

# AGREEMENT FOR ENGINEERING SERVICES

This Agreement, made 12<sup>TH</sup> day of MARCH, 20 03, by and between this \_\_\_\_\_, \_\_\_\_\_

OHIO COUNTY WATER DISTRICT, hereinafter referred to as the OWNER, and HUNTER MARTIN & ASSOCIATES, INC. hereinafter referred to as ENGINEER:

The OWNER intends to construct SERIES III WATER SYSTEM IMPROVEMENTS

in OHIO County, State of KENTUCKY

for which the ENGINEER agrees to perform the various professional engineering services for the design and construction of said system.

## WITNESSETH:

That for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed:

### SECTION A - ENGINEERING SERVICES

The ENGINEER shall furnish engineering services as follows:

1. The ENGINEER will conduct preliminary investigations, prepare preliminary drawings, provide a preliminary itemized list of probable construction costs effective as of the date of the preliminary report, and submit a preliminary engineering report.
2. The ENGINEER will furnish 10 copies of the preliminary engineering report and layout maps to the OWNER.
3. The ENGINEER will attend conferences with the OWNER or other interested parties as may be reasonably necessary.
4. After the preliminary engineering report has been reviewed and approved by the OWNER and the OWNER directs the ENGINEER to proceed, the ENGINEER will perform the necessary design surveys, accomplish the detailed design of the project, prepare construction drawings, specifications and contract documents and prepare a final cost estimate based on the final design for the entire system. It is also understood that if subsurface explorations (such as borings, soil tests, rock soundings and the like) are required, the ENGINEER will furnish coordination of said explorations without additional charge, but the costs incident to such explorations shall be paid for by the OWNER as set out in Section D hereof.

5. Prior to the advertisement for bids, the ENGINEER will provide for each construction contract, not to exceed 10 copies of detailed drawings, specifications, and contract documents for use by the OWNER, appropriate Federal, State and local agencies from whom approval of the project must be obtained. The cost of such drawings, specifications, and contract documents shall be included in the basic compensation paid to the ENGINEER.
6. The ENGINEER will furnish additional copies of the drawings, specifications and contract documents as required by prospective bidders, materials suppliers, and other interested parties, but may charge them for the reasonable cost of such copies. Upon award of each contract, the ENGINEER will furnish to the OWNER three sets of the drawings, specifications and contract documents for execution. The cost of these sets shall be included in the basic compensation paid to the ENGINEER. Original documents, survey notes, tracings, and the like except those furnished to the ENGINEER by the OWNER, are and shall remain the property of the ENGINEER.
7. The drawings prepared by the ENGINEER under the provisions of Section A-4 above shall be in sufficient detail to permit the actual location of the proposed improvements on the ground. The ENGINEER shall prepare and furnish to the OWNER without any additional compensation, three copies of a map(s) showing the general location of needed construction easements and permanent easements and the land to be acquired. Property surveys, property plats, property descriptions, abstracting and negotiations for land rights shall be accomplished by the OWNER, unless the OWNER requests, and the ENGINEER agrees to provide these services. In the event the ENGINEER is requested to provide such services, the ENGINEER shall be additionally compensated as set out in Section D hereof.
8. The ENGINEER will attend the bid opening and tabulate the bid proposals, make an analysis of the bids, and make recommendations for awarding contracts for construction.
9. The ENGINEER will review and approve, for conformance with the design concept, any necessary shop and working drawings furnished by contractors.
10. The ENGINEER will interpret the intent of the drawings and specifications to protect the OWNER against defects and deficiencies in construction on the part of the contractors. The ENGINEER will not, however, guarantee the performance by any contractor.
11. The ENGINEER will establish baselines for locating the work together with a suitable number of bench marks adjacent to the work as shown in the contract documents.
12. The ENGINEER will provide general engineering review of the work of the contractors as construction progresses to ascertain that the contractor is conforming with the design concept.
13. Unless notified by the OWNER in writing that the OWNER will provide for resident inspection, the ENGINEER will provide resident construction inspection. The ENGINEER'S undertaking hereunder shall not relieve the contractor of contractor's obligation to perform the work in conformity with the drawings and specifications and in a workmanlike manner; shall not make the ENGINEER an insurer of the contractor's performance; and shall not impose upon the ENGINEER any obligation to see that the work is performed in a safe manner. Attachment No. III - The Limitations of Authority, Duties and Responsibilities of the Resident Construction Inspector is attached as an integral part of this Agreement.
14. The ENGINEER will review the contractor's applications for progress and final payment and, when approved, submit same to the OWNER for payment.
15. The ENGINEER will prepare necessary contract change orders for approval of the OWNER and others on a timely basis.

