

**AGREEMENT BETWEEN OWNER AND ENGINEER  
FOR PROFESSIONAL SERVICES  
HINES & LYNN INTERSECTION IMPROVEMENTS PROJECT**

*This AGREEMENT*, dated \_\_\_\_\_, 2021, is between **Anderson Engineering, Inc.**, hereafter referred to as Engineer, and the **City of Republic**, Missouri, hereafter referred to as the City.

Whereas the City desires to appoint an Engineer to furnish Engineering Services for design, administration, consultation, inspection, surveying, materials testing and other services related to Intersection Improvements at Hines & Lynn in the City in Greene County, Missouri;

Whereas the City has previously solicited qualifications from engineers and the City has favorably considered the qualifications of the Engineer;


Whereas the Engineer hereby submits a proposal for the aforesaid Engineering work and attached hereto as "Exhibit A", which the terms and conditions of which proposal, including fees, are satisfactory to the City;

Now, therefore, this Agreement witnesseth that for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed that the Engineer shall furnish Engineering and Related Services and the City shall make payment for same in accordance with the terms and conditions set forth in said proposal and marked "Exhibit A" which said proposal is attached hereto and is hereby made a part hereof. The scope of work is limited to that specifically indicated in said "Exhibit A".

**CITY OF REPUBLIC, MISSOURI**

\_\_\_\_\_  
David Cameron, City Administrator

**ANDERSON ENGINEERING, INC.**

  
Andrew T. Novinger, Vice President

## **EXHIBIT 'A'**

### **AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES**

July 22, 2021

Anderson Engineering, Inc. (Engineer) hereby proposes to provide Engineering Services to the City of Republic, Missouri (City), specific to the City's Intersection Improvements Project at and in the vicinity of Hines and Lynn Streets in the City of Republic, Greene County, Missouri as described herein:

Project services provided by the Engineer may consist of, as a general description but are not limited to, engineering consultation, planning, surveying, easement preparation, materials testing, observation, reports, MDNR application preparation, bidding assistance, construction administration, geotechnical assistance and other services related to the design and administration of construction of intersection improvements. The project and proposed services are further described as follows:

#### **A. PROJECT SCOPE:**

Proposed services as described herein are explicitly limited to the design of intersection improvements generally consisting of a roundabout (approximately 90' diameter with no signals) and the modification of existing pavement and water/storm/sewer facilities in the vicinity to accommodate the proposed improvements as well as other related work. Additional land and easements may be required and assistance may be provided with related legal descriptions and surveys.

#### **B. BASIC SERVICES:**

Basic Services for the project are generally described as follows.

##### **1. Boundary Surveying and Easement Assistance**

- a. Boundary surveying will be provided as needed to generally locate existing right-of-way and for easements adjacent to the existing intersection.
- b. Assistance may be provided with the acquisition of adjacent property if necessary. A title search may be necessary to verify the location of the existing easements and boundaries and any related fees by the title search entity shall be paid directly by the City. Easement legal descriptions may be provided along with draft easement forms. Six temporary easements and four permanent easements are anticipated.

##### **2. Design Phase**

The Design Phase will be based on the accepted preliminary layout and will generally include the following services:

- a. Preparation of detailed Construction Plans and Technical Specifications for the construction of improvements will be provided. Construction plans may include general layouts, profiles, site grading, erosion control, details and other related information. MoDOT standard specifications for applicable materials such as pavement will be utilized unless indicated otherwise.
- b. Opinions of cost may be provided for consideration after preliminary design and prior to bidding per the layouts current at those times. Additional opinions may be provided as an additional service.

### **3. Bidding Assistance**

Bidding Assistance may generally include the following:

- a. Preparation of Bid and Contract Documents to be used for bidding the proposed work.
- b. Copies of Plans and Bid Documents will be made available for bid solicitation with a fee for said documents to be paid by the requesting bidder to the Engineer. Four copies may be provided to the City at no additional cost. Additional copies may be provided per reimbursable expenses.
- c. Assistance will be provided with preparation of a bid advertisement for the project. The City shall place the advertisement in a paper approved by the funding agencies and pay related advertisement fees.
- d. The Engineer may respond to bidder questions, assist with the bid opening, and provide a general review of bids and tabulation to assist in determination of the apparent low bidder.

