

# Memorandum

To: Missouri River Levee Ad Hoc Consultant Selection Subcommittee

From: Brian L. Henkel, P.E., Groundwater Management Engineer

Date: 11/6/2009

Re: Contract for Professional Services for the Missouri River R-613 and R-616 Levee Accreditation Project

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The Missouri River Levee Ad Hoc Consultant Selection Subcommittee (Subcommittee) interviewed three proposal teams for accreditation of the Missouri River levees R-613 and R-616 (Project) on September 30<sup>th</sup>, 2009. The teams were ranked in the following order: Tetra Tech, JEO and AMEC. The Board authorized the General Manager to enter into contract negotiations with Tetra Tech to provide professional services for the Project. District staff and management have worked with Tetra Tech personnel to develop a detailed scope, time and cost estimate and contract. The Project will span multiple years and has been divided into three phases. The first phase will be completed within this fiscal year and will be utilized to determine the scope and fees of the subsequent phases. Phase 1 will consist of the following tasks:

- Project management including document review, client meetings, stakeholder meetings, agency coordination and preparation of scope for alternatives development,
- Alternatives development including stakeholder coordination, levee setback options and several deliverables,
- GIS database management,
- Levee inspection and inventory,
- Levee inspection report,
- Surveying,
- Hydrology and hydraulics (H&H) including incorporation of available H&H models, confirmation of effective hydraulic models, interior drainage and system analysis and
- Geophysical investigation.

A detailed listing of the fees associated with these tasks is included as Attachment 1 to Exhibit C. Phase one will be completed by April 2011 and a detailed schedule is included as Attachment 1 to Appendix A. The detailed professional services agreement is also included as an attachment to this memorandum.

The total fees for Phase 1 of the Project are \$330,878. The budgeted amount for the Project for this fiscal year is \$300,000. The Project would therefore exceed 110% of the budgeted amount. The District also budgeted for cost sharing on the City of Omaha's levee accreditation in the amount of \$250,000. The City of Omaha has decided to pursue a less aggressive schedule for levee certification and accreditation and the possibility of needing the budgeted cost share amount is unlikely. This budgeted cost share money could be utilized to cover the overrun amount.

- **Management recommends that the subcommittee recommend to the Board that the General Manager to be authorized to execute a professional services contract with Tetra Tech to provide engineering services for Phase I of the Missouri River R-613 and R-616 Levees Certification Project for a maximum fee of \$330,878, subject to changes deemed necessary by the General Manager and approval as to form by District legal counsel and further that account 03-12-4400, Project Maintenance - Professional Services, be allowed to exceed 110% of the budgeted amount.**

Attachment 1 to Exhibit C

P-MRNRD MO River R-613/616 Federal Levee Certification - Investigative Phase

TASKS	Title:	Proj Mgr	Sr. QC Review	Sr. Engr.	Project Engr.	Project Engr.	CADD Tech	Sr. Geologist	Sr. Geotech	Proj. Engr.	Survey Mgr.	Expenses
	Name(s):	Sotak	Chen	Sexton	Rogers	Gregalunas	Klein	Laymon	Chapel	McIntosh	Whitfield	
<b>Project Management</b>												
Prepare for and Attend Kickoff Meeting		8				8			8	4		\$3,812
Document Review - As-Builts; Design, Geotech, & Inspection Rpts; O&M Manual		12	12	4		12			20	16		\$11,468
Project Management - Monthly Client Mtg (6)		15										\$2,400
Project Management - Monthly Invoice/Schedule Update		10							8			\$2,880
Project Management - Internal Kickoff Meeting		4	2	2	2	2	2	2	4	4		\$3,422
Stakeholder Meeting (2) - NRD, NDNR, USACE, NGPC, C.O.B., Iowa?		16				12				6		\$400 \$4,838
Prepare Scope of Work for Alternatives Development		8	2	2		2		12	12	4		\$6,382
USACE Coordination Meetings (3) (408 / PL 84-99, etc.)		18										\$2,880
												<b>38,082</b>
<b>Alternatives Development &amp; Deliverables</b>												
Stakeholder Meeting (2) - NRD, Sarpy County, City of Bellevue, NDOR, MAPA		12	8	2	20	20						\$600 \$8,840
Alternatives Development - MO River setback		30	6	6	60	50	40	2	2	8		\$800 \$23,994
Deliverable - Prepare Benefit/Cost Summary after Investigative Effort		40	4	4	22	20						\$350 \$12,930
Deliverable - Outside Information Review - US Hwy 75 Hydraulic Study		22	4	4		32				8		\$200 \$9,384
Deliverable - Outside Information Review - Other		20	6	6	12	20				10		\$200 \$10,430
Deliverable - Investigation Summary and Proposed Alternatives Analysis		80	20	8	24	40			8			\$800 \$27,240
												<b>92,818</b>
<b>GIS Database Management</b>												
Incorporate Existing Information						16						\$1,520
Incorporate Levee Inspection Information						40						\$3,800
Incorporate Existing Geotechnical Information						12						\$1,140
Prepare Maps Identifying Potential Underseepage Concerns						14			4			\$200 \$2,170
												<b>8,630</b>
<b>Levee Inspection/Inventory</b>												
Field Inspection of Levees		65	65		65							\$2,300 \$33,500
Compare Field Notes with O&M Manual/As-Builts		8	2		16							\$3,600
												<b>37,100</b>
<b>Levee Inspection Report</b>												
Prepare Levee Inspection Memo		20		4	30							\$7,640
Review Levee Inspection Memo w/ NRD		4			4							\$50 \$1,170
Identify Levee Deficiencies		20	10	4	40				12			\$12,760
												<b>21,570</b>
<b>Surveying</b>												
Assess Existing Information & Scope Survey for Phase 2		2				4				12		\$2,308
												<b>2,308</b>
<b>Hydrology and Hydraulics (H&amp;H)</b>												
Obtain and Review Available H&H Models/Reports		4	4	4		20						\$4,180
Confirm Effective Hydraulic Models		6	6			30						\$5,010
Conduct Interior Drainage Study		80	20	20		160				80		\$150 \$46,190
Assess Capacity/Integrity of Existing Drainage Structures		8	4							100		\$150 \$14,530
System Analysis (Incl. Risk & Reliability)		100	40	20		220	140					\$400 \$57,900
												<b>127,810</b>
<b>Geophysical Investigation</b>												
Review Sub-Surface Information from As-Builts, Design Rpts & Geotech Rpts									8			\$1,280
Review GIS Potential Underseepage Maps									8			\$1,280
												<b>2,560</b>
												<b>Total Contract: 330,878</b>

Assumptions

- 1 Costs to obtain detailed information from FEMA is not known. It is assumed that the P-MRNRD will absorb all of these costs.
- 2 P-MRNRD to Videotape all side drains/penetrations
- 3 No Submittals to FEMA are anticipated during the Investigative Phase.
- 4 Erosion and Sedimentation Analysis done at beginning of Alternatives Development Phase
- 5 Review of most recent pump station (mech/elec) will determine if additional inspection is needed in next phase of project.
- 6 Review/Inspection of two closures (Hwy 370 & BNSF/UPRR corridors) to be made during levee inspections and included in inspection fee.
- 7 O&M Manual Update to be done during Final Design
- 8 No FEMA correspondence/submittals are anticipated during Investigative Phase. (FEMA will be kept in loop during stakeholder meetings as desired by P-MRNRD)
- 9 Document preparation for USACE 408 Review, if pertinent to this project, will begin during Alternatives Development phase.



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This Agreement shall be governed by the laws of the State of Virginia. Should you have any questions concerning this Agreement, you may contact EJCDC by writing to:

Arthur Schwartz, Esq.  
General Counsel  
National Society of Professional Engineers  
1420 King Street  
Alexandria, VA 22314

Phone: (703) 684-2845  
Fax: (703) 836-4875  
e-mail: [aschwartz@nspe.org](mailto:aschwartz@nspe.org)

**You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between us which supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this agreement.**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD FORM OF AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR  
PROFESSIONAL SERVICES

P-MRNRD MO River R-613/R-616  
Federal Levee Certification  
Sarpy County, NE

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

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This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (No. C-700, 2002 Edition) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance on the completion and use of this Agreement, see EJCDC User's Guide to the Owner-Engineer Agreement, No. E-001, 2002 Edition.

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STANDARD FORM OF AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR  
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of       N ,       200 (“Effective Date”) between  
      ov. 12       9

      Papio-Missouri River Natural Resources District (P-MRNRD) (“Owner”) and

      Tetra Tech, Inc. (Tetra Tech) (“Engineer”).

Owner intends to       investigate the technical, environmental and economic requirements to  
      provide

      levee certification for the R-613 and R-616 levee systems (levees) in southern and eastern Sarpy County,

      Nebraska. Said investigation will be conducted within applicable FEMA and USACE guidelines.

      Said

      certification may require design and construction services on the entire levee system.

\_\_\_\_\_ (“Project”).

Owner and Engineer agree as follows:

**ARTICLE 1 – SERVICES OF ENGINEER**

1.01 *Scope*

- A. Engineer shall provide, or cause to be provided, the services set forth herein and in Exhibit A.

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

2.01 *General*

- A. Owner shall have the responsibilities set forth herein and in Exhibit B.
- B. Owner shall pay Engineer as set forth in Exhibit C.
- C. Owner shall be responsible for, and Engineer may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement.

## ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES

### 3.01 *Commencement*

- A. Engineer shall begin rendering services as of the Effective Date of the Agreement.

### 3.02 *Time for Completion*

- A. Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided in Exhibit A, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- C. If Owner authorizes changes in the scope, extent, or character of the Project, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.
- E. If Engineer fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled to the recovery of direct damages resulting from such failure.

## ARTICLE 4 – INVOICES AND PAYMENTS

### 4.01 *Invoices*

- A. *Preparation and Submittal of Invoices.* Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of Exhibit C. Engineer shall submit its invoices to Owner on a monthly basis. Invoices are due and payable within 30 days of receipt.

### 4.02 *Payments*

- A. *Application to Interest and Principal.* Payment will be credited first to any interest owed to Engineer and then to principal.
- B. *Failure to Pay.* If Owner fails to make any payment due Engineer for services and expenses within 30 days after receipt of Engineer's invoice, then:
  - 1. amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and
  - 2. Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services,

expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.

- C. *Disputed Invoices.* If Owner contests an invoice, Owner may withhold only that portion so contested, and must pay the undisputed portion.
- D. *Legislative Actions.* If after the Effective Date of the Agreement any governmental entity takes a legislative action that imposes taxes, fees, or charges on Engineer's services or compensation under this Agreement, then the Engineer may invoice such new taxes, fees, or charges as a Reimbursable Expense to which a factor of 1.0 shall be applied. Owner shall pay such invoiced new taxes, fees, and charges; such payment shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C.

## ARTICLE 5 – OPINIONS OF COST

### 5.01 *Opinions of Probable Construction Cost*

- A. Engineer's opinions of probable Construction Cost are to be made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional generally familiar with the construction industry. However, since Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner wishes greater assurance as to probable Construction Cost, Owner shall employ an independent cost estimator as provided in Exhibit B.

