## CITY OF FAYETTEVILLE WORK AUTHORIZATION FOR PROFESSIONAL SERVICES BY GRADIENT, PLLC

In accordance with the General Services Agreement (Agreement) dated April 1, 2022, between the CITY OF FAYETTEVILLE (hereinafter called OWNER) and GRADIENT, PLLC (hereinafter called CONSULTANT), OWNER hereby authorizes CONSULTANT to proceed and CONSULTANT agrees to perform in accordance with the terms of the Agreement and this Work Authorization, the following services for the following Project:

## I. <u>PROJECT</u>

This Work Authorization is for professional services related to:

- The Project is for the design of storm drainage system improvements within the Lock's Creek Area. This contract authorizes the Scope of Work shown in Exhibit A, which is hereby attached and incorporated herein by reference. This will be for the hours per task shown in the spreadsheet included with Exhibit A in the not to exceed the total amount shown below.
- Funding Mechanism: Stormwater Enterprise Fund
- Division/Department Representing the City: Stormwater/Public Services

## II. AGREEMENT & SCOPE OF SERVICE

The terms of the Agreement, attached as Exhibit C, are hereby incorporated by reference as if written herein and the parties confirm that its terms are a part of this Work Authorization.

The Scope of Services to be provided by CONSULTANT, in connection with this Authorization is as follows:

- See Exhibit A for full scope of services
- See Exhibit B for hours and fee estimate

The CONSULTANT shall request written confirmation and or execute an additional Work Authorization describing any scope change before performing any work beyond the scope specified in this Work Authorization. The confirmation shall identify any change in compensation and/or delay in completion which the scope changes entails and must be approved by the City Manager or his designee.

## III. <u>RESPONSIBILITIES</u>

The responsibilities of the OWNER and CONSULTANT, in addition to those provided in the Agreement which are specific to this Project, are as follows:

- Owner
  - Maps and other relevant institutional knowledge will be provided to CONSULTANT
  - Owner will provide prompt review and decisions regarding all submittals
- Consultant
  - As described in Exhibit A

## IV. <u>COMPENSATION</u>

OWNER shall compensate CONSULTANT for providing the services set forth herein in accordance with the terms of the Agreement.

In the absence of a lump sum fee agreement, it is understood and agreed that:

- 1. CONSULTANT will perform under this Agreement on a best effort, not-to-exceed ceiling price basis and will notify OWNER when the ceiling price will be exceeded.
- 2. The not to exceed compensation (including travel) for this Work Authorization is \$645,811.00. This is not a guaranteed maximum amount but CONSULTANT shall not continue performing work in excess of this amount without further specific authorization. OWNER will be billed only for actual time worked and identified expenses.

Payment shall be made in accordance with the terms of the above referenced Agreement.

## V. <u>SCHEDULE</u>

All work under this Work Authorization shall begin upon receipt of fully executed Work Authorization which shall be considered a Notice To Proceed (NTP). CONSULTANT will deliver 90% Design drawings within 210 days of NTP.

## VI. <u>MISCELLANEOUS</u>

- 1. The terms in this Work Authorization shall have the same meaning as provided in the Agreement.
- 2. As mandated by N.C. Gen. Stat. § 147-86.59(a), CONSULTANT certifies that it is not listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C. Gen. Stat. § 147-86.58. CONSULTANT further certifies that, in accordance with N.C. Gen. Stat. § 147-86-59(b), it shall not utilize any subcontractor found on the State Treasurer's Final Divestment List. CONSULTANT certifies that the signatory to this Work Authorization is authorized by CONSULTANT to make the foregoing statement.
- 3. E-Verify- CONSULTANT acknowledges that "E-Verify" is the federal E-Verify program operated by the U.S. Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. CONSULTANT further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes. The work in the United States, shall verify the work authorization of the employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with N.C. Gen. Stat. § 64-26(a). CONSULTANT pledges, attests and warrants through execution of this contract that CONSULTANT complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes and further pledges, attests and warrants that any subcontractors currently employed by or subsequently hired by CONSULTANT shall comply with any and all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Work Authorization.
- 4. Force Majeure- Neither party shall be deemed to be in default of its obligations hereunder if and *so long as* it is prevented from performing such obligations by an act of war, hostile foreign actions, adverse governmental actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.
- 5. Morality Clause- If, in the sole opinion of the City of Fayetteville, at any time CONSULTANT or any of its owner(s) or employee(s) or agent(s) (collectively

referenced as an "Actor") engages in any one or more actions that bring disrepute, contempt, scandal, or public ridicule to the Actor or subject the Actor to prosecution or offend the community or public morals or decency or denigrate individuals or groups in the community served by the City of Fayetteville or are scandalous or inconsistent with community standards or good citizenship or may adversely affect the City of Fayetteville's finances, public standing, image, or reputation or are embarrassing or offensive to the City of Fayetteville or may reflect unfavorably on the City of Fayetteville or are derogatory or offensive to one or more employee(s) or customer(s) of the City of Fayetteville, the City of Fayetteville may immediately upon written notice to CONSULTANT terminate this Agreement, in addition to any other rights and remedies that the City of Fayetteville may have hereunder or at law or in equity.

- 6. Venue and Forum Selection- The Parties expressly agree that if litigation is brought in connection with this contract and (1) the litigation proceeds in the Courts of the State of North Carolina, the parties agree that the appropriate venue shall be in Cumberland County (Twelfth Judicial District of North Carolina); or (2) the litigation proceeds in a federal court, the parties agree that the appropriate venue shall be the United States District Court for the Eastern District of North Carolina
- 7. Termination for Cause- In the event of substantial failure by CONSULTANT to perform in accordance with the terms of this contract, City of Fayetteville shall have the right to terminate CONSULTANT upon ten calendar (10) days written notice in which event CONSULTANT shall have neither the obligation nor the right to perform further services under this contract nor shall the City of Fayetteville be obligated to make any further payment for work that has not been performed.
- 8. Termination for Convenience- Upon thirty (30) calendar days' written notice to CONSULTANT, the City of Fayetteville may, without cause and without prejudice to any other right or remedy legally available to the City of Fayetteville, terminate this Contract. Upon such notice, CONSULTANT shall have neither the obligation nor the right to perform services under this contract nor shall the City of Fayetteville be obligated to make any further payment for work that has not been performed in accordance with the terms stated herein. In such case of termination, CONSULTANT shall be paid for the completed and accepted work executed in accordance with this Contract prior to the written notice of termination. Additionally, upon mutual agreement, CONSULTANT may be paid for any completed and accepted work which takes place in order to achieve a specifically identified item in the scope of services or a milestone of the Contract, between the written notice of termination and the effective date of termination. Unless otherwise stated or agreed upon, the effective

date of termination shall automatically occur 30 days' after the written notice is sent by the City of Fayetteville.

- 9. Protest Protest related to this procurement must be addressed to the Purchasing Manager for City of Fayetteville, 433 Hay St, Fayetteville, NC 28301 and shall be received, in writing, within 2 calendar days of bid award. Responses will be in writing by email and first-class mail not later than (7) calendar days following receipt of said protest by the Purchasing Manager.
- 10. To the extent permitted by law, CONSULTANT agrees to defend, indemnify, and hold harmless the City of Fayetteville and its elected officials, employees, agents, successors, and assigns, from any and all liability and claims for any injury or damage caused by any act, omission or negligence of CONSULTANT, its agents, servants, employees, contractors, licensees, or invitees. Indemnification of the City by CONSULTANT does not constitute a waiver of the City's governmental immunity in any respects under North Carolina law.
- 11. <u>CITY'S TERMS SUPERSEDE:</u> To the extent a conflict exists between the terms of this Agreement and the terms and conditions in any of the attachments to the Agreement, the terms of this Agreement shall govern.

[Signature page to follow]

## CONSULTANT ACCEPTANCE:

GRADIENT, PLLC

BY: Gordon A. Rose

TITLE: Member/Manager

DATE: September 9, 2022

## AUTHORIZATION BY:

## CITY OF FAYETTEVILLE

BY:\_\_\_\_\_

TITLE:

DATE: \_\_\_\_\_

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Jody Picarella, Chief Financial Officer

EXHIBIT A

# SCOPE OF SERVICES

## EXHIBIT A – SCOPE OF SERVICES LOCK'S CREEK AREA DRAINAGE IMPROVEMENTS

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## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

## **CITY STANDARD REQUIREMENTS**

Applicable The Engineer shall perform the Scope of Services in accordance with the latest edition of applicable published City of Fayetteville Standards. Other standards that shall be considered during the project include:

- Published PWC Standards;
- NCDOT Standard Specifications for Roads and Structures;
- NCDENR Erosion and Sediment Control Planning Design Manual; and
- MUTCD (Manual on Uniform Traffic Control Devices).

## **1 TECHNICAL REPORT**

- 1.1 Project Background and Description
  - 1.1.1 Project Area Description

This project involves the design of storm drainage system improvements within the Lock's Creek Area. The project includes storm drainage improvements to:

- Pasture Lane
- Windmill Road
- Carriage Road
- Coldwater Drive
- Lock's Creek Road
- Bridgeton Way
- Jereens Creek Road
- Bombay Drive

A map of the project area is provided as Exhibit 1.

## 1.1.2 Point of Origin of Project

This project was identified as Package 23 in Concern Area 12 in the Cape Fear 2 (East) Watershed Study consisting of:

- **PS12** The pipe system beginning on Coldwater Drive near Pasture Lane, running along Pasture Lane, crossing Windmill Road, running along the backyards until crossing under Carriage Road and with an outfall into the Locks Creek Tributary is undersized. The system causes streets to flood and ponded water travels overland impacting several homes. There are also inlet capacity issues at various locations that adds to the ponding as water enters the system. The street flooding along Pasture Lane and Windmill Road impact travel lanes and access to several homes. This system is also impacted from backwater from Locks Creek during larger storm events.
- **PS18** This pipe system starts at the roadway sag along Locks Creek Road and runs along Bridgeton Way, crossing over Jereens Creek Road, runs between several house towards Bombay Drive and then drains directly to Locks Creek. This system is undersized and results in street flooding that impacts travel lanes. The roadway elevation along Bombay Drive is low enough that this system is greatly impacted from

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

backwater from Locks Creek during frequent storm events while the upper segments of the pipe system is impacted during larger storm events.

