.

In the previous permit term, the City passed an ordinance to enforce erosion and sediment controls at construction sites.

#### **3.3 Selected BMPs for Construction Site Storm Water Runoff Control**

##### **3.3.1 *BMP #1 – General Permit and Construction Site SWPPP***

The City of Southside Place shall continue to require all contractors to apply to the TCEQ for a Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit Number TXR 150000 for any construction which shall disturb more than one (1) acre of land. As part of this permit, contractors must train their staff on erosion and sediment controls as well as post notices informing the public of the activities that may impact the quality of runoff.

The City shall continue to review plans to ensure that all construction in the City of Southside Place meets the following minimum standards.

- The site plan review procedures must incorporate consideration of potential water quality impacts.
- The permittee may not approve any plans unless the plans contain appropriate site specific control measures.

### 3.3.1.1 Measurable Goals

The measurable goal for implementation of this BMP is to continue to require the acquisition of the Construction General Permit Number TXR 150000 for construction activities that disturb areas in excess of one (1) acre. The second measurable goal is for the Advisory Committee to continue to complete construction plan review of SWPPP for all small and large construction operations.

### 3.3.1.2 Schedule

Program	BMP	Activity	Date Due
3. Construction Site Storm Water Runoff Control	Construction Site SWPPP	1. Continue requiring contractors to obtain a General Permit	Year 1 - 5
		2. Continue review of site control measures in construction plans	Year 1 - 5

### 3.3.1.3 Responsible Persons

The Building Official shall have the responsibility to enforce the TPDES Construction General Permit as applicable. The City Engineer shall oversee the construction plan reviews.

### 3.3.2 BMP #2 – Construction Site Inspections (Parts III.B.3.(b)(1)-(7))

The City of Southside Place regulates storm water discharge associated with construction activities. The City inspections of construction sites are completed by City staff trained as well as through contract with the City of West University Place to observe and evaluate any lack of compliance with NPDES and TPDES permits and City regulations.

**Any inconsistencies in staff training and procedures shall be corrected in this permit term. All changes must be included in the annual report. Changes to written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.**

### 3.3.2.1 Measurable Goals

The measurable goal for implementation of this BMP is to continue to monitor construction site activities and to update existing program as necessary to remove any procedural inconsistencies.

**3.3.2.2 Schedule**

Program	BMP	Activity	Date Due
1. Construction Site Storm Water Runoff Control	Construction Site Inspections	1. Continue monitoring construction activities	Year 1 - 5
		2. Update existing program as required	Year 1 - 5

**3.3.2.3 Responsible Persons**

The City Engineer is responsible for implementation of BMP #2 to meet Measurable Goal 3.3.2.1.

## **4. POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

### **4.1 *Regulatory Requirement***

*40 CFR 122.34(b)(5) – Develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects that are less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for your community. Use an ordinance or other regulatory mechanism to address post-construction runoff. Ensure adequate long-term operation and maintenance of BMPs.*

### **4.2 *Current Programs***

The Planning and Zoning Commission regulates development in the City. There are existing ordinances that address development in The City of Southside Place. The City has developed Storm Drainage Design Criteria that control construction and development of projects. The Public Works Department and Building Official conduct pre-development reviews and inspections of proposed development projects. Building Permits are issued by the Building Official which precludes construction without planning and oversight by the developer and/or contractor. Storm Water Drainage Design Requirements have been established defining criteria for on-site controls to prevent pollution from site runoff. Both structural and non-structural controls are evaluated for efficacy prior to project approval by the City.

### **4.3 *Selected BMPs for Post-Construction Storm Water Management in New Development and Redevelopment***

#### **4.3.1 *BMP #1 – Evaluate and Update Regulatory Authority and Procedures***

The City of Southside Place will evaluate the existing legal authority to enforce the requirements for erosion and sediment controls and proper waste management at construction sites, as well as the sanctions to ensure compliance with the requirements. If necessary, ordinances or other regulatory mechanisms will be updated to provide the formal authority.

The City of Southside Place shall implement the following steps to address storm water runoff from new development and redevelopment sites that discharge into the municipal separate storm sewer system that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development:

- Describe the program;
- Develop new or improve existing ordinances to regulate discharges from new development and redevelopment projects;
- Establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, and maintain a combination of

structural and non-structural BMPs appropriate for the community and that protects water quality;

- Document and maintain records of enforcement actions;
- Long-term operation and maintenance of post construction storm water control measures is addressed; and
- Operation and maintenance is documented.

**Any inconsistencies in the existing program shall be corrected in this permit term. All changes must be included in the annual report. Changes to written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.**

***4.3.1.1 Measurable Goals***

The measurable goal for implementation of BMP #1 is to evaluate existing legal authority in permit year 1. If necessary, the ordinance or other regulatory mechanism and procedures will be updated and adopted in the second permit year. Development and implementation will be according to the schedule below.