### ~~5.02 *Designing to Construction Cost Limit*~~

- ~~A. If a Construction Cost limit is established between Owner and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F, "Construction Cost Limit," to this Agreement.~~

### 5.03 *Opinions of Total Project Costs*

- A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in collating the various cost categories which comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

## ARTICLE 6 – GENERAL CONSIDERATIONS

### 6.01 *Standards of Performance*

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time

and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services.

- B. Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct any such deficiencies in technical accuracy without additional compensation except to the extent such corrective action is directly attributable to deficiencies in Owner-furnished information.
- C. Engineer may employ such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- D. Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- E. Engineer and Owner shall comply with applicable Laws and Regulations and Owner-mandated standards that Owner has provided to Engineer in writing. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, and compensation.
- F. Engineer shall not be required to sign any documents, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such documents.
- G. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (No. C-700, 2002 Edition) unless both parties mutually agree to use other General Conditions by specific reference in Exhibit J.
- H. Engineer shall not at any time 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 or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.
- I. Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the Work in accordance with the Contract Documents.
- J. Engineer shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or of any other persons (except Engineer's own employees and its Consultants) at the Site or otherwise furnishing or

performing any Work; or for any decision made on interpretations or clarifications of the Contract Documents given by Owner without consultation and advice of Engineer.

6.02 *Design Without Construction Phase Services*

- A. If Engineer's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, then (1) Engineer's services under this Agreement shall be deemed complete no later than the end of the Bidding or Negotiating Phase; (2) Engineer shall have no design or shop drawing review obligations during construction; (3) Owner assumes all responsibility for the application and interpretation of the Contract Documents, contract administration, construction observation and review, and all other necessary Construction Phase engineering and professional services; and (4) Owner waives any claims against the Engineer that may be connected in any way thereto.

6.03 *Use of Documents*

- A. All Documents are instruments of service in respect to this Project, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed. Owner shall not rely in any way on any Document unless it is in printed form, signed or sealed by the Engineer or one of its Consultants.
- B. A party may rely that data or information set forth on paper- (also known as hard copies) that the party receives from the other party by mail, hand delivery, or facsimile, are the items that the other party intended to send. Files in electronic media format of text, data, graphics, or other types that are furnished by one party to the other are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- C. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any transmittal errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files.
- D. When transferring documents in electronic media format, the transferring party makes no representations as to long-term compatibility, usability, or readability of such documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the documents' creator.
- E. Owner may make and retain copies of Documents for information and reference in connection with use on the Project by Owner. Engineer grants Owner a license to use the Documents on the Project, extensions of the Project, and other projects of Owner, subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project or on any other project without



written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to Engineer's Consultants; (3) Owner shall indemnify and hold harmless Engineer and Engineer's Consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification without written verification, completion, or adaptation by Engineer; (4) such limited license to Owner shall not create any rights in third parties.

- F. If Engineer at Owner's request verifies or adapts the Documents for extensions of the Project or for any other project, -then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

#### 6.04 Insurance

- A. Engineer shall procure and maintain insurance as set forth in Exhibit G, "Insurance." Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer.
- B. Owner shall procure and maintain insurance as set forth in Exhibit G, "Insurance." Owner shall cause Engineer and Engineer's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by Owner which are applicable to the Project.
- C. Owner shall require Contractor to purchase and maintain general liability and other insurance in accordance with the requirements of Paragraph 5.04 of the "Standard General Conditions of the Construction Contract," (No. C-700, 2002 Edition) as prepared by the Engineers Joint Contract Documents Committee and to cause Engineer and Engineer's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project.
- D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- E. All policies of property insurance relating to the Project shall contain provisions to the effect that Engineer's and Engineer's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against Engineer or its Consultants, or any insureds or additional insureds thereunder.
- F. At any time, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

6.05 *Suspension and Termination*

A. Suspension.

By Owner: Owner may suspend the Project upon seven days written notice to Engineer.

By Engineer: If Engineer's services are substantially delayed through no fault of Engineer, Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement.

B. Termination. The obligation to provide further services under this Agreement may be terminated:

1. For cause,

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

b. By Engineer:

1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or

2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control.

3) Engineer shall have no liability to Owner on account of such termination.

c. Notwithstanding the foregoing, this Agreement will not terminate under Paragraph 6.05.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience,

a. By Owner effective upon Engineer's receipt of notice from Owner.

C. *Effective Date of Termination.* The terminating party under Paragraph 6.05.B may set the effective date of termination at a time up to 30 days later than otherwise provided to allow

Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

D. *Payments Upon Termination.*

1. In the event of any termination under Paragraph 6.05, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.03.E.
2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 6.05.D.1, to invoice Owner and to payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C.

6.06 *Controlling Law*

- A. This Agreement is to be governed by the law of the state in which the Project is located.

6.07 *Successors, Assigns, and Beneficiaries*

- A. Owner and Engineer are hereby bound and the partners, successors, executors, administrators and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 6.07.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.
  2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

3. Owner agrees that the substance of the provisions of this Paragraph 6.07.C shall appear in the Contract Documents.

6.08 *Dispute Resolution*

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking the procedures of Exhibit H or other provisions of this Agreement, or exercising their rights under law.
- B. If the parties fail to resolve a dispute through negotiation under Paragraph 6.08.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties may exercise their rights under law.

6.09 *Environmental Condition of Site*

- A. Owner has disclosed to Engineer in writing the existence of all known and suspected Asbestos, PCBs, Petroleum, Hazardous Waste, Radioactive Material, hazardous substances, and other Constituents of Concern located at or near the Site, including type, quantity, and location.
- B. Owner represents to Engineer that to the best of its knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at the Site.
- C. If Engineer encounters an undisclosed Constituent of Concern, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.
- D. It is acknowledged by both parties that Engineer's scope of services does not include any services related to Constituents of Concern. If Engineer or any other party encounters an undisclosed Constituent of Concern, or if investigative or remedial action, or other professional services, are necessary with respect to disclosed or undisclosed Constituents of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until Owner: (1) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Constituents of Concern; and (2) warrants that the Site is in full compliance with applicable Laws and Regulations.
- E. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on 30 days notice.
- F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

6.10 *Indemnification and Mutual Waiver*

- A. *Indemnification by Engineer.* To the fullest extent permitted by law, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, partners, agents, consultants, and employees from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Engineer or Engineer's officers, directors, partners, employees, or Consultants. The indemnification provision of the preceding sentence is subject to and limited by the provisions agreed to by Owner and Engineer in Exhibit I, "Allocation of Risks," if any.
- B. *Indemnification by Owner.* To the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer, Engineer's officers, directors, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's officers, directors, partners, agents, consultants, or employees, or others retained by or under contract to the Owner with respect to this Agreement or to the Project.
- C. *Environmental Indemnification.* In addition to the indemnity provided under Paragraph 6.10.B of this Agreement, and to the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer and its officers, directors, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, and all court, arbitration, or other dispute resolution costs) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under the Site, provided that (i) any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.
- D. *Percentage Share of Negligence.* To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.

- E. *Mutual Waiver.* To the fullest extent permitted by law, Owner and Engineer waive against each other, and the other's employees, officers, directors, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project.

#### 6.11 *Miscellaneous Provisions*

- A. *Notices.* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by facsimile, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.
- B. *Survival.* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.
- C. *Severability.* Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. *Waiver.* A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- E. *Accrual of Claims.* To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.

### ARTICLE 7 – DEFINITIONS

#### 7.01 *Defined Terms*

- A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above or in the exhibits; in the following provisions; or in the "Standard General Conditions of the Construction Contract," prepared by the Engineers Joint Contract Documents Committee (No. C-700, 2002 Edition):
1. *Additional Services* – The services to be performed for or furnished to Owner by Engineer in accordance with Exhibit A, Part 2, of this Agreement.
  2. *Basic Services* – The services to be performed for or furnished to Owner by Engineer in accordance with Exhibit A, Part 1, of this Agreement.
  3. *Construction Cost* – The cost to Owner of those portions of the entire Project designed or specified by Engineer. Construction Cost does not include costs of services of Engineer or other design professionals and consultants, cost of land or

rights-of-way, or compensation for damages to properties, or Owner's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

4. *Constituent of Concern* – Any substance, product, waste, or other material of any nature whatsoever (including, but not limited to, Asbestos, Petroleum, Radioactive Material, and PCBs) which is or becomes listed, regulated, or addressed pursuant to [a] the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); [b] the Hazardous Materials Transportation Act, 49 U.S.C. §§1801 et seq.; [c] the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); [d] the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; [e] the Clean Water Act, 33 U.S.C. §§1251 et seq.; [f] the Clean Air Act, 42 U.S.C. §§7401 et seq.; and [g] any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
5. *Consultants* – Individuals or entities having a contract with Engineer to furnish services with respect to this Project as Engineer's independent professional associates, consultants, subcontractors, or vendors.
6. *Documents* – Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.
7. *Drawings* – That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.
8. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
9. *Reimbursable Expenses* – The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic and Additional Services for the Project.
10. *Resident Project Representative* – The authorized representative of Engineer, if any, assigned to assist Engineer at the Site during the Construction Phase. The Resident Project Representative will be Engineer's agent or employee and under Engineer's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by Owner. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.
11. *Specifications* – That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

12. *Total Project Costs* – The sum of the Construction Cost, allowances for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner’s costs for legal, accounting, insurance counseling and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement.

## ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

### 8.01 *Exhibits Included*

- A. Exhibit A, “Engineer’s Services,” consisting of \_\_\_\_\_ pages.
- B. Exhibit B, “Owner’s Responsibilities,” consisting of \_\_\_\_\_ pages.
- C. Exhibit C, “Payments to Engineer for Services and Reimbursable Expenses,” consisting of \_\_\_\_\_ pages.
- D. Exhibit D, “Duties, Responsibilities and Limitations of Authority of Resident Project Representative,” consisting of \_\_\_\_\_ pages.
- E. Exhibit E, “Notice of Acceptability of Work,” consisting of \_\_\_\_\_ pages.
- F. Exhibit F, “Construction Cost Limit,” consisting of \_\_\_\_\_ pages.
- G. Exhibit G, “Insurance,” consisting of \_\_\_\_\_ pages.
- H. Exhibit H, “Dispute Resolution,” consisting of \_\_\_\_\_ pages.
- I. Exhibit I, “Allocation of Risks,” consisting of \_\_\_\_\_ pages.
- J. Exhibit J, “Special Provisions,” consisting of \_\_\_\_\_ pages.
- K. Exhibit K, “Amendment to Owner-Engineer Agreement,” consisting of \_\_\_\_\_ pages.

### 8.02 *Total Agreement*

- A. This Agreement (consisting of pages 1 to ~~\_\_\_\_\_~~15 inclusive, together with the exhibits identified above) constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument based on the format of Exhibit K to this Agreement.

### 8.03 *Designated Representatives*

- A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer’s and Owner’s representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement.



Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner:

Engineer:

—Papio-Missouri River Natural Resources District

—Tetra Tech, Inc.

By: \_\_\_\_\_

By: —Michael K. Sotak, P.E.

Title: \_\_\_\_\_

Title: —Office Manager

Date Signed: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Engineer License or Certificate No. —E-8759  
State of: —Nebraska

Address for giving notices:

Address for giving notices:

—8901 S. 154<sup>th</sup> Street

—9910 North 48<sup>th</sup> Street

—Omaha, NE 68138-3621

—Suite 200

\_\_\_\_\_

—Omaha, NE 68152-1548

Designated Representative (see Paragraph 8.03.A):

Designated Representative (see Paragraph 8.03.A):

—John Winkler

—Michael K. Sotak, P.E.

