RESOLUTION NO. 20-____

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and he is hereby authorized to enter into an agreement by and between the City of Huntsville and Amiri Engineering in the amount of Sixty One Thousand Nine Hundred Twenty Dollars and No/100's(\$61,920.00) for engineering services for the Monroe Street Parking Deck located at 705 Monroe Street, Huntsville, Alabama on behalf of the City of Huntsville, a municipal corporation in the State of Alabama, which said agreement is substantially in words and figures similar to the certain document attached hereto and identified as <u>"Standard Agreement between the City of Huntsville and Amiri Engineering"</u> consisting of <u>seventeen (17) pages</u>, together with the signature of the City Council President and an executed copy of said document being permanently kept on file in the Office of the City Clerk Treasurer of the City of Huntsville, Alabama

ADOPTED this the _____ day of _____, 2020.

President of the City Council of the City of Huntsville, Alabama

APPROVED this the day of , 2020.

Mayor of the City of Huntsville, Alabama

STANDARD AGREEMENT BETWEEN CITY OF HUNTSVILLE AND AMIRI ENGINEERING

This Agreement is made by and between the City of Huntsville, Alabama, a Municipal Corporation by:

City of Huntsville 308 Fountain Circle Huntsville, Alabama 35801

(hereinafter referred to as the "Owner") and:

Amiri Engineering 2609 Artie Street SW Huntsville, Alabama 35805

(hereinafter referred to as the "Engineer") under seal for services described below to be rendered for the following Project:

 Project Title:
 Monroe Street Parking Deck

 Address:
 705 Monroe Street

 General Project
 Description: Construction Materials Testing, Special Inspections and ADEM Inspections

 for the Monroe
 Street Parking Deck

This Agreement shall be effective on the date it is executed by the last party to execute it. The Owner and the Engineer hereby agree as follows:

Date:

President of the City Council:

ARTICLE I THE ENGINEER'S BASIC DUTIES TO THE OWNER

1.1 By executing this Agreement, the Engineer represents to the Owner that the Engineer is professional qualified to act as the Engineer for the project and is licensed to practice Engineering by all public entities having jurisdiction over the Engineer and the Project. The Engineer further represents to the Owner that the Engineer will maintain all necessary licenses, permits or other authorizations necessary to act as Engineer for the Project until Engineer's remaining duties hereunder have been satisfied. The Engineer assumes full responsibility to the Owner for the negligent acts, errors and omissions of its consultants or others employed or retained by the Engineer in connection with the Project.

1.2 Execution of this Agreement by the Engineer constitutes a representation that the Engineer has become familiar with the Project site and the local conditions under which the Project is to be implemented.

1.3 PERIOD OF PERFORMANCE

1.3.1 The Engineer shall commence services pursuant to this agreement as of <u>June 12, 2020</u>. The final completion date for the completion of the Project shall be approximately <u>June 2021</u>.

1.4 ADMINISTRATION OF CONSTRUCTION

1.4.1 The Engineer shall provide administration of the Construction Contract as set forth below and shall perform those duties and discharge those responsibilities set forth herein.

1.4.2 The Engineer shall represent the Owner during construction. Instructions and other appropriate communications from the Owner to the contractor shall be communicated through the Engineer. The Engineer shall act on behalf of the Owner only to the extent provided herein.

1.4.3 The Engineer shall carefully examine the Work of the Contractor whenever and wherever appropriate. The purpose of such examinations will be to determine the quality, quantity and progress of the Work in comparison with the requirements of the Construction Contract. In making such examinations, the Engineer shall exercise care to protect the Owner from defects or deficiencies in the Work, from unexcused delays in the schedule and from overpayment to the Construction Contract. Following each such examination the Engineer shall submit a written field observation report of such examination, together with any appropriate comments or recommendations, to the Owner.

1.4.4 The Engineer shall at all times have access to the Work wherever it is located. The Engineer shall not have control or charge of construction means, methods, techniques, sequences or procedures, or safety precautions or programs in connection with the Work.

1.4.5 The Engineer shall reject Work which does not conform to the Contract Documents unless directed by the Owner, in writing, not to do so. Whenever, in the Engineer's opinion, it is necessary or advisable, the Engineer shall require special examination or testing of the Work in accordance with the provisions of the Construction Contract whether or not such Work is fabricated, installed or completed.