***4.3.1.2 Schedule***

Program	BMP	Activity	Date Due
4. Construction Site Storm Water Controls	Ordinance Requiring Erosion and Sediment Controls at Construction Sites	1. Evaluate existing legal authority and procedures	Year 1
		2. Update ordinance or other regulatory mechanisms and procedures and adopt them	Year 2 - 5

***4.3.1.3 Responsible Persons***

The City Manager has responsibility for implementation of BMP #1 to meet Measurable Goal 4.3.1.1.

## **5. POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

### **5.1 *Regulatory Requirement***

*40 CFR 122.34(b)(6) – Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.*

### **5.2 *Current Programs***

The City of Southside Place has several thousand linear feet of storm sewers and grass lined ditches. The Public Works Department handles runoff management, street drainage system maintenance and street maintenance. The Department also maintains the sanitary sewer system. These operations are housed at the City of Southside Place Public Works Department Facility, which also houses the maintenance activities for City equipment. The Department Facility includes one building and storage facilities. Most equipment maintenance activities take place inside buildings to prevent pollutants from entering storm sewers. Most of the outdoor area is paved in concrete or asphalt that prevents sediment from entering the storm water stream.

Employees are instructed to maintain the grounds, and the outdoor areas are cleaned of trash and debris as necessary. Employees involved in maintenance of the storm sewer system are trained to inspect facilities and to clean, maintain, and do small repairs of the system as necessary. If a major repair is necessary an outside contractor is hired. Employees are instructed to pick up and dispose of all debris and waste properly. All Public Works Department operations, which include storm sewer, street and bridge, water, and wastewater operations, require training of employees, which includes the containment of pollutants and prevention of pollutants from entering the environment and the storm sewer system. The Police and Fire Departments are trained in Spill Response and containment. The Building Official is trained to inspect for controls on housing and commercial construction, and enforces ordinances prohibiting migration of pollutants from construction sites.

### **5.3 *Selected BMPs for Pollution Prevention and Good Housekeeping for Municipal Operations***

#### **5.3.1 *BMP #1 – Municipal Operation and Maintenance Program (Parts III.B.5.(1)-(6))***

The City shall develop its Municipal Operation and Maintenance Program in order to streamline its efforts prevent and reduce pollutant runoff from municipal activities and municipally owned areas including but not limited to:

- Park and open space maintenance
- Street, road, or highway maintenance
- Building maintenance
- Storm water system maintenance
- Land disturbances
- Municipal parking lots

- Vehicle and equipment maintenance and storage yards, and
- Waste transfer stations

### ***5.3.1.1 Measurable Goals***

The City shall complete the following tasks over the course of the permit term as scheduled in the next section of this BMP:

**1. Inventory.** The City shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates as well as all applicable permit numbers, registration numbers, and authorizations for each facility or control. The inventory shall be available for review by TCEQ.

**2. Training and Education.** The City shall train appropriate employees involved in implementing pollution prevention and good housekeeping practices. The training records such as attendance list shall be kept on record for inspection by TCEQ when requested.

**3. Disposal of Waste Material.** Waste materials removed from City-owned facilities and storm water controls shall be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

**4. Contractor Requirements and Oversight.**

(a) Any contractors hired by the City to perform maintenance activities on the City property must be contractually required to comply with all of the storm water control measures and good housekeeping practices outlined here.

(b) The City shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures.

**5. Municipal Operation and Maintenance Activities.**

(a) The City shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in storm water.

(b) The City shall identify pollutants of concern that could be discharged from the O&M activities (metals, chlorides, hydrocarbons, sediment, trash, bacteria, etc.).

(c) The City shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in storm water from O&M activities.

(d) All pollution prevention measures shall be visually inspected regularly. **A log of inspections must be maintained and made available for review by the TCEQ upon request.**

**6. Structural Control Maintenance.** If BMPs include structural controls, maintenance of the controls must be performed as frequently as required to maintain their effectiveness.

**5.3.1.2 Schedule**

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Municipal Operation and Maintenance Program	1. Develop an inventory of facilities and storm water controls owned by the City	Year 1
		2. Maintain inventory	Year 1 - 5
		3. Develop Training and Education program	Year 2
		4. Utilize Training and Education program	Year 3 - 5
		5. Dispose of Waste Materials in accordance with 30 TAC Chapters 330 or 335, as applicable	Year 1 - 5
		6. Develop Contractor Requirements and Oversight (Part 4 of the Municipal Operations and Maintenance Program)	Year 2
		7. Any contractors hired by the City must be contractually required to comply with Contractor Requirements and Oversight developed in step 6 of this BMP	Year 3 - 5
		8. Provide contractor oversight	Year 3 - 5
		9. Develop an assessment of City-owned operations	Year 1
		10. Identify pollutants of concern for operations in Step 9 of this BMP	Year 1
		11. Develop pollution prevention measures for operations in Step 9 of this BMP	Year 2
		12. Implement pollution prevention measures from Step 11 of this BMP	Year 3 - 5
		13. Inspect pollution prevention measures from Step 11 of this BMP	Year 3 - 5

**5.3.1.3 Responsible Persons**

The City Manager, the City Engineer, and the Public Works Director are mutually responsible for implementation of BMP #1 to meet Measurable Goal 5.3.1.1.

**5.3.2 BMP 2 – Provide Spill Response Kits and Training**

The City shall continue to provide training in spill response procedures and spill response kits to the Public Works Department and at the City Fire Department. **The City shall keep a log of employees who attended the spill response procedures training.**

**5.3.2.1 Measurable Goals**

The measurable goal for implementation of BMP #2 is to continue to provide spill response kits and training for the duration of the permit term.

**5.3.2.2 Schedule**

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Provide Spill Response Kits and Training	1. Provide spill response kits	Year 1 - 5
		2. Provide spill response training	Year 1 - 5

**5.3.2.3 Responsible Persons**

The City Manager has responsibility for implementation of BMP #2 to meet Measurable Goal 5.3.2.1.

**5.3.2 BMP #3 – Hazardous Waste Collection**

The City shall collect hazardous waste material from municipal activities. This shall include collection and proper disposal of hazardous waste material at least once a year. Waste materials shall be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

**5.3.3.1 Measurable Goals**

The measurable goal for implementation of BMP #3 is to update the current hazardous waste collection program to be in accordance with the newly-developed Operation and Maintenance program designated for municipal operations in Southside Place.

**5.3.3.2 Schedule**

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Hazardous Waste Collection	1. Evaluate and revise program	Year 1
		2. Implement revisions	Year 2
		3. Hazardous Waste Collection	Year 1 - 5

**5.3.2.3 Responsible Persons**

The City Manager has responsibility for implementation of BMP #3 to meet Measurable Goal 5.3.3.1.

**5.3.4 BMP #4 – Operation and Maintenance of Storm Sewer System**

The City shall continue to operate and maintain the storm sewer system to minimize migration of pollutants into the system.

**5.3.4.1 Measurable Goals**

The measurable goal for implementation of BMP #4 is to continue to inspect storm sewer lines, manholes, drains, and gutters, and to repair, clean, or replace any parts of the system found to be deficient. Ensure that the waste from cleaning of storm sewers is disposed of properly.

**5.3.4.2 Schedule**

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Operation and Maintenance of Storm Sewer System	1. Evaluate storm sewer system and correct deficiencies when found	Year 1 - 5

**5.3.3.3 Responsible Persons**

The City Engineer has responsibility for implementation of BMP #4 to meet Measurable Goal 5.3.4.1.

**APPENDIX A**  
**SWMP SUMMARY**

**SWMP IMPLEMENTATION SUMMARY (PART 1)**

PROGRAM	BMP	ACTIVITY	DEPT./PERSON RESPONSIBLE	DUE DATE				
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<b>Public Education, Outreach and Involvement</b>	Clean Water Clear Choice Program	Participate in the Program	City Manager	x	x	x	x	x
		Utilize HCPID's multi-media outreach	City Manager	x	x	x	x	x
	Municipal Website	1. Consolidate all SWMP efforts under one link	City Manager		x			
		2. Provide means for the public to report possible violations via municipal website	City Manager		x			
		3. Utilize the website and update regularly	City Manager		x	x	x	x
	Storm Water Inlet Marking	1. Develop a plan of action	City Manager	X				
		2. Execute Phase I	City Manager		X			
		3. Execute Phase II	City Manager			X		
		4. Execute Phase III	City Manager				X	
		5. Execute Phase IV	City Manager					X

SWMP IMPLEMENTATION SUMMARY (PART 2)								
PROGRAM	BMP	ACTIVITY	DEPT./PERSON RESPONSIBLE	DUE DATE				
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<b>Illicit Discharge Detection and Elimination (IDDE)</b>	Review and Update MS4 Map	1. Review and update storm sewer system records	City Engineer	x	x	x	x	x
		2. Update the MS4 map with locations and names of all outfalls in the City of Spring Valley as well as bodies of water that receive discharge from those outfalls	City Engineer		x			
		3. Create a map, hard copy or digital		x				
	City Staff Education and Training	1. Review the training program and revise as necessary	City Engineer	x				
		2. All current field staff shall complete training	City Engineer	x				
		3. New staff shall complete training as part of the new-hire process	City Engineer	x	x	x	x	x
	Public Reports of Illicit Discharge and Spills	1. Designate members of Public Works as central contact persons for illicit discharge reports	City Manager	x				
		2. Monitor and respond to reports. Take appropriate action.	City Manager	x	x	x	x	x
	Tracing and Removing Sources of Illicit Discharge	1. Implement existing procedures for tracing and removing of storm water pollution sources	City Manager & City Engineer	x				
		2. Update existing measures as necessary	City Manager & City Engineer	x				
		3. Implement updated procedures for tracing and removing of storm water pollution sources	City Manager & City Engineer		x	x	x	x
	Illicit Discharge Detection and Elimination	1. Develop a draft ordinance	City Manager	x				
		2. Finalize Ordinance	City Manager	x				
		3. Implement Ordinance	City Manager	x	x	x	x	x

SWMP IMPLEMENTATION SUMMARY (PART 3)								
PROGRAM	BMP	ACTIVITY	DEPT./PERSON RESPONSIBLE	DUE DATE				
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Construction Site Storm Water Runoff Control	Construction Site SWPPP	1. Continue requiring contractors to obtain a General Permit	Building Official	x	x	x	x	x
		2. Continue review of site control measures in SWPPP	City Engineer	x	x	x	x	x
	Construction Site Inspection and Ordinance Enforcement	1. Continue monitoring construction activities in accordance with City Ordinance	City Engineer	x	x	x	x	x
		2. Update existing Ordinance as required	City Engineer	x	x	x	x	x

SWMP IMPLEMENTATION SUMMARY (PART 4)								
PROGRAM	BMP	ACTIVITY	DEPT./PERSON RESPONSIBLE	DUE DATE				
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Post-Construction Storm Water Management	Evaluate and Update Regulatory Authority and Procedures	Regulate quality of Post-Construction storm water runoff from new development and redevelopment	City Engineer	x	x	x	x	x

SWMP IMPLEMENTATION SUMMARY (PART 5)								
PROGRAM	BMP	ACTIVITY	DEPT./PERSON RESPONSIBLE	DUE DATE				
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Pollution Prevention and Good Housekeeping for Municipal Operations	Municipal Operation and Maintenance Program	1. Develop an inventory of facilities and storm water controls owned by the City	City Engineer, Public Works Director & City Manager	x				
		2. Maintain inventory	City Engineer, Public Works Director & City Manager	x	x	x	x	x
		3. Develop Training and Education program	City Engineer, Public Works Director & City Manager		x			
		4. Utilize Training and Education program	City Engineer, Public Works Director & City Manager			x	x	x
		5. Dispose of Waste Materials in accordance with 30 TAC Chapters 330 or 335, as applicable	City Engineer, Public Works Director & City Manager	x	x	x	x	x
		6. Develop Contractor Requirements and Oversight (Part 4 of the Municipal Operations and Maintenance Program)	City Engineer, Public Works Director & City Manager		x			
		7. Any contractors hired by the City must be contractually required to comply with Contractor Requirements and Oversight developed in step 6 of this BMP	City Engineer, Public Works Director & City Manager			x	x	x
		8. Provide contractor oversight	City Engineer, Public Works Director & City Manager			x	x	x
		9. Develop an assessment of City-owned operations	City Engineer, Public Works Director & City Manager	x				
		10. Identify pollutants of concern for operations in Step 9 of this BMP	City Engineer, Public Works Director & City Manager	x				
		11. Develop pollution prevention measures for operations in Step 9 of this BMP	City Engineer, Public Works Director & City Manager		x			
		12. Implement pollution prevention measures from Step 11 of this BMP	City Engineer, Public Works Director & City Manager			x	x	x
		13. Inspect pollution prevention measures from Step 11 of this BMP	City Engineer, Public Works Director & City Manager			x	x	x
	Spill Response Kits and Training	1. Provide Spill Response Kits	City Manager	x	x	x	x	x
		2. Provide Spill Response Training	City Manager	x	x	x	x	x
	Hazardous Waste Collection	1. Evaluate and update current hazardous waste collection policy	City Manager	x				
		2. Implement recommendations	City Manager		x			
		3. Collect hazardous waste	City Manager	x	x	x	x	x
	Operation and Maintenance of Storm Sewer System	Evaluate storm sewer system and correct deficiencies	City Engineer	x	x	x	x	x

# **APPENDIX B**

## **PERMIT**

## **APPENDIX C**

### **RECORD KEEPING**

- Record of Employee Training
- Training Program Revisions
- Ordinance Revisions
- Log of Inspection of Good Housekeeping Pollution Prevention Measures
- Log of Attendees of the Spill Response Procedures Training

**APPENDIX D**

**COPY OF ANNUAL REPORTS**