- 16. The ENGINEER will make final review prior to the issuance of the statement of substantial completion of all construction and submit a written report to the OWNER. Prior to submitting the final pay estimate, the ENGINEER shall submit a statement of completion to and obtain the written acceptance of the facility from the OWNER.
- 17. The ENGINEER will provide the OWNER with one set of reproducible record (as-built) drawings, and two sets of prints at no additional cost to the OWNER. Such drawings will be based upon construction records provided by the contractor during construction and reviewed by the resident inspector and from the resident inspector's construction data.
- 18. If State statutes require notices and advertisements of final payment, the ENGINEER shall assist in their preparation.
- 19. The ENGINEER will be available to furnish engineering services and consultations necessary to correct unforeseen project operation difficulties for a period of one year after the ate of statement of substantial completion of the facility. This service will include instruction of the OWNER in initial project operation and maintenance but will not include supervision of normal operation of the system. Such consultation and advice shall be furnished without additional charge except for travel and subsistence costs. The ENGINEER will assist the OWNER in performing a review of the project during the 11th month after the date of the certificate of substantial completion.
- 20. The ENGINEER further agrees to obtain and maintain, at the ENGINEER'S expense, such insurance as will protect the ENGINEER from claims under the Workman's Compensation Act and such comprehensive general liability insurance as will protect the OWNER and the ENGINEER from all claims for bodily injury, death, or property damage which may arise from the performance by the ENGINEER or by the ENGINEER'S employees of the ENGINEER'S functions and services required under this Agreement.
- 21. The services called for in the Section A-1 and A-2 of this Agreement shall be completed and the report completed and the report submitted within 60 calendar days from the date of authorization to proceed. After acceptance by the OWNER of the Preliminary Engineering Report and upon written authorization from the OWNER, the ENGINEER will complete final plans, specifications and contract documents and submit for approval of the OWNER and all State regulatory agencies within 60 calendar days from the date of authorization unless otherwise agreed to by both parties.

If the above is not accomplished within the time period specified, this Agreement may be terminated by the OWNER. The time for completion will be extended by the OWNER for a reasonable time if completion is delayed due to unforeseeable causes beyond the control and without the fault or negligence of the ENGINEER.

## SECTION B - COMPENSATION FOR ENGINEERING SERVICES

- 1. The OWNER shall compensate the ENGINEER for preliminary engineering services in the sum of:  
\_\_\_\_\_ Dollars (\$ ~~0~~ )

which shall be payable after the review and approval of the preliminary engineering report by the OWNER.

- 2. The OWNER shall compensate the ENGINEER for design and contract administration engineering services in the amount of : Select (a) or (b)

(a) XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Dollars (\$ XXXX )

(b) As shown in Attachment I, TABLE I

When Attachment I is used to establish compensation for the design and contract administration services, the actual construction costs on which compensation is determined shall exclude legal fees, administrative costs, engineering fees, land rights, acquisition costs, water costs, and interest expense incurred during the construction period.

3. The compensation for design and contract administration services (B-2) shall be payable as follows:

(a) A sum which equals seventy per cent (70%) of the total compensation payable under Section B-2, after completion and submission of the construction drawings, specifications, cost estimates, and contract documents, and the acceptance of the same by the OWNER.

(b) A sum which, together with the compensation provided in Section B-3(a) above, equals eighty per cent (80%) of the compensation payable immediately after the construction contracts are awarded.

