

REQUEST FOR QUALIFICATIONS (RFQ) FOR
TESTING & DESIGN SERVICES FOR ARLINGTON BLVD IMPROVEMENTS
(Advertisement)

The City of Greenville, North Carolina is seeking proposals from qualified firms interested in providing engineering services for infrastructure rehabilitation work to include geotechnical investigations, sampling & testing and design of storm water infrastructure, subgrade stabilization and pavement design of Arlington Blvd between Hooker Road and Red Banks Road, construction management and CEI services for the project. The complete RFQ can be accessed on the City's website at www.greenvillenc.gov.

The City has established a 4% Minority Business Enterprise (MBE) and 4% Women Business Enterprise (WBE) **goal** for the participation of MWBE firms in supplying goods and services for the completion of this project. All firms submitting qualifications and/or proposals agree to employ "good faith efforts" towards achieving these goals and supply other information as requested in the "MWBE Professional Services Forms". Goals must be met separately by HUB certified firms.

Interested firms are invited to submit proposals (in the required quantity and format) by 2:00 p.m., Tuesday, November 21st, 2017, to the following address:

Craig A Midgett, EI, Civil Engineer 1
City of Greenville
Public Works Department-Engineering Division
1500 Beatty Street
Greenville, North Carolina 27834

PUBLIC WORKS

October 19, 2017

To Whom It May Concern:

Subject: **Request for Qualifications (RFQ)** from Firms for Design and Construction Services for the Arlington Blvd Improvements

The City of Greenville, North Carolina is seeking proposals from qualified firms interested in providing engineering and construction management services for evaluation and design of infrastructure rehabilitation work to include geotechnical investigations, sampling, testing and design for storm water infrastructure, subgrade stabilization and pavement design of Arlington Blvd between Hooker Road and Red Banks Road construction management and CEI services for the project.

Interested firms are invited to submit proposals as outlined in the enclosed RFQ. Questions regarding the RFQ should be directed to Craig A Midgett, EI, Civil Engineer I, at (252) 329-4683 or cmidgett@greenvillenc.gov.

Sincerely,



Craig A Midgett, EI, Civil Engineer I

Enclosure

cc: Kevin Mulligan, P.E., Director of Public Works
Scott P.M. Godefroy, P.E., City Engineer
Lisa A. Kirby, P.E., Senior Engineer
James Lynn Raynor, P.E., Civil Engineer II, Capital Improvements Projects

**REQUEST FOR QUALIFICATIONS (RFQ) FOR
TESTING & DESIGN SERVICES FOR ARLINGTON BLVD**

**Public Works Department
City of Greenville, North Carolina
October 2017**

I. Overview and Purpose

The City of Greenville, NC, desires to obtain Testing and Design services for the Department of Public Works. Public Works wishes to employ the services of an Engineering firm, or team of firms, to perform engineering and construction management services to include surveying, geotechnical investigations, design of storm water infrastructure rehabilitation, and evaluation and design of subgrade stabilization & pavement design of Arlington Blvd between Hooker Road and Red Banks Road. All sampling and testing will be conducted with accordance to ASTM, NC DOT and the City of Greenville's construction and testing specifications.

The engineering firms must provide examples of experience with regard to surveying, geotechnical and pavement condition evaluation, roadway design and stormwater infrastructure design including, but not limited to;

- Conduct testing and sampling of existing subgrade materials and using that information to develop a pavement design, including any subgrade mitigation/stabilization, along Arlington Blvd between Red Banks Rd and Hooker Rd.
- Using the attached Exhibit A, develop designs for the repair and construction of stormwater infrastructure in and adjacent to Arlington Blvd from Hooker Rd to train tracks.
- Develop construction documents for replacing infrastructure in and adjacent to Arlington Blvd between Evans Street and Greenville Blvd.
- Provide construction management and CEI services during the construction phase and close-out of the project.

CMT technicians should hold relevant NC DOT certifications to test the materials listed above.

Following the review of the proposals, if multiple firms/teams are short-listed they will be contacted to schedule an interview/presentation. Please note, these interviews may or may not be required depending on the initial review and ranking of the proposals. If requested, during the interview, the teams will present the methodologies they have utilized and determined most effective in their experience. In addition, we will discuss specific abilities or experiences.

Detailed approaches, scopes, and project cost estimates will be developed during contract negotiations with the selected firm prior to initiation of each task order. Cost estimates are not required for submission of this RFQ.

The general timeline for this project is as follows:

Contract Awards	January	2017
Notice to Proceed	January	2017
Design Complete	May	2018

II. Background Information

The Arlington Blvd roadway and stormwater infrastructure project will consist of rehabilitating and/or replacing segments of the aging stormwater conveyance system that conveys runoff from an existing highly urbanized watershed and the roadway remediation and resurfacing of 1.75 miles of Arlington Blvd from Hooker Rd to Red Banks Rd.

Included with this RFQ is a section of the Stormwater Master Plan provided to the City of Greenville by Kimley-Horn. Please familiarize yourselves with the attached to give you the general scope of what the stormwater infrastructure repairs will be. The focus of the stormwater component of this project will be between Evans Street and the train tracks crossing Arlington Blvd and the infrastructure between Evans Street and Greenville Blvd..

The section of Arlington Blvd between Hooker Road and Red Banks Road is the final leg of a section of the boulevard between Firetower Road and Heart Drive that needs resurfacing. That section is showing evidence of a sub-base that is under stress and much of the boulevard has the appearance of a roadway with a subgrade that needs some type of remediation. The City suspects a comprehensive subgrade repair operation, i.e. full depth reclamation, will be necessary but would like to be as efficient as possible determining which sections of the road need complete reconstruction and which sections can be simply resurfaced.

The City of Greenville is looking for a qualified firm, or team of firms, to perform sampling, testing and design for storm water infrastructure, subgrade stabilization and pavement design for the reconstruction of storm water infrastructure and road remediation. Award of the contract for the services shall be made to the responsible firm whose proposal is deemed most advantageous to the City of Greenville. Special consideration shall be given to experience on similar projects, familiarity with the services to be provided, accreditations, personnel certifications and technical ability.

III. Scope of Work for Roadway and Stormwater (Consultant Responsibilities)

A. Task Order 1 (Preliminary Design and Sampling)

Services to be provided are generally as follows:

1. Perform a visual inspection of the roadway along Arlington Blvd between Red Banks Rd and Hooker Rd
2. Conduct sampling per NCDOT Sampling Guidelines along Arlington Blvd between Red Banks Rd and Hooker Rd
3. Deliver soil samples to an NCDOT certified laboratory for testing to include CBRs, Proctors and soil index/classification testing
4. Create recommendations for any subgrade remediation project wide

5. Develop a pavement design
6. Obtain and review the video inspection of the existing storm drain pipe along the section of Arlington Blvd between Red Banks Rd and Hooker Rd
7. Coordinate with Greenville Utilities Commission for the location of existing utilities within the corridor and identify any potential conflicts
8. Generate a preliminary sketch plan along with Opinion of Probable Cost for all proposed alternatives for repairs.
9. Develop a preliminary phasing plan for the completion of the proposed work for repairs of both road and stormwater structures.
10. Meet with the owner to review preliminary findings and discuss alternatives for repairs of both road and stormwater structures.

B. Task Order 2 (Final Design for Roadway and Stormwater)

Services to be provided are generally as follows:

1. Summary of sampling and testing results.
2. Any recommendations for the subgrade remediation of Arlington Blvd.
3. A pavement design for Arlington Blvd.
4. Summary of initial findings (as they relate to conflicts, capacity, localized flooding, etc.) as ascertained from the review/gathering of historical data, and interviews with city staff, other government agencies, and citizens.
5. Report-style summation of results regarding hydrologic/hydraulic analyses of existing drainage conditions for the 2yr and 10yr-24 hour rainfall events for each identified drainage area.
6. For each delineated area, a summary of alternative solutions considered with preliminary drawings and cost estimates for proposed drainage improvements, including the consultant's recommendations.
7. Final design drawings, specifications, construction schedules, cost estimates, and bid documents detailing the drainage improvements chosen for each identified drainage area.
8. Completed permit applications (where applicable) along with all necessary accompanying documents for each project.

C. Task Order 3 (Construction Management/CEI (Consultant Responsibilities))

The table below identifies anticipated tasks and the associated deliverables.

SERVICE	FUNCTION	BENEFIT	DELIVERABLES
Construction Phase Services			
Pre-construction Conference	Outline project specifics. Inform contractor of project administration procedures.	Establish ground rules and responsibilities.	Agenda and Meeting Minutes.
Management Information System (MIS)	Implement system for organizing, tracking, filing, and managing paper/ electronic correspondence including letters, information requests, submittals, contracts, reports, O&M manuals, progress payments, and change orders, etc.	Better record keeping. Improved claim resolution capabilities.	Paper files, Digital files, and Correspondence logs.
Surveying	Basic horizontal and vertical control	Quality Control of site layout	Data for record drawings.

	points and all other staking considered necessary by engineer.	Ease of scheduling ahead.	
Review Traffic Control Plans	Review contractor's plans for detours, shutdowns and access for emergency vehicles.	Traffic control plans provide adequate traffic management and make provisions for contingencies.	Review and recommendation on traffic control plan for approval by COG and NCDOT.
Review Material Submittals	Review and approve contractor's submittals for materials to include ".	Quick response time.	Approved submittals.
Weekly Meetings	Conduct weekly meetings to discuss schedule, current, and past issues.	Maintains dialogue between team members.	Agenda Meeting Minutes.
Issues Management	Analyze issues, seek appropriate advice, and give recommendations.	Provides solutions to actual conditions found in field. Minimizes delays.	Design clarifications. Recommendation and preparation of contract change orders.
Schedule	Monitor contractor's schedule weekly. Notify parties of actual or potential deviation from schedule. Work with project team to correct noncompliance with schedule.	Better project coordination. Fewer delays. Fewer time related disputes.	Schedule reports and recommendations.
Cost Control	Monitor project funding. Monitor project budgets. Review contract item payments, material quantities, and change order payments.	Effective use of funds. Early warning of potential funding problems.	Budget reports and cost estimate reviews
Change Orders	Review potential change orders for contractual and technical merit. Prepare independent cost estimate and schedule analysis of work. Provide recommendation and prepare change orders for execution. Keep the City apprised of impact of cumulative change orders.	Change orders reflect fair price for added or deleted work.	Independent cost estimates. Recommendation with change orders ready for execution. Change order summary reports
Dispute Resolution	Make recommendations and implement procedures for reducing the likelihood of disputes and claims. Assist in the resolution of disputes.	Disputes are avoided or resolved quickly.	Dispute avoidance procedures and recommendations.

VI. Supervision of Consultant

The consultant will be under the supervision of the City of Greenville's Director of Public Works or his designee.

VII. Minority Business Enterprises and Women's Business Enterprises

It is the policy of the City of Greenville to provide minorities and women equal opportunity for participating in all aspects of the City's contracting and procurement programs, including but not limited to, construction projects, supplies and materials purchase, and professional and personal service contracts. In accordance with this policy, the City has adopted a Minority and Women Business Enterprise (MWBE) Plan and subsequent program, outlining verifiable goals.

The City has established a 4% Minority Business Enterprise (MBE) and 4% Women Business Enterprise (WBE) goal for the participation of MWBE firms in supplying goods and services for the completion of this project. All firms submitting qualifications and/or proposals agree to employ “good faith efforts” towards achieving these goals and supply other information as requested in the “MWBE Professional Services Forms” included in Appendix A. Failure to complete the MWBE forms may be cause to deem the submittal nonresponsive.

Questions regarding the City’s MWBE Program should be directed to the MWBE Office at (252) 329-4462.

VIII. Equal Employment Opportunity Clause

The City has adopted an Equal Employment Opportunity Clause, which is incorporated into all specifications, purchase orders, and contracts, whereby a vendor agrees not to discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin or ancestry. By submitting qualifications and/or proposals, the firm is attesting that they are an Equal Opportunity Employer.

Federal law (Rehabilitation Act and ADA) prohibits handicapped discrimination by all governmental units. By submitting a proposal, the vendor is attesting to its policy of nondiscrimination regarding the handicapped.

IX. E-Verify Compliance

By submitting a proposal, consultant acknowledges that compliance with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes is required by the Consultant and its Subconsultant by North Carolina law and the provisions of the Contract Documents. The Consultant represents that the Consultant and its Subconsultant are in compliance with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Article 2 of Chapter 64 of the North Carolina General Statutes requires employers, that transact business in the State of North Carolina and employ 25 or more employees in the State of North Carolina, to electronically verify the legal employment status of an employee through the federal E-Verify program after hiring the employee to work in the State of North Carolina.

X. Iran Divestment Act

As a result of the Iran Divestment Act of 2015 (Act), Article 6E, N.C. General Statute § 147-86.55, the State Treasurer published the Final Divestment List (List) which includes the final companies and persons engaged in investment activities in Iran and will be updated every 180 days. The list can be found at <https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx>.

By submitting the Proposal, the Consultant certifies that, as of the date of this bid, it is not on the then current List created by the State Treasurer. The Consultant must notify the Department immediately if, at any time before the award of the contract, it is added to the List.

As an ongoing obligation, the Consultant must notify the Department immediately if, at any time during the contract term, it is added to the List. Consistent with § 147-86.59, the Consultant shall not contract with any person to perform a part of the work if, at any time the subcontract is signed, that person is on the then-current List.

During the term of the Contract, should the Department receive information that a person is in violation of the Act as stated above, the Department will take action as appropriate and provided for by law, rule or contract.

XI. Consultant Selection Criteria

A responding firm must meet the following minimum requirements to submit a proposal:

- Have previous experience providing construction materials testing.
- Be licensed to practice engineering in the State of North Carolina
- Be able to meet the insurance requirements of the City of Greenville (we'll need this provided)

EVALUATION CRITERIA

General Qualifications, Competence and Reputation of Firm (30%)

- Age, size, staff qualifications and stability of firm
- Laboratory accreditations
- Representative projects
- Availability of staff to handle the project
- Reputation of firm with owner and other clients

Experience of Involved Staff (25%)

- Key Personnel – Roles and Experience
- Personnel certifications
- Sub-consultants, if any

Availability (25%)

- Ability to provide qualified personnel on a continual basis
- Current workload – staff availability

Hourly Rate Schedule (15%)

- Provide a unit rate fee schedule indicative of experience

The selection team will consist of the Director of Public Works, City Engineer, Senior Engineer and Civil Engineer I & II (Capital). The team will evaluate the RFQ's based on the aforementioned items and corresponding percentages. It is envisioned that the City will select one team from the proposals but it is possible several teams will be short-listed and interviews/presentations will be scheduled.

XII. Proposal Submission and Deadline

All proposals are limited to 15 pages inclusive of the cover letter, and shall be typed on 8 1/2" x 11" sheets, single spaced, one sided. In order to reduce costs and to facilitate recycling; binders, dividers, tabs, etc. are

prohibited. One staple in the upper left-hand corner is preferred. Proposals containing more than 15 pages will not be considered.

Interested firms are invited to submit four (4) hard copies and one electronic copy of their proposal no later than **2:00 pm, Tuesday, November 21, 2017.**

Proposals should be placed in an envelope with “Proposal for Testing and Design Services for Arlington Blvd Improvements” on the outside. The proposals should be addressed to:

Craig A Midgett, EI, Civil Engineer I
City of Greenville
Public Works Department-Engineering Division
1500 Beatty Street
Greenville, North Carolina 27834

Each firm submitting a proposal shall agree to comply with all applicable state, federal and municipal laws, rules, regulations and ordinances governing this project, including any other requirements that may be dictated by state or federal agencies participating in project funding.

The City of Greenville reserves the right to reject any or all proposals.

For questions regarding this Request for Qualifications, contact Craig A Midgett at (252) 329-4683 or cmidgett@greenvillenc.gov.

Proposal Format:

- Cover Letter
- Briefly describe why your firm is interested and should be considered for this project. Also, provide contact information for any questions or additional requests for information that may arise during the review of your proposal.
- Consultant Background
 - Provide the following information for the lead consultant and any proposed sub-consultants: Firm names, background, history, number of years in business, size of firm, number of employees dedicated to this project and their proposed responsibilities to this project. Please include applicable professional registrations of team members as well as any specialized experience in applicable areas.
- Experience
 - List a minimum of three recent projects similar to this one completed by your firm or team. The list should include project name, a brief description of the project, total project budget, design budget, client name and client contact information.
- Project Approach
 - Briefly outline your technical and procedural approach for the design project. Also, describe key issues and potential problems facing this project and how your firm or team would address these issues. Please provide a description of the degree or level of involvement in the planning and design process for the team members identified above.
- Equal Employment Opportunity Statement

- The City of Greenville does not discriminate in administering any of its programs and activities. The consultant awarded the contract for work on this project is required to insure that no person shall be denied employment, fair treatment or be discriminated against on the basis of race, sex, religion, age, national origin or handicap. (Please include a copy of any EEO policy or statement adopted by your firm).
- Availability - address availability of staff to handle the project
- Hourly Rate Schedule - Provide a unit rate fee schedule indicative of experience.
- Please provide necessary MWBE documentation which is provided in this RFQ. This documentation is not included in the 15-page requirement for the RFQ.

**City of Greenville/Greenville Utilities Commission
Minority and Women Business Enterprise Program**

**MWBE Guidelines for Professional Service Contracts
\$50,000 and above**

Policy Statement

It is the policy of the City of Greenville and Greenville Utilities Commission to provide minorities and women equal opportunity for participating in all aspects of the City's and Utilities' contracting and procurement programs, including but not limited to, construction projects, supplies and materials purchases, and professional and personal service contracts.

Goals and Good Faith Efforts

Service providers responding to this solicitation shall comply with the MWBE program by making Good Faith Efforts to achieve the following aspirational goals for participation.

	CITY	
	MBE	WBE
Professional Services	4%	4%

Submitters shall submit MWBE information with their submissions on the forms provided. This information will be subject to verification by the City prior to contract award. **As of July 1, 2009, contractors, subcontractors, suppliers, service providers, or MWBE members of joint ventures intended to satisfy City MWBE goals shall be certified by the NC Office of Historically Underutilized Businesses (NC HUB) only.** Firms qualifying as "WBE" for the City's goals must be designated as a "women-owned business" by the HUB Office. Firms qualifying as "MBE" for the City's goals must be certified in one of the other categories (i.e.: Black, Hispanic, Asian American, American Indian, Disabled, or Socially and Economically Disadvantaged). According to new Statewide Uniform Certification (SWUC) Guidelines, ethnicity supersedes gender; therefore, firms who are certified as both a "WBE" and "MBE" will satisfy the "MBE" category only. **Each goal must be met separately. Exceeding one goal does not satisfy requirements for the other.**

The City shall accept NCDOT certified firms on federally funded projects only.

Please note: A service provider may utilize any firm desired. However, for participation purposes, all MWBE firms who wish to do business *as a minority* must be certified by NC HUB. A complete database of NC HUB certified firms may be found at <http://www.doa.nc.gov/hub/>

Instructions

The submitter shall provide the following forms:

- FORM 1—Sub-Service Provider Utilization Plan
This form provides the amount of sub-contracted work proposed on the project for MWBE. This proposed participation is based on the current scope of work. Submitter must turn in this form with submission. If the submitter does not customarily subcontract elements of this type of project, do not complete this form. Instead complete FORM 2.
- FORM 2--Statement of Intent to Perform work without Sub-Service Providers
This form provides that the submitter does not customarily subcontract work on this type of project.
- Sub-Service Provider Utilization Commitment
Submitted by the selected service provider after negotiation of the contract and prior to Award, this form lists the MWBE firms committed to participate on the project. This commitment will reflect any changes in the Plan due to adjustments in project scope.
NOTE: A firm is expected to maintain the level of participation proposed in FORM 1 – Sub-Service Provider Utilization Plan – unless there is a negotiated change in the service required by the City. A firm is also encouraged to increase MWBE participation in the Utilization Commitment as a result of ongoing Good Faith Efforts.
- Proof of Payment Certification
Submitted by the selected service provider with each payment application, listing payments made to subconsultants. This form is not provided with the submission.

In addition to the forms provided above, each service provider must provide a discussion of its diverse business policies and procedures to include the good faith efforts it employed to utilize minority and women-owned firms on this project. This discussion must include:

- 1. Outreach efforts that were employed by the firm to maximize the utilization of MWBE's.*
- 2. A history of MWBE firms used on similar projects; and*
- 3. The percentage participation of MWBE firms on these projects.*

NOTE: Those service providers submitting FORM 2 should discuss and provide documentation to justify 100% performance without the use of subconsultants (both majority and minority) per the statements of the form.

Minimum Compliance Requirements: All written statements, signed forms, or intentions made by the Submitter shall become a part of the agreement between the Submitter and the City for performance of contracts. Failure to comply with any of these statements, signed forms, or intentions or with the minority business guidelines shall constitute a breach of the contract. A finding by the City that any information submitted (either prior to award of the contract or during the performance of the contract) is inaccurate, false, or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the City whether to terminate the contract for breach or not. In determining whether a Submitter has made Good Faith Efforts, the City will evaluate all efforts made by the Submitter and will determine compliance in regard to quantity, intensity, and results of these efforts.

**Statement of Intent to Perform work without
Sub-Service Providers
FORM 2**

(Must be included with submission if not subcontracting any portion of work)

We, _____, hereby certify that it is our
intent to perform **100% of the work required** for the _____ contract.
(Project Name)

In making this certification, the Proposer states the following:

i. It is a normal and customary practice of the Proposer to perform all elements of this type of contract with its own workforce and without the use of subconsultants. *The Proposer has substantiated this by providing documentation of at least three (3) other projects within the last five (5) years on which they have done so.*

Check box to indicate documentation is attached.

ii. The Proposer has a valid business reason for self-performing all work on the Contract as opposed to subcontracting with a MWBE. The Proposal must describe the valid business reason for self-performing, and the Proposer must submit with its Bid or Proposal documentation sufficient to demonstrate to the Authority reasonable satisfaction the validity of such assertions.

Check box to indicate documentation is attached.

iii. If it should become necessary to subcontract some portion of the work at a later date, the Proposer will notify the City and institute good faith efforts to comply with all requirements of the MWBE program in providing equal opportunities to MWBEs to subcontract the work. **The firm will also submit a Request to Change MWBE Participation Form (even if the final subconsultant is not MWBE).**

The undersigned hereby certifies that he or she has read the terms of this certification and is authorized to bind the Proposer in accordance herewith.

Date: _____

Name & Title of Authorized Representative _____

Signature of Authorized Representative _____

Sub-Service Provider Utilization Commitment

(Must be submitted after contract negotiation and prior to Award)

We _____, do certify that on the
 _____ we will expend a minimum of _____%

of the total dollar amount of the contract with certified **MBE** firms and a minimum of _____% of the total dollar amount of the work with **WBE**.

Name, Address, & Phone Number of Sub-Service Provider	*MWBE Category	Work description	% of Work

*Minority categories: Black, African American (**B**), Hispanic or Latino (**L**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**S**) Disabled (**D**)

The undersigned will enter into a formal agreement with MWBE firms for work listed in this schedule. Failure to fulfill this commitment may constitute a breach of contract.

The undersigned hereby certifies that he/she has read the terms of this commitment and is authorized to bind the submitter to the commitment herein set forth.

Date: _____

Name & Title of Authorized Representative _____

Signature of Authorized Representative _____

REQUEST TO CHANGE MWBE PARTICIPATION

(Submit changes only if recipient of intent to award letter, continuing through project completion.)

Project: _____

Bidder or Prime Consultant: _____

Name & Title of Authorized Representative: _____

Address: _____ Phone #: _____

_____ Email Address: _____

Original Total Contract Amount: \$ _____

Total Contract Amount (including approved change orders or amendments): \$ _____

Will this request change the dollar amount of the contract? Yes No

If yes, give the total contract amount including change orders and proposed change: \$ _____

The proposed request will do the following to overall MWBE participation (please check one):

Increase Decrease No Change

Name of subconsultant: _____

Service provided: _____

Proposed Action:

Replace subconsultant
 Perform work in-house

For the above actions, you must provide one of the following reasons (Please check applicable reason):

The listed MBE/WBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract.

The listed MBE/WBE is bankrupt or insolvent.

The listed MBE/WBE fails or refuses to perform his/her subcontract or furnish the listed materials.

The work performed by the listed subconsultant is unsatisfactory according to industry standards and is not in accordance with the plans and specifications; or the subconsultant is substantially delaying or disrupting the progress of the work.

If replacing subconsultant:

Name of replacement subconsultant: _____

Is the subconsultant a certified MWBE? Yes No

If no, please attach documentation of outreach efforts employed by the firm to utilize an MWBE.

Dollar amount of original consultant contract \$ _____

Dollar amount of amended consultant contract \$ _____

Other Proposed Action:

Increase total dollar amount of work

Add as an additional subconsultant*

Decrease total dollar amount of work

Other

Please describe reason for requested action: _____

**If adding additional subconsultant:*

Is the subconsultant a certified MWBE? Yes No

If no, please attach documentation of outreach efforts employed by the firm to utilize an MWBE.

Dollar amount of original consultant contract \$ _____

Dollar amount of amended consultant contract \$ _____

Interoffice Use Only:

Approval Y N

Date _____

Signature _____

Pay Application No. _____
 Purchase Order No. _____

Proof of Payment Certification
 M/WBE Contractors, Suppliers, Service Providers

Project Name: _____

Prime Service Provider: _____

Current Contract Amount (including change orders): \$ _____

Requested Payment Amount for this Period: \$ _____

Is this the final payment? Yes ___ No ___

Firm Name	M/WBE Category*	Total Amount Paid from this Pay Request	Total Contract Amount	Total Amount Remaining

*Minority categories: Black, African American (B), Hispanic or Latino (L), Asian American (A) American Indian (I), Female (F) Socially and Economically Disadvantaged (S) Disabled (D)

Date: _____ Certified By: _____ Name _____

_____ Title _____

_____ Signature _____

4.2 Secondary Systems

Alternatives for Secondary Systems generally consist of additional conveyance capacity in the form of larger pipe sizes, additional barrels, or alternative routes for stormwater conveyance that add overall capacity to the systems. As stated in **Section 3.2**, Secondary Systems were modeled with EPA SWMM and generally less complex than the Primary System alternatives. The Secondary Systems have similar constraints to the Primary Systems, such as private property encroachment, utility conflicts, and spatial constraints; however, permitting is often less complex as 401/404 and FEMA permits are generally not required for Secondary Systems.

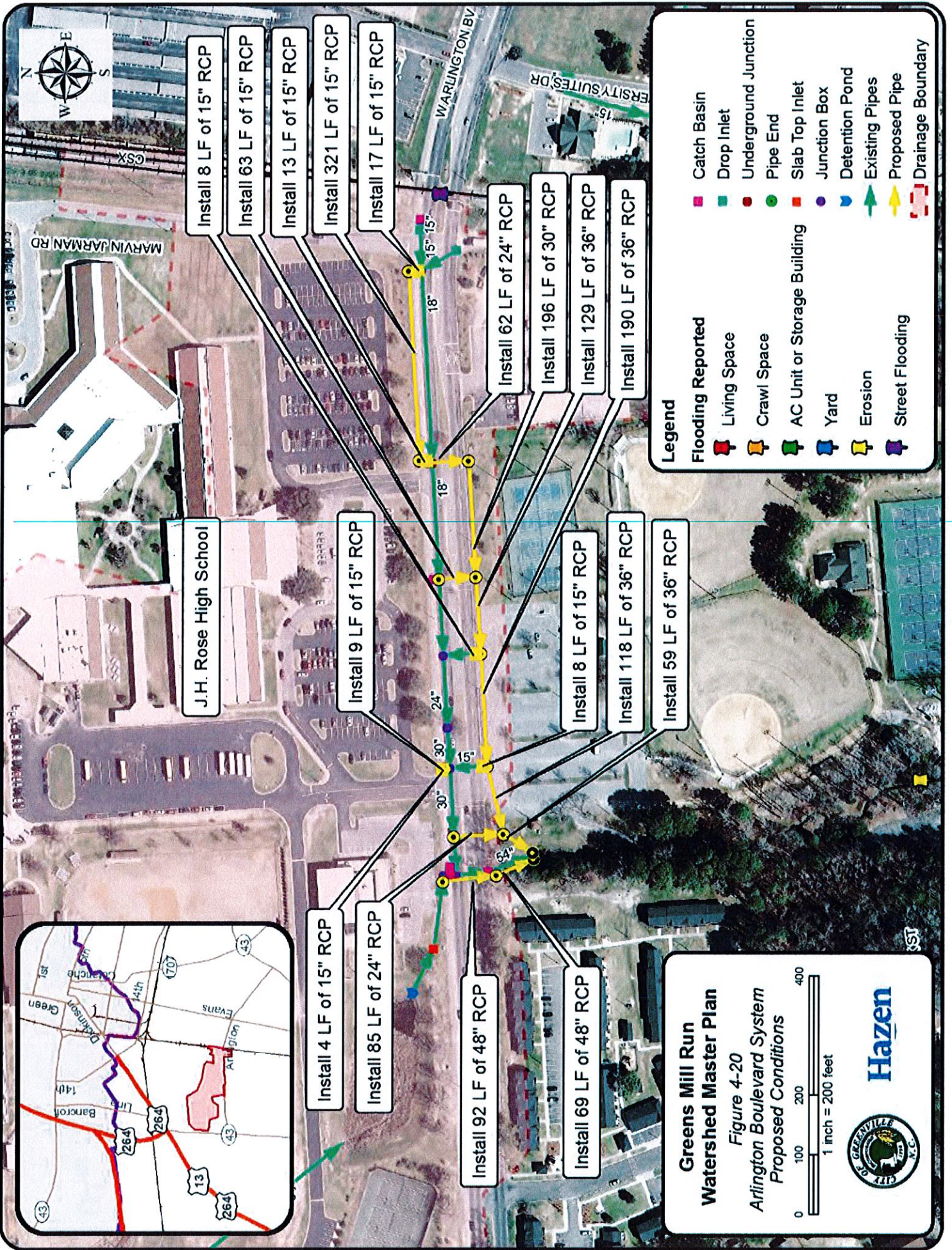
The following paragraphs describe the recommend alternatives for each of the Secondary Systems. **Section 3.2** provides detailed information, such as system modeling limits, explanations for detailed modeling, etc.; therefore, such information is not presented in this section. Alternatives were developed with the goal of alleviating surface surcharging during the 10-year storm event.

4.2.1 Arlington Boulevard System

Figure 4-20 shows improvements recommended for the Arlington Drive system to achieve a 10-year level of service. Alternatives that increased pipe sizes of the main system were analyzed; however, after increasing the diameters by three standard sizes, the desired LOS was still not met. Therefore, those alternatives were abandoned in favor of installing a parallel system that increases overall system capacity, while leaving the existing system in place. The recommended improvements include:

- Install 444 LF of 15" RCP
- Install 148 LF of 24" RCP
- Install 197 LF of 30" RCP
- Install 161 LF of 48" RCP
- Install 5 inlets
- Install 12 junction boxes
- Install 2 discharges

The model showed that the proposed improvements eliminated surface flooding within the system for the 10-year storm event. Utilities impacted include several water and sewer line crossings, as well as electrical modifications along the south side of Arlington Boulevard. The opinion of probable cost for improvements is \$920,000. Most of the parallel system is located along the frontage of the Evans Park property and discharges into the same stream as the existing system. In addition, a new pipe is proposed to provide a dedicated discharge from the constructed wetland at J.H. Rose High School to the discharge on the Evans Park property.



Install 8 LF of 15" RCP

Install 63 LF of 15" RCP

Install 13 LF of 15" RCP

Install 321 LF of 15" RCP

Install 17 LF of 15" RCP

J.H. Rose High School

Install 9 LF of 15" RCP

Install 62 LF of 24" RCP

Install 196 LF of 30" RCP

Install 129 LF of 36" RCP

Install 190 LF of 36" RCP

Install 8 LF of 15" RCP

Install 118 LF of 36" RCP

Install 59 LF of 36" RCP

Install 4 LF of 15" RCP

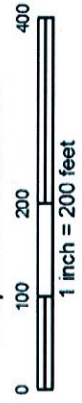
Install 85 LF of 24" RCP

Install 92 LF of 48" RCP

Install 69 LF of 48" RCP

Greenshed Master Plan
Watershed Master Plan

Figure 4-20
 Arlington Boulevard System
 Proposed Conditions



Hazen

- Legend**
- Flooding Reported: Red pushpin
 - Living Space: Orange pushpin
 - Crawl Space: Green pushpin
 - AC Unit or Storage Building: Blue pushpin
 - Yard: Yellow pushpin
 - Erosion: Purple pushpin
 - Street Flooding: Yellow pushpin
 - Catch Basin: Pink square
 - Drop Inlet: Green square
 - Underground Junction: Red circle
 - Pipe End: Green circle
 - Slab Top Inlet: Red square
 - Junction Box: Purple circle
 - Detention Pond: Blue arrow
 - Existing Pipes: Green arrow
 - Proposed Pipe: Yellow arrow
 - Drainage Boundary: Red dashed line