

Scott Conger, Mayor  
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Suite 301  
Jackson, Tennessee 38301



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March 14, 2024

Robert Karesh  
Tennessee Department of Environment and Conservation  
William R. Snodgrass – Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102

Re: Compliance Review Meeting and Corrective Action Plan Acceptance  
Small Municipal Separate Storm Sewer System Program Audit  
National Pollutant Discharge Elimination System  
NPDES Permit Tracking No. TNS075361  
Jackson, Madison County, Tennessee

Dear Mr. Karesh,

This letter is in response to the Compliance Review Meeting and Corrective Action Plan Acceptance letter that was received in our office on December 19, 2023.

The City of Jackson has submitted documentation that supports the completion and continued progress towards the corrective actions listed in the letter. The attachment includes detailed documentation for the corrective actions specified.

We appreciate your assistance in this matter and want to guarantee our commitment to complying with all conditions of the 2022 permit. We hope this information satisfies all remaining requirements and ensures the City of Jackson's compliance with the 2022 permit.

Please feel free to contact me at (731) 425-8320 or via email at [sconger@jacksontn.gov](mailto:sconger@jacksontn.gov) if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Scott Conger". The signature is written in a cursive style.

Scott Conger  
Mayor

Att: Corrective Action Plan (CAP) Documentation

cc: Wendy Braxter-Rhyne, City of Jackson Stormwater Program Manager  
Stan Pilant, City of Jackson, Director of Planning, Growth, and Development  
Amanda Hicks, City of Jackson, City Engineer  
Chris Coughlin, City of Jackson, Assistant City Engineer  
John Lay, Division of Water Resources  
Conner Franklin, Division of Water Resources  
Ann Morbitt, Division of Water Resources  
Greg Overstreet, Division of Water Resources  
Jessica Murphy, Division of Water Resources  
April Grippo, Division of Water Resources

**Corrective Action Plan (CAP)  
Small Municipal Separate Storm Sewer System (MS4)  
NPDES Permit Tracking Number TNS075361**

MS4 Name: City of Jackson

County: Madison

Tracking NO. TNS075361

Date(s) of Audit: 29AUG23 and 30AUG23

Inspectors(s): Robert Karesh and John Lay

On-Site Contact(s): Wendy Braxter-Rhyne, City of Jackson Stormwater Program Manager

**Minimum Control Measure 3 – Illicit Discharge Detection and Elimination (IDDE)**

– Documentation that demonstrates that the City has begun transitioning the online version of ordinance to current;

**Documentation includes the following:**

- 1. Copy of City of Jackson Purchase Order for services from CivicPlus.**
- 2. Copy of Statement of Work (SOW) from CivicPlus. This includes description and cost of services.**

– Documentation that demonstrates that revisions have been made to the City’s Rules and Regulations to include the revisions related to the conflicting allowable non-stormwater discharges;

**Documentation includes the following:**

- 1. Copy of Public Notice for Jackson Municipal Regional Planning Commission (MRPC) Meeting scheduled for December 6, 2023.**
- 2. Copy of Agenda for Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023.**
- 3. Copy of Minutes from Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023 at 3:00 p.m.**
- 4. Copy of Memorandum from Stan Pilant, Director of Planning, Growth and Development and Chairman of Jackson MRPC, confirming unanimous approval to the City’s Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System.**
- 5. Copy of revised Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System, which was approved by the Jackson Municipal Regional Planning Commission on Wednesday, December 6, 2023.**

– Documentation that demonstrates that the City has begun updating the storm sewer system map to include direction of flow;

**Documentation includes the following:**

- 1. Copy of public notice for Requests for Qualifications for Stormwater Infrastructure (RFQ).**

2. **Copy of Agenda for Jackson City Council meeting on December 5, 2023.**
3. **Copy of Minutes from Jackson City Council meeting on December 5, 2023 at 9:00 a.m.**
3. **Copy of invoice for Professional Services from Kimley Horn. This includes description and cost of services.**
4. **Copy of Jackson Stormwater Masterplan Project Schedule. Phases include Survey, Conditional Assessment and Stormwater Modeling and Masterplan.**
5. **Copy of Professional Services Agreement for City of Jackson Stormwater Masterplan and Conditions Assessment between the City of Jackson and Kimley Horn signed on December 14, 2023.**

– Documentation that demonstrates that revisions have been made to the City’s Rules and Regulations to finalize and implement an Enforcement Response Plan that includes all the enforcement sanctions utilized by the City to address non-compliance and specify a timeframe for illicit complaint investigations to be initiated within 7 days; and

**Documentation includes the following:**

1. **Copy of Public Notice for Jackson Municipal Regional Planning Commission (MRPC) Meeting scheduled for December 6, 2023.**
2. **Copy of Agenda for Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023.**
3. **Copy of Minutes from Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023.**
4. **Copy of Memorandum from Stan Pilant, Director of Planning, Growth and Development and Chairman of Jackson MRPC confirming unanimous approval to the City’s Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System and Rules and Regulations for the Control of Soil Erosion and Stormwater.**
5. **Copy of revised Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System and Rules and Regulations for the Control of Soil Erosion and Stormwater, which were approved by the Jackson Municipal Regional Planning Commission on Wednesday, December 6, 2023.**

– Documentation that demonstrates implementation of the City's IDDE plan and maintaining related documentation.

**Existing outfalls within the City of Jackson were identified using the City of Jackson’s GIS Outfall map. The City’s Senior GIS Analyst divided the city into sections that showed outfall locations and existing land use. The City’s Stormwater Program Manager used the maps to identify outfalls that were located in high priority areas such as retail, office professional, light industrial, heavy industrial, public utilities, and whole warehouse land use. A list was generated that included outfall identification number, nearest address, property owner, district category, land-use type, and receiving stream. This list will be utilized when performing dry weather field investigations of outfalls. 134 outfalls were located on the map in high priority areas. This number may be modified during field investigations.**

**Dry weather field investigations of outfalls began in February 2024 using sectioned maps to locate the outfalls, outfall investigation field sheets to record the data, camera for visual documentation and phone to record GIS coordinates. The data will be stored in a file until the OpenGov administrator has completed the Outfall Investigation Portal. When the OpenGov portal for outfall investigation is completed, all information will be transferred and stored in OpenGov database.**

**Documentation includes the following:**

- 1. Copy of the maps showing outfalls and land use areas.**
- 2. Copy of identified outfalls in retail, office professional, light industrial, heavy industrial, public utilities, and whole warehouse land use areas. Outfalls were identified using the City of Jackson's existing outfall map.**
- 3. Copies of several completed dry weather screenings during the month of February and March 2024. Dry weather screenings were completed for outfalls listed on Map 1 and May 7.**
- 4. Copy of waterbody chart for MS4 area that lists parameters.**

#### **Minimum Control Measure 4 – Construction Site Stormwater Runoff Control**

– Documentation that demonstrates that revisions have been made to the City's Rules and Regulations to include the revisions related to the specific design storm, special conditions and construction buffers; and

**Documentation includes the following:**

- 1. Copy of Public Notice for Jackson Municipal Regional Planning Commission (MRPC) Meeting scheduled for December 6, 2023.**
- 2. Copy of Agenda for Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023.**
- 3. Copy of Minutes from Jackson Municipal Regional Planning Commission (MRPC) Meeting on December 6, 2023.**
- 4. Copy of Memorandum from Stan Pilant, Director of Planning, Growth and Development and Chairman of Jackson MRPC confirming unanimous approval to the City's Rules and Regulations for the Control of Soil Erosion and Stormwater.**
- 5. Copy of revised Rules and Regulations for the Control of Soil Erosion and Stormwater, which was approved by the Jackson Municipal Regional Planning Commission on Wednesday, December 6, 2023.**

– Documentation that demonstrates that the City has performed pre-construction meetings for priority sites.

**Documentation includes the following:**

- 1. Copies of sign-in sheets from three pre-construction meetings during the month of October 2023 and February 2024.**
- 2. Copy of OpenGov portal during the project review phase (PRST). Notes will be entered during the Engineering Review of construction plans to document priority sites. Priority sites will also be flagged during this process.**

- 3. Copy of OpenGov portal during the Commercial Development (CD) phase. Engineering will require a pre-construction conference for priority sites before a development permit can be issued. A copy of the pre-construction sign-in sheet will be uploaded to the portal. Priority sites will be tracked during this process.**

#### **Monitoring Program, Sampling Requirements and Reporting**

– Documentation that demonstrates that the City has begun developing, implementing, and documenting a monitoring program as specified in the 2022 Permit.

**The City of Jackson Purchasing Department sent out Requests for Proposals (RFP) on January 29, 2024 for Stormwater Stream Monitoring and Visual Assessment Services. Three Proposals were received in their office on February 13, 2024 before 10:30 a.m. The proposals were evaluated and a professional agreement was offered to Civil & Environmental Consultant, Inc.**

**The City of Jackson Purchasing Department is currently preparing all requirement documents in order for the professional service agreement between the City of Jackson and Civil & Environmental Consultant, Inc. to be presented at the City Council Meeting on Tuesday, April 2, 2024. Stormwater Stream Monitoring and Visual Assessment Services will begin immediately after contract is signed. The Stormwater Program Manager will be the contact for this project.**

#### **Documentation includes the following:**

- 1. Copy of Public notice for Requests for Proposals (RFP) for Stormwater Stream Monitoring and Visual Assessment Services.**
- 2. Copy of email from City of Jackson Purchasing Department congratulation and offering Janette Wolf, Civil & Environmental Consultant, Inc. the contract for Stormwater Stream Monitoring and Visual Assessment Services.**
- 3. Copy of Civil & Environmental Consultant, Inc. Professional Services.**





**CivicPlus**  
 302 South 4th St. Suite 600  
 Manhattan, KS 66502  
 US

**Quote #:**  
**Date:**  
**Expires On:**

**Statement of Work**  
**Q-37527-1**  
**2/14/2023 12:17 PM**  
**5/15/2023**

**Client:**  
**JACKSON, TENNESSEE**

**Bill To:**  
**JACKSON, TENNESSEE**

<b>SALESPERSON</b> Krystal Hays	<b>Phone</b> x	<b>EMAIL</b> khays@civicplus.com	<b>DELIVERY METHOD</b>	<b>PAYMENT METHOD</b> Net 30
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QTY	PRODUCT NAME	DESCRIPTION	PRODUCT TYPE	TOTAL
500.00	Republication	Republication (per page) without zoning updated through 5-2021	One-time	USD 0.00
1.00	Online Code Hosting	Online Code Hosting	Renewable	USD 564.00
1.00	Full-Service Supplementation Subscription	Full-Service Supplementation Subscription without zoning	Renewable	USD 4,400.00
1.00	Annual Electronic Supplementation Service Included	Online Supplementation will begin with the ordinances received on an annual basis.	Renewable	USD 0.00
1.00	Annual Print Supplementation Service Included	Print Supplementation will begin with the ordinances received from the municipality on an annual basis.	Renewable	USD 0.00
3.00	Printed Copies and Freight Included - up to [#] copies	Printed Copies and Freight Included	Renewable	USD 0.00

Total Investment - Initial Term	USD 4,964.00
Annual Recurring Services - Year 2	USD 5,212.20

Initial Term & Renewal Date	12 Months
Renewal Procedure	Automatic 1 year renewal term, unless 60 days notice provided prior to renewal date
Renewal Invoice Schedule	Annually on date of signing
Annual Uplift	5% starting in Year 2

This Statement of Work ("SOW") shall be subject to the terms and conditions of the CivicPlus Master Services Agreement and the applicable Solution and Services terms and conditions located at <https://www.civicplus.help/hc/en-us/p/legal-stuff> (collectively, the "Binding Terms"). By signing this SOW, Client expressly agrees to the terms and conditions of the Binding Terms throughout the term of this SOW.



**Acceptance**

The undersigned has read and agrees to the following Binding Terms, which are incorporated into this SOW, and have caused this SOW to be executed as of the date signed by the Customer which will be the Effective Date:

**Authorized Client Signature**

By: *Billy Amundson*  
Name: *Billy Amundson*  
Title: *City Recorder*  
Date: *9/1/23*

**CivicPlus**

By: *Amy Vikander*  
Name: *Amy Vikander*  
Title: *Senior VP of Customer Service*  
Date: *9/15/2023*

Organization Legal Name: *City of Jackson TN*  
Billing Contact: *Billy Amundson*  
Title: *City Recorder*  
Billing Phone Number: *781-425-8278*  
Billing Email: *BAmundson@JacksonTN.gov*  
Billing Address: *121 E. Main*

*Jackson TN 38394*  
Mailing Address: (If different from above)

PO Number: (Info needed on Invoice (PO or Job#) if required)  
*10378*



### Jackson MRPC Meeting 12-6-23

Public Notices & Press Releases

Jackson MRPC Meeting 12-6-23

City of Jackson, TN / Government / Communications and Engagement / Public Notices & Press Releases / Jackson MRPC Meeting 12-6-23

#### Jackson Municipal Regional Planning Commission Meeting

Published on 12-06-2023

Notice is hereby given that the Jackson Municipal Regional Planning Commission will hold a meeting on Wednesday, December 6, 2023 at 3:00 PM at City Hall in the George A. Smith Meeting Room on the First Floor, Suite 107



[Click here for meeting agenda](#)

**AGENDA**  
**JACKSON MUNICIPAL REGIONAL PLANNING COMMISSION**  
**CITY HALL – GEORGE A. SMITH MEETING ROOM**  
**FIRST FLOOR – 109 EAST MAIN STREET – SUITE 107**  
**DECEMBER 6, 2023 – 3:00 P.M.**

- I. CALL TO ORDER/DETERMINATION OF QUORUM
- II. APPROVAL OF MINUTES FROM THE NOVEMBER 1, 2023 MEETING
- III. SUBDIVISIONS
  - 1. Consideration of a final plat for Epperson Place Section 1, comprising 20 lots and 2 common areas on 7.93± acres in a RS-1 (Single Family Residential) District, submitted by Surveying Services, Inc. on behalf of K&L Properties
  - 2. Consideration of a final plat for Shiloh Springs Section 13B, comprising 10 lots on 4.81± acres and Section 14B, comprising 14 lots and 1 common area on 8.96± acres in a RS (Single Family Residential) District, submitted by Surveying Services, Inc. on behalf of Jerry Winberry
- IV. DESIGN REVIEW
  - 1. Consideration of a design review application for a new fence, proposed to be located at 418 East Baltimore Street, submitted by James Lawrence III
- V. REVISIONS TO RULES AND REGULATIONS
  - 1. Consideration of approval of revisions to Rules and Regulations for the Control of Soil Erosion and Stormwater and Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System
- VI. OTHER BUSINESS
  - 1. Any other business properly presented
- VII. ADJOURN

**MINUTES**  
**JACKSON MUNICIPAL REGIONAL PLANNING COMMISSION**  
**CITY HALL – GEORGE A. SMITH MEETING ROOM**  
**FIRST FLOOR – 109 EAST MAIN STREET – SUITE 107**  
**DECEMBER 6, 2023—3:00 P.M.**

**Members Present:** Jerry Day, Chair  
Wayne Arnold, Vice Chair  
Mayor Scott Conger  
Mandy White  
Pat Ross

**Members Absent:** Janna Hellums  
Charles Adams  
Andrew Long  
Councilwoman Marda Wallace

**Staff Present:** Stan Pilant, Director of Planning

**Others Present:** Amanda Hicks, City Engineer

The meeting was called to order upon Chair Jerry Day determining that a quorum was present.

The minutes of the November 1, 2023 meeting were presented and a call to vote on approval of the minutes as presented was put forth. Hearing no objections, the motion to approve the minutes passed unanimously.

**Consideration of a final plat for Epperson Place Section 1, comprising 20 lots and 2 common areas on 7.93± acres in a RS-1 (Single Family Residential) District, submitted by Surveying Services, Inc. on behalf of K&L Properties --** Mr. Pilant presented the final plat to the Planning Commission. Using a location map, he explained the location of the site, surrounding uses in the area and the components of the final plat. The subdivision creates 20 new building lots by adding the first section of Rockford Drive from Old Humboldt Road, which is a public street.

After the administrative review, the planning, engineering, and JEA engineering staffs recommend approval of the final plat with the following conditions:

- 1) The developer provides to the Jackson Energy Authority a wastewater system development fee in the amount of \$8,000. A bond will be required in the amount of \$14,000 for the remaining wastewater work to be completed.
- 2) The developer provides to the Jackson Energy Authority a water system development fee in the amount of \$8,000.
- 3) The developer provides to the City of Jackson a street performance security in the amount of \$17,700.

- 4) The developer provides to the City of Jackson a street light installation fee in the amount of \$2,000.
- 5) All inspections and testing will need to be completed prior to recording the final plat.

A motion was made by Vice Chair Wayne Arnold, seconded by Mandy White to approve the final plat for Epperson Place Section 1, as recommended by the staff. Motion passed unanimously.

**Consideration of a final plat for Shiloh Springs Section 13B, comprising 10 lots on 4.81± acres and Section 14B, comprising 14 lots and 1 common area on 8.96± acres in a RS (Single Family Residential) District, submitted by Surveying Services, Inc. on behalf of Jerry Winberry** -- Mr. Pilant presented the final plat to the Planning Commission. Using a location map, he explained the location of the site, surrounding uses in the area and the components of the final plat. The subdivision creates 24 new building lots by adding Chadro Cove and Haley's Cove, which are public streets.

After the administrative review, the planning, engineering, and JEA engineering staffs recommend approval of the final plat with the following conditions:

- 1) The developer provides to the Jackson Energy Authority a wastewater system development fee in the amount of \$9,600.
- 2) The developer provides to the Jackson Energy Authority a water system development fee in the amount of \$9,600.
- 3) The developer provides to the City of Jackson a street performance security in the amount of \$19,800.
- 4) The developer provides to the City of Jackson a street light installation fee in the amount of \$2,000.
- 5) All inspections and testing will need to be completed prior to recording the final plat.

A motion was made by Vice Chair Wayne Arnold, seconded by Pat Ross to approve the final plat for Shiloh Springs Section 13B and 14B, as recommended by the staff. Motion passed unanimously.

**Consideration of a design review application for a new fence, proposed to be located at 418 East Baltimore Street, submitted by James Lawrence III** -- Mr. Pilant presented the design review request to the Planning Commission. Using a location map, he explained the location of the site and that the applicant will be constructing a new fence around the perimeter of the property in connection with the proposed redevelopment of the property and building located as a high-end dining establishment.

After review, the Planning Staff would recommend approval of the design review request since it represents a good design and is similar in design to other fences in the area.

A motion was made by Pat Ross, seconded by Vice Chair Wayne Arnold to approve the proposed design review for a new fence located at 418 East Baltimore Street, as recommended by the staff. Motion passed unanimously.

**Consideration of approval of revisions to Rules and Regulations for the Control of Soil Erosion and Stormwater and Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System --** Mr. Pilant stated that according to city code, whenever there are changes or revisions made to the rules and regulations affecting soil erosion and stormwater, it has to be reviewed and approved by the Planning Commission. The city was audited back in September 2023 which resulted to making changes or altering the rules and regulations to match state law.

The Environmental Advisory and Appeals Board has met and recommended approval of the revisions to the Planning Commission.

A motion was made by Vice Chair Wayne Arnold, seconded by Mandy White to approve the revisions to Rules and Regulations for the Control of Soil Erosion and Stormwater and Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System, as recommended by the staff. Motion passed unanimously.

Afterwards, Amanda Hicks, City Engineer, also added that several different stormwater changes will go into effect over the next two years.

There being no further business, the meeting was adjourned.

Stan Pilant  
111 E. Main St.  
Suite 201  
Jackson, Tennessee 38301



Telephone: 731-425-8286  
Fax: 731-927-8781  
Email: [spilant@jacksontn.gov](mailto:spilant@jacksontn.gov)

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## MEMORANDUM

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**TO:** Wendy Rhyne, Stormwater/Engineer

**FROM:** Stan Pilant, Director of Planning, Growth and Development

**RE:** Rules and Regulations for the Control of Soil Erosion and Stormwater and Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System

**DATE:** December 14, 2023

The Jackson Municipal Regional Planning Commission met on Wednesday, December 6, 2023, and unanimously approved the revisions to the Rules and Regulations for the Control of Soil Erosion and Stormwater and Rules and Regulations for the Control of Illicit Discharges to the City Storm Sewer System.

A handwritten signature in blue ink, appearing to be "Stan Pilant", written over a horizontal line.

Stan Pilant  
Director of Planning, Growth and Development

Scott Conger, Mayor

## **CITY OF JACKSON, TENNESSEE**

### **RULES AND REGULATIONS FOR THE CONTROL OF ILLICIT DISCHARGES TO THE CITY STORM SEWER SYSTEM**

#### **SECTION 1. AUTHORITY**

These Rules and Regulations are promulgated pursuant to City of Jackson Code of Ordinances, Title 14, Chapter 6, titled “Regulations for Discharges into the Storm Sewer System”.

#### **SECTION 2. PURPOSE**

The purpose of these rules and regulations is to provide for the health, safety, and general welfare of the citizens of the City of Jackson through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. These rules and regulations establish methods for controlling discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) to the City to comply with the current National Pollution Discharge Elimination System (NPDES) permit and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges.

The objectives of these rules and regulations are:

- 1) To regulate the contribution of pollutants to the MS4 by stormwater discharges by any user.
- 2) To prohibit illicit connections and discharges to the MS4.
- 3) To establish procedures to carry out all inspection, surveillance, monitoring, and enforcement necessary to ensure compliance with these rules and regulations.

These rules and regulations are a part of the City of Jackson’s Stormwater Management Program and are intended to prevent certain non-stormwater discharges to and improper disposal of contaminants in the storm sewer system, to reduce, to the maximum extent practicable, pollutants that may be present in the outfalls from the storm sewer system.

#### **SECTION 3. DEFINITIONS**

For the purpose of these rules and regulations, the following shall mean:

Administrative or Civil Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.



Board. Also referred to as the Environmental Advisory/Appeals Board.

Clean Water Act (CWA). The Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.).

City. Also referred to as the City of Jackson.

Construction Activity. Activities which include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Discharge or discharge of a pollutant. The addition of pollutants to waters from a source.  
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 present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hot spot. An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater. Examples might include operations producing concrete or asphalt, auto repair shops, auto supply shops, large commercial parking areas and restaurants.

Illicit Discharge. An illicit discharge is defined as either of the following:

- (i) Any discharge to a MS4 that is not composed entirely of stormwater.
- (ii) Any infiltration into the storm drain system resulting from spills, illegal dumping, and contaminated runoff from residential, commercial and industrial properties.

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

- (i) Any drain or conveyance, whether on the surface or subsurface that allows an illicit discharge to enter the storm drain system including but not limited to any conveyances that allow any non-stormwater 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,
- (ii) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Municipal Separate Storm Sewer System (MS4). The system of conveyances (including sidewalks, 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)...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 Clean Water Act that discharges into waters of the United States.
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

National Pollutant Discharge Elimination System (NPDES) Permit. 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-Stormwater Discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Outfall. Location where stormwater exits the facility property, including pipes, ditches, swales, and other structures that transport stormwater.

Person. Any and all persons, including individuals, firms, partnerships, associations, public or private institutions, state or federal agencies, municipalities or political subdivisions or public or private corporations.

Pollutant. Anything that 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 some may cause or contribute to pollution; floatables; pesticides, 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.

Potable Water. Any water from a public water supply system or private well that is suitable to drink.

Significant Contributor. A source of pollutants where the volume, concentration, or mass of a pollutant in a stormwater discharge can cause or threaten to cause pollution, contamination, or nuisance that adversely impact human health or the environment and cause or contribute to a violation of any applicable water quality standards for receiving water.

Storm Sewer System. A system of roadside drainage ditches, street curbs & gutters, curb inlets, catch basins, pipes, culverts, manholes, basins and natural & manmade channels and swales, located within the City of Jackson and owned by the City of Jackson.

Stormwater. Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater control measure or SCM. Permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

Stormwater associated with industrial activity. Defined in 40 C.F.R. 122.26(b)(14) and incorporated here by reference. Most relevant to the City is 40 C.F.R. 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities, including borrow pits containing erodible material. Disturbance of soil for the purpose of crop production is exempt from NPDES permit requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial (construction) activity. Maintenance to the original line and grade, hydraulic capacity; or to the original purpose of the facility (e.g., re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair and repaving of an existing road) is not considered a construction activity.

Stormwater discharge- construction related activities. Activities that cause, contribute to or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; and activities to control stormwater including the siting, construction and operation of best management practices (BMPs).

Stormwater Management 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.

Stream. Defined by TCA 69-3-103(38) “stream” means a surface water that is not a wet weather conveyance.

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

#### **SECTION 4. PROHIBITION OF ILLICIT DISCHARGES**

No person shall discharge or cause to be discharged into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater. No person shall allow discharges that flow from a stormwater facility that is not inspected in accordance with the City’s Rules and Regulations for the Control of Soil Erosion and Stormwater - Section 6.C. Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning

wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxics.

The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as described in Section 5.

## **SECTION 5. EXCEPTIONS TO ILLICIT DISCHARGES**

Discharges to the storm sewer system that are in accordance with a valid NPDES Permit shall not be considered illicit discharges under these rules and regulations. Any person who holds or obtains a valid NPDES Permit to discharge to the storm sewer system shall provide a copy of the permit to Stormwater Management upon request.

The following are categories of non-stormwater discharges or flows (i.e., illicit discharges) that are not identified as a significant contributor of pollutants to the City Storm Sewer System:

1. Water line flushing
2. Landscape irrigation
3. Diverted stream flows
4. Rising ground waters
5. Uncontaminated ground water infiltration (Infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)
6. Uncontaminated pumped ground water
7. Discharges from potable water sources
8. Air conditioning condensation
9. Irrigation water
10. Springs
11. Water from crawl space pumps
12. Footing (foundation) drains
13. Lawn watering
14. Individual residential car washing

15. Flows from riparian habitats and wetlands
16. Dechlorinated swimming pool discharges
17. Street wash water with no soaps or solvents
18. Discharges or flows from firefighting activities

Unless the City determines they are significant contributors of pollutants to the MS4.

## **SECTION 6. PROHIBITION OF ILLICIT CONNECTIONS**

The construction, use, maintenance or continued existence of illicit connections to the storm sewer system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under laws or practices applicable or prevailing at the time of connection. This prohibition expressly includes SCM's connected to the system not properly inspected and maintained in accordance with this ordinance.

Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMP's necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. Discharges from existing SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be prohibited.

## **SECTION 7. 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 in, or may result in, illicit discharges or pollutants discharging into the storm sewer system, the person shall take all necessary steps to ensure the discovery, containment and cleanup of such release.

In the event of release of hazardous materials, the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the City of Jackson Stormwater Management in person, or by telephone, fax or email 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 Jackson Stormwater Management within three (3) business days of the telephone 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 (3) years.

## **SECTION 8. ILLEGAL DUMPING**

No person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the City of Jackson. Such illegal activity exposes runoff to contamination, generating an illicit discharge. Therefore, any individual or corporation guilty of illegal dumping may have committed a violation of this ordinance.

## **SECTION 9. VIOLATIONS**

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of the rules and regulations for the Control of Illicit Discharges to the City Storm Sewer System. Any person who has violated or continues to violate the provisions of these rules and regulations, may be subject to the enforcement response plan (ERP) outlined in the next section.

In the event the violation constitutes an immediate danger to public health or public safety, the City of Jackson is authorized to enter upon the subject private property, without giving prior notice, to take any and all measures necessary to correct the violation and/or restore the property.

Stormwater Management personnel will periodically conduct visual screening and field tests of storm sewer system outfalls to detect illicit discharges. Reports submitted to Stormwater Management by the general public and/or City Departments will also be investigated. Illicit discharge complaint investigations will be performed within seven (7) days of receiving the complaint. Upon detection of an illicit discharge, an attempt will be made to trace the discharge to its source. Upon verification of an illicit discharge source, the enforcement response plan (ERP) will be implemented.

## **SECTION 10. ENFORCEMENT**

### **A. Enforcement authority.**

The City of Jackson shall have the authority to issue notices of violation and citations, and to impose civil penalties to anyone that violates this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City, The City's enforcement authority includes (as set forth in the City's Enforcement Response Plan (ERP)):

1. Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action.
2. Written Notices – Written notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.

3. Citations with Administrative Penalties – The City has the authority to assess monetary penalties, which may include civil and administrative penalties.
4. Stop Work Orders – Stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.
5. Cease and Desist Order – The Cease and Desist Order will halt all activities except for those activities directed at cleaning up, abating discharge, and installing control measures.
6. Withholding of Plan Approvals or Other Authorizations – Where a facility is in noncompliance, the City’s own approval process affecting the facility’s ability to discharge to the MS4 can be used to abate the violation.
7. Additional Measures – The City may also use other escalated measures provided under local legal authorities. The City may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project’s bond or directly billing the responsible party to pay for work and materials.

B. Notification of Violation.

1. Verbal warning. Verbal warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.
2. Written notice. Whenever the City finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the City may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the City. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.
3. Consent orders. The City is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.
4. Show cause hearing. The City may order any person who violates this chapter or permit, or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement

action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

5. Compliance order. When the City finds that any person has violated or continues to violate this chapter or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures or devices be installed and/or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.
6. Cease and desist and stop work orders. When the City finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the City may issue a stop work order or an order to cease and desist all such violations and direct those persons in noncompliance to:
  - a. Comply forthwith; or
  - b. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation; including halting operations except for terminating the discharge and installing appropriate control measures.
7. Suspension, revocation or modification of permit. The City may suspend, revoke or modify the permit authorizing the land development project or any other project of the applicant or other responsible person within the City. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the City may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
8. Conflicting standards. Whenever there is a conflict between any standard contained in this chapter and in the BMP manual(s) adopted by the City under this ordinance, the strictest standard shall prevail.

#### C. Penalties.

Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City, shall be guilty of a civil offense.

1. Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.



2. Measuring civil penalties. In assessing a civil penalty, the City shall consider:
  - a. The harm done to the public health or the environment;
  - b. Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
  - c. The economic benefit gained by the violator;
  - d. The amount of effort put forth by the violator to remedy this violation;
  - e. Any unusual or extraordinary enforcement costs incurred by the City; The amount of penalty established by ordinance or resolution for specific categories of violations; and
  - f. Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
  
3. Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the City may recover:
  - a. All damages proximately caused by the violator to the City, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.
  