### **4. Construction Services**

The Construction Phase of the project will be undertaken following the issuance of a notice to proceed and will generally include the following:

- a. Attend preconstruction meeting(s) that may be held as necessary to discuss the project with the selected contractor and City staff to answer questions related to the project and generally discuss the project.
- b. Assistance may be provided with supporting field services and observation of construction on an as needed basis, to coordinate design changes (if required) and to answer questions that may arise. A majority of observation is to be provided by the City and any observation (by City or Engineer) is to be general in nature and may not disclose all construction deficiencies and shall not relieve the Contractor of their responsibility to complete the project per the approved construction documents.
- c. Construction staking of the improvements. The layout of the proposed improvements will be staked (1) one time per contract. Any additional staking or restaking that is required during construction after initial staking is completed may be the duty of the Contractor or requester per Engineer's hourly rates.
- d. Materials testing of pavements, concrete and soils may occur to assess the adequacy of materials. On-site field assistance may be provided.

### **5. Water and Sewer Utility Design Services**

Services may be provided related to redesign of existing water and sewer utilities as needed to facilitate proposed project improvements. Design will be based on topographic surveying and info. provided by the City and generally as follows:

- a. Review of information provided by the City related to existing utility locations and characteristics.
- b. Preparation of detailed contract drawings and specifications for the construction of the water and sewer improvements and for submittal to MDNR.
- c. Preparation and submittal of an MDNR application for a construction permit. The application fee shall be paid directly by the City to the MDNR.

Note: It is assumed that work will be by City crews. If bidding and construction management is requested related services may be provided as an additional service or as a separate agreement. Electrical design is not included or believed necessary.

## 6. Additional Services

Additional Services shall be considered any services requested not otherwise explicitly indicated herein. Fees for additional services shall be per the attached hourly rates and/or by the terms otherwise indicated herein. Separate agreement may be provided when requested by the City.

- a. Meeting Representation: Engineer's staff may attend requested meetings including those with the City, the Board, easement grantors, agencies, and the public when requested or as needed during the project. Materials may be provided per reimbursable rates.
- b. Assistance may be provided with the general review of pay requests, assistance in preparation and review of change orders, and consultation about construction on an as needed basis.
- c. Preparation of Record Documents based on information provided by the Contractor, the City's representatives and Engineer's general observation may be provided.
- d. Additional Site Surveys (Boundary) & Easements may be provided if requested. The Engineer may provide additional assistance in preparation of boundary surveys, easement documents and/or deed descriptions to convey the rights required for construction of improvements from their respective owners to the City including preparation of necessary easements, preparation of legal descriptions for warranty deeds, general performance of research, field location and field surveys as required, lot pinning, and survey plat provision when required.
- e. Redesigns/Change Orders: If necessary, the Engineer may provide redesigns or change orders to facilitate changes in scope after initial design.
- f. Other services not indicated specifically herein may be provided as an additional service when requested and reasonably necessary and authorized.

## C. PAYMENTS TO THE ENGINEER

The City shall pay the Engineer for the services rendered as described previously on the following basis:

<b>1. Boundary Surveying &amp; Easement Assistance</b>	
a. Boundary Surveying	\$ 4,800.00
b. Easement Assistance	\$ 7,000.00
<b>Subtotal</b>	<b>\$ 11,800.00</b>
<b>2. Design Phase Services</b>	<b>\$ 148,862.00</b>
<b>3. Bidding Assistance</b>	<b>\$ 18,000.00</b>
<b>4. Construction Phase</b>	
a. Construction Administration (if requested)	\$ Hourly (NTE \$20,000)
b. General Construction Observation (if requested)	\$ Hourly (NTE \$20,000)
c. Construction Staking	\$ Hourly (NTE \$12,000)
d. Material Testing	\$ Hourly (NTE \$8,700)
<b>5. Water and Sewer Utility Design Services</b>	<b>\$ 14,800.00</b>

**Note:** Preliminary Phase services were included in previous project preliminary services agreement and not included herein. Staking is only for the improvements designed by the Engineer and does not include such items as gas, electric, telephone, cable, or other items.

**GENERAL CONDITIONS:** Please refer to the attached “Exhibit B” - General Conditions and the terms and conditions therein which shall be considered part of this agreement.

**OTHER**

This proposal is valid for acceptance within 60 days from the date on this proposal. This proposal includes providing two sets of signed plans and one set of technical specifications.