1.4.6 The Engineer shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples. Approval by the Engineer of the Contractor's submittal shall constitute the Engineer's representation to the Owner that such submittal is generally in conformance with the design concept and information given through the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay to the Contractor or the Project. Owner should receive a copy of all approved shop drawings, product data, samples, etc.

1.4.7 The Engineer shall review, and advise the Owner concerning, proposals and requests for Change Orders from the Contractor. The Engineer shall prepare Change Orders for the Owner's approval and execution in accordance with the Construction Contract, and shall have authority to order, by Field Order, minor changes in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time.

1.4.8 The Engineer shall indemnify and hold harmless the Owner, its officers, agents, and employees, from and against all liability, claims, damages, loss, costs and expenses arising out of, or resulting from, Engineer's negligent acts, errors, or omissions in the performance of the Engineer's professional services under this agreement. In the event the Owner is alleged to be liable on account of alleged negligent acts, errors or omissions of the Engineer, the Engineer shall defend such allegations and shall bear all costs, fees and expenses of such defense.

1.5 ADDITIONAL SERVICES

The following services of the Engineer are not included in Paragraphs 1.3 through 1.4. Nevertheless, the Engineer shall provide such services if authorized in writing by the Owner, and they shall be paid for by the Owner as provided hereinafter.

1.5.1 Making revision in drawings, specifications or other documents when such revisions are inconsistent with written direction by the Owner previously given, are required by the enactment of revision of codes, laws or regulations subsequent to the preparation of such documents and not reasonably anticipated, or are due to other causes not within the control or responsibility of the Engineer, either in whole or in part.

1.5.2 Preparing drawings, specifications and supporting data in connection with Change Orders, provided that such Change Orders are issued by the Owner due to causes not within the control or responsibility of the Engineer, either in whole or in part.

1.5.3 Providing additional services for repair or replacement of Work damaged by fire or other cause during construction provided that such services are required by causes not the responsibility of the Engineer, either in whole or in part.

1.5.4 Providing services made necessary solely by the default of the Contractor or major defects or deficiencies in the Work of the Contractor.

1.6 SERVICE SCHEDULE

1.6.1 The Engineer shall perform its services expeditiously. Upon request by the Owner, the Engineer shall submit for the Owner's approval a schedule for the performance for the Engineer's services which shall include allowance for time required for the Owner's review of submissions and for approvals of authorities having jurisdiction over the Project. This schedule, when approved by the Owner, shall not, except for cause, be exceeded by the Engineer.

1.7 PERSONNEL

1.7.1 The Engineer shall assign only qualified personnel to perform any service concerning the project. At the time of execution of this Agreement, the parties anticipate that the following named individuals will perform those functions indicated:

NAME	FUNCTION
<u>Nasser Amiri</u>	Geotechnical Engineer

So long as the individuals named above remain actively employed or retained by the Engineer, they shall perform the functions indicated next to their names. Newly hired employees by the Engineer after the execution of this contract shall be declared to the Owner in writing and classed in a manner similar to existing employees, and subject to all of the terms of this Agreement.

1.7.2 The Owner shall designate representatives who are authorized to make all decisions except for change orders on the Owner's behalf when requested to do so by the Engineer. The following designated Owner representative(s) are

authorized to make such decisions and shall be available on any on-call basis and shall be called in the order listed herein:

Name	Work TelephoneCell Telephone
William C. Bell	256-427-5281

The Owner shall furnish a revised listing to the Engineer when any changes affecting this list.

ARTICLE II THE OWNER'S BASIC DUTIES TO THE ENGINEER OTHER THAN COMPENSATION

2.1 The Owner shall provide the Engineer with adequate information regarding the Owner's requirements for the Project including any desired or required design or construction schedule, or both, and any budgetary requirements.

2.2 The Owner shall review any documents submitted by the Engineer requiring the Owner's decision, and shall render any required decision pertaining thereto.

2.3 The Owner shall furnish a copy of the construction documents for the project to the Engineer.

2.4 The Owner shall furnish structural, mechanical, chemical and other laboratory tests, inspections and reports as required by law or the Contract Documents.