  - b. The costs of the City's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.
  
4. Referral to TDEC. In accordance with the City's Enforcement Response Plan and the NPDES Permit requirements, the City may also notify TDEC of violations.
  
5. Other remedies. The City may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.
  
6. Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

## **SECTION 11. APPEALS AND VARIANCES**

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the City's governing body.

- A. Cease and Desist Order or assessment of correction costs. Any person aggrieved by the issuance of a Cease and Desist Order or assessment of correction costs per the City Correction/Collection Procedures, may appeal such actions to the Environmental Advisory/Appeals Board. The Notice of Appeal shall be in writing on forms provided by Stormwater Management and must be submitted to Stormwater Management within

thirty (30) days of the after the action that is being appealed. The hearing of the appeal shall be in accordance with the Bylaws of the Environmental Advisory/Appeals Board.

- B. Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.
- C. Public hearing. Upon receipt of an appeal, the City's governing body, or other appeals board established by the City's governing body shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days' notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the governing body of the city shall be final.
- D. Appealing decisions of the City's governing body. Any alleged violator may appeal a decision of the City's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.
- E. Variances.

The Environmental Advisory/Appeals Board may vary the provisions of these rules and regulations in those situations where, in the Board's opinion, the enforcement thereof would do manifest injustice and would be contrary to the spirit and purpose of this code, or public interest, or when, in its opinion, the interpretation of the rules and regulations by Stormwater Management should be modified or reversed. Variances shall not violate any Federal, State or Local ordinance, law, rule or regulation or permit issued to the City of Jackson. If the decision of the Board reverses or modifies an order or assessment of Stormwater Management or varies the application of any provisions of this code, the minutes of the meeting of the Board must be specific as to the reasons for the reversal, modification or change. Stormwater Management shall immediately take action in accordance with such decision. Every decision of the Board shall be final; subject however to such remedy as any aggrieved person might have at law and equity.

**CITY OF JACKSON, TENNESSEE**  
**RULES AND REGULATIONS FOR THE**  
**CONTROL OF SOIL EROSION AND STORMWATER**

**SECTION 1. AUTHORITY**

These Rules and Regulations are promulgated pursuant to City of Jackson Code of Ordinances, Title 14, Chapter 5, titled “EROSION AND STORMWATER CONTROL”.

**SECTION 2. PURPOSE**

Within the City of Jackson, stormwater runoff from disturbed land sites convey high volumes of sediment and other pollutants into receiving waters, degrading water quality and land surfaces, contributing to the impairment of the flood plain, increasing street and storm sewer maintenance cost, and increasing flooding and dusty conditions. The removal of existing trees and vegetation can compound and aggravate the aforementioned conditions.

The purpose of these rules and regulations is to protect, maintain, and enhance the environment of the City of Jackson and the public health, safety and the general welfare of the citizens of the City, by controlling discharges of pollutants to the city’s stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the City of Jackson. These rules and regulations establish methods for controlling discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) and will enable the City to comply with the National Pollution Discharge Elimination System (NPDES) permit and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges.

The objective of these rules and regulations are:

- 1) To reduce erosion and sedimentation resulting from the development of land within the City of Jackson.
- 2) To attenuate the stormwater runoff from developed land.
- 3) To integrate measures to reduce practices that adversely affect the natural vegetative cover within the City of Jackson.

**SECTION 3. DEFINITIONS**

For the purpose of these rules and regulations, the following shall mean:

Administrative or Civil Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City of Jackson declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars (\$50.00) and

not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

Analytical monitoring. Test Procedures for the Analysis of Pollutants - Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required. Pollutant parameters shall be determined using sufficiently sensitive methods in Title 40 C.F.R. § 136, as amended, and promulgated pursuant to Section 304 (h) of the Act. The chosen methods must be sufficiently sensitive as required in state rule 0400-40-03-.05(8).

Aquatic Resource Alteration Permit (ARAP). Physical alterations to properties of the waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). ARAP means a permit issued pursuant to T.C.A. § 69-3-108 of the Act, which authorizes the alteration of properties of waters of the state that result from activities other than discharges of wastewater through a pipe, ditch, or other conveyance.

As built plans (record drawings). Drawings depicting conditions as they were actually constructed.

Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures; and practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage. BMPs include source control practices (non-structural BMPs) and engineered structures designed to treat runoff.

- Structural BMPs are facilities that help prevent pollutants in stormwater runoff from leaving the site.
- Non-structural BMPs are techniques, activities and processes that reduce pollutants at the source.

BMP Manual. Technical guidance including additional policies, criteria, standards, specifications, constants, and information for the proper implementation of the requirements of the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges.

Board. Also referred to as the Environmental Advisory/Appeals Board.

Buffer Zone or Water Quality Riparian Buffer. A permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

Channel. A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clearing. Removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities. Clearing, grading, and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams, or power lines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).

City. Also referred to as the City of Jackson.

Design storm. A storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent. The estimated design rainfall amounts, for any return period interval (i.e., 1-yr, 2-yr, 5-yr, 25-yr, etc.) in terms of either depths or intensities for any duration, can be found by accessing the data available at [https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_map\\_cont.html](https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html).

Detention basin. - A structure or facility, natural or artificial, which stores stormwater on a temporary basis and releases it at a controlled rate.

Disturbed area. An area of land subjected to erosion due to the removal of vegetative cover and/or earthmoving activities, including filling.

Drainage. The interception and removal of groundwater or surface water by natural or artificial means.

Erosion and Drainage Control Plan (EDCP). A plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

Exceptional Tennessee Waters. Surface waters designated by the Tennessee Department of Environment and Conservation as having the characteristics set forth at Tennessee Rules, Chapter 0400-40-03-.06(4). Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.

Impervious Cover. Surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc).

Land Disturbance Activity. Any activity which changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

Maintenance Agreement. A legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

Operator. Any person who owns, leases, operates, controls, or supervises a source. Including, but not limited to, an owner or operator of any “facility or activity” subject to regulation under the NPDES program.

Permanent Stabilization. When all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- A perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion.
- Equivalent permanent stabilization measures such as the use of riprap; permanent geotextiles; hardened surface materials including concrete, asphalt, gabion baskets or Reno mattresses have been employed.
- For construction projects on land used for agricultural or silvicultural purposes, permanent stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

Person. Any and all persons, including individuals, firms, partnerships, associations, public or private institutions, state or federal agencies, municipalities or political subdivisions or public or private corporations.

Pollution. Degradation of water quality, preventing the use of water for some specific purpose, caused by a natural or human-made substance.

Priority construction. Any construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.

Rainfall event. Defined as any occurrence of rain preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.

Registered Engineer and Registered Landscape Architect. An engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.

Retention basin. A wet or dry stormwater holding area, either natural or manmade, which does not have an outlet to adjoining watercourses or wetlands other than an emergency spillway.

Sediment. Solid material, both inorganic (mineral) and organic, that is in suspension, is being transported; or has been moved from the site of origin by wind, water, gravity or ice as a product of erosion.

Sediment basin. A temporary basin consisting of an embankment constructed across a wet weather conveyance, an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, impoundment, permanent pool, primary spillway, secondary or emergency spillway and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., waters with unavailable parameters, Exceptional TN Waters, or waters with available parameters).

Site. Any tract, lot, or parcel of land or combination of tracts, lots or parcels of land proposed for development.

Soil erosion. The wearing away of land by the action of wind, water, gravity or a combination thereof.

Stop Work Order. An order issued which requires that all construction activity on a site be stopped.

Stormwater. Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater control measure or SCM. Permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

Stormwater runoff. Waters from rains falling within a tributary drainage basin, flowing over the surface of the ground or collected in channels, watercourses, or conduits, measured in depth of inches.

Stream. Defined by TCA 69-3-103(38) “stream” means a surface water that is not a wet weather conveyance.

Tennessee Erosion and Sediment Control (TDESC) Handbook. Guidance issued by the Division of Water Resources for the purpose of developing Stormwater Pollution Prevention Plans and Erosion and Sediment Control Plans required by the Construction General Permit CGP.

Temporary stabilization. When vegetation or non-erodible surface has been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease.

Treatment chemicals. Polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are polyacrylamide-chitosan (PAM–CS).

Turbidity. Cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.

Vegetative cover. Grasses, shrubs, trees, and other vegetation, which hold and stabilize soils.

Waste site. An area where material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.

Waters (or waters of the state). Any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

Waters with unavailable parameters. Any segment of surface waters that has been identified by the TDEC as failing to support one or more classified uses. Unavailable parameters exist where water quality is at, or fails to meet, the levels specified in water quality criteria in Rule 0400-40-03-.03, even if caused by natural conditions. In the case of a criterion that is a single response variable or is derived from measurement of multiple response variables, the unavailable parameters shall be the agents causing water quality to be at or failing to meet the levels specified in criteria. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (<https://tdeconline.tn.gov/dwr/>), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html>.

Water quality riparian buffer. A permanent strip of natural perennial vegetation adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing the risk of any potential sediments, nutrients, or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

Water quality treatment volume (WQTV). A portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the 1-year 24-hour design storm. The WQTV is further determined by the type of treatment provided.

Wetland. Land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh.



Wet weather conveyances. Man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:

- The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
- The conveyance's channels are at all times above the groundwater table.
- The flow carried by the conveyance is not suitable for drinking water supplies.
- Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Tennessee Rules, Chapter 0400-40-3-.04(3)).

#### **SECTION 4. SITE DEVELOPMENT PERMIT REQUIREMENTS**

##### **A. General**

A Site Development Permit is required for any activity(s) within the City of Jackson that will involve any clearing, grading, or any form of land disturbance caused by the movement of earth or that will increase stormwater runoff due to a decrease of soil permeability. No land shall be disturbed within the City of Jackson unless a Site Development Permit has been issued in accordance with these regulations.

For the purpose of this policy, clearing shall include but not be limited to, activities that change the natural character of the existing vegetative cover such as clear cutting, grubbing and selective tree removal (i.e. logging).

For new development and redevelopment projects that involve land disturbances of one or more acres of land, or will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land, proof of coverage under the Tennessee Construction General Permit (CGP) when requested and a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the City when requested, will be required in addition to the site development permit.

##### **B. Exceptions**

No Site Development Permit shall be required for:

1. Accepted land management practices as identified in the "Tennessee Right to Farm Act" (Section 43-26-101, TCA).
2. Home gardens, home landscaping, or lawn preparation at existing residential houses unless the possibility for erosion or alteration of drainage patterns or structures is such

that adjacent properties or waterways may be affected.

3. The installation, maintenance and repair of any public utility as well as roadway and storm drainage construction and maintenance by government agencies and their agents, provided, however that such land disturbing activities shall comply fully with the Rules and Regulations set forth by the Tennessee Department of Environment and Conservation (TDEC).

### C. Construction Stormwater Management

1. The City of Jackson adopts the current edition of the Tennessee Erosion and Sediment Control Handbook produced by the Tennessee Department of Environment and Conservation (TDEC), as its MS4 stormwater construction BMP manual.
2. Requirements for design storm for all waters as well as special conditions for unavailable parameters waters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000).
3. Construction site operators are required to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.
4. Requirements for all priority construction activities must include preconstruction meetings with construction site operators for priority construction activities.
5. Construction site operators are required to implement appropriate erosion prevention and sediment control measures and best management practices. EPSC requirements shall meet the Tennessee's CGP design storm(s), be consistent with the TDEC ESC Handbook best management practices and with the requirements of this ordinance.
6. Where site assessments are required by the CGP, the operator shall provide a copy of the assessment to the City.
7. Twice-Weekly inspections of the site and the BMP's/SCM's must be performed by an individual who has either received certification under the Level I Fundamentals of Erosion Prevention and Sediment Control course or has other credentials identified as equivalent within this ordinance.
8. Landscaping and stabilization requirements.
  - a. Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be stabilized. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must

be completed not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- i. where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
    - ii. where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days.
  - b. For steep slopes of 35% or more, stabilization measures shall be initiated within 7 days in Construction buffer zones. Construction buffer zones shall be those water quality buffers and buffer zones as defined in 14-502 above and shall meet the requirements in this ordinance and, where appropriate in the TN CGP. The criteria for the width of the construction buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark." Construction buffers are not primary sediment control measures and shall not be relied on as such. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. The designer/operator must comply with the vegetation requirements and the permissible land uses set forth for buffers in the TN CGP. Where it is not practicable to maintain a construction water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used.
  - c. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as properly anchored mulch, soil binders or matting must be employed.
9. As built plans (record drawings). All applicants are required to submit actual as built plans certified by the design engineer for any structures located on-site within 90 days after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A certification by the design engineer certifying that SCM's will function within original design parameters as constructed shall be included. A final inspection by the City is required before any performance security or performance bond will be released. The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMP's/SCM's have been made and accepted by the City. No bonds or securities shall be released by

the City until the as built plans have been accepted by the City. The warranty period for any infrastructure to be accepted by the City for maintenance shall not commence until the City has accepted the as built plans.

## **SECTION 5. REQUIREMENTS FOR EROSION AND DRAINAGE CONTROL PLANS (EDCP)**

### **A. Applicability & Responsibility**

For purposes of obtaining a Site Development Permit for residential subdivisions and commercial subdivisions/establishments, an Erosion and Drainage Control Plan (EDCP) meeting the requirements established in Section B below, shall be submitted for approval to the City by the owner/developer. This information shall be supplied for the entire tract of land whether or not the property will be developed in stages. If the development is to occur in stages, all phases will be left in the natural/undisturbed state except for those phases under active construction.

The EDCP must be approved by the City Engineer or Authorized Representative prior to commencement of land disturbance activities. The owner/developer shall implement the requirements of the approved EDCP and shall be responsible for continuous maintenance of the erosion and sediment control measures during construction. For residential & commercial subdivision of land, the owner/developer shall be responsible for implementation of the entire plan including drainage improvements and erosion control measures that go through or across several lots/sites in the subdivision. The subsequent owner of each building lot/site shall also be required to obtain a Site Development Permit that shall be obtained concurrently with the building permit. No formal EDCP is required for a single residence on a parcel of 2 acres or less. However, the Homebuilder shall provide and maintain erosion and drainage control measures to meet the terms and conditions established in his/her Site Development Permit.

An amended EDCP must be submitted to the City Engineer or Authorized Representative if site plans or conditions change during land disturbance activities.

### **B. Minimum Requirements for the EDCP**

1. The EDCP shall be prepared and stamped by a Professional Engineer (P.E.) registered in the State of Tennessee. The City Engineer may wave the P.E. requirement if the EDCP requires no engineering design calculations.
2. The EDCP shall specify erosion prevention and sediment control best management practices (BMPs) measures that are in accordance with the recommendations contained in the current Tennessee Erosion and Sediment Control Handbook produced by the Tennessee Department of Environment and Conservation (TDEC).
3. The EDCP must provide documentation that all required permits have been obtained from Federal and State regulatory agencies or provide a written waiver of such permits.

4. The EDCP shall be drawn at a scale of 1" = 100' (or larger) and will include (a) a site location (key map) as well as the adjacent properties and (b) identification of any structural or natural feature of the land which has a significant impact on drainage or siltation controls. Grading limits shall be shown.
5. Special flood hazard areas shall be identified by Floodway and Flood Fringe boundary lines as shown by the Federal Emergency Management Agency scientific and engineering reports, with accompanying Flood Insurance Rate Maps and Flood Boundary and Floodway Maps and any revision(s). Floodway data shall be plotted on the plans from scaled information obtained from FEMA studies. Flood Fringe data shall be plotted on the plans from scaled information and then refined by adjusting this line to existing contours relative to the hydraulic profile of the stream for the 100-Year Frequency Flood.
6. The EDCP shall show property boundary bearings and distances for the site on which the work is to be completed.
7. The EDCP shall contain a reasonable estimate of the anticipated starting and completion dates of the development. The timing schedule shall include the sequence and application of erosion and sediment control measures.
8. The EDCP shall show existing and proposed topography of the site at two (2) foot contour intervals except on slopes exceeding 20% grade. In such conditions, contour intervals shall not exceed five (5) feet.
9. The EDCP shall show the elevation, dimension, location, extent and slope of all existing and proposed ditch lines.
10. The EDCP shall show the location and identification of all existing and proposed site features and/or structures (either manmade or natural) that could have a significant impact on drainage or siltation controls.
11. The EDCP shall contain plans and specifications for all drainage provisions, retaining walls, cribbing, planting, anti-erosion devices or other protective devices (whether temporary or permanent) to be constructed in connection with, or as a part of the proposed work.
12. The EDCP shall contain a map showing the drainage area of land tributary to the site and calculations of estimated runoff used to determine the design characteristics of any drainage device(s). Development of property upstream shall be considered in design calculations. Downstream improvements may also be required of the developer if such improvements are required to handle additional stormwater runoff generated by the proposed development.
13. The EDCP shall document that the post-development maximum stormwater flow rate from the site will not exceed the pre-development maximum stormwater flow rate for

- the 1, 2, 5 and 10-year 24-hour frequency rainfall events. Generally accepted engineering methods shall be used to calculate stormwater runoff rates and volumes. The EDCP shall show plans and specifications for structures necessary to limit post-development runoff to pre-development rates.
14. The EDCP shall outline plans for post-construction care, maintenance, or final disposition of silt basins, stormwater retention/detention basins, or other structural improvements or devices included in the plan.
  15. The EDCP shall list the name(s) of all stormwater receiving waters from the construction site. Any construction activity that discharges directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters will be defined as a priority construction site. Priority construction site operators will be required to attend a pre-construction meeting prior to work commencing.
  16. Erosion and sedimentation control measures and drainage structures shall be designed, installed, and maintained so as to provide effective soil erosion and drainage control. Drainage area recommendations and treatment design specifications are provided in the current Tennessee Erosion and Sediment Control Handbook. The selection and design of the control measures and structures should be consistent with the design storm requirements for the current Tennessee Construction General Permit (TNR100000).
  17. For an outfall that receives drainage from 10 or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 2-year, 24-hour storm and runoff from each acre drained, or equivalent control measures as specified in the current Tennessee Erosion and Sediment Control Handbook, shall be required until permanent stabilization of the site.
  18. The EDCP shall specify that erosion and sediment control measures shall be inspected twice weekly at intervals at least 72 hours apart and repaired as necessary. During prolonged rainfall, daily checking and repairing is necessary. Twice-Weekly inspections of the site and the BMP's/SCM's must be performed by an individual who has either received certification under the Level I Fundamentals of Erosion Prevention and Sediment Control course or has other credentials identified as equivalent within this ordinance.
  19. The EDCP shall specify that erosion and sediment control measures shall be in place and functional prior to any clearing, grading, excavating, filling or otherwise disturbing natural terrain and that these control elements must be maintained throughout the development activity.
  20. The EDCP shall include a description of temporary and permanent stabilization practices. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees and the preservation of mature vegetation. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or

permanently ceased.

## **SECTION 6. PERMANENT STORMWATER MANAGEMENT**

### **A. Design and Construction Inspection**

1. In order to comply with the City's permanent stormwater standards for new development and redevelopment projects, design and install SCMs as established by Tennessee Rule 0400-40-10-.04 and comply with other requirements of Tennessee Rule 0400-40-10-.04. Note that for design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.
2. SCMs must be designed to provide full treatment capacity within 72 hours following the end of the preceding rain event for the life of the new development or redevelopment project. The designer may select from the most appropriate alternatives listed in the City's BMP Manual.
3. Designs shall be based on the 24-hour design storm adopted by the City: The City has adopted, for use in designing water quality SCMs, the design storm requirements as established in Tennessee Rule 0400-40-10-.04. The Post Construction/Permanent water quality design storm is a 1-year, 24 storm event for water quality SCMs.
4. In addition to the design storm requirements as established in Tennessee Rule 0400-40-10-.04., the City requires the following design standards for detention and retention ponds.
  - a. The calculated peak flow rate of stormwater runoff resulting from a 1-year, 2-year, 5-year, and a 10-year frequency 24-hour duration storm shall be no greater after development of the site than that which would have resulted from the same return frequency storm on the same site prior to the development of the site.
  - b. The plans shall include sufficient design information to show that the facility will operate as required as established by Tennessee Rule 0400-40-10-.04 and complying with other requirements of Tennessee Rule 0400-40-10-.04. This shall include the existing or pre-development peak flow discharges, the post-development flow discharges, and volumes of stormwater runoff based on the proposed development, as well as all necessary computations used to determine the reduced peak flow rates for the design storms. The capacity of the facility shall be sufficient to control the volume of stormwater runoff resulting from a 1-year, 2-year, 5-year and a 10-year frequency 24-hour duration storm.
  - c. Discharge from the stormwater detention pond shall be routed to an existing natural or manmade stormwater conveyance. Calculations showing the capacity of the receiving stormwater conveyance and its capacity to convey the 1-year, 2-year, 5-year and a 10-year frequency storm shall be provided.

5. Water Quality Riparian Buffers. Post Construction/Permanent water quality riparian buffers is defined and shall meet the requirements described in these rules and regulations. The criteria for the width of the post construction/permanent buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the “ordinary high-water mark.” Stormwater discharges should enter the post construction/permanent water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow.

Post Construction/Permanent buffers for waters with available parameters for siltation or habitat alteration or unassessed waters:

- a. Average buffer width: 30 feet.
- b. Minimum buffer width: 15 feet

Post Construction/Permanent buffers for Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration:

- a. Average buffer width: 60 feet.
- b. Minimum buffer width: 30 feet

The designer/operator must comply with the vegetation requirements and the permissible land uses set forth for buffers in the MS4 permit.

#### B. Permanent SCM Maintenance and Inspection

1. As built plans. All applicants are required to submit actual as built plans for any structures located on-site within 90 days after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by either a registered professional engineer or landscape architect licensed to practice in Tennessee. A sealed certification by the design engineer that all SCM's will function within design parameters as constructed shall accompany the as built plans. A final inspection by the City is required before any performance security or performance bond will be released. The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all stormwater management facilities have been made and accepted by the City.
2. In addition to the certified as built drawings, the City shall be provided with a permanent stormwater management plan for the site and all stormwater management



facilities (e.g., SCM's). Occupation permits shall not be granted until the permanent stormwater management plan has been approved and accepted by the City.

3. Inspection of stormwater management facilities. Periodic inspections of facilities shall be performed, documented, and reported in accordance with this chapter, as detailed in §14-506.
4. Records of installation and maintenance activities. Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation of the stormwater facility, and of all maintenance and repairs to the facility, and shall retain the records for at least three (3) years. These records shall be made available to the City during inspection of the facility and at other reasonable times upon request.
5. Failure to meet or maintain design or maintenance standards. If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this chapter, the City, after notice as specified in the Enforcement Response Plan, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the City shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have thirty (30) days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the City may take necessary corrective action. The cost of any action by the City under this section shall be charged to the responsible party.
6. In the event that the stormwater management facility becomes a danger to public health/public safety-the City may take such immediate corrective action as deemed necessary.

C. New Development, Existing Locations and Ongoing Development

1. On-site stormwater management facilities inspection and maintenance agreement.
  - a. Where the stormwater facility is located on property that is subject to a development agreement, and the development agreement provides for a permanent stormwater maintenance agreement that runs with the land, the owners of property must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owners and all subsequent property owners and their lessees and assigns, including but not limited to, homeowner associations or other groups or entities.
2. The maintenance agreement shall:

- a. Assign responsibility for the maintenance and repair of the stormwater facility to the owners of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.
  - b. Provide for a periodic inspection by the property owners in accordance with the requirements of subsection (5) below for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this ordinance. The property owners will arrange for this inspection to be conducted by individual(s) approved by the City who will submit a signed written report of the inspection to the City. It shall also grant permission to the City to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.
3. Provide that the minimum maintenance and repair needs include but are not limited to: the removal of silt, litter and other debris, the cutting of grass, cutting and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities. It shall also provide that the property owners shall be responsible for additional maintenance and repair needed to meet the intended design specification of the stormwater facility.
4. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the City.
5. Provide that if the property is not maintained or repaired within the prescribed schedule, the City shall perform the maintenance and repair at its expense and bill the same to the property owner. The maintenance agreement shall also provide that the City's cost of performing the maintenance shall be a lien against the property.
6. Existing problem locations – no maintenance agreement
  - a. The City shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problems affecting or caused by such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance. Discharges from existing SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as non-compliant discharges.
  - b. Inspection of existing facilities. The City may, to the extent authorized by state and federal law, enter and inspect private property for the purpose of determining if there are illicit non-stormwater discharges, and to establish inspection programs to verify that all stormwater management facilities are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type

associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the City's NPDES MS4 stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other SCM's.

D. Owner/Operator Inspections. The owners and/or operators of the SCMs shall:

1. Perform routine inspections to ensure that all SCM's are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at a site. Owners or operators shall maintain documentation of these inspections. The City may require submittal of this documentation.
2. Perform comprehensive inspection of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by individual(s) approved by the City. Complete inspection reports for these five-year inspections shall include:
  - a. Facility type,
  - b. Inspection date,
  - c. Latitude and longitude and nearest street address,
  - d. BMP owner information (e.g. name, address, phone number, fax, and email),
  - e. A description of BMP condition including: vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,
  - f. Photographic documentation of BMP's, and
  - g. Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and reinspection dates.
3. Owners or operators shall maintain documentation of these inspections. The City may require submittal of this documentation.
4. The City will determine inspection frequency for approved SCMs with a minimum of once every five years by the MS4 by a licensed professional engineer, a licensed landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements.

- E. Requirements for all existing locations and ongoing developments. The following requirements shall apply to all locations and developments at which land disturbing activities have occurred previous to the enactment of this ordinance:
1. Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP Manual and on a schedule acceptable to the City.
  2. Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
  3. Drainage ways shall be appropriately stabilized.
  4. Trash, junk, rubbish, etc. shall be cleared from drainage ways.
  5. Stormwater runoff shall, at the discretion of the City be treated to the maximum extent practicable to prevent its pollution. Such control measures may include, but are not limited to, the following:
    - a. Ponds
      - i. Detention pond
      - ii. Extended detention pond
      - iii. Wet pond
      - iv. Alternative storage measures
    - b. Constructed wetlands
    - c. Infiltration systems
      - i. Infiltration/percolation trench
      - ii. Infiltration basin
      - iii. Drainage/recharge well
      - iv. Porous pavement
    - d. Filtering systems
      - i. Media Filter
      - ii. Sand filter
      - iii. Filter/absorption bed
      - iv. Filter and buffer strips
    - e. Open channel
      - i. Swale

F. Water Quality Buffer Zone Management and Maintenance

The water quality riparian buffer zone shall be managed to enhance and maximize the unique value of these resources. Management includes specific limitations on alteration of the natural conditions of these resources. The following practices or activities are prohibited within the

buffer zone.

1. Removal of trees unless they are in danger of falling, causing damage to dwellings or other structures, or causing blockages in the stream.
2. Soil disturbance by grading, stripping or other practices.
3. Filling or dumping
4. Use, storage or application of herbicides, except for spot spraying of noxious weeds or non-native species.
5. Storage or operation of motorized vehicles, except for maintenance and emergency use approved by Stormwater Management.

Exclusion: Any project that has received a State or Federal Permit (including but not limited to Aquatic Resource Alteration Permits (ARAP), 401 or 404 permits) will be excluded from those requirements of this policy that are superseded by requirements of the State or Federal Permits.

G. Plat Recording of Water Quality Riparian Buffer Zones:

All plats prepared for recording and right-of-way plats shall clearly show the extent of any Water Quality Riparian Buffer Zone on the subject property by metes and bounds. The Buffer Zone shall be clearly labeled as “Buffer/Non-Disturbance Zone” on the Plat.

**SECTION 7. REQUIREMENTS FOR A VEGETATIVE IMPACT EVALUATION (VIE)**

A. Applicability & Responsibility

For purposes of obtaining a Site Development Permit for residential subdivisions and commercial subdivisions/establishments, a Vegetative Impact Evaluation (VIE), meeting the requirements established in Section B below, shall be submitted for approval to the City Forester by the owner/developer. No VIE shall be required for:

1. Normal lawn and tree maintenance performed in conjunction with existing residential uses, or performed on public right of ways;
2. Activities performed for the health, safety and welfare of the public due to a natural catastrophe such as an ice storm, flood, or other acts of God;
3. Site preparation on an individual lot for the purpose of constructing a single family or two-family dwelling provided that a building permit has been issued for the construction of said dwelling;
4. Site preparation associated with an existing single family or two-family residential

dwelling, on an individual lot or adjacent lot under same ownership for the purpose of building a pool, deck, fence or other similar structure provided that building permit has been issued for that structure.

B. Minimum Requirements for the VIE

1. The VIE must be prepared by a qualified individual that has been pre-certified by the City as possessing the skills and experience to prepare the VIE. The certification shall consist of a certification form to be filled out by the individual wishing to be certified. The certification form will consist of a set of questions designed to gather information concerning an individual's educational background, employment history, skills and licenses for determining qualifications.
2. The VIE shall contain a description of the property that shall include a general property location description, the acreage of property, the proposed use of the property, and the name, address, and telephone number of the property owner/developer.
3. The VIE shall contain a general overview of the current condition of the property that shall include the current use of the property, recent uses, surrounding land uses, a general description of existing plant community, such as oak, hickory, forest, pasture, Savannah, etc., and any unique characteristics of the property such as specimen trees, erosion problems, drainage features, vegetative blight, etc.
4. The VIE shall contain a generalized tree survey based upon the most current available information. The survey shall show the location, extent, and type of "significant trees" upon the site, including common and scientific names of the trees.

**"Significant trees"** are those that are either historic or specimen trees or trees that are:

- a. Eight (8) inches or large in diameter, excluding pines (unless used for credit)
- b. Four (4) inches or more dbh, for valuable ornamental species such as dogwood, redbud, buckeye, paw paw, and sassafras.

Diameter is measured at four and a half feet above grade (diameter at breast height - dbh). If a tree is on a slope, measure from the high side of the slope. Measure above or below unusual swells in the trunk.

**Historic trees** are those that are of notable historical interest and value due to its association with the physical and cultural development of the City of Jackson. A **specimen tree** is one that is of high value due to its type, size, age and other relevant criteria.