Title: —General Manager

Title: —Office Manager

Phone Number: —402.444.6222

Phone Number: —402.933.1345

Facsimile Number: —402.895.6543

Facsimile Number: —402.933.1346

E-Mail Address: —jwinkler@papionrd.org

E-Mail Address: —Mike.Sotak@tetrattech.com

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT A**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, 12 Nov,  
\_\_\_\_\_2009.

**Engineer's Services**

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Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. Engineer shall provide Basic and Additional Services as set forth below.

**PART 1 – BASIC SERVICES**

Tetra Tech was selected to assist the P-MRNRD in the certification of the R-613 and R-616 levee system (levees) in southern and eastern Sarpy County, Nebraska. Said certification will first involve a technical investigation/categorization of the system to likely be followed by an alternatives analysis and then design and construction of modifications to the levees which will meet USACE approval for levee modifications deemed necessary to meet certification requirements and ultimately, FEMA accreditation which will come after the certification process. The scope of the alternatives analysis will be formulated during the investigative phase described herein. Professional efforts by Tetra Tech and its subconsultants for the alternatives analysis and any and all subsequent phases related to the project will be negotiated at a later date.

A.1.01 Study and Report Investigative Phase

The scope of services contained herein is related to the investigative phase of the project where the levee inventorying is conducted along with the review of all pertinent existing information. Additional information will be obtained through various field investigations and studies to supplement the existing information so that an alternatives analysis for certification of the levees can be formulated.

The following scope of services is broken down into 8 phases, as intended to describe the intended process:

**Project Management**

Prepare for and Attend Kickoff Meeting – Prepare agenda and pertinent information and attend a meeting with NRD and Consultant Team to review responsibilities, communication expectations and project scope and schedule.

Document Review – Review of all pertinent existing documents including preliminary studies, O&M manuals, available design information, inspection reports, etc.

Project Management – Monthly Client Meetings – Monthly meetings between consultant team project manager and client representative(s) to review progress and work ahead for the coming weeks.

Project Management – Monthly Invoice/Schedule Update – Monthly preparation of consultant invoice including incorporation of internal and subconsultant invoices, description of services rendered and update of MS Project schedule.

Project Management – Internal Kickoff Meeting – Prepare agenda and pertinent information and attend a meeting with the consultant team to define project roles, establish communication lines, review project schedule and discuss inter-relationships of tasks to be completed.

Stakeholder Meetings – Prepare for and attend two (2) meetings with project stakeholders defined by NRD and consultant team to relay the intended project path and identify any input needed from stakeholder agencies. The NRD may also choose to receive input from stakeholder groups.

Prepare Scope of Work for Alternatives Development – Based upon findings in investigative phase, develop scope of work for alternatives development for the next phase of the levee certification project.

USACE Coordination – Prepare for and attend three (3) meetings with the U.S. Army Corps of Engineers to discuss progress on the levee certification project and how it meshes with the Corps' 208/408 and PL 84-99 programs.

### **Alternatives Analysis & Deliverables**

Stakeholder Meetings – Prepare for and attend two (2) meetings with project stakeholders defined by NRD and consultant team to discuss the potential effects of a levee setback along the MO River R-613 levee. Stakeholder groups may include Sarpy County, City of Bellevue, NDOR, NGPC, etc.  
Alternatives Development – Missouri River Setback

Prepare economic, technical and environmental alternatives analysis for up to three (3) routes for the setback of the MO River R-613 levee. Analysis is not intended to serve as the full requirements of an EA or USACE 408 review, but rather to investigate this alternative at a level of detail that will help guide the geophysical/geotechnical investigation of the existing and proposed levee system.

Deliverable – Benefit/Cost Summary – Upon completion of investigative effort, identify and prepare written summary of the benefits and benefitting entities of levee certification and assign an economic value to the benefits. Also address project costs consistent with the information available at that time and assign an appropriate contingency. This phase will include a cut at the cost of levee raises and more detailed cost info from the MO River R-613 levee setback analysis.

Deliverable – Review of US Hwy 75 Hydraulic Study – Review of documents pertinent to the H/H study of the US Hwy 75 bridge improvements and preparation of items for NRD to be aware of that may affect levee certification.

Deliverable - Other Information Review – Review of other information during investigative phase of project not scoped at onset of project.

Deliverable – Investigation Summary and Proposed Alternatives Analysis – Preparation of written summary of entire investigation phase services including benefit/cost summary, levee inspection, geophysical analysis and overall system analysis. Summary to include proposed alternatives analysis including scope of next phase of levee certification work (Alternatives Analysis Phase.)

### **GIS Database Management**

Incorporate Existing Information – Build project database with all readily available, pertinent information.

Incorporate Levee Inspection Information – Incorporate levee inspection information into GIS database including photos, inspection logs and summary reports.

Incorporate Existing Geotechnical Information – Incorporate all available geotechnical information in levee areas from O&M manuals, bridge plans, etc.

Prepare Maps Identifying Potential Underseepage Concerns – Prepare map using available soil information, aerial imagery and other factors to identify areas of possible concern for levee underseepage. Along with the geophysical investigation, this map will be used to develop an appropriate geotechnical investigation plan.

### *Levee Inspection / Inventory*

Field Inspection of Levees – Preparation for and participation in pedestrian survey of approximately 18.2 miles of R-613 and R-616 levees. Survey to include logging of levee system as per USACE standard levee inspection procedures. Survey to include three members of consultant team and NRD staff as desired. Survey will include analysis of embankment, photographic journal, analysis of (2) closure mechanisms, and inspection of all crossings and penetrations. Survey results to be logged on inspection logs.

Compare Field Notes with O&M Manuals/As-Built – Once survey is complete, logs will be compared to all available information that details the same information, including aerial imagery, plan sets, past inspection logs and as-built drawings in O&M manual.

### *Levee Inspection Report*

Prepare Levee Inspection Memo – Once pedestrian survey is complete, prepare report of all inspection logs and findings pertinent to levee certification process. Information to be assembled into overall investigative phase report.

Review Levee Inspection Memo w/ NRD – Meet with NRD representatives to review findings in Levee Inspection Report.

Identify Levee Deficiencies – Highlight in inspection report all levee deficiencies found during pedestrian survey and analysis of all topographic information. Information to be assembled into Levee Inspection Memo.

### *Surveying*

Asses Existing Information and Scope Survey for Phase 2 – Gather and assess all available survey information from various parties and assess the compatibility of the material to be incorporated into a topographic survey for final design needs that will be conducted during the next phase of the project.

### Hydrology and Hydraulics

Obtain and Review Available H&H Models/Reports – Work with NRD to obtain and review all pertinent H&H models to the Papio Creek, Missouri River and Platte River systems.

Confirm Effective Models – Run pertinent hydraulic models to confirm published elevational data for established hydrology.

Conduct Interior Drainage Study – Prepare hydrologic and hydraulic information for all interior drainage within levee systems. Compare findings w/ water surface elevations within creek/river systems using joint probability analysis or normal water surface elevations as per FEMA criteria.

Assess Capacity/Integrity of Existing Drainage Structures – Use field inspection notes, survey information and videotapes provided by NRD of all penetrations to assess the capacity and integrity of each structure. Note any deficiencies to be studied further in alternatives development phase.

System Analysis – Analyze the entire Papillion Creek, Missouri River and Platte River system along with interior drainage information as a whole instead of two-dimensionally along levee corridors. Analyze backwater and hydrograph peaking possibilities as well as sedimentation issues and make recommendations related to alternatives to be studied in next phase. Analysis shall also address USACE's Risk & Reliability concerns in 408 program. Based on direction from the USACE, a simplified Risk and Reliability Analysis will be completed for with and without project conditions. By modeling the expected variability in hydraulic parameters (stage/discharge, channel roughness, channel geometry, debris, sediment, etc), the risk for each stakeholder can be quantified due to a failure of the levee system. As required by ETL 1110-2-570, HEC-FDA will be used to compute the probabilistic risk of failure and potential economic impacts due to such failure. Future work will be completed on the FDA model once the Alternatives Analysis is completed.

### Geophysical Investigation

Review Sub-Surface Information from As-Builts, Design Reports & Geotech Reports – Obtain and review all available information with any sub-surface information including boring logs from O&M manual, bridge plans, design documents, etc.

Review GIS Potential Underseepage Maps – Review maps prepared in GIS Database Management for insight on areas within levee system that are potentially subject to underseepage due to soil types or ancient channels, etc. Monitor areas during geophysical investigation.

A schedule for the services detailed above is provided for in Attachment 1 to Appendix A.

A. Engineer shall:

- ~~1. Consult with Owner to define and clarify Owner's requirements for the Project and available data.~~

- ~~2. Advise Owner of any need for Owner to provide data or services of the types described in Exhibit B which are not part of Engineer's Basic Services.~~
- ~~3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by Engineer, including but not limited to mitigating measures identified in the environmental assessment.~~
- ~~4. Identify and evaluate [insert specific number or list here] alternate solutions available to Owner and, after consultation with Owner, recommend to Owner those solutions which in Engineer's judgment meet Owner's requirements for the Project.~~
- ~~5. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to Owner which Engineer recommends. For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services to be provided by Engineer and its Consultants; and, on the basis of information furnished by Owner, a summary of allowances for other items and services included within the definition of Total Project Costs.~~
- ~~6. Perform or provide the following additional Study and Report Phase tasks or deliverables: [here list any such tasks or deliverables]~~
- ~~7. Furnish \_\_\_\_\_ review copies of the Report and any other deliverables to Owner within \_\_\_\_\_ calendar days of authorization to begin services and review it with Owner. Within \_\_\_\_\_ calendar days of receipt, Owner shall submit to Engineer any comments regarding the Report and any other deliverables.~~
- ~~8. Revise the Report and any other deliverables in response to Owner's comments, as appropriate, and furnish \_\_\_\_\_ copies of the revised Report and any other deliverables to the Owner within \_\_\_\_\_ calendar days of receipt of Owner's comments.~~

~~B. Engineer's services under the Study and Report Phase will be considered complete on the date when the revised Report and any other deliverables have been delivered to Owner.~~

~~A.1.02 Alternatives Development Preliminary Design Phase~~

~~A. After acceptance by Owner of documents and reports prepared in the Investigative Phase, the Report and any other deliverables, selection by Owner of a recommended solution and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, and upon written authorization from Owner, Engineer shall prepare a scope of services for the Alternatives Development Phase.~~

- ~~1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.~~
- ~~2. Provide necessary field surveys and topographic and utility mapping for design purposes. Utility mapping will be based upon information obtained from utility owners.~~

- ~~3. Advise Owner if additional reports, data, information, or services of the types described in Exhibit B are necessary and assist Owner in obtaining such reports, data, information, or services.~~
- ~~4. Based on the information contained in the Preliminary Design Phase documents, prepare a revised opinion of probable Construction Cost, and assist Owner in collating the various cost categories which comprise Total Project Costs.~~
- ~~5. Perform or provide the following additional Preliminary Design Phase tasks or deliverables:  
[here list any such tasks or deliverables]~~
- ~~6. Furnish \_\_\_\_\_ review copies of the Preliminary Design Phase documents and any other deliverables to Owner within \_\_\_\_\_ calendar days of authorization to proceed with this phase, and review them with Owner. Within \_\_\_\_\_ calendar days of receipt, Owner shall submit to Engineer any comments regarding the Preliminary Design Phase documents and any other deliverables.~~
- ~~7. Revise the Preliminary Design Phase documents and any other deliverables in response to Owner's comments, as appropriate, and furnish to Owner \_\_\_\_\_ copies of the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables within \_\_\_\_\_ calendar days after receipt of Owner's comments.~~

~~B.A. Engineer's services under the Preliminary Design Phase will be considered complete on the date when the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables have been delivered to Owner.~~

#### A.1.03 Final Design and Bidding Phase

- ~~A. After acceptance by Owner of the Alternatives Development Study, including acceptance of a recommended plan, and Preliminary Design Phase documents, revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, and any other deliverables subject to any Owner directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Owner, Engineer shall prepare a scope of services for the Final Design and Bidding of the recommended alternative.~~
  - ~~1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. If appropriate, Specifications shall conform to the 16 division format of the Construction Specifications Institute.~~
  - ~~2. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities.~~
  - ~~3. Advise Owner of any adjustments to the opinion of probable Construction Cost known to Engineer.~~



4. ~~Perform or provide the following additional Final Design Phase tasks or deliverables: [here list any such tasks or deliverables]~~
  5. ~~Prepare and furnish Bidding Documents for review by Owner, its legal counsel, and other advisors, and assist Owner in the preparation of other related documents. Within \_\_\_\_\_ days of receipt, Owner shall submit to Engineer any comments and, subject to the provisions of Paragraph 6.01.G, instructions for revisions.~~
  6. ~~Revise the Bidding Documents in accordance with comments and instructions from the Owner, as appropriate, and submit \_\_\_\_\_ final copies of the Bidding Documents, a revised opinion of probable Construction Cost, and any other deliverables to Owner within \_\_\_\_\_ calendar days after receipt of Owner's comments and instructions.~~
- ~~B. Engineer's services under the Final Design Phase will be considered complete on the date when the submittals required by Paragraph A1.03.A.6 have been delivered to Owner.~~
- ~~C. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding or Negotiating, Construction, and Post Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.~~
- ~~D. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is \_\_\_\_\_. If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.~~

#### ~~A.1.04 Bidding or Negotiating Phase~~

- ~~A. After acceptance by Owner of the Bidding Documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:~~
1. ~~Assist Owner in advertising for and obtaining bids or proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre Bid conferences, if any, and receive and process contractor deposits or charges for the Bidding Documents.~~
  2. ~~Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.~~
  3. ~~Provide information or assistance needed by Owner in the course of any negotiations with prospective contractors.~~

- ~~4. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors for those portions of the Work as to which such acceptability is required by the Bidding Documents.~~
  - ~~5. Perform or provide the following additional Bidding or Negotiating Phase tasks or deliverables: [here list any such tasks or deliverables]~~
  - ~~6. Attend the Bid opening, prepare Bid tabulation sheets, and assist Owner in evaluating Bids or proposals and in assembling and awarding contracts for the Work.~~
- ~~B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors (except as may be required if Exhibit F is a part of this Agreement).~~

~~A.1.05~~ A.1.04 Construction Observation Phase

- ~~A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from Owner, Engineer shall prepare a scope of services for the Construction Observation Phase.~~
- ~~1. *General Administration of Construction Contract.* Consult with Owner and act as Owner's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities, and authority of Engineer as assigned in the 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, which shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and the General Conditions except as otherwise provided in writing.~~
  - ~~2. *Resident Project Representative (RPR).* Provide the services of an RPR at the Site to assist the Engineer and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit D. The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in Exhibit D. *[If Engineer will not be providing the services of an RPR, then delete this Paragraph 2 by inserting the word "DELETED" after the paragraph title, and do not include Exhibit D.]*~~
  - ~~3. *Selecting Independent Testing Laboratory.* Assist Owner in the selection of an independent testing laboratory to perform the services identified in Exhibit B, Paragraph B2.01.0.~~
  - ~~4. *Pre-Construction Conference.* Participate in a Pre-Construction Conference prior to commencement of Work at the Site.~~
  - ~~5. *Schedules.* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.~~
  - ~~6. *Baselines and Benchmarks.* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.~~

~~7. *Visits to Site and Observation of Construction.* In connection with observations of Contractor's Work while it is in progress:~~

~~a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress and quality of 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 Contractor's Work in progress or to involve detailed inspections of Contractor's Work in progress beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of 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 Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.~~

~~b. The purpose of Engineer's visits to, and representation by the Resident Project Representative, if any, at 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 the 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 will conform in general to the Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. 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 or used by Contractor, for security or safety on the Site, for safety precautions and programs incident to Contractor's Work, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.~~

~~8. *Defective Work.* Recommend to Owner that Contractor's Work be rejected while it is in progress if, on the basis of Engineer's observations, Engineer believes that such Work will not produce a completed Project that conforms generally to the Contract Documents or that it will threaten the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.~~

~~9. *Clarifications and Interpretations; Field Orders.* Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Engineer may issue Field Orders authorizing minor variations in the Work from the requirements of the Contract Documents.~~

- ~~10. *Change Orders and Work Change Directives.* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.~~
- ~~11. *Shop Drawings and Samples.* Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the 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. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.~~
- ~~12. *Substitutes and "or equal."* Evaluate and determine the acceptability of substitute or "or equal" materials and equipment proposed by Contractor, but subject to the provisions of Paragraph A2.02.A.2 of this Exhibit A.~~
- ~~13. *Inspections and Tests.* Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such tests.~~
- ~~14. *Disagreements between Owner and Contractor.* Render formal written decisions on all duly submitted issues relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance, or progress of Contractor's Work; review each duly submitted Claim by Owner or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if Engineer in its discretion concludes that to do so would be inappropriate. In rendering such decisions, Engineer shall be fair and not show partiality to Owner or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.~~
- ~~15. *Applications for Payment.* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
  - ~~a. Determine the amounts that Engineer recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the quality of such Work is generally in accordance with the Contract Documents (subject to an evaluation of the 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), and~~~~

~~the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe Contractor's Work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of Contractor's Work (subject to any subsequent adjustments allowed by the Contract Documents).~~

~~b. By recommending any payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control Contractor's Work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the Work in progress, materials, or equipment has passed to Owner free and clear of any liens, 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.~~

~~16. Contractor's Completion Documents. Receive, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided under Paragraph A1.05.A.11, and the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such review by Engineer will be limited as provided in Paragraph A1.05.A.11.~~

~~17. Substantial Completion. Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, conduct an inspection to determine if the Work is substantially complete. If after considering any objections of Owner, Engineer considers the Work substantially complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.~~

~~18. Additional Tasks. Perform or provide the following additional Construction Phase tasks or deliverables: [here list any such tasks or deliverables].~~

~~19. Final Notice of Acceptability of the Work. Conduct a final inspection to determine if the completed Work of Contractor is 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 the form attached hereto as Exhibit E (the "Notice of Acceptability of Work") that the Work is acceptable (subject to the provisions of Paragraph~~

A1.05.A.15.b) to the best of Engineer's knowledge, information, and belief and based on the extent of the services provided by Engineer under this Agreement.

~~B. *Duration of Construction Phase.* The Construction Phase will commence with the execution of the first construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract as indicated in Paragraph A1.03.C, Construction Phase services may be rendered at different times in respect to the separate contracts. Subject to the provisions of Article 3, Engineer shall be entitled to an equitable increase in compensation if Construction Phase services are required after the original date for final completion of the Work as set forth in the construction Contract.~~

~~C. *Limitation of Responsibilities.* Engineer shall not be responsible for the acts or omissions of any Contractor, or of any subcontractors, suppliers, or other individuals or entities performing or furnishing any of the Work. Engineer shall not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.~~

#### A.1.06 *Post Construction Phase*

~~A. Upon written authorization from Owner, Engineer, during the Post Construction Phase, shall:~~

- ~~1. Provide assistance in connection with the adjusting of Project equipment and systems.~~
- ~~2. Assist Owner in training Owner's staff to operate and maintain Project equipment and systems.~~
- ~~3. Assist Owner in developing procedures for control of the operation and maintenance of, and record keeping for Project equipment and systems.~~
- ~~4. Together with Owner, visit the Project to observe any apparent defects in the Work, assist Owner in consultations and discussions with Contractor concerning correction of any such defects, and make recommendations as to replacement or correction of Defective Work, if present.~~
- ~~5. Perform or provide the following additional Post Construction Phase tasks or deliverables:  
\_\_\_\_\_.~~
- ~~6. In company with Owner or Owner's representative, provide an inspection of the Project within one month before the end of the Correction Period to ascertain whether any portion of the Work is subject to correction.~~

~~B.A. The Post Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate at the end of the Construction Contract's correction period.~~

## **PART 2 – ADDITIONAL SERVICES**

### A2.01 *Additional Services Requiring Owner's Written Authorization*

- A. If authorized in writing by Owner, Engineer shall furnish or obtain from others Additional Services of the types listed below.
1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
  2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
  3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer or its design requirements including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond Engineer's control.
  4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in Paragraph A1.01.A.4.
  5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
  6. Providing renderings or models for Owner's use.
  7. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting Owner in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by Owner.
  8. Furnishing services of Engineer's Consultants for other than Basic Services.
  9. Services attributable to more prime construction contracts than specified in Paragraph A1.03.C.
  10. Services during out-of-town travel required of Engineer other than for visits to the Site or Owner's office.
  11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructibility review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.

12. Preparing additional Bidding Documents or Contract Documents for alternate bids or prices requested by Owner for the Work or a portion thereof.
13. Determining the acceptability of substitute materials and equipment proposed during the Bidding or Negotiating Phase when substitution prior to the award of contracts is allowed by the Bidding Documents.
14. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required by Exhibit F.
15. Providing construction surveys and staking to enable Contractor to perform its work other than as required under Paragraph A1.05.A.6, and any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
16. Providing Construction Phase services beyond the original date for final completion of the Work.
17. Providing assistance in responding to the presence of any Constituent of Concern at the Site, in compliance with current Laws and Regulations.
18. Preparing and furnishing to Owner Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor.
19. Preparation of operation and maintenance manuals.
20. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, or other dispute resolution process related to the Project.
21. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
22. Other services performed or furnished by Engineer not otherwise provided for in this Agreement.

*A2.02 Additional Services Not Requiring Owner's Written Authorization*

- A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice from Owner.
  1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner.
  2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; and services after the award of the Construction Contract in evaluating and determining the acceptability of a



substitution which is found to be inappropriate for the Project or an excessive number of substitutions.

3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
4. Additional or extended services during construction made necessary by (1) emergencies or acts of God endangering the Work, (2) the presence at the Site of any Constituent of Concern, (3) Work damaged by fire or other cause during construction, (4) a significant amount of defective, neglected, or delayed work by Contractor, (5) acceleration of the progress schedule involving services beyond normal working hours, or (6) default by Contractor.
5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of any part of the Work by Owner prior to Substantial Completion.
6. Evaluating an unreasonable claim or an excessive number of claims submitted by Contractor or others in connection with the Work.
7. Services during the Construction Phase rendered after the date stated in A1.05.B.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT B**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, 12 Nov., \_\_\_\_\_, 2009.

**Owner's Responsibilities**

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Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 *In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:*

- A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications; and furnish copies of Owner's standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.
- B. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.
- C. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:
  1. Property descriptions.
  2. Zoning, deed, and other land use restrictions.
  3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
  4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
  5. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.

6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.
- D. Give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of the presence at the Site of any Constituent of Concern, or of any other development that affects the scope or time of performance of Engineer's services, or any defect or nonconformance in Engineer's services, the Work, or in the performance of any Contractor.
- E. Authorize Engineer to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.
- F. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.
- G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.
- I. Provide, as required for the Project:
  1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
  2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.
  3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the moneys paid.
  4. Placement and payment for advertisement for Bids in appropriate publications.
- J. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructibility review.
- K. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.
- L. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this

Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.

- M. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.
- N. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.
- O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof.
- P. Provide Engineer with the findings and reports generated by the entities providing services to Owner pursuant to this paragraph.
- Q. ~~Perform or provide the following additional services: \_\_\_\_\_.~~

**COMPENSATION DECISION GUIDE  
FOR USE WITH EXHIBIT C TO EJCDC E-500, 2002 EDITION**

**1. Compensation for Basic Services (not including Resident Project Representative and Post-Construction Services)**

Decision Question: Which method of compensation is to be used?

	Lump Sum	Standard Hourly Rates	Percentage of Construction Costs	Direct Labor Costs Times a Factor	Direct Labor Costs Plus Overhead Plus a Fixed Fee	Salary Costs Times a Factor
Use These Sheets	Sheet C-2	Sheets C-3 and C-4	Sheets C-5 and C-6	Sheets C-7 and C-8	Sheets C-9 and C-10	Sheets C-11 and C-12
Use This Appendix	N/A	Appendices 1 (C-24) and 2 (C-25)	N/A	Appendix 1 (C-24)	Appendix 1 (C-24)	Appendix 1 (C-24)

**2. Compensation for Resident Project Representative and Post-Construction Basic Services**

Decision Question: Which method of compensation is to be used?

	Lump Sum	Standard Hourly Rates	Percentage of Construction Costs	Direct Labor Costs Times a Factor	Salary Costs Times a Factor
Use These Sheets	Sheet C-13	Sheets C-14 and C-15	Sheet C-16	Sheets C-17 and C-18	Sheets C-19 and C-20
Use This Appendix	N/A	Appendices 1 (C-24) and 2 (C-25)	N/A	Appendix 1 (C-24)	Appendix 1 (C-24)

**3. Compensation for Additional Services**

Decision Question: Which method of compensation is to be used?

	Standard Hourly Rates	Direct Labor Costs Times a Factor	Salary Costs Times a Factor
Use These Sheets	Sheet C-21	Sheet C-22	Sheet C-23
Use This Appendix	Appendices 1 (C-24) and 2 (C-25)	Appendix 1 (C-24)	Appendix 1 (C-24)

Example: If Basic Services (other than RPR and Post-Construction) will be compensated using Lump Sum; RPR/Post-Construction services using Direct Labor Times a Factor; and Additional Services using Standard Hourly Rates; then use only Sheets C-2, C-17, C-18, C-21, Appendix 1 (Sheet C-24), and Appendix 2 (Sheet C-25) to form Exhibit C.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated \_\_\_\_\_, \_\_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Lump Sum Method of Payment**

A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative and Post-Construction Phase services, if any, as follows:

1. A Lump Sum amount of \$\_\_\_\_\_ based on the following assumed distribution of compensation:
  - a. Study and Report Phase \$\_\_\_\_\_
  - b. Preliminary Design Phase \$\_\_\_\_\_
  - c. Final Design Phase \$\_\_\_\_\_
  - d. Bidding and Negotiating Phase \$\_\_\_\_\_
  - e. Construction Phase \$\_\_\_\_\_
2. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.
3. The Lump Sum includes compensation for Engineer’s services and services of Engineer’s Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
4. The portion of the Lump Sum amount billed for Engineer’s services will be based upon Engineer’s estimate of the proportion of the total services actually completed during the billing period to the Lump Sum.

C2.02 [Not used]

C2.03 [Not used]

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Page \_\_\_ of \_\_\_ Pages

Exhibit C – Basic Services (other than RPR and Post-Construction) – Lump Sum Method of Payment  
EJCDC E-500 Standard Form of Agreement Between Owner and Engineer for Professional Services.  
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SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Standard Hourly Rates Method of Payment**

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative and Post-Construction Phase services, if any, as follows:
1. An amount equal to the cumulative hours charged to the Project by each class of Engineer’s employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and Engineer’s Consultant’s charges, if any.
  2. Engineer’s Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit C as Appendices 1 and 2.
  3. The total compensation for services under Paragraph C2.01 is estimated to be \$\_\_\_\_\_ based on the following assumed distribution of compensation:
    - a. Study and Report Phase \$\_\_\_\_\_
    - b. Preliminary Design Phase \$\_\_\_\_\_
    - c. Final Design Phase \$\_\_\_\_\_
    - d. Bidding or Negotiating Phase \$\_\_\_\_\_
    - e. Construction Phase \$\_\_\_\_\_
  4. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total estimated compensation amount unless approved in writing by Owner.
  5. The total estimated compensation for Engineer’s services included in the breakdown by phases as noted in Paragraph C2.01.A.3 incorporates all labor, overhead, profit, Reimbursable Expenses and Engineer’s Consultant’s charges.



6. The amounts billed for Engineer's services under Paragraph C2.01 will be based on the cumulative hours charged to the Project during the billing period by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and Engineer's Consultant's charges.
7. The Standard Hourly Rates and Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

#### *C2.02 Compensation For Reimbursable Expenses*

- A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.
- B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of \_\_\_\_\_.

#### *C2.03 Other Provisions Concerning Payment*

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
- B. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts
  1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated

amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.

- D. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Percentage of Construction Cost Method of Payment**

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative and Post-Construction Phase services, if any, as follows:
1. *General.* An amount equal to \_\_\_\_\_ percent of the Construction Cost. This amount includes compensation for Engineer’s Services and services of Engineer’s Consultants, if any. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and Reimbursable Expenses.
  2. As a basis for payment to Engineer, Construction Cost will be based on one or more of the following determinations with precedence in the order listed for Work designed or specified by Engineer:
    - a. For Work designed or specified and incorporated in the completed Project, the actual final cost of the work performed by Contractor and paid by Owner.
    - b. For Work designed or specified but not constructed, the lowest bona fide Bid received from a qualified bidder for such Work; or, if the Work is not bid, the lowest bona fide negotiated proposal for such Work.
    - c. For Work designed or specified but not constructed upon which no such Bid or proposal is received, Engineer’s most recent opinion of probable Construction Cost.
    - d. Labor furnished by Owner for the Project will be included in the Construction Cost at current market rates including a reasonable allowance for overhead and profit. Materials and equipment furnished by Owner will be included at current market prices.
    - e. No deduction is to be made from Engineer’s compensation on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).

3. Progress payments:

- a. The portion of the amounts billed for Engineer's services which is on account of the Percentage of Construction Cost will be based upon Engineer's estimate of the proportion of the total services actually completed during the billing period to the Percentage of Construction Cost.
- b. Upon conclusion of each phase of Basic Services, Owner shall pay such additional amount, if any, as may be necessary to bring total compensation paid during such phase on account of the percentage of Construction Cost to the following estimated percentages of total compensation payable on account of the percentage of Construction Cost for all phases of Basic Services:

Study and Report Phase	_____ %
Preliminary Design Phase	_____ %
Final Design Phase	_____ %
Bidding or Negotiating Phase	_____ %
Construction Phase	_____ %
	100%

- c. Engineer may alter the distribution of compensation between individual phases of the work noted herein but shall not exceed the total percent fee unless approved in writing by the Owner.

C2.02 [Not used]

C2.03 [Not used]

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, -consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, 12 Nov., \_\_\_\_\_, 2009.

**Payments to Engineer for Services and Reimbursable Expenses**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Direct Labor Costs Times a Factor Method of Payment**

A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative and Post-Construction Phase services, if any, as follows:

1. An amount equal to Engineer’s Direct Labor Costs times a factor of \_\_\_\_\_ 3.02 for the services of Engineer’s employees engaged on the Project, plus Reimbursable Expenses, provided however, and notwithstanding anything to the contrary contained in this Agreement, the total amount of money due to ENGINEER for such services and for Reimbursable Expenses and Engineer’s Consultant’s charges shall not exceed the amount of estimated to be \$ \_\_\_\_\_ \$330,878 unless an additional payment for the services, expenses or charges resulting in such excess is authorized in writing by OWNER in advance of such services, expenses or charges being furnished, expended, or incurred, the amount of \_\_\_\_\_, and Engineer’s Consultant’s charges, if any, estimated to be \$ \_\_\_\_\_ 330,878 being intended by parties as the maximum amount of money to be due to Engineer under this Agreement.

2. Engineer’s Reimbursable Expenses Schedule is attached to this Exhibit C as Appendix 1.

2.3. The total compensation for services under Paragraph C2.01 is estimated to be \$ \_\_\_\_\_ based on the following assumed distribution of compensation:

- a. Investigative Study and Report Phase \$ \_\_\_\_\_ \$330,878 (See Attachment 1 to Exhibit C)
- b. Alternatives Development Preliminary Design Phase \$ \_\_\_\_\_ (To be negotiated at a later date)
- c. Final Design and Bidding Phase \$ \_\_\_\_\_ (To be negotiated at a later date)

d. Construction Observation Bidding or Negotiating Phase \$ \_\_\_\_\_ (To be negotiated at a later date)

Construction Phase \_\_\_\_\_ \$ \_\_\_\_\_

3-4. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total compensation amount unless approved in writing by Owner.

4-5. The total estimated compensation for Engineer's services included in the breakdown by phases as noted in Paragraph C2.01.A.3, incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer's Consultant's charges.

5-6. The portion of the amounts billed for Engineer's services which are related to services rendered on a Direct Labor Costs times a Factor basis will be billed based on the applicable Direct Labor Costs for the cumulative hours charged to the Project by Engineer's principals and employees multiplied by the above-designated factor, plus Reimbursable Expenses and Engineer's Consultant's charges incurred during the billing period.

6-7. Direct Labor Costs means salaries and wages paid to employees but does not include payroll related costs or benefits.

7-8. The Direct Labor Costs and the factor applied to Direct Labor Costs will be adjusted annually (as of \_\_\_\_\_) date of execution of contract to reflect equitable changes to the compensation payable to Engineer.

#### C2.02 Compensation For Reimbursable Expenses

- A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.
- B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, ~~plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of \_\_\_\_\_.~~
- D. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) date of execution of contract to reflect equitable changes in the compensation payable to Engineer.

#### C2.03 Other Provisions Concerning Payment

Page \_\_\_\_ of \_\_\_\_ Pages

Exhibit C- Basic Services (other than RPR and Post-Construction) – Direct Labor Costs Times a Factor Method of Payment  
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- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.0. [ms1]
- B. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts
1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
  3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Direct Labor Costs Plus Overhead Plus a Fixed Fee Method of Payment**

A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative and Post-Construction Phase services, if any, as follows:

1. An amount equal to Engineer’s Direct Labor Costs plus overhead for the services of Engineer’s employees engaged directly on the Project, plus Reimbursable Expenses estimated to be \$\_\_\_\_\_, plus Engineer’s Consultant’s charges, if any, estimated to be \$\_\_\_\_\_, plus a fixed fee of \$\_\_\_\_\_.
2. Engineer’s Reimbursable Expenses Schedule is attached to this Exhibit C as Appendix 1.
3. The total compensation for services under Paragraph C2.01 is estimated to be \$\_\_\_\_\_ based on the following assumed distribution of compensation:
  - a. Study and Report Phase \$\_\_\_\_\_
  - b. Preliminary Design Phase \$\_\_\_\_\_
  - c. Final Design Phase \$\_\_\_\_\_
  - d. Bidding or Negotiating Phase \$\_\_\_\_\_
  - e. Construction Phase \$\_\_\_\_\_
4. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total compensation amount unless approved in writing by Owner.



5. The total estimated compensation for Engineer's services, included in the breakdown by phases as noted in Paragraph C2.01.A.3, incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer's Consultant's charges.
6. The portion of the amounts billed for Engineer's services will be based on the applicable Direct Labor Costs for the cumulative hours charged to the Project during the billing period by Engineer's employees plus overhead, Reimbursable Expenses, Engineer's Consultant's charges, and the proportionate portion of the fixed fee.
7. Direct Labor Costs means salaries and wages paid to employees but does not include payroll-related costs or benefits.
8. Overhead includes the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation, and holiday pay applicable thereto; the cost of general and administrative overhead which includes salaries and wages of employees engaged in business operations not directly chargeable to projects, plus non-Project operating costs, including but not limited to, business taxes, legal, rent, utilities, office supplies, insurance, and other operating costs. Overhead shall be computed as a percentage of Direct Labor Costs. Fixed fee is the lump sum amount paid to Engineer by Owner as margin or profit and will only be adjusted by an amendment to this agreement.
9. Direct Labor Costs and Overhead applied to Direct Labor Costs will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

**C2.02 Compensation For Reimbursable Expenses**

- A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.
- B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges, reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of \_\_\_\_\_.
- D. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C2.03 *Other Provisions Concerning Payment*

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
- B. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts
  - 1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - 2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
- D. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

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Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C2.01 Compensation For Basic Services (other than Resident Project Representative and Post-Construction) – Salary Costs Times a Factor Method of Payment**

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative, and Post-Construction Phase services, if any, as follows:
1. An amount equal to Engineer’s Salary Costs times a factor of \_\_\_\_\_ for all Basic Services by principals and employees engaged directly on the Project, plus Reimbursable Expenses, estimated to be \$\_\_\_\_\_, and Engineer’s Consultant’s charges, if any, estimated to be \$\_\_\_\_\_.
  2. Engineer’s Reimbursable Expenses Schedule is attached to this Exhibit C as Appendix 1.
  3. The total compensation for services under Paragraph C2.01 is estimated to be \$\_\_\_\_\_ based on the following assumed distribution of compensation:
    - a. Study and Report Phase \$\_\_\_\_\_
    - b. Preliminary Design Phase \$\_\_\_\_\_
    - c. Final Design Phase \$\_\_\_\_\_
    - d. Bidding or Negotiating Phase \$\_\_\_\_\_
    - e. Construction Phase \$\_\_\_\_\_
  4. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total compensation amount unless approved in writing by Owner.
  5. The total compensation for Engineer’s services, included in the breakdown by phases as noted in Paragraph C2.01.A.3, incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer’s Consultant’s charges.

6. The portion of the amounts billed for Engineer's services will be based on the applicable Salary Costs for the cumulative hours charged to the Project incurred during the billing period by Engineer's principals and employees multiplied by the above designated factor, plus Reimbursable Expenses and Engineer's Consultant's charges.
7. Salary Costs means salaries and wages paid to Engineer's employees plus the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation, and holiday pay applicable thereto.
8. The Salary Costs and the factor applied to Salary Costs will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

#### *C2.02 Compensation For Reimbursable Expenses*

- A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.
- B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of \_\_\_\_\_.
- D. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

#### *C2.03 Other Provisions Concerning Payment*

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
- B. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts

1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
- D. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.04 *Compensation For Resident Project Representative and Post-Construction Basic Services – Lump Sum Method of Payment*

- A. Owner shall pay Engineer for Resident Project Representative and Post-Construction Basic Services as follows:
1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under Paragraph A1.05 of Exhibit A, the Lump Sum amount of \$\_\_\_\_. The Lump Sum includes compensation for the Resident Project Representative's services, and for the services of any direct assistants to the Resident Project Representative. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses related to the Resident Project Representative's Services.
  2. *Post-Construction Phase Services.* For Post-Construction Phase Services under Paragraph A1.06 of Exhibit A, a Lump Sum amount of \$\_\_\_\_. The Lump Sum includes compensation for Engineer's post-construction services and such services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses related to Post-Construction Phase Services.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.04 *Compensation For Resident Project Representative and Post-Construction Basic Services – Standard Hourly Rates Method of Payment*

A. Owner shall pay Engineer for Resident Project Representative and Post-Construction Basic Services as follows:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under Paragraph A1.05A of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this Paragraph is estimated to be \$\_\_\_\_\_ based upon Contract Times as set forth herein.
2. *Post-Construction Phase Services.* For Post-Construction Phase services under Paragraph A1.06 of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this Paragraph is estimated to be \$\_\_\_\_\_.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01, and are directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and assistants; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative or Post-Construction Basic Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such services, the latter multiplied by a factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

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Page \_\_\_\_ of \_\_\_\_ Pages

Exhibit C- Basic Services (other than RPR and Post-Construction) – Standard Hourly Rates Method of Payment  
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C. Other Provisions Concerning Payment Under this Paragraph C2.04

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of\_\_\_\_\_.
2. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. Estimated Compensation Amounts
  - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - b. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.



SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.04 *Compensation For Resident Project Representative and Post-Construction Basic Services – Percentage of Construction Cost Method of Payment*

A. Owner shall pay Engineer for:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under Paragraph A1.05 of Exhibit A of the Agreement, an amount equal to \_\_\_\_\_ percent of the Construction Cost. This amount includes compensation for Resident Project Representative's services, and those of any assistants to the Resident Project Representative. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and Reimbursable Expenses.
2. *Post-Construction Phase Services.* For Post-Construction Phase services under Paragraph A1.06 of Exhibit A, an amount equal to \_\_\_\_\_ percent of the Construction Cost. This amount includes compensation for Engineer's Services and services of Engineer's Consultants, if any. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and Reimbursable Expenses.
3. As a basis for payment to Engineer, Construction Cost will be based on one or more of the following determinations with precedence in the order listed for Work designed or specified by Engineer.
  - a. For Work designed or specified and incorporated in the completed Project, the actual final cost of the work performed by Contractor and paid by Owner.
  - b. For Work designed or specified but not constructed, the lowest bona fide Bid received from a qualified bidder for such Work; or, if the Work is not Bid, the lowest bona fide negotiated proposal for such Work.
  - c. For Work designed or specified but not constructed upon which no such Bid or proposal is received, Engineer's most recent opinion of probable Construction Cost.
  - d. Labor furnished by Owner for the Project will be included in the Construction Cost at current market rates including a reasonable allowance for overhead and profit. Materials and equipment furnished by Owner will be included at current market prices.
  - e. No deduction is to be made from Engineer's compensation on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.04 *Compensation For Resident Project Representative and Post-Construction Basic Services – Direct Labor Costs Times a Factor Method of Payment*

A. Owner shall pay Engineer for:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under Paragraph A1.05.A.2 of Exhibit A of the Agreement, an amount equal to Engineer's Direct Labor Costs times a factor of \_\_\_\_\_ for the services of Engineer's employees engaged directly in resident Project representation, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_, based upon Contract Times as set forth herein.
2. *Post-Construction Phase Services.* For Post-Construction Phase services under Paragraph A1.06 of Exhibit A, an amount equal to the Engineer's Direct Labor Costs times a factor of \_\_\_\_\_ for the services of Engineer's employees engaged directly on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any in the Post-Construction Phase. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01, and are directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and assistants; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative or Post-Construction Basic Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such services, the latter multiplied by a factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment Under this Paragraph C2.04

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
2. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. Estimated Compensation Amounts
  - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - b. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.04 *Compensation For Resident Project Representative and Post-Construction Basic Services – Salary Costs Times a Factor Method of Payment*

A. Owner shall pay Engineer for:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under Paragraph A.1.05.A.2 of Exhibit A, an amount equal to the Engineer's Salary Costs times a factor of \_\_\_\_\_ for services of Engineer's employees engaged directly in resident Project representation, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_, based upon Contract Times as set forth herein.
2. *Post-Construction Phase Services.* For Post-Construction Phase services under Paragraph A1.06 of Exhibit A, an amount equal to the Engineer's Salary Costs times a factor of \_\_\_\_\_ for services of Engineer's employees engaged directly on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any in the Post-Construction Phase. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Resident Project Representative or Post-Construction Basic Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and assistants; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative or Post-Construction Basic Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such services, the latter multiplied by a factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment Under this Paragraph C2.04

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
2. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. Estimated Compensation Amounts
  - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - b. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder.
4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.05 Compensation For Additional Services – Standard Hourly Rates Method of Payment

A. Owner shall pay Engineer for Additional Services, if any, as follows:

1. *General.* For services of Engineer's employees engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under Paragraph A2.01.A.20, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A; and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of \_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_ ) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment For Additional Services

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_.
2. *Factors.* The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.05 *Compensation For Additional Services – Direct Labor Costs Times a Factor Method of Payment*

A. Owner shall pay Engineer for Additional Services as follows:

1. *General.* For services of Engineer's employees engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A of the Agreement, except for services as a consultant or witness under Paragraph A2.01.A.20, an amount equal to Engineer's Direct Labor Costs times a factor of \_\_\_\_\_, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A; and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment For Additional Services

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
2. *Factors.* The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.



3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

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Page \_\_\_\_ of \_\_\_\_ Pages

**Exhibit C – Compensation for Resident Project Representative and Post-Construction Basic Services –  
Direct Labor Costs Times a Factor Method of Payment**  
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SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

C2.05 *Compensation For Additional Services – Salary Costs Times a Factor Method of Payment*

A. Owner shall pay Engineer for Additional Services as follows:

1. *General.* For services of Engineer's employees engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under Paragraph A2.01.A.20, an amount equal to the cumulative hours charged to the Project by each Engineer's employees times the Engineer's applicable Salary Costs times a factor of \_\_\_\_\_, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.

B. Compensation For Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to Additional Services, the latter multiplied by a factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment For Additional Services

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of \_\_\_\_\_.
2. *Factors.* The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

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Page \_\_\_\_ of \_\_\_\_ Pages

Exhibit C – Compensation for Resident Project Representative and Post-Construction Basic Services –  
Salary Costs Times a Factor Method of Payment

EJCDC E-500 Standard Form of Agreement Between Owner and Engineer for Professional Services.  
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This is **Appendix 1 to EXHIBIT C**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated 12 Nov, 2009.

**Reimbursable Expenses Schedule**

Current agreements for engineering services stipulate that the Reimbursable Expenses are subject to review and adjustment per Exhibit C. Reimbursable expenses for services performed on the date of the Agreement are:

Fax	\$	/page
8"x11" Copies/ B&W Impressions		/\$0.10/page
8"x11" Copies/ Color	\$0.10/page	
11" x 17" Copies / B&W	\$0.10/page	
11" x 17" Copies / Color	\$0.10/page	
Presentation Boards (plot and mount)	\$150/board	
Blue Print Copies	/\$0.20/sq. ft.	
Reproducible Copies (Mylar)	/sq. ft.	
Reproducible Copies (Paper)	/sq. ft.	
Mileage (auto)	/\$0.55/mile	
GPS Camera	\$3/photo Not to Exceed \$100/day	
Voice Conferencing	\$0.10/minute	Field Truck Daily Charge
	/day	
Mileage (Field Truck)	/mile	
Field Survey Equipment	/day	
Confined Space Equipment	/day plus expenses	
Resident Project Representative Equipment	/month	
Computer CPU Charge	/hour	
Specialized Software	/hour	
Personal Computer Charge	/hour	
CAD Charge	/hour	
CAE Terminal Charge	/hour	
VCR and Monitor Charge	/day, \$ /week, or \$ /month	
Video Cameorder	/day, plus \$ /tape	
Electrical Meters Charge	/week, or \$ /month	
Flow Meter Charge	/week, or \$ /month	
Rain Gauge	/week, or \$ /month	
Sampler Charge	/week, or \$ /month	
Dissolved Oxygen Tester Charge	/week	
Fluorometer	/week	
Laboratory Pilot Testing Charge	/week, or \$ /month	
Soil Gas Kit	/day	
Submersible Pump	/day	
Water Level Meter	/day, or \$ /month	
Soil Sampling	/sample	

~~Groundwater Sampling~~ \_\_\_\_\_ /sample  
~~Health and Safety Level D~~ \_\_\_\_\_ /day  
~~Health and Safety Level C~~ \_\_\_\_\_ /day  
~~Electronic Media Charge~~ \_\_\_\_\_ /hour  
~~Long Distance Phone Calls~~ \_\_\_\_\_ at cost  
~~Mobile Phone~~ \_\_\_\_\_ /day  
Meals and Lodging \_\_\_\_\_ at cost

\* All other direct costs will be invoiced at actual cost plus G&A of 13.46%

This is **Appendix 2 to EXHIBIT C**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Standard Hourly Rates Schedule**

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A. Standard Hourly Rates

1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
2. The Standard Hourly Rates will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.
3. The Standard Hourly Rates apply only as specified in Article C2.

B. Schedule

Hourly rates for services performed on or after the date of the Agreement are:

Billing Class 9 Senior Associate	\$ _____/hour
Billing Class 8 Staff Manager	_____/hour
Billing Class 7 Professional VI	_____/hour
Billing Class 6 Professional V	_____/hour
Billing Class 5 Professional IV	_____/hour
Billing Class 4 Professional III	_____/hour
Billing Class 3 Professional II	_____/hour
Billing Class 2 Technician II	_____/hour
Billing Class 1 Technician I	_____/hour
Principal	_____/hour
Support Staff	_____/hour

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT D**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

*Note to User: Delete this Exhibit D if Engineer will not be providing Resident Project Representative Services under Paragraph A1.05.A.2*

**Duties, Responsibilities, and Limitations of Authority of Resident Project Representative**

Paragraph 1.01.A of the Agreement is amended and supplemented to include the following agreement of the parties:

*D1.01 Resident Project Representative*

- A. Engineer shall furnish a Resident Project Representative (“RPR”), assistants, and other field staff to assist Engineer in observing progress and quality of the Work. The RPR, assistants, and other field staff under this Exhibit D may provide full time representation or may provide representation to a lesser degree.
- B. Through such additional observations of Contractor’s 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. However, 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 the Contractor’s Work nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to the Contractor’s work in progress, for any failure of Contractor to comply with Laws and Regulations applicable to Contractor’s performing and furnishing the Work, or responsibility for Contractor’s failure to furnish and perform the Work in accordance with the Contract Documents. In addition, the specific terms set forth in section A.1.05 of Exhibit A of the Agreement are applicable.
- C. The duties and responsibilities of the RPR are as follows:
  - 1. *General:* RPR is 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 in matters pertaining to the Contractor’s work in progress shall in general be with Engineer and Contractor, keeping Owner advised as necessary. RPR’s dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner with the knowledge of and under the direction of Engineer.

2. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
3. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
4. *Liaison:*
  - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's superintendent, assist in providing information regarding the intent of the Contract Documents.
  - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
  - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
5. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
6. *Shop Drawings and Samples:*
  - a. Record date of receipt of Samples and approved Shop Drawings.
  - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
  - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.
7. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
8. *Review of Work and Rejection of Defective Work:*
  - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
  - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project

as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

9. *Inspections, Tests, and System Startups:*

- a. Consult with Engineer in advance of scheduled major inspections, tests, and systems startups of important phases of the Work.
- b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
- c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.

10. *Records:*

- a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor, and other Project-related documents.
- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, 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.
- c. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment.
- d. Maintain records for use in preparing Project documentation.
- e. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.



*11. Reports:*

- a. Furnish to Engineer periodic 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.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Constituent of Concern. .

12. *Payment Requests:* Review Applications for Payment with Contractor for compliance with the established procedure 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.

13. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

- a. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

D. Resident Project Representative shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in the Agreement or the Contract Documents.

3. Undertake any of the responsibilities of Contractor, subcontractors, suppliers, or Contractor's superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT E**, consisting of \_\_\_\_\_ pages, referred to  
in and part of the **Agreement between Owner and  
Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

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NOTICE OF ACCEPTABILITY OF WORK

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PROJECT:

OWNER:

OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION:

EFFECTIVE DATE OF THE CONSTRUCTION AGREEMENT:

CONSTRUCTION CONTRACT DATE:

ENGINEER:

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To:

OWNER

And To:

CONTRACTOR

From:

ENGINEER

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The Engineer hereby gives notice to the above Owner and Contractor that the completed Work furnished and performed by Contractor under the above Contract is acceptable, expressly subject to the provisions of the related Contract Documents, the Agreement between Owner and Engineer for Professional Services dated \_\_\_\_\_, \_\_\_\_\_, and the terms and conditions set forth on the reverse side of this Notice.

By: \_\_\_\_\_

Title: \_\_\_\_\_

---

Dated

:

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(Reverse side of Notice)

**CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK**

The Notice of Acceptability of Work ("Notice") on the front side of this sheet is expressly made subject to the following terms and conditions to which all persons who receive said Notice and rely thereon agree:

1. This Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the professional judgment of Engineer.
3. This Notice is given as to the best of Engineer's knowledge, information, and belief as of the date hereof.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's work) under Engineer's Agreement with Owner and under the Construction Contract referred to on the front side of this Notice, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Agreement and Construction Contract.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract referred to on the front side of this Notice, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT F**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Construction Cost Limit**

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Paragraph 5.02 of the Agreement is amended and supplemented to include the following agreement of the parties:

*F5.02 Designing to Construction Cost Limit*

- A. Owner and Engineer hereby agree to a Construction Cost limit in the amount of Dollars (\$\_\_\_\_\_).
- B. A bidding or negotiating contingency of \_\_\_\_\_ percent will be added to any Construction Cost limit established.
- C. The acceptance by Owner at any time during Basic Services of a revised opinion of probable Construction Cost in excess of the then established Construction Cost limit will constitute a corresponding increase in the Construction Cost limit.
- D. Engineer will be permitted to determine what types and quality of materials, equipment and component systems are to be included in the Drawings and Specifications. Engineer may make reasonable adjustments in the scope, extent, and character of the Project to the extent consistent with the Project requirements and sound engineering practices, to bring the Project within the Construction Cost limit.
- E. If the Bidding or Negotiating Phase has not commenced within three months after completion of the Final Design Phase, or if industry-wide prices are changed because of unusual or unanticipated events affecting the general level of prices or times of delivery in the construction industry, the established Construction Cost limit will not be binding on Engineer. In such cases, Owner shall consent to an adjustment in the Construction Cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Final Design Phase and the date on which proposals or Bids are sought.
- F. If the lowest bona fide proposal or Bid exceeds the established Construction Cost limit, Owner shall (1) give written approval to increase such Construction Cost limit, or (2) authorize negotiating or rebidding the Project within a reasonable time, or (3) cooperate in revising the Project's scope, extent, or character to the extent consistent with the Project's requirements and with sound engineering practices. In the case of (3), Engineer shall modify the Contract Documents as necessary to bring the Construction Cost within the Construction Cost Limit. Owner shall pay Engineer's cost to provide such modification services, including the costs of

the services of Engineer's Consultants, all overhead expenses reasonably related thereto, and Reimbursable Expenses, but without profit to Engineer on account of such services. The providing of such services will be the limit of Engineer's responsibility in this regard and, having done so, Engineer shall be entitled to payment for services and expenses in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or Bid exceeding the established Construction Cost limit.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT G**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Insurance**

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Paragraph 6.04 of the Agreement is amended and supplemented to include the following agreement of the parties.

G6.04 *Insurance*

A. The limits of liability for the insurance required by Paragraph 6.04.A and 6.04.B of the Agreement are as follows:

1. By Engineer:

- |   |           |
|---|-----------|
| a. Workers' Compensation:                               | Statutory |
| b. Employer's Liability --                              |           |
| 1) Each Accident:                                       | \$ _____  |
| 2) Disease, Policy Limit:                               | \$ _____  |
| 3) Disease, Each Employee:                              | \$ _____  |
| c. General Liability --                                 |           |
| 1) Each Occurrence (Bodily Injury and Property Damage): | \$ _____  |
| 2) General Aggregate:                                   | \$ _____  |
| d. Excess or Umbrella Liability --                      |           |
| 1) Each Occurrence:                                     | \$ _____  |
| 2) General Aggregate:                                   | \$ _____  |
| e. Automobile Liability --                              |           |
| 1) Bodily Injury:                                       |           |
| a) Each Accident  | \$ _____  |
| 2) Property Damage:                                     |           |
| a) Each Accident  | \$ _____  |

[or]



3) Combined Single Limit  
(Bodily Injury and Property Damage):  
Each Accident \$ \_\_\_\_\_

f. Professional Liability –

1) Each Claim Made \$ \_\_\_\_\_  
2) Annual Aggregate \$ \_\_\_\_\_

g. Other (specify):

\$ \_\_\_\_\_

2. By Owner:

a. Workers' Compensation: Statutory

b. Employer's Liability --

1) Each Accident \$ \_\_\_\_\_  
2) Disease, Policy Limit \$ \_\_\_\_\_  
3) Disease, Each Employee \$ \_\_\_\_\_

c. General Liability --

1) General Aggregate: \$ \_\_\_\_\_  
2) Each Occurrence (Bodily Injury and Property Damage): \$ \_\_\_\_\_

d. Excess Umbrella Liability --

1) Each Occurrence: \$ \_\_\_\_\_  
2) General Aggregate: \$ \_\_\_\_\_

e. Automobile Liability --

1) Bodily Injury:  
a) Each Accident \$ \_\_\_\_\_

2) Property Damage:  
a) Each Accident \$ \_\_\_\_\_

[or]

1) Combined Single Limit  
(Bodily Injury and Property Damage):

Each Accident

\$ \_\_\_\_\_

f. Other (specify):

\_\_\_\_\_ \$

**B. Additional Insureds**

1. The following persons or entities are to be listed on Owner's general liability and property policies of insurance as additional insureds, as provided in Paragraph 6.04.B:

a. \_\_\_\_\_  
Engineer

b. \_\_\_\_\_  
Engineer's Consultant

c. \_\_\_\_\_  
Engineer's Consultant

2. During the term of this Agreement the Engineer shall notify Owner of any other Consultant to be listed as an additional insured on Owner's general liability and property policies of insurance.

3. The Owner shall be listed on Engineer's general liability policy as provided in Paragraph 6.04.A.

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT H**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Dispute Resolution**

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Paragraph 6.08 of the Agreement is amended and supplemented to include the following agreement of the parties:

[NOTE: Select one of the two alternatives provided]

*H6.09 Dispute Resolution*

- A. Mediation. Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof (“Disputes”) to mediation by *[insert name of mediator, or mediation service]*. If such mediation is unsuccessful in resolving a Dispute, then (a) the parties may mutually agree to a dispute resolution of their choice, or (b) either party may seek to have the Dispute resolved by a court of competent jurisdiction.

[or]

~~A. Arbitration. All Disputes between Owner and Engineer shall be settled by arbitration in accordance with the *[here insert the name of a specified arbitration service or organization]* rules effective at the Effective Date of the Agreement, subject to the conditions stated below. This agreement to arbitrate and any other agreement or consent to arbitrate entered into in accordance with this Paragraph H6.08.A will be specifically enforceable under prevailing law of any court having jurisdiction.~~

~~1. Notice of the demand for arbitration must be filed in writing with the other party to the Agreement and with the *[specified arbitration service or organization]*. The demand must be made within a reasonable time after the Dispute has arisen. In no event may the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such Dispute would be barred by the applicable statute of limitations.~~

~~2. All demands for arbitration and all answering statements thereto which include any monetary claims must contain a statement that the total sum or value in controversy as alleged by the party making such demand or answering statement is not more than \$ \_\_\_\_\_ (exclusive of interest and costs). The arbitrators will not have jurisdiction, power, or authority to consider, or make findings (except in denial of their own jurisdiction) concerning any Dispute if the amount in controversy in such Dispute is more than \$ \_\_\_\_\_ (exclusive of interest and costs), or to render a monetary award in response thereto against any party which totals more than \$ \_\_\_\_\_ (exclusive of interest and costs). Disputes that are~~

~~not subject to arbitration under this paragraph may be resolved in any court of competent jurisdiction.~~

- ~~3. The award rendered by the arbitrators shall be in writing, and shall include: (i) a precise breakdown of the award; and (ii) a written explanation of the award specifically citing the Agreement provisions deemed applicable and relied on in making the award.~~
- ~~4. The award rendered by the arbitrators will be consistent with the Agreement of the parties and final, and judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to appeal or modification.~~
- ~~5. If a Dispute in question between Owner and Engineer involves the work of a Contractor, subcontractor, or consultants to the Owner or Engineer (each a "Joinable Party"), either Owner or Engineer may join each Joinable Party as a party to the arbitration between Owner and Engineer hereunder, and Engineer or Owner, as appropriate, shall include in each contract with each such Joinable Party a specific provision whereby such Joinable Party consents to being joined in an arbitration between Owner and Engineer involving the work of such Joinable Party. Nothing in this Paragraph H6.08.A.5 nor in the provision of such contract consenting to joinder shall create any claim, right, or cause of action in favor of the Joinable Party and against Owner or Engineer that does not otherwise exist.~~

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT I**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Allocation of Risks**

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Paragraph 6.10 of the Agreement is amended and supplemented to include the following agreement of the parties:

**16.10.B Limitation of Engineer's Liability**

~~[NOTE: Select one of the three alternatives listed below for 16.11 B.1]~~

- ~~1. *Engineer's Liability Limited to Amount of Engineer's Compensation.* To the fullest extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants, and any of them, to Owner and anyone claiming by, through, or under Owner for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract, or warranty express or implied of Engineer or Engineer's officers, directors, partners, employees, agents, or Engineer's Consultants, or any of them, shall not exceed the total compensation received by Engineer under this Agreement.~~

~~{or}~~

- ~~1. *Engineer's Liability Limited to Amount of Insurance Proceeds.* Engineer shall procure and maintain insurance as required by and set forth in Exhibit G to this Agreement. Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants, and any of them, to Owner and anyone claiming by, through, or under Owner for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract, or warranty express or implied, of Engineer or Engineer's officers, directors, partners, employees, agents, or Engineer's Consultants, or any of them (hereafter "Owner's Claims"), shall not exceed the total insurance proceeds paid on behalf of or to Engineer by Engineer's insurers in settlement or satisfaction of Owner's Claims under the terms and conditions of Engineer's~~

~~insurance policies applicable thereto (excluding fees, costs and expenses of investigation, claims adjustment, defense, and appeal). If no such insurance coverage is provided with respect to Owner's Claims, then the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants, and any of them to Owner and anyone claiming by, through, or under Owner for any and all such uninsured Owner's claims shall not exceed \$\_\_\_\_\_.~~

[or]

- ~~1. *Engineer's Liability Limited to the Amount of \$\_\_\_\_\_.* Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants, and any of them, to Owner and anyone claiming by, through, or under Owner for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract, or warranty express or implied of Engineer or Engineer's officers, directors, partners, employees, agents, or Engineer's Consultants, or any of them, shall not exceed the total amount of \$\_\_\_\_\_.~~

~~[NOTE: If appropriate and desired, include I6.10.B.2 below]~~

- ~~2. *Exclusion of Special, Incidental, Indirect, and Consequential Damages.* To the fullest extent permitted by law, and notwithstanding any other provision in the Agreement, consistent with the terms of Paragraph 6.10.E the Engineer and Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants, or any of them, shall not be liable to Owner or anyone claiming by, through, or under Owner for any special, incidental, indirect, or consequential damages whatsoever arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to any such damages caused by the negligence, professional errors or omissions, strict liability, breach of contract, or warranties, express or implied, of Engineer or Engineer's officers, directors, partners, employees, agents, or Engineer's Consultants, or any of them, and including but not limited to:~~

~~[NOTE: list here particular types of damages that may be of special concern because of the nature of the project or specific circumstances, e.g., cost of replacement power, loss of use of equipment or of the facility, loss of profits or revenue, loss of financing, regulatory fines, etc. If the parties prefer to leave the language general, then end the sentence after the phrase "or any of them."]~~

~~[NOTE: the above exclusion of consequential and other damages can be converted to a limitation on the amount of such damages, following the format of Paragraph I6.10.B.1 above, by providing~~

~~that "Engineer's total liability for such damages shall not exceed \$\_\_\_\_\_."}]~~

~~[NOTE: If appropriate and desired, include I6.10.B.3 below]~~

~~[NOTE: The foregoing provisions may be included as a supplement to Paragraph 6.10.E, which contains a mutual waiver of damages applicable to the benefit of both Owner and Engineer.]~~

~~3. Agreement Not to Claim for Cost of Certain Change Orders. Owner recognizes and expects that certain Change Orders may be required to be issued as the result in whole or part of imprecision, incompleteness, errors, omissions, ambiguities, or inconsistencies in the Drawings, Specifications, and other design documentation furnished by Engineer or in the other professional services performed or furnished by Engineer under this Agreement ("Covered Change Orders"). Accordingly, Owner agrees not to sue and otherwise to make no claim directly or indirectly against Engineer on the basis of professional negligence, breach of contract, or otherwise with respect to the costs of approved Covered Change Orders unless the costs of such approved Covered Change Orders exceed \_\_\_\_\_% of Construction Cost, and then only for an amount in excess of such percentage. Any responsibility of Engineer for the costs of Covered Change Orders in excess of such percentage will be determined on the basis of applicable contractual obligations and professional liability standards. For purposes of this paragraph, the cost of Covered Change Orders will not include any costs that Owner would have incurred if the Covered Change Order work had been included originally without any imprecision, incompleteness, error, omission, ambiguity, or inconsistency in the Contract Documents and without any other error or omission of Engineer related thereto. Nothing in this provision creates a presumption that, or changes the professional liability standard for determining if, Engineer is liable for the cost of Covered Change Orders in excess of the percentage of Construction Cost stated above or for any other Change Order. Wherever used in this paragraph, the term Engineer includes Engineer's officers, directors, partners, employees, agents, and Engineer's Consultants.~~

~~[NOTE: The parties may wish to consider the additional limitation contained in the following sentence.~~

~~Owner further agrees not to sue and otherwise to make no claim directly or indirectly against Engineer with respect to any Covered Change Order not in excess of such percentage stated above, and Owner agrees to hold Engineer harmless from and against any suit or claim made by the Contractor relating to any such Covered Change Order.]~~

SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT J**, consisting of \_\_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**Special Provisions**

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Paragraph(s) \_\_\_\_\_ of the Agreement is/are amended to include the following agreement(s) of the parties:



SUGGESTED FORMAT  
(for use with E-500, 2002 Edition)

This is **EXHIBIT K**, consisting of \_\_\_\_\_ pages, referred to  
in and part of the **Agreement between Owner and  
Engineer for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT**

1. Background Data:

- a. Effective Date of Owner-Engineer Agreement: \_\_\_\_\_
- b. Owner: \_\_\_\_\_
- c. Engineer: \_\_\_\_\_
- d. Project: \_\_\_\_\_

2. Nature of Amendment [Check those that are applicable and delete those that are inapplicable.]

- \_\_\_\_\_ Additional Services to be performed by Engineer
- \_\_\_\_\_ Modifications to Services of Engineer
- \_\_\_\_\_ Modifications to Responsibilities of Owner
- \_\_\_\_\_ Modifications to Payment to Engineer
- \_\_\_\_\_ Modifications to Time(s) for rendering Services
- \_\_\_\_\_ Modifications to other terms and conditions of the Agreement

3. Description of Modifications

Attachment 1, "Modifications"  
[List other Attachments, if any]

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is \_\_\_\_\_.

OWNER:

ENGINEER:

---

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date  
Signed: \_\_\_\_\_

---

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

This is **Attachment 1**, consisting of \_\_\_\_ pages, to  
Amendment No. \_\_\_\_\_, dated \_\_\_\_\_, \_\_\_\_\_.

## **Modifications**

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[Include the following paragraphs that are appropriate and delete those not applicable to this amendment. Refer to paragraph numbers used in the Agreement or a previous amendment for clarity with respect to the modifications to be made. Use paragraph numbers in this document for ease of reference herein and in future correspondence or amendments.]

1. Engineer shall perform the following Additional Services:
  
2. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:
  
3. The responsibilities of Owner are modified as follows:
  
4. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional or modified compensation:
  
5. The schedule for rendering services is modified as follows:
  
6. Other portions of the Agreement (including previous amendments, if any) are modified as follows: