PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT made and effective as of thed	lay of	_, 2022 by
and between ST. CHARLES PARISH acting herein by and throu	gh its President, v	vho is duly
authorized to act on behalf of said Parish, hereinafter called the	e OWNER, and C	RESCENT
ENGINEERING & MAPPING, LLC, a corporation and/or limited li	iability company ac	cting herein
by and through its Contracting Officer, hereinafter called CONSU	JLTANT, duly aut	thorized by
corporate resolution or certificate of authority attached hereto and	made a part hereof	f. Whereas
the Owner desires to employ a professional consulting firm to p	perform consulting	work and
services for KING AND HAHN STREET DRAINAGE IMPROVE	MENTS Project N	o. P220202
as described in Ordinance Nowhich is attached hereto	o and made a part l	hereof.

1.0 GENERAL TERMS

The Owner agrees to employ the Consultant and the Consultant agrees to perform professional services required for the project described above. Consultant will conform to the requirements of the Owner and to the standards of the agencies participating with the Owner in the Project. The Consultant will coordinate all work between the Owner and all participating agencies and regulating agencies, if needed. Written authorization to begin different phases of the project will be given to the Consultant by the Owner, including Conceptual, Preliminary Design, Final Design, Bidding Assistance and Construction and Services. The Owner may terminate the Contract by written notification and without cause per Section 11.0 during any phase of the project.

The Consultant shall at all times during this Agreement maintain a valid Louisiana Consulting License and any other applicable licenses necessary for performance of the Project.

All work shall be under the direction of the Owner, and all plans, specifications, etc. shall be submitted to the Owner and all approvals and administration of this contract shall be through the Owner.

2.0 PROJECT

2.1 The Owner hereby contracts with the CONSULTANT to perform all necessary professional services in connection with the project as defined as follows:

KING AND HAHN STREET DRAINAGE IMPROVEMENTS Projects No. P220202

2.2 The Project consist of the scope of services and work as defined in Attachment "A" hereto.

- 2.3 Consultant shall perform all scope of services and work in accordance with the Schedule as defined in Attachment "B" hereto unless otherwise mutually agreed upon by the parties in writing.
- 2.4 The Consultant agrees to comply with all Federal, State, and Local Laws and Ordinances applicable to the scope of services and work or in entering any other agreement with any another party to complete the work.

3.0 SERVICES OF CONSULTANT

- 3.1 Consultant shall provide Owner professional work and services in all phases of the Project to which this Agreement applies and as hereinafter provided to properly plan and execute the work on the project(s) assigned to the Consultant. These services may include but may not be limited to serving as Owner's professional consulting representative for the Project, providing professional consultation and advice, and furnishing customary civil, surveying, geotechnical, structural, mechanical, electrical, instrumentation and control consulting services and construction consulting and inspection.
- 3.2 Services provided by the Consultant shall be performed in accordance with generally accepted professional consulting practice at the time and the place where the services are rendered.
- 3.3 Consultant shall obtain from Owner authorization to proceed in writing for each phase of the Project.
- 3.4 Consultant shall provide minutes of all meetings with St. Charles Parish regarding any phase of the Project.
- 3.5 Consultant shall provide work and services to complete the project, including all necessary services described herein or usually implied as a prerequisite for the performance of the services whether or not specifically mentioned in this agreement, including attendance by the Consultant at project conferences and public hearings.
- 3.6 The Phases of the Project are as defined in Attachment "A".

4.0 OWNERSHIP OF DOCUMENTS

- 4.1 Documents including but not limited to plans, specifications, maps, basic survey notes, sketches, charts, computations and all other data prepared or obtained under the terms of this authorization shall become the property of the Owner and shall be made available for Owner's inspection at any time during the Project and, shall be delivered to the Owner prior to termination or final completion of the Contract.
- 4.2 Consultant may retain a set of documents for its files.
- 4.3 Reuse of Documents. Any reuse of documents or materials without written authorization or adaptation by Consultant to the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Consultant or to Consultant's independent professional associates, subcontractors, and consultants.
- 4.4 No materials, to include but not limited to reports, maps or other documents produced as a result of this Contract, in whole or in part, shall be available to Consultant for copyright purposes. Any such materials produced as a result of this Contract that might be subject to copyright shall be the property of the Owner and all such rights shall belong to the Owner, and the Owner shall be sole and exclusive entity who may exercise such rights.

5.0 SUPPLEMENTARY SERVICES

The Consultant shall provide, when requested in writing by the Owner, supplementary services not included in the basic work and services.

The compensation to the Consultant for the supplemental services, when performed by the Consultant, shall be in the form of a lump sum, billable hours, or "not to exceed" hourly rate which is mutually agreeable to the Owner and the Consultant in writing.

Such supplementary services may include the following:

- A. Soil investigations
- B. Laboratory inspection of materials and equipment
- C. Right-of-Way, easement and property acquisition surveys, plats, maps and documents
- D. Any major revisions for which the Consultant is not responsible, that are authorized by the Owner after the completion and approval of either the preliminary or final plans and specifications
- E. Services concerning replacement of any work damaged by fire or other causes during construction
- F. Services made necessary by the default of the contractor in the performance of the construction contract
- G. Services as an expert witness in connection with court proceedings
- H. Traffic consulting if necessary
- I. Topographic Survey

- J. Preparation of Environmental Assessment documents and/or Environmental Permits
- K. If all or part of the work is to be financed by a Federal or State Grant, the Consultant shall assist the Owner in the preparation of the Grant application and with the Grant Administration, unless otherwise specifically agreed upon previously herein.

6.0 **DEFECTIVE WORK**

During such visits and on the basis of such observations, Consultant may disapprove of or reject Contractor's work while it is in progress if Consultant believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the Project as reflected in the Contract Documents

7.0 NOTICE TO PROCEED

The Owner shall notify the Consultant in writing to undertake the services stated in this Agreement, and the Consultant shall commence the services within ten (10) days after receipt of such notification.

If the Owner desires to divide the Project into various parts, a Notice to Proceed shall be issued for each part, and the Owner and the Consultant shall mutually agree upon the period of time within which services for each part of the Project shall be performed.

The Consultant will be given time extensions for delays beyond their control or for those caused by tardy approvals of work in progress by various official agencies, but no additional compensation shall be allowed for such delays.

8.0 PAYMENTS

- 8.1 Owner shall pay Consultant for the performance of work and services as outlined in Attachment "C" to this Agreement.
- 8.2 Payment for Consultant work and services on projects that do not require construction services, such as feasibility studies or drainage studies, shall be made based upon Consultant's estimate of the proportion of the services actually completed at the time of billing and shall be made in partial payments at monthly intervals.
- 8.3 If the Project, or any portion thereof, is not completed for any reason, the final fee for consulting work and services shall be negotiated between Owner and Contractor. If the final fee for work and services is not mutually agreed upon, either party may elect in writing to submit the dispute to mediation. If mediation is not mutually agreed upon, written notice will be submitted to the other party of the intent to submit the dispute to the 29th Judicial District Court of St. Charles Parish, State of Louisiana.

- 8.4 If authorized in writing by Owner, for the performance of, or for obtaining from others Additional Services which are not considered normal or customary consulting, the Owner shall pay Consultant based on monthly invoices submitted by the Consultant, within sixty (60) days of receipt of Consultant's invoice. Consultant shall provide written notice to Owner when no services or work have been performed during a given month.
- 8.5 For Additional Authorized Services provided by the Consultant such as, but not limited to, wetlands permitting, land and right-of-way acquisition, surveying, NPDES and LADEQ permit renewal or acquisition work, etc. Owner shall pay Consultant based on an agreed upon hourly rate(s) between the Owner and Consultant. Payment shall be not-to-exceed based on hourly rates and actual hours worked.
- 8.6 The following documentation shall be required for payment to Consultant and shall be attached to the monthly invoice.
 - a. A copy of the Owner's written authorization to perform the service.
 - b. Timesheets for all hours invoiced.
 - c. Invoice copies, logs or other substantiation of non-salary expenses.
- 8.7 For Additional Authorized Services that Consultant acquires from subcontractors and/or subconsultants, Owner shall pay Consultant a fixed sum previously agreed upon by Owner and Consultant, such sum to be established in each case when the scope of the work involved has been determined and before any of the Additional Services are provided. The use of subcontractors and/or subconsultants shall be subject to the provisions set forth in this Agreement. The following documentation shall be required for payment to Consultant and shall be attached to the monthly invoice:
 - a. A copy of the Owner's written consent for the subcontractor and/or subconsultant to perform the service stating the Owner's and Consultant's agreed upon fixed sum established for the service performed.
 - b. Evidence that the subcontractor and/or subconsultant is insured as required by this Agreement.
- 8.8 For <u>Supplementary Services</u> described in Section 5, Owner shall pay Consultant for the fee negotiated at the time the work is assigned by the method stipulated in the contract amendment.

9.0 **BUDGET LIMITATIONS**

The construction budget for this Project shall be determined by the Owner, and the Consultant shall be advised of the budget limitation in writing by the Owner and the Consultant shall indicate his acceptance of same in writing to the Owner. Any subsequent budget revisions shall be confirmed in writing.

If, at the completion of the Preliminary or Design Phase, the Consultant does not concur with the construction budget, he shall so notify the Owner, and the Consultant and Owner shall mutually agree on a revised construction budget prior to any work on the Design Phase.

If no bid is received within the budget limitation and a redesign of the project if required by the Owner, such redesign shall be accomplished by the Consultant at no additional cost to the Owner, provided, however, if the receipt of bids is, for any reason, delayed beyond a period of six (6) months from the date of the completion of the Design Phase the amount stated as the construction budget shall be adjusted, immediately prior to the time bids are received, by use of a construction cost index acceptable to both parties of this agreement.

10.0 FUNDS

No work shall be authorized until funds are established for each individual task.

11.0 TERMINATION OR SUSPENSION

- 11.1 This Agreement may be terminated for any reason by either party upon thirty (30) days written notice.
- 11.2 The Consultant, upon receipt of such notice, shall immediately discontinue all services in connection with the performance of this Agreement and shall proceed to cancel promptly all existing orders and contracts insofar as such orders or contracts are chargeable to this Agreement.
- 11.3 The Consultant shall, as soon as practicable after receipt of notice of termination, submit a statement showing in detail the services performed and payments received under this Agreement to the date of termination.
- 11.4 The Owner shall then pay the Consultant promptly that portion of the prescribed fee to which both parties agree.
- 11.5 Consultant fully acknowledges that no payment will be made for any work performed or expenses incurred after receipt of the termination by either party unless mutually agreed upon in writing.
- 11.6 Failure to meet agreed delivery dates or authorized extensions are considered substantial failures and breach of this contractual agreement by Consultant.
- 11.7 This agreement shall automatically terminate upon satisfactory completion of all services and obligations described herein or three (3) years from the date of its execution, which ever event occurs first.

12.0 INSURANCE

- 12.1 The Consultant shall secure and maintain at his expense such insurance that will protect him and the Owner, from claims under Workmen's Compensation Acts and from claims for bodily injury, death or property damage which may arise from performance of services under this Agreement. Insurance for bodily injury or death shall be in the <u>unencumbered</u> amount of \$1,000,000.00 for one person and not less than \$1,000,000.00 for all injuries and/or deaths resulting from any one occurrence. The insurance for property damage shall be in the <u>unencumbered</u> amount of \$1,000,000.00 for each accident and not less than \$1,000,000.00 aggregate.
- 12.2 The Consultant shall also secure and maintain at his expense professional liability insurance in the unencumbered sum of \$1,000,000.00.
- 12.3 All certificates of insurance SHALL BE FURNISHED TO THE OWNER and shall provide that insurance shall not be cancelled without ten (10) days prior written notice to the Owner. The Owner may examine the policies.
- 12.4 Consultant shall include all subcontractors and/or subconsultants as insured under its policies or shall furnish separate certificates for each. All coverages for subcontractors and/or subconsultants shall be subject to all the requirements stated herein.
- 12.5 Contractor shall secure and maintain at his expense Comprehensive Automobile Liability Bodily Injury Liability \$1,000,000 each person: \$1,000,000 each occurrence. Property Damage Liability \$1,000,000 each occurrence. The Comprehensive Automobile Liability policy must have coverage for loading and unloading and must include owned, hired and leased autos.
- 12.6 St Charles Parish shall be named as an additional insured on general liability insurance policies.
- 12.7 For all purposes under Louisiana law, the principals of this Contract shall be recognized as the statutory employer of all contract employees as provided in LSA-R.S. 23:1061.
- 12.8 Insurance policies shall be endorsed to provide for a waiver of subrogation in favor of St. Charles Parish for worker's compensation policies. The certificate of insurance shall reference the waiver of subrogation endorsement.
- 12.9 The Worker's Compensation Policy Territory Coverage must include Louisiana.

13.0 INDEMNIFICATION

Consultant shall indemnify and hold harmless the Owner, its employees, agents and representatives, against any and all claims, demands, suits or judgments for sums of money to any party for loss of life or injury or damages to person or property growing out of, resulting from or by any reason of any negligent act by the Consultant, its employees, agents, servants or representatives, while engaged upon or in connection with the services required or performed hereunder.

14.0 WARRANTY

- 14.1 <u>Consultant</u> warrants that it will perform its design services with the degree of skill and to the standard of care required of the consulting profession to meet all Federal, State and Local requirements.
- 14.2 If <u>Consulting Services for project</u> designed by <u>Consultant</u> does not meet those requirements noted herein above, then to the extent that this occurs as a direct result of <u>Consultant's</u> failure to meet the standard of care in its design services, <u>Consultant</u> will indemnify the Parish for <u>Consultant's</u> share of the costs incurred to bring <u>Consulting Services for project</u> to the limitations mandated.
- 14.3 The obligations expressed in Section 14 above in no way limit the Consultant's obligations expressed elsewhere in this Contract.

15.0 EXCLUSIVE JURISDICTION AND VENUE

For all claims arising out of or related to this agreement, CONSULTANT hereby consents and yields to the exclusive jurisdiction and venue of the Twenty-Ninth Judicial District Court for the Parish of St. Charles, State of Louisiana, and expressly waives any (a) pleas of jurisdiction based upon Consultant's residence and (b) right of removal to Federal Court based upon diversity of citizenship.

16.0 OTHER

This Agreement constitutes the entire agreement between the parties. There are no understandings, agreements, or representations, oral or written, not specified withing this Agreement. This Agreement may not be modified, supplemented or amended in any manner, except by written agreement signed by both parties.

IN WITNESS WHEREOF, the parties to these presents have hereunto caused these presents to be executed the day, month and year first above mentioned.

WITNESSES:	ST. CHARLES PARISH
	By: Matthew Jewell Parish President
	Date:
WITNESSES:	CRESCENT ENGINEERING & MAPPING, LLC
	By: Dennis M. Hymel, Jr., P.E. President/Engineering Manager
	Date:

ATTACHMENT "A" PROJECT SCOPE

KING AND HAHN STREET DRAINAGE IMPROVEMENTS Project No. (P220202)

Project Scope:

The Project involves improving the drainage system in the area of Julia, King and Hahn Streets in Hahnville, LA by developing a new outfall channel located south of and parallel to Hahn St. from the rear of the SCP West Bank Yard to the outfall canal near the Union Pacific Railroad and connecting said channel via reinforced concrete box culverts (or similar structure) to the drainage systems of Hahn St. and Julia St.

A new drainage structure system is proposed along the east (river side) of King St. to facilitate stormwater runoff from the Julia St. watershed area to the new outfall system. These improvements are generally as shown in the 2021 West Bank Master Drainage Plan by T. Baker Smith, LLC as Priority 1, Improvement Groups 1 & 2 for the Hahnville 1 watershed.

PART 1 - BASIC SERVICES

A. PRELIMINARY DESIGN PHASE

Upon written authorization by OWNER to proceed, the CONSULTANT shall:

- 1. Perform preliminary, 1-D, HEC analysis of proposed solutions and compare hydraulic performance of said solution(s) to the existing Master Drainage Plan (MDP) solutions.
- 2. Prepare Preliminary Design Phase documents including final design criteria, preliminary drawings (11" x 17"), and a specifications outline. A hydraulic design memorandum may be provided to confirm design parameters, constraints and modeling results based upon the preliminary design. CONSULTANT shall visit the Project site, as needed, to prepare the Preliminary Design Phase documents.
- 3. Coordinate all surveys and other investigations and/or "Additional services" as may be required to prepare construction plans.
- 4. Advise OWNER if additional reports, data, information and/or services are necessary for the design of the Project and assist OWNER in obtaining such reports, data, information, or services.
- 5. After reasonable, but not extensive, research of utility owners and a reasonable effort by the CONSULTANT to determine the presence of utilities within the Project limits, provide written request to utility owners identified in the Project Limits for available utility information.

- 6. Conduct an Intermediate Preliminary Design meeting with OWNER, if necessary, to review initial design progress and discuss with the OWNER any major changes or alterations which may be necessary.
- 7. Obtain the OWNER's contract documents and OWNER technical specifications for inclusion within the final contract, plans and specifications. CONSULTANT shall not be responsible for conducting a review nor making edits within OWNER's contract documents beyond the data which is required to be entered by the CONSULTANT. CONSULTANT will consult with the OWNER regarding OWNER policies and practices for construction contract administration, sampling, testing and resident inspection.
- 8. Based upon the information contained in the Preliminary Design Phase documents, prepare an Opinion of Probable Construction Cost.
- 9. Furnish three (3) copies of the Preliminary Design Phase documents and revised Opinion of Probable Construction Cost to OWNER as well as electronically to other parties as required by the OWNER. CONSULTANT's services under the Preliminary Design Phase shall be considered complete on the date when the Preliminary Design Phase documents are delivered to the OWNER.
- 10. During all phases of Basic Services and Additional Services, OWNER shall arrange for and assist with obtaining access for CONSULTANT to enter upon public and private property as required to perform the professional services.

B. FINAL DESIGN PHASE

Upon written acceptance of the Preliminary Design Phase documents by the OWNER, and upon written authorization by OWNER to proceed, the CONSULTANT shall:

- 1. Prepare Final Drawings and Specifications indicating the scope, extent and character of the Work to be performed and furnished by the CONTRACTOR.
- 2. Visit the Project site as needed to assist in preparing the Final Drawings and Specifications.
- 3. Provide technical and design data necessary for the execution of Additional Services.
- 4. Assist OWNER in consultation with authorities having jurisdiction over the Work and make standard revisions to Drawings and Specifications in response to directives from such authorities, as appropriate and reasonable.
- 5. Prepare a Final Opinion of Probable Construction Costs.
- 6. Furnish for review by OWNER, three (3) copies of the Draft Final Drawings (11"x17") and Draft Final Specifications and bidding documents as well as submit electronically

to all parties as required by the OWNER. Upon receipt of final written comments from the OWNER, CONSULTANT shall meet with OWNER to discuss and resolve any outstanding comments on Final Drawings and/or Specifications.

- 7. Revise Final Drawings as per mutually agreed resolution to OWNER's comments and provide three (3) copies of the Final Drawings (22"x34") and Final Specifications including bidding documents, signed, and sealed by CONSULTANT'S Louisiana Licensed Professional Engineer to OWNER.
- 8. CONSULTANT'S services under the Final Design Phase will be considered complete on the date when CONSULANT has delivered to OWNER the Final Drawings and Specifications, other assembled Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables.

C. BIDDING OR NEGOTIATING PHASE

Upon written acceptance of the Final Design documents by the OWNER, and upon written authorization by OWNER to proceed, the CONSULTANT shall:

- Assist OWNER in advertising for and obtaining bids or proposals for the Work, assisting OWNER in issuing assembled design, contract and bidding related documents to prospective CONTRACTORs and maintain a record of prospective CONTRACTORs to which documents have been issued.
- 2. Receive and process, or assist with thereof, any deposits or charges for plans and specifications from prospective CONTRACTORs.
- 3. Prepare and issue Addenda, as appropriate, to clarify, correct or change the construction or bidding documents.
- 4. Attend, conduct (as appropriate) and record minutes of any pre-bid conferences held.
- 5. Consult with OWNER as to the qualifications of prospective CONTRACTORs.
- 6. Consult with OWNER as to the qualifications of subcontractors, suppliers, and other individuals and entities proposed by prospective CONTRACTORS, for those portions of the Work as to which review of qualifications is required by the issued documents.
- 7. If required by the issued documents, evaluate and advise the OWNER as to the acceptability of "or equals" and substitute materials and equipment proposed by prospective CONTRACTORs.
- 8. Attend the bid opening, prepare bid tabulation sheets to meet OWNER schedule, and assist OWNER in evaluating bids or proposals, assembling final contracts for the Work

for execution by OWNER and CONTRACTOR, and in issuing notices of award of such contracts.

9. The Bidding and Negotiating Phase shall be considered complete upon the commencement of the Construction Administration Phase.

D. CONSTRUCTION ADMINISTRATION PHASE

Upon completion of the Bidding and Negotiation Phase, and upon written authorization by the OWNER, the CONSULTANT shall:

- 1. Schedule, conduct and record minutes of the Pre-Construction Conference with the OWNER and CONTRACTOR, including SUBCONTRACTORS, if applicable.
- 2. Assist the OWNER in the selection of an independent testing laboratory, if applicable.
- 3. Maintain and safeguard during the Construction Phase at least one original printed record version of the Construction Contract Documents, including Drawings and Specifications signed and sealed by Engineer of Record and other design professionals in accordance with applicable Laws and Regulations.
- 4. Receive, review, and determine the acceptability of any and all schedules that CONTRACTOR is required to submit to OWNER, including the Progress Schedule, Schedule of Submittals.
- 5. Review and recommend to the OWNER for approval or otherwise, the CONTRACTOR's Applications for Payment and Progress Schedule.
- 6. Make visits to the Site at intervals deemed appropriate by the ENGINEER at various stages of construction to observe as an experienced and qualified design professional, the progress of the CONTRACTOR's executed work. Such visits and observations by ENGINEER, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work, but rather are to be limited to general observation of the Work based on ENGINEER's exercise of professional judgment, as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, ENGINEER will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and ENGINEER shall keep OWNER informed of the progress of the Work.
- 7. ENGINEER shall not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any

Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, ENGINEER neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.

- 8. Reject Work if, on the basis of ENGINEER's observations, ENGINEER believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to OWNER regarding whether Contractor should correct such Work or remove and replace such Work, or whether OWNER should consider accepting such Work as provided in the Construction Contract Documents.
- 9. Accept from CONTRACTOR submittal of all matters in question concerning the requirements of the Construction Contract Documents, Requests for Information (RFI) or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.
- 10. Subject to any limitations in the Construction Contract Documents, ENGINEER may prepare and issue Field Orders requiring minor changes in the Work.
- 11. Recommend Change Orders and Work Change Directives to OWNER, as appropriate, and prepare Change Orders and Work Change Directives as required.
- 12. Review and approve or take other appropriate action with respect to Shop Drawings, and other required CONTRACTOR submittals, but only for conformance with the information given in the Construction Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto.
- 13. Receive from CONTRACTOR, review, and transmit to OWNER maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, Samples, and other data. Receive from CONTRACTOR, review, and transmit to OWNER the annotated record documents which are to be assembled by CONTRACTOR in accordance with the Construction Contract Documents to obtain final payment. The extent of ENGINEER's review of record documents shall be to check that Contractor has constructed the project according to plans and specifications, and all construction changes are acceptable to the ENGINEER.

- 14. Promptly after notice from CONTRACTOR that CONTRACTOR considers the entire Work ready for its intended use, in company with OWNER and CONTRACTOR, visit the Site to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the punch list of items to be completed, notice to CONTRACTOR, and issuance of a Certificate of Substantial Completion.
- 15. Conduct a final visit to the Project to determine if the Work is complete and acceptable so that ENGINEER may recommend, in writing, final payment to CONTRACTOR. Accompanying the recommendation for final payment, ENGINEER shall also provide a notice in writing to OWNER and CONTRACTOR that the Work is acceptable to the best of ENGINEER's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement.

PART 2 - ADDITIONAL SERVICES

A. TOPOGRAPHIC SURVEYS

CONSULTANT shall perform field survey data collection of topographic and drainage features as well as perform reconnaissance of field conditions for surveying within the project area to an extent of which is necessary for the project's design. The topographic data collection for this project may include but is not limited to: general topographic transects, roadway centerline and edge elevations and/or cross sections, cross sections of roadside ditches and outfalls, invert and size data of drainage structures and catch basins, topographic surveys of driveways, survey of above-ground utility features, survey of sanitary sewer manholes and general groundline sections of areas where new ditches or drainage structures are proposed.

The limits of the topographic surveys shall include the following areas:

- Beginning at approximate address 639 Hahn St., Hahnville, LA and proceeding south for
 a distance of approximately 150 feet by 100 feet wide, then turn 90 degrees right and
 proceed southwesterly for approximately 6,250 feet in length by approximately 150' wide
 through virgin, wooded terrain primarily on the John Melancon tract (now or formerly),
 including approximate location of water pipeline and appurtenances;
- Beginning at the rear of Hahn St. at the existing gate and proceeding northeasterly for approximately 500 feet in length by approximately 80' wide, centered on Hahn St.;
- Beginning at the intersection of Hahn & King St., proceeding northwesterly for a distance of approximately 1,025 feet by approximately 30' left of centerline to 50' right of centerline of King St., including structure Finish Floor Elevations;
- Beginning at the intersection of Julia & King St. proceeding northeasterly for approximately 500' to the intersection of Julia St. & Gum St. by 70 feet wide centered on Julia St.;
- As directed by CONSULTANT engineering staff: Major drainage inverts and channel flowlines located generally along Sycamore St., Maple St. and Pine St. between Julia St. and Oak St. as well as along Sycamore St. south of Hahn St. to determine limits of overall watershed and subsurface network for Hahn and Julia St. systems.

• The drainage outfalls of the area near Sunset Ct. will be surveyed for determination if these systems will be tied into the project.

Survey data will be collected using RTK GPS and conventional total station methods and will be projected in state plane coordinates, Louisiana South, NAD 83 and based upon NAVD 88 vertical datum, Geoid 18, as determined by GPS observation. If SCP has available and current control monumentation in the area, surveys will be based upon said control network.

Temporary Bench Marks and Primary Control Points to be used for construction will be established within the project area. CONSULTANT will initiate a LA One Call prior to beginning survey work and will attempt to contact utility owners to mark lines in the field. No guarantee can be made that all utilities which exist will be collected within the topographic surveys.

Subsurface Utility Engineering (SUE) will be utilized for major utility crossings in the area of the intersection of King St. and Hahn St. and will be limited to sewer and water mains. Potholing of these lines will be conducted once the approximate crossing location of the proposed drainage structures is known and SUE services will be limited to these test holes. The scope of services shall be in accordance with providing Subsurface Utility Engineering Quality Level A services in accordance with Cl/ASCE Standard 38-02: Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data

Quality Level A - Locating/Test Holes: Test holes shall be completed as described above. The Consultant shall use minimally intrusive excavation techniques, which ensure the safety of the excavation, the integrity of the utility line to be measured, and that of other lines which may be encountered during excavation. The excavation shall be by means of air-assisted and/or water-assisted vacuum excavation equipment manufactured specifically for the purpose.

Excavation of Test Holes:

- 1. Clear the test hole area of surface debris.
- 2. In paved areas, neatly cut and remove existing pavement, which cut shall not exceed 225 square inches (0.15 square meters) unless otherwise approved.
- 3. Excavate the test hole. The nominal diameter of the test hole shall not exceed 15 inches (375 mm) unless otherwise approved.
- 4. Expose the utility only to the extent required for identification and data collection purposes.
- 5. Avoid damage to lines, wrapping, coatings, cathodic protection or other protective coverings and features.
- 6. Hand-dig as needed to supplement excavation and to ensure safety.
- 7. Revise the test hole location as necessary to positively expose the utility.
- 8. Store excavated material for re-use or disposal at an approved location near the project, as appropriate.

Collection, Recording, and Presentation of Data: Measure and/or record the following information on an appropriately formatted test hole data sheet that has been sealed and dated by the CONSULTANT's Engineer.

1. Difference in elevation of top and/or bottom of the utility and the above ground mark to a vertical accuracy of ± 0.05 feet (15 mm).

- 2. Field sketch showing horizontal location referenced to a minimum of two (2) swing ties to physical structures existing in the field.
- 3. Approximate centerline bearing of utility line.
- 4. Outside diameter of pipe, width of duct banks, and configuration of multi-conduit systems.
- 5. Utility structure material composition, when reasonably ascertainable.
- 6. Other pertinent information as is reasonably ascertainable from test hole.
- 7. Site Restoration:
 - a. Replace bedding material around exposed utility lines.
 - b. Backfill and compact the excavation in a manner acceptable to owner. Re-use excavated material with appropriate compaction.
 - c. As applicable, provide permanent pavement restoration within the limits of the original cut using materials, compaction, and pavement thickness similar or equal to that found.
 - d. For excavations in unpaved areas, restore disturbed area as nearly as practicable to pre-existing conditions.
 - e. Furnish and install permanent surface marker (e.g., P.K. nail, peg, steel pin, or hub) directly above the centerline of the utility.

Information gathered shall be shown on a test hole data sheet which shall be sealed by the licensed Professional Engineer in responsible charge of SUE activities and shown on the topographic survey drawings. The x, y, z of the test hole stake and test hole number shall be shown on the drawing. If the utilities or over 10 feet deep they may not be found using our techniques for test holes.

Topographic survey data will be processed using Bentley® MicroStation and Inroads Survey and a master topographic survey file will be developed in a .DGN format. Other formats such as AutoCAD may be made available, however, may not contain all feature code information collected. Survey data including point files, control reports and the AutoCAD file will be provided along with a certification letter signed and sealed by the Louisiana Professional Land Surveyor in charge of survey services. A hard copy survey deliverable shall be provided.

B. PROPERTY SURVEYS & MAPPING

Prior to the beginning of the design phase, the CONSULTANT shall conduct property surveys of the following parcels for consideration in the location of project design features:

Parcel ID # 110300300003, Lot 3-711 Hahn St., Hahnville, LA Parcel ID # 101701300007, Lot 7 & W8 -639 Hahn St., Hahnville, LA

The property survey shall be conducted for each parcel. Upon completion of the property surveys, the CONSULTANT shall provide an electronic copy of field notes, and electronic test file listing coordinates and descriptions of all found monuments, a PDF copy of all documents (Plats, maps, etc.) used to determine property line locations and a PDF copy of title take-offs used to determine property line locations. The CONSULTANT shall provide an electronic copy of the property survey in Microstation .DGN and .PDF formats showing the project centerline(s) data, all surveyed

property lines, property monuments, existing right of ways and all major improvements thereon with ties to the project centerline. The property surveys shall be referenced to the project control network.

Right of Way mapping and/or servitude mapping of project taking areas shall be provided on standard plan sheets showing limits of taking lines, project centerline and major improvements.

A meets and bounds description in English units for each parcel shall also be provided. Title Reports are excluded from this Agreement.

C. <u>SUPPLEMENTAL PERMITTING SURVEYS</u>

As needed during the acquisition of environmental permits, the CONSULTANT shall conduct additional surveys as requested for or in the support of Needs and Alternatives Justification (NAJ) requests, Hydraulic Modification Impact Analysis (HMIA), water quality certificate requests, staking of project limits within wetlands or other requests made by agency analysts which require additional surveying services.

D. GEOTECHNICAL

CONSULTANT shall, or through the use of a subconsultant, a geotechnical investigation shall be conducted onsite and together with laboratory testing, foundation design recommendations and slope stability analyses shall be presented in a geotechnical report for the project, signed and sealed by a Louisiana licensed geotechnical engineer. The geotechnical investigation, analysis and design shall include the following:

- Field exploration consisting of (1) boring near the King St. drainage improvements, (2) borings in the area of the large box culvert proposed near Hahn St., and (2) borings along the length of the outfall channel with one (1) of which near the wastewater treatment plant roadway crossing. Borings shall be a minimum of 24 feet in depth below ground surface or as needed to effectively derive design parameter and analysis.
- Laboratory testing including water content, Atterberg limits, dry unit weights, unconfined compressive strength, grain/particle size analysis and triaxial unconsolidated undrained compression tests, in accordance with acceptable industry practices for the project type.
- Final geotechnical boring logs with field and laboratory data, strata and groundwater
- Backfill and abandonment of bore holes in accordance with all local, state and federal regulations. Refer to the *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook* for State regulations in the making of boreholes.
- Engineering recommendations for drainage structure foundation design and bedding including lateral earth pressure recommendations for shoring; estimated settlement of proposed drainage structures and mitigation techniques, if necessary, subgrade preparation and other earthwork recommendations

• Slope stability analysis for proposed large open ditch sections

E. ENVIRONMENTAL

CONSULTANT shall develop permit drawings, applications and supporting information and work to acquire the federal, state, and local regulatory permits to conduct the proposed activity, excluding applicable permit submittal fees. A wetland delineation shall also be conducted, and a Jurisdictional Determination sought as part of the USACE Section 404 permitting process.

- 1. Wetland Delineation and Jurisdictional Determination: CONSULTANT, or through the use of a subconsultant, shall conduct a wetland delineation throughout the project limits to determine the presence of jurisdictional wetlands or "other waters of the United States" in accordance with the requirements of the USACE's 1987 Wetland Delineation Manual (Wetlands Research Program Technical Report (Y-87-1) and the USACE's "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)" (ERDC/EL TR-10-20). Upon completion of the wetland report and upon approval of the Client, the report will be transmitted to the USACE New Orleans District, Enforcement Section and requesting a Jurisdictional Determination. CONSULTANT will track the delineation through the approval process.
- 2. **Permit Drawings, Application Preparation and Submittal:** CONSULTANT will prepare and submit permit applications and accompanying drawings to each appropriate agency. The information used to complete the applications will come from the desktop screening findings, pre-application meeting notes, agency field trip notes, preliminary design details, and topographic data collected by CONSULTANT. Applications and accompanying drawings will be provided to the Client for review and approval. Upon approval by the Client, CONSULTANT will submit the applications to the appropriate agencies.
- 3. **Permit Tracking & Responses:** Once permits are submitted, CONSULTANT will contact the agency analysts on a regular basis to keep track of the permit processing progress as a means to expedite receipt of permits. CONSULTANT will answer questions about the proposed project or make revisions to the applications as requested by the analysts, once approved by the Client. CONSULTANT will prepare standard requested documents required by the agency analysts. The full spectrum of tasks required during the permit acquisition phase of the project is agency-dependent and difficult to estimate. Once the permits and other clearance letters are received from the agencies, CONSULTANT will submit a "final compliance package" to the client.

Items not included in this scope of work but can be provided via Supplemental Agreement include Cultural Resource & Archeological Surveys, Scenic Streams permit, Wetland Mitigation procurement and assistance, Permitee Responsible Mitigation (PRM) Plans, Threatened & Endangered Species surveys, and agency requests beyond standard requests such as excessive HMIA or NAJ requests.

ATTACHMENT "B" PROJECT SCHEDULE

KING AND HAHN STREET DRAINAGE IMPROVEMENTS Project No. (P220202)

Project Schedule:

The CONSULTANT shall complete the following phases of the project within the number of calendar days shown after a Notice to Proceed for said Phase:

<u>Project Phase</u>	Calendar Days to Complete
Topographic Surveys	115
Conceptual Phase	30
Preliminary Design Phase	30
Final Design Phase	60

Time for Completion

- 1. If, through no fault of the CONSULTANT, such periods of time or dates are changed, or the normal and continuous progress of the CONSULTANT's services is impaired, or CONSULTANT's services are delayed or suspended, then the time for completion of CONSULTANT's services shall be adjusted equitably.
- 2. If OWNER authorizes changes in the scope, extent, character, or breadth of the Project or CONSULTANT's services, including accelerating or significantly altering the project schedule, then the time for completion of the CONSULTANT's services and the rates and amounts of compensation payable to the CONSULTANT shall be adjusted equitably.
- 3. If CONSULTANT fails, through its own fault, to complete the project within the time set forth, as duly adjusted, then OWNER may be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting or arising our of such failure.
- 4. Unforeseen global, market and economic conditions and/or related volatility otherwise may impact the timely delivery of services under this contract. Should conditions arise which may affect the CONSULANT's services, the CONSULTANT shall notify the OWNER immediately in writing to discuss equitable schedule adjustments.
- CONSULTANT shall not be responsible for delays caused by third parties including but not limited to, local, state and federal agencies having jurisdiction over the work, nor shall the CONSULANT be held responsible for delays to the Project due to permit issuance or access permissions.

ATTACHMENT "C" PROJECT COMPENSATION

KING AND HAHN STREET DRAINAGE IMPROVEMENTS Project No. (P220202)

Project Cost:

Payment to CONSULTANT for Basic Services as outlined above shall be on a percentage of Construction Cost, based upon ASCE Curve B.

Estimated Construction Cost \$2,300,000.00 Estimated Fee (Basic Services) \$230,000.00

Basic Engineering Services:

Preliminary Design Phase (30%)	\$69,000.00
Final Design Phase (40%)	\$92,000.00
Bidding or Negotiating Phase (5%)	\$11,500.00
Construction Administration Phase (25%)	\$57,500.00

CONSULTANT shall invoice OWNER monthly on a basis of percentage completed of each Phase as shown above and on the Project schedule.

For additional services, and any other services required for this project, the OWNER shall pay the CONSULTANT on the basis of billable rates per the CONSULTANT's rate sheet (attached), for services actually rendered, but shall not exceed the total fees for each additional service as listed below, unless noted as Lump Sum. Payments for Lump Sum shall be made on a basis of percentage completed.

CONSULTANT's billable rates include total compensation for CONSULTANT's services including labor costs, overhead, profit and expenses. Payment for CONSULTANT's SUBCONSULTANTs shall be made at actual invoice amount plus 10 percent and limited to the not to exceed amounts. CONSULTANT's Lump Sum fee includes all labor costs, overhead, profit, equipment, expenses and any subconsultant fees.

Additional Services:

Topographic Surveys	\$109,000.00 (Lump Sum)
Property Surveys & Mapping	\$25,900.00
Supplemental Permitting Surveys	\$18,435.00
Geotechnical	\$18,130.00
Environmental	\$31,185.00

The total compensation for services under this contract shall not exceed \$432,650.00, unless amended via a Supplemental Agreement.