5. The VIE shall indicate which significant trees are intended for removal and/or grubbing and which will be left undisturbed.
6. The VIE shall be prepared at the same scale as the site plan that clearly illustrates the relationships between areas of significant trees and proposed site

improvements.

### C. Removal of trees

Removal of a significant tree shall be allowed if the developer/owner demonstrates by specific development plans one or more of the following conditions:

1. The tree or specific trees that interfere with the reasonable use of the site may be removed to allow placement of structures such as buildings, parking, drives, signs, utility easements, etc.
2. The tree is located in such proximity to an existing or proposed structure that the safety, utility or structural integrity of the structures is materially impaired.
3. The tree materially interferes with the location, servicing, or functioning of existing utility lines or services.
4. The tree creates a substantial hazard to motor, bicycle or pedestrian traffic by virtue of physical proximity to traffic or impairment of vision.
5. The tree is diseased, insect ridden, or weakened by age, abuse, storm, or fire and is likely to cause injury or damage to people, buildings or other improvements.
6. The removal of the tree is necessary to promote the growth of surrounding significant trees. Under this provision, the applicant must demonstrate a preference for protecting historic and specimen trees.
7. Any law or regulation requires the removal.
8. Trees that impair visibility of the front of the project. It shall be demonstrated on the VIE that trees removed pursuant to this condition do indeed impair more than ten (10) percent of the visibility of the front of the project, as measured as a function of canopy width of tree(s) at widest point to linear footage of frontage. In the case of a corner lot, this would apply to both frontages.

### D. Replacement of removed trees

Replacement of removed trees shall be in accordance with the following provisions:

1. Trees removed shall be replaced at the expense of the developer/owner.
2. Each removed tree shall be replaced with a new tree (s) having a total dbh equivalent to that of the removed tree, up to the level in which the Landscape Ordinance requirements have been equally met. Ratio of species shall be the same.
3. Single-trunk replacement trees shall be a minimum of one and a half inch in

diameter at a point six (6) inches above the base and a minimum of ten (10) feet in overall height.

4. A replacement tree may be a tree moved from one location to another on the site.
5. Any tree, existing or replacement, used in meeting the requirement of this chapter, which dies shall be replaced, by the owner, by either a tree of a minimum of one and a half inches in diameter and a minimum of ten (10) feet in overall height at the time of planting or a replacement tree(s) equivalent to the tree lost.

E. Bond Requirements (VIE)

A performance bond shall consist of a bond issued by a bonding company, a certificate of deposit, or irrevocable letter of credit (with automatic renewal) from a FDIC insured financial institution payable to The City of Jackson to ensure the installation of the replacement trees before any certificate of occupancy is granted. Replacement trees, where specific development plans have not been submitted, that are not to be installed within twelve (12) months of the date of the Development permit must be bonded.

Such bond and/or security shall be in an amount equal to the accurate value of installation and materials plus fifty (50) percent. Accurate value will be determined by one of the following options: 1) the average of two (2) documented estimates from commercial nurseries. The estimates are the responsibility of the owner/developer and are subject to confirmation, or 2) a value determined by Staff utilizing an established and accepted value per tree.

Upon satisfactory replacement of trees (s), posted security will be released after a re-inspection. Failure to install the replacement trees within six (6) months from the date the bond is received shall result in the forfeiture of the bond.

F. Protection of trees during development activities

Trees that are to be preserved shall be protected and maintained during the development activities in accordance with the tree protection and maintenance sections of the city's "Landscape Standards and Practices".

G. Credits available for preserving trees

For trees that are preserved within commercial developments, a reduction of required parking spaces may be allowed when the reduction would result in the preservation of a significant tree as defined herein.

The reduction in required parking may be granted only if it will prevent removal of a significant tree that is located within the area of the site designated as a parking lot area. The reduction of required parking spaces shall not exceed the number of parking spaces required to prevent removal of significant trees, or the number in the following schedule,



whichever is less.

Required Parking Spaces	Maximum Reduction
1-4	0
5-9	1
10-19	2
20 or more	15 percent

Preserved trees also qualify for credit under the landscape requirement of the Zoning Ordinance. The credit would be granted in accordance with the following schedule:

Any tree six (6) inches or greater dbh:	1 : 3
Any tree twelve (12) inches or greater dbh:	1 : 5
Any tree eighteen (18) inches or greater dbh:	1 : 10

The City Forester or designee may grant additional credit for saving historic and specimen trees.

## **SECTION 8. DEVELOPMENT PERMIT FEE SCHEDULE**

The Site Development Permit Fee shall be the sum of the EDCP and VIE Fees, but a minimum of \$25.00.

The EDCP Fee shall be \$25.00 for each acre of land to be disturbed or fraction of an acre of land to be disturbed.

The VIE Fee shall be \$50.00.

## **SECTION 9. CONFLICTS WITH OTHER RULES AND REGULATIONS**

If provisions of these rules and regulation conflict with other applicable laws, rules or regulations, the more stringent provision shall apply.

## **SECTION 10. ENFORCEMENT**

### A. Enforcement authority:

The City shall have the authority to issue notices of violation and citations, and to impose civil penalties to anyone that violates this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City. The City's enforcement authority includes (as set forth in the City's Enforcement Response Plan (ERP)):

1. Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action.

2. **Written Notices** – Written notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.
3. **Citations with Administrative Penalties** – The City has the authority to assess monetary penalties, which may include civil and administrative penalties.
4. **Stop Work Orders** – Stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.
5. **Cease and Desist Order** – The Cease and Desist Order will halt all activities except for those activities directed at cleaning up, abating discharge, and installing control measures.
6. **Withholding of Plan Approvals or Other Authorizations** – Where a facility is in noncompliance, the City’s own approval process affecting the facility’s ability to discharge to the MS4 can be used to abate the violation.
7. **Additional Measures** – The City may also use other escalated measures provided under local legal authorities. The City may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project’s bond or directly billing the responsible party to pay for work and materials.

B. Notification of violation:

1. Verbal warning. Verbal warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.
2. Written notice. Whenever the City finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the City may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the City. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.
3. Consent orders. The City is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.

4. Show cause hearing. The City may order any person who violates this chapter or permit, or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.
5. Compliance order. When the City finds that any person has violated or continues to violate this chapter or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures or devices be installed and/or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.
6. Cease and desist and stop work orders. When the City finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the City may issue a stop work order or an order to cease and desist all such violations and direct those persons in noncompliance to:
  - a. Comply forthwith; or
  - b. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation; including halting operations except for terminating the discharge and installing appropriate control measures.
7. Suspension, revocation or modification of permit. The City may suspend, revoke or modify the permit authorizing the land development project or any other project of the applicant or other responsible person within the City. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the City may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
8. Conflicting standards. Whenever there is a conflict between any standard contained in this chapter and in the BMP manual(s) adopted by the City under this ordinance, the strictest standard shall prevail.

## **SECTION 11. PENALTIES**

Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to

abate or take corrective action by the City, shall be guilty of a civil offense.

1. Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.
2. Measuring civil penalties. In assessing a civil penalty, the City shall consider:
  - a. The harm done to the public health or the environment;
  - b. Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
  - c. The economic benefit gained by the violator;
  - d. The amount of effort put forth by the violator to remedy this violation;
  - e. Any unusual or extraordinary enforcement costs incurred by the City; The amount of penalty established by ordinance or resolution for specific categories of violations; and
  - f. Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
3. Recovery of damages and costs. In addition to the civil penalty in subsection (1) above, the City may recover:
  - a. The lesser of \$450.00 per day for each day that the violation exists or all damages proximately caused by the violator to the City, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.
  - b. The costs of the City's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.
4. Referral to TDEC. In accordance with the City's Enforcement Response Plan and the NPDES Permit requirements, the City may also notify TDEC of violations.
5. No Site Development Permit. If site work begins prior to the owner/developer obtaining a Site Development Permit, the Permit Fee shall double and if the exact number of trees lost cannot be determined, the number of replacement trees shall be twice the required number of trees specified in Article VI, Section 23 Landscaping Requirements within the Zoning Ordinance of the City of Jackson, Tennessee.
6. Other remedies. The City may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

7. Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

## **SECTION 12. APPEALS AND VARIANCES**

### **A. Appeals - Site Development Permit**

Whenever Authorized Personnel shall revoke or refuse to issue a Site Development Permit for any reason, including an interpretation of these rules and regulations, any person affected by such refusal or revocation, or his duly authorized agent, may appeal that decision to the Environmental Advisory/Appeals Board (hereinafter, the "Board"). Appeals shall be in writing on forms provided by the City and shall be submitted to the City within thirty (30) days after the decision of the Authorized Personnel.

### **B. Appeals - Civil penalty or damage assessment**

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the City's governing body.

1. Cease and Desist Order or assessment of correction costs. Any person aggrieved by the issuance of a Cease and Desist Order or assessment of correction costs per the City Correction/Collection Procedures, may appeal such actions to the Environmental Advisory/Appeals Board. The Notice of Appeal shall be in writing on forms provided by the City and must be submitted to the City within thirty (30) days of the after the action that is being appealed. The hearing of the appeal shall be in accordance with the Bylaws of the Environmental Advisory/Appeals Board.
2. Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.
3. Public hearing. Upon receipt of an appeal, the City's governing body, or other appeals board established by the City's governing body shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days' notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the governing body of the city shall be final.
4. Appealing decisions of the City's governing body. Any alleged violator may appeal a decision of the City's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

### **C. Variances**

The Board may vary the provisions of the Rules and Regulations in respect to a particular case when, in its opinion, the enforcement thereof would do manifest injustice, and would

be contrary to the spirit and purpose of these rules & regulations, or public interest, or when, in its opinion, the interpretation of the Rules and Regulations by Authorized Personnel should be modified or reversed. Variances shall not violate any Federal, State or Local Ordinance. The Board shall, in every case, reach a decision without unreasonable or unnecessary delay. In reaching a decision, the Board must consider the specific requirements of state and federal law. If a decision of the Board reverses or modifies an decision or order by Authorized Personnel or varies the application of any provision of this code, the minutes of the meeting of the Board must be specific as to the reasons for the reversal, modification or change in application by the Board. Authorized Personnel shall immediately take action in accordance with such a decision. Every decision of the Board shall be final, subject however to such remedy as any aggrieved party might have at law or equity.



Order Confirmation for Ad #: 0005839496

Customer: CITY OF JACKSON PURCHASING
Address: 115 E MAIN ST STE 202
JACKSON TN 38301 USA
Acct. #: NAS-302816JS
Phone: 7314258245
zpolk@cityofjackson.net; swhite@
CITY OF JACKSON PURCHASING
Ordered By: Montrell Lawrence

OrderStart Date: 10/05/2023

Order End Date: 10/05/2023

Tear Sheets 0 Affidavits 0 Blind Box Promo Type Materials Special Pricing Size 1 X 43.00

Order Amount \$109.65 Tax Amount \$0.00 Total Order Amount \$109.65 Order Payment Amount \$0.00 Order Amount Due \$109.65

Ad Order Notes:

Sales Rep: aarbeitman

Order Taker: aarbeitman

Order Created 10/03/2023

INVOICE TEXT: 0005839496THECITYOFJACKSONWILLRECEIVESEALEDREQUESTSFORQUALIFICATIONFORSTORMWATERINF

Table with 4 columns: Product, # Ins, Start Date, End Date. Rows include NAS-Jackson Sun and NAS-Jacksonsun.com.

\* ALL TRANSACTIONS CONSIDERED PAID IN FULL UPON CLEARANCE OF FINANCIAL INSTITUTION

Text of Ad: 10/03/2023

0005839496
The City of Jackson will receive sealed requests for qualification for Stormwater Infrastructure until 10:30 a.m., Tuesday, October 24, 2023. The Bid/Proposal packet can be obtained from our website at City of Jackson under Purchasing. RFQ must be mailed or delivered to City Hall, 115 E. Main St., Suite 202, Jackson, TN 38301 Attn: Purchasing. Bonds and State Contractors' License will be required if over \$25,000. The City reserves the right to waive informalities and to reject any and all bids/proposals. The City of Jackson is an Equal Opportunity Title VI employer. Below is a QR link to our Purchasing website.



**JACKSON CITY COUNCIL MEETING**

**December 5, 2023 – 9:00 A.M.**

**GEORGE A. SMITH MEETING ROOM**

**I. CALL TO ORDER**

**II. INVOCATION AND PLEDGE OF ALLEGIANCE TO THE FLAG**

Candice Busby

**III. ROLL CALL**

**IV. APPROVAL OF MINUTES OF THE NOVEMBER 7, 2023 CITY COUNCIL  
MEETING AND NOVEMBER 14 & 16 SPECIAL CALLED MEETINGS**

**V. PROCLAMATIONS/RECOGNITIONS**

**VI. INVITATION FOR PUBLIC COMMENT**

**VII. FIRST READING**

1. Proposed Budget Amendment- General Fund, CDBG for Financial Empowerment Center \$22,000.00
2. Proposed Budget Amendment- General Fund, JPD Insurance Recovery \$12,103.70
3. Proposed Ordinance to Amend Title 8, Chapter 1-Liquor Stores
4. Consideration of an Ordinance to rezone property located west of Anglewood Drive from RS-1 (Single Family ) District to RS-2 (Single Family) District, comprising 41.821 acres, more or less



5. Consideration of an Ordinance to rezone property located at Ashport Road from RS-2 (Single Family) District to RS-2/PRD (Single Family/Planned Residential Development) District, comprising 40.2 acres, more or less
6. Consideration of an Ordinance to rezone property located at 10 McClellan Road from RS-1 (Single Family) District to O-C (Office Center )District, comprising 2.96 acres, more or less
7. Consideration of an Ordinance to close and abandon Elmer Street

**VIII. SECOND READING**

1. Proposed Budget Amendment- Capital Outlay Fund, Architectural and Engineering Services, Public Safety Complex \$250,000.00
2. Proposed Budget Amendment- General Fund, FLOCK Cameras \$200,650.00
3. Proposed Budget Amendment- General Fund, Boyd Foundation Grant \$25,000.00
4. Proposed Budget Amendment- Capital Outlay Fund, NED Air Conditioner Units \$40,000.00
5. Proposed Budget Amendment- General Fund, JPD Violent Crimes Grant \$1,973,681.00
6. Proposed Budget Amendment-General Fund, JPD Byrne JAG Grant \$50,051.00
7. Proposed Budget Amendment- General Fund, JPD VOCA Grant \$45,267.00
8. Proposed Budget Amendment- General Fund, JPD Training Grant \$40,000.00
9. Proposed Budget Amendment- General Fund, JPD BVP Grant \$6,600.00

## **IX. NEW BUSINESS**

1. Consideration of a Resolution to limit truck traffic on Primrose Drive
2. Consideration of a Resolution to memorialize James L. Cupples by designating Wright Industrial Cove as “James L. Cupples Cove”
3. Consideration of a Street Acceptance request for Baptist Memorial Health Care Corporation
4. Consideration of a Street Acceptance request for Shepherds Field Section 12
5. Consideration of a Street Acceptance request for Walnut Trace North Section 18-A
6. Consideration of a Street Acceptance request for Walnut Trace North Section 18-B
7. Consideration of a Street Acceptance request for Walnut Trace North Section 19
8. Consideration of a Street Acceptance request for Wyndstone Sections 6A & 7A
9. Consideration of a contract for Architectural and Engineering services for a Public Safety Complex
10. Consideration of a Guaranteed Maximum price proposal for the Senior Activity Center
11. Consideration of a contract with Kimley Horn for the Stormwater Masterplan and Conditions Assessment
12. Consideration of an extension to the Men’s Homeless Shelter Consultant Agreement

13. Consideration of a professional services agreement with TLM for a proposed 2023 (CDBG) Grant application
14. Consideration of a Resolution to submit applications for FY 2023 Small Cities Block Grant (CDBG) Child Care Creation Grant
15. Consideration of a Resolution to support the Tennessee Department of Economic and Community Development Broadband Connected Community Facilities Grant
16. Consideration of Committee and Board Appointments:
  - a. Jackson Community Redevelopment Agency Board- Reappointment of Monte Jones
17. Budget Amendments less than \$10,000.00
18. Consideration of Invoices over \$10,000.00

**X. ADJOURN**

**MINUTES**  
**JACKSON CITY COUNCIL MEETING**  
**December 5, 2023 – 9:00 A.M.**  
**GEORGE A. SMITH MEETING ROOM**

**CALL TO ORDER, INVOCATION, PLEDGE, AND ROLL CALL (1:59 – 2:56)**

The Council of the City of Jackson met in a regular session on Tuesday, December 5, 2023, at 9:00 a.m. Mayor Scott Conger called the meeting to order, Councilwoman Candice Busby lead us in the invocation and Allegiance Pledge. The Mayor called the roll. Councilmembers Candice Busby; Johnny Dodd; Richard Donnell; Julie Holt; Larry Lowrance; Russ McKelvey; Frank McMeen; J.P. Stovall; Marda Wallace was present. Also present was Markeisha Johnson, recorder of the minutes. For the full details, listen to the December 5, 2023 video by going to the City of Jackson website: [jacksontn.gov/Government/Mayor & Council/Council Meeting Archives](http://jacksontn.gov/Government/Mayor & Council/Council Meeting Archives) (time-frame reference).

**APPROVAL OF MINUTES (2:59- 3:13)**

The minutes for City Council October 3, 2023 and November 7, 2023 meeting were approved. Also, the Special Called meetings for November 14, and 16, were approved.

**PROCLAMATIONS/RECOGNITIONS (3:34 – 3:35)**

*None*

**INVITATION OF PUBLIC COMMENT (3:36 – 7:15)**

*Sabrina Parker – New Business Item 14*

**FIRST READING**

- 1. Proposed Budget Amendment- General Fund, CDBG for Financial Empowerment Center \$22,000.00 (7:54 – 8:14)**

Councilmember McMeen made a motion, seconded by Councilmember Stovall to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**2. Proposed Budget Amendment- General Fund, JPD Insurance Recovery**

**\$12,103.70 (8:15 - 8:29)**

Councilmember Holt made a motion, seconded by Councilmember McKelvey, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**3. Proposed Ordinance to Amend Title 8, Chapter 1-Liquor Stores (8:30 - 37:29)**

*Keith Davis – CC Wine & Liquor Store*

Councilmember Holt made a motion, seconded by Councilmember Stovall, to approve the agenda item as submitted. Councilmember McKelvey made a motion to amend the 2mile radius to a 1mile radius, seconded by Councilmember Wallace. Upon a vote, 2 votes in favor, 4 against, and 3 abstained; the motion failed. Councilmember Stovall called for question, seconded by Councilmember McMeen. Upon a call for a vote, all voted aye, except Donnell, who voted nay; the motion passed 7- 0 - 2. The previous agenda item was approved. Upon a call for vote, all voted aye, except Lowrance, McKelvey, and Wallace, who voted nay; the motion passed 6- 0 -3

**4. Consideration of an Ordinance to rezone property located west of Anglewood**

**Drive from RS-1 (Single Family ) District to RS-2 (Single Family) District,  
comprising 41.821 acres, more or less (37:30 - 38:03)**

Councilmember McMeen made a motion, seconded by Councilmember Wallace, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**5. Consideration of an Ordinance to rezone property located at Ashport Road from RS-2 (Single Family) District to RS-2/PRD (Single Family/Planned Residential Development) District, comprising 40.2 acres, more or less (38:05- 38:35)**

Councilmember McMeen made a motion, seconded by Councilmember Busby, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt, who abstained; the motion passed 8-0-1.

**6. Consideration of an Ordinance to rezone property located at 10 McClellan Road from RS-1 (Single Family) District to O-C (Office Center )District, comprising 2.96 acres, more or less**

\*\* Mayor Conger said Item 6 will be strike out until next month's agenda

**7. Consideration of an Ordinance to close and abandon Elmer Street (38:37 - 38:53)**

Councilmember Wallace made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**SECOND READING**

**1. Proposed Budget Amendment- Capital Outlay Fund, Architectural and Engineering Services, Public Safety Complex \$250,000.00 (38:56 - 39:27)**

Councilmember McMeen made a motion, seconded by Councilmember Wallace, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**2. Proposed Budget Amendment- General Fund, FLOCK Cameras \$200,650.00**

**(39:28 - 39:41)**

Councilmember Dodd made a motion, seconded by Councilmember McMeen, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**3. Proposed Budget Amendment- General Fund, Boyd Foundation Grant**

**\$25,000.00 (39:42 - 39:55)**

Councilmember Holt made a motion, seconded by Councilmember Busby, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**4. Proposed Budget Amendment- Capital Outlay Fund, NED Air Conditioner**

**Units \$40,000.00 (39:56- 40:11)**

Councilmember McMeen made a motion, seconded by Councilmember Holt, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**5. Proposed Budget Amendment- General Fund, JPD Violent Crimes Grant**

**\$1,973,681.00 (40:12- 40:26)**

Councilmember Dodd made a motion, seconded by Councilmember Holt, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**6. Proposed Budget Amendment-General Fund, JPD Byrne JAG Grant \$50,051.00**

**(40:28 - 40:41)**

Councilmember Holt made a motion, seconded by Councilmember McMeen, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**7. Proposed Budget Amendment-General Fund, JPD VOCA Grant \$45,267.00**

**(40:42- 40:55)**

Councilmember Holt made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**8. Proposed Budget Amendment-General Fund, JPD VOCA Grant \$40,000.00**

**(40:56- 41:09)**

Councilmember Wallace made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**9. Proposed Budget Amendment-General Fund, JPD BVP Grant \$6,600.00**

**(41:10 - 41:23)**

Councilmember Holt made a motion, seconded by Councilmember McMeen, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**NEW BUSINESS**

**1. Consideration of a Resolution to limit truck traffic on Primrose Drive**

**(41:26 - 41:39)**



Councilmember McMeen made a motion, seconded by Councilmember Busby, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion unanimously.

**2. Consideration of a Resolution to memorialize James L. Cupples by designating Wright Industrial Cove as “James L. Cupples Cove”  
(41:41 - 42:19)**

Councilmember McKelvey made a motion, seconded by Councilmember McMeen to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**3. Consideration of a Street Acceptance request for Baptist Memorial Health Care Corporation (42:21 - 42:34)**

Councilmember Holt made a motion, seconded by Councilmember Wallace, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**4. Consideration of a Street Acceptance request for Shepherds Field Section 12 (42:35 - 42:48)**

Councilmember McKelvey made a motion, seconded by Councilmember Wallace, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt, who abstained; the motion passed 8 -0 -1

**5. Consideration of a Street Acceptance request for Walnut Trace North Section 18-A (42:49 - 43:03)**

Councilmember McKelvey made a motion, seconded by Councilmember Busby, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt, who abstained; the motion passed 8 -0 -1

**6. Consideration of a Street Acceptance request for Walnut Trace North**

**Section 18-B (43:04 - 43:19)**

Councilmember McKelvey made a motion, seconded by Councilmember Busby, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt and Donnell, who abstained; the motion passed 7 -0 -2

**7. Consideration of a Street Acceptance request for request for Walnut Trace**

**North Section 19 (43:21 - 43:35)**

Councilmember McKelvey made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt, who abstained; the motion passed 8 -0 -1

**8. Consideration of a Street Acceptance request for Wyndstone Sections 6A &**

**7A (43:36 - 43:50)**

Councilmember Dodd made a motion, seconded by Councilmember McKelvey, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Holt, who abstained; the motion passed 8 -0 -1

**9. Consideration of a contract for Architectural and Engineering services for a**

**Public Safety Complex (43:52 - 45:52)**

Councilmember McMeen made a motion, seconded by Councilmember Holt, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**10. Consideration of a Guaranteed Maximum price proposal for the Senior**

**Activity Center (45:57 - 49:31)**

Councilmember McMeen made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Lowrance, who abstained; the motion passed 8-0-1

**11. Consideration of a contract with Kimley Horn for the Stormwater Masterplan and Conditions Assessment (49:38 - 55:12)**

Councilmember McMeen made a motion, seconded by Councilmember Holt, to approve the agenda item as submitted. Councilmember Lowrance question the bidding process. Councilmember McMeen called for question, seconded by Councilmember McKelvey, 8 votes in favor and 1 against. Upon a call for a vote to approve agenda item submitted, all voted aye, except Lowrance, who abstained; the motion passed 8-0-1

**12. Consideration of an extension to the Men's Homeless Shelter Consultant**

**Agreement (55:15 - 55:25)**

Councilmember Stovall made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**13. Consideration of a professional services agreement with TLM for a**

**proposed 2023 (CDBG) Grant application (55:28 - 55:48)**

Councilmember Wallace made a motion, seconded by Councilmember Dodd, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**14. Consideration of a Resolution to submit applications for FY 2023 Small**

**Cities Block Grant (CDBG) Child Care Creation Grant (55:50 - 1:08:45)**

*Jasmin Pearman – Director of Hands Up Daycare Center*

Councilmember McKelvey made a motion, seconded by Councilmember Stovall, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Busby, who abstained; the motion passed 8- 0- 1.

**15. Consideration of a Resolution to support the Tennessee Department of Economic and Community Development Broadband Connected Community Facilities Grant (1:08:50 - 1:09:15)**

Councilmember McMeen made a motion, seconded by Councilmember Stovall, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

**16. Consideration of Committee and Board Appointments:**

**a. Jackson Community Redevelopment Agency Board- Reappointment of Monte Jones (1:09:20 – 1:09:32)**

Councilmember Holt made a motion, seconded by Councilmember McKelvey, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, except Donnell, who abstained; the motion passed 8- 0- 1.

**17. Budget Amendments less than \$10,000.00 (1:09:34**

**18. Consideration of Invoices over 10,00.00 - 1:09:49)**

Councilmember Dodd made a motion, seconded by Councilmember McMeen, to approve the agenda item as submitted. Upon a call for a vote, all voted aye, the motion passed unanimously.

There being no further business, the meeting was adjourned. (1:10:40)

  
**SCOTT CONGER, MAYOR**

<b>Please remit payment electronically to:</b>		<b>If paying by check, please remit to:</b>	
Account Name:	KIMLEY-HORN AND ASSOCIATES, INC.	KIMLEY-HORN AND ASSOCIATES, INC.	
Bank Name and Address:	WELLS FARGO BANK, N.A., SAN FRANCISCO, CA 94163	P.O. BOX 932514	
Account Number:	2073089159554	ATLANTA, GA 31193-2514	
ABA#:	121000248		

CITY OF JACKSON, TN  
 121 EAST MAIN STREET  
 SUITE 301  
 JACKSON, TN 38301

Invoice No: 118005020-0124  
 Invoice Date: Jan 31, 2024  
 Invoice Amount: \$17,330.00  
 Project No: 118005020  
 Project Name: JACKSON STORMWATER  
 Project Manager: MAYS, DUSTY  
 Client Reference: PO #10526

Federal Tax Id: 56-0885615  
 For Services Rendered through Jan 31, 2024

**LUMP SUM**

KHA Ref # 118005020.1-27145198

Description	Contract Value	% Complete	Amount Earned to Date	Previous Amount Billed	Current Amount Due
<b>SURVEY</b>					
ANDERSON BRANCH	48,200.00	15.00%	7,230.00	4,820.00	2,410.00
CANE, BOND, MERIDIAN CREEK	39,600.00	15.00%	5,940.00	3,960.00	1,980.00
BAYBERRY CREEK	105,355.00	0.00%	0.00	0.00	0.00
CENTRAL CREEK	130,216.00	0.00%	0.00	0.00	0.00
DELOACH CREEK	205,968.00	0.00%	0.00	0.00	0.00
DYER CREEK	484,115.00	0.00%	0.00	0.00	0.00
JONES CREEK	129,019.00	0.00%	0.00	0.00	0.00
MATTHEWS BRANCH	106,534.00	0.00%	0.00	0.00	0.00
MOIZE CREEK	529,926.00	0.00%	0.00	0.00	0.00
SANDY CREEK	289,630.00	0.00%	0.00	0.00	0.00
SOUTH FORK TRIBS	276,237.00	0.00%	0.00	0.00	0.00
<b>PM/DATA COLLECTION</b>					
ANDERSON BRANCH	13,650.00	30.00%	4,095.00	2,730.00	1,365.00
CANE, BOND, MERIDIAN CREEK	13,500.00	30.00%	4,050.00	2,700.00	1,350.00
BAYBERRY CREEK	37,600.00	20.00%	7,520.00	3,760.00	3,760.00
CENTRAL CREEK	43,800.00	5.00%	2,190.00	0.00	2,190.00
DELOACH CREEK	85,500.00	5.00%	4,275.00	0.00	4,275.00
DYER CREEK	190,700.00	0.00%	0.00	0.00	0.00
JONES CREEK	58,400.00	0.00%	0.00	0.00	0.00
MATTHEWS BRANCH	47,600.00	0.00%	0.00	0.00	0.00
MOIZE CREEK	166,600.00	0.00%	0.00	0.00	0.00
SANDY CREEK	103,900.00	0.00%	0.00	0.00	0.00
SOUTH FORK TRIBS	128,700.00	0.00%	0.00	0.00	0.00
<b>CONDITION ASSESSMENT</b>					
ANDERSON BRANCH	198,750.00	0.00%	0.00	0.00	0.00
CANE, BOND, MERIDIAN CREEK	161,500.00	0.00%	0.00	0.00	0.00

<b>Please remit payment electronically to:</b>		<b>If paying by check, please remit to:</b>	
Account Name:	KIMLEY-HORN AND ASSOCIATES, INC.	KIMLEY-HORN AND ASSOCIATES, INC.	
Bank Name and Address:	WELLS FARGO BANK, N.A., SAN FRANCISCO, CA 94163	P.O. BOX 932514	
Account Number:	2073089159554	ATLANTA, GA 31193-2514	
ABA#:	121000248		

CITY OF JACKSON, TN  
 121 EAST MAIN STREET  
 SUITE 301  
 JACKSON, TN 38301

Invoice No: 118005020-0124  
 Invoice Date: Jan 31, 2024  
 Invoice Amount: \$17,330.00  
 Project No: 118005020  
 Project Name: JACKSON STORMWATER  
 Project Manager: MAYS, DUSTY  
 Client Reference: PO #10526

Federal Tax Id: 56-0885615  
 For Services Rendered through Jan 31, 2024

Description	Contract Value	% Complete	Amount Earned to Date	Previous Amount Billed	Current Amount Due
BAYBERRY CREEK	84,875.00	0.00%	0.00	0.00	0.00
CENTRAL CREEK	96,250.00	0.00%	0.00	0.00	0.00
DELOACH CREEK	146,750.00	0.00%	0.00	0.00	0.00
DYER CREEK	332,500.00	0.00%	0.00	0.00	0.00
JONES CREEK	96,375.00	0.00%	0.00	0.00	0.00
MATTHEWS BRANCH	76,750.00	0.00%	0.00	0.00	0.00
MOIZE CREEK	377,875.00	0.00%	0.00	0.00	0.00
SANDY CREEK	216,750.00	0.00%	0.00	0.00	0.00
SOUTH FORK TRIBS	192,375.00	0.00%	0.00	0.00	0.00
<b>H&amp;H MODELING</b>					
ANDERSON BRANCH	229,400.00	0.00%	0.00	0.00	0.00
CANE, BOND, MERIDIAN CREEK	267,000.00	0.00%	0.00	0.00	0.00
BAYBERRY CREEK	143,200.00	0.00%	0.00	0.00	0.00
CENTRAL CREEK	161,900.00	0.00%	0.00	0.00	0.00
DELOACH CREEK	284,000.00	0.00%	0.00	0.00	0.00
DYER CREEK	668,200.00	0.00%	0.00	0.00	0.00
JONES CREEK	227,900.00	0.00%	0.00	0.00	0.00
MATTHEWS BRANCH	158,300.00	0.00%	0.00	0.00	0.00
MOIZE CREEK	505,300.00	0.00%	0.00	0.00	0.00
SANDY CREEK	307,900.00	0.00%	0.00	0.00	0.00
SOUTH FORK TRIBS	344,400.00	0.00%	0.00	0.00	0.00
<b>MASTERPLAN REPORT</b>					
ANDERSON BRANCH	81,900.00	0.00%	0.00	0.00	0.00
CANE, BOND, MERIDIAN CREEK	92,400.00	0.00%	0.00	0.00	0.00
BAYBERRY CREEK	36,300.00	0.00%	0.00	0.00	0.00
CENTRAL CREEK	43,220.00	0.00%	0.00	0.00	0.00
DELOACH CREEK	82,600.00	0.00%	0.00	0.00	0.00
DYER CREEK	182,800.00	0.00%	0.00	0.00	0.00

<b>Please remit payment electronically to:</b>		<b>If paying by check, please remit to:</b>	
Account Name:	KIMLEY-HORN AND ASSOCIATES, INC.	KIMLEY-HORN AND ASSOCIATES, INC.	
Bank Name and Address:	WELLS FARGO BANK, N.A., SAN FRANCISCO, CA 94163	P.O. BOX 932514	
Account Number:	2073089159554	ATLANTA, GA 31193-2514	
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CITY OF JACKSON, TN  
 121 EAST MAIN STREET  
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Invoice No: 118005020-0124  
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 Project No: 118005020  
 Project Name: JACKSON STORMWATER  
 Project Manager: MAYS, DUSTY  
 Client Reference: PO #10526

Federal Tax Id: 56-0885615  
 For Services Rendered through Jan 31, 2024

Description	Contract Value	% Complete	Amount Earned to Date	Previous Amount Billed	Current Amount Due
JONES CREEK	56,400.00	0.00%	0.00	0.00	0.00
MATTHEWS BRANCH	46,000.00	0.00%	0.00	0.00	0.00
MOIZE CREEK	159,500.00	0.00%	0.00	0.00	0.00
SANDY CREEK	100,300.00	0.00%	0.00	0.00	0.00
SOUTH FORK TRIBS	124,300.00	0.00%	0.00	0.00	0.00
<b>Subtotal</b>	<b>9,518,720.00</b>	<b>0.37%</b>	<b>35,300.00</b>	<b>17,970.00</b>	<b>17,330.00</b>
<b>Total LUMP SUM</b>					<b>17,330.00</b>

**Total Invoice: \$17,330.00**





November 27, 2023

Mayor Scott Conger  
City of Jackson  
121 East Main Street, Suite 301  
Jackson, TN 38301

Re: Professional Services Agreement  
City of Jackson Stormwater Masterplan and Conditions Assessment

Dear Mayor Conger:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to the City of Jackson ("Client" or "City") for providing professional engineering services for the City of Jackson Stormwater Masterplan and Conditions Assessment. Our project understanding, scope of services, schedule, and fee are below.