 PS27 & PS28 - The tributary to Locks Creek that runs parallel to Cedar Creek Road overtops LA Dunham Road (2 – 4.5 ft pipes) and Locks Creek Road (1- 5 ft pipe) in frequent storm events. Both Locks Creek Road and Carriage Road are often inundated and can prohibit safe passage during larger storm events.

## 1.1.3 Project Need

Concern Area 12 represent the entire Locks Creek neighborhood and is a combination of the secondary system concern areas 10 and 11. There are 3 access points into the neighborhood; Pasture Lane and Carriage Road are both off of LA Dunham Road while the third one is Locks Creek Road off of Cedar Creek Road. The tributary to Locks Creek that runs parallel to Cedar Creek Road overtops LA Dunham Road (2 – 4.5 ft pipes) and Locks Creek Road (1- 5 ft pipe) in frequent storm events. Both Locks Creek Road and Carriage Road are often inundated and can prohibit safe passage during larger storm events. Parts of Whisker Lake Drive, Turkey Run and Bombay Drive are inundated from backwater from Locks Creek in frequent storm events. Several pipe systems within the neighborhood are undersized that flood streets and adjacent parcels. During the 25-year event there are large portions of the neighborhood that are disconnected with more than 0.5 foot of floodwaters within the roadways.

## 1.1.4 Project Goal(s)

The primary project goals include:

- Minimize future flooding
- Meet the design level of service

## 1.2 Existing Conditions

## 1.2.1 Summary of Past Reports/Investigations

The Engineer shall identify and provide summaries of past reports, field investigations, citizen complaints, existing stormwater control measures (SCMs) and other readily available information on the notable features and drainage history of the project area. SCMs can be either a walk through or on google maps.

## 1.2.2 Existing Photos of Problem Area/Drainage Issues

The Engineer shall develop a photolog to be included as an Appendix to the Drainage Study Report that documents flooding and other drainage issues, past damage, high water marks, and other relevant information within the project area.

## 1.2.3 TV Inspection Results

TV Inspection data of the existing storm drainage system has not been conducted. Because the existing drainage system within these various streets

#### Lock's Creek Area - Drainage Improvements - Scope of Services

will be replaced, it has been determined CCTV inspection of the existing system in this area is not warranted and will not be conducted.

## 1.2.4 Project Area Characteristics

The Engineer shall summarize existing project area characteristics including, but not limited to, the following:

- Drainage system type(s);
- Soil conditions;
- Primary land use;
- Slope; and
- Other notable features.

## 1.2.5 Existing Level of Service

The Engineer shall provide estimated level of service of existing drainage system based on existing modeling information or field/desktop estimates.

## 1.3 Project Justification

## 1.3.1 Cost/Benefit Analysis

A simplified Benefit Cost Analysis (BCA) shall be performed to determine the relative merit of the project and prepare for potential funding opportunities if warranted. The BCA shall compare the Net Present Value (NPV) Benefits of the project to NPV Costs of the project. A project is considered to be cost-effective when the ratio is greater than or equal to 1.0, indicating that the net benefits exceed total project costs. An exposure analysis to determine the expected building and content losses from extreme events shall be completed in accordance with FEMA's Benefit Cost Analysis Reference Guide document: [https://www.fema.gov/media-library/assets/documents/18870] Project lifecycle costs incorporated into the BCA should include capital costs for the project and operations and maintenance (O&M) costs over the project's useful life.

## 1.3.2 Value Provided

The Engineer shall provide compelling information on the value provided by the proposed improvements. This may include new infrastructure's ability to better manage stormwater runoff; reduction in yard and street flooding; minimization of future damage to structures; reduction in flood insurance; inclusion of a community amenity; co-benefits such as a reduction in displacement and health issues; etc.

## 1.3.3 Proposed Level of Service

Drainage infrastructure in the Lock's Creek Storm Drainage Improvements project area, see Exhibit 1, shall be designed for compliance at minimum with the below table:

Classification	Level of Service Design Standard (yr)	Freeboard Requirement
Secondary System (closed-pipe drainage)		

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

Conduits & On-Grad Inlets	10	Throat of inlet or edge
		of pavement
Inlets at Sag Locations		
City/Private	25	Edge of Roadway
• DOT	50	
Major Trunk Lines <sup>1</sup>	25	Throat of inlet or edge
		of pavement
Road Crossings <sup>2</sup>		
Bridges		
City/Private	25	Low Chord of Bridge
• DOT	50	
Essential Facilities <sup>3</sup>		
Tier 1	100	
• Tier 2	50	
Emergency Spillway	Varies	Meet Dam Safety
		requirements and
		discuss with City .
Habitable Structures	10	0.75 feet above LAG

1-In secondary system locations where pipe sizes and flows increase significantly to collect drainage from smaller localized networks, the higher LOS requirements that are typically applicable to city/private culver crossings should be followed to ensure adequate performance in these critical locations

2-Private roadways should follow same LOS standards as public roadways.

3-Tier 1 essential facilities include hospitals, police and fire stations, emergency shelters, FEMA disaster Points of Distributions and other government entities, as well as water and wastewater treatment plants. Tier 2 facilities include those with high vulnerability and limited ability to evacuate during emergency situations, such as schools daycares, assisted living facilities, and jail.

As alternative analysis for projects, use of vacant land for SCMs (now and in the future) and property buyouts should be evaluated.

#### 1.3.4 Assumptions

- Value Provided information will be extracted from the final report of the watershed study
- Project Benefit will be as defined in the final report of the watershed study.
- Additional information will be included based upon the results of this updated study and design.

#### 1.3.5 Project Benefit Statement

The Engineer shall provide compelling information on the impact of the proposed improvements to the community. This may include new infrastructure's ability to better manage stormwater runoff; reduction in yard and street flooding; minimization of future damage to structures; reduction in flood insurance; inclusion of a community amenity; co-benefits such as a reduction in displacement and health issues; etc. The majority of this information will be extracted from the final report of the watershed study.

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

## 2 DATA GATHERING

The Engineer shall engage with City staff and other key stakeholders to gather existing information pertinent to the project. This may include, but is not limited to, the following:

- Spatial/Geographic Information System (GIS) data such as soil types, land use, rights-of-way, easements, property lines, anticipated development, utilities, open channel systems, closed conveyance systems, flood protection measures/structures, SCMs and stormwater management facilities, etc.
- Boundary survey, topography and benchmarks
- Land use, including public lands (parcels)
- Stream flow records and water quality data
- FEMA floodplain data
- LiDAR data
- Summaries of previous depth or flow monitoring within local stormwater systems
- Previous reports and planning documents, including Detailed Watershed Plans
- Regulatory documents
- Existing ordinances and policies
- Environmental/ecological documents
- Maps and drawings of drainage system components including shop drawings, etc.
- Staff interviews
- Historic problem information (flooding and water quality), high water marks, citizen complaint records, and other relevant data

## **3 COMMUNITY OUTREACH PROGRAM**

3.1 Perform Community Outreach

Community outreach is important to educate, garner support and gather ideas regarding potential solutions for protecting and improving the City's water resources and stormwater infrastructure. Flooding is an on-going issue within these neighborhoods. There are a number of residences which will be affected by this project and interest is expected to be very high regarding any storm drainage improvements. It is anticipated at least two (2) community meetings will be beneficial to notify residents of the project. One (1) meeting will be held early in the design process to notify residents of the types of improvements which will be made along with the anticipated results. Just as important will be notification as to improvements.

A second meeting will be held near the end of the design process outlining the scope of work to be undertaken along with an anticipated timeline. Notifications regarding the meetings will be made by flyers and/or letters (produced by the City) and mailed to residences in the project area. Representatives of the City and Gradient will coordinate these meetings and distribution of flyers. City staff will coordinate the location and time of these meetings as well as leading the presentations. Gradient will assist in preparation of materials for the meeting and will assist in the presentations.

#### Lock's Creek Area - Drainage Improvements - Scope of Services

## 3.2 Provide Outreach Results

Following the first community meeting, the Engineer shall compile the comments presented and, in consultation with City staff, determine if any changes in the scope of work need to be considered.

Following the second community meeting, the Engineer will again compile the comments from residents and prepare a summary report of those comments.

## **4 FIELD SURVEY**

## 4.1 Field Verification

The Engineer shall field verify the existing drainage system shown in Exhibit 1 and determine survey requirements. Proper judgement shall be used in determining appropriate limits for the project and the Engineer shall clearly define where the existing drainage problem(s) is located and the limits of survey necessary to address critical areas and potential downstream impacts. The City shall furnish to the Engineer any available recent topographic and storm water infrastructure inventory data relative to the project.

## 4.2 Survey Requirements

## Lock's Creek Area Storm Drainage Improvements

Upon completion of the field verification task, the Engineer shall perform a detailed survey of the project area. The survey limits will generally extend from right-of-way to right-of-way of various streets and other areas as identified on Exhibit 1. Field survey efforts will be performed by Joyner Keeny Land Surveying, out of their Fayetteville, NC office, working as a sub-consultant to Gradient. All horizontal surveys shall be tied to the North Carolina State Plane Coordinate System (North American Datum 1983) and all vertical surveys shall be based on the National American Vertical Datum of 1988. The survey shall comply with the standards for a Class A survey as detailed in the Standards of Practice for Land Surveying in North Carolina, Amended August 1, 2000, or latest revision.

