PROFESSIONAL ENGINEERI NG SERVICES AGR EEMENT

Jonesboro Rail Crossing Study

THIS AGREEMENT is made and entered into by and between the City of Jonesboro, Arkansas, hereinafter referred to as "City", and Bridgefarmer and Associates, Inc., hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

The City desires to engage the services of the Engineer to prepare the “Jonesboro Rail Crossing Study” which is intended to develop alternatives and conceptual plans for improvements to the 18 public rail crossings along the BNSF Thayer South Subdivision in the City of Jonesboro, Arkansas.

Hereinafter referred to as the "Project".

The Engineer will render engineering services for the City under the terms and conditions provided herein. That for, and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

I. Employment of the Engineer

The City hereby agrees to retain the Engineer to perform professional engineering services in connection with the Project. The Engineer agrees to perform such services in accordance with the terms and condition of this Agreement.

II. Scope of Services

The parties agree that Engineer shall perform such services as expressly set forth and described in Exhibit "A", which is attached hereto and thereby made a part of this Agreement. The parties understand and agree that deviations or modifications, in the form of written changes, may be authorized from time to time by the City. The Engineer shall have no further obligations or responsibilities for the project except as agreed to in writing. The Engineer's services and work product are intended for the sole use and benefit of City and are non- intended to create any third-party rights or benefits, or for any use by any other entity or person for any other purpose.

The Engineer shall perform his or her professional engineering services with the professional skill and care ordinarily provided by competent engineers practicing in Arkansas and under the same or similar circumstances and professional license. Professional services shall be performed as expeditiously as is prudent, considering the ordinary professional skill and care of a competent engineer.

III. Schedule of Work

The Engineer agrees to commence services immediately upon execution of this Agreement, and to proceed diligently with said service, except for delays beyond the reasonable control of Engineer, to completion, as described in the Completion Schedule attached hereto as Exhibit “B” and thereby made a part of this Agreement.

IV. Compensation and Method of Payment

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the attached hereto as Exhibit "C" and thereby made a part of this Agreement. The Engineer further agrees that it will prepare and present such monthly progress reports and itemized statements as are described in said Exhibit "C". City agrees to pay invoices within 30 days upon receipt. Statement for services shall include a line for previous payments, contract amount, and amount due

current invoice.

V. Information To Be Provided by The City

The City agrees to furnish, prior to commencement of work, all information requested by Engineer that is available to the City and as outlined in Exhibit "D".

Unless otherwise specifically indicated in writing, Engineer shall be entitled to rely, without liability, on the accuracy and completeness of information provided by City, City's consultants and contractors, and information from public records, without the need for independent verification.

VI. Insurance

Engineer agrees to procure and maintain for the duration of the contract Professional Liability Insurance ($1,000,000 per claim), Worker's Compensation ($1,000,000 each accident), General Liability ($1,000,000 each occurrence) and Automobile Insurance ($1,000,000 each accident).

VII. Assignment and Subletting

The Engineer may utilize a third party to support certain project services. The Engineer agrees that neither this Agreement nor other services to be performed hereunder will be assigned or sublet without the prior written consent of the City. The Engineer further agrees that the assignment or subletting of any portion or feature of the work or materials required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the City as provided by this Agreement.

VIII. Contract Termination

The parties agree that City or the Engineer shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to the other. In the event of such termination without cause, Engineer shall deliver to City all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs, or other items prepared by Engineer in connection with this Agreement. Engineer shall be entitled to compensation for any and all services completed to the satisfaction of City in accordance with the provisions of this Agreement prior to termination.

IX. Engineer's Opinion of Cost

The parties recognize and agree that any and all opinions of cost prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer does not guarantee that bids solicited or received in connection with the Project will not vary from the opinion by the Engineer.

X. Ownership of Documents

All materials and documents prepared or assembled by ENGINEER under this Contract shall become the sole property of City and shall be delivered to City without restriction on future use. ENGINEER may retain in its file's copies of all drawings, specifications, and all other pertinent information for the work. ENGINEER shall have no liability for changes made to any materials or other documents by others subsequent to the completion of the Contract.

XI. Complete Contract

This Agreement, including the exhibits hereto numbered "A" through "D" constitutes the entire agreement by and between the parties regarding the subject matter hereof, and supersedes all prior or contemporaneous written or oral understanding. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written agreement.

XII. Mailing of Notices

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to City permitted or required under this Agreement shall be addressed to City at the following address:

Mr. Craig Light, P.E.
Engineering Director
City of Jonesboro
300 S. Church
Jonesboro, Arkansas 72401

City agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

Mr. Shahriar Azad, P.E.
Project Manager,
Bridgefarmer and Associates,Inc.
323 Center Street, Suite 1430
Little Rock, AR 72201

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is posted by the sending party.

XIII. Arkansas State Board Of Licensure for Professional Engineers and Professional Surveyors Contact Information

Recipients of professional land surveying services under this agreement may direct complaints regarding such services to the Arkansas State Board Of Licensure for Professional Engineers and Professional Surveyors, 623Woodland Ave. Little Rock, AR 72201,Phone (501) 682-2827.

XIV. Contract Amendments

This Agreement may be amended only by the mutual agreement of the parties expressed in writing.

XV. Effective Date and Period of Performance

This Agreement shall be effective from and after execution by both parties hereto, with originals in the hand of both parties. Period of performance for the work included in this contract is eighteen months.

WITNESS OUR HANDS AND SEALS on the date indicated below.

City of Jonesboro, Arkansas

An Arkansas Home-Rule Municipal Corporation

By: Harold Copenhaver

Mayor

Date:

By: April Leggett

City Clerk

Attest:

Bridgefarmer and Associates, Inc.

Arkansas Board of Professional Engineers Firm No. 945

By: Mansoor Ahsan

Chief Executive Officer

Date:

By: Ken Hsu

Accountant

Attest:

Contents

Background

On July 10, 2024, the Federal Railroad Administration (FRA) issued a Notice of Funding Opportunity (NOFO) in the Federal Register to solicit eligible projects under the Railroad Crossing Elimination (RCE) Program. The appropriations authority to fund projects under this program was provided by Congress through the Infrastructure Investment and Jobs Act (IIJA). In response to the NOFO, the City of Jonesboro submitted an application for the Jonesboro Rail Crossing Study and was awarded FRA funding for this project.

The project will explore options to reduce interactions between trains and the public for the 18 existing crossings of the BNSF Thayer South Subdivision in the City of Jonesboro. Alternative analysis and conceptual engineering will be performed for the crossings considering options including potential closure, consolidation, grade separation, and safety treatment.

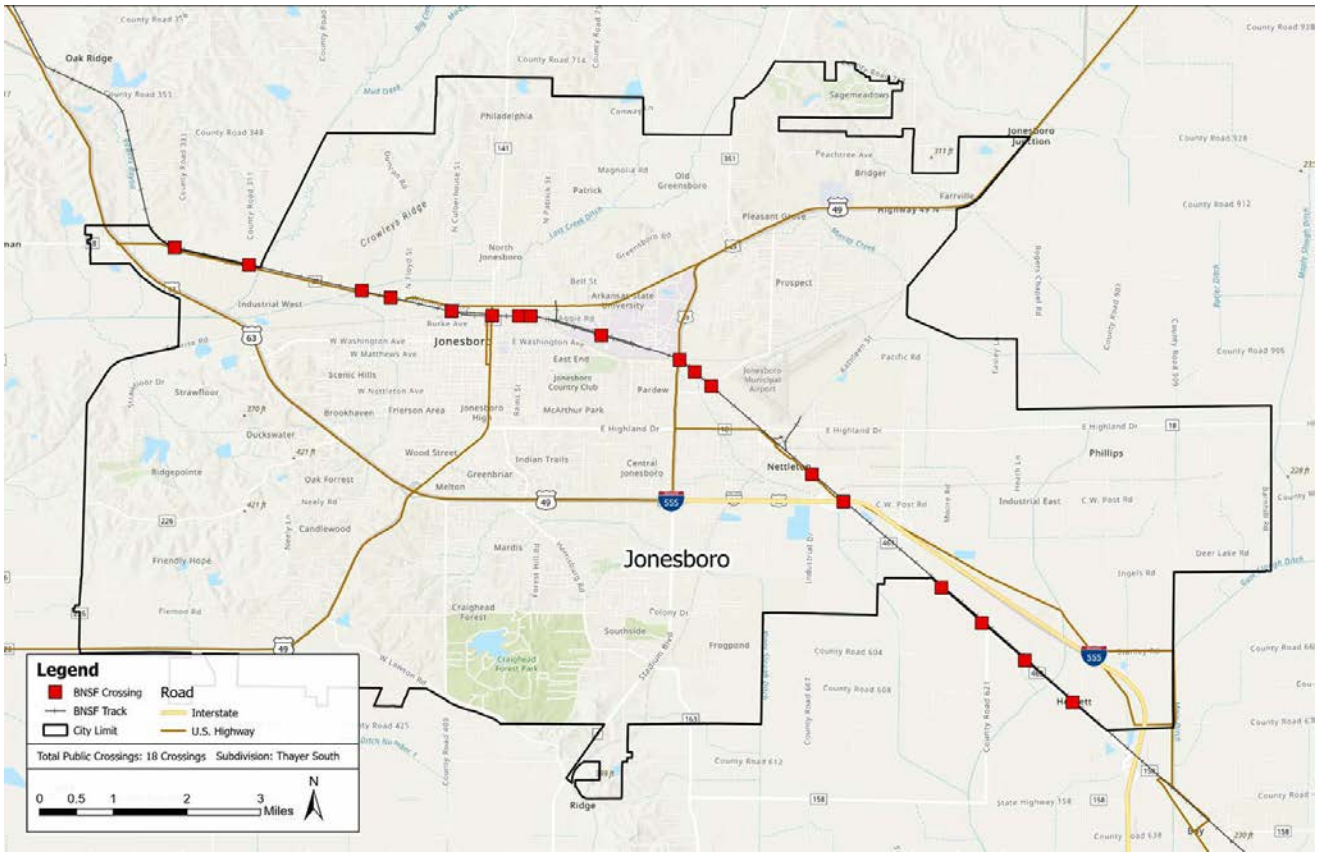
Project Description

The Jonesboro Rail Crossing Study is intended to develop alternatives and conceptual plans for improvements to the 18 public rail crossings along the BNSF Thayer South Subdivision in the City of Jonesboro, Arkansas. Of the 18 public crossings, 13 are at-grade. 9 of the at-grade crossings are active crossings and 4 are passive with no signalization currently installed.

The goals of the Jonesboro Rail Crossing Study align with the Arkansas Stat Freight Plan 2022, which emphasizes efforts to improve and eliminate at-grade crossings. The objectives of this study focus on reducing railroad grade crossing crashes/incidents and enhancing the resilience of critical freight infrastructure, enhancing freight movement, assessing and addressing issues with railway crossing conditions to improve freight movement and safety, enhancing highway-rail at-grade crossings, evaluating potential grade separations for safety and movement, and reducing operational delays for system efficiency. The study will include a focus on minimizing impacts on the natural, historic, and cultural resources of the region.

This Track 1 citywide crossing study will identify opportunities to close crossings, perform alternatives analysis on critical crossings, and evaluate potential highway-rail grade crossing improvements, such as lights and gates, roadway realignments, and vertical adjustments, as well as grade separations to prepare for Track 2 project development activities. Once implemented, this strategy will significantly enhance the City's ability to respond to emergency service calls for incidents on the north side of the railroad. Additionally, all access between Jonesboro Municipal Airport and I-555 requires crossing the BNSF intermodal rail corridor at grade. The study will assess the impacts of already identified potential at-grade crossing closures (at Dan Avenue/BNSF, Willett Road/BNSF/Dan Avenue), crossing consolidations (County Road 311/313 and Neil Drive/Airport Road), and grade separation (Industrial Drive at Nettleton) as well as a comprehensive evaluation of the remaining crossings in the City of Jonesboro along the BNSF Thayer South Subdivision.

The benefits of this plan will serve communities within the City and throughout the region by developing a program of projects to minimize interactions between trains and road users, decrease incidents, improve emergency response reliability, reduce occupied crossing conflicts, improve traffic operations connectivity, enhance freight efficiency, and lower costs. This plan will identify and evaluate existing conditions and potential railroad crossing improvements. Through thorough conceptual design and analysis, coordination with the public, and coordination with stakeholders, this project will recommend improvements to reduce public interactions with trains, providing a solid foundation for future implementation plans. Successful completion of this planning phase will position the City of Jonesboro to seek additional RCE grants for engineering and construction.



Project Management Approach

Team Organization

Bridgefarmer & Associates, Inc. will serve as the Lead Engineering/Planning firm. The majority of the work will be developed in the Little Rock office with Project Manager Shahriar Azad, PE supported by Railroad Coordinator, Bill Glavin, PE, Deputy Project Manager, Michael Binkley, PE and Bridgefarmer support staff from satellite offices in Dallas, Austin, Houston, and Atlanta.

Bridgefarmer & Associates, Inc.

Shahriar Azad, PE	Bill Glavin, PE	Michael Binkely, PE
Project Manager	Railroad Coordinator	Deputy Project Manager

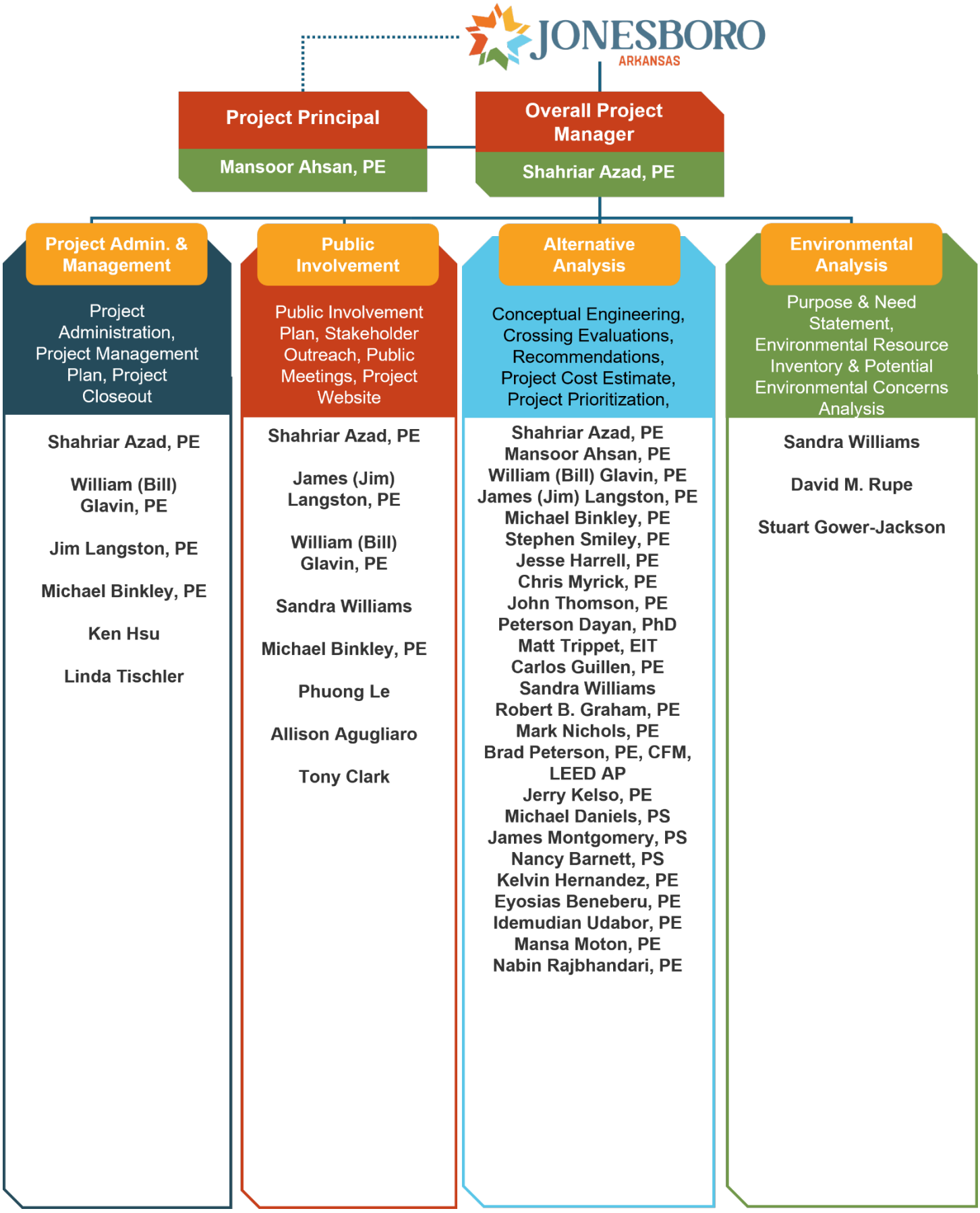
323 Center Street, Suite 1430
Little Rock, AR
Office: (501) 312-2400

Supporting this team are several subconsultants who will perform specific roles:

W. William Graham Jr., Inc.– Alternative Analysis (Railroad Design and Evaluation)

Crafton Tull – Alternative Analysis (Roadway and Civil Design) and Environmental analysis

Traffic Engineering Solutions, PLLC – Alternative Analysis (Railroad Highway Crossing Safety Evaluation)


JONESBORO
ARKANSAS
Project Principal
Mansoor Ahsan, PE
Overall Project Manager
Shahriar Azad, PE
Project Admin. & Management
Project Administration, Project Management Plan, Project Closeout
Shahriar Azad, PE
William (Bill) Glavin, PE
Jim Langston, PE
Michael Binkley, PE
Ken Hsu
Linda Tischler
Public Involvement
Public Involvement Plan, Stakeholder Outreach, Public Meetings, Project Website
Shahriar Azad, PE
James (Jim) Langston, PE
William (Bill) Glavin, PE
Sandra Williams
Michael Binkley, PE
Phuong Le
Allison Agugliaro
Tony Clark
Alternative Analysis
Conceptual Engineering, Crossing Evaluations, Recommendations, Project Cost Estimate, Project Prioritization,
Shahriar Azad, PE
Mansoor Ahsan, PE
William (Bill) Glavin, PE
James (Jim) Langston, PE
Michael Binkley, PE
Stephen Smiley, PE
Jesse Harrell, PE
Chris Myrick, PE
John Thomson, PE
Peterson Dayan, PhD
Matt Trippet, EIT
Carlos Guillen, PE
Sandra Williams
Robert B. Graham, PE
Mark Nichols, PE
Brad Peterson, PE, CFM, LEED AP
Jerry Kelso, PE
Michael Daniels, PS
James Montgomery, PS
Nancy Barnett, PS
Kelvin Hernandez, PE
Eyosias Beneberu, PE
Idemudian Udabor, PE
Mansa Moton, PE
Nabin Rajbhandari, PE
Environmental Analysis
Purpose & Need Statement, Environmental Resource Inventory & Potential Environmental Concerns Analysis
Sandra Williams
David M. Rupe
Stuart Gower-Jackson

Team Decision-Making

Decision making will be through a collaborative effort ultimately finalized through the City of Jonesboro and FRA. To support decisions, Bridgefarmer will develop the project following the NEPA process and include public involvement, railroad coordination with BNSF Railway, and Stakeholder coordination with the City of Jonesboro, ArDOT, Craighead County, and the FRA. Stakeholders will be provided with opportunities to provide input and comments. These will be documented and addressed to during the project study.

