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CHAPTER/ SECTION	EXPLANATION	OLD PAGES TO BE DELETED	NEW PAGES TO BE ADDED
	The purpose of this printing is to include the following revised exhibits in the <i>Professional Services Guidance Manual</i> .		
PS-9000	Campaign Finance Law Compliance Certification of Confidentiality, TC 40-4 Certification of Conformity with Procurement Process, TC 40-10 Certification of Understanding of Restriction for Selection Committee, TC 40-9 Committee Ranking to Determine the Three Short-Listed Consultant Firms, TC 40-18 Consulting Engineer and Related Services Prequalification Application, TC 40-1 Consulting Engineer and Related Services Prequalification Criteria Contract Modification, TC 40-17 Engineering and Related Services Fee Proposal, TC 40-2 Engineering and Related Services Pay Estimate, TC 40-408 Ex Parte Disclosure, TC 40-6 Instructions for Response to KYTC Announcement for Engineering Services Listing of Responding Firms, TC 40-8	PS-9001 PS-9002 PS-9003 PS-9004 PS-9005 PS-9006 PS-9007 PS-9008 PS-9009 PS-9010 PS-9011 PS-9013 PS-9015	PS-9001 PS-9002 PS-9003 PS-9004 PS-9005 PS-9006 PS-9007 PS-9008 PS-9009 PS-9010 PS-9011 PS-9013 PS-9015
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PS-9000	Engineering and Related Services Fee Proposal, TC 40-2	PS-9009	PS-9009
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PS-9000	Campaign Finance Law Compliance Consulting Engineer and Related Services Prequalification Application, TC 40-1 Consulting Engineer and Related Services Prequalification Criteria Contract Modification, TC 40-17 Engineering and Related Services Fee Proposal, TC 40-2 Instructions for Response to KYTC's Announcement for Engineering and Related Services Prequalification Requirements for Geotechnical Drilling Services, TC 66-209 Prequalification Requirements for Geotechnical Engineering Services, TC 66-210 Prequalification Requirements for Geotechnical Laboratory Testing Services, TC 66-211 Project Authorization, TC 10-1	PS-9001 PS-9006 PS-9007 PS-9009 PS-9013 PS-9016 PS-9017 PS-9018 PS-9019	PS-9001 PS-9006 PS-9007 PS-2008 PS-9009 PS-9013 PS-9016 PS-9017 PS-9018 PS-9019
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PS-9000	Table of Contents	PS-9007	PS-9007
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Matthew G. Bevin Governor

# COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

**Greg Thomas** Secretary

OFFICE OF THE SECRETARY 110710
OFFICIAL ORDER

SUBJECT: Professional Services Guidance Manual

This manual has been prepared to provide information and guidance to personnel of the Kentucky Transportation Cabinet. Its purpose is to establish uniformity in the interpretation and administration of laws, regulations, policies, and procedures applicable to the operations and services of the Division of Professional Services and its relationship with other units of the Cabinet.

The policies and procedures set forth herein are hereby approved and declared effective unless officially changed.

All previous instructions, written and oral, relative to or in conflict with this manual are hereby superseded.

Signed and approved this 29 The day of Macet, 2017

Greg Thomas

Approved as to Legal Form

Office of Legal Services



# PROFESSIONAL SERVICES



### COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

March 2017



Produced by the Organizational Management Branch Office of Human Resource Management



# ${\cal P}_{ m rofessional}\, {\cal S}_{ m ervices}$

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#### **GENERAL INFORMATION**

#### 15-01.0100 **INTRODUCTION**

The Division of Professional Services has designed this manual to assist the Kentucky Transportation Cabinet (KYTC) in contracting for professional engineering and engineering-related services with individuals and with firms. This manual shall serve as a uniform guide to KYTC offices and divisions in the interpretation and administration of the statutes, regulations, policies, and procedures related to the procurement of professional services.

This chapter, Chapter 15-01, lists the code of ethics and provides a brief overview of the procedures to follow when contracting for professional engineering and engineering-related services.

Chapter 15-02 discusses the procurement authority of KYTC and the statutes and regulations governing professional engineering and engineering-related services. Also included is the exemption from competitive bidding for the contracting of professional services.

Chapters 15-03 through 15-07 include requirements and procedures for:

- Procurement of professional engineering and engineering-related services
- Pregualification, selection, and approval
- Contract administration
  - Contract modifications
  - ♦ Contract monitoring
  - ♦ Contract completion
  - ♦ Contract cancellation
  - ◆ Contract payment, including the requirements of the Finance and Administration Cabinet

Record retention

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#### 15-01.0100 <u>Introduction (cont.)</u>

Chapter 15-08 includes procedures for the selection of other professional services utilized by KYTC.

This manual references the forms, as well as the applicable state statutes, used in contracting for professional engineering and engineering-related services and includes them as exhibits.

KYTC will revise this manual as necessary to include any changes in policies and procedures.

#### 15-01.0200 PROFESSIONAL ENGINEERING AND ENGINEERING-RELATED SERVICES PROCUREMENT AUTHORITY

KYTC has the authority to contract for professional services subject to Legislative Research Commission (LRC) approval under KRS 45A, the Model Procurement Code.

#### **15-01.0300** CODE OF ETHICS

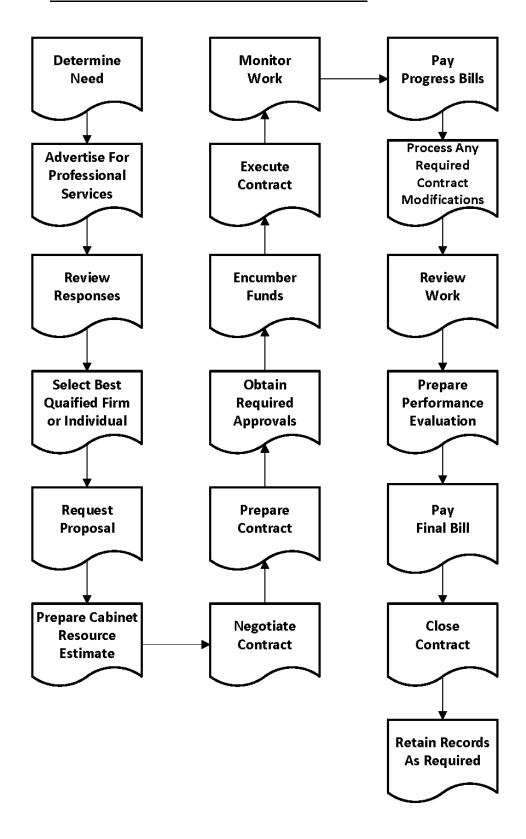
All KYTC personnel shall subscribe to the following:

- Consider the interests of the Commonwealth of Kentucky and KYTC first when contracting for professional services
- Request and accept assistance from other KYTC and state personnel as required without allowing it to impair the dignity and responsibility of the employee's position
- Seek to obtain the maximum value for each dollar spent for professional services
- Demand honesty and truth in contracting
- > Denounce all forms of bribery or favors
- Invite all professionals to submit their qualifications for consideration by KYTC
- Assist other KYTC personnel in the contracting for professional services as necessary

All persons involved in the procurement of professional services shall scrupulously comply with both the letter and the spirit of Kentucky Revised Statutes (KRS) Chapter 11A, "Executive Branch Code of Ethics", pertaining to standards of ethical conduct in the Executive Branch; KRS 45A.340, "Conflicts of Interest of Public Officers and Employees"; and KRS 45A.800, KRS 45A.810, KRS 45A.825, KRS 45A.830, KRS 45A.835, KRS 45A.827, KRS 45A.807, and KRS 45A.050.

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#### 15-01.0400 FLOW CHART FOR CONTRACTING PROFESSIONAL SERVICES



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#### 15-01.0500

#### **DEFINITIONS**

The following definitions are terms commonly used in this manual and in routine processes performed by the Division of Professional Services. Other definitions may be found at 23 CFR 172.3 and KRS 45A.800.

#### **ALLOWABLE COSTS**

Costs or prices based on estimated costs for contracts, which are eligible for federal-aid reimbursement only to the extent that costs incurred or cost estimates included in negotiated prices are allowable in accordance with the federal cost principles

#### **AUDIT**

A formal examination, in accordance with professional standards, of a consultant's accounting systems, incurred cost records, and other cost presentations to test the reasonableness, allowability, and allocability of costs in accordance with the federal cost principles (as specified in 48 CFR part 31)

#### **A**WARD

The presentation of an agreement or contract to a professional

#### **CABINET**

Contracting agency responsible for procurement of transportation-related architectural and engineering services in the Commonwealth of Kentucky

The Kentucky Transportation Cabinet (KYTC), as contracting agency, is responsible for:

- Procuring transportation-related architectural and engineering services in the Commonwealth of Kentucky
- Preparing and maintaining written architectural and engineering procurement policies and procedures in accordance with federal and state laws and regulations
- Reviewing and approving written architectural and engineering procurement policies and procedures of subrecipients including their revisions

## COMPETITIVE NEGOTIATION

A method of contracting when competition is determined feasible

When the Kentucky Transportation Cabinet (KYTC) determines in writing, based on regulations issued by the Finance and Administration Cabinet, that the use of competitive bidding is not practical, KYTC may contract using noncompetitive negotiation. For architectural and engineering and engineering-related services, KYTC follows the contracting policy of the Commonwealth as explained in KRS 45A, including public announcement of the project, evaluation of qualifications of firms prequalified, and discussions with three firms.

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#### **15-01.0500** Definitions (CONT.)

CONSULTANT, FIRM, PRIME FIRM, PROFESSIONAL

**ENGINEER** An individual or firm, licensed to practice engineering in the

Commonwealth of Kentucky under KRS Chapter 322, under contract with KYTC to perform defined engineering and engineering-related professional

services on a specific project

**CONTRACT** All types of state agreements, including:

Grants and orders for the purchase or disposal of supplies, services, or other items

- > Lump-sum contracts
- Cost-plus-fixed-fee contracts
- Incentive contracts
- Contracts providing for the issuance of job or task orders
- Letter contracts

### CONTRACT

MODIFICATION An agreement using the TC 40-17 form, Contract Modification (Exhibit

**9008**), modifying the existing agreement, such as an agreement that introduces new details or cancels details but leaves the general purpose and effect of the contract intact or any formal revision to the terms of a

contract

COST PER UNIT OF WORK

A price based on units when the extent of work cannot be defined but a

cost of the work per unit can be determined in advance with reasonable

accuracy

**COST PLUS A** 

FIXED FEE CONTRACT A price based on the actual allowable cost of the work plus a pre-

established fixed amount for operating margin

**DEPARTMENT** Kentucky Department of Highways within KYTC

**DIRECT SALARY** Salary of person(s) directly involved with and chargeable to a specific

project (for example, engineering or technician time spent on a project)

**Discipline** An engineering or engineering-related service area with responsibility

falling to a specific user division

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15-01.0500 <u>Definitions</u> (CONT.)

**FEDERAL COST** 

PRINCIPLES The cost principles contained in 48 CFR part 31 of the Federal Acquisition

Regulation for determination of allowable costs of commercial, for-profit

entities

FHWA Federal Highway Administration

**FORMAL** 

**ANNOUNCEMENT** Official notice, in accordance with legal requirements, to inform the public

that KYTC is requesting qualifications for a specific project

**GENERAL Provisions** An addendum to the contract, which is referenced within the agreement

(Exhibit 9012)

**LUMP SUM CONTRACT** A fixed price, including cost and operating margin, agreed upon between

the professional and KYTC for a group of tasks without breakdown of

individual values—a lot price

**MANAGEMENT** 

**SUPPORT ROLE** Firm(s) performing engineering management services or other services

acting on the contracting agency's behalf, which are subject to review and oversight by agency officials, such as a program or project administration role typically performed by the contracting agency and necessary to fulfill the duties imposed by Title 23 of the United States Code, other federal and

state laws, and applicable regulations

NONCOMPETITIVE

**NEGOTIATION** A method of contracting when competition is not feasible

KYTC may enter into contracts for professional, technical, scientific, or artistic services by using noncompetitive negotiation. Use of noncompetitive negotiation is subject to FHWA review and approval when

using federal funds.

**OPERATING MARGIN** The portion of a negotiated lump sum fee computed as a percentage of

the direct labor and overhead

**OVERHEAD COSTS** Indirect costs, including salaries and other costs, not chargeable to any

specific project

These costs normally support the different projects with which a firm is involved. Examples of indirect costs are accounting, general maintenance

and repair, building rent, utilities, and furniture.

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15-01.0500 **DEFINITIONS** (CONT.) **PON (PROOF** OF NECESSITY) The form used to justify and request permission from the LRC Government Contract Review Committee to employ consulting engineers, architects, appraisers, attorneys, consultants, and others (Exhibit 9014) The evaluation of potential professionals in which KYTC considers such **PREQUALIFICATION** factors as financial capability, reputation, and management skills in order to develop a list of professionals qualified to contract with KYTC for professional engineering and engineering-related services **PREQUALIFICATION CATEGORY** Any type of project for which engineering and engineering-related services are contracted and as identified on Page 2 of the TC 40-1 form, Consulting Engineer and Related Services Prequalification Application (Exhibit 9006) Individual or firm of recognized technical competence **PROFESSIONAL PROFESSIONAL EMPLOYMENT CONTRACT** A contract for professional, technical, scientific, or artistic services exempted from competitive bidding **PROFESSIONAL ENGINEERING** & ENGINEERING-Specialized engineering or engineering-related professional services RELATED SERVICES performed by individuals or firms of recognized technical competence, education, and/or experience that are involved in the planning, design, construction, operation, and maintenance of transportation systems **PROFESSIONAL** Specialized services performed by individuals or firms of recognized **S**ERVICES technical competence **PROJECT** Any KYTC undertaking requiring the contracting of services of an engineer, engineering firm, architect, or other professional of technical expertise The director of the user division or the person designated by the division PROJECT SUPERVISOR director to oversee the performance of a firm to provide contracted services on a project **PROPOSAL** An offer made by the professional to KYTC as a basis for negotiations for

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entering into a contract

#### **15-01.0500 DEFINITIONS** (CONT.)

#### RECIPIENT

Any state, territory, possession, the District of Columbia, Puerto Rico, or any political subdivision, or instrumentality thereof, or any public or private agency, institution, or organization, or other entity, or any individual, in any state, territory, possession, the District of Columbia, or Puerto Rico, to whom federal assistance is extended, either directly or through another recipient, for any program, including any successor, assignee, or transferee thereof

The term *recipient* does not include any ultimate beneficiary under any such program. For all transportation-related architectural and engineering services procured using federal funds in the Commonwealth of Kentucky, KYTC is considered the recipient based upon this definition.

#### **SALARY ADDITIVES**

Employer-paid fringe benefits, including employer portion of FICA, hospitalization, group life insurance, unemployment contributions to the state, and other such benefits

#### SCOPE OF WORK

All services and actions required of the professional by the contract

#### **SERVICES**

The rendering by a professional of its time and effort rather than the furnishing of a specific end product other than reports, which are merely incidental to the required performance or service

#### **SMALL PURCHASES**

The method of procurement of engineering- and design-related services where an adequate number of qualified sources are reviewed and the total contract costs do not exceed an established simplified acquisition threshold

### SPECIFIC RATES OF

COMPENSATION

A price that includes all direct salary costs, salary additives, indirect costs, and the net fee

Supporting data shall identify these cost elements.

#### **SPECIAL PROVISIONS**

A section within the agreement that states terms and/or conditions that apply only to the subject contract for its duration as a result of project-specific circumstances or events

#### **SUBCONSULTANT**

A second consultant contracted to a prime consultant for the performance of work contracted by KYTC that requires prequalification

#### SUBCONTRACTOR

An individual or firm contracted to a prime firm for the performance of work contracted by KYTC that does not require prequalification

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### 15-01.0500 <u>DEFINITIONS</u> (CONT.)

#### **SUBRECIPIENT**

A nonfederal entity that receives a subaward from a pass-through entity (for example, recipient – KYTC) to carry out part of a federal program; but does not include an individual that is a beneficiary of such program

A subrecipient may also be a recipient of other federal awards directly from a federal awarding agency. For all transportation-related architectural and engineering services procured using federal funds in the Commonwealth of Kentucky, other state agencies and regional/local jurisdictions are typically considered subrecipients based upon this definition.

# TECHNICAL COMPETENCE

Knowledge of, and skill in the exercise of, practices required for successful accomplishment of a business, job, or task

# TERMINATION CLAUSE

A contract clause that allows KYTC to terminate, at its own discretion, the performance of work in full or in part and to make settlement of the professional's claims in accordance with appropriate regulations

#### **USER DIVISION**

A division or office within KYTC that requires the procurement of engineering and engineering-related services for a project

Where KYTC is procuring consultant services in conjunction with another agency, governmental entity, or state, that unit outside KYTC may be designated as a co-user division.



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### **REGULATORY REQUIREMENTS**

#### 15-02.0100 STATE REGULATORY REQUIREMENTS

Administrative Regulations (KAR) provide that contracts for professional, technical, scientific, and artistic services may be made by noncompetitive negotiation (KRS 45A.095 and 600 KAR 6:070). The Secretary of the Transportation Cabinet, or designee, shall determine that competition is not feasible for professional engineering and engineering-related services contracted by the Transportation Cabinet (KYTC) in accordance with KRS 45A.095.

Professional service contracts for engineering and engineering-related services are negotiated based on demonstrated competence in and qualification for services required at fair and reasonable prices (KRS 45A).

.0120 LEGISLATIVE RESEARCH COMMISSION: Professional service contracts or their modifications cannot be awarded until the contract or modifications have been submitted to the LRC Government Contract Review Committee for examination and approval.

#### 15-02.0200 FEDERAL REGULATORY REQUIREMENTS

For highway projects funded in whole or in part by federal-aid funds, the KYTC is regulated by Title 23 of the United States Code [23 U.S.C. 112(b) (2)], the Code of Federal Regulations [23 CFR Chapter 1, Part 172 (Procurement, Management, and Administration of Engineering and Design Related Services) and 2 CFR Chapter 3, Part 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards)], as well as other applicable federal regulations.

.0210 ENGINEERING SERVICES: The Federal Highway Administration (FHWA) and the KYTC have agreed that the processes outlined in this manual and as described within the approved Stewardship Agreement between the KYTC and the FHWA will serve as the accepted procedure for the contracting of professional services for federal-aid projects funded under the federal regulatory requirements detailed in Section 15-02.0200. FHWA involvement, approval, and documentation requirements are outlined in the Stewardship Agreement.

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- AUDIT OF FEDERAL PROJECTS: All federal-aid proposals that exceed \$150,000 shall have a risk analysis performed to determine when an audit is required and the scope of the audit to be performed to test compliance with requirements of the cost principles set forth in Federal Acquisition Regulations, 48 CFR Chapter 1, Part 31.105.
- **.0230 AFFIRMATIVE ACTION:** Whenever possible, disadvantaged business enterprises are to be used as sources of supplies, equipment, construction, and services. Affirmative steps shall include the following:
  - Place qualified small and minority businesses on solicitation lists.
  - Assure that small and minority businesses are solicited whenever they are potential sources.
  - When economically feasible, divide total requirements into smaller tasks or quantities so as to permit maximum small- and minority-business participation.
  - Where the requirement permits, establish delivery schedules that encourage participation by small and minority businesses.
  - ➤ Require use of services and assistance of the Small Business Administration, the Office of Minority Business Enterprise of the Economic Development Cabinet, and the Community Services Administration.
  - If any subcontracts are to be let, require the prime firm to take the affirmative steps identified above.
  - Advertise projects that give preference to project teams that include contracting engineering and engineering-related services with disadvantaged business enterprises; however, a DBE Participation Plan and/or Local Presence should not exceed more than 10 percent of the total evaluation criteria.
- .0240 FEDERAL COMPLIANCE FOR SUBCONSULTANTS: The KYTC shall comply with 23 CFR 172.9(c). All provisions pertaining to prime firms shall also pertain to subconsultants.
- **NONCOMPETITIVE NEGOTIATION:** Noncompetitive negotiation may be used to obtain engineering and engineering-related services when the award of a contract is not feasible under small-purchase or competitive-negotiation procedures.

Circumstances under which the KYTC may award a contract by noncompetitive negotiation are limited to any one of the following:

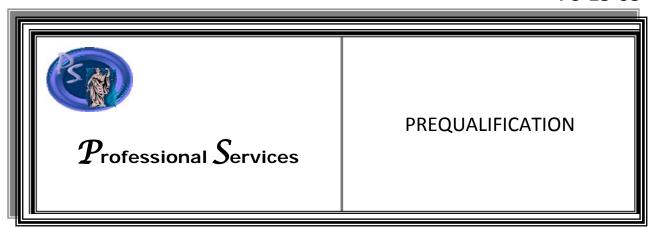
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#### .0250 NONCOMPETITIVE NEGOTIATION (CONT.):

- > The service is available only from a single source.
- > An emergency prohibits the time necessary to conduct competitive negotiations.
- > After solicitation of a number of sources, competition is determined inadequate.



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#### 15-03.0100 Prequalification for Professional Engineering and Engineering-Related Services

- .0110 Purpose: To be considered for a contract to provide professional engineering and engineering-related services for the Transportation Cabinet (KYTC), a firm shall meet the KYTC's prequalification requirements before responding to a KYTC advertisement for professional services. The Division of Professional Services shall ensure that the KYTC has at its disposal and available for use a current list of prequalified consulting engineering firms and other professionals.
- **.0120** APPLICATION & REVIEW: A firm desiring consideration for prequalification shall complete the applicable qualification questionnaire pertaining to the services for which prequalification is desired. These forms include:
  - TC 40-1 form, Consulting Engineer and Related Services Prequalification Application (Exhibit 9006)
  - ➤ TC 66-209 form, Prequalification Requirements for Geotechnical Drilling Services (Exhibit 9016)
  - > TC 66-210 form, Prequalification Requirements for Geotechnical Engineering Services (Exhibit 9017)
  - ➤ TC 66-211 form, Prequalification Requirements for Geotechnical Laboratory Services (Exhibit 9018)

Upon return of these forms to the Division of Professional Services, a review of the firm's qualifications shall be requested from the appropriate user division or office.

- **.0121 PREQUALIFICATION CATEGORIES:** Prequalification categories used by the KYTC are identified on Page 2 of the TC 40-1 form, *Consulting Engineer and Related Services Prequalification Application* (Exhibit 9006)
- **.0122 CRITERIA FOR PREQUALIFICATION:** Written criteria for prequalification in the categories identified on Page 2 of the TC 40-1 form are shown in the *Consulting Engineer and Related Services Prequalification Criteria* (**Exhibit 9007**). User divisions may update and revise criteria as needed.

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NOTIFICATION TO FIRMS: The list of prequalified consultants shall be modified to reflect the action taken by the user division or office. As chairperson of the Consultant Prequalification Committee, the Director of the Division of Professional Services, or designee, shall notify each firm of all actions involving that firm. In cases of disapproval for any services, the chairperson may also notify the firm of the appeals procedure as outlined herein.

- **.0140 CONSULTANT PREQUALIFICATION COMMITTEE:** The members of the Consultant Prequalification Committee shall be the following, or the member's designee:
  - Director, Division of Professional Services, Chairperson
  - Director, Division of Construction
  - Commissioner, Department of Aviation
  - Director, Division of Traffic Operations
  - Director, Division of Highway Design
  - Director, Division of Maintenance
  - Director, Division of Structural Design
  - Director, Division of Materials
  - Director, Division of Planning
  - Director, Division of Environmental Analysis

The committee shall consider appeals for firms that wish to be considered for consulting work by the KYTC but have been denied prequalification by the user division or office.

The Division of Professional Services is to provide necessary administrative and technical support to the committee and is to maintain all pertinent information for the committee.

any disapproval to the Consultant Prequalification Committee. Any appeal shall be made in writing to the chairperson of the Consultant Prequalification Committee within thirty (30) days of notification of disapproval. The letter to the chairperson shall state the basis of the appeal. Within sixty (60) days from receipt of an appeal, the committee shall review the appeal and make a decision regarding it. If the firm agrees, the committee may delay a decision for up to an additional sixty (60) days while the committee meets with the firm to discuss the appeal. The committee shall notify the State Highway Engineer and the firm of its decision.

If the appeal is denied, the firm may appeal the decision to the State Highway Engineer within thirty (30) days of written notice of the denial by the Consultant Prequalification Committee. The State Highway Engineer shall notify the firm of his or her decision within thirty (30) days. The decision of the State Highway Engineer is final.

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**.0160 CHANGES IN FIRM'S QUALIFICATION INFORMATION:** Prequalified firms shall notify the Division of Professional Services of any major changes, either increasing or decreasing the firm's professional or financial qualifications, capabilities, personnel, etc., or a change of address.

The user division shall review the updated information received from the firm and reclassify the firm as appropriate with respect to types of work and capacity of the firm.

If a prequalified firm fails to notify the Division of Professional Services of any major changes, either increasing or decreasing the firm's professional or financial qualifications, capabilities, personnel, etc., or a change of address, the firm may be removed from the list of prequalified firms until it notifies the division of the changes.

If the change of address notification is submitted to the division during what would have been the firm's prequalification year and no other changes have occurred in the firm, the firm shall be restored to the list of prequalified firms. Removal from the list of prequalified firms due to lack of notification of an address change shall not be a basis for appeal.

- .0170 CONDITIONAL PREQUALIFICATIONS: The user division or the Consultant Prequalification Committee may grant conditional prequalification to a firm if either of the following applies:
  - > The firm has no direct highway or transportation experience but has identified personnel who have technical training or education and other types of experience that may allow the firm to perform the regulated services.
  - ➤ The firm performed poorly on past projects for the KYTC or has been removed from the list of prequalified firms for performance-related reasons and has restructured itself to address the problems.

After the firm has performed services for the KYTC in the category of work for which it was conditionally prequalified, it may request a prequalification determination from the user division.

Denial of conditional prequalification of a firm to perform services for the KYTC shall not be eligible for appeal.

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.0180 ANNUAL SUBMISSION OF PREQUALIFICATION APPLICATION & CERTIFICATION LETTER: In even calendar years, prequalified firms shall submit qualification and performance data on or prior to their anniversary dates of prequalification.

These complete prequalification applications shall include one original and one copy of the application for each functional area requested and one original and one copy of a current marketing brochure, unless otherwise communicated to the firm in writing. Copy for functional area may be submitted as an electronic document in Adobe .pdf format on a CD or DVD.

In odd calendar years, in lieu of a full application, firms may submit a letter that:

- Certifies that no substantial changes have occurred from the previously submitted application along with annual certifications
- Includes information regarding any previously approved changes from the last update
- Includes a certificate of liability insurance

An officer of the firm shall attest that the firm is financially solvent and has a working arrangement with financial institutions so that all outstanding financial obligations will be met.

**Note:** If a substantial change has occurred or if the firm is requesting prequalification for any additional areas, the firm shall submit a full application.

- .0190 REMOVAL FROM PREQUALIFICATION LIST BY THE PREQUALIFICATION COMMITTEE: The Consultant Prequalification Committee may remove a firm from the list of prequalified firms for any of the following reasons:
  - Failure to submit an annual application on the anniversary date of the firm's initial application
  - Falsification of the firm's prequalification application
  - ➤ Falsification of the firm's Response to Kentucky Transportation Cabinet's Announcement for Engineering and Engineering-Related Services for any project
  - Violation of KRS Chapter 11A, "Executive Branch Code of Ethics"
  - Falsification of information provided to the KYTC for audit purposes

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#### .0190 REMOVAL FROM PREQUALIFICATION LIST BY THE PREQUALIFICATION COMMITTEE (CONT.):

- Failure to keep its firm license current with the Kentucky State Board of Licensure for Professional Engineers and Land Surveyors
- Failure to notify the Cabinet within thirty (30) days of the loss of personnel that has an impact on the firm's prequalification or project management
- ➤ Violation of certification that the firm's owner, principals, partners, or any of their family members having an interest of 10 percent or more in any business entity involved in the performance of the contract have not contributed more than the amount specified in KRS 121.056(2) to the election campaign of the current governor

The chairperson of the prequalification committee shall notify the firm in writing of its proposed removal and the reason(s) for removal.

APPEALS PROCEDURE FOR FIRMS REMOVED FROM THE PREQUALIFICATION LIST BY THE PREQUALIFICATION COMMITTEE: Firms removed from the prequalification list by the Consultant Prequalification Committee may appeal to the committee. Any appeal shall be made in writing to the chairperson of the committee within thirty (30) days of notification of removal. The letter to the chairperson shall state the basis for the appeal. Within sixty (60) days from receipt of an appeal, the committee shall review the appeal and make a decision regarding it. If the firm agrees, the committee may delay a decision for up to an additional sixty (60) days while the committee meets with the firm to discuss the appeal. The committee shall notify the State Highway Engineer and the firm of its decision.

If the appeal is denied, the firm may appeal the decision to the State Highway Engineer within thirty (30) days of written notice of the denial. The State Highway Engineer shall notify the firm of his or her decision within thirty (30) days.

If the appeal is denied again, the firm may appeal the decision to the Secretary of the Transportation Cabinet within thirty (30) days of written notice of the denial. The Secretary's decision shall be issued within thirty (30) days and is final.



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## $P_{ m rofessional}\,S_{ m ervices}$

#### SELECTION PROCESS

#### 15-04.0100 SELECTION OF PROFESSIONALS FOR ENGINEERING AND ENGINEERING-RELATED SERVICES

.0110 Purpose: To select the best qualified firm to perform engineering and engineeringrelated services for the Kentucky Transportation Cabinet (KYTC) when state personnel cannot perform the work due to unavailability of personnel, time restrictions, or lack of specialized skills

#### **.0120 POLICY:** It is the policy of KYTC to:

- Ensure the fair and equitable treatment of all qualified individuals or firms interested in providing professional engineering and engineering-related services for KYTC
- Announce publicly all requirements for professional engineering and engineering-related services
- Award a contract for professional engineering and engineering-related services to the firm best qualified to perform the work on a project on the basis of demonstrated competence and qualification for the required type of professional services at fair and reasonable prices
- ➤ Afford responding firms in all regions of the Commonwealth equal consideration for selection

#### 15-04.0200 APPROVAL FOR USE OF A CONSULTANT

When seeking to engage a consulting firm to perform professional engineering and engineering-related services for a project, the user division shall recommend evaluation factors and their relative weights for a project. The Secretary of the KYTC, or designee, shall approve the evaluation factors and relative weights placed on each of the factors.

Generally, the user division shall select evaluation factors on the basis of the following:

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#### 15-04.0200 APPROVAL FOR USE OF A CONSULTANT (CONT.)

- Relative experience of consultant personnel assigned to project team:
  - ◆ Experience with highway projects, or projects on another mode of transportation, or with intermodal transportation projects for KYTC
  - ◆ Experience with highway projects, or projects on another mode of transportation, or with intermodal transportation projects for federal, local, or other state governmental agencies
- Capacity to comply with project schedule
- Past record of performance on a project of a similar type and complexity
- Project approach and proposed procedures to accomplish the services for the project
- Location of the office where the tasks are to be performed
  - ◆ Local presence of a consultant office is permitted; however, local preference of a consultant office is prohibited.
  - ◆ Evaluation points of the local presence and a DBE Participation Plan shall not exceed 10 percent of the total evaluation criteria.
- Special or unique expertise
- Special or unique equipment
- Familiarity with geographic areas and resources

Because of the uniqueness or complexity of a project, the user division may recommend evaluation factors or relative weights different from the above. Evaluation factors and their relative weights shall appear in the public announcement.

# 15-04.0300 Announcement of the Need for Professional Engineering and Engineering-Related Services

.0310 PREPARATION OF PROCUREMENT BULLETIN FOR ENGINEERING AND ENGINEERING-RELATED PROFESSIONAL SERVICES: A procurement bulletin shall contain one or more advertisement for services. The Division of Professional Services shall prepare an advertisement for professional engineering and engineering-related services for the announcement of projects to the general public. The procurement advertisement shall include:

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# .0310 PREPARATION OF PROCUREMENT BULLETIN FOR ENGINEERING AND ENGINEERING-RELATED PROFESSIONAL SERVICES (CONT.):

- The general scope of the project as provided by the user division
- A discussion of procedures to follow for submission of a proposal on the project
- An anticipated project schedule as provided by the user division
- Any requirements for DBE utilization
- Deadline for filing a response
- ➤ The evaluation factors and their relative weights on which a response shall be evaluated by the selection committee
- ➤ A timetable for the selection committee's meetings for the project
- ➤ A list of all firms prequalified pursuant to 600 KAR 6:040 in each applicable category as of the date of the bulletin
- ➤ A list of the firms prequalified pursuant to 600 KAR 6:040 and certified as a DBE as of the date of the bulletin
- ➤ If established in advance by the State Highway Engineer, the maximum fee for consultant services for the project
- If appropriate, the item numbers from the "Six (6) Year Plan"
- The items required by KRS 45A.825(2)(b)
- > Other materials that may assist firms in responding to the announcement

The advertisement may require the initial solicitation of a complete work price and qualification proposal.

.0311 STATEWIDE SERVICES: The announcement for statewide professional engineering and engineering-related services may specify more than one firm to be selected to provide the services indicated in the procurement bulletin. The maximum contract length to assign new work for these services will be limited to 5 years, although work assigned under the initial contract may continue until completion. Such statewide services may include:

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#### .0311 STATEWIDE SERVICES (CONT.):

- Aerial and Photogrammetric Services
- Aviation
- Biological and Ecological Studies
- Bridge Inspection
- Bridge Maintenance
- Bridge Painting Inspection
- Construction
- Construction Engineering Inspection
- Cultural Historic and Archaeological Studies
- Electrical Engineering
- Environmental Investigation and Remediation
- Environmental Services
- > Environmental Studies
- Fracture Critical Bridge Inspection
- Geotechnical Drilling Services
- Geotechnical Engineering and Laboratory Testing
- Geotechnical Services
- Highway Design
- Intelligent Transportation Systems
- Local Public Administration (LPA) Projects
- Maintenance Services
- NBIS (National Bridge Inspection Standards)
- Pavement Rehabilitation Design
- Planning Services
- Railroad Rehabilitation Inspection
- Right of Way Services
- Roadway Signing Plans
- Sign Support Inspection
- Standard Structural Design
- Structural Steel Inspection
- Surveying Services
- Traffic Data Services
- Traffic Estimation and Forecasting
- Traffic Modeling Services
- > Traffic Operations
- Tunnel Maintenance
- Underground Storage Tanks
- Underwater Bridge Inspection
- Value Engineering
- **DISTRIBUTION OF PROCUREMENT BULLETIN:** To be in compliance with KRS 45A.825 (2) (c), the procurement bulletin shall be posted electronically.

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.0330 RESPONSES TO ANNOUNCEMENTS: Prequalified firms shall send their responses to the announcement to the Division of Professional Services. All prequalified firms responding to the announcement for preconstruction-related engineering or other related professional services shall submit the number of copies of a completed Response to Kentucky Transportation Cabinet's Announcement for Engineering and Engineering-Related Services as specified in the procurement bulletin. The response should follow the format as specified in the Instructions for Response to Kentucky Transportation Cabinet's Announcement for Engineering and Related Services (Exhibit 9013). Firms not responding with the correct number of copies or those providing incomplete information on their responses to the announcement shall not be considered for selection. In accordance with the provisions of KRS 45A.110 and KRS 45A.115, each responding firm shall include the required affidavit for bidders or offerors (Campaign Finance Law Compliance Form, Exhibit 9001).

- .0331 FIRMS NOT PREQUALIFIED: To be considered for a project that appears in the procurement bulletin, a firm must be prequalified in the specified areas prior to the response due date, which appears in the bulletin for a particular project. The Division of Professional Services shall certify to prequalification committee members the prequalification status of each firm on the TC 40-8 form, Listing of Responding Firms (Exhibit 9015), the same form used to certify responses.
- **CERTIFICATION OF RESPONSES TO ANNOUNCEMENTS:** Using the TC 40-8 form, *Listing of Responding Firms* (Exhibit 9015), the Division of Professional Services shall prepare a list of all firms that responded on, or before, the deadline specified in the procurement bulletin and that submitted the appropriate number of copies of the requested forms. The Director of the Division of Professional Services, or designee, shall certify the *Listing of Responding Firms*.

The Division of Professional Services shall return to the submitting firms the responses received after the deadline or with fewer copies of responses than requested and shall not list these firms on the selection evaluation for consideration to perform the project.

**.0350 CONFIDENTIALITY OF THE LIST OF RESPONSES:** The list of responses to the announcement shall be kept confidential until the contract has been negotiated.

#### 15-04.0400 PROFESSIONAL ENGINEERING AND ENGINEERING-RELATED SERVICES SELECTION COMMITTEE

.0410 Purpose: A Professional Engineering and Engineering-Related Services Selection Committee shall be created for a project or group of projects when KYTC procures professional engineering and engineering-related services.

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**.0420 MEMBERSHIP:** The committee shall consist of six (6) members selected in the following manner:

- Two (2) Professional Engineers (from the pool): The Secretary of the KYTC, or designee, under the supervision of the Auditor of Public Accounts, or designee, shall randomly select engineers from the pool established in accordance with Section 15-04.0450. The first employee selected shall be placed on the selection committee. To ensure the inclusion of at least one merit employee, if the first employee selected is a merit employee, the second employee selected shall be placed on the selection committee. If the first employee selected is a nonmerit employee, the selection process shall continue until a merit employee is selected. That merit employee shall be placed on the selection committee.
- Two (2) Professional Engineers (from the user division): The director of the user division that will be responsible for monitoring the professional services shall appoint two (2) merit professional engineers from either the user division or the same functional area in the district where the project is located. If the user division does not have two (2) professional engineering merit employees or if the services in the announcement are for related professional services other than engineering, the director shall appoint two (2) merit employees who have familiarity and experience related to the services that are being contracted. If the director is a merit employee, the director may appoint herself or himself to the committee.
- An Individual from Outside Executive Branch: The Kentucky Society of Professional Engineers together with the Consulting Engineers of Kentucky shall nominate nine individuals who are not employees of the Executive Branch of state government. The Governor shall appoint three of these individuals to serve in the pool from which the Secretary of the KYTC, or designee, under the supervision of the Auditor of Public Accounts, or designee, shall randomly select one individual to serve on the committee.
- ➤ A Merit Employee from the Office of the Auditor of Public Accounts: The Auditor of Public Accounts shall appoint a merit employee of his or her office who may, at the discretion of the Auditor, serve as a nonvoting member of the committee.
- .0421 Co-User Divisions: If the services being announced involve approximately equal or separate responsibilities for the project(s) for two divisions (or other units requiring the procurement of services), upon approval by the Director of the Division of Professional Services, or designee, each co-user division shall appoint one (1) committee member as indicated herein.
  - In cases where KYTC is procuring consultant services in conjunction with another agency, governmental entity, or state, that unit outside KYTC may be designated as a co-user division for the purpose of having one (1) representative on the selection committee.

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**.0430 QUALIFICATIONS FOR COMMITTEE MEMBERS:** All Professional Engineering and Engineering-Related Services Selection Committee members shall meet the following requirements:

- All committee members shall have experience that qualifies them to serve on the committee.
- No employee of KYTC shall be required to involuntarily serve as a member of the committee.
- ➤ All committee members shall complete a TC 40-9 form, Certificate of Understanding of Restrictions for Members of Professional Engineering or Engineering-Related Services Selection Committee (Exhibit 9004). This form certifies that a committee member understands and will abide by the following restrictions while serving on the committee:
  - ◆ A person shall not serve in a pool from which selection committee members are drawn or on a selection committee if that person, his or her spouse, parent, sibling, or child; (1) is employed by a firm that has been prequalified by KYTC for services relevant to the selection process pursuant to Section 15-03.0110; or (2) owns one percent (1%) or more of a firm that KYTC has prequalified for services relevant to the selection process pursuant to Section 15-03.0110.
  - ◆ For a period of one (1) year after a person ends service on a selection committee, the Commonwealth shall not consider a firm for any engineering and engineering-related services contract if that person or his or her spouse, parent, sibling, or child is employed by a firm that has been awarded a contract by a selection committee of KYTC for services relevant to the selection process pursuant to Section 15-03.0110, or owns one percent (1%) or more of a firm that has been awarded a contract by a selection committee of KYTC on which he or she served.
  - ◆ If the individual, randomly selected to serve on the committee in accordance with the requirements for membership listed above, is an employee of a consulting firm that KYTC has prequalified for services relevant to the selection process pursuant to Section 15-03.0110; or owns one percent (1%) or more of a firm that has been prequalified by KYTC for services relevant to the selection process pursuant to Section 15-03.0110, that consulting firm shall not be considered for any projects reviewed by that selection committee. The selection committee chairperson shall return the firm's response for that project with a letter of explanation.

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#### **.0440 TERM OF MEMBERSHIP:** The following requirements apply:

Any individual appointed to serve in a pool from which selection committee members are drawn shall serve in the pool for an initial one-year term and may be reappointed for another one-year term. The individual shall serve until a successor is qualified and appointed. At the conclusion of service in a pool, that individual shall be prohibited from service in a pool until a year has elapsed. A successor or a replacement, in the case of a vacancy in the pool, shall be appointed in the same manner as the initial appointee.

- The selection committee members appointed by the director of the user division monitoring the work shall serve on a selection committee for a specific project or group of projects for the duration of the selection committee's participation in the project or group of projects to which the members were appointed. The duration is defined as follows: from when a project or group of projects appears in the procurement bulletin until such time the LRC Government Contract Review Committee approves that project or group of projects and the consultant(s) is issued a Notice of Approval for Payment.
- Any individual appointed by the Auditor of Public Accounts to serve on selection committees shall serve an initial one-year term and may be reappointed for another one-year term. The individual shall serve until a successor is qualified and appointed. At the conclusion of service, that individual shall be prohibited from serving on a selection committee until a year has elapsed. A successor or a replacement, in the case of a vacancy, shall be appointed in the same manner as the initial appointee.
- .0450 ESTABLISHMENT OF THE POOL OF PROFESSIONAL ENGINEERS FROM THE KENTUCKY TRANSPORTATION CABINET (KYTC): The State Highway Engineer shall annually request voluntary applications from the professional engineering staff in KYTC for availability to serve in the pool of six (6) professional engineers. The State Highway Engineer, or designee, shall review all applications and submit a list of no more than ten applications from which the Secretary shall appoint a pool of six to serve for one year.

All six (6) of the engineers shall be employees of KYTC and licensed professional engineers of the Commonwealth.

A person serving on the Professional Engineering Services Selection Committee from this pool shall not be eligible to also serve on the same selection committee as a representative of a user division specified in **Section 15-04.0420**.

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# 15-04.0500 ORGANIZATION OF PROFESSIONAL ENGINEERING AND ENGINEERING-RELATED SERVICES SELECTION COMMITTEE

Upon receipt of written approval from the Secretary of the KYTC to announce KYTC's need for a consultant to perform professional engineering and engineering-related professional services, the Director of the Division of Professional Services, or designee, shall organize a Professional Engineering and Engineering-Related Services Selection Committee for each project (or group of projects) to be included in the procurement bulletin. This committee shall evaluate responses to the announcement for professional engineering and engineering-related services and select and rank the three best qualified firms.

- **COMMITTEE STAFF:** The Division of Professional Services shall provide the committee with administrative and technical support and office supplies. The Secretary of the KYTC, or designee, shall designate suitable quarters for the committee in Frankfort.
- **.0520 STANDARDS OF CONDUCT:** All members of the committee shall comply with the "Executive Branch Code of Ethics" established in KRS Chapter 11A.
- **ORIENTATION FOR SELECTION COMMITTEE MEMBERS:** All persons serving on the committee or in a pool for a selection committee shall receive from the Division of Professional Services an orientation packet that contains:
  - > A copy of all applicable statutes and regulations
  - A copy of KRS Chapter 11A financial disclosure form, instructions and applicable regulations regarding the "Executive Branch Code of Ethics"
  - A copy of KRS Chapters 45A.800 through 45A.835, and Chapters 45A.827, 45A.807, and 45A.050
  - Certification of Understanding of Restrictions for Members of Professional Engineering or Engineering Related Services Selection Committee
  - A TC 40-4 form, Certification of Confidentiality (Exhibit 9002)
  - ➤ A TC 40-6 form, "Ex Parte" Disclosure (Exhibit 9011)
  - An example Rating Sheet showing all responding firms, qualification factors, and their relative weights
  - TC 40-18 form, Committee Ranking to Determine the Three Short-Listed Consultant Firms (Exhibit 9005)

Committee members shall be provided access to a copy of the latest approved edition of the KYTC Professional Services Guidance Manual.

All persons serving on a committee shall be provided with and have access to the necessary and applicable prequalification status of any firm that has responded to an announcement for engineering and engineering-related services.

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#### 15-04.0600 COMMITTEE MEETINGS

The initial meeting of a Professional Engineering and Engineering-Related Services Selection Committee shall be called by the Director of the Division of Professional Services, or designee, for the purposes of:

- ➤ Electing a chairperson and a vice-chairperson, who shall hold their positions for the duration of the selection committee's participation in a project or until their services as members of the committee cease. The meeting to select the consultant or consultants shall consist of a minimum of three (3) of the five (5) voting members to conduct business
- ➤ A presentation will be provided by the project manager to make the committee familiar with the project and services requested
- Committee members will be provided with the following:
  - The pregualification status for each responding firm and its project teams
  - ♦ Copies of the firms' responses
  - The announcement of the request for proposal and any addendum
  - ◆ The request for proposal (if different from above)
  - ◆ A Rating Sheet showing all responding firms, qualification factors, and their relative weights
  - ◆ A TC 40-4 form, Certification of Confidentiality (Exhibit 9002), requiring all committee members' signatures
  - ◆ A TC 40-6 "Ex Parte" Disclosure (Exhibit 9011)
  - ◆ A TC 40-8 form, Listing of Responding Firms (Exhibit 9015)
  - ♦ Consultant performance rating information
  - Other information provided by the user division pertinent to the selection of the best qualified firm for the project
- Discussing the future conduct of the affairs of the selection committee

Policy for committee meetings are as follows:

- ➤ If necessary, meetings of the committee may be called by the chairperson at a mutually convenient time during normal working hours at least one week in advance.
- Special meetings may also be called upon consensus of four of the voting members with a majority of the merit system employee representatives of the committee.

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## 15-04.0600 COMMITTEE MEETINGS (CONT.)

All motions and decisions require a simple affirmative vote of all members present for passage.

- A quorum for the meeting shall be four of the five voting members. Voting by proxy shall not be allowed.
- ➤ The selection committee shall meet in executive session to discuss and evaluate all responses to the advertisement that were received in a timely manner.
- ➤ Minutes of all committee meetings shall be taken, and the public is to be permitted access to these minutes after the contract has been awarded and the selected consultant is issued a notice of approval for payment for the project.

## 15-04.0700 REVIEW OF RESPONSES

It is the intent that firms in all regions of the Commonwealth be given equal opportunity to be selected for a project by the Professional Engineering and Engineering-Related Services Selection Committee and that all firms submitting proper responses within the stipulated time period be given fair and impartial consideration. The preference of a local consultant is prohibited as an evaluation factor, although local presence of consultant office location is an acceptable factor. The committee shall use the evaluation factors and relative weights indicated in the announcement for each project to screen all consultant responses received in proper form. The evaluation factors and weights may vary by project; therefore, the announcement for that project shall indicate what they are. The evaluation system used for each project shall conform with all applicable federal and state laws and administrative regulations.

Before the second selection committee meeting to determine and rank the three (3) best qualified firms, each voting committee member shall review all responses certified to the committee in accordance with Sections 15-04.0330 and 15-04.0340. Using the weighted evaluation factors that appeared in the advertisement, each committee member shall preliminarily evaluate and numerically rate each firm. These evaluations and ratings shall be considered preliminary and confidential working documents and shall not be available to the public.

In executive session, the members of the selection committee shall discuss the responses and their evaluations and ratings of the responses. Using the weighted evaluation factors that appeared in the announcement in the procurement bulletin, the committee shall determine the three (3) best qualified firms and develop a ranking of the three firms.

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## 15-04.0700 REVIEW OF RESPONSES (CONT.)

The committee review procedure is as follows:

In making this determination, each committee member shall identify the three

 (3) firms he or she has ranked as the best qualified. Every member's choices shall be placed on a short list. Committee members shall have the opportunity to provide insight into why they believe each firm should or should not be selected for the project.

- 2. After review and discussion of all firms on the short list with regard to their qualifications and the quality of their proposals, the committee may, by a consensus of the members, eliminate firms from further consideration for the project.
- 3. After consideration of the evaluation factors, the committee shall vote by secret ballot to individually rank each of the remaining firms.
- 4. The committee will then review and discuss the new compilation of short-listed firms identified by the secret ballot. The selection committee may, by consensus, eliminate any firm from further consideration.
- 5. If at the end of this process more than three (3) firms remain under consideration, the selection committee shall repeat the above process until only three (3) firms remain for consideration.
- 6. After consideration of the evaluation factors, the committee members shall vote by secret ballot to individually rank the three (3) remaining firms.
- 7. If a selection committee vote results in a tie between two (2) firms, one of which shall perform more of the work tasks in Kentucky than the other, the committee shall rank the former firm one (1) place ahead of the latter on statefunded projects.
- 8. In case of a tie rating for one of the three best qualified firms where the work performed in Kentucky is equal or it is a federally funded project, the selection committee shall again discuss and then reevaluate the firms that had the tie ratings until the tie is broken.
- 9. If the selection committee elects, it may interview any of the responding firms to aid in its determination of the best qualified firms.
- 10. The committee shall compile and show on the TC 40-18 form, *Committee Ranking to Determine the Three Short-Listed Consultant Firms* (Exhibit 9005), the list of the three (3) firms determined to be the best qualified and the ranking of these three (3) firms as determined by secret ballot. Copies of the TC 40-18 form shall be available to the public after the selected firm receives notice of approval for payment from the Division of Professional Services.

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## 15-04.0700 REVIEW OF RESPONSES (CONT.)

Selection committee members and their administrative support staffs are prohibited from discussing the responses or ranking of consultants outside the committee meetings except for answering general procedural questions. Selection committee members shall complete and sign the TC 40-6 form, "Ex Parte Disclosure" (Exhibit 9011), which discloses to the other selection committee members ex parte communication between a committee member and a firm responding to the procurement bulletin for that particular project.

## **.0710 DEBRIEFING:** The debriefing policy is as follows:

- Requests must be submitted in writing (email is acceptable) to the Director of the Division of Professional Services, or designee, within thirty (30) days of the selection date.
- A firm may request a maximum of two (2) debriefings per calendar year.
- ➤ Debriefings shall only address the individual firm's proposal. The firm's current workload, prequalification areas, or direct experience, and those of their subconsultants, may be discussed. Suggestions for improvement are an expected committee response. The strengths of the short-listed firms, or the proposals of any other firms, shall not be discussed.
- > A firm may request to see their firm's current evaluation ratings.
- > Debriefings may be scheduled after a successful KYTC negotiation occurs.
- Debriefings may be face-to-face, written, or general in nature.
- A firm may request a copy of the Project Approach section from the selected consultant's response to announcement for an advertisement.

#### **.0711** FACE-TO-FACE DEBRIEFING: Face-to-face debriefing will occur as follows:

- Marketing materials shall not be handed out during the debriefing. Consultants shall not make any direct marketing approach to the committee members during the debriefing.
- ➤ Once a debriefing is scheduled, the firm shall provide written questions to the Director of the Division of Professional Services, or designee.
- Questions are limited to the firm's capabilities and to the proposal being addressed.
- ➤ Face-to-face debriefings shall only occur in an organized meeting chaired by the Director of the Division of Professional Services, or designee.
- ➤ Consultants shall not make individual contact with members of the selection committees for purposes of receiving debriefing information.
- The Director of the Division of Professional Services, or designee, shall arrange a face-to-face debriefing such that a majority of the selection committee will be in attendance.

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#### .0711 FACE-TO-FACE DEBRIEFING (CONT.):

- Debriefings shall last no more than thirty (30) minutes.
- ➤ The debriefing will be arranged within thirty (30) days from the date of request and the members of the selection committee will be notified. However, the face-to-face debriefing shall occur after the project negotiation and near the estimated notice to proceed date.
- The consultant may not bring more than two (2) other persons to the debriefing. Hence, there shall be no more than a total of three (3) persons from the firm at the debriefing.

## .0712 WRITTEN DEBRIEFING: Written debriefing will occur as follows:

- ➤ Once the debriefing is scheduled, the firm shall provide written questions to the Director of the Division of Professional Services, or designee.
- ➤ Upon approval of the questions, the Director of the Division of Professional Services, or designee, shall submit the questions to all committee members who shall have fourteen (14) days to respond.
- Questions are limited to the firm's capabilities and to the proposal being addressed.
- The Director of the Division of Professional Services, or designee, shall review the responses and send them to the requesting firm within thirty (30) days of the original request or upon successful negotiation.

#### **.0713 GENERAL DEBRIEFING:** General debriefing will occur as follows:

- ➤ If a firm has not submitted on a project before, or if the firm has not been short-listed for over one (1) year, they may request a general debriefing with the Director of the Division of Professional Services, or designee, and members of the selection committees chosen by the Director of the Division of Professional Services, or designee.
- ➤ Debriefings shall give general directions on preparing a response to announcement and provide information on best practices.
- .0720 REVIEW OF RESPONSES FOR STATEWIDE SERVICES: For committee reviews involving statewide services advertised in accordance with Section 15-04.0311, the committee shall rank the number of top-ranked firms as specified in the procurement bulletin and may select a second-ranked and third-ranked firm, but a minimum of three (3) firms will be ranked. Fee proposals shall be requested in accordance with Section 15-04.0810 from each firm that is ranked.

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#### 15-04.0800 NOTIFICATION OF SELECTED FIRM

The Chairperson of the Professional Engineering and Engineering-Related Services Selection Committee shall notify the Director of the Division of Professional Services, or designee, of the firms determined by the committee to be the three (3) best qualified and the order of their ranking. The director, or designee, shall notify the top-ranked firm of its selection. The division shall send a letter to the three (3) finalists advising them of the rankings.