2.5 If the Owner becomes aware of any fault or defect in the Project, nonconformance with the Construction Contract, or of any errors, omissions or inconsistencies in the drawings or specifications, prompt notice thereof shall be given by the Owner to the Engineer.

2.6 The Owner shall perform those duties set forth in Paragraphs 2.1 through 2.5 as expeditiously as may reasonably be necessary for the orderly progress of the Engineer's services and of the Work.

2.7 The Owner's review of any documents prepared by the Engineer or its consultants shall be solely for the purpose of determining whether such documents are generally consistent with the Owner's construction program and intent. No review of such documents shall relieve the Engineer of its responsibility for the accuracy, adequacy, fitness, suitability and coordination of its work product.

ARTICLE III CONSTRUCTION COSTS

N/A

ARTICLE IV BASIS OF COMPENSATION

4.1 The Owner shall compensate the Engineer for services rendered pursuant to Paragraphs 1.3 through 1.4 of this Agreement by payment of the not- to- exceed amount of <u>\$61,920.00</u> with a reimbursable amount of <u>\$500.00</u>. This includes the cost of addenda related to the bidding of this project.

4.2 Payment to the Engineer of the sum set forth in Paragraph 4.1 shall be allocated per the attached proposal to include construction materials testing, ADEM and special inspections:

Additional services of the Engineer as described in Paragraph 1.5, if any, shall be compensated as follows: Compensation for such services shall be computed on an hourly basis in accordance with Exhibit "A" attached herewith. Additional Services of consultants, if any, shall be compensated on the basis of multiple of one point two (1.2) times the amounts billed to the Engineer for such service.

4.3 Reimbursable Expenses as defined in Article V, shall be reimbursed to the Engineer by the Owner as provided in Article V.

4.4 If the Engineer's services are changed materially through no fault of the Engineer, compensation due to the Engineer shall be equitably adjusted, either upward or downward.

ARTICLE V PAYMENT TO THE ENGINEER

5.1 ENGINEER'S INVOICES

5.1.1 Not more frequently than monthly, unless otherwise agreed in writing by the Engineer and the Owner, the Engineer shall submit an invoice to the Owner requesting payment for services properly rendered and reimbursement for Reimbursable Expenses due hereunder. The Engineer's invoice shall describe with reasonable particularity each service rendered, the date thereof, the time expended if services under Paragraphs 1.7 or 4.5 are included in the invoice and the person(s) rendering such service. The Engineer's invoice shall be accompanied by such documentation or data in support of Reimbursable Expenses for which reimbursement is sought as the Owner may require.

5.1.2 If payment is requested for services rendered by the Engineer pursuant to Paragraphs 1.3 through 1.6, the invoice shall additionally reflect the allocations as provided in Paragraph 4.2 and shall state the percentage of completion as to each such allocation. The invoice shall bear the signature of the Engineer, which signature shall constitute the Engineer's representation to the Owner that the services indicated in the invoice have progressed to the level indicated, have been properly and timely performed as required herein that the Reimbursable Expenses included in the invoice have been reasonably incurred, that all obligations of the Engineer covered by prior invoices have been paid in full, and that, to the best of the Engineer's knowledge, information and informed belief, the amount requested is currently due and owing, there being no reason known to the Engineer the payment of any portion thereof should be withheld. Submission of the Engineer's invoice for final payment and reimbursement shall further constitute the Engineer's representation to the Owner of the amount invoiced, all obligations of the Engineer to others, including its consultants, incurred in connection with the Project, will be paid in full.

5.2 TIME FOR PAYMENT

5.2.1 The Owner shall make payment to the Engineer of all sums properly invoiced as provided in Paragraph 5.1, within thirty (30) days of the Owner's receipt thereof.

5.3 OWNER'S RIGHT TO WITHHOLD PAYMENT

5.3.1 In the event the Owner becomes credibly informed that any representations of the Engineer, provided pursuant to Subparagraph 5.1.2, are wholly or partially inaccurate, the Owner may withhold payment of sums then or in the future otherwise due to the Engineer until the inaccuracy, and the cause thereof, is corrected to the Owner's reasonable satisfaction.

5.4 REIMBURSABLE EXPENSES

5.4.1 Reasonable expenses for the project will only include expenses for ADEM Permit and Monitoring for the duration of the project and anything related to the ADEM process.