This proposal includes one set of reviews with the state governmental agency identified above. If additional reviews are required not as a result of errors by Anderson Engineering, then that additional work will be billed at our standard hourly charge rates in addition to the fees listed above.

**ASSUMPTIONS**

We have also assumed that all right of ways, easements, property ownership issues, and private utilities affecting the project will be provided by you to us. We will make a Utility Locate call to identify public utilities; however, we have assumed that all public utilities will be located accurately by the Utility Locator.

**GENERAL INFORMATION**

Please note that any changes in the scope of work to be performed, or changes in the information provided to us, such as changes in the location of proposed well improvements, which results in additional work will be billed at our standard hourly charge rates in addition to the fees listed above.

There are many additional, related services that we could perform, but since this proposal is limited in nature, this proposal does not include any electric utility extension design, any design service not expressly listed above, and submittal of permits to any other regulatory agencies other than Missouri Department of Natural Resources(MDNR). Anderson Engineering would be happy provide a proposal for these services upon request and address as an additional service.

**NOTICE OF LIMITATIONS:**

Changes in scope or other items that result in redesign may result in additional fees and considered additional services. Site safety, security, location of utilities, and means and methods of construction are the responsibility of the Contractor. The location of utilities is based upon information provided by others and subject to any inaccuracies therein. Modification, relocation or assessment of utilities such as electric or telephone are not included herein. Review times by MDNR or other applicable agencies is subject to those agencies and no guaranty is given as to when approvals may be obtained or the timeline of the submittal and approval process. Full time/resident construction observation is not included and is the responsibility of the Client unless accepted as additional service.

## GENERAL CONDITIONS

**1. PAYMENT TERMS:** A/E will submit invoices to CLIENT monthly and/or upon completion of services. Payment is due upon receipt regardless of whether CLIENT has been, or is to be, reimbursed by any other party. CLIENT agrees to pay a service charge of one and one half percent (1 ½%) per month on accounts 45 days past due. If requested by CLIENT, LIEN WAIVERS WILL BE PROVIDED UPON PAYMENT. All collection costs, including reasonable attorney fees will be assessed to CLIENT which CLIENT agrees to pay.

**2. INSURANCE:** A/E maintains Worker's Compensation and Employer's Liability Insurance in conformance with applicable state law. A/E has insurance under public liability and property damage which A/E deems to be adequate. Certificates of insurance evidencing such coverage will be provided, if requested.

**3. STANDARD OF CARE:** The only warranty or guarantee made by A/E in connection with the services performed hereunder, is that A/E will use that degree of care and skill ordinarily exercised under similar conditions by reputable members of the profession currently practicing in the same or similar locality. NO OTHER REPRESENTATION, WARRANTY, OR GUARANTEE EXPRESSED OR IMPLIED IS MADE OR INTENDED BY PROPOSAL, SERVICES PERFORMED OR BY FURNISHING ORAL OR WRITTEN REPORTS.

**4. RIGHT-OF-ENTRY:** CLIENT will furnish right-of-entry on the property for A/E employees, agents, and subcontractors to perform the service and represents that it has obtained the needed permits and licenses for the project. A/E will take reasonable precautions to minimize damage to the property caused by its operations, but have not included in the fee the cost of restoration of damage which may result. If CLIENT desires A/E to restore the property to its former condition, A/E will accomplish this and add the cost to the fee.

**5. ELECTRONIC FILES:** Any changes to the electronic specifications by either the CLIENT or A/E are subject to preview and acceptance by the other party. Additional services by A/E made necessary by changes to the electronic file specifications shall be compensated for as Additional Services.

Electronic files furnished by either party shall be subject to an acceptance period of 30 days during which the receiving party agrees to perform appropriate acceptance tests. The party furnishing the electronic file shall correct any discrepancies or errors detected and reported within the acceptance period. After the acceptance period, the electronic files shall be deemed to be accepted and neither party shall have any obligation to correct errors or maintain electronic files. The CLIENT is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by A/E and electronic files, the signed or sealed hard-copy construction documents shall govern.