The survey shall include sufficient data to produce a digital topographic corridor strip map with contours at a minimum of 1' intervals. Survey points shall include the following:

- Channel information including low point (thalweg), toe and top of bank elevation, any major change in slope of bank at locations (minimum every 50 feet) such that an accurate channel plan view and profile can be generated (all major changes in slope, cross-section, and direction of the channel must be captured). Each channel cross-section shall have at least five points within and inclusive of the channel banks and shall have a minimum of two points outside the channel banks on each side of the channel;
- Elevations along the road centerlines, edge of pavement, and curb lines (left and right) adequate to produce profiles suitable for accurate design;
- Locations of storm sewer pipes and structures including sizes, wingwall angles, inlet conditions (e.g., beveled), shapes, material, condition, invert elevations, and

#### Lock's Creek Area - Drainage Improvements – Scope of Services

rim/grate elevations;

- Locations of sanitary sewer pipes, structures, including sizes, materials, invert elevations, and rim elevations, horizontal locations of clean-outs if they are visible and within the survey corridor;
- Horizontal locations of all underground non-gravity utilities including valves, hydrants, meters, etc.; and overhead utilities including poles, lines, guys, boxes, etc. Vertical clearance of overhead utilities shall be measured in areas where construction equipment may impact the overhead utilities.
- Vertical locations of underground utilities such as water, sewer, gas, electric, telephone, cable, fiber optic, etc. that may impact the design (see Section 7 for more details).
- Building corners of structures, finished floor elevations, vent opening elevations, HVAC unit location and elevations, crawl space door elevations, and spot elevations at the lowest adjacent grade to the permanent structure;
- Locations of other physical features which may be affected by construction of possible alternatives including walkways and driveways (type), fences (type, height/material), walls (type), signs, planters, sheds, brick or stone mailboxes, rock outcroppings, etc.;
- Locations of trees greater than, or equal to, 6" diameter labeled with size and variety, ornamental trees of any size, any landscaped areas within the projected work area;
- Description, book, and page number of the official registry of all properties affected by the Project, including current property owner name(s), tax parcel identification number, street address, existing property acquisitions, rights-ofway, and all existing recorded easements associated with the Project from the Register of Deeds.

#### 4.3 Survey Notifications

The Engineer shall not commence the survey effort until the City provides written authorization and survey notifications to citizens in the project area. The Engineer shall provide the City with a list of property owners in the project area that should be notified.

4.4 Field Survey Project Administration Prior to acceptance and use of the survey, the Engineer shall perform a field review of the survey to verify that it is complete and accurate.

## 4.5 Survey Submittal

The Engineer shall provide the survey data to the City in an electronic AutoCAD format, version 2018 or higher (latest version), and in ASCII format.

#### Lock's Creek Area - Drainage Improvements – Scope of Services

## **5 UTILITY COORDINATION**

#### 5.1 Fayetteville Public Works Commission (PWC)

PWC has indicated they are not requesting any improvements or changes to their existing water and sanitary sewer utilities in the project area. However, with the number of utility crossings anticipated, a certain number of these crossings may result in conflicts where revisions and/or realignments may need to be made to existing utilities. Also, raising the level of Lock's Creek Road at its entrance may likely include the relocation of existing utilities. In addition, should existing sanitary sewer slopes or inverts need to change due to conflicts with the proposed storm drainage improvements, a permit will be required.

Without knowing the extent of potential conflicts or changes required to the existing utilities, a certain amount of time has been budgeted to account for this possibility. Should they be required, the following tasks shall be performed with the review and approval of the City's Project Manager. Engineer shall track water & sewer related costs separately. The City will in turn invoice directly to PWC base upon agreed reimbursable agreement.

#### 5.1.1 Water & Sewer Design

The Engineer shall coordinate with the City and PWC to include water and sewer design in the project area per PWC standards. Water and Sewer Design shall include the following tasks:

#### Water Main:

- No changes are anticipated to the existing water distribution system.
- Should changes to the system be required due to conflicts with the proposed storm drainage improvements, the required separations will be maintained or ferrous materials incorporated.
- An estimated number of hours has been included to address potential changes, realignments or other issues pertaining to utility conflicts to include review meetings with PWC personnel (virtual or in-person).
- PWC standard details and technical specifications will be incorporated into the contract documents.

#### Sanitary Sewer:

- No changes are anticipated to the existing sanitary sewer system.
- Should road elevations be raised sanitary sewer manholes will need to be adjusted/relined. Any manholes which are relined will have a requirement to CCTV the manhole upon completion.
- Should changes to the system be required due to conflicts with the proposed storm drainage improvements, the required separations will be maintained or ferrous materials incorporated.
- An estimated number of hours has been included to address potential changes, realignments or other issues pertaining to utility conflicts to include review meetings with PWC personnel (virtual or in-person).

#### Lock's Creek Area - Drainage Improvements - Scope of Services

## 5.1.2 Water & Sewer Permitting

The Engineer shall complete permit applications for permitting of the new water and sewer lines as necessary to comply with PWC requirements. All permitting documents shall be submitted directly to PWC. The fee estimate included <u>does</u> <u>not include</u> any modeling required for the Engineer's report as it is unknown at this time. Sewer and water permit application fees will be addressed as reimbursable expenses.

## 5.1.3 Construction Staking

Not included in this scope of work. If required, this will be incorporated in a Construction Period Services contract at a later date.

- 5.1.4 Construction Site Observations Not included in this scope of work. If required, this will be incorporated in a Construction Period Services contract at a later date.
- 5.1.5 As-Built Survey

Not included in this scope of work. If required, this will be incorporated in a Construction Period Services contract at a later date.

## 5.2 Electrical/Communications and Other Utilities

The Engineer shall coordinate potential impacts to electrical primary and secondary feed lines, streetlights, telephone/cable lines, gas lines, and other utilities with the respective utility companies. Coordination, review and approval of all work shall involve the City's Project Manager.

## 5.3 Field Meetings

The Engineer shall coordinate field meetings at the 35% and 90% design stage with affected utility companies to identify possible conflicts and prevent potential impacts to project design or construction.

## **6 MONITORING**

MONITORING WILL NOT BE REQUIRED FOR THIS PROJECT.

## 7 GEOTECHNICAL INVESTIGATIONS & SUBSURFACE UTILITY ENGINEERING

<u>Geotechnical:</u> The Engineer shall investigate subsurface conditions within the project limits. This desktop assessment shall be completed during the Conceptual Design process and look at readily available geologic and soils information and/or soil borings data to determine physical limitations that may affect the cost of, or the feasibility of various alternatives. Engineer shall also have a subconsultant conduct up to three (3) soil borings to a maximum depth of 25 feet to aid in the design of the storm drainage system and to provide information to the Contractor.

<u>Subsurface utility engineering (SUE)</u> shall be performed as required to identify depth and location of existing utilities. SUE services will be provided by GEL Solutions. The Engineer shall coordinate SUE needs with the City and incorporate survey from the SUE into the design plans. SUE services may consist of "Quality Level A" services, vacuum excavations or soft digs, or "Quality Level B" horizontal subsurface utility location data.

## Lock's Creek Area - Drainage Improvements - Scope of Services

Quality Level A (QL-A) is defined as the precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment (such as <u>vacuum excavation</u>) is typically used to minimize the potential for utility damage. Quality Level A service is typically called "test holes". It is anticipated up to ten (10) test holes will be conducted along the existing underground utility lines (water, gas, communication or power).

Quality Level B (QL-B) involves the application of appropriate surface geophysical methods to determine the existence and horizontal position of the utilities. This activity is called "designating". Paint marks are painted on the ground or pin flags are installed over the buried utility. The approximate accuracy of the paint marks or pin flags is +/- 2 feet left or right of the utility marked. QL-B utility location designations shall be accomplished via electromagnetic methods for conductive lines and Ground Penetrating Radar (GPR) for non-conductive lines. Locations of utilities for other areas of the project shall be based on surface accessible structures or designations by the utility owner or NC811. Marking of existing utility lines shall be confined to the rights-of-way of roads within the project area and is expected to consist of the following lengths of roadway:

- Pasture Lane: 950 LF
- Coldwater Drive: 200 LF
- Windmill Road: 250 LF
- Carriage Road: 225 LF
- Lock's Creek Road: 2,050 LF (two locations)
- Bridgeton Way: 620 LF
- Jereens Creek Road: 220 LF
- Bombay Drive: 220 LF

## 8 DRAINAGE/H&H MODEL EVALUATION

Drainage infrastructure in the project area (as shown in Exhibit 1) shall be evaluated for compliance with the based off the table provided in section **1.3.3 Proposed Level of Service**s Portions of the drainage system not meeting City design standards shall be identified and a proposed conceptual plan shall be developed to improve the systems' level of service.

8.1 Hydrologic\_and Hydraulic (H&H) Model Development

The Engineer shall develop a H&H model to evaluate the hydraulic performance of pipes & inlets within the project area. This shall include modeling of peak flows for various storm events and street spread analysis as noted herein. The Engineer will update the existing conditions and proposed condition ICM, HEC-RAS 1D, and/or HEC-RAS 2D (Rain On Grid) models developed for the Cape Fear 2 East Watershed Study based on the updated field survey data and proposed design alternatives. The models will be run for 2-,10-,25-,50- and 100-year Type A, Type B and C NOAA temporal distributions using depths obtained from NOAA Atlas 14 point precipitation frequency estimates. The point precipitation frequency estimates shall be increased 6% for future conditions rainfall.

Subwatersheds shall be delineated to calculate peak flows for the drainage system. Watershed characteristics shall be determined for each subwatershed and proposed land uses shall be developed from information provided by the City and/or County.

#### Lock's Creek Area - Drainage Improvements - Scope of Services

Hydrologic parameters calculated shall include, subwatershed area, existing land use, future land use, curve number or Rational C values, time of concentration, soil types, impervious area, and channel routing characteristics. The model shall use any available monitoring results, high water marks or other relevant data for model verification where appropriate.

- 8.2 Existing and Proposed Improvements Analysis for Current and Buildout Conditions The Engineer shall evaluate and determine water surface profiles for at minimum the 2-, 10-, 25-, 50- and 100-year design events with and without proposed improvements for existing and buildout conditions as part of the modeling efforts with a focus on compliance with City design standards. The Engineer shall model the following scenarios:
  - Existing land use; existing rainfall
  - Existing land use; future rainfall (6% increase)
  - Proposed land use; existing rainfall
  - Proposed land use; future rainfall

Starting water surface elevations (WSELs) shall be based on either the slope area method or from published WSELs developed by FEMA, Army COE, or others if available. Selection of the appropriate starting WSEL shall be discussed and agreed upon with the City prior to finalizing the modeling and shall be documented in the Conceptual Design Report. **2D** maps based upon topographic data and modeling results shall be provided indicating the approximate extent of street and structure flooding in the project area for the various storm events. Potential structure flooding shall be assessed based on available topographic data. Street spread shall be evaluated for the existing flood prone areas per City design standards using spreadsheet analysis or other methods. Infrastructure improvements shall be evaluated based upon the built-out conditions. Backup data on flood depth and street spread for the various design storms shall be provide in an Appendix to the Model Technical Memorandum.

## 8.3 Model Validation

We are aware of one, readily available highwater mark in the project area (see below). For purposes of this proposal, the Team will utilize the Hurricane Florence rainfall event that produced flooding in the area and determine the approximate storm frequency of the event and compare the results of the model from the closest storm event. If the existing conditions model does not reasonably match the known flooding, the Team will make reasonable adjustments to the model to better correlate to the known flooding. If reasonable model adjustments can't be made, the Team will notify the City to determine if the additional investigation is warranted. The following assumptions apply to this task.

- Rainfall data ((MRMS QPE 1hr) for Hurricane Florence will be used for historical flooding evaluation and comparisons with the HEC-RAS 2D (RoG) model
- The one highwater mark obtained by NCEM located on a house on Bombay Drive next to Lock's Creek, 85.88 feet NAVD88 (Fair; +/- 0.20 feet), will be used for model validation

#### Lock's Creek Area - Drainage Improvements – Scope of Services

- The Gradient Team will spend up to 16 hours making reasonable adjustments to the model parameters to validate the model.
- Additional investigation, including evaluation of Hurricane Florence, with ICM is not included in the fee.

## 8.4 H&H Model Technical Memorandum

The Team will update the proposed condition model developed for the PS23 solution to match the updates performed to update the existing condition model and present the results to the City. Gradient will prepare up to three (3) optional alignments (horizontal and/or vertical) for the proposed storm drainage improvements. Woolpert, as a subconsultant to Gradient, will model each option provided by Gradient and present the results to Gradient and the City to determine the final, selected solution. Woolpert will then produce a technical memorandum that summarizes the model updates, model validation, alternatives and final recommended solution. The following assumptions apply to this task.

- Gradient will identify additional inlets required to meet spread requirements.
- Woolpert will update the subcatchments to include the new inlets and pipes. It is assumed this will require up to four (4) new subcatchments.
- Woolpert will model up to three (3) different optional alignments and present the results to Gradient and the City.
- The Technical Memorandum will be a summary analysis and will include figures/tables showing the limits of the various flood events and will include the digital supporting information for the City to include into their citywide model. This will be a memorandum only and not a full, final report as required for the watershed studies.
- Draft model runs shall be provided to the City at the 35% design stage submittal, and final model runs submitted at the end of project.
- The water surface elevations at and around the proposed project are primarily controlled by the downstream Cedar Creek Road culvert. A downstream evaluation will compare pre- and post-project water surface elevations to document changes in water surface elevations as a result of the proposed project and determine if there is an adverse impact to nearby, including downstream, structures.
- Depending on the status of the upcoming FEMA LOMR for Locks Creek, a
  FEMA CLOMR/LOMR may, or may not, be required once the design plans are
  complete and the project is ready to be constructed. The effort to complete a
  CLOMR/LOMR is not included with this scope/fee. The need for a
  CLOMR/LOMR will be determined near the end of the design effort and a
  scope and fee for this effort can be negotiated.

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

## **9 CONSTRUCTION PLANS**

The Engineer shall submit design drawings at the 35%, 90%, and 100% completion stages for the proposed improvements. Preliminary results indicate the design plans will include approximately: <u>Storm Drainage System</u>

- <u>PS12</u>: Approximately 2,350 LF of pipe system improvements beginning on Coldwater Drive near Pasture Lane, thence along Pasture Lane, crossing Windmill Road, then routed along the backyards of several properties until crossing under Carriage Road with an outfall to the Lock's Creek Tributary. New pipes will range in size from 24 to 60 inches in diameter.
- <u>PS18</u>: Approximately 1,530 LF of pipe system improvements starting at the roadway sag along Lock's Creek Road, thence along Bridgeton Way, crossing over Jereens Creek Road, then between several houses towards and across Bombay Drive with an outfall into Lock's Creek.
- <u>PS27</u>: Raising the elevation of Lock's Creek Road at the entrance of the neighborhood and upgrading the culverts to three (3) 60-inch diameter pipes.
- <u>PS28</u>: Raising the elevation of Lock's Creek Road from Carriage Road to Bombay Drive to remove the low areas (sags) which are inundated with backwater from Lock's Creek.

The final construction plans and contract documents shall include, but not be limited to, the following:

9.1 Design Plans

Design plans shall include but may not be limited to the following:

- Existing conditions, including roadway, planimetric features, structures, vegetation and utilities, as determined by field survey;
- Existing deed title lines; existing and proposed right-of-way lines; existing easements as provided by the City; and proposed storm drainage easements, proposed temporary construction easements, and permanent conservation easements. Fee simple, right-of-way and/or easements shall be sufficient to encompass all improvements, including landscaping;
- Location (plan and profile) of proposed storm drainage features (channels, culverts, pipes, manholes, drop inlets, etc.);
- Location (plan and profile) of identified existing utilities and proposed utilities and shall indicate proposed underground and overhead utilities to be reconstructed and/or relocated as part of the Project.
- Location of construction work areas and indication of which existing features may be impacted by construction (fences, trees, sheds, etc.) indicating the party responsible for removal and/or re-establishment;
- Typical cross sections of open channels showing armoring or stabilization techniques;
- Recommendation of construction materials to be used;
- For each property, the City tax code designation, the deed book and page number, parcel number, and street address as well as names of property owners

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

per tax records;

• Erosion control plans;

The Engineer shall prepare plans on 24" x 36" plan and profile sheets at a scale of 1"=20' horizontal and 1"=5' vertical or as directed by the City. The Engineer shall furnish 1 full sized set of prints, 1 half sized set of prints and one digital version in pdf to the City's Project Manager for review and approval at each stage of completion. The City's Project Manager shall return to the Engineer all pertinent comments summarized on a single plan set or in an itemized Word document. The Engineer shall revise the plans as required by the City's Project Manager in conformance with the review comments. The Engineer shall use City standard details to the extent possible. NCDOT standard details shall be used if there is not an appropriate City standard.

#### 9.1.1 35% Submittal

This shall include development of a Conceptual Design Report/Technical Memorandum and Conceptual Design Drawing Set including:

#### **Conceptual Design Report/Technical Memorandum**

- Description of project area and existing drainage problems;
- Map(s) of existing system and H&H conditions showing inundation areas and affected structures;
- Description of evaluation process and potential alternatives;
- Recommended improvements and level of service;
- Recommend next steps if water rise is determined in FEMA flood area;
- Document water rise and provide for City comment and citizen input if water surface level analysis determines ≥ 1" water rise at downstream or other properties due to upsizing of pipe;
- Map(s) of proposed improvements and H&H conditions showing inundation areas and affected structures;
- Modeling output for existing and proposed conditions;
- Traffic concerns;
- Constructability concerns;
- List of anticipated permits;
- Opinion of probable construction cost in Excel and PDF format;
- Design calculations in Excel and PDF format; and
- Modeling output as GIS shape file or in PDF format.

#### **Conceptual Design Drawings Set**

- Cover Sheet with overall location plan;
- Legend;
- General Notes;
- Easement limits and affected parcel information (including table of properties with land & structure value information);

#### Lock's Creek Area - Drainage Improvements – Scope of Services

- Plan and Profile sheets of proposed storm drainage improvements that show water bodies, wetlands, parcel lines, structures, graveyards, railroads, etc.;
- Utility Plan (if required) to include preliminary plan & profile sheets of utility line relocation in each street, if necessary, to avoid conflicts with proposed storm drainage system;
- Custom structures

## 9.1.2 90% Submittal

Following 35% Design approval by the City, the plans shall be updated and submissions shall be made to City and PWC. The submission shall include those items in the 35% Submittal above and the following:

- Construction Details;
- Final Plan & Profile sheets (for both storm drainage and water distribution system);
- Erosion Control Plan;
- Construction Traffic Control Plan;
- Landscape Plan, as required; and
- Draft specifications and bid tab, as required.

## 9.1.3 100% submittal

Upon final approval from the City and PWC, the Engineer shall address review comments from the 90% submittal, revise drawings and specifications as appropriate and prepare the final contract documents. The final submission shall include following:

## In Electronic Format:

- Half size design drawings in PDF format;
- Full size design drawings in PDF format;
- Design drawings in DWG format;
- Final Technical Specifications, including Special Provisions, in Word format;
- Opinion of probable construction cost in Excel format;
- Updated Technical Report that provides final design calculations and modeling data in PDF format; and
- Stakeout file for construction in CAD or as ascii file will be provided during Construction Period Services and is <u>not included</u> in this scope of work.

## 9.2 Erosion Control

The Engineer shall design and specify erosion control measures that minimize erosion and prevent off-site sedimentation during construction of the Project. The design shall be in accordance with the requirements of the North Carolina Department of Environment and Natural Resources (NCDENR), Erosion and Sediment Control Planning Design Manual. The Engineer shall show erosion control measures and details on the plans starting with the 90% submittal.

#### Lock's Creek Area - Drainage Improvements - Scope of Services

9.3 Construction Traffic Control

The Engineer shall furnish a traffic control plan starting with the 90% submittal that shall indicate the Engineer's proposed phasing of construction for the Project including any utility construction and/or relocation. The Engineer shall prepare the construction traffic control plans in conformance with the following:

- Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD), current as of the date Final Traffic Control plans are begun as prepared by the National Advisory Committee on Uniform Traffic Control Devices, including subsequent revisions;
- The 1985 edition of the "North Carolina Supplement to the MUTCD, Part VI; NCDOT;
- "The State Policy and Procedure for Traffic Control Through Construction Work Zones"; and
- The 2002 edition of the "Highway Design Branch Roadway Design Standards", with all subsequent revisions.

The final traffic control plan shall include a phasing sequence listing work to be done in each phase, the traffic control details of each phase (NCDOT or consultant prepared drawing) and any special considerations, such as time limitations, hour of day limitations, or intermediate completion times. It shall also include temporary pavement markings. The final construction traffic control plans shall be sealed by a registered professional engineer.

## 9.4 Cost Opinion

The Engineer shall develop an Opinion of Probable Cost for each design submittal including quantity take-offs using the City's CIP Cost Tool. The Tool was developed utilizing recent bid tab and available construction cost data to aid in developing and delivering probable construction costs for drainage improvement projects. Cost opinions shall be provided in both Excel and PDF format.

## **10 PERMITTING**

Several permits are required for construction of the proposed improvements. Final determination of permitting requirements and application preparation shall begin following the 90% milestone submittal. Permits included in this Scope of Services are summarized below:

10.1 Erosion & Sediment Control

The Engineer shall prepare submittals and approvals required for NCDENR erosion control permits and NPDES permits for construction activities. Erosion Control permit submittals shall be prepared and submitted upon completion of the 90% design drawings. The Engineer shall respond to permitting agency comments and incorporate comments into design documents if feasible.

#### Lock's Creek Area - Drainage Improvements – Scope of Services

#### 10.2 Environmental

The Engineer shall assess whether modifications to open channel drainage features shall require jurisdictional determinations. Where required, USACOE 401/404 permitting shall be included in the Scope of Services for the proposed improvements. See Section 14.1.

#### 10.3 Water Distribution System

None anticipated. However, Engineer will coordinate with PWC on any required water line repairs and/or relocation due to conflicts and will provide documents for PWC's review and approval prior to construction.

#### 10.4 Sanitary Sewer System

None anticipated. However, Engineer will coordinate with PWC on any required sewer line repairs and/or relocation due to conflicts and will provide documents for PWC's review and approval prior to construction.

## 10.5 Letter of Map Revision (LOMR)

It is assumed for the basis of this scope of work that the City has not moved forward with the LOMR for this area. No effort has been included to conduct a "no-rise" certification or any other flood studies.

## **11 CONTRACT PREPARATION AND BID PHASE SERVICES**

## 11.1 Contract Document Preparation

The Engineer shall review the City's Technical Specifications and confirm their adequacy for the project. If necessary, Engineer shall prepare Project Special Provisions for items not addressed in the City's Technical Specifications and provide a draft copy of these provisions with the 90% submittal to the City.

## 11.2 Prepare Bidding/Proposal Documents

The Engineer will prepare Contract Documents including Division 00 Procurement and Contracting Requirements, Division 01 General Requirements including measurement and basis for payment, technical specifications, and appendices including federal requirements. Contract Documents will utilize EJCDC documents provided by the City.

## 11.3 Bid Phase Services

After completion of the 100% submittal to the City, the Engineer shall provide bid period services that include:

- administering distribution of Specifications and Construction Drawings to contractors and to plan rooms;
- attendance at pre-bid conference with the project team and respond to questions from prospective bidders;
- response to Bidder questions or RFIs;
- prepare addenda as necessary and provide to Owner;
- evaluate and determine the acceptability of "or equals' and substitute materials and equipment proposed by prospective contractors prior to award;
- evaluate and tabulate bid results;
- award recommendation letter based on the bid review; and
- if Owner engages in negotiations with bidders or proposes, assist with respect to technical and engineering issues that arise during negotiations.

## **12 REAL ESTATE REQUIREMENTS**

## 12.1 Right-of-Way (temporary and permanent)

The Engineer shall provide a plan view drawing which shows all property lines, rights-ofway, and temporary and permanent easements. All street rights-of-way and easement widths shall be clearly labeled.

#### 12.2 Easements

The Engineer shall provide design plans which include designation of all easements needed for inspection and emergency maintenance of stormwater management facilities. Easement limits and effected parcel information (including table of properties with land & structure value information) shall be developed and provided for City review at the 35% design stage. At a minimum, easements shall be compliant with City of Fayetteville Standards, to include both maps and legal descriptions, and have the following characteristics:

- a. Minimum 20-foot permanent maintenance access easement from a public or private right-of-way to all stormwater management facilities;
- b. Minimum 10-foot permanent drainage easement around the perimeter of all stormwater management facilities. Any fences constructed around such facilities shall be outside of the 10-foot permanent drainage easement;
- c. Minimum 20-foot easement for closed pipe systems; and
- d. Adequate access to all parts of the public drainage system and structures.

## 12.3 Easement Plats

The Engineer shall prepare up to twenty (20) easement plats including metes and bounds descriptions for each permanent drainage easement. Plats shall meet the City's Planning Department, Cumberland County and State of North Carolina requirements for preparing and recording easement plats. Applicable review and recording fees shall be paid by the City. The City shall provide the Engineer with a standard form of agreement from the City Real Estate Division to be used in preparing easement documents. Required easements shall be identified upon completion and City review of the 90% plans.

## **13 TECHNICAL SPECIFICATIONS REVIEW**

- 13.1 Review City's Current Technical Specifications Not included; addressed in Section 11 above.
- 13.2 Prepare Special Provisions Not included; addressed in Section 11 above.

## City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

## 14 ADDITIONAL SERVICES

## 14.1 Wetlands:

It is anticipated the discharge for the various proposed storm drainage pipes will be along the bank of Lock's Creek and tributaries and may require a permit from the US Army, Corps of Engineers (USACE). The following services will be provided by Carolina Ecosystems (CEI) as a subconsultant to Gradient:

## 14.1.3 Wetland/Stream Delineation

- 14.1.1.1 Delineate wetlands potentially subject to jurisdiction under the Clean Water Act (CWA) on the site. Wetland/upland and/or wetland/open water boundary delineation will be performed and follow current USACE methodologies including regional supplements. Approximate location of wetland flags will be recorded for initial planning, and later surveyor location.
- 14.1.1.2 Characterize and identify stream channels potentially subject to jurisdiction under the CWA using current USACE methodologies. Representative stream channel points (origin and intermittent-perennial transition points) will be flagged in the field for survey by Gradient's survey subconsultant. Approximate locations will be recorded for initial planning, and surveyor location.

## 14.1.1.3 Provide surveyor support including:

- Provide sketch maps and flag numbers for all wetlands and streams,
- Record and share GPS locations of stream origins and transition points, and wetland boundary flag locations, and
- Review survey results for accurate depiction of delineated resources.

## 14.1.4 Prepare a Request for Preliminary Jurisdictional Determination (PJD):

Upon completion of Task 1, CEI will prepare a request for PJD for the USACE. The request will include appropriate field documentation and approximate maps (or accurate maps if surveying is complete at that time). A site visit with the USACE will be scheduled and attended to verify the delineation results. An email summary of the field visit will be prepared to document any relevant changes/discussions.

## 14.1.3 PCN Preparation & Submittal:

Upon receipt of construction drawings, CEI will prepare an electronic Pre-Construction Notification (PCN) application for a Nationwide Permit (NWP) including:

- On-line electronic PCN form
- Cover letter
- Vicinity, USGS, Soil Survey, and Jurisdictional Features Maps
- Site plans (prepared by Gradient)
- Supporting information including on-line threatened and/or endangered species and historical resources data searches
- **14.1.4** The electronic PCN package will be made available for Client review, followed by submittal to the USACE and NC Division of Water Resources as applicable. Agency

#### City of Fayetteville NC Lock's Creek Area - Drainage Improvements – Scope of Services

questions that are office-based and do not require additional field work or analysis of impacts will be addressed during their review.

## **15 SERVICES NOT INCLUDED**

The following services are not included in this scope of services:

- Phase I/II Environmental Site Assessments ;
- Traffic impact analysis, traffic signalization or other traffic studies;
- Changes to the construction plans after construction document approval;
- Review agency fees and plat recording or filing fees. If paid directly by GRADIENT, we will invoice for these fees as reimbursable expenses;
- Other CLIENT directed services not specifically included.

## **16 PROJECT ADMINISTRATION**

The Engineer shall manage the project in a manner that is responsive to the needs and schedule of the City and assure the quality of the product. The following project management efforts shall be conducted in coordination with the City:

16.1 Project Schedule

The Engineer shall prepare and submit a project schedule for review and approval by the City's Project Manager. The schedule shall be broken down by work tasks and milestone events. This schedule shall be used as a project control system for the Engineer and as a basis for status reporting.

## 16.2 Monthly Meetings

The Engineer shall conduct monthly meetings with the City and subconsultants to update progress and bring critical issues to the City's attention for timely action and decision; establish meeting dates, times and attendees with the City; notify attendees; prepare and distribute agenda and information in advance of the meeting; and conduct the meeting and prepare/distribute meeting minutes following the meeting.

## 16.3 Progress Reports

The Engineer shall prepare and submit a progress report to update the project schedule, list milestones achieved, provide current status of each major task, support and document schedule changes, update project costs and justify any changes to the schedule or proposed budgets. Progress reports shall be provided at the end of each month and shall accompany each invoice.

## 16.4 Quality Assurance/Quality Control (QA/QC)

The Engineer shall coordinate and conduct QA/QC including reviews at key stages of the project, independent project quality control reviews to assess conformance to project scope, data collection, methodologies, model output, budget, schedule, and prepare QA/QC documentation.

#### Lock's Creek Area - Drainage Improvements – Scope of Services

## 16.5 Project Deliverables

All project deliverables shall be certified (signed, sealed and dated) by a professional engineer and/or surveyor registered in the state of North Carolina. The Engineer shall participate in project closeout and ensure it is completed on a timely basis.

## 16.6 Invoice Template

The Engineer shall utilize the City provided invoicing template for all services rendered in association with the project.

## EXHIBIT B

# FEE ESTIMATE

#### Exhibit B: Fee Estimate

#### Lock's Creek Area Drainage Improvements

	Imber Description	Total	Sub-Totals
1 TECH	HNICAL REPORT	10141	Sub rotuis
1.1	1 Project Background & Description		
	1.1.1 Project Area Description	\$370.00	
	1.1.2 Point of Origin of Project	\$370.00	
	1.1.3 Project Need 1.1.4 Project Goals	\$1,400.00 \$1,400.00	\$3,540.0
1.2	2 Existing Conditions	Ş1,400.00	\$3,340.0
	1.2.1 Summary of Past Reports/Investigations	\$1,610.00	
	1.2.2 Existing Photos of Problem Area/Drainage Issues	\$2,800.00	
	1.2.3 TV Inspection Results	\$0.00	
	1.2.4 Project Area Characteristics 1.2.5 Existing Level of Service	\$1,400.00 \$1,030.00	\$6,840.0
1.3	Project Justification	\$1,050.00	\$0,840.0
	1.3.2 Value Provided	\$5,620.00	
	1.3.3 Proposed Level of Service	\$1,030.00	
	1.3.4 Assumptions	\$825.00	
	1.3.5 Project Benefit Statement	\$1,030.00	\$8,505.0
	A GATHERING 1 Gather Existing Data	\$3,220.00	
	2 Review with City	\$700.00	\$3,920.0
	IMUNITY OUTREACH		
	1 Perform Community Outreach	\$4,150.00	
	2 Community Outreach Results	\$1,330.00	\$5,480.0
	D SURVEY 1 Field Verification	\$6,860.00	
	2 Survey Requirements	\$49,780.00	
	3 Survey Notifications	\$3,800.00	
4.4	Field Survey Project Administration	\$8,020.00	
	5 Survey Submittal	\$1,540.00	\$70,000.0
	ITY COORDINATION		
5.1	Fayetteville Public Works Commission (PWC)	442.452.00	
	5.1.1 Water & Sewer Design & Coordination 5.1.2 Water & Sewer Permitting	\$13,160.00 \$2,480.00	
	5.1.2 Water & Sewer Permitting 5.1.3 Construction Staking	\$2,480.00	
	5.1.4 Construction Site Observation	\$0.00	
	5.1.5 As-Built Survey	\$0.00	
	2 Electrical/Communications & Other Utilities	\$6,500.00	
	3 Field Meetings	\$3,960.00	\$26,100.0
Mon	nitoring Not Included		
GEO	Not Included TECHNICAL INVESTIGATIONS & SUE		
	Geotechnical Investigation	\$10,000.00	
	Subsurface Utility Exploration (SUE)	\$42,000.00	\$52,000.0
	INAGE/H&H MODEL EVALUATION		
	1 Hydrologic & Hydraulic (H&H) Model Development	\$6,880.00	
	2 Existing & Proposed Improvements Analysis 3 Model Validation	\$28,555.00	
	H&H Model Technical Memorandum	\$4,570.00 \$14,715.00	\$54,720.0
	ISTRUCTION PLANS & CONTRACT DOCUMENTS	<i>\$14,715.00</i>	<i>\$54,72010</i>
	1 Design Plans		
	9.1.1 35% Submittal		
	9.1.1.a Conceptual Design Report/Technical Memo		
	9.1.1.b Conceptual Design Drawings Set 9.1.2 70% Submittal	\$80,600.00	
	9.1.2 90% submittar 9.1.2.a Updated Design Report	\$0.00	
	9.1.2.b 70% Construction Drawings	\$0.00	
	9.1.2.c Easement Exhibit Maps	\$0.00	
	9.1.2.d Draft Specifications	\$0.00	
	9.1.2.e Opinion of Probable Construction Cost	\$0.00	
	9.1.3 90% Submittal	éa 460.00	
	9.1.3.a 90% Design Report/Technical Memo 9.1.3.b 90% Design Drawings Set	\$3,460.00 \$82,400.00	
	9.1.3.c Easement Exhibit Maps	\$0.00	
	9.1.3.d Draft Specifications & Bid Tab	\$20,220.00	
	9.1.3.e Opinion of Probable Construction Cost	\$7,460.00	
	9.1.4 100% Submittal		
	9.1.4.a Hard Copy Plans	\$23,960.00	
	9.1.4.b Electronic Plans 9.1.4.c Specifications	\$730.00 \$2,410.00	
	9.1.4.d Opinion of Probable Construction Cost	\$4,840.00	
	9.1.4.e Technical Report	\$4,200.00	
	9.1.4.f Stakeout File	\$0.00	
	2 Erosion Control Plans	\$16,200.00	
	Construction Traffic Control Plans	\$20,460.00	
	Construction Cost Opinion	\$5,010.00	\$284,070.0
	MITTING 1 Erosion & Sediment Control (NCDEQ)	\$11,240.00	
	2 Environmental	\$8,920.00	
	3 Others	\$0.00	\$20,160.0
	ITRACT PREPARATION & BID PHASE SERVICES	÷:	,
	1 Contract Document Preparation	\$3,960.00	
11.2	2 Prepare Bidding/Proposal Documents	\$5,280.00	
11.3	3 Bid Phase Services		
	11.3.1 Pre-Bid Meeting	\$1,980.00	
	11.3.2 Response to RFIs 11.3.3 Review of Rids & Rid Tabulation	\$2,270.00	
	11.3.3 Review of Bids & Bid Tabulation 11.3.4 Recommendation of Award	\$1,970.00 \$330.00	\$15,790.0
REAL	L ESTATE REQUIREMENTS	2330.00	<i>~~~,~~</i> 0.0
	1 Right-Of-Way (temporary & permanent)	\$0.00	
12.2	2 Easements	\$4,750.00	
	3 Easement Plats	\$15,800.00	\$20,550.0
	HNICAL SPECIFICATIONS REVIEW	AD 5-	
	1 Review City's Current Technical Specifications 2 Prenare Special Provisions	\$0.00 \$0.00	60.4
	2 Prepare Special Provisions DITIONAL SERVICES	\$0.00	\$0.0
	1 Wetlands		
	14.1.1 Wetland/Stream Delineation	\$6,860.00	
	14.1.2 Prepare Request for Preliminary JD	\$1,980.00	
	14.1.3 PCN Preparation & Submittal	\$3,960.00	
	14.1.4 Project Management & Coordination	\$1,900.00	\$14,700.0
	VICES NOT INCLUDED		
	ect Administration	éa ann ar	
6 Proje	Project Schedule     Monthly Meetings	\$3,380.00 \$10,620.00	
5 Proje 16.1		\$10,620.00 \$8,640.00	
6 Proje 16.1 16.2		\$14,820.00	
5 Proje 16.1 16.2 16.3	3 Progress Reports 4 QA/QC		
5 Proje 16.1 16.2 16.3 16.4		\$7,840.00	
5 Proje 16.1 16.2 16.3 16.4 16.5	4 QA/QC		\$57,436.0
5 Proje 16.1 16.2 16.3 16.4 16.5	4 QA/QC 5 Project Deliverables 6 Invoicing	\$7,840.00	
5 Proje 16.1 16.2 16.3 16.4 16.5	4 QA/QC 5 Project Deliverables	\$7,840.00	\$57,436.0 \$2,000.0
6 Proje 16.1 16.2 16.3 16.4 16.5	4 QA/QC 5 Project Deliverables 6 Invoicing	\$7,840.00	

## EXHIBIT C

# GENERAL SERVICES AGREEMENT

## GENERAL SERVICES AGREEMENT FOR CONSULTING SERVICES BETWEEN

## CITY OF FAYETTEVILLE FAYETTEVILLE, NORTH CAROLINA

AND

.

**GRADIENT, PLLC** 

APRIL 1, 2022

#### STATE OF NORTH CAROLINA COUNTY OF CUMBERLAND

#### GENERAL SERVICES AGREEMENT FOR CONSULTING SERVICES

THIS AGREEMENT, effective the day of April 1, 2022 by and between THE CITY OF FAYETTEVILLE, NORTH CAROLINA (hereinafter referred to as CITY), with principal business offices at Fayetteville, North Carolina, and GRADIENT, PLLC (hereinafter referred to as CONSULTANT), a corporation with principal business offices at 230 Donaldson Street, Suite 500A, Fayetteville, NC 28301.

#### WITNESSETH:

WHEREAS, CITY, is engaged in the operation and maintenance of facilities and services which from time to time require revision, renovation and extension of existing facilities, and the construction of new facilities and other related projects; and

WHEREAS, the professional services of engineers, architects, surveyors and others will from time to time in the future be needed by the CITY in the renovation of existing facilities, and in the construction of new facilities and other related projects; and

WHEREAS, pursuant to N.C.G.S. 143-64.31 it is the public policy of this State that municipalities announce all requirements for architectural, engineering and surveying services, to select firms qualified on the basis of demonstrated competence and qualification and to negotiate contracts for services at a fair and reasonable fee with the best qualified firm; and

WHEREAS, CONSULTANT provides professional consulting services of the nature required by the CITY and employs trained and experienced engineering, technical and/or other personnel possessing adequate knowledge, skills and experience to provide professional services to the CITY; and

WHEREAS, the CITY proposes to announce to various competing firms its need for professional consulting services in the future by requesting Proposals and the subsequent acceptance of proposals and the issuance of written authorizations to proceed, which together with this Agreement shall constitute a contract between the CITY and the CONSULTANT; and

WHEREAS, the parties contemplate that the services of CONSULTANT will be performed in various stages in accordance with separate authorizations to be issued by CITY, and the parties desire to set forth the basic terms of their agreement in this General Services Agreement rather than in separate authorizations to be issued by CITY.

**NOW THEREFORE, IN CONSIDERATION** of the premises and the mutual covenants herein contained, the parties hereto do hereby contract and agree as follows:

**ARTICLE 1 - REQUEST FOR PROPOSAL-SUBMITTAL OF PROPOSAL.** As the need for consulting services arise, **CITY** will request a Proposal for said services from **CONSULTANT** which shall describe the scope of work, program, estimated schedule and **CITY'S** requirements.

If CONSULTANT has the qualified personnel to meet CITY'S requirements to perform the consulting services requested by the CITY, CONSULTANT will submit to CITY within the time specified a written Proposal describing the necessary engineering, technical and/or other services, guidance, opinions and advice to be provided. The Proposal shall set forth in general terms CONSULTANT'S recommendations to carry out the work. CONSULTANT shall list the background and experience of CONSULTANT'S personnel to be assigned to the project. Said Proposal shall contain a fee schedule setting forth fees for services of the various categories of personnel to be assigned to CITY'S project.

ARTICLE 1.1 - ACCEPTANCE OF PROPOSAL. CITY and CONSULTANT contemplate certain discussions, negotiations and possible changes to the Proposal submitted by CONSULTANT. Upon a meeting of the minds, CONSULTANT shall submit the final Proposal which shall set forth the agreement of the parties. If said Proposal is acceptable, the CITY shall accept same in writing. CONSULTANT'S fee schedule shall remain in effect during the term of this Agreement, unless modified by the parties in writing. CITY shall provide CONSULTANT with a specific written Authorization to Proceed for each Proposal accepted by CITY.

**ARTICLE 2 - TERM OF AGREEMENT**. The term of this General Services Agreement for Consulting Services shall be for three (3) years from the date it is effective. The Agreement may be extended thereafter by mutual written agreement of the parties.

ARTICLE 2.1 - ASSIGNMENT. It is the intent of this Agreement to secure the personal services of the CONSULTANT and failure of the CONSULTANT for any reason to make the personal services available to the CITY for the purposes described in this Agreement shall be cause for termination of this Agreement. The CONSULTANT shall not assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of CITY. Nothing contained in this paragraph shall prevent CONSULTANT from employing such independent consultants, associates, and sub-contractors as it may deem appropriate to assist CONSULTANT in the performance of services rendered.

**ARTICLE 3 - COMPENSATION. CONSULTANT** shall submit to **CITY** monthly invoices for services performed during that month, computed on the basis of the Proposal accepted by **CITY**. **CITY** agrees to pay **CONSULTANT'S** monthly invoice within thirty (30) days after said invoice is received by the **CITY**. Adjustments to an invoice for billing errors may extend the time for payment. For clarity, compensation to **CONSULTANT** shall be based upon Task and/or Work Authorizations that are provided to and agreed upon by the **CITY**. The Signing of this General Services Agreement does not bind or obligate the **CITY** to pay **CONSULTANT** any compensation.

**ARTICLE 3.1 - VERIFICATION OF INVOICES. CITY** has the right to require the **CONSULTANT** to produce for inspection all **CONSULTANT**'S time records, salaries of personnel and charges for direct expenses for which cost-plus compensation is provided. **CONSULTANT** agrees to provide **CITY** with said records on a timely basis and cooperate with **CITY** to verify the accuracy of all invoices.

ARTICLE 3.2 - COSTS AND EXPENSES. CONSULTANT will invoice CITY for all travel and living expenses of its employees assigned to a project which said expenses shall be at actual cost, unless said costs or expenses are specifically set forth and included in a fixed price contract. Accommodations for CONSULTANT'S employees shall be arranged by CONSULTANT. Living expenses for CONSULTANT'S employees shall be the usual and customary expenses for accommodations to which CONSULTANT'S employees are accustomed, and which are prevailing in Cumberland County, North Carolina.

**ARTICLE 3.3 – NON APPROPRIATION.** Notwithstanding any other provisions of this Agreement, the parties agree that payments due hereunder from the CITY are from appropriations

and monies from the City Council and any other governmental entities. In the event sufficient appropriations or monies are not made available to the CITY to pay the terms of this agreement for any fiscal year, this Agreement shall terminate immediately without further obligation of the CITY.

**ARTICLE 4 - PROFESSIONAL STANDARDS AND DUTIES OF CONSULTANT. CONSULTANT** shall be held to the same standard and shall exercise the same degree of care, skill and judgment in the performance of services for **CITY** as is ordinarily provided by a similar professional under the same or similar circumstances at the time in Cumberland County, North Carolina.

ARTICLE 4.1 - CONSULTANT NOT RESPONSIBLE FOR CONSTRUCTION MEANS OR SAFETY. A CONSULTANT for general construction projects shall not be responsible for any general contractor's or other project participant's failure to fulfill their contractual responsibilities to the CITY, nor shall CONSULTANT be responsible for construction means, methods, techniques, sequences, or procedures. Neither shall CONSULTANT be responsible for a project safety program or safety precautions unless CONSULTANT'S Proposal sets forth a safety program which is accepted by CITY and becomes a part of the agreement between the parties.

ARTICLE 4.2 - CONSULTANT AS CONSTRUCTION MANAGER. In the event the CITY contracts with the CONSULTANT to provide Construction Management Services, the CONSULTANT shall be responsible for determining that each construction contractor provides work to the quality level specified and in accordance with the plans and specifications. In no event shall CONSULTANT be responsible for any contractor's, subcontractor's, vendor's, or other project participant's failure to comply with federal, state or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards unless it has contracted with the CITY to do so.

ARTICLE 5 - ESTIMATES OF COST AND TIME. Although CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, or over competitive bidding or market conditions, nevertheless CONSULTANT'S cost estimates and time estimates shall be made on the basis of current labor and material prices and the CONSULTANT'S experience and qualifications, and CONSULTANT'S estimates shall represent its best judgment as an experienced and qualified professional familiar with electric, water and sewer utility projects, or other projects for which CONSULTANT is employed. Although CONSULTANT has no control over the resources provided by contractors to meet contract schedules, nevertheless CONSULTANT'S estimates or forecast of schedules shall be made on the basis of its experience and qualifications and shall represent CONSULTANT'S best judgment as an experience and qualifications and shall represent CONSULTANT'S best judgment as an experience and qualified professional familiar with electric, water and sewer utility projects for which CONSULTANT'S best judgment as an experience and qualified professional familiar to sever utility projects, or other projects for which CONSULTANT for severe the basis of its experience and qualified professional familiar with electric, water and sever utility projects, or other projects for which CONSULTANT'S best judgment as an experience and qualified professional familiar with electric, water and sever utility projects, or other projects for which CONSULTANT is employed. CONSULTANT'S best judgment as an experience and schedules will not vary from the estimates and schedules given to CITY.

#### **ARTICLE 6.0 - LIABILITY, INDEMNIFICATION AND INSURANCE.**

6.1 - GENERAL. The CITY and CONSULTANT have considered the risks and potential liability that may exist during the performance of services by CONSULTANT, and have agreed to allocate such liabilities in accordance with this Article. During the performance of services under this Agreement, CONSULTANT shall purchase and maintain insurance coverage as hereinafter set forth, without lapse or changes contrary to the requirements of this section. Words and phrases used in this Article shall be interpreted in accordance with customary insurance industry usage and practice.

6.2 - INDEMNITY AND PROFESSIONAL LIABILITY. To the extent permitted by law, CONSULTANT agrees to defend, indemnify and hold harmless the CITY and its elected officials, employees, agents, successors, and assigns, from any and all liability and claims for any injury or damage caused by any negligent or tortious act, omission or negligence of CONSULTANT, its agents, servants, employees, contractors, licensees, or invitees. Indemnification of the **CITY** by **CONSULTANT** does not constitute a waiver of the **CITY'S** governmental immunity in any respects under North Carolina law. **CONSULTANT** agrees to purchase and maintain professional liability insurance (errors and omissions insurance) in the amount of \$1,000,000 coverage for each claim, with a general aggregate of \$2,000,000. Said insurance coverage shall be underwritten by an insurance company authorized to do business in the State of North Carolina by the North Carolina Department of Insurance, with an A.M. Best rating of not less than A-VII.

**6.3- LIABILITY INSURANCE. CONSULTANT** agrees to indemnify and hold the **CITY**, its servants, agents and employees, harmless from and against all liabilities, claims, demands, suits, losses, damages, costs and expenses (including attorney's fees) for third party bodily injury to or death of any person, or damage to or destruction of any third party property, to the extent caused by the negligence of the **CONSULTANT**, Consultant's employees, and Consultant's subcontractors, for whom **CONSULTANT** is legally responsible during the performance of services under this Agreement. **CONSULTANT** shall purchase and maintain at all times during performance of services under this Agreement Commercial General Liability Insurance with combined single limits of \$1,000,000.00 coverage for each occurrence with a general aggregate of \$2,000,000.00, designating the **CITY** as an additional insured and which said insurance provides **CONSULTANT** with insurance for contractual liability which CONSULTANT has assumed pursuant to the terms of this Article 6.

**6.4- OTHER INSURANCE.** In addition to professional liability insurance and commercial general liability insurance set forth above, **CONSULTANT** further agrees to purchase and maintain at all times during the performance of services under this Agreement insurance coverage as follows:

- (a) Worker's Compensation Insurance as provided by North Carolina law which said policy shall also afford coverage to **CONSULTANT** for employer's liability.
- (b) Automobile liability insurance with \$1,000,000.00 combined single limit for each accident covering bodily injury and property damage.
- (c) The CGL policy required above shall include independent contractor liability coverage.
- (d) The CGL policy required above shall provide CONSULTANT with products and completed operations insurance, said coverage to be written on an occurrence basis, with coverage extended for such a period of time that suits can be filed before the running of the statute of limitations on any claim for injury to person or property due to negligence of CONSULTANT in the design of any building designed by the CONSULTANT under the terms of this Agreement.

ARTICLE 7 - INDEPENDENT CONTRACTOR. CONSULTANT is an independent contractor and shall undertake performance of the services pursuant to the terms of this Agreement as an independent contractor. CONSULTANT shall be wholly responsible for the methods, means and techniques of performance. CITY shall have no right to supervise methods and techniques of performance employed by CONSULTANT, but CITY shall have the right to observe such performance.

ARTICLE 8 - COMPLIANCE WITH LAWS. CONSULTANT agrees that in performing services pursuant to this Agreement to comply with all applicable regulatory requirements including federal, state and local laws, rules, regulations, orders, codes, criteria, and standards. CONSULTANT shall be responsible for procuring all permits, certificates, and licenses necessary to allow CONSULTANT to perform services under this Agreement. CONSULTANT shall not be responsible for procuring permits required for the construction of any building, unless such responsibility is specifically agreed to by CONSULTANT.

ARTICLE 9 - CITY'S RESPONSIBILITIES. CITY will furnish to CONSULTANT all of CITY'S requirements for the project, including, but not limited to, scope of work, program, time constraints, schedule milestones, financial constraints, design objectives and design constraints, which are available to the CITY or which the CITY can reasonably obtain to furnish to CONSULTANT to enable CONSULTANT to make a Proposal to CITY. Additionally, the CITY shall also be responsible for the following:

- (1) Make final decisions utilizing information supplied by CONSULTANT.
- (2) Designate personnel to represent CITY in matters involving the relationship between CITY, CONSULTANT and third parties.
- (3) Provide such accounting, independent cost estimating, and insurance counseling services as may be required by the project.
- (4) Provide such legal services as **CITY** may require or **CONSULTANT** may reasonably request with regard to legal issues pertaining to the project, including those which may be raised by contractors, subcontractors, vendors or other project participants.
- (5) Enter into contracts for the purchase, construction, or other services with contractors, subcontractors, and vendors.
- (6) Provide financing for the project and make all payments in accordance with the terms of the contract.

ARTICLE 10 - OWNERSHIP OF DOCUMENTS. All documents, including drawings and specifications prepared by CONSULTANT pursuant to this AGREEMENT, are instruments of service in respect of the Project. They are not intended or represented to be suitable for reuse by CITY or others on extensions of the Project or on any other project. Any reuse without written verification or adaption by CONSULTANT for the specific purpose intended will be at CITY'S sole risk and without liability to CONSULTANT. Any such verification or adaptation will entitle CONSULTANT to further compensation at rates to be agreed upon by CITY and CONSULTANT.

**ARTICLE 11 - TERMINATION OF CONTRACT FOR CAUSE**, In the event of substantial failure by **CONSULTANT** to perform in accordance with the terms of this contract, **CITY** shall have the right to terminate **CONSULTANAT** upon ten calendar (10) days written notice in which event **CONSULTANT** shall have neither the obligation nor the right to perform further services under this contract nor shall the **CITY** be obligated to make any further payment for work that has not been performed.

**ARTICLE 12 - TERMINATION OF CONTRACT FOR CONVENIENCE.** Upon thirty (30) calendar days' written notice to **CONSULTANT**, **CITY** may, without cause and without prejudice to any other right or remedy legally available to the **CITY**, terminate this Contract. Upon such notice, **CONSULTANT** shall have neither the obligation nor the right to perform services under this contract nor shall the **CITY** be obligated to make any further payment for work that has not been performed in accordance with the terms stated herein. In such case of termination, **CONSULTANT** shall be paid for the completed and accepted work executed in accordance with this Contract prior to the written notice of termination. Additionally, upon mutual agreement, **CONSULTANT** may be paid for any completed and accepted work which takes place in order to achieve a specifically identified item in the scope of services or a milestone of the Contract, between the written notice of termination and the effective date of termination. Unless otherwise stated or agreed upon, the effective date of termination shall automatically occur 30 days after the written notice is sent by the **CITY**.

**ARTICLE 13 - NONDISCLOSURE OF PROPRIETARY INFORMATION. CONSULTANT** shall consider all information provided by **CITY** and all drawings, reports, studies, calculations, plans, specifications, and other documents resulting from the **CONSULTANT'S** performance of the **SERVICES** to be proprietary, unless such information is available from public sources. **CONSULTANT** shall not publish or disclose proprietary information for any purposes other than the performance of the **SERVICES** without the prior written authorization of **CITY**. **CONSULTANT** shall not make any written or verbal statement to any press or news media concerning the Project without the written authorization of **CITY**.

**ARTICLE 14 - NOTICE.** Any formal notice, demand, or request required by or made in connection with this agreement shall be deemed properly made if delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below.

TO CITY:	CITY OF FAYETTEVILLE ATTENTION: DOUGLAS J. HEWETT CITY MANAGER 433 HAY STREET FAYETTEVILLE, NORTH CAROLINA 28301
TO CONSULTANT:	<b>GRADIENT, PLLC</b> ATTENTION: GORDON A. ROSE, PE MEMBER/MANAGER

Nothing contained in this Article shall be construed to restrict the transmission of routine communication between representatives of **CONSULTANT** and **CITY**.

FAYETTEVILLE, NC 28301

**ARTICLE 15 – FORCE MAJEURE.** Neither party shall be deemed to be in default of its obligations hereunder if and *so long as* it is prevented from performing such obligations by an act of war, hostile foreign actions, adverse governmental actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

230 DONALDSON STREET, SUITE 500A

**ARTICLE 16 - GOVERNING LAW.** This Agreement shall be governed by the laws of the State of North Carolina.

#### **ARTICLE 17 - MISCELLANEOUS.**

17.1 NONWAIVER FOR BREACH. No breach or non-performance of any term of this Agreement shall be deemed to be waived by either party unless said breach or non- performance is waived in writing and signed by the parties. No waiver of any breach or non- performance under this Agreement shall be deemed to constitute a waiver of any subsequent breach or non-performance and for any such breach or non-performance each party shall be relegated to such remedies as provided by law.

**17.2 PRECEDENCE.** In the event of any conflict or discrepancy between the terms of this Agreement and the specific written authorization to proceed pursuant to this Agreement, then the written authorization to proceed shall be given precedence over this Agreement in resolving such conflicts or discrepancies. If any conflict or discrepancy is discovered by either party hereto, then the written authorization to proceed, or this Agreement, shall be modified or amended, as necessary.

17.3 SEVERABILITY. The invalidity, illegality, or un-enforceability of any portion or provision of this Agreement shall in no way affect the validity, legality and/or enforceability of any other portion or provision of this Agreement. Any invalid, illegal or unenforceable provision of

this Agreement shall be deemed severed from this Agreement, and the balance of the Agreement shall be construed and enforced the same as if the Agreement had not contained any portion or provision which was invalid, illegal or unenforceable. Provided, however, this section 17.3 shall not prevent this entire Agreement from being void in the event any portion or provision of this Agreement which is of the essence of this Agreement shall be deemed void as provided by law or as determined by a court of competent jurisdiction.

**ARTICLE 18 - INTEGRATED AGREEMENT.** The **CITY'S** request for Proposal, the **CONSULTANT'S** written Proposal, the **CITY'S** authorization to proceed and this General Services Agreement for Consulting Services shall be integrated into and shall become the integrated agreement between the parties. **CONSULTANT** and **CITY** agree that all prior negotiations, representations, proposals, letters, agreements, understandings, or other communications between them, whether written or oral, are hereby merged into the Agreement and that the Agreement supersedes all such prior negotiations, contracts and/or agreements. This Agreement shall not be modified unless such modifications are evidenced in writing, signed by both **CONSULTANT** and **CITY**.

**ARTICLE 19 - BENEFITS LIMITED TO PARTIES.** Nothing herein shall be construed to give any right or benefits hereunder to anyone other than **CITY** and **CONSULTANT**.

**19.1** LIMITATIONS. CONSULTANT's total liability to CITY under each authorization shall not exceed the total compensation paid under the authorization, or \$1,000,000, whichever is greater; any portion of liability determined to be consequential damages under this per authorization limit, shall not exceed the compensation paid under the authorization. In no event shall **CONSULTANT's** total liability in the aggregate, for all services under this agreement, exceed \$4,000,000. limits set forth in this agreement shall apply notwithstanding any and all causes whatsoever including, but not limited to negligence (of any degree), errors, omissions, warranty, indemnity, strict liability or breach of contract, provided, however, that the foregoing limitation shall not apply to any indemnity obligations of consultant with respect to third party personal injury and death or damage to third party property.

**ARTICLE 20 – VENUE AND FORUM SELECTION.** The Parties expressly agree that if litigation is brought in connection with this contract and (1) the litigation proceeds in the Courts of the State of North Carolina, the parties agree that the appropriate venue shall be in Cumberland County (Twelfth Judicial District of North Carolina); or (2) the litigation proceeds in a federal court, the parties agree that the appropriate venue shall be the United States District Court for the Eastern District of North Carolina.

ARTICLE 21 - E-VERIFY. CONSULTANT acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. CONSULTANT further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS §64-26(a). CONSULTANT pledges, attests and warrants through execution of this contract that CONSULTANT complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes and further pledges, attests and warrants that any subcontractors currently employed by or subsequently hired by CONSULTANT shall comply with any and all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this contract.

ARTICLE 22 – MORALITY CLAUSE. If, in the sole opinion of the CITY, at any time CONSULTANT or any of its owner(s) or employee(s) or agent(s) (collectively referenced as an "Actor") engages in any one or more actions that bring disrepute, contempt, scandal, or public ridicule to the Actor or subject the Actor to prosecution or offend the community or public morals or decency or denigrate individuals or groups in the community served by the CITY or are scandalous or inconsistent with community standards or good citizenship or may adversely affect the CITY'S finances, public standing, image, or reputation or are embarrassing or offensive to the CITY or may reflect unfavorably on the CITY or are derogatory or offensive to one or more employee(s) or customer(s) of the CITY, the CITY may immediately upon written notice to CONSULTANT terminate this Contract, in addition to any other rights and remedies that the CITY may have hereunder or at law or in equity.

**ARTICLE 23** – **PROTEST.** Protest related to this procurement must be addressed to the Purchasing Manager for City of Fayetteville, 433 Hay St, Fayetteville, NC 28301 and shall be received, in writing, within 2 calendar days of bid award. Responses will be in writing by email and first-class mail not later than (7) calendar days following receipt of said protest by the Purchasing Manager.

ARTICLE 24 - IRAN DIVESTMENT ACT CERTIFICATION. As mandated by N.C.G.S. 147-86.59(a), CONSULTANT hereby certifies that it is not listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. CONSULTANT further certifies that in accordance with N.C.G.S. 147-86.59(b) that it shall not utilize any subcontractor found on the State Treasurer's Final Divestment List. CONSULTANT certifies that the signatory to this General Services Agreement is authorized by the CONSULTANT to make the foregoing statement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized representatives effective the day and year first above written.

		CITY OF FAYETTEVILLE
	CITY OF FAYETTEVILLE, NORTH CAROLINA	This instrument has been pre-audited in the mark Required by the Local Government Budget and Fis Control Act.
date: 4/22/2022	BY: Andlas J. Hewet	
ATTEST:	Douglas J. Hewett, ICMA-CM	Chief Financiał Officer
Allest.	City Manager	
Tanela J. Hegilf		
CITY CLERK		
	1762 ENT, PLLC	
, /		
DATE: 3/31/22	BY: Julm An	
* 1	Gordon A. Rose, PE	
	TITLE: Member/Manager	

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