(c) A sum equal to twenty per cent (20%) of the compensation will be paid on a monthly basis for general engineering review of the contractor's work during the construction period on percentage ratios identical to those approved by the ENGINEER as a basis upon which to make partial payments to the contractor(s). However, payment under this paragraph and of such additional sums as are due the ENGINEER by reason of any necessary adjustments in the payment computations will be in an amount so that the aggregate of all sums paid to the ENGINEER will equal one hundred (100%) per cent of the compensation. A final payment to equal 100 per cent shall be made when it is determined that all services required by this Agreement have been completed except for the services set forth in Section A-19 hereof.

**SECTION C - COMPENSATION FOR RESIDENT INSPECTION  
AS SET FORTH IN SECTION A-13**

When the ENGINEER provides resident inspection, the ENGINEER will, prior to the Preconstruction Conference, submit a resume of the residential inspector's qualifications, anticipated duties and responsibilities for approval by the OWNER. The OWNER agrees to pay the ENGINEER for such services in accordance with the schedule set out in Attachment I, Table 3. The ENGINEER will render to OWNER for such services an itemized bill, once each month, for compensation for such services performed hereunder during such period, the same to be due and payable by the OWNER to the ENGINEER on or before the 10th day of the following period. Under normal construction circumstances, and for the proposed construction period of 100 days, the cost of resident inspection is estimated to be \$48,792.56 .

**SECTION D - ADDITIONAL ENGINEERING SERVICES**

In addition to the foregoing being performed, the following services may be provided UPON PRIOR WRITTEN AUTHORIZATION OF THE OWNER.

1. Site surveys for water treatment plants, sewage treatment works, dams, reservoirs, and other similar special surveys as may be required.
2. Laboratory tests, well tests, borings, specialized geological, soils, hydraulic or other studies recommended by the ENGINEER.
3. Property surveys, detailed description of sites, maps, drawings or estimates related thereto, assistance in negotiating for land and easement rights.
4. Necessary data and filing maps for water rights, water adjudication and litigation.
5. Redesigns ordered by the OWNER after final plans have been accepted by the OWNER.
6. Appearances before courts or boards on matters of litigation or hearings related to the project.
7. Preparation of environment impact assessments or environmental impact statements.
8. Performance of detailed staking necessary for construction of the project in excess of the control staking set forth in Section A-11.
9. The ENGINEER further agrees to provide a manual of shop drawings and manufacturers' operation and maintenance manuals for facilities when required for       N/A      .
10. Making drawings from field measurements of existing facilities when required for planning additions or alterations thereto is estimated to be       N/A      .
11. Services due to changes in the scope of the Project or its design, including but not limited to, changes in size, complexity, schedule or character of construction.
12. Revising studies or reports which have previously been approved by the OWNER, or when revisions are due to causes beyond the control of the ENGINEER.
13. Preparation of design documents for alternate bids where major changes require additional documents.
14. Preparation of detailed renderings, exhibits or scale models for the Project.
15. Providing special analysis of the OWNER'S needs such as owning and operating analysis, plan for operation and maintenance, OWNER'S special operating drawings or charts and any other similar analysis.
16. The preparation of detailed rate schedules over and above the schedule necessary for the Preliminary Engineering Report, additional feasibility studies, appraisals and evaluations, detailed quantity surveys of material and labor, and material audits or inventories by the OWNER.
17. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) defective or incomplete work of the contractor, and (3) the contractor's default under Construction Contract due to delinquency or insolvency.
18. Providing design services relating to future facilities, systems and equipment which are not intended to be constructed or operated as a part of the Project.

19. Providing other services not otherwise provided for in this Agreement, including services normally furnished by the OWNER as described in Section F - SPECIAL PROVISIONS - Owner's Responsibilities.
20. Financing assistance including any requirements by the financing agency.