5.5 ENGINEER'S RECORDS

5.5.1 Documentation accurately reflecting the time expended by the Engineer and his personnel and records of Reimbursable Expenses shall be maintained by the Engineer and shall be available to the Owner for review and copying upon request.

ARTICLE VI TERMINATION

6.1 TERMINATION FOR CAUSE

6.1.1 This Agreement may be terminated by either party upon seven (7) days written notice to the other should such other party fail substantially to perform in accordance with its material terms through no fault of the party initiating the termination.

6.2 TERMINATION BY THE OWNER WITHOUT CAUSE

6.2.1 This Agreement may be terminated by the Owner without cause upon seven (7) days' written notice to the Engineer. In the event of such a termination without cause, the Engineer shall be compensated for all services performed prior to termination, together with Reimbursable Expenses incurred. In such event, the Engineer shall promptly submit to the Owner its invoice for final payment and reimbursement which invoice shall comply with the provisions of Paragraph 5.1.

ARTICLE VII MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

7.1.1 This Agreement shall be governed by the law of the State of Alabama.

7.2 INTENT AND INTERPRETATION

7.2.1 The intent of this Contract is to require complete, correct and timely execution of the Work. Any Work that may be required, implied or inferred by the Contract Documents, or any one or more of them, as necessary to product the intended result shall be provided by the Engineer.

7.2.2 This Contract is intended to be an integral whole and shall be interpreted as internally consistent. What is required by any one Contract Document shall be considered as required by the Contract.

7.2.3 When a word, term or phrase is used in this Contract, it shall be interpreted or construed, first, as defined herein; second, if not defined, according to its generally accepted meaning in the Engineering industry; and third, if there is no generally accepted meaning in the Engineering industry, according to its common and customary usage.

7.2.4 The words "include", "includes", or "including", as used in this Contract, shall be deemed to be followed by the phrase, "without limitation".

7.2.5 The specification herein of any act, failure, refusal, omission, event, occurrence or condition as constituting a material breach of this Contract shall not imply that any other, non-specified act, failure, refusal, omission, event, occurrence or condition shall be deemed not to constitute a material breach of this Contract.

7.2.6 Words or terms used as nouns in this Contract shall be inclusive of their singular and plural forms, unless the context of their usage clearly requires a contrary meaning.

7.3 TIME IS OF THE ESSENCE

7.3.1 Time limitations contained herein, or provided for hereby, are of the essence of this Agreement.

7.4 USE AND OWNERSHIP OF DOCUMENTS

7.4.1 The drawings, specifications and other documents or things prepared by the Engineer for the Project shall become and be the sole property of the Owner. The Engineer shall be permitted to retain copies thereof for its records

and for its future professional endeavors. Such drawings, specifications and other documents or things are not intended by the Engineer for use on other projects by the Owner or others. Any reuse by the Owner without the written approval of the Engineer, shall be at the sole risk of the Owner and the Owner shall indemnify and save harmless the Engineer from any and all liability, costs, claims, damages, losses and expenses including attorney's fees arising out of, or resulting from, such reuse by the Owner; provided however, that this agreement to indemnify and save harmless shall not apply to any reuse of documents retained by, or through, the Contractor.

7.5 SUCCESSORS AND ASSIGNS

7.5.1 The Engineer shall not assign its rights hereunder, excepting its right to payment, nor shall it delegate any of its duties hereunder without the written consent of the Owner. Subject to the provisions of the immediately preceding sentence, the Owner and the Engineer, respectively, bind themselves, their successors, assigns and legal representatives to the other party to this Agreement and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement.

7.6 NO THIRD-PARTY BENEFICIARIES

7.6.1 Nothing contained herein shall create a contractual relationship with, or any rights in favor of, any third party.

7.7 INSURANCE

The Engineer shall carry insurance of the following kinds and amounts in addition to any other forms of insurance or bonds required under the terms of the contract specifications. The Engineer shall procure and maintain for the duration of the job until final acceptance by the Owner, or as later indicated, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Engineer, his agents, representatives, employees or subcontractors.

A. MINIMUM SCOPE OF INSURANCE:

1. General Liability:

Insurance will be written on an occurrence basis. Claims-made coverage will be accepted only on an exception basis after the Owner's approval. General Liability Coverage and Owners Contractors Protective Insurance should be written by the same insurance company.

Commercial General Liability

Products and Completed Operations Contractual Personal Injury Explosion, Collapse and Underground Broad Form Property Damage

2. Professional Liability:

Insurance may be written on a "claims-made" basis, providing coverage for negligent acts, errors or omissions in the performance of professional services. Coverage will be maintained for three years after completion of the professional services and Certificates of Insurance will be submitted to the Owner within reasonable economic terms. Coverage shall be no less comprehensive than that which is carried by at least 25% of the registered Engineers or Engineering Firms contracting in the United States. Such coverage shall be carried on a continuous basis including prior acts coverage to cover the subject project. The professional liability insurance shall contain contractual liability coverage.

3. Automobile Liability:

Business Automobile Liability providing coverage for all owned, hired and non-owned autos. Coverage for loading and unloading shall be provided under either automobile liability or general liability policy forms.

4. Workers' Compensation Insurance:

Statutory protection against bodily injury, sickness or disease or death sustained by employee in the scope of employment. Protection shall be provided by a commercial insurance company or a recognized self-insurance fund authorized before the State of Alabama Industrial Board of Relations.

5. Employers Liability Insurance:

Covering common law claims of injured employees made in lieu of or in addition to a worker's compensation claim.

B. MINIMUM LIMITS OF INSURANCE:

1. General Liability:

Commercial General Liability on an "occurrence form" for bodily injury and property damage:

- \$1,000,000 General Aggregate Limit
- \$ 1,000,000 Products Completed Operations Aggregate
- \$ 1,000,000 Personal & Advertising Injury
- \$1,000,000 Each Occurrence

2. Professional Liability:

Insurance may be made on a "claims-made" basis:

\$ 100,000 Per Claim - Land Surveyors\$ 250,000 Per Claim - Other Professionals

3. Automobile Liability:

\$ 500,000 Combined Single Limit per accident for bodily injury and property damage.

4. Workers' Compensation:

As Required by the State of Alabama Statute

5. Employers Liability:

\$ 100,000 Bodily Injury by Accident or Disease \$ 500,000 Policy Limit by Disease

C. OTHER INSURANCE PROVISIONS:

The Owner is hereby authorized to adjust the requirements set forth in this document in the event it is determined that such adjustment is in the Owner's best interest. If the insurance requirements are not adjusted by the Owner prior to the Owner's release of specifications with regard to the project in question, then the minimum limits shall apply.

The policies are to contain, or be endorsed to contain, the following provisions:

A. All Coverages:

The Engineer is responsible to pay all deductibles. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Owner. Cancellation of coverage for non-payment of premium will require ten (10) days written notice to the Owner.

D. ACCEPTABILITY OF INSURERS:

Insurance is to be placed with insurers with an A. M. Best's rating of no less than A-V.

E. VERIFICATION OF COVERAGE:

The Owner shall be indicated as a Certificate Holder and the Engineer shall furnish the Owner with Certificates of Insurance reflecting the coverage required by this document. The A. M. Best Rating and deductibles, if applicable, shall be indicated on the Certificate of Insurance for each insurance policy. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates are to be received and approved by the Owner before work commences. The Owner reserves the right to require complete, certified copies of all required insurance policies at any time.

F. CONSULTANTS AND/OR SUBCONTRACTORS WORKING FOR THE ENGINEER:

The Engineer shall include all subcontractors and/or consultants as insureds under its policies or shall furnish separate certificates and/or endorsements for each subcontractor and/or consultant.

G. HOLD HARMLESS AGREEMENT:

1. Other Than Professional Liability Exposures:

The Engineer, to the fullest extent permitted by law, shall indemnify and hold harmless the Owner, its elected and appointed officials, employees, agents and specified volunteers against all claims, damages, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to personal injury, including bodily injury sickness, disease or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, and (2) is caused by any negligent act or omission of the Engineer or any of their consultants, or anyone directly or indirectly employed by them or anyone for whose acts they are legally liable. Such obligation should not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

2. Professional Liability:

The Engineer shall indemnify and hold harmless the Owner, its officers, agents, employees, and specified volunteers from and against any and all claims, demands, losses and expenses including, but not limited to attorney's fees, liability, or consequential damages of any kind or nature resulting from any negligent acts, errors, or omissions of the Engineer or any subconsultants employed by them or anyone employed by them or anyone for whose acts they are legally liable in the performance of the professional services under this agreement.

ARTICLE VIII OTHER CONDITIONS OR SERVICES

8.1 N/A

8.2 ENTIRE AGREEMENT

8.2.1 This Agreement represents the entire agreement between the Owner and the Engineer and supersedes all prior communications, negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both Owner and Engineer.

ENGINEER

OWNER

SEAL

<u>Nasser Amiri</u> By:

(SIGNATURE)

Nasser Amiri Amiri Engineering 2609 Artie Street SW Huntsville, AL 35805 Tommy Battle By: SEAL

(SIGNATURE)

Tommy Battle, Mayor City of Huntsville 308 Fountain Circle Huntsville, AL 35801

(DATE OF EXECUTION)

(DATE OF EXECUTION)

AMIRI ENGINEERING CORP.

Exhibit A

Geotechnical, Materials & Environmental Engineers

April 29, 2020

City of Huntsville Attn: Mr. William Bell Project Management P.O. Box 308 Huntsville, Alabama 35804

Subject: Proposal to Provide Special Inspections and Construction Materials Testing Services Monroe Street Parking Deck Huntsville, Alabama AMIRI Proposal No.: 194735CMT

Dear Mr. Bell,

Thank You for the opportunity to provide this proposal to provide Construction Materials Testing and Special Inspection Services for the subject project. Our services will be billed based on the actual time spent and charged based on the Unit Prices listed attached. However, based on the review of the project documents and our experience with similar construction, we have provided the attached budget for the consulting and construction materials testing services for the subject project. This proposal has been prepared in two (2) parts as follows:

Part I: Budget for Construction Materials Testing and Special Inspections

Part II: Unit Fee Schedule

We are looking forward to continuing to work with you on this project. If you have any questions about the information contained herein or if we may be of further service to you, please do not hesitate to contact us.

Sincerely,

AMIRI ENGINEERING CORPORATION

Nasser Amiri, P.E. Senior Geotechnical Engineer

<u>PART II</u>

SPECIAL INSPECTIONS AND CONSTRUCTION MATERIALS TESTING

Our services will be billed based on the actual work performed and the unit fees enclosed in this proposal. However, based on the Construction Materials quantities, review of the project documents and our experience with similar construction, we are providing the following budget estimate. It is our understanding that the proposed scope of work will include the following:

- 1. Earthwork and Pavement Construction.
- 2. Caisson Inspection and Testing.
- 3. Concrete testing for Caissons and the Structure.
- 4. Reinforcement Steel Observation.
- 5. Weld Inspection of precast Members.

1.0 Earthwork Testing

We understand that the building site will receive minor fill placement. However, it is anticipated that some undercutting and backfilling of the undercut void with Engineered Fill will be required. Based on our experience with similar construction, we anticipate that fill placement may take place in about 15 to 20 workdays. Based on this schedule, the following are the estimated costs associated with Earthwork Testing:

Standard Proctor on Borrow pit samples, 2 Sample @ \$95.00/Sample	\$	190.00
Engineering Technician for Field Density Testing, 60 Hours@ \$45.00/Hour	\$	2700.00
Nuclear Density Gauge Rental, 100 Hours @ \$5.00/Hour	\$	500.00
Professional Engineer for Proofrolling Observation, Undercutting Observation, and Report Preparation, 27 Hours @ \$90.00/Hour	\$	2430.00
Mileage, 200 Miles/Trip @ \$.50/Mile Subtotal for Earthwork Testing	<u>\$</u> \$	100.00

2.0 Caisson Inspection

Based on the structural plans for the subject project, we understand that a total of about 90 caissons will be installed for the proposed structure. Based on our experience with caisson installation in the site vicinity, we assume that in average, slightly more than one (1) caisson will be cast during each working day. Therefore, for the purpose of this proposal, we assume that caisson installation for this subject project will be accomplished within 80 working days. Typically, Caisson Inspection and Monitoring is performed on a full-time basis, and caisson

contractors typically work 10 hours per day or more. This work will be performed by a Geologist or an Engineering Staff and closely supervised by Project Manager, P.E. Based on the scope provided above, costs associated with caisson Inspection will be as follows:

Engineering Staff or Geologist to perform Caisson Inspection 75 working days @ 10 hours/day @ \$45.00/hour	\$	33,750.00
Project Manager, P.E. for Field Inspection, Consulting, Report Review and Prepare Caisson Summary Report, 30 hours @ \$90.00/hour	\$	2,700.00
Mileage, 200 miles@ 10 Miles/Trip @ \$0.5/Mile Estimated Budget for Caisson Inspection	<u>\$</u> \$	100.00

3.0 Concrete Testing

3.1 Concrete Placed in Caissons:

Where possible, we will have the Caisson Inspector to perform field testing and sampling of concrete to be placed in the Caissons. However, depending on the Caisson Contractor's schedule, occasions will arise that Caisson Inspector would have to continuously monitor Caisson drilling and perform inspection. In such instances, a technician will have to perform field concrete sampling.

Costs associated with transportation of concrete cylinders to laboratory, performing compressive strength tests on concrete cylinders and reporting for anticipated 90 sets of concrete cylinders (4 cylinders per set) is estimated to be on the order of \$5,000.

3.2 Concrete Placed in the Structure:

Based on review of the plans, retaining wall footings, retaining walls, grade beams, slab-ongrade, elevator and stair shaft bottoms, sidewalks, and wash pours over the precast slab panels will be cast in-place concrete. Concrete quantity or pour schedule were not available at this time. and our experience with similar construction, excluding the concrete to be placed within the caissons, there will be about 1200 cubic yards.

We assume that project specification requires that one set of concrete cylinders (4 specimens per set) be made from the first 25 yards plus one set per every 50 cubic yards thereafter, from on every day of concrete pour. We also assume that one (1) specimen will be tested at 7 days, two (2) specimens tested at 28 days and one (1) specimen retained in reserve for later, if required. The following are the estimated concrete schedules anticipated (excluding Caissons):

We assume that there will be a total of 60 pours for the slab on grade, grade beams, retaining wall footings, retaining walls, elevator and stair pit pours, and below grade elevator and stairwell walls, and cast-in-place WASH placed on the ends of the precast slabs. Based on this schedule, we suggest a budget of \$ 7,000.

4.0 Reinforcement Steel and Pre-pour inspections

The Reinforcement steel within the grade beams, retaining wall footings, retaining walls, grade beams, slab-on-grade, stair and elevator pits, and other miscellaneous cast-in-place concrete will be observed by professional engineer. For the purpose of this proposal, we assume that a total of 50 site visits for these inspections. Based on this schedule, we suggest a budget of \$ 3000.

5. Weld Inspection

All precast panels to include welds connecting embeds in the precast slabs, columns, beams and precast exterior panels require to be observed for weld type, weld length, placement pattern and weld quality. For the purpose of this proposal, we assume that welds will be observed in 10 to 14 episodes. Based on this schedule, our costs would be \$ 2500.

6.ADEM – NPDES Inspections

ADEM NPDES Permit application (NOI) and document monthly inspection of sediment control devices in accordance with Alabama Department of Environmental Management (ADEM). This will include one inspection per month and one inspection after every rain episode of ³/₄ inches for a period of 24 hours. For the purpose of this proposal, we assume that the entire project (earthwork as well as building construction) will be completed within 16 months. We also assume that a total of 20 inspections will be required. For the purpose of this proposal, we assume that ADEM Permit will be obtained by the Civil Engineer. However, field inspections will be performed by Amiri Engineering Corporation. The costs associated with ADEM-NPDES inspections, will be as follows:

Inspections; assume 20 inspections, including travel time & report prep.	
20 inspections @ \$100.00/Inspection	<u>\$2000.00</u>
Subtotal	\$ 2000.00

BUDGET SUMMARY

Earthwork Testing including retaining wall backfill testing, etc	\$	5920.00
Caisson Inspection	\$	36500.00
Concrete Testing for Concrete Poured in Caissons	\$	5000.00
Concrete Testing for Concrete Poured in Structures	\$	7000.00
Reinforced Steel Placement Observation and Inspection	\$	3000.00
Weld Inspection of Precast Panels	\$	2500.00
ADEM NPDES, Permit, Inspections and Closure	<u>\$</u>	<u>2000.00</u> 61,920.00

PART II

SCHEDULE OF SERVICES AND FEES FOR CONSTRUCTION MONITORING AND MATERIALS TESTING

FIELD TESTING PERSONNEL

PROJECT ENGINEERING TECHNICIAN to perform:

- 1. Field Inspection and molding of concrete cylinders
- 2. Density testing of structural fill
- 3. Concrete batch plant inspection
- 4. Coring of concrete and asphalt
- 5. Asphalt batch plant and placement observation
- 6. Roofing and waterproofing observation

Depending on the task performed, the Engineering Technician will have the certifications which are required.

Engineering Technician Lev	9	42.00/hour

PERSONNEL ENGINEERING CONSULTING

Staff Engineer/Geologist	45.00/hour
Senior Project Engineer/Manager, P.E	90.00/hour
of Experience and active Registered Engineering License in State of Alabama	

CONCRETE AND AGGEGATE TESTING

Laboratory compressive strength testing of concrete cylinders, grout and mortar Cubes, Flexural strength testing of beams:

1. Compressive strength test on concrete cylinders (4" x 8" cylinder)	\$ 10.50/ea.
2. Flexural strength test on concrete beams	\$ 20.00/ea.
3. Compressive cores (testing and reporting)	\$ 15.00/ea.
4. Compressive strength test on mortar cubes	\$ 120.0/ea.
5. Core End preparation, each side,	\$ 15.00/ea.
6. Compressive strength prisms, including capping	\$ 20.00/ea.
7. Prism End preparation, each side,	\$ 7.50/ea.
8. Concrete cylinder molds and caps	\$ 2.50/ea.
9. Concrete Core Machine Rental, per day	\$ 50.00/day
10. Diamond Bid Charges for coring, Per inch of depth per inch diameter	\$ 2.50/in.
Review of submitted mix design for compliance With ACI requirements	\$ 75.00/ea.
Sieve Analysis of aggregated (dry)	\$ 50.00/ea.
Material liner than the No. 200 sieve (washed)	\$ 40.00/ea.

SOIL TESTING

Moisture/Density Relationship	
a. Standard Proctor Compaction Method (ASTM D 69	98)\$100.00/ea.
b. Modified Proctor Method	
(ASTM D 1557)	\$110.00/ea.
Use of Nuclear Density Gauge	\$ 6.00/hr.
Natural Moisture Content Determination	\$ 7.00/ea.
Atterberg Limit Determination	\$ 55.00/ea.
Material Finer than No. 200 Sieve (washed)	\$ 25.00/ea.
Mechanical Grain Size Analysis	\$ 65.00/ea.
Dynamic Cone Penetrometer Test	\$ 10.00/ea.
Collect Bulk Samples for Proctor Test	\$ 20.00/ea.
Sieve and hydrometer analysis, ASTM D422	\$120.00/ea.
Specific gravity, ASTM D854	\$ 55.00/ea.
Unit weight, dry, undisturbed sample	\$ 55.00/ea.
PH test,	\$ 50.00/ea.
Remolding samples to specified conditions	\$ 40.00/ea.
Unit weight, dry, undisturbed sample	\$ 50.00/ea.
Unit Weight, split spoon samples	\$ 25.00/ea.
Californian Bearing Ratio Test,	\$400.00/ea.

ASPHALT TESTING

Field density Tests	\$ 25 00/ea
Nuclear Density Gauge Rental, per hour	\$ 6.00/ea
Asphalt Core thickness determination, cut cores and measure thickness	\$ 30 00/ea
Measurement of basestone thickness	\$ 20.00/ea
Bulk Specific Gravity of cores	\$ 25.00/ea
Marshall Density,	\$ 90 00/ea
Marshall Stability	\$ 90.00/ea.
	\$ 90.00/ea

REMARKS

Transportation charge of \$ 0.50 per mile will be included for all travel to and from the project location.

The personnel rates will be billed portal to portal with overtime billed for time in excess of eight (8) hours per day or for work performed on weekends or holidays at a rate of 1.5.