Early in the project, evaluation criteria will be formulated using input from the design team and input from stakeholders and the general public. Outside input will be obtained through public involvement and stakeholder coordination meetings. ***By developing decision making criteria this early before developing alternatives, the project will clearly follow a transparent process.***

The evaluation criteria will also be weighted based on relative importance of the elements assessed by the stakeholders and general public. For example, not cutting off emergency access through the area may carry more weight than if a small amount of right-of-way is needed.

Communication Plan

Bridgefarmer's PM will be the lead point of contact for all communications using multiple forms including phone, email, virtual meetings through Microsoft Teams, and face-to-face meetings. The communication plan will enable effective coordination amongst the team with direct communication to the City of Jonesboro by Shahriar Azad.

Through regular team meetings, Shahriar Azad will manage team communications to relay information to the planning/design staff. Bridgefarmer will also support the City of Jonesboro on all communications with FRA.

Communication with the major Stakeholders will be led by Shahriar as the default unless the City elects to be that lead at any given meeting. All meetings will have an agenda and meeting minutes will be maintained by Bridgefarmer & Associates, Inc. to be distributed to the meeting attendees within 7 days of the meeting.

Email correspondence will be stored in a project email folder to be retained through the project duration and to allow for ready search and retrieval of information at any time.

Public communications will be documented to indicate the attendees, date of meeting, and comments resulting from the meeting. A public meeting summary report will be prepared for the project to consolidate all comments received and the responses to the comments.

For invoicing, a progress report will communicate monthly status of the project activities.

Project Quality

Bridgefarmer follows a Quality Management Plan. Project Quality for this project will be a full team effort and includes independent fatal flaw analysis with constructability reviews of the early engineering concepts to avoid progressing alternatives that would be impractical or very costly to build.

Bridgefarmer will review work done internally and by the engineering subconsultants, who will complete their quality review prior to Bridgefarmer. Our PM has experience from several schematic and environmental designs, as well as railroad experience, so he is familiar with the needs of quality work done early to have success with railroad coordination.

Further, the engineering and environmental staff will perform independent reviews to ensure the environmental document and the proposed designs are the same. Bridgefarmer will provide the technical write-up to alternative descriptions to ensure accurate results.

Measured areas will be delineated in GIS and CADD for overlay on aerial mapping. This increases the quality and accuracy of all measurements such as waters of the US, offsets to right-of-way features, or distances to buildings.

Work Plan

The scope of the Project includes project administration and management, stakeholder and public involvement, at-grade crossing evaluations, and alternative analysis and conceptual engineering to fulfill the purpose of providing a basis for future implementation plans that will enhance safety by minimizing conflicts between trains and road users, increase reliability of emergency responders, and improve freight rail operations across the BNSF Thayer South Subdivision through the City of Jonesboro.

Completion of the Project will provide the necessary exhibits, design criteria, and reports to support future implementation plans for improved public safety and mobility. Interim deliverables will be a component of the project scope.

Task 1 – Project Administration and Management

(Ongoing - 18-months)

Task 1 Deliverables:
1. Project Management Plan
2. Final Performance Review

Task 1.1 – Project Administration

Project Administration includes work that is necessary for management of the Project.

It will include:

1.1.1 Interagency coordination and technical stakeholder coordination.
Bridgefarmer will conduct a kickoff meeting, and schedule and hold regular meetings with the FRA and other stakeholders.

1.1.2 Coordination with various regulatory agencies, public entities, and utilities
Bridgefarmer will support the City of Jonesboro through documented coordination efforts including phone calls, email, and meetings as necessary.

1.1.3 Public Engagement
Bridgefarmer will assist the City of Jonesboro with any materials needed for public engagement activities enacted by the City of Jonesboro and engage in any required public involvement associated with the environmental task.

1.1.4 Project Review

Bridgefarmer will conduct review of interim deliverables as well as the final project and ensure implementation according to the agreement.

Task 1.2 – Project Management Plan

The Project Management Plan (PMP) describes how the project will be monitored to ensure safe, effective, and timely delivery of the project.

1.2.1 Detailed project schedule

Bridgefarmer will prepare a detailed schedule describing the order and timing of tasks and allocation of resources necessary to complete the project and submit for FRA approval.

1.2.2 Detailed cost breakdown

Bridgefarmer will prepare a detailed cost breakdown describing the resources necessary to ensure safe, effective, and timely delivery of the project and submit for FRA approval.

1.2.3 Revisions of the PMP

Bridgefarmer will revise the PMP throughout the project duration as may be required by the FRA

Task 1.3 – Project Closeout

Project Closeout includes work that is necessary for successful final delivery of the Project.

It will include:

1.3.1 Final Project Review

Bridgefarmer will review the final Project and ensure implementation according to the agreement.

1.3.2 Verify payment of all claims and invoices for costs over the course of the Project.

Bridgefarmer will ensure that all costs incurred are paid according to the agreements

1.3.3 Submit a final claim for reimbursement to FRA

Bridgefarmer will support the City of Jonesboro in submitting the final claim for reimbursement to the FRA within 90 days of the Project Performance Period end date.

1.3.4 Submit a Final Performance Report to the FRA within 90 days of the end of the Project Performance Period.

Bridgefarmer will prepare a Final Performance Report that describes the cumulative activities of the Project, including a complete description of achievements with respect to the Project objectives and milestones

Task 2 – Stakeholder and Public Involvement

(PIP 2 months after NTP, Project website 3 months after NTP with updates ongoing, public involvement and stakeholder coordination tasks ongoing throughout)

Task 2 Deliverables:
3. Public Involvement Plan
4. Project Meetings
5. Project Website
6. Public Engagement Summary Report
7. Preliminary Purpose and Need Statement

Task 2.1 – Preliminary Purpose and Need Statement

Bridgefarmer will prepare a preliminary purpose and need statement which, once approved by the FRA, is to serve as the foundation of alternative analysis and is subject to FRA and public review and comment to serve as a part of the NEPA process.

Task 2.2 – Public Involvement Plan

Bridgefarmer will prepare a formal Public Involvement Plan (PIP) for FRA approval that will identify key involvement steps and coordination needs.

The PIP will include:

2.2.1 Identifying key involvement steps that align with milestones identified in the Project Management Plan

2.2.2 Identifying key local, state, and federal agencies, civic and business groups, relevant interest groups, present and potential users, private service providers, and other key stakeholder groups, that should be consulted with.

2.2.3 Identifying key contacts within agencies, civic and business groups, public officials, relevant interest groups, present and potential users, private service providers, other key stakeholder groups, and the public.

Task 2.3 – Stakeholder Outreach

The PIP developed and approved by the FRA in Task 2.2 will be used as the basis of engaging identified stakeholders and agencies. Stakeholder outreach may involve focus groups, interviews, a stakeholder committee, or other activities.

Bridgefarmer will facilitate this outreach and use it to identify site specific issues and context of the studied crossings.

Task 2.4 – Public Meetings

There will be at least 3 public meetings held through the course of the project: for project introduction, for sharing findings, and for sharing recommendations.

Bridgefarmer will support the City of Jonesboro in advertising, preparing for, and conducting these public meetings.

These meetings will involve the public in the planning process in accordance with the detailed project schedule from Task 1.2. These meetings will be publicized following FRA and FHWA guidelines to ensure the involvement of the public.

Task 2.5 – Project Website

Bridgefarmer will develop and keep up to date a website, with FRA approval, following the guidance in the approved PIP developed in task 2.2.

The website will serve to keep the public involved and informed as a singular location for all project information including meeting information, progress summaries, and concepts being considered.

Task 3 – At-Grade Crossing Evaluations

(Work beginning following FRA approval of PMP-interim deliverables 10-16 months after NTP, final report 18 months after NTP)

Task 3 Deliverables:
8. Jonesboro Rail Crossing Study
9. Order of Magnitude Cost Estimates

Task 3.1 – Crossing Evaluations

Bridgefarmer will perform evaluations for the crossings included in the study area.