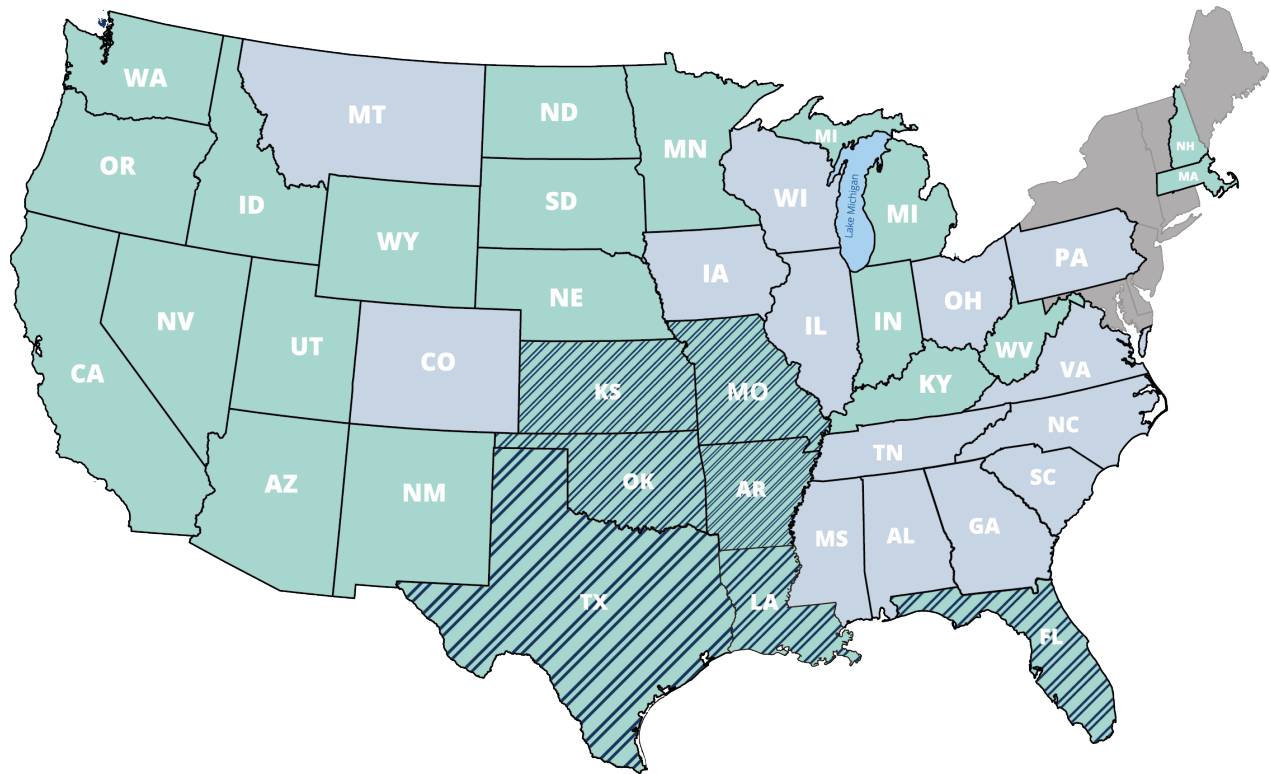
**6. SAFETY:** Should A/E provide any services at the job site during construction, CLIENT AGREES that, in accordance with generally accepted construction practices, the contractor will be solely responsible for working conditions on the job site, including safety of all persons and property during the performance of the work, and compliance with OSHA regulations, and these requirements will apply continuously and not limited to normal working hours.

**7. NO RESPONSIBILITY FOR CONTRACTOR'S PERFORMANCE:**

Except for its own subcontractors and employees, Anderson Engineering shall not be responsible for safety precautions, the quality of any contractor's work, acts or omissions of any contractor, subcontractor, supplier, or other person at the project site.

**8. SUSPENSION OF SERVICES/TERMINATION:** Either party may suspend performance immediately upon becoming aware of a breach of the terms of this agreement by the other party and provide notice of its intention to terminate. In the event A/E determines there may be a significant risk that A/E's invoices may not be paid on a timely basis A/E may suspend performance and/or retain any reports or other information until Client provides A/E with adequate assurances of payment. The filing of a voluntary or involuntary bankruptcy petition, appointment of a receiver, assignment for the benefit of creditor or other similar act of insolvency shall constitute a breach. Termination will become effective fourteen (14) calendar days after receipt of notice by the breaching party unless the event(s) giving rise to the breach are remedied within that time frame.


