

STORMWATER MANAGEMENT PROGRAM PLAN FOR
THE CITY OF MUSCLE SHOALS
2016 - 2021

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1 Chapter 1 – Introduction

1.1 Program Overview

This document presents the City of Muscle Shoals' Stormwater Management Program as required by the Alabama Department of Environmental Management's (ADEM) National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) Permit. This permit covers stormwater discharges from regulated small municipalities. The overall goal of the program is to protect water quality by an effort to reduce to the maximum extent practicable (MEP) the discharge of pollutants in stormwater.

1.2 Regulatory Background

In 1990 the Environmental Protection Agency (EPA) passed regulations establishing phase I of the NPDES stormwater program. The phase I program for MS4s requires operators of "medium" and "large" MS4s that generally serve populations of 100,000 or greater to implement a stormwater management program as a means to control polluted discharges from certain municipal, industrial, and construction activities into the MS4.

In 1999, EPA passed regulations establishing phase II of the NPDES stormwater program

1.3 Regulated Area

The phase II MS4 General Permit applies to operators of regulated small MS4s that discharge stormwater to waters of the state. The City of Muscle Shoals is located in northwest Alabama adjacent to the Tennessee River.

The City of Muscle Shoals (City) has distinct drainage characteristics that make it generally different than many other areas in the state. The topography of the City is a karst topography. The City has some areas that drain to existing streams, some that drain to retention ponds and are pumped to surface streams, and some that drain to retention ponds that discharge to the subsurface. The City operates a system of regional retention facilities within the City in these sink areas. Generally these regional retention facilities are sink areas that naturally collect stormwater from the surrounding drainage area that have been improved or enlarged by over excavating the existing sink area. Recently Alabama Department of Environmental Management (ADEM) groundwater branch personnel have visited our area and have indicated that they believe that some of our retention facilities would qualify as class V underground injection control (UIC) wells that should be permitted as such by ADEM. The proposed UIC permit is currently being prepared and the UIC wells are not currently permitted.

In general the requirements of the MS4 permit will not apply to the areas covered by the UIC permit since they are not discharged to a water of the state. However, it is the intention of the City that this document and the City's current ordinances will be applied in both areas. Currently the City operates eight (8) regional detention facilities that collect stormwater from approximately 80% of the commercial and industrial areas within

the City. The remaining areas of the City are generally residential and generally drain into the Wilson Lake Reservoir on the Tennessee River, or Pond Creek.

1.4 Water Quality Issues

The primary receiving water for the stormwater from the City's retention ponds that have pumping stations is an Unnamed Tributary to Pond Creek that is located on the Tennessee Valley Authority Reservation. Pond Creek is listed as an Agricultural & Industrial by ADEM for its water use classification. The water use classification is the most beneficial use that the water of the stream will support. Discharge Compliance with Water Quality Standards

The general permit requires, at a minimum, that the permittees develop, implement and enforce a SWMP designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Full implementation of BMPs, using all known, available, and reasonable methods of prevention, control and treatment to prevent and control stormwater pollution from entering waters of the State of Alabama is considered an acceptable effort to reduce pollutants from the municipal storm drain system to the MEP.

1.4.1 Discharge to Impaired Waters

According to ADEM's 303(d) list dated 2016; one stream that is located within the City of Muscle Shoals is designated as impaired. Pond Creek drains the most heavily industrialized areas around Muscle Shoals. Pond Creek is listed on ADEM's 303(d) list as being impaired by Organic enrichment (CBOD, NBOD), Metals (Arsenic, Cyanide, and Mercury) and priority is low. Currently there are no TMDL's for Pond Creek and the pollution source is listed as "Non-irrigated crop production, Urban runoff/storm sewers, and Natural.

1.5 Subdivision Regulations and Ordinances

Muscle Shoals has the following ordinances and regulations currently in place in order to meet the requirements of the permit.

1.5.1 Zoning Ordinance

Components of the Zoning Ordinance include the following;

- a. Classification and establishment of districts;
- b. Uses permitted in districts;
- c. Enforcement;
- d. District regulations;
- e. Off street parking and loading provisions;
- f. Variances and appeals;

1.5.2 Subdivision Regulations

Components of the Subdivision Regulations include the following;

- a. Authority and jurisdiction;
- b. Jurisdiction;

- c. Purpose;
- d. Enforcement, violations, and penalties;
- e. Effect of approvals;
- f. Bond requirements;
- g. Design Principles;
- h. General requirements for streets and right of ways;
- i. Minimum design standards for streets;

1.5.3 Drainage Manual

Components of the Subdivision Regulations include the following;

- a. Policy;
- b. Purpose;
- c. Applicability;
- d. Definitions;
- e. Design criteria;
- f. Development within FEMA flood plains;
- g. Site grading considerations;
- h. Erosion control;
- i. Computation methods;
- j. Stormwater detention/retention and maintenance;
- k. Permanent maintenance agreements;
- l. Facility access easements;

1.5.4 Stormwater Pollution Prevention Ordinance

Components of the Subdivision Regulations include the following;

- a. Defines a site as any disturbance of more than one acre;
- b. Design requirements including requirement for BMP's;
- c. Establishes a city permit requirement for grading;
- d. Establishes a prohibition on illicit discharges;
- e. Suspension of MS4 access;
- f. Requirement to prevent, control, and reduce stormwater pollutants by the use of best management practices;
- g. Enforcement;
- h. Erosion and sediment control;

2 Chapter 2 – SWMP Administration

2.1 SWMP Plan Implementation Responsibilities

The building department is responsible for the overall management of the SWMP. However, additional departments are involved and provide necessary activities associated with the permit's Minimum Control Measures (MCM).

2.1.1 City of Muscle Shoals City Council

The Council is the legislative body for the City and is responsible for the promulgation of resolutions, ordinances, and the budget related to the implementation of the SWMP.

2.1.2 Mayor's Office

The Mayor is the executive for the City and is responsible for overall oversight of the program, and for maintaining communication between Council and each department.

2.1.3 Building Department

The building department will lead the day to day activities and administration of the program, with substantial assistance and input from other departments as depicted in this plan.

2.1.4 Public Works Department

Public works department will have a role in several of the MCM, including public education, and illicit discharge detection and elimination. They will also be involved in the good housekeeping issues in the City.

2.2 Coordination between Local MS4s

The City of Muscle Shoals shares sections of its watersheds with other cities and the County. The City does not rely on any of these for compliance with our general permit. Therefore there is no need for any intra-jurisdictional agreements. However, the City does anticipate sharing some of its efforts in implementing various MCM of the permit such as Educational Outreach and Public Participation. This coordination will be on a voluntary basis only and allow for cost effective implementation of certain program MCMs.

2.3 SWMP Revisions and Updates

As a part of the annual review of the SWMP, in conjunction with the preparation of the annual report, all revisions and updates that are required by ADEM or necessary to maintain permit compliance will be submitted to the Department for review. Upon approval of the revisions and updates, the modified SWMP Plan will become effective.

3 Chapter 3 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, Home owners, Businesses

3.1.2.1.3 Measureable Goal

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

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, Home owners, Businesses, Landscapers

3.1.2.2.3 Measureable Goal

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

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 Measureable Goal

This requirement is continuous by ordinance.

3.1.2.4 Environmental Web Page

3.1.2.4.1 Current Program

This element of MCM 1 will 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 Measureable 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.

3.1.2.5 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 Measureable Goal

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

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, Home owners, Businesses, Landscapers

3.1.2.6.3 Measureable Goal

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

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 Measureable 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.

3.2.2.2 *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 and updated as necessary to continue to meet the permit requirements.

3.2.2.2.2 *Measureable 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.

3.2.2.3 *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 *Measureable 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.

3.2.2.4 *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 *Measureable 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.

3.2.2.5 *Procedure for Eliminating Illicit Discharges*

3.2.2.5.1 *Current Program*

This element of MCM 2 describes the procedure for eliminating illicit discharges if discovered.

3.2.2.5.2 *Procedure*

Illicit discharges are defined by City ordinance. The City ordinance covers the enforcement actions available to the City if a illicit discharge is found. The City ordinance is attached with this SWMPP.

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 (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 I 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 Measureable 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 properly trained and certified as QCI's.

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 provided 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

3.4 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 Measureable 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.

3.4.2.2 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 Measureable 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.

3.5 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 Measureable 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 truck loads of

leaves and the number of miles of streets swept during each year and report that information in the annual report.

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 Measureable Goals

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

4 Underground Injection Control (UIC) Well Stormwater Components

4.1 Description of System

The topography of the City of Muscle Shoals (City) is a karst topography. The land is has many existing sink areas where there is no connection to surface water streams or discharges. The City operates a system of regional retention facilities within the City in these sink areas. Generally these facilities are sink areas that naturally collect stormwater from the surrounding drainage area that have been improved or enlarged by over excavating the existing sink area. Some of these facilities are pumped to surface water discharge points while others are emptied by natural infiltration through the bottom of the ponds. These UICs are used to manage stormwater runoff from City property and private property (public roads and facilities, residential areas, etc.). Stormwater collected in UICs is injected (percolated) into the ground, where it disperses into the subsurface.

4.2 Description of BMPs for UICs

The five general BMP categories described below encompass a comprehensive range of actions that together will help ensure that UICs are constructed, operated and maintained in a manner that meets ADEM permit requirements and protects groundwater for use as drinking water. The BMPs listed below are in addition to the BMPs discussed above that are generally required for the MS4 permit. Many of the BMPs already discussed for the MS4 surface water discharges are also beneficial to the UIC discharges such as street sweeping, leaf collection, construction BMPs, etc.

4.2.1 System Inventory and Assessment

This BMP focuses on tracking, updating, and refining information related to the location and physical characteristics of existing and new public UICs. This task will be ongoing during year 1 (one) of the permit. Generally this BMP will do the following:

- a) Develop and implement a UIC list and maps.
- b) Evaluate UICs relative to factors that could present a risk to groundwater quality.

4.2.2 Pollution Control

This BMP focuses on reducing pollutant discharges from activities and practices, such as spills, illegal disposal, improper site management, and erosion that can increase the discharge of pollutants to UICs. It applies to activities both on public and private sites that may impact discharges to public UICs. Generally the BMP will do the following:

- a) Implement a Spill Prevention and Pollution Control (SPPC) Plan.

4.2.2.1 Spill Prevention and Pollution Control Plan

The City will prepare an SPPC Plan for UICs to be available for use by City employees should a spill ever occur that would affect a UIC facility. The plan will be prepared and submitted to ADEM for review in year one (1) of the permit.

4.2.3 Education and Training

This BMP will be conducted along with the education and training required by the MS4 permit. The education and training will be focused on the general public as well as City employees. The UIC training will include additional training to raise and promote awareness of groundwater protection.

4.3 UIC System Monitoring

The System Monitoring plan involves ongoing stormwater discharge monitoring activities that will be conducted to demonstrate that UICs are operated in a manner that protects groundwater quality.

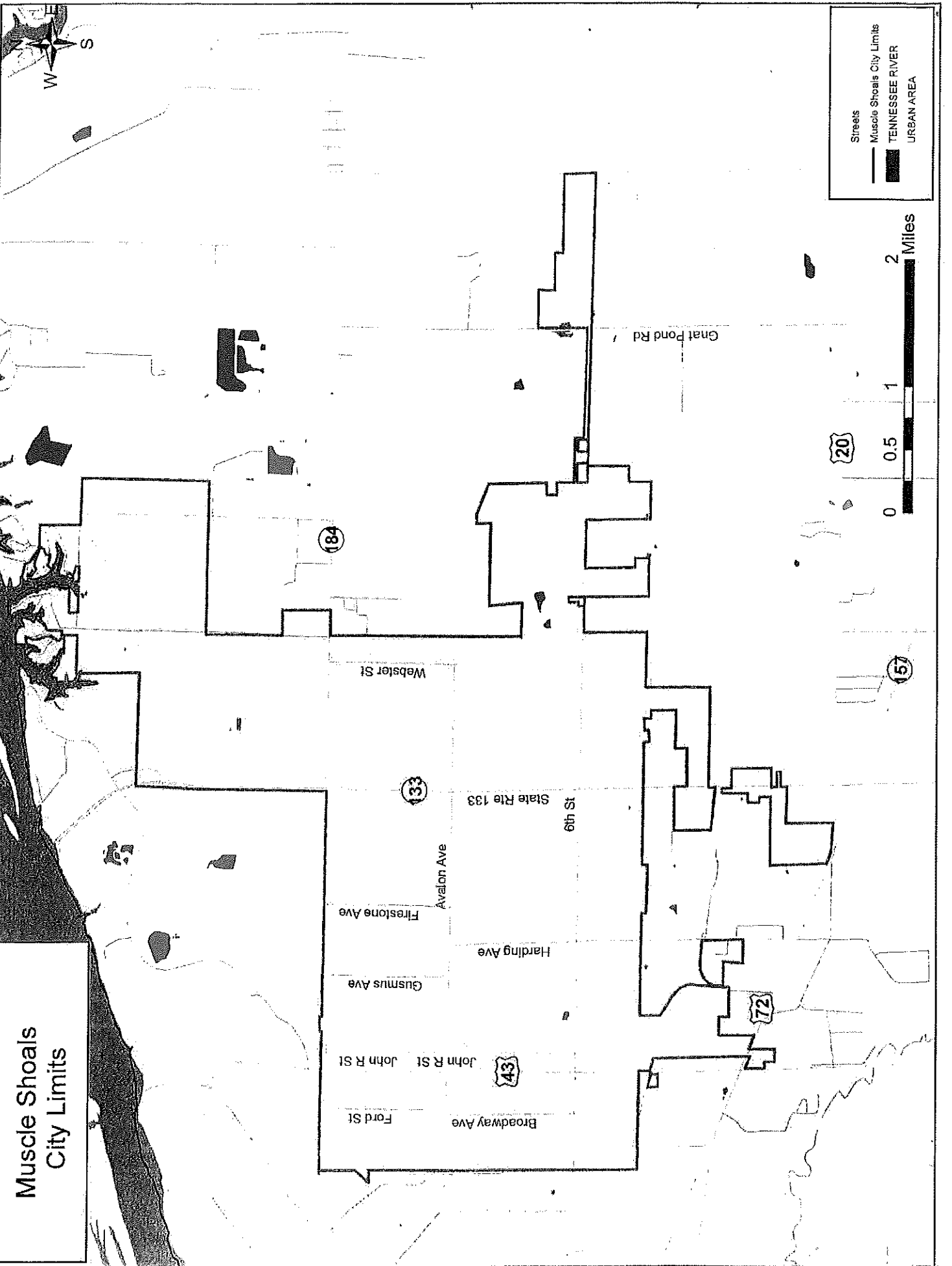
System Monitoring includes two types of monitoring that address different needs of the UICs.

- a) Annual stormwater discharge monitoring of each of the City UICs to assess the quality of stormwater entering the UICs.

4.3.1 Annual Stormwater Monitoring

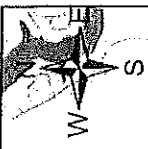
This monitoring is to determine the quality of the stormwater discharged into the UICs to demonstrate that the operation of the City owned UICs meet the ADEM permit requirements. Sampling will be conducted at a minimum once per year at each of the City's UIC facilities. Additional testing may be conducted as needed. The location, date, and time of testing will be recorded and provided to ADEM in the City's annual report.

City Limits Map



Muscle Shoals City Limits

Streets
Muscle Shoals City Limits
TENNESSEE RIVER
URBAN AREA



Stormwater Ordinances

Chapter 38 - ENVIRONMENT^[1]

Footnotes:

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Cross reference— Animals, ch. 14; weeds declared a nuisance, § 50-30.

ARTICLE I. - IN GENERAL

Sec. 38-1. - Miscellaneous ordinances not affected by Code.

Nothing in this Code or the ordinance adopting this Code shall affect any ordinance concerning the matters in the provisions in sections 20-1 through 20-10, 20-12 through 20-14 of the 1979 Code, as amended, and all such ordinances are hereby recognized as continuing in full force and effect to the same extent as if set out at length in this Code.

Secs. 38-2—38-20. - Reserved,

ARTICLE II. - STORMWATER

DIVISION 1. - GENERALLY

Secs. 38-21—38-40. - Reserved.

DIVISION 2. - STORMWATER POLLUTION PREVENTION PLAN

Sec. 38-41. - Adoption.

The City of Muscle Shoals Stormwater Pollution Prevention Plan (SWPPP), is hereby adopted to provide specifications and design criteria that are adequate to prevent transportation of sediment from the site. The site is identified as a disturbed area one acre or larger except as allowed in subsection 38-115(c).

(Ord. No. 1369-06, § I, 5-1-06)

Sec. 38-42. - Design requirements.

- (a) *Grading.* No grading is to take place prior to the developer or contractor having an approved NPDES stormwater permit and a city permit. The site shall have the required signage as required by ADEM and shall have a city permit posted. All graded sites (cut or filled) and all stockpiles shall have erosion

control protection as described in an approved best management practices plan.

- (b) *Best management practices plan (BMP)*. Prior to a city permit being issued the developer or contractor will submit a BMP for city approval. The plan will address all proposed sediment control relative to the site.
- (1) A sequence of construction is required for the development site, and is to include stripping and clearing; rough grading; construction of utilities, infrastructure, buildings; final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
 - (2) The BMP will include all erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
 - (3) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures will be specified.
 - (4) The BMP will provide for maintenance of control facilities, and the addition of facilities should they be necessary.
 - (5) Modifications to the plan shall be processed and approved or disapproved by the city in writing, and shall include major amendments of the erosion and sediment control plan submitted to the city. Field modifications of a minor nature may be made as the contractor deems necessary without written authorization.
 - (6) Residential property less than two acres in area shall not be required to submit an erosion and sediment control plan. However, all other regulations and requirements herein referred to herein shall be complied with. (See subsection 38-115(c).)
- (c) *Erosion control*. As soon as possible, all disturbed areas are to be seeded and covered with mulch or sodded, and the application of such slope stability materials as may be required to allow germination to occur.
- (1) Soil stabilization shall be completed within five days of inactivity in construction.
 - (2) If seeding or another vegetative erosion control method is used, it shall become established within 30 days or the city's designated agent may require the site to be reseeded or a nonvegetative option employed.
 - (3) Special techniques that meet the design criteria outlined in the SWPPP on steep slopes or in drainage ways shall be used to ensure stabilization.
 - (4) Soil stockpiles must be stabilized or covered at the end of each workday. Silt fence and/or silt basins may be used.
 - (5)

At the close of the construction season, the entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion.

- (6) Techniques shall be employed to prevent the blowing of dust or sediment from the site caused by construction vehicles or equipment. Techniques that divert upland runoff past disturbed slopes shall be employed.
- (d) *Sediment control.* Prior to construction startup, the site shall have barriers installed as required to prevent erosion from leaving the site. Barriers can include silt fence, hay bales, siltation ponds, aggregate bales, etc.
 - (1) Settling basins that are designed in a manner that allows adaptation to provide long term stormwater management is acceptable.
 - (2) The developer or contractor may provide protection for adjacent properties by the use of an existing vegetated buffer strip in combination with perimeter controls. The buffer strip shall be used only if approved by the city's designated agent.
- (e) *Slopes.* The suggested maximum slope for any site is 3:1, unless the city approves a steeper slope to meet other community or environmental objectives. All slopes are to be stabilized as soon as possible. For slopes steeper than 3:1, a seeded mat or sod shall be applied and approved by the building department.
- (f) *Construction site access.* Temporary construction site access shall include a stone paved approach into the site. The dimensions are generally ten feet × 50 feet, and laid out as per the cities standard BMP detail drawings.
 - (1) Excess mud which is tracked off-site by construction vehicles is to be removed from the street prior to a rain event.
 - (2) *Inspection.* The city or designated agent shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the BMP as approved. Plans for grading, stripping, excavating, and filling work bearing the approval of the city's designated agent shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the city at least two working days before the following:
 - a. Start of construction.
 - b. Installation of sediment and erosion measures.
 - c. Completion of site clearing.
 - d. Completion of rough grading.
 - e. Completion of final grading.
 - f. Close of the construction season.
 - g. Completion of final landscaping.

The permittee or his/her agent, shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved BMP. The purpose of such inspections will be to determine the overall effectiveness of the BMP and the need for additional control measures. All inspections shall be documented in written form and submitted to the city's designated agent at the time interval specified in the approved permit.

- (4) The city or its designated agent, shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports.
- (g) *BMP detail drawings.* City-approved BMP detail drawings herein included are made a part of this plan. The developer or contractor may devise his own details for presentation to the city's designated agent for approval.

(Ord. No. 1369-06, § I, 5-1-06)

Secs. 38-43—38-50. - Reserved.

DIVISION 3. - BEST MANAGEMENT PRACTICES OF STORM SEWER SYSTEMS

Sec. 38-51. - Definitions.

Best management practices. Structural device, measure, facility, or activity that helps to achieve stormwater management control objectives at a designated site.

Plan. A document approved at the site design phase that outlines the measures and practices used to control stormwater runoff at a site. The plan shall be prepared by a professional engineer. The subdivision regulations and the building code shall be amended to include these regulations.

(Ord. No. 1360-06, § I, 1-17-06)

Sec. 38-52. - Design.

- (a) All stormwater best management practices (herein BMP) criteria, shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure. Design guidelines are outlined in the most recent version of the subdivision regulations of the city and/or in the Stormwater Pollution Protection Plan (referred to as SWPPP) as adopted by the City of Muscle Shoals, Alabama.
- (b) Stormwater easements and covenants shall be provided by the property owner for access for facility inspections and maintenance. Easements and covenants shall be identified with City of Muscle Shoals, Alabama prior to the issuance of a permit.
- (c) Final design shall be approved by the city engineer or building officials of the city.
- (d) Property owner/developer will acquire a NPDES permit from Alabama Department of Environmental Management (herein ADEM) and present a copy to the city.

- (e) A permit will be issued by the city prior to construction startup. This permit acknowledges receipt of proper BMP and ADEM permit.

(Ord. No. 1360-06, § II, 1-17-06)

Sec. 38-53. - Routine maintenance.

- (a) All stormwater BMP's shall be maintained according to the measures outlined in the subdivision regulations and as approved in the permit.
- (b) The person(s) or organization(s) responsible for maintenance shall be designated in the plan. Options include:
 - (1) Property owner;
 - (2) Homeowner's association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements;
 - (3) Private contractor under contract with the owner.
- (c) Maintenance agreements shall specify responsibilities for financing maintenance.

(Ord. No. 1360-06, § III, 1-17-06)

Sec. 38-54. - Nonroutine maintenance.

Nonroutine maintenance includes maintenance activities that are expensive but infrequent, such as pond dredging or major repairs to stormwater structures.

- (1) Nonroutine maintenance shall be performed on an as-needed basis based on information gathered during regular inspections.
- (2) If nonroutine maintenance activities are not completed in a timely manner or as specified in the approved plan, the city may fine the owner an appropriate amount to cover the cost of the city's providing maintenance.

(Ord. No. 1360-06, § IV, 1-17-06)

Sec. 38-55. - Inspections.

- (a) The person(s) or organization(s) responsible for maintenance shall inspect stormwater BMP's on a regular basis as outlined in the plan.
- (b) Authorized representatives of the city may enter at reasonable times to conduct on-site inspections or routine maintenance.
- (c) For BMP's maintained by the property owner or homeowner's association, inspection and maintenance reports shall be filed with the city, as provided for in the plan.
- (d) Authorized representatives of the city may conduct inspections to confirm the information in the reports filed under subsection (c).

(Ord. No. 1360-06, § V, 1-17-06)

Secs. 38-56—38-70. - Reserved.

DIVISION 4. - ILLICIT DISCHARGE AND CONNECTION TO STORM DRAINAGE SYSTEM; REGULATIONS

Sec. 38-71. - Purpose/intent.

The purpose of the regulations is to provide for the health, safety, and general welfare of the citizens of Muscle Shoals through the regulation of nonstormwater discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This division establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (hereafter NPDES) permitting process. The objectives of this division are:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
- (2) To prohibit illicit connections and discharges to the municipal separate storm sewer system.
- (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this division.

(Ord. No. 1358-06, § 1, 1-17-06)

Sec. 38-72. - Definitions.

For the purposes of this division, the following shall mean:

Authorized enforcement agency. Employees or designees of the city clerk's office.

Best management practices (hereafter BMP's). Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMP's also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. section 1251 et seq.), and any subsequent amendments thereto.

Construction activity. Activities subject to NPDES construction permits. Currently these include construction projects resulting in land disturbance of five acres or more. Beginning in March 2003, Discharge Elimination System ES Stormwater Phase II permits will be required for construction projects resulting in land disturbance of one acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition.

Hazardous materials. Any material, including any substance, waste or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial presence or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illegal discharge. Any direct or indirect nonstormwater discharge to the storm drain system, which is not covered under a proper permit.

Illicit connections. An illicit connection is defined as either of the following:

- (1) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including, but not limited to, any conveyances which allow any nonstormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
- (2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Industrial activity. Activities subject to NPDES industrial permits as defined in 40 CFR, section 122.26(b) (14).

National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit. means a permit issued by Environmental Protection Agency (hereafter EPA), (or by a state under authority delegated pursuant to 33 USC section 1342(b)), that authorized the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Nonstormwater discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and

accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Storm drainage system. Publicly-owned facilities by which stormwater is collected and/or conveyed, including, but not limited to: any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

Stormwater. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater pollution prevention plan. A document which described the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Wastewater. Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

(Ord. No. 1358-06, § 2, 1-17-06)

Sec. 38-73. - Applicability.

This division shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

(Ord. No. 1358-06, § 3, 1-17-06)

Sec. 38-74. - Responsibility for administration.

The City of Muscle Shoals, Alabama shall administer, implement, and enforce the provisions of this division. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the mayor to persons or entities acting in the beneficial interest of or in the employ of the city.

(Ord. No. 1358-06, § 4, 1-17-06)

Sec. 38-75. - Severability.

The provisions of this division are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this division or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this division.

(Ord. No. 1358-06, § 5, 1-17-06)

Sec. 38-76. - Ultimate responsibility.

The standards set forth herein and promulgated pursuant to this division are minimum standards; therefore this division does not intend, nor imply, that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

(Ord. No. 1358-06, § 6, 1-17-06)

Sec. 38-77. - Discharge prohibitions.

(a) *Prohibition of illegal discharges.* No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including, but not limited to: pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater. The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by the ordinance from which this division derives: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, noncommercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated - typically less than 1.5 PPM chlorine), fire fighting activities, and any other water source not containing pollutants.
- (2) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.
- (3) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.
- (4) The prohibition shall not apply to any nonstormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(b) *Prohibition of illicit connections.*

- (1) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this division if the person connects a line conveying sewage or any contaminated industrial or commercial wastewater to the MS4, or allows such a connection to continue.

(Ord. No. 1358-06, § 7, 1-17-06)

Sec. 38-78. - Suspension of MS4 access.

- (a) *Suspension due to illicit discharges in emergency situations.* The city may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary, including injunctive relief, to prevent or minimize damage to the MS4 or waters of the United States, or to minimize danger to persons, and charge the violator and/or owner of the property with all costs associated with the suspension and cleanup.
- (b) *Suspension due to the detection of illicit discharge.* Any person discharging to the MS4 in violation of this division may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the authorized enforcement agency.

(Ord. No. 1358-06, § 8, 1-17-06)

Sec. 38-79. - Industrial or construction activity discharges.

Any person subject to an industrial or construction activity covered by a NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the city prior to the allowing of discharges to the MS4. Copies of sample test reports shall be acceptable proof.

(Ord. No. 1358-06, § 9, 1-17-06)

Sec. 38-80. - Monitoring of discharges.

- (a) *Applicability.* This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.
- (b) *Access to facilities.*
- (1) The city shall be permitted to enter and inspect facilities subject to regulation under this division as often as may be necessary to determine compliance with this division. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.
 - (2) Facility operators shall allow the city ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
 - (3) The city shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's stormwater discharge.
 - (4) The city has the right to require the discharger to install monitoring equipment. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
 - (5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the city, and shall not be replaced. The costs of clearing such access shall be borne by the operator.
 - (6) Unreasonable delays in allowing the city access to permitted facility is a violation of a stormwater discharge permit and of this division. A person who is the operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this division.
 - (7) If the city has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be violation of this division, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this division or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

(Ord. No. 1358-06, § 10, 1-17-06)

Sec. 38-81. - Requirement to prevent, control, and reduce stormwater pollutants by the use of best management practice.

The city will adopt requirements identifying best management practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and nonstructural BMPs. Further, any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and nonstructural BMP's to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. These BMP's shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

(Ord. No. 1358-06, § 11, 1-17-06)

Sec. 38-82. - Notification of spills.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the city three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

(Ord. No. 1358-06, § 12, 1-17-06)

Sec. 38-83. - Enforcement.

(a) *Notice of violation.* Whenever the city finds that a person has violated a prohibition or failed to meet a requirement of this division, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analyses, and reporting;
 - (2) The elimination of illicit connections or discharges;
 - (3) That violating discharges, practices, or operations shall cease and desist;
 - (4) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - (5) Notification to ADEM; and
 - (6) The implementation of source control or treatment BMPs.
- (b) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such redemption or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

(Ord. No. 1358-06, § 13, 1-17-06)

Sec. 38-84. - Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within ten days from the date of the notice of violation. Hearing on the appeal before the appropriate authority or his/her designee, shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

(Ord. No. 1358-06, § 14, 1-17-06)

Sec. 38-85. - Enforcement measures after appeal.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within 15 days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

(Ord. No. 1358-06, § 15, 1-17-06)

Sec. 38-86. - Cost of abatement of the violation.

Any person violating any of the provisions of this division shall be liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal monthly payments. Interest at the rate of five percent per annum shall be assessed on the balance beginning 30 days following the discovery of the violation. Within 15 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs.

(Ord. No. 1358-06, § 16, 1-17-06)

Sec. 38-87. - Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this division. If a person has violated or continues to violate the provisions of this division, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

(Ord. No. 1358-06, § 17, 1-17-06)

Sec. 38-88. - Compensatory action.

In lieu of enforcement proceedings, penalties, and remedies authorized by this division, the authorized enforcement agency may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

(Ord. No. 1358-06, § 18, 1-17-06)

Sec. 38-89. - Violations deemed a public nuisance.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this division is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

(Ord. No. 1358-06, § 19, 1-17-06)

Sec. 38-90. - Criminal prosecution.

Any person that has violated or continues to violate this division shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$500.00 per violation, per day, and/or imprisonment for a period of time not to exceed 30 days. The authorized enforcement agency may

recover all attorney's fees court costs and other expenses associated with enforcement of this division, including sampling and monitoring expenses.

(Ord. No. 1358-06, § 20, 1-17-06)

Sec. 38-91. - Remedies not exclusive.

The remedies listed in this division are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

(Ord. No. 1358-06, § 21, 1-17-06)

Secs. 38-92—38-110. - Reserved.

DIVISION 5. - EROSION AND SEDIMENT CONTROL

Sec. 38-111. - Introduction/findings/purpose.

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches and the dredging of lakes. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat. As a result, the purpose of the practices set forth in this division is to safeguard persons, protect property, and prevent damage to the environment in the City of Muscle Shoals, Alabama. The practices contained herein will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land of one acre or more in the city.

(Ord. No. 1359-06, § 1, 1-17-06)

Sec. 38-112. - Definitions.

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Certified contractor. A person who has received training and is licensed by the Alabama Department of Environmental Management (herein ADEM) to inspect and maintain erosion and sediment control practices.

Clearing. Any activity that removes the vegetative surface cover.

Drainage way. Any channel that conveys surface runoff throughout the site.

Erosion control. A measure that prevents erosion.

Erosion and sediment control plan. A set of plans prepared by or under the direction of a licensed professional engineer indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

Grading. Excavation or fill of material, including the resulting conditions thereof.

Perimeter control. A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff, or diverting it to a sediment trap or basin.

Phasing. Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

Sediment control. Measures that prevent eroded sediment from leaving the site.

Site. A parcel of land or a contiguous combination thereof, where grading work is performed as a single-unified operation.

Site development permit. A permit issued by the municipality for the construction or alteration of ground surface. Permitted BMP's include improvements and structures for the control of erosion, runoff, and grading.

Stabilization. The use of practices that prevent exposed soil from eroding.

Start of construction. The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

Watercourse. Any body of water, including, but not limited to: lakes, ponds, rivers, streams, and bodies of water delineated by the city.

Waterway. A channel that directs surface runoff to a watercourse or to the public storm drain,

(Ord. No. 1359-06, § II, 1-17-06)

Sec. 38-113. - Permits.

- (a) No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of one acre or more without the approval by the city of an erosion and sediment control plan.
- (b) No site development permit is required for the following activities:
 - (1)

Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.

- (2) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
- (c) Each application shall bear the name(s) and address(es) of the owner or developer of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm, and shall be accompanied by a filing fee of \$75.00, for application for a parcel of property up to, and including, five acres and a filing fee of \$150.00, for application for a parcel of property greater than five acres.
- (d) Each application shall include a statement that any land clearing, construction, or development, involving the movement of earth shall be in accordance with the erosion and sediment control plan and that a certified contractor shall make an inspection when construction or grading activity takes place.
- (e) The applicant will be required to file with the city, a faithful performance bond, letter of credit, or other improvement security in an amount deemed sufficient by city to cover all costs of improvements, landscaping, maintenance of improvements for such period as specified by the city, and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

(Ord. No. 1359-06, § III, 1-17-06)

Sec. 38-114. - Review and approval.

- (a) The city will review each application for a site development permit to determine its conformance with provisions of this regulation. Within 30 days after receiving an application, the city shall, in writing:
 - (1) Approve the permit application;
 - (2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
 - (3) Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.
- (b) Failure of the city to act on an original or revised application within 30 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed, unless such time is extended by agreement between the applicant and the city. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the city.

(Ord. No. 1359-06, § IV, 1-17-06)

Sec. 38-115. - Erosion and sediment control plan.

- (a) The erosion and sediment control plan shall include the following:

- (1) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
 - (2) All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
 - (3) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
 - (4) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
- (b) Modifications to the plan shall be processed and approved or disapproved in the same manner as section 38-114 of this division, may be authorized by the city by written authorization to the permittee, and shall include:
- (1) Major amendments of the erosion and sediment control plan submitted to the city.
 - (2) Field modifications of a minor nature.
- (c) Residential property less than two acres in area shall not be required to submit an erosion and sediment control plan. However, all other regulations and requirements herein referred to herein shall be complied with.
- (Ord. No. 1359-06, § V, 1-17-06)

Sec. 38-116. - Design requirements.

- (a) Grading, erosion control practices, sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the city's stormwater pollution prevention plan (hereinafter referred to as SWPPP), and shall be adequate to prevent transportation of sediment from the site to the satisfaction of the city. Cut and fill slopes shall be no greater than 3:1, except as approved the city to meet other community or environmental objectives.
- (b) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other chapters of this Code. Clearing techniques that retain natural vegetation and drainage patterns, as described in SWPPP, shall be used to the satisfaction of the city.
- (c) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- (d) Phasing shall be required on all sites disturbing greater than 30 acres, with the size of each phase to be established at plan review and as approved by the city.

(e) Erosion control requirements shall include the following:

- (1) Soil stabilization shall be completed within five days of inactivity in construction.
- (2) If seeding or another vegetative erosion control method is used, it shall become established within 30 days or the city may require the site to be reseeded or a nonvegetative option employed.
- (3) Special techniques that meet the design criteria outlined in SWPPP on steep slopes or in drainage ways shall be used to ensure stabilization.
- (4) Soil stockpiles must be stabilized or covered at the end of each workday. Silt fence may be used, silt basins may also be used.
- (5) The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.
- (6) Techniques shall be employed to prevent the blowing of dust or sediment from the site caused by construction vehicles or equipment.
- (7) Techniques that divert upland runoff past disturbed slopes shall be employed.

(f) Sediment control requirements shall include:

- (1) Settling basins, sediment traps, or tanks and perimeter controls.
- (2) Settling basins that are designed in a manner that allows adaptation to provide long term stormwater management, if required by the city.
- (3) Protection for adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls. The buffer strip shall be used only if required by the city.

(g) Waterway and watercourse protection requirements shall include:

- (1) A temporary stream crossing installed and approved by U.S. Army Corps of Engineers if a wet watercourse will be crossed regularly during construction.
- (2) Stabilization of the watercourse channel before, during, and after any in-channel work.
- (3) All on-site stormwater conveyance channels designed according to the criteria outlined in SWPPP.
- (4) Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.

(h) Construction site access requirements shall include:

- (1) A temporary construction access road provided at all sites.
- (2) Other measures required by the city in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains.

(Ord. No. 1359-06, § VI, 1-17-06)

Sec. 38-117. - Inspection.

- (a) The city or designated agent, shall make inspections as hereinafter required, and either shall approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the erosion and sediment control plan as approved. Plans for grading, stripping, excavating, and filling

work, bearing the approval of the city, shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the city at least two working days before the following:

- (1) Start of construction;
 - (2) Installation of sediment and erosion measures;
 - (3) Completion of site clearing;
 - (4) Completion of rough grading;
 - (5) Completion of final grading;
 - (6) Close of the construction season;
 - (7) Completion of final landscaping.
- (b) The permittee or his/her agent, shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved erosion and sediment control plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to the city at the time interval specified in the approved permit.
- (c) The city or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports.

(Ord. No. 1359-06, § VII, 1-17-06)

Sec. 38-118. - Enforcement.

- (a) *Stop-work order; revocation of permit.* In the event that any person holding a site development permit pursuant to this division violates the terms of the permit or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the city may suspend or revoke the site development permit.
- (b) *Violation and penalties.* No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this division. Any person violating any of the provisions of this division shall be given a written notice to correct said violations set forth in said notice and shall do so within seven days of said notice. Upon failure to do so, the city shall notify ADEM of said violations.

(Ord. No. 1359-06, § VIII, 1-17-06)

Secs. 38-119—38-140. - Reserved.

ARTICLE III. - DRAINAGE MANUAL

DIVISION 1. - GENERAL; PURPOSE; DEFINITIONS

Sec. 38-141. - Introduction.

The City of Muscle Shoals was founded in 1921 and remained largely undeveloped until the mid 60's when U.S. Highway 43 was constructed through the city. The city has grown up around that highway, and has grown to a population of more than 15,000 residents. The city has a complicated hydrology and topography. The city's topography is defined by a karst topography that has formed many depressions, both large and small, throughout the city. The large majority of the city drains to these depressions and many of them have been excavated by the city and are now operated and maintained by the city as regional retention/detention facilities. There are still many more of these depressions throughout the city that remain as natural retention areas that are only relieved by evaporation, and infiltration into the groundwater table. Many of these natural retention areas are located on private property that is not under the control of the city and they are not operated or maintained by the city.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-142. - General.

This manual represents the application of accepted principles of stormwater drainage engineering and is a working supplement to basic information obtainable from standard drainage handbooks and other publications on drainage. The policy statements of this section provide the underlying principles by which all drainage facilities shall be designed. The application of the policy is facilitated by the technical criteria contained in the remainder of the manual.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-143. - Policy.

- (a) Stormwater runoff peak flow rates for the two, five, ten, 25 and 100-year frequency storms shall not cause increased adverse inundation of any building or structure.
- (b) Street curbs, gutters, inlets and storm sewers shall be designed to intercept, contain and transport all runoff from the ten-year frequency storm unless a greater frequency storm is required by the city engineer.
- (c) In addition to subsection (b) above, the public drainage system shall be designed to convey those flows from greater than the ten-year frequency storm up to and including the 100-year frequency storm without damaging the system or any existing or proposed structures.
- (d) When stormwater detention is required by the city, stormwater runoff peak flow rates shall not be increased at any point of discharge for the two, five, ten, and 25-year storm frequency events.
- (e)

Situations may arise where stormwater from a developed site is discharged to an existing privately owned natural retention area that is not maintained by the City of Muscle Shoals. In this situation retention must be provided such that the total volume discharged for a 25-year storm is not greater than predevelopment volumes. In addition, the 100-year storm should be evaluated to ensure that no existing structures will be adversely affected. In these areas the infiltration onsite of stormwater is encouraged.

- (f) Regulation of peak flows to allowable levels, as determined by the provisions of this policy, shall be achieved by storage on-site or off-site. The detention/retention section of this manual provides a guide to acceptable methods.
- (g) It is understood that this manual will not be applicable to all situations that may arise within proposed developments. When special situations arise they will be evaluated on a case-by-case basis and exceptions to this manual may be made by the city engineer when warranted. However, in all cases it must be determined that any alternate designs must, at a minimum, not cause damage to downstream property or structures.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-144. - Purpose.

- (a) Experience has shown that most of the more serious flooding, erosion, and water quality problems are "created." Usually this occurs from conveying more stormwater to a given area than can be carried away effectively. Ever increasing drainage problems emerge unless well conceived, cooperative stormwater drainage and flood control programs are undertaken. The stormwater management goals of the City of Muscle Shoals, AL, are to prevent flooding, and erosion that may result from stormwater runoff from development and redevelopment projects. The city's drainage manual (the manual) provides guidance and direction for meeting these goals.
- (b) The purpose of the manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals. The manual is intended to provide information to the general public on the city's stormwater policies and design practices, as well as assist developers, engineers, and city staff in the preparation, review and approval of the stormwater report and construction drawings that must accompany private and public development proposals. This document is organized to facilitate specific design and submittal activities related to stormwater management infrastructure. Stormwater management, particularly in the area of stormwater quality management, is an evolving science. As such, the manual will be updated as necessary to reflect accepted standard practice in stormwater management.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-145. - Applicability.

- (a) Unless otherwise exempted, this manual shall be used for all public and private projects that change land use, existing stormwater flow patterns, and/or stormwater pollutant discharges as applicable to all premises within the City of Muscle Shoals.
- (b) Any new development or redevelopment involving the following shall be subject to the manual:
 - (1) Construction of commercial, industrial or institutional facilities.
 - (2) Expansion of commercial, industrial or institutional facilities.
 - (3) Redevelopment of commercial, industrial or institutional facilities if the renovation will substantially affect stormwater drainage.
 - (4) Construction of multifamily residential facilities.
 - (5) Expansion of multifamily residential facilities.
 - (6) Redevelopment of multifamily residential facilities if the renovation will substantially affect stormwater drainage.
 - (7) Construction of residential subdivisions.
 - (8) Expansion of residential subdivisions.
 - (9) Redevelopment of residential subdivisions, if the renovation will substantially affect stormwater drainage.
 - (10) Filling or regarding to change the topography of any existing land within the City of Muscle Shoals.
 - (11) Construction, reconstruction, improvement, and/or modification of all private and public transportation facilities which alter existing drainage patterns under this item. Routine maintenance of these facilities or construction of elements that do not impact the existing drainage patterns are excluded.
 - (12) The manual is not applicable to the expansion, construction, or reconstruction of one single-family dwelling or one two-family dwelling on a single parcel unless it is deemed appropriate by the city building official.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-146. - Definitions.

Unless specifically defined in this section, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage, and to give this article its most reasonable application.

Blue-line stream. Any stream shown on the 7.5 minute U.S.G.S. Quad Maps.

Buffer zone. A naturally undisturbed, vegetated and pervious streamside zone that is protected from clearing, grading, filling, paving, building or other destruction of the naturally vegetated state.

Covenants by property owner for permanent maintenance of stormwater facilities. A legal document executed by the property owner and recorded with the Colbert County Courthouse guaranteeing perpetual and proper maintenance of stormwater facilities.

Detention. A practice to store stormwater runoff by collection as a temporary pool of water and provide for its gradual (attenuated) release and thereby control peak discharge rates.

Discharge. Dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, including any direct or indirect entry of any solid or liquid matter into the stormwater system by any means intentional or otherwise.

Disturbed area. Portion of any site that has been altered from existing conditions, including but not limited to the following: Providing access to a site; clearing of vegetation; grading; earth moving; providing utilities and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems; altering land forms; or construction or demolition of a structure on the land.

Downstream. Downgradient from the lowest point of each subwatershed in a development.

Erosion. The removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by development activities or effects.

Floodplain. For a given flood event, that area of land temporarily covered by water.

Frequency storms:

- (1) *Two-year frequency storm.* A storm event with a 50 percent chance of being equaled or exceeded in a given year. Defined to be 3.78 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.
- (2) *Five-year frequency storm.* A storm event with a 20 percent chance of being equaled or exceeded in any given year. Defined to be 4.78 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.
- (3) *Ten-year frequency storm.* A storm event with a ten percent chance of being equaled or exceeded in any given year. Defined to be 5.46 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.
- (4) *25-year frequency storm.* A storm event with a four percent chance of being equaled or exceeded in any given year. Defined to be 6.21 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.
- (5) *50-year frequency storm.* A storm event with a two percent chance of being equaled or exceeded in any given year. Defined to be 6.82 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.
- (6)

100-year frequency storm. A storm event with a one percent chance of being equaled or exceeded in any given year. Defined to be 7.47 inches in 24 hours or other such magnitude the city engineer shall establish based upon scientific and engineering information.

Hydraulic. Pertaining to, involving, moved or operated by a fluid, especially water, under pressure or under a gravity-driving force.

Hydrologic. Pertaining to the scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.

Impervious area. Impermeable surfaces, such as pavement or rooftops, which prevent the percolation of water into the soil.

Infiltration. A practice designed to promote the recharge of groundwater by containment and concentration of stormwater in porous soils.

Major collector channel. Drain 20 acres or more.

Major storm. A 100-year design storm or a storm that has a probability of one percent chance in any given year.

Minor collector channel. Drains less than 20 acres.

Natural resources conservation service (NRCS). An organization within the U.S. Department of Agriculture that has published standard drainage procedures in the form of Technical Release No. 55. Formerly known as the soil conservation service (SCS).

Outfall. The terminus of a stormwater system where the contents are released.

Parking area. The off-street facility including parking spaces along with adequate provision for drivers and aisles for maneuvering and giving access, and for entrance and exit, designed to be usable for the parking of vehicles.

Peak flow. The maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

Peak flow attenuation. The reduction of the peak discharge of a storm.

Person. Any individual, firm, corporation, partnership, association, organization or entity, including governmental entities, or any combination thereof.

Retention. A practice designed to store stormwater runoff by collection as a permanent pool of water without release except by means of evaporation, infiltration, or attenuated release when runoff volume exceeds storage capacity of the permanent pool.

Rip-rap. A combination of large stone, cobbles and boulders used to line channels, stabilize stream banks, and reduce runoff velocities.

Runoff. The water resulting from precipitation that is not absorbed by the soil.

Sanitary sewer. A system of underground conduits that collect and deliver sanitary wastewater to a wastewater treatment plant.

Sanitary wastewater. Wastewater from toilets, sinks and other plumbing fixtures.

Site development. To physically alter a site. Site development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Stormwater. Runoff from rain, snow or other forms of precipitation, resulting in surface runoff and drainage.

Stormwater system. The system of roadside drainage, roadside curbs and gutters, curb inlets, swales, catch basins, manholes, gutters, ditches, pipes, lakes, ponds, sinkholes, channels, creeks, streams, storm drains, and similar conveyances and facilities, both natural and manmade, located within the city which are designated or used for collecting, storing, or conveying stormwater, or through which stormwater is collected, stored or conveyed, whether owned or operated by the city or other person.

Swale. A natural or manmade depression or wide shallow ditch used to route or filter runoff.

Upstream. Upgradient of the lowest point of each subwatershed of a development.

Utility, public or private. Any agency which under public franchise or ownership, or under certification of convenience and necessity, provides the public with electricity, natural gas, steam, communication, rail transportation, water, sewage collection, or other similar service.

Vegetation. Collection of plant life, including trees, shrubs, bushes and grass.

(Ord. No. 1438-11, 11-14-11)

Secs. 38-147—38-165. - Reserved.

DIVISION 2. - STORMWATER POLICY

Sec. 38-166. - Design criteria.

- (a) *Street drainage.* No lowering of the standard height of street crown shall be allowed for the purposes of obtaining additional hydraulic capacity.
- (b) *Drainage system.*
 - (1) *Culverts.*
 - a. Construction plans for proposed reinforced concrete box culverts, and related structures may be adaptations of the current Alabama Department of Transportation (ALDOT) Standards.
 - b. For culverts in residential streets, runoff from the 100-year frequency flow shall not produce a headwater elevation at the roadway greater than either 12 inches above the roadway crown elevation or any top of upstream curb elevation, whichever is lower.
 - c. For culverts in streets other than a residential street, runoff from the 100-year frequency storm shall not produce a headwater elevation at the roadway greater than six inches above the roadway crown elevation or six inches above any top of upstream curb elevation, whichever is lower.
 - (2) *Drainage facilities.* All drainage facilities (including but not limited to, headwalls, open channels, storm sewers, area inlets, and detention, retention and water quality controls and their appurtenances) shall comply with the following requirements, unless otherwise noted in this section:
 - a. Storm sewer inlets and gutter transitions shall be designed to avoid future driveways and to avoid conflicts with standard water and wastewater service locations. No utilities shall be allowed to cross under a storm sewer inlet.
 - b. Drainage channels and detention ponds that are to be maintained by the public (city) shall be contained within dedicated easements. Adequate room for access shall be provided for drainage channels and detention ponds.
 - 1. Ramps no steeper than five feet horizontal to one foot vertical shall be provided at appropriate locations to allow access to drainage channels and detention ponds.
 - 2. The minimum bottom width for any channel with vegetative side slopes shall be eight feet.
 - 3. A reinforced concrete trickle channel shall be provided in all newly constructed channels and from detention pond inlets to outlets. The area adjacent to trickle channels shall slope at a minimum of two percent.
 - c. Detention ponds shall be designed with adequate area around the perimeter for access and maintenance. Said area shall be a minimum of seven feet wide for ponds with depths of five feet or less (back slopes included) and a minimum of 15 feet wide for ponds over five feet deep or with back slopes in excess of five feet high. Said area shall not slope more than five percent.
 - d. Rip-rap for slope protection or velocity dissipation shall be formed concrete dissipaters or mortared rip-rap.
- (3) *Storm drains.*

- a. Storm drains between lots (crossing blocks) shall be avoided as much as possible. When unavoidable, such mains shall be laid along a straight alignment (absent of curves, jogs and manholes/junction boxes when traversing between lots) with manholes/junction boxes provided at each intersecting street. Storm drains along rear of residential lots (through back yards) shall be avoided. Easements shall be a minimum of 15 feet in width with an additional two feet of easement for every one foot of depth over eight feet.
- b. All bends, wyes and pipe size changes in storm sewers shall occur at manholes/junction boxes unless otherwise approved by the city engineer.
- c. Bedding of storm sewer shall be to the top of pipe.
- d. Storm drains shall have a minimum size of 15 inches in diameter.
- e. Junction boxes and manholes shall be reinforced concrete. Junction boxes in lieu of manholes shall be provided where any pipe opening exceeds 36 inches and where the distance from the outside surfaces of any two pipes entering a manhole is less than one foot, measured along the inside of the manhole.

(4) *Open channel sections.*

- a. Minor collector channels shall be constructed with underground storm sewers. If it can be established by certified engineering data to the satisfaction of the city engineer that storm sewers are not physically feasible, open ditches may be used, provided that such ditches are lined properly with materials accepted by the city engineer. These structures shall be of sufficient cross-section and slope as to fully contain design flows and facilitate self cleaning. Outfalls shall enter major collector drainage ways and major streams at grade or be designed and constructed with adequate concrete aprons, energy dissipaters or similar features to prevent erosion.
- b. Major collector channels drainage ways, detention ponds and related structures may utilize either existing natural open sections which may be modified, or newly constructed facilities. If modified or newly constructed facilities are utilized, they shall be lined with permanent materials including, but not limited to, concrete or vegetation.
- c. Vegetated channels shall have sufficient grade but with velocities that will not be so great as to create erosion. Side slopes shall not be steeper than three (horizontal) to one (vertical) for channels four feet or less in depth and no steeper than 4:1, in all other channels to allow for future growth and to promote slope stability. All slopes shall be hydromulched, sodded or seeded with approved grass, grass mixtures or groundcover suitable to the area and season in which they are applied.
- d. Discharge from storm sewer outfalls shall not cause channel, or stream bank erosion. If the storm drain discharges to an open drainage facility (as determined by the city), the applicant must show acceptable nonerosive conveyance to that drainage facility, appropriate energy dissipation at the outfall and a stable headwall.

e.

No area within the limits of construction of the development shall allow stormwater to become stagnant. Maximum retention or "draw-down" time for detention ponds shall not exceed 24 hours from the time of peak storage to the time of complete emptying of the pond, as determined by hydrograph routing or other calculations acceptable to the city. This requirement does not apply to facilities in which retention or "draw-down" time is required to be greater than 24 hours.

(c) *Computations.* Computations to support all drainage designs shall be submitted to the city engineer for review. The computations shall be in such form as to allow for timely and consistent review and also to be made a part of the permanent city record for future reference. Computations shall demonstrate that as a result of the proposed development there will not be any adverse impact to downstream structures adjacent to the drainage for design storms up to the 100-year storm. All computations submitted shall be from a licensed professional engineer with expertise in the area of hydraulics and hydrology.

(d) *Development within FEMA floodplains.*

(1) *Federal Emergency Management Agency.*

- a. The Federal Emergency Management Agency (FEMA) maintains flood insurance rate maps (FIRMs) that depict floodplain and floodway boundaries based on existing conditions of development in the contributing area.
- b. FEMA revises or amends FIRMs by issuing of a letter of map amendment (LOMA) or letter of map revision (LOMR). FEMA establishes the process and fee schedule for review of LOMA or LOMR requests.

(2) *Coordination of City of Muscle Shoals and FEMA floodplain delineations.*

- a. If a LOMR is to be requested due to land development activities that alter existing conditions, then the following requirements are applicable:
 1. The property owner must enter into a letter agreement with the city assuring that the proposed activities are consistent with existing plans and improvements of the city, that the city will request its consultant to prepare any studies, plans, proposals or applications to FEMA and that the city will incur no cost, expense or liability from the project.
 2. The property owner must provide all information necessary for city review and submission to its consultation for preparation of the request and pay all costs, fees and expenses associated with the request.
- b. If a LOMR-F is to be requested, due to land development activities that alter existing conditions, then the following requirements are applicable:
 1. The property owner must complete an application for permit to "develop in a special flood hazard area" and an application for a "building permit". Both permits require submission of an elevation certificate based on construction drawings and completed by a registered land surveyor or licensed engineer.

2. A second elevation certificate based on existing construction conditions must be submitted to the city; (1) for slab construction - after the slab form is set but prior to pouring; or (2) for crawl space or stem wall construction - after the floor is framed or the form set but prior to erecting any walls, to ensure compliance with floor elevation requirements of the flood damage prevention ordinance. The slab for all equipment servicing the building must also comply with elevation requirements of the ordinance.
3. A third elevation certificate based on finished construction must be submitted to the city to ensure compliance with flood damage prevention ordinance and prior to issuance of a certificate of occupancy. At the time the third elevation certificate is completed, the application to FEMA for a LOMR-F to remove the structure from the floodplain and avoid paying flood insurance can begin.

(e) *Site grading considerations.*

- (1) A comprehensive grading plan shall be included with subdivision or site construction plans.
- (2) The grading plan shall be designed to ensure all lots will adequately drain upon completion of the improvements.
- (3) Where practical, all lots shall be graded from rear to front at which point the drainage shall be intercepted by the street. Alternate grading schemes may be utilized if it can be demonstrated to the satisfaction of the city engineer that grading from rear to front would be detrimental to trees or other natural features; or it would not be reasonably adaptable to the existing topography because of excessive cuts and fills, or future lot development (i.e., commercial, industrial or multifamily lots).
- (4) All lots shall be graded at a minimum of one percent. Grading of lots with existing slopes of one percent or greater will not be required provided the conditions under subsection (3) above have been satisfied and it is demonstrated to the satisfaction of the city engineer that there are no existing or proposed features that will prevent the lots from adequately draining.
- (5) Unless otherwise accepted by the city engineer, surface swales shall be designed and provided along lot lines when more than two lots will be contributing to stormwater runoff at any given point. Side slopes for swales shall not exceed 10:1 (horizontal: vertical) unless otherwise accepted by the city engineer.
- (6) Minimum finished floor elevations shall be shown for all lots. Such elevations shall be as required by the City of Muscle Shoals Flood Damage Prevention Ordinance (Ordinance No. 1421-10).
- (7) Blue tops shall be set at lot corners and other points to ensure grading is accomplished in accordance with the plan.
- (8) Following final grading, all exposed areas shall be permanently stabilized. Earthen areas shall be seeded or sodded and erosion controls shall remain in place until grass growth reaches 1½ inches; is of a density where it can be reasonably expected to be self-sustaining; and there are no bare areas in excess of ten square feet.

(f) *Erosion control.*

- (1) Silt fences, sedimentation basins, stabilized construction entrances/exits and similar recognized techniques shall be employed during and after construction to prevent point source sedimentation loading of downstream facilities. such installations shall be to the satisfaction of the city engineer. Additional measures may be required during and after construction if, in the opinion of the city engineer, they are warranted.
- (2) All disturbed and exposed areas due to construction shall be permanently stabilized. All such areas shall be dressed with topsoil and vegetated by seeding or sodding as appropriate. Where the city engineer determines that future maintenance is materially impaired or erosion is a distinct possibility, the developer shall be required to use concrete or similar permanent cover in lieu of vegetation. Erosion control matting (either pre-seeded or seeded after placement) may also be required if the city engineer determines that such protection of slopes is required to ensure that seeding or soil will not wash off of slopes.
- (3) The developer of a proposed development shall submit to the Muscle Shoals Planning Commission with the construction plans four copies of a plan to control erosion on the site of the proposed subdivision. Said plan shall be prepared by the subdivider's engineer according to the best available practices of sediment and erosion control and shall consist of a map(s) and a description of the premises setting forth the proposed: (a) improvements to be constructed; (b) changes to be made in the contours of the site; and (c) removal or destruction of the natural topsoil, trees, or other natural vegetation on the said described premises.
- (4) The city engineer shall review said sediment and erosion control plan and submit written comments to the Muscle Shoals Planning Commission prior to presentation of the construction plans for approval. Written comments shall specifically state the acceptability of the plan, nonacceptability, or any necessary changes to insure adequate erosion control. The city engineer shall also submit written comments to the Muscle Shoals Planning Commission, prior to presentation of a final plat for approval, stating that the sediment and erosion control plan has been carried out in substantial compliance with this section or that the subdivider has failed to comply. Where the city engineer's comments or other validated evidence indicates that the subdivider has not carried out the approved sediment and erosion control plan the Muscle Shoals Planning Commission shall not grant final approval of the subdivision.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-167. - Submittal requirements and computation methods.

(a) *Plan requirements.*

- (1) A site development plan shall be required for any site development except when:
 - a. The developed area is used for gardening or agricultural purposes;
 - b. The proposed work does not, in the opinion of the building department, affect the drainage on the site.

(2) Development plan requires plans showing existing and proposed one-foot contours as they relate to the roadway, parking lot, drainage facilities, cut and fill slopes, all stormwater pipe size, material and location, identification of all areas of depression, blue-line streams, easements, erosion and sediment control measures, detention pond data including size, location, slope of bottom, outlet, invert, top elevations, spillway size and elevation, and the detention easement and an adequately sized traversable access easement. Also, catch basin location, elevation, slope, swales, ditches, and their stabilization treatment. When this site development plan includes a street to be dedicated to the city, a complete set of roadway plans must be submitted including profiles, grades, and cross-sections showing cross slope, and limits of construction. All development plans that are submitted to the building department must meet the following minimum standards:

a. Must contain the following certification from the design engineer:

1. The engineer of record for this project assumes full responsibility for the design shown hereon and the effects thereof. The city by reviewing this information assumes no responsibility for any unforeseen negative impacts to adjoining or downstream property owners.

b. Stamp and signature from appropriate design professional;

c. Constructible plans;

d. All required hydraulic and hydrologic calculations with reasonable assumptions;

e. Pre- and post-developed contours;

f. Erosion and sediment control plan;

g. Required retaining wall calculations (if any);

h. Owner's, and if applicable lessee's, name, address and phone number;

i. Vicinity map.

(3) Plans that do not meet these minimum standards will be rejected, and will not be reviewed further until submission standards are met.

(b) *Drainage report requirements.* Drainage report must be submitted with any proposed project and must address the calculations and requirements set forth in this section. The report must be prepared by a professional engineer licensed by the State of Alabama that is proficient in hydraulics and hydrology. The report must address any possible downstream impacts of the proposed development and mitigation of those impacts if required.

(c) *Hydrology methods.*

(1) Consideration of peak runoff rates for design conditions is generally adequate for conveyance systems such as storm sewers or open channels. However, if the design includes flood routing, detention ponds, retention ponds, etc., a flood hydrograph is usually required.

(2) Rational method. The rational method is generally acceptable for the determination of peak flows from watersheds smaller than 50 acres. This method is not acceptable for detention/retention pond sizing, or evaluation.

(3) NRCS unit hydrograph method.

- a. The NRCS unit hydrograph method is specifically cited for drainage computations, using 24-hour Type II rainfall distribution and AMC II soil conditions. The NRCS method shall be used to compute a peak flow for sizing all stormwater conveyances or to generate a hydrograph for the purposes of detention/retention routing. The NRCS unit hydrograph method shall be used for all design calculations, but other methods may be consulted for sizing stormwater conveyances (particularly if conservative values and assumptions are used).
- b. The NRCS was formerly called the soil conservation service (SCS), part of the United States Department of Agriculture. The TR-55 publication (Urban Hydrology for Small Watersheds) is the principal technical reference to be downloaded from NRCS:

http://www.wsi.nrcs.usda.gov/products/w2g/h&h/docs/other/TR55_documentation.pdf.

(4) The maximum sheet flow length to be used shall be ≤ 100 feet.

(d) *Functional design of stormwater drainage systems.* In selecting the design frequency storm, the following criteria (listed in the order of being progressively more restrictive) will be used:

- (1) Longitudinal side drains shall be designed for a ten-year frequency flood, providing that no residential or commercial structures are flooded by a 100-year flood.
- (2) Roadway cross-drains for all local streets and collector streets shall be designed for a ten-year frequency flood, providing that no structures are flooded by a 100-year flood.

(e) *Design of open channels.* Manning's equation is the principal means for determining flow capacity and velocity in open channels. Open channels shall be designed according to the "Design of Roadside Channels with Flexible Linings Hydraulic Engineering Circular Number 15, Third Edition (HEC 15). This guide can be downloaded at the following address:

<http://www.fhwa.dot.gov/engineering/hydraulics/pubs/05114/index.cfm>.

(f) *Design of curb and grate inlets.*

- (1) Use of the City of Muscle Shoals standard inlets (see City of Muscle Shoals Construction Specifications) or ALDOT standard inlets is required within all public rights-of-way or drainage easements. Use of standard inlets on private property is encouraged for reasons of structural reliability, ease of maintenance, common availability and standardized installation methods. The designer must locate street inlets to quickly drain stormwater from paved surfaces, keeping streets passable and safe for vehicular traffic. Street inlets must be spaced and located in a manner to carefully balance vehicle safety, drainage system capacity, economics and efficiency. Maximum inlet spacing is generally 300 feet unless proven otherwise by computations. Inlets should be located at uphill corners of each street intersection to prevent sheet flow of stormwater. The basic geometry of stormwater flow along curbs is a thin shallow triangular cross-sectional area. If the section contains curb and gutter, then the stormwater flow is a composite shape formed by both concrete and asphalt surfaces, for which Manning's equation is still applicable. Based upon the longitudinal slope of the gutter and the cross slope of the street, the gutter flow will spread across the street. The spread impacts vehicular traffic in a negative way, causing vehicles to hydroplane or to pull in

one direction. Basic references for computing spreads, inlet capacities, and interception rates for curb and grate inlets are FHWA Hydraulic Engineering Circular No. 12, Drainage of Highway Pavements (March 1984), or FHWA Hydraulic Engineering Circular No. 22, Urban Drainage Design Manual (November 1996). Both references can be downloaded in Acrobat format at the FHWA website: <http://www.fhwa.dot.gov/engineering/hydraulics/highwaydrain/index.cfm>.

- (2) Detailed inlet computations are usually not required for local residential streets and alleys, except at sag locations where potentially inadequate inlets could flood nearby houses and buildings. Slow design speeds on local streets usually minimize the impact of spread and hydroplaning, although local streets do tend to have steeper approach slopes for intersections. Typical considerations for inlet design include:
 - a. Place inlets at all sag locations and other depressed areas to ensure positive drainage. Ensure that ponded water does not flood nearby structures, buildings, or houses. Flanking inlets, at an offset distance of 25 feet or 50 feet, are desirable in sag locations with large flow rates.
 - b. Place inlets at street intersections to prevent stormwater from flowing across a street or entrance. This is particularly important wherever a local street intersects a larger street, such as a collector or arterial. Valley gutters across street intersections are not encouraged, unless specifically used for very short streets or culs-de-sac.
 - c. Maintain a minimum curb and gutter longitudinal slope of 0.5 percent to keep positive drainage. When designing a flat stretch of street, the street designer may incorporate a gently rolling vertical profile to maintain positive drainage (along with placement of additional inlets). The designer is cautioned that the use of long vertical curves is discouraged in areas with minimum slopes.
- (g) *Design of storm drainage systems.* Manning's equation is typically used to compute nonpressurized flow in pipes and storm drainage systems where inlets and headwalls are closely spaced to allow atmospheric pressure throughout the entire system. Computations for each pipe should be performed systematically (such as in a table) and include the drainage area, design flow, velocity, capacity, diameter or size, slope, length, construction material, upstream and downstream inlets, etc. Computations should also include one or more maps and drawings to show drainage areas, impervious surfaces, slopes, land cover, paths for computing time of concentration, and any off-site areas that contribute flow. Minimum size diameter of storm drainage pipes is 15 inches. For allowable types of pipe see the City of Muscle Shoals Construction Specifications. Computation of the hydraulic grade line (HGL) may be required by the engineer, particularly if pipes are designed without excess capacity, pipes are placed at steep slopes with high velocities, the outfall is submerged, or if there are excessive deflection angles in the stormwater drainage system. Excessive velocities should be avoided to prevent HGL problems and the potential for erosion. Minimum design velocities should be at least three feet per second to ensure that a storm drainage system has some capability for self-cleaning.

(h)

Design of culverts. A culvert is a single drainage pipe, not part of an enclosed system, which has a pipe or box opening as the inlet condition. Allowable flow within culverts are subject to inlet control, outlet control, or some combination of the two controls. Culvert design is performed using FHWA Hydraulic Design Series No. 5, Hydraulic Design of Highway Culverts (September 1985), which can be downloaded at http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=7&id=13 as an Adobe Acrobat document. Considerations in culvert design include analysis of open channels at both ends of the culvert, potential for storage or channel routing, and design of energy dissipators and outlet protection. Head loss can be reduced by using headwalls, wingwalls, mitered slopes, and tapered inlets; refer to FHWA Hydraulic Design Series No. 5 for more details concerning culvert design. Considerations for determining the allowable headwater are potential for upstream property damage, road overtopping, erosion potential, human safety, and whether wingwalls and headwalls are designed as part of the culvert. Minimum size diameter for culverts is 15 inches.

- (i) *Hydraulic grade line computations.* Where the hydraulic grade line (HGL) is deemed to be critical by the city engineer or his representative, the HGL shall be computed. HGL computations must be performed by a registered engineer using principles of hydrology and hydraulics, and basic formulas such as conservation of momentum and energy, continuity of flow, and types of flow classification.
- (j) *Analysis of downstream system.*
 - (1) Discharge from a developed site (typically a stormwater detention or retention basin) must be routed to an existing natural or manmade stormwater pipe or channel with adequate capacity. Calculations must be submitted that show the capacity of the receiving stormwater pipe or channel to handle the design storms. The first reason for analysis of the downstream system is to ensure that known flooding problems are not exacerbated. Stormwater detention basins are always designed so that the peak flow discharge is not increased. This means that the immediate downstream receiving channel, if it currently has adequate capacity, will continue to be adequate. However, if the stormwater detention basin causes a longer duration for peak or near-peak flows, then flooding could occur in locations where it did not occur before. The second reason for analysis of the downstream system is to determine any backwater effects on the detention outlet structure and embankment. In most situations, the design engineer assumes inlet control conditions for the detention basin control structure, which must be verified to ensure that the detention basin operates as designed.
 - (2) If no existing natural or manmade stormwater channel exists downstream the discharge must be returned to a sheet flow condition before it is discharged. The location of the discharge onto the downstream property must be in a similar location as the predevelopment discharge.

(Ord. No. 1438-11, 11-14-11)

Sec. 38-168. - Stormwater detention/retention and maintenance,

- (a) *Stormwater detention and retention.*

- (1) General. For the purposes of this article, retention refers to storage without access to a positive outlet, and detention refers to temporary storage facilities with a controlled release of the stored water. Retention and detention can be used separately or together in storage basins as site conditions require.
 - (2) Stormwater detention is typically not required in the following two situations:
 - a. The project site discharges stormwater runoff directly into a City of Muscle Shoals retention pond or City of Muscle Shoals pipe system with adequate capacity for the additional stormwater.
 - b. Stormwater detention for a project site is either unwarranted or impractical. The engineer must submit complete hydrologic and hydraulic computations to support this conclusion. Typically this might occur in the very lowest downstream reaches of a major watershed, if it can be proved that undetained stormwater should be discharged quickly to avoid the peak discharge timing for the entire watershed.
 - (3) All detention computations must use NRCS design methods with Type II 24-hour storm and average antecedent moisture conditions (AMC II).
- (b) *Design criteria for sizing detention structures.*
- (1) All stormwater detention structures must attenuate the post development peak flow rates from the two-year, five-year, ten-year and 25-year NRCS 24-hour design storms to discharge at or below predevelopment peak flow rates. The purpose for detention structures is to slow or attenuate the peak flows downstream by controlling the release rate. The post development peak outflow rate is limited to the predevelopment peak outflow rate as the basis of detention design.
 - (2) The calculations shall include sufficient design information to show that the facility will operate as required. This shall include the existing (or before site development) peak flow discharges, the after site development peak flow discharges, and/or volumes of stormwater runoff based on the proposed site development, as well as all necessary computations used to determine the reduced peak flow rates for the design storms. The capacity of the facility shall be sufficient to control the volume of stormwater runoff resulting from two-year, five-year, ten-year, and 25-year frequency, 24-hour duration storms. The facility must be designed to pass a 100-year storm without damaging the facility.
 - (3) Discharge from the stormwater detention pond shall be routed to a ditch, channel, or stormwater facility of adequate capacity. Calculations showing the capacity of the receiving stormwater facility and its capability to convey a ten-year frequency storm shall be provided. The city engineer has authority to condition the approval upon the compliance with additional requirements, including but not limited to, correctly sizing and installing off-site conveyance facilities or other stormwater management solutions required to reduce the adverse impact of the proposed development on other properties or the development.
- (c) *Design standards for detention/retention facilities.*
- (1)

A retention basin should be sized so that the volume of the excavated material from the pond is equal to the difference between the pre-development and post-development runoff volume from the development. The volume calculation should be based on a 25-year, 24-hour rainfall event. A 100-year, 24-hour rainfall event should also be analyzed to ensure that no structures or roadways will be inundated.

- (2) Adequate attention must be given to safety and sanitation in the design of any detention/retention facility. This includes, but is not limited to, a minimum of two percent slope in the bottom of all detention ponds, a minimum of 3:1 (H:V) side slopes or with traversable access to the pond's vegetated bottom and side slopes for maintenance, an exception can be made to the minimum slope requirement in the bottom of the pond if the pond invert is finished in concrete.
- (3) Detention/retention ponds that are to be fully maintained by the City of Muscle Shoals must also meet the following requirements:
 - a. Have a minimum surface area of five acres.
 - b. Side slopes should have a 3:1 maximum slope. Where depths exceed ten feet slopes should be benched at intervals to help prevent erosion.
 - c. Six-foot high commercial grade chain link fencing with three strands of barb wire (seven-foot total height) shall be installed around the perimeter of the basin.
 - d. The city may require the pond bottom to have a concrete flume on grade to the discharge point or the low point in the pond.
 - e. The basin must be accessible from a public street.
 - f. A 14-foot double swing gate shall be installed at the access point.
 - g. Rip-rap and geotechnical fabric with concrete binder shall be placed at all points where a concentrated source of water enters the basin (i.e., pipes, ditches, etc.). The edge of the rip-rap should be finished flush with the slopes and bottom for access by mowing equipment.
 - h. All basins to be sodded with hybrid Bermuda sod (sod to be approved by the city prior to placement). In retention ponds the city may waive the requirement for sod in areas that will likely remain inundated.
 - i. A minimum of one foot of freeboard shall be provided above the high water elevation of the design rainfall event.
 - j. The maximum depth of the basin should be consistent with safety and aesthetic considerations for the system.
 - k. Developer shall provide an "as built survey" of the basin to the city for filing. If pumps are used, the city shall dictate the type and quality of pumps and motors. O & M manuals shall be provided.
- (d) *Facility maintenance.*
 - (1)

Permanent maintenance agreements. If there is a stormwater detention facility shown on the design plans, the city requires that the current property owner (as well as any future owners of this property) enter into a permanent maintenance agreement with the City of Muscle Shoals.

(2) *Facility access and easements.*

- a. Adequate easements shall be provided for maintenance whether the facility is publicly or privately maintained.
- b. Facility easements: Encompasses the entire stormwater detention basin.
- c. Access easements: Provides access to the facility easement, if the easement is not immediately adjacent to the public right-of-way (minimum 20 feet wide).
- d. The City of Muscle Shoals is not responsible for damage to any structures, utilities or vegetation located within a facility access easement, whenever such access is deemed necessary by city inspection personnel. The City of Muscle Shoals is not responsible for repair or replacement of structures, utilities and vegetation. A facility access easement is normally intended for heavy equipment access rather than ordinary passenger vehicle access. A city inspector will normally gain access to a detention basin by parking nearby.

(e) *Facility construction requirements.* All stormwater pipes, structures, ditches, facilities, etc., shall be constructed in accordance with the City of Muscle Shoals Construction Specifications Manual, Latest Edition.

(Ord. No. 1438-11, 11-14-11)

Secs. 38-169—38-190. - Reserved.

Subdivision Regulations

SUBDIVISION REGULATIONS

Subdivision Regulations City of Muscle Shoals, Alabama

for the

City of Muscle Shoals,
Alabama

Updated January 2012

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Article I. General Provisions

Section 101. Enactment and Authority

Under the provisions of title 11, chapter 52 of the Code of Ala. of 1975 [Code of Alabama 1976, § 11-52-1 et seq.], which provisions are hereby made a part hereof, these regulations governing the subdivisions of land are hereby adopted by the City of Muscle Shoals Planning Commission as of the effective date of these regulations. A copy of these regulations will be certified to the probate judge of Colbert County and copies are available from the City Clerk of the City of Muscle Shoals.

Section 102. Jurisdiction

On and after their effective date, these regulations shall govern each and every subdivision of land within the corporate limits of the City of Muscle Shoals as the same now exists or may hereafter be altered.

Section 103. Purpose

The subdivision regulations are adopted for the following purposes:

1. To protect and provide for the public health, safety, and general welfare of the city and its environs.
2. To guide the future growth and development of the city in accordance with plans and policies adopted pursuant to the comprehensive planning process.
3. To provide for adequate light, air, and privacy to secure safety from fire, flood, and other dangers, and to prevent overcrowding of the land and undue congestion of population.
4. To encourage the orderly and beneficial development of the city and its environs.

5. To protect and conserve the value of land throughout the city and its environs and the value of buildings and improvements upon the land and to minimize the conflicts among the uses of land and buildings.
6. To guide public and private policy and action in order to provide adequate and efficient transportation, water, sewerage, schools, parks, playgrounds, recreation, and other public requirements and facilities.
7. To provide the most beneficial relationship between the uses of land and buildings and the circulation of traffic throughout the city, having particular regard to the avoidance of congestion in the streets and highways, and the pedestrian traffic movements appropriate to the various uses of land and buildings, and to provide for the proper location and width of streets and building lines.
8. To establish reasonable standards of design and procedures for subdivision and resubdivision, in order to further the orderly layout and use of land; and to insure proper legal descriptions and monuments of subdivided land.
9. To insure that the public facilities are available and will have a sufficient capacity to serve the proposed subdivision.
10. To prevent the pollution of air, streams, and ponds; to assure the adequacy of drainage facilities; to safeguard the water tables; and to encourage the wise use and management of natural resources throughout the community and the value of the land.
11. To preserve the natural beauty and topography of the Muscle Shoals area and to insure appropriate development with regard to these natural features.
12. To provide for open spaces through the most efficient design and layout of the land, including the use of average density in providing for minimum width and area of lots, while preserving the density of land as established in the zoning ordinance of Muscle Shoals.

Section 104. Enforcement, Violations, and Penalties

1. Enforcement. It shall be the duty of the planning commission to enforce these regulations by bringing to the attention of the mayor, city council, or city attorney any violations or lack of compliance herewith.

2. Violations and Penalties. Whoever, being the owner or agent of the owner of any land located within a subdivision, transfers or sells or agrees to sell or negotiates to sell any land by reference to or exhibition of or by other use of a plat of a subdivision before such plat has been approved by the Muscle Shoals Planning Commission and recorded or filed in the county probate office shall forfeit and pay a penalty of \$100.00 for each lot or parcel so transferred or sold, or agreed or negotiated to be sold, and the description of such lot or parcel by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties or from the remedies provided in this section.

The city may enjoin such transfer or sale or agreement by a civil action for injunction brought in any court of competent jurisdiction or may recover the same penalty provided in this section by a civil action in any court of competent jurisdiction.

State law reference—similar provisions, Code of Ala. 1975, § 11-52-33.

Section 105. Effect of Preliminary Plat Approval

Receipt of the approved copy of the preliminary plat by the subdivider is authorization, subject to the taking of proper permits and to the requirements for waivers as set forth in section 108 herein, to proceed with the construction plan phase of any improvements to the subdivision under the direction and supervision of the city engineer, and/or other supervisory personnel required by the city and subject to the approved construction plans and to proceed with the staking of streets and lots in preparation for the final plat.

Section 105A Effect of Construction Plan Approval

Receipt of the approved copy of the construction plans by the subdivider is authorization, subject to the taking of proper permits and to the requirements for waivers as set forth in section 108 herein, to proceed with the construction of the improvements

to the subdivision under the direction and supervision of the city engineer, and/or other supervisory personnel required by the city according to the approved construction plans.

Section 106. Effect of Final Approval

Receipt of the approved copy of the final plat by the subdivider is authorization to record the plat in the office of the probate judge of Colbert County, to transfer lots in the subdivision, and to seek a building permit for structures to be erected on any lot. No building permit shall be issued on any structure in any subdivision that has not received final approval and been recorded in the office of the probate judge of Colbert County, Alabama. No building permit shall be issued for any structure in any subdivision that does not fully comply with these regulations.

Section 108. Inspections and As-built Drawings

Final inspections of all improvements shall be performed and accurate as-built construction drawings of all improvements shall be supplied to the City and utility departments prior to the release of any performance bond (or the approval of the final plat of subdivision, where no performance bond was provided).

Section 109. Maintenance Bond Requirements

Prior to the release of any performance bond (or the approval of the final plat of subdivision, where no performance bond was provided), a maintenance bond shall be provided to the Planning Commission to provide warranty against defect in the manufacture, construction or installation of improvements. The amount of the maintenance bond shall be ten percent (10%) of the total cost of improvements and shall be available for 12 months following the completion of improvements and the application by the owner for acceptance by the City of Muscle Shoals.

Section 110. Previously Platted Subdivisions

No building permit shall be issued and no construction of improvements shall commence for any lot on an undeveloped street within a subdivision approved prior to 1980. All such subdivisions shall be resubmitted to the Planning Commission for approval in accordance with the standards provided within these regulations.

Section 111. Covenants and Building Restrictions

No final plat of land within the force and effect of the zoning ordinance shall be approved unless the building restrictions to be established conform with the minimum requirements of the zoning ordinance. If the proposed subdivision does not lie within the force and effect of the zoning ordinance, the preliminary and final plat may be required to contain a statement of the allowable use of each lot and adequate covenants may be required to be recorded establishing use restrictions.

Section 112. Waivers, Variances and Exceptions

Whenever the tract to be subdivided is of such unusual size or shape or is surrounded by such development or unusual conditions that a strict application of the requirements contained in these regulations would result in a substantial hardship or injustice to the

property owner, the Muscle Shoals Planning Commission Muscle Shoals Planning Commission may vary or modify such requirements so that the subdivider is allowed to develop his property in a reasonable manner, but so, at the same time, the public welfare and interests of the city are protected and the general intent and spirit of these regulations are preserved.

No waiver, variation, or modification to these regulations shall be effective unless a specific written request is conspicuously noted on the preliminary plat submitted to the commission for approval and such waiver request is specifically approved by the affirmative vote of six members of the commission. Unless a waiver is requested and approved in this manner, it shall be deemed to have been denied by the commission.

In granting variances and modifications to these regulations, the Muscle Shoals Planning Commission may require such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so varied or modified. Any variance or modification thus authorized is required to be entered in writing in the minutes of the Muscle Shoals Planning Commission and the reason that justified the departure to be set forth therein.

Section 113. Conflicts of Interest Prohibited

Under no circumstances shall a preliminary plat, final plat, construction plans of improvements, preliminary master subdivision plan, project inspection, or other materials or labor necessary for compliance with these regulations be prepared, submitted, signed, attested to, carried out or certified by a registered surveyor or registered professional engineer or by a firm, corporation or partnership engaged in the business of engineering and land surveying if that same individual, firm, corporation, or partnership is also employed by, is an official of, is on contract or retainer to the City of Muscle Shoals, Alabama, for the purposes of engineering and/or land surveying.

In addition, any member of the Muscle Shoals Planning Commission or any other planning employees or technical planning consultants to the commission shall in no case review or enter into deliberations or voting on any matter in which they may have any conflict of interest whatsoever in regard to these regulations.

Section 114. References Incorporated: Higher Standard Shall Prevail

The following specifications are hereby incorporated into these regulations and shall govern the materials and placement of any improvements within a subdivision within the Muscle Shoals planning jurisdiction:

The Muscle Shoals Construction Specifications (Ord. No. 1437-11)

The City of Muscle Shoals Drainage Manual (Ord. No. 1438-11)

"A Policy on the Geometric Design of Highways and Streets," AASHTO, 6th ed.

Muscle Shoals Stormwater Ordinance (Ord. No. 1266-02, § 1, 1-7-02)

Whenever a conflict shall occur between the standards of this document and those set forth in any specification or standard referenced herein, including but not limited to those specified in this Section, the higher standard of development, as determined by the Muscle Shoals City Engineer, shall apply.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article II. Definitions

Section 201. Usage

1. For the purpose of these regulations, certain abbreviations, terms, and words used herein shall be used, interpreted, and defined as set forth in this article.
2. A "person" includes a corporation, a partnership, a partnership, and an incorporated association of persons such as a club; "shall" is always mandatory; a "building" includes a "structure"; a "building" or "structure" includes any part thereof; "used" or "occupied" as applied to any land or building shall be construed to include the words "intended, arranged, or designed to be used or occupied".

Section 202. Definitions

1. *Adjoining Property Owner or Owners* – The individual owning property adjoining the tract of land proposed for subdivision development. If the owner of such adjoining property is a corporation, the term shall apply to the officers and agents of such corporation who shall be identified on preliminary plats as adjoining property owners. Owners of property located across streets, alleys, watercourses, drainage easements, and other rights-of-way adjoining the proposed subdivision are, for the purposes of this regulation, adjoining property owners and shall be so identified on all preliminary plats.
2. *Agriculture* – The use of land for agricultural purposes, including farming, dairying, pasturage, agriculture, horticulture, floriculture, viticulture, and animal and poultry husbandry, and the customary accessory uses.
3. *Alley* – A public right-of-way less than 25 feet in width designed to provide secondary access to the side or rear of properties whose principal frontage is on some other street.

4. *Approved Plat* – A plat conforming to the requirements of these regulations that has received the approval of the planning commission and has the signature of those officials authorized to sign the plat under the requirements of these regulations.
5. *Base Flood* – A flood event having a one percent chance of being equaled or exceeded in any given year, i.e. the 100-year flood.
6. *Base Flood Elevation* – The crest elevation in relation to mean sea level expected to be reached by the base flood.
7. *Building* – A roofed structure built for the shelter, housing, or enclosure of persons or property.
8. *Building Line* – A line on a lot parallel to the street line representing the forward limit for the construction of the any portion of a building.
9. *Construction Plans* – plans and profiles for proposed improvements that are prepared in accordance to these regulations by a professional engineer and depict the proposed layout, materials, and construction specifications for proposed improvements.
10. *City* – The City of Muscle Shoals, Alabama.
11. *City Engineer* – The duly designated engineer of the City of Muscle Shoals, Alabama.
12. *Developer* – The person, firm, or corporation who owns or controls a tract of land proposed for subdivision, and at whose direction plans and surveys for such subdivisions are prepared. The term "developer" also means "subdivider".
13. *Engineer* – A registered professional engineer in good standing with the state board of registration in Alabama.
14. *Final Plat* – A finished drawing compiled in accordance with these regulations.
15. *Flood Hazard Boundary Map* – A map officially promulgated by the Federal Emergency Management Agency (formerly the Federal Insurance Administration)

depicting the boundaries of flood hazard areas in the vicinity of Muscle Shoals covering areas part or all of which extend beyond the area covered by the flood boundary and floodway map. Where two or more flood hazard boundary maps are extant, the one bearing the most recent date shall be considered official.

16. *Floodway* – The channel of a river, stream or other watercourse and the adjacent land areas which must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation by more than one foot.

17. *Floodway Fringe* – That area of the flood plain lying outside the floodway but still subject to inundation by waters of the base flood.

18. *Lot* – A parcel of land intended for transfer of ownership or for building development, whether immediate or future.

19. *Lot, corner* – A lot abutting upon two or more streets at their intersection.

20. *Lot, through* – A lot other than a corner lot, abutting upon two or more streets.

21. *Lot Width* – The distance between the side lot lines measured at the building line.

22. *Major Street Plan* – The official plan of the planning commission showing the location of existing and planned roadways designed to serve the City of Muscle Shoals and its environs.

23. *Master Plan* – The comprehensive plan of the City of Muscle Shoals and environs duly adopted by the Muscle Shoals Planning Commission.

24. *Planning Commission* – The Muscle Shoals, Alabama Planning Commission.

25. *Preliminary Plat* – A drawing of the proposed design of a subdivision compiled in accordance with all of the requirements of these regulations.

26. *Street* – The entire platted or proposed public way for vehicular and pedestrian traffic, whether designated as a street, highway, thoroughfare, parkway, road, avenue, boulevard, lane, place, alley or however otherwise designated.

a. *Major Street or Arterial* – Those streets designated as such on the major street plan of the City of Muscle Shoals, Alabama, or as may be determined necessary by the city.

b. *Secondary Street or Collector Street* – A street supplementary to the major street system and primarily a means of moving traffic between arterials and local system. Direct access to abutting properties is a secondary function and should be avoided. Collector street may be required for entrance roads for large subdivisions or as primary connections streets between adjoining development or properties.

c. *Minor Street or Local Street* – A street primarily for access to abutting properties and as interconnection between abutting properties and other streets.

d. *Cul-de-sac Streets* – Streets having no outlet at one end.

27. *Subdivision* – The division of a lot, tract, or parcel of land into two or more lots, plots, sites, or other divisions of land, whether described by metes or bounds or by any other description, for the purpose, whether immediate or future, of sale or of building development. It includes mobile home parks, whether lots (spaces) are for rent or sale. It includes resubdivision and, when appropriate to the context, relates to the process of subdividing the land or territory subdivided. Provided, however, that the following is not included within this definition:

a. The parceling off or sale of tracts measuring five or more acres for residential or agricultural use, provided that the property has thirty (30) feet access to a publicly dedicated and maintained road.

b. The parceling off or sale of plots in a cemetery intended for the burial of the dead.

c. The partitioning of a tract of land among heirs or claimants through a sale or division, when ordered by a court of competent jurisdiction.

d. The conveyance of a portion of one property owner's previously unplatted land to an owner of directly abutting unplatted land, provided that no such conveyance shall reduce a parcel of land below the minimum area as

required by any agency with jurisdiction over that piece of property. Furthermore, the deed conveying said property must recite that the land conveyed is to form a homogenous part of the grantee's property, is not a separate building lot, and shall not be conveyed to a third party as a separate property unless and until it shall have been subdivided in accordance with applicable subdivision regulations.

- e. The conveyance of a tract of land of any size to a public utility, provided that the deed shall recite that the said tract shall be used solely as the site for a pumping station, potable water storage tank, transformer substation, switching facility, valve and/or metering facility, or other similar public utility service facility.

28. *Submission* – The presentation of a plat or plan, prepared in strict conformity to these regulations and the bylaws of the planning commission. The presentation of a plat or plan after the date required shall be termed an inappropriate submission by the planning commission. Likewise, a plat not in compliance in all aspects with plat requirements contained in these regulations shall be ruled an inappropriate submission by the Muscle Shoals Planning Commission.

29. *Surveyor* – A qualified, registered land surveyor in good standing with the state board of registration of Alabama.

30. *Temporary Cul-de-sac* – A cul-de-sac to give access to future subdivisions adjoining the subdivision property. Such temporary cul-de-sacs shall have a minimum right-of-way radius of 60 feet and a paved turning area with a radius of at least 40 feet.

31. *Townhouses* – A row of three or more dwellings flush against each other at the sides or attached at the sides by party walls, each unit of which is designed as a residence for one family.

32. *Utilities* – Distribution system for water, gas, electric, telephone, cable and antenna system, and collection system for sanitary and storm sewer, where appropriate.

33. *Variance* – An approved variation from the minimum standards required by these regulations. Such variances shall be approved only upon application as outlined in these regulations and upon a favorable vote of six members of the planning commission.

34. *Zoning Ordinance* – The duty adopted comprehensive zoning ordinance and all amendments thereto as officially adopted by the Muscle Shoals City Council.

Subdivision Regulations
City of Muscle Shoals
Colbert, Alabama

Article III. Submission; Approval Procedure; Plat Requirements

Section 301. Overall Procedures

To obtain approval of a proposed subdivision, the developer shall submit to the Muscle Shoals Planning Commission a preliminary and final plat prepared by a registered land surveyor and construction plans of proposed improvements prepared by a registered engineer. Typical subdivisions requiring improvements will proceed in three to four steps:

- 1) a master design plan will be submitted to for review and comment (optional in many cases),
- 2) a preliminary plat will be submitted for review and approval,
- 3) construction plans (including drainage report) will be submitted for review and approval,
- 4) a final plat will be presented following completion of all improvements or the presentation of adequate surety for the completion of improvements.

No landowner or developer shall proceed with improvements or sale of subdivided land without the written approval of the Muscle Shoals Planning Commission and receipt of necessary construction permits prescribed by the city engineer.

Section 302. Master Design Plan

A developer presenting a subdivision who owns, leases, or has options to purchase 20 or more acres of additional vacant land contiguous to, but not included in, said subdivision, shall also submit a master design plan depicting the proposed future development of all such land. Such a master design plan is intended to assist the Muscle Shoals Planning Commission in coordinating the phased development of large areas. Acceptance of the master design plan by the Muscle Shoals Planning Commission shall not be deemed equivalent to their granting preliminary plat approval of the development. As a minimum, the master design plan shall contain an outline of the contiguous land from deed legal descriptions and shall show preliminary street and

lot layout and areas to be reserved for public purposes. Said plan shall show topography of the adjacent land from existing topographic maps such as USGS quadrangle maps. Where such a master design plan is required, it shall be submitted to the Planning Commission at least 15 days prior to a regularly scheduled meeting of the Muscle Shoals Planning Commission.

Subdivisions that do not meet the above requirements for a master design plan are strongly encouraged nonetheless to present a master design plan for informal review by City staff. The purpose of this plan is to ensure the harmonious coordination of existing and planned developments and to afford an opportunity to discuss potential difficulties prior to initiating the process of subdivision, minimizing the potential for costly mistakes.

Section 303. Preliminary Plat Procedure

The subdivider shall submit four copies of the preliminary plat to the Muscle Shoals Planning Commission at least 15 days prior to a regularly scheduled meeting of the Muscle Shoals Planning Commission; otherwise, the proposed subdivision shall be considered at the next regularly scheduled meeting where the subdivider has complied with these deadline requirements.

The subdivider shall submit six copies of any requests for variances from any article or section of these regulations along with material to support his claim for relief from appropriate sections or articles.

To defray the costs of notifying interested parties of the preliminary plat, a fee established by the city council shall be paid by the subdivider at the time of filing the preliminary plat. The subdivider and the owners of the land immediately adjoining the proposed subdivision shall be given prior notice by mail at least seven days before the hearing on the preliminary plat, in accordance with the provisions of Code of Ala. 1975, § 11-52-32.

The Muscle Shoals Planning Commission shall approve, approve conditionally, or disapprove such preliminary plat within 30 days after the appropriate submission thereof at its regular meeting unless the subdivider consents to an extension of this period. If approved conditionally, the conditions and reasons therefore shall be stated in the minutes of the Muscle Shoals Planning Commission. If any of the requirements are modified or waived, the reasons for such shall be specified in the minutes of the Muscle Shoals Planning Commission, if the Muscle Shoals Planning Commission should disapprove the preliminary plat, the reasons for such action shall be stated in the

minutes, and if possible, recommendations made on the basis of which the proposed subdivision would be approved. A preliminary plat that has been disapproved by the Muscle Shoals Planning Commission shall not be reconsidered for a period of one year from the time of the ruling disapproving the plat, unless all such reasons for disapproval are removed in the resubmission.

The approval of a preliminary plat shall not be deemed as final acceptance, but rather an expression of approval of the layout as submitted on the preliminary plat, and shall allow the developer to proceed according to article 1, section 105. Preliminary approval of a proposed subdivision shall lapse at the end of one year, unless the Muscle Shoals Planning Commission grants an extension.

The preliminary plat is a tool for determining the most efficient and economical layout of a site and is intended to ensure quality layout and design and conformity with municipal plans prior to a developer investing in fully detailed engineering studies and plans. Therefore, while construction plans (see Section 304) may be submitted by the developer for review at the same time as the preliminary plat, such concurrent submission is discouraged in order to avoid costly construction plan revisions.

Section 304. Construction Plans

The subdivider shall submit four copies of construction plans of improvements to the Muscle Shoals Planning Commission at least 30 days prior to a regularly scheduled meeting of the Muscle Shoals Planning Commission; otherwise, the proposed subdivision shall be considered at the next regularly scheduled meeting where the subdivider has complied with these deadline requirements. The construction plans of proposed improvements shall be presented for review by the city engineer and utility departments and all other designated staff. Within 30 days of the receipt of the plans, the Planning Commission shall notify the developer's engineer of discrepancies requiring correction. The construction plans shall conform to all applicable requirements of these regulations except those expressly waived by the Muscle Shoals Planning Commission.

The subdivider and the owners of the land immediately adjoining the proposed subdivision shall be given prior notice by mail at least seven days before the hearing on the construction plans. To defray the costs of notifying interested parties of the

Construction Plans, a fee established by the city council shall be paid by the subdivider at each phase of development.

The Muscle Shoals Planning Commission shall approve, approve conditionally, or disapprove such construction plans within 30 days after the appropriate submission thereof at its regular meeting unless the subdivider consents to an extension of this period. If approved conditionally, the conditions and reasons therefore shall be stated in the minutes of the Muscle Shoals Planning Commission. If any of the requirements are modified or waived, the reasons for such shall be specified in the minutes of the Muscle Shoals Planning Commission. If the Muscle Shoals Planning Commission should disapprove the construction plans, the reasons for such action shall be stated in the minutes, and if possible, recommendations made on the basis of which the proposed subdivision would be approved. Construction plans that have been disapproved by the Muscle Shoals Planning Commission shall not be reconsidered for a period of one year from the time of the ruling disapproving the plat, unless all such reasons for disapproval are removed in the resubmission.

Section 305. Construction and Inspection of Improvements

Subdivision improvements shall be constructed under the supervision of an engineer employed by the developer. Construction of subdivision improvements may begin only after the construction plans have been approved and the developer has purchased construction permits from the City of Muscle Shoals. The fees for such permits shall be as prescribed by ordinance. Quality control during construction shall be maintained by three means, as follows:

1. A pre-construction meeting shall be required prior to the commencement of any component or phase of construction activities. The developer and the developer's engineer shall meet with city engineer and appropriate representatives of the City of Muscle Shoals and utility department representatives to discuss construction activities, including the proposed schedule of inspections.
2. The developer's engineer shall ensure that a qualified inspector, experienced in street, water main, and sewer construction, conducts regular inspections during construction of improvements. At minimum, inspections shall occur at the stages of subgrade proofrolling and base proofrolling during the course of construction. The inspector shall maintain a logbook of all inspections, which shall be furnished to the city engineer for review upon completion of construction.

3. The developer's engineer shall notify the city engineer before work begins on each of the following steps at least 24 hours in advance.

- a. Clearing and grading.
- b. Placing of subbase.
- c. Laying of sanitary sewer lines, storm pipe, water pipe.
- d. Pouring curb and gutter.
- e. Placing of base.
- f. Placement of asphalt.

Upon completion of construction, two sets of as-built plans and profiles shall be delivered to the city engineer. These plans shall show all storm sewer, wastewater, water, gas, and electrical improvements as constructed, including the correct referenced locations and depths of all sanitary sewer stubs, wyes, manholes and water valves. As-built plans shall be tied to State Plane Coordinates.

Section 306. Final plat and final acceptance procedure

A final plat will be considered by the Muscle Shoals Planning Commission once approval of the preliminary plat and construction plans have been granted. The subdivider shall file four copies of the final plat with the Chairman of the Muscle Shoals Planning Commission at least 15 days prior to the date of the meeting of the Muscle Shoals Planning Commission at which it is to be submitted and considered.

1. Approval or disapproval of the final plat shall take place within 30 days after the date of its appropriate submission to the Muscle Shoals Planning Commission unless the subdivider agrees to an extension at that time, if the final plat is disapproved, the grounds for refusal shall be stated in the minutes of the Muscle Shoals Planning Commission. The disapproval of a final plat carries with it the stipulation that it or another plat containing all or a portion of the property cannot be resubmitted for a minimum period of one year, unless all reasons for disapproval shall have been removed.

2. The Muscle Shoals Planning Commission may give approval of the final plat at any of its meetings; however, final notification shall come only from the Chairman of the Muscle Shoals Planning Commission when it has been deemed that all the requirements as set forth herein have been met. This final approval by the Chairman of the Muscle Shoals Planning Commission shall be given on the face of the final plat and shall be given only after the signatures of all other agencies, except the county engineer, have been given. The county engineer's signature, if required, shall be given after all other approvals.

3. Approval of the final plat will not be given until the Muscle Shoals Planning Commission is notified by the city engineer that either:

- a. All required approved improvements have been installed and completed by the subdivider and all required as-built plans and required test results submitted as required by rules or ordinance; or
 - b. A bond in an amount equal to 150% of the estimated cost of all such improvements and approved by the city engineer has been filed. Such bond shall be made with a surety company authorized to engage in the making of surety bonds in and by the State of Alabama. No permit for the construction of houses or housing units in the subdivision shall be issued until the Muscle Shoals Planning Commission has given approval of the final plat.
4. When application is made for final plat approval, the subdivider shall pay an additional fee to defray the expenses of investigation, hearing, and acting upon the final plat. Said fee shall be established by city council.
5. The final plat shall be filed for record in the office of the probate judge of Colbert County along with any required restrictive covenants (if outside the city limits). The city engineer and the Chairman of the Muscle Shoals Planning Commission shall each be furnished with one copy of the final plat showing the probate judge's recording stamp and the plat book and page number where the final plat is recorded.
6. In any case where a final plat differs substantially from the previously approved preliminary plat, in street layout or in the handling of surface water, drainage, or in lot size, then the Muscle Shoals Planning Commission may require an additional preliminary submission either before or as a condition to approval of the final plat.
7. Where the subdivider owns land adjacent to that shown on the final plat, drainage easements, or proposed easements, crossing said adjacent lands, necessary to serve the land in the final plat, shall be indicated on the preliminary plat and the Muscle Shoals Planning Commission may require dedication of such easements, at the time of approval of the final plat.
8. No city maintained facilities (streets, storm drains, drainage ways, etc.) will be accepted for maintenance by the City of Muscle Shoals until the city engineer and the public works department shall have approved the same and the acceptance thereof is authorized by the city council in the form of a resolution.
9. Upon final acceptance the subdivider, or contractor undertaking the construction work for the subdivider, shall file a bond with the city in an amount equal to ten percent of the construction costs of the subdivision improvements. Payment of

the proceeds of such bond or any portion thereof shall be to the order of the city as directed by the city engineer for reimbursements of all costs incurred by or on behalf of the city necessary to maintain the streets, sanitary sewers, drainage structures and other improvements for a period of one year following the completion and acceptance of all the improvements in the subdivision by the city.

10. The term "bond" as used in this section shall be deemed to include the deposit of cash with the city clerk in the appropriate amount required under this section; the delivery of a standby letter of credit in favor of the city issued by a financial institution licensed to do business in the State of Alabama, the form and substance of which is acceptable to the city attorney and city clerk and approved by the Muscle Shoals Planning Commission and issued by a company authorized to issue surety bonds in the State of Alabama. Said bond shall also include such other forms of cash collateral or obligations of insurance companies as may be approved as to form and substance by the city attorney, city clerk and approved by the Muscle Shoals Planning Commission from time to time.

Section 307. Resubdivisions and Small Subdivisions

In a case where an existing subdivision lot or lots is re-subdivided, and meets the requirements of the Muscle Shoals Zoning Ordinance and these regulations for size, setbacks, and other requirements, and no improvements are required, and presents no other design or engineering problems in the opinion of the city engineers and the Chairman of the Muscle Shoals Planning Commission, the preliminary plat procedure may be omitted and the final plat procedure shall take effect, provided the petitioner has secured and presented to the Chairman of the Muscle Shoals Planning Commission a written waiver of legal notice and hearing requirements from all adjoining property owners.

In a case where a small subdivision shall contain so few lots, and no other engineering problems, in the opinion of the city engineer and the Chairman of the Muscle Shoals Planning Commission, the preliminary plat may be presented along with, and at the same time of, the final plat. All other procedures shall remain the same.

An existing subdivision to be resubdivided with three or fewer lots involved or a proposed new subdivision containing three or fewer lots may be approved by the city engineer and the Chairman of the Muscle Shoals Planning Commission for immediate recordation as a final plat in the office of the probate judge of Colbert County, provided that:

1. The subdivider has secured and presented to the Chairman of the Muscle Shoals Planning Commission a written waiver of the legal notice and hearing requirements from all adjoining property owners;
2. The lots meet the minimum requirements of all applicable regulations with respect to lot area and widths;
3. The lots have frontage on an existing public street which substantially conforms to the requirements of these regulations;
4. The lots can be served by an existing sanitary sewer, or have been approved for on-site disposal by the health department;
5. No other engineering problems exist in the opinion of the city engineer; and
6. No public interest in a street, easement, or the like will be impaired or placed in doubt.

Section 308. Preliminary Plat Requirements

All preliminary plats presented to the Muscle Shoals Planning Commission shall contain, as a minimum:

1. Name and address of owners and the designer of the plat. Said designer shall be a land surveyor registered to practice in the State of Alabama.
2. Names and addresses of current record (as per the tax assessor's records) of adjoining property owners, which shall include those across public rights-of-way, other rights-of-way, easements, creeks, etc.
3. Date of the plat, north arrow, scale of not less than one inch equals 100 feet, amount of acreage contained in the plat and a statement as to the remaining adjoining acreage the developer or subdivider owns has an option on or leases.
4. Proposed lot layout showing the following:
 - a. Lot dimensions, building lines and back and side setback lines and lot and block numbers and proposed street names. The locations of existing buildings, watercourses, railroads, power lines, bridges, culverts, and drainpipes on the land to be subdivided and immediately adjoining land.
 - b. Rights-of-way, easements, alleys, location and proposed widths
 - c. Proposed subdivision boundaries, with dimensions and tie to nearest government monument, with description of monument
 - d. A statement as to the current and proposed zoning (if applicable)
 - e. A vicinity sketch showing location of proposed site in relation to existing major streets, etc.

- f. If the proposed subdivision abuts an existing street, the location of any intersecting streets on the other side abutting street shall be depicted
- g. Evidence from the appropriate governing body (state, county, federal, or city) that the proposed subdivision has access over a publicly dedicated and maintained street or road
- h. The names, locations, widths, and other dimensions of existing or proposed parks, playgrounds, open spaces or other public property
- i. If any portion of the land included in, or immediately adjacent to, the proposed subdivision is located within the floodway or the 100-year flood boundary of a stream or river, as depicted on the flood boundary and floodway map, or is located in a special flood hazard area, as depicted on a flood hazard boundary map, then such floodway, boundary, or flood hazard area shall be indicated on the preliminary plat as accurately as possible.
- j. The following information will be required on the preliminary plat when submitted prior to construction plans:
 - i. Any pertinent topographic data, including contours at no more than five feet intervals for slopes over five percent and contours at no more than two feet intervals for slopes less than five percent
 - ii. Approximate locations for proposed storm drains, sanitary sewers with approximate sizes and design data.
 - iii. Proposed street profiles, traffic signalization, and sidewalk locations.

Section 309. Construction Plan Requirements

Construction plans of proposed improvements shall include construction plans of proposed streets, sanitary sewers, and drainage structures and shall be prepared by a registered professional engineer. Street design shall conform to the provisions of these regulations and such other specifications as may be promulgated by the city engineer. The construction plans of sanitary sewers shall include sufficient data to insure that the sewers have been designed in accordance with these subdivision regulations. The construction plans of drainage features shall contain sufficient data, including calculations of pipe diameters, runoff velocity in open gutters, and downstream erosion to permit the city engineer to verify the design's conformity to the provisions of these regulations and the City of Muscle Shoals Drainage Manual.

Section 310. Final Plat Requirements

The final plat shall be an original drawing on mylar or other high quality reproducible material and shall be tied to an accepted corner based on the U.S. Government Survey. This plat shall also show the following:

1. Tract boundary lines, right-of-way lines of streets, easements, and other rights-of-way, and property lines of lots, with accurate dimensions, bearings, or deflection angles, radii, arcs, central angles of all curves, front building lines and rear and side setback lines.
2. Name, number and right-of-way of each street and other right-of-way.
3. Locations, dimensions, and purposes of any easements.
4. Number to identify each lot or building site and the approved street name or number and street address of each lot.
5. Purpose for which sites, other than residential lots, are dedicated or reserved, it being understood that any reservations of areas for other than residential purposes shall be subject to the proper zoning thereof or being restricted by covenants.
6. Location of monuments.
7. Reference to recorded subdivision plats of adjoining platted land by plat book and page number.
8. Title, graphic scale, north arrow, name and registration number of subdivision engineer, and date, together with the quarter section or quarter sections in which the subdivision is located, the total acres of the subdivision, and the acreage of the platted lots.
9. Space for the approval of the city engineer and the Chairman of the Muscle Shoals Muscle Shoals Planning Commission, county engineer, and, if either is involved, the park and recreation authority, the board of education or the county health department.
10. Certificates and acknowledgements for designer and owner as required in Code of Ala. 1975, § 35-2-51.
11. Final plat shall be drawn on a scale of not less than one inch equals 100 feet. Size shall be such that the plat will be suitable for recording in the probate office of Colbert County, Alabama. The scale of one-inch equals 100 feet, if in the opinion of the city engineer is not practical, may be reduced but in no case shall the scale be less than one inch equals 200 feet.
12. A statement to the fact that the plat designer has closed each lot or parcel and that each lot or parcel mathematically closes to a closure of not less than one to 5,000.

13. Proper identification and notations of any areas subject to flood as required by article XI of these regulations. The developer's engineer [is] to include a statement on the plat if none of the development is located in a flood hazard area.
14. A statement of the allowable use of each lot in the subdivision and four copies of restrictive covenants for approval by the planning commission to insure said use(s) of each lot, if required by the planning commission.
15. A certified statement by the subdivider's engineer that the improvements within this development were designed and installed in accordance with the approved plans and specifications to the best of his or her knowledge.
16. The subdivider's engineer shall submit in writing to the city engineer the estimated cost of all infrastructures within subdivision.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article IV. Subdivision Design Principles

Section 401. General Suitability of Land

Land subject to flooding, improper drainage, or severe erosion or that is for topographical or other reasons unsuitable for residential use, and where such problems cannot be solved by sound engineering design shall not be platted for residential use, nor for any other use that will continue or increase the danger to health, safety, or property destruction.

Section 402. Conformity to Comprehensive Plan

All proposed subdivisions shall conform to any city, county, or regional plan and to the city zoning ordinance. Whenever a tract to be subdivided embraces any part of a highway, major street, secondary street, or parkway, so designated on any city, county, or regional plan, such part of such proposed public way shall be platted by the subdivider in the same location and at the same or greater width as indicated on such city, county, or regional plan.

When features of other plans adopted by the planning and zoning commission (such as schools or other public building sites, parks, or other land for public uses) are located in whole or in part in a land subdivision, such features shall be either dedicated or reserved by the subdivider for acquisition within 18 months by the appropriate public agency.

Whenever a plat proposes the dedication of land to public use that the planning and zoning commission finds not suitable for such public use, the planning and zoning commission shall refuse to approve the plat, and shall notify the governing body or the appropriate public agency of the reasons for such action.

Subdivision Regulations

City of Muscle Shoals
Colbert County, Alabama

Section 403. Name of Subdivision and Streets

The name of any subdivision in the jurisdiction of the planning and zoning commission, or the name of any street in any subdivision, must be approved by the planning and zoning commission, which shall have the sole authority over such names. Subdivision names, or the names of streets in subdivisions, shall not duplicate nor closely approximate the name of any other existing subdivision or street in the planning and zoning commission jurisdiction. Streets that are continuations of existing streets shall bear the same name or number as the existing street.

Section 404. Subdivisions to have Public Access

Access to every subdivision, or part thereof, shall be provided over a public street, road or highway which has been dedicated to the public and has been accepted for maintenance by resolution of the appropriate governing body and shall have a right-of-way width of not less than 50 feet.

Section 405. Omitted

Article V. General Requirements for Streets, Rights-of-Way, and Easements

Section 501. Continuation of Existing Street

Existing streets shall be continued at the same or greater width, but in no case less than the required width of right-of-way and pavement specified in these regulations.

Section 502. Street Jogs

Street jogs with centerline offsets of less than 150 feet shall not be permitted.

Section 503. Cul-de-sacs

Except by variance where topographic or other conditions make a greater length unavoidable, cul-de-sacs shall not be greater in length than 800 feet. They shall be provided at the closed end with a turnaround having a property line radius of at least 50 feet with an outside pavement radius of at least 40 feet.

Section 504. Development along Major Street Limited Access Highway or Railroad Right-of-Way

Where a subdivision abuts or contains a major street, a limited access highway, or a railroad right-of-way, the Muscle Shoals Planning Commission may require a street approximately parallel to and on each side of such right-of-way either as a marginal access street or at a suitable distance for an appropriate use of the intervening land. Due regard should be given requirements for approach grades and future grade separations in determining distances. Lots shall have no direct access to major streets (or limited access highway), but only to access streets. No-access reserve strips may be required, and insured by adequate covenants.

Section 508. Surface Drainage

A site grade plan shall be developed so that all lots shall be graded to provide a continuous fall away from buildings without ponding. Due regard shall be given to the accumulative effect of the storm drainage plan so that no portion of the subdivision or adjoining property is damaged or adversely affected. The city engineer shall approve the grading plan. Care shall be taken in grading and drainage planning to ensure proper drainage will be provided after the subdivision is fully developed. All drainage design must meet the requirements of the City of Muscle Shoals Shoals Drainage Manual.

Section 505. Alleys

Alleys may be required at the rear of all lots used for multifamily, commercial, or industrial developments but shall not be provided in one- and two-family residential developments unless the subdivider provides evidence satisfactory to the Muscle Shoals Planning Commission of the need for alleys. All alleys shall be a minimum of 20 feet in width, and shall be paved to the full width.

Section 506. Reserve Strips

Reserve strips controlling access to street, alleys, and public grounds shall not be permitted unless their control is placed in the hands of the governing body, under conditions approved by the governing body.

Section 507. Easements

Easements shall be coordinated with appropriate utilities. Easements having a minimum width of 10 feet and located along the side or rear lot lines shall be provided as required for utility lines, and underground mains and cables. Storm drainage easements, including off-site easements, will be required when necessary for the control of surface drainage. Each final plat shall contain the following marginal note:

Note: All easements shown on this plat are for public utilities, sanitary sewers, storm sewers, and storm ditches and may be used for such purposes to serve property both within and without this subdivision. No permanent structure or other obstruction shall be located within the limits of a dedicated easement.

Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water or drainage right-of-way of adequate width. Parallel streets may be required by the Muscle Shoals Planning Commission in connection therewith. Where a portion of the subdivision lies within a floodway, as specified on a federal flood hazard map or adopted best available data, a permanent conservation easement shall be located floodway and extending fifty feet (50') from the perimeter or outer edge of the floodway.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article VI. Minimum Design Requirements for Streets

Section 601. Street Right-of-Way Widths

The right-of-way width shall be the distance across a street from property line to property line. Minimum street right-of-way widths shall be as follows and increased accordingly where necessary:

1. Major streets as shown on the major street plan, 100 feet minimum.
2. Collector streets, 80 feet minimum.
3. Minor streets and dead-end streets, 50 feet minimum
4. Alleys, 20 feet.

The rights-of-way shall be graded to their full width so as to produce proper drainage, a pleasing appearance, reasonable grades for driveways, and where required, a sidewalk grade substantially on the same elevation as the top of the curb. The minimum slope shall be one-fourth inch per foot and the maximum slope shall be one inch per foot.

Where the periphery of a proposed subdivision abuts an existing street which is not improved substantially in accordance with these regulations, the developer shall install curb and gutter and shall perform all grading and drainage work otherwise required on that half of the said street which directly abuts his subdivision, provided however that such half-street improvement shall produce a street with a total paving width of not less than 24 feet. The Muscle Shoals Planning Commission may amend or waive this requirement where peculiarities of terrain or other circumstances so dictate.

Section 602. Street Pavement Width

Street pavement widths shall be from back of curb to back of curb and shall be as follows:

1. Major Street, as required by the planning commission.
2. Collector streets, 40 feet.

3. Minor streets and dead-end streets, 26 feet.
 4. Alleys, 20 feet.
- Design and construction shall conform to the standards of the Muscle Shoals Construction Specifications.

Section 603. Street Grades

Maximum or minimum street grades shall be as follows, with no grades exceeding the maximum for any length of street except by variance of the Muscle Shoals Planning Commission:

1. Major streets, not in excess of seven percent.
 2. Collector streets, not in excess of 12 percent.
 3. Minor streets and dead-end streets and alleys, not in excess of 15 percent.
 4. No street grade shall be less than one-half of one percent.
- *streets will be classified by the City Engineer.

Section 604. Horizontal Curvature

The minimum radii of centerline curvature shall be as specified for streets conforming to "A Policy on the Geometric Design of Highways and Streets," AASHTO, 5th ed.

Section 605. Vertical Alignment

Vertical alignment shall be specified for streets conforming to "A Policy on the Geometric Design of Highways and Streets," AASHTO, 5th ed.

Section 606. Stub Streets

Where a proposed subdivision abuts unplatted land, the developer shall provide streets stubbed out to the adjoining tract at intervals as required by the planning commission. Such streets shall be located at points where the topography of the adjoining unplatted land will permit their future extension with reasonable ease. Such stub streets shall be paved by the developer to the boundary of the unplatted land unless the Muscle Shoals Planning Commission for reasons of storm drainage, preventing erosion, or other practical considerations, expressly waives this requirement. A stub street that provides the sole access to more than two lots shall be terminated by a temporary cul-de-sac turnaround with a paved radius not less than 40 feet. A developer extending an existing

stub street shall remove the turnaround and extend the existing street profile as appropriate.

Section 607. Street Intersections

Street intersections shall be as nearly at right angles as possible. No street intersections shall be at an angle of less than 70 degrees, unless required by unusual circumstances and approved by the Muscle Shoals Planning Commission. Intersections of local streets with major streets shall be minimized.

Section 608. Curblin Radius

The curblin radius at street intersections shall be at least 25 feet. Where the angle of street intersections is less than 90 degrees, the city engineer may require a longer radius.

Section 609. Construction Specifications

All streets shall be paved and improved in accordance with the Muscle Shoals Construction Specifications and shall be built, paved and improved according to article VI standards and in accordance with cross sections prepared by the subdividers engineer and approved by the city engineer and Muscle Shoals Planning Commission.

Section 610. Subgrade

Street subgrade shall be cut and prepared in accordance with the Muscle Shoals Construction Specifications. All subgrade shall be cut to the grade as shown on the construction plans.

Section 611. Curb and Gutter

All streets developed within the City of Muscle Shoals and its police jurisdiction shall be provided with concrete curb and gutters conforming to the City of Muscle Shoals Construction Specifications. Standard gutters shall be preferred over the modified curb and gutter.

Section 612. Base Material

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All base material shall be installed in accordance with the city of Muscle Shoals Construction Specifications.

Section 613. Paving

All paving material shall be installed in accordance with the City of Muscle Shoals Construction Specifications.

Section 614. Sidewalks

The subdivider shall install a sidewalk on each side of every local, collector or arterial street with a district bounded on the north by Second Street, south by Sixth Street, east by Wilson Dam Road, and west by Woodward Avenue. Sidewalks shall not be required in any phase of any development ongoing at the time of adoption of these regulations. All sidewalks shall be a minimum of four feet in width, four inches in thickness, of 3,000 pounds concrete, and conforming to the concrete specifications of the city engineer. Each sidewalk shall have a minimum lateral drainage slope of one-fourth inch per foot. Curb ramps shall be provided at all intersections to meet ADA requirements. A median strip of grassed or landscaped areas at least two feet wide shall separate all sidewalks from adjacent curbs. The planning commission reserves the right to require sidewalks in other areas that may be considered highly pedestrian.

Section 615. Traffic and Street Signs

The subdivider shall install at cost of the developer stop signs, yield signs, stop lines, yield lines and other necessary traffic control signs and devices as required by the engineer. All such signs shall be in compliance with latest version of the Manual on Uniform Traffic Control Devices. The city engineer shall review and comment on the proposed location, appropriateness, need, type and number of traffic signs and devices required.

Section 616. Underground Utilities

When installed underground, electrical cables may be direct-buried or installed in conduit, provided that any such cable placed under the pavement if a public street shall be installed in conduit. Underground electrical cable shall be stubbed out at each street intersection so as to facilitate provision of streetlights.

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Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article VII. Design Standards for Lots and Blocks

Section 701. Block Lengths and Widths

Block lengths and widths shall be as follows:

1. Blocks shall be no greater than 1,200 feet nor less than 400 feet in length, except in unusual circumstances, and approved by variance by the Muscle Shoals Planning Commission.
2. Blocks shall be wide enough to provide two tiers of lots of minimum depth, except where abutting upon major streets, limited access highways, or railroads or where other situations make this requirement impractical.

Section 702. Lot Sizes

Lots in the city limits shall meet the lot width and lot area requirements of the zoning ordinance. In those areas outside of the force and effect of the zoning ordinance, lots shall be no less than 75 feet wide at the building line, and contain no less than 9,000 square feet. Front building lines shall be no less than 30 feet.

Lots shall have a depth of not less than 100 feet and not greater than five times the width of the lot at the building line, unless unusual circumstances make these limitations not practical and a variance is granted by the planning commission.

Where individual septic tanks are allowed, the Colbert County health officer may prescribe minimum lot sizes greater than the sizes specified herein to conform to health standards.

Commercial and industrial lots outside of the city limits shall be adequate to provide service areas and off-street parking suitable to the use intended, but in no case less than the standards specified above.

Corner lots shall have adequate width to meet building setback requirements from both abutting streets. Minimum front setbacks shall be established on both frontages.

Lots outside the city limits shall have a minimum side yard setback of five feet and a minimum rear yard setback of 25 feet (see also section 707). Lots in the city limits shall comply with zoning ordinance requirements.

Section 703. Lot Lines

All lot lines shall be perpendicular to straight streets or radial to curved street lines, unless not practical because of topographic or other features and a variance is granted by the planning commission.

Section 704. Lots Abutting Public Streets

Each lot shall abut upon a dedicated public street.

Section 705. Double and Reverse Frontage Lots

Double frontage and reverse frontage lots shall be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten feet in width, and across which there shall be no right of access, shall be provided along the line of lots abutting such a traffic artery or other disadvantageous use. Adequate covenants shall be recorded to insure the prohibited access across said easement.

In addition, the subdivider shall plant and maintain to maturity an effective opaque, vegetative screen to be planted and maintained according to the instructions of a reputable plant nursery or other qualified person in the field.

Section 706. Monuments and Markers

Each subdivision shall have as a minimum monument pipes 1 1/4 inches in diameter and two feet in length placed at all main control points within the subdivision. Said monuments shall extend no higher than six inches above finished grade. All corners on platted lots shall be marked by a one-half-inch diameter pipe 18 inches long, which may not extend over three inches above finished grade. Location of points of curvature

(PC's) and points of tangency (PT's) for street centerlines shall be marked with a monument pipe identical with those used to identify all lot corners in the subdivision. Said PC and PT markers will be placed on each boundary of the right-of-way.

Permanent concrete monuments, approved by a registered land surveyor, meeting the following minimum standards may also be used in lieu of pipes. Such concrete monuments shall be at least four inches square or five inches in diameter and at least two feet in length. Said monuments shall extend no higher than six inches above the finished grade and shall be marked on top with a cross, brass plug, iron rod, or other durable material securely embedded.

Section 707. Lots Abutting Major Streets or Railroads

Residential lots which have rear yards abutting on a major street or railroad shall be planted with a minimum rear yard setback of 200 feet, unless the Muscle Shoals Planning Commission determines that for reasons of topography or other features a lesser rear yard will achieve the same purpose.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article VIII. Design Requirements for Drainage and Storm Sewers

Stormwater Drainage shall meet the requirements set forth in the City of Muscle Shoals Drainage Manual.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article IX. Design Requirements for Sanitary Sewers

Section 901. General Design Criteria

Sanitary sewers shall be designed in accordance with "The Utilities Board City of Muscle Shoals Materials and Installation Requirements for Potable Water Lines and Appurtenances and for Sanitary Sewer Lines and Appurtenances". All material used in the construction of sanitary sewers and appurtenances shall meet the requirements for sanitary sewers as specified in the Utilities Board City of Muscle Shoals Materials and Installation Requirements for Potable Water Lines and Appurtenances and for Sanitary Sewer Lines and Appurtenances.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article X. Water Facilities

Section 1001. General Design Criteria

All water mains in subdivisions served by The Utilities Board City of Muscle Shoals shall be constructed by the developer at his/her cost in compliance with the current Utilities Board City of Muscle Shoals Materials and Installation Requirements for Potable Water Lines and Appurtenances and for Sanitary Sewer Lines and Appurtenances.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XI. Erosion Control

Section 1101. Sediment and Erosion Control Plan

Must meet requirements set forth in the City of Muscle Shoals Drainage Manual. The developer will be deemed to be responsible for the development until vegetation is established in all disturbed areas of the site. The sale of lots will not relieve the developer of this responsibility.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XII. Requirements for Subdivisions Subject to Flooding

Section 1201. Streams Depicted on Flood Boundary and Floodway Map

Land located within the subdivision jurisdiction of the City of Muscle Shoals which abuts on or is bisected by a stream, segment of a stream, or other water body for which the 100-year floodway fringe are depicted on the flood boundary and floodway map shall be subdivided in accordance with the following regulations:

1. Except as provided in section 1202 below, any portion of a proposed subdivision lot which lies within a floodway and an area within fifty feet of the boundary of the floodway shall be designated as a drainage easement on the final plat. The area within the regulatory floodway shall be further identified by the word "floodway." The portion of the lot lying outside the floodway and easement area shall be of such size and configuration as will permit construction of a residence without encroaching upon the floodway easement. The following note shall be set forth on the margin of the final plat in 14-point type or larger:

Note: No filling or construction shall be allowed in the portion of this subdivision designated as "floodway" without the written permission of the Muscle Shoals Planning Commission.

2. Land lying outside the floodway but within the floodway fringe shall be depicted on the preliminary and final plat by means of hatching or shading. There shall be a note on the margin of the final plat indicating that land so hatched or shaded is located in the floodway fringe, and that no house or other structure for human habitation may be built thereon unless the lowest floor (including basement, if any) is constructed at an elevation not less than one foot above the base flood elevation. Each lot or portion of a lot lying within the floodway fringe shall contain a note on the final plat indicating the minimum first floor elevation for any habitable structure to be built thereon, which elevation shall be one foot above base flood elevation or higher. The base flood elevation shall be determined by reference to flood profiles and other data in flood insurance study or best available data.

3. For developments located within the subdivision jurisdiction of the City of Muscle Shoals that abut on or are bisected by a stream, segment of a stream or other water body, base flood elevation data shall be generated for all subdivision proposals, including the placement of mobile home parks and subdivisions, which is greater than 50 lots or five acres, whichever is less.

Section 1202. Channelization by Variance

In the event that a developer requests a variance, according to section 108 of these regulations, to channelize, straighten, narrow, or relocate a floodway, the following procedure shall be employed:

1. The developer's engineer shall submit to the city engineer designs of the proposed change to the floodway channel, together with supporting data such as cross sections, profiles, engineering calculations, and the like demonstrating that the proposed change will accommodate the base flood and will not have the cumulative effect, when combined with all other existing and anticipated development, of increasing the water surface elevation along any significant reach of the stream by more than one foot or of causing other adverse effects

upon any part of the drainage system on account of increased stream velocity, eddy action or other phenomena.

2. The developer's engineering report and design shall be submitted to the city engineer, who shall submit written comments upon it to the Muscle Shoals Planning Commission prior to the commission's action on the variance concurring with, or taking exception to, the said engineering report and design. After verifying the accuracy of the plans, profiles, and calculations, the city engineer shall forward them to the Federal Emergency Management Agency with a request that the flood boundary and floodway map be amended if and when the proposed channel improvements are constructed.
3. No subdivision proposing to alter the regulatory floodway shall be approved until certified by the Federal Emergency Management Agency as the proposed changes will accommodate the base flood and will not have the cumulative effect, when combined with all other existing and anticipated development, of increasing the water surface elevation along any significant reach of the stream by more than one foot or of causing other adverse effects upon any part of the drainage system on account of increased stream velocity, eddy action or other phenomena.

Approval by the Muscle Shoals Planning Commission of any plat of a subdivision involving the channelizing, straightening, or relocation of such a stream shall not be construed to constitute an amendment of the flood insurance rate map or the flood boundary and floodway map.

Section 1203. Streams Outside of the City Limits, but in Subdivision Jurisdiction

For subdivisions located within the subdivision jurisdiction of the City of Muscle Shoals that abut on or are bisected by a stream, segment of a stream or other water body for which no floodway is depicted on any flood boundary and floodway map, but along which a special flood hazard area is depicted on a flood hazard boundary map officially promulgated by the Federal Emergency Management Agency, shall be platted as follows:

1. The developer's engineer shall measure the average width of the normal rainy season streambed from top of bank to top of bank. The floodway width shall be deemed to equal five times the width of the normal streambed or 100 feet, whichever is greater. It shall be presumed that the floodway is equally distributed on either side of the centerline of the stream. Land lying outside the floodway

boundary, but within the special flood hazard area, shall be deemed floodway fringe land.

2. If owing to topography or other factors, the method prescribed in paragraph (1) above does not yield a reasonable and practical measurement of the floodway, the developer's engineer may offer other information to establish the floodway configuration more precisely in accordance with accepted engineering practice.
3. To determine the base flood elevation, the developer's engineer shall investigate all available sources of information, such as historic flood profiles, eyewitness accounts, and the like. He shall prepare a report setting forth the said elevation, and citing the evidence upon which his estimate is based. The city engineer shall advise the Muscle Shoals Planning Commission in writing prior to approval of the preliminary plat whether or not he concurs with the estimated base flood elevation and whether or not additional research is needed.
4. After receipt of the report from the developer's engineer, together with the comments of the city engineer, the Muscle Shoals Planning Commission shall issue the developer a ruling approving or disapproving the floodway configuration and base flood elevation. The developer's engineer may then proceed to complete the subdivision plans in accordance with the provisions of section 1201.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XIII. Planned Developments and Condominiums

Section 1301. Site Design Standards and Platting Procedures

Platting requirements for Planned Residential Developments shall comply with the standards established herein for the subdivision of property, however, for the purposes of determining zoning features required for subdivision, the flexible design standards established by Zoning Ordinance provisions for PRD overlay districts shall apply to all subdivisions within such districts.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XIV. Nonresidential Subdivisions

Section 1401. Design and Layout Standards

If a proposed subdivision in the city limits is zoned for commercial or industrial purposes or a subdivision located inside the city limits is intended for commercial or industrial uses, the layout of the subdivision shall be appropriately altered to suit the anticipated building types, vehicular traffic, parking demand and other characteristics.

In addition to the principles and standards in these regulations, which are appropriate to the planning of all subdivisions, the applicant shall demonstrate to the satisfaction of the Muscle Shoals Planning Commission that the street, parcel, and block pattern proposed is specifically adapted to the uses anticipated and takes into account other uses in the vicinity. The following principles and standards shall be observed, but not limited to, the following:

1. Proposed industrial parcels shall be suitable in area and dimensions to the types of industrial development anticipated.
2. Street rights-of-way and pavement shall be adequate to accommodate the type and volume of traffic anticipated to be generated thereupon.
3. Special requirements may be imposed by the local government with respect to street, curb, gutter, and sidewalk design and construction.
4. Special requirements may be imposed by the local government with respect to the installation of public utilities, including water, sewer, and storm water drainage.
5. Every effort shall be made to protect adjacent residential areas from potential nuisance from a proposed commercial or industrial subdivision, including the provision of extra depth in parcels backing up on existing or potential residential development and provisions for a permanently landscaped buffer strip when necessary.
6. Streets carrying nonresidential traffic, especially truck traffic, shall not normally be extended to the boundaries of adjacent existing or potential residential areas.

7. Site plan application shall be required for all nonresidential developments within the planning jurisdiction for approval of all city agencies and county agencies as appropriate prior to the issuing of building permits.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XV. Amendment and Legal Considerations

Section 1501. Amendments

The Muscle Shoals Planning Commission may amend these regulations from time to time after publication and a public hearing as required by law.

Section 1502. Saving Clause

These regulations shall not be construed as abating any action now pending under, or by virtue of, prior existing subdivision regulations, or about to accrue, or as affecting the liability of any person, firm, or corporation, or as waiving any right of the city under any section or provision existing at the time of adoption of these regulations, or as vacating or annulling any rights obtained by any person, firm, or corporation by lawful action of the city, except as shall be expressly provided for in these regulations.

Section 1503. Interpretation by the Muscle Shoals Planning Commission

Whenever a subdivider, city official or aggrieved person affected by the administration and enforcement of these regulations finds uncertainty in the interpretation of these regulations, that person shall submit the same in writing to the Muscle Shoals Planning Commission, which shall be the sole authority for interpretation of these regulations.

Section 1504. Regulations to the Minimum Standards

In their interpretation and application, these regulations are considered as minimum standards. Whenever the provisions of these regulations and those of some other valid regulation, ordinance, or statute apply to the same subject matter, that control measure requiring the highest, or more strict, standard shall govern.

Section 1505. Separability

If any part or provision of these regulations or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in the controversy in which such judgment shall have been rendered, and shall not affect or impair the validity of the remainder of these regulations or the application thereof to other persons or circumstances. The Muscle Shoals Planning Commission hereby declares that it would have enacted the remainder of these regulations even without any such part, provision, or application.

Section 1506. Effective Date

These regulations shall be effective and shall supersede all former subdivision regulations of the City of Muscle Shoals upon the date of their adoption, provided however that proposed subdivisions have received preliminary plat approval prior to the adoption of these regulations shall be allowed to be platted and approved under the conditions imposed at the time of their preliminary approval for a period of nine months after the adoption of these regulations.

Subdivision Regulations
City of Muscle Shoals
Colbert County, Alabama

Article XVI. Mobile Home Park Regulations

Section 1601. Site Design Standards

A mobile home park shall meet the following site standards and regulations:

1. The minimum area for any mobile home park shall be four acres.
2. The maximum density is ten mobile home sites per acre.
3. Minimum front, side, and rear yard setbacks shall be 50 feet at mobile home park boundaries.
4. All minimum interior side yard and rear yard setbacks shall include a minimum of a 15-foot-wide planting area of trees and shrubs to act as a screen between mobile home park and abutting property.
5. Access points shall be located on public streets providing safe and convenient access.
6. No sign or other form of advertising shall be permitted other than that necessary to identify the mobile home park.
7. All mobile home parks shall have hard surface streets well marked and lighted by the mobile home park owner. Those outside city limits for rent only shall meet county road standards: 24 feet wide, hard surface, with four-foot shoulder. Those inside the city limits and all with lots for sale shall meet city road standards: 27 feet wide, asphalt or concrete with curbs, gutters, and sidewalks. All mobile home lots shall abut upon a street and shall have hard surface driveways.
8. The entire area shall be adequately serviced by water and sewer and all mobile homes remaining for a period exceeding 30 days must meet the requirements of the minimum housing code pertaining to mobile homes.
9. No accessory building or structure shall be erected or maintained in any required minimum setback area for the mobile home park or any individual mobile home space nor shall an accessory building or structure be located more than 100 feet from the mobile home it is to serve.

Section 1602. Design Standards for Individual Mobile Home Sites

The following site standards shall apply to individual mobile home spaces within each mobile home park.

1. **Size.** No mobile home space shall be less than 4,000 square feet.
2. **Setbacks.** Minimum front, side and rear yard setbacks shall be as follows:
 - a. Front yard shall be 20 feet.
 - b. Side yards shall be a total of 25 feet with one yard not less than ten feet.
 - c. Rear yards shall be ten feet.
3. **Landscaping.** All minimum setback areas shall be permanently landscaped and maintained with ground cover, trees and shrubs (see landscaping requirements, section 406).

Sec. 1603. Site Plan Application Required

A site plan application shall be submitted and approved by the city agencies for a mobile home park prior to the issuance of any grading permit or building permits. The plan shall contain the following information:

1. The scale of the map shall not be less than one inch to 50 feet with contours at five-foot vertical intervals showing pertinent topographical features.
2. The location, use, plan, and dimension of each building or structure to be constructed and the location of each mobile home to be parked.
3. The location, dimension and arrangement of all open spaces, yards, access ways, entrances, exits, off-street parking facilities, pedestrian ways, location and width of roads, streets, and sidewalks.
4. Location, dimensions, and arrangement of all areas devoted to planting, lawns, trees or similar purposes, with a description including the height and density of all trees or planting to be used for screening.
5. Location and description of all facilities to be used for sewage disposal, water supply, and storm drainage.

Sec. 1604. Building Permit Requirements

Each mobile home hereinafter located on a lot for any purpose, residential, commercial, construction site or industrial caretaker use, shall meet the following requirements specified on building permits and enforced by permit and inspection thereof:

1. **Mobile home anchorage.** A mobile home stand shall be installed to provide adequate support for the placement and tie down of each mobile home. The

- stand shall not heave, shift or settle unevenly under weight of the mobile home due to frost action, inadequate drainage, vibration, wind or other forces action on the structure. Anchors or tie downs such as cast-in-place concrete deadmen, eyelets imbedded in concrete, screw augers or arrowhead anchors shall be placed at least every 20 feet. Each device shall be able to sustain a minimum load of 4,800 pounds. State law references: Uniform Code for the Anchoring of Mobile Homes Act, Code of Ala. 1975, § 24-5-30 et seq.
2. **Mobile home skirting.** Skirting shall be provided around the entire mobile home, from the bottom of the mobile home to the mobile home stand. The materials used shall be aluminum or other durable siding material.
3. **Existing mobile homes on lots or spaces.** Existing mobile homes will be brought into compliance with these regulations within a period of 18 months after the adoption thereof. The Building Inspector may grant an exception to this requirement in writing to a mobile home owner who presents documentation proving eligibility for food stamps and/or supplemental security income (SSI).
4. **Streets:**

- a. **General.** All mobile home parks shall be provided with a safe and convenient vehicular access from abutting public streets or roads to each mobile home lot. Streets, driveways or other means shall provide such access.
- b. **Private streets.** Streets in a mobile home park shall be private, provided that where an adjoining tract of land would have access to public streets only through the mobile home park, at least one street meeting all standards prescribed in the subdivision regulations shall be dedicated to the public for the purpose of providing such access.
- c. **Entrance streets.** Entrances to mobile home parks shall have direct connections to a public street and shall be designed to allow free movement of traffic on such adjacent public streets. No parking shall be permitted on the entrance street for a distance of 100 feet from its point of beginning.
- d. **Circulation.** The street system shall provide convenient circulation by means of minor streets and properly located collector streets. Dead-end streets shall be limited in length to 600 feet and their closed end shall be provided with an adequate turnaround (60-foot diameter cul-de-sac). No street of less than two lanes shall be permitted.
- e. **Pavement widths.** Pavements shall be of adequate widths to accommodate the contemplated parking and traffic load in accordance with the type of street with ten feet minimum moving lanes for collector

streets, nine feet minimum moving lanes for minor streets, seven feet minimum lane for parallel parking and in all cases shall meet the following requirements:

- i. Collector streets with guest parking allowances, 34 feet.
- ii. Collector streets and all other streets except minor streets without parking allowances, 24 feet.
- iii. Minor streets serving less than 40 lots (no parking), 18 feet.
- iv. Pavement widths of interior streets shall be 20 feet minimum width.

f. *Street grades.* Grades of all streets shall be sufficient to insure adequate surface drainage, but shall not be more than eight percent. Short runs with a maximum grade of 12 percent may be permitted, provided traffic safety is assured.

g. *Intersections.* Street intersections shall generally be at right angles. Offsets at intersections and intersections of more than two streets at one point shall be avoided.

h. *Extent of improvements.* All streets shall be provided with a smooth, hard and dense surface, which shall be durable and well drained under normal use and weather conditions. The surface shall be maintained free of cracks and holes and its edges shall be protected by suitable means to prevent raveling and shifting of the base.

i. *Streetlights.* Lighting shall be designed to produce a minimum of one-tenth foot candle throughout the street system. Potentially hazardous locations, such as major street intersections, shall be individually illuminated with a minimum of three-tenths foot-candle.

5. *Walks:*

a. *General requirements.* All mobile home developments shall be provided with safe, convenient, all-season pedestrian access of adequate width for intended use, durable and convenient to maintain.

b. *Common walk system.* A common walk system shall be provided and maintained between locations where pedestrian traffic is concentrated. Such common walks shall have a minimum width of 4 feet.

c. *Individual walks.* All mobile home stands shall be connected to common walks, or to driveways, or to parking spaces. Such individual walks shall have a minimum width of two feet.

6. *Driveways and Parking Spaces:*

a. *Driveways.* Improved driveways shall be provided on lots where necessary for convenient access to mobile homes. The minimum width shall be ten feet.

b. *Parking spaces.* The design criteria for automobile parking shall be based upon two parking spaces for each mobile home lot. Parking may be in tandem.

Subdivision Regulations
City of Muscle Shoals
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Article XVIII. Certifications, Certifications, Bonds, Violations, Applications, Check List

- Owner's Certificate
- Surveyor's Certificate
- Certification of the Approval of Streets and Utilities
- Certificates of Approval for Recording
- Performance Bond
- City Council Acceptance of Public Dedication
- Certificate of Approval of the Final Plat by the Planning Commission
- Violation Complaint
- Notice of Violation
- Notice of Citation
- Subdivision Application
- Preliminary Plat Checklist
- Construction Plans/Subdivision Improvements Checklist
- Final Plat Checklist
- Re-subdivision Check List

OWNER'S CERTIFICATE

OWNER'S CERTIFICATE AND DEDICATION. We, the undersigned (name of owner) do hereby certify that we are the owners of and the only person having any right, or interest, in the land shown of the Plat of (name of subdivision), and that the Plat presents a correct survey of the above described property made with consent, and that we hereby dedicate to the public use all the streets shown on said Plat. The easements, as shown on the plat, are created for the installation and maintenance of public utilities. We hereby guarantee a clear title to all lands so dedicated from ourselves and our heirs or assigns forever, and have caused the same to be released from all encumbrances so that the title is clear, except as shown in the abstractor's certificate.

RESTRICTIONS: (if any, follow here)

Witness _____, 20____, this _____ hand _____, day of _____

Witness _____

MORTGAGE OWNERS CERTIFICATE

MORTGAGE OWNERS CERTIFICATE AND DEDICATION. We, the undersigned (name of owner) do hereby certify that _____ are the owners of a mortgage attached to the land shown of the Plat of _____ and that the Plat presents a correct survey of the above described property made with consent, and that we hereby dedicate to the public use all the streets shown on said Plat. The easements, as shown on the plat, are created for the installation and maintenance of public utilities. We hereby guarantee a clear title to all lands so dedicated from ourselves and our heirs or assignees forever, and have caused the same to be released from all encumbrances so that the title is clear, except as shown in the abstractor's certificate.

RESTRICTIONS: (if any, follow here)

Witness _____ hand _____ this _____ day of _____, 20_____

Witness _____

SURVEYOR'S CERTIFICATE

SURVEYOR'S CERTIFICATE. I, _____, the undersigned, do hereby certify that I am a professional land surveyor or civil engineer, registered in the State of Alabama, and that the annexed map of (name of subdivision) consisting of _____ sheets, correctly represents a survey made under my supervision on the _____ day of _____, 20_____, and that all of the monuments shown hereon actually exist and their positions are correctly shown.

Signature _____

License Number _____

Witness _____

CERTIFICATION OF THE APPROVAL
OF STREETS AND UTILITIES

I hereby certify that the streets, utilities, and other improvements have been installed in an acceptable manner according to City of Muscle Shoals specifications in the subdivision entitled _____, or that a performance bond in the amount of \$ _____ has been posted with the City of Muscle Shoals to assure proper construction of all requirement improvements in case of default.

20 _____
Muscle Shoals City Engineer

20 _____
Muscle Shoals Electric Board

20 _____
Muscle Shoals Water and Sewer Board

20 _____
North Alabama Gas

One note shall be placed for each signature required.

CERTIFICATION OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat for _____ subdivision has been found to comply with the Subdivision Regulations of the City of Muscle Shoals, Alabama, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the Office of the Probate Judge of Colbert County.

20 _____
Chairman, Planning Commission

ATTEST:
Secretary _____

By _____

Approved as to form and legality this _____ day of _____ A. D., 20 _____
Attorney: _____

Approved by the City Council of Muscle Shoals this _____ day of _____ A. D., 20 _____

ATTEST:
Clerk _____ Mayor _____

CITY COUNCIL ACCEPTANCE
OF PUBLIC DEDICATION

Be it resolved by the City Council of the City of Muscle Shoals, Alabama, that the dedication shown on the attached Plat of (name of subdivision) is hereby accepted.

Adopted by the City Council of the City of Muscle Shoals, Alabama, this the _____ day of _____, 20_____

Mayor

ATTEST:

Clerk

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as principal and the undersigned Surety, are held and firmly bound unto the City of Muscle Shoals, Alabama, hereinafter called the "City", in the full sum of _____ for the payment of which, well and truly to be made, we, and each of us, bind ourselves jointly and severally, by these presents.

Dated this the _____ day of _____, A.D., 20_____.

The conditions of this obligation are such that,

WHEREAS, PRINCIPAL, has submitted to the Planning Commission, a Final Plat for subdivision of a tract of land described as follows:

AND, WHEREAS, PRINCIPAL, has pursuant to the Subdivision Regulations of the City of Muscle Shoals elected to title this bond in lieu of actual completion of improvements and utilities in the above subdivision.

NOW, THEREFORE, if the PRINCIPAL shall, within _____ month(s) from the date of approval of the Final Plat of the subdivision, faithfully install complete improvements and utilities in the rules and regulation of the City and pay all bills for contractors, subcontractors, labor and materials incurred in completion thereof; and shall hold harmless and indemnify the City and all interest property owners against liability, loss, or damage by reason of failure of PRINCIPAL to faithfully perform the conditions hereof, then this obligation shall be null and void, otherwise to remain in full force and effect; PROVIDED, however, that actions upon this bond by contractors, subcontractors, laborers, or material men shall be limited to six months from and after completion of the improvements and utilities above referred to.

Signed, sealed, and delivered the day and year first above written.

Principal

ATTEST:

Secretary

CERTIFICATE OF APPROVAL
OF THE FINAL PLAT BY THE

PLANNING COMMISSION

(to be placed on the plat)

Pursuant to the Muscle Shoals Subdivision Regulation, all the requirements for approval have been fulfilled. The City of Muscle Shoals Planning Commission gave Final Approval of this final plat on

Secretary

Date _____

CITY OF MUSCLE SHOALS
VIOLATION COMPLAINT

Date of Complaint _____ Complaint Received By _____

Form of Complaint _____ Citizen _____ Public Official _____ Inspector _____

Name of Person Filing Complaint: _____

Nature of Complaint: _____

Location: _____

Probable Violation of Article _____ Section _____ of the Muscle Shoals Subdivision Regulations, described as follows:

Referred for inspection to: _____

Date of inspection: _____

Inspection Findings: _____

Violation Found _____ No Violation Found _____ Other _____

Initial Action Following Discovery of Violation: _____

Notice of Violation Sent On: _____

Other: _____

Follow-Up Inspection Due On: _____

Notes: _____

CITY OF MUSCLE SHOALS
NOTICE OF CITATION

Date of Notice

Name of Property Owner
Mailing Address
City, State, ZIP

Dear _____ (name of property owner):

On _____ (date upon which initial violation was confirmed), I investigated and confirmed a violation of the Muscle Shoals Subdivision Regulations on your property located at _____ (street address of subject property) _____ (city, state, zip). The nature of this violation is _____ (description of violation) _____ (cite Article number _____ (cite Section and subparagraph numbers) _____ of the Subdivision Regulations. Our records show that the Notice of Violation was sent to you on _____ (date that the notice was mailed) _____ and received by you on _____ (date of receipt by property owner). _____ (explain the nature of this violation and requesting that you correct the problem on or before _____ (deadline for correction of violation specified in the notice of the violation) _____).

On _____ (date of re-inspection), I performed a follow-up investigation to determine whether or not the violation had been corrected in accordance with the Notice of Violation. My inspection of the property revealed that the violation has not been corrected in accordance with the Subdivision Regulations. Therefore, the City of Muscle Shoals is hereby issuing this Citation to you for failure to correct a violation of the Subdivision Regulations. To correct this violation, you must _____ (specify corrective measures including the amount of the fine that must be paid by the property owner) _____ on or before _____ (date after the date of citation) _____. If this violation is not corrected in full by the aforementioned date, the City of Muscle Shoals will be obligated to file a written complaint with the Municipal Court for relief. If such a complaint is filed, you will be required to appear before the Municipal Court, at a time and date to be determined by the Court, to answer the charge of violation as explained in this Citation. If you have any questions regarding this violation or the subsequent actions that the City will take, please do not hesitate to contact me at _____ (specify contact number and/or email address) _____ during _____ (hours of specify business hours) _____.

We appreciate your efforts to resolve this violation as soon as possible. Thank you for your cooperation.

Sincerely,

(signature of enforcement officer)
Enforcement Officer

CITY OF MUSCLE SHOALS
NOTICE OF VIOLATION

Date of Notice

Name of Property Owner
Mailing Address
City, State, ZIP

Dear _____ (name of property owner):

On _____ (date of investigation), I investigated and confirmed a violation of the Muscle Shoals Subdivision Regulations on your property located at _____ (street address of subject property). The nature of this violation is _____ (description of violation), which violates Article _____ (cite Article number) _____ (cite Section and subparagraph numbers) _____ of the Subdivision Regulations.

I am writing to request that you take action to correct this violation on or before _____ (specify date by which the violation must be corrected). In order to avoid the issuance of a formal citation and penalty, if you feel that this notice has been issued in error or you feel that an extension to the deadline is necessary, please arrange a meeting with me on or before _____ (date - five business days after the date of notice) _____. I will be happy to discuss this problem with you in greater detail.

Thank you for your help in addressing this problem. The City of Muscle Shoals appreciates your cooperation.

Sincerely,

(signature of enforcement officer)
Enforcement Officer

CITY OF MUSCLE SHOALS
SUBDIVISION APPLICATION

Property owners in the City of Muscle Shoals who wish to subdivide property within the City and within the City's extrajurisdictional planning jurisdiction must complete a Subdivision Application form. To request Planning Commission approval of a proposed subdivision plan, please complete the following application and return the form with all necessary supporting documentation to City Hall. Incomplete applications will not be processed. For additional information, please call the City of Muscle Shoals at 256-385-7483 during regular business hours.

Applicant Information

Name of Applicant: _____

Mailing Address: _____

Business Hours Telephone Number: _____

Fax Number (if available): _____

NOTE: If the applicant is not the owner of the subject property, then a letter signed by the owner authorizing the applicant to submit the application must accompany the application.

Consulting Engineer Information

(if same as applicant, complete only first three lines)

Name of Lead Consultant: _____

Name of Consulting Firm: _____

Professional Trade Affiliation: [] Engineer [] Surveyor [] Architect

Mailing Address: _____

Business Hours Telephone Number: _____

Fax Number (if available): _____

Property Summary Information

Owner(s) of Record: _____

Street Address of Subject Property: _____

Is Subject Property Located within the City Limits of Muscle Shoals? [] yes [] no

Tax Map and Lot Number of Subject Property: _____

Zoning Classification of Subject Property: _____

Size of Subject Property (in acres): _____

Size in Acres of Smallest Lot to be Created: _____

Total Number of New Lots to be Created: _____

Is Subject Property Located Within 300 Feet of a City Water or Sewer Main? [] yes [] no

Uses to be Allowed in Subdivision: [] residential [] industrial [] commercial

Is Property Located Within a 100-Year Floodplain? [] yes [] no

Supporting Information

[] Full Payment of the Required Application Fee

[] Six (6) prints or copies of a preliminary plat of the proposed subdivision satisfying all requirements of Article V, Section 4.3 of the Muscle Shoals Subdivision Regulations.

[] A listing of the names and mailing addresses of all owners of land immediately adjoining the proposed subdivision property as their names may appear upon the plats contained in the County Tax Assessor's office and as their addresses appear in the directory of the municipality or on the tax records of the municipality or county.

[] A complete list of all local, state, and federal permits or approvals that have been applied for or secured by the applicant for the proposed subdivision as of the date of filing of this application

Certifications

Applicant:

I hereby certify and attest that, to the best of my knowledge and abilities, the information provided in this application is true and accurate. Further, I agree to provide any additional information within my powers that may be required by the Enforcement Officer, City Engineer, or Planning Commission to determine the compliance of the proposed property construction or improvement activities with the Subdivision Regulations and Zoning Ordinance of the City of Muscle Shoals.

Date: _____ Applicant's Signature: _____

Property Owner:

I hereby certify and attest that, to the best of my knowledge and abilities, the information provided in this application is true and accurate. Further, I agree to provide any additional information within my powers that may be required by the Enforcement Officer, City Engineer, or Planning Commission to determine the compliance of the proposed property construction or improvement activities with the Subdivision Regulations and Zoning Ordinance of the City of Muscle Shoals.

Date: _____ Property Owner's Signature: _____

FOR CITY OF MUSCLE SHOALS USE ONLY

Enforcement Officer's Information

Date Filed: _____

Received By: _____

Application Fee Received: \$ _____ [] cash [] check # _____

Date Reviewed and Deemed Complete: _____

Enforcement Officer's Signature: _____

Public Hearing Date: _____

Date Public Hearing was Closed (if different from above): _____

Planning Commission Action on Preliminary Plat: [] Approved [] Denied

Date of Final Action by Planning Commission: _____

Planning Commission Findings and/or Special Conditions of Approval: _____

Planning Commission Chair's Signature: _____

PRELIMINARY PLAT CHECKLIST

Name of Plat _____

Developer's Engineer _____

Copy of Plat Sent To (check applicable spaces):

- City Engineer []
- Planning Department []
- Muscle Shoals Police Department []
- Muscle Shoals Fire Department []
- Muscle Shoals Water and Sewer Board []
- North Alabama Gas District []
- Muscle Shoals Electric Board []

PART I: SPECIFICATIONS FOR PLAT DOCUMENT

Meets All Requirements of Section 7.1: [] yes [] no [] NA

List of Items Missing, and Remarks: _____

PART II: DESIGN PRINCIPLES AND STANDARDS

1. Conformity to Comprehensive Plan: [] yes [] no [] NA

Meets Requirements of Section 4.1: _____

Remarks: _____

2. Lot Arrangement: [] yes [] no [] NA

Meets Requirements of Section 4.4: _____

Remarks: _____

3. Minimum Lot Size: [] yes [] no [] NA

Meets Requirements of Section 4.5: _____

Remarks: _____

4. PUD: Meets Requirements of Section 4.7: [] yes [] no [] NA

Remarks: _____

5. Condominium: Meets Requirements of Section 4.8: [] yes [] no [] NA

Remarks: _____

9. Easements: Meets Requirements of Section 4.10: [] yes [] no [] NA

Remarks: _____

7. Master Plat: Meets Requirements of Section 6.3: [] yes [] no [] NA

Remarks: _____

PART III: IMPROVEMENTS

1. Parking on Multi-Family Lots: Meets Requirements of Section 5.4(3): [] yes [] no [] NA

Remarks: _____

Plat Reviewed By: _____ Date: _____

Additional Comments: _____

Note: Mail or deliver copy of completed Preliminary Plat Checklist to Developer's Engineer and each member of the Planning Commission at least one week before meeting of Planning Commission.

**CONSTRUCTION PLANS/SUBDIVISION IMPROVEMENTS
CHECKLIST**

Name of Subdivision _____
Date Construction Plans Received by City Engineering Department _____

PART I: CONSTRUCTION PLANS
A. Horizontal and Vertical Geometry of Streets

1. Maximum Slope of Streets Does not Exceed:
Local Streets 13.5%
Subcollectors 12%
Collectors 8%

yes no
Date _____

Authorized Signature _____

2. Except for short distances, street slopes do not exceed the following:
Local Service Streets 7%
Subcollectors 5%
Collectors 4%

yes no
Date _____

Authorized Signature _____

3. Maximum Slope within 75' of intersection of street centerlines does not exceed 5% for local service streets or 3% for subcollectors/collectors.

yes no
Date _____

Authorized Signature _____

4. All streets have a minimum slope of 0.5%:

yes no
Date _____

Authorized Signature _____

5. Street centerline radii are not less than:
Local Service Street 100'
Subcollector 150'
Collector 230'

yes no
Date _____

Authorized Signature _____

6. Tangent sections between curves not less than the following lengths:
Local Service Street 100'
Subcollector 200'
Collector 600'

yes no
Date _____

Authorized Signature _____

7. Minimum site distance (both horizontal and vertical curves is as follows):

Local Service Street 100'
Subcollector 150'
Collector 200'

yes no
Date _____

Authorized Signature _____

B. Street Cross Section and Materials Standards

1. Streets conform to one of the cross sections shown in Figures 1, 2, or 3.

yes no
Date _____

Authorized Signature _____

2. If answer to B.1. above is no, then an optional cross-section acceptable to the City Engineer is used.

yes no
Date _____

Authorized Signature _____

3. Plans comply with all other provisions of Articles VI and VII.

yes no
Date _____

Authorized Signature _____

Authorized Signature _____

4. Design and specifications for curb, subbase, base, paving, and sidewalks (if applicable) meet all requirements [] yes [] no

Authorized Signature _____

Date _____

C. Storm Drainage

1. Drainage structures & facilities designed and sized per the City of Muscle Shoals Drainage Ordinance. All calculations of pipe size and gutter runoff velocity are set forth on the construction plans.

[] yes [] no

Authorized Signature _____

Date _____

2. Ditches and flumes, if any, will have capacity, erosion resistance, and strength to discharge runoff from design storm without suffering damage or requiring more than usual maintenance.

[] yes [] no

Authorized Signature _____

Date _____

D. Sanitary Sewers

1. Sanitary sewer design conforms to Article IX.

[] yes [] no

Authorized Signature _____

Date _____

2. Developer has planned oversized sewers to serve vacant, developable upstream land and has prepared cost estimates per Article IX, Section 902, as applicable.

[] yes [] no

Authorized Signature _____

Date _____

3. Sewage lift station(s), if any, meet all City and Water Works and Sewer Board specifications.

[] yes [] no

Authorized Signature _____

Date _____

E. Water Facilities

1. Water facilities meet the City and Water Works and Sewer Board specifications and Article X.

[] yes [] no

Authorized Signature _____

Date _____

F. Erosion Control

1. Erosion Control Plan meets the requirement of Article XI.

[] yes [] no

Authorized Signature _____

Date _____

Remarks on construction plans _____

To: Planning Commission

From: City Engineer

FINAL PLAT CHECKLIST
(Developer's, Engineer/Surveyor's)

Name of Plat: _____
 Developer: _____
 Developer's Engineer/Surveyor: _____

Date: _____
 The construction plans of the herein described subdivision are [] are not [] considered satisfactory in accordance with the requirements of the Subdivision Regulations and other standards of the Engineering Department. (If not satisfactory, the following changes are needed: _____)

 City Engineer

	Yes	No	NA
The subdivision is tied to an accepted corner based on the U.S. Government Survey			
Title, graphic scale, north arrow, name and registration number of the subdivision designer, together with the quarter section(s) in which the subdivision is located are provided.			
Tract boundary lines, right-of-way lines of streets, easements, and other rights-of-way, and property lines of lots, with accurate dimensions, bearings, or deflection angles, radii, arcs, and central angles of all curves have been provided.			
Right-of-way width of each street or other right-of-way has been provided.			
The locations and dimensions of all easements, together with the statement required by Article V have been provided.			
Number to identify each lot or building site has been provided.			
The purpose for which sites, other than residential lots, are dedicated or reserved has been indicated.			
Minimum building setback lines on all lots, as required by Article VI have been provided.			
Reference to recorded subdivision plats of adjoining platted land, by plat book and page number has been provided.			
Spaces for the approval for the City Engineer, the Secretary of the Planning Commission, the Colbert County Health Department, and the County Engineer.			

Distribution of Part I:
 Furnish copy to Planning Department after Construction Plans have been reviewed and approved.
 Maintain original in Engineering Department's folder on the subdivision in question.

RESUBDIVISION CHECKLIST

Name of Plat _____

Developer's Engineer/Surveyor _____

	Yes	No	NA
The developer has secured and presented to the Planning Director a written waiver of legal notice and hearings from all adjoining property owners.			
The lots meet the requirements of all applicable regulations with respect to the lot area and width.			
All required improvements as required by the Subdivision Regulations are in place.			
The number of lots in the subdivision will not be increased as a result of the re-subdivision by more than two (2) lots or five percent (5%) of the total number of lots, whichever is greater.			
No public interest in a street, easement, or the like shall be impaired or placed in doubt as a result of the resurvey.			
The Final Plat document meets all requirements of Article II, Section 310			

Plat Reviewed By _____ Date _____

PLAT APPROVED FOR SIGNATURE AND RECORDATION

Signature of Reviewer _____ Date _____

Note: Place a copy of completed checklist in subdivision folder.

	Yes	No	NA
Certificates and acknowledgements for the designer and owner, as required in Section 35-2-51 of the Code of Alabama, 1975 along with the following statement: "I hereby certify that all parts of this survey and drawing have been completed in accordance with the requirements of the Minimum Technical Standards for the Practice of Land Surveying in Alabama" have been provided.			
If the plat is a PUD with private streets, a provision has been provided for the future dedication of any or all of the private streets to the public, if required, and all such private streets have been so identified.			
The final plat is drawn to a scale of not less than one-inch equals one hundred feet (1" = 100').			
State plane monuments have been provided, as required.			
All required improvements have been completed and as-built plans submitted to the City Engineer, or the only improvements remaining to be completed are final surface paving and shoulder dressing and a bond, as required by the Subdivision Regulations, has been provided.			
The Source of Title/Information has been provided on the plat			

Signature of Engineer/Surveyor _____ Date _____