This includes the following for each identified crossing in the study area:

3.1.1 Existing FRA Inventory Data Summaries evaluating existing crossing conditions including crossing type (active or passive), crossing position (at grade or grade separated and train operations (number of train tracts, train speed, and train traffic through the railroad crossing).

3.1.2 Documenting roadway crossing features including number of lanes, speed limit, AADT, traffic flows, the composition of traffic through the railroad crossing (including pedestrian, bicycle, and public transit if applicable), types of traffic control devices, land use, site distance, topography, and distance to next closet crossing.

3.1.3 Accident history summary, including incident volume, crash history, near misses, injuries, fatalities, and incidences of rail-related trespassing for each railroad crossing and documentation of deficiencies that hinder achieving a higher level of safety.

3.1.4 Site review, including the use of computer-based tools (such as Google Earth, Arc GIS, and Street View) and site visits, to assess potential hazards, the character of the adjacent road network, and whether the crossing creates access issues for the community. Right of entry letters will be submitted to landowners to obtain permission to access private property if/where necessary.

3.1.5 Determination of approximate existing ROW from aerial photography and available GIS information.

3.1.6 Determination of major utility presence and preparation of a preliminary major utility base map.

3.1.7 Community Plan Review: identification of any planned or programmed infrastructure improvement in state and local planning documents, as well as any planned infrastructure enhancements by the rail operators. Identification of any future development projects in proximity to the railroad crossing

3.1.8 Travel Delays and Blockages: Determination of travel delays including peak demand and direction in which the travel delays are occurring in consideration of access issues for medical emergency facility response times. Determination of frequency and duration of roadway blockage by trains and peak demand for train operations and shift change schedule.

3.1.9 Assessment of proximity to hospitals and medical facilities, schools, churches, and community centers in relation to crossings.

3.1.10 Equity assessments using tools such as CEJST, the ETC Explorer, and Census data will be performed for each crossing to determine whether disadvantaged communities are impacted by inequities in the transportation system.

Task 3.2 – Recommendations

The Purpose and Need Statement (Task 2.1) and the evaluations performed in Task 3.1 will be used by Bridgefarmer to propose and summarize recommendations at all crossings identified in the study area. These recommendations will be further developed in Task 4.

These recommendations will include the following for each proposed improvement to be carried forward into future project development phases:

3.2.1 Developing safety improvement alternatives

3.2.2 Studying changes in travel patterns and accessibility

3.2.3 Assessment of the impact to the receiving land use environment

3.2.4 Evaluation of impacts to the roadway system and public safety

3.2.5 Community and population impact analysis

3.2.6 ROW acquisition determination assessment

3.2.7 Development of existing crossing inventory and proposed plan actions

3.2.8 Preparation of a preliminary cost estimate of alternatives

Task 3.3 – Order-of-Magnitude of Project Estimate Cost

Bridgefarmer will prepare an Order-of-Magnitude of Project Estimate Cost to estimate costs to design, construct and implement the proposed recommended projects.

This includes cost estimates for each alternative, including quantity and unit costs for each proposed project (core track structures, roadway crossing enhancements, land acquisition, any new facilities or upgrades required for train operations) and contingencies.

Task 3.4 – Project Prioritization

The Purpose and Need Statement (Task 2.1) and the evaluations performed in Task 3.1 along with the alternative analysis performed in Tasks 3.2 and 3.3, will be used by Bridgefarmer to prepare a prioritization of the proposed projects and potential funding mechanisms, using the following prioritization schedule:

Tier I (less than 12 months)

Tier II (12 months to 18 months)

Tier III (18 months to 36 months)

Tier IV (over 36 months)

Task 4 – Alternative Analysis & Conceptual Engineering

(Work beginning Following Task 3.1, 10-16 months after NTP, final report 18 months after NTP.)

Note: Prior to initiating work under this task, Bridgefarmer will submit to FRA, for approval, a memo documenting the methodologies to be employed in carrying out Alternative Analysis

Task 4 Deliverables:	
10.	Alternative Analysis Report (with supporting Conceptual Engineering, Transportation Analysis, and Preliminary Resource Inventory and Potential Concerns Analysis)
11.	Environmental Resource Inventory and Potential Concerns Analysis

Task 4.1 – Conceptual Engineering

Bridgefarmer will develop Conceptual Engineering to identify necessary infrastructure improvements and develop cost estimates for each alternative. And continue coordination with the City of Jonesboro, the FRA and other key stakeholders throughout the conceptual engineering phase.

Conceptual engineering will include:

4.1.1 Developing design criteria

4.1.2 Developing track work concepts, structural concepts, and roadway crossing concepts for grade separation or closure, track relocation, installation of protective devices (signals, signs, and other measures that would improve safety), mobility enhancements, and technology solutions.

Bridgefarmer will develop exhibits that communicate the concepts being developed, i.e. roll plots and alternative analysis matrices.

Conceptual engineering designs will form the basis of future project design and construction and will fulfill the high-level construction engineering requirements found in the *Railroad Capital Project Guidance* document (2023 or most current version), section IV.b.ii.D.

Task 4.2 – Environmental Resource Inventory and Potential Concerns Analysis

Bridgefarmer will identify key environmental considerations in the development of alternatives to support future lifecycle stages of project development.

Bridgefarmer will perform a high-level qualitative socioeconomic, cultural, human environment, and natural environmental resource inventory and preliminary effects analysis as a part of and concurrently with the development and screening of proposed concepts in Task 4.1.

Development of preliminary environmental analysis will address the high-level environmental concerns in the *Railroad Capital Project Guidance* document (2023 or most current version), section IV.b.ii.E.

Exhibit A

ARTICLE 4: STATEMENT OF WORK

4.1 General Project Description

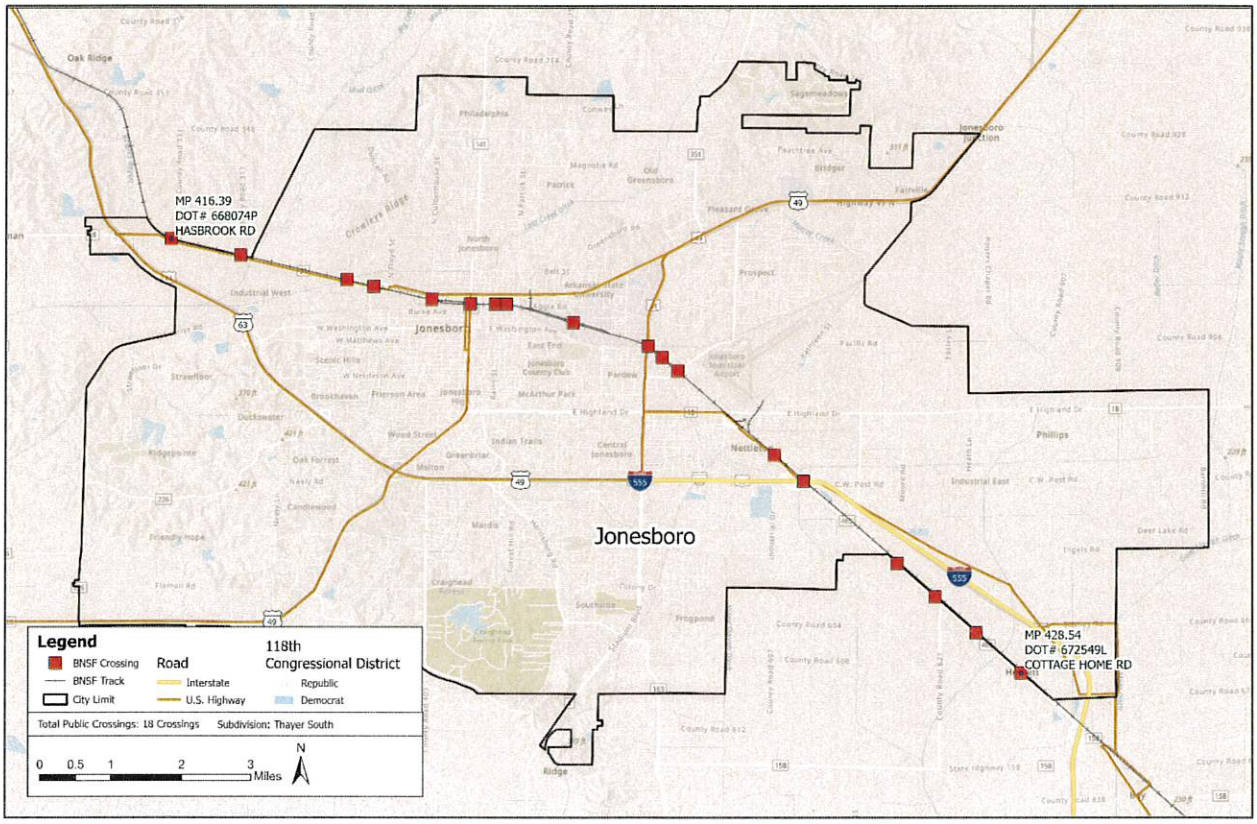
Jonesboro is a critical freight hub in the northeast region of Arkansas. It faces significant daily challenges with its train traffic averaging 22 trains per crossing with frequently occupied crossings that lead to safety hazards, emergency response delays, and unpredictable congestion. These issues severely impact the quality of life for residents, commuters, and visitors while also affecting regional mobility and freight infrastructure. In response, the City of Jonesboro, in partnership with BNSF, requested and received FY2023–2024 RCE program funds for this Jonesboro Rail Crossing Study.

