

**STORMWATER MANAGEMENT PLAN
FOR
THE CITY OF FLORENCE
2021 – 2026**

MAYOR: Andrew Betterton

COUNCIL MEMBERS:

**Kaytrina P. Simmons
William (Dick) Jordan
Bill Griffin
Michelle Rupe Eubanks
Blake Edwards
Jimmy Oliver**

PREPARED BY:


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219 West Alabama Street • Florence , Alabama 35630

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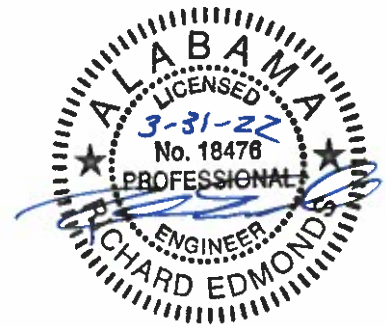
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Section 1

Executive Summary

The U.S. Environmental Protection Agency has published final regulations for Phase II Storm Water Permitting (40 CFR parts 122 and 123) after signing on October 29, 1999. Included in the Federal Register is a listing of municipalities, including the City of Florence, which are required to comply with the regulations. A Notice of Intent (NOI) was filed with ADEM and the permit has been issued for 2021 - 2026. The permit will give direction for the City's compliance efforts for a period of up to five years following issuance, at which time permit renewal will be required. The application for a general permit includes the NOI and the Storm Water Management Program. To address the Phase II regulations, the City of Florence has prepared this document to address the proposed regulatory requirements. This document and an NOI will be required in 2022 for extending permit coverage. The requirements include five minimum control measures designed for municipal storm water management:

1. Public Education and Public Involvement on Storm Water Impacts
2. Illicit Discharge Detection and Elimination Program
3. Construction Site Storm Water Runoff Control
4. Post-Construction Storm Water Management in New Development and Redevelopment
5. Pollution Prevention and Good Housekeeping for Municipal Operations.

There are a few “suggested components” that are deemed desirable by the USEPA and would require voluntary actions on the part of the City. These five minimum control measures are final for the present time, but may be modified by the Federal Government or the State permitting authority in the future.

The regulations also specify requirements for record keeping, and for allowing citizen access to records. Annual reporting must be filed with the State, documenting efforts in storm water management related to the five minimum control measures and other permitting requirements during the five years of the permit. Reports will be due each year.

This document was developed for the City by comparing mandatory components with existing and planned City storm water activities. The results of this comparison were used to develop a listing of needed activities that will be considered by the City.

The City has made exceptional progress in developing the storm water management program. These include topographic mapping of the City, requirements for developers to include erosion control measures in their plans, and other storm water management actions that are either already in place or planned for implementation in the near future. The City already has the mandatory components in operation prior to the permitting deadline of 2021. It should be noted that these mandatory components are not required to be implemented by the date of permit application, but during the 5-year permit cycle.

The SWMP addresses the applicable requirements of the City of Florence NPDES Permit for the years 2021 – 2026. Each of the five minimum control measures are outlined with a general scope, documentation, rationale, proposed BMP's, measurable goals and schedules for achieving those goals. The BMP's and the rationale will be included in the annual reports which are due no later than May 31st each year.

The City of Florence is intent on complying with the NPDES Permit requirements and will make every effort possible to achieve that goal.

A handwritten signature in blue ink, appearing to read 'A. Betterton', is positioned above a horizontal line.

Mayor Andrew Betterton

Introduction

The City of Florence is currently permitted to discharge to waters of the state. A part of this permit is a Storm Water Management Program. This program is to address issues of concern raised by *National Pollutant Discharge Elimination System (NPDES) Regulations for the Water and Pollution Control Program Addressing Storm Water Discharges*. The proposed regulations, generally referred to as Phase II Storm Water Permitting Requirements, were initially published as 40 CFR Parts 122 and 123 in the Federal Register on January 9, 1998.

The purpose of this program is to provide minimum Storm Water Run off control measures that can be enforced by Subdivision Regulations and Building Codes and Ordinances. The program also serves as a logical basis for recording detailed information that may be required to support the City's NPDES Phase II Permit process.

Regulation of Storm Water Collection Systems in the United States

Municipal storm water collection systems suffer the discharge of many substances as well as water. As storm water flows over pavements, lawns, driveways, parking lots and industrial sites, it often picks up pollutants, such as oil and grease, fertilizers, pesticides and metals. Erosion and sediment from active construction sites discharges into storm drainage systems unless there is adequate prevention.

Private discharges from residential areas may contribute to storm water pollution by improper disposal of lawn clippings, leaves, used oil and household chemicals as well as improper use of pesticides. Industrial and commercial facilities may discharge pollutants into storm water collection systems through cross-connection of storm drains and sanitary sewers. Floor drains are sometimes connected directly into the storm drainage system.

Because of the pollution resulting from these sources, the federal government has created the National Storm Water Program for regulating storm water discharges throughout the United States. This program and its effects on state and local government agencies and those involved in industrial and construction activities is addressed in the SWPP.

Current Extent of the National Storm Water Program

The National Storm Water Program originated with the federal government and is directed by the U.S. Environmental Protection Agency (EPA). The voluntary cooperation of authorized states and mandatory participation of many local government agencies will be required to implement a successful program. The program was implemented in two major phases, with effective dates of October 1992 and March 2003, respectively. The first phase included discharges associated with industrial activity (including construction activity) and discharges from all public storm water collection systems serving urban populations of

100,000 or more. The second phase includes all other public storm water collection systems within urbanized areas plus other small public storm water collection systems meeting EPA or state criteria for designation.

Outside urbanized areas, all storm water collection systems serving a population center of at least 10,000 people with a population density of at least 1,000 people per square mile are included in the National Storm Water Program after the full implementation of Phase II. Within urbanized areas, almost all storm water collection systems, as well as those serving a population of fewer than 10,000 people, are included in the program.

The second phase of the National Storm Water Program also reduced the minimum size of construction projects requiring permit coverage. Whereas the minimum amount of soil disturbance that would trigger a permit requirement under Phase I was 5 acres, this minimum has been reduced to 1 acre in Phase II, for most cases.

The EPA has the authority to require storm water discharge permits from any discharge that contributes to a violation of a water quality standard or that contributes a substantial load of pollutants to the waters of the United States. The EPA could exercise this authority to extend the National Storm Water Program as needed in the future.

Return flows from irrigated agriculture, agricultural storm water runoff, and discharges from non-point silvicultural activities are exempt from *National Pollutant Discharge Elimination Systems* (NPDES permit requirements (40 Code of Federal Regulation (CFR) 122.2; 40 CFR 122.3 (e) and (f)).

Legal Basis For Storm Water Regulations

The EPA developed the National Storm Water Program in response to legislation passed by Congress. The most important item of legislation was the *Federal Clean Water Act of 1972* (CWA) (Public Law 92-500), which established the NPDES. The CWA has been amended several times. One important set of amendments was the *Water Quality Act of 1987* (Public Law 100-4) that established the phased approach for storm water discharge regulation in the United States.

The CWA has been setting the direction of water pollution control in the United States since 1972. The CWA is built on the premise that no one has a right to pollute the waters of the United States. Anyone wishing to discharge pollutants must obtain a permit to do so, and the permit must limit the composition of the discharge and the concentrations of the pollutants in it. Some permit conditions require specified levels of control based on a consideration of technology and cost, regardless of the receiving water's ability to purify naturally. However,

tighter limits may be imposed, if necessary, to preserve or restore the quality of the water body that receives the discharge.

The Role of State Governments in Storm Water Permitting

The CWA allows states to request EPA authorization to administer the NPDES program within their borders. The EPA must approve a state's request to operate the permit program once the EPA determines that the state has adequate legal authorities, procedures and the ability to administer the program. The EPA is also obligated to adopt standard requirements for state NPDES programs, including guidelines on monitoring, reporting, enforcement, personnel, and funding. At all times following authorization, state NPDES programs must be consistent with minimum federal requirements, although the programs may always be more stringent.

At present, most states have chosen to assume at least some storm water permitting authority. Within these authorized states, all permit submissions are made to the state agency that administers and enforces the storm water program. In non-authorized states, the appropriate EPA regional office is responsible for permitting and permit enforcement.

All states are required to develop water quality standards for waters of the United States within their boundaries. States are required to review their water quality

standards at least once every 5 years and, if appropriate, revise or adopt new standards. The minimum elements that must be included in a state's water quality standards include the use designation for all water bodies in the state, water quality criteria sufficient to protect those use designations, and an anti-degradation policy consistent with EPA's water quality standards (40 CFR 131.6)

Role of Local Governments in Storm Water Regulation

The role of local governments in the National Storm Water Program has become very significant. As stated previously, the first phase of the program involved only municipal entities serving urban populations of 100,000 or more. The total number of Phase I municipal permits was fewer than 300. However, Phase II required several thousand additional municipal permits to be issued. Many of the Phase II municipal discharges are small government agencies with limited technical resources.

Municipal discharges have a very broad set of requirements under the National Storm Water Program. **First**, they are responsible for obtaining permit coverage for the discharges from their own storm water collection system, and in meeting various requirements regarding the operation and overseeing that system. **Second**, they are responsible for obtaining permit coverage for any industrial facilities or construction sites that they own. **Finally**, they are also responsible for recordkeeping, inspection, and enforcement of storm water permit requirements

for construction activities and certain types of industrial operations within their jurisdiction.

The two primary types of public storm water collection systems in the United States are separate systems and combined systems. Most cities use separate systems which are designed to carry only storm water runoff and other wet weather flows. However, over 30 of the oldest cities in the United States rely on *Combined Sewer Systems* (CSS). A CSS carries sanitary sewage under dry weather conditions, but is surcharged with runoff under storm conditions.

Technology – Based Requirements of Storm Water Discharge Permits

Storm Water permits are intended to achieve improvements in water quality by reducing or eliminating pollutant loadings from storm water sources. The exact requirements for attaining this goal depend upon the type of permit, the type of discharge and the characteristics of the body of water that receives the discharge.

Technology – based requirements represent the minimum level of control that must be imposed by an NPDES permit. The *best conventional technology* (BCT) standard applies to the control of conventional pollutants, while the *best available technology* (BAT) standard applies to the control of all toxic pollutants and all pollutants that are neither toxic nor conventional pollutants. BCT and BAT standards are generally applied to storm water discharges associated with

industrial or construction activity. These requirements are met by the development and implementation of *Best Management Practices* (BMPs) and pollution prevention measures as a part of a storm water pollution prevention plan for the industrial facility or construction site.

Two technology based standards have been established for discharges from public storm water collection systems. The first standard provides that municipal permits must contain a requirement to effectively prohibit illicit non-storm water discharges into the system. The other standard requires that permits for discharges from public storm water collection systems reduce the discharge of pollutants to the *maximum extent practicable* (MEP), including management practices, control techniques, system design and engineering methods.

Storm Water Discharge Permits and State Water Quality Standards

In addition to technology based controls, *NPDES permits* must include any conditions more stringent than technology based controls necessary to meet state water quality standards. *Water quality standards* establish the “goals for a water body”. The CWA states the national goal of achieving “water quality which provides for the protection and propagation of fish, shellfish, wildlife and recreation in and on the water,” wherever attainable. These national goals are commonly referred to as the fishable / swimmable goals of the CWA. The EPA

requires that water quality standards provide for fishable / swimmable uses, unless those uses have been shown to be unattainable.

Scientific studies are performed to establish the *Total Maximum Daily Load* (TMDL) of a particular pollutant that is allowable without violation of the water quality standard. If TMDL studies indicate that too much of a particular pollutant is entering the stream system, then any discharge permit within that stream system may be subject to revision in order to lower the pollutant levels to the TMDL value.

Municipal Storm Water Discharge Permit Requirements

The EPA has identified five minimum control measures that are always necessary for municipal storm water discharges to comply with the statutory requirements of eliminating illicit non-storm water discharges and reducing pollutant loading to the maximum extent possible:

1. Public education and public involvement on storm water impacts
2. Illicit discharge detection and elimination
3. Construction site storm water runoff control
4. Post-construction storm water management in areas of new development and re-development
5. Pollution prevention and good housekeeping for municipal operations.

Additional requirements are often imposed for larger systems. These include spill prevention and response, monitoring of wet weather flows and dry weather flows, and special inspection and enforcement requirements for high-risk industrial discharges that contribute flows to the public drainage system.

Judgment is required in order to determine the best combination of control measures for a particular municipal storm water collection system. The selection of control measures should consider such factors as the conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Various municipal entities may choose to cooperate in the development and implementation of the minimum control measures.

Types of Permits Required for Municipal Discharges

Separate types of storm water discharge permits are used for municipal storm water discharges, for *construction storm water discharges*, and for *industrial storm water discharges*.

Therefore, industrial facilities or construction sites that discharge into the Florence municipal separate storm sewer system are still required to obtain EPA or state permit coverage for the facility's discharge. This is true even if the industrial facility or construction site is operated by the same agency that operated the public drainage system. Therefore, many local and state government agencies should obtain two or three different types of storm water discharge permits: one

for the public drainage system as a whole, and separate permits for each industrial facility and construction site operated by the city. If Florence initiates a construction project which disturbs more than one acre, a general permit from ADEM will be required.

Section 2

Storm Water Management Program (SWMP) for Florence

A. Requirements for the SWMP

1. The City of Florence hereby implements and enforces a SWMP designed to reduce the discharge of pollutants from Florence to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP includes management practices, control techniques and system design, engineering methods; and such other provisions as ADEM may determine appropriate for the control of such pollutants as follows:
 - a. The BMP's that Florence will implement for each of the storm water minimum control measures have been prepared by a professional engineer registered in Alabama.
 - b. Permittee shall begin implementation of the terms and conditions of this permit as soon as the effective date of permit coverage, and shall meet the deadlines and schedules established in the Permit and in SWMP;
 - c. Coordination among entities covered under this small MS4 permit may be necessary to comply with the conditions of the SWMP. The SWMP shall include, where applicable, condition mechanisms among entities covered under the permit to encourage coordinated storm water related policies, programs, and projects within adjoining or shared areas. Entities covered under the small MS4 permit may include: municipalities, counties, colleges and hospitals.
 - d. The measurable goals for each of the BMP's including, as appropriate, the months and years in which the city will undertake required actions, including interim milestones and the frequency of the action will be described herein. Such measurable goals, including the deadlines and interim milestones, shall be enforceable requirements of this permit. The city understands that extensions of milestones may be granted for good cause shown and failure to implement effective BMP's is not good cause to extent milestones.
 - e. The person responsible for implementing or coordinating the BMPs for the city's SWMP is the chief official of the engineering department.
2. The city will review and revise its relevant ordinances, or adopt any new ordinances or other regulatory mechanisms as allowed in accordance with 40 CFR 122.34(b)(3)(ii)(B), that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to implement and enforce its SWMP.

This legal authority will, at a minimum, authorize the City to:

- (a) Prohibit Non-Storm water Discharges unless otherwise authorized in Part I.B of the permit or unless such storm water discharges are in compliance with a separate NPDES permit, or determined by the Department not to be a significant contributor of pollutants to waters of the State.

- (b) **Prohibit Illicit Discharges** – Prohibit and eliminate illicit connections or discharges to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include those prohibited discharges listed in Part I.C. and any other discharge not authorized under a regulatory mechanism.
- (c) **Prohibit Spills or Other Releases** – Control the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.
- (d) **Require Compliance with conditions in the Permittee’s ordinances, permits, contracts or orders.**

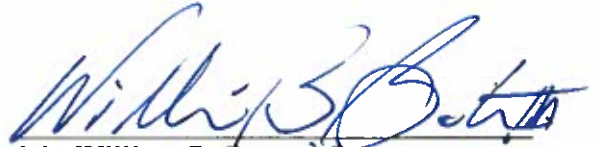
Require Installation, Implementation and Maintenance of Control Measures. Require operators of construction sites and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 to the maximum extent practicable through the installation, implementation and maintenance of storm water control measures.

- (e) **Receive and Collect Information** – The Permittee must have the authority to request a copy of the applications submitted to ADEM, as well as supporting materials.
- (f) **Inspect** – The Permittee must have the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations for active or potential polluted storm water discharges, or non-compliance with regulatory requirements established by the MS4 to meet requirements of this permit.
- (h) **Require Response to Violations** – The Permittee must have the ability to promptly require that discharges cease and desist discharging and/ or cleanup and abate a discharge.
- (i) **Levy Monetary Penalties** – The Permittee must have the ability to:
 - 1. Levy citations or administrative fines against responsible parties.
 - 2. Require recovery and remediation costs from responsible parties.
- (j) **Impose Civil / Criminal Penalties** – The Permittee must have the ability to impose more substantial civil or criminal sanctions (including referral to a city or district attorney) and escalate the corrective response, consistent with its enforcement response plan developed pursuant to Part III.B.4.d of this permit, for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.

- (k) Control the contribution of pollutants from a portion of the shared MS4 to another portion of MS4 through the interagency agreements among Permittees. Control of contributions of pollutants to the maximum extent practicable from one portion of the shared MS4 to another portion for the MS4 through interagency agreements with other owners of the MS4 is encouraged.

The City of Florence has taken the necessary steps to obtain and maintain full legal authority to the extent allowed under State law to implement and enforce each of the requirements contained in this permit.

The intent of the City of Florence is to provide for control of the discharge of storm water run off such that the receiving waters of the state are not adversely effected. The city will enforce the ordinances related to the SWMP documents herein.

A handwritten signature in blue ink, appearing to read "William B. Batson, III". The signature is written in a cursive style and is positioned above a horizontal line.

Mr. William B. Batson, III
Coordinator

Minimum Control Measures

I. Public Education and Outreach on Storm Water Impacts.

The City has implemented a public education and public involvement program that seeks to 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 storm water runoff. The City will continue this program through the permit period by:

1. Distributing education materials to the community.
2. Conducting activities that encourage the public to be involved in reducing pollutants.
3. Involving citizens in monitoring and reporting.
4. Holding public hearings for citizen input. Citizens will be encouraged to participate with ideas and suggestions in the decision making process in the development of the city's overall SWMP. The program will be developed by advertising public hearings.
5. Participating with other entities in the area whose focus is to address pollution issues and to educate citizens about the dangers and involve them in taking action.
6. Storm water structure stenciling and posting signs that prohibit dumping.

Documentation

The city has developed a documentation method which consists of providing a file which contains copies of mail out materials and presentation materials. Records will be kept of public involvement events including at a minimum a description of the event, the date it occurred, the number of people participating, and the impact of the event. The file will also

contain input and reports from citizens and steps that were taken to address their concerns.

Progress for this program will be provided in each annual report.

Rationale

1. Educational material will be mailed to each home and business at least one time a year. This material will educate the public about storm water pollution prevention and they can be involved. Some materials will also be made available on the City's website for review by the public.
2. Literature will be available for hand out at schools and at public events.
3. The public will also be informed about storm water pollution prevention by newspaper ads, billboards, posted signs on travel ways and by the City's website in addition to the mail outs and handouts.
4. The city will encourage the public to become involved in the program by providing "Earth Day" or "Earth Month" activities. Earth Day and Earth Month will encourage people to pick up trash by selecting a mile of roadway or a section of a drainage ditch as their responsibility. Littering will be discouraged by appropriate signs on travel ways.
5. Citizens will be encouraged to look for possible forms of discharge violations and given ways to report their findings to the City.
6. Younger citizens will be encouraged to participate in environmental art contests.
7. The target audiences include the general public, businesses, engineers, architects, contractors, developers and industries. These audiences were selected because collectively they contribute to littering and / or they are active in soil disturbance and there is a possibility of fuel spills or chemical damage from some of these entities.

8. The main sources of pollution that the education program addresses is trash and litter, soil disturbances, fuel and chemical processes and the use of fertilize and pesticide.
9. The outreach to the target audience will be through mail and public announcement methods. The city expects to reach approximately 10,000 people within the permit boundary.
10. Overall management and implementation responsibility of the education and outreach program is the city engineering official.
11. The success of the program will be measured by keeping track of the number of violations of the permit that we recorded each year and the amount of trash and litter collected each year. Hopefully permit violations and trash collection will decrease due to the efforts of the target audience.

Education and outreach efforts will be prioritized to target the following audiences and subject areas:

A. General Public

- a. General impacts of storm water flows into surface waters will be addressed by mailouts each year.
- b. Impacts from impervious surfaces include flushing of debris and soil during rains. The public will be encouraged to keep parking lots and yards clean.
- c. Source control BMP's and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, cigarette butts, and landscaping. Encourage residential neighborhoods to clean up pet waste daily, abstain from changing oil or using fuel without protection for spills. Provide containers around downtown for citizens to

discard their cigarette butts. They will be asked to plant bushes and trees to help reduce runoff. They will be reminded to use environmentally friendly fertilizers and pesticides.

B. General Public, Businesses, Including Home-Based and Mobile Businesses:

- a. BMP's for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- b. Impacts of illicit discharges and how to report them.
- c. Citizens will be discouraged in using hazardous materials and if they do see them being used, to report any spills.

C. Homeowners, Landscapers, and Property Managers

- a. Yard care techniques that protect water quality.
- b. BMP's for use and storage of pesticides and fertilizers.
- c. BMP's for carpet cleaning and auto repair and maintenance.
- d. Runoff reduction techniques, including site design, pervious paving, retention of forests and mature trees.
- e. Storm water pond maintenance.

D. Engineers, Contractors, Developers, Review Staff and Land Use Planners

- a. Design professionals will be required to provide the following in their plans and specifications:
 - b. Technical standards for construction site sediment and erosion control.
 - c. Runoff reduction techniques, including site design, pervious paving, alternative parking lot design, retention of forests and mature trees.
- d. Storm water treatment and flow control BMP's.

- e. Impacts of increased storm water flows into receiving water bodies are to be addressed with storm water detention. Design professionals will be asked to submit a drainage report for a site to be developed that shows if there will be additional runoff and how it will be mitigated.
- f. Site protection during construction and post construction.
- g. Encourage use of low impact development (LID) such as greenways and water detention.
- h. Flow Control BMP

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Mail out Fliers	To each home At least once per year	April or September
Host & Encourage Clean-up Events	City to Host at Least One Event	April each Year
Distribute Literature At Public Events	Distribute Literature at Least Two Events	Spring & Summer Each Year
Post Signs Prohibiting Litter	At Least One per Year	Spring
Public Hearing for Public Involvement	At Least One per Year	Annually
Placement of Storm Drain Markers	One Time per Year	Annually
Art Contest in Elementary Schools	One Time per Year	Annually
Run off Reduction Permeable Pavement	Continuous by Ordinance	In progress
Site Protection Increased Vegetation & Green Areas	Continuous by Ordinance	In progress

II. Illicit Discharge Detection and Elimination Program

The City shall continue its program to detect and eliminate illicit discharges into the storm water system to the maximum extent possible. This program includes the following elements:

1. Maintain and update city storm water maps annually. Maps include all known outfalls, waters of the state and structural BMPS located in the permit boundary.
2. Develop a dry weather screening program designed to detect and address non-storm water discharges into the storm water system. A minimum of 20% of the City's outfalls will be screened each year with the goal of screening them all at least once during the five year permit period. Detection of illicit discharges will occur when dry weather spills or discharges are noted during inspections. No field tests will be performed. If discharge is identified, samples will be collected and transported to a lab for testing. If any on site sewage is detected above ground, in storm pipes or in ditches, the local health department will be notified. In addition to the dry weather screening program, the following areas will be routinely inspected for possible illicit discharges:
 1. Areas of older infrastructure
 2. Industrial and Commercial Areas
 3. Areas with a history of illicit discharge
 4. Areas with onsite sewage disposal systems
 5. Areas upstream of 303(d) or TMDL water bodies
3. Procedures for tracing the source of illicit discharges will be visual or odor methods in combination with familiarity of the local industrial make up.

If illicit discharge is verified, the discharger will be notified and required to provide clean up. They will also be required to control the discharge to prevent further contamination. The program will be evaluated by follow up surveys. These discharges will be included in the inspections permanently. Enforcement procedures will be escalated if necessary due to repeat violations.

4. Notifying ADEM of suspicious illicit discharges entering the City's MS4 from an adjacent MS4. The City will encourage citizens and City personnel to be looking for suspicious discharges and report them to the Engineering Office. Personnel from the Engineering Office will follow up on this report to see if it appears to be an illicit discharge and its source. The Engineering Office will notify ADEM of any suspicious discharge coming from another MS4.
5. Maintaining a mechanism for the public to report illicit discharges discovered in the permitted area and procedures for appropriate investigation of reports. The current mechanism is for the public to contact the Engineering Office. When this occurs, the City uses a software program designed for this purpose to collect the information and set up a work order to address the issue.
6. Inform city employees, businesses and the general public of hazards associated with illegal disposal of waste. Charity car washes are not considered major contributions and thus do not constitute illegal discharges
7. Ordinance has been passed by city council to prohibit illicit discharge. This ordinance will be reviewed and updated as needed to fulfill the requirements of this permit. Ordinances were chosen because they are enforceable by city

officials. Enforcement of the ordinances will be executed by the city engineering department personnel.

8. The ordinance is being implemented each time the city performs site inspections and documents the results. These inspections are performed on a routine schedule.
9. The city will through its enforcement officer, notify public employees through annual meetings that there are certain hazards associated with illegal discharges and improper disposal of waste. Businesses and general public will be notified by mail out material. This effort will augment the reminders that are posted by department heads for good housekeeping and pollution prevention by city personnel.
10. All responsibility for the illicit discharge detection and elimination program and for implementation of the BMP's is the city's designated official who is at present the engineering department official.
11. The success of the minimum measure will be determined by evaluating the decrease in pollution on streets, storm sewers, ditches and creek banks. Photographs will be taken and filed each year so that progress can be verified.
12. The city will provide an ongoing training program for city field personnel using video training courses. The personnel will receive training in reporting and responding to illicit discharges. Personnel will receive QCI training and will follow up with annual re-certification. Documentation will be kept on file.

Documentation

The City will maintain files which contain map updates; inspection reports with photos; test results of any samples taken from suspicious discharges; copies of notifications from the

public and description of steps taken to address the issue; a record of illicit discharges discovered, the offender, and when the problem was addressed; along with certificates of training of City personnel.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Dry Weather Screening	Inspect 20% of Outfalls	Bimonthly
Update MS4 Map	One Time per Year	April
Review IDDE Ordinance & Update if Needed	One Time per Year	October
Train City Personnel In IDDE	Twice per Year	Annually
Site Inspections at industrial, commercial and other sites of potential illicit discharge	12 Times per Year	Monthly

III. Construction Site Storm Water Runoff Control

The City has an ongoing program in place to reduce, to the maximum extent practicable, the pollutants in storm water runoff from construction sites. The program includes the following elements:

1. The City has chosen to provide erosion and sediment controls at construction sites through subdivision regulations and ordinances. The ordinances are enforceable by city officials and will apply to non-subdivision type construction such as city infrastructure projects and building site development. A copy of the subdivision regulations and all related ordinances is attached in the Appendix.
2. Maintaining specific procedures for construction site plan review and approval. Before a building permit or grading permit is issued by the Building Department,

construction plans are sent to all departments for review and comment. The Engineering Department reviews the plans for adequate erosion and sedimentation control. If it is a qualifying site, the Engineering Department also requests a copy of the NOI for an NPDES permit. If inadequacies are found in the plans or permit, this is communicated to the responsible official of the site. Approval is not given to proceed until all departments are satisfied.