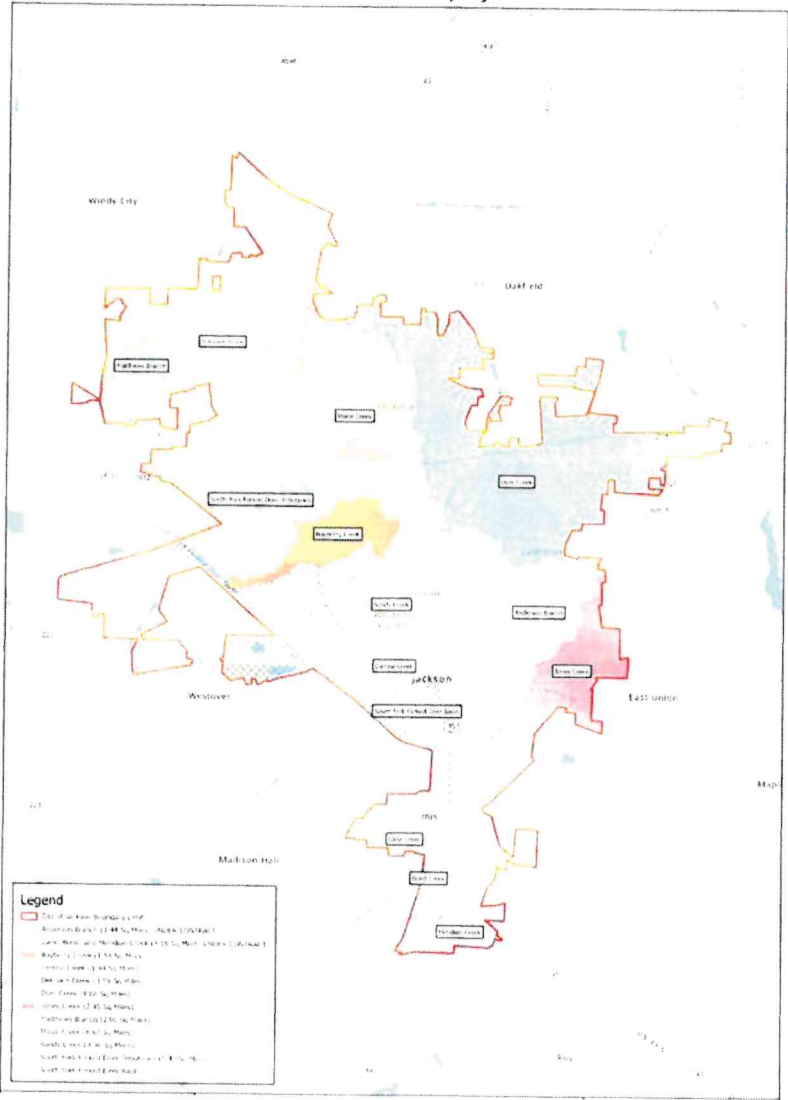
### **Project Understanding**

The City of Jackson wishes to have Kimley-Horn conduct a stormwater assessment of the following watersheds: Anderson Branch, Bayberry Creek, Bond Creek, Cane Creek, Central Creek, DeLoach Creek, Dyer Creek, Jones Creek, Matthews Branch, Meridian Creek, Moize Creek, Sandy Creek, and South Fork Tributaries within the City Limits and shown on the **Project Area Map**. Kimley-Horn will prepare a Stormwater Masterplan and perform a Conditions Assessment of these watersheds to satisfy the recently awarded American Rescue Plan ("ARP") grant from Tennessee Department of Environment and Conservation ("TDEC"). The City of Jackson **Watershed Masterplan ("WSMP")** will collect survey information for existing stormwater infrastructure, perform a conditions assessment of the collected infrastructure, perform existing and future conditions stormwater modeling of the watersheds, and prepare a stormwater masterplan report. See below map for study area limits.

### **Definitions and Terms**

1. **Primary System:** the main stem that defines the drainage area for each watershed and certain additional tributary streams of significance for each watershed shown on the **Project Area Map** and described herein.
2. **Secondary System:** open or closed conveyances (beyond the *Primary System*) identified for modeling and analysis as part of this Scope of Services. *Secondary Systems* typically convey runoff originating in public right-of-way and exclude private drainage systems not conveying runoff from public right-of-way. Limits of *Secondary System* modeling shall be determined during project execution, as described herein. An individual *Secondary System* is defined as a set of interconnected structures, pipes, and ditches discharging to a single point.
3. **Level of Service (LOS):** the locally required performance standard for public infrastructure such as culverts, ditches, and closed system drainage systems.
4. **Existing Conditions Hydrologic Model:** *Primary System* hydrologic model based on flows computed for current land use or zoning districts.

- 5. *Existing Conditions Hydraulic Model: Primary System* hydraulic model where flows computed in the *Existing Conditions Hydrologic Model* are routed through infrastructure as it currently exists.
- 6. *Future Conditions Hydrologic Model: Primary System* hydrologic model based on flows computed for future land use or zoning districts.
- 7. *Future Conditions Hydraulic Model: Primary System* hydraulic model where flows computed in the *Future Conditions Hydrologic Model* are routed through infrastructure as it currently exists.
- 8. *Alternatives Hydraulic Model: Primary System* hydraulic model where flows computed in the *Future Conditions Hydrologic Model* are routed through infrastructure proposed to address level of service (LOS) deficiencies identified over the course of the project.



## **Scope of Services**

Kimley-Horn and its Subconsultant, Gresham Smith, will provide the services specifically set forth below.

### ***Task 1 – Project Management and Grant Administration***

Kimley-Horn will manage the project in a manner to be responsive to the needs and schedule of the City and to provide quality assurance and control of deliverables. The project management and grant administration efforts will consist of the following items:

- Oversee the Consultant project team to manage budget, schedule, and conformance to the project scope and ARP guidelines
- Provide a minimum of two contacts for the City so that at any time someone familiar with the project is available to the City if questions, comments, concerns, or other project needs arise. These points of contact will be Dusty Mays as the Project Manager ([dusty.mays@kimley-horn.com](mailto:dusty.mays@kimley-horn.com) / 731-225-3068) and Justin Avent (Gresham Smith) ([justin.avent@greshamsmith.com](mailto:justin.avent@greshamsmith.com) / 901-562-0110) as the Assistant Project Manager
- Ensure the quality control procedures are followed
- Develop and implement the project work plan
- Inform the City in writing if during the life of the project a substantial deviation in the schedule occurs for any reason. Other minor schedule updates will occur in the monthly project reporting
- Meet with the City's Project Team in person or via conference call as included in **Task 8**, and be available to answer project related questions via phone and email
- Manage and direct Consultant's subconsultants in execution of project Scope
- Prepare and submit monthly progress report to the City to update the project schedule, list milestones achieved, provide status of each major task, support and document schedule changes, and justify any proposed changes to the schedule or budgets
- Coordinate with the City, provide deliverables to City for review and respond to City review comments
- Maintain a project cost accounting system
- Maintain a project filing system for storage and retrieval of project documents
- Coordination with TDEC and ARP grant administration

Project final deliverables shall be certified (signed, sealed, and dated) by a professional engineer and/or surveyor registered in the State of Tennessee. Project management is anticipated to occur on an ongoing basis throughout the entire 36-month project schedule.

### ***Task 2 – Data Collection***

#### ***Task 2.1 – Review Existing Data Sources***

The Consultant shall assemble relevant available data such as Geographic Information Systems (GIS), as-built drawings, FEMA flood studies, City culvert inspection reports, USGS studies, reports and other documentation of flooding history, stormwater work order service requests, TN Dam Safety

documentation, and recent City bid tabulation data. GIS data may include aerial photography, topography, zoning, soils, planimetrics, stormwater inventory, water, sewer, and greenway plans.

#### **Task 2.2 – Gaps Analysis**

The Consultant shall determine additional data needs based on the assessment of existing data available to complete the modeling and analysis for the City of Jackson WSMP. Through discussion with City staff and GIS analysis, the Consultant shall identify information needed to support the Primary System and Secondary System modeling efforts as defined herein.

#### **Task 2.3 – Engineering Field Investigation**

The Consultant shall conduct field investigations along the *Primary System* as shown in **Project Area Map** to collect data required for the modeling analysis and project evaluation. Field investigation locations shall be determined by the Consultant for the following purposes:

- Estimate Manning's 'n' values
- Verify watershed boundaries
- Identify and review key hydraulic structures to be modeled
- Collect georeferenced photographs

#### **Task 3 – Field Surveying Data Collection**

The intent of this task is for the Consultant to capture the stormwater utility infrastructure in the **Project Area Map** and use the data to develop a GIS scope and coverage for the stormwater network. This task will be accomplished using a combination of Global Positioning Systems (GPS) data capture and conventional surveying as needed. The Consultant team includes Geodesy Professional Services, LLC and Collier Engineering Co., Inc. ("Survey Subconsultants") for field surveying data collection.

Collection of field survey data shall be accomplished using a combination of GPS and conventional surveying. This task will be managed as a unit cost task and only the actual number of cross sections, bridges, culverts, dams, finished floor elevations, etc. collected at the established unit rates will be billed. The Consultant shall not exceed the estimated number of survey items without prior written authorization from the City. If approved, the Consultant shall invoice for additional items at the applicable billing rates for each type. The City of Jackson WSMP Project Area is shown in **Project Area Map**. Field survey data will be collected and incorporated into a geodatabase. The geodatabase design will be developed in collaboration with the City to determine what fields should be included both for population under this contract and future efforts by the City. The following paragraphs describe the field survey activities.

Consultant shall provide quality control of Survey Subconsultants data. Consultant shall field verify select portions of Survey Subconsultants data to verify accuracy and suitability for hydraulic modeling.

#### **Task 3.1 – Field Survey Specifications**

Consultant shall follow the following specifications for collection of survey data:

- Survey data collection is limited to the types and locations specified herein.
- Data collection shall be to survey grade accuracy and includes:

- Elevations shall meet the posted standards of the TN VRS network
- All survey work shall be "Class A" surveying standard and performed in compliance with the Standards of Practice for Land Surveying in Tennessee as defined for GIS surveys
- The horizontal datum is NAD 83/2011
- The coordinate system is Tennessee State Plane 4100
- The vertical datum is NAVD 88
- The unit of measurement is the US Survey Foot
- The City will be responsible for notifying property owners of work activities and the need to access drainage easements or private property. The City will provide the Consultant with a letter stating that field crews are authorized to enter private property for the purposes of this project.

#### ***Task 3.2 – Geodatabase Design***

Consultant shall work with the City to develop a geodatabase that includes feature classes for data collected as part of the project. Point feature classes are expected to include drainage structure, pipe end, and difficult access. Line type feature classes are expected to include culverts, pipes, and secondary open channel. Consultant shall provide the City with a proposed geodatabase design for review and comment and shall make requested adjustments.

#### ***Task 3.3 – Closed System Inventory***

The Consultant will employ conventional survey or survey grade GPS to locate the x, y, and z coordinates of each visible stormwater system structure. The Consultant will collect various attributes for each of these structures as determined during **Task 3.2**. The attributes may include but are not limited to the following:

- Unique identification number
- Horizontal (x, y) location
- Vertical (z) location (structure)
- Street number
- Street name
- Street designation
- Structure type
- Structure size
- Structure material
- Structure age
- Structure condition
- Water quality (odor, sheen, dry weather flow, etc.)
- Obstruction percentage
- Obstruction type
- Pipe shape
- Pipe size
- Pipe invert elevation

- Pipe material
- Pipe end type (projecting from fill, flared end section etc.)
- Headwall type
- Headwall material
- Wingwall configuration (straight or mitered to slope)
- Wingwall angle
- Structure criticality (Probability of Failure and Severity of Failure Consequence)
- Hyperlinked photo

Collection of the public stormwater drainage system will be the emphasis of this project. This will include systems that convey stormwater runoff from public streets or public property, including systems on public or private property that convey runoff originating from public streets or crossing private property. Only the outfalls of private systems will be inventoried unless the private system drains across a private property and conveys public water in which case the entire system will be inventoried. "Public water" is defined as water draining from a public street right-of-way or originating from City-owned property. The size of the systems to be inventoried will be all pipes greater than or equal to 15" in diameter. Private crossings will not be inventoried unless they are longer than 50 feet or greater than or equal to 24" in diameter unless specific private pipe(s) are determined by the Consultant's hydraulic engineer as critical to the system hydraulics for the masterplan.

If, during the course of the stormwater inventory, the Consultant's field crews observe odors, sheens, or potential illicit discharges the Consultant will notify the City's Project Manager within the same business day if at all possible but no later than 24 hours from the time of observation. Additionally, if the Consultant's field crews observe dry weather flows as defined in the City's current Phase II permit the Consultant will record the location of the dry weather flow and report it to the City's Project Manager on a weekly basis.

A unit cost and a specific number of closed system inventory structures have been estimated for budgetary purposes noted in **Table A** under Fee and Expenses.

#### **Task 3.4 – Primary System**

For *Primary Systems*, typical data collection will include infrastructure information at stream crossings, stream channel dimensions and dam information. Consultant shall collect survey for structures / infrastructure at stream crossings if:

- Consultant cannot establish parity between the FEMA model data and City inventory data
- Structures not included in the FEMA model but impact *Primary System* hydraulics (private drives/roads, new roads, etc.)
- Structure is missing critical data within the City's inventory (invert, size, etc.)

##### *Task 3.4.1 – Open Channel Cross Sections*

The Consultant shall utilize FEMA cross section data if appropriate and recent, for hydraulic modeling purposes. Where FEMA cross-section data does not exist or requires augmentation for hydraulic modeling, the Consultant shall obtain field survey cross-sectional data shall be collected from top of

bank to top of bank, plus one shot 50-feet beyond both banks. Cross-sectional information outside the limits of the field surveyed sections will be based on the best available information (GIS topography, DEMs, etc.). A unit cost and a specific number of *Primary System* Channel Cross Sections has been estimated for budgetary purposes in **Table A** under Fee and Expenses.

#### *Task 3.4.2 – Bridges*

Bridges requiring survey for modeling purposes will include dimensional and elevation data for modeling backwater effects on the hydraulic model. Bridge data will include shots parallel to the road representing the road overtopping elevation, bridge deck thickness, location and height of railing, pier location and dimensions, and underlying channel and abutment dimensions and elevations. A unit cost and a specific number of Bridges to be collected has been estimated for budgetary purposes in **Table A** under Fee and Expenses.

#### *Task 3.4.3 – Culverts*

Culverts at stream crossings will be characterized by two pipe ends (one at each end of each barrel). Sufficient dimensional and elevation data will be collected to model backwater effects of culverts within the Primary System. Multi-barrel culverts shall include two pipe ends for each barrel. Additionally, culverts will include 5 ground shots representing the overtopping profile of the above road/train embankment as follows: one directly above the culvert, 25 and 50 feet upstation of the original shot, and 25 and 50 feet downstation of the original shot. A unit cost and a specific number of Culverts to be collected has been estimated for budgetary purposes in **Table A** under Fee and Expenses.

#### *Task 3.4.4 – Dams and Impoundments*

Where impoundments along the Primary System include significant storage, which is expected to impact system performance, field survey will be obtained which will allow for hydrologic/hydraulic modeling of the impoundment. Field survey data will consist of top of dam profile (five shots: center, right abutment, left abutment, and one point in between the center and each abutment) and dimension (width of crest); edge of water elevation; and dimension, elevation, and type/lining of emergency spillway. Access permitting, dimension, elevation, and type of primary spillway and barrel will also be obtained, however, boats will not be utilized in gathering this data. Note: impoundments and detention/retention facilities outside the Primary System will not be surveyed. A unit cost and a specific number of Dams and Impoundments to be collected has been estimated for budgetary purposes in **Table A** under Fee and Expenses.

#### **Task 3.5 – Secondary Open Channel Measurements**

If man-made or natural channels exist along the Secondary System and require measurement for modeling purposes, a typical single channel measurement (top width, bottom width, depth, and liner type) will be taken by use of a measuring tape. The channel length and horizontal location will be digitized from best available data (aerial photography, GIS topography, etc.) and the channel measurement will be inferred onto the digitized line as representation of the entire channel length. Channel longitudinal slope will be estimated based on best available topographic information (likely using elevational data from upstream/downstream bounding structures). A unit cost and a specific



number of Secondary Channel Cross Sections to be collected has been estimated for budgetary purposes in **Table A** under Fee and Expenses.

#### ***Task 3.6 – Difficult Access (DA) Structures***

Some structures will be difficult to access in the field for various reasons. These could be sedimentation, debris, structure being covered over or paved over, access problems, etc. A reasonable attempt to access the structure will be made. In the event that this is not possible, then a location will be stored for the structure and a report provided to the City. The City will resolve DA structure issues. Once the structure is made accessible then the Consultant will re-visit the structure and collect the missing attributes. These structures will be invoiced twice, once for the initial visit and again for the second.

The Consultant will spend approximately 5 minutes searching for system structures. Difficult access structures and structures that are not found will be reported bi-weekly to the City. Should the City staff identify and resolve the issues with these structures, the Consultant will return and collect the appropriate attribute information. For cost estimating purposes, the Consultant will assume that approximately 1% of the total structures estimated will be DA structures.

#### ***Task 3.7 – System Connectivity***

The Consultant will utilize ESRI ArcGIS software to compile a GIS representation of the underground stormwater utility system. The Consultant will identify, organize and import relevant background files to supplement the project field data and assist with establishing system connectivity. The Consultant shall provide system wide connectivity to the extent possible and perform quality control (QC) of the inventory by a hydraulic engineer.

#### ***Task 4 – Condition Assessment***

Condition of Closed System Inventory structures collected during **Task 3** will be assessed by Consultant following completion of inventory activities in watershed work areas. Consultant shall send field staff teams into the watershed to conduct a visual condition assessment of each surface accessible structure. Field staff will utilize the same naming system as developed for use in collecting field survey inventory data. Each feature shall have a Facility ID which will be used as a common identifier for data collection and condition assessment activities.

Consultant field staff shall utilize iPads or similar equipment to collect the following attributes for each closed system inventory structure. For budgeting purposes, we have assumed that **8,700** structures will be assessed. All assessments will be performed visually from the surface; confined spaces will not be entered to perform assessments. Pipe assessments will only be performed visually from the surface with limited polecam footage obtained as deemed necessary by the Consultant.

#### ***Task 4.1 – Manholes, Junction Boxes, Catch Basins, Pond Outlet Structures***

- Facility ID number
- Closest address
- General location (in lawn, in street, etc.)

- Surface cover (grass, asphalt, etc.)
- Location coordinates (+/- 3.0 ft)
- Cover type (solid, grate, etc.)
- Cover material (cast iron, concrete, etc.)
- Inlet type (curb, yard, etc.)
- Window openings
- Simple sketch with all pipes entering/exiting structure and their direction of flow
- Structure material(s)
- Structure condition (a rating of 1 to 10)
- Maintenance rating (a rating of 1 to 5)
- Photos of unique situations
- Flow characterization
- Identification of possible illicit discharges
- Cleaning recommendations
- Rehabilitation and/or replacement recommendations
- Comments (from standardized list)

**Task 4.2 – Pipe Inlets, Outlets, and Headwalls**

- Facility ID number
- Closest address
- General location (in lawn, in field, etc.)
- Location coordinates (+/- 3.0 ft)
- End type (headwall, pipe extension, etc.)
- Simple sketch with all pipes entering/exiting structure and their direction of flow
- Headwall material
- Structure condition (a rating of 1 to 10)
- Maintenance rating (a rating of 1 to 5)
- Photos of unique situations
- Flow characterization
- Identification of possible illicit discharges
- Cleaning recommendations
- Rehabilitation and/or replacement recommendations
- Comments (from standardized list)

**Task 4.3 – Storm Sewer and Culvert Pipes**

- "To" and "From" structure ID numbers
- Pipe size
- Pipe shape
- Direction of flow
- Pipe material
- Pipe condition at structure

- Cleaning recommendations
- Rehabilitation and/or replacement recommendations based on condition at structure
- Comments (from standardized list)

**Task 4.4 – Ditches**

- Facility ID number
- Closest address
- General location (in lawn, in field, etc.)
- Location coordinates (+/- 3.0 ft)
- Ditch dimensions
- Ditch condition
- Photos of unique situations
- Flow characterization
- Identification of possible illicit discharges
- Cleaning recommendations
- Repair recommendations
- Comments (from standardized list)

**Task 4.5 – TN Stream Quantification Tool (SQT) Assessment**

Kimley-Horn will use the Tennessee SQT to evaluate the existing condition of streams within each watershed. Up to 50 locations will be evaluated as a part of this Task. The stream reaches will be assessed for the morphological metrics of hydrology, floodplain connectivity, lateral migration, bedform diversity, and riparian vegetation. Following TN SQT methodology, Kimley-Horn will prepare an assessment summary of the existing conditions score at each location.

**Task 5 – Public Involvement**

The limited public involvement effort for the City of Jackson WSMP will consist of the following tasks:

**Task 5.1 – Website Information Development**

The City will own and maintain a project page hosted within the City's website. The Consultant shall provide the City with information to populate the website, including the following:

- Project Area Map or data to allow for City creation of map
- Timeline of project described in quarterly timeframes (City to update based on project progress reports provided by Consultant with monthly invoices)

**Task 5.2 – One-on-One Onsite Resident Interviews**

Data from the City maintained drainage complaints will be used to help identify properties requiring onsite resident interviews. The purpose of the interviews is to collect additional information that is not apparent from drainage complaint data, such as high-water marks (visual/photographic documentation, no field survey data), extent of flooding, property damage, etc. Consultant shall schedule, attend, and record minutes of onsite interviews. Additional information collected will be summarized in the complaint geodatabase or as a separate geodatabase/shapefile to augment complaint geodatabase information.

**Task 5.3 – Public Questionnaire**

A questionnaire will be digitally distributed or posted on the City's website to assess the watershed's condition from the perspective of residents and property owners (historical flooding, drainage issues, erosion, etc.). Activities will consist of:

- Prepare drainage questionnaire to be digitally distributed throughout the City. Methods to distribute the questionnaire will include an online survey instrument, e-mail, City social media, and City website. No hard copy distribution is anticipated for this Scope of Services.
- Tabulate questionnaire responses in a geodatabase format using the respondent's address for geocoding.
- Present results of questionnaire in tabular format and illustrated and color coded on a watershed map.

Questionnaire results will be used to help identify *Secondary Systems* for modeling and for sharing feedback with the public and/or elected officials.

**Task 6 – Hydrologic and Hydraulic Modeling**

Whenever possible, the Consultant shall avoid duplication of previous technical effort by utilizing pertinent resources collected during **Task 2** from sources including the City, the TEMA, the Natural Resources Conservation Service, the U.S. Geological Survey, and Federal Emergency Management Agency. The *Primary System* for this project consists of the following streams as listed below; limits are shown on the **Project Area Map**:

**Table 6-1: Primary System Streams and Lengths**

Watershed Name	Length (ft)
Anderson Branch	36,500
Cane, Bond, and Meridian Creek	30,000
Bayberry Creek	21,000
Central Creek	21,000
DeLoach Creek	42,500
Dyer Creek	130,500
Jones Creek	39,500
Matthews Branch	16,000
Moize Creek	63,000
Sandy Creek	40,500
South Fork Tributaries	40,000
<b>Total</b>	<b>480,500</b>

*Secondary Systems* shall be identified as discussed in **Task 6.2**.

**Task 6.1 – Primary System**

*Task 6.1.1 – Hydrologic Modeling*

The Consultant shall utilize a model/methodology as specified in **Table 6-2** to develop the hydrologic characteristics and peak flows for *Primary System* streams.

**Table 6-2: Hydrologic Models and Methodology**

Conveyance System Type	Model / Methodology
Primary – Open	HEC-HMS / NRCS NEH Part 630

The hydrology limits are approximated as shown in **Project Area Map**. Watershed boundaries may be revised during the project based on topography, field walks, drainage system inventory, and other factors. Subwatersheds will be delineated as appropriate (at structures, bridges, confluences, etc.) and shall vary in size as deemed appropriate by the Consultant. Subwatersheds divides will occur at significant hydrologic features such as culvert crossings, confluences, and detention/impoundment facilities. Watershed characteristics will be identified for each subwatershed in a manner consistent with the NRCS National Engineering Handbook Part 630 Hydrology (NEH630) and land uses will be developed from City GIS layers or using zoning GIS coverage information provided by the City and/or Madison County. Hydrologic parameters calculated will include: subwatershed area, land use (or zoning), curve number (based on land use/zoning), time of concentration, NRCS soil types, significant detention storage areas, and channel routing characteristics. The Consultant shall evaluate the 2-, 10-, 25-, 50-, 100-year; 24-hour; SCS Type II rainfall distribution events as part of the modeling efforts. Hydrologic modeling will not incorporate detention associated with individual development projects. Hydrologic models to be developed are listed in the "Definitions and Terms" section. Rainfall depths will be based on NOAA Atlas 14 data as follows:

**Table 6-3: Depth-Duration-Frequency Table**

Duration (yr)	2	10	25	50	100
24-Hour Rainfall (in)	3.41	4.91	5.8	6.5	7.22

*Latitude / Longitude: 35.6212 / -88.7953*

Areal variations in rainfall depths will not be incorporated into the models. Time of concentration for *Primary System* subwatersheds shall be calculated based on the Velocity Method described in NEH 630 and will be held constant in all models.

*Task 6.1.2 – Hydraulic Modeling*

Hydraulic modeling of the Primary System will utilize the hydraulic model as specified in **Table 6-4** and/or as refined by the City/Consultant during project execution.

**Table 6-4: Primary System Hydraulic Models and Methodology**

Conveyance System Type	Methodology
Primary – Open	2D HEC-RAS (unsteady state)

Hydraulic models as listed in **Definitions and Terms** shall be developed to determine hydraulic profiles for the corresponding hydrographs developed by the models described in **Task 6.1.1**. *Primary System* models shall include all streams and tributaries in a single geometry file. The effective or preliminary FEMA model will be utilized to the extent possible to establish and/or check calculated starting water surface elevations, provide a point of verification for model results, and provide geometric input data as applicable. 100-year floodplain boundaries will be developed and illustrated based on the *Existing Conditions Hydraulic Model* and the *Future Conditions Hydraulic Model*. Models for all tributaries and the main stem stream will be incorporated into a single HEC-RAS model.

*Primary System* hydraulic modeling will determine Level of Service (LOS) at roadway crossings within the limits of the *Primary System* based on the *Existing Conditions Hydraulic Model*. Stream crossings which overtop during the applicable LOS storm event shall be considered deficient. Required LOS shall be as specified in the City's Stormwater Management Manual for City maintained roads, TDOT's requirements for state-maintained roads, or railroad guidelines. For dams across the *Primary System* that include a road, sufficiency of the crossing will be based on the applicable road design standards.

#### *Task 6.1.3 – Water Surface Elevation Increases Due to Improvements*

Proposed improvements may result in increases in water surface resulting from increased downstream flows. To offset water surface increases associated with improvements, additional volume will be added along the *Primary System* via modifications such as floodplain benching or increased storage at a downstream attenuation location. This Scope of Services includes development of floodplain benching or other additional storage measures to maintain *Alternatives Hydraulic Model* 100-year water surface elevations at or below the 100-year water surfaces calculated in the *Future Conditions Hydraulic Model* unless the City approves an increase in water surface elevation. Up to 11,000 bank-feet of floodplain benching analysis is included for each watershed. Floodplain benching will be included in the WSMP report document described in **Task 7**.

#### *Task 6.1.4 – Identification of At-Risk Structures*

The Consultant shall evaluate mapping results of the *Existing Conditions Hydraulic Model* and the *Future Conditions Hydraulic Model* to identify buildings at risk of flooding during the 100-year storm events. Consultant shall provide illustrations and tabular listing of all addresses with buildings deemed to be at risk of flooding based on intersecting the buildings GIS layer with the 100-year floodplain GIS layer produced through project modeling. The table shall be organized by stream and shall include property address, lowest adjacent grade (based on available LiDAR data), and the calculated water surface at the building based on the relevant model.

#### *Task 6.1.5 – Conceptual Alternatives Development*

The Consultant shall utilize the *Future Conditions Hydraulic Model* as the starting point for recommendation of alternatives to address LOS deficiencies identified through the modeling process. Alternatives may also be identified to reduce the number of at-risk structures. At-risk structures will be evaluated in clusters rather than each one individually. At-risk structures to be addressed via improvements will be selected in collaboration with the City based on system service request data and City knowledge of problem areas. For each alternative, the goal will be to provide the City's required

LOS. In some cases, providing the required LOS may not be feasible, therefore a reduced LOS may be proposed with City approval. At some improvement locations, upstream or downstream improvements may be required to achieve improvement in LOS at the subject location. In these cases, the Consultant shall evaluate upstream and downstream crossing for improvements, regardless of LOS status, and propose improvements which will be linked with the LOS violation crossing.

Additional crossing capacity will be achieved by optimizing horizontal expansion of the opening area to the extent that can be achieved given spatial and other constraints at the specific crossing. The Consultant shall make a field visit as deemed necessary to locations where alternatives are proposed to assess existing above and below ground utilities, spatial constraints, and other constructability issues associated with infrastructure improvements. Depending on the size of existing infrastructure, the horizontal expansion factor is expected to be in the 50-100% range.

Because the City does not control TDOT streets, private roads/driveways, or railroads, alternatives will not be proposed at these locations unless model results show that they negatively impact the ability of City-owned infrastructure to meet the required LOS. Alternatives will not be proposed on any public or private dams (including those with public roads across the top) due to complexity of modeling, design, and regulatory agency coordination required to meet state Tennessee Safe Dams requirements.

One alternative at each eligible crossing not meeting the required LOS (up to the amount specified in **Task 7.1.1**) will be evaluated by the Consultant and presented in the WSMP report document described in **Task 7**. Alternatives will be evaluated to determine both their individual and cumulative effect on water surfaces within the *Primary System*, with the report indicating when solution alternatives are hydraulically dependent upon each other.

### **Task 6.2 – Secondary Systems**

#### *Task 6.2.1 – Identification of Secondary Systems*

*Secondary Systems* include selected drainage features and systems that drain to the *Primary Systems*. Examples include closed pipe or open channel systems or other hydraulic systems with known flooding problems that are not located within the *Primary System*. For budgetary estimating purposes, approximately 40,000 linear feet (up to ten (10) systems) of *Secondary System* are included for study in each watershed by the Consultant. Analyzed systems will be identified based on watershed reconnaissance, historical drainage complaints, and input from the City. While these methods will identify the *Secondary Systems*, system modeling described herein shall determine system sufficiency and potential solutions. The Consultant shall present the list of *Secondary Systems* for consideration to the City's Project Manager for approval before the analysis is performed. The list shall include a graphic depiction of the limits of the *Secondary System*, the piping system contained therein, and the reason(s) the *Secondary System* has been selected for consideration. The Consultant and the City will work collaboratively to determine which *Secondary Systems* will be selected for detailed modeling.

#### *Task 6.2.2 – Hydrologic and Hydraulic Modeling*

The Consultant shall use methods and software as shown in **Tables 6-5** and **6-6** to evaluate hydrology and hydraulic performance.

**Table 6-5: Secondary System Hydrologic Methodology**

Conveyance System Type	Methodology
Secondary – Closed/Open	Rainfall: SCS Type II Infiltration: Curve Number Runoff: EPA-SWMM

**Table 6-6: Secondary System Hydraulic Modeling Software**

Conveyance System Type	Methodology
Secondary – Closed/Open	EPA-SWMM or other software capable of export to EPA-SWMM format*

\* Consultant shall provide individual EPA-SWMM files for each Secondary System and storm event.

Modeling will analyze the capacity of the conveyance system only, therefore no surface depth or spread calculations will be performed as part of this Scope of Services. The Consultant shall evaluate the 2-, 10-, 25-, 50-, 100-year, 24-hour events as part of the modeling efforts (SCS Type II rainfall distribution). Level of service for analyzed *Secondary Systems* will be determined based on the calculated hydraulic grade line (HGL).

It is anticipated that all *Secondary Systems* will be in areas that are fully developed/built-out therefore no future conditions modeling will be performed on these systems.

*Task 6.2.3 – Conceptual Alternatives Development*

The Consultant shall use models developed in **Task 6.2.2** for planning level conceptual alternatives to address LOS deficiencies. The goal will be to provide the City's required LOS when possible. One (1) alternative will be evaluated for each *Secondary System* within each watershed and presented in the WSMP report document described in **Task 7**.

**Task 6.3 – Level of Service (Design Storm) Standards**

The following minimum design storm requirements are from the City's Subdivision and Land Development Regulations (the "Manual"). **Bold / Italicized** content is in addition to the Manual requirements.



**Table 6-7: Level-of-Service Requirements**

Facility	Design Storm	Level of Service
Stormwater Collection System • 15" minimum diameter	10-year	10-year storm <i>within the pipe (no pressurized flow)*</i>
Roadway Culverts at Stream Crossings • <b>Minimum 1' freeboard*</b>	100-year	FEMA mapped streams*, "blue-line" streams shown on USGS or USDA soils maps
	10-year	All other stream crossings
Drainage Ditches	10-year	Non-erosive velocities and contained within the ditch limits

*\*Requirement in addition to the Manual*

**Task 6.4 – Boundary Conditions**

Downstream boundary conditions for each model will be set as follows:

- At the downstream end of the *Primary System* model, Consultant shall evaluate if coincidental peaks are likely at the confluence point based on the ratio of relative watershed sizes and FEMA guidance. If applicable, boundary conditions shall be set to account for coincident peaks.
- If coincident peaks are not applicable, Consultant shall use the normal depth boundary condition, with downstream channel slope based best available data.
- For *Primary Systems* or *Secondary Systems* that terminate at an impoundment area, the downstream boundary condition shall be selected from best available information, which may include FEMA study, information collected from Tennessee Safe Dams Program, field survey data, design documents, or other available data.
- For *Secondary Systems* that terminate at another closed system or to an unmodeled open channel, the downstream boundary condition shall be set at the crown of the pipe.

The WSMP report document described in **Task 7** shall include a detailed discussion of boundary condition selection.

**Task 6.5 – Primary System Model Validation**

Consultant shall validate *Existing Conditions Hydraulic Model* prior to beginning subsequent modeling efforts. The City shall inform the Consultant of a storm event which was known to cause flooding, and the Consultant shall review available rainfall gage data and determine which gage data best applies to each the model. Storm specific rainfall data shall be assigned to the subbasins and the models run to compare model system response to known system responses during the storm event. Known system responses may be obtained from USGS gage data, community sourced high-water marks, or anecdotal accounts of City staff or residents.

Validation method(s) and outcomes will be documented in the WSMP report document described in **Task 7**.

**Task 6.6 – Task 6 Deliverables**

The Consultant shall provide a digital copy of the models to the City as part of the project final deliverables. *Primary System* models shall be provided in their native format; *Secondary System* models shall be provided in native and EPA-SWMM format. Models shall include all supporting data necessary to run them and duplicate results reflected in the watershed plan report provided under **Task 7**.

**Task 7 – Watershed Master Plan**

All alternatives shall include illustrative figures, writeups, and/or tables to show pertinent data.

**Task 7.1 – Flood Hazard Mitigation Alternative Development**

Based upon the modeling results, Consultant shall identify portions of the storm drainage system not meeting LOS requirements for possible improvements. City staff input will be cross-referenced to the model results to determine flooding that may have been misidentified, that should be classified as maintenance or nuisance issues, or that may not qualify for service under the established City program guidelines.

Once the model results have been validated, improvement options to be considered may include:

- Upgrade of the culvert/drainage system to meet established design criteria
- Upgrade of portions of the culvert/drainage system to lesser design standards (with City approval)
- Use alternative stormwater control measures such as detention/retention ponds, and floodplain storage, for water quantity control
- Improvements along alternative alignments to minimize construction cost and impacts to private property, transportation systems, and other existing infrastructure

**Task 7.1.1 – Primary System**

*Primary System* improvements will be developed and evaluated using the storm event flows from the *Future Conditions Hydrologic Model*. Consultant shall include discussion of various configurations considered as part of the iterative process to establish the alternative(s) presented in the report and why they were not selected for inclusion. This Scope of Services assumes that up to ten (10) crossing locations in each watershed along the *Primary System* will require alternative development based on level-of-service requirements or addressing of at-risk structures. If floodplain benching is required to resolve at-risk structures, the bank-footage will be measured against the quantity specified in **Task 6.1.3**.

**Task 7.1.2 – Secondary System**

One (1) improvement alternative will be included for each *Secondary System*; however, Consultant shall include discussion of other configurations considered, and why they were not selected for inclusion. Improvement alternative will be designed to meet the required LOS for the subject system. While improvements will not be developed for storm events greater than required, alternatives models shall include information and supporting data necessary for future user to evaluate performance of improvements in all storm events.

**Task 7.2 – Asset Protection and Bank Stabilization Alternatives**

Based on information collected regarding stream stability and erosion in **Task 4.5**, the Consultant shall recommend up to five (5) bank stabilization projects in each watershed to protect structure foundations/utilities/assets and reduce sediment loads to the streams. Consultant shall screen potential projects to select and include those which eliminate or minimize impacts to private property and are accessible via publicly owned properties. Consultant shall work with the City to determine screening priorities prior to selecting projects for inclusion in the report.

**Task 7.3 – Preliminary Opinion of Probable Construction Costs (OPCC)**

Improvements will be recommended and a budget (planning level) OPCC will be computed using recent bid tab information of similar projects and input on the local bid climate from City staff. Recent bid tab information, including prices and items as necessary, shall be provided to the Consultant by the City. Consultant shall also use its own library of cost data for creation of OPCCs. Preliminary budget costs for improvements shall include, at a minimum, the following elements: storm drainage improvements, channel stabilization materials, grading, necessary street improvements/replacements, floodplain benching, water and sewer utility relocations, erosion and sediment control measures, traffic control measures, miscellaneous items (e.g. fencing, walls, etc.), environmental mitigation costs, and easement acquisition estimates as appropriate.

**Task 7.4 – Prioritize Projects**

The Consultant shall work with the City to develop a prioritization protocol customized to the City's priorities. Two protocols will be developed: Infrastructure and Bank Stabilization. The Consultant will provide the City with initial scoring factors for consideration based on scoring protocols used in other master planning efforts and shall collaborate with the City to refine and establish a draft protocol. Once the draft protocol is accepted by the City, the Consultant shall score all proposed alternatives. Consultant shall meet with City staff to present OPCCs and prioritization, identify adjustments necessary to the prioritization protocol, if any, and address other comments or questions the City may have regarding the OPCC and prioritization.

**Task 7.5 – Draft Watershed Master Plan Report**

The draft watershed master plan report will be prepared and submitted to the City for review. An executive summary as well as supporting documentation for all the recommended projects will be included. Permitting requirements for each proposed project will be summarized including the expected permits required, potential mitigation requirements, and summarization of any discussions with representatives from regulatory agencies. Upon completion of the draft report the Consultant shall submit three (3) hard copies and one complete digital PDF of the report to the City for review.

**Task 7.6 – Projects Geodatabase**

Consultant shall develop and populate feature class fields with information about each identified project and shall provide to the City as part of the deliverables. Consultant shall submit draft projects geodatabase to the City with the Draft WSMP report.

**Task 7.7 – Final Deliverables**

The Consultant shall incorporate City comments into a final planning report and projects geodatabase.

The following items shall constitute the final submittal:

1. Geolocated project photos and point shapefile
2. Shapefile for updated watershed boundary
3. Field survey data
4. Shapefile for information collected in one-on-one onsite resident interviews
5. Shapefile for 100-year floodplain developed as part of *Primary System* modeling
6. Complete *Primary System* and *Secondary System* models (all scenarios) with all supporting documentation, information, tables, input files, etc. ready to run for future City use
7. Projects geodatabase
8. Watershed master plan report document: Two (2) hard copies and one digital copy

**Task 8 – Project Meetings**

Anticipated meetings for this project include the following:

- Project kickoff meeting (1)
- Resident interviews (4) per watershed
- Quarterly in person project progress meetings (12)
- Conference calls will be held in the months that do not have an in-person project progress meeting scheduled (24)
- Model validation meeting (1)
- Prioritization protocol coordination meeting (1)
- Cost and prioritization review meeting (1)
- Final project summary presentation (1)

Strategic project meetings as described above will be held between the Consultant and the City during the project at mutually agreed upon times within the project. The purpose of these meetings will be to guide the City of Jackson WSMP study to develop optimized alternatives and recommendations that are the most cost-effective methods of managing stormwater within these watersheds. The Consultant will prepare agenda and meeting minutes for each meeting and distribute to the City for review and comment prior to finalization. Additional meetings, if needed, can be negotiated as the need becomes apparent during project execution.

**Additional Services**

Any services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates. Additional services we can provide include, but are not limited to, the following:

- Design of Recommended Improvements
- Stormwater Permitting
- Stormwater Utility Fee Study and Rate Development
- Stormwater Program Management

**Information Provided By Client**

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

**Schedule**

We will provide our services as expeditiously as practicable to meet a mutually agreeable schedule. Kimley-Horn will achieve substantial completion of the above scope by December 2026 to meet ARP grant guidelines.

**Fee and Expenses**

Kimley-Horn will perform the services in **Tasks 1 - 8** above for the total lump sum fee of **\$9,518,720**. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Watershed	Size (Sq Miles)	Survey	PM / Data Collection	Condition Assessment	H&H Modeling	Masterplan Report
Anderson Branch	3.44	\$48,200	\$13,650	\$198,750	\$229,400	\$81,900
Cane, Bond, Meridian Creek	4.16	\$39,600	\$13,500	\$161,500	\$267,000	\$92,400
Bayberry Creek	1.58	\$105,355	\$37,600	\$84,875	\$143,200	\$36,300
Central Creek	1.84	\$130,216	\$43,800	\$96,250	\$161,900	\$43,220
DeLoach Creek	3.59	\$205,968	\$85,500	\$146,750	\$284,000	\$82,600
Dyer Creek	9.68	\$484,115	\$190,700	\$332,500	\$668,200	\$182,800
Jones Creek	2.45	\$129,019	\$58,400	\$96,375	\$227,900	\$56,400
Matthews Branch	2.00	\$106,534	\$47,600	\$76,750	\$158,300	\$46,000
Moize Creek	8.67	\$529,926	\$166,600	\$377,875	\$505,300	\$159,500
Sandy Creek	4.36	\$289,632	\$103,900	\$216,750	\$307,900	\$100,300
South Fork Tribs	5.40	\$276,237	\$128,700	\$192,375	\$344,400	\$124,300
<b>Totals</b>	<b>47.17</b>	<b>\$2,344,800</b>	<b>\$889,950</b>	<b>\$1,980,750</b>	<b>\$3,297,500</b>	<b>\$1,005,720</b>

**Table A: Field Surveying and Data Collection Table – Unit Rates**

Structure Type	Total Unit Rate	Estimated Structures	Estimated Fee
Primary Open System Channel Cross-Section	\$510.00	750	\$382,500.00
Bridges and Culverts	\$710.00	290	\$205,900.00
Dams and Impoundments	\$1,500.00	5	\$7,500.00
Closed System Structures	\$200.00	8,650	\$1,730,000.00
Difficult Access	\$210.00	90	\$18,900.00
<b>Total Surveying</b>		<b>9,785</b>	<b>\$2,344,800.00</b>

Consultant may alter the distribution of compensation between individual phases noted herein to be consistent with services rendered, but shall not exceed the lump sum amount unless approved in writing by the City.

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

**Closure**

In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard Provisions, "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to the City of Jackson.

Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please include the invoice number and Kimley-Horn project number with all payments. Please provide the following information:

\_\_\_\_\_ Please email all invoices to \_\_\_\_\_

\_\_\_\_\_ Please copy \_\_\_\_\_

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons execute this Agreement in the spaces provided below. We will commence services only after we have received a fully-executed agreement and a Notice to Proceed. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

To ensure proper set up of your projects so that we can get started, please complete and return with the signed copy of this Agreement the attached Request for Information. Failure to supply this information could result in delay in starting work on your project.



**Request for Information**

*Please return this information with your signed contract; failure to provide this information could result in delay in starting your project*

**Client Identification**

Full, Legal Name of Client					
Mailing Address for Invoices					
Contact for Billing Inquiries					
Contact's Phone and e-mail					
Client is (check one)	Owner	<input type="checkbox"/>	Agent for Owner	<input type="checkbox"/>	Unrelated to Owner

**Property Identification**

	Parcel 1	Parcel 2	Parcel 3	Parcel 4
Street Address				
County in which Property is Located				
Tax Assessor's Number(s)				

**Property Owner Identification**

	Owner 1	Owner 2	Owner 3	Owner 4
Owner(s) Name				
Owner(s) Mailing Address				
Owner's Phone No.				
Owner of Which Parcel #?				

**Project Funding Identification – List Funding Sources for the Project**


*Attach additional sheets if there are more than 4 parcels or more than 4 owners*



**KIMLEY-HORN AND ASSOCIATES, INC.**  
**STANDARD PROVISIONS (with addition of Section 20)**

- 1) **Kimley-Horn's Scope of Services and Additional Services.** Kimley-Horn will perform only the services specifically described in this Agreement. If requested by the Client and agreed to by Kimley-Horn, Kimley-Horn will perform Additional Services, which shall be governed by these provisions. Unless otherwise agreed to in writing, the Client shall pay Kimley-Horn for any Additional Services an amount based upon Kimley-Horn's then-current hourly rates plus an amount to cover certain direct expenses including telecommunications, in-house reproduction, postage, supplies, project related computer time, and local mileage. Other direct expenses will be billed at 1.15 times cost.
- 2) **Client's Responsibilities.** In addition to other responsibilities herein or imposed by law, the Client shall:
  - a. Designate in writing a person to act as its representative, such person having complete authority to transmit instructions, receive information, and make or interpret the Client's decisions.
  - b. Provide all information and criteria as to the Client's requirements, objectives, and expectations for the project and all standards of development, design, or construction.
  - c. Provide Kimley-Horn all available studies, plans, or other documents pertaining to the project, such as surveys, engineering data, environmental information, etc., all of which Kimley-Horn may rely upon.
  - d. Arrange for access to the site and other property as required for Kimley-Horn to provide its services.
  - e. Review all documents or reports presented by Kimley-Horn and communicate decisions pertaining thereto within a reasonable time so as not to delay Kimley-Horn.
  - f. Furnish approvals and permits from governmental authorities having jurisdiction over the project and approvals and consents from other parties as may be necessary.
  - g. Obtain any independent accounting, legal, insurance, cost estimating, and feasibility services required by Client.
  - h. Give prompt written notice to Kimley-Horn whenever the Client becomes aware of any development that affects Kimley-Horn's services or any defect or noncompliance in any aspect of the project.
- 3) **Period of Services.** Unless otherwise stated herein, Kimley-Horn will begin work after receipt of a properly executed copy of this Agreement. This Agreement assumes conditions permitting continuous and orderly progress through completion of the services. Times for performance shall be extended as necessary for delays or suspensions due to circumstances that Kimley-Horn does not control. If such delay or suspension extends for more than six months, Kimley-Horn's compensation shall be renegotiated.
- 4) **Method of Payment.** Client shall pay Kimley-Horn as follows:
  - a. Invoices will be submitted periodically for services performed and expenses incurred. Payment of each invoice will be due within 25 days of receipt. The Client shall also pay any applicable sales tax. All retainers will be held by Kimley-Horn and applied against the final invoice. Interest will be added to accounts not paid within 25 days at the maximum rate allowed by law. If the Client fails to make any payment due under this or any other agreement within 30 days after Kimley-Horn's transmittal of its invoice, Kimley-Horn may, after giving notice to the Client, suspend services and withhold deliverables until all amounts due are paid.
  - b. If the Client relies on payment or proceeds from a third party to pay Kimley-Horn and Client does not pay Kimley-Horn's invoice within 60 days of receipt, Kimley-Horn may communicate directly with such third party to secure payment.
  - c. If the Client objects to an invoice, it must advise Kimley-Horn in writing giving its reasons within 30 days of receipt of the invoice or the Client's objections will be waived, and the invoice shall conclusively be deemed due and owing. If the Client objects to only a portion of the invoice, payment for all other portions remains due.
  - d. If Kimley-Horn initiates legal proceedings to collect payment, it may recover, in addition to all amounts due, its reasonable attorneys' fees, reasonable experts' fees, and other expenses related to the proceedings. Such expenses shall include the cost, at Kimley-Horn's normal hourly billing rates, of the time devoted to such proceedings by its employees.
  - e. The Client agrees that the payment to Kimley-Horn is not subject to any contingency or condition. Kimley-Horn may negotiate payment of any check tendered by the Client, even if the words "in full satisfaction" or words intended to have similar effect appear on the check without such negotiation being an accord and satisfaction of any disputed debt and without prejudicing any right of Kimley-Horn to collect additional amounts from the Client.
- 5) **Use of Documents.** All documents and data prepared by Kimley-Horn are related exclusively to the services described in this Agreement and may be used only if the Client has satisfied all of its obligations under this Agreement. They are not intended or represented to be suitable for use or reuse by the Client or others on extensions of this project or on any other project. Any modifications by the Client to any of Kimley-Horn's documents, or any reuse of the documents without written authorization by Kimley-Horn will be at the Client's sole risk and without liability to Kimley-Horn, and the Client shall indemnify, defend and hold Kimley-Horn harmless from all claims, damages, losses and expenses, including but not limited to attorneys' fees, resulting therefrom. Kimley-Horn's electronic files and source code remain the property of Kimley-Horn and shall be provided to the

Client only if expressly provided for in this Agreement. Any electronic files not containing an electronic seal are provided only for the convenience of the Client and use of them is at the Client's sole risk. In the case of any defects in the electronic files or any discrepancies between them and the hardcopy of the documents prepared by Kimley-Horn, the hardcopy shall govern.

- 6) **Intellectual Property.** Kimley-Horn may use or develop its proprietary software, patents, copyrights, trademarks, trade secrets, and other intellectual property owned by Kimley-Horn or its affiliates ("Intellectual Property") in the performance of this Agreement. Unless explicitly agreed to in writing by both parties to the contrary, Kimley-Horn maintains all interest in and ownership of its Intellectual Property and conveys no interest, ownership, license to use, or any other rights in the Intellectual Property to Client. Any enhancements of Intellectual Property made during the performance of this Agreement are solely owned by Kimley-Horn and its affiliates. If Kimley-Horn's services include providing Client with access to or a license for Kimley-Horn's (or its affiliates') proprietary software or technology, Client agrees to the terms of the Software License Agreement set forth at <https://www.kimley-horn.com/khts-software-license-agreement> ("the License Agreement") which terms are incorporated herein by reference.
- 7) **Opinions of Cost.** Because Kimley-Horn does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to the costs of construction and materials, are made solely based on its judgment as a professional familiar with the industry. Kimley-Horn cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. If the Client wishes greater assurance as to the amount of any cost, it shall employ an independent cost estimator. Kimley-Horn's services required to bring costs within any limitation established by the Client will be paid for as Additional Services.
- 8) **Termination.** The obligation to provide further services under this Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or upon thirty days' written notice for the convenience of the terminating party. Kimley-Horn shall be paid for all services rendered and expenses incurred to the effective date of termination, and other reasonable expenses incurred by Kimley-Horn as a result of such termination.
- 9) **Standard of Care.** The standard of care applicable to Kimley-Horn's services will be the degree of care and skill ordinarily exercised by consultants performing the same or similar services in the same locality at the time the services are provided. No warranty, express or implied, is made or intended by Kimley-Horn's performance of services, and it is agreed that Kimley-Horn is not a fiduciary with respect to the Client.
- 10) **LIMITATION OF LIABILITY.** In recognition of the relative risks and benefits of the Project to the Client and Kimley-Horn, the risks are allocated such that, to the fullest extent allowed by law, and notwithstanding any other provisions of this Agreement or the existence of applicable insurance coverage, that the total liability, in the aggregate, of Kimley-Horn and Kimley-Horn's officers, directors, employees, agents, and subconsultants to the Client or to anyone claiming by, through or under the Client, for any and all claims, losses, costs or damages whatsoever arising out of or in any way related to the services under this Agreement from any causes, including but not limited to, the negligence, professional errors or omissions, strict liability or breach of contract or any warranty, express or implied, of Kimley-Horn or Kimley-Horn's officers, directors, employees, agents, and subconsultants, shall not exceed twice the total compensation received by Kimley-Horn under this Agreement or \$50,000, whichever is greater. Higher limits of liability may be negotiated for additional fee. This Section is intended solely to limit the remedies available to the Client or those claiming by or through the Client, and nothing in this Section shall require the Client to indemnify Kimley-Horn.
- 11) **Mutual Waiver of Consequential Damages.** In no event shall either party be liable to the other for any consequential, incidental, punitive, or indirect damages including but not limited to loss of income or loss of profits.
- 12) **Construction Costs.** Under no circumstances shall Kimley-Horn be liable for extra costs or other consequences due to unknown conditions or related to the failure of contractors to perform work in accordance with the plans and specifications. Kimley-Horn shall have no liability whatsoever for any costs arising out of the Client's decision to obtain bids or proceed with construction before Kimley-Horn has issued final, fully approved plans and specifications. The Client acknowledges that all preliminary plans are subject to substantial revision until plans are fully approved and all permits obtained.
- 13) **Certifications.** All requests for Kimley-Horn to execute certificates, lender consents, or other third-party reliance letters must be submitted to Kimley-Horn at least 14 days prior to the requested date of execution. Kimley-Horn shall not be required to execute certificates, consents, or third-party reliance letters that are inaccurate, that relate to facts of which Kimley-Horn does not have actual knowledge, or that would cause Kimley-Horn to violate applicable rules of professional responsibility.

- 14) **Dispute Resolution.** All claims arising out of this Agreement or its breach shall be submitted first to mediation in accordance with the American Arbitration Association as a condition precedent to litigation. Any mediation or civil action by Client must be commenced within one year of the accrual of the cause of action asserted but in no event later than allowed by applicable statutes.
- 15) **Hazardous Substances and Conditions.** Kimley-Horn shall not be a custodian, transporter, handler, arranger, contractor, or remediator with respect to hazardous substances and conditions. Kimley-Horn's services will be limited to analysis, recommendations, and reporting, including, when agreed to, plans and specifications for isolation, removal, or remediation. Kimley-Horn will notify the Client of unanticipated hazardous substances or conditions of which Kimley-Horn actually becomes aware. Kimley-Horn may stop affected portions of its services until the hazardous substance or condition is eliminated.
- 16) **Construction Phase Services.**
- a. If Kimley-Horn prepares construction documents and Kimley-Horn is not retained to make periodic site visits, the Client assumes all responsibility for interpretation of the documents and for construction observation, and the Client waives any claims against Kimley-Horn in any way connected thereto.
  - b. Kimley-Horn shall have no responsibility for any contractor's means, methods, techniques, equipment choice and usage, equipment maintenance and inspection, sequence, schedule, safety programs, or safety practices, nor shall Kimley-Horn have any authority or responsibility to stop or direct the work of any contractor. Kimley-Horn's visits will be for the purpose of endeavoring to provide the Client a greater degree of confidence that the completed work of its contractors will generally conform to the construction documents prepared by Kimley-Horn. Kimley-Horn neither guarantees the performance of contractors, nor assumes responsibility for any contractor's failure to perform its work in accordance with the contract documents.
  - c. Kimley-Horn is not responsible for any duties assigned to it in the construction contract that are not expressly provided for in this Agreement. The Client agrees that each contract with any contractor shall state that the contractor shall be solely responsible for job site safety and its means and methods; that the contractor shall indemnify the Client and Kimley-Horn for all claims and liability arising out of job site accidents; and that the Client and Kimley-Horn shall be made additional insureds under the contractor's general liability insurance policy.
- 17) **No Third-Party Beneficiaries; Assignment and Subcontracting.** This Agreement gives no rights or benefits to anyone other than the Client and Kimley-Horn, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole benefit of the Client and Kimley-Horn. The Client shall not assign or transfer any rights under or interest in this Agreement, or any claim arising out of the performance of services by Kimley-Horn, without the written consent of Kimley-Horn. Kimley-Horn reserves the right to augment its staff with subconsultants as it deems appropriate due to project logistics, schedules, or market conditions. If Kimley-Horn exercises this right, Kimley-Horn will maintain the agreed-upon billing rates for services identified in the contract, regardless of whether the services are provided by in-house employees, contract employees, or independent subconsultants.
- 18) **Confidentiality.** The Client consents to the use and dissemination by Kimley-Horn of photographs of the project and to the use by Kimley-Horn of facts, data and information obtained by Kimley-Horn in the performance of its services. If, however, any facts, data or information are specifically identified in writing by the Client as confidential, Kimley-Horn shall use reasonable care to maintain the confidentiality of that material.
- 19) **Miscellaneous Provisions.** This Agreement is to be governed by the law of the State where the Project is located. This Agreement contains the entire and fully integrated agreement between the parties and supersedes all prior and contemporaneous negotiations, representations, agreements, or understandings, whether written or oral. Except as provided in Section 1, this Agreement can be supplemented or amended only by a written document executed by both parties. Any conflicting or additional terms on any purchase order issued by the Client shall be void and are hereby expressly rejected by Kimley-Horn. If Client requires Kimley-Horn to register with or use an online vendor portal for payment or any other purpose, any terms included in the registration or use of the online vendor portal that are inconsistent or in addition to these terms shall be void and shall have no effect on Kimley-Horn or this Agreement. Any provision in this Agreement that is unenforceable shall be ineffective to the extent of such unenforceability without invalidating the remaining provisions. The non-enforcement of any provision by either party shall not constitute a waiver of that provision nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- 20) The City of Jackson's liability for tort claims is governed by Tenn. Code Ann. § 29-20 known as the Tennessee Governmental Tort Liability Act. Under the statute liability of a municipality is limited and its employees and prohibits a municipality from entering into a contract to assume the liability of others.