Payment for services specified in this Section D shall be in accordance with Attachment No. II when authorized by the OWNER. Barring unforeseen circumstances, such payment is estimated not to exceed \$10,500.00. The ENGINEER will render to OWNER for such services an itemized bill, separate from any other billing, once each month, for compensation for services performed hereunder during such period, the same to be due and payable by OWNER to the ENGINEER on or before the 10th day of the following period.

## SECTION E - INTEREST ON UNPAID SUMS

If OWNER fails to make any payment due ENGINEER within 60 days for services and expenses and funds are available for the project, then the ENGINEER shall be entitled to interest at the rate of 12 cent per annum from said 60th day, not to exceed an annual rate of 12 per cent.

## SECTION F - SPECIAL PROVISIONS

### 1. OWNER'S RESPONSIBILITIES

- a. Provide to the ENGINEER all criteria, design and construction standards and full information as to the OWNER'S requirements for the Project.
- b. Designate a person authorized to act as the OWNER'S representative. The OWNER or his representative shall receive and examine documents submitted by the ENGINEER, interpret and define the OWNER'S policies and render decisions and authorizations in writing promptly to prevent unreasonable delay in the progress of the ENGINEER'S services.
- c. Furnish laboratory tests, air and water pollution tests, reports and inspections of samples, materials or other items required by law or by governmental authorities having jurisdiction over this Project, or as recommended by the ENGINEER.
- d. Provide legal, accounting, right-of-way acquisition and insurance counseling services necessary for the Project, legal review of the Construction Contract Documents, and such auditing services as the OWNER may require to account for expenditures of sums paid to the Contractor.
- e. Furnish above services at the OWNER'S expense and in such manner that the ENGINEER may rely upon them in the performance of his services under this Agreement and in accordance with the Project timetable.
- f. Guarantee full and free access for the ENGINEER to enter upon all property required for the performance of the ENGINEER'S services under this Agreement.

- g. Give prompt written notice to the ENGINEER whenever the OWNER observes or otherwise becomes aware of any defect in the Project or other event which may substantially affect the ENGINEER'S performance of services under this Agreement.
  - h. Protect and preserve all survey stakes and markers placed at the project site prior to the assumption of this responsibility by the contractor and bear all costs of replacing stakes or markers damaged or removed during said time interval.
- 2. All original documents, including but not limited to ideas, designs, drawings and specifications, as an instrument of professional service, are to remain the property of the ENGINEER. Reuse of any document without written verification or adaptation by the ENGINEER will be at the OWNER'S sole risk and without legal liability and exposure to the ENGINEER.
- 3. Delegation of Duties - Neither the OWNER nor the ENGINEER shall delegate his duties under this Agreement without the written consent of the other.
- 4. Extent of Agreement - This Agreement represents the entire and integrated Agreement between the OWNER and the ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by the OWNER and the ENGINEER.
- 5. Governing Law - Unless otherwise specified within this Agreement, this Agreement shall be governed by the law of the principal place of business of the ENGINEER.
- 6. In the event any provisions of this Agreement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties.
- 7. The ENGINEER has not been retained or compensated to provide design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required by the Contractor to perform his work but not relating to the final or completed structure; omitted services include but are not limited to shoring, scaffolding, underpinning, temporary retainment of excavations and any erection methods and temporary bracing.
- 8. The ENGINEER intends to render his services under this Agreement in accordance with generally accepted professional practices for the intended use of the Project.
- 9. Since the ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others or over the Contractor(s) methods of determining prices, or over competitive bidding or market conditions, his opinions of probably Project cost and Construction Cost provided for herein are to be made on the basis of his experience and qualifications and represent his best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but the ENGINEER cannot and does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probably cost prepared by him. If prior to the bidding or negotiating phase OWNER wishes greater assurance as to the project or construction cost, he shall employ an independent cost estimator.
- 10. TERMINATION
  - a. Should the OWNER decide to abandon, discontinue or terminate the Project after the preliminary report or at any later stage of development, the ENGINEER shall receive seven days written notice and be compensated for his services through the effective date in accordance with the fees for Professional Engineering Services as described in Attachment No. I for each completed phase as listed in Section B-3 (if any); plus the actual hours spent in accordance with Attachment No. II for work performed on any