3. Provide annual QCI training for the City personnel tasked with the responsibility to perform MS4 inspections.
4. Perform, at a minimum, monthly inspections of active construction sites. Additional inspections may occur on large developments or developments who are found to have ineffective BMPs or are near waters of the State. Inspection forms have been developed to document these inspections. The forms continue to be reviewed and updated as needed.
5. Notifying ADEM within 30 days of discovery if a construction site does not have an NPDES permit or they have had repeated violations or have not responded to notices of violations from the City.
6. Continue to provide a mechanism for the public to report complaints regarding discharges from construction sites. Citizens can call the Engineering Department or contact via the City's website and register a complaint. The Engineering Department will create a record of the complaint and follow-up with an inspection to take the appropriate action.
7. Continue to require site operators 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.

Documentation

Procedures for controlling site waste, site plan review, input from the public, enforcement, securing NPDES permits and site inspections are documented in existing ordinances including subdivision regulations. Copies of public input, results of plan review, records of enforcement and copies of permits will be kept on file.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Require all Qualified Construction Sites to be Permitted by ADEM	100% of sites permitted	Annually
Require all Sites Regardless Of Size to Use Erosion Control	100% of sites seeking permits	Annually
Review Ordinances And Update If Required	One Time per Year	Annually
Perform Inspections of Active Construction Sites	100% of Active Sites	Monthly
Provide Training for QCI Personnel	One Time per Year	Annually

IV. Post Construction Storm Water Management in New Development and Redevelopment

The City has an ongoing program for addressing storm water runoff from new and redeveloped sites of one acre or larger or less than one acre if it is a part of a larger development. This program strives to ensure that controls are in place to prevent or

minimize water quality impacts after construction is complete. The following are elements of this program:

1. Maintain existing ordinances that address post construction storm water management to the maximum extent practicable. Continue to review and update these ordinances as necessary.
2. The Engineering Department will require a drainage report from every site development project to ensure that post construction runoff mimics pre-construction runoff. This report will be required before a permit to start construction is issued.
3. Have the Planning Department encourage developers to consider incorporating low impact development design in their developments when feasible.
4. Continue to have the City maintain detention basins that are over 1 ac-ft in volume. For smaller basins or underground basins, continue to use a detention basin agreement where the Owner agrees to ensure long term O & M of those basins.
5. Add a statement to plats that require maintenance of structural BMP's that are not the responsibility of the City.
6. Develop an ordinance that will require the owner of a development with structural BMPs to perform or have performed a post-construction inspection of those BMPs at least once a year and submit copies of documentation of those inspections.
7. The city has no requirement for directing growth to any certain areas other than is allowed by zoning. Sensitive areas in the city will be protected by plan review

prior to construction. At that time, open spaces, wetlands etc. will be addressed and protected as directed by city ordinance and the Army Corp. of Engineers. Developers will be encouraged to preserve trees and open spaces as much as is feasible. Regulations are not in effect at present which require minimization of impervious areas, although developers are encouraged to consider pervious pavements.

8. Developers will be encouraged to construct wet ponds to slow run off and allow treatment of sediment.
9. Grassed swales are encouraged in areas where maintenance is viable and where slopes permit.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
To have all post construction sites secured with vegetation and run off control	Each site closed out with City Approval	Annually
Maintenance agreements, Post Construction	One filed at courthouse for each site	Annually

V. Pollution Prevention / Good Housekeeping for Municipal Operations

The city has in place a program to prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the maximum extent practicable. The program elements include the following:

1. Maintain an inventory of all municipal facilities and evaluate which ones have the potential to discharge pollutants.

2. Develop methods to control run off from municipal operations. The methods include 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.
3. 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.
4. The pollution prevention / good housekeeping program for municipal operation was developed after reviewing the responsibilities of department heads and the requirements for equipment maintenance and department duties.
5. The city requires that on all city projects where soil is disturbed, city personnel will prevent soil erosion run off on any site by using wattles or silt fence. On small projects, these BMP's can be portable. Clean up of any soil which erodes is mandatory.
6. Protection of sites from fuel or oil spills is mandatory. Any spills are to be reported to the cities enforcement personnel immediately.
7. All operations either by street department, utility department, park and recreation department personnel are required to exhibit responsibility toward this minimum control measure.
8. Fleet maintenance requires housed operations for maintenance and cleaning operations. Sediment, oil and grease are trapped and disposed of in proper facilities.

9. The city has a series of large detention basins throughout the city. These basins collect floatables during rain events. The floatables are removed by city personnel documented by weight and reported in the annual report.
10. Solid waste pollutants from streets and parking lots are captured at storm water inlets where possible or are collected at detention basins as mentioned above. Sand and gravel storage is contained at city facilities but are not considered contaminants as they are naturally occurring material. All solid waste collected in the drainage facility are to be disposed of at the landfill.
11. New flood management projects are to be protected by collecting solids and disposing of the debris at the landfill. The drainage system is to be assessed each year and if any new water quality protection devices are required, the city will provide such device to the best of their ability.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Personnel Training	One time per year	Annually
Develop Inspection Plan For Municipal Facilities	Develop Plan for All Facilities with Potential to Discharge Pollutants	Finish by March of 2023
Develop SOPs for Facilities that have Potential to Discharge Pollutants	Develop Plan for Each Applicable Facility	Finish by March of 2023
Continue Cleaning Out Storm Drains & Detention Basins	Once per Month	Annually
Continue Providing Curbside Pickup of Residential Debris	Weekly Thru City	Annually

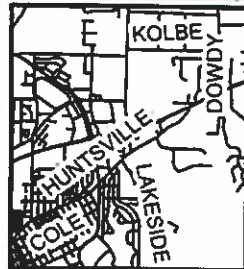
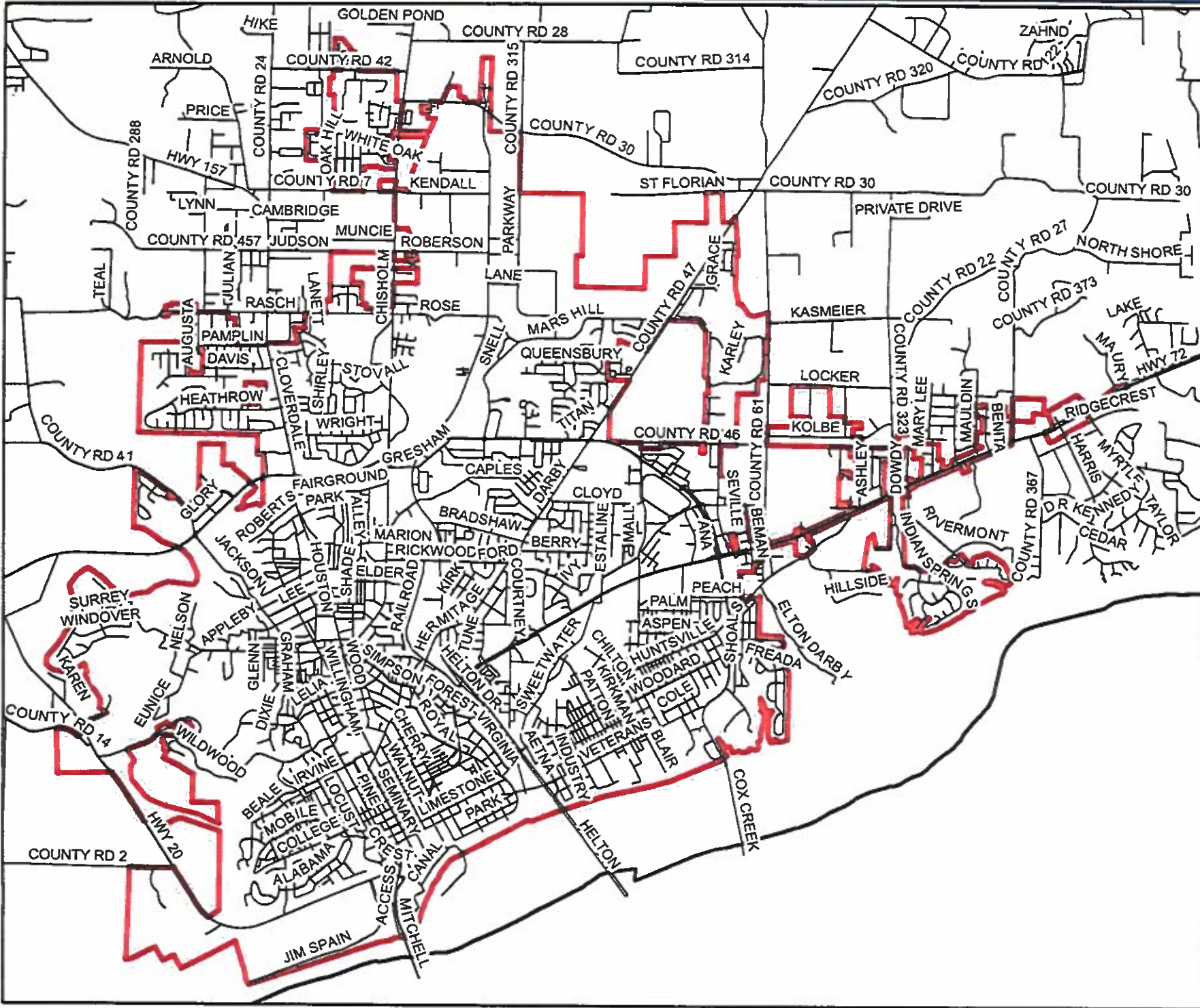
APPENDIX

1. MS4 Maps and Outfalls
2. Inspection Report Form
3. Subdivision Regulations
4. Ordinance Number 2004-16
5. Ordinance Number 2004-17
6. Ordinance Number 2004-18
7. Definitions and Acronyms

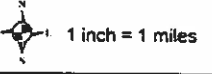
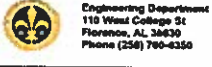
APPENDIX 1

MS4 Maps and Outfalls

MS4 Urbanized Area Map



CITY OF FLORENCE



LEGEND

- Streets
- Florence City Limits

STORM WATER DISCHARGES CITY OF FLORENCE, ALABAMA NPDES PHASE II

LOCATION	SITE NO.	DESCRIPTION	RECEIVING WATER	NORTHING	EASTING	LATITUDE	LONGITUDE
10-3-11	site 1	Commercial / Residential	UT to Cypress Creek	1748692.762848	444284.110017	N 34°48'24.60"	W 87°41'08.24"
12-3-11	site 1	Industrial	Sweetwater Creek	1750555.814834	454001.756069	N 34°48'43.18"	W 87°39'11.85"
12-3-11	site 2	Industrial	Sweetwater Creek	1746879.77156	453640.158436	N 34°48'06.81"	W 87°39'16.12"
1-3-11	site 1	Commercial	UT to Sweetwater Creek	1753747.799498	453639.748708	N 34°49'14.75"	W 87°39'16.25"
1-3-11	site 2	Commercial	UT to Sweetwater Creek	1752497.174828	454738.694254	N 34°49'02.39"	W 87°39'03.04"
1-3-11	site 3	Commercial	Sweetwater Creek	1753530.543275	455920.240082	N 34°49'12.63"	W 87°38'48.89"
14-2-11	site 1	Industrial	Craven Branch	1774084.345463	450732.186047	N 34°52'35.85"	W 87°39'51.48"
14-2-11	site 2	Industrial	UT to Huddon Branch	1775640.038982	451549.732259	N 34°52'51.25"	W 87°39'41.70"
14-2-11	site 3	Industrial	UT to Huddon Branch	1775340.318904	452771.537755	N 34°52'48.31"	W 87°39'27.02"
14-2-11	site 4	Industrial	UT to Huddon Branch	1777318.388372	450959.025033	N 34°53'07.85"	W 87°39'48.82"
14-3-11	site 1	Industrial	UT to Tennessee River	1743862.450579	449690.194853	N 34°47'36.94"	W 87°40'03.35"
14-3-11	site 2	Industrial	UT to Tennessee River	1743576.746702	449550.567649	N 34°47'34.12"	W 87°40'05.02"
2-3-11	site 1	Industrial	UT to Sweetwater Creek	1754843.513331	448733.661964	N 34°49'25.51"	W 87°40'15.12"
2-3-11	site 2	Industrial	UT to Sweetwater Creek	1755673.535843	449001.154925	N 34°49'33.72"	W 87°40'11.93"
23-2-11	site 1	Industrial	UT to Cox Creek	1768820.472053	451787.347372	N 34°51'44.00"	W 87°39'39.00"
23-2-11	site 2	Industrial	Craven Branch	1772351.859002	451838.175226	N 34°52'18.73"	W 87°39'38.17"
23-2-11	site 3	Industrial	Craven Branch	1770727.725906	453096.953646	N 34°52'02.69"	W 87°39'23.03"
23-2-11	site 4	Industrial	UT to Cox Creek	1767504.879834	453067.355763	N 34°51'30.81"	W 87°39'23.33"
24-2-11	site 1	Commercial	UT to Cox Creek	1767479.507693	453652.588762	N 34°51'30.57"	W 87°39'16.30"
25-2-11	site 1	Residential	UT to Cox Creek	1763479.605748	455770.373928	N 34°50'51.03"	W 87°38'50.82"
25-2-11	site 2	Industrial / Agriculture	Craven Branch	1767166.090332	455765.249292	N 34°51'27.50"	W 87°38'50.95"
26-2-11	site 1	Industrial / Residential	Cox Creek	1762794.770000	449936.180000	N 34°50'44.00"	W 87°40'00.00"
26-2-11	site 2	Commercial / Residential	Cox Creek	1753144.730000	446094.459000	N 34°49'08.66"	W 87°40'46.74"
27-2-11	site 1	Cemetery	UT to Cox Creek	1766399.323232	446918.793639	N 34°51'19.77"	W 87°40'37.09"
27-2-11	site 2	Residential	UT to Cox Creek	1764864.426359	446743.874662	N 34°51'04.59"	W 87°40'39.15"
31-2-10	site 1	Commercial	UT to Sweetwater Creek	1759287.160283	460896.544186	N 34°50'09.64"	W 87°37'49.29"
31-2-10	site 2	Commercial	UT to Sweetwater Creek	1759217.693902	461966.047188	N 34°50'08.97"	W 87°37'36.46"
31-2-10	site 2-a	Commercial	UT to Sweetwater Creek	1758965.339279	461776.874723	N 34°50'06.47"	W 87°37'38.73"
31-2-10	site 3	Commercial	UT to Sweetwater Creek	1758261.205513	460918.274761	N 34°49'59.49"	W 87°37'49.02"
31-2-10	site 4	Commercial	UT to Sweetwater Creek	1757522.889041	460800.185591	N 34°49'52.19"	W 87°37'50.42"
31-2-10	site 5	Commercial	UT to Wilson Creek	1761966.888554	460005.034299	N 34°50'36.14"	W 87°38'00.03"
31-2-10	site 6	Commercial	UT to Sweetwater Creek	1761191.510537	458589.862532	N 34°50'28.46"	W 87°38'16.88"
32-2-10	site 1	Commercial	UT to Tennessee River	1758421.633578	466806.219367	N 34°50'01.15"	W 87°36'38.38"
33-2-11	site 1	Residential	Cox Creek	1758043.663316	442051.406385	N 34°49'57.05"	W 87°41'35.23"
34-2-11	site 1	Commercial / Residential	Cox Creek	1760078.593105	443745.358513	N 34°50'17.22"	W 87°41'14.90"
34-2-11	site 2	Industrial	Cox Creek	1760406.220806	443589.04067	N 34°50'20.45"	W 87°41'16.83"
35-2-11	site 1	Industrial	UT to Cox Creek	1757200.598883	449207.794255	N 34°49'48.84"	W 87°40'09.31"
36-2-11	site 1	Park & Recreation	UT to Cox Creek	1762007.22209	456084.895656	N 34°50'36.48"	W 87°38'47.06"
36-2-11	site 2	Commercial	UT to Cox Creek	1760846.210942	457630.659511	N 34°50'25.02"	W 87°38'28.50"
4-3-11	site 1	Residential	Cox Creek	1756768.021452	440425.202251	N 34°49'44.41"	W 87°41'54.66"
6-3-10	site 1	Commercial / Residential	UT to Sweetwater Creek	1756319.15959	458709.611892	N 34°49'40.30"	W 87°38'15.41"
6-3-10	site 2	Commercial	Sweetwater Creek	1755098.411729	458234.508552	N 34°49'28.17"	W 87°38'21.16"
7-3-10	site 1	Commercial / Residential	UT to Tennessee River	1749750.126079	460298.127759	N 34°48'35.34"	W 87°37'56.25"

MAP LEGEND

LOCATION  **SITE 5**

SECTION NO., TOWNSHIP, RANGE **32-2-10**

WLC civil engineers
land surveyors

White, Lynn, Collins, & Associates, Inc.
219 W. ALABAMA STREET • FLORENCE, ALABAMA 35630
PHONE (256) 766-1051 • FAX (256) 766-1201

SCALE: 1" = 1'	DATE: 04/02/2010	SURVEYED BY:	DRAWN BY: ELK.	CHECKED BY: L.L.
CRD FILE:			JOB NO.:	



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LEADER
 LOCATION SITE 5
 SECTION NO., TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
 CITY OF FLORENCE, ALABAMA
 NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 118 W. ALABAMA STREET
 FLORENCE, ALABAMA 36503
 PHONE (205) 795-1381
 FAX (205) 795-1375

CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 10 T3S R11W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT.
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION.
 3. SECTION CORNERS OBTAINED FROM TYPICAL QUADRANGLE MAPS.



CONTOUR INTERVAL 5'

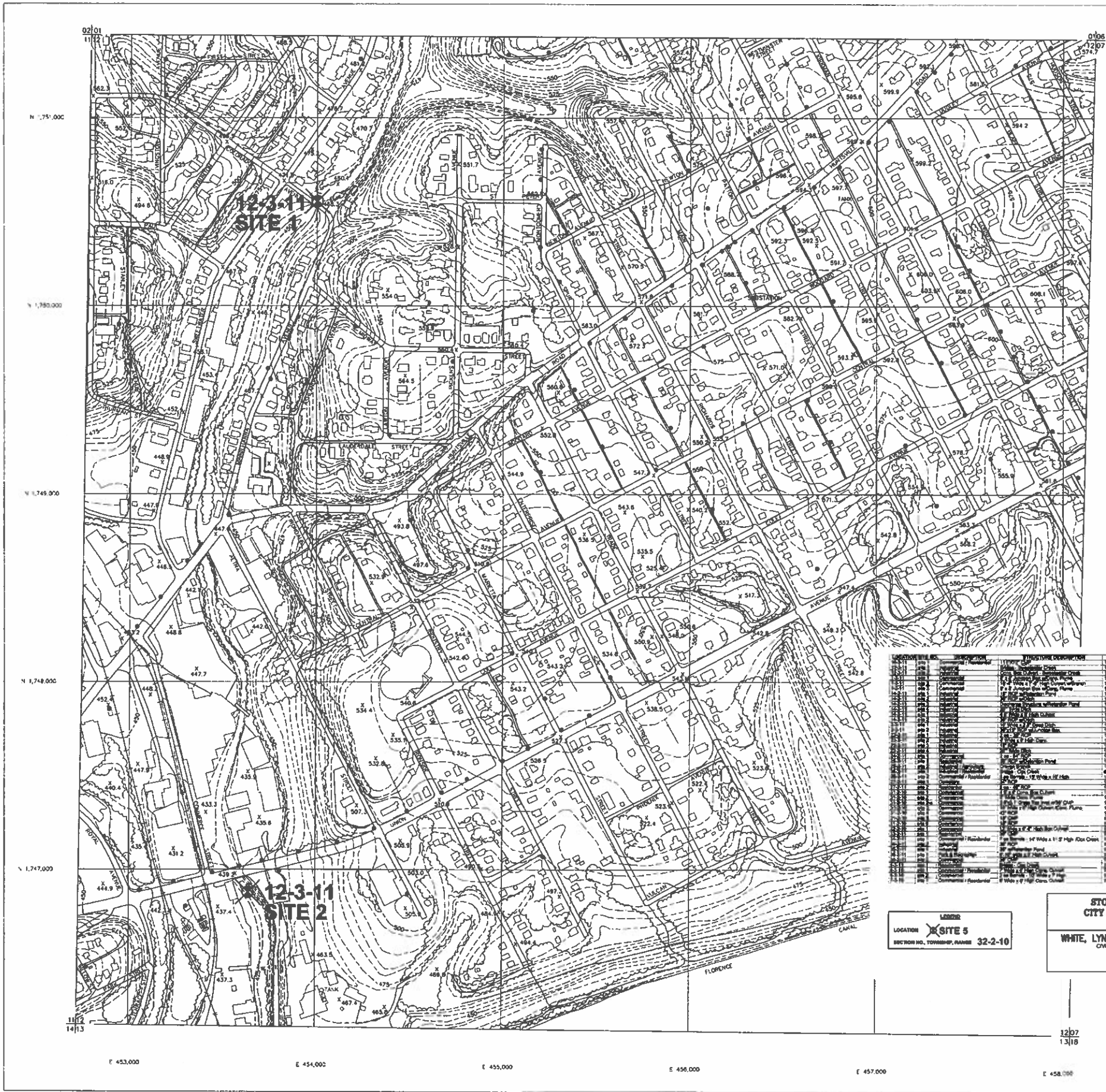
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BY PHOTOCGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 10 T3S R11W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 12 T3S R11W



NOTE:
 1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM TWA QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

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5+95	Station 100	5+95	Station 100

LOCATION **SITE 5**
 SECTION NO., TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
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NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 818 N. ALABAMA STREET
 FLORENCE, ALABAMA 36505
 PHONE (205) 798-1500
 FAX (205) 798-1501

BY PHOTOGRAMMETRIC METHODS
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PREPARED BY

 Atlantic Aerial Surveys
 A.A.S.W.C. #9002010

SEC. 12 T3S R11W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 01 T3S R11W



NOTE
 1. GROUND CONTROL, SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE D.T.E. TO HEAVY VEGETATION
 3. SECTION CORNER DETERMINED FROM T.M. QUADRANGLE MAPS.



CONTOUR INTERVAL: 5'

SHEET INDEX

Easting		Northing	
1112	1113	1752	1753
1011	2076	0910	1112
1514	3181	7167	4131
2223	2419	2021	2324
2726	2530	2928	2726
3435	0631	0623	3436
0302	0106	0204	0302
0112	0708	0810	1112
1514	3181	7167	4131
2223	2419	2021	2324
2726	2530	2928	2726

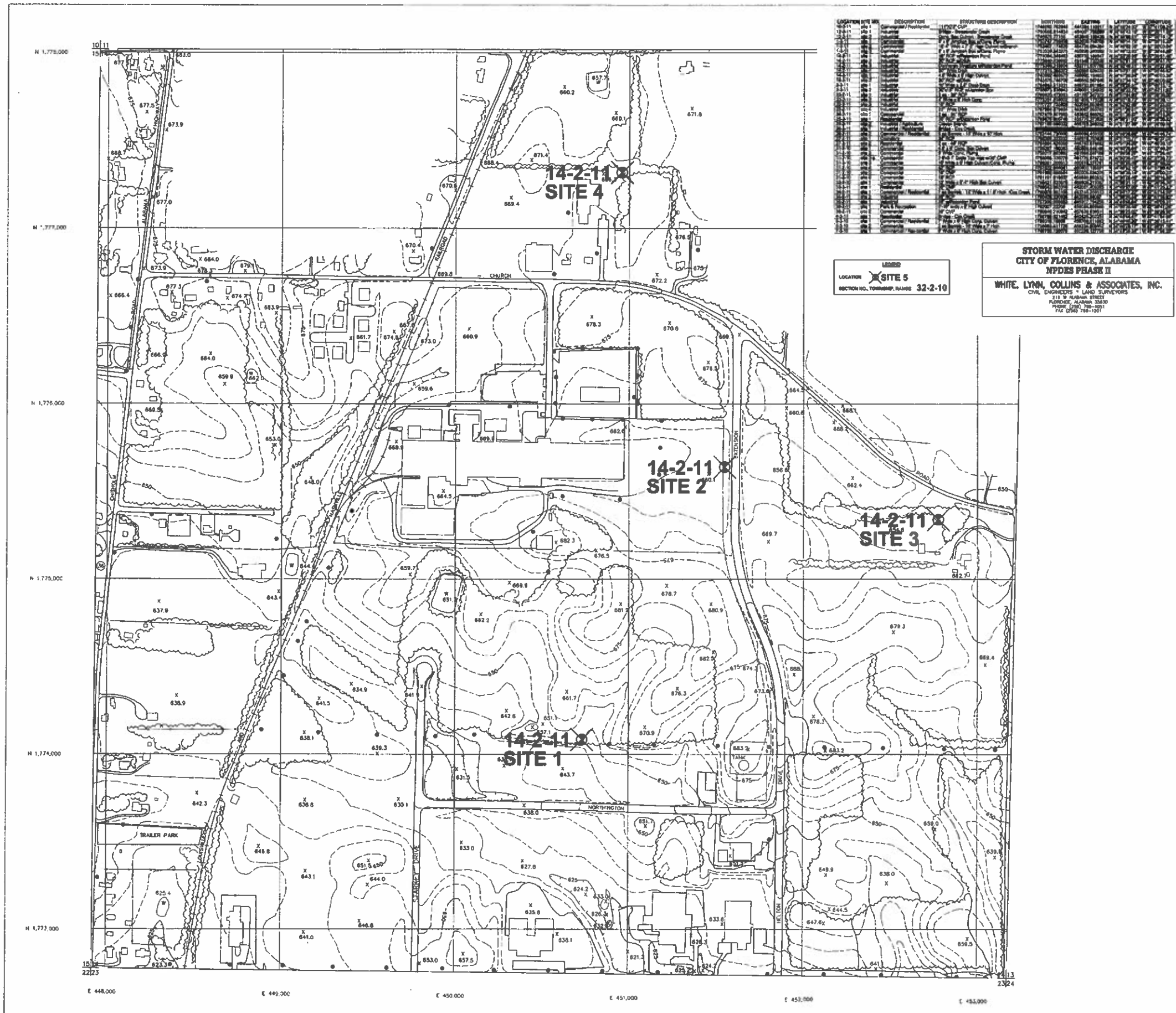
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1113	598.0	Corner of Florence Blvd & State St	1113.0	1758.0
1114	597.0	Corner of Florence Blvd & State St	1114.0	1758.0
1115	596.0	Corner of Florence Blvd & State St	1115.0	1758.0
1116	595.0	Corner of Florence Blvd & State St	1116.0	1758.0
1117	594.0	Corner of Florence Blvd & State St	1117.0	1758.0
1118	593.0	Corner of Florence Blvd & State St	1118.0	1758.0
1119	592.0	Corner of Florence Blvd & State St	1119.0	1758.0
1120	591.0	Corner of Florence Blvd & State St	1120.0	1758.0
1121	590.0	Corner of Florence Blvd & State St	1121.0	1758.0
1122	589.0	Corner of Florence Blvd & State St	1122.0	1758.0
1123	588.0	Corner of Florence Blvd & State St	1123.0	1758.0
1124	587.0	Corner of Florence Blvd & State St	1124.0	1758.0
1125	586.0	Corner of Florence Blvd & State St	1125.0	1758.0
1126	585.0	Corner of Florence Blvd & State St	1126.0	1758.0
1127	584.0	Corner of Florence Blvd & State St	1127.0	1758.0
1128	583.0	Corner of Florence Blvd & State St	1128.0	1758.0
1129	582.0	Corner of Florence Blvd & State St	1129.0	1758.0
1130	581.0	Corner of Florence Blvd & State St	1130.0	1758.0
1131	580.0	Corner of Florence Blvd & State St	1131.0	1758.0
1132	579.0	Corner of Florence Blvd & State St	1132.0	1758.0
1133	578.0	Corner of Florence Blvd & State St	1133.0	1758.0
1134	577.0	Corner of Florence Blvd & State St	1134.0	1758.0
1135	576.0	Corner of Florence Blvd & State St	1135.0	1758.0
1136	575.0	Corner of Florence Blvd & State St	1136.0	1758.0
1137	574.0	Corner of Florence Blvd & State St	1137.0	1758.0
1138	573.0	Corner of Florence Blvd & State St	1138.0	1758.0
1139	572.0	Corner of Florence Blvd & State St	1139.0	1758.0
1140	571.0	Corner of Florence Blvd & State St	1140.0	1758.0
1141	570.0	Corner of Florence Blvd & State St	1141.0	1758.0
1142	569.0	Corner of Florence Blvd & State St	1142.0	1758.0
1143	568.0	Corner of Florence Blvd & State St	1143.0	1758.0
1144	567.0	Corner of Florence Blvd & State St	1144.0	1758.0
1145	566.0	Corner of Florence Blvd & State St	1145.0	1758.0
1146	565.0	Corner of Florence Blvd & State St	1146.0	1758.0
1147	564.0	Corner of Florence Blvd & State St	1147.0	1758.0
1148	563.0	Corner of Florence Blvd & State St	1148.0	1758.0
1149	562.0	Corner of Florence Blvd & State St	1149.0	1758.0
1150	561.0	Corner of Florence Blvd & State St	1150.0	1758.0
1151	560.0	Corner of Florence Blvd & State St	1151.0	1758.0
1152	559.0	Corner of Florence Blvd & State St	1152.0	1758.0
1153	558.0	Corner of Florence Blvd & State St	1153.0	1758.0
1154	557.0	Corner of Florence Blvd & State St	1154.0	1758.0
1155	556.0	Corner of Florence Blvd & State St	1155.0	1758.0
1156	555.0	Corner of Florence Blvd & State St	1156.0	1758.0
1157	554.0	Corner of Florence Blvd & State St	1157.0	1758.0
1158	553.0	Corner of Florence Blvd & State St	1158.0	1758.0
1159	552.0	Corner of Florence Blvd & State St	1159.0	1758.0
1160	551.0	Corner of Florence Blvd & State St	1160.0	1758.0
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1165	546.0	Corner of Florence Blvd & State St	1165.0	1758.0
1166	545.0	Corner of Florence Blvd & State St	1166.0	1758.0
1167	544.0	Corner of Florence Blvd & State St	1167.0	1758.0
1168	543.0	Corner of Florence Blvd & State St	1168.0	1758.0
1169	542.0	Corner of Florence Blvd & State St	1169.0	1758.0
1170	541.0	Corner of Florence Blvd & State St	1170.0	1758.0
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1172	539.0	Corner of Florence Blvd & State St	1172.0	1758.0
1173	538.0	Corner of Florence Blvd & State St	1173.0	1758.0
1174	537.0	Corner of Florence Blvd & State St	1174.0	1758.0
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1176	535.0	Corner of Florence Blvd & State St	1176.0	1758.0
1177	534.0	Corner of Florence Blvd & State St	1177.0	1758.0
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1200	511.0	Corner of Florence Blvd & State St	1200.0	1758.0
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1206	505.0	Corner of Florence Blvd & State St	1206.0	1758.0
1207	504.0	Corner of Florence Blvd & State St	1207.0	1758.0