**9. GOVERNING LAWS:** This Agreement shall be governed in all respects by the laws of the State of Missouri.



## LICENSED IN

 Civil Engineering

 Civil Engineering  
Structural Engineering

 Civil Engineering  
Land Surveying  
Structural Engineering

## Springfield, MO

Joplin, MO  
Carthage, MO  
Monett, MO

Fort Leonard Wood, MO  
Destin, FL  
Harrisonville, MO

Kansas City, MO  
Rogers, AR  
Columbia, MO



### **Civil Engineering**

- Site Development
- Wastewater Collection and Treatment
- Water Supply, Distribution and Treatment
- Storm Water Collection Management
- Floodplain Analysis
- Transportation Engineering
- Bridges
- Industrial/Manufacturing Development
- Funding Application Assistance

### **Structural Engineering**

- Military and Industrial
- Components and Equipment Support
- Aircraft Hangers
- Residential
- Evaluations and Inspections
- Commercial and Public Facilities

### **Geotechnical Services**

- Explorations, Studies and Surveys
- Foundation Analysis and Design
- In-Situ Testing
- Exploratory Drilling
- Monitoring Wells and Piezometers
- Laboratory Testing and Analysis
- Mining and Sinkhole Investigations

### **Construction Materials Testing and Inspection**

- AASHTO Certified Materials Testing Labs
- Concrete, Asphalt, Soil, Rock, Aggregate Testing
- Structural Steel and Welds Inspections
- Triaxial and Consolidation, Permeability Testing

### **Geographic Information Services**

- Interactive Mapping Services
- Spatial Information Analysis
- Detailed Visualizations of Projects

### **Commercial Drone Services**

- Certified through the Federal Aviation Administration
- Aerial Inspections
- Thermal Imaging
- Construction Site Progress
- Aerial Topography Photography

### **Land Surveying**

- Boundary Surveys
- Site, Topographic and Utility Surveys
- ALTA/ACSM Title Surveys
- GIS Services/Asset Management Services
- Construction Staking
- Job site Quantity Measurements



## FEE SCHEDULE

THIS SCHEDULE IS PREPARED AS A METHOD OF CHARGING FOR SERVICES ON A UNIT AND HOURLY BASIS. THE RATES ARE BASED UPON THE SKILL AND KNOWLEDGE OF OUR PERSONNEL. INVOICES WILL BE SUBMITTED MONTHLY AND/OR UPON COMPLETION OF SERVICES. PAYMENT IS DUE ON RECEIPT OF THE INVOICE. ACCOUNTS OVER FORTY-FIVE DAYS ARE SUBJECT TO A 1 1/2% MONTHLY SERVICE CHARGE. SERVICES WILL BE PERFORMED IN ACCORDANCE WITH ACCEPTED STANDARD METHODS UTILIZING PROPERLY TRAINED, REGISTERED, LICENSED, OR CERTIFIED PERSONNEL AS REQUIRED. HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR CONSTRUCTION METHODS, MATERIALS, PROCEDURES, PRODUCTS, OR ACTIONS OF OTHERS.

ANDERSON ENGINEERING, INC., BY  EFFECTIVE: 1/1/2021 THRU 12/31/2021

Jerrod Hogan, PLS, C.E.O.

## BASIC CHARGES

### PERSONNEL (HOURLY RATES):

PRINCIPAL	\$	262.50
PRINCIPAL ENGINEER	\$	218.50
ENGINEERING MANAGER	\$	196.50
PROJECT MANAGER	\$	177.50
PROJECT ENGINEER	\$	157.50
ASSOCIATE ENGINEER	\$	133.00
DESIGN ENGINEER	\$	106.00
PROJECT DESIGNER	\$	139.50
SENIOR DESIGNER	\$	125.50
DESIGNER III	\$	113.50
DESIGNER II	\$	102.00
DESIGNER	\$	91.50
PROJECT COORDINATOR	\$	101.00
PROJECT COORDINATOR ASSISTANT	\$	65.00
PRINCIPAL SURVEYOR	\$	196.50
SURVEY MANAGER	\$	168.00
PROJECT SURVEYOR	\$	131.50
ASSOCIATE SURVEYOR	\$	110.50
LAB MANAGER	\$	142.00
TECHNICIAN IV - SURVEY/LAB SPECIAL	\$	105.00
TECHNICIAN III - SURVEY/SENIOR LAB	\$	86.00
TECHNICIAN IIS - SURVEY	\$	72.00