- **SUBMITTAL OF FEE PROPOSAL:** The Division of Professional Services shall notify by letter the top-ranked firm of its selection for the project. The selected firm shall be asked to meet with KYTC representatives in accordance with the schedule identified in the procurement bulletin to discuss in detail the scope of services to be provided by the consultant for the project. After this meeting the consultant shall send a copy of the items and units of work to KYTC representatives as follows (unless otherwise agreed):
  - For **roadway design**, a description of the work units, including all subconsultants, to District and Central Office Highway Design personnel
  - For **structure design**, a description of the structure to be designed, including but not limited to type, length, span arrangement, curves, skew, and pilings, based on preliminary geotechnical information and any other pertinent considerations, including all subconsultants, to the Division of Structural Design
  - ➤ For **planning studies**, a description of the work units, including all subconsultants, to the Division of Planning
  - For **environmental assessments**, a copy of the proposed person-hours to achieve each task, including those of all subconsultants, to the Division of Environmental Analysis
  - For geotechnical assessments, a copy of the fee proposal and work units, including all subconsultants, that qualify the tasks to be performed to achieve the geotechnical services as determined at the prenegotiation meeting to the Division of Structural Design, Geotechnical Branch
  - ➤ For **bridge maintenance work**, a description of the work units and type of equipment, including all subconsultants, that are anticipated to the Division of Maintenance, Bridge Preservation Branch

The firm shall submit to the Division of Professional Services a fair and reasonable fee proposal with information containing job classification, work distribution, pay rates, subconsultants, and direct expenses.

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#### 15-04.0900 CERTIFICATION OF CONFORMITY WITH THE PROCUREMENT PROCESS

First, the Secretary of the KYTC, the Director of the Division of Professional Services, or designee—as the negotiator for the project—and each voting member of the Professional Engineering and Engineering-Related Services Selection Committee shall be supplied with a TC 40-10 form, *Certification of Conformity with Procurement Process* (Exhibit 9003), and a copy of the proposed separate contract before the contract is submitted to the LRC Government Contract Review Committee.

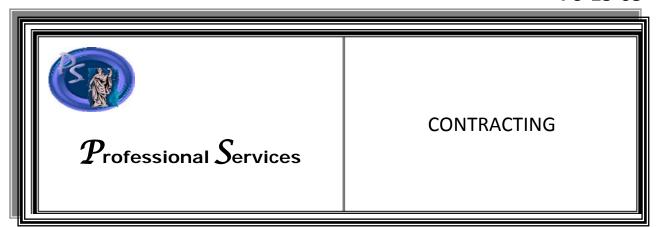
Those listed above shall sign these separate certificates certifying that to the best of their knowledge they are either aware or unaware of circumstances that may constitute a violation of the procurement process and a statement affirming that responding firms in all regions of the Commonwealth were given equal consideration for selection.

Finally, the representative of the Auditor of Public Accounts shall prepare and file a report with the LRC Government Contract Review Committee certifying that the applicable procedural provisions were or were not met.

These certificates shall be kept in the project file and are to be made available to the LRC Government Contract Review Committee upon request. The public shall not be denied access to these certificates.



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### 15-05.0100 CONTRACTING FOR PROFESSIONAL ENGINEERING AND ENGINEERING-RELATED SERVICES

- **.0110 Purpose:** To outline policies and procedures for negotiating and contracting for professional engineering and engineering-related services
- **.0120 POLICY:** In negotiating and contracting for professional engineering and engineering-related services, the KYTC shall follow the policies set forth in KRS 45A for the processing of contracts and contract modifications. The KYTC shall strive to negotiate fair and reasonable prices for all services.

### 15-05.0200 PREPARATION OF KYTC ESTIMATE FOR CONTRACTS WITH PROFESSIONAL FIRMS

- **.0210 Purpose:** To prepare a reasonable estimate of the cost of the required services
- **.0220 Policy:** When contracting for professional engineering and engineering-related services with a firm, the KYTC shall prepare an estimate of the resources necessary to complete the project.
- .0230 KYTC ESTIMATES FOR CONTRACTS WITH PROFESSIONAL FIRMS: After the Division of Professional Services requests a proposal and fee estimate from the firm, the user division shall prepare an estimate of resources required to complete the project. The user division shall also discuss the project with other divisions and request resource estimates from them as necessary.
  - .0231 COORDINATION OF RESOURCE ESTIMATES: The user division shall request all of the resource estimates from other divisions as necessary. The information provided in the request shall be based on project information available and the user division's best estimate of the project requirements.

All resource estimates shall be sent directly to the Division of Professional Services.

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#### .0231 COORDINATION OF RESOURCE ESTIMATES (CONT.):

When requested, the Division of Structural Design shall prepare estimates of person-hours required for the design of bridges, culverts, etc., and forward them to the Division of Professional Services. Information provided to the Division of Structural Design by the consultant on behalf of the user division shall include:

- ➤ A list of all structures required for concurrence by the Division of Structural Design
- For bridge structures, information regarding span lengths, height, horizontal or vertical curvature, road class, and any particular problems with vertical clearance
- For reinforced concrete culverts requiring structural design, size of culverts, and any culvert features such as a varying thickness on the top slab, a special inlet, or angles in the barrel
- Any retaining walls
- Any other items requiring structural design

The Division of Traffic Operations shall prepare resource estimates for striping and signing plans, signal plans, and lighting plans. Available information such as the size of the facility to be lighted, the number of signal locations, and the probability of integrated signs shall be included with the request from the user division.

The Division of Planning shall prepare resource estimates for project planning as determined at the scoping meeting with other KYTC staff and the consulting firm.

The Division of Environmental Analysis shall prepare resource estimates for environmental disciplines as determined at the scoping meeting with other KYTC staff and the consulting firm.

The District Transportation Engineering Branch Manager for Project Development or the staff member preparing the estimate shall prepare the resource estimates for field surveys and office roadway design work.

The Division of Materials shall prepare an estimate of unit prices and quantity estimates for geotechnical services when requested. The staff member from the user division preparing the KYTC's person-hour estimate shall provide to the Division of Materials the available information on alignment and profile.

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#### .0231 COORDINATION OF RESOURCE ESTIMATES (CONT.):

The Division of Construction shall prepare an estimate of the person-hours, costs, and operating margin for construction engineering and inspection services as determined at the prenegotiation meeting with other KYTC staff and the consulting firm.

The Division of Maintenance shall prepare an estimate of the person-hours costs, and operating margin for bridge maintenance inspection services as determined at the scoping meeting with other KYTC staff and the consulting firm.

The Division of Facilities Support shall prepare a resource estimate for services involving the design in rest areas.

The Division of Professional Services policy relative to departmental concurrence of person-hours includes the following:

- ➤ The agreement or contract modification is for roadway design, structure design, environmental services, or related engineering services work.
- > This policy applies to normal highway design projects and not to projects to be negotiated under statewide contracts.
- The total number of person-hours for any one disciplined area of design (roadway design, structure design, environmental services) is less than 500 hours. For example: An agreement or modification with 500 structure hours, 1,000 hours of roadway design, and 300 hours of environmental work would only require an independent person-hour estimate for roadway design. Structure design and environmental services could be reviewed and approved.
- The design work is not subdivided into several modifications in order to keep the person-hours less than 500 hours.
- The project manager provides a recommendation to the Director of the Division of Professional Services, or designee, in writing that he or she has reviewed and approves the scope of work, person-hours, employee classifications, and their associated percentages for the design work.
- > The project manager does not approve the fee amount.
- The fee amount shall be reviewed and may be approved by the Director of the Division of Professional Services, or designee.

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### 15-05.0300 ANNUAL EVALUATION OF PROFESSIONAL FIRMS

.0310 Purpose: To specify procedures to be followed by professional firms for determining information for use in determining fair and reasonable prices for all services.

.0320 Poucy: Professional firms shall allow the KYTC access to all financial information necessary to determine a firm's direct wage rates, indirect cost rates (overhead), and direct project charges that are not included in indirect cost (overhead) rates. Professional firms shall submit an indirect cost rate proposal (overhead proposal) within 150 days (5 months) of their fiscal year end.

The following limits shall apply:

- Travel expenses for all employees of a firm shall be limited to those incurred from a firm's office located in Kentucky or the border of Kentucky nearest the firm's office.
- For the purpose of computing average hourly pay rates for all full-time classifications, the number of annual base available hours per year is 2,080.
- For contract negotiation purposes, direct expenses shall be reimbursement rates for travel expenses related to mileage and shall be the twelve-month average of reimbursement rates in accordance with the provisions of 200 KAR 2:006 beginning January 1 and ending December 31.
- ➤ If not included in a firm's indirect costs rate (overhead), other direct expenses for firm employees or survey crews are limited to the following items incurred from an office in Kentucky or the border of Kentucky nearest the firm's office and shall not exceed the maximum pursuant to 200 KAR 2:006.
  - Printing of reports for distribution external to the KYTC—estimated cost from printer per document
  - ◆ Travel for survey crew—travel time to and from job site in hours multiplied by survey crew wage rate, multiplied by 1.3 for salary additives
  - ◆ Special equipment that is project-specific
  - ♦ Capital cost of money if applicable
  - Personal computer time—actual audited cost up to maximum of \$15 per hour

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**.0330 FINANCIAL RECORDS:** All firms are required to maintain financial records in accordance with Federal Acquisition Regulation 48 CFR, Chapter 1, Part 31. All firms shall maintain payroll time records for all employees, including principals.

.0340 PREPARATION OF AUDIT/ATTESTATION REPORT: Annually the External Audit Branch of the Division of Audit Services is to evaluate the financial information of a firm and determine the appropriate wage rates, indirect cost (overhead) rate, and direct project charges to be used for a firm. If the firm has been audited recently by a federal or state government agency and desires the KYTC to utilize that audit for its indirect cost (overhead) rate, the firm must provide the audit(s) to the External Audit Branch for approval before its scheduled evaluation.

If the KYTC has not evaluated the firm in the previous twelve (12) months, the last available evaluation may be used for determination of the fee specified in the contract. This evaluation may be used with the understanding that a contract modification shall be processed if an evaluation by the KYTC reveals substantial differences in indirect cost (overhead) rate, wage rates, or direct project expenses.

If the firm has a current audit of sufficient detail accepted by a federal or state government agency and desires that the KYTC utilize that audit for establishment of its indirect cost (overhead) rate, the firm shall provide the audit report to the KYTC prior to the scheduled evaluation. The Division of Professional Services may use the indirect cost (overhead) rate, wage rates, and direct project expenses from that audit in negotiating a fee while awaiting evaluation by the External Audit Branch of the Division of Audit Services. This audit may be used with the understanding that a contract modification shall be processed if an evaluation by the KYTC reveals substantial differences in indirect cost (overhead) rate, wage rates, or direct project expenses.

- .0341 COPY OF AUDIT/ATTESTATION REPORT TO FIRM: The firm shall be provided a copy of the audit/attestation report issued to the Division of Professional Services.
- .0342 FIRM'S APPEAL OF AUDIT/ATTESTATION REPORT: If the firm disagrees with the audit/attestation report, the firm may, within thirty (30) days of the date of the letter, appeal any part of the report to the External Audit Review Committee in accordance with 600 KAR 6:080. The committee may request the firm to answer questions in person, by electronic communication, or in writing. The firm shall have thirty (30) days from receipt by the firm of the committee's decision to appeal the decision to the Secretary of the KYTC. An administrative hearing shall be held to hear the appeal pursuant to KRS Chapter 13B.

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#### 15-05.0400 METHODS OF CONTRACTING WITH PROFESSIONAL FIRMS

**.0410 Purpose:** To use the most acceptable method of contracting for professional engineering and engineering-related services

- **.0420 Policy:** The following methods of contracting with professional firms shall be acceptable:
  - Lump sum
  - Cost plus a fixed fee
  - Specific rates of compensation
  - Cost per unit of work
- **LUMP SUM:** When the user division chooses lump sum contracting, the firm shall present to the Division of Professional Services a statement showing the probable cost for the elements of work and the expected operating margin. This statement shall include a supported breakdown of the direct and indirect costs and the subconsultant costs the firm expects to incur. The method of dividing the project into work units and the calculation of related time units shall be such that the estimate can be easily reviewed.

The Division of Professional Services and the user division shall verify the supporting documentation before recommending the contract for approval. The documentation shall include:

- Reasonableness of the amount proposed and consideration of the degrees of risk and responsibility to be assumed by the professional firm
- The extent, scope, complexity, character, and duration of the required services
- Professional and financial investments required of the firm
- The firm's normal expected return for such services
- Conditions under which the professional firm is expected to perform
- The KYTC's estimate of the appropriate amount for the services required
- The KYTC's findings on the basis of experience and knowledge

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.0440 Cost Plus a Fixed Fee: For cost plus a fixed fee contracts, the KYTC shall establish an upper limit of payment of actual cost that cannot be exceeded without obtaining KYTC approval. During negotiations, the Division of Professional Services shall be responsible for establishing the upper limit, along with the fixed fee to be paid to the professional firm for the services required. The division shall establish the fixed fee and upper limit on the basis of past experience gained from negotiations of similar projects, judgment regarding scheduling and complexity of work, and the user division's estimates.

- .0450 Specific Rates of Compensation: The Division of Professional Services shall document the basis on which the amount specified as the upper limit or upset limit was established. The agreement shall contain provisions that permit adjustment to this upper limit when the firm establishes, and the user division agrees, that there has been, or is to be, a significant change in the:
  - Scope, complexity, or character of the services to be performed
  - Conditions under which the work is required to be performed
  - Duration of the work if the change from the time period specified in the agreement for completion of the work warrants such adjustment

In the case of statewide agreements under which there are to be subsequent individual authorizations, the establishment of a maximum amount is not required. A maximum amount, however, shall be established for each of the individual authorizations.

A proposal using this method of contracting shall be supported in the same manner as that indicated for the lump sum method used for professional firms.

Except for an individual acting as a professional firm, the specific rates of compensation shall include:

- Direct salary costs
- Salary additives
- Indirect costs
- Net fee

The agreement of supporting data shall specifically identify these costs.

Other direct costs may be included as an element of a specific rate or as independent cost items.

.0460 COST PER UNIT OF WORK: Using this method, the professional firm shall be paid on the basis of units completed. This method of contracting is appropriate when the extent of the work cannot be definitely defined but cost of the work per unit may be determined in advance with reasonable accuracy.

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### 15-05.0500 CONTRACT NEGOTIATIONS WITH PROFESSIONAL FIRMS

**.0510 Purpose:** To negotiate a reasonable fee with the professional firm for engineering and engineering-related services

- .0520 Poucy: The Director of the Division of Professional Services, or designee, is the designated negotiating agent for the KYTC, Department of Highways, for engineering and other related services and shall be designated as the procuring officer in accordance with KRS 45A. The negotiating agent shall strive to negotiate all contracts and contract modifications for engineering and engineering-related services at a fee that is fair and reasonable to both the Commonwealth and the consultant.
  - **.0521 USER DIVISIONS OF THE KYTC OUTSIDE THE DEPARTMENT OF HIGHWAYS:** For professional engineering and engineering-related services requested by user divisions within the KYTC but outside of the Department of Highways, that user division may be responsible for negotiating the fee. (In this case, whenever the procedures of this section specify the Division of Professional Services, the user division shall be substituted.)
  - **.0522 STANDARDS OF CONDUCT:** All employees of the KYTC negotiating for professional engineering services selection shall comply with the *Executive Branch Code of Ethics*, established in KRS Chapter 11A. All KYTC employees negotiating contracts shall scrupulously comply with both the letter and the spirit of KRS 45A.340 regarding *Conflicts of Interest*.
- .0530 PROPOSAL AND FEE ESTIMATES: The professional firm shall submit to the Division of Professional Services its proposal and fee estimate on the TC 40-2 form, Engineering and Related Services Fee Proposal (Exhibit 9009). The proposal submitted by the firm shall include a breakdown of the estimated fee for performing the work and one of the following:
  - A statement that the payment shall be based on the percentage of work completed
  - ➤ The proposed project milestones and corresponding maximum percentage payments

The breakdown of the estimated fee shall include:

- Cost of materials
- Direct salaries
- Overhead
- Payroll activities

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## .0530 Proposal and Fee Estimates (cont.):

- Other direct costs
- Indirect costs
- Operating margin
- Payout schedule
- Subconsultant costs, if applicable
- Classifications and Percentages for Design
- > Use of DBE firms, if applicable

Proposed milestones and percentage of payments should accompany the proposal and fee estimate.

The Division of Professional Services shall analyze the proposal and may confer with the Deputy State Highway Engineer, State Highway Engineer, and others regarding the proposal, as necessary. The proposal shall be used as a basis for further negotiation of the professional services agreement.

Unreasonable or deliberately inflated proposals shall be rejected and shall be cause for termination of negotiation in accordance with **Section 15-05.0581**.

- .0540 AUDIT ASSURANCE FOR CONTRACTS OTHER THAN LUMP SUM: For contracts that are to be executed using a method of compensation other than lump sum, the professional firm shall use an accounting system that segregates and accumulates reasonable, allocable, and allowable costs to be charged to a contract for an audit by the External Audit Branch of the Division of Audit Services.
- **.0550 USE OF SUBCONSULTANTS:** If a firm desires to utilize the services of a subconsultant to perform any part of the work, the firm shall, at the time of negotiations, submit a fee proposal for the amount of work to be subcontracted. The fee proposal shall be based on the audited overhead and wage rates for the subconsultant.

Subconsultants shall be prequalified with the KYTC to perform the services. Prior approval from the Director of the Division of Professional Services or designee is necessary.

If a firm desires to utilize a subconsultant to perform part of the work after a contract is approved and notice to begin work is given, the firm shall request a contract modification in accordance with **Section 15-06.0210**. The request shall identify the tasks and corresponding negotiated person-hours to be subcontracted and the fee revision, using the subconsultant's overhead, wage rates, and indirect expenses.

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## .0550 USE OF SUBCONSULTANTS (CONT.):

A firm awarded a contract for engineering and engineering-related services with the KYTC shall perform at least fifty percent (50%) of the dollar value of the work for the project. If circumstances exist that warrant subcontracting more than fifty percent (50%) of the work for the project, the Director of the Division of Professional Services or designee may, upon recommendation by the user division, grant a waiver of the requirement that fifty percent (50%) of the work be performed by the prime firm.

#### .0560 OPERATING MARGIN FOR CONTRACT NEGOTIATIONS:

.0561 LUMP SUM: Not more than fifteen percent (15%) when the total direct labor costs plus overhead cost for a contract (including all contract modifications) are less than \$2 million

For a contract with a total direct labor cost, plus overhead cost, of or exceeding \$2 million, the operating margin shall be ten percent (10%). The subconsultant's fee negotiated as part of the contract shall not be counted against the first \$2 million.

- **.0562 COST PLUS A FIXED FEE:** A lump sum not to exceed ten percent (10%) of the estimated cost at the time of the execution of the agreement
- **.0563 UNIT PRICE:** Not more than fifteen percent (15%) of the estimated unit cost at the time of execution of the contract

The operating margin shall be allowed only on the negotiated direct labor and overhead costs regardless of the type of contract.

- **COMPARISON OF FEE ESTIMATES:** The Division of Professional Services shall compare the firm's proposed fee with the KYTC's estimate to determine both the reasonableness of the fee and areas of substantial differences that may require further negotiation.
- **NEGOTIATIONS WITH PROFESSIONAL FIRMS:** The Division of Professional Services shall negotiate with the professional firm to arrive at a reasonable fee and basis of payment, including incremental payments for completed work where appropriate, for the services to be performed under the contract. Contracts shall be negotiated using the following conditions:
  - When negotiations involve a face-to-face meeting there shall be at least two KYTC employees present.
  - When negotiations are conducted by email, all correspondence shall include an email copy to another KYTC employee.
  - When negotiations are conducted via telephone, a second KYTC employee shall be present either by conference call or by speaker phone.

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.0581 Unsuccessful Negotiations: If the Division of Professional Services is unable to negotiate a satisfactory contract with the Professional Engineering and Engineering-Related Services Selection Committee's topranked firm at a fee that the negotiator considers to be fair and reasonable to the Commonwealth, the negotiator shall formally terminate negotiations with that firm. The Division of Professional Services shall notify, in writing, the firm and the chairperson of the committee that negotiations have been terminated.

The Division of Professional Services shall then request a proposal and fee estimate from the firm ranked second-best-qualified by the Professional Engineering and Engineering-Related Services Selection Committee and proceed to negotiate. If negotiation with the second-ranked firm is unsuccessful, the Division of Professional Services shall notify, in writing, the firm and the chairperson of the committee that negotiations have been terminated.

The Division of Professional Services shall then request a proposal and fee estimate from the firm ranked third-best-qualified by the Professional Engineering and Engineering-Related Services Selection Committee and proceed to negotiate. If negotiations are unsuccessful, the Division of Professional Services shall notify, in writing, the firm and the chairperson of the committee that negotiations have been terminated.

The Director of the Division of Professional Services, or designee, shall notify the Chairperson of the Professional Engineering and Engineering-Related Services Selection Committee that a satisfactory contract could not be negotiated with any of the three selected firms. If the State Highway Engineer recommends proceeding with the project at this point, the procurement procedure shall start again from the beginning pursuant to **Section 15-04.0300**.

In such case, the user division shall review the project scope and submit a recommendation to the State Highway Engineer as to whether to readvertise the project.

**.0582 MINUTES OF CONTRACT NEGOTIATIONS:** The firm shall keep written documentation of each negotiation meeting and submit the documentation to the Division of Professional Services in a specified format for approval and inclusion in the contract file. The public shall not be denied access to the documentation.

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#### 15-05.0600 PROJECT AUTHORIZATION

**.0610 Purpose:** To establish the authorization for the funding of the project and to establish uniform project numbers prior to processing the contract

- **POLICY:** The project authorization, implementing the TC 10-1 form, *Project Authorization* (Exhibit 9019), and the uniform project numbers shall be established prior to the processing of an agreement.
- .0630 PROCEDURE: The director of the user division, or designee, shall prepare the TC 10-1 form and, in coordination with the Division of Professional Services, secure the necessary approvals.

#### 15-05.0700 PROOF OF NECESSITY (PON) AND CONTRACTS FOR AGREEMENTS WITH PROFESSIONAL FIRMS

- **.0710 Purpose:** To obtain approval of contracts for professional engineering and engineering-related services
- .0720 Policy: Before an agreement with a professional firm is binding, a Legislative Research Commission Personal Services Contract Proof of Necessity (PON) (Exhibit 9014) and a contract shall be prepared, approved, and signed by the Secretary of the KYTC.
- .0730 PREPARATION OF THE CONTRACT: The Division of Professional Services shall prepare an agreement or a contract to cover the services to be provided, method and amount of payment, time of completion, and necessary special provisions. The agreement shall incorporate by reference the General Provisions (Exhibit 9012), which set forth conditions and terms for the following:
  - Definitions of terms used.
  - > Authority of the KYTC's project manager
  - General scope of the work
  - ➤ Items of work providing detailed guidance to the professional firm as to the required standards, manner of presentation, procedures to be utilized, etc.
  - Inspections required to review progress of work
  - Work notice, which stipulates when and under what conditions the firm may begin work
  - Time of completion, which defines the completion date and the conditions under which a time extension may be granted

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#### .0730 Preparation of the Contract (cont.):

Progress reports, which outline the interval and manner in which the firm is to report the work progress

- Payment and general information as to the manner and frequency the firm may submit pay estimates
- Extra work for fee adjustment, which furnishes general information as to what is considered to be extra work and the manner in which additional payment may be made to the professional firm for the work
- ➤ Accuracy of professional firm's work, which outlines the responsibility of the firm regarding accuracy of work
- Disputes, which stipulate the manner in which disagreements are to be resolved
- Legal responsibilities, which require the firm to be familiar with and abide by all federal, state, and local laws, ordinances, etc., and outlining the responsibility of the firm in the event of negligence on the firm's part
- Subletting of assignment, which outlines the conditions under which the professional firm may obtain the services of others to perform a portion of the work
- Termination of agreement, which stipulates the conditions under which the contract may be ended
- Federal cost principles contained in the federal procurement regulations
- Warrants, which require the firm to certify that it has not, and shall not:
  - ♦ Obtain the services of others to secure the contract or pay fees, gifts, etc. to any person or company in order to secure the contract
  - ◆ Have *ex parte* communication with selection committee members about a project from the date of the bulletin to the date of notification of selection
  - ♦ Violate federal restrictions on lobbying activities
  - ◆ Utilize the services of a KYTC employee

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#### .0730 Preparation of the Contract (cont.):

- Requirements of the firm to certify that it shall:
  - ♦ Maintain sufficient staff, equipment, etc. to perform the work
  - Maintain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred and make such materials available at its respective offices at all reasonable times during the contract period and for three years from the date of final payment under the contract

**Note:** These materials shall be available for inspection by the KYTC, Federal Highway Administration (FHWA), or any authorized representative of the federal government; and copies thereof shall be furnished if requested.

- Perform the work in such a manner to comply with Title VI of the 1964 Civil Rights Act, Title 49 CFR 21 (nondiscrimination, Governor's Code of Fair Practices), and other applicable federal and state laws and regulations
- ♦ Conform to the Americans with Disabilities Act, Public Laws 101-336
- Assurance that the firm's owner, principals, partners, or any immediate family member having an interest of ten percent (10%) or more in any business entity involved in the performance of the contract have not contributed more than the amount specified in KRS 121.056(2) to the election campaign of the current governor
- **.0740 DIVISION OF PROFESSIONAL SERVICES' REVIEW OF CONTRACT:** Before sending the contract to the firm for signing, the Division of Professional Services shall:
  - Determine that the agreement provides for review at appropriate stages during the performance of the work
  - ➤ Determine that the agreement contains suitable provisions, where appropriate, for incremental payments for completed work and outlines the basis on which such payments may be made
  - Verify that the agreement provides that the professional firm and any subconsultants shall maintain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred and shall make such materials available at their respective offices at all reasonable times during the contract period and for three years from the date of the final payment under the contract

**Note:** These materials shall be available for inspection by an authorized representative of the state or federal government, and copies thereof shall be furnished.

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## .0740 DIVISION OF PROFESSIONAL SERVICES' REVIEW OF CONTRACT (CONT.):

Determine that the certification of the consultant and the certification of the KYTC are referenced in contracts with consulting engineering firms for federalaid projects

**.0750 PREPARATION OF THE PON:** The Division of Professional Services shall prepare the Proof of Necessity (PON) (Exhibit 9014). The PON includes:

- Descriptions of the nature and scope of work
- Justification for work being performed by an outside firm
- Estimated cost
- Duration of the contract
- Supervision
- Required reports

If multiple phases of a project are planned, descriptions, including the estimated costs and duration of the contract, may be included in the PON for each phase.

## 15-05.0800 APPROVAL OF CONTRACT AND PROOF OF NECESSITY (PON)

- **.0810 DISTRIBUTION OF PROJECT PACKET:** The Division of Professional Services shall assemble the PON, contract, and supporting information documenting the selection and negotiations processes in a packet and forward it through the KYTC's approval process.
- **APPROVAL OF CONTRACT BY FIRM:** The contract and negotiation minutes shall be sent to the firm for the signature of an authorized representative. All original documents shall be returned to the Division of Professional Services.
- Services, or designee, shall approve the PON and the negotiation minutes and recommend the agreement for approval before forwarding the project packet to the Office of Legal Services. That office shall review the contract for form and legality and then sign and forward the contract and project packet to the Executive Director for the Office of Project Development. The Executive Director for the Office of Project Development shall review the PON, sign the contract, and forward the project packet to the State Highway Engineer, then to the Commissioner of the Department of Highways, and then to the Secretary of the KYTC for their approvals.
  - .0831 CONTRACT APPROVAL BY OTHER KYTC OFFICES: KYTC offices outside the Department of Highways shall work directly with the Office of the Secretary to obtain approval of their contracts for professional engineering and engineering-related professional services. Whenever these procedures refer to the KYTC approval process, these offices shall send their contracts and other information directly to the Secretary for approval.