STORM WATER DISCHARGE
 CITY OF FLORENCE, ALABAMA
 NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 111 W ALABAMA STREET
 FLORENCE, ALABAMA 36505
 PHONE (256) 798-1001
 FAX (256) 798-1001

LOCATION: **SITE 5**
 SECTION NO., TOWNSHIP, RANGE: 32-2-10

BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990
 PREPARED BY:
 Atlantic Aerial Surveys
 A. A. S. W. O. #9002010

SEC. 01 T3S R11W



LOCATION	DESCRIPTION	STRUCTURE DESCRIPTION	DATE	STATUS
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14-2-11-2
14-2-11-3
14-2-11-4
14-2-11-5
14-2-11-6
14-2-11-7
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14-2-11-99
14-2-11-100

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
 WHITE, LYNN COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 218 W. ALABAMA STREET
 FLORENCE, ALABAMA 36509
 PHONE (256) 786-1051
 FAX (256) 786-1051

CITY OF
 FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 14 T2S R11W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNER OBTAINED FROM TVA QUADRANGLE MAPS



CONTOUR INTERVAL 5'

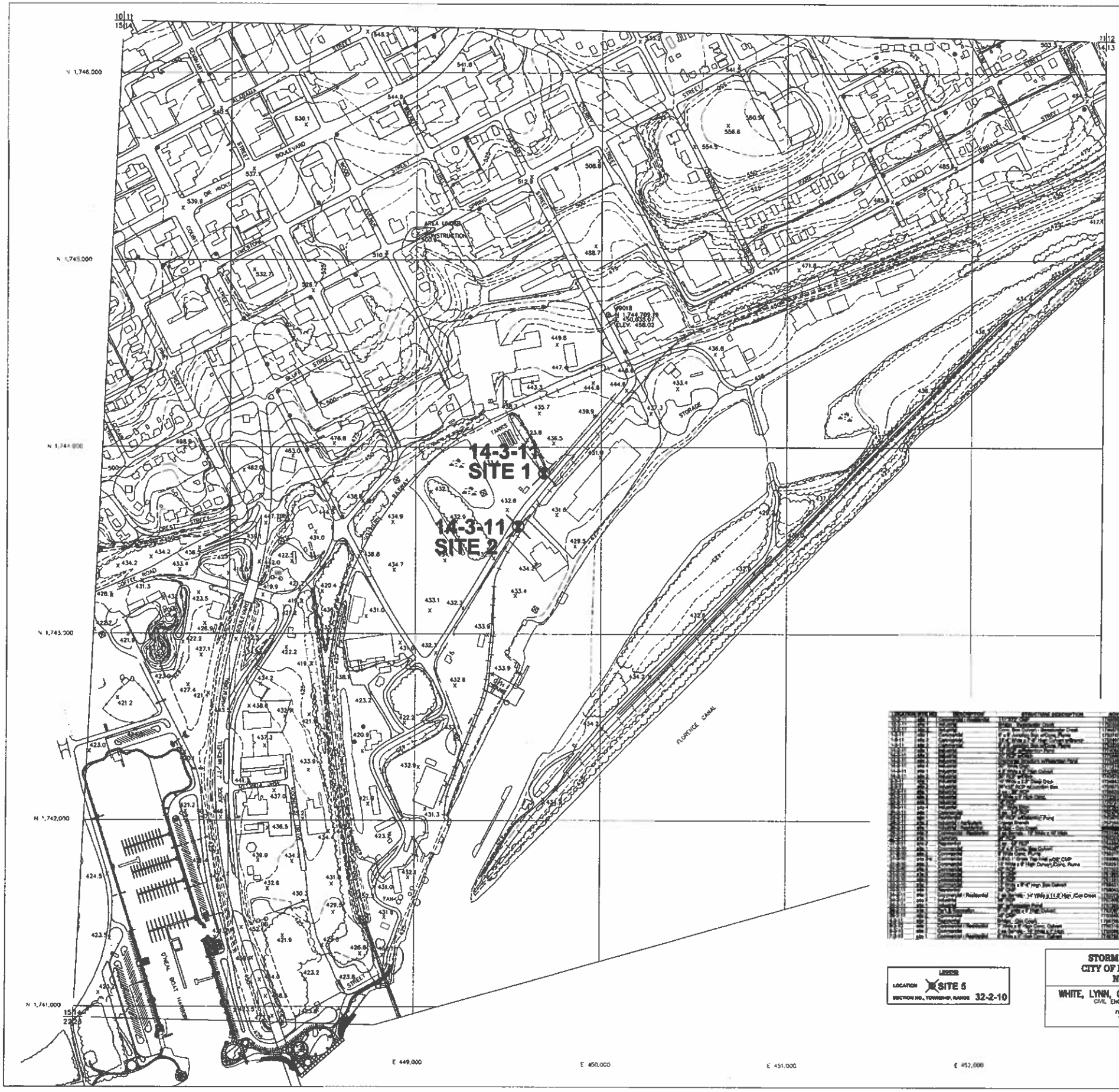
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BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 14 T2S R11W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 14 T3S R11W



- NOTE:
- 1 GROUND CONTROL SUPPLIED BY CLIENT
 - 2 DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 - 3 SECTION CORNERS OBTAINED FROM TYPICAL QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

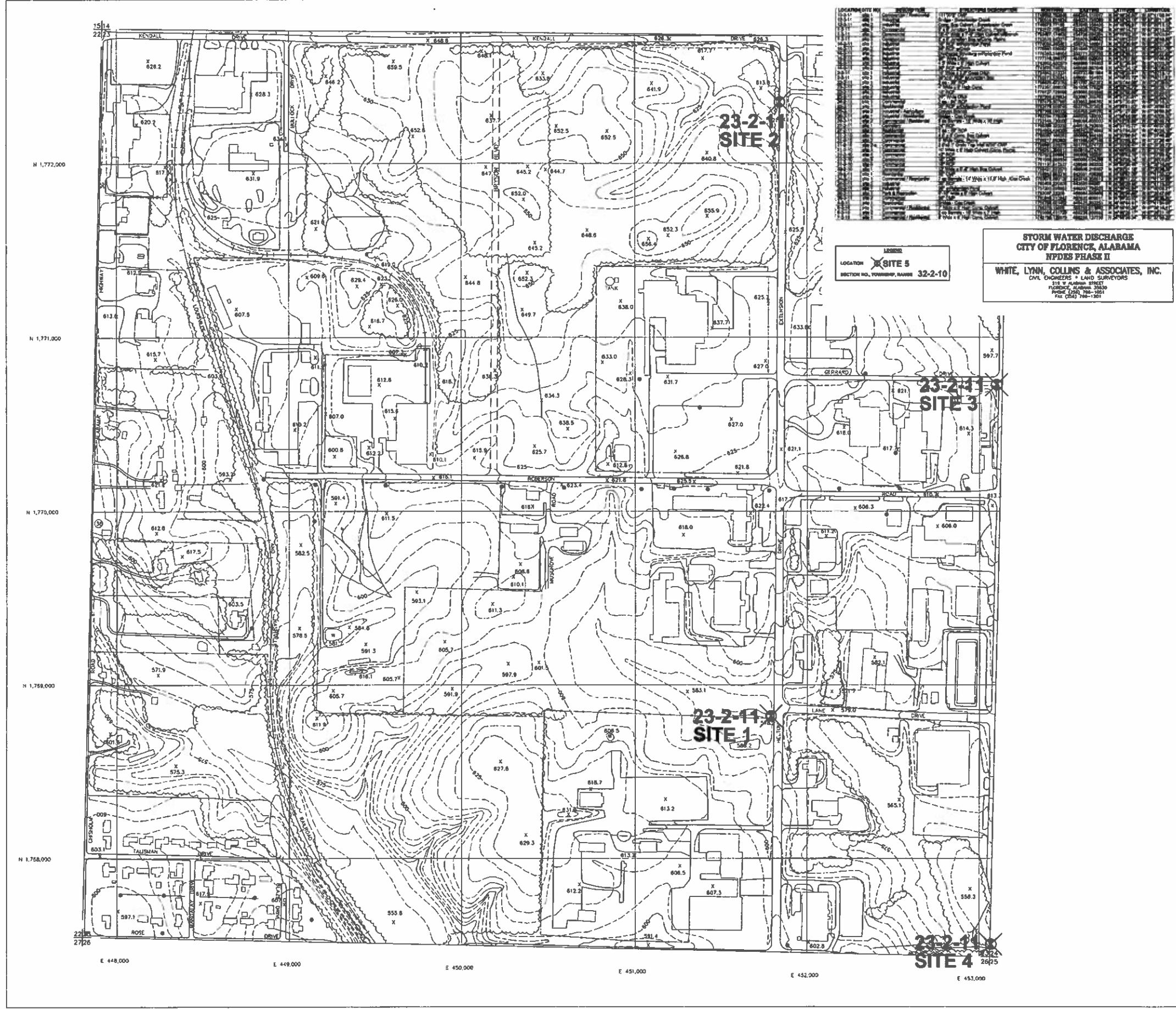
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10	1	10	11
10	1	11	27
10	1	12	08
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10	2	2	17
10	2	3	16
10	2	4	16
10	2	5	16
10	2	6	16
10	2	7	16
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10	10	11	26
10	10	12	26

LESSOR
 LOCATION **SITE 5**
 SECTION NO., TOWNSHIP, RANGE **32-2-10**

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 210 S ALABAMA STREET
 FLORENCE, ALABAMA 36501
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 FAX (205) 748-1252

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 14 T3S R11W



CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 23 T2S R11W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTIONS CONVERTED FROM THE QUADRANGLE MAPS



CONTOUR INTERVAL 5'

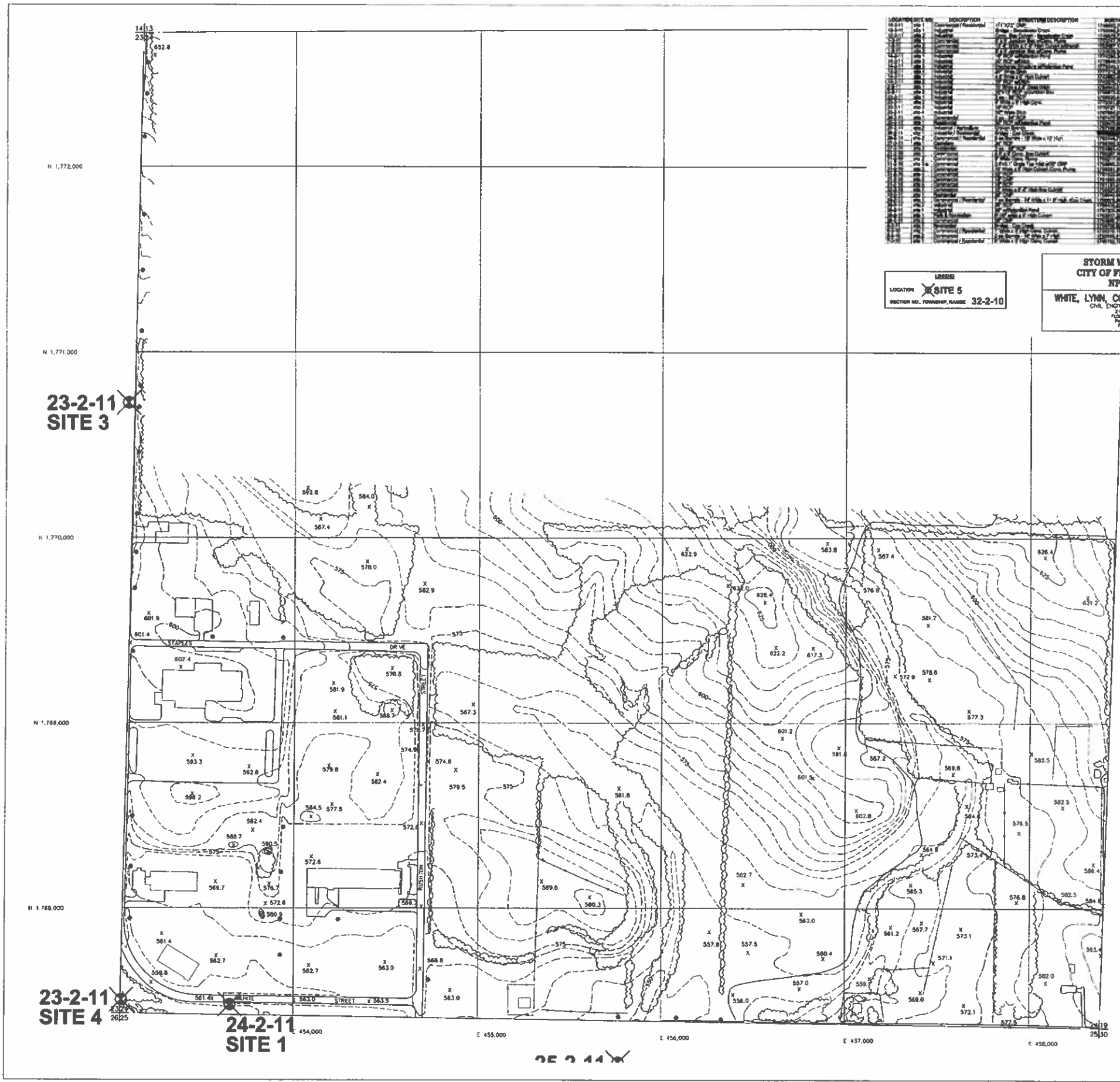
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13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102

By PHOTOGAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 23 T2S R11W



STATION	DESCRIPTION	HEIGHT	DATE	REMARKS
1
2
3
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LEADER
LOCATION SITE 5
SECTION NO., TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
WHITE, LYNN, COLLINS & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
110 S ALABAMA STREET
FLORENCE, ALABAMA 36503
TEL (205) 671-1071
FAX (205) 671-1071

CITY OF FLORENCE, AL
TOPOGRAPHIC MAP
SEC. 24 T2S R11W



- NOTE:
- GROUND CONTROL SUPPLIED BY CLIENT
 - DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 - SECTION CORNER OBTAINED FROM TVA QUADRANGLE MAPS



CONTOUR INTERVAL: 5'

SHEET INDEX

Sheet No.	Section	Sheet No.	Section	Sheet No.	Section	Sheet No.	Section
10	11	12	13	14	15	16	17
18	19	20	21	22	23	24	25
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34	35	36	37	38	39	40	41
42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57
58	59	60	61	62	63	64	65
66	67	68	69	70	71	72	73
74	75	76	77	78	79	80	81
82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97
98	99	100	101	102	103	104	105

BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS
TAKEN DURING THE MONTH OF
FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
A.A.S.W.O. #9002010

SEC. 24 T2S R11W

23-2-11
SITE 4

24-2-11
SITE 1

25-2-11
SITE 2

25-2-11
SITE 1

36-2-11
SITE 1

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N 1,765,000

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E 456,000

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E 458,000

CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 25 T2S R11W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CONFINED FROM EVA QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

10	11	12	07	08	09	10	11	12	07	08	09	10	11	12
15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
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BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS
TAKEN DURING THE MONTH OF
FEBRUARY, 1990

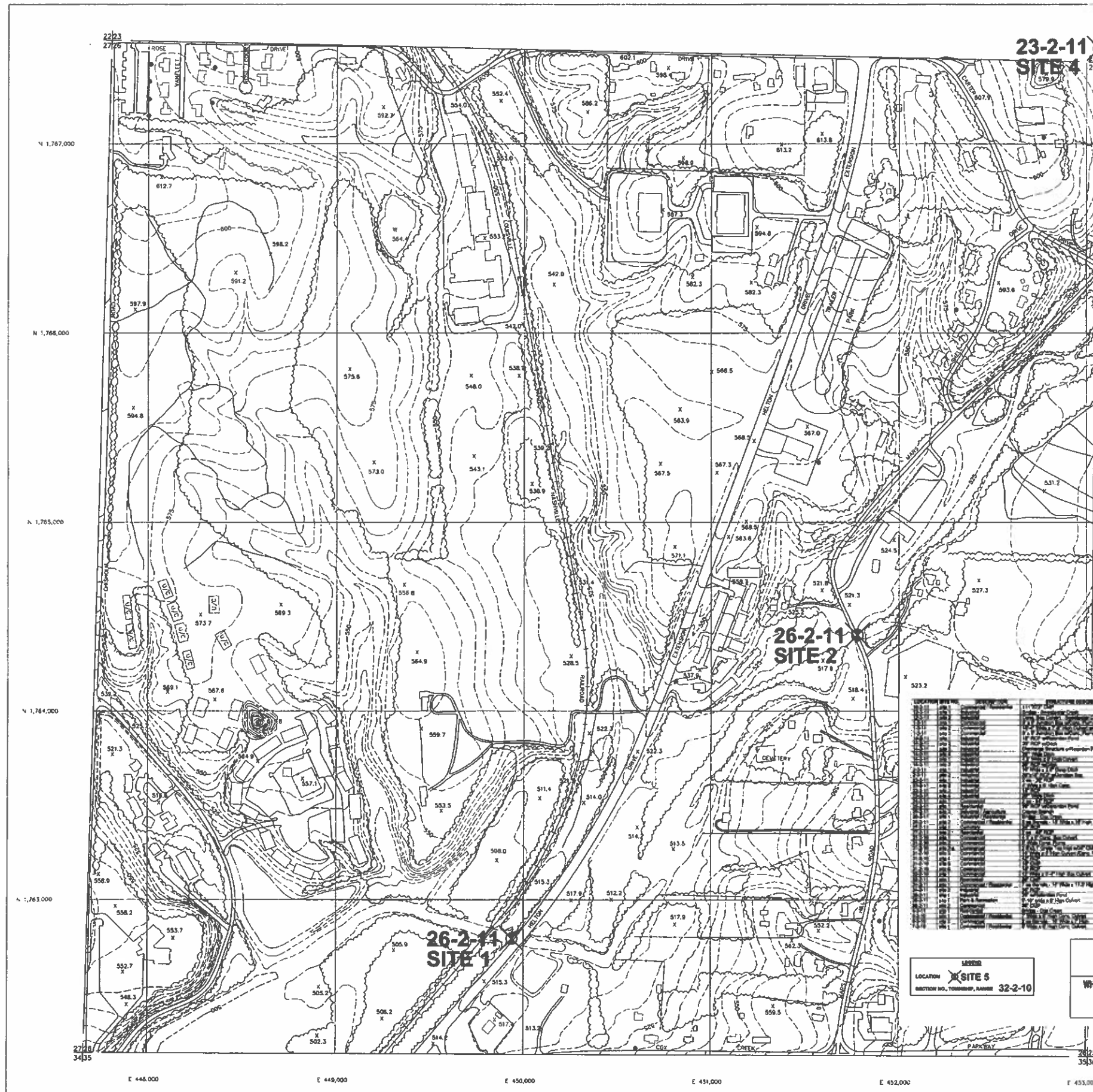
PREPARED BY
 Atlantic Aerial Surveys
A.A.S.W.O. #9002010

SEC. 25 T2S R11W

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70	Revised	1/1/91	JLC	

LOCATION: **SITE 5**
SECTION NO., TOWNSHIP, RANGE: **32-2-10**

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
WHITE, LYNN, COLLINS & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
510 W. ALABAMA STREET
FLORENCE, ALABAMA 36505
PHONE: 252-736-1200
FAX: 252-736-1201



23-2-11
SITE 4

26-2-11
SITE 2

26-2-11
SITE 1

Sheet No.	Sheet Description	Sheet No.	Sheet Description
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81	90	91	100

LOCATION: SITE 5
SECTION NO., TOWNSHIP, RANGE: 32-2-10

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
WHITE, LYNN, COLLINS & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
210 W. BIRMINGHAM STREET
FLORENCE, ALABAMA 36530
PHONE: (205) 796-1001
FAX: (205) 796-1201

CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 26 T2S R11W



NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT.
2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION.
3. SECTION CORNERS OBTAINED FROM T.V.A. QUADRANGLE MAPS.