Indemnification by the City of Jackson is limited to damages incurred by the third-party as a result of acts by or omissions of the City of Jackson for which the City of Jackson is found, or would be found, liable under the law.


The City of Jackson cannot legally agree to a contract provision which requires it to indemnify or hold harmless another governmental entity or private party beyond the liability imposed by law. The Tennessee Attorney General, in its Opinion 93-01 states such an indemnity contract provision "appropriates public money and abrogates governmental immunity without authorization of the general assembly". Therefore, the City of Jackson's indemnification is only up to the limit allowed by law.

The City of Jackson's Indemnification of a third-party is excluded for the acts or omissions of a third-party or any other party other than the City of Jackson whether the liability is sole, contributory, or comparative in nature.

This addendum replaces and/or supersedes any other contractual agreements regarding indemnity contained in this contract.

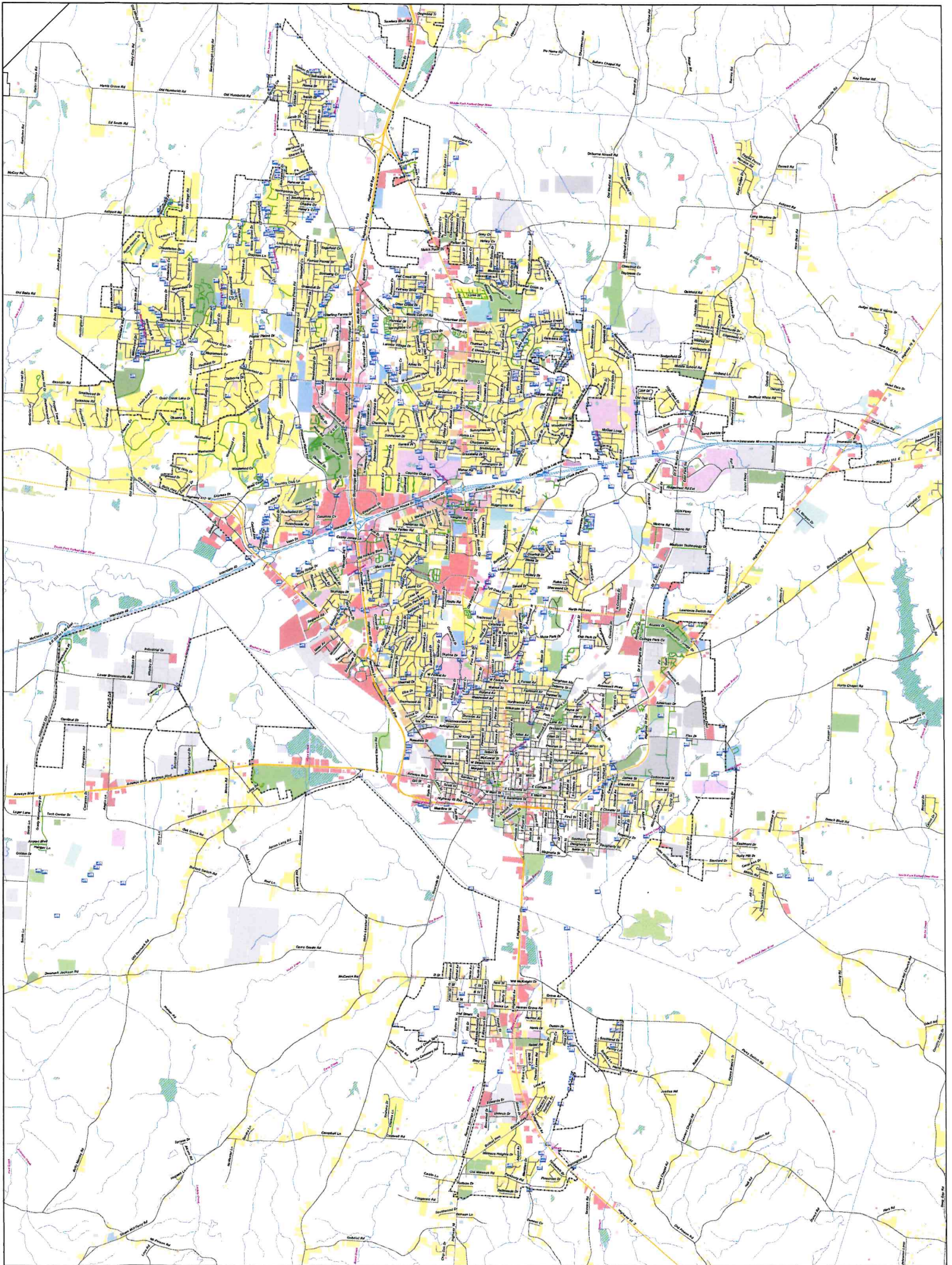
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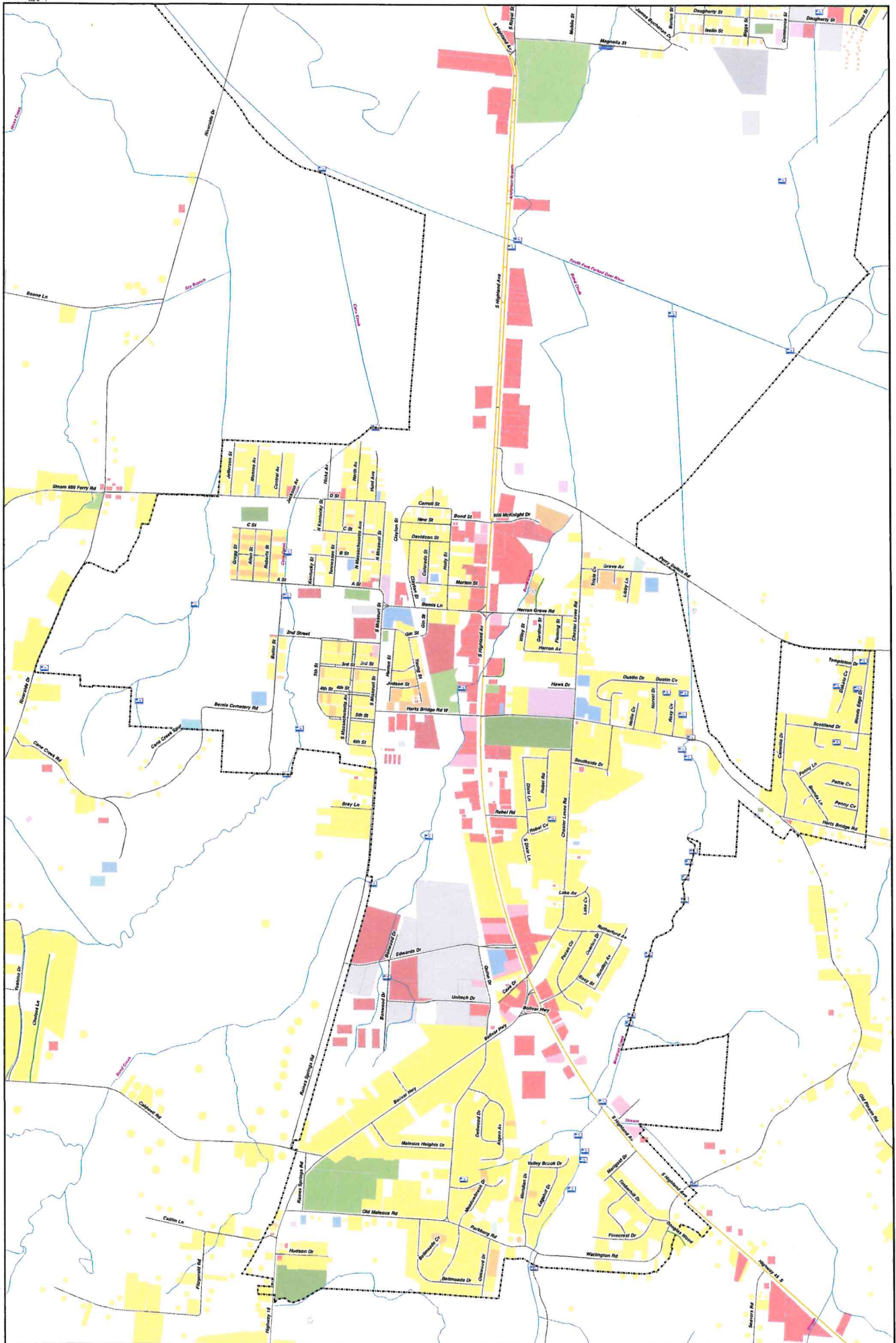
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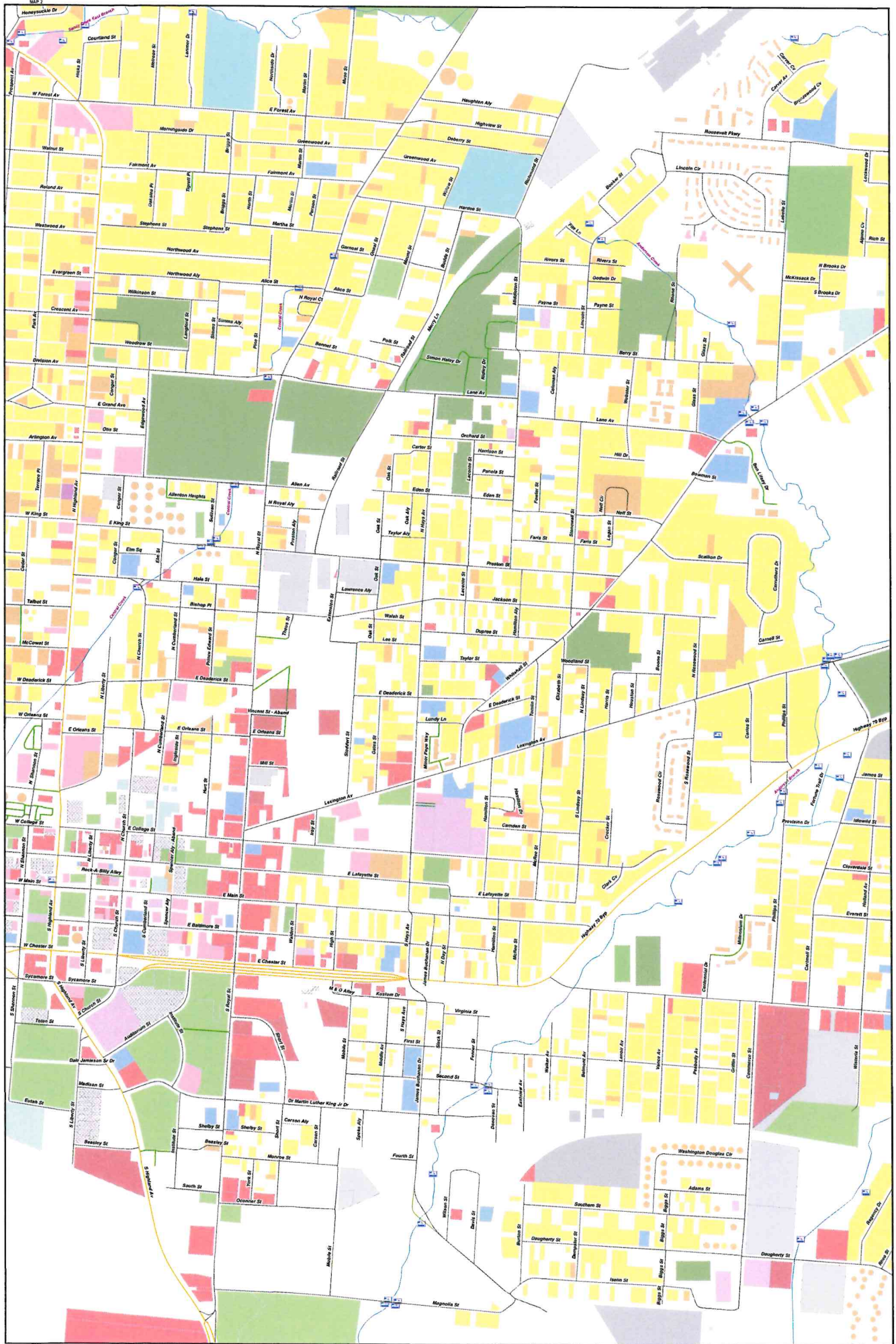
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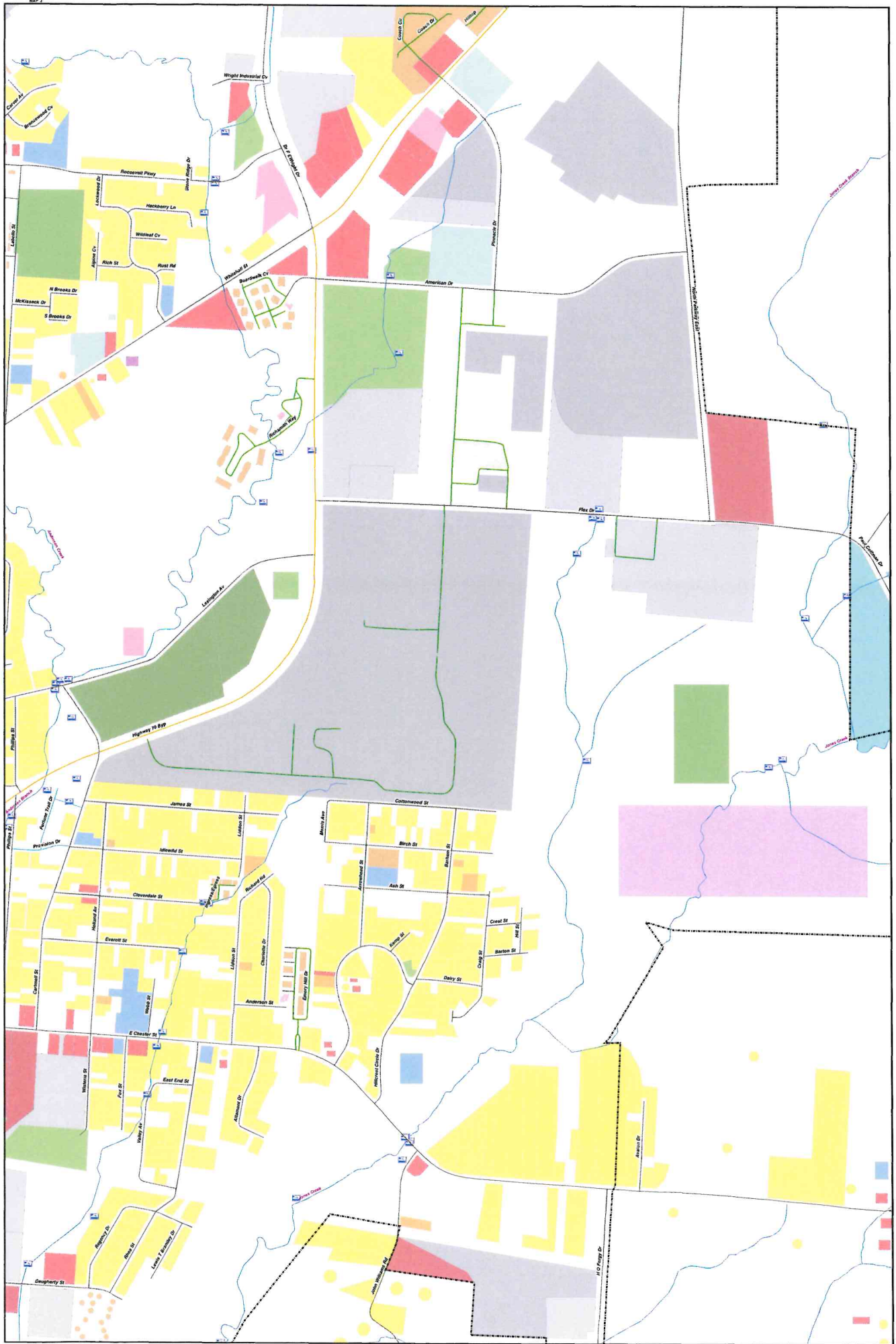
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-  CULTURAL REC
-  DUPLEX
-  HEAVY INDUSTRIAL
-  HOTEL
-  LIGHT INDUSTRIAL
-  MULTI FAMILY
-  OFFICE PROFESSIONAL
-  PARKING OR OUTBUILDING
-  PARKS
-  PUBLIC FACILITIES
-  PUBLIC UTILITIES
-  RETAIL
-  SCHOOLS
-  SINGLE FAMILY RESIDENTIAL
-  TRANS COMM
-  WHOLE WAREHOUSE

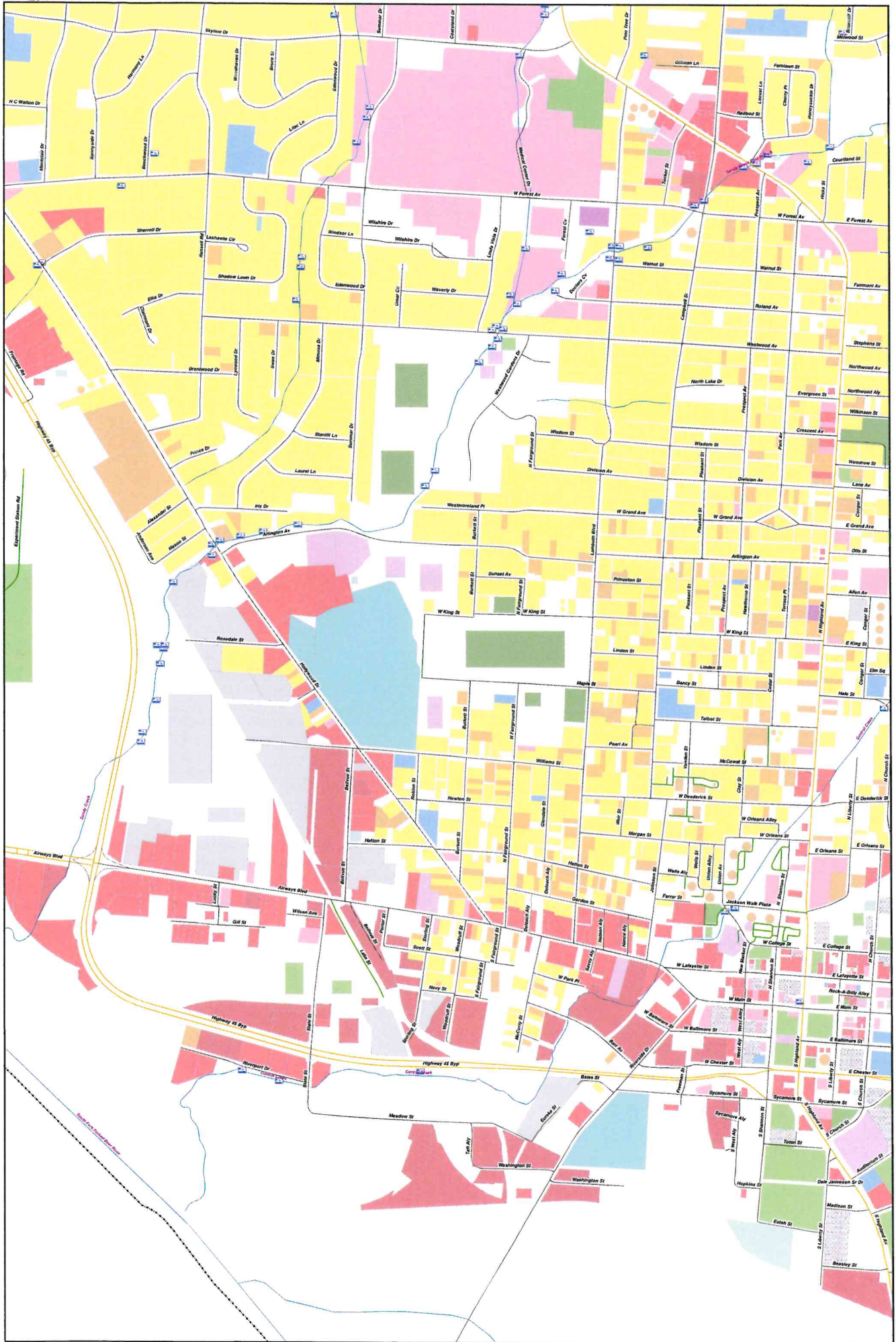


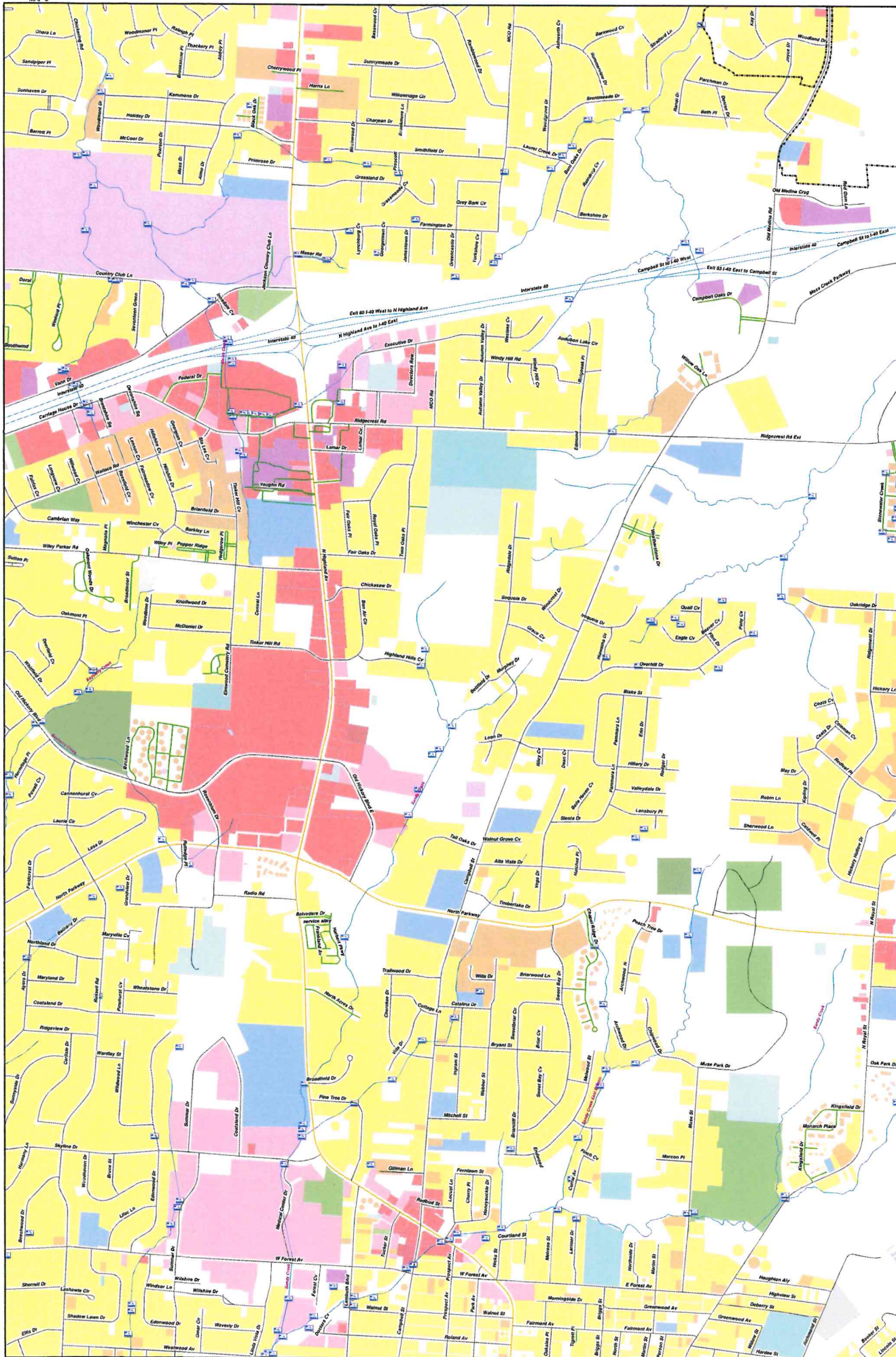


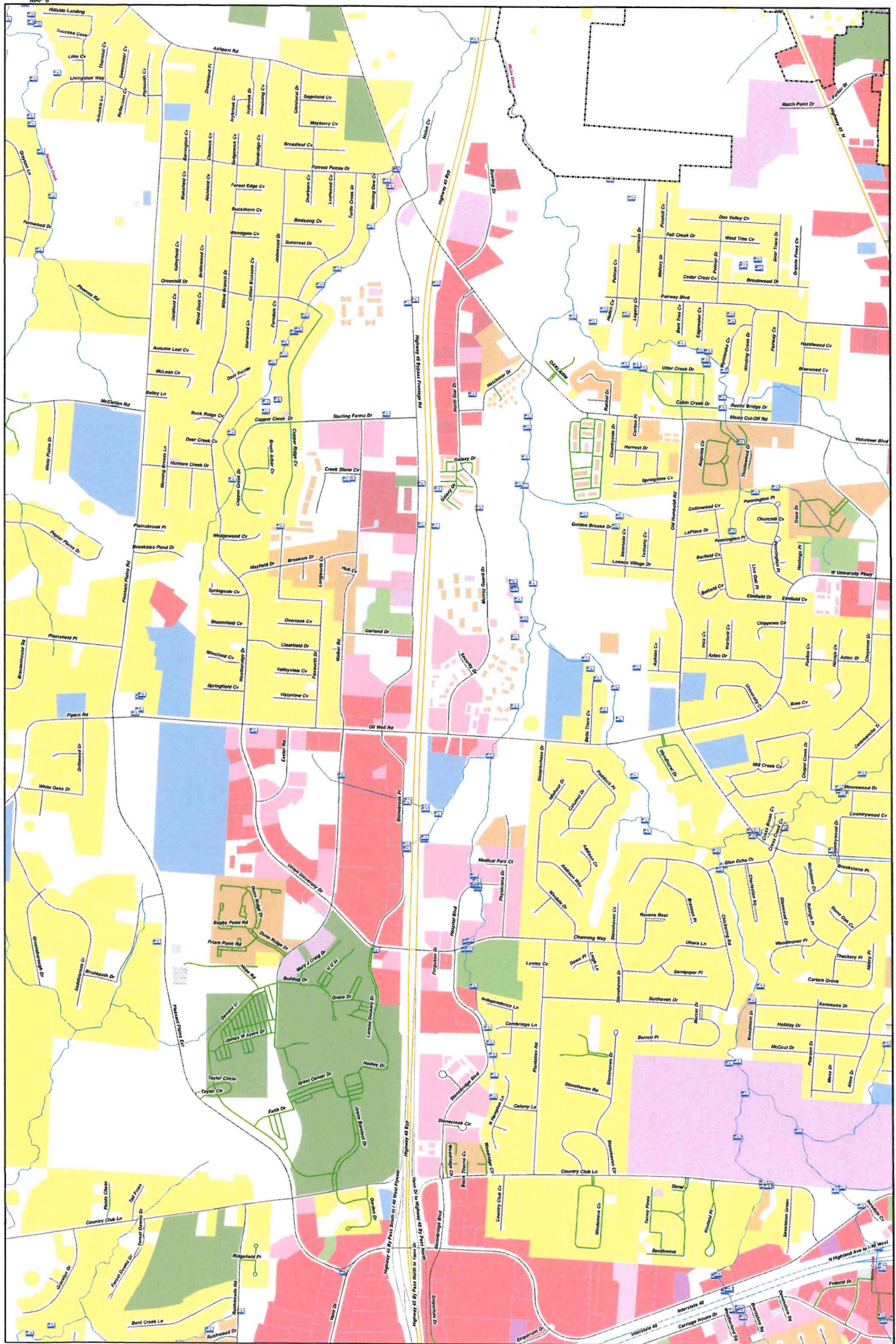


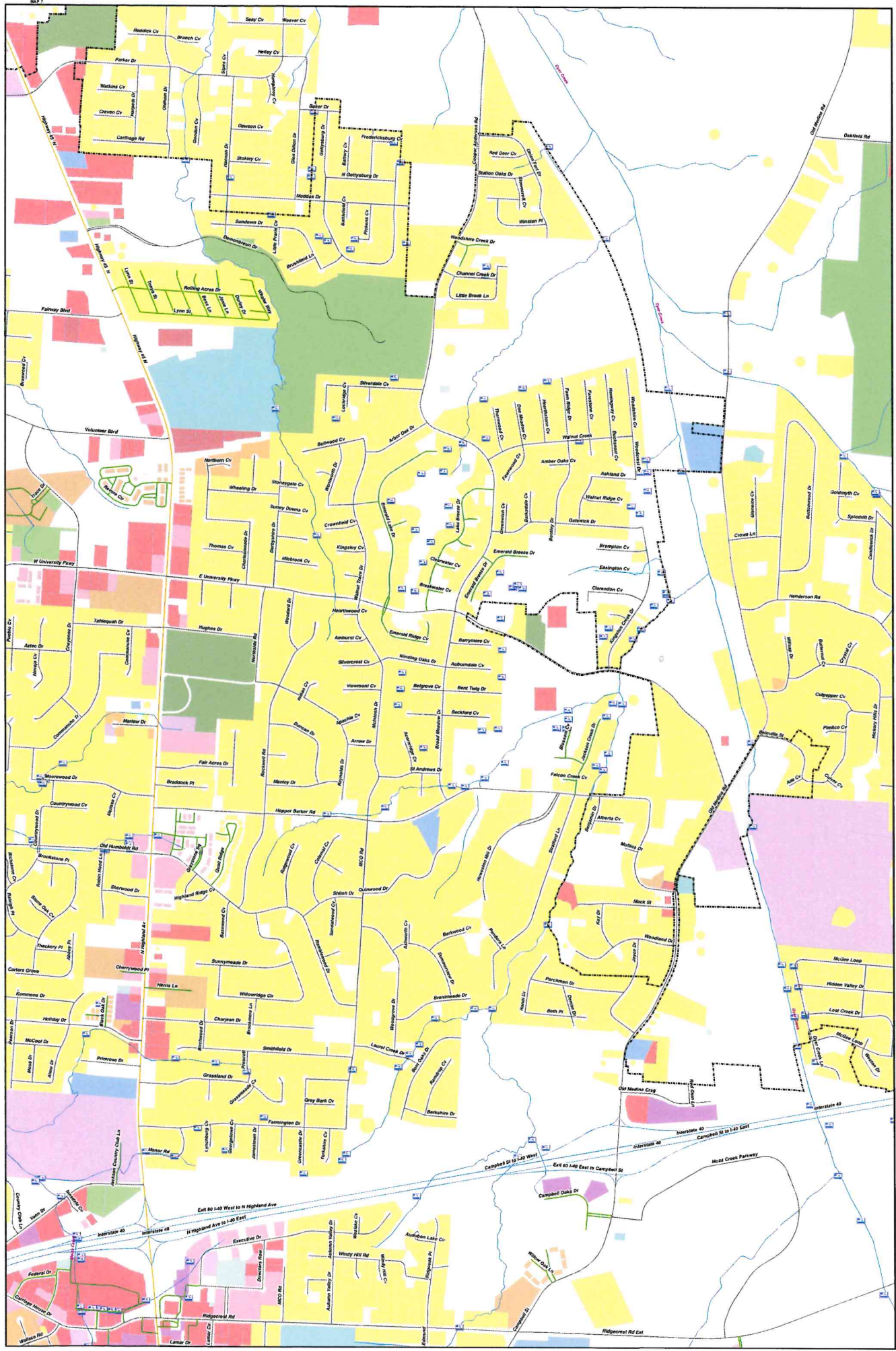


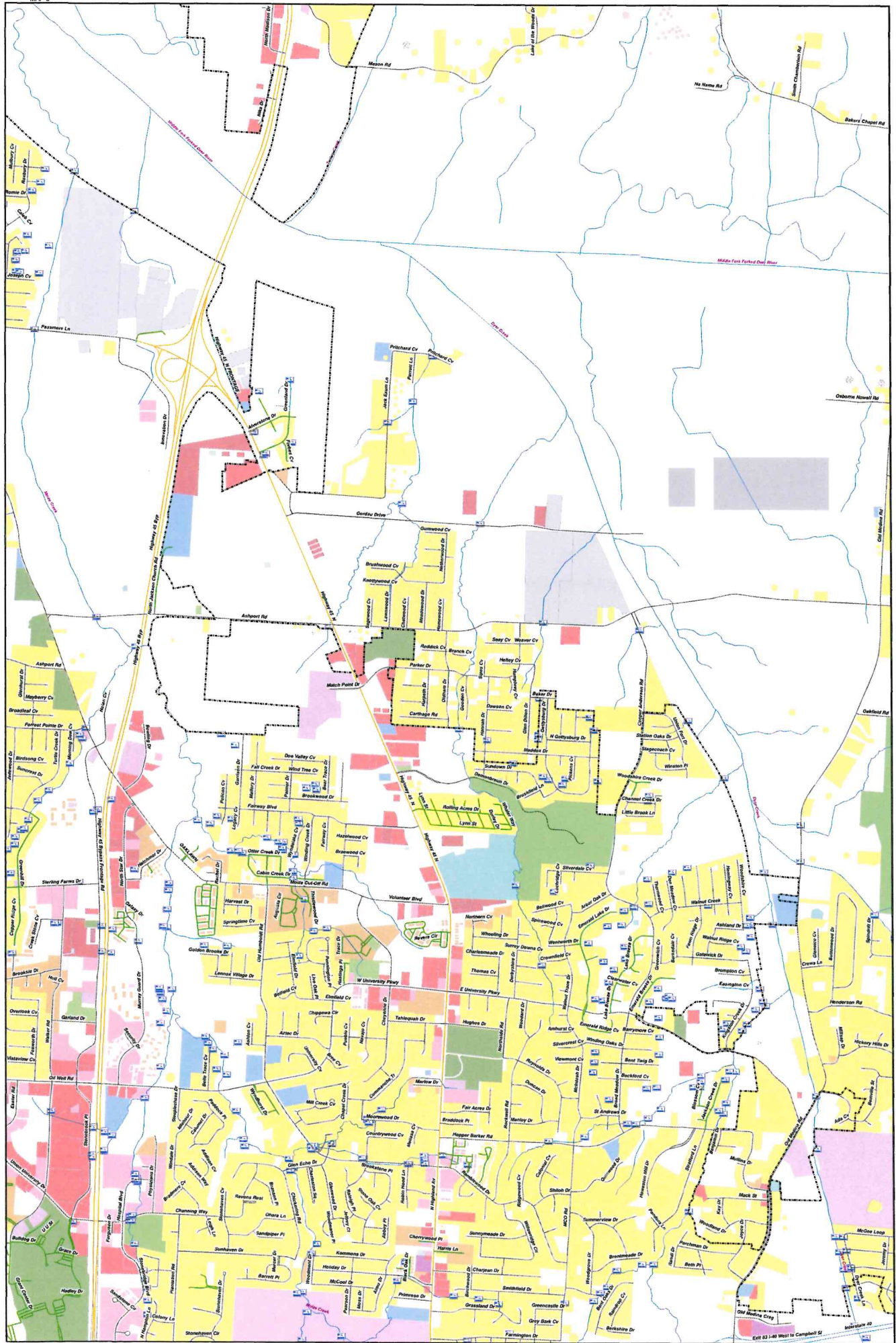


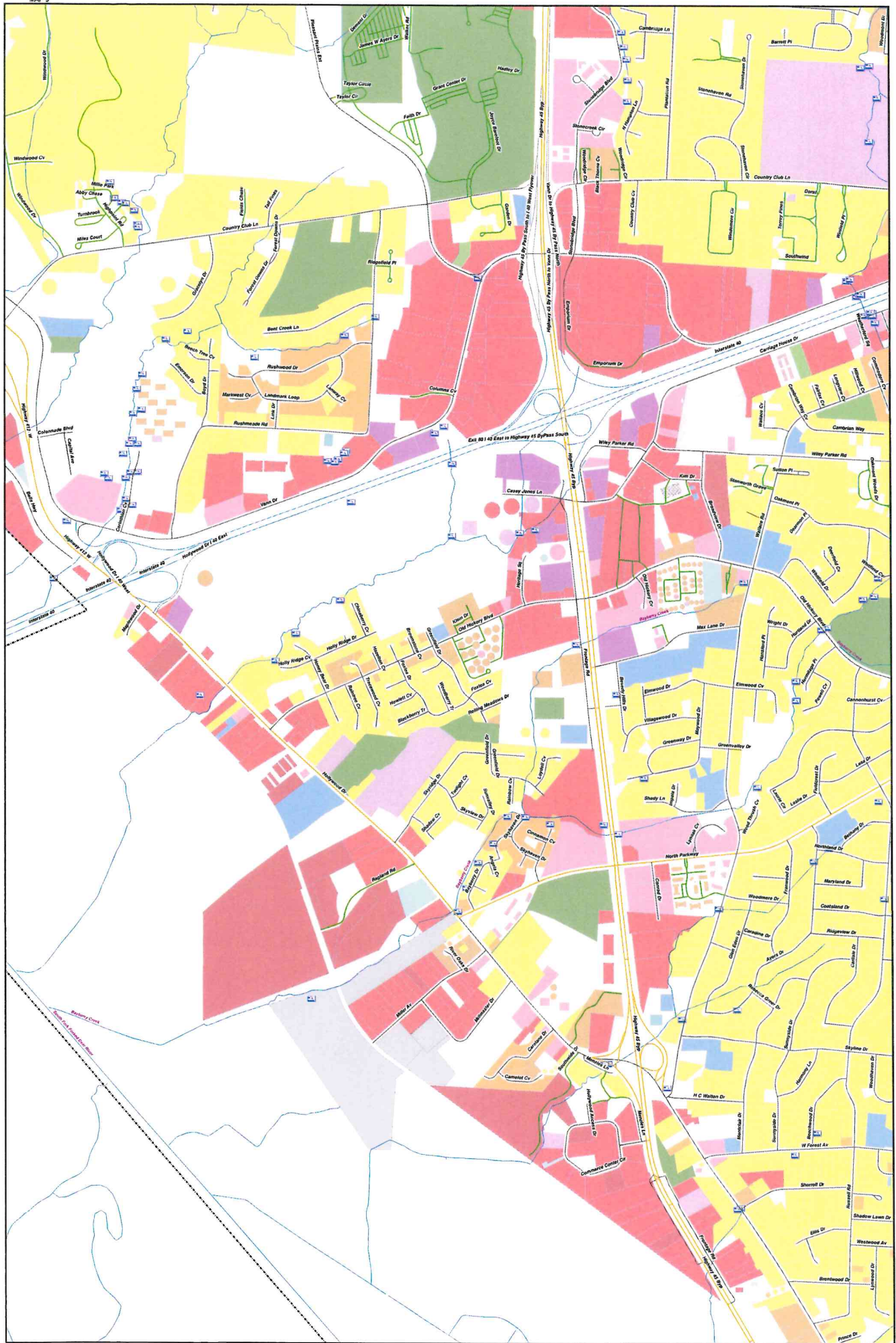


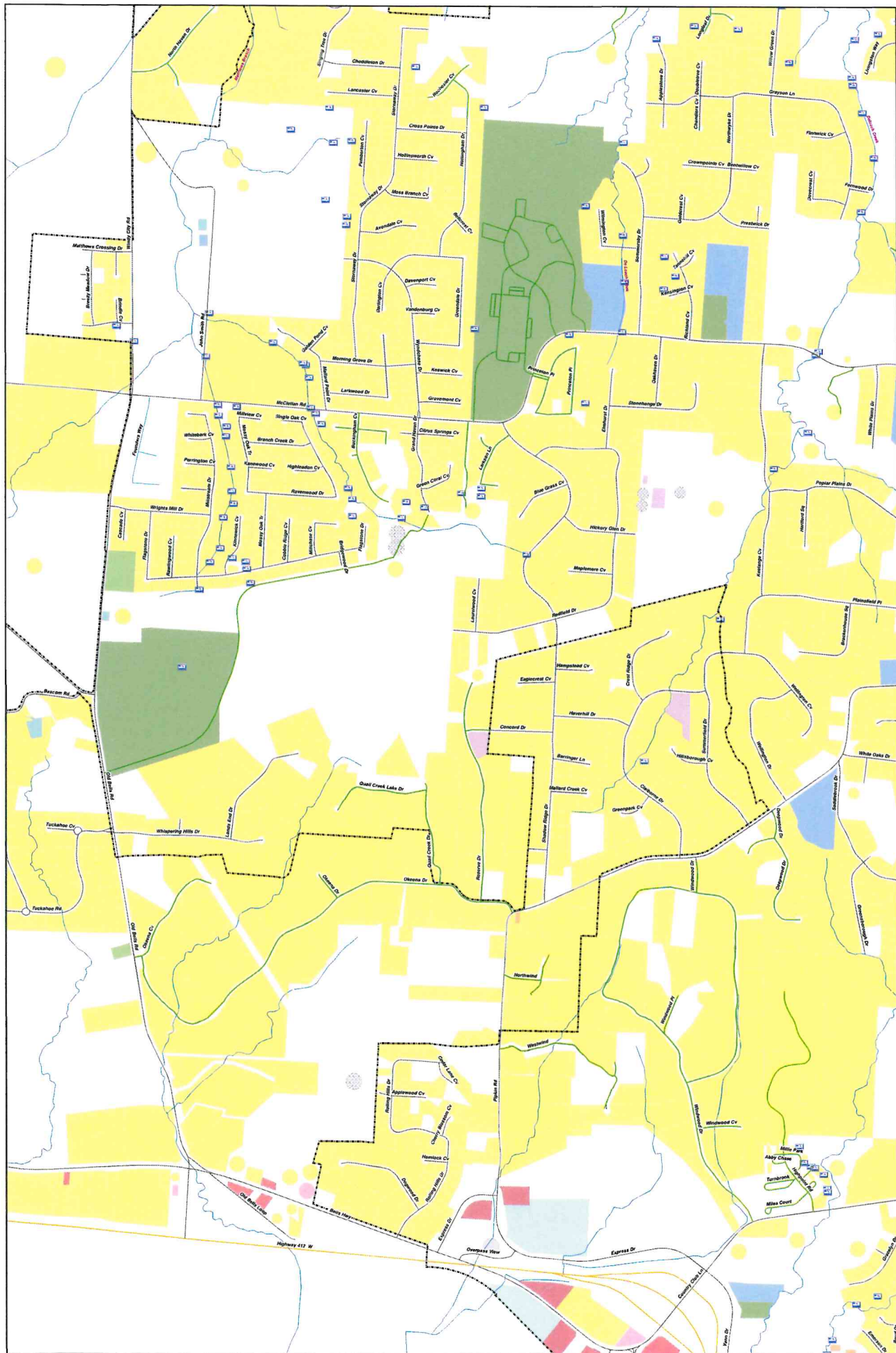




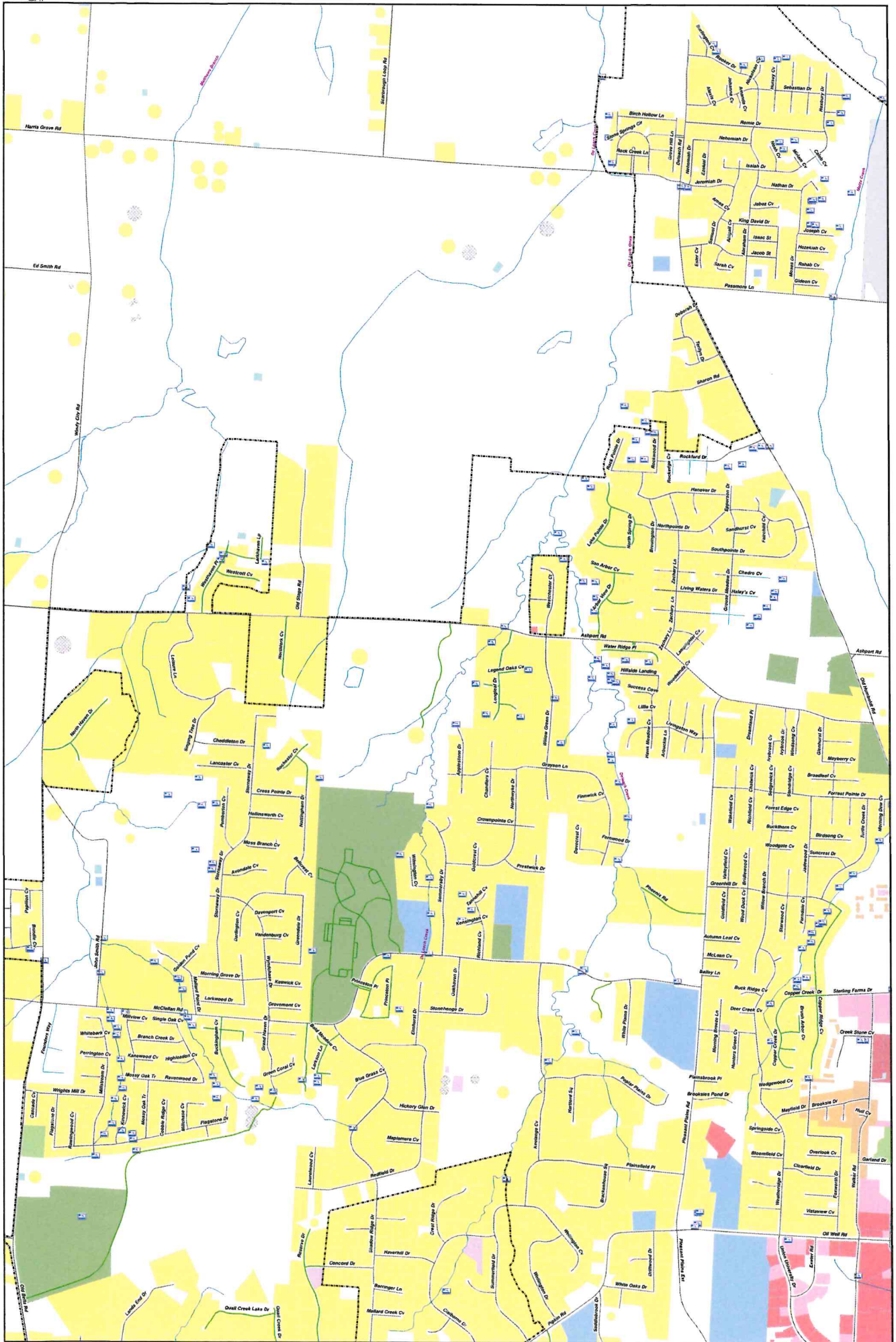












Map 1 BEMIS\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1a	111 Edwards Drive	CS Jackson LLC	09 Industrial	Whole Warehouse	Bond Creek
1b	121 Edwards Drive	H&M Industrial Service, Inc.	09 Industrial	Whole Warehouse	Bond Creek
2	48 Bonwood Drive	Kelley Greg Farms, LLC	09 Industrial Drive	Whole Warehouse	Bond Creek
3	1535 S. Highland Ave	Kayla Investments LLC	08 Commercial	Whole Warehouse	Bond Creek
4	217 A. Street	J&H LP of Jackson	09 Industrial	Whole Warehouse	Bond Creek
5	21 Meridian Springs Drive	Meridian Springs LLC	08 Commercial	Office Professional	Meridian Creek
6	b/s 840 and 840 S. Highland Ave	Brooks William J	08 Commercial	b/s Whole Warehouse	Bond Creek

Map 2 EAST\_MIDTOWN\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	106 Glass Street	Chacon Jr Luis E	05 Religious	Church	Anderson Branch Creek
2	718 Whitehall Street	Pearson Fredrick	08 Commercial	Retail	Anderson Branch Creek
3	471 Daugherty Street	Merriweather Derrick	08 Commercial	Retail	Anderson Branch Creek

Map 3 EAST2\_MIDTOWN\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	112 Wright Industrial Cove	Bolivar Subway Inc	08 Commercial	Retail	Jones Creek
2	1474 E Chester Street	Bryant Jalyn Ronald	08 Commercial	Retail	Jones Creek
3	1722 E Chester Street	Smith Terry	08 Commercial	Retail	Jones Creek

Map 3 EAST2\_MIDTOWN\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	112 Wright Industrial Cove	Bolivar Subway Inc	08 Commercial	Retail	Jones Creek
2	1474 E Chester Street	Bryant Jalyn Ronald	08 Commercial	Retail	Jones Creek
3	1722 E Chester Street	Smith Terry	08 Commercial	Retail	Jones Creek

Map 4 WEST\_MIDTOWN\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	47 Riverport Drive	Cooks Pest Control	08 Commercial	Whole Warehouse	Central Creek
2	37 Riverport Drive	Dyess Floyd E	08 Commercial	Retail	Central Creek
3	133 Union Ave	City of Jackson	02 City	Retail/Office Professional	Central Creek
4	146 Union Ave	Jackson Downtown Revenue	02 City	Retail/Office Professional	Central Creek
5	922 Hollywood Drive	Nassar Aiman	08 Commercial	Retail	Sandy Creek
6	935 Hollywood Drive	Bull Market of Mississippi, LLC	08 Commercial	Retail	Sandy Creek
7	15 Westwood Gardens Drive	City of Jackson	02 City	Cultural Rec	Sandy Creek
8	3 Westwood Gardens Drive	City of Jackson	02 City	Cultural Rec	Sandy Creek
9	550 Westwood Ave	City of Jackson	02 City	Public Facilities	Sandy Creek
10	544 Roland Ave	Jackson Energy Authority	02 City	Public Utilities	Sandy Creek
11	544 Roland Ave	Jackson Energy Authority	02 City	Public Utilities	Sandy Creek
12	544 Roland Ave	Jackson Energy Authority	02 City	Public Utilities	Sandy Creek
13	45 Forest Cove Cove	Forest Cove Long Term	08 Commercial	Office Professional	Sandy Creek
14	45 Forest Cove Cove	Forest Cove Long Term	08 Commercial	Office Professional	Sandy Creek
15	544 Roland Ave	Jackson Energy Authority	02 City	Public Utilities	Sandy Creek
16	544 Roland Ave	Jackson Energy Authority	02 City	Public Utilities	Sandy Creek
17	45 Forest Cove Cove	Forest Cove Long Term	08 Commercial	Office Professional	Sandy Creek
18	399 W Forest Ave	399 West Forest LLC	08 Commercial	Retail	Sandy Creek
19	923 Campbell Street	399 West Forest LLC	08 Commercial	Whole Warehouse	Sandy Creek
20	1341 N Highland Ave	St Johns Masonic	08 Commercial	Retail	Sandy Creek
21	1302 N Highland Ave	Patel Kartik and Dhaval Patel	08 Commercial	Retail	Sandy Creek
22	14 Locust Lane	Nunn Ayanna R	08 Commercial	Retail	Sandy Creek
23	21 Medical Center Drive	West Tenn Healthcare Inc	01 County	Retail	Sandy Creek
24	238 Summar Ave	West Tenn Healthcare Inc	01 County	Office Professional	Sandy Creek
25	238 Summar Ave	West Tenn Healthcare Inc	01 County	Office Professional	Sandy Creek
26	238 Summar Ave	West Tenn Healthcare Inc	01 County	Office Professional	Sandy Creek

Map 5 CAMPBELL\_I-40\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	569 Skyline Drive	569 Skyline Partners	08 Commercial	Office Professional	Sandy Creek
2	569 Skyline Drive	569 Skyline Partners	05 Religious	Office Professional	Sandy Creek
3	1573 N Highland Ave	First Presbyterian Church	05 Religious	Church/Office Professional	Sandy Creek
4	111 Old Hickory Blvd	Cox Susan A	08 Commercial	Retail	Sandy Creek
5	49 Old Hickory Blvd	Perimeter Jackson Realty LLC	08 Commercial	Office Professional	Sandy Creek
6 a,b,c,d,e	276 Carriage House Drive	TNI Properties LLC	08 Commercial	Office Professional	Moize Creek
7a,b,c,d	375 Vann Drive	M&E Investmenst LLC	08 Commercial	Retail	Moize Creek
8a,b	375 Vann Drive	M&E Investmenst LLC	08 Commercial	Retail	Moize Creek
9	2628 N Highland Ave	Jones Carl F III Etux	08 Commercial	Retail	Moize Creek

Map 6 NORTH BYPASS\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	214 Oil Well Road	Leaders Credit Union	08 Commercial	Office Professional	Moize Creek
2	38 Stonebrook Place	Brooks Holdings LLC	08 Commercial	Retail	Moize Creek
3	71 Stonebrook Place	Kroger Limited Partnership I	08 Commercial	Retail	Moize Creek
4	123 Stonebrook Place	Dayton Hudson Cor #921	08 Commercial	Retail	Moize Creek
5	127 Stonebrook Place	Yale Jackson HoldCo LLC	08 Commercial	Retail	Moize Creek
6a,b,c	at 2780 Hwy 45 Bypass	West Tenn Healthcare Inc	08 Commercial	Retail	Moize Creek
7a,b	at 2780 Hwy 45 Bypass	West Tenn Healthcare Inc	08 Commercial	Retail	Moize Creek
8 a,b,c,d,e	379 and 386 Hospital Blvd	JMCG Hospital District	01 County	Office Professional	Moize Creek
9 a,b,c,d	9 Physicians Drive	Flagship Jackson Physicians LLC,	08 Commercial	Office Professional	Moize Creek
10	24 Channing Way	City of Jackson	02 City	Parks	Moize Creek
11	130 North Star Drive	Jackson Utility Divison	07 Other Exempt	Public Utilites	Moize Creek
12	130 North Star Drive	Jackson Utility Divison	07 Other Exempt	Public Utilites	Moize Creek
13	130 North Star Drive	Jackson Utility Divison	07 Other Exempt	Public Utilites	Moize Creek
14	130 North Star Drive	Jackson Utility Divison	07 Other Exempt	Public Utilites	Moize Creek
15	1023 Old Humboldt Road	Patterson Charles Etux	08 Commercial	Office Professional	Moize Creek
16	1023 Old Humboldt Road	Patterson Charles Etux	08 Commercial	Office Professional	Moize Creek
17	1023 Old Humboldt Road	Patterson Charles Etux	08 Commercial	Office Professional	Moize Creek

Map 7 NORTHEAST\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1a	191 Vann Drive	C&H Investment Group LLC	08 Commercial	Retail	Moize Creek
1b	138 A&B Vann Drive	Cox Susan	08 Commercial	Retail	Moize Creek
2a	79 Innsdale Cove	Bhikhabhai V Patel Etal	08 Commercial	Retail	Moize Creek
2b	53 Carriage House Drive	McCauley Elizabeth Ann	08 Commercial	Retail	Moize Creek
3	15 Carriage House Drive	McCauley Elizabeth Ann	08 Commercial	Retail	Moize Creek
4	2 Executive Drive	Turky Construction LLC	08 Commercial	Retail	Moize Creek
5	37 Executive Drive	Cox Susan A	08 Commercial	Office Professional	Moize Creek

Map 8 NORTH\_NORTHEAST\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
N/A	N/A	N/A	N/A	N/A	Moize Creek

Map 9 BYPASS\_1-40\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	1806 Hollywood Drive	Chiger Barbara Thomas	08 Commercial	Retail	Bayberry Creek
1a	1772 Hollywood Drive	Johnson William L	08 Commercial	Light Industrial	Bayberry Creek
2	365 North Parkway	K O Investments LLC	08 Commercial	Office Professional	Bayberry Creek
3	327 North Parkway	Barnes David	08 Commercial	Retail	Bayberry Creek
4	1771 Hwy 45 Bypass	St Mary Manor LLLP	08 Commercial	Muilt Family/Retail	Bayberry Creek
5	63 Heritage Square	F P B Investments LLC	08 Commercial	Retail/Hotel	Unnamed Tributary
6	63 Heritage Square	F P B Investments LLC	08 Commercial	Retail	Unnamed Tributary
7	1000 Vann Drive	Duclagle Partners	08 Commercial	Retail	Unnamed Tributary

8 a,b,c,d,e,f	1401 Vann Drive	Carmax Auto Superstores Inc	08 Commercial	Retail	Unnamed Tributary
9	48 Corinthian Cove	Jackson Hotel Partners LLC	08 Commercial	Retail	Unnamed Tributary

Map 10 NORTHWEST\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
N/A	N/A	N/A	N/A	N/A	Deloach Creek

Map 11 NORTH\_NORTHWEST\_11\_23

<u>Outfall No.</u>	<u>Nearest Address</u>	<u>Property Owner</u>	<u>District Category</u>	<u>Land-Use Type</u>	<u>Receiving Stream</u>
1	Creek Stone Cove	BLC Partners	08 Commercial	Office Professional	Moize Creek
2	480 Oil Well Road	First State Properties Inc	08 Commercial	Office Professional	Moize Creek
3	Walker Road	First Choice Property & Dev LLC	08 Commercial	Retail	Moize Creek

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 1-#16  
 Inspection Date: 2-20-2024  
 Nearest Location: 121 Edwards Drive  
 Name of Receiving Waters: Bond Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 36"  
 Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



**Marked Location**

400 ft

[Edit Location](#)

[Directions](#)

7 min walk

Address

150-194 Edwards Dr  
Jackson, TN 38301  
United States



Latitude  
35.556987

Longitude  
-88.820612

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 1 #3  
 Inspection Date: 2-20-2024  
 Nearest Location: 1535 S. Highland Ave  
 Name of Receiving Waters: Bond Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 48"  
 Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?:  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



### Dropped Pin



0 ft away



#### Details

Address  
1535 S Highland Ave  
Jackson, TN 38301  
United States



Coordinates  
35.57130° N, 88.81516° W



**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 1-#5  
 Inspection Date: 2-15-2024  
 Nearest Location: 21 Meridian Springs Drive  
 Name of Receiving Waters: Meridian Creek  
 Impaired:             Yes         No            Parameters: \_\_\_\_\_  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): N/A  
 Type:                     Culvert     Open Channel  
 Shape:                    Circular     Trapezoidal     N/A  
 Submerged In Water:  No             Partically     Fully  
 Filled with Sediment:  No             Partically     Fully  
 Flow present?         Yes         No  
 Flow Description:     Trickle     Moderate     Heavy             N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely
- Potential (presence of two or more indicators)
- Suspect (one or more indicators with a severity of 3)
- Obvious

**DATA COLLECTION:**

Sample for the lab?     Yes         No  
 If yes, collected from:  Flow         Pool

Notes: \_\_\_\_\_



Marked Location ×

[Edit Location](#)

[Directions](#)

[1 min walk](#)

Address

S Highland Ave  
Jackson, TN 38301  
United States



Remove



Save it



Share

Latitude

35.550342

Longitude

-88.806735

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 7-#1a-1  
 Inspection Date: 3-5-2024  
 Nearest Location: 191 Vann Drive  
 Name of Receiving Waters: Moize Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 60"  
 Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



Marked Location

Edit Location

Directions  
1 min. walk

Address  
Jackson Country Club  
Jackson, TN 38305  
United States



Latitude  
35.672693

Longitude  
-88.835007

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 7-#1a-2  
 Inspection Date: 3-5-2024  
 Nearest Location: 191 Vann Drive  
 Name of Receiving Waters: Moize Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 24"

Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



Marked Location



Edit Location

Directions  
1 min walk

Address

Jackson Country Club  
Jackson, TN 38305  
United States



Remove



Save to



Share

Latitude

35.672693

Longitude

-88.835007

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 7-2a  
 Inspection Date: 3-5-2024  
 Nearest Location: 191 Vann Drive  
 Name of Receiving Waters: Moize Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 48"  
 Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely
- Potential (presence of two or more indicators)
- Suspect (one or more indicators with a severity of 3)
- Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



Marked Location

X

Edit Location

Directions

Address  
100 Vann Dr  
Jackson, TN 38305  
United States



Remove



Save to...



Share

Latitude  
35.671754

Longitude  
-88.833276

8 Places at this Address

See All



**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 7-#26-1  
 Inspection Date: 3-12-2024  
 Nearest Location: 53 Carriage House Drive  
 Name of Receiving Waters: Moize Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 72"

Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?:  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



Dropped Pin

- Directions
- Download
- Move
- More

2 Places at This Address

**Roto-Rooter Plumbing & Water Cleanup**  
66 Federal Dr, Jackson



**Mfs USA Logistics Inc**  
66 Federal Dr, Jackson



Details

Address  
66 Federal Dr  
Jackson, TN 38305  
United States



Coordinates  
35.66978° N, 88.83298° W

**OUTFALL INVENTORY FIELD SHEET**

Outfall ID: Map 7-#26-2  
 Inspection Date: 3-12-2024  
 Nearest Location: 53 Carriage House Drive  
 Name of Receiving Waters: Moize Creek  
 Impaired:  Yes  No      Parameters: See chart  N/A

**OUTFALL DESCRIPTION:**

Diameter (inches): 8' x 6'  
 Type:  Culvert  Open Channel  
 Shape:  Circular  Trapezoidal  N/A  
 Submerged In Water:  No  Partically  Fully  
 Filled with Sediment:  No  Partically  Fully  
 Flow present?:  Yes  No  
 Flow Description:  Trickle  Moderate  Heavy  N/A

**PHYSICAL INDICATORS:**

Indicator	Check if present	Description	Relative Severity
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Red <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Gray	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	(See severity)	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some indications of origin (e.g. possible suds or oil sheen) <input type="checkbox"/> 3 - Origin clear (e.g. obvious oil sheen, suds)

**OVERALL OUTFALL CHARACTERIZATION:**

- Unlikely  
 Potential (presence of two or more indicators)  
 Suspect (one or more indicators with a severity of 3)  
 Obvious

**DATA COLLECTION:**

Sample for the lab?  Yes  No  
 If yes, collected from:  Flow  Pool

Notes: \_\_\_\_\_



**Dropped Pin** ✕

[Directions](#) [Download](#) [Move](#) [More](#)

**2 Places at This Address**

**Roto-Rooter Plumbing & Water Cleanup**  
88 Federal Dr, Jackson

**Mfs USA Logistics Inc**  
66 Federal Dr, Jackson

**Details**

**Address**  
66 Federal Dr  
Jackson, TN 38305  
United States

**Coordinates**  
35.66978° N, 88.83298° W

ID 305B   Waterbody ID	Waterbody Name	Primary County	Other Counties	Water Type	Water Size	Impairment Cause Name	TMDL Priority	Potential Impairment Source Name
TN08010205012_0700	Bond Creek	Madison County		RIVER	9.7	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010205012_0700	Bond Creek	Madison County		RIVER	9.7	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010205012_0800	Cane Creek	Madison County		RIVER	14.4	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010205012_0800	Cane Creek	Madison County		RIVER	14.4	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010205012_0800	Cane Creek	Madison County		RIVER	14.4	SEDIMENTATION/SILTATION	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010205012_0900	Hicks Creek	Madison County		RIVER	28.5	SEDIMENTATION/SILTATION	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010205017_2000	Meridian Creek	Madison County		RIVER	0.73	FLOW REGIME MODIFICATION	NA	DAM OR IMPOUNDMENT
TN08010205017_3000	Meridian Creek	Madison County		RIVER	8.73	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010205017_3000	Meridian Creek	Madison County		RIVER	8.73	SEDIMENTATION/SILTATION	Low	GRAZING IN RIPARIAN OR SHORELINE ZONES
TN08010205018_0100	Jones Creek	Madison County		RIVER	18.4	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)

ID 305B   Waterbody ID	Waterbody Name	Primary County	Other Counties	Water Type	Water Size	Impairment Cause Name	TMDL Priority	Potential Impairment Source Name
TN08010204010_0700	Dyer Creek	Madison County		RIVER	30.6	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010204010_0700	Dyer Creek	Madison County		RIVER	30.6	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010204010_0700	Dyer Creek	Madison County		RIVER	30.6	SEDIMENTATION/SILTATION	Low	CHANNELIZATION
TN08010204010_0700	Dyer Creek	Madison County		RIVER	30.6	SEDIMENTATION/SILTATION	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN08010204010_0700	Dyer Creek	Madison County		RIVER	30.6	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010204010_0800	Moize Creek	Madison County		RIVER	12.8	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010204010_0800	Moize Creek	Madison County		RIVER	12.8	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010204010_0800	Moize Creek	Madison County		RIVER	12.8	SEDIMENTATION/SILTATION	Low	CHANNELIZATION
TN08010204010_0800	Moize Creek	Madison County		RIVER	12.8	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010204010_0900	De Loach Creek	Madison County		RIVER	13.4	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010204010_0900	De Loach Creek	Madison County		RIVER	13.4	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010204010_0900	De Loach Creek	Madison County		RIVER	13.4	SEDIMENTATION/SILTATION	Low	CHANNELIZATION
TN08010204010_0900	De Loach Creek	Madison County		RIVER	13.4	SEDIMENTATION/SILTATION	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010204010_1100	Mathews Creek	Madison County		RIVER	16.1	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010204010_1100	Mathews Creek	Madison County		RIVER	16.1	SEDIMENTATION/SILTATION	Low	CHANNELIZATION
TN08010204010_1100	Mathews Creek	Madison County		RIVER	16.1	SEDIMENTATION/SILTATION	Low	CROP PRODUCTION (NON-IRRIGATED)
TN08010204010_1100	Mathews Creek	Madison County		RIVER	16.1	SEDIMENTATION/SILTATION	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)

City of Jackson

South Fork Forked Deer River

ID 305B   Waterbody ID	Waterbody Name	Primary County	Other Counties	Water Type	Water Size	Impairment Cause Name	TMDL Priority	Potential Impairment Source Name
TN08010205012_0400	Sandy Creek	Madison County		RIVER	4.3	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010205012_0400	Sandy Creek	Madison County		RIVER	4.3	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010205012_0400	Sandy Creek	Madison County		RIVER	4.3	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010205012_0500	Central Creek	Madison County		RIVER	2.02	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	CHANNELIZATION
TN08010205012_0500	Central Creek	Madison County		RIVER	2.02	PHYSICAL SUBSTRATE HABITAT ALTERATIONS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010205012_0600	Anderson Branch	Madison County		RIVER	5.2	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN08010205012_0600	Anderson Branch	Madison County		RIVER	5.2	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)

[https://www.tn.gov/environment/program\\_areas/wr-water-resources/water-quality/water-quality-reports-publications.html](https://www.tn.gov/environment/program_areas/wr-water-resources/water-quality/water-quality-reports-publications.html)



City of Jackson – Senior Activity Center  
 Pre-Construction Meeting  
 February 2, 2023 11:00 a.m.

Print Name	Organization	Email Address	Phone
Jimmy Hanson	HCS	j.hanson@chemnickconstruction.com	731-234-0859
Brenda Johnson	A to Z	BJohnson@jackson.gov	731-394-1497
Wendy Baxter-Hymer	A to Z	w.hymer@jackson.gov	731-234-8683





### Location

**PRIMARY LOCATION**  
The main location associated with this record.

**29 WESTWOOD GARDENS DR**  
JACKSON, TN 38301  
0770 F 0400100000000000

**PRIORITY SITE**

View Location



### Details

Submitted on Aug 25, 2023 at 1:11 pm

**Attachments**  
12 files

**Activity Feed**  
Latest activity on Sep 18, 2023

**Applicant**  
Shawn Verberry

**Location**  
29 WESTWOOD GARDENS DR, JACKSON, TN 38301

### Timeline

- Administrative Review**  
Completed Aug 25, 2023 at 1:45 pm
- Application Fee**  
Waved Aug 25, 2023 at 2:35 pm
- Subdivision Review**  
Completed Aug 25, 2023 at 3:00 pm
- Building Review**  
Completed Aug 25, 2023 at 10:34 am
- JEA Review**  
Completed Sep 5, 2023 at 3:17 pm

Property Owner Information (for this record)



Timeline

- 
**Administrative Review**  
 Completed Aug 29, 2023 at 1:48 pm
- 
**Application Fee**  
 Waived Aug 29, 2023 at 1:39 pm
- 
**Subdivision Review**  
 Completed Aug 29, 2023 at 3:00 pm
- 
**Building Review**  
 Completed Aug 28, 2023 at 10:34 am
- 
**JEA Review**  
 Completed Sep 5, 2023 at 3:17 pm
- 
**Planning Review**  
 Completed Sep 7, 2023 at 9:33 am
- 
**Engineering Review**  
 Completed Sep 13, 2023 at 1:49 pm
- 
**Final Sign Off**  
 Completed Sep 13, 2023 at 4:11 pm
- 
**Review Fees**  
 Waived Sep 14, 2023 at 9:30 am
- 
**Certificate of Approval**  
 Issued Sep 14, 2023 at 9:30 am

Engineering Review

Complete

Assignee

WR Wendy Braxter-Rhyne

Due date

📅 Sep 08

Inspection Types

📄 Engineering Site Review

Not Inspected

WR

Wendy Braxter-Rhyne

Sep 6, 2023 at 1:51 pm

Per the MS4 general permit, this site is listed as a priority site. A pre-construction meeting is required with construction site operators due to construction activities discharging directly into Sandy Creek, which is recognized as an unavailable condition for sitation. Please forward me the contact information for the contractor.

WR

Wendy Braxter-Rhyne

Sep 6, 2023 at 2:02 pm



# CD-45

Latest activity on Feb 22, 2024



**Applicant**  
Jill Wicks

**Location**  
50 South Creek Drive, Jackson, TN 38301

### Timeline

- Planning Approval**  
Completed Feb 21, 2024 at 11:26 am
- Administrative Approval**  
Completed Feb 21, 2024 at 2:48 pm
- Engineering Approval**  
Completed Feb 21, 2024 at 3:11 pm
- Priority Site Pre-Construction Meeting**  
Completed Feb 22, 2024 at 9:55 am
- Development Fee**  
Paid Feb 22, 2024 at 12:34 pm
- Development Permit**  
Issued Feb 22, 2024 at 12:34 pm
- Development Inspection**  
In Progress
- Planning Inspection**  
In Progress

Feb 23

Search



Expiration Date

Active

Request Changes

Download All Upload New Files

### Attachments

#### Uploads

1 Uploaded File [Download](#)

doc0252102024022095525.pdf

doc0252102024022095525.pdf

Uploaded by Wendy Braxter Rhyme on Feb 22, 2024 at 10:00 AM





### Proposals for Stormwater Stream Monitoring

Public Notices & Press Releases

Proposals for Stormwater Stream Monitoring

City of Jackson, TN / Government / Communications and Engagement / Public Notices & Press Releases / Proposals for Stormwater Stream Monitoring

#### Proposals for Stormwater Stream Monitoring

Posted on 02-13-2024

Notice is hereby given that the City of Jackson will receive sealed Proposals for Stormwater Stream Monitoring until 10:30 a.m., Tuesday, February 13, 2024.

Proposals must be mailed or delivered to City Hall, 115 E. Main St., Suite 202, Jackson, TN 38301, Attn: Purchasing



#### PURCHASING DEPARTMENT

For the Proposals page, [click here](#)

The City reserves the right to waive informalities and to reject any and all proposals. The City of Jackson is an Equal Opportunity Title VI employer.



## Bids or Proposals

Purchasing

Bids or Proposals ▾

Bids +

RFPs -

**Disclaimer: It is up to each potential bidder to examine all documents and to make sure you have downloaded/received all addendum and bid information, prior to Bid/Proposal opening.**

- The City of Jackson will receive a seal Proposal for Third-Party Hotel Provider until 10:30 a.m., Tuesday, February 13, 2024. Below is the Proposal packet with any current addendums.  
[Click here for Proposal](#)
- The City of Jackson will receive a seal Proposal for Stormwater Stream Monitor and Visual Assessment Services until 10:30 a.m., Tuesday, February 13, 2024. Below is the Proposal packet with any current addendums.  
[Click here for Proposal Addendum](#)

RFOs +

**Montrell Lawrence - RE: City of Jackson RFP**

---

**From:** "Wolf, Janette" <jwolf@cecinc.com>  
**To:** Montrell Lawrence <mlawrence@jacksontn.gov>  
**Date:** 3/12/2024 6:50 PM  
**Subject:** RE: City of Jackson RFP  
**Cc:** "Wilson-Kokes, Lindsay" <lwilsonkokes@cecinc.com>  
**Attachments:** TCprofessionalservices-CEC.pdf

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Hi Montrell,

Thanks great news!!! We're excited to get to work. We have a standard Terms and Conditions that we can apply. They are attached. Please let me know if you need anything further.

Also – thank you for providing the evaluation scores, that's important feedback for us.

Looking forward to hearing from you.

Thanks,

**Janette L. Wolf, \*P.E., CPESC, CPSWQ, CESSWI | Principal**  
Civil & Environmental Consultants, Inc.  
117 Seaboard Lane, Suite E-100, Franklin, TN 37067  
**direct** [615.577.9339](tel:615.577.9339) **office** [615.333.7797](tel:615.333.7797) **mobile** [615.476.3222](tel:615.476.3222)  
[www.cecinc.com](http://www.cecinc.com)

\*Licensed Professional Engineer in Tennessee

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**From:** Montrell Lawrence <mlawrence@jacksontn.gov>  
**Sent:** Tuesday, March 12, 2024 9:58 AM  
**To:** Wolf, Janette <jwolf@cecinc.com>  
**Subject:** RE: City of Jackson RFP

Hello Janette,

Thanks for reaching out. I was in the process of emailing you today. There was an evaluation process, congratulations, Civil & Environmental Consultants, Inc were selected. I want to ask if you all have a contract to utilize or we need to utilize our contract? The project is on a limited time frame of March 2024 to November 2024 anticipating you all can start as soon as possible. We do have to present this to our City Council April 2nd.

Congratulations again, we look forward to working with you all.

**Mrs. Montrell Lawrence**

City of Jackson-Purchaser

Office [731-425-8687](tel:731-425-8687)

[mlawrence@jacksontn.gov](mailto:mlawrence@jacksontn.gov)



## PURCHASING DEPARTMENT

>>> "Wolf, Janette" <[jwolf@cecinc.com](mailto:jwolf@cecinc.com)> 3/11/2024 3:46 PM >>>

Good Afternoon Montrell,

Just wanted to check in on the status of RFP #24-12, Stormwater Stream Monitoring and Visual Stream Assessment. If there's an update on the status of this SOQ review, we'd appreciate it.

Thank you and have a good day!

**Janette L. Wolf, \*P.E., CPESC, CPSWQ, CESSWI** | *Principal*  
Civil & Environmental Consultants, Inc.



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**From:** Montrell Lawrence <[mlawrence@jacksontn.gov](mailto:mlawrence@jacksontn.gov)>

**Sent:** Thursday, February 8, 2024 9:35 AM

**To:** Wolf, Janette <[jwolf@cecinc.com](mailto:jwolf@cecinc.com)>

**Subject:** City of Jackson RFP

Hello,

An addendum I is attached.

**Mrs. Montrell Lawrence**

City of Jackson-Purchaser

Office [731-425-8687](tel:731-425-8687)

[mlawrence@jacksontn.gov](mailto:mlawrence@jacksontn.gov)



## PURCHASING DEPARTMENT

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## 1. AGREEMENT

The following terms and conditions ("TERMS") shall apply to and are an integral part of the attached proposal ("PROPOSAL") between Civil & Environmental Consultants, Inc. ("CEC") and the client ("CLIENT") named in the attached PROPOSAL. CLIENT's acceptance of the PROPOSAL includes acceptance of these TERMS and acceptance of this PROPOSAL shall form the entire agreement between the parties ("AGREEMENT"). In the event of a conflict or inconsistency between these TERMS and the PROPOSAL, these TERMS shall take precedence. Acceptance of the AGREEMENT by CLIENT will occur when CLIENT directs CEC, orally or in writing, to commence performance of its services.

## 2. STANDARD OF CARE

CEC shall perform its services consistent with the professional skill and care ordinarily provided by professionals, such as CEC, practicing in the same or similar locality under the same or similar circumstances and in effect at the time of performance. CEC provides no warranties or guarantees whether express or implied.

## 3. SITE ACCESS, SITE CONDITIONS AND SUBSURFACE FEATURES

CLIENT will grant or obtain free access to the site for all equipment and personnel for CEC to perform the services set forth in this AGREEMENT. CEC will take reasonable precautions to limit damage to the site, but it is understood by CLIENT that, in the normal course of the services, some damage may occur and the correction of such damage is not part of this AGREEMENT unless so specified in the PROPOSAL.

The CLIENT is responsible for the accuracy of locations for all subsurface structures and utilities. CEC will take reasonable precautions to avoid known subsurface structures, and the CLIENT waives any claim against CEC, and agrees to defend, indemnify, and hold CEC harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subsurface structures and utilities not identified or accurately located. In addition, CLIENT agrees to reimburse CEC for time and expenses incurred by CEC in defense of any such claim based upon CEC's current fee schedule and expense reimbursement policy.

CEC may, but is not required to, undertake an investigation to locate any utilities, structures or materials as CEC deems prudent. Such investigation by CEC shall not impose any additional obligation or liabilities on CEC and CLIENT agrees that such investigation, if undertaken, is for CEC's convenience only.

The CLIENT recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretation, and recommendations by CEC will be based solely on information available to CEC. CEC is responsible for the data, interpretations, and recommendations based on its services, but will not be responsible for other parties' interpretations or use of the information developed.

## 4. BIOLOGICAL POLLUTANTS, HAZARDOUS MATERIALS AND HAZARDOUS CONDITIONS

CLIENT warrants that a reasonable effort to investigate and inform CEC of known or suspected Biological Pollutants, Hazardous Materials and hazardous conditions on or near the site has been made by the CLIENT. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the by-product of any such biological organisms. The term "Hazardous Materials" shall mean any toxic substances, chemicals, pollutants, or other materials, in whatever form or state, including but not limited to smoke, vapors, soot, fumes, acids, alkalis, minerals, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollutant, that is known or suspected to adversely affect the health and safety of humans or of animal or plant organisms, or which are known or suspected to impair the environment in any way whatsoever. Hazardous Materials shall also include, but not be limited to, those substances defined, designated, or listed in Section 404 of the Solid Waste Disposal Act (42 USC Subsection 6903); Section 9601(14) of the Comprehensive Environmental Response, Compensation and Liability Act (42 USC Subsection 9601(14)); as listed or designated under Sections 1317 and 1321(b)(2)(a) of the Title 33 (33 USC Subsections 1317 and 1321(b)(2)(a)); or as defined, designated, or listed under any other federal, state, or local law, regulation or ordinance concerning hazardous wastes, toxic substances, or pollutants.

CEC and CLIENT agree that when unanticipated or suspected Biological Pollutants, Hazardous Materials and/or hazardous conditions are encountered it may be necessary for CEC to take immediate measures to protect health and safety. CEC agrees to immediately notify CLIENT when unanticipated or suspected Biological Pollutants, Hazardous Materials and/or hazardous conditions are encountered. CLIENT agrees to make any disclosures required by law to the appropriate governing agencies. In the event the site is not owned by CLIENT, CLIENT recognizes that it is the CLIENT's responsibility to inform the property owner of the discovery of unanticipated or suspected Biological Pollutants, Hazardous Materials and/or hazardous conditions.

Notwithstanding any other provision of the AGREEMENT, CLIENT waives any claim against CEC, and to the maximum extent permitted by law, agrees to defend, indemnify, and hold CEC harmless from any claim, liability, and/or defense costs for injury or loss arising from CEC's discovery of unanticipated or suspected Biological Pollutants, Hazardous Materials and/or hazardous conditions. CLIENT will be responsible for ultimate disposal of any samples secured by CEC which are found to be contaminated with Biological Pollutants and/or Hazardous Materials.

Nothing contained in this AGREEMENT shall be construed or interpreted as requiring CEC to assume liability for the generation, transportation, treatment, storage and/or disposal of hazardous waste within the meaning of the Resource Conservation and Recovery Act of 1976, as amended, or within the meaning of any similar federal, state, or local regulation or law.

If during remediation and/or construction activities waste manifests are required, CLIENT shall provide an authorized person to sign manifests or will provide CEC with a written limited power of attorney or agency agreement to sign manifests on CLIENT'S behalf.

## 5. EVOLVING TECHNOLOGIES

Services such as those provided by CEC may involve technologies which are new or emerging and these technologies may supersede current techniques. In addition, standards for our services, including statutes and regulations, may change with time. CLIENT understands that CEC's recommendations and/or services must be based upon the current Standard of Care utilizing established technologies and standards excluding new or emerging technologies unless agreed to by both parties in writing.

## 6. SAMPLE DISPOSAL

CEC will provide storage for samples collected for sixty (60) days. Further storage or transfer of samples can be made at CLIENT's expense and upon prior written request.

## 7. SAFETY/CONSTRUCTION OBSERVATION

CLIENT, its contractor or other representatives shall be solely responsible for working conditions on the site, including compliance with OSHA regulations and safety of all persons and property during the performance of the work. CEC will not be responsible for means, methods, techniques, sequences or procedures of construction including, but not limited to safety.

If CEC is retained by the CLIENT to provide a site representative for the purpose of observing specific portions of any construction work as set forth in the PROPOSAL, CEC will report observations and professional opinions. CEC's presence on the site does not in any way guarantee the completion or quality of the performance of the work by any party retained by the CLIENT to provide construction related services. CEC does not have the duty to reject or stop work of CLIENT or its agents unless contractually obligated.

## 8. BILLING AND PAYMENTS

8.1. General: Invoices will be submitted in accordance with the provisions outlined in the PROPOSAL. Payment is due from CLIENT thirty (30) days from the invoice date. If a retainer or pre-payment is required by the PROPOSAL, payment must be received by CEC prior to commencement of services. Payment shall be made as follows:

Electronic Payment:  
PNC Bank, Pittsburgh, PA 15222  
PNC Bank Routing #043000096  
CEC Account #2272405  
SWIFT & BIC Code: PNCCUS33  
Remittance Detail: accountsreceivable@cecine.com

Lockbox (regular mail):



Civil & Environmental Consultants, Inc.  
P.O. Box 644246  
Pittsburgh, PA 15264-4246

Any retainer shall be applied to the final invoice and unused funds, if any, returned to CLIENT. In the event CLIENT fails to pay CEC within thirty (30) days of invoice, CLIENT agrees that CEC will have the right to suspend performance of services after written notice to CLIENT. CEC will be entitled to interest of one and one half percent (1.5%) per month for past due amounts. CEC will be entitled to collect for time and expenses (per CEC's current fee schedules), attorneys' fees and other costs incurred by CEC for collection of past due amounts.

Our PROPOSAL does not include gross receipts taxes, business or occupation taxes or assessments that the municipality where the project is located may assess upon CEC or its subcontractors. If such taxes are or become a liability of CEC, the CLIENT agrees to reimburse CEC at cost.

8.2. Reimbursable Expenses: Direct non-salary expenses (e.g. Travel, Equipment, Subcontractors/Vendors) will be billed according to the terms of our PROPOSAL.

8.3. Litigation Services: If litigation services are not part of the PROPOSAL to which these TERMS are attached and are requested by CLIENT, the scope and fee schedule for the requested litigation services will be identified in a separate PROPOSAL. CLIENT shall reimburse CEC for costs incurred in responding to subpoenas or other legal requests related to the services provided by CEC under this AGREEMENT.

8.4. Design Build: If CLIENT requests CEC to perform design-build services, such services will be performed in accordance with separate TERMS and a PROPOSAL for such design-build services.

## 9. CHANGES

9.1. Changes: Upon a change in CEC's scope of services or discovery of unforeseen conditions, or any direction or instruction outside of the PROPOSAL, CEC will provide CLIENT with the estimated cost of performing the change and any change in the AGREEMENT schedule. Prior to CEC being required to implement the change, CLIENT shall authorize the requested change either verbally or in writing amending the AGREEMENT price and schedule.

9.2. Unauthorized Changes: If changes are made in CEC work products by CLIENT or persons other than CEC, any and all liability against CEC arising out of such changes is waived and CLIENT assumes full responsibility for such changes unless CLIENT has given us prior notice and has received written consent from CEC for such changes.

## 10. DELAYS

Delays not due to CEC shall result in an extension of the schedule equivalent to the length of delay. If such delays result in additional costs to CEC, the AGREEMENT price shall be equitably adjusted by the amount of such additional costs.

## 11. INSURANCE

CEC will maintain Workmen's Compensation Insurance as required by state law, General Liability Insurance for bodily injury and property damage with a limit of \$1,000,000 per occurrence and an aggregate limit of \$2,000,000 and Automobile Liability with a limit of \$1,000,000. Professional liability will be provided with a limit of \$1,000,000 per claim and \$1,000,000 in the aggregate, if applicable. CLIENT and/or the property owner will be listed as additional insured for General Liability Insurance upon CLIENT's written request.

## 12. ALLOCATION OF RISK

12.1. Limitation of Remedies: CLIENT agrees to limit CEC's liability for any claim arising from, or alleged to arise from any acts, errors or omissions in the performance of services under this AGREEMENT, whether such claim is based in negligence, breach of contract, or other legal theory to an aggregate limit of the amount of fees paid to CEC under this AGREEMENT, or \$50,000, whichever is greater, except for CEC's willful misconduct or gross negligence.

12.2. Waiver of Consequential Damages: CEC and CLIENT agree to waive any claim against each other for consequential, incidental, special or punitive damages.

12.3. Indemnification: CEC shall indemnify and hold harmless CLIENT from and against any and all claims, damages, or liability to the extent caused by the negligent performance of services under this AGREEMENT by CEC, including injuries to employees of CEC.

## 13. TERMINATION

This AGREEMENT may be terminated by either party seven (7) days after written notice: i) in the event of breach of any provision of this AGREEMENT; ii) if the CLIENT suspends the work for more than three (3) months in the aggregate; or iii) for CLIENT or CEC's convenience. In the event of termination for suspension or convenience, CEC will be paid for services performed prior to the date of termination plus reasonable termination and demobilization expenses, including, but not limited to the cost of completing analyses, records and reports necessary to document job status at the time of termination.

## 14. GOVERNING LAW

The law of the Commonwealth of Pennsylvania will govern the validity of these TERMS and the AGREEMENT, their interpretation and performance. If any of the provisions contained in these TERMS and the AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired.

## 15. DISPUTE RESOLUTION

15.1. Notice of Dispute: Within fifteen (15) days of the occurrence of any incident, act, or omission upon which a claim for relief may be based, the party seeking relief shall serve the other party with a written notice specifying the nature of the relief sought, the amount of relief sought, a description of the reason relief should be granted, and the provisions of this AGREEMENT that authorize the relief requested.

15.2. Meet and Confer: Within ten (10) days of receipt of the Notice of Dispute, the parties shall meet and confer in a good faith attempt to resolve the dispute. Participants in the meet and confer must have the authority to enter into a binding resolution on behalf of each party.

15.3. Jurisdiction and Venue: After completion of the meet and confer, either party may proceed to litigation. CEC and CLIENT agree that any court of record in Allegheny County, Pennsylvania, shall have the exclusive jurisdiction and venue over any claims relating to or arising under this AGREEMENT.

15.4. Waiver of Jury Trial: THE PARTIES AGREE AND IRREVOCABLY WAIVE THEIR RIGHT TO TRIAL BY JURY IN ANY ACTION, DISPUTE, PROCEEDING OR SUIT RELATING DIRECTLY OR INDIRECTLY TO THIS AGREEMENT OR THE PROJECT.

## 16. ASSIGNMENT

CLIENT and CEC each binds itself and its successors and assigns to the other and its successors and assigns with respect to all covenants of this AGREEMENT. Neither CLIENT nor CEC shall assign, sublet or transfer any rights under or interest in this AGREEMENT without the prior written consent of the other party. This section shall not, however, apply to subrogation rights (if any) of any insurer of either party.

## 17. OWNERSHIP

CEC shall have title to all drawings, specifications or other documents ("WORK PRODUCT") furnished to CLIENT and intended for use in connection with projects under this AGREEMENT. CLIENT is granted a limited license to use and reproduce the WORK PRODUCT prepared by CEC for use in the execution of the project(s) under this AGREEMENT. The WORK PRODUCT is not to be used by CLIENT or other contractors, subcontractors, or material suppliers on other projects without the express written consent of CEC.

## 18. FILE RETENTION

Upon conclusion of the project, CEC's file on the project will be closed and may be sent offsite for storage. Unless CLIENT requests a longer retention period in writing, CEC reserves the right to destroy all file information seven (7) years after the project is closed.

## 19. SURVIVAL

In the event of termination, cancellation or avoidance of this AGREEMENT, the terms and conditions of Articles 3 (Site Access, Site Conditions and Subsurface Features), 4 (Biological Pollutants, Hazardous Materials and Hazardous Conditions), 5 (Evolving Technologies), 11 (Insurance), 12 (Allocation of Risk), 14(Governing Law), and 15 (Dispute Resolution) shall survive termination of the AGREEMENT.

## END OF TERMS