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.0840 REQUIRED FEDERAL APPROVAL: When the project is subject to approval from the FHWA, the Division of Professional Services shall send a copy of contract agreement or modification. The following documents will be available for review:

- Independent KYTC person-hour estimate(s)
- Consultant fee proposal and person-hour estimates, including those of all subconsultants
- Negotiated person-hours and corresponding fee
- Selection documentation, including list of responses
- > A copy of the audit utilized for the firm
- Negotiation minutes
- Contract
- Backup data (predesign conference minutes, scoping minutes, and other related correspondence)
- ➤ A comparison of the KYTC person-hours versus those of the consultant versus negotiated person-hours
- **.0850 EMERGENCY APPROVALS OF CONTRACT:** In an emergency, KYTC approvals for the PON and the contract shall be expeditiously processed through the KYTC.

When the Secretary signs the agreement, the contract becomes effective. The contract shall expire at the end of 120 days unless the LRC Government Contract Review Committee has approved it.

## 15-05.0900 Fund Encumbrance

- .0910 Purpose: To have funds encumbered
- .0920 Policy: Before a notice of approval for payment can be issued, funds shall be encumbered. The Division of Professional Services shall request fund encumbrance from the Division of Accounts. After funds are encumbered and the contract is filed for review by the LRC Government Contract Review Committee (refer to Section 15-05.0100), the notice of approval for payment shall be issued and the contract executed.

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#### 15-05.1000 LRC GOVERNMENT CONTRACT REVIEW COMMITTEE

.1010 Purpose: To assure that the contract is acceptable to the LRC Government Contract Review Committee

- .1020 Policy: The KYTC shall cooperate with the LRC Government Contract Review Committee to achieve a professional services contract acceptable to the committee and the KYTC.
- Services receives eMARS approval indicating the contract has been automatically filed with the LRC Government Contract Review Committee, the division shall send a notice to proceed and approval for payment to the firm indicating that it may begin work and bill for services.
- **REVIEW BY COMMITTEE:** After the LRC Government Contract Review Committee examines and accepts the contract, its meeting minutes will serve as notification of acceptance to the Division of Professional Services for the contract file.

If the committee objects to the contract, the administrator shall prepare a notification of objection and forward it to the Secretary. The Secretary shall review the objection and consult with the Office of Legal Services and the LRC liaison to decide who shall handle the appeal. The LRC liaison shall notify the Division of Professional Services of the objection and of the way the appeal shall be handled.

.1060 APPEAL TO COMMITTEE: If determination is made to appeal the decision of the LRC Government Contract Review Committee, the KYTC shall present its appeal to the committee. The Secretary of the KYTC shall receive notification from the committee of its acceptance or objection to the appeal. If the appeal is accepted, the Secretary shall notify the Division of Professional Services and route the notification to the division for inclusion in the contract file.

If the committee continues to object to the contract, it may recommend to the KYTC that the contract be canceled or modified. Upon receipt of this recommendation, the Secretary shall consult with the Office of Legal Services, the Director of the Division of Professional Services or designee, the user division director, and others as may be appropriate. On the basis of these discussions, the Secretary shall decide either to cancel or modify the contract or to leave the contract as written.

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CONTRACT CANCELLATION OR MODIFICATION: If the contract is canceled, the Division of Professional Services shall notify the firm of the cancellation and take necessary steps to close the contract. If the contract is to be modified, the Division of Professional Services shall notify the firm and the user division of the necessary modifications and follow the contract modification and change order procedures (refer to Section 15-06.0200). When contract modifications have been approved through the required process, the contract is again sent to the LRC Government Contract Review Committee for review.

- **.1080 COMMITTEE ACTIONS:** If the LRC Government Contract Review Committee objects to the modification or if the KYTC notifies the committee that it will not modify or cancel the contract, the committee may notify the House and Senate Appropriations and Review Committees of its objections.
- Appropriations and Review Committees review the contract and decide whether to accept or object to the contract. If the contract is deemed acceptable, the committees notify the LRC Government Contract Review Committee of the acceptance. If the committees object to the contract, they notify the KYTC, committee, and Governor of the objections and forward the contract to the General Assembly for appropriate action.

#### 15-05.1100 KENTUCKY EEO ACT, KRS 45.560-45.640

.1110 Policy: The Notice to Proceed / Notice to Bill will advise the selected consultant to submit copies of EEO documents to the Finance and Administration Cabinet, Office of EEO and Contract Compliance (EEO/CC) on state-funded contracts that exceed \$500,000. The selected consultant will have ten (10) days from receipt of the notice to comply. EEO forms may be sent via U.S. Mail, fax, or email.

If the selected consultant has a current approval letter from EEO/CC and there are no outstanding noncompliance issues, copies of the EEO forms are not required. However, the decision to obtain additional copies of the EEO forms is left solely to the contracting agency.

.1120 PROCEDURE: The Division of Professional Services will cc: EEO/CC on Notice to Proceed / Notice to Bill correspondence. For audit purposes, the Division of Professional Services shall retain a copy of the EEO documents in the official contract file.

Upon receipt of EEO information from the selected consultant, EEO/CC will date stamp each EEO document. Within 1–3 business days of receipt, EEO/CC will review the EEO documents to determine completeness and compliance. In conducting the review, EEO/CC will use 'Special EEO Data' provided by the U.S. Census Bureau. This special EEO data focuses solely on available labor within the architect/ engineering industry.

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#### .1120 PROCEDURE (CONT.):

Information regarding the selected consultant's status will be sent via email to the Division of Professional Services contact person. Status may include:

- Approved—vendor is certified or determined exempt
- Underutilized—affirmative action plan documents required
- Unable to process—missing form(s)
- Unable to process—incomplete information
- Unable to process—missing signature
- Noncomply—vendor failed to provide required information

If additional information is required, EEO/CC will contact the vendor for necessary information. When requesting additional information, EEO/CC will make the request via email or fax to expedite the process.

When an affirmative action plan is required, EEO/CC will ask the Division of Professional Services to set the deadline. Companies have ten (10) business days to submit an affirmative action plan.

After review of the subconsultant reports, EEO/CC will contact the selected consultant for EEO documentation pertaining to second-tier subconsultants.

**Note:** The selected consultant is only responsible for providing EEO documentation for subconsultants that are not on the Approved Vendors/Contractors List. EEO/CC updates the Approved Vendors/Contractors List on a weekly basis.



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## **CONTRACT ADMINISTRATION**

## 15-06.0100 CONTRACT ADMINISTRATION

- **.0110 Purpose:** To monitor and review the process of the work to assure that the work meets KYTC standards
- **.0120 Policy:** All work performed under a professional services contract shall be subject to general supervision, direction, review, and approval by the KYTC.
- .0130 PROJECT SUPERVISOR: The director or office head of the user division shall assign a supervisor to each project or may serve as the project supervisor. The project supervisor is responsible for coordinating all activities with the firm and for providing necessary supervision through the duration of the contract. This coordination includes:
  - Scheduling, monitoring, and controlling the firm's activities
  - Reporting the status of these activities to the appropriate authority
  - Periodically reviewing the work to determine whether it is in accordance with the agreement for the particular project

The type and extent of the reviews may vary from project to project and depend on the complexity and scope of the work.

Reviews by state personnel shall assure that the work is being performed in a satisfactory manner and in accordance with the agreement. Also, the reviews shall uncover any changes in the scope of the work, which may require a supplemental agreement and increased or decreased compensation. Any deviation from the agreement's terms on the part of the professional shall be brought immediately to the attention of the appropriate authority for review and advice.

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.0140 SUBCONTRACTING SPECIAL WORK: During the project the firm may subcontract with other firms to perform specialized services. The firm shall have prior approval of the Director of the Division of Professional Services, or designee, before utilizing the services of a subconsultant. The subconsultant shall be prequalified by the KYTC if the services subcontracted are covered under Chapter 15-03.

If the services to be performed by the subconsultant are subject to prequalification by the KYTC and were not identified in the original negotiations (or subsequent contract modifications), the firm shall submit a request for a fee adjustment for the person-hours to be performed by the subconsultant.

If the subcontractor services are not subject to prequalification procedures in accordance with **Chapter 15-03** and exceed \$50,000, the External Audit Branch of the Division of Audit Services shall review them for reasonableness of cost. For subcontracts equal to or less than \$50,000, the negotiator may accept the rates and costs if they are reasonable and in line with past costs incurred for similar work.

Engineering services may also be performed by a general engineering consultant, acting in a management support role to assist KYTC in the monitoring, reviewing, development, and delivery of services provided by multiple consultants on complex projects. Any organizational conflict of interest shall be predetermined and prohibited or mitigated in these types of contracts.

When federal funds participate in a consultant services contract, the contracting agency shall receive approval from FHWA, before utilizing a consultant to act in a management support role for the contracting agency. Use of consultants in management support roles does not relieve the contracting agency of responsibilities associated with the use of federal funds, as specified in 23 U.S.C. 302(a) and 23 U.S.C. 106(g)(4) and should be limited to large projects or circumstances where unusual cost or time constraints exist, unique technical or managerial expertise is required, and/or an increase in contracting agency staff is not a viable option.

**.0150 RESPONSIBILITY FOR PAY ESTIMATES:** The director or office head of the user division or the project supervisor is responsible for verifying that the work has been accomplished in an acceptable manner and in conformance with the agreement before signing a pay estimate for the work completed.

## 15-06.0200 CONTRACT MODIFICATIONS

**.0210 Purpose:** To modify a contract because of an increase or decrease in total compensation, a change in the scope of work to be performed, or a time extension

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- **.0220 Policy:** When it is determined by either the firm or the KYTC that one or more of the following conditions are acceptable, a contract modification for a fee or schedule adjustment may be requested:
  - Change in termini or section
  - > Addition of major phases of work to project scope
  - Modification of previously approved work resulting from factors beyond the control of the consultant firm
  - Modification of a major item if the item is designated as a basis of the original negotiations and the conditions for a contract modification consideration are identified in the original contract
  - Delay by the KYTC as outlined in each contract
  - Use of a subconsultant for services previously identified to be done by the firm or other subconsultant
  - Availability of current audit in accordance with Section 15-05.0340
- **.0230 REQUEST FOR CONTRACT MODIFICATION:** The Division of Professional Services or user division, district office, or the firm may originate a request for a contract modification.
- **NEGOTIATION OF CONTRACT MODIFICATIONS:** When the director or office head of the user division determines that the change is considered appropriate, the user division shall advise the firm in writing of the contemplated change in the scope, complexity, extent, character, or duration of the original agreement. When additional or reduced compensation is justified, the user division shall request a revised proposal from the firm.

The contract modification shall be negotiated using the same procedure as the original contract (see **Section 15-05.0500**).

After a fee or any other contract modifications have been negotiated, the Division of Professional Services shall prepare a TC 40-17 form, *Contract Modification* (Exhibit 9008).

.0250 PREPARATION OF THE PROJECT AUTHORIZATION MODIFICATION: If additional funds are needed as a result of a contract modification, the director or office head of the user division shall initiate a modification of the TC 10-1 form, Project Authorization (Exhibit 9019). The user division shall notify the Division of Professional Services when the modified Project Authorization has been approved by the Secretary of KYTC so that the TC 40-17 form, Contract Modification (Exhibit 9008), can be processed.

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- .0260 APPROVAL OF CONTRACT MODIFICATION: After preparation of the Contract Modification, the Division of Professional Services shall send it to the firm for signature. After signing the Contract Modification, the firm shall return it to the Division of Professional Services. The Director of the Division of Professional Services, or designee, shall initial the Contract Modification. The Contract Modification, the Legislative Research Commission Personal Services Contract Proof of Necessity (Exhibit 9014), and other supporting documentation shall be reviewed and signed by the:
  - Director or project supervisor of the user division
  - Executive Director of the Office of Project Development
  - State Highway Engineer
  - Commissioner of the Department of Highways
  - Secretary of KYTC

After approval by the Secretary, the contract modification, proof of necessity (PON), and other supporting documentation shall be returned to the Division of Professional Services for further processing.

- **.0270 FUND ENCUMBRANCE:** The Division of Professional Services shall prepare the appropriate eMARS documentation for processing and approval by the Division of Accounts. After final approval in eMARS, the contract modification information will be electronically available to the LRC Government Contract Review Committee for review.
- .0280 LRC REVIEW, NOTICE TO PROCEED, AND NOTICE OF APPROVAL FOR PAYMENT: Refer to Section 15-05.0100.

#### 15-06.0300 COMPLETION OF CONTRACT

- **.0310 Purpose:** To determine that all terms and conditions of the professional services contract have been met and to evaluate the quality of the firm's work
- **.0320 POLICY:** Upon completion of the contract, the KYTC shall review the work performed to determine whether it meets the terms and conditions of the contract and evaluate the firm for future reference.
- .0330 CONTRACT COMPLETION: The project supervisor or the director or office head of the user division shall review the work performed by the firm, including any progress and final reports, to determine whether all terms and conditions of the contract have been met before processing the final voucher for payment or releasing the firm.

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- .0340 CONTRACT PERFORMANCE DOCUMENTATION: Before approving the final invoice for payment, the project supervisor or the director or office head of the user division shall evaluate the firm and prepare written documentation of the firm's performance on the project. The project supervisor shall collect the evaluations of other disciplines if applicable.
  - .0341 DISTRIBUTION OF PERFORMANCE DOCUMENTATION: The user division and, if applicable, other disciplines shall send the firm written documentation of the firm's performance on the project. Copies of the documentation shall be placed in the contract file maintained by the Division of Professional Services and in the firm's experience record file.
  - **.0342 Below-Average Rating:** The firm may appeal in writing a below-average rating to the director or office head of the user division director within thirty (30) days of written documentation of the firm's performance on the project. The director or office head of the user division shall notify the firm within thirty (30) days from the firm's appeal of his or her decision regarding whether to revise the performance rating.

The firm may appeal in writing the decision of the director or office head of the user division to the chairperson of the Consultant Prequalification Committee within thirty (30) days. The committee shall review all documentation relating to the firm's performance on the project. The committee may discuss the performance rating with the project supervisor or the firm. The committee shall notify the firm and the user division of its decision within ninety (90) days from the firm's appeal.

If the firm's appeal is denied, it may appeal the decision to the State Highway Engineer within thirty (30) days of written notice of denial of its appeal by the Consultant Prequalification Committee. The State Highway Engineer shall notify the firm of his or her decision within thirty (30) days. The decision of the State Highway Engineer is final.

If the performance evaluation documentation is revised, the initial documentation shall be removed from all files and replaced with revised performance documentation.

**AUDIT REQUESTED:** Prior to the final payment, the Director of the Division of Professional Services, or designee, shall request the External Audit Branch of the Division of Audit Services to perform a final audit if appropriate.

The final audit shall determine:

- Total Allowable Contract Costs
- Person-Hours by Classification
- Estimated Operating Margins
- Total Dollars to Be Paid to the Firm.

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#### .0350 AUDIT REQUESTED (CONT.):

The External Audit Branch shall audit all cost plus a fixed fee contracts.

**.0360 FINAL REPORT TO FHWA:** The user division is to forward to the Federal Highway Administration (FHWA) a copy of all progress and final reports for federal-aid projects if required or requested by the FHWA.

## 15-06.0400 CANCELLATION OF CONTRACT

- **.0410 Purpose:** To terminate a contract for professional services when the termination is in the best interest of the KYTC
- **.0420 Policy:** All professional service contracts shall include a provision for the termination of the agreements and shall allow for the cancellation of the contract by the KYTC with proper notice to the firm.
- .0430 CANCELLATION: When the KYTC decides to cancel a professional services contract, the Division of Professional Services shall notify the firm of the cancellation and the reasons for the cancellation. The KYTC is liable only for payment of services up to the date of cancellation of the contract.

## **15.06.0500 CONTRACT FILE**

- **.0510 Purpose:** To assure that proper records of professional services contracts are maintained
- **POLICY:** For all professional engineering and engineering-related services contracts, the Division of Professional Services shall maintain a complete record of all correspondence, meetings, forms, contracts, contract modification, and other documents related to the contracts.

## 15-06.0700 DISADVANTAGED BUSINESS ENTERPRISE (DBE) REPORT

Each quarter, the Division of Professional Services shall provide the Office for Civil Rights and Small Business Development the following information:

- All federally funded projects for which a contract or contract modification has been negotiated and a notice to proceed has been issued during the previous three (3) months
- Names of all DBE firms that have been contracted or subcontracted for the projects identified above and the amounts
- ➤ The percentage of DBE participation for each contract and overall DBE percentage for the projects identified above

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## 15-06.0700 DISADVANTAGED BUSINESS ENTERPRISE (DBE) REPORT (CONT.)

The Division of Professional Services shall provide year-end total information to the Office for Civil Rights and Small Business Development after the end of each federal fiscal year.

#### 15-06.0800 RANDOM AUDIT OF COMPLETED CONTRACTS

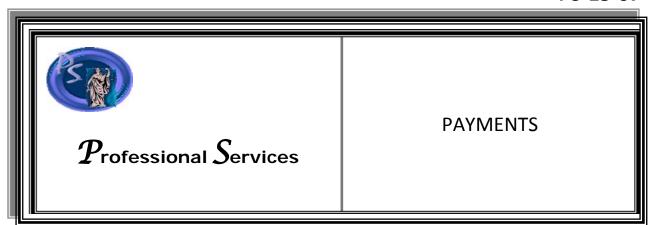
Quarterly, the Division of Professional Services shall randomly select ten percent (10%) of the lump-sum contracts completed during the previous three (3) months for a post-audit by the External Audit Branch of the Division of Audit Services regarding operating margin and person-hours by classification. The maximum number of contracts to be post-audited for any quarter shall be three (3), with a minimum of one (1).

### 15-06.0900 RECORDS MAINTENANCE

- **.0910 Purpose:** To retain professional engineering and engineering-related services contract files for review and audit
- **.0920 POLICY:** Professional engineering and engineering-related services contract files, in addition to the professional records, shall be maintained as outlined in the KYTC Records Retention Schedule.



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## 15-07.0100 **PAYMENTS TO FIRMS**

- **.0110 Purpose:** To pay firms for satisfactory work completed for the KYTC
- **POLICY:** Before payment of a partial or final request for payment, the KYTC shall review the work of the firm, including any progress or final reports, to ensure that the firm has completed the work for which the firm has requested payment and that the firm has satisfactorily followed the terms and conditions of agreement.

# 15-07-0200 PARTIAL PAYMENTS

- **.0210 Purpose:** To pay firms for satisfactory work completed to date
- **.0220 Policy:** Upon receipt of a request for payment, the KYTC shall verify that the firm has completed the work for which the firm has requested payment and that the firm has satisfactorily followed the terms and conditions of agreement.
- **REQUESTS FOR PAYMENT:** During the course of the project, the firm shall submit progress billings as agreed upon in the contract. The firm shall submit to the executive director of the district office or the director of the user division, or designee, a TC 40-408 form, *Engineering and Engineering-Related Services Pay Estimate* (Exhibit 9010), or other request for payment documentation approved by the user division with a progress report as an invoice.

The executive director of the district office or the director of the user division, or designee, shall review the estimate, verify that the work has been completed as described in the document, sign the *Engineering Services and Engineering-Related Pay Estimate* or approved request for payment, and forward it to the Division of Accounts. A record of the *Engineering Services and Engineering-Related Pay Estimate* or an approved request for payment is available through the eMARS reporting system.

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PAYMENTS PS-15-07

**PROCESSING A PAY DOCUMENT:** The Pre-Audit Section of the Division of Accounts shall receive the *Engineering and Engineering-Related Services Pay Estimate* or approved request for payment and shall audit the documents for accuracy and completeness.

The Division of Accounts shall assign a pay voucher number to the pay document and shall place it in a pending file until a check and warrant are received from the Office of the Treasury.

Office of the Treasurer, the Division of Accounts shall review the check for accuracy. The Division of Accounts shall send the check to the firm, forward a copy of the transmittal to the user division, and file the pay document and warrant in its files for future reference.

**.0251 FILING OF TRANSMITTAL:** The user division shall maintain the transmittal copy in its contract files.

## **15-07.0300** FINAL PAYMENTS

- .0310 Purpose: To pay the firm for satisfactory work completed
- .0320 Policy: Final invoices and requests for payment shall be authorized only after all work has been reviewed and accepted, including any final reports prepared by the firm. All terms and conditions of the contract shall be satisfactorily met, and the final audit, if applicable, shall be performed prior to processing the final payment.
- .0330 REQUEST FOR FINAL PAYMENT: Requests for final payment shall be processed after the successful completion of a contract (refer to Section 15-06.0300, "COMPLETION OF CONTRACT"). Using the TC 40-408 form, Engineering and Engineering-Related Services Pay Estimate (Exhibit 9010), the KYTC shall process final payments in the same way as progress billings or partial payments.

After reviewing the pay document, the director or office head of the user division shall forward the pay document and performance evaluation documentation from all divisions involved in the project to the Division of Professional Services. The Director of the Division of Professional Services, or designee, shall sign the final pay document and send it to the Executive Director of the Office of Project Development, who shall review the pay document, including the performance evaluation documentation, and sign it. The Executive Director of the Office of Project Development shall forward the pay document to the Division of Accounts. The Division of Accounts shall process the pay document in accordance with Section 15-07.0240, "PROCESSING A PAY DOCUMENT."



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## SELECTION OF OTHER PROFESSIONAL SERVICES

## 15-08.0100 Selection of Other Professional Services

- .0110 SELECTION OF ATTORNEYS: Pursuant to the provisions of KRS Chapter 45A, the KYTC may contract with the most qualified available attorney. If the Executive Director of the Office of Legal Services determines that outside legal services are necessary, the office shall prepare the required documentation and request for proposals. The Secretary of the KYTC or the Executive Director of the Office of Legal Services may schedule interviews with attorneys responding to the advertised request for proposal to determine the attorneys' qualifications for further consideration. The Secretary of the KYTC or the Executive Director of the Office of Legal Services shall make the contract award and negotiate a fair and reasonable compensation with the most qualified attorney pursuant to the provisions of KRS 45A.695.
- .0120 SELECTION OF PROFESSIONAL FIRM TO PROVIDE RIGHT-OF-WAY SERVICES: When securing the following right-of-way services of a professional firm, the Division of Right of Ways and Utilities uses the procedures specifically addressed in Chapter 900 of the Right of Way Guidance Manual (ROW-900):
  - Fee Appraisers
  - > Fee Buyers
  - Court Witnesses
  - Valuation Witnesses



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## TABLE OF EXHIBITS

EXHIBIT NUMBER	EXHIBIT TITLE & FORM NUMBER	MANUAL <u>REFERENCE</u>
9001	Campaign Finance Law Compliance	15-04
9002	Certification of Confidentiality, TC 40-4	15-04
9003	Certification of Conformity with Procurement Process, TC 40-10	15-04
9004	Certificate of Understanding of Restrictions for Members of Professional Engineering or Engineering-Related Services Selection Committee, TC 40-9	15-04
9005	Committee Ranking to Determine the Three Short-Listed Consultant Firms, TC 40-18	15-04
9006	Consulting Engineer and Related Services Prequalification Application, TC 40-1	15-01, 15-03
9007	Consulting Engineer and Related Services Prequalification Criteria	15-03
9008	Contract Modification, TC 40-17	15-01, 15-06
9009	Engineering and Related Services Fee Proposal, TC 40-2	15-05
9010	Engineering and Engineering-Related Services Pay Estimate, TC 40	-408 15-07
9011	"Ex Parte" Disclosure, TC 40-6	15-04
9012	General Provisions	15-01, 15-05
9013	Instructions for Response to KYTC's Announcement for Engineering and Related Services	15-04
9014	Legislative Research Commission Personal Services Contract Proof of Necessity15-0	)1, 15-05, 15-06

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TABLE OF EXHIBITS PS-9000

EXHIBIT NUMBER	EXHIBIT TITLE & FORM NUMBER	MANUAL <u>REFERENCE</u>
9015	Listing of Responding Firms, TC 40-8	15-04
9016	Prequalification Requirements for Geotechnical Drilling Services, TC 66-209	15-03
9017	Prequalification Requirements for Geotechnical Engineering Services, TC 66-210	15-03
9018	Prequalification Requirements for Geotechnical Laboratory Testing Services, TC 66-211	15-03
9019	Project Authorization, TC 10-1	15-05, 15-06



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Rev. 9-16-22

## Required Affidavit for Bidders, Offerors and Contractors (KRS 45A.110 & 45A.115)

## Affidavit Effective for One (1) Year from Date of Execution

**Instructions:** Pursuant to <u>KRS 45A.110</u> and <u>45A.115</u>, a bidder, offeror, or contractor ("Contractor") is required to submit a Required Affidavit for Bidders, Offerors, and Contractors to be awarded a contract, or for the renewal of a contract. An authorized representative of the contracting party must complete the attestation below, have the attestation notarized, and return the completed affidavit to the Commonwealth.

## **Attestation**

As a duly authorized representative for the Contractor, I swear and affirm under penalty of perjury, that that the Contractor has not knowingly violated campaign finance laws of the Commonwealth of Kentucky and that the award of a contract will not violate any provision of the campaign finance laws of the Commonwealth. For purposes of this attestation, "Knowingly" means that the bidder or offeror is aware or should have been aware of the existence of a violation. The bidder or offer understands that the Commonwealth retains the right to request an updated affidavit at any time.

Signature	Printed Name	
Title	Date	
Bidder or Offeror Name:		_
Address:		-
-		-
Commonwealth of Kentucky Ver	dor Code (If known):	-
Subscribed and sworn to befor	me this day of,	
State of:	Notary:	
County of:	My Commission Expires:	



# KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

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C	ERTIFICATION OF CONFIDENTIALITY						
PROFESSIONAL ENGINEERING AND RELATED SERVICES SELECTION COMMITTEE							
SECTION 1: PROJECT INFORMATION							
ITEM #	PROJECT DESCRIPTION						
COUNTY	ROUTE						
SECTION 2: CERTIFICATION							
l,	, as						
	Member, Governor's Pool						
	Member, Secretary's Pool						
	Member, User Division						
project appears in the Procuremen Research Commission's Governmen Professional Services has issued a No	any specifics of the above project with any prequalified firm from the time the t Bulletin for engineering and Related Services until such time the Legislative of Contract Review Committee has approved the contract and the Division of otice of Approval for Payment to the selected Consultant, with the exception of a requalified firms have an opportunity to participate.						
SIGNATURE	DATE						
NOTE: This form must be returned the above project for inclusion in the	to the Selection Committee Secretary at the Selection Committee meeting for e project file.						