CONTOUR INTERVAL: 5'

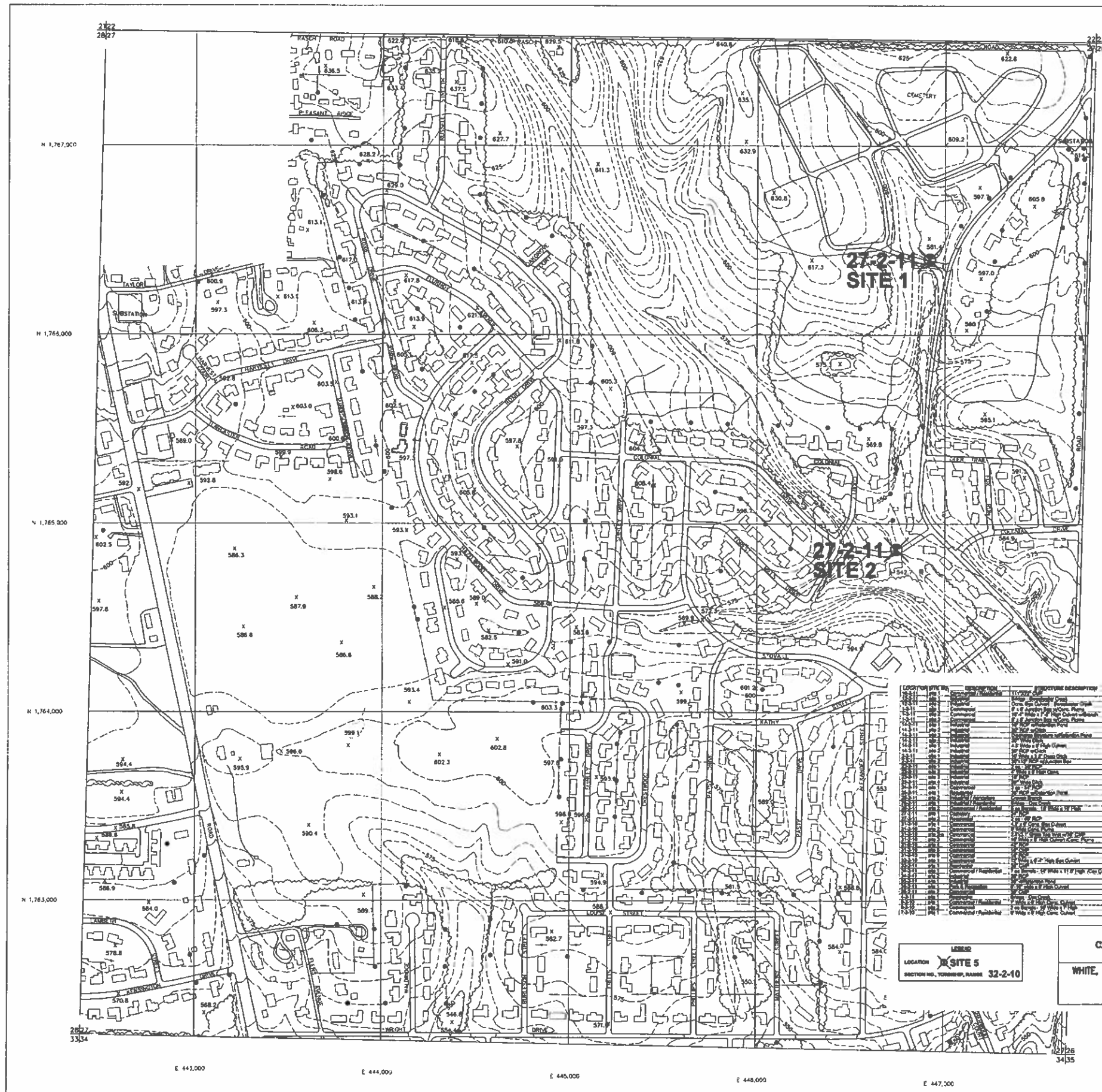
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80	89	90	99
81	90	91	100

BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS
TAKEN DURING THE MONTH OF
FEBRUARY, 1990

PREPARED BY
Atlantic Aerial Surveys
A. A. S. W. O. #9002010

SEC. 26 T2S R11W



CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 27 T2S R11W



- NOTE:
1. GROUND CONTROL, SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS DETERMINED FROM T24 QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

E11W R11N		E12W R11N		E13W R11N	
10	11	12	13	14	15
01	02	03	04	05	06
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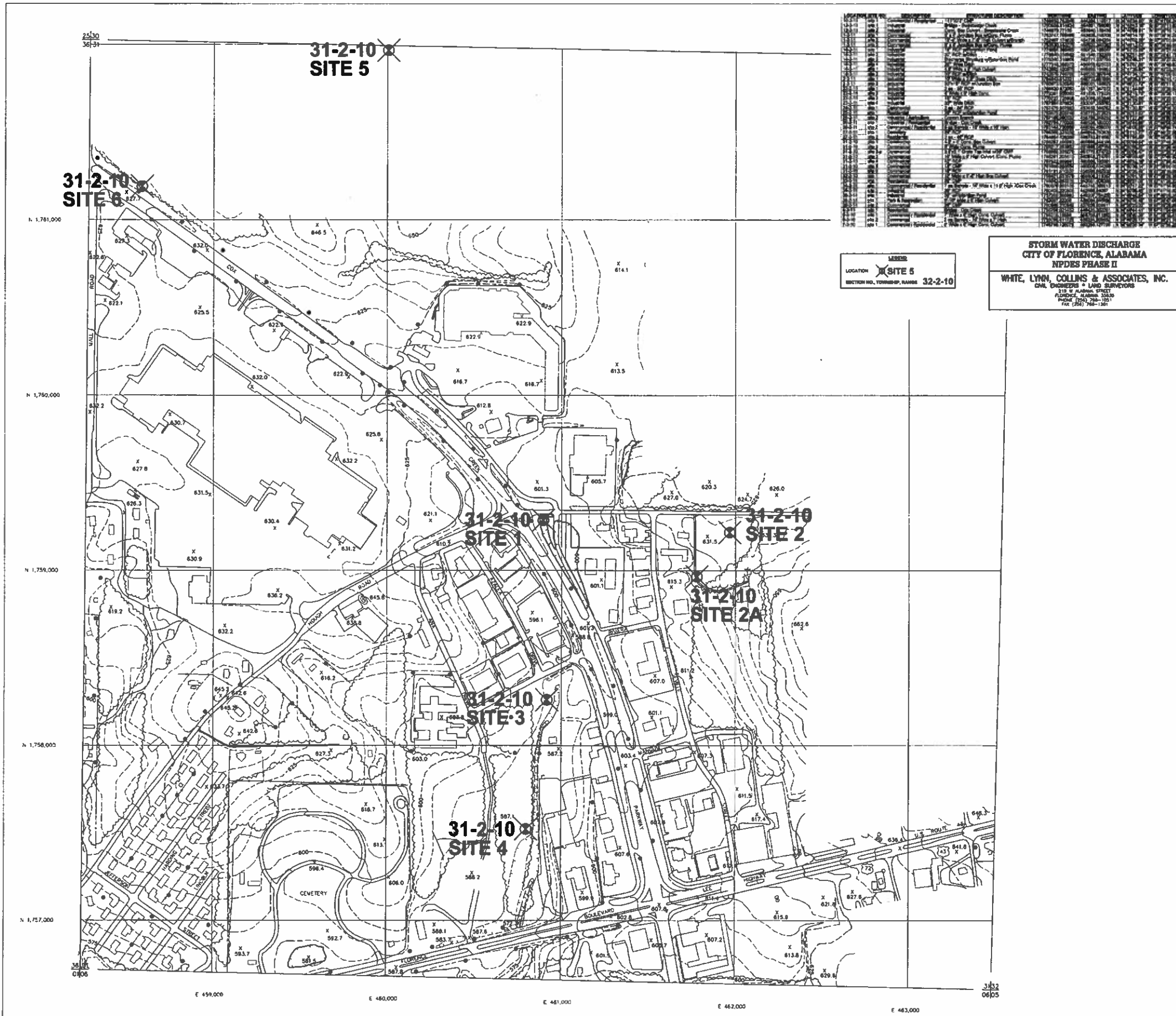
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 SECTION NO., TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 118 W. BARBER STREET
 FLORENCE, ALABAMA 36503
 PHONE (205) 796-1551
 FAX (205) 796-1551

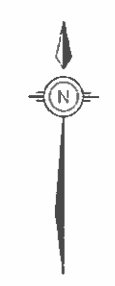
BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 27 T2S R11W



CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 31 T2S R10W



NOTE:
 1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNER DERIVED FROM IVA QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

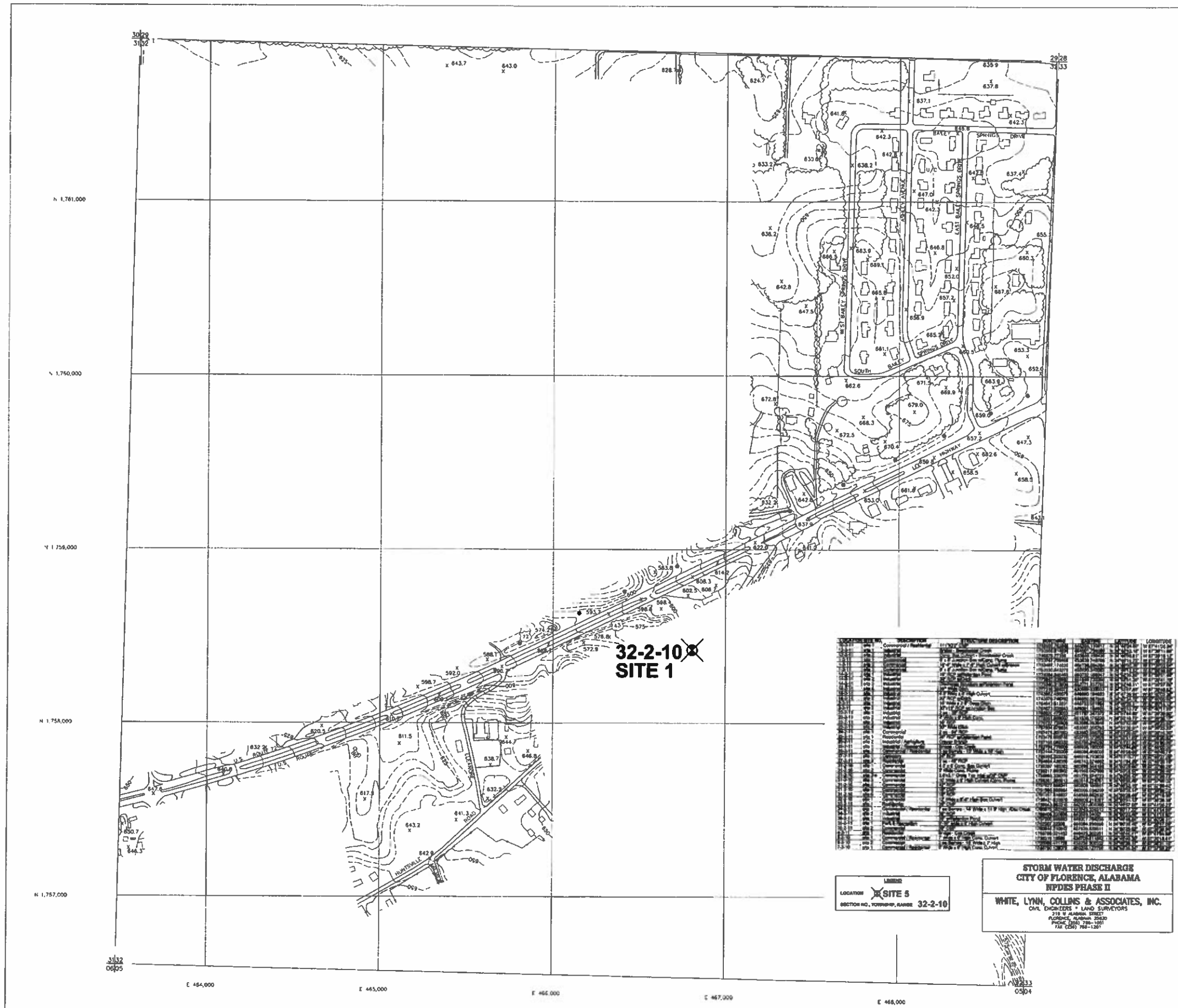
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BY PHOTOGRAMMETRIC METHOD
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY

 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 31 T2S R10W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 32 T2S R10W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM T4 QUADRANGLE MAPS



CONTOUR INTERVAL 5'

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47 20' E	R10W											50' 30' E			
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BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS TAKEN DURING THE MONTH OF FEBRUARY, 1990

PREPARED BY:
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

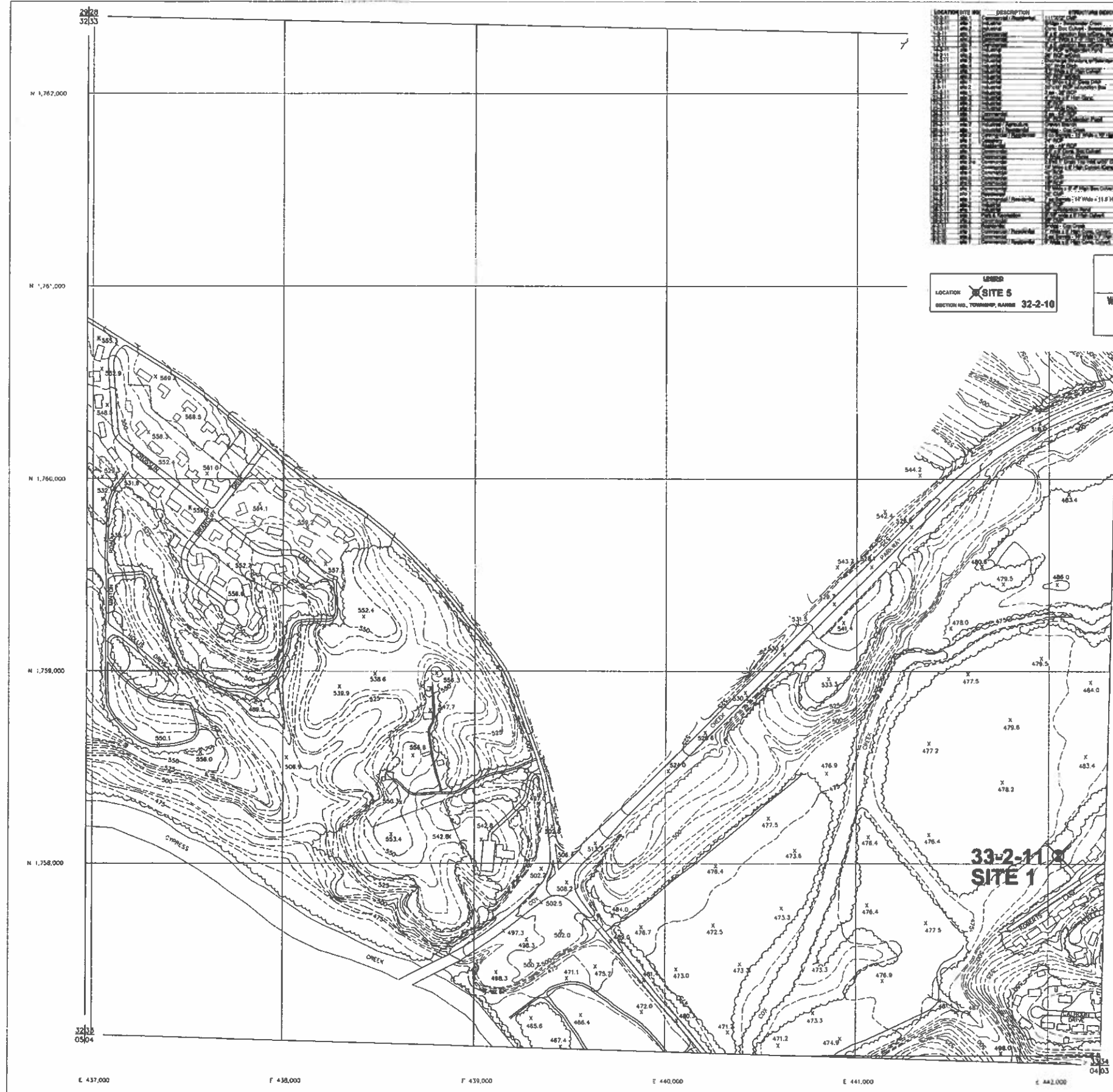
SEC. 32 T2S R10W

STORM WATER DISCHARGE
 CITY OF FLORENCE, ALABAMA
 NPDES PHASE II

WHITE, LYNN COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 215 W. ALABAMA STREET
 FLORENCE, ALABAMA 35233
 PHONE (205) 798-1011
 FAX (205) 798-1281

LOCATION: **SITE 5**
 SECTION NO., TOWNSHIP, RANGE: 32-2-10

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97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

SECTION NO., TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
RPDES PHASE II
WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 218 W. ALABAMA STREET
 FLORENCE, ALABAMA 36530
 PHONE (256) 798-1031
 FAX (256) 798-1801



CITY OF
 FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 33 T2S R11W

- NOTE:
1. GROUND CONTROL, SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM T.V.A. QUADRANGLE MAPS



CONTOUR INTERVAL: 5'

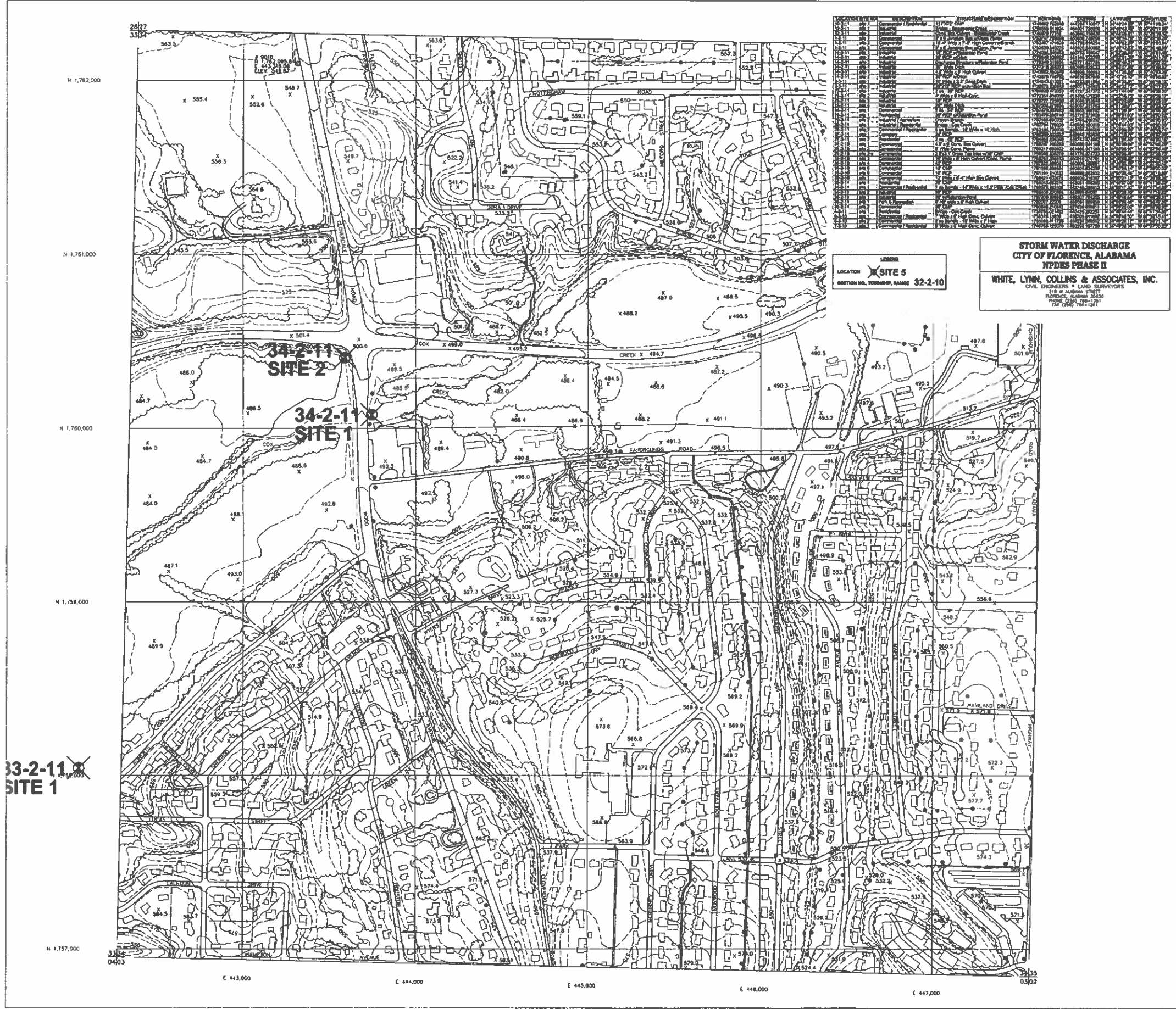
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27	26	25	30	29	28	27	26	25	30	29	28
34	35	36	31	32	33	34	35	36	31	32	33

BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 33 T2S R11W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 34 T2S R11W



- NOTE:
1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNER OBTAINED FROM T4A QUADRANGLE MAPS



CONTOUR INTERVAL 5'

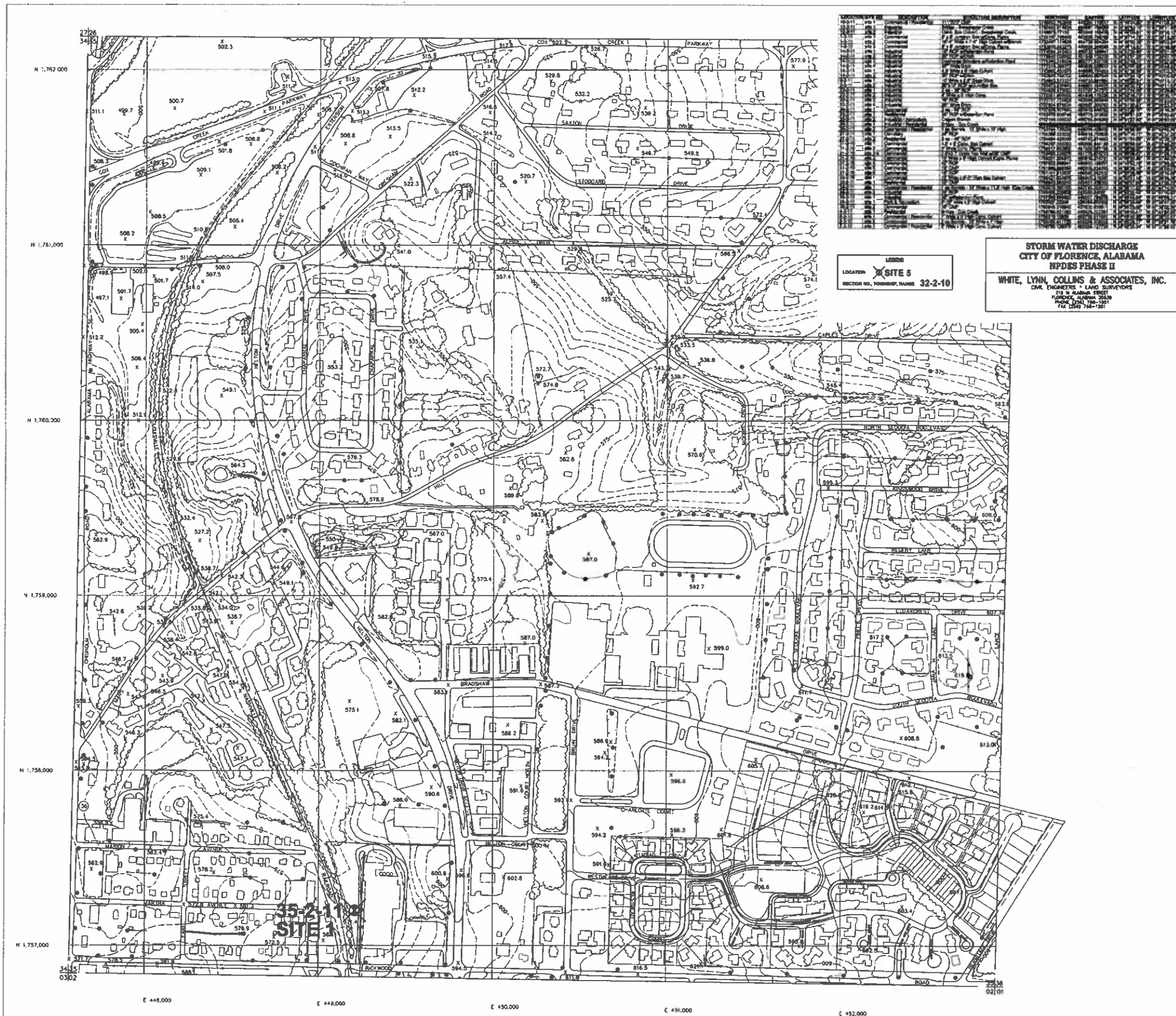
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22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
27	26	25	30	29	28	27	26	25	30	29	28	27	26	25

BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS TAKEN DURING THE MONTH OF FEBRUARY, 1990

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 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 34 T2S R11W



CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 35 T2S R11W



NOTE:
 1. GROUND CONTROL, SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM "A" QUADRANGLE MAPS



CONTOUR INTERVAL 5'

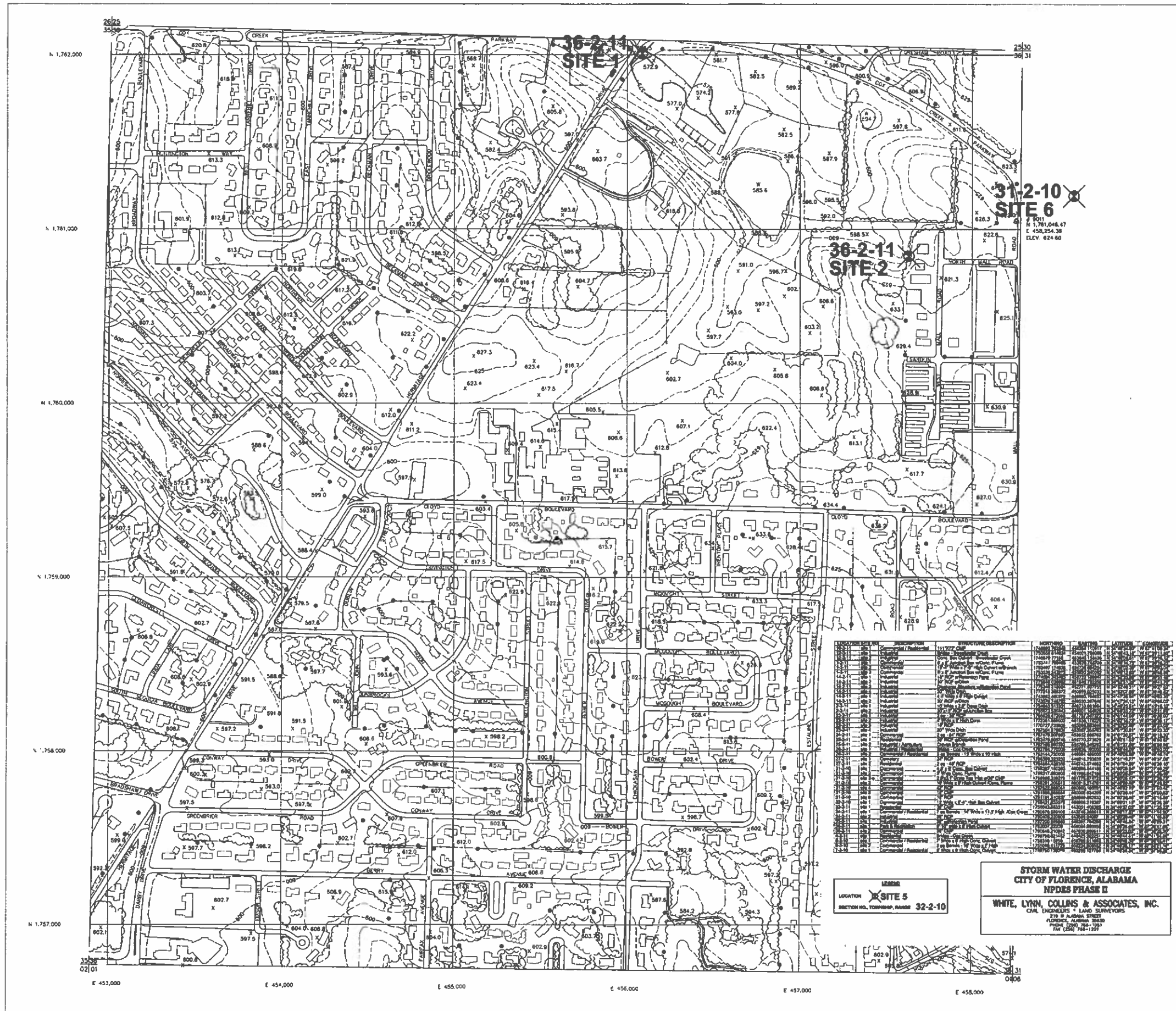
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81	80	79	74	73	72
88	87	86	81	80	79
95	94	93	88	87	86
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BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 35 T2S R11W



CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 36 T2S R11W



NOTE:
 1. GROUND CONTROLS SUPPLIED BY CLIENT.
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION.
 3. SECTION CORNER OBTAINED FROM TYPICAL QUADRANGLE MAPS.



CONTOUR INTERVAL 5'

SHEET INDEX

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22	23	24	19	20	21	22	23	24	19	20	21	22
27	26	25	30	29	28	27	26	25	30	29	28	27

NO.	DESCRIPTION	DATE	BY	REVISION
1	1" = 100' PLAN	1/11/90	WLC	1
2	1" = 100' PROFILE	1/11/90	WLC	1
3	1" = 100' CROSS SECTION	1/11/90	WLC	1
4	1" = 100' LONGITUDINAL SECTION	1/11/90	WLC	1
5	1" = 100' SPREADSHEET	1/11/90	WLC	1
6	1" = 100' PHOTOGRAPHIC	1/11/90	WLC	1
7	1" = 100' GROUND CONTROL	1/11/90	WLC	1
8	1" = 100' FIELD NOTES	1/11/90	WLC	1
9	1" = 100' SURVEY DATA	1/11/90	WLC	1
10	1" = 100' CALCULATIONS	1/11/90	WLC	1
11	1" = 100' FINAL REPORT	1/11/90	WLC	1

LOCATION: **SITE 5**
 SECTION: **36-2-10**

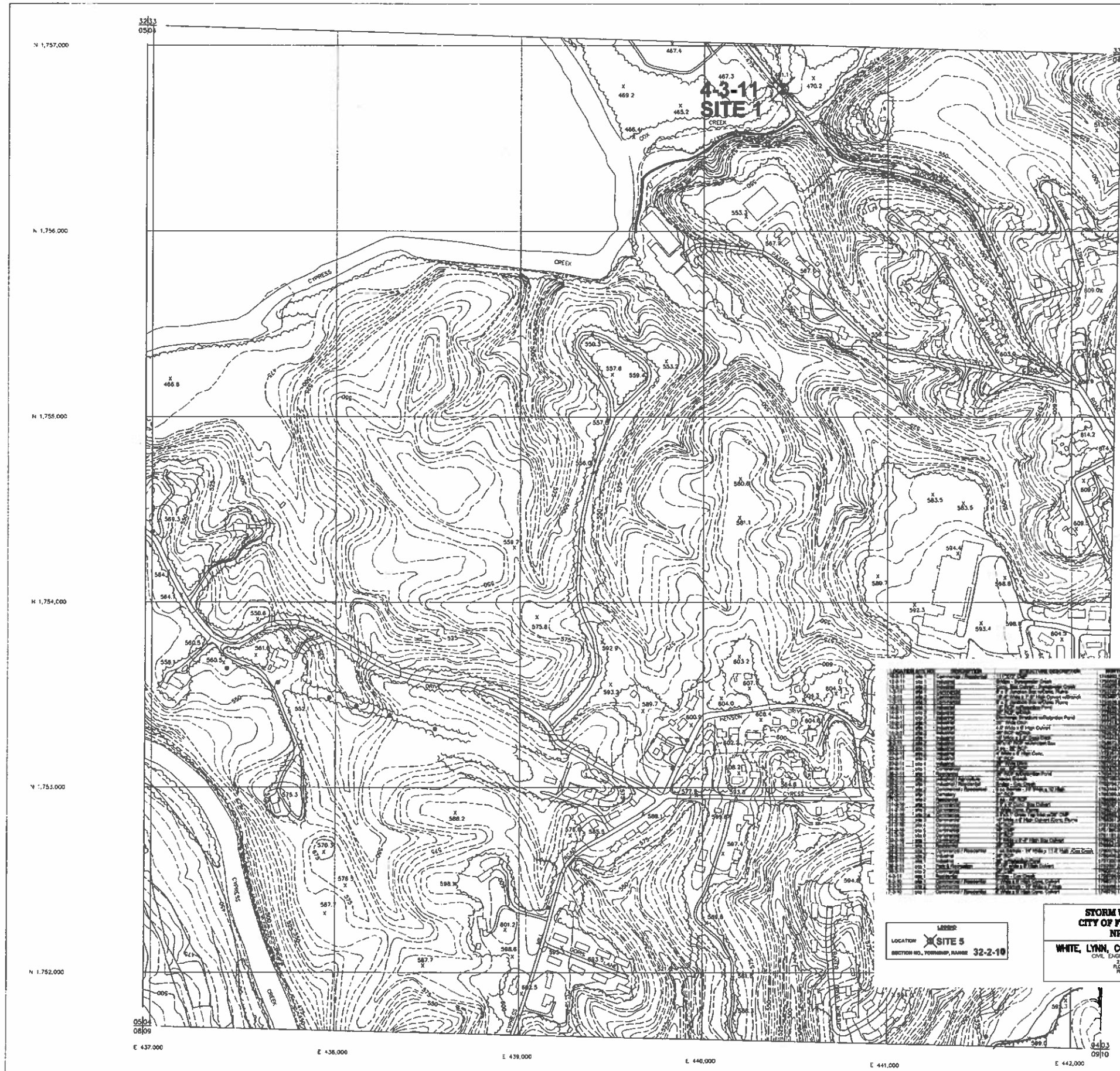
STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NPDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 219 S. ALABAMA STREET
 FLORENCE, ALABAMA 36503
 PHONE: (205) 794-1191
 FAX: (205) 794-1191

BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 36 T2S R11W

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CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 04 T3S R11W



NOTE:
 1. GROUND CONTROL, SUPPLIED BY CLIENT.
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION.
 3. SECTION CORNERS OBTAINED FROM TMA QUADRANGLE MAPS.



CONTOUR INTERVAL 5'

SHEET INDEX

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 04 T3S R11W



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STORM WATER DISCHARGE
CITY OF FLORENCE, ALABAMA
NFDIS PHASE II
WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 218 N. ALABAMA STREET
 FLORENCE, ALABAMA 36530
 PHONE (256) 766-1201
 FAX (256) 766-1201

LOCATION: **SITE 5**
 SECTION NO., TOWNSHIP, RANGE: **32-2-10**

CITY OF FLORENCE, AL
 TOPOGRAPHIC MAP
 SEC. 06 T3S R10W



NOTE:
 1. GROUND CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM TMA QUADRANGLE MAPS



CONTOUR INTERVAL: 5'

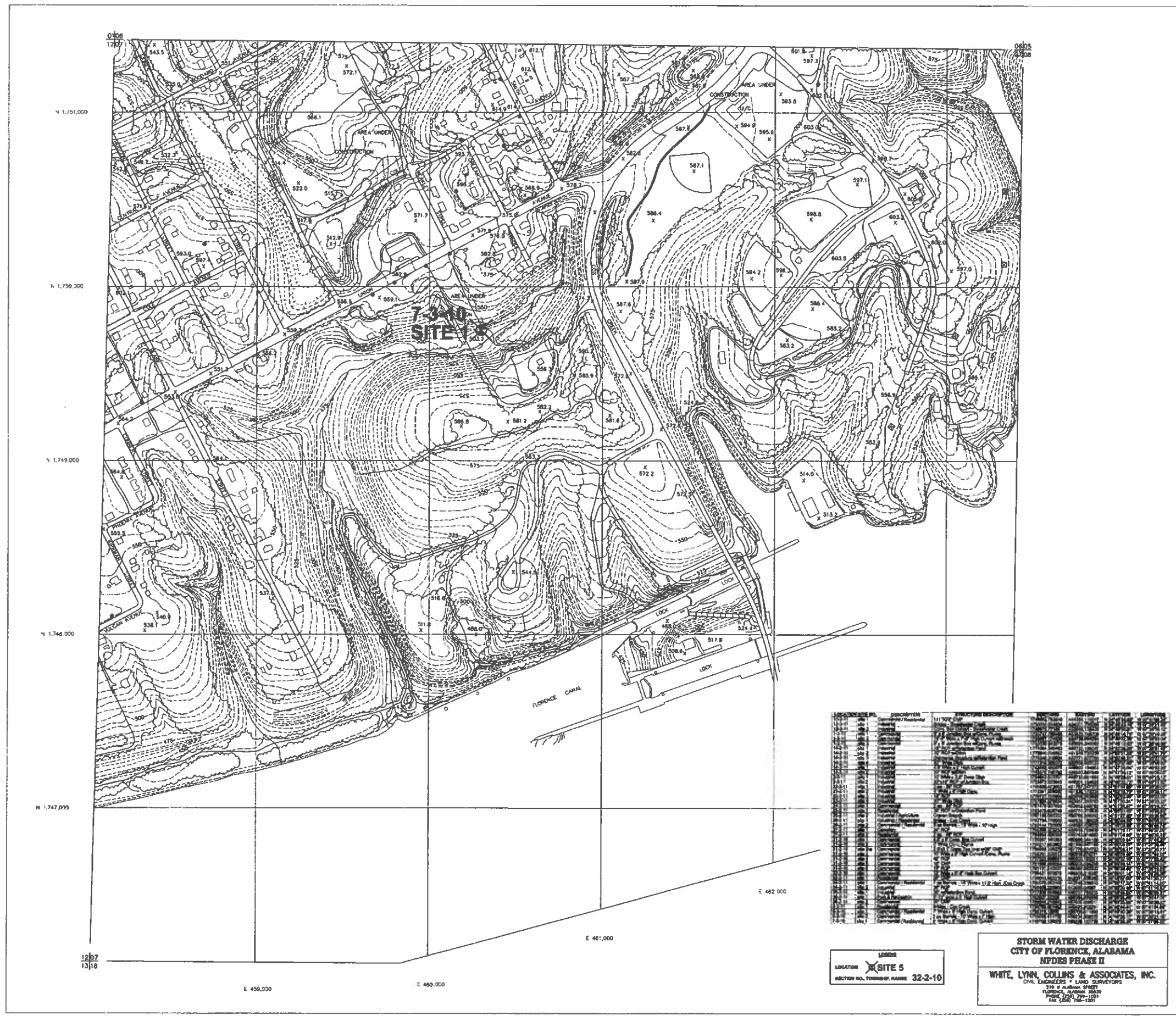
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BY PHOTOGRAMMETRIC METHODS
 FROM AERIAL PHOTOGRAPHS
 TAKEN DURING THE MONTH OF
 FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

SEC. 06 T3S R10W



CITY OF FLORENCE, AL

TOPOGRAPHIC MAP

SEC. 07 T3S R10W



- NOTE:
1. DOTTED CONTROL SUPPLIED BY CLIENT
 2. DASHED CONTOURS APPROXIMATE DUE TO HEAVY VEGETATION
 3. SECTION CORNERS OBTAINED FROM TWA QUADRANGLE MAPS



CONTOUR INTERVAL 5'

SHEET INDEX

10	11	2	07	08	09	10	11	12	07	08	09	10	11	12
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BY PHOTOCGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS TAKEN DURING THE MONTH OF FEBRUARY, 1990

PREPARED BY
 Atlantic Aerial Surveys
 A.A.S.W.O. #9002010

Station	Reading	117	118	119	120	121	122	123	124	125	126	127	128	129	130
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SECTION NO. TOWNSHIP, RANGE 32-2-10

STORM WATER DISCHARGE
 CITY OF FLORENCE, ALABAMA
 NFDES PHASE II
 WHITE, LYNN, COLLINS & ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 310 W. ALABAMA STREET
 FLORENCE, ALABAMA 36503
 PHONE (205) 798-1293
 FAX (205) 798-1291

SEC. 07 T3S R10W

APPENDIX 2

Inspection Report Form

**CONSTRUCTION SITE
INSPECTION REPORT**

Project Name: _____ File No: _____

Project Location: _____

Owner Information:

Name: _____ Phone Number: _____

Address: _____ Email: _____

Inspection Date: _____ Time: _____ Inspected by: _____

STAGE OF CONSTRUCTION

- | | | |
|--|--|--|
| <input type="checkbox"/> Pre-Construction Conference | <input type="checkbox"/> Rough Grading | <input type="checkbox"/> Finish Grading |
| <input type="checkbox"/> Clearing and Grubbing | <input type="checkbox"/> Building Construction | <input type="checkbox"/> Final Stabilization |

INSPECTION CHECKLIST

Yes No NA

- Have all denuded areas requiring temporary or permanent stabilization been stabilized?
Seeded? Yes/No Mulched? Yes/No Graveled? Yes/No
- Are soil stock piles adequately stabilized with seeding and/or sediment trapping measures?
- Does permanent vegetation provide adequate stabilization?
- Have sediment trapping facilities been constructed as a first step in LDA?
- For perimeter sediment trapping measures, are earthen structures stabilized?
- Are sediment basins installed where needed?
- Are finished cut and fill slopes adequately stabilized?
- Are on-site channels and outlets adequately stabilized?
- Do all operational storm sewer inlets have adequate inlet protection?
- Are stormwater conveyance channels adequately stabilized with channel lining and/or outlet protection?
- Is in-stream construction conducted using measures to minimize channel damage?
- Are temporary stream crossings of non-erodible material installed where applicable?
- Is necessary restabilization of in-stream construction complete?
- Are utility trenches stabilized properly?
- Are soil and mud kept off public roadways at intersections with site access roads?
- Have all temporary control structures that are no longer needed been removed?
- Have all control structure repairs and sediment removal been performed?
- Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases at peak stormwater runoff?

Comments: _____

Verbal/Written notification given to: _____

Signature: _____ Date: _____

APPENDIX 3

Subdivision Regulations

Appendix A SUBDIVISION REGULATIONS¹

¹Editor's note(s)—A resolution adopted Sept. 28, 2010, amended the subdivision regulations of the city, which was promulgated by the planning commission on August 22, 1989, and effective on September 1, 1989. Such regulations are included herein as enacted, including catchlines and numbering. The editors have added words in brackets to facilitate use, indexing and reference. The absence of a history note following a section indicates that the section was derived from the subdivision regulations as originally adopted. A history note in parentheses following a section will indicate that the section has been amended by the provisions shown in such history note. A uniform system of capitalization and treatment of numbers has been used. Obviously misspelled words have been corrected.

State law reference(s)—Municipal control of subdivisions generally, Code of Ala. 1975, § 11-52-30 et seq.; reservation of lands in subdivisions for future acquisition for public streets, Code of Ala. 1975, § 11-52-50 et seq.

ARTICLE I. IN GENERAL

Section I. Purpose.

- (A) *Statement of authority and intent.* These subdivision regulations are adopted under authority of Title 11, Chapter 52, of the Code of Alabama, 1975, as amended. It is the intent of these regulations to provide for the harmonious development of land within the subdivision jurisdiction; for the coordination of streets within subdivisions with other existing or planned streets or with other features of the master plan; for adequate and convenient open spaces for traffic, utilities, recreation, light and air; and for a distribution of population and traffic that will tend to create conditions favorable to health, safety, convenience or prosperity, and to minimize increases in the peak flow rates of stormwater runoff caused by urban development of watersheds within the subdivision jurisdiction.
- (B) *Area of jurisdiction.* These regulations shall govern all subdivision of property within the jurisdiction of City of Florence.
- (C) *Application of regulations.* From and after the effective date of these subdivision regulations, every plat of land that is a subdivision, as defined herein, shall be prepared, presented for approval, and recorded as required herein; no plat will be recorded or will have any validity unless it has been approved by the Florence Planning Commission as having fulfilled the requirements of these regulations.

If the proposed subdivision is designed according to the City of Florence regulations for a "Planned Residential Development", or a "Planned Unit Development", then subdivision approval by the Florence City Planning Commission can be granted simultaneously with approval of the planned residential development or planned unit development plans.

Where it is determined that development of a subject area under review by the planning commission will result in a significant increase in stormwater runoff, then stormwater detention regulations shall apply. This determination will be based on:

- (1) Location and size of the development;
- (2) Slope and soil conditions;
- (3) Existing drainage facilities and drainage basins;
- (4) Other considerations which may pertain to the discharge of stormwater from the development of the site.

Stormwater detention regulations as contained in Section III(B) shall apply to road and street construction, subdivision of property, and for those developments within the planning jurisdiction of the City of Florence. Every development shall handle its own increase in stormwater runoff. Where the development's storm drainage system outfall discharges directly into a main stream, neither detention facilities nor engineering computations in justification are ordinarily required; a statement from the developer's engineer that detention storage is not required for that reason is adequate.

Section II. Definitions.

For the purposes of these subdivision regulations certain words and phrases used herein are defined as follows:

Alabama Department of Environmental Managements (ADEM). ADEM is the state agency responsible for administering all federal environmental laws in the state.

Alabama Department of Transportation (ALDOT). The Alabama Department of Transportation provides transportation system for users in the State of Alabama. The department is responsible for state highways and bridges in Alabama.

Alley. Any public space or thoroughfare twenty (20) feet or less in width which has been dedicated or deeded for public use.

As-built plans. A post construction record providing details of construction and reflecting all changes in the engineering plans during the course of the development's construction.

Best management practices plan (BMP). A BMP is a method of reducing the amount of pollution from non-point sources to a level acceptable with state and local water quality standards for a specific site. It may include a specific method or a combination of methods designed to achieve this result. The BMP considers the site conditions, including topography, soil type, and other characteristics of the site.

Block. A parcel of land entirely surrounded by streets, streams railroad right-of-way, parks or other public spaces or by a combination thereof.

Building setback line. The line indicating the minimum horizontal distance between the street line and the face of buildings.

Buffer strip. An area of land, which may include landscaping, walls, fences, and berms that is located between land uses of different character to physically and visually separate such uses, and is intended to mitigate negative impacts of the more intense use on a residential or vacant parcel.

Build-to line. An alignment established a certain distance from the curb line to a line along which the building shall be built. Front porches and handicap ramps may be exempt from build-to line requirements but must occur behind the property line. There shall be designated a minimum build-to line and a maximum build-to line with a maximum distance between of five (5) feet in which the part of the structure nearest the street or access easement will be served.

City council. The chief legislative body of the City of Florence.

City engineer. The city engineer is responsible for supervising the execution of all contracts with the city for the improvement of streets, sidewalks, parks, bridges and storm sewer systems in the city.

County engineer. The duly appointed engineer of Lauderdale County, Alabama.

Cross-walkway. A public right-of-way ten (10) feet or more in width between property lines, which provides pedestrian access to adjacent properties.

Developer. The owner of land proposed to be subdivided or a person designated in writing by the legal owner as his or her representative.

Developer's engineer. A licensed professional engineer in the State of Alabama that serves as an agent for the developer and provides engineering and construction services during site development.

Developer's surveyor. A licensed professional surveyor in the State of Alabama that serves as an agent for the developer and provides land surveying services during site development.

Development. The act of installing site improvements and building structures.

Easement. A grant by the owner for the use of a strip of land by others for specific purposes (ie: utility or drainage). Drainage easements shall be specifically identified as drainage easements. If there are other utilities within the drainage easement, it shall be designated as a drainage and utility easement.

Engineering plans. The drawings on which the proposed subdivision improvements are shown and which, if approved, will be used for construction of the improvements.

Fifty-year frequency rainstorm. A rainstorm with a two (2) percent chance of being equaled or exceeded in any given year.

Final plat. The final map or drawing on which the subdivision plan is submitted to the planning commission for approval and which, if approved, will be submitted to the office of the judge of probate of Lauderdale County for recording.

General approval. The approval by the planning commission of the general subdivision plan or plat, as such approval is required by these regulations.

General subdivision plan. The general plan and engineering drawings prepared based on the preliminary plan which, if approved, will be utilized for the preparation of the final plat and for the actual construction of the public improvements of the subdivision.

Health officer. The health officer of Lauderdale County or his/her authorized representative; the term may jointly mean the state health officer or his/her authorized representative.

Improvements. Street surfacing, with curb and gutter, sidewalks, water mains, sanitary sewers, storm sewers, utilities and monuments, detention basins, hydrants, required open spaces, street-trees, etc.;

Lot. A portion of a subdivision intended as a unit for transfer of ownership or for development.

Main stream. A stream on which floods are controlled by the Tennessee Valley Authority's reservoir system, or a stream which has the channel capacity adequate to accommodate the ten-year frequency rainstorm without overflow as determined by the city engineer.

Master plan. The comprehensive plan made and adopted by the Florence City Planning Commission for the physical development of the City of Florence and surrounding area; the term includes any unit or component part of such plan separately adopted and any amendment to such plan or part thereof.

Municipal or municipality. The City of Florence and, where appropriate to the context, that area lying within the corporate limits of such city as such corporate limits exist or may exist in the future.

National pollutant discharge elimination system (NPDES). The national pollutant discharge elimination system program was created by the federal government to control point discharges of water pollution.

Planning commission. The Florence City Planning Commission, as such commission was created heretofore by ordinances adopted by the City of Florence, pursuant to Title 11, Chapter 52, of the Code of Alabama, 1975, as amended.

Preliminary subdivision plan. The preliminary map or drawing on which the proposed layout of a subdivision is submitted to the planning commission for consideration and approval.

Private roads. A road which has not been dedicated to the public and is not owned or maintained by the city, county, or state. Typically, these roads are used for more than one (1) property owner to access a dedicated public right-of-way. Proposed private roads are not permitted in the City of Florence for new site development. Private roads on properties annexed into the city shall retain their designation as private roads and the city will not be responsible for their maintenance.

Reserve strip. The strip of land smaller than a lot retained in private ownership for the purpose of controlling access to land dedicated or intended to be dedicated to street or other public uses.

Roadway. The portion of a street available for vehicular traffic; where curbs are laid, the portion between curbs.

Sidewalk. The portion of a street or cross-walkway, paved or otherwise surfaced, intended for pedestrian use.

Stormwater pollution prevention plan (SWPPP). The stormwater pollution prevention plan is the program by which the city monitors new construction to ensure compliance with the requirements of the city's Phase II NPDES stormwater permit application.

Street. A public right-of-way which provides access to adjacent properties.

"Closed-end street." Sometimes called a cul-de-sac; a short street having one (1) end open to traffic and being terminated at the other end with a vehicular turnaround. The maximum length of a closed-end street shall be eight-hundred (800) feet.

"Collector street." A street, existing or planned, which serves or is intended to serve as a secondary traffic-way, collecting from minor streets and feeding it into major streets or to important generators of traffic.

"Local street." A street of limited continuity which serves or is intended to serve the local needs of a neighborhood.

"Major street." A street, existing or planned, which serves or is intended to serve as a principal traffic-way and which is designated on the plan for circulation (major street plan) as a limited access highway, major street, thoroughfare, parkway or other term to identify those streets comprising the basic structure of the street system.

"Marginal access street." A street running parallel to and adjacent to or in the immediate vicinity of a major street, and which has as its principal purpose the relief of such major street from the local service of abutting properties.

Street trees. Trees currently located or required to be planted within the right-of-way of local streets, collector streets, major streets, or highways; planted in a linear fashion and provide spatial enclosures as well as other technical and aesthetic benefits, and are a tree species which is listed on the current street tree list.

Subdivision. The division of a lot, tract, or parcel of land into two (2) or more lots, plats, sites or other divisions of land for the purpose, whether immediate or future, of sale or building development. The term includes re-subdivision and, when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided.

Subdivision jurisdiction. All land located in the City of Florence and all land lying within three (3) miles thereof and not located in any other municipality or its subdivision jurisdiction.

Ten-year frequency rainstorm. A rainstorm with a ten (10) percent chance of being equaled or exceeded in any given year.

Twenty-five-year frequency rainstorm. A rainstorm with a four (4) percent chance of being equaled or exceeded in any given year.

Traffic calming. The Institute of Transportation Engineers (ITE) defines traffic calming as measures that involve "changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes."

Traffic control plan. If required, a traffic control plan shall be included with the engineering plans. This plan provides details for allowing the contractor to work safely during the construction of all public improvements for the site, while still allowing the safe and efficient flow of traffic.

Traffic plan. A traffic plan shall be included with the engineering plans. The plan will show all traffic control features on the proposed public rights-of-ways, including, but not limited to "Stop," "Yield," speed limit and street name signs, and any traffic calming measures.

Section III. Amendments.

- (A) *Amendment policy.* These subdivision regulations are based on comprehensive planning studies and on the need for uniform standards of design and construction for subdivisions and improvements to carry out the objective of a sound, stable and desirable development. It is recognized that casual change or amendment to the regulations would be detrimental to the achievement of that objective, and it is therefore declared to be the policy of the planning commission to amend these regulations only when one (1) or more of the following conditions prevail:
- (1) *Error.* There is a manifest error in the regulations.
 - (2) *Change in conditions.* Changed or changing conditions in a particular area, engineering standards, or, in the planning jurisdiction, which make a change in the regulations necessary and desirable.
- (B) *Amendment procedure.* Amendments to these subdivision regulations may be requested by any person concerned with or affected by the application of the regulations. A request for an amendment shall state the name, address, and interest of the person requesting the amendment, as well as the nature and purpose of the amendment requested, and the need therefore.

Section IV. Interpretation and validity.

- (A) *Interpretation.* Any determination on the suitability of property for development is the responsibility of the applicant. Furthermore, it is the responsibility of the applicant to ensure that he/she is in compliance with all federal, state, and local requirements related to the development of any property.

In interpreting and applying the provisions of these regulations, they shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. Whenever the provisions of these regulations require higher standards than are required in any other applicable statute, ordinance or regulations, the provisions of these regulations shall govern; whenever other applicable statutes, ordinances or regulations require higher standards than the provisions of these regulations such other applicable statutes, ordinances or regulations shall govern.

The standards and requirements of these regulations may be modified by the planning commission in the case of a plan and program for a comprehensive community development or a neighborhood unit, which in the judgment of the planning commission provides adequate public spaces and improvements for vehicular and pedestrian circulation, landscaping, recreation, light, air and service needs of the tract when fully developed and populated, and which also provides such covenants or other legal provisions as will assure conformity to and achievement of the plan.

- (B) *Validity.* The requirements and provisions of these regulations are severable, and should any section or part thereof be declared by any court of competent jurisdiction to be unconstitutional or invalid the decision of the court shall not affect the validity of the regulations as a whole or any section or part thereof other than the section or part so declared to be unconstitutional or invalid.

ARTICLE II. SUBDIVISION CRITERIA

Section I. Procedures.

- (A) *General procedure.* The procedure for review and approval of a subdivision by the planning commission consists of three (3) consecutive steps, as follows:

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- (1) Preparation and submission of a preliminary plan of the proposed subdivision with the attendant items required herein.
 - (2) Preparation and submission for review and approval of a general subdivision plan with the attendant items required herein.
 - (3) Preparation and submission for review and final approval of a final plat with the attendant items required herein.

In no event shall the preliminary plan or the general subdivision plan be considered as a submission of a plat for approval or disapproval as required by § 11-52-32, Code of Alabama, 1975, as amended, but only the final plat shall be so considered.

(B) *Preliminary plan.*

- (1) *Purpose.* The purpose of the preliminary plan is to develop a general design on which to base the subdivision plan, and thus to avoid having to revise such design to make it conform to the master plan and to relate it to surrounding development. To this end, the applicant should consult informally with the planning commission's technical staff on preparation of the preliminary plan."
- (2) *Submission and review.* The applicant shall submit to the planning commission eight (8) copies of the preliminary subdivision plan (twenty-four (24) inches x thirty-six (36) inches or "D" size sheet), together with all attendant items required herein, with written application for preliminary plan approval at least fifteen (15) days prior to the meeting at which it is to be considered. Property owners who abut the proposed subdivision as certified by an abstract title company shall be notified by mail of the application to subdivide. The preliminary plan will be reviewed by the planning commission. The review shall take into consideration, in addition to the requirements set out in these regulations, the components of the master plan, the zoning ordinance, and, programs and regulations that might affect the area, as well as the design and development of the subdivision.
- (3) *Action on preliminary plan.* Within forty-five (45) days, the planning commission or its staff shall inform the applicant that the preliminary plan as submitted or as modified does or does not meet the objectives of these regulations. When the planning commission or its staff, find that the preliminary plan does not meet the objectives of these regulations, the reasons therefore will be given, with any changes recommended to be made.
- (4) *Effect of approval.* Preliminary approval of a subdivision plan shall not constitute acceptance of the plat of the proposed subdivision but will be deemed only as an expression of approval of the plan submitted as a guide to preparation and submittal of the general plan for approval by the planning commission. Preliminary approval of a subdivision plan shall be effective for a (maximum) period of six (6) months unless application by the applicant for an extension is granted by the planning commission. If the general plan has not been submitted to the planning commission within this time limit, the preliminary plan will again be submitted and designed to regulations in effect at the time of re-submittal.

(C) *General subdivision plan.*

- (1) *Purpose.* The purpose of the general subdivision plan, with the attendant items required herein, is to provide plans for the construction of the subdivision and its improvements. To this end, during preparation of the general subdivision plan, the applicant should consult with the planning commission's technical staff, with the city engineer, county engineer, if appropriate, and with other officials and agencies concerned with the subdivision and the improvements. The general subdivision plan should be based upon the general design shown on the preliminary plan, together with the recommended changes.

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- (2) *Submission and review.* The applicant shall submit to the planning commission eight (8) copies of the general subdivision plan with eight (8) full sets of construction drawings (twenty-four (24) inches × thirty-six (36) inches or "D" size sheet), together with all attendant items required herein, with written application for preliminary plan approval at least fifteen (15) days prior to the meeting at which it is to be considered. The general subdivision plan, together with the attendant items required herein, shall be reviewed by the planning commission and will be referred for review and report to the (1) city engineer, (2) county engineer, if appropriate, (3) county health officer, (4) utility agencies, companies, or departments concerned with the tract or adjacent tracts, and other appropriate officials. The review shall take into consideration, in addition to the plans and other factors considered in connection with the preliminary plan, the particular requirements and conditions affecting installation of improvements.

If it is the intent of the applicant to develop the subdivision in phases over a period of time, then declaration of such intent by the applicant must be approved by the planning commission at this stage of review. In addition, proposed phases must be illustrated and a time frame for build-out must be outlined. Each proposed phase must stand alone with regard to all public improvements including stormwater detention and other issues which may be required by the planning commission upon review.

- (3) *Action on general subdivision plan.* Notice of the time and place for a general subdivision plan to be considered will be sent by the planning commission to the applicant and to the person whose name and address appears on the plan as the owner of the land. Property owners who abut the proposed subdivision as certified by an abstract title company will be notified by mail of the application for general approval. At the next regular monthly meeting following the submission of a general subdivision plan, but in any event within forty-five (45) days, the planning commission will act upon the general subdivision plan and will communicate in writing to the applicant its general approval or its disapproval. In the case of general approval, the planning commission will state:
- (a) The specific changes required to be made in the general subdivision plan.
 - (b) The character and extent of the required improvements.

In the case of disapproval, the planning commission will state the grounds for disapproval.

- (4) *Effect of approval.* General approval of a subdivision plan does not constitute acceptance of the plat of the proposed subdivision but deemed only as an expression of approval of the plan submitted as a guide for preparation of the final plat. The final plat will be submitted for approval by the planning commission and for recording upon fulfillment of the requirements of these regulations and the conditions of general approval. General approval of a subdivision plan will be effective for a minimum period of six (6) months unless, upon application by the applicant, the planning commission grants an extension. If the final plat has not been submitted to the planning commission within this time limit, the general subdivision plan should again be submitted and designed to regulations in effect at the time of re-submittal.

(D) *Final plat.*

- (1) *Purpose.* The purpose of the final plat, together with the attendant items required herein, is to provide an accurate record of street and property lines and other elements being established on the land and the conditions of their use. The final plat will be based upon the general subdivision plan, together with the required changes, but it may include only the portion of the approved general subdivision plan which the applicant proposes to record and develop at the time, provided, however, that such portion conforms to all requirements of these regulations.
- (2) *Submission and review.* The applicant shall submit to the planning commission eight (8) copies of the final plat with the attendant items required herein and with written application for final approval at

least fifteen (15) days prior to the meeting at which it is to be considered. The final plat with the attendant items required herein will be reviewed by the planning commission and will be referred for review and report to the city engineer, county engineer, if appropriate, the county health officer, the utility agencies, companies or departments concerned with the tract or adjacent tracts and other appropriate officials. The review shall take into consideration conformance to the approved general subdivision plan and fulfillment of any conditions of such approval and the proper installation of required improvements in conformance with the requirements of these regulations and other applicable standards and regulations.

- (3) *Action on final plat.* Before acting on the final plat, the planning commission will mail notice to the applicant and owner of the land, whose name or names and address or addresses are shown on the plat or application, of the time and place for the hearing to be held on the plat, at least five (5) days before the date fixed for such hearing. Similar notices shall be mailed to the owners of land immediately adjoining the proposed subdivision, as certified by an abstract title company.

The planning commission will act upon the final plat within thirty (30) days after its submission and will communicate in writing to the applicant final approval or disapproval. In the case of approval, the commission will enter such approval upon the final plat by the appropriate certificate. In the case of disapproval, the planning commission will state the grounds for disapproval.

- (4) *Recording of plat.* After approval of a final plat, such plat will thereafter be immediately filed by the planning commission, for recording in the office of the judge of probate of Lauderdale County. After recording, the original tracing of the final plat will be retained by the planning commission, unless the applicant shall also have filed a photographic reproducible of the final plat, in which case, the original shall be returned.
- (5) *Effect of approval.* Approval of a final plat will not constitute acceptance by the public of the dedication of a street or other public way, park or space. Approval of a final plat will be effective for a maximum period of six (6) months unless, upon request by the applicant, the planning commission grants an extension. If the final plat has not been recorded within this time frame, the general subdivision plans must be resubmitted and designed to regulations in effect at the time of re-submittal.

Section II. Documents.

(A) *Specifications for preliminary plan.*

- (1) *General form.* The preliminary plan will show in simple outline the general design of the proposed subdivision in its entirety and in relation to existing conditions and to its surroundings. The plan will illustrate adjoining properties and names of owners of un-subdivided properties to determine the need for future projection of public rights-of-way.
- (2) *Information to be shown.* The preliminary plan will contain the following information:
- (a) *Location map.* A diagram showing the relation of the proposed subdivision to main traffic arteries, schools, recreation areas, business and industrial areas, and other important features.
- (b) *Survey data.* Proposed property boundaries will be shown. Contours or spot elevations as required for the general subdivision plan, or a sufficiently close approximation of such contours, to allow a thorough review of the proposed development. Sufficient topographic data beyond the boundaries of the proposed development shall be provided so that effects to adjoining property can be evaluated.
- (c) *Miscellaneous data.* The scale of the preliminary plan, north arrow, date, name and address of the owner, applicant, and the professional engineer or land surveyor must be provided.

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- (d) *Streets and sidewalks.* The street pattern in relation to existing and proposed streets, including those shown on the master plan or on a neighborhood plan, and projection of streets into adjoining properties for future development or connections must be provided.

Although not required to be illustrated at the preliminary review, sidewalks shall be required on both sides of a street.

Where it is determined by the planning commission that the need for pedestrian accommodation is remote or unsafe, sidewalks may be eliminated on one (1) or both sides of an existing or proposed street.

The general review must illustrate sidewalk layout along with other required engineering items.

Sidewalk construction including connections to streets and driveways must meet all the requirements of the Americans with Disabilities Act (ADA).

- (e) *Street trees.* Street trees will be required within the right-of-way, between the sidewalk and the back of curb. Although not required to be illustrated at the preliminary review, street trees will be required on both sides of a street. The general subdivision review must illustrate street tree layout and specifications as required by these regulations.
- (f) *Lots and blocks.* The general arrangement of lots and blocks, with dimensions of typical lot widths and depths must be provided.
- (g) *Non-residential sites.* Identification of existing and proposed parks, recreation areas, schools or other public uses; sites, if any, for multi-family dwellings, shopping centers, churches, industry, or other nonresidential uses must be included.
- (h) *Utilities.* The approximate locations and sizes of existing utility lines must be included.
- (i) *Easements.* The approximate locations, widths, and purposes of existing easements must be included.
- (j) *Buffer strip.* A buffer strip is defined as an area of land, including landscaping, walls, fences, and building setbacks, that is located between land uses of different character to physically and visually separate such uses, and is intended to mitigate negative impacts of the more intense use on a residential or vacant parcel.

Where the proposed subdivision adjoins an existing residential area, and such proposed land use may have a depreciating effect on the existing residential area, a buffer strip may be required by the planning commission between the proposed subdivision and the existing residential area(s).

Where the proposed subdivision adjoins a commercial area, industrial area, railroad right-of-way, or other land use which would have a depreciating effect on the proposed use of the land, a buffer strip may be required by the planning commission.

The minimum width of a buffer strip will be one hundred (100) feet if no improvements are proposed. The planning commission may allow a reduction in the required width depending on improvements proposed by the developer within the strip i.e.; landscaping, walls, fences, berms, etc. Detailed drawings of a buffer strip must be submitted for general approval.

- (k) The proposed preliminary subdivision plan must be submitted on a twenty-four (24) inches × thirty-six (36) inches sheet as well as an electronic format (jpeg or similar) with additional eleven-inch by seventeen-inch hard copies.
- (l) Additional information as required on the application for planning commission review (including adjoining property owners as certified by an abstract title company) and as determined by the City of Florence to allow a thorough evaluation of the proposed development must be included.

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- (m) A plat review fee as outlined on the application for planning commission review is required. Should the layout or scope of the proposed development change dramatically at the request of the applicant during the course of review by the planning commission, an additional plat review fee will be required.

(B) *Specifications for general subdivision plan.*

- (1) *General form.* The general subdivision plan will show accurately with sufficient detail construction of the subdivision and improvements for the design of the proposed subdivision in relation to existing conditions and its surroundings. It must be drawn to a scale of not less than one (1) inch equals one hundred (100) feet and the sheet size shall not be larger than twenty-four (24) inches by thirty-six (36) inches or "D" size, at least six (6) inches of which will be provided on the left side for binding. Where necessary, the plan may be on several sheets accompanied by an index sheet showing the entire subdivision.
- (2) *Information to be shown.* The general subdivision plan must contain the following information:
 - (a) *Location map.* A diagram showing the location of the proposed subdivision.
 - (b) *Survey data.* The boundary lines of the subdivision with length and bearing of lines; section and corporation lines; contours at intervals of two (2) feet based on a datum plane that is mean sea level; where contours will not provide adequate information for drainage determinations, spot elevations in sufficient number to show drainage conditions must be given. Sufficient topographic data beyond the boundaries of the proposed development must be provided so that effects to adjoining property can be evaluated.
 - (c) *Miscellaneous data.* Present tract designation according to the records of the office of the judge of probate of Lauderdale County; the title or name under which the proposed subdivision is to be recorded, with name and address of the owner and the applicant; notations giving scale, (true) north arrow, datum, benchmarks, date of survey and name of the registered professional engineer or land surveyor.
 - (d) *Streets and sidewalks.* The name, right-of-way width and location of streets, sidewalks, and other public ways on and adjacent to the tract; the type width and elevation of surfacing; any legally established centerline elevations; walks, curbs, gutters, culverts and similar features; the name, right-of-way width and location of proposed streets, with their approximate grades and gradients, and similar data for alleys, if any. Sidewalks will be required within the right-of-way on both sides of a street as part of the required public improvements for subdivision development. Sidewalks must be located in accordance with Section III(B) of these regulations.

Where it is determined by the planning commission that the need for pedestrian accommodation is remote or unsafe, sidewalks may be eliminated on one (1) or both sides of an existing or proposed street.
 - (e) *Street trees.* The location of street trees as required by these regulations must be included. Trees must be located within the right-of-way on both sides of a street as part of the required public improvements for subdivision development. Street trees must be located and planted in accordance with Section III(B) of these regulations. Canopy symbols are to be drawn at mature canopy size.
 - (f) *Lots and blocks.* Lot lines, lot numbers and block letters, tabulation stating gross and net acreage of the subdivision, acreage of existing and proposed public areas within the tract, number of residential lots, typical lot size and lineal feet of proposed streets must be included.

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- (g) *Nonresidential sites.* Sites to be reserved or dedicated for parks, recreation areas, schools or other public uses; sites, if any, for multi-family dwellings, shopping centers, churches, industry or other non-residential uses must be included.
 - (h) *Utilities.* The location, size and invert elevation of sanitary and storm sewers; the location and size of water mains; the location of gas lines, fire hydrants, approximate locations of utility poles and street lights must be included. If water mains are not on or adjacent to the tract; the direction and distance to, and the size of the nearest ones, showing invert elevation of sewers and the location of proposed utilities, if not shown elsewhere, must be included.
 - (i) *Easements, in general.* The location, width, and purpose of existing and proposed easements must be included.
 - (j) *Building setback lines/build-to lines.* The required building setback lines for construction must be included.

The planning commission may authorize build-to lines in lieu of conventional setback requirements upon request by the developer and submittal of drawings illustrating typical lot layout with paving, rights-of-way and structures, and other information as may be required by the planning commission so as to properly evaluate the application. Consideration of build-to lines will be based on the subdivision in its entirety as well as surrounding properties and zoning classifications. There will be designated a minimum build-to line and a maximum build-to line with a maximum distance of five (5) feet between in which the part of the structure nearest the street or access easement will be served.

- (k) *Adjoining land.* The approximate direction and gradient of the ground slope, including any levees or embankments; the character and location of buildings, railroads, power lines, towers, and other nearby nonresidential land uses or adverse influences; names of recorded subdivision plats of adjoining platted land by record name, date, and number and the names of record owners of adjoining un-subdivided land must be included.
- (l) *Other existing conditions.* The locations of watercourses, marshes, wetlands, wooded areas, isolate trees one (1) foot or more in diameter to be preserved, buildings or structures, and other significant features on the tract must be included.
- (m) *Proposed public improvements.* Highways or other major public improvements planned by public authorities for future construction on or near the tract must be included.
- (n) *Engineering plans.* Plans must be submitted showing the required information as listed. The cross sections and profiles of streets showing grades approved by the city engineer or county engineer, as appropriate, must be drawn to city or county standards. Profiles will be presented on a 1:10 ratio of vertical scale to horizontal scale; i.e., one (1) inch equals five (5) feet vertical and one (1) inch equals fifty (50) feet horizontal. Cross sections will be presented on a 1:1 ratio of vertical scale to horizontal scale; i.e., one (1) inch equals five (5) feet vertical and horizontal. Construction detail sheets may be drawn at the appropriate scale to portray the requirements, details, and materials. Details of stormwater sewerage including sizes, type, alignment, grade, invert elevations, top elevation of street and field intake structures, etc., must be shown. If installed by the applicant, details of sanitary sewerage including size, type, alignment, grade, invert elevations, top of manhole elevations, stub out locations, etc., must be shown. A general subdivision map must be furnished showing existing contours prior to development and the final contours after development on a horizontal scale on one (1) inch equals one hundred (100) feet. All elevations must be based on the datum plane of mean sea level.
- (o) *Subsurface conditions report.* Location and results of soil percolation tests if individual sewage disposal systems are proposed must be provided.

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- (p) *Stormwater detention plan.* Hydrologic and hydrologic computations utilized in the design of stormwater facilities as set forth in Section III(B) and contained herein must be included.
 - (q) *Phased development.* If it is the intent of the applicant to develop the subdivision in phases over a period of time, then declaration of such intent by the applicant must be approved by the planning commission at this stage of review. In addition, proposed phases must be illustrated and a time frame for build-out must be outlined. Each proposed phase must stand alone with regard to all public improvements including stormwater detention and other issues which may be required by the planning commission upon review.
 - (r) The proposed general subdivision plan must be submitted in an electronic format (jpeg or similar) as well as eleven (11) inch by seventeen (17) inch hard copies.
 - (s) Additional information as required on the application for planning commission review (including adjoining property owners as certified by an abstract title company) and as determined by the City of Florence to allow a thorough evaluation of the proposed development.

(C) *Specifications for final plat.*

- (1) *General form.* The final plat will show accurately the subdivision as established on the ground and in relation to its surroundings. It will be drawn to a scale of not less than one (1) inch equals one hundred (100) feet, and the sheet size shall not be larger than thirty-six (36) inches by twenty-four (24) inches. At least six (6) inches will be provided on the left side for binding. Where necessary, the plat may be on several sheets accompanied by an index sheet showing the entire subdivision. If phased development is proposed, the final plat may be submitted for approval progressively in continuous sections satisfactory to the planning commission.
- (2) *Information to be shown.* The final plat will contain the following information:
 - (a) *Location map.* A diagram showing the location of the proposed subdivision
 - (b) *Survey data.* Primary control points, approved by the city engineer or county engineer, if appropriate, or description and ties to such control points, to which all dimensions, angles, bearings and similar data on the plat shall be referred; the boundary lines of the subdivision, right-of-way lines of streets, easements and other rights-of-way, property lines of residential lots and other sites with accurate dimensions, bearings or deflection angles, and radii, arcs and central angles of all curves; the location and description of monuments, according to state law; and in accordance with standards as recognized by the State of Alabama Board of Licensure for Professional Engineers and Land Surveyors.
 - (c) *Miscellaneous data.* Notations giving scale, (true) north arrow, and date of final plat.
 - (d) *Streets.* The name and right-of-way width of each street or other public way.
 - (e) *Lots and blocks.* Identification by letter of each block and by number of each lot in each block.
 - (f) *Nonresidential sites.* The purpose for which sites, other than residential lots, are dedicated or reserved.
 - (g) *Utilities.* The location and dimensions of any utility right-of-way or easements.
 - (h) *Easements.* The location, dimensions and purpose of any other easements.
 - (i) *Building setback line and build-to lines.* Minimum building setback line of all lots and other sites.

The planning commission may authorize build-to lines in lieu of conventional setback requirements upon request by the developer and submittal of drawings illustrating typical lot layout with paving, rights-of-way, structures, and other information as may be required by the planning commission so as to properly evaluate the application. Consideration of build-to lines

will be based on the subdivision in its entirety as well as on surrounding properties and zoning classifications.

- (j) *Buffer strip.* If required by the planning commission a buffer strip area will be designated as such on the plat and further, noted as a "non-buildable protected area".
 - (j) *Adjoining land.* The names of recorded subdivision plats of adjoining platted land by record name, date and number.
 - (k) *Certificate of owner.* Notarized certification by the landowner of the adoption of the plat and the dedication of streets, utility easements, and other public areas must be provided.
 - (l) *Certificate of survey.* Certification by the registered professional engineer or land surveyor that the plat represents a survey made by him/her, that the monuments shown thereon actually exist as located, and that all dimensional and other data are correct.
 - (m) *Approvals.* Space for certificates of approval of the planning commission, the city engineer, county engineer, emergency management director, probate judge, and county health officer, where such approval is called for by these regulations.
- (3) *Attendant items.* The final plat must be accompanied by the following items:
- (a) *Protective covenants.* If proposed, the protective covenant in form for recording.
Protective covenants and owners associations are mandatory for planned residential developments and planned unit developments and must be recorded prior to the final plat.
 - (b) *Engineering plans.* (Conditions as required by planning commission or city engineer for preliminary and general approval must be included.)
 - (c) *Conveyances.* A conveyance to the City of Florence or the County of Lauderdale by fee simple or by easement of land set aside for parks, recreation area or other public use; such conveyance to be without reservation of rights except for restriction that land is to be dedicated only to the specified purposes.
 - (d) *Plat review fee.* A check payable to the Florence City Planning Commission for the payment of the fee charged for review of the final plat.
 - (e) *Recording fee.* A check payable to the office of the judge of probate of Lauderdale County or the payment of the fee charged for recording the final plat.
 - (f) *Stormwater detention facilities.* Final design of detention facilities as approved by the city engineer. The design shall be in accordance with the provisions of Section III(B) as contained herein.
 - (g) *Guarantees of performance.* The planning commission will not approve the final plat of any subdivision for which improvements have been completed unless the improvements have been installed in accordance with the standards and specifications of these regulations and have been certified to the planning commission by appropriate officials and agencies of the city.

In lieu of the completion of improvements, a performance bond executed by the applicant with surety, as is hereafter specified, to secure to the municipality the actual construction and installation of such improvements in accordance with Section IV(E) of these regulations is required prior to submission of a plat for final approval.

Section III. Design standards.

- (A) *Principles of acceptability.*

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- (1) *Conformance to master plan.* In general, the subdivision shall conform to the master plan for the City of Florence and adjacent territory within the subdivision jurisdiction, to the zoning ordinance (if the subdivision is within the City of Florence or the city's extraterritorial jurisdiction), and to other applicable ordinances or regulations. If a suggested plan for the neighborhood in which the land to be subdivided is located has been made by the planning commission, the layout of the subdivision shall be in general conformance thereto.
 - (2) *Provisions for future subdivision.* Parcels within a subdivision shall be arranged so as to provide for and to allow the opening of future streets and logical further subdivision. Street rights-of-way will be stubbed out accordingly to adjoining properties for future development.
 - (3) *Land subject to flooding.* Land subject to periodic flooding, as shown in the Federal Emergency Management Agency Flood Insurance Study, City of Florence and Lauderdale County, 2009, or latest edition, and land deemed to be uninhabitable must not be platted for residential occupancy or for any use that may increase danger to health, life, property, or aggravate the flood hazard. Such land within the tract to be subdivided will be set aside for such uses as will not be endangered by periodic or occasional inundation or will not produce unsatisfactory, unsanitary, or unhealthy living conditions. If the land to be subdivided is located in an area having poor drainage or other physical impairment, the planning commission may approve the subdivision, provided the applicant agrees to make such improvements as are necessary to render the area substantially safe for residential use, or in lieu of the improvements, will furnish a surety bond or certified check covering the cost of the required improvements, as provided herein.

Chapter 19, Article III of the Code of the City of Florence, Flood Damage Prevention Regulations will govern and the following standards for subdivisions will apply:

- a. All subdivision proposals will be consistent with the need to minimize flood damage.
 - b. All subdivision proposals will have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 - c. All subdivision proposals will have adequate drainage provided to reduce exposure to flood hazards, and;
 - d. Base flood elevation data will be provided for subdivision proposals and other proposed development, including manufactured home parks and subdivisions, greater than fifty (50) lots or five (5) acres, whichever is the lesser.
- (4) *Natural features.* Natural scenic features of the land, such as streams, will be considered community assets, and the design of the subdivision will protect and utilize such natural scenic features.
 - (5) *Trees.* Because of their value in soil conservation, health and community appearance, stormwater management, traffic calming, and pedestrian safety, street trees will be required as public improvements on both sides of a street, within the right-of-way. They will be of a required species, height, caliper, spacing, and located and planted in accordance with Section III(B)(11) of these regulations.

Large trees will be preserved wherever possible. No tree or low bushy species, which might obstruct vision, will be placed within twenty-five (25) feet of the intersecting property lines at a street intersection.
 - (6) *Reserve strips.* There will be no reserve strips controlling land dedicated or intended to be dedicated to street or other public use except where their control is placed in the appropriate governing body under conditions approved by the planning commission.
 - (7) *Buffer strip.* If required by the planning commission a buffer strip area will be designated as such on the plat and further, noted as a "non-buildable protected area".

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- (8) *Names.* The name of the subdivision and new street names will not duplicate nor closely approximate phonetically or original spelling the name of any other subdivision or street in Lauderdale County. Street names will be subject to approval of the planning commission. In general, the use of names associated with the history and development of the City of Florence and Lauderdale County is desirable.

(B) *Streets.*

- (1) *Street layout.* The street layout will be devised for the most advantageous development of the entire neighborhood or neighborhoods in which the land to be subdivided is located. Existing streets that abut the subdivision will be continued, and the continuations will be at least as wide as the existing streets and in alignment with them. The street layout will also provide for the future projection into adjoining lands a sufficient number of streets to provide convenient circulation. The street layout, alignment and design standards will be in accordance with the applicable principles contained in A Policy on Geometric Design of Highway and Streets as published by the American Association of State Highway and Transportation Officials (AASHTO). The following objectives will also be applicable to the street layout:
- (a) Adequate vehicular and pedestrian access must be provided to all parcels.
 - (b) Local street systems will be designed to minimize through traffic movements.
 - (c) The street pattern should minimize out-of-the-way vehicular travel.
 - (d) Local circulation systems and land development patterns should not detract from the efficiency of bordering arterial routes.
 - (e) Elements in the local circulation systems should not have to rely on extensive traffic regulations in order to function efficiently and safely.
 - (f) Traffic generators within residential areas should be considered in the local circulation pattern.
 - (g) Planning and construction of residential streets should clearly indicate their local nature.
 - (h) The local street system should be designed for a relatively uniform low volume of traffic.
 - (i) Local streets must be designed to discourage excessive speeds. Provisions for traffic calming may be required by the city engineer.
 - (j) Pedestrian-vehicular conflict points should be minimized.
 - (k) The arrangement of local streets must permit economical and practical patterns, shapes, and sizes of development parcels.
 - (l) Local streets must be related to topography from the standpoint of both economics and amenities.
- (2) *Terrain classification.* For purposes of these regulations the following are definitions of terrain classification:
- (a) Ordinary-cross slope range of zero (0) percent to eight (8) percent.
 - (b) Rolling-cross slope range of greater than eight (8) percent to fifteen (15) percent.
 - (c) Hilly-cross slope of over fifteen (15) percent.
- (3) *Development density.* For the purposes of these regulations the following are definitions of development density in terms of gross land area:
- (a) Low-two (2) or less dwelling units per acre.

- (b) Medium-greater than two (2) up to six (6) dwelling units per acre.
- (c) High-over six (6) dwelling units per acre.
- (4) *Major street.* Wherever a subdivision embraces a major street or thoroughfare, as shown on the plan for circulation (major street plan) component of the master plan, such major street will be platted in the general location and of the width called for by such plan.
- (5) *Marginal access street.* Where a subdivision has frontage on a major street or thoroughfare, as shown on the plan for circulation (major street plan), a marginal access street or frontage road will be provided adjacent to and on each side of the major street. Within the right-of-way of the marginal access street, sufficient area for clear-zone requirements and screen planting will be provided. Separation strips will be provided with screen planting to provide protection from the noise and lights of the major street traffic; screen planting will be so placed that it does not obstruct vision at intersections. The alignment and design standards will be in accordance with the applicable requirements of A Policy on Geometric Design of Highways and Streets as published by the American Association of State Highway and Transportation Officials (AASHTO).
- (6) *Collector streets.* Collector streets will be provided to collect traffic from local streets and feed it into major streets or to important generators of traffic, such as schools and shopping centers. In general, collector streets will be located and approximately midway between major streets or in the form of a loop or partial loop within the neighborhood.

COLLECTOR STREET DESIGN STANDARDS

Terrain Classification	Ordinary			Rolling			Hilly		
	Low	Med.	High	Low	Med.	High	Low	Med.	High
Development Density									
Min ROW Width (ft)	80								
Min Clear Road Width Face to Face of Curb (ft)	36	36	40	36	36	40	36	36	40
Type of Curb	Vertical Face								
Sidewalk Width (ft)	6								
Sidewalk Distance from Back of Curb(Planting Strip) (ft)	10								
Required Tree Planting	With no existing or proposed overhead utility lines use large mature height trees (75% to 100% in quantity) and medium mature height (0% to 25% in quantity). With existing or proposed overhead utility lines use small mature height trees.								
Min. Stopping Site Distance (ft)	250			200			150		
Max. Grade (%)	9			11			13		
Min. Grade (%)	0.5								
Min. Spacing	1,320 (1/4 mile)								

Along Major Traffic Route (ft)			
Design Speed (mph)	35	30	25
Min. Centerline Radius (ft)	350	230	150
Max. Superelevation (ft/ft)	0.04		

- (7) *Local streets.* Local streets will be provided to facilitate access to neighborhoods and private property. They will be arranged so that use by through traffic is discouraged. The following table contains local street design standards.

LOCAL STREET DESIGN STANDARDS

Terrain Classification	Ordinary			Rolling			Hilly		
	Low	Med.	High	Low	Med.	High	Low	Med.	High
Development Density									
Min ROW Width (ft)	60								
Min Clear Road Width Face to Face of Curb (ft)	30								
Type of Curb V=Vertical Face R*= Roll Type	R*/V	V	V	R*/V	V	V	V	V	V
Sidewalk Width (ft)	5								
Sidewalk Distance from Back of Curb (Planting Strip) (ft)	9								
Required Tree Planting	With no existing or proposed overhead utility lines use medium mature height trees (60% to 80% in quantity) and large mature height trees (20% to 40% in quantity) With existing or proposed overhead utility lines use small mature height trees.								
Min Stopping Site Distance (ft)	200			150			125		
Max Grade (%)	7			10			15		
Min Grade (%)	0.5								
Max Cul-de-sac Length (ft)	800	600	600	800	600	600	800	600	600

MinCul-de-sac Radius (ft)	50		
Design Speed (mph)	30	25	20
Min Centerline Radius (ft)	230	145	80
Max Super-elevation (ft/ft)	0.04		

R* = Roll Type (Unless otherwise determined by City Engineer)

- (8) *Increase in street widths.* In front of schools and community activity areas and in front of areas zoned or designed for commercial or industrial uses, the minimum clear roadway width of streets will be increased on the side or sides on which the land for the school or community activities use is located by at least fifteen (15) feet to insure the free flow of traffic without interference by vehicles entering or leaving parking area. (This is not a parking space requirement and will not affect requirements of the zoning ordinance, or otherwise for off-street parking facilities; neither will fulfillment of this requirement and its acceptance by the planning commission be deemed approval or endorsement of any amendment to the zoning ordinance necessary for such commercial or industrial uses.)
- (9) *Half streets.* No new half streets will be platted. Where a tract of land to be subdivided abuts upon an existing half street, the other half of the street will be platted.
- (10) *Intersections.* Street intersections will be right angles or nearly so. Where, for topographic or other reasons, an intersection cannot be at right angles, the intersection will be designed as to insure safety. There will be a minimum number of intersections of minor streets with major streets. Intersections of local streets must be designed to operate without any traffic control devices.

STREET INTERSECTION DESIGN STANDARDS

Terrain Classification	Ordinary			Rolling			Hilly		
	Low	Med.	High	Low	Med.	High	Low	Med.	High
Development Density									
Approach Design Speed (mph)	25			25			20		
Clear Sight Distance, Length Along Each Approach Leg (ft)	160			160			120		
Vertical Alignment Within Area (max grade, %)	Flat*			2			4		
Min. Angle of Intersection(degrees)	75, 90 Preferred								
Min Curb Radius (ft)									
Local-Local	20								
Local-Collector	25								
Min Centerline Offset of Adjacent Intersections (ft)									

Local-Local	150
Local-Collector	150
Collector-Collector	200

* Vertical alignment within the limits of intersections will be as flat as feasible with consideration given to drainage of surface runoff.

(11) *Required street trees.* The size and placement of street trees are dependent on the type of streets within the area to be developed. Trees will be installed, and if necessary, staked in accordance with the International Society of Arboriculture Best Management Practices (BMP's).

- (a) All required street trees, regardless of mature size, will have a minimum caliper of two (2) inches at the root crown, be at a minimum of eight (8) feet tall, and the tree stem will have all branches removed to a height of five and one-half (5.5) feet for line of sight clearance at time of planting.
- (b) Street tree planting will occur in the planting strip between the back of curb and the sidewalk. For local streets, and where no existing or proposed overhead utility lines exist, required street trees will be species of medium mature height trees (sixty (60) percent to eighty (80) percent in quantity and greater than twenty-five (25) feet—less than forty (40) feet) and large mature height trees (twenty (20) percent to forty (40) percent in quantity and greater than forty (40) feet).

For collector streets, and where no existing or proposed overhead utility lines exist, required street trees will be species of a large mature height (seventy-five (75) percent to one hundred (100) percent in quantity and greater than forty (40) feet) and medium mature height (zero (0) percent to twenty-five (25) percent in quantity and greater than twenty-five (25) feet—less than forty (40) feet).

If existing or proposed overhead utility lines exist, required street trees will be a species of a small mature height (less than twenty-five (25) feet).

- (c) *Tree placement.* Trees will be offset, not centered, within the planting strip. Trees will be offset from the back of curb two-thirds ($\frac{2}{3}$) of the width of the planting strip.
 - 1. For collector streets, the placement setback is six and one-half (6.5) feet.
 - 2. For local streets, the placement setback is six (6) feet.
- (d) *Tree spacing and quantity.* The total tree quantity is based on the length of curb frontage and to maximize canopy interlacing. There will be one (1) tree required per every thirty-five (35) linear feet of curb frontage for the development.
 - 1. Large trees will be planted at a minimum ratio of one (1) for every fifty (50) feet.
 - 2. Medium trees will be planted at a minimum ratio of one (1) for every thirty-five (35) feet.
 - 3. Small trees will be planted at a minimum ratio of one (1) for every twenty (20) feet.

Prior to submitting the tree plan for review, the developer is advised to consult with the urban forester for the City of Florence.

- (e) *Species diversity.* A minimum of four (4) species from each size class installed are required for planting within a subdivision. A minimum of two (2) species shall be planted per street to prevent a monoculture. All four (4) species per size class are to be used equitably within a development.
- (f) Street trees will not be located within any areas required for intersection sight distance.

The following classes of trees are acceptable specie for their given size classes. The developer should consider a diversity of species within the development. The urban forester may require specie changes within a development to minimize or reduce overpopulation of specific species or specie within the urban street tree population or if a species has been shown to have invasive or other undesirable characteristics.

Small Trees; Mature Height Less Than Twenty-Five (25) Feet

Botanical Name	Common Name
<i>Acer griseum</i>	Paperbark Maple
<i>Acer palmatum</i>	Japanese Maple
<i>Cercis canadensis</i>	Eastern Redbud
<i>Chionanthus retusus</i>	Taiwan Fringe Tree
<i>Chionanthus virginicus</i>	Fringe Tree
<i>Cornus kousa</i>	Kousa Dogwood
<i>Magnolia sieboldii</i>	Oyama Renge
<i>Magnolia stellata</i>	Star Magnolia
<i>Magnolia x soulangiana</i> 'Burgundy'	Burgundy Saucer Magnolia
<i>Malus floribunda</i>	Japanese Flowering Crabapple
<i>Malus hupensis</i>	Tea Crabapple
<i>Malus ioensis</i>	Praire Crabapple
<i>Malus species</i>	Crabapple
<i>Prunus cerasifera</i>	Purple Leaf Plum
<i>Prunus glandulosa</i>	Flowering Almond
<i>Prunus mume</i>	Flowering Apricot
<i>Ternstroemia gymnanthera</i>	Ternstroemia

Medium Trees; Mature Height Between Twenty-Five (25) feet and Forty (40) feet

Botanical Name	Common Name
<i>Cornus florida</i>	Flowering Dogwood
<i>Malus floribunda</i> 'Harvest Gold'	Harvest Gold Crabapple
<i>Magnolia fraseri</i>	None
<i>Magnolia macrophylla</i>	Big Leaf Magnolia
<i>Magnolia kobus</i>	Kobus Magnolia
<i>Halesia diptera</i>	Two Winged Silver Bell
<i>Lagerstroemia fauriei</i>	Japanese Crepe Myrtle
<i>Magnolia denudata</i>	Yulan Magnolia
<i>Carpinus betulus</i>	European Hornbeam
<i>Halesia carolina</i>	Snowdrop Tree
<i>Quercus gravesii</i>	Chisos Red Oak
<i>Quercus laurifolia</i>	Laurel Oak

Large Trees; Mature Height Greater Than Forty (40) feet

Botanical Name	Common Name
<i>Magnolia hypoleuca</i>	None
<i>Ginkgo biloba</i>	Ginkgo

Quercus muehlenbergii	Chinkapin Oak
Nyssa sylvatica	Tupelo
Quercus stellata	Post Oak
Acer plantanoides	Norway Maple
Acer rubrum	Scarlet Maple
Acer saccharum	Big Tooth Maple
Carya glabra	Pignut Hickory
Carya ovata	Shagbark Hickory
Cedrus atlantica	Atlas Cedar
Celtis laevigata	Sugarberry
Quercus robur	English Oak
Pistacia chinensis	Chinese Pistache
Prunus serrulata	Japanese Flowering Cherry
Zelkova serrata	Japanese Zelkova
Sassafras albidum	Sassafras
Carya illinoensis	Pecan
Quercus rubra	Red Oak
Taxodium distichum	Swamp Cypress
Cedrus deodara	Deodara Cedar
Platanus X acerifolia 'bloodgood'	London Plane Tree
Liriodendron tulipifera	Tulip Tree
Magnolia grandiflora	Southern Magnolia
Quercus palustris	Pin Oak
Quercus phellos	Willow Oak
Quercus coccinea	Scarlet Oak
Quercus falcata	Southern Red Oak
Quercus shumardii	Shumard Oak
Quercus virginiana	Southern Live Oak
Betula nigra	River Birch
Fagus grandifolia	American Beech
Acer saccharinum	Silver Maple
Ulmus americana	American Elm
Quercus alba	White Oak

(12) *Street drainage.* The determination of the type of street drainage to be used depends on the topography of the area to be developed. The roadways will be constructed so that stormwater runoff is directed into natural watercourses or existing storm drainage facilities. For local streets with curb and gutter, the drainage system will be designed to provide ten (10) feet of available travel lane for a twenty-five-year design storm. For collector streets with curb and gutter, the drainage system design will be as approved by the city engineer.

(13) *Storm drainage.* The design basis for all curb and gutter, culverts, and ditches will be a twenty-five-year design storm. All cross drains shall be concrete pipe meeting the requirements of ALDOT.

The applicant will be required to address the long-term maintenance of all open drainage ditches. This may include improvements such as culvert or improved channel systems.

(14) *Stormwater detention.* Stormwater detention will be designed as follows:

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- (a) Development areas ranging from ten thousand (10,000) square feet to fifty (50) acres — twenty-five-year return frequency, twenty-four-hour duration rainfall. The discharge structure will be designed for a ten-year return frequency and the entire watershed will be considered in evaluating the basin size.
 - (b) Development areas greater than fifty (50) acres — to be routed through detention basin — fifty-year return frequency, twenty-four-hour duration rainfall. The discharge structure will be designed for a ten-year return frequency and the entire watershed will be considered in evaluating the basin size.
 - (c) Depending on existing conditions downstream, more stringent requirements may be imposed on the discharge structure and storage volume of the basin. It will be the responsibility of the developer's engineer to address the possibility of any adverse impact downstream due to the development.

Fences may be required around detention basins by the city engineer's office. Items to be considered in evaluating if a fence is required will include but not be limited to the following:

1. Adjacent land use.
2. Steepness of side-slopes.
3. Pond inflow and outflow pipes.
4. Design features of other drainage structures such as high wing-walls or headwalls.
5. Public safety.

Landscaping will be required around the perimeter of stormwater detention basins. A raised landscaping strip five (5) feet in width will surround the detention area. Landscaping will consist of one (1) tree every twenty (20) linear feet with shrubs and other ornamental ground cover in between. The landscaping plan will be subject to approval by the urban forester. The planting of trees and/or shrubs will not be permitted in the detention basin.

For the above areas only the ten thousand (10,000) square feet area refers to impervious area.

Stormwater detention may be waived in the following specific cases:

1. Commercial or industrial developments which add less than ten thousand (10,000) square feet of impervious area.
2. If the developer's engineer can show by a hydrologic study that requiring detention for a particular site will result in an increased potential for flooding downstream.
3. Stormwater runoff from the site drains directly to a river, creek, or stream.

A request for waiver must be in writing by the developer's engineer and accompanied by supporting technical documentation.

All detention basins will be sodded and concrete flumes constructed to connect all inlets to the detention basin outlet structure. The minimum permissible slope for the bottom of a detention basin will be one-half of one (0.5) percent.

All hydrologic and hydraulic computations utilized in the design of stormwater facilities must be prepared by persons proficient in the field of hydrology and hydraulics. Major detention structures must be designed by an engineer licensed to practice in the State of Alabama.

The required hydrologic and hydraulic computations for stormwater detention will be in accordance with procedures outlined in the United States Department of Agriculture, Soil Conservation Services, *Technical Release No. 55 Urban Hydrology for Small Watersheds*, and all

subsequent revisions thereto, and the Soil Conservation Service (Soil Survey of Lauderdale County). Other computational procedures may be employed if approved by the city engineer.

Adequate attention must be given to safety and sanitation in the design of any detention facility. Sufficient information must be shown on the plans to provide for proper construction of the detention facility. Sufficient information to show that the detention facility will operate as required will be provided to the city engineer for review and approval in accordance with these provisions. If a development is to be constructed in phases, stormwater detention for the entire development will be addressed with the initial phase and will be constructed with the development of each phase. The capacity of the detention facility must be sufficient to control the volume of stormwater runoff resulting from a ten-year frequency, twenty-four-hour duration rainfall within the peak of flow requirements stated above.

For stormwater detention facilities (including adjacent landscaping) equal to or greater than one (1) acre-feet in design capacity and serving multiple property owners in a commercial, residential, or industrial subdivision, perpetual maintenance of the basin will be the responsibility of the City of Florence if within the city limits. Easements and rights of entry shall be dedicated to provide access for the city to provide maintenance. Exceptions to the City of Florence being responsible for maintenance of large detention basins (greater than one (1) acre-feet in design capacity) will be made in instances where the topography of the basin is such that the basin can be easily maintained by the adjacent landowners and/or the primary owner is a corporate entity. Exceptions will be determined by the city engineer. The extent of maintenance by the City of Florence shall be cutting the grass once or twice a year, and treating for mosquitoes, if required.

Stormwater detention facilities equal to or greater than one (1) acre-feet in design capacity and its associated landscaping that is outside the city limits shall be maintained by adjacent property owners, or by an owners association.

When the city is responsible for the maintenance of the basin, mowing of the grass within the basin shall be done on a frequency determined by the city public works department. Typically, maintenance will include spraying for mosquitoes as required and cutting the grass once or twice per year. In both cases, the outlet structures will be maintained by the City of Florence, and the city's area of responsibility will be delineated on the record plat. (A "structure" is defined, for purposes of these regulations, as any work of man requiring design and construction but not the basins themselves.) Adequate erosion and sediment control measures will be employed during the development's construction phase and until adequate ground cover is reestablished to ensure the stormwater drainage and detention facilities perform as designed.

Easements for detention facilities and its associated landscaping will be distributed across one (1) or more buildable lots and the lot property owners will be responsible for the perpetual maintenance of the basin and landscaping. The maximum grade of the sides slope will be 4:1 (horizontal: vertical) and have a maximum depth of four (4) feet. A note will be required on the final plat specifying maintenance responsibility.

The determination of the type of street drainage to be used depends on the topography of the area to be developed and the erosion characteristics of the soil which will exist in roadway ditches. The roadways will be constructed so that the storm drainage system outfall discharges directly into a mainstream or proposed storm drainage facilities.

(C) *Blocks.*

- (1) *Size and shape of blocks.* The lengths, widths and shapes of blocks will be determined with consideration of the limitations and opportunities of topography, the provision of building sites suitable to the intended uses, and the need for convenient access, circulation, control of and safety from street traffic. In general, block lengths will not exceed one thousand two hundred (1,200) feet and

block lengths will not be less than five hundred (500) feet; provided, however, that where site conditions make longer blocks necessary or desirable, such blocks may be as long as one thousand six hundred (1,600) feet.

- (2) *Cross-walkways.* Cross-walkways will be provided where necessary for convenient access to schools, playgrounds, shopping centers, adjacent streets and other community facilities.
- (3) *Block on major street.* Where the proposed subdivision is adjacent to or contains a major street, the long dimensions of the blocks will be parallel, or approximately parallel, to the major street.
- (4) *Blocks for commercial or industrial use.* Blocks intended for commercial or industrial use will be designed specifically for such use, with consideration of off-street loading, unloading, and off-street parking facilities, and access thereto.

(D) *Lots.*

- (1) *Size and shape of lots.* The size; width, depth, shape, orientation of lots, and the minimum building setback lines will be appropriate to the location of the subdivision and the type of development and use contemplated. Every lot will contain a suitable building site.
- (2) *Minimum dimension.* Lots for residential use will be at least sixty (60) feet wide at the building setback line and contain at least the following areas:

Where served by the municipal water supply system and sanitary sewerage system- seven thousand two hundred (7,200) square feet.

Where served by the neither the municipal water supply system nor sanitary sewerage system, minimum lot sizes will be determined by the Lauderdale County Health Department.

For the purpose of this regulation, individual wells and individual sewerage disposal systems are not considered to be approved private water supply and approved private sanitary sewerage systems.

- (3) *Maximum depth.* The maximum depth of any lot, exclusive of unusable land, will be three and five-tenths (3.5) times and [the] width of the lot at the building setback line.
- (4) *Lot to abut on a street.* Every lot shall abut upon a dedicated street for at least thirty (30) feet.
- (5) *Corner lots.* Corner lots for residential use will be increased in width over the minimum specified herein so that front yard distance can be provided on both streets, and the building setback line will be so located.
- (6) *Property lines at corners.* Where necessary by reason of curb radii, property lines at street intersection corners will be arcs having radii of at least ten (10) feet or will be chords of such arcs.
- (7) *Sidelines of lots.* Sidelines of lots will be approximately at right angles or radial to the street line.
- (8) *Double frontage lots.* Double frontage lots will be permitted only where necessary to provide separation of residential development from major streets or to overcome specific disadvantages of topography and orientation. A buffer strip at least ten (10) feet wide will be provided along the line of lots abutting such major street or disadvantageous use. There will be no right of access provided across a buffer for double-fronting lots and a notation stating same will be required on the final plat.

(E) *Public spaces.*

- (1) *Parks, recreation areas, and school sites.* Wherever a subdivision embraces a park, a combination playground, play-field, or athletic field and a school site, as shown on the plan for public services (community facilities plan) component of the master plan, such park, recreation area or school site will be platted in the general location and of the size called for by the plan for public services (community facilities plan).

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- (2) *Utility easements.* Where easements are required for public utilities, they will be at least twenty (20) feet wide, ten (10) feet on each side of rear or side property lines of lots. The width of easements will be increased, or they will be extended, where necessary to provide space for utility pole bracing or other construction. No new half easement for utilities will be platted.
 - (3) *Drainage easements.* Easements for drainage ways will be a minimum of twenty (20) feet in width. Wider easements may be required in some circumstances.

(Res. of 10-23-2012, § 1)

Section IV. Improvements.

- (A) *General requirements.* Street, utility, and other improvements will be installed in each new subdivision in accordance with the standards and requirements specified herein.
- (B) *Engineering requirements.* Improvements required by these regulations will be made in accordance with the specification and under the supervision of the city engineer, county engineer, if appropriate, county health officer, the utility agencies, companies, or departments concerned with the tracts or adjacent tracts, and other appropriate authorities.

The city engineer, or a duly designated representative, may enter during all reasonable hours any proposed or existing development and construction. These persons may make inspection of the required public improvements, including storm drainage and detention facilities for the purpose of determining plan requirements or compliance with the regulations. The city's stormwater pollution prevention plan (SWPPP) contains requirements for the following items for subdivision development:

1. A city permit for permission to clear, grub and excavate for all construction projects on one (1) acre or more posted at the job site.
 2. A copy of the BMP approved by ADEM provided to the city for approval prior to the permit being posted. A copy of the notice of registration (NOR) that was sent to the Alabama Department of Environmental Management must also be submitted.
 3. Inspections will be made periodically by the city engineering department and inspection reports will be filed in the department. The city will check to ensure the developer is complying with all requirements of the Alabama Department of Environmental Management. The developer's engineer will be required to inspect the approved BMP monthly and submit inspection reports to the city engineer's office. The city will review the inspection reports and take action deemed appropriate by the city engineer.
 4. At the conclusion of the project, the developer must submit a copy of the termination request that was submitted to the Alabama Department of Environmental Management.
- (C) *Required improvements.*
 - (1) *Monuments.*
 - (a) *Control corners.* Whenever any person, firm or corporation divides any parcel of real estate into lots and lays out streets, it will be the duty of the surveyor to cause two (2) or more monuments of such development to be designated as "control corners " and to place at such control corners monuments adequately marked which will be of such material and affixed to the earth in such a manner as to assure permanency. Any lot or lots sold or otherwise transferred and located in a subdivision and described by metes and bounds shall be described in a manner to include reference to the location of the lot or lots with respect to the subdivision's control if such exists.
 - (b) *Two (2) monuments.* In surveying subdivisions, at least two (2) monuments designated as control corners must be placed in each block for the control of that block.

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- (c) *Other points.* Suitable markers, metal stakes, or adequately described points must be set at all corners except those located by monuments. They must be set at a point of curve, point of intersection, property line and point of tangency, unless a monument has already been placed to these points.
- (2) *Roadways.* Roadways will be surfaced for their entire width and will have curb and gutter, as specified in Section III(B).
- (3) *Road construction requirements.* Construction of all roads will meet the following minimum requirements and conform to the Alabama Department of Transportation's Standard Specifications for Highway Construction, latest edition. Best management practices for erosion control shall be used throughout construction and development. The developer will be solely responsible for all erosion control in accordance with ADEM regulations and for securing any required permits by ADEM.
- (a) *Notification of work:* It will be the duty and responsibility of the developer or contractor to give written notice to the city engineer, or his authorized agent, one (1) working day prior to starting any phase of road construction. The developer or contractor will notify the city engineer, or his authorized agent, in writing the day work is resumed after a delay of more than five (5) working days. This includes all phases of construction, clearing, grading, drainage, gutters, inlets, base, surfacing and any work that pertains to the streets, roads, or development. Failure to notify as specified may be grounds for non-acceptance.
- (b) *Testing:* The tests required normally consist of, but are not limited to: gradation, moisture, compaction, and asphalt analysis of road building materials. As a minimum, developers will be required to determine modified proctor density data for approved road building materials.
- (c) *Payment and scheduling for all testing* will be the responsibility of the developer and will be conducted by an independent testing laboratory approved by the city engineer. Copies of all test reports are to be provided to the city engineer before additional construction occurs.
- (d) *Clearing and grubbing:* All roads shall be graded to their full right-of-way width. All areas shall be cleared of all vegetation, trees, stumps, large rocks, and other objectionable or unsuitable material prior to grading or filling unless otherwise approved, in writing, by the city engineer.
- (e) *Slope paving:* Slope paving will be required in ditches as determined necessary by the city engineer. Other alternatives may be approved by the city engineer.
- (f) *Embankment sections:* The city engineer will have the right to approve all borrow sources; however this does not relieve the developer from full responsibility for the quality of material used. Roadway fill or embankment of earth material will be placed in uniform layers, full width, and not exceeding eight-inch thickness (loose measurement). Each layer will be compacted so that a uniform specified density is obtained. Compaction tests will be performed at the frequency and location as directed by the developer's engineer and/or the city engineer. Additional layers of fill will not be added until directed by the developer's engineer and the city engineer. For other than fill sections of earth material, refer to Section 210 and Section 306 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.
- (g) *Sub-grade:* The sub-grade will be compacted and properly shaped prior to the placing of base materials. The top six (6) inches of the roadbed will be modified, with the work being performed under Section 230 Roadbed Processing, of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition. It will be full width of regular section and extend two (2) feet outside of curb and gutter and/or valley gutter sections. The embankment or sub-grade may be inspected by proof rolling, under the supervision of the developer's engineer and city engineer or his/her designee, with a fully loaded tandem axle dump truck to check for soft or yielding areas. Any unsuitable materials will be removed and replaced with a suitable

material compacted to density requirements in accordance with the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.

- (h) Base: Base course will meet the requirements for crushed aggregate as set forth in Section 301 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition. Base course will have a minimum thickness of seven (7) inches compacted thickness, full width of regular section and will extend one (1) foot outside of curb sections. The density requirements for compaction will be in accordance with Section 306 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.
- (i) Roadway pavement: All roads and/or streets will be paved and comply with the following:
 - (1) Two hundred twenty (220) pounds/square yard (two (2) inches) hot bituminous concrete binder course in accordance with Section 414 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.
 - (2) Tack coat in accordance with Section 405 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.
 - (3) One hundred ten (110) pounds/square yard (one (1) inch) hot bituminous concrete wearing course in accordance with Section 416, Mix A, of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.
 - (4) Prime coat in accordance with Section 401 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.

The mix will be approved by the city engineer and be covered in the latest memorandum recommendation from the office of the Alabama Department of Transportation County Transportation Engineer or as specified by the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition. Local approved limestone may be used in lieu of the siliceous aggregate requirement.

- (j) Storm drainage: An adequate storm drainage system based on a minimum twenty-five-year design storm including curb, pipes, culverts, headwalls, and ditches will be provided for the drainage of surface water. All cross drains will have sufficient length for required typical section and will be installed according to ALDOT specifications. Minimum diameter of cross drain pipes will be eighteen (18) inches. Cross drains will be concrete pipe (Class III minimum) and will meet or exceed the current ALDOT specifications. Minimum diameter of side drain pipes will be eighteen (18) inches. Side drains will be either concrete pipe (Class III minimum), bituminous corrugated metal pipe with paved invert (14 gauge minimum), or High Performance Polyethylene pipe (color other than black).

All manhole covers for drainage structures shall be lettered "Dump No Waste! Drains to Waterways" with a raised fish image.

- (k) Installation of utilities: After grading is completed and approved by the developer's engineer and city engineer and before any roadbed processing of the sub-grade is performed, all of the underground utilities within the roadway prism will be installed completely and approved by the developer's engineer and the city engineer throughout the length of the street and across the section. Once pavement is placed, it will not be open cut except with written permission of the city engineer. Any utility desiring to cross the road will go over the road or dry bore under the road. All water lines located under pavement will be encased. Backfill placed in utility trenches will be a suitable material compacted to density requirements in accordance with the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition.

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- (l) **Signage of subdivision:** Proper signage in accordance with the Manual of Uniform Traffic Control Devices, latest edition, (MUTCD) will be required and maintained in all subdivisions. The developer will be responsible for the placement and maintenance of proper signage of new streets or roads until and unless the road is accepted into the city road system. A signage plan will be submitted to the city engineer for approval prior to the installation of any street signs. Regulatory and warning signs will be in accordance with the MUTCD. All signage will be shown on the traffic plan for the development. This plan will be included in the engineering plans and in the as-built plans at the completion of all work.

If property is annexed into the city by the developer or owner of the subdivision and there is (are) an existing private road(s), the developer is required to install a sign of reasonable size at all private roads in the subdivision stating "PRIVATE ROAD" and it will be the responsibility of the developer or owners of the subdivision to maintain these signs until and unless the roads are accepted by the city.

- (m) **Topsoil and grassing:** When all construction is completed, all slopes and shoulders will be covered with a sufficient amount of topsoil and will have a stand of permanent grass either by sprigging or seeding, to prevent undue erosion.
- (n) **Widening of existing right-of-ways:** Where a subdivision borders an existing road with a right-of-way less than that specified in these regulations, the applicant will be required to dedicate additional right-of-way to conform with the minimum requirements.
- (o) **No open drainage way will be permitted along the side of a lot in a subdivision.**
- (4) **Sidewalks.** Sidewalks will be of appropriate width and location for the particular roadway classification. Sidewalks within cross-walkways, if provided, shall be a minimum of five (5) feet in width and constructed at least four (4) inches thick.
- (5) **Water supply.** Where a public water supply is available in sufficient capacity, the developer will submit plans, or other drawings, prepared by a professional engineer licensed to practice in the State of Alabama, that depicts water lines, valves, fire hydrants, and other associated water system appurtenances to the City of Florence Gas and Water/Wastewater Department and Florence Fire Department for review. Following review and any changes that may be requested by the department, the water line will be installed by the department subject specifically to Sections 27-219 and 27-220, and other applicable Sections 27-211 through 27-226 of the Code of Florence, Alabama, as well as the NFPA (National Fire Protection Association) Code 1141.
- (6) **Sanitary sewerage.** Where a public sanitary sewer is reasonably accessible and of sufficient size and capacity, as determined by the City of Florence Gas and Water/Wastewater Department, the developer will install a sanitary sewer system with a stub-out for each lot in the proposed subdivision and will connect such system to the public sanitary sewer. To avoid cutting pavement or roadway when connections are made, stub-outs will extend from the sewer line to points outside the roadway. Prior to installation by the developer's contractor, the developer will submit plans or other drawings completed by a professional engineer licensed to practice in the State of Alabama, that depicts the sewer lines, manholes, and other associated sewer system appurtenances to the City of Florence Gas and Water/Wastewater Department for review. Following review and any requested changes by the department, the sewer line will be installed by qualified licensed contractor, and subject to inspection by the department. Any deficiencies noted by the department must be corrected. The line and its use is subject to sections 27-246 through 27-254 of the Code of Florence, Alabama where applicable.

Where a public sanitary sewer is not reasonably accessible, as determined by the City of Florence Gas and Water/Wastewater Department, the developer will install a private sewer system subject to requirements and regulation of the county health department and/or the Alabama Department of

Environmental Management (ADEM). Ownership, maintenance, and operation will be the responsibility of the developer.

Where a public sanitary sewer is reasonably accessible, as determined by the City of Florence Water and Sewer Department and the county health officer, the applicant will install a sanitary sewer system with a stub-out for each lot in the proposed subdivision and connect such system to the public sanitary sewer. To avoid cutting pavement or roadway when connections are made, stub-outs will extend from the sewer line to points outside the roadway.

Where a public sanitary sewer is not reasonably accessible, as determined by the City of Florence Water and Sewer Department and the county health officer, and where the applicant installs a private sanitary sewer system, such system will be constructed in accordance with the requirements and under the supervision of the county health officer.

- (7) *Street drainage.* The necessary facilities for drainage of surface water and roadways in the subdivision will be installed in accordance with Section III(B)(11), as contained herein.
 - (8) *Stormwater detention.* Stormwater detention will be provided in accordance with Section III(B) of these regulations.
 - (9) *Utilities.* Above ground utilities will be placed on rear or side property lines of lots along easements provided for this purpose.
 - (10) *Street signs.* Each intersection will have signs on diagonally opposite corners identifying the streets which form the intersection unless the city engineer approves the placement of only one (1) set of signs. Construction and installation of street signs will be in accordance with the requirements of the city engineer or county engineer, if appropriate.
 - (11) *Traffic control signs.* Construction and installation of traffic control signs will be in accordance with the MUTCD.
- (D) *Minimum requirements for construction permitting and erosion control.* Construction which disturbs one (1) acre or more of ground surface within the city limits of Florence will require a general permit for stormwater runoff control. This permit will be obtained from the Alabama Department of Environmental Management (ADEM) by the owner/developer of the property.

A copy of the approved permit will be submitted to the city engineer prior to beginning site construction, grading, or clearing activity. The city will review the permit and issue a permit to begin work.

Along with the permit the owner/developer will submit construction plans and a plan for best management practice (BMP). The BMP will describe in detail the use of silt fences, hay bales, rip rap siltation basins, or other means to be used for erosion control.

All construction plans will include by notation in the project notes, requirements for the contractors to provide erosion control, for preventing fuel or hazardous chemical spills and over use of pesticides, fertilizers, or herbicides. Waste material such as asphalt, petroleum products, sealants, concrete, etc., will not be left on site.

Any information provided by the public as to the betterment of the proposed BMP or as to the failure of an operating BMP can be addressed to the stormwater management personnel for consideration or correction.

Any owner/developer of a site one (1) acre or larger who does not conform to these regulations is subject to a fine of not more than five hundred dollars (\$500.00) per day.

Once an owner/developer has been notified by the city engineer that his/her BMP is not meeting the requirements of these regulations the owner/developer will have three (3) working days to correct the problem before fines become effective. The fine will be enforced each day thereafter until the BMP is corrected. The owner/developer will be responsible for the correction and for notifying the city stormwater management personnel when the correction is made.

(E) *Guarantees of performance.*

- (1) *Completion of improvements.* The planning commission will not approve the final plat of any subdivision for which improvements have been completed unless the improvements have been installed in accordance with the standards and specifications of these regulations and have been certified to the planning commission by appropriate officials and agencies of the city.
- (2) *Performance bond.* In lieu of the completion of improvements, a performance bond executed by the applicant with surety, as is hereafter specified, to secure to the municipality the actual construction and installation of such improvements, at a time and in accordance with the regulations of the planning commission, is required prior to submission of a plat for final approval.

Sufficient surety will be provided to accommodate the cost of public improvements, inflation, and the provision of fifteen (15) percent increase in costs due to design changes (contingencies). Sureties may be extended upon expiration, but not be permitted beyond five (5) years. At the conclusion of five (5) years, if the subdivision has not been completed, the surety will be called in and the city will complete the improvements.

Types of surety. One (1) of the following types of surety is required prior to the submission of a plat for final approval:

- (a) A performance bond executed by the applicant with corporate surety licensed by the State of Alabama to act as surety on performance bonds.
 - (b) An irrevocable letter of credit to the City of Florence from one (1) or more financial institutions, subject to state and federal regulations, guaranteeing payment necessary to complete subdivision improvements in accordance with previously approved plans and specifications.
 - (c) A loan agreement provided by the developer to the City of Florence from one (1) or more financial institutions, subject to state or federal regulations, confirming that funds necessary to complete all subdivision improvements in accordance with previously approved plans and specifications are available and guaranteed for disbursement to the appropriate party at agreed stages with each disbursement, including the final disbursement, being approved by the engineer/surveyor for the developer and the city engineer.
 - (d) Prior to the signing of the plat by the city engineer, a preconstruction conference will take place with the developer, the developer's engineer or designated representative, contractor and the city to discuss the requirements of the subdivision regulations with regard to public improvements and/or other issues regarding construction.
- (3) *Warranty.* In addition to the performance bond or completion of improvements, a warranty is required from the developer to the City of Florence guaranteeing the improvements against all defects in workmanship and materials for a period of one (1) year. The form of said warranty [is] to be approved by the city engineer.
 - (4) *Release of guarantees.* The performance bond and/or warranty will be filed with the city engineering department and will be released upon written notification from the city engineer that all improvements have been completed in accordance with city standards.

Surety will be released only when all public improvements have been completed (drainage, sewer, roads, curb and gutter, fire hydrants, water, signage, sidewalks, street trees, required landscaping for buffer strips and public areas, etc.).

During construction of the subdivision the city engineering department will make periodic visits to the site for the purpose of interim inspections. The developer's engineer will be responsible for making daily inspections of the subdivision. It will be the responsibility of the developer's engineer to notify the city at each stage of construction for the purpose of performing interim inspections. Prior to these

inspections, the developer's engineer will certify the improvements associated with the specific stage of construction meet city requirements. Inspection logs must be submitted by the developer's engineer at the completion of each phase of construction. The interim inspections will include at the minimum the sub-grade, base, paving, and the curb and gutter. Additionally, the city engineering department will require certification from the gas and water department stating that the sewer lines/manholes in all streets have passed all required tests prior to placement of the roadway base. The developer will not be allowed to proceed with the next phase of construction until the prior stage is completed and has been inspected. The developer's engineer must notify the city when drainage improvements are being constructed to allow the city to perform more frequent inspections.

The purpose of these interim inspections is to ensure substantial conformance to city standards at the different stages of construction. The periodic inspections made by the city will in no way release the developer's engineer of responsibility for continual inspection of the subdivision during the entire construction process.

The developer's engineer will be responsible for the detailed inspection of the subdivision throughout the entire construction process. It will be his/her responsibility to ensure that all streets, the curb and gutter, sidewalks, street-trees, sanitary sewer system, storm sewer system, traffic control system, detention basin with all associated structures, and any other public improvements that will be dedicated to the City of Florence, conform to city standards.

The developer's engineer will be responsible for ensuring that all required subdivision testing be performed and that the results comply with the requirements of the city engineering department. These tests will include sub-grade, base and paving testing for all streets, and the pressure and vacuum testing for the sanitary sewer system. The developer's engineer will also be responsible for ensuring that a mandrel testing and a television inspection has been performed for all sanitary sewer lines. Finally, the developer's engineer will be responsible for providing as-built drawings to the city engineering department at the completion of the subdivision development. The city may also require that small diameter high performance polyethylene storm sewer culverts be televised prior to acceptance.

When all required testing has been completed and the as-built drawings have been submitted to the city engineering department the developer must submit written certification to the city engineer that all construction requirements have been satisfied, and all work has been completed in accordance with the approved plans and all city requirements.

Upon receipt of the required written certification, the city engineer will perform a preliminary inspection of the subdivision to ensure that all required work has been performed. The developer's engineer will be required to be present during the inspection in the event that construction deficiencies are noted. The city engineer will advise the water and sewer department that the subdivision has been completed and request a final inspection of the sanitary sewer system. The developer's engineer will also provide a copy of the as-built plans to the water and sewer department.

When all noted deficiencies have been addressed and the city engineer grants preliminary acceptance of the subdivision the city engineer shall notify the planning department that all required public improvements for the subdivision have been completed in substantial conformance with the approved plans and specifications.

The developer will be required to provide surety or some other type of guarantee to cover the cost of any problems in workmanship that may develop during the period between preliminary and final acceptance. The surety amount will be determined by the city engineer, but shall not be less than ten (10) percent of the value of the public improvements. Release of guarantees will be in the form of written notification to the developer, appropriate institution(s), and the planning commission, or its authorized representative.

The developer guarantees all public improvements for a period of one (1) year. At the conclusion of this one-year period, if there are no problems, final acceptance of the subdivision will be granted. The city engineer will submit a resolution of acceptance to the city council for adoption. After the resolution is passed by the city council, the city will assume all responsibility for the perpetual maintenance of the subdivision.

(Res. of 10-23-2012, § 2)

Section V. Dedications and reservations.

(A) *Rights-of-way.*

- (1) *Dedications.* The rights-of-way for all new cross-walkways and streets, except major streets or thoroughfares as shown in the master plan, will be dedicated for public use; the land required to widen the rights-of-way of any existing streets, including major streets, to the minimum widths called for by these regulations or by the master plan will be similarly dedicated for public use.
- (2) *Reservations.* The right-of-way for a new major street or section thereof will be dedicated for public use.

(B) *Easements.*

- (1) *Utilities.* Where required, easements for utilities will be provided, together with the right of ingress and egress.
- (2) *Drainage.* Where required, easements for drainage will be provided, together with the right of ingress or egress.

(C) *Parks, recreation areas, and school sites.*

- (1) *Proposed sites.* Where a proposed park, recreation areas, or school site shown in the master plan, is located in whole or in part in a subdivision, the planning commission may require the dedication or reservation of such area within the subdivision in those cases in which the planning commission deems such requirement to be reasonable. In general, the commission will require dedication of parks and recreation areas in a reasonable amount, but not to exceed ten (10) percent of the gross area of the tract to be subdivided; the commission will require the reservation by the applicant for future taking by the appropriate school board of school sites, and it shall be the responsibility of the applicant to negotiate with the school board for purchase of the site; provided however, that the land for school sites is not to be held in such reserved status for an unreasonable length of time.
- (2) *Large scale of development.* Where deemed essential by the planning commission, upon consideration of the particular type of development proposed in the subdivision, and especially in large scale neighborhood unit development, the planning commission may require the dedication or reservation of such other areas or sites of a character, extent, and location suitable to the needs created by such development for parks, recreation, schools, and other neighborhood purposes.

ARTICLE III. ESTATE-LOT SUBDIVISIONS

Section I. Purpose.

The estate-lot subdivision regulations are intended to allow some design flexibility of required improvements for low density, large acreage residential developments.

All public improvements for estate-lot developments will be in accordance with Article II of the City of Florence subdivision regulations with the exception of the requirements outlined herein.

Section II. Design standards.

The minimum pavement width will be twenty (20) feet exclusive of curb and gutter.

All lots in the subdivision must be three (3) acres or larger, excluding public road right-of-way. There will be no subdivision of lots below the three-acre minimum permitted in estate-lot subdivisions and a note stating same will be required on the final plat for recording.

Parking will not be allowed on streets.

ARTICLE IV. ADMINISTRATION

- (A) *General provisions.* These subdivision regulations will be administered by the Florence City Planning Commission.
- (B) *Modifications.*
 - (1) *Large scale development.* The standards and requirements of these regulations may be modified by the planning commission in the case of a plan and program for a complete community or a neighborhood unit, which in the judgment of the planning commission provides adequate public spaces and improvements for the circulation, recreation, light, air, and service needs of the tract when fully developed and populated, and which also provides such covenants or other legal provisions as will assure conformity to and achievement of the plan.
 - (2) *Conditions.* In granting modification, the planning commission may require such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so modified.
- (C) *Enforcement.* No plat of a subdivision of land lying within the subdivision jurisdiction will be filed or recorded in the office of the judge of probate of Lauderdale County until it has been submitted to and approved by the planning commission and the approval entered upon the final plat by the appropriate certificate.
- (D) *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 by exhibition to or by other use of a plat of a subdivision before such plat has been approved by the planning commission and recorded or filed in the office of the judge of probate of Lauderdale County, will forfeit and pay a penalty of one hundred dollars (\$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 will not exempt the transaction from such penalties or from the remedies herein provided. The City of Florence 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. Any person, firm, or corporation violating any provisions of the stormwater detention regulations, as contained herein, will be fined not more than five hundred dollars (\$500.00) for each offense; a separate offense will be deemed committed for each day a violation continues. A notice of violation may be issued by the city engineer, whenever he/she determines that activity on a property does not comply with the approved storm drainage and detention facilities construction plans. The notice of violation of the provisions of the stormwater detention regulations, as contained herein, or of any rule or regulation adopted pursuant thereto will be to the owner of the property or his agent and will:
 - (1) Be in writing;

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Appendix A - SUBDIVISION REGULATIONS
ARTICLE IV. ADMINISTRATION

- (2) Include a description of the property sufficient for identification of where said violation occurred; and
- (3) List the specific requirements of the approved plan which have been violated.
- (E) *Fees.* The applicant shall pay an initial filing fee with submission of a preliminary plat to partially cover the costs of review. Upon submission of a final plat, the applicant shall pay to the planning commission a final plat fee plus a recording fee for the probate judge of Lauderdale County.
- (F) *Effective date.* Adopted this 28th day of September, 2010.

APPENDIX 4

Ordinance Number 2004-16

**ORDINANCE
FOR
STORMWATER OPERATION AND
MAINTENANCE**

ORDINANCE #2004-16

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FLORENCE, ALABAMA
as follows:

Section I. Best Management Practice (BMP)

Definitions. 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 revised to include these regulations.

Section II. Design

- A. All stormwater BMPs 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 of Florence.
- B. Stormwater easements and covenants shall be provided by the property owner for access for facility inspections and maintenance. Easements and covenants shall be recorded with City of Florence prior to the issuance of a permit.
- C. Final design shall be approved by The City Engineer.
- D. The property owner/developer will acquire an NPDES Permit from ADEM and present a copy to the City Engineer.
- E. A permit will be issued by the City Engineer prior to construction start up. This permit acknowledges receipt of proper BMP and ADEM permit.

Section III. Routine Maintenance

- A. All stormwater BMPs shall be maintained according to the measures outlined in the most recent version of The City of Florence Stormwater Pollution Prevention Plan, as required by 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.

Section IV. Nonroutine Maintenance

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

- A. Nonroutine maintenance shall be performed on an as-needed basis based on information gathered during regular inspections.
- B. If nonroutine maintenance activities are not completed in a timely manner or as specified in the approved plan, The City of Florence may fine the Owner an appropriate amount to cover the cost of the city providing maintenance.

Section V. Inspections

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

ADOPTED this the 16th day of March, 2004.

APPENDIX 5

Ordinance Number 2004-17

**ORDINANCE
FOR
ILLICIT DISCHARGE AND CONNECTION TO
THE STORMWATER SYSTEM**

ORDINANCE #2004-17

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FLORENCE, ALABAMA
as follows:

SECTION 1. PURPOSE/INTENT.

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Florence through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance 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 (NPDES) permit process. The objectives of this ordinance 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 ordinance

SECTION 2. DEFINITIONS

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

Authorized Enforcement Agency: employees or designees of the director of the municipal agency designated to enforce this ordinance.

Best Management Practices (BMPs): schedules of activities, prohibitions of practices, general good house keeping 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. BMPs 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. § 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 1 acre or more. Beginning in March 2003, NPDES Storm Water Phase II permits will be required for construction projects resulting in land disturbance of 1 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 non-storm water 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:

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 non-storm water 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, 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) Storm Water Discharge Permit. Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-Storm Water Discharge. Any discharge to the storm drain system that is not composed entirely of storm water.

Person. Means 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; non-hazardous 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 storm water 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.

Storm Water. 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 describes 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 means any water or other liquid, other than uncontaminated storm water, discharged from a facility.

SECTION 3. APPLICABILITY.

This ordinance 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.

SECTION 4. RESPONSIBILITY FOR ADMINISTRATION.

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

SECTION 5. SEVERABILITY.

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance 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 Ordinance.

SECTION 6. ULTIMATE RESPONSIBILITY.

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

SECTION 7. DISCHARGE PROHIBITIONS.

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 storm water.

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 this ordinance: 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, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated - typically less than one 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 non-storm water 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.

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 ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

SECTION 8. SUSPENSION OF MS4 ACCESS.

Suspension due to Illicit Discharges in Emergency Situations

The City of Florence 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 to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

Suspension due to the Detection of Illicit Discharge

Any person discharging to the MS4 in violation of this ordinance 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.

SECTION 9. INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity NPDES storm water 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 of Florence prior to the allowing of discharges to the MS4.

SECTION 10. MONITORING OF DISCHARGES.

1. Applicability.

This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.

2. Access to Facilities.

- (1) The City of Florence shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. 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 The City of Florence 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 storm water, and the performance of any additional duties as defined by state and federal law.
- (3) The City of Florence 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 storm water discharge.
- (4) The City of Florence has the right to require the discharger to install monitoring equipment as necessary. 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 of Florence and shall not be replaced. The costs of clearing such access shall be borne by the operator.

- (6) Unreasonable delays in allowing the City of Florence access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water 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 ordinance.
- (7) If the City of Florence 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 a violation of this ordinance, 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 ordinance 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.

SECTION 11. REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

City of Florence will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, 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 non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs 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 storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

SECTION 12. 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 storm water, 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 non-hazardous 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 of Florence within 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.

SECTION 13. ENFORCEMENT.

1. Notice of Violation.

Whenever the City of Florence finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (a) The performance of monitoring, analyses, and reporting;
- (b) The elimination of illicit connections or discharges;
- (c) That violating discharges, practices, or operations shall cease and desist;
- (d) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (e) Payment of a fine to cover administrative and remediation costs; and
- (f) The implementation of source control or treatment BMPs.

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.

SECTION 14. 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 10 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.

SECTION 15. 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 30 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.

SECTION 16. COST OF ABATEMENT 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. The property owner may file a written protest objecting to the amount of the assessment within 5 days. If the amount due is not paid within a timely manner

as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of 5 percent per annum shall be assessed on the balance beginning on the 30th day following discovery of the violation.

SECTION 17. INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, 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.

SECTION 18. COMPENSATORY ACTION.

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

SECTION 19. 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 Ordinance 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.

SECTION 20. CRIMINAL PROSECUTION.

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$1,000.00 dollars 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 ordinance, including sampling and monitoring expenses.

SECTION 21. REMEDIES NOT EXCLUSIVE.

The remedies listed in this ordinance 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.

SECTION 22. ADOPTION OF ORDINANCE.

This ordinance shall be in full force and effect (30) days after its final passage and adoption. All prior ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

ADOPTED this the 16th day of March, 2004.

APPENDIX 6

Ordinance Number 2004-18

ORDINANCE FOR EROSION AND SEDIMENT CONTROL

ORDINANCE #2004-18

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FLORENCE, ALABAMA
as follows:

Section I. Introduction/ 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 this local regulation is to safeguard persons, protect property, and prevent damage to the environment in The City of Florence. This ordinance 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 in The City of Florence.

Section II. Definitions

Certified Contractor

A person who has received training and is licensed by 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 includes 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 of Florence.

Waterway

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

Section III. Permits

- A) No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of *1 acre or more* without the approval of an Erosion and Sediment Control Plan by ADEM.
- 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.
- 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 provide inspection when construction or grading activity takes place.
- E) The applicant will be required to file with City of Florence a faithful performance bond, letter of credit, or other improvement security in an amount deemed sufficient by the city to cover all costs of improvements, landscaping, maintenance of improvements for such period as specified by The City of Florence and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

Section IV. Review and approval

- its
- A) ADEM will review each application for a site development permit to determine conformance with the provisions of this regulation. ADEM 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.
- of
- B) Failure of the ADEM to act on an original or revised application within 30 days 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 ADEM. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by ADEM.

Section V. 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 IV of this regulation, may be authorized by ADEM by written authorization to the permittee, and shall include

- 1) Major amendments of the erosion and sediment control plan submitted to ADEM
- 2) Field modifications of a minor nature

Section VI. 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 (SWPPP), and shall be adequate to prevent transportation of sediment from the site to the satisfaction of ADEM. Cut and fill slopes shall be *no greater than 2:1*, except as approved ADEM 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 the SWPPP, shall be used to the satisfaction of ADEM.
- 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 ADEM.
- E) Erosion control requirements shall include the following:
 - 1) Soil stabilization shall be completed within *five days* of clearing or inactivity in construction.
 - 2) If seeding or another vegetative erosion control method is used, it shall become established within *two weeks* or ADEM may require the site to be reseeded or a non-vegetative 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 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.
 - 7) Techniques that divert upland runoff past disturbed slopes shall be employed.
- F) Sediment controls 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 ADEM.

- 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 Engineer.

G) Waterway and watercourse protection requirements shall include

- 1) A temporary stream crossing installed and approved by The Army Corp 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 the 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 access road provided at all sites
- 2) other measures required by ADEM in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains

Section VII. Inspection

A) ADEM 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 stamp of approval of the City Engineer shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the City Engineer 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 ADEM at the time interval specified in the approved permit.

- C) ADEM 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.

Section VIII. Enforcement

- A) Stop-Work Order; Revocation of Permit

In the event that any person holding a site development permit pursuant to this ordinance 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, ADEM 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 ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$1,000.00 for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration.

Section IX. Separability

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

ADOPTED this the 16th day of March, 2004.

APPENDIX 7

Definitions and Acronyms

Definitions and Acronyms

All definitions contained in Part VI shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory / statutory definitions have been provided, but in the event of a conflict, the definition found in the Statute or Regulation takes precedence.

1. Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
2. Control Measure as used in this permit, refers to any Best Management practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
3. CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.
4. Discharge, when used without a qualifier, refers to “discharge of a pollutant” as defined as ADEM Administrative Code 335-6-6-.02(m).

5. Green Infrastructure refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspire (the return of water to the atmosphere either through evaporation or by plants), or reuse storm water or runoff on the site where it is generated.
6. Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product.
7. Illicit Connection means any man-made conveyance connecting an illicit discharge directly to municipal separate storm sewer.
8. Illicit Discharge is defined at 40 CFR Part 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharged resulting from fire fighting activities.
9. Indian Country, as defined in 18 USC 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the

limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including right-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

10. MEP is an acronym for “Maximum Extent Practicable,” the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR Part 122.34.

11. MS4 is an acronym for “Municipal Separate Storm Sewer System” and is used to refer to either a large, medium or small municipal separate storm sewer system or county system. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities.

12. Municipal Separate Storm System is defined at 40 CFR Par 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used

for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined in ADEM Administrative Code 335-6-6-.02(nn).

13. NOI is an acronym for “Notice of Intent” to be covered by this permit and is the mechanism used to “register” for coverage under a general permit.

14. Department means the Alabama Department of Environmental Management or an authorized representative.

15. Small municipal separate storm sewer system is defined at 40 CFR Part 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States, but is not defined as “large” or “medium” municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

16. Storm water is defined at 40 CFR Part 122.26 (b)(13) and means storm water runoff, snow melt runoff and surface runoff and drainage.

17. Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the county separate storm sewer system.

18. SWMP is an acronym for “Storm Water Management Program.”

19. Total Maximum Daily Load (TMDL) means the calculated maximum permissible pollutant loading to a waterbody at which water quality standard can be maintained. The sum of wasteload allocations (WLAs) and load allocations (LAs) for any given pollutant.

20. 303 (d) Stream –

Section 303 (d) of the Clean Water Act Requires that each state identify those waters that do not currently support designated uses, and to establish a priority ranking of these waters by taking into account the severity of the pollution and the designated uses of such waters. For each waterbody on the list, the state is required to establish a total maximum daily load (TMDL) for the pollutant or pollutants of concern at a level necessary to implement the applicable water quality standards. Guidance issued in August 1997 by the Environmental Protection Agency (EPA) suggested that states also include a schedule for TMDL development. The TMDL schedule included as part of Alabama’s 2010 List provides the expected date the specific TMDL will be drafted and submitted for public notice and comment. TMDL dates range from one to ten years following EPA approval of the 2010 Section 303 (d) List.