This comprehensive evaluation of 18 public railroad crossings along the BNSF Thayer South Subdivision aims to address these critical transportation challenges. The plan will develop a program of projects designed to minimize train-road interactions, reduce incidents, enhance emergency response reliability, alleviate traffic congestion, and improve freight efficiency and multimodal connectivity. Ultimately, the improvements will enhance safety, mobility, and the overall quality of life in Jonesboro, benefiting both the local community and the regional economy.

4.2 Project Location

The study corridor runs from the southeast crossing at Cottage Home Road (-90.590901, 35.767496; BNSF MP 428.54) to the northwest crossing at Hasbrook Road (-90.767144, 35.856743; BNSF MP 416.39), within jurisdictional limits of Jonesboro.

The project is contained within Arkansas Congressional District No. One (1).



4.3 Project Scope

The Recipient will notify FRA in writing of any requested changes in Project Scope and will not proceed with the changed scope unless approved by FRA in writing. If approved, changes to Project Scope may require additional environmental review or an amendment to this Agreement.

Task 1: Project Administration and Management

Subtask 1.1: Project Administration

The City of Jonesboro (Recipient) will perform all the tasks required for the Project through a coordinated process that will involve affected railroad owners, operators, and funding partners, including:

- BNSF Railway Inc.
- FRA

The Recipient will facilitate the coordination of all activities necessary for the implementation of the Project. The Recipient will:

- Conduct a Project kickoff meeting with FRA following award;
- Complete necessary steps to hire a qualified consultant to perform required Project work;
- Hold regularly scheduled Project meetings with FRA;

- Review and approve work as it is completed; and
- Participate in other coordination as needed.

Subtask 1.2: Project Management Plan

The Recipient will prepare a Project Management Plan (PMP) that describes how the Project will be implemented and monitored to ensure effective, efficient, and safe delivery of the Project on time and within budget. The PMP will describe, in detail, the activities and steps necessary to complete the tasks outlined in this Statement of Work.

The PMP will include a Project Schedule and Project Budget for the work to be performed under this Agreement. The Project Schedule will be consistent with the Estimated Project Schedule in Section 5.2 of Attachment 2 but provide a greater level of detail. Similarly, the Project Budget should be consistent with the Approved Project Budget in Section 6.5 of Attachment 2 but provide a greater level of detail.

The Recipient will submit the PMP to FRA for review and approval. The Recipient will implement the Project as described in the approved PMP. The Recipient will not begin work on subsequent tasks until FRA has provided written approval of the PMP unless FRA has provided pre-award authority for such work under Section 6.6 of this Attachment 2. FRA will not reimburse the Recipient for costs incurred in contravention of this requirement.

FRA may require the Recipient to update the PMP. The Recipient will submit any such updates to FRA for review and approval, and FRA will determine if updates to the PMP require an amendment to this Agreement. The Project Budget and Project Schedule may be revised consistent with Article 5 of Attachment 1 of this Agreement without amending this Agreement.

Subtask 1.3: Project Closeout

The Recipient will submit a Final Performance Report as required by Section 7.2 of Attachment 1 of this Agreement, which should describe the cumulative activities of the Project, including a complete description of the Recipient's achievements with respect to the Project objectives and milestones.

Task 1 Deliverable(s)

- Project Management Plan
- Final Performance Report

Task 2: Stakeholder and Public Involvement

Subtask 2.1: Preliminary Purpose and Need Statement

The Recipient will develop and submit to FRA for approval a preliminary Purpose and Need statement to serve as the foundation for the Alternative Analysis. The Preliminary Purpose and Need is for the project and planning and will be subject to agency and public review and comment as part of a potential future NEPA process.

Subtask 2.2: Public Involvement Plan

The Recipient will develop and submit to FRA for approval a Public Involvement Plan (PIP) that identifies involvement activities linked to key milestones in the planning/conceptual engineering and alternatives analysis process and aligns with the Detailed Project Schedule from Task 1. The PIP is for project planning and will be subject to agency review and comment as part of a potential future NEPA process.

A PIP will need to identify key contacts within agencies, civic and business groups, public officials, relevant interest groups, present and potential riders/users, private service providers/shippers, other key stakeholder groups, and the public. The PIP will also identify potential state, local, and Federal agencies that should be consulted with. The Recipient will prepare and submit to FRA for approval a PIP.

Subtask 2.3: Stakeholder Outreach

The identified stakeholders and agencies will be engaged in accordance with the PIP. This may be through focus groups, interviews, a stakeholder committee, or similar activities. Stakeholder outreach will be used to identify site-specific issues and better understand the context of the crossings within the study.

Subtask 2.4: Public Meetings

Public meetings held by the Recipient will need to align with the Public Involvement Plan. There will be at minimum three separate public meetings for the following milestones:

- Project Introduction
- Findings
- Recommendations

The meetings will involve the public in the planning process and relay information, including key milestones, in alignment with the Detailed Project Schedule from Task 1. The meetings should be publicized in accordance with FRA and FHWA guidelines to ensure the appropriate distribution of information.

Subtask 2.5: Project Website

A project website will be developed, subject to FRA approval, to keep the public involved and serve as a singular location for all project information. The website will be updated frequently and follow the Public Involvement Plan's guidance.

Task 2 Deliverable(s)

- Public Involvement Plan
- Project Meetings
- Project Website

- Public Engagement Summary Report
- Preliminary Purpose & Need Statement

Task 3: At-Grade Crossing Evaluations

The Recipient will submit the Jonesboro Rail Crossing Study, which will memorialize the crossing evaluations and initial project recommendations, to FRA for approval. The plan will set the baseline information for alternatives analysis and environmental evaluations.

Subtask 3.1: Crossing Evaluations

The Recipient will perform evaluations for the crossings included in the study area. The evaluations will assess MUTCD standards, hazard identification, and set the stage for subsequent recommendations and alternatives analysis. It will give FRA and stakeholders a clear understanding of the existing rail infrastructure. Crossing evaluations will include:

- Existing FRA Inventory Data Summary: evaluate the existing crossing conditions to assess crossing type (active or passive) and crossing position (at-grade or grade separated), including train operations (the number of train tracks, train speed, and train traffic through the railroad crossing).
- Accident History Summary: the safety of the highway-rail grade crossings (including incident volume, crash history, near misses, injuries, fatalities, or incidences of rail-related trespassing for each railroad crossing, if such exists, and deficiencies that hinder achieving a higher level of safety.)
- Desktop Review: Use tools such as Google Earth, ArcGIS, and Street View to assess and record site conditions prior to performing in-person site visits.
- Site Visits: Site visits will be performed at crossing locations to assess potential hazards, including line-of-sight obstructions (vegetation overgrowth and trees, etc.). Assess the character of the adjacent road network and whether the railroad crossing creates access issues for the community.
- Roadway Crossing Features: Crossing features reviewed will include the number of highway lanes, highway speed limit, AADT, traffic flows, the character of highway traffic through the railroad crossing, types of traffic control devices (including protective devices), land use, sight distance, topography, and distance to the next closest crossing. If applicable, information will be included on sidewalks, bicycle lanes, and public transit.
- Community Plan Review: Identify any planned or programmed infrastructure improvements in state and local planning documents and determine if rail operators have planned infrastructure enhancements. Identify future development projects in proximity to the railroad crossing, if applicable.
- Travel Delays and Blockages: Determine travel delays, including the peak demand for each railroad crossing and the direction in which the travel delays are occurring (northbound, southbound, westbound, and eastbound) in consideration of access issues for medical emergency facility response times. If applicable, establish the frequency and duration of roadway blockage by trains, including sidewalks and bicycle lanes, and consider peak demand for train operations and crew shift change schedule. Assess distance locations of hospitals and medical facilities, schools, churches, and community centers in relation to crossings.

- Equity Assessment: Equity assessments will be performed for each crossing to determine whether disadvantaged communities are impacted by inequities in the transportation system. Tools such as CEJST, the ETC Explorer, and Census data will be reviewed as part of this analysis.