## KENTUCKY TRANSPORTATION CABINET Department of Highways

TC 40-10 Rev. 10/2021 Page 1 of 1

DIVISION OF PROFESSIONAL SERVICES

## **CERTIFICATION OF CONFORMITY WITH PROCUREMENT PROCESS**

PROFESSIONAL ENG	INEERING AND RELATED SERVICES SI	ELECTION COMMITTEE				
SECTION 1: PROJECT INFORMATION						
AGREEMENT #	ITEM/COUNTY	ROUTE				
PROJECT DESCRIPTION: (text limited for a	accurate printing)					
SECTION 2: CERTIFICATION						
I certify that we are not aware of any circum services for the above listed project.	stances which may constitute a violation of KR	S 45A for the procurement of consultant				
DIRECTOR OF PROFESSIONAL SERVICE	ES .	DATE				
SECRETARY OF TRANSPORTATION		DATE				
NOTE: You must sign and return this form to	the Secretary of the Selection Committee for	inclusion in the project file				



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF PROFESSIONAL SERVICES

TC 40-10 Rev. 10/2021

Page 1 of 1

## **CERTIFICATION OF CONFORMITY WITH PROCUREMENT PROCESS**

PROFESSIONAL ENG	INEERING AND RELATED SERVICES SE	ELECTION COMMITTEE				
SECTION 1: PROJECT INFORMATION						
AGREEMENT #	STATEWIDE SERVICE	REGION				
PROJECT DESCRIPTION: (text limited for a	accurate printing)					
SECTION 2: CERTIFICATION						
I certify that we are not aware of any circum services for the above listed project.	stances which may constitute a violation of KR	S 45A for the procurement of consultant				
DIRECTOR OF PROFESSIONAL SERVICE	ES	DATE				
SECRETARY OF TRANSPORTATION		DATE				
NOTE: You must sign and return this form to	o the Secretary of the Selection Committee for	inclusion in the project file				
<u> </u>	,	. ,				

**PS-9004** 



# KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

TC 40-9 Rev. 05/2022 Page 1 of 1

## CERTIFICATION OF UNDERSTANDING OF RESTRICTIONS FOR MEMBERS OF PROFESSIONAL ENGINEERING OR ENGINEERING-RELATED SERVICES SELECTION COMMITTEE

SECTION 1: CERTIFICATION	
I,	inet on which I shall serve for firm that has been awarded a
I understand that for a period of one (1) year after my service on the Se Commonwealth shall not consider a firm or any engineering or engineering-rela spouse, either of my parents, any of my siblings, or any of my children are emplawarded a contract by the Selection Committee of the Transportation Cabinet or relevant to the selection process or own one percent (1%) or more of a firm that he the Selection Committee of the Transportation Cabinet on which I served.	ated services contract if I, my loyed by a firm that has been on which I served for services
SECTION 2: CERTIFICATION AGREEMENT	
SIGNATURE	DATE



# KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

TC 40-18 Rev. 10/2021 Page 1 of 1

## COMMITTEE RANKING TO DETERMINE THE THREE SHORT-LISTED CONSULTANT FIRMS

SECTION 1: PROJECT INFORMATION							
DATE				col	JNTY		
ITEM #				RO	UTE		
SECTION 2: SELECTION COMMITTEE RANKINGS							
FIRM	SELECTION COMMITTEE RANKING TOTAL SHORT-LIST RANKING						
SECTION 3: CERTIFICATION							
The Consultant Selection Committee certifies that all firms consideration to be selected, and the above ranking representations.	that prop sents the	erly respo three (3) l	onded to t best quali	the above ified firms	project w	vere given e vroject.	equal
USER DIVISION MEMBER 1 - CHAIRMAN		USER D	IVISION	MEMBER	2		
SECRETARY SELECTION MEMBER 1		SECRET	ARY SE	LECTION	MEMBE	R 2	
STATE AUDITOR REPRESENTATIVE*		GOVER	NOR SEL	ECTION	MEMBE	R	
*Auditor not present		•					



# KENTUCKY TRANSPORTATION CABINET Division of Professional Services CONSULTING ENGINEER AND RELATED SERVICES PREQUALIFICATION APPLICATION

TC 40-1 Dec. 2022 Page 1 of 18

NAME OF FIRM:		DATE:		STATE: YEAR ESTABLISHED:
MAIN OFFICE:				TELEPHONE NUMBER:
Street:	City:	State:	Zip:	
KENTUCKY BRANCH OFFIC				TELEPHONE NUMBER:
Street:	City:	State:	Zip:	TELEPHONE NUMBER:
KENTUCKY BRANCH OFFIC	JE #∠.			TELEPHONE NOWBER.
Street: CHECK THE PREFERRED MAILING A	City:	State:	Zip:	
		ucky Branch Office #2		
WEB SITE ADDRESS:	E-MAIL ADDR	RESS:		FAX NUMBER:
This application is based o	on the following factors: (Chec	k appropriate designat	ion)	
ORGANIZATION	TYPE OF APPLICATION	CERTIFIED DBE IN KENTUCKY		TOTAL EMPLOYEES IN FIRM
☐ Individual	New	Yes		Minority Female
☐ Partnership	☐ Updated	☐ No		Minority Male
☐ Corporation	Reinstatement	(If yes, attach a copy o KYTC certification letter		Non-Minority Female
Professional Limited				Total Employees in Firm
☐ Liability Company				Total Employees in
				Kentucky Offices     Total PE's in Kentucky     Offices
Federal Indentification Nu	umber:			
Is firm licensed with Kentu	icky State Board of Licensure	for Professional Engir	eers and L	and Surveyors?
☐ Yes ☐ No L	icense Number:			
	contained within this applic			N OF FALSE INFORMATION IS ATION CABINET.
I vame of Filli of Individua	I Submitting Application:			
Signature:				
Name of Person Signing:				
Title of Person Signing:				
Date:	-			
				·

Name of Firm:	Date: TC 40-1 Rev Dec. 2022 Page 2 of 1
INDICATE TYPES OF PROJECTS FOR WHICH YOUR	FIRM REQUESTS PREQUALIFICATION
ROADWAY DESIGN	RIGHT OF WAY SERVICES
Rural Roadway Design	☐ Acquisition
Urban Roadway Design	Relocation
Surveying	Appraisal
☐ Photogrammetry & Related Services	Appraisal Review
Advanced Traffic Engineering Design & Modeling	☐ Applaisal Neview
Advanced Drainage & Design	MAINTENANCE / BRIDGE MAINTENANCE SERVICES
☐ Value Engineering	☐ In-depth Structure Inspection
☐ E-Plan Room	Underwater Structure Inspection
	Tunnel Inspection
	☐ Landscaping Arboriculture
JTILITY DESIGN	
Communication	AVIATION
Electrical Level 1	
Electrical Level 2	☐ Airport Master Planning
Gas Level 1	☐ Airport Design
Gas Level 2	Airport Noise Analysis
Water & Sewer Level 1	
Water & Sewer Level 2	
Petroleum	ENVIRONMENTAL AQUATIC & TERRESTRIAL
Utility Preconstruction Coordination	ECOSYSTEMS ANALYSIS
Utility Construction Inspection	
· ·	□ Freshwater Macroinvertebrates
STRUCTURE DESIGN	☐ Water Quality
Spans Under 500 Feet	☐ Botany
Spans Greater Than 500 Feet	☐ Terrestrial Zoology
	☐ Wetlands
GEOTECHNICAL SERVICES	
☐ Geotechnical Drilling	ENVIRONMENTAL ARCHAEOLOGY & OTHER
☐ Geotechnical Engineering	SERVICES
Geotechnical Laboratory Testing	☐ Prehistoric Archaeology
	☐ Historic Archaeology
TRAFFIC OPERATIONS	☐ Highway Noise Analysis
Traffic Engineering	Air Quality Analysis
Electrical Engineering Traffic Signals	Stream & Wetland Mitigation
Electrical Engineering Roadway Lighting	Socio-Economic Analysis
	Cultural-Historic Analysis
TRANSPORTATION PLANNING	Environmental Document Writing & Coordination
☐ Transportation Planning Engineering	
Advanced Transportation Planning Engineering	ENVIRONMENTAL & UST SERVICES
Road Centerline Data Collection	
Traffic Data Collection	UST & Hazmat Preliminary Site Assessment (Phase I)
Traffic Forecasting	UST Closure Assessment
Travel Demand & Simulation Modeling	UST Site Investigation (Phase II)
Travel Demand & Simulation Modeling	UST Corrective Action
Pedestrian & Bicycle Facility Planning & Design	☐ Hazmat Site Investigation (Phase II)
Conceptual Transportation Planning	☐ Hazmat Corrective Action
CONSTRUCTION ENGINEERING SERVICES	INTELLIGENT TRANSPORTATION SYSTEMS
Construction Project Supervision	Architecture Development
Bridge Painting Project Inspection	System Design, Deployment & Integration
Bridge Painting Project Management	System Maintenance, Management & Operations
Structural Steel Fabrication Inspection	Technology / System Evaluation
Construction Scheduling / Claims Analysis	
	TRANSPORTATION DELIVERY SYSTEMS
	☐ Transit Technical Studies
	Transit Management
	Transit Marketing / Advertising

Name of Firm: Date: TC 40-1 Rev Dec. 2022 Page 3  TOTAL NUMBER OF FULL-TIME PERSONNEL IN YOUR ORGANIZATION INCLUDING KEY PERSONNEL					
PRIMARY FUNCTIONAL CLASSIFICATION	KENTUCKY OFFICES	OFFICES IN OTHER STATES	TOTAL		
Structural Engineers			0		
Highway Design Engineers			0		
Surveyors (PLS's)			0		
Certified Photogramitrists			0		
Transportation Planning Engineers			0		
Licensed Landscape Architects			0		
EIT's			0		
Geotechnical Engineers			0		
Construction Engineers			0		
Environmental Engineers			0		
Traffic Engineers			0		
NBIS Team Leaders			0		
Certified Diver / Civil Engineer (PE)			0		
NTIS Team Leaders			0		
Technologist / Technician			0		
Planners			0		
Draftsman			0		
CADD Operators			0		
Geotechnical Technicians			0		
Drillers			0		

TOTAL NUMBER OF FULL-TIME PERSONNEL IN YOUR ORGANIZATION INCLUDING KEY PERSONNEL					
PRIMARY FUNCTIONAL CLASSIFICATION	KENTUCKY OFFICES	OFFICES IN OTHER STATES	TOTAL		
Construction Inspectors			0		
Geologists			0		
Architects			0		
Archaeologists			0		
Socio-Economic Specialists			0		
Noise Specialists			0		
Air Quality Specialists			0		
Historians			0		
Terrestrial Ecosystem Specialists			0		
Aquatic Ecosystem Specialists			0		
Hazardous Waste / UST Specialists			0		
EIS / Technical Writers			0		
Mechanical Engineers			0		
Electrical Engineers			0		
Certified Welding Inspectors (AWS QCI CWI)			0		
Non-Destructive Testing Inspector of Welds			0		
Right of Way Project Managers			0		
Right of Way Buying Agents			0		
Right of Way Relocation Agents			0		
Independent Fee Buyers			0		
Drainage Design Engineers			0		
Other (Please List)			0		

Name of Firm:		Date: TC 40-1 Rev Dec. 2022 Page 5 of
OWNERS AND OFFICERS OF FIRM (include title):		
V as	A Porconnel of Cirms (No. 1)	Manager and A
A.	Personnel of Firm: (Names and years of experience of full the Highway Design Engineers (Indicate specialty):	L. UST / Hazmat Specialists:
Α.	riigiinay besign Engineers (maidate specialty).	E. OO17 Hazinat opedansts.
В.	Structural Engineers:	M. Landscape Architects:
C.	Transportation Planning Engineers:	N. EIS Writers:
D.	Traffic Engineers:	O. Historians:
E.	Surveyors:	P. Socio-Economic Specialists:
F.	Planners (indicate specialty):	Q. Air Quality Experts:
G.	Construction Engineers:	R. Noise Specialists
Н.	Electrical Engineers (indicate specialty):	S. Aquatic Ecosystem Specialists 1. Fisheries
		Macroinvertebrates     Water Quality
I.	Environmental Engineers:	T. Terrestrial Ecosystem Specialists 1. Botany 2. Zoology 3. Wetlands
J.	Geotechnical:	U. Archaeologists  1. Prehistoric  2. Historic
K.	Geologists:	V. Right of Way Project Managers:

Nan	ne of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 6 of 18			
	INDICATE KEY MEMBERS OF YOUR FIRM THAT ARE LICENSED PROFESSIONAL ENGINEERS OR LAND SURVEYORS IN KENTUCKY: (Name, Type, and Number are required.)					
N	ame: T	ype:	Number:			
N	ame: T	ype:	Number:			
N	ame: T	ype:	Number:			
N	ame: T	ype:	Number:			
N	ame: T	ype:	Number:			
N	ame: T	ype:	Number:			
N	ame: T	<sup>-</sup> ype:	Number:			
N	ame: T	<sup>-</sup> ype:	Number:			
N	ame: T	<sup>-</sup> ype:	Number:			
N	ame: T	уре:	Number:			
ΟU	TSIDE ASSOCIATES AND CONSULTANTS US	SUALLY EMPLOYED BY YOUR FIRM				
	CATEGORY	NAME OF FIRM OR INDI	VIDUAL ADDRESS			
Α.	Civil Engineers					
B.	Transportation Planning Engineers					
C.	Structural Engineers					
D.	Geotechnical Engineers					
E.	Photogrammetry					
F.	Environmental Specialists (Indicate Specialty)					
G.	Architects					
Н.	Landscape Architects					
I.	Other Consultant Affiliations					

Name of Firm:			Date:	TC 40-1 Rev Dec. 2022	Page 7 of
PERSONAL HISTORY S (Furnish complete data but		ALS AND	ASSOCIATES WITHIN YO	UR FIRM	
NAME:					
Last:		First: -		Middle Initial:	
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
EDUCATION: College:		Degree:	Year:	Specialization:	
MEMBERSHIP IN PROFESSIONAL	ORGANIZATIONS	Degree.	Tour.	Openanization.	
KENTUCKY LICENSURE:					
Туре			Year in Whi	ch You Were First Licensed	
NAME:					
Last:		First: -	VEADO AO DEINIGIDAL IN	Middle Initial:	
YEARS OF EXPERIENCE N PROFESSION: EDUCATION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
College:		Degree:	Year:	Specialization:	
MEMBERSHIP IN PROFESSIONAL	ORGANIZATIONS				
KENTUCKY LICENSURE:					
Type			Year in VVni	ch You Were First Licensed	
NAME:		Fig. 4.		RA1:-L-II _ 1:-1x1-1;	
Last: YEARS OF EXPERIENCE	YEARS AS PRINCIPAL IN	First:	YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
N PROFESSION:	THIS FIRM:		OTTER FIRMS.	OTHER HIANTRINGIPAL.	
College:		Degree:	Year:	Specialization:	
MEMBERSHIP IN PROFESSIONAL	ORGANIZATIONS				
KENTUCKY LICENSURE:			Vear in Whi	ch You Were First Licensed	
Type — NAME:			real III vvIII	on rou were riist Electised	
Last:		First:		Middle Initial:	
(EARS OF EXPERIENCE N PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
EDUCATION:		_			
College: //EMBERSHIP IN PROFESSIONAL	ORGANIZATIONS	Degree:	Year:	Specialization:	
ENTUCKY REGISTRATION:					
Туре —			Year in Whi	ch You Were First Licensed	
NAME:					
Last:		First:	1	Middle Initial:	
/EARS OF EXPERIENCE N PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
EDUCATION:		Deer	V	Consisting to	
College: //EMBERSHIP IN PROFESSIONAL	ORGANIZATIONS	Degree:	Year:	Specialization:	
ENTUCKY LICENSURE:					
Туре —			Year in Whi	ch You Were First Licensed	
IAME: Last:		First:		Middle Initial:	
EARS OF EXPERIENCE	YEARS AS PRINCIPAL IN	FirSt.	YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:	
N PROFESSION: EDUCATION:	THIS FIRM:		acc r manor	O MER MART RINGIFAL	
College:		Degree:	Year:	Specialization:	
MEMBERSHIP IN PROFESSIONAL	ORGANIZATIONS				
ENTUCKY LICENSURE:					
Type			Year in Whi	ch You Were First Licensed	

Name of Firm:			Date:	IC 40-1 Rev Dec. 2022 Page 8 c
PERSONAL HISTORY STATEMENT OF RESPONSIBLE PROFESSIONAL PERSONNEL (Furnish complete data but keep to essentials.)				
NAME:				
Last:		First:	T	Middle Initial:
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:
EDUCATION:				
College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS			
KENTUCKY LICENSURE:				
Туре			Year in Whi	ich You Were First Licensed
NAME:				
Last:		First:		Middle Initial:
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:
EDUCATION:				
College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS			
KENTUCKY LICENSURE: Type			Vear in Whi	ich You Were First Licensed
NAME:			rear iii VVIII	S Su VVCIO I IISt Electioed
Last:		Circl		Middle Initial:
	T	First:	YEARS AS PRINCIPAL IN	YEARS OF EXPERIENCE
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		OTHER FIRMS:	OTHER THAN PRINCIPAL:
EDUCATION:			V.	O and in Francisco
College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS			
KENTUCKY LICENSURE:			V:-\A/I-	:-L V \\\
Type			Year in vvn	ich You Were First Licensed
NAME:				
Last:		First:	T	Middle Initial:
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:
EDUCATION:				
College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS			
KENTUCKY LICENSURE:				
Туре			Year in Whi	ich You Were First Licensed ——
NAME:				
Last:		First:	T	Middle Initial:
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:
EDUCATION: College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS	Degree.	Tout.	оробиндают.
KENTUCKY LICENSURE:				
Туре			Year in Whi	ich You Were First Licensed
NAME:				
Last:		First:		Middle Initial:
YEARS OF EXPERIENCE IN PROFESSION:	YEARS AS PRINCIPAL IN THIS FIRM:		YEARS AS PRINCIPAL IN OTHER FIRMS:	YEARS OF EXPERIENCE OTHER THAN PRINCIPAL:
EDUCATION:	,			
College:		Degree:	Year:	Specialization:
MEMBERSHIP IN PROFESSIONAL OF	RGANIZATIONS			
KENTUCKY LICENSURE:				
Type			Year in Whi	ich You Were First Licensed

lame of Firm:	Date:	_ TC 40-1 R	ev Dec. 2022 Page 9 o
PRESENT ACTIVITIES FOR WHICH YOUR FIRM HAS PRIME RESPONSIBILITY			
PROJECT / TYPE OF WORK / LOCATION / DESCRIPTION OF ENGINEERING ACTIVITIES	NAME AND ADDRESS OF OWNER	FEE	ESTIMATED COMPLETION DATE OF SERVICES
			_

Name of Firm:		_ Date:		TC 40-1 Rev Dec. 2022	Page 10 of 18
(Such as Geotechnical	S IN WHICH YOUR FIRM IS ASSOCIATE, Photogrammetry, Environmental, etc.) (for which your firm is responsible.)	ED WITH	OTHERS:		
PROJECT:				TYPE OF WORK:	
LOCATION:		OWNER:			
FEE:	ESTIMATED COMPLETION DATE OF SERVICES:		FIRM ASSOCIATE	ED WITH:	
RESPONSIBILITIES					
PROJECT:				TYPE OF WORK:	
LOCATION:		OWNER:			
FEE:	ESTIMATED COMPLETION DATE OF SERVICES:		FIRM ASSOCIATE	ED WITH:	
RESPONSIBILITIES					
PROJECT:				TYPE OF WORK:	
LOCATION:		OWNER:			
FEE:	ESTIMATED COMPLETION DATE OF SERVICES:		FIRM ASSOCIATE	ED WITH:	
RESPONSIBILITIES					

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 11 of	
COMPLETED WORK ON WHICH YOUR FIRM WAS THE PRIME FIRM OF RECORD DURING THE LAST 10 YEARS:			
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:  ☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED: ☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:  ☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED: ☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
TOTAL NUMBER OF COMPLETED PROJECTS:	(See next sheet)	TOTAL FEE: (See next sheet)	

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 12 of 1	
COMPLETED WORK ON WHICH YOUR FIRM WAS THE PRIME FIRM OF RECORD DURING THE LAST 10 YEARS:			
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
PROJECT:		TYPE OF WORK:	
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:	
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:	
		☐ Yes ☐ No	
TOTAL NUMBER OF COMPLETED PROJECTS:	0	TOTAL FEE: \$ 0.00	

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 13 of 1
<b>COMPLETED WORK ON WHICH YOUR FIRM WAS A</b> (Such as Geotechnical, Photogrammetry, Environmenta (Indicate phase of work for which your firm is responsib	al, etc.)	HOTHER FIRMS DURING THE LAST 10 YEARS:
PROJECT:		TYPE OF WORK:
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
PROJECT:		☐ Yes ☐ No  TYPE OF WORK:
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
PROJECT:		☐ Yes ☐ No
TROUBOT.		THE OF WORK.
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
		☐ Yes ☐ No
PROJECT:		TYPE OF WORK:
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
PROJECT:		☐ Yes ☐ No  TYPE OF WORK:
PROJECT.		TIPE OF WORK.
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
		☐ Yes ☐ No
PROJECT:		TYPE OF WORK:
LOCATION:	ESTIMATED FEE:	YEAR YOUR WORK WAS COMPLETED:
NAME AND ADDRESS OF OWNER:		CONSTRUCTED:
		☐ Yes ☐ No
TOTAL NUMBER OF COMPLETED PROJECTS:	0	TOTAL FEE FOR WORK WHICH \$ 0.00

I KET PERSONNEL (IIICIUUR	e names, dates of employment wit	h prior firms and / or organizations):
NAME	DATE OF PRIOR EMPLOYMENT	FIRM / ORGANIZATION
TRANSPORTATION PROJ	ECTS KEY PERSONNEL HAVE SU	PERVISED:

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 15 of 18
LIST TRANSPORTATION PROJECTS KEY PERSONNEL H	AVE SUPERVISED:	
COMPUTER EQUIPMENT & SOFTWARE:		
HARDWARE	SOF	TWARE

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 16 of 18
MAJOR EQUIPMENT:		
	PHOTOGRAMMETR	IC:
	ARCHAFOLOGICAL	
	ARCHAEOLOGICAL	•
	NOISE:	
SURVEYING:	AIR:	
	AQUATIC & WATER	QUALITY:
	TERRESTRIAL:	

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 17 of 18
FINANCIAL STATEMENT	BALANCE SHEET AS	S OF:
TOTAL CURRENT ASSETS (Including cash, bid deposits, notes, receivable, stocks, bonds, inventories, interest receivable, life insurance)	☐ Individual ☐ Partnership ☐ Corporation ☐ Professional Limited Liability C	ompany
TOTAL FIXED ASSETS (Net book value of plant, equipment, and real estate)	TOTAL CURRENT LIABILITIES (Judgments, accounts / notes pa owed to subcontractors, accrued accrued salaries and payrolls, ac interest payable)	taxes,
TOTAL OTHER ASSETS (Non-business real estate, land, building improvements, miscellaneous)	TOTAL FIXED & OTHER LIABILI (Including mortgage on plant, eq and real estate and other liabilitie	uipment,
TOTAL ASSETS \$ 0.00	TOTAL LIABILITIES	\$ 0.00
	NET WORTH  (Including individual or partnersh stock, surplus)	nip capital \$0.00

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Related	Sel vices	Prequalification	Application,	TC 40-1

Name of Firm:	Date:	TC 40-1 Rev Dec. 2022 Page 18 of
ADDITIONAL INFORMATION:		
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# PREQUALIFICATION CRITERIA & INSTRUCTIONS FOR ENGINEERING AND ENGINEERING-RELATED SERVICES WITH THE KENTUCKY TRANSPORTATION CABINET

## PREPARED BY: KYTC DIVISION OF PROFESSIONAL SERVICES

EFFECTIVE: JANUARY 2022

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#### **PREQUALIFICATION ACTIONS**

KRS Chapter 45A requires that consulting firms desiring to be considered for professional services must be licensed with the Secretary of State to do business in Kentucky. To become prequalified with the Transportation Cabinet, each firm must provide an annual update of their qualifications upon anniversary date. Historically, the anniversary date is the date of the letter from the Cabinet granting approval of the firm's prequalification request and is now available electronically for each firm. This shall establish the firm's annual renewal date by which the firm is expected to have renewed its qualifications with the Cabinet.

Each year, thirty (30) days prior to the firm's annual renewal date, each firm must submit all supporting documentation for review by the Cabinet's Prequalification Committee directly in the Consultant Portal or through an updated electronic Prequalification Application Form TC 40-1.

Annual applications shall include a full electronic application submittal for each functional area requested, and any other supporting documentation required by each functional area. These electronic applications should be submitted directly through the Professional Services portal for review by the functional area(s). Upon review, the functional area may require additional documentation before granting approval or may recommend denial.

In odd calendar years, in lieu of a full application, firms may certify that nothing has substantially changed from the previously submitted application along with annual certifications. This odd year update request should include information regarding any previously approved changes from the last even year full update. Any significant modifications to organization, staffing, or financial status which could affect the firm's qualification status with the Cabinet should be clearly stated. The request should include a Certification of Professional Liability Insurance and a Certificate of Workers Compensation and Employment Insurance policy. An officer of the firm must also attest that the firm is financially solvent and have a working arrangement with financial institutions such that all outstanding financial obligations will be met. If a substantial change has occurred or the firm is requesting prequalification additional area(s) a full application will be required.

A firm desiring to be considered for an award as a prime shall provide an original Certificate of continuous Professional Liability Insurance in an amount not less than \$1,000,000 with their annual prequalification application. The firm shall also provide a Certificate of Workers Compensation and Employment Insurance policy. A certificate of self-insurance shall not be accepted by the Transportation Cabinet.

It is the sole responsibility of the firm to initiate a renewal of its prequalification with the Cabinet. If the firm makes no effort within thirty (30) days of its annual renewal date, then the firm is automatically removed from the Cabinet's listing of prequalified consultants.

If the firm has undergone significant modifications to its organization, staffing, or financial status which could affect the firm's qualification status with the Cabinet, then a revised prequalification application is required at the time those changes occur and no later than thirty (30) days prior to the firm's annual renewal date.

A prequalified firm shall immediately notify the Division of Professional Services of a change in the address of the firm or the name of the firm. Firms shall also report immediately of any change in the continuous professional liability policy on file with the Division of Professional Services. If a prequalified firm fails to notify the Division of Professional Services of a change of the address, it may be removed from the list of prequalified firms until it notifies the Division of its new address. If the change of address notification is submitted to the Division of Professional Services prior to the firm's annual prequalification date and no other changes have occurred in the firm, the firm shall be restored to the list of prequalified firms. Removal from the list of prequalified firms pursuant to this subsection shall not be a basis for appeal.

Please direct requests for prequalification forms (TC 40-1) and questions regarding the status of prequalification actions to:

Ms. Ashley Jewell Kentucky Transportation Cabinet Department of Highways Division of Professional Services 200 Mero Street, 3<sup>rd</sup> Floor Frankfort, KY 40622

Phone: (502) 564-4555

#### ENGINEERING AND RELATED SERVICES PREQUALIFICATION CRITERIA

The following criteria should be used by the Cabinet's User Divisions in evaluating a firms qualifications in the requested categories or sub-categories. Acceptable experience of a firm requesting prequalification in a category of work may result from satisfactory work performed by an individual(s) working for the requesting firm or by an individual(s) who gained the required experience while working for another firm or governmental agency that performed similar work or projects. The Division of Professional Services, the External Audit Branch, the User Divisions or the Prequalification Committee may request additional documents to supplement information provided in a submitted prequalification form.

Prequalification Criteria is set by the User Division responsible for the services. Criteria is expected to be revised by Professional Services no more than every two years, by January of each even calendar year.

#### Performance-based Prequalification and Renewal

The single best indicator of firm viability is a strong history of performance. Firms with a proven track record will be prequalified unless conditions of their previous prequalification status change. A firm's renewal of prequalification status will be based on a satisfactory performance on current projects; and an affirmation by an officer of the firm that the licensed professional engineers identified in previous submittals for prequalification remain in that visible function, no equipment requirements have been listed previously, and that the firm is financially solvent and has working arrangements with financial institutions such that all outstanding financial obligations may be met. Any changes in any of these conditions must be submitted as part of the annual request for renewal. Failure to submit information on such changes can lead to the firm's removal of prequalification.

#### **Initial Prequalification**

A firm will provide all information required for the individual areas for which prequalification is requested. An alphabetized listing of the firm's staff with appropriate professional status, areas in which each person works (i.e., Environmental, Highway Design, etc.), and an identification of whether they are full-time or part-time employees will be provided.

A full time employee is defined as one who has eligibility to participate in the firm's benefits program. In addition, an officer of the firm must attest that the firm is financially solvent and have a working arrangement with financial institutions such that all outstanding financial obligations will be met.

#### Reasons for Removal of Prequalification

A firm's project performance and retention of qualified personnel will be a basis for continued prequalification. As stated above, under the Qualification-Based Selection (QBS) process, performance is an important indicator of a firm's ability to product the required plans or other product. Removal of prequalification may therefore be based on a firm's failure to perform in a professional and capable manner. Failure to meet schedules on items within the consultant's responsibility will also be a basis for removal of prequalification.

Removal from prequalification will generally be for one (1) year. Re-evaluation of conditions after that year indicating continued non-performance might lead to continued denial of prequalification on a year by year basis.

In addition to the criteria listed below, the deliberate misrepresentation of the firm's qualification and/or the failure to notify the Cabinet of significant changes in the staffing situation of economic condition of a firm will result in the loss of the prequalification status for a period of at least one (1) year. The failure to correct the identified deficiencies will result in the continued denial of prequalification on an annual basis.

## Department of Aviation (502-564-4480)

## <u>Airport Master Planning</u> – The following must be demonstrated to be considered:

- 1. Firm Experience: The level of knowledge and experience shall be demonstrated by providing a detailed project listing of no less than two (2) Airport Master Planning documents within the last five (5) years from the date of the application. The Airport Master Planning documents must be for airports within the United States and shall be subject to the regulations set forth by the Federal Aviation Administration (FAA). The following is a list of acceptable documents that will be considered as a "Master Planning Document" for prequalification approval purposes:
  - Airport Layout Drawing Set or full Airport Layout Plan Update conforming to the latest version of the FAA ARP Standard Operating Procedure (SOP)
     2.0 and FAA Advisory Circular 150/5070-6, Airport Master Plans, which may include:
    - Detailed Airport Layout Drawing
    - Data Sheet
    - Facilities Layout Plan
    - Terminal Area Plan (as needed)
    - Airport Airspace Drawing
    - Inner Portion of the Approach Surface Drawing
    - Airport Land Use Drawing
    - Off-Airport Land Use Drawing (as needed)
    - Airport Property Map / Exhibit A
    - Runway Departure Surface Drawing
    - Utility Drawing
    - Airport Access Plans
  - Airport Master Plan or Airport Master Plan Update conforming to the latest version of the FAA Advisory Circular 150/5070-6, Airport Master Plans.
  - Airport Site Selection Study conforming to the latest version of the FAA Advisory Circular 150/5070-6, Airport Master Plans.
  - Runway Safety Area Determination conforming to the latest version of the FAA ARP Standard Operating Procedure (SOP) 8.0.
  - Statewide or Regional Aviation System Plan conforming to the latest version of the FAA Advisory Circular 150/5070-7, The Airport System Planning Process.
- 2. Staffing: Each completed project listed shall include all currently employed, full-time staff with experience on the listed project. Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, work experience, and their role as part of the design team. At least one (1) employee in the firm must be primarily responsible for the project (Primary Project Planner or Project Manager) and should have their roles clearly identified and explained.

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If a staff member's experience was obtained while completing an applicable Airport Master Planning document at a firm other than the current firm, that information shall also be listed, along with the role the staff member had in the completion of the Master Planning Document.

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## Airport Design - The following must be demonstrated to be considered:

- 1. Firm Experience: The level of knowledge and experience shall be demonstrated by providing a detailed project listing of no less than three (3) Airport Design projects within the last five (5) years from the date of the application. The Airport Design projects must be for airports within the United States and shall be subject to the regulations set forth by the Federal Aviation Administration (FAA). The following is a list of acceptable projects that will be considered as "Airport Design" projects for prequalification approval purposes:
  - New airport design (runway, taxiway, apron, etc.);
  - Runway/Taxiway/Apron geometry modification (extensions, widenings, relocations, expansions, etc.);
  - Major airport pavement rehabilitation (runway/taxiway/apron overlay or reconstruction);
  - Runway safety area improvements (grading modifications);
  - Major airfield drainage improvements, including stormwater systems, edge drains, or drainage repairs between the runway and taxiway.

Please note that the following aviation-related projects will <u>not</u> be considered as "Airport Design" projects for prequalification approval:

- · Airfield lighting or lighting rehabilitation projects;
- Airport navigational aids, including Runway End Identifier Lights (REILs), Precision Approach Path Indicator Systems (PAPIs), Wind Cones, Localizers, or any other ground-based navigational system;
- Airfield markings (runway/taxiway/apron) or marking rehabilitation projects;
- Fuel system installation or fuel system relocation projects;
- · Runway approach obstruction removal projects;
- Airport buildings or infrastructure design or demolition, such as hangars, terminal buildings, adjacent residences, etc.;
- Airport access roads, perimeter roads, or any other projects providing access to the airfield;
- · Perimeter fencing projects
- 2. Staffing: Each completed project listed shall include all currently employed, full-time staff with experience on the listed project. This information should include applicable education, training, work experience, and their role as part of the design team. At least one (1) employee in the firm must be primarily responsible for the project (Primary Project Design Engineer or Project Manager) and should have their roles clearly identified and explained. Additionally, the employee responsible for the project must possess a current valid Professional Engineering license and be registered in the state of Kentucky, incorporating their PE stamp and signature on all final plans and specifications.

If a staff member's experience was obtained while completing an applicable Airport Design project at a firm other than the current firm, that information shall be listed, along with the role the staff member had in the completion of the project design.

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## <u>Airport Noise Analysis</u> – The following must be demonstrated to be considered:

- 1. Firm Experience: The level of knowledge and experience shall be demonstrated by providing a detailed project listing of at least one (1) Airport Noise Analysis project, or detailing the Noise Analysis component of a larger Aviation Master Planning project within the last five (5) years from the date of the application. The Airport Noise Analysis must be for airports within the United States and shall be subject to the regulations set forth by the Federal Aviation Administration (FAA). In order for a project to be eligible for Airport Noise Analysis prequalification, it must have been completed within the guidelines of the most current FAA Environmental Impacts Policies and Procedures (ORDER 1050.1F) utilizing the FAA Aviation Environmental Design Tool (AEDT) for noise analysis. In the event that no employee of your firm has completed any projects meeting this criteria, we will accept written certification of recent completion of FAA's AEDT training.
- 2. Staffing: Each completed project listed shall include all currently employed, full-time staff with experience on the listed project. This information should include applicable education, training, work experience, and their role as part of the design team. At least one (1) employee in the firm must be primarily responsible for the project (Primary Project Design Engineer or Project Manager) and should have their roles clearly identified and explained.

If a staff member's experience was obtained while completing an applicable Airport Noise Analysis at a firm other than the current firm, that information shall also be listed, along with the role the staff member had in the completion of the project design.

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#### Airport Project Inspection – The following must be demonstrated to be considered:

- Staffing A firm must demonstrate that they have, under current employment, project construction inspection staff fully capable of performing construction oversight on all types of airport construction projects. Please provide the names for each of the construction inspection employees, listing their applicable education and training, as well as their project oversite/reporting experiences demonstrating their knowledge of all the most current KYTC and FAA Airport Construction and Safety Standards such as:
  - a. FAA AC 150/5370-10 (Standards for Specifying Construction of Airports),
  - b. FAA AC 150/5370-2 (Operational Safety on Airports with Emphasis on Safety During Construction)
  - c. FAA AC 150/5200-18 (Airport Safety Self Inspection)
  - d. Kentucky Transportation Cabinet Department of Highways Standard Specifications for Road and Bridge Construction.

Although specific airport construction project inspection experience is not absolutely required, qualified staff must have adequate experience (a minimum of five (5) projects with total construction budgets of \$250,000 each) in onsite construction inspection and be capable of performing any field testing, inspection, as well as the necessary documentation of quantities and progress reporting required by the airport project plans and specifications. For employees with little or no airport experience, an additional statement detailing how these staff members plan to become familiar with the necessary FAA Advisory Circulars and other specifics of working in an airport environment must also be included.

Additionally, the submitting firm must have at least one (1) employee with a current Professional Engineering license and be registered in the state of Kentucky who will directly oversee and be responsible for the inspection staff.

If a staff member's construction inspection experience was obtained while completing an applicable Airport Project Inspection at a firm other than the current firm, that information shall also be listed, along with the role the staff member had in the completion of the project inspection.

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## Division of Construction (502-564-4780)

<u>CONSTRUCTION PROJECT SUPERVISION</u> - The Consultant shall provide engineering and engineering-related services to include detailed construction engineering and inspection of materials and workmanship for highway construction in accordance with current Department of Highways standards and procedures. Consultant must be familiar with Kentucky Standard Specifications and sampling and testing requirements.

The consultant engineering firm must provide a minimum of one (1) professional engineer with licensure in Kentucky, who can demonstrate highway construction knowledge and experience, on site as a Project Engineer. The firm must also be capable of providing home office support such as additional personnel, direction and equipment when necessary.

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BRIDGE PAINTING PROJECT INSPECTION – The consultant firm shall provide the number of inspectors as requested by the Kentucky Transportation Cabinet for on-site field inspection of the bridge painting project(s). The inspector(s) will use paint inspection instruments, visual inspection, and industry standards to inspect the contractors' work and enforce the Kentucky Standard Specifications and Special Notes. Personal protection equipment and inspection equipment shall be provided by the consultant firm. The inspector(s) shall keep complete and accurate daily records of all work performed and the materials used in accordance with the Division of Construction Guidance Manual and as directed by the Engineer. Computer shall be provided by the consultant firm along with technical support in the event of computer issues. Computer must be capable of running AASHTOWare Project SiteManager.

The inspection will include, but not be limited to, inspect all work for acceptance, document work activities and complete daily reports, provide visual and instrument inspections of surface preparation and coatings applications to ensure conformance to applicable specifications, containment and emissions monitoring, monitor work for compliance with KYOSHA, OSHA, EPA, and state guidelines specified.

The firm will provide inspector(s) who have successfully completed one (1) of the following certifications: SSPC-BCI Level 1 or NACE CIP Level 1. The firm will provide documentation that shows availability of a minimum of five (5) qualified inspectors. The firm will also provide inspector(s) that demonstrate experience and knowledge of on-site bridge painting inspection and recordkeeping. The inspector(s) must be capable of handling the physical requirements needed to access and perform arms-length inspection of the entire project structure(s).

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BRIDGE PAINTING PROJECT MANAGEMENT – The Consultant shall provide bridge painting project management and related services to include detailed daily reporting, project coordination with contractor and State/District personnel, pay estimates, inspection of workmanship in accordance with current Department of Highways standards, plans, procedures, and project special notes. Manager and inspectors must be familiar with Kentucky Standard Specifications, Division of Construction Guidance Manual 63-01, partnering, sampling, testing and inspection requirements and project special notes.

The consultant firm must provide a minimum of one (1) Project Manager, who can demonstrate bridge painting project management/supervision, reporting, documentation and computation of pay estimates and inspection knowledge and experience, as an onsite project manager. The firm must be capable of providing home office support such as direction, additional support personnel, equipment and an on-site field office with computer and internet capabilities. Computers must be capable of running AASHTOWare Project SiteManager.

The firm shall provide on-site field inspection of the bridge painting project. The inspector(s) will use paint inspection instruments; visual inspection and industry standards to inspect the contractors work and enforce the Kentucky Standard Specifications and Special Notes. The inspector(s) shall keep complete and accurate daily records of all work performed and the materials used in accordance with the Division of Construction Guidance Manual.

The inspections will include but not be limited to: inspect all work for acceptance, document work activities, and complete daily reports, provide visual and instrument inspections of surface preparation, and coatings applications to ensure conformance to applicable specifications, containment and emissions monitoring, monitor work for compliance with KY OSHA, OSHA, EPA, and state guidelines as specified.

The firm must provide an adequate number of inspectors to provide complete quality assurance field inspections. The firm will provide documentation that demonstrates availability of a minimum of one (1) project manager. The inspectors will have successfully completed one (1) of the following certifications: SSPC-BCI Level 1 or NACE CIP Level 1 and maintain their qualification for the duration of the project. The inspector(s) must demonstrate experience and knowledge of on-site bridge painting inspection and recordkeeping. The inspector(s) must be capable of handling the physical requirements needed to access and perform arms-length inspection of the entire project structure.

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STRUCTURAL STEEL FABRICATION INSPECTION - The inspection will include performing all radiography, ultrasonic, magnetic particle and dye penetrate testing of welds as required and visual inspection to insure fabrication in accordance with applicable specifications. Level Two nondestructive testing inspectors for magnetic particle and ultrasonic or radiographic testing. Consultant engineering firms must have a minimum of one (1) licensed professional engineer who can demonstrate knowledge and experience in welding theory, techniques, procedures, and inspections. Licensure in Kentucky is not necessarily required.

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<u>CONSTRUCTION SCHEDULING/CLAIMS ANALYSIS</u> – The Consultant shall provide analysis consisting of construction contract claims and schedules to define issues and establish strategy of defense of claim; preparation and documentation of reports, graphics, charts, exhibits, and schedules; calculation and documentation of delays, recoverable damages, loss of productivity, inefficiencies, and other causes of claims.

Key staff members of the firms should consist of civil engineers, attorneys and certified public accountants experienced in claims review and evaluation. Consultant personnel must have at least five (5) years of experience in claim review. The firm must have a minimum of one (1) licensed professional engineer who can demonstrate knowledge and experience in computerized Highway construction project critical path scheduling. Engineers must be licensed, but not necessarily in Kentucky.

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# Division of Environmental Analysis (502-564-7250)

## **FISHERIES**

Applicants must demonstrate professional qualification for Fisheries by providing evidence of a Federal Recovery Permit for federally-listed fish species in Kentucky or, submitting documentation that details education and work experience as follows:

## **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Biology or Environmental Science including thirty (30) semester hours in biology with three (3)-hour courses related to fisheries such as fisheries biology, limnology, fisheries management, fisheries science, ecology, and ichthyology.\*

## QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE

Four (4) years with a BS

Two (2) years with an MS

Two (2) years with a Ph.D\*\*

Qualifying experience is considered to be work having to do with the ecology or biology of freshwater fish.

It must include the following:

- 1. A field study, publication or presentation at a scientific meeting demonstrating a knowledge of the taxonomy, sampling and ecology of freshwater fish.
- 2. One year experience in the assessment of impacts of construction projects on aquatic life, including mitigation measures.
- 3. Work indicating a knowledge of Kentucky and Federal rare, threatened, and endangered species of freshwater fish.

## **EQUIPMENT LIST**

- 1. Taxonomic references sufficient to identify the fishes of Kentucky to species level.
- 2. Seines.
- \* Experience may substitute for education in exceptional cases if expertise in area can be proven by written examples of work.
- \*\* Ph.D. dissertation may substitute for one (1) year of experience if it involved the biology or ecology of freshwater fish.

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#### FRESHWATER MACROINVERTEBRATES

## **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Biology or Environmental Science including thirty (30) semester hours in biology with three (3)-hour courses related to the taxonomy and biology of macroinvertebrates of freshwater lakes and streams and two (2) three (3)-hour courses related to aquatic biology or aquatic ecology.\*

## QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE

Four (4) years with a BS

Two (2) years with an MS

Two (2) years with a Ph.D\*\*

Qualifying experience is considered to be work having to do with the ecology or biology of freshwater invertebrates.

It must include the following:

- 1. A field study, publication or presentation at a scientific meeting demonstrating a knowledge of the taxonomy, sampling, and ecology of freshwater invertebrates.
- 2. One (1) year experience in the assessment of impacts of construction projects on aquatic life, including mitigation measures.
- 3. Work indicating a knowledge of Kentucky and Federal rare, threatened, and endangered species of aquatic invertebrates. Documentation of Federal Recovery Permits held by the applicant for freshwater macroinvertebrates should be provided in the application for review.

## **EQUIPMENT LIST**

- Taxonomic references sufficient to identify most aquatic invertebrates to at least genus and pelecypods, gastropods, and crustaceans to species. If an expert is to be used in the identification of certain groups, his/her name and the group(s) to be identified should be specified.
- 2. Dip net with fine mesh and/or a surber sampler.
- 3. Stereo dissection microscope.
- \* Experience may substitute for education in exceptional cases if expertise in area can be proven by written examples of work.
- \*\* Ph.D. dissertation may substitute for one (1) year of experience if it involved the biology or ecology of aquatic invertebrates.

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## **WATER QUALITY**

## **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Chemistry, Biology, Environmental Science, Sanitary Engineering, Geology; including 12 semester hours in chemistry-related courses including one (1) course related specifically to water chemistry of streams and lakes.\*

## QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE

4 years with a BS

2 years with an MS

2 years with a Ph.D\*\*

Qualifying experience is considered to be work having to do with the chemistry of freshwater.

It must include the following:

- A field study, publication, or presentation at a scientific meeting demonstrating knowledge of the sampling and determination of water chemistry of freshwater streams and/or lakes.
- 2. One (1) year experience in the assessment of impacts of construction projects on water chemistry, including measures to reduce these impacts.

## **EQUIPMENT LIST**

Capacity to perform the following tests:

- Color
- Turbidity
- PH
- Iron
- Nitrate Nitrogen
- Alkalinity
- Acidity
- Chloride
- Ammonia Nitrogen
- Sulfate
- Hardness
- Specific Conductance
- Orthophosphate
- Dissolved Oxygen
- Discharge
- \* Experience may substitute for education in exceptional cases if expertise in area can be proven by written examples of work.
- \*\* Ph.D. dissertation may substitute for one (1) year of experience if it involved the biology or ecology of plants.

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## **BOTANY**

Applicants must demonstrate professional qualification for Botany by providing evidence of a Federal Recovery Permit for federally-listed plant species in Kentucky or, submitting documentation that details education and work experience as follows:

#### **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Biology or Environmental Science including thirty (30) semester hours in biology with three (3)-hour courses related to botany such as plant taxonomy, plant ecology, dendrology, botany, plant physiology, silviculture, etc.\*

#### QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE

Four (4) years with a BS

Two (2) years with an MS

Two (2) years with a Ph.D.\*\*

Qualifying experience is considered to be work having to do with the ecology or biology of plants.

It must include the following:

- 1. A field study, publication or presentation at a scientific meeting demonstrating knowledge of the taxonomy, sampling, and ecology of plants.
- 2. One (1) year experience in the assessment of impacts of construction projects on plants and plant communities, including mitigation measures.
- 3. Work indicating a knowledge of Kentucky and Federal rare, threatened and endangered species of plants.

## **EQUIPMENT LIST**

- 1. Taxonomic references sufficient to identify plants to species level.
- 2. Plant press.
- \* Experience may substitute for education in exceptional cases if expertise in area can be proven by written examples of work.
- \*\* Ph.D. dissertation may substitute for one (1) year of experience if it involved the biology or ecology of plants.

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## TERRESTRIAL ZOOLOGY

## **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Biology or Environmental Science including thirty (30) semester hours in biology with three (3)-hour courses related to terrestrial zoology such as vertebrate zoology, wildlife management, wildlife ecology, mammalogy, herpetology, or ornithology.\*

#### QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE

Four (4) years with a BS

Two (2) years with an MS

Two (2) years with a Ph.D.\*\*

Qualifying experience is considered to be work having to do with the ecology or biology of terrestrial animals.

It must include the following:

- 1. A field study, publication or presentation at a scientific meeting demonstrating knowledge of the taxonomy, sampling, and ecology of terrestrial animals.
- 2. One (1) year experience in the assessment of impacts of construction projects on terrestrial animals and wildlife habitat including mitigation measures.
- Work indicating a knowledge of Kentucky and Federal rare, threatened and endangered species of terrestrial animals. Documentation of relevant Federal Recovery Permits held by the applicant should be provided in the application for review.

## **EQUIPMENT LIST**

- 1. Taxonomic references sufficient to identify animals to species level.
- 2. Mist nets.
- 3. Caving lights.
- 4. Small mammal traps.
- \* Experience may substitute for education in exceptional cases if expertise in area can be proven by written examples of work.
- \*\* Ph.D. dissertation may substitute for one (1) year of experience if it involved the biology or ecology of terrestrial animals.

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#### **WETLANDS**

Applicants must demonstrate professional qualification for Wetlands by providing evidence of certification as a Professional Wetlands Scientist as determined by the Society of Professional Wetland Scientists or, submitting documentation that details education and work experience as follows:

#### **EDUCATION GRADUATE AND UNDERGRADUATE TRANSCRIPTS REQUIRED**

BS in Biology or related to natural sciences including thirty (30) semester hours in biology. With at least eight (8) semester hours (or six (6) semester hours with labs) of courses related to botany and flora, one (1) three-(3)-hour course in ecological analyses, habitat assessments, or plant community assessments. At least one (1) three (3)-hour course in vertebrate biology or classification such as ichthyology, herpetology, entomology, ornithology, or mammalogy.\*

## **REQUIRED TRAINING - CERTIFICATES REQUIRED**

Training in the application of the Corps of Engineers Wetland Delineation Manual, 1987. Training must satisfy pre-requisite requirements for the Wetland Delineator Certification Program.

#### QUALIFYING EXPERIENCE PRESENT CURRICULUM VITAE -

Written examples required three (3) years of experience in practicing wetland delineation and mitigation under the US ACE supervised 404 program.

**NOTE:** MS and Ph.D. degrees may substitute for experience for up to two (2) years, only if the degree was completed with thesis or two (2) years of research work related to wetlands. An M.A. degree may qualify for one (1) year experience if it relates to wetlands.

Qualifying experience applies to the individual and is considered to be work having to do with the classification, delineation, and/or mitigation of jurisdictional wetlands.

Qualifying experience must include the following:

- Project Leader on US ACE approved or reviewed wetland delineation projects; may include any example where wetlands were determined or delineated and underwent US ACE review; and,
- Project Leader of field study and author of a publication demonstrating competence in sampling and analytical procedures involving wetlands; or,
- Project Leader for wetland mitigation involving creation, restoration or enhancement of wetlands used in 404 permits; or,
- Project Leader for monitoring studies and reports of wetlands that have been reviewed and approved by US ACE.

## **EQUIPMENT AND REFERENCE MATERIAL**

List Equipment and Material Sampling equipment necessary for wetlands analysis shall include:

- (1) a soil probe, auger, or space, for soil samples,
- (2) Munsell soil color chart for hydric soil determinations,
- (3) taxonomy reference books for plant identification,
- (4) the USFWS publication entitled National List of Plant Species that Occur in Wetlands: Kentucky edition or Region 1 Northeast,

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- (5) plant press and collection bags, and
- (6) stereo dissection microscope for plant identification.
- \* Education cannot substitute entirely for experience requirement. MS and Ph.D. degrees in the area of wetland may qualify for up to two (2) years of experience. MA degrees may qualify up to one (1) year of experience.
- \*\* Education and experience cannot be substituted for training.

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#### PREHISTORIC AND HISTORIC ARCHAEOLOGY

## PROFESSIONAL QUALIFICATIONS

The principal investigator is responsible for the quality of the archaeological work and resulting report. All Section 106 related investigations should be carried out under the direction of a principal investigator. He or she must ensure that all other project personnel have sufficient experience to perform assigned duties.

**Principal Investigator.** The Secretary of the Interior's Standards for Professional Qualifications in Archaeology are those used by the National Park Service and have been previously published in the Code of Federal Regulations, 36 CFR Part 61. These are quoted below:

"The qualifications define minimum education and experience required performing identification, evaluation, registration, and treatment activities. In some cases, additional areas or levels of expertise may be needed, depending upon the complexity of the task and the nature of the historic properties involved. In the following definitions a year of full-time professional experience need not consist of a continuous year of full-time work but may be made up of discontinuous periods of full-time work adding up to the equivalent of a year of full-time experience."

## **Archaeology**

The minimum professional qualifications in archaeology are a graduate degree in archaeology, anthropology, or closely related field plus:

- At least one (1) year of full-time professional experience or equivalent specialized training in archaeological research, administration or management;
- At least four (4) months of supervised field and analytic experience in general North American archaeology; and
- · Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in Prehistoric Archaeology shall have at least one (1) year of full-time professional experience at a supervisory level in the study of archaeological resources of the prehistoric period. A professional in Historic Archaeology shall have at least one (1) year of full-time professional experience at a supervisory level in the study of archaeological resources of the historic period.

In addition to the previous criteria, the SHPO requires that the Principal Investigator have twelve (12) months of professional field experience in the eastern United States, of which at least three (3) months must be in Kentucky or the Ohio Valley (southern Ohio, southern Indiana, southern Illinois, western West Virginia, Kentucky, and Tennessee). In some instances, up to two (2) months of analytical and report writing experience in the Ohio Valley may be substituted for field experience. Applicants must demonstrate that SHPO qualification requirements have also been satisfied.

## Field Supervisors

The Transportation Cabinet also qualifies applicants to direct field work, and to complete analytical and report writing as a primary author under the supervision of an approved Principal Investigator. Qualifications for field supervisors are graduated, as the tasks and skills required for each level of investigation become increasingly complex. Please note that for the following, as for the Principal Investigator, experience is measured in actual days of laboratory or field experience, with five days in the field being one (1) week of experience, four (4) weeks being a month of experience, and so on.

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## Survey Projects (Phase I)

- 1. An undergraduate degree in Anthropology or Archaeology or a closely related field;
- 2. Four (4) months minimum of archaeological laboratory experience;
- 3. One (1) year field experience in North American archaeology; and
- 4. Three (3) months of field experience in Kentucky or the Ohio Valley, of which two (2) months may be substituted with analytical experience or report writing within the Ohio Valley.

## **Testing Projects (Phase II)**

- 1. Two (2) academic years of graduate school in Anthropology or closely related field;
- 2. Demonstrated ability to analyze artifacts and write reports;
- 3. One (1) year field experience in North American archaeology, of which at least a combined four (4) months must be excavation (evaluation and/or mitigation);
- 4. One (1) month as a Field Supervisor on Phase I projects;
- 5. Three (3) months of field experience in Kentucky or the Ohio Valley, of which two (2) months may be substituted with analytical experience or report writing within the Ohio Valley.

#### Mitigation Projects (Phase III)

- 1. Graduate degree in Anthropology or Archaeology or closely related field;
- 2. Demonstrated ability to analyze artifacts and write reports;
- 3. One (1) year field experience in North American archaeology, of which at least a combined six (6) months must be excavation (evaluation and/or mitigation);
- 4. Four (4) months as a Field Supervisor on Phase I and Phase II investigations; and
- 5. Three (3) months of field experience in Kentucky or the Ohio Valley, of which two (2) months may be substituted with analytical experience or report writing within the Ohio Valley.

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## **HIGHWAY NOISE ANALYSIS**

## **EDUCATION**

B.S. in Engineering, Environmental Sciences, or BA with course work related to transportation-related course work. At least one (1) semester hour of computer sciences.

## **QUALIFYING EXPERIENCE**

One (1) year of co-authored base studies with BS or BA

Six (6) months of co-authored based studies with MS, MA, or Ph.D.

Qualifying experience is considered to be work associated with noise impact assessment and modeling techniques and should include the following:

Research or documentation, which demonstrates knowledge of noise, impacts assessment, and engineering principles. Attendance of noise impact assessment and abatement courses offered by FHWA or independent consultants are required. Experience in field noise sampling along with collaboration of documentation required for submittal of a noise impact analysis. Including noise levels and abatement measures as required by FHWA 23 CFR Part 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise."

## **EQUIPMENT**

- FHWA Traffic Noise Model (23 CFR 772.9)
- · Computer hardware utilized for analyses
- Type I or Type II Sound Level Meter

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## **AIR QUALITY ANALYSIS**

#### **EDUCATION**

BS in Engineering, Environmental Sciences, or Meteorology; including twelve (12) semester hours of air quality-related courses, (i.e. meteorology, engineering principles, or dispersion modeling). At least three (3) semester hours of computer sciences. BA With course work related to transportation planning.

## **QUALIFYING EXPERIENCE**

Four (4) years with a BS or BA

Two (2) years with an MS or MA

Two (2) years with a Ph.D. (1 year if research or dissertation related to air quality principles)

Qualifying experience is considered to be work associated with air quality principles and modeling techniques and should include the following:

- Research or documentation, which demonstrates knowledge of air pollution meteorology, dispersion modeling, and engineering principles.
- Affiliation with a professional society related to air quality.
- One (1) year experience in the assessment of impacts of construction projects on ambient air quality including mitigation measures as required by the Clean Air Act Amendments of 1990.
- Work indicates knowledge of Kentucky and Federal Air Quality Regulations.

#### **EQUIPMENT**

State of the art computer models, which consists of:

- A. Mobile Source Emissions Model: MOVES or current promulgated EPA mobile source emissions model
- B. Dispersion Model: CAL3QHC
- C. F-I Computer hardware utilized for analyses.

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#### STREAM AND WETLAND MITIGATION

A firm shall have a minimum of one (1) engineer licensed in Kentucky and (1) biologist who meets the prequalification criteria listed below who will both be directly involved in the project design, development, and (as-needed) post-construction evaluation and monitoring relative to implementation of design (as-built) specifications. A firm's employees involved in overseeing natural stream channel or functional wetland mitigation design through projects should have relevant training, and successful project experience for the applicable discipline prequalification is sought. Submission of a vita or resume containing education, training and experience will be necessary to assist the Kentucky Transportation Cabinet (KYTC) in this review. Inclusion of projects constructed should be provided. In addition, each firm shall provide such documentation as project performance evaluations, documented implementation and performance relative to constructed design success metrics, and other pertinent information that will aid in the KYTC's evaluation of the firm's performance of a completed mitigation project.

Equipment shall be adequate to provide plans and studies utilizing computer drafting and digital terrain modeling techniques for the applicable project, and in a format specified by the Cabinet. Sufficient financial information shall be provided to demonstrate the stability of the firm during the pregualification period.

Excluding construction, projects are typically divided into three (3) phases: data collection, design, and monitoring. A firm shall have the capability to provide the following products.

Stream and Wetland Data Collection – 1) Document stream (or wetland) project preconstruction conditions relative to bioregion reference streams (or wetland type); 2) the expected functional class of streams (wetlands) to be restored; and 3) as applicable, documentation of habitat conditions of streams (wetlands) that will be disturbed by road construction projects.

Please provide one (1) project submission that demonstrates the following capabilities for stream or wetland, as applicable. This submission should be in the form of a report.

## Stream and Wetland

- Location map drawn to scale, with any notes necessary for site location.
- Stream (wetland) and watershed areas accurately delineated on USGS 7.5' Topographic Quadrangle maps.
- Watershed condition and hydrologic characteristics.
- Description of riparian and transitional zone characteristics and condition.
- Stream bio-survey (wetland functional) assessment may be qualitative, or quantitative depending on stream order/watershed size.
- · Tabulated survey notes.

## Stream Specific

- Completed Habitat Assessment Field Data Sheet as obtained through the Kentucky Division of Water (modified from the USEPA's Rapid Bioassessment Protocols).
  - High or low gradient form, as applicable.
- Description of channel substrate, bank (each) material and bank (each) condition.
- Morphological (Rosgen or other characteristically defined) stream physical or functional classification.

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Natural Stream (Functional Wetland) Design - Provide stream channel (wetland) construction or restoration plans in the detail required for construction of the project. The format for drawings shall conform to cabinet CADD standards. The elements of the design plan will include the following.

- Scale drawings showing the proposed work in plan, cross-section and profile view.
- · Construction detail drawings as needed for clarity.
- · Vegetation planting details.
- Description of measures to be used for creation of aquatic riparian (or buffer) habitat.
- Description of unique or species of concern (e.g. Threatened or Endangered species) habitat designs and implementation.
- · Monitoring plan.
- Summary report documenting all design criteria, analyses and computations.

Biologist Qualifications - In addition to the above requirements, the firm shall have a minimum of one (1) aquatic biologist that meet each of the pre-qualification requirements below, or additional aquatic biologists that together meet those minimum pre-qualifications, and have project responsibility.

- Fisheries
- · Freshwater macroinvertebrates
- Water quality
- Botany
- Wetlands

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## **SOCIO-ECONOMIC ANALYSIS**

## **EDUCATION**

Bachelor's degree with a major, minor; emphasis, or area of concentration in planning; or a bachelor's degree in transportation or a closely related field. Closely related fields include administration, business, economics, geology, geography, political science, and others.

## **QUALIFYING EXPERIENCE**

One (1) year with a bachelor's degree.

Qualifying experience is considered to be work to do with urban and regional planning or socio-economic impact analysis.

Work indicates a knowledge and familiarity with FHWA guidelines and regulations relative to socioeconomic analyses and community impact assessments of transportation projects.

Work on a community comprehensive plan including land use planning, population, and economic base study analyses, etc.

#### CONTINUING EDUCATION

Courses in Relocation, Right-of-Way, Community Impact Assessments, Environmental Justice, Public Involvement, Context Sensitive Design, Secondary and Cumulative Impacts, and related topics

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## **CULTURAL-HISTORIC ANALYSIS**

#### PROFESSIONAL QUALIFICATIONS

The Secretary of the Interior's Standards for Professional Qualifications in History and Architectural History are those used by the National Park Service and they have been previously published in 36 CFR Part 61. Familiarity with Section 106 is also required. In order to be qualified in history and/or architectural history, the following education and experience should be met:

**History:** The minimum professional qualification in history is a graduate degree in history or a closely related field, or a bachelor's degree in history, or a closely related field, plus one (1) of the following:

- (a) At least two (2) years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historical organization or agency, museum, or other professional institution; or
- (b) Substantial contribution through research and publication, to the body of scholarly knowledge in the field of history.

Architectural History: The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or closely related field, with course work in American architectural history; or a bachelor's degree in architectural history, art history, historic preservation, or closely related field, plus one (1) of the following:

- (a) At least two (2) years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or
- (b) Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

## SPECIFIC EXPERIENCE

Also in order to be qualified; experience and/or training and knowledge with FHWA guidelines and regulations relative to cultural-historic architectural analyses of transportation projects must be demonstrated. This includes familiarity with the Section 106 process and Section 4(f).

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## **ENVIRONMENTAL DOCUMENT WRITING AND COORDINATION**

## **EDUCATION**

Graduate of a college or university with a bachelor's degree

## **QUALIFYING EXPERIENCE**

Two (2) years with a BS

One (1) year with an MS/MA

Qualifying experience is considered to be work and training having to do with the preparation and coordination of categorical exclusions, environmental assessments, and environmental impact statements.

It should include, or be demonstrated by the following:

- Specific training in environmental document preparation, such as NHI/FHWA training;
- 2. Work indicating one's knowledge and familiarity with FHWA guidelines and regulations in regard to environmental document writing and coordination;
- 3. Specific experience in environmental document preparation;
- 4. Specific examples of environmental documents authored (by project identification and client); or
- List other experience with technical writing and/or special environmental studies prepared.

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## HAZARDOUS MATERIALS (HAZMAT) AND UNDERGROUND STORAGE TANKS (UST)

## **EDUCATION**

Bachelor of Science in Chemistry, Chemical Engineering, Geology, Hydrogeology, Industrial Hygiene, or closely related field of study.

#### QUALIFYING TRAINING

Minimum 40-Hour Waste Site Worker Protection training to comply with OSHA CFR 1910.120(e)(2).

Include proof of current certification, (i.e., current 40-hour certification and/or current 8-hour annual refresher course certification) for each individual listed to conduct any work in the Underground Storage Tank (UST) or Hazardous Materials (HAZMAT) area.

#### **LICENSURE**

License as a Professional Geologist or Professional Engineer for all UST related services with the exception of Preliminary Site Assessment (Phase I).

#### QUALIFYING EXPERIENCE

The applicant shall identify the personnel who will be performing each phase of work for which prequalification is sought. Qualifying experience is considered to include on-site experience and report development as appropriate for conducting each phase of work. The applicant shall demonstrate competence for each area of prequalification requested in accordance with the criteria outlined.

## **UST and HAZMAT Preliminary Site Assessments (Phase I):**

The applicant shall demonstrate proof of personnel's experience conducting PSAs with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The description shall identify the specific work conducted by the individual on listed projects. Individuals identified in support of this prequalification shall have authored a minimum of three (3) PSA reports. For each individual identified in support of this prequalification, the application shall also provide a sample of a PSA, authored by the individual and developed in accordance with ASTM E1527-13 and compliant with the Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312).

## **Underground Storage Tanks (UST) Closure Assessment:**

The applicant shall demonstrate proof of personnel's experience developing Closure Assessment Reports (CAR) with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The applicant shall submit a copy of letters issued by the Kentucky Division of Waste Management, Underground Storage Tank Branch for a minimum of two (2) projects, indicating acceptance of a CAR. Documentation of approval by the regulatory agency for verifiably equivalent activities in other states may substitute. Vitae for individuals identified to conduct this work shall include the projects documented by the letters. The reports shall have been authored by those identified in support of the request for prequalification approval. The prequalification application shall also provide a copy of a sample CAR, or verifiably equivalent report

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prepared for the regulatory agency of another state, authored by each individual identified in the application for this area of work.

## Underground Storage Tanks (UST) Site Investigation (Phase II):

The applicant shall demonstrate proof of personnel's experience developing Site Investigation Reports with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The applicant shall submit a copy of letters issued by the Kentucky Division of Waste Management, Underground Storage Tank Branch for a minimum of two (2) projects, indicating acceptance of a Site Investigation Report. Documentation of approval by the regulatory agency for verifiably equivalent activities in other states may substitute. Vitae for individuals identified to conduct this work shall include the projects documented by the letters. The reports shall have been authored by individuals identified in support of the firm's prequalification in this area. The prequalification application shall also provide a copy of a sample Site Investigation Report, or verifiably equivalent report prepared for the regulatory agency of another state, authored by each individual identified in the application for this area of work.

## **Underground Storage Tanks (UST) Corrective Action:**

The applicant shall demonstrate proof of personnel's experience developing and implementing corrective action with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The applicant shall submit a copy of letters issued by the Kentucky Division of Waste Management, Underground Storage Tank Branch for a minimum of two (2) projects, indicating acceptance of a Corrective Action Plan and a Corrective Action Report (No Further Action letter). Documentation of approval by the regulatory agency for verifiably equivalent activities in other states may substitute. Vitae for individuals identified to conduct this work shall include the projects documented by the letters. The reports shall have been authored by individuals identified in support of the firm's prequalification in this area. The prequalification application shall also provide a copy of a sample Corrective Action Plan and a Corrective Action Report, or verifiably equivalent report prepared for the regulatory agency of another state, authored by each individual identified in the application for this area of work.

## Hazardous Materials (HAZMAT) Site Investigation (Phase II):

A minimum of two (2) years of experience conducting Site Investigation fieldwork and reporting is required.

The applicant shall demonstrate proof of personnel's experience conducting Site Investigations with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The applicant shall submit a copy of letters issued by the Kentucky Division of Waste Management for a minimum of two (2) projects, indicating acceptance of a Site Investigation Report. Documentation of approval by the regulatory agency for verifiably equivalent activities in other states may substitute. Vitae for individuals identified to conduct this work shall include the projects documented by the letters. The reports shall have been authored by individuals identified in support of the firm's prequalification in this area. The prequalification application shall also provide a copy of a sample Site Investigation Report, or verifiably equivalent report prepared for the

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regulatory agency of another state, authored by each individual identified in the application for this area of work.

## Hazardous Materials (HAZMAT) Corrective Action:

A minimum of two (2) years of experience developing Corrective Action Plans is required.

The applicant shall demonstrate proof of personnel's experience developing and implementing corrective action with submittal of a detailed vitae for each individual identified in support of the firm's prequalification in this area. The applicant shall submit a copy of letters issued by the Kentucky Division of Waste Management for a minimum of two (2) projects, indicating acceptance of a Corrective Action Plan and a Corrective Action Report. Documentation of approval by the regulatory agency for verifiably equivalent activities in other states may substitute. Vitae for individuals identified to conduct this work shall include the projects documented by the letters. The reports shall have been authored by individuals identified in support of the firm's prequalification in this area. The prequalification application shall also provide a copy of a sample Corrective Action Plan and Corrective Action Report, or verifiably equivalent report prepared for the regulatory agency of another state, authored by each individual identified in the application for this area of work.

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## Division of Highway Design (502-564-3280)

<u>RURAL ROADWAY DESIGN</u> – The purpose of this prequalification is to determine if a firm has the <u>capability</u> to design rural roadway projects. Roadways that have been designed within a rural context may include but not be limited to:

- · paved or earth shoulders
- shared-use paths
- · cross drains
- entrance pipes
- · 'V' or flat bottom roadway ditches with ditch channel treatments
- superelevation and transitions
- depressed medians

The firm shall submit a stand-alone prequalification document addressing the following requirements:

#### Company

- A. Sufficient financial information should be provided to demonstrate the stability of the firm during the prequalification period. Financial Information should include but is not limited to the following:
  - 1. Finance Statement sheet (Balance of Assets and Liabilities)
  - 2. Insurance
- B. Contact information (name, email, phone number) for a person in your firm to answer questions about the application

## II. Personnel

- A. The firm must demonstrate that current staff has the knowledge and skills to design a roadway in a rural context as described above and develop a set of contract plans for construction. Provide a resume for each individual that should be considered for this category. The firm must have at least two (2) engineers licensed in Kentucky with highway/transportation and related drainage experience. Each resume should contain the following:
  - 1. Educational history
  - 2. Professional certifications
  - 3. Applicable training courses
  - 4. Applicable skills
  - 5. Rural roadway projects worked on in the last ten (10) years with current or former firm. For each project include:
    - a. Project location, route, and description
    - b. Firm name (if other than applicant)
    - Specific responsibility and roles on each project (e.g. lead designer, detailer, project manager, traffic modeler, public involvement, drainage designer, etc.)
  - 6. Other projects worked on that may be applicable

## III. Projects Completed by Firm

A. The firm shall provide a minimum of three (3) projects completed within the last ten (10) years to show that they have the capability to design a roadway in a

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rural context as described above and develop a set of contract plans for construction. The information for each project shall include the following:

- 1. A project description, which should include the following:
  - a. Client and reference contact information
  - b. Project location, route, length, and description including project purpose and need
  - c. Standards used for project design
  - d. Firm's role on the project (prime or subconsultant and work performed)
  - e. Current staff names involved with the project and roles
  - f. Completion date of design
  - g. Firm's design fee
  - h. Performance evaluation documents or letters (if applicable)

## IV. Equipment and Software

- A. The firm should have adequate resources to provide plans and studies utilizing CAD and civil design techniques to provide Electronic Engineering Data for an average type of project and to a format specified by in KYTC's current CADD standards. The following shall be listed:
  - Civil Design software owned. Note: the firm will be required to own Bentley CONNECT product appropriate for the project and of the latest version recognized by KYTC for any new design starts after Nov. 1<sup>st</sup>, 2019 with software training to qualify for KYTC work. See the CADD Standards website for current version information.
  - Additional design software (e.g. autoturn, drainage software, etc.) owned by firm
  - 3. Specialty hardware used for highway design work

## CONDITIONAL APPROVAL for Small Rural Roadway Design Projects:

- A. The firm may be prequalified conditionally for rural roadway design if it demonstrates the <u>capability</u> to design small rural roadway projects with an estimated design fee of less than \$300,000. The firm shall follow the same submittal process described above. This prequalification may be applicable to companies that:
  - 1. Have only one (1) engineer licensed in Kentucky
  - 2. Have little or no previous experience designing and delivering contract plans on large rural projects
  - Shows adequate applicable project design experience on small rural projects
  - 4. Does not have the capabilities or resources to manage large rural projects
  - 5. Expecting to do rural roadway design work for local public agencies only
  - 6. Although there are no software requirements, it is recommended to adhere to Equipment and Software requirements above

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<u>URBAN ROADWAY DESIGN</u> – The purpose of this prequalification is to determine if a firm has the <u>capability</u> to design urban roadway projects. Roadways that have been designed within an urban context may include but not be limited to the following features:

- · curb and gutter
- storm sewer with curb drainage boxes
- · shared-use paths, bike lanes, and/or sidewalks
- cross drains
- intersections
- auxiliary lanes

The firm shall submit a stand-alone prequalification document addressing the following requirements:

#### I. Company

- A. Sufficient financial information should be provided to demonstrate the stability of the firm during the prequalification period. Financial Information should include but is not limited to the following:
  - 1. Finance Statement sheet (Balance of Assets and Liabilities)
  - 2. Insurance
- B. Contact information (name, email, phone number) for a person in your firm to answer questions about the application

## II. Personnel

- A. The firm must demonstrate that current staff has the knowledge and skills to design a roadway in an urban context as described above and develop a set of contract plans for construction. Provide a resume for each individual that should be considered for this category. The firm must have at least two (2) engineers licensed in Kentucky with highway/transportation and related drainage experience. Each resume should contain the following:
  - 1. Educational history
  - 2. Professional certifications
  - 3. Applicable training courses
  - 4. Applicable skills
  - Urban roadway projects worked on in the last ten (10) years with current or former firm. For each project include:
    - a. Project location, route, and description
    - b. Firm name (if other than applicant)
    - Specific responsibility and roles on each project (e.g. lead designer, detailer, project manager, traffic modeler, public involvement, drainage designer, etc.)
  - 6. Other projects worked on that may be applicable

## III. Projects Completed by Firm

- A. The firm shall provide a minimum of three (3) projects completed within the last ten (10) years to show that they have the capability to design a roadway in an urban context as described above and develop a set of contract plans for construction. The information for each project shall include the following:
  - 1. A project description, which should include the following:

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a. Client and reference contact information

- b. Project location, route, length, and description including project purpose and need
- c. Standards used for project design
- d. Firm's role on the project (prime or subconsultant and work performed)
- e. Current staff names involved with the project and roles
- f. Completion date of design
- g. Firm's design fee
- h. Performance evaluation documents or letters (if applicable)

## IV. Equipment and Software

- A. The firm should have adequate resources to provide plans and studies utilizing CAD and civil design techniques to provide Electronic Engineering Data for an average type of project and to a format specified by in KYTC's current CADD standards. The following shall be listed:
  - Civil Design software currently owned. Note: the firm will be required to own Bentley CONNECT product appropriate for the project and of the latest version recognized by KYTC for any new design starts after Nov. 1<sup>st</sup>, 2019 with software training to qualify for KYTC work. See the CADD Standards website for current version information.
  - Additional design software (eg autoturn, drainage software, etc.) owned by firm
  - 3. Specialty hardware used for highway design work

## **CONDITIONAL APPROVAL for Small Urban Roadway Design Projects:**

- A. The firm may be prequalified conditionally for urban roadway design if it demonstrates the <u>capability</u> to design small urban roadway projects with an estimated design fee of less than \$300,000. The firm shall follow the same submittal process described above. This prequalification may be applicable to companies that:
  - 1. Have only one (1) engineer licensed in Kentucky
  - 2. Have little or no previous experience designing and delivering contract plans on large urban projects
  - Shows adequate applicable project design experience on small urban projects
  - 4. Does not that the capabilities or resources to manage large urban projects
  - 5. Expecting to do urban roadway design work for local public agencies only
  - 6. Although there are no software requirements, it is recommended to adhere to the Equipment and Software requirements described above

(REVISED 12/21)

Advanced Drainage Analysis and Design – The purpose of this prequalification is to determine if a firm has the <u>capability</u> to perform advanced drainage analysis for highway projects. Advanced Drainage Analysis and Design encompasses advanced hydrologic and hydraulic analysis techniques for site specific needs in the design of highways. It may include but not be limited to: 2-D hydraulic floodplain analysis, FEMA map revisions, FEMA No-Rise certifications, advanced hydrologic evaluations using Bulletin 17C procedures, specialized energy dissipation techniques, water quality modeling, advanced flood relief water quantity modeling, evaluation of other professional engineer drainage designs, and serving as an expert witness in court proceedings. It may also include standard highway drainage designs where that need arises in performance of specialty drainage contracts.

The firm shall submit a prequalification document addressing the following requirements:

#### 1. Company

- a. Sufficient financial information should be provided to demonstrate the stability of the firm during the prequalification period. Financial Information should include but is not limited to the following:
  - i. Finance Statement sheet (Balance of Assets and Liabilities)
  - ii. Insurance
- Contact information (name, email, phone number) for a person in your firm to answer questions about the application

## 2. Personnel

The firm must demonstrate that current staff has the knowledge and skills to perform Advanced Drainage Analysis and Design, as defined above, and develop the required associated work products. Provide a resume for each individual that should be considered for this category. The firm must have at least one (1) engineer licensed in Kentucky with highway drainage experience. Each resume should contain the following:

- a. Educational history
- b. Professional certifications
- c. Applicable training courses
- d. Applicable skills
- e. Advanced Drainage Design and Analysis work performed in the last ten (10) years with current or former firm. For each project include:
  - i. Project location, route, and description
  - ii. Firm name (if other than applicant)
  - iii. Specific responsibility and role on each project.
- f. Other projects worked on that may be applicable

## 3. Projects Completed by Firm

The firm shall provide a minimum of three (3) projects completed within the last ten (10) years to show that they have the capability to perform basic and advanced drainage analysis. The description for each project shall include the following:

- a. Client and reference contact information
- b. Project location, route, and description including project purpose and need
- c. Standards used for Drainage Analysis and Design
- d. Firm's role on the project (prime or subconsultant and work performed)
- e. Current staff names involved with the project and roles
- f. Completion date of design

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- g. Firm's design fee
- h. Performance evaluation documentation

## 4. Equipment and Software

The firm should have adequate resources to provide study results or other work products, as required for Advanced Drainage Analysis and Design. The following shall be listed:

- a. Advanced Drainage Analysis and Design software currently owned and used
- b. Specialty hardware used

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<u>SURVEYING</u> – The purpose of this prequalification is to determine if a firm has the <u>capability</u> to survey projects for KYTC. The firm shall submit prequalification document addressing the following requirements:

#### 1. Personal

- a. The firm must demonstrate that the current staff has the knowledge and skills to survey for KYTC. Provide a resume for each individual that should be considered for this category. The firm must have at least one (1) professional land surveyor licensed in Kentucky. Each resume should contain the following:
  - i. Educational history
  - ii. Professional certifications
  - iii. Applicable training courses
  - iv. Applicable skills
  - v. Surveying projects worked on in the last ten years with current or former firm. For each project include:
    - 1. Project location, route, and description
    - 2. Firm name (if other than applicant)
    - 3. Specific responsibility and roles on each project
  - vi. Other projects worked on that may be applicable
- b. If the company uses UAS (Unmanned Aircraft Systems) to survey, then list number of certified UAS pilots, and all certifications that go along with UAS operations. Any use of this technology will follow FAA (Federal Aviation Administration) regulations. Also, list the drone brand(s) and model(s) being used for the surveying.
- c. The company shall provide its firm's Kentucky State Board Professional Land Surveyors' License number.
- 2. Equipment Adequate equipment to provide digital data and computer graphics necessary for modern surveying practices must be available. In this submittal, list all major company assets that are available to complete surveying projects for KYTC. A firm is to make a recommendation to the KYTC Project Manager for the best surveying procedure to use on a per project basis. A firm may use mobile LIDAR for point cloud collection if feasible. The firm will discuss scope with KYTC Project Manager before any work commences.

#### 3. Projects

- a. The firm shall provide a minimum of three (3) projects completed within the last ten (10) years to show that they are capable of surveying projects for KYTC. The information for each project shall include the following:
  - i. If the project was a roadway:
    - 1. Location
    - 2. Route
    - 3. Linear Miles
  - ii. If the project was a site:
    - 1. Location
    - 2. Site
    - 3. Size of site in Acres
  - iii. If the project is out of state:
    - Include the contact information for an individual within that client that was directly responsible for that project.
    - 2. The following is optional:

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- a. Performance evaluation documents
- b. Letters from the agency addressing past performance or other similar documents
- iv. For all surveying projects:
  - 1. Method of surveying
  - 2. Estimated Completion date
  - 3. Brief description of project
  - 4. Company's Role: Prime or Subcontractor
  - 5. Description of Company's work
  - 6. Cost
  - 7. Client

If any other firm is hired to subcontract the installation of monumentation and perform control surveys, it is required that firm be on the KYTC prequalification list.

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<u>PHOTOGRAMMETRY AND RELATED SERVICES</u> – The purpose of this prequalification is to determine if a firm has the <u>capability</u> to conduct photogrammetry and related services for KYTC. The firm shall submit a prequalification document addressing the following requirements:

## 1. Personal

- a. The firm must demonstrate that current staff has the knowledge and skills to provide photogrammetry and related services. Provide a resume for each individual that should be considered for this category. The firm must have at least one (1) certified photogrammetrist who shall be on staff and be responsible for the coordination of work on projects. Each resume should contain the following:
  - i. Educational history
  - ii. Professional certifications
  - iii. Applicable training courses
  - iv. Applicable skills
  - v. Photogrammetry and related services worked on in the last ten years with current or former firm. For each project include:
    - 1. Project location, route, and description
    - 2. Firm name (if other than applicant)
    - 3. Specific responsibility and roles on each project
  - vi. Other projects worked on that may be applicable
- b. List number of certified pilots (Fixed Wing, and/or Helicopter)
- c. If the company uses UAS to survey, then list number of certified UAS pilots, and all certifications that go along with UAS operations. Any use of this technology must follow FAA regulations. Also, list the drone brand(s) and model(s) being used.

### 2. Equipment

a. A firm shall have the necessary equipment to produce photographic mapping in accordance with current Cabinet CADD standards and format. In this submittal, list all major company assets that are available to complete photogrammetry projects for KYTC. A firm is to make a recommendation to the KYTC Project Manager for the best mapping procedure to use on a per project basis. A firm may use mobile LIDAR for point cloud collection if feasible. The firm will discuss the scope with KYTC Project Manager before any work commences.

#### 3. Projects

- a. The firm shall provide a minimum of three (3) projects completed within the last ten (10) years to show that they have the capability of conducting photogrammetry and related services for KYTC. The information for each project shall include the following:
  - i. If the project was a roadway:
    - 1. Location
    - 2. Route
    - 3. Linear Miles
  - ii. If the project was a site:
    - 1. Location
    - 2. Site
    - 3. Size of site in Acres

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- iii. If the project is out of state:
  - 1. Include the contact information for an individual within that client that was directly responsible for that project.
  - 2. The following is optional:
    - a. Performance evaluation documents
    - Letters from the agency addressing past performance or other similar documents.
- iv. For all projects:
  - 1. Method
  - 2. Estimated Completion date
  - 3. Brief description of project
  - 4. Company's Role: Prime or Subcontractor
  - 5. Description of Company's work
  - 6. Cost
  - 7. Client

Note: If another firm is hired to subcontract the installation of monumentation and perform control surveys for the photogrammetry process, that firm is required to be on the KYTC prequalification list for Surveying.

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ADVANCED TRAFFIC ENGINEERING DESIGN AND MODELING - The purpose of this prequalification is to determine if a firm has the capability to perform advanced traffic engineering analysis for roadway design projects, including microsimulation and corridor signal analysis. The firm shall submit a prequalification document addressing the following requirements:

- KYTC Basic Traffic Engineering Design Course: At least one (1) member of the firm must have attended the KYTC Basic Traffic Engineering Design course. Provide documentation for all staff that attended the course.
- The firm must have at least one (1) full-time staff member registered as a Professional Traffic Operations Engineer (PTOE). List the name(s) of individuals and date of certification.
- 3. Demonstrate staff experience in all of the following categories. Include a resume for each staff person that includes their specific training and role in applicable projects. There should be at least two (2) projects represented for each category. Each applicable staff person should have a minimum of four (4) years of experience in traffic engineering.
  - a. Traffic Operations Analysis
    - 1. Roadway capacity and traffic flow analysis
      - a. LOS, capacity, speed, travel time, throughput
    - 2. Intersection analysis (signalized, unsignalized, roundabout)
      - a. Delay, queue length
    - 3. Freeway operations
      - a. Merge, diverge, weave analysis, speed differential
  - b. Access Management
    - 1. New alignment
    - 2. Retrofit condition
  - c. Traffic Control Devices
    - 1. Traffic signing
    - 2. Signal progression
  - d. Traffic Engineering Studies
- 4. Signal Systems Operations:
  - Provide a resume for each staff member that has knowledge and experience in the design of traffic signal systems.
  - b. List and describe projects in which staff applied signal system design concepts.
  - c. Identify software owned by the firm and staff that has experience in applying that software for developing signal timing plans for progression.
  - d. Optionally, include experience in the operation, retiming, and maintenance of signal systems.
- 5. **Microsimulation Modeling:** A listing of preferred microsimulation software can be found on Highway Design's webpage under Resources » Software and Support. List microsimulation software packages owned by the firm.

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- a. Provide a resume for each staff member that has knowledge and experience in microsimulation.
- Include training and years of experience in using each software. Demonstrate staff member's proficiency in developing, calibrating, and using microsimulation models.

- c. List at least two (2) projects that current staff was involved in which microsimulation was used in the development of a highway design.
- d. Experience current staff had on projects with another firm or agency is acceptable. Include how the model was used to make project decisions and how it was used for public involvement (when applicable).

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#### **VALUE ENGINEERING**

The purpose of this prequalification is to determine if a firm has the capability to perform value engineering analysis for roadway and bridge design projects. The firm shall submit a stand-alone prequalification document or a distinct, separate section of a prequalification document addressing the following requirements:

#### 1. Staffing

SAVE Certification: At least one member of the firm shall have attained the accreditation of Certified Value Specialist (CVS) through the SAVE International organization. List the name(s) of individuals and date of certification.

## 2. Projects Completed by Firm

Demonstrate staff experience in leading/conducting value engineering studies for transportation projects. Include a resume for each CVS who may lead transportation studies. Include example projects with demonstrative adopted recommendations.

## 3. Personnel

Include resumes of staff with CVS certification who will lead value engineering studies. Optionally, the firm may supplement their application with resumes of other staff who are transportation subject matter experts in areas such as roadway design, traffic engineering, constructability, etc. and are available to serve on value engineering studies.

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## **E-PLAN ROOM**

The purpose of this prequalification is to determine if a firm has the capability to create and/or maintain an electronic web-based engineering content management system (ePlan Room) with reproduction and distribution services of engineering content.

## I. Firm Experience

The firm shall demonstrate the ability to host a web-based interface for engineering content and provide a mechanism where KYTC clients can go online to view, download, and order hard copies of project content and electronic images, engineering data sets, geometric alignment information, three-dimensional terrain model content and other information pertaining to KYTC construction projects. The company should have the following relevant experience:

- A. Customized cloud based distribution systems
- B. Document and Planroom Management
- C. eComm Information Management
- D. Software and Database Development
- E. Cyber Security and Networking Firewall Management
- F. Printing software, file handling, and file conversion software
- G. High speed color and monochrome printing, scanning, and CD services

## II. Equipment and Software

- A. The firm should have adequate resources to create, develop, and maintain an electronic web-based engineering content management system for an average type of project and to a format specified by in KYTC's current standards. The following shall be listed:
  - 1. Secure file transfer method to exchange files to and from KYTC
  - 2. Abide by KYTC Hard Copy Reproductive Standards
  - 3. Web Based Ordering and eFile System

#### III. Staffing

- A. The firm must demonstrate that current staff has the knowledge and skills to provide a web-based engineering content management system as described above. Provide a resume for each individual that should be considered for this category. Each individual resume should contain the following:
  - 1. Relevant projects completed
  - 2. Educational history
  - 3. Professional certifications
  - 4. Applicable training courses
  - 5. Applicable skills
  - 6. Web-based engineering content management system projects worked on in the last ten (10) years with current or former firm
  - 7. Other projects worked on that may be applicable
- B. Contact information (name, email, phone number) for a person in your firm to answer questions about the application.
- C. The firm must have staffing adequate to have phone accessibility for file revisions or order placement from 8:00 AM to 5:00 PM EST, Monday through Friday, excluding approved holidays.

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### Utility Design: Water and Sewer Level 1

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of **water and sewer** utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Gravity distribution sanitary sewer main
  - b. Pressurized distribution water main
  - c. Structures (manholes, valves, valve boxes, basin, retrained joints, thrust blocks)
  - d. Water/Wastewater property service line
- 2. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may include work with another firm or agency.
- The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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### Utility Design: Water and Sewer Level 2

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of **water and sewer** utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- 1. The firm must be prequalified for Utility Design: Water and Sewer Level 1.
- 2. The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Gravity transmission sanitary sewer main
  - b. Force main sanitary sewer
  - c. Pressurized transmission water main
  - d. Transmission structure (manhole, box, basin) valve, and fitting
  - e. Pump/lift station
- 3. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may include work with another firm or agency.
- 4. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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### **Utility Design: Communication**

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of communication utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Fiber optic cable
  - b. Coaxial cable
  - c. Copper cable
  - d. Property service line
  - e. Conduit and structure
  - f. Overhead installation
  - g. Underground installation
- 2. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, construction inspector, etc.) Experience for staff may be include work with another firm or agency.
- The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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#### Utility Design: Electric Level 1

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of **electric** utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Distribution facility: Single-phase, Three (3)-phase
  - b. Overhead distribution facility
  - c. Underground distribution facility including direct bury, conduit and structure
  - d. Overhead and underground property service line
- 2. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may be include work with another firm or agency.
- 3. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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### Utility Design: Electric Level 2

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of **electric** utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- 1. The firm must be prequalified under Utility Design: Electric Level 1.
- 2. The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Overhead transmission facility (69kV and up)
  - b. Underground transmission facility (69kV and up) including direct bury, conduit and structure
  - c. Overhead engineered steel pole and tower
- 3. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may be include work with another firm or agency.
- 4. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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## Utility Design: Gas Level 1

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of gas utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Distribution natural gas facility
  - b. Natural gas property service line
  - c. Distribution regulation valve, fitting, and connection
- 2. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may be include work with another firm or agency.
- 3. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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## Utility Design: Gas Level 2

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of gas utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- 1. The firm must be prequalified under Utility Design: Gas Level 1.
- 2. The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Transmission natural gas facility
  - b. Transmission regulation valve, fitting, and connection
- 3. The firm shall provide a one (1) page biography of active staff that will used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may be include work with another firm or agency.
- 4. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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## Utility Design: Petroleum

The purpose of this prequalification is to determine if a firm has the capability to perform engineering design for the relocation of **petroleum** utilities to accommodate transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- The firm shall submit two (2) or three (3) projects that they have led the design for each of the below design elements. There shall be a full description of the work and a listing of applicable active employees with their role in the project. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Petroleum facility
  - b. Jet fuel facility
  - c. Pump station
  - d. Regulation valve, connection, and fitting
- 2. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. It shall have at least one (1) Professional Engineer licensed in Kentucky with qualifying experience. The biography should list relevant training and experience. Experience should include pertinent utility projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may be include work with another firm or agency.
- 3. The firm shall demonstrate knowledge on use of utility company standards and requirements. It shall also demonstrate an understanding of easement width, description, and clearance requirements for the specified utility type.

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#### **Utility Preconstruction Coordination**

The purpose of this prequalification is to determine if a firm has the capability to be an agent of the Kentucky Transportation Cabinet in conducting utility coordination through the project development process inclusive of early utility involvement, an emphasis on utility conflict avoidance or minimization, and finally the coordination of remaining conflicts with utility relocations for the accommodation of transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- 1. The firm shall submit at least two (2) projects that they have coordinated and managed the utility coordination process with emphasis on effective practices such as early coordination, utility conflict management, impact avoidance measures, or strategic utility investigation approaches as well as the management of utility relocations. The examples must be specific to the following utility company types. There shall be a full description of the utility facilities coordinated, experiences, challenges encountered, approaches used within Preliminary and Final Design Phases, and a listing of applicable active employees with their role in the project denoted. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. At least two (2) municipally owned utilities
  - b. At least two (2) privately owned utility companies
- 2. The firm shall document understanding and acceptance of the following activities. There shall be a brief description of experience, a statement of capacity to fulfill the activities, and a listing of applicable active employees with their role. These statements shall be limited to less than two (2) pages and include experiences complying with regulations, statutes, policies and processes.
  - Federal utility accommodation and relocation policies, rules, and regulations
  - b. State statute on utility accommodation and relocation in public right of way
  - c. Kentucky Transportation Cabinet accommodation and relocation policies
  - d. Design management
- 3. The firm shall provide a one (1) page biography of active staff to be used for KYTC initiated-projects. The biography should list relevant training, certifications, and experience. Experience should include utility coordination or relocation projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may include work with another firm or agency.
- The firm shall have at least one (1) active staff member explicitly identified to lead the utility coordination effort. This utility coordinator shall be dedicated to work on

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KYTC projects and possess any available Kentucky Utility Coordination Training Certification, as developed and approved by the Kentucky Transportation Cabinet (KYTC). This staff member must have attended and passed the Utility Coordination Training course with a minimum exam score of 70 percent within 90 days of training availability. Proof of valid and current certification must be provided with the application.

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## **Utility Construction Inspection**

The purpose of this prequalification is to determine if a firm has the capability to be an agent of the Kentucky Transportation Cabinet inspecting the construction of utility relocations for the accommodation of transportation project construction. The firm shall submit a prequalification document addressing the following requirements:

- 1. The firm shall submit at least two (2) projects that they have inspected the construction of two (2) or more of the following utility facility types. The intent of this prequalification is to provide inspection services for general compliance and transportation project clearance for multiple utilities on a roadway project, which will allow transportation project construction to proceed. It is not intended to be a quality control inspection of individual utility relocations on behalf of the respective utility companies. The firm shall prove experience inspecting both overhead and underground utility construction inspection. There shall be a full description of the facilities inspected, experience, challenges encountered, and a listing of applicable active employees with their role in the project denoted. Each project should note whether the firm was the prime consultant or a sub consultant.
  - a. Water & Sewer
  - b. Communication
  - c. Electric
  - d. Gas
  - e. Petroleum
- The firm shall document understanding and acceptance of the following activities. There shall be a brief description of experience, a statement of capacity to fulfill the activities, and a listing of applicable active employees with their role.
  - a. Utility construction management
  - b. Utility construction inspection
  - c. Utility company design and construction standards
- 3. The firm shall provide a one (1) page biography of active staff that will be used for KYTC initiated-projects. The biography should list relevant training and experience. Experience should include utility relocation projects only, the years the work was completed, and the individual's role in each project (i.e. project manager, designer, etc.) Experience for staff may include work with another firm or agency.
- 4. The firm shall have at least one (1) active staff member explicitly identified to lead the utility construction inspection effort. This utility construction inspector shall be dedicated to work on KYTC projects and possess any available Kentucky Utility Coordination Training Certification, as developed and approved by the Kentucky Transportation Cabinet (KYTC). This staff member must have attended and passed the Utility Coordination Training course with a minimum exam score of 70 percent within 90 days of training availability. Proof of valid and current certification must be provided with the application.

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# Division of Maintenance - Bridge Maintenance Branch (502-564-4556)

## **IN-DEPTH STRUCTURE INSPECTION**

To be pre-qualified for in-depth inspection, the consultant must meet the following requirements:

- Demonstrate experience with performing inspections for NBIS purposes, or demonstrate an understanding of NBIS requirements for such inspections by demonstrating knowledge of the current edition of FHWA Bridge Inspector's Reference Manual (BIRM), the current edition of the AASHTO Manual for Bridge Evaluation, the current edition of the AASHTO Manual for Bridge Element Inspection and the Recording and Coding guide for Structural Inventory and Appraisal of the Nations Bridges; and
- Demonstrate an understanding of the access and traffic control requirements of conducting such inspections by providing a narrative describing what types of access equipment might be required and how traffic control would be handled (which should identify whether these can be provided in house or obtained through other means)
- Have adequate staff, who meet minimum requirements for qualification for Team Leader or Program Manager as set forth in National Bridge Inspection Standards (23 CFR 650 C), to be present in each area of operation during all phases of inspection and condition reporting. (A copy of certificate of successful completion of National Highway Institute course 130055 "Safety Inspection of In-service Bridges" will be required for each Team Leader for inspection).
- Have adequate inspection staff trained for element level condition reporting in AASHTOWARE Bridge Management (BrM) software used by KYTC; and
- Have available computer hardware for installation of KYTC's BrM software.
- Have adequate staff, meeting team leader qualifications under NBIS, to perform inspections within prescribed frequencies described in scope of work.
- Have available trained staff for performing Non Destructive Testing (Dye Penetrate and Magnetic Particle)

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## **UNDERWATER STRUCTURE INSPECTION**

To be prequalified for underwater structure inspection, the consultant must meet the following requirements:

 Meet all the minimum criteria of and be prequalified for In-Depth Structure Inspection; andHave a staff member who is a Kentucky licensed professional engineer and also a certified diver because all underwater inspections are required to be performed by a professional engineer.

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#### **TUNNEL INSPECTION**

To be pre-qualified tunnel inspection, the consultant must meet the following requirements:

- Demonstrate experience with performing inspections for NTIS purposes, or demonstrate an understanding of NTIS requirements for such inspections by demonstrating knowledge of current edition of the Specifications for the National Tunnel Inventory (S.N.T.I.) and the Tunnel Operations, Maintenance, Inspection, and Evaluation Manual (TOMIE) as set forth in 23 CFR 650.5.
- Have adequate staff who meet minimum requirements for qualification for Team Leader or Program Managers as set forth in the National Tunnel Inspection Standards (23 CFR 650.5), (A copy of certificate of successful completion of National Highway Institute course 130110 "Tunnel Safety Inspection" will be required for each Team Leader for inspection).
- Have all inspection staff trained for element level condition reporting.
- Have adequate staff, meeting Team Leader qualifications under NTIS, to perform inspections within prescribed frequencies described in scope of work.
- Have adequate staff to perform inspections of specialized complex tunnel systems, such as: ventilation, mechanical, electrical and fire protection systems.

(ADDED 1/17)

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# Division of Maintenance – Permits Branch (502-564-4556)

## LANDSCAPING ARBORICULTURE SERVICES

To be pre-qualified in Landscaping Arboriculture Services, firms must meet the following requirements:

#### Experience:

The firm must demonstrate knowledge and prior experience with developing vegetation management plans. The firm must demonstrate a history of providing expertise for complex arboriculture issues. The firm must demonstrate a history of performing arboriculture services in accordance with industry standards as defined by the International Society of Arboriculture, American Society of Consulting Arborists, and all federal, state, and local regulations. The firm must have the ability to perform arm's length field inspections. The firm must be capable of submitting pdf files of typed written reports, spreadsheets, and scaled drawings. The firm must be capable of recording and submitting detailed vegetation inventories, which must include GPS locations and digital photographs of individual plants and trees.

Firms that have not previously submitted accepted vegetation plans to the Department of Highways may be required to submit sample vegetation plans developed by the firm or arborists employed by the firm.

#### Staffing:

Include resumes for each key individual indicating their specific training, experience, related certifications, and applicable past projects. Additionally, the firm must have at least one (1) employee that holds current status as an International Society of Arboriculture (ISA) Certified Arborist at all times throughout the period of prequalification. Submit proof of certification for each individual that holds ISA Certification.

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# Division of Planning (502-564-7183)

## CONCEPTUAL TRANSPORTATION PLANNING SERVICES

A firm shall provide evidence to the Kentucky Transportation Cabinet of:

- (1) knowledge of acceptable transportation planning practices;
- (2) prior experience in the last ten years in transportation planning activities to include:
  - collection or acquisition, processing, and presentation of transportationrelated data; and
  - · analysis of transportation-related data; and
  - · public involvement; and
  - financial analysis to identify and evaluate funding priorities and options for proposed improvements.
- (3) at least one (1) staff member who is certified by the American Institute of Certified Planners (AICP) OR one (1) staff member who is a licensed professional engineer.

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the project should be identified and their roles should be clearly explained.

Prequalification in Conceptual Planning Services does not permit a firm to offer engineering services unless those services are offered by an engineer who is a licensed professional engineer in Kentucky.

Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project.

In addition, a minimum of one (1) report by the firm shall be submitted showing evidence of the requirements in Item 2. The firm shall provide a listing of all equipment available for the development of product deliverables; including hardware and software, and demonstrate the firm's knowledge and previous use of data collection, mapping and/or other equipment and programs, as needed.

(ADDED 1/20)

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#### TRANSPORTATION PLANNING ENGINEERING

A firm shall provide evidence to the Kentucky Transportation Cabinet of:

- (1) knowledge of acceptable transportation planning practices; and
- (2) prior experience in the last ten years in transportation planning activities to include:
  - collection or acquisition, processing, and presentation of transportationrelated data;
  - · analysis of transportation-related data;
  - · traffic forecasting;
  - development of a draft purpose and need statement;
  - · identification of transportation deficiencies and needs;
  - development and evaluation of improvement concepts to meet identified needs;
  - preparation of cost estimates for proposed improvements;
  - selection and scheduling of recommended improvements;
  - public involvement, including Local Officials/Stakeholders and public engagement and outreach; and
  - financial analysis to identify and evaluate funding priorities and options for proposed improvements.

(3) at least two (2) staff members who are licensed professional engineers OR one (1) staff member who is a licensed professional engineer AND one (1) staff member who is certified by the American Institute of Certified Planners (AICP)

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the project should be identified and their roles should be clearly explained.

Prequalification in Transportation Planning Engineering Services does not permit a firm to offer engineering services unless those services are offered by an engineer who is a licensed professional engineer in Kentucky.

Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project.

In addition, a minimum of one (1) report by the firm shall be submitted showing evidence of the requirements in Item 2. The firm shall provide a listing of all equipment available for the development of product deliverables; including hardware and software, and demonstrate the firm's knowledge and previous use of data collection, mapping and/or other equipment and programs, as needed.

(REVISED 12/19)

### ADVANCED TRANSPORTATION PLANNING ENGINEERING

A firm shall provide evidence to the Kentucky Transportation Cabinet of:

- (1) knowledge of acceptable transportation planning practices; and
- (2) prior experience in the last ten years in the following; and:
  - (a) multimodal transportation planning at the project and systems level, to include:
    - collection or acquisition, processing, and presentation of transportationrelated data;
    - forecasts of traffic and/or other transportation-related data;
    - · analysis of transportation-related data;
    - development of a draft purpose and need statement;
    - · identification of transportation deficiencies and needs;
    - development and evaluation of improvement concepts to meet identified needs;
    - preparation of cost estimates for improvements;
    - · selection and scheduling of recommended improvements; and
    - public involvement, including Local Officials/Stakeholders and public engagement and outreach.
  - (b) economic analysis to evaluate the economic justification of proposed improvements, with emphasis on identifying and comparing all costs and benefits, including:
    - · facility management and maintenance costs and benefits;
    - · user costs and benefits;
    - social and environmental costs and benefits due to business transfers and the generation of new business, including land use changes;
    - as well as subsequent impacts developed through econometric modeling or other economic tools, as appropriate; and
  - (c) financial analysis to identify and evaluate all possible funding options to determine the financial feasibility of proposed improvements.
- (3) at least two (2) staff members who are licensed professional engineers OR one (1) staff member who is a licensed professional engineer AND one (1) staff member who is certified by the American Institute of Certified Planners (AICP)

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the project should be identified and their roles should be clearly explained.

Prequalification in Advanced Transportation Planning Engineering Services does not permit a firm to offer engineering services unless those services are offered by an engineer who is a licensed professional engineer in Kentucky.

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Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project.

In addition, a minimum of one (1) report prepared by the firm shall be submitted showing evidence of the requirements listed in Item 2. If a firm does not have the required experience in economic analysis, they may acquire it through an outside source. In this case, the experience of the outside source must be documented, along with a sample report showing evidence of the required experience. A brief explanation of the anticipated contractual arrangements between the firm and the source of the econometric analysis experience should be documented.

The firm shall provide a listing of all equipment available for the development of product deliverables, including hardware and software, and document or demonstrate the firm's knowledge and previous use of data collection, mapping, and/or other equipment and programs, as needed.

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ROAD CENTERLINE DATA COLLECTION - A firm needs to demonstrate its ability to utilize Global Positioning System (GPS) receivers and aerial orthoimagery to create geospatial polylines and points. The firm must demonstrate proficiency of performing both of these methods and determine if a firm has the ability to collect geospatial transportation features for KYTC. The firm shall submit evidence of its ability to meet the following requirements:

## 1. GPS Collection and Processing

- The firm shall provide a listing of the specific equipment and software in its possession that would be used to collect and process GPS data.
  - The GPS receiver(s) must be certified by the manufacturer to have the capability of obtaining sub-meter horizontal accuracy after post-processing or real-time correction.
  - The software must be compatible with the GPS equipment and capable of generating polyline and point features in shapefile or file geodatabase format.
- The firm shall provide a narrative that proves its ability to repeatedly satisfy KYTC's horizontal accuracy standard of 0.5 to 2 meter relative positional error at the 95% confidence level.

## 2. Aerial Orthoimagery Digitizing

The firm shall provide a listing of the specific geospatial software in its possession that would be used to digitize polyline and point features over orthoimagery basemaps.

## 3. Personnel

The firm shall demonstrate that current staff members have the knowledge and skills to provide these services for KYTC. Resumes must be provided for each individual that could potentially perform work in this category. Each individual's resume must contain the following:

- Educational history
- Applicable professional certifications
- o Applicable training received
- o Applicable skills
- Related work experience

### 4. Related Projects

The firm shall provide a minimum of three (3) related projects completed within the last five years that demonstrate its capability to provide these services for KYTC. There must be a minimum of one (1) project utilizing each of the aforementioned collection techniques to prove competency for both methods. The description of each project must include the following:

- Client name
- Contract amount
- Location of the features collected
- Type and number of features collected
- o Equipment and software used
- Procedures for collecting features, including Quality Assurance and Quality Control measures
- o Participating personnel

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### TRAFFIC DATA COLLECTION

A firm shall provide evidence of:

- 1. the firm's knowledge of acceptable traffic data collection practices.
- a listing of the firm's current staff members and their prior experience collecting traffic data.
- a listing of the firm's previous completed projects in which they collected traffic data
- 4. a listing of all equipment used for traffic data collection owned by the firm.

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the traffic data collection should be identified and their roles should be clearly explained.

Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project. The firm shall provide a listing of all equipment available for the development of product deliverables; including hardware and software, and demonstrate the firm's knowledge and previous use of data collection, mapping, and/or other equipment and programs, as needed.

Traffic data includes Volume, Axle Classification, Speed and Length Data. It is to be collected according to the guidelines set forth in the current edition of the Federal Highway Administration's (FHWA) Traffic Monitoring Guide (TMG). Equipment used by the Kentucky Transportation Cabinet (KYTC), Division of Planning, is the Peek ADR Traffic Data Recorders.

Data is to be provided to KYTC in the following formats:

- ADR binary files (if Peek ADR Traffic Data Recorders are used);
- · Peek's Daily; and

## **Classification Data**

Axle classification data is to be collected using FHWA Scheme "F" 13 plus 2 bins are as follows:

- Motorcycles
- Passenger Cars All sedans, coupes and station wagons
- Other Two (2)-Axle, Four (4)-Tire Single Unit Vehicles excluding passenger cars.
- Buses buses with two (2) axles and six (6) tires or three (3) or more axles
- Two (2)-Axle, Six (6)-Tire Single Unit Trucks
- Three (3)-Axle Single Unit Trucks
- Four (4) or More Axle Single Unit Trucks
- Four (4) or Less Axle Single Trailer Trucks
- Five (5)-Axle Single Trailer Trucks
- Six (6) or More Axle Single Trailer Trucks
- Five (5) or Less Multi-Trailer Trucks
- Six (6)-Axle Multi Trailer Trucks
- Seven (7) or More Axle Multi-Trailer Trucks

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- (reserved for future)
- Unknown vehicles

## **Speed Data**

Speed data is to be collected in 13 bins. Bins are as follows:

- <25 MPH</p>
- 25 29 MPH
- 30 34 MPH
- 35 39 MPH
- 40 44 MPH
- 45 -49 MPH
- 50 -54 MPH
- 55 59 MPH
- 60 64 MPH
- 65 69 MPH
- 70 74 MPH
- 75 79 MPH
- >80 MPH

Speed data can be collected at any classification site.

## Length Data

Length data is to be collected in four (4) bins. Bins are as follows:

- <25 Feet</p>
- 25 to 49.9 Feet
- 50 to 54.9 Feet
- >54.9 Feet

Length data can be collected at any classification site.

#### TRAFFIC FORECASTING A firm shall provide evidence to the Cabinet of:

- 1. Knowledge and experience in the development of forecasts for various project phases, and generally accepted traffic forecasting parameters.
- 2. Knowledge and experience with generating DHV, PHF, K-factors, D-factors, truck percentages as well as turn movement development from manual and automatic counts.
- 3. Knowledge and experience in the use of traffic demand models for appropriate forecasting studies.
- Experience in the analysis of outputs from traffic modeling software such as our preferred software, TransCAD and simulation software such as TransModeler (a Caliper product).
- 5. A professional engineer licensed in Kentucky with experience in traffic forecasting as defined herein who will be directly involved with the proposed work.
- 6. Availability of and experience to collect traffic data that may be necessary for the purpose of completing a forecast. Data shall be in a format that is compatible with the Cabinet's existing database.
- 7. Traffic forecasting experience shall include pavement design forecasts, estimation of residual traffic, forecasts for turn lane geometries, bypass studies, interchange justification studies, road user cost analysis for detours, environmental analysis forecasts, and interchange studies.
- 8. Subconsultants shall be prequalified in their proposed work.

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the project should be identified and their roles should be clearly explained.

Signal timing studies, traffic impact studies, project scoping studies, micro-simulation studies, level of service (LOS) analysis, as well as environmental and design work will not be considered as experience for traffic forecasting studies. Any qualifying experience contained in these types of work shall be specifically identified in the request for pregualification.

Qualifying experience should be within the last five (5) years and the work should have been performed for the Kentucky Transportation Cabinet, another state highway agency, