

Ord.

**2017-0228**

**INTRODUCED BY: LARRY COCHRAN, PARISH PRESIDENT  
(DEPARTMENT OF WASTEWATER)**

**ORDINANCE NO. 17-7-17**

An ordinance to approve and authorize the execution of a Contract for Engineering Services with Glenn G. Shaheen & Associates, Inc. (GSA) for necessary professional engineering services associated with Parish Project No. S170601 Luling Oxidation Pond Rehabilitation and Upgrades.

**WHEREAS**, this project requires professional services for the updating of the Luling Oxidation Pond to maintain compliance with State and Federal regulations and discharge limits, by creating plans and specifications and potential subsequent construction management for work done on the Luling Oxidation Pond.

**THE ST. CHARLES PARISH COUNCIL HEREBY ORDAINS:**

**SECTION I.** That the Engineering Services Contract with Glenn G. Shaheen & Associates, Inc. (GSA), for the design of Parish Project No. S170601 Luling Oxidation Pond Rehabilitation and Upgrades is hereby approved and accepted.

**SECTION II.** That the Parish President is hereby authorized to execute said Engineering Services Contract on behalf of St. Charles Parish.

The foregoing ordinance having been submitted to a vote, the vote thereon was as follows:

YEAS: BENEDETTO, HOGAN, WILSON, CLULEE, GIBBS, BELLOCK, FISHER-PERRIER


NAYS: NONE

ABSENT: WOODRUFF, FLETCHER

And the ordinance was declared adopted this 31st day of July, 2017, to become effective five (5) days after publication in the Official Journal.

CHAIRMAN: 

SECRETARY: 

DLVD/PARISH PRESIDENT: 

APPROVED:  DISAPPROVED:

PARISH PRESIDENT: 

RETD/SECRETARY: 

AT: 11:30a RECD BY: 

**SINGLE PROJECT**  
**CONTRACT FOR ENGINEERING SERVICES**

THIS AGREEMENT made and effective as of the 4<sup>th</sup> day of August, 2017, by and between ST. CHARLES PARISH acting herein by and through its President, who is duly authorized to act on behalf of said Parish, hereinafter called the Owner, and GSA CONSULTING ENGINEERS, INC, a corporation acting herein by and through its Contracting Officer, hereinafter called Engineer. Whereas the Owner desires to employ a professional consulting engineering firm to perform engineering services for the S170601 LULING OXIDATION POND REHABILITATION AND UPGRADES project as described in Ordinance No. 17-7-17 which is attached hereto and made a part hereof.

**1.0 GENERAL**

The Owner agrees to employ the Engineer, and the Engineer agrees to perform professional services required for the project described above. Engineering will conform to the requirements of the Owner and to the standards of the agencies participating with the Owner in the Project. The Engineer will coordinate all work between the Owner and all participating agencies and regulating agencies, if needed. Written authorization to begin Conceptual, Preliminary, and Design phases of the project will be given to the Engineer by the owner. The Owner may terminate the Contract by written notification and without cause per Section 7.0 during any phase of the project.

**2.0 CHARACTER AND EXTENT OF BASIC SERVICES OF THE ENGINEER**

**2.1 General**

**2.1.1** Engineer shall provide for Owner professional engineering 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 Engineer. These services will include but will not be limited to serving as Owner's professional engineering representative for the Project, providing professional engineering consultation and advice, and furnishing customary civil, surveying, geotechnical, structural, mechanical, electrical, instrumentation and control engineering services and construction engineering and inspection.

**2.1.2** In general, the Project consists of the Design and Construction Management of the following major elements:

The scope of the project is to perform maintenance and improvements to the existing St. Charles Parish Luling Oxidation Pond to maintain compliance with State and Federal regulations administered by the Department of Environmental Quality (DEQ), including current effluent permit limits. Items of interest to be evaluated and recommendations made for, shall include but are not necessarily limited to:

- Installation of a six foot security fence around the 57 acre pond;
- Determine depth of sludge within the seven acre cell and determine a cost effective removal process;
- Installation of aeration system for the seven acre cell;
- Establish a plug flow for the seven acre cell;
- Reroute all influent lines (5) to the seven acre cell, install a screening system to remove debris from incoming wastewater, and install a flow measuring device

- Refurbish the bridge crossing the George Cousins Canal by the influent lines entering the Luling Pond area; and;
- Feasibility of increasing the levee elevation around the perimeter of the pond.

**2.1.3 Services provided by the Engineer shall be performed in accordance with generally accepted professional engineering practice at the time and the place where the services are rendered.**

**2.1.4 Engineer shall obtain from Owner authorization to proceed in writing for each phase of the Project.**

**2.1.5 Engineer shall provide minutes of all meetings with St. Charles Parish to include but not limited to meetings regarding any phase of the Project, Pre-Bid Conferences, Progress Meetings, Technical review Committee Meetings, etc.**

**2.2 Conceptual Design Report Phase**

**2.2.1 Reviewing available data and consulting with the Owner to clarify and define the Owner's requirements for the Project.**

**2.2.2 Conducting a Pre-Design Meeting Workshop with the Owner.**

**2.2.3 Advising the Owner as to the necessity of providing or obtaining from others additional data or services. These additional services may include photogrammetry, reconnaissance surveys, property surveys, topographical surveys, geotechnical investigations and consultations, compilation of hydrological data, materials engineering, and environmental assessments and impact statements.**

**2.2.4 Identifying and analyzing requirements of governmental authorities having jurisdiction to approve the design of the Project, and participating in consultations with such authorities.**

**2.2.5 Providing analyses of the Owner's needs, planning surveys and comparative evaluations of prospective site plans and solutions.**

**2.2.6 Preparing a comprehensive Conceptual Design Report presenting selected solutions to the Owner with the Engineer's findings and recommendations. The Report will contain as a minimum:**

- Discussion of project background and need.
- Schematic layouts, sketches, or photographs.
- Conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved.
- Any special material specifications including major equipment specifications.
- A preliminary cost estimate for each alternative.
- Engineer's conceptual opinion of probable costs for the selected alternative.
- Project Master Schedule.
- Discussion as to what permits are needed, time to acquire approvals, and potential adjacent land owner authorizations/servitudes that need addressing.
- Discussion of the type of additional services, mentioned in 2.2.3, that will be needed.

**2.2.7 Meeting with the Owner and presenting findings of the Conceptual Design Report.**

**2.2.8 The Conceptual Design Report and Engineer's documentation and opinion of costs, along with the following documents and files, shall be delivered to Owner within 30 calendar days, or as otherwise stated in the written authorization from Owner to Engineer to proceed with Conceptual Design.**

- Five(5) copies of the report for review.
- Once the report has been finalized, submit two(2) copies of the revised report plus one(1) electronic file copy in PDF format, and one(1) electronic file copy of the Master project schedule in Microsoft Project format.
- All files will be titled so as to distinguish between conceptual, preliminary, and final design stages.

## 2.3 Design Memorandum Phase

2.3.1 The Design Memorandum or Preliminary Engineering Design Report will summarize the process and design criteria established in Conceptual Design and initiate acquiring necessary permits and servitudes. The document will be used in the development of final design plans and specifications and will serve as a guide by designers and other interested parties.

2.3.2 The Design Memorandum will consist minimally of the following sections:

- Site Development – project site plan that includes anticipated construction area required and any known servitudes or property owners.
- Hydraulics - if necessary
- Treatment Processes - if necessary
- Design Criteria including a listing of all standard specifications to be used by type (concrete, piling, steel electrical, roads/foundations, etc)
- Preliminary Drawings – 11X17 minimum size
- The following indexes: Drawings, Division 00 St Charles Parish Bidding/Contract Documents showing revision number, Division 01 St Charles Parish General Specifications showing revision number, and Division 02-16 material and equipment specifications, to be used in final design.
- Engineer's preliminary opinion of probable costs.
- Updated Project Master Schedule.
- Summary of estimated quantities – initial bid schedule
- Instrumentation & Control Philosophy
- Power Requirements
- Additional data that will be needed, such as topographical, geotechnical, and project surveying.

2.3.3 The engineer will deliver to owner within 15 days following Design Memorandum authorization, a detailed description (including specifications) and estimated cost of required additional services such as site survey, topographical survey, or geotechnical investigation. In addition, the engineer will also deliver estimated time and cost to apply for regulatory permits from local, state or federal authorities. The owner will have the option to utilize their own surveyor, land/servitude acquisition consultant, permit consultant, or geotech firm.

2.3.4 Meeting with the Owner and presenting findings of the Preliminary Design Report.

2.3.5 The Preliminary Engineering Design Report and Engineer's documentation and opinion of costs, along with the following documents and files, shall be delivered to the Owner within 30 days or as otherwise stated in the written authorization from Owner to Engineer to proceed with Preliminary Engineering.

- Five(5) copies of the report for review.
- Once the report has been finalized, submit two(2) copies of the revised report plus one(1) electronic file copy in PDF format, and one(1) electronic file copy of

the updated Master project schedule in Microsoft Project format.

- Two(2) copies of the drawings(11x17 minimum).
- Once the drawing review is complete, submit one copy of the revised drawings plus one(1) electronic file copy of each drawing in AutoCADD format(release 2000 or later) and in PDF format.
- All files will be titled so as to distinguish between conceptual, preliminary, and final design stages.

## **2.4 Design Phase**

**2.4.1 Prepare for incorporation into Contract Documents final drawings based on the accepted preliminary design documents to show the scope, extent, and character of the work to be furnished and performed by Contract (hereinafter called "Drawings") and Specifications which will be prepared in conformance with the sixteen division format of the Construction Specifications Institute.**

**2.4.2 Preparing and furnishing to the Owner a revised opinion of probable total project costs based on the final Drawings and Specifications.**

**2.4.3 Preparing the contract/bid document that includes St. Charles Parish's Standardized Construction Contract files and the added engineer's specifications for review and approval by the Owner (and the Owner's legal and other advisors).**

**2.4.4 Meeting with the Owner and presenting the final design.**

**2.4.5 The Final Design Services shall be completed and Engineer's documentation and opinion of costs, along with the following documents and files, shall be delivered to the Owner within 30 days or as otherwise stated in the written authorization.**

- Three(3) copies of the contract/bid document for review.
- Once the contract/bid document has been finalized, submit two(2) stamped copies of the revised document plus one(1) electronic file copy in PDF format, and one(1) electronic file copy of the updated Master project schedule in Microsoft Project format.
- Two(2) copies of the drawings – D Size for review.
- Once the drawing review is complete, submit two stamped copies of the revised drawings plus one(1) electronic file copy of each drawing in AutoCADD format(release 2000 or later) and in PDF format.
- All files will be titled so as to distinguish between conceptual, preliminary, and final design stages

## **2.5 Bidding Phase**

**2.5.1 Produce Contract Documents (specifications and 22" by 34" drawings) for each Project for bidding purposes.**

**2.5.2 Assist Owner as necessary in advertising for and obtaining bids for construction, materials, equipment and services; and maintain a record of prospective bidders to whom Bidding Documents have been issued, attend Pre-Bid Conferences and receive and process fees for Bidding Documents. Distribute Bidding Documents to potential bidders.**

**2.5.3 Issue addenda as appropriate to interpret, clarify or expand the Bidding Documents.**

**2.5.4 Consult with and advise Owner as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor (herein called "Contractor") for those portions of the work as to which such acceptability is required by the Bidding Documents.**

**2.5.5 Consult with Owner and confirm in writing the acceptability of substitute materials and equipment proposed by Contractor when substitution prior to the award is required by the Bidding Documents.**

**2.5.6 Attend the Bid Opening, prepare Bid Tabulation Sheets and assist Owner in evaluating bids or proposals and recommend, in writing, contract awarding. In addition, Engineer shall assemble contract documents as specified in Exhibit A on page 19 attached hereto and made a part hereof, for presentation and execution.**

**2.6 Construction Phase  
During the Construction Phase**

**2.6.1 General Administration of Construction Contract. Engineer shall consult with and advise Owner and act as Owner's representative as provided in Articles 1 through 17, inclusive, of the Standard General Conditions of the Construction Contract of the Engineer's Joint Contract Documents Committee. The extent and limitations of the duties, responsibilities and authority of Engineer as assigned in said Standard General Conditions shall not be modified, except as Engineer may otherwise agree in writing. All of Owner's instructions to Contractor will be issued through Engineer who will have authority to act on behalf of Owner to the extent provided in said Standard General Conditions except as otherwise provided in writing.**

**2.6.2 Visits to Site and Observation of Construction. In connection with observations of the work of Contractor while it is in progress.**

**2.6.2.1 Engineer shall make visits to the site once per month minimum, or more frequent visits as deemed necessary by Owner and/or progress of work during the construction periods to observe as an experienced and qualified design professional the progress and quality of the various aspects of Contractor's work. Based on information obtained during such visits and on such observations, Engineer shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and Engineer shall keep Owner informed of the progress of the work.**

**2.6.2.2 The purpose of Engineer's visits to (and representation by Resident Project Representative if utilized) the site will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed work of Contractor will conform generally to the Contract Documents and that the integrity of the design concept as reflected in the Contract Documents has been implemented and preserved by Contractor. On the other hand, Engineer shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct or have control over Contractor's work nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor, for safety precautions and programs incident to the work of**

Contractor or for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor furnishing and performing their work except as provided in 2.6.3. Accordingly, Engineer can neither guarantee the performance of the construction contracts by Contractor nor assume responsibility for Contractor's failure to furnish and perform their work in accordance with the Contract Documents.

- 2.6.3 **Defective Work.** During such visits and on the basis of such observations, Engineer may disapprove of or reject Contractor's work while it is in progress if Engineer 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.
- 2.6.4 **Interpretations and Clarifications.** Engineer shall issue necessary interpretations and clarifications of the Contract Documents.
- 2.6.5 **Shop Drawings.** Engineer shall review and approve (or take other appropriate action in respect of) Shop Drawings (as that term is defined in the aforesaid Standard General Conditions), samples and other data which Contractor is required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto except as provided in 2.6.3.
- 2.6.6 **Substitutes.** Engineer shall evaluate and determine the acceptability of substitute materials and equipment proposed by Contractor and make a recommendation to Owner for his approval.
- 2.6.7 **Inspections and Tests.** Engineer shall have authority, as Owner's representative, to require special inspection or testing of the work, and shall receive and review all certificates of inspections, testing and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents (but only to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents).
- 2.6.8 **Dispute between Owner and Contractor.** Engineer shall act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make recommendations on all claims of Owner and Contractor relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work.
- 2.6.9 **Applications for Payment.** Based on Engineer's on-site observations as an experienced and qualified design professional, on information provided by the Resident Project Representative and on review of applications for payment and the accompanying data and schedules:
- 2.6.9.1 **Engineer shall determine the amounts owed to Contractor and recommend in writing payments to Contractor in such amounts. Such recommendations of payment will constitute a representation to Owner based on such observations and review, that the work has progressed to the point indicated, and that, to the best of Engineer's knowledge, information and belief, the quality of**

such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation). In the case of unit price work, Engineer's recommendations of payment will include final determination of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents).

**2.6.9.2** By recommending any payment Engineer will not thereby be deemed to have represented that exhaustive, continuous or detailed reviews or examinations have been made by Engineer to check the quality or quantity of Contractor's work as it is furnished and performed beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Engineer's review of Contractor's work for the purposes of recommending payments will not impose on Engineer responsibility to supervise, direct or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto or Contractor compliance with laws, rules, regulations, ordinances, codes or orders applicable to their furnishing and performing the work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes any Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the work, materials or equipment has passed to Owner free and clear of any lien, claims, security interests or encumbrances, or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid except as provided in, but not limited to paragraph 2.6.3.

**2.6.10 Construction Closeout Document.** Engineer shall receive and review maintenance and operating instructions, tests and approvals which are to be assembled by Contractor in accordance with the Contract Documents (but such review will only be to determine that their content complies with the requirements of, and in the case of certificates of inspection, tests and approvals the results certified indicate compliance with, the Contract Documents); and shall transmit them to Owner with written comments.

**2.6.11 Inspection.** Engineer shall conduct an inspection to determine if the work is substantially complete and a final inspection to determine if the completed work is acceptable. If the completed work is acceptable, the Engineer shall recommend in writing, a Notice of Substantial Completion to the Owner and the Contractor that the work is acceptable (subject to any conditions therein expressed).

**2.6.12 Pre-Construction Conference.** Engineer shall assist Owner in conducting a Pre-Construction Conference with Contractor for the project to discuss construction-related matters. Engineer will supply two stamped copies of the Construction Drawings incorporating addenda items generated during the bid process plus one(1) electronic file copy of each drawing in AutoCADD format(release 2000 or later) and in PDF format titled to reflect "Construction Drawings"



- 2.6.13 Owner shall select independent material testing labs. Engineer shall review testing results and based on these results, recommend to Owner the acceptability of material provided by the Contractor and used in the Project.
  - 2.6.14 Limitation of Responsibilities. Engineer shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor or supplier, or any of the Contractor's or Sub-Contractor's or supplier's agents or employees or any other persons (except Engineer's own employees and agents) at the site or otherwise furnishing or performing any of the Contractor's work; however, nothing contained in paragraphs 2.6.1 through 2.6.12 inclusive, shall be construed to release Engineer from liability for failure to properly perform duties and responsibilities assumed by Engineer in the Contract Documents, inclusive of but not limited to 2.6.3.
  - 2.6.15 Work Directive Changes and Change Orders. To be provided as appropriate to construct the project and in accordance with State and Local Laws.
- 2.7 Close-out and Operational Phase  
During this Phase, Engineer shall:
- 2.7.1 Provide start-up services for the new facility.
  - 2.7.2 Prepare training materials and provide 0 hours of training for Owner's staff to operate and maintain the new facility. The program consists of classroom training and hands-on training using the installed equipment.
  - 2.7.3 Assemble 2 complete sets of equipment manufacturer's operation and maintenance manuals in proper order for Owner's future reference.
  - 2.7.4 Assemble 2 complete sets of approved shop drawings in proper order for Owner's future reference.
  - 2.7.5 Provide technical consultation and assistance in correcting warranty items.
  - 2.7.6 Provide assistance in connection with the refining and adjusting of new equipment or system.
  - 2.7.7 Prepare a final set of stamped project drawings reflecting "as built" along with one(1) electronic file copy of these drawings in AutoCADD format(release 2000 or later) and in PDF format titled to reflect "as built".
  - 2.7.8 In company with Owner, visit the Project to observe any apparent defects in the completed construction, assist Owner in consultations and discussions with Contractor concerning correction of such deficiencies, and make recommendations as to replacement or correction of defective work.
  - 2.7.9 Engineer shall have 45 days from Contractor's Substantial Completion date to complete requirements of Contract sections 2.7.4 and 2.7.7.
- 2.8 Resident Engineer and Inspection
- 2.8.1 Engineer shall furnish, if requested, a Resident Project Representative (RPR), assistants and other field staff to assist Engineer in observing performance of the work of Contractor. The RPR(s), and the level of support supplied, shall be subject to approval by the Owner.
  - 2.8.2 Through more extensive on-site observations of the work in progress and field checks of materials and equipment by the RPR and assistants, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the work of the Contractor.
  - 2.8.3 The RPR shall be the Engineer's agent at the site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings

- Project, record the results of these inspections and report to Engineer.
- 2.8.4.6 Interpretation of Contract Documents.** Report to Engineer and Owner when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by the Engineer.
- 2.8.4.7 Modifications.** Consider and evaluate Contractor suggestions for modifications in Drawing or Specifications and report with RPR's recommendations to Engineer and Owner. Transmit to Contractor decisions as issued by Engineer.
- 2.8.4.8 Records.**
- Maintain at the job site orderly files for correspondence, reports for job conferences, Shop Drawings, and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports and other Project related documents.
  - Keep a diary or log book recording Contractor hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures, and send copies to Engineer and Owner.
  - Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.
  - Keep pictorial record of progress of project.
- 2.8.4.9 Reports:**
- Furnish Engineer and Owner periodic (daily) reports as required of progress of the work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
  - Consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the work.
  - Draft proposed Change Orders and Work Directive Changes, obtaining backup material from Contractor and recommend to Engineer Change Orders, Work Directive Changes and Field Orders in accordance with State and Local Laws.
  - Report immediately to Engineer and Owner upon the occurrence of any accident.
- 2.8.4.10 Payment Requests.** Review applications for payment with Contractor for compliance with the established procedure as set forth in the Construction Contract for their submission and forward with recommendations to Engineer noting particularly the relationship of the payment requested to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.

**2.8.4.11 Certificates, Maintenance and Operations Manuals.** During the course of the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by contractor are applicable to the times actually installed and in accordance with the Contract Documents, and having this material delivered to Engineer for review and forwarding to Owner prior to final payment for the work.

**2.8.4.12 Completion.**

- Before Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
- Conduct final inspection in the company of Engineer, Owner and Contractor and prepare a final list of items to be completed or corrected.
- Observe that all items on final list have been completed or corrected and make recommendation to Engineer concerning acceptance.

**2.8.5 Limitation of Authority.**

**2.8.5.1 Resident Project Representative**

- Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment unless authorized by Engineer.
- Shall not exceed limitations of Engineer's authority as set forth in the Agreement or the Contract Documents.
- Shall not undertake any of the responsibilities of Contractor, Sub-Contractor or Contractor's superintendent.
- Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
- Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the work.
- Shall not accept Shop Drawing or sample submittals from anyone other than Contractor.
- Shall not authorize Owner to occupy the project in whole or in part.
- Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by Engineer.

**3.0 SERVICES OF THE OWNER**

**3.1** Provide full information as to the requirements of the Project.

**3.2** Assist the Engineer in planning and design services by placing at his disposal all existing plans, maps, field notes, statistics, computations and other data in its possession relative to existing facilities.

**3.3** Guarantee access to and make all provisions for the Engineer and his subconsultants to enter upon public property as required for performing the services.

**4.0 COMPENSATION**

**4.1** For performance of Basic Engineering and Resident Engineering and Inspection as outlined in Section 2, Paragraphs 2.1 through 2.8.5.1

inclusive, required by the Owner, the Owner shall authorize and pay the Engineer as per the following:

4.1.1 Owner shall pay Engineer for the performance of Basic Engineering services as outlined in Section 2, Paragraphs 2.1 through 2.7.9 inclusive, a professional engineering fee based upon either a percentage of the construction cost of the project or a lump sum estimate by the Engineer.(mark the method of compensation with an X)

X Percentage of construction method is to be used, the fee shall be determined by referring to curve A on page 20 (Exhibit B) of this Contract, which indicates the rate of compensation for Basic Engineering Services expressed as a percentage of the construction cost. This curve is from American Society of Civil Engineer's Manual No. 45, 1980 Edition.

     Lump Sum amount of \$                      paid according to section 4.1.1.3

4.1.1.1 The fee for basic engineering services based on a percentage of the construction costs will have a maximum limitation of 110% of the Engineer's opinion of probable construction cost submitted with the final Drawings and Specifications referred to in Section 2, Paragraph 2.4.2 of this Contract. The fee for basic engineering services based on a percentage of the construction cost will have a minimum limitation of 90% of the Engineer's opinion of probable construction cost submitted with the final Drawings and Specifications referred to in Section 2, Paragraph 2.4.2 of this Contract.

4.1.1.2 An estimated construction cost based on the Engineer's conceptual opinion of probable cost for the project shall initially be used for the determination of interim fees until the more detailed Engineer's revised opinion of probable total project costs based on the final Drawings and Specifications referred to in Section 2, Paragraph 2.4.2 of this Contract is available.

4.1.1.3 Payment for basic engineering services shall be made based upon Engineer'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 for the following phases:

- For performing services outlined in Section 2.2, Conceptual Design Report Phase, Paragraphs 2.2.1 through 2.2.8 inclusive, Owner agrees to pay Engineer as follows:

- Ten percent (10%) of the total basic engineering services fee. Said fee shall be payable in partial payments on a monthly basis.

- For performing services outlined in Section 2.3 Design Memorandum Phase, Paragraphs 2.3.1 through 2.3.3 inclusive, Section 2.4 Design Phase, Paragraphs 2.4.1 through 2.4.6 inclusive, Owner agrees to pay Engineer as follows:

- Sixty percent (60%) of the total basic engineering service fee. Said fee shall