10. TERMINATION

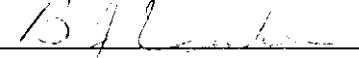
- a. Should the OWNER decide to abandon, discontinue or terminate the Project after the preliminary report or at any later stage of development, the ENGINEER shall receive seven days written notice and be compensated for his services through the effective date in accordance with the fees for Professional Engineering Services as described in Attachment No. I for each completed phase as listed in Section B-3 (if any): plus the actual hours spent in accordance with Attachment No. 11 for work performed on any incomplete phase: plus actual hours spent in accordance with Attachment No. 11 for Additional Engineering Services as described in Section D.
- b. In the event the project is delayed for causes beyond the control of the ENGINEER for a period of six months or more, the ENGINEER shall be paid for his services to the beginning of the delay based on actual hours spent in accordance with Attachment No. II plus travel and other out-of-pocket expenses at actual cost.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below.

(SEAL)

OWNER: OHIO COUNTY WATER DISTRICT

BY: 

ATTEST: 

Type Name: Henry Morgan

Type Name: B. J. Dickens

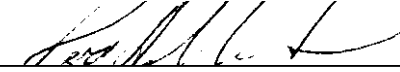
Title: Chairman

Title: Secretary

Date: 3-19-03

(SEAL)

ENGINEER: HUNTER MARTIN & ASSOCIATES, INC.

By: 

ATTEST: 

Type Name: Rod H. Martin

Type Name: Michael Gardner

P.E./President

Title: Secretary

\_\_\_\_\_



**ATTACHMENT FOR ENGINEERING SERVICES  
ATTACHMENT NO. I**

AGREEMENT FOR ENGINEERING SERVICES  
KENTUCKY ATTACHMENT I

FEES FOR PROFESSIONAL ENGINEERING SERVICES  
AS A PERCENTAGE OF NET CONSTRUCTION COST

This attachment will be executed and made a part of the "Agreement for Engineering Services". It will be used as a guide for determining maximum compensation for basic engineering and resident inspection services.

TABLE I - BASIC DESIGN

These fees shall pertain to projects requiring complex or detailed engineering design. This will include sewage treatment plants, sewage collection, sewage lift stations, water treatment plants, water distribution mains and appurtenances less than 12 inches in diameter, water pump stations, water storage facilities, and renovations of water and sewer facilities.

<u>NET CONSTRUCTION COST</u>	<u>PER CENT</u>
\$ 100,000	13.00
200,000	11.20
300,000	10.25
400,000	9.70
500,000	9.30
600,000	8.98
700,000	8.70
800,000	8.45
900,000	8.25
1,000,000	8.10
2,000,000	7.15
3,000,000	6.72
4,000,000	6.40
5,000,000	6.25
6,000,000	6.15
7,000,000	6.05
8,000,000	5.97
9,000,000	5.90
10,000,000	5.85

TABLE II - BASIC DESIGN

These fees shall pertain to less complex projects such as light industrial buildings, roads, streets, storm drains 24 inches and larger, water distribution mains 12 inches and larger, and appurtenances related thereto.

<u>NET CONSTRUCTION COST</u>	<u>PER CENT</u>
\$ 100,000	10.50
200,000	9.15
300,000	8.42
400,000	7.98
500,000	7.68
600,000	7.40
700,000	7.20
800,000	7.00
900,000	6.87
1,000,000	6.72
2,000,000	6.20
3,000,000	5.93
4,000,000	5.80
5,000,000	5.73
6,000,000	5.66
7,000,000	5.60
8,000,000	5.57
9,000,000	5.53
10,000,000	5.50

**ATTACHMENT FOR ENGINEERING SERVICES**

**ATTACHMENT FOR ENGINEERING SERVICES  
ATTACHMENT NO. I**

Surveys for design such as topography, profiles, cross sections and the like, soundings -- not to exceed six feet in depth -- to estimate the amount of rock excavation, are included in the basic service instead of being classified as additional or special services. Such variations are more consistent with general practice in Kentucky, and schedules of compensation set out herein have been adjusted to allow for these variations.

**TABLE III - PERCENTAGES FOR ESTABLISHING  
FULL TIME RESIDENT INSPECTION COSTS**

NET CONSTRUCTION COST	PER CENT
\$ 100,000	12.00
200,000	9.40
300,000	7.80
400,000	7.00
500,000	6.40
600,000	5.80
700,000	5.40
800,000	5.00
900,000	4.70
1,000,000	4.40
2,000,000	3.40
3,000,000	2.95
4,000,000	2.60
5,000,000	2.50
6,000,000	2.32
7,000,000	2.20
8,000,000	2.12
9,000,000	2.05
10,000,000	2.00

NOTE: Add one per cent to the above rate for the treatment facility portion of the project.

**GENERAL INFORMATION FOR BASIC AND RESIDENT INSPECTION FEES**

The resident inspector will maintain a daily diary meeting FmHA requirements.

Compensation for construction costs between the values listed in the schedule should be determined by interpolation.

If a project is divided into units and all units are authorized for design at the same time, the compensation will be determined by adding together the cost of the construction of the various units and applying the table to the sum of these costs. The initial construction award amount will set the fee per cent for project (change orders will not adjust fee per cent). For construction inspection, the initial per cent times the revised construction cost will create an upset figure not to be exceeded. Only liquidated damages will be available for additional inspection fees. If remaining funds are used and additional construction is rebid, the project shall be treated as a new project with new fee percentages.

DATE:	<u>3-19-03</u>	OWNER:	<u>OHIO COUNTY WATER DISTRICT</u>
		BY:	<u>Henry Morgan</u>
		TITLE:	Henry Morgan, Chairman
		ENGINEER:	<u>HUNTER MARTIN &amp; ASSOCIATES, INC</u>
		BY:	<u>Rod H. Martin</u>
DATE:	<u>3-18-03</u>	TITLE:	Rod H. Martin P.E. /President

ATTACHMENT FOR ENGINEERING SERVICES  
ATTACHMENT NO. 11

RATE SCHEDULE

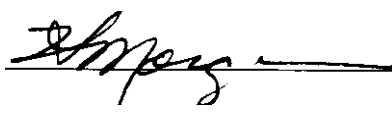
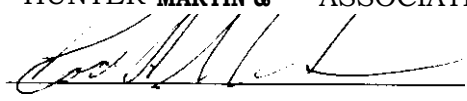
As per Section D, Additional Engineering Services, this attachment will be executed and made a part of the "Agreement for Engineering Services". The Owner and Engineer hereby agree to the following rates:

	<b>RATE PER HOUR</b>
<b>SERVICE:</b>	
Project Engineer	\$62.00
Project Surveyor	58.00
Design Engineer	54.00
Project Manager	50.00
Engineering or Surveying Assistant	46.00
Technician/Draftsman	42.00
Office, Secretary and Clerical	36.00
Resident Inspector	40.00
Field Party:	
2 Men	70.00
3 Men	90.00
<b>REIMBURSEMENTS:</b>	
Vehicle Travel	\$0.35/Mile
Out-of-Town Subsistence/Lodging (When Required)	Actual Cost

EXPLANATIONS:

Work on any job shall be billed from the Engineer's office.

All work over 8 hours per day or on Saturdays, Sundays or legal holidays (when approved by client) shall be billed at 1.25 times the above rates except for materials and vehicle charges.

	OWNER:	OHIO COUNTY WATER DISTRICT
	BY	
DATE <u>3-19-03</u>	TITLE:	Henry Morgan, Chairman
	ENGINEER:	HUNTER <b>MARTIN &amp;</b> ASSOCIATES, INC.
	BY	
DATE <u>3-12-03</u>	TITLE:	Rod H. Martin, P.E./President

**ATTACHMENT III**  
**TO**  
**AGREEMENT FOR ENGINEERING SERVICES**

THE LIMITATIONS OF AUTHORITY, DUTIES AND RESPONSIBILITIES OF THE RESIDENT CONSTRUCTION INSPECTOR ARE AS FOLLOWS:

1. The Resident Construction Inspector shall set under the direct supervision of the ENGINEER, shall be the ENGINEER'S agent in all matters relating to on-site construction review of the Contractor's work, shall communicate only with the ENGINEER and the Contractor (or Contractors), and shall communicate with subcontractors only through the Contractor or his authorized superintendent. The OWNER shall communicate with the Resident Construction Inspector only through the ENGINEER.
2. The Resident Construction Inspector shall review and inspect on-site construction activities of the Contractor relating to portions of the Project designed and specified by the ENGINEER as contained in the Construction Contract Documents.
3. Specifically omitted from the Resident Construction Inspector's duties are any review of the Contractor's safety precautions, or the means, methods, sequences, or procedures required for the Contractor to perform the work but not relating to the final or completed Project. Omitted design or review services include but are not limited to shoring, scaffolding, underpinning, temporary retention of excavations and any erection methods and temporary bracing.
4. The specific duties and responsibilities of the Resident Construction Inspector are enumerated as follows:
  - a. Schedules: Review the progress schedule, schedule of Shop Drawing submissions and schedule of values prepared by Contractor and consult with ENGINEER concerning their acceptability.
  - b. Conferences: Attend preconstruction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with ENGINEER and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
  - c. Liaison:
    - (1) Serve as ENGINEER'S liaison with Contractor, working principally through Contractor's superintendent and assist him in understanding the intent of the Contract Documents. Assist ENGINEER in serving as OWNER'S liaison with Contractor when Contractor's operations affect OWNER'S on-site operations.
    - (2) As requested by ENGINEER, assist in obtaining from OWNER additional details or information, when required at the job site for proper erection of the work.
  - d. Shop Drawings and Samples:
    - (a) Receive and record date of receipt of Shop Drawings and samples, receive samples which are furnished at the site by Contractor, and notify ENGINEER of their availability for examination.

- (2) Advise ENGINEER and Contractor or its superintendent immediately of the commencement of any work requiring a Shop Drawing or sample submission if the submission has not been approved by ENGINEER.
- e. Review of Work, Rejection of Defective Work, Inspections and Tests:
  - (1) Conduct on-site inspection of the work in progress to assist ENGINEER in determining if the work is proceeding in accordance with the Contract Documents and that completed work will conform to the Contract Documents.
  - (2) Report to ENGINEER whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, test or approval required to be made or has been damaged prior to final payment; and advise ENGINEER when he believes work should be corrected or rejected or should be uncovered for inspection, or requires special testing, inspection or approval.
  - (3) Verify that tests, equipment and systems start-ups, and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that Contractor maintains adequate records thereof; observe, record and report to ENGINEER appropriate details relative to the test procedures and start-ups.
  - (4) Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections and report to ENGINEER.
- f. Interpretation of Contact Documents: Transmit to Contractor ENGINEER'S clarifications and interpretations of the Contract Documents.
- g. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report them with recommendations to ENGINEER.
- h. Records:
  - (1) Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and samples submissions, reproductions of original Contract Documents including all 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.
  - (2) Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to ENGINEER.
  - (3) Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.
- i. Reports:

- (1) Furnish ENGINEER periodic reports as required of progress of the work and Contractor's compliance with the approved progress schedule and schedule of Shop Drawing submissions.
  - (2) Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the work.
  - (3) Report immediately to ENGINEER upon the occurrence of any accident.
- j. Payment Requisitions: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to ENGINEER, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.
- k. Certificates, Maintenance and Operating 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 items actually installed; and deliver this material to ENGINEER for his review and forwarding to OWNER prior to final acceptance of the work.
- l. Completion:
- (1) Before ENGINEER issues a Statement of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
  - (2) Conduct final review in the company of ENGINEER, OWNER and Contractor and prepare a final list of items to be completed or corrected.
  - (3) Verify that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.