Subtask 3.2: Recommendations

The Recipient will develop a thorough and clear summary of the proposed recommendations for crossing improvements at each crossing. Recommendations will be developed further in Task 4. This summary will incorporate the following to carry forward into future project development phases:

- Develop safety improvement alternatives
- Study shifts in travel patterns and accessibility of alternatives
- Assess the impact of alternatives on the receiving land use environment
- Evaluate alternatives impact on roadway system and public safety
- Community and population impact analysis
- ROW acquisition determination assessment
- Develop existing crossing inventory and proposed plan actions
- Prepare a preliminary cost estimate of alternatives

Subtask 3.3: Order-of-Magnitude of Project Estimate Cost

The objective of this task is to identify the estimate costs to design, construct, and implement the proposed project(s). The Recipient will provide cost estimates for each alternative, including quantity and unit cost of each element relating to core track structures, roadway crossing enhancements, land acquisition, contingencies, and any new facilities or upgrades required for train operations

Subtask 3.4: Project Prioritization

The Recipient will prioritize the recommendations for implementation and will use the following project development phases:

- Tier I (Less than 12 months)
- Tier II (12 months to 18 months)
- Tier III (18 months to 36 months)
- Tier IV (Over 36 months)

Task 3 Deliverable(s)

- Jonesboro Rail Crossing Study
- Order-of-Magnitude of Costs Estimates

Task 4: Alternatives Analysis & Conceptual Engineering

The Recipient will submit an Alternatives Analysis report to the FRA for approval, which will determine the preliminary range of reasonable alternatives to carry forward into future project development phases. The Recipient must consider at least two alternatives, which can include the no-build alternative along with one proposed alternative for each rail crossing. The Alternatives Analysis report will build upon completed and approved deliverables identified in Tasks 1 through 3. Prior to initiating

work under Task 4, the Recipient will submit to FRA, for approval, a memo documenting the methodologies to be employed in carrying out Alternative Analysis.

Subtask 4.1: Conceptual Engineering

The Recipient will develop conceptual engineering to a level sufficient to identify necessary infrastructure improvements and determine the cost estimates for each alternative. Conceptual engineering will include developing design criteria, track work concepts, structural concepts, and roadway crossing concepts for grade separation or closure, track relocation, installation of protective devices (signals, signs, and other measures that improve safety), mobility enhancements, and technology solutions, etc. The Recipient will coordinate with key stakeholders, including FRA, on this task. Conceptual engineering designs will form the basis of the Project design and construction. The scope elements should fulfill the high-level conceptual engineering requirements found in the *Railroad Capital Project Guidance* (2023)[3] document section V.b.ii.D.

Subtask 4.2: Environmental Resource Inventory and Potential Concerns Analysis

The objective of this task is to identify key environmental considerations in the development of the alternatives to support future lifecycle stages of the project's development. The Recipient will perform a high-level qualitative socioeconomic, cultural, human environment, and natural environmental resource inventory and preliminary effects analysis as part of the development and screening of options concurrently with task 4.1. The Recipient can use the *Railroad Capital Project Guidance* (2023)[1] document section IV.b.ii.E as a high-level reference for developing the preliminary environmental analysis.

Task 4 Deliverables

- Alternative Analysis Report (with supporting Conceptual Engineering, Transportation Analysis, and Preliminary Environmental Resource Inventory and Potential Concerns Analysis)
- Environmental Resource Inventory and Potential Concerns Analysis

4.4 Implement Required Environmental Commitments

The Recipient will implement the Project in a manner consistent with the documents and environmental commitments identified below.

Table 4-A: Environmental Commitments

Document Type	Commitment Reference	Document Date

[1] *Railroad Capital Project Guidance* is available at https://railroads.dot.gov/elibrary/fra-guidance-development-and-implementation-railroad-capital-project

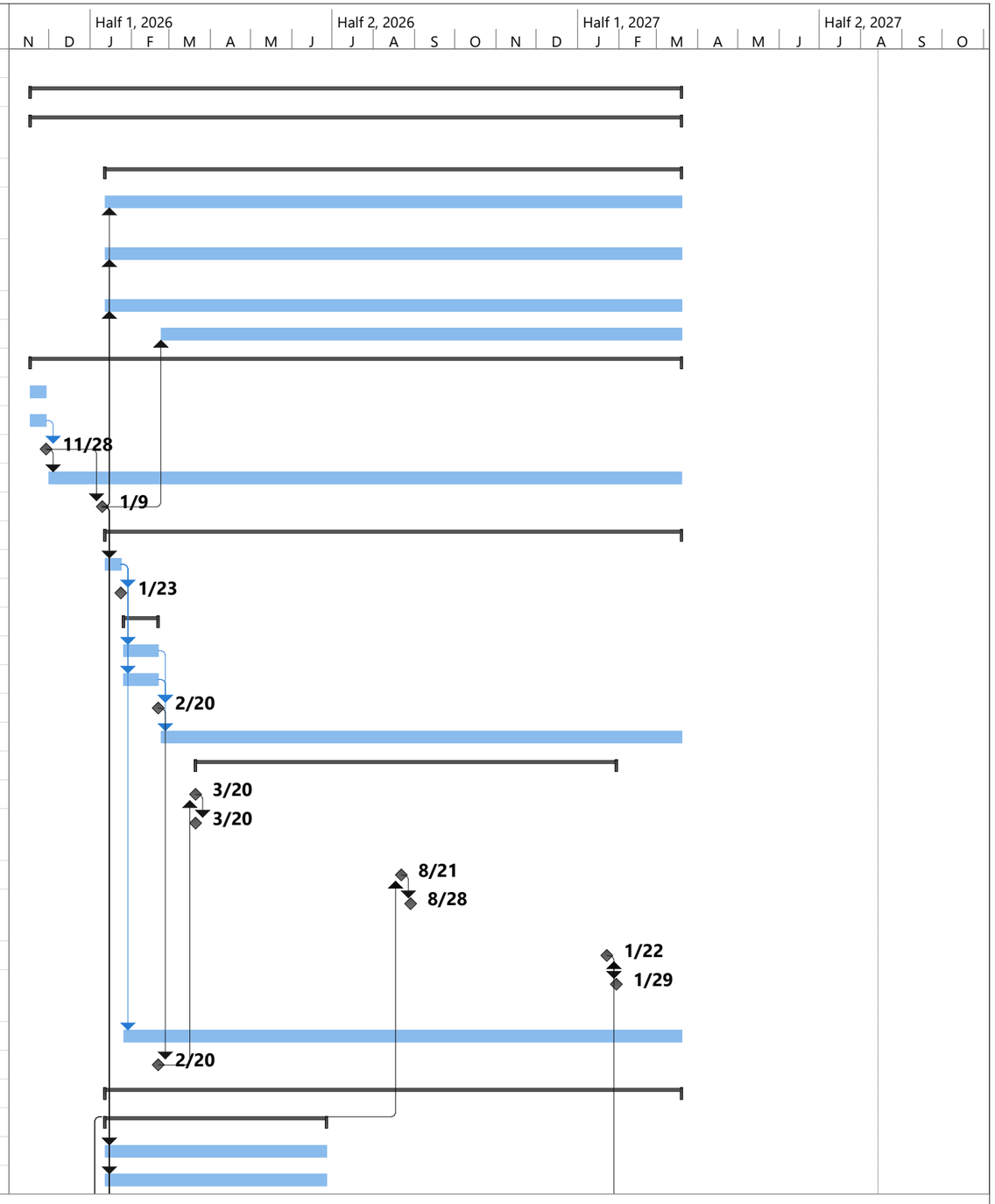
TBD	TBD	TBD

Attachment A:Justification of Costs and Fees
September 26, 2025
Evaluation of 18 Railroad Crossings, Jonesboro, Arkansas
Prime Consultant: Bridgefarmer & Associates, Inc.
PROJECT SUMMARY

PROJECT SCOPE	Bridgefarmer & Associates, Inc.	Crafton Tull	Graham Engineers	Traffic Engineering Solutions	TOTAL
PROJECT ADMINISTRATION AND MANAGEMENT					
1.1 Project Administration	$ 32,540.00				**$ 32,540.00**
1.2 Project Management Plan	$ 18,720.00				**$ 18,720.00**
1.3 Project Closeout	$ 24,488.00				**$ 24,488.00**
STAKEHOLDER AND PUBLIC INVOLVEMENTS					
2.1,2.2 Purpose and Need Statement and Public Involvement Plan	$ 14,792.00	$1,680		$ 892.00	**$ 17,364.00**
2.3 Stakeholder Outreach	$ 105,510.00	$7,805		$ 8,920.00	**$ 122,235.00**
2.4 Public Meetings	$ 40,128.00	$ 11,970.00		$ 3,568.00	**$ 55,666.00**
2.5 Project Website					**$ -**
AT-GRADE CROSSING EVALUATIONS					
3.1 Crossing Evaluations	$ 70,008.00			$ 59,905.00	**$ 129,913.00**
3.2 Recommendations	$ 72,300.00			$ 24,530.00	**$ 96,830.00**
3.3 Order-of-Magnitude Project Cost Estimate	$ 58,616.00				**$ 58,616.00**
3.4 Project Prioritization	$ 43,576.00			$ 2,230.00	**$ 45,806.00**
ALTERNATIVE ANALYSIS AND CONCEPTUAL ENGINEERING					
4.1 Conceptual Engineering	$ 515,980.00	$200,879	$ 27,574.00		**$ 744,433.00**
4.2 Environmental Resource Inventory and Potential Environmental Concerns	$ 19,072.00				**$ 19,072.00**
TOTAL PROJECT	**$ 1,015,730.00**	**$ 222,334.00**	**$ 27,574.00**	**$ 100,045.00**	**$ 1,365,683.00**

Exhibit B

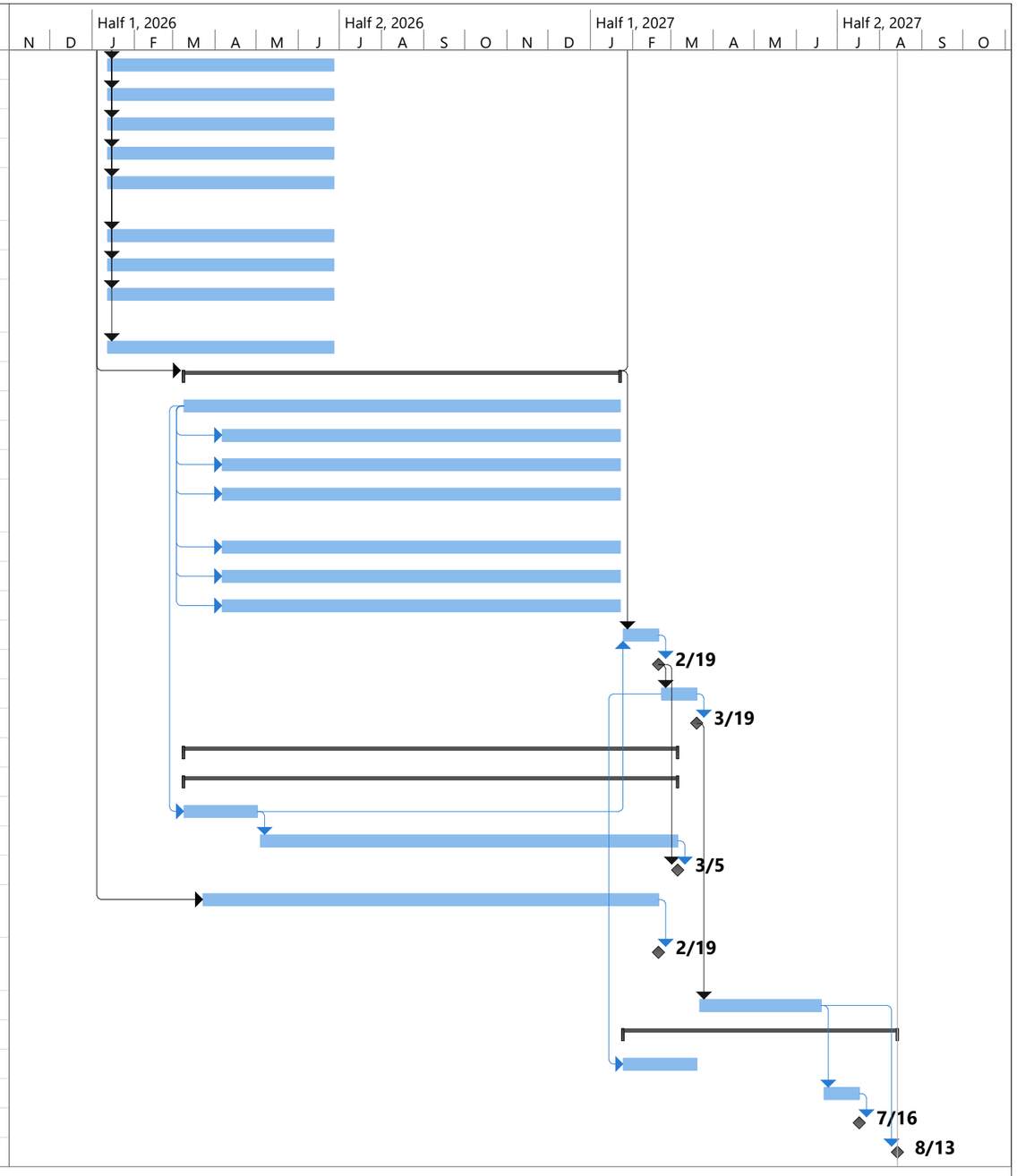
ID	Task Name	Duration	Start	Finish
1	**NTP**	0 days	Mon 11/17/25	Mon 11/17/25
2	**Jonesboro Rail Crossing Study**	**350 days**	**Mon 11/17/25**	**Fri 3/19/27**
3	**Task 1 – Project Administration and Management (Task 1.3 at end of Schedule)**	**350 days**	**Mon 11/17/25**	**Fri 3/19/27**
4	**Task 1.1 – Project Administration**	**310 days**	**Mon 1/12/26**	**Fri 3/19/27**
5	Task 1.1.1 – Interagency coordination and technical stakeholder coordination	310 days	Mon 1/12/26	Fri 3/19/27
6	Task 1.1.2 – Coordination with various regulatory agencies, public entities, and utilities	310 days	Mon 1/12/26	Fri 3/19/27
7	Task 1.1.3 – Public Engagement	310 days	Mon 1/12/26	Fri 3/19/27
8	Task 1.1.4 – Project Review	280 days	Mon 2/23/26	Fri 3/19/27
9	**Task 1.2 – Project Management Plan**	**350 days**	**Mon 11/17/25**	**Fri 3/19/27**
10	Task 1.2.1 – Detailed Project Schedule	10 days	Mon 11/17/25	Fri 11/28/25
11	Task 1.2.2 – Detailed Cost Breakdown	10 days	Mon 11/17/25	Fri 11/28/25
12	**Deliverable #1: Project Management Plan (PMP)**	0 days	Fri 11/28/25	Fri 11/28/25
13	Task 1.2.3 – Revisions of the PMP	340 days	Mon 12/1/25	Fri 3/19/27
14	FRA Approval of the PMP	0 days	Fri 1/9/26	Fri 1/9/26
15	**Task 2 – Stakeholder and Public Involvement**	**310 days**	**Mon 1/12/26**	**Fri 3/19/27**
16	Task 2.1 – Preliminary Purpose and Need Statement	10 days	Mon 1/12/26	Fri 1/23/26
17	**Deliverable #7 Preliminary Purpose and Need Statement**	**0 days**	**Fri 1/23/26**	**Fri 1/23/26**
18	**Task 2.2 – Public Involvement Plan**	**20 days**	**Mon 1/26/26**	**Fri 2/20/26**
19	Task 2.2.1 – Identifying Key Involvement Steps	20 days	Mon 1/26/26	Fri 2/20/26
20	Task 2.2.2 – Identifying Key Stakeholders	20 days	Mon 1/26/26	Fri 2/20/26
21	**Deliverable #3: Public Involvement Plan**	0 days	Fri 2/20/26	Fri 2/20/26
22	**Task 2.3 – Stakeholder Outreach**	280 days	Mon 2/23/26	Fri 3/19/27
23	**Task 2.4 – Public Meetings**	**225 days**	**Fri 3/20/26**	**Fri 1/29/27**
24	**Deilverable #4a: Public Meeting (Project Introduction)**	0 days	Fri 3/20/26	Fri 3/20/26
25	**Deliverable #6a: Public Engagement Summary Report (Project Introduction)**	0 days	Fri 3/20/26	Fri 3/20/26
26	**Deliverable #4b: Public Meeting (Sharing Findings)**	0 days	Fri 8/21/26	Fri 8/21/26
27	**Deliverable #6b: Public Engagement Summary Report (Sharing Findings)**	0 days	Fri 8/28/26	Fri 8/28/26
28	**Deliverable #4c: Public Meeting (Sharing Recommendations)**	0 days	Fri 1/22/27	Fri 1/22/27
29	**Deliverable #6c: Public Engagement Summary Report (Sharing Recomendations)**	0 days	Fri 1/29/27	Fri 1/29/27
30	**Task 2.5 – Project Website**	300 days	Mon 1/26/26	Fri 3/19/27
31	**Deliverable #5: Project Website**	0 days	Fri 2/20/26	Fri 2/20/26
32	**Task 3 – At-Grade Crossing Evaluations**	**310 days**	**Mon 1/12/26**	**Fri 3/19/27**
33	**Task 3.1 – Crossing Evaluations**	**120 days**	**Mon 1/12/26**	**Fri 6/26/26**
34	Task 3.1.1 – Existing FRA Inventory Data Summaries	120 days	Mon 1/12/26	Fri 6/26/26
35	Task 3.1.2 – Documenting Roadway Crossing Features	120 days	Mon 1/12/26	Fri 6/26/26



Project: Jonesboro Schedule_15
Date: Thu 9/25/25

Task Milestone Summary Project Summary

ID	Task Name	Duration	Start	Finish
36	Task 3.1.3 – Accident History Summary	120 days	Mon 1/12/26	Fri 6/26/26
37	Task 3.1.4 – Site review	120 days	Mon 1/12/26	Fri 6/26/26
38	Task 3.1.5 – Approximate ROW Determination	120 days	Mon 1/12/26	Fri 6/26/26
39	Task 3.1.6 – Identification of Major Utilities	120 days	Mon 1/12/26	Fri 6/26/26
40	Task 3.1.7 – Identification of Planned or Programmed Infrastructure Improvement	120 days	Mon 1/12/26	Fri 6/26/26
41	Task 3.1.8 – Identification of Future Development	120 days	Mon 1/12/26	Fri 6/26/26
42	Task 3.1.9 – Determination of Travel Delays	120 days	Mon 1/12/26	Fri 6/26/26
43	Task 3.1.10 – Assessment of Proximity to Medical Facilities, Schools, Churches, and Community Centers	120 days	Mon 1/12/26	Fri 6/26/26
44	Task 3.1.11 – Equity Assessments	120 days	Mon 1/12/26	Fri 6/26/26
45	**Task 3.2 – Recommendations**	**230 days**	**Mon 3/9/26**	**Fri 1/22/27**
46	Task 3.2.1 – Development of Safety Improvement Alternatives	230 days	Mon 3/9/26	Fri 1/22/27
47	Task 3.2.2 – Study of Changes in Travel Patterns and Accessibility	210 days	Mon 4/6/26	Fri 1/22/27
48	Task 3.2.3 – Assessment of Impact to the Land Use Environment	210 days	Mon 4/6/26	Fri 1/22/27
49	Task 3.2.4 – Evaluation of Impacts to the Roadway System and Public Safety	210 days	Mon 4/6/26	Fri 1/22/27
50	Task 3.2.5 – Community and Population Impact Analysis	210 days	Mon 4/6/26	Fri 1/22/27
51	Task 3.2.6 – ROW Acquisition Determination Assessment	210 days	Mon 4/6/26	Fri 1/22/27
52	Task 3.2.7 – Preliminary Cost Estimate of Alternatives	210 days	Mon 4/6/26	Fri 1/22/27
53	**Task 3.3 – Order-of-Magnitude of Project Estimate Cost**	**20 days**	**Mon 1/25/27**	**Fri 2/19/27**
54	**Deliverable #9: Order of Magnitiude Cost Estimates**	0 days	Fri 2/19/27	Fri 2/19/27
55	**Task 3.4 – Project Prioritization**	20 days	Mon 2/22/27	Fri 3/19/27
56	**Deliverable #8: Jonesboro Rail Crossing Study**	0 days	Fri 3/19/27	Fri 3/19/27
57	**Task 4 – Alternative Analysis & Conceptual Engineering**	**260 days**	**Mon 3/9/26**	**Fri 3/5/27**
58	**Task 4.1 – Conceptual Engineering**	**260 days**	**Mon 3/9/26**	**Fri 3/5/27**
59	Task 4.1.1 – Development of Design Criteria	40 days	Mon 3/9/26	Fri 5/1/26
60	Task 4.1.2 – Development of Design Alternative Concepts	220 days	Mon 5/4/26	Fri 3/5/27
61	**Deliverable #10: Alternative Analysis Report**	**0 days**	**Fri 3/5/27**	**Fri 3/5/27**
62	**Task 4.2 – Environmental Resource Inventory and Potential Concerns Analysis**	240 days	Mon 3/23/26	Fri 2/19/27
63	**Deliverable #11: Environmental Resource Inventory and Potential Concern Analysis**	0 days	Fri 2/19/27	Fri 2/19/27
64	**3 Month Float (Revisions, Further Analysis, etc.)**	65 days	Mon 3/22/27	Fri 6/18/27
65	**Task 1.3 – Project Closeout**	**145 days**	**Mon 1/25/27**	**Fri 8/13/27**
66	Task 1.3.1 – Final Project Review	40 days	Mon 1/25/27	Fri 3/19/27
67	Task 1.3.2 – Verify Payment of all Claims and Invoices	20 days	Mon 6/21/27	Fri 7/16/27
68	Task 1.3.3 – Submit a Final Claim for Reimbursement	0 days	Fri 7/16/27	Fri 7/16/27
69	**Task 1.3.4 – Submit a Final Performance Report (Deliverable #2)**	0 days	Fri 8/13/27	Fri 8/13/27



Project: Jonesboro Schedule_15
Date: Thu 9/25/25

Task Milestone Summary Project Summary

Exhibit C-1A

CRAFTON, TULL & ASSOCIATES, INC.
ESTIMATE FOR PROFESSIONAL SURVEYING SERVICES

CLIENT: City of Jonesboro/Bridgefarmer (Attn: Brad Peterson, PE/Crafton Tull)
PROJECT: Evaluation of 18 RR Crossing - Survey Support
CT NO.: **RFP Date:** September 19, 2025

SCOPE OF WORK:

Preliminary SOW includes establishing the RR ROW 500-ft either side of the roadway(s) crossing intersection with RR, the associated roadway(s) ROW that enter/exit the RR ROW, and an as-built survey within the aforementiong ROW(s), providing a CAD working drawing of each in either AutoCAD or MicroStationat to support the engineer's project evaluations.

COMMENTS:

The client will assist as needed with right-of-entry.

DESCRIPTION/TASK		SSM	SPS	PS	SI	SPC	FS
01	Research, Fieldwork, ROW Computatiosn, As-Built Drafting	16.0	36.0	72.0	72.0	145.0	145.0
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
Total Units (Man-hours)		16.0	36.0	72.0	72.0	145.0	145.0

BUDGET (CRAFTON TULL STANDARD FEE SCHEDULE, EFFECTIVE JANUARY 1, 2025)

A. PERSONNEL SERVICES AND EQUIPMENT:

16	HRS	Sr. Surveying Manager	@	$	205.00	per	HR	$ 3,280.00	
36	HRS	Sr. Project Surveyor (SPS)	@	$	160.00	per	HR	$ 5,760.00	
72	HRS	Professional Surveyor (PS)	@	$	140.00	per	HR	$ 10,080.00	
72	HRS	Surveyor Intern II (SI)	@	$	125.00	per	HR	$ 9,000.00	
145	HRS	Survey Party Chief II (SPC)	@	$	110.00	per	HR	$ 15,950.00	
145	HRS	Field Surveyor III (FS)	@	$	85.00	per	HR	$ 12,325.00	
								Total Labor	$ 56,395.00

B. TRAVEL AND TRANSPORTATION EXPENSES: (Meals/Lodging rate is based on GSA rates for FY2025. Mi rate per GSA for 2025.)

Mileage	450	miles	@	$	0.700	per	mile	$ 315.00	
Meals	0	days	@	$	68.00	per	day (per man)	$ -	
Lodging	0	days	@	$	110.00	per	night (per man)	$ -	
								Subtotal	$ 315.00

C. MISCELLANEOUS EXPENSES:

GPS Equipment	0	hours	@	$	35.00	per	hour	$ -	
Robotic Total Station	0	hours	@	$	20.00	per	hour	$ -	
LiDAR Scanning	0	hours	@	$	35.00	per	hour	$ -	
UAV	0	units	@	$	1,000.00	per	unit	$ -	
Arkansas 811 - Locate(s)	18	hours	@	$	94.00	per	hour	$ 1,692.00	
Titles	0	tiltes	@	$	225.00	per	title	$ -	
RR Escort for Survey (4 x RailPros Standard Day $1018)								$ 4,072.00	
								Subtotal	$ 5,764.00
								Total Expenses	$ 6,079.00
								Total Estimated Fees	**$ 62,474.00**

Estimated Submittal Date By:	TBD	If Given Notice-To-Proceed By:	TBD

TBA Days	TBA Days	TBA Days
← Pre-Fieldwork →	← Fieldwork →	← Post-Fieldwork →

PREPARED BY: James W. Montgomery **DATE:** September 22, 2025

Exhibit C-1:Justification of Costs and Fees
September 26, 2025
Evaluation of 18 Railroad Crossings, Jonesboro, Arkansas
SUMMARY
Subconsultant: Crafton Tull

PROJECT SCOPE	HOURS	SALARY	EXPENSES	TOTAL
PROJECT ADMINISTRATION AND MANAGEMENT	0	$0	$0	$0
STAKEHOLDER AND PUBLIC INVOLVEMENTS	100	$19,810	$1,645	$21,455
AT-GRADE CROSSING EVALUATIONS	0	$0	$0	$0
ALTERNATIVE ANALYSIS AND CONCEPTUAL ENGINEERIN(	864	$135,280	$65,599	$200,879
TOTAL-Crafton Tull	964	$ 155,090.00	$ 67,244.00	$ 222,334.00

Exhibit C-2:Justification of Costs and Fees
September 26, 2025
Evaluation of 18 Railroad Crossings, Jonesboro, Arkansas
SUMMARY
Subconsultant: Graham Engineers

PROJECT SCOPE	HOURS	SALARY	EXPENSES	TOTAL
PROJECT ADMINISTRATION AND MANAGEMENT	0	$0	$0	$0
STAKEHOLDER AND PUBLIC INVOLVEMENTS	0	$0	$0	$0
AT-GRADE CROSSING EVALUATIONS	0	$0	$0	$0
ALTERNATIVE ANALYSIS AND CONCEPTUAL ENGINEERIN(	150	$26,250	$1,324	$27,574
TOTAL- Graham Engineers	150	$ 26,250.00	$ 1,324.00	$ 27,574.00

Exhibit C-3:Justification of Costs and Fees
September 26, 2025
Evaluation of 18 Railroad Crossings, Jonesboro, Arkansas
SUMMARY

Subconsultant: Traffic Engineering Solutions

PROJECT SCOPE	HOURS	SALARY	EXPENSES	TOTAL
PROJECT ADMINISTRATION AND MANAGEMENT	0	$0	$0	$0
STAKEHOLDER AND PUBLIC INVOLVEMENTS	60	$13,380	$0	$13,380
AT-GRADE CROSSING EVALUATIONS	355	$79,165	$7,500	$86,665
ALTERNATIVE ANALYSIS AND CONCEPTUAL ENGINEERIN(	0	$0	$0	$0
TOTAL-Traffic Engineering Solutions	415	$ 92,545.00	$ 7,500.00	$ 100,045.00