MS4 ANNUAL REPORT

THE CITY OF MUSCLE SHOALS

2019 - 2020

MAYOR: DAVID BRADFORD

COUNCIL MEMBERS:

KEN SOCKWELL

MIKE LOCKHART

ALLEN NOLES

CHRIS HALL

TERRY McMINN

CITY CLERK & TREASURER:

RICKY WILLIAMS

PREPARED BY:

Civil Group, LLC.

919 E Avalon Avenue – Suite - B

Muscle Shoals, Alabama 35661

(256) 320-5082

1 Chapter 1 Introduction

The information provided is intended to provide a general outline of activities within the City of Muscle Shoals that are intended to serve the purpose of meeting the requirements of the City's MS4 permit.

2 Chapter 2 (Reserved)

3 Chapter 3 City of Muscle Shoals Program Components

This chapter provides guidance to staff and others to meet the requirements of the ADEM general permit for stormwater discharges from the MS4.

The Five Program Minimum Control Measures (MCM) are:

a. Public Education and Public Involvement on Stormwater Impacts (MCM 1)
b. Illicit Discharge Detection and Elimination (MCM 2)
c. Construction Site Runoff Control (MCM 3)
d. Post Construction Stormwater Management (MCM 4)
e. Pollution Prevention/Good Housekeeping for Municipal Operations (MCM 5)

3.1 MCM 1 - Public Education and Public Involvement on Stormwater Impacts

3.1.1 Permit Requirement

The City must develop and implement a public education and outreach program to inform the community about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff to the MEP. The City shall continuously implement this program in the areas served by the MS4. The permittee shall also comply, at a minimum, with applicable state and local public notice requirements when implementing a public involvement/participation program.

3.1.2 Strategies, Goals and Timeline

The City employs a variety of strategies for MCM 1 including distributing education materials to the community and conducting outreach activities. These efforts will educate the public as to the impacts of discharges on water bodies and the steps that each person can take to reduce pollution in the stormwater runoff.

The effort will be continuous through the permit period. Educational material will be mailed to each home and business up to two times per year. The City's website will include annual reports, and this plan. The website will also include a citizen action button that can be used by the public to report stormwater related issues. These activities will represent efforts (BMPs) that are effective in reducing the impacts of pollutants on stormwater runoff. Each involvement and outreach strategy will be detailed below along with its goal, timeline, and department responsible for implementation of the measure.

3.1.2.1 Create a Citizen based Environmental Advisory Committee

3.1.2.1.1 Current Program

This element of MCM 1 will establish a citizen based environmental advisory committee (EAC). This committee will be used to gain input from the citizens of the City regarding stormwater issues.

3.1.2.1.2 Potential Target Audience

General public, Homeowners, Businesses

3.1.2.1.3 Measurable Goal

In year one (1) of the permit cycle the City will seek interested citizens and form the EAC.

3.1.2.1.4 Progress toward Goal

The City continues to use the planning commission to serve as the EAC. The planning commission is composed of members from the general public and they also interact with developers and contractors.

3.1.2.2 Mail Out Fliers

3.1.2.2.1 Current Program

This element of MCM 1 will continue an existing program in which the City provides a direct mail out to all homeowners and businesses within the City. The mailer discusses the stormwater requirements for the City and provides steps the general public can use to assist with removing pollutants from stormwater runoff.

3.1.2.2.2 Potential Target Audience

General public, Homeowners, Businesses, Landscapers

3.1.2.2.3 Measurable Goal

The mailer will be sent out in all years of the permit cycle.

3.1.2.2.4 Progress toward Goal

The City did an annual mailer to all businesses and residents. The mailer included information regarding stormwater runoff (see appendix).

3.1.2.3 Run Off Reduction Permeable Pavement

3.1.2.3.1 Current Program

This element of MCM 1 will continue to encourage low impact development within the City. The ordinance to allow and encourage this work was approved in the previous permit cycle.

3.1.2.3.2 Potential Target Audience

Developers, Contractors

3.1.2.3.3 Measurable Goal

This requirement is continuous by ordinance.

3.1.2.3.4 Progress toward Goal

The city maintains an ordinance that encourages low impact design considerations.

3.1.2.4 Environmental Web Page

3.1.2.4.1 Current Program

This element of MCM 1will make data readily available to the citizens of the City. The City's website will be expanded to incorporate an environmental page which will include a link to the City's SWMP Plan, MS4 Annual Report, and other stormwater related topics, as well as providing a citizen action button that can be used by citizens to report any issues.

3.1.2.4.2 Potential Target Audience

General public

3.1.2.4.3 Measurable Goal

In year one (1) of the permit cycle the City will expand the website to include an environmental page.

In year two (2) of the permit cycle the City will expand the environmental page to include stormwater related topics, information about the stormwater management program in general, and information about how readers can reduce stormwater impacts and links to other related websites.

In years three (3) through five (5) the website will be maintained and updated as needed to remain in compliance with the general permit.

3.1.2.4.4 Progress toward Goal

The City's website includes stormwater related topics and information about the stormwater management program. The website can be viewed at the address below:

http://www.cityofmuscleshoals.com/Default.asp?ID=371&pg=Stormwater+Management

3.1.2.5 Art Contest

3.1.2.5.1 Current Program

This element of MCM 1 will provide for an art contest at Elementary Schools relating to the environment.

3.1.2.5.2 Potential Target Audience

Elementary Age School Children

3.1.2.5.3 Measurable Goal

This contest will be held once per year in each year of the permit.

3.1.2.5.4 Progress toward Goal

This was not done this year due to the COVID 19 issues. The city plans to continue this in future years.

3.1.2.6 Maintain Existing "Shoaly" Signs

3.1.2.6.1 Current Program

This element of MCM 1 will maintain the "Shoaly" no littering signs that were installed in under the requirements of the previous SWMPP.

3.1.2.6.2 Potential Target Audience

General public, Homeowners, Businesses, Landscapers

3.1.2.6.3 Measurable Goal

The City will continuously maintain the existing signs and replace or add signs as needed during the duration of the permit.

3.1.2.6.4 Progress toward Goal

The City continues to maintain the 15 existing "Shoaly Says Don't Litter" signs. This year 6 signs were replaced that were faded.

3.2 MCM 2 - Illicit Discharge Detection and Elimination (IDDE) Program

3.2.1 Permit Requirements

The permittee shall implement an ongoing program to detect and eliminate illicit discharges into the MS4, to the maximum extent practicable.

3.2.2 Strategies, Goals, and Timelines

The City employs a variety of strategies for MCM 2 including ordinances, system maps, and dry weather inspections. These activities will represent efforts (BMPs) that are effective in reducing the impacts of pollutants on stormwater runoff from illicit discharges.

3.2.2.1 Prepare and Maintain a Outfall Map

3.2.2.1.1 Current Program

This element of MCM 2 will establish an outfall map showing at a minimum the latitude/longitude of all known outfalls larger than 36" diameter, names of waters of the state that receive the outfalls, and structural BMP's owned, operated, or maintained by the City.

3.2.2.1.2 Measurable Goal

In year one (1) of the permit cycle the City will prepare a map as described. In years two (2) through year five (5) the map will be updated as required to continue to meet the permit requirements.

3.2.2.1.3 Progress toward Goal

The City continues to maintain and revise, as needed, an outfall map that shows current city public and private outfall/retention ponds (see appendix).

3.2.2.2 Maintain Illicit Discharge Ordinance

3.2.2.2.1 Current Program

This element of MCM 2 will maintain a City ordinance that will prohibit non-stormwater discharges to the MS4. The ordinance shall be reviewed annually an updated as necessary to continue to meet the permit requirements.

3.2.2.2.2 Measurable Goal

In year one (1) through year five (5) of the permit the ordinance will be reviewed and modified as necessary to continue to meet the goals of the permit.

3.2.2.2.3 Progress toward Goal

The City maintains an illicit discharge ordinance.

3.2.2.3 Perform Dry Weather Screenings

3.2.2.3.1 Current Program

This element of MCM 2 will establish a dry weather screening program designed to detect and address at a minimum fifteen percent (15%) of the outfalls once per year with all (100%) screened at least once per five years.

3.2.2.3.2 Measurable Goal

In year one (1) through year five (5) the City will inspect 25% of outfalls each year. Inspection logs and results will be included in the annual report each year.

3.2.2.3.3 Progress toward Goal

The City conducted dry weather inspections on the City's retention ponds during the months of April through October (see letter in appendix).

3.2.2.4 Prepare Procedure for Tracing the Source, Reporting of Illicit Discharges

3.2.2.4.1 Current Program

This element of MCM 2 will establish a procedure for tracing the source and reporting of an illicit discharge if discharge is found during dry weather screening.

3.2.2.4.2 Measurable Goal

In year one (1) of the permit cycle the City will prepare a procedure as described above. In years two (2) through five (5) the procedure will be used if any illicit discharges are found during dry weather screening. If illicit discharges are found, they will be documented in the annual report.

3.2.2.4.3 Progress toward Goal

The City has prepared a procedure for city personnel to follow in order to trace sources of illicit discharges as needed.

3.3 MCM 3 Construction Site Storm Water Runoff Control

3.3.1 Permit Requirements

The permittee must develop/revise, implement and enforce an ongoing program to reduce, to the MEP, the pollutants in any stormwater runoff to the MS4 from qualifying construction sites.

3.3.2 Strategies, Goals, and Timelines

The City employs a variety of strategies for MCM 3 including ordinances, subdivision regulations, plan review, and permitting. These activities will represent efforts (BMPs) that are effective in reducing the impacts of pollutants on stormwater runoff from construction sites.

3.3.2.1 Construction Site Plan Review and Permitting

3.3.2.1.1 Current Program

This element of MCM 3 includes the continued review of site plans for proposed construction projects within the City. The plans are reviewed by the City Building Official, and the City Engineer (when needed for larger projects).

The city will review pre-construction grade plans and will require proper BMP. Site operators are required to obtain an NPDES Permit for one acre and larger sites. These permits are provided to the city's review agency. The city will follow up with a site grade permit. The site will be monitored by city personal. Sites will be reported to the operator if they are in violation with discarded materials, chemicals, litter, sanitary waste, concrete wash out, erosion and or sediment buildup.

Any information from the public is encouraged and will be considered by the building department as to any enforcement issues. The city will inspect these sites monthly at a minimum. Violations will be reported to the operator with instructions as to clean up. Non-attention to these notices will result in enforcement procedures as outline and in existing ordinances. Priority for site inspection will be related to sites which have a prior history of violation and/or which threaten the environment most. The construction site control program is regulated by the city building department. Success for this minimum control measure will be determined by the number of violations recorded each year.

3.3.2.1.2 Measurable Goals

In year one (1) through year five (5) the City will review, permit, and inspect all site plans each year to ensure that a BMP plan is included for sites disturbing more than 1 acre. Inspections will be conducted monthly at a minimum.

In year one (1) through year five (5) the City will ensure that staff performing inspections are trained and certified as QCI's.

3.3.2.1.3 Progress toward Goal

The City does permits for disturbances greater than 1 acre. The city has inspected the sites in conjunction with the required building inspections. Copies of inspections are retained at the building department at City Hall. The City requires inspection staff to receive annual QCI training. A sample copy of the inspection reports and training certificates are included in the appendix. All inspection reports are retained on file.

3.3.2.2 Notification of Non-Compliant Sites

3.3.2.2.1 Current Program

This element of MCM 3 includes the requirement that the City notify ADEM of any construction projects or industrial facilities subject to ADEM regulations and permits who have not filed and received permit coverage.

3.3.2.2.2 Procedure

The City will provide the following documentation to ADEM within 30 days of the discovery of a non-compliant site.

a. Construction site location
b. Name of owner / operator
c. Estimated project size or type of industrial activity including the SIC code if known
d. Record of communication with the owner / operator regarding the violation, including inspection, warning, and any responses

Enforcement will be tracked in files. The following will be included:

a. Name of Owner / Operator
b. Location of site
c. Description of violation
d. Required compliance schedule
e. Description of enforcement response including escalated response and repeat violations
f. Enforcement documentation
g. Referrals to different departments of agencies

3.3.2.2.3 Progress toward Goal

The City had no noncompliant sites during the last year.

3.4 MCM 4 – Post-Construction Stormwater Management in New Development and Redevelopment

3.4.1 Permit Requirements

The permittee shall implement post construction stormwater management including structural and non-structural controls including low impact development and green

infrastructure practices to obtain permanent stormwater management over the life of the property's use.

3.4.2 Strategies, Goals, and Timelines

The City employs a variety of strategies for MCM 4 including ordinances, bonding, and written agreements. These activities will represent efforts (BMPs) that are effective in reducing the long-term impacts of pollutants on stormwater runoff from post construction sites.

3.4.2.1 Post Construction Storm Water Agreements

3.4.2.1.1 Current Program

This element of MCM 4 includes the requirement for developer agreements for long term maintenance of stormwater facilities.

3.4.2.1.2 Measurable Goals

In year one (1) through year five (5) the City will require all sites that contain structural BMPs to enter into an agreement for the maintenance of the facility.

3.4.2.1.3 Progress toward Goal

The City requires post construction stormwater agreements for privately maintained stormwater detention facilities. Three agreements were obtained during this permit year and they are on file.

3.4.2.2 Post Construction Storm Water Inspections

3.4.2.2.1 Current Program

This element of MCM 4 includes the requirement for owner / operator of a facility to provide annual inspections of the facilities.

3.4.2.2.2 Measurable Goals

In year one (1) the City will maintain an inventory of the newly developed or redeveloped sites within the MS4 that have structural BMPs. In year two (2) through year five (5) the City will require all sites that contain structural BMPs be inspected either by City personnel or by the facility owner.

3.4.2.2.3 Progress toward Goal

The City has completed an inventory of privately owned stormwater facilities.

3.5 MCM 5 – Pollution Prevention / Good Housekeeping for Municipal Operations

3.5.1 Permit Requirements

The permittee shall implement Pollution Prevention / Good Housekeeping for Municipal Operations Strategies for City projects and facilities.

3.5.2 Strategies, Goals, and Timelines

The City employs a variety of strategies for MCM 5 including in house training, printed material review, documentation of training sessions, schools and courses taken. The program will address maintenance activities, maintenance schedules and inspection procedures. The program will address controls for reducing pollutants such as floatables and other pollutants from roadways, parking lots, maintenance yards, recycling centers, and mineral storage areas.

3.5.2.1 Leaf Collection and Street Sweeping

3.5.2.1.1 Current Program

This element of MCM 5 includes the requirement for the City to collect leaves from and sweep streets within the MS4. The City currently operates one street sweeper and two leaf collection vehicles within the City.

3.5.2.1.2 Measurable Goals

In year one (1) through year five (5) the City will continue its current street sweeping and leaf collection program. The City will measure the number of truckloads of leaves and the number of miles of streets swept during each year and report that information in the annual report.

3.5.2.1.3 Progress toward Goal

During the last year, the city has collected 32 tons of leaves and debris from retention ponds and over 900 56-gallon bags of trash from inlets and drains. During that same time the city provided over 70 hours of street sweeping.

3.5.2.2 In House Training

3.5.2.2.1 Current Program

This element of MCM 5 includes training of City personnel regarding effective measures to prevent litter and pollution from City operations. The training will be administered a minimum of once per year to the City's street department and park and recreation personnel.

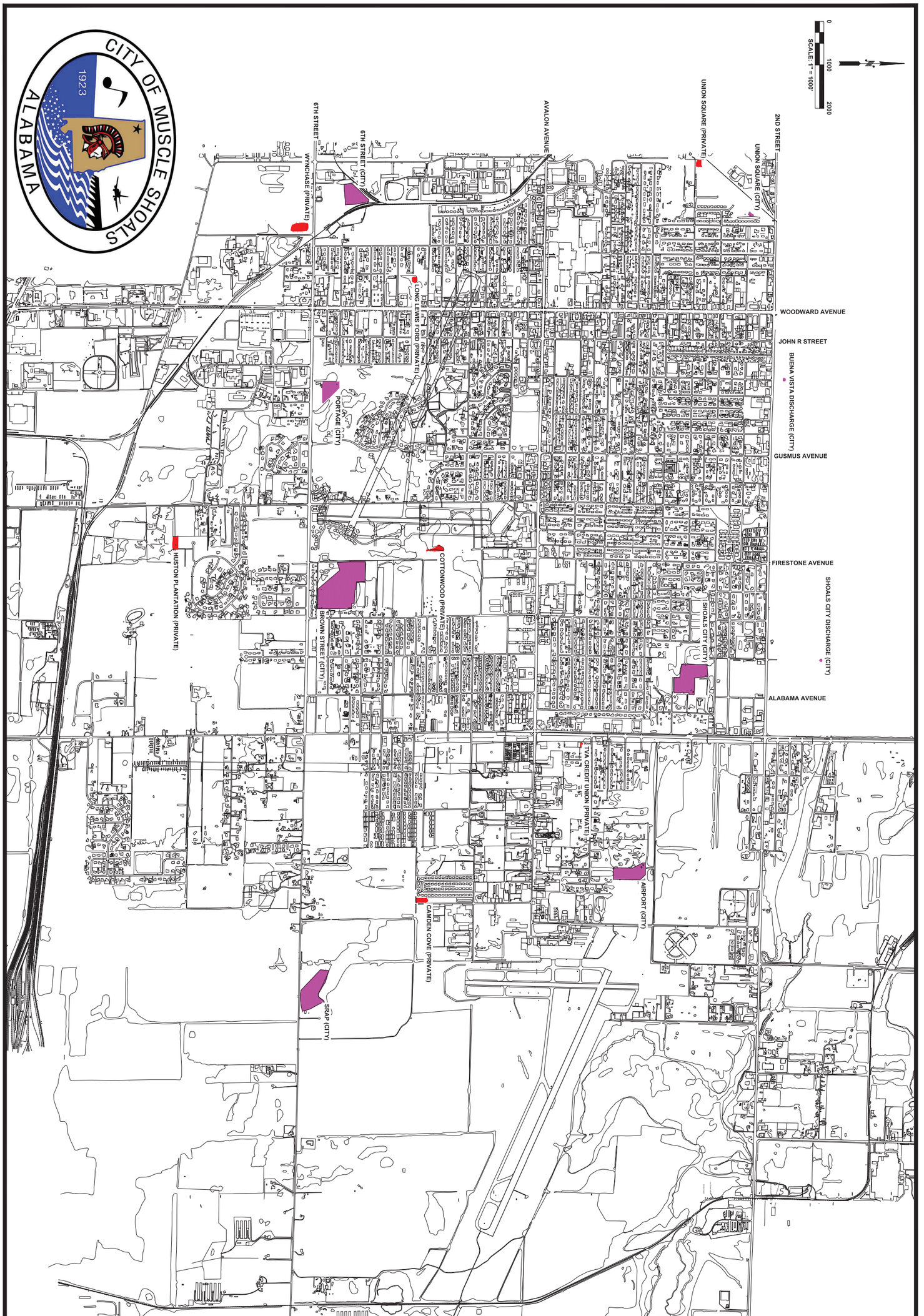
3.5.2.2.2 Measurable Goals

In year one (1) through year five (5) the City will train the staff listed above regarding litter and pollution controls.

3.5.2.2.3 Progress toward Goal

The public works department maintains an erosion control plan and policy for public works projects and a policy regarding spills on roadways (see appendix).

City Outfall Map



PLOTTED: Jan/26/2018 - 3:12pm, City Paving Map
DRAWN BY: JCS
CHECKED BY: BNW
DWG FILE: Muscle Shoals Outfall Map.dwg
JOB NO:
DATE: 1/25/2018
HORZ 1"= 1000'
VERT 1"= N/A

SHEET 1 OF 1

REVISIONS:

ELECTRONIC FILE DISCLAIMER: The official drawings are those that are signed, sealed and dated by the Professional Engineer/Surveyor. Information transferred electronically to clients is not necessarily a true representation of the official document. Civil Group, LLC is not responsible for information on these plans in electronic form, provided verbally by others, written by others or interpreted by others.

MUSCLE SHOALS CITY OUTFALL MAP
COLBERT COUNTY, AL

civil group
engineering • surveying
919 EAST AVALON AVE., SUITE B
MUSCLE SHOALS, ALABAMA 35661
P 256.320.5082 ● F 256.320.5082

Information and Letters from City Departments

ADEM
Alabama Department of Environmental Management

QCI Training Program

thompson ENGINEERING

Certificate of Completion

is hereby granted to:

Milton David Osborn

City of Muscle Shoals

for satisfactory completion of
Online Refresher
Training

QCI No. T3288
Expires 6/26/2020

This certificate confers four (4.0) professional development hour (PDH) equivalents to students who require credits for licenses or certifications. Such PDHs are subject to the qualifying requirements of the licensing or certifying organization.

ADEM
Alabama Department of Environmental Management

QCI Training Program

thompson

Certificate of Completion

is hereby granted to:

Michael T. Crosswhite

City of Muscle Shoals

for satisfactory completion of
Online Refresher
Training

QCI No. T0314
Expires 3/2/2021

This certificate confers four (4.0) professional development hour (PDH) equivalents to students who require credits for licenses or certifications. Such PDHs are subject to the qualifying requirements of the licensing or certifying organization.

QCI Training Program

Certificate of Completion

is hereby granted to:

William Looser

City of Muscle Shoals

for satisfactory completion of 8 instructional hours

ADEM
Alabama Department of Environmental Management

Initial Training Class

August 1, 2019

thompson
ENGINEERING

Instructor Name
John Carlton

QCI NO: T6207
EXPIRES: 08/01/2020

This certificate confers eight (8.0) professional development hours (PDHs) to students who require credits for licenses or certifications. Such PDHs are subject to the qualifying requirements of the licensing or certifying organization.

CITY OF MUSCLE SHOALS

POST OFFICE BOX 2624 • MUSCLE SHOALS, ALABAMA 35662

256.383.5675 • Fax 256.386.9201

www.cityofmuscleshoals.com

DAVID H. BRADFORD
Mayor

RICKY WILLIAMS
City Clerk/Treasurer

Mayor David Bradford
City Of Muscle Shoals
PO Box 2624
Muscle Shoals Al

May 5 2020

Dear Mayor Bradford
This letter is in regard to trash picked up around catch basins and storm drains in the City Of Muscle Shoals. As of 4-17-2020 approximately 930, 56 gallons bags were picked up. Also on a yearly basis the Buena Vista Retention Pond is cleaned out and approximately 32 tons of trash debris and silt were removed and hauled to landfill. All of this Trash would have made its way to the Tennessee River via the pumps if not picked up.

Sincerely
Ken Gresham KG
Maintenance Supervisor

CITY OF MUSCLE SHOALS

POST OFFICE BOX 2624 • MUSCLE SHOALS, ALABAMA 35662

256.383.5675 • Fax 256.386.9201

www.cityofmuscleshoals.com

DAVID H. BRADFORD
Mayor

RICKY WILLIAMS
City Clerk/Treasurer

Mayor David Bradford
City Of Muscle Shoals
PO Box 2624
Muscle Shoals Al

May 5 2020

Dear Mayor Bradford
During the Months of April-Oct 2019, dry weather inspections of all of the City's Retention Ponds .During these walkthroughs, there were no illicit discharges found.

Sincerely
Ken Gresham KG
Maintenance Supervisor

SAMPLE REPORT

STORMWATER CONSTRUCTION SITE INSPECTION REPORT

GENERAL INFORMATION

Project Name:	Stoneridge
Location:	Stoneridge
Date of Inspection:	10-22-2019
Start/End Time:	11.00 AM 1:PM
Inspector's Name:	William Looser
Inspector's Title:	code Enforcement
Inspector's Contact Information:	
Describe present phase of construction:	Subdivision complete, construting homes

Type of Inspection:
☑ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

WEATHER INFORMATION

Has there been a storm event since the last inspection? ☐Yes ☐No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☑Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature:

Have any discharges occurred since the last inspection? ☐Yes ☐No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☐No
If yes, describe:

CERTIFICATION STATEMENT

"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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

William Looser	William Looser	OCT 22nd 2019
Signature of Inspector	*Printed Name and Title*	*Date*

SAMPLE REPORT

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1. All inactive slopes and disturbed areas have been stabilized.	☑Yes ☐No	☐Yes ☑No	
2. Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☑Yes ☐No	☐Yes ☑No	
3. Are all sanitary waste recepticles placed in secondary containment and free of leaks?	☑Yes ☐No	☐Yes ☑No	
4. Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☑Yes ☐No	☐Yes ☑No	
5. Are discharge points and receiving waters free of any sediment deposits?	☑Yes ☐No	☐Yes ☑No	
6. Are storm drain inlets properly protected?	☑Yes ☐No	☐Yes ☑No	
7. Is the construction exit preventing sediment from being tracked into the street?	☑Yes ☐No	☐Yes ☑No	
8. Is trash/litter from work areas collected and placed in covered dumpsters?	☑Yes ☐No	☐Yes ☑No	
9. Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☑Yes ☐No	☐Yes ☑No	
10. Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☑Yes ☐No	☐Yes ☑No	
11. Are materials that are potential stormwater contaminants stored inside or under cover?	☑Yes ☐No	☐Yes ☑No	
12. Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☑Yes ☐No	☐Yes ☑No	
13. (Other)	☐Yes ☐No	☐Yes ☑No	

TRACING ILLICIT DISCHARGES

1. Preparation
    i. Review/consider information collected when illicit discharge was initially identified and documented.
    ii. Obtain storm drain mapping for the area of the reported illicit discharge.
    iii. Gather all necessary equipment including tape measure, clear container, clipboard with necessary forms, flashlight, and camera.

2. Process
    i. Follow the Illicit Discharge.
    ii. If the source is located make a note of the source.
    iii. If the source cannot be found, continue to monitor, and inspect until source is located.

3. Notification
    i. If source is potential issue, then notify the City Engineer.

4. Documentation
    i. Document a written report and retain for records.