TECHNICIAN II - LAB	\$	62.00
TECHNICIAN I - SURVEY/LAB AIDE	\$	51.50
ENVIRONMENTAL SPECIALIST II	\$	131.50
ENVIRONMENTAL SPECIALIST I	\$	105.00
ONE MAN SURVEY CREW	\$	124.50
TWO MAN SURVEY CREW	\$	157.50
THREE MAN SURVEY CREW	\$	210.00
FOUR MAN SURVEY CREW	\$	261.50
GIS DIRECTOR	\$	164.00
GIS MANAGER	\$	136.50
GIS ANALYST	\$	126.00
GIS SPECIALIST	\$	105.00
GIS TECHNICIAN	\$	89.50
IBC FIRESTOP INSPECTOR	\$	105.00
DRILLING COORDINATOR	\$	139.50
PROJECT REPRESENTATIVE III	\$	105.00
PROJECT REPRESENTATIVE II	\$	89.50
PROJECT REPRESENTATIVE I	\$	76.00
STRUCTURAL STEEL INSPECTOR	\$	105.00
AWS CERTIFIED WELD INSPECTOR	\$	105.00
PARTICLE & DYE TESTING - LEVEL II	\$	100.00
ADMINISTRATIVE ASSISTANT	\$	52.50

### EXPENSES & EQUIPMENT CHARGES:

VEHICLE (3/4 TON OR LESS)	\$	0.70 /MILE
VEHICLE (SUBURBAN & 1 TON)	\$	0.80 /MILE
WATER TRUCK PER DAY	\$	81.00 /DAY
WATER TRUCK PER MILE	\$	0.77 /MILE
LIDAR SCANNER	\$	500.00 /DAY
MOBILE LIDAR	\$	1,000.00 /MILE (\$5,000 MIN)

GPS	\$	303.50 /DAY
ROBOTIC TOTAL STATION	\$	281.00 /DAY
DRONE	\$	447.50 /DAY
COPIES	\$	0.16 EACH
PRINTING PLANS	\$	0.56 /SF + TECH TIME

### REIMBURSABLES

COST PLUS 15% - TRAVEL EXPENSES (INCLUDING MEALS & LODGING) OUTSIDE PRINTING, CONSUMABLE MATERIALS, AND SUBCONTRACTOR EXPENSES.

### MINIMUM CHARGE

THERE IS A MINIMUM CHARGE OF 2 HOURS OF TECHNICIAN TIME PER JOB SITE VISIT, EXCEPT FOR CONCRETE CYLINDER AND SAMPLE PICKUP

**OVERTIME (OVER 8 HOURS PER DAY OR SATURDAY, SUNDAY, AND HOLIDAY WORK) – 1.5 TIMES THE HOURLY RATE**

**HOURLY RATES** - APPLY TO MEETING AND TRAVEL TIME, INCLUDING CONCRETE CYLINDER PICK-UP, FOR ALL PERSONNEL

**DEPOSITION OR COURT TESTIMONY** – 1.5 TIMES THE HOURLY RATE

**HAZARDOUS OPERATION CHARGE:**

FOR LEVEL C: 1.5 TIMES THE BASIC CHARGE; FOR LEVEL A &amp; B: 2 TIMES THE BASIC CHARGES

**FIELD TESTING AND INSPECTION CHARGES:**

FIELD DENSITY (COMPACTION TEST)	.....	BASIC CHARGES + \$	9.50 /EACH
CONE PENETROMETER	.....	BASIC CHARGES + \$	18.00 /EACH
FLOOR FLATNESS EQUIPMENT	.....	BASIC CHARGES + \$	297.00 /EACH
DYNAMIC CONE PENETROMETER	.....	BASIC CHARGES + \$	29.50 /EACH
CORING EQUIPMENT CHARGES	.....	BASIC CHARGES + \$	118.50 /DAY
MAGNESIUM STRAIGHT EDGE	.....	BASIC CHARGES + \$	52.50 /DAY
ROLLING STRAIGHT EDGE	.....	BASIC CHARGES + \$	236.50 /DAY

**LABORATORY TEST CHARGES:****AGGREGATES (ASTM)**

	UNIT CHARGE
L.A. ABRASION, SMALL AGG. (C131)	\$ 151.00
L.A. ABRASION, LARGE AGG. (C535)	\$ 184.00
SULFATE SOUNDNESS TEST (C88): 5-CYCLE	\$ 254.00
SULFATE SOUNDNESS TEST (C88): 10-CYCLE	\$ 354.00
SULFATE SOUNDNESS TEST (C88): 20-CYCLE	\$ 500.00
SIEVE ANALYSIS, DRY AGG. (C136)	\$ 62.00
SIEVE ANALYSIS (C117)	\$ 75.50
SIEVE ANALYSIS (C117, C136)	\$ 93.50
SPECIFIC GRAVITY, FINE AGG. (C128)	\$ 68.50
SPECIFIC GRAVITY, COARSE AGG. (C127)	\$ 68.50
LIGHTWEIGHT PIECES IN AGG. (C123)	\$ 106.00
ORGANIC IMPURITIES (C40)	\$ 62.00
FLAT & ELONGATED PIECES (D4791)	\$ 93.50
DELETERIOUS MATLS (MODOT TM71)	\$ 82.00
CLAY LUMPS & FRIABLE PARTICLES (C142)	\$ 101.00
DRY RODDED UNIT WEIGHT (C29)	\$ 44.00

**MASONRY TESTS (ASTM)**

COMPRESSIVE STRENGTH 4" BLOCK	\$ 30.50
COMPRESSIVE STRENGTH 6" BLOCK	\$ 38.00
COMPRESSIVE STRENGTH 8" BLOCK	\$ 52.50
COMPRESSIVE STRENGTH 12" BLOCK	\$ 87.00
COMPRESSIVE STRENGTH MORT/GR CUBE	\$ 14.50
GROUT PRISM	\$ 14.50
MORTAR CYLINDER (2" X 4")	\$ 14.50
ABSORPTION, MASONRY BLOCK	\$ 50.50
LINEAR SHRINKAGE (SET OF 3)	\$ 379.00

**BITUMINOUS TESTING**

ASPHALT CONTENT	\$ 113.50
ASPHALT CONTENT & AGG. GRADATION	\$ 189.00
SIEVE ANALYSIS EXTRACTION	\$ 93.50
MARSHALL TEST, FIELD - 3 PUCKS	\$ 93.50
MARSHALL TEST, LAB - 3 PUCKS	\$ 138.50
RETAINED STABILITY	\$ 214.00
ASPHALT CORE DENSITY, EACH	\$ 30.50
THEORETICAL MAX. DENSITY	\$ 151.00

**CONCRETE/ROCK CORE**

CORE TRIM & TEST	\$ 50.25
THICKNESS (AASHTO T148/ASTM C174)	\$ 28.50

**SOIL TESTS (ASTM)**

	UNIT CHARGE
ATTERBERG LIMITS (D4318)	\$ 68.50
SWELL TEST, 1/16 TSF (D4546)	\$ 184.00
SWELL PRESSURE (D4546)	\$ 347.50
SHRINKAGE LIMIT (D4643)	\$ 68.50
MOISTURE CONTENT (2216)	\$ 7.50
SIEVE + HYDROMETER	\$ 170.00
HYDROMETER ONLY (D422)	\$ 93.50
USCS CLASSIFICATION	\$ 31.50
PERCENT PASSING #200	\$ 50.50
SPECIFIC GRAVITY (D845)	\$ 87.00
UNCONFINED COMPRESSION	\$ 60.00
UNCONFINED/TRIAXIAL, REMOLDED	\$ 93.50
TRIAXIAL TEST, PP, CU w/PP /POINT	\$ 368.50
ORGANIC MATTER (D2974-C)	\$ 62.00
PENETROMETER	\$ 5.50
SAMPLE PREP, PER HOUR	\$ 60.00
SHELBY TUBE DENSITY	\$ 38.00
RESISTIVITY, 1 POINT	\$ 73.50
RESISTIVITY, MINIMUM	\$ 84.00
PERMEABILITY, FALLING HEAD	\$ 453.50
PERMEABILITY, FLEXIBLE WALL	\$ 428.50
PERMEABILITY CONSOLIDATION TEST	\$ 189.00
CONSOLIDATION TEST, TO 8 TSF	\$ 480.00
CONSOLIDATION TEST, >8 TSF	\$ 62.00
CALIFORNIA BEARING RATIO, LAB, /PNT	\$ 126.00
Ph	\$ 62.00

**LABORATORY COMPACTION TESTS**

MOISTURE DENSITY RELATIONSHIP	
STD. PROCTOR (D698), MTH. A & B	\$ 181.50
STD. PROCTOR (D698), MTH. C	\$ 214.00
STD. PROCTOR (D698), 1 POINT	\$ 64.00
MOD. PROCTOR (D1557), MTH. A & B	\$ 221.50
MOD. PROCTOR (D1557), MTH. C	\$ 299.50
MOD. PROCTOR (D1557), 1 POINT	\$ 70.50
RELATIVE DENSITY	\$ 454.50

**CONCRETE TESTING**

4" X 8" OR 6" X 12" TEST MOLD	\$ 2.25
6" X 12" CYLINDER, TESTED AND MOLD	\$ 17.25
4" X 8" CYLINDER, TESTED AND MOLD	\$ 12.25
SAW CONCRETE CYLINDER	\$ 29.75
BEAM FLEXURAL STRENGTH	\$ 42.00
CONCRETE BEAM, NOT TESTED	\$ 23.75
SAMPLE PREP, CLIENT MADE (5 CYLS.)	\$ 31.50



**DRILLING SERVICES CHARGES:**

ENGINEER, STANDBY TIME, STAKEOUT CREW & OFFICE PERSONNEL	BASIC CHARGES
MILEAGE - CME 55 RIGS ( \$100 MINIMUM)	\$ 2.89 /MILE
MILEAGE - CME 75 RIGS ( \$100 MINIMUM)	\$ 3.27 /MILE
MILEAGE - CME 550 RIGS ( \$150 MINIMUM)	\$ 3.27 /MILE
CME 55 DRILL RIG AND TWO MAN CREW	\$ 211.00 /HOUR
CME 75 DRILL RIG AND TWO MAN CREW	\$ 245.50 /HOUR
CME 550 DRILL RIG AND TWO MAN CREW	\$ 245.50 /HOUR
CORE BIT CHARGE	\$ 6.92 /FOOT
ROCK CORE SET UP	\$ 86.05 /BORING
DECONTAMINATION EQUIPMENT	\$ 167.00 /DAY
GROUT MACHINE	\$ 278.50 /DAY
PLUG & BACKFILL BORINGS (UP TO 20 FT. DEPTH)	\$ 13.00 /EACH
ALL-TERRAIN DRILL RIG RENTAL SURCHARGE	\$ 334.00 /DAY
CME 55 EQUIPMENT RENTAL SURCHARGE	\$ 184.00 /DAY
CME 75 EQUIPMENT RENTAL SURCHARGE	\$ 236.50 /DAY
WATER TRUCK TANK & EQUIPMENT SURCHARGE	\$ 89.50 /DAY
RESISTIVITY, FIELD TESTING, EQUIPMENT	\$ 289.00 /DAY
DOWNHOLE, CAMERA, ROCK CORE	\$ 131.50 /DAY
MINIMUM DRILLING CHARGE	\$ 2,000.00 /DAY

**DRILLING ITEM:**

	<b><u>DEPTH:</u></b>				
	0' TO 20'	20' TO 40'	40' TO 60'	60' TO 100'	100' TO 150'
SOIL OVERBURDEN, 4 IN. AUGER	\$ 9.20	\$ 10.25	\$ 11.35	\$ 12.70	\$ -
SOIL OVERBURDEN, 6 IN. HS AUGER	\$ 11.10	\$ 12.70	\$ 13.75	\$ 15.40	\$ -
SOIL OVERBURDEN, 8 IN. HS AUGER	\$ 11.90	\$ 13.75	\$ 16.75	\$ 19.50	\$ -
SOIL OVERBURDEN, 10 IN. HS AUGER	\$ 12.70	\$ 19.50	\$ -	\$ -	\$ -
SOIL OVERBURDEN, 12 IN. HS AUGER	\$ 15.40	\$ 23.60	\$ -	\$ -	\$ -
ROCK PENETRATION	\$ 34.35	\$ 38.40	\$ 40.85	\$ 47.55	\$ 70.10
NQ CORING	\$ 44.65	\$ 47.55	\$ 53.55	\$ 61.65	\$ -
STANDARD PENETRATION TEST	\$ 25.40	\$ 31.60	\$ 38.70	\$ 44.65	\$ -
3IN. SHELBY TUBES	\$ 31.60	\$ 38.70	\$ 44.65	\$ 51.40	\$ -

NOTE: A HIGHER PRICE WILL APPLY WHEN THERE IS AN INCREASED RISK OF LOSING AUGERS OR BREAKING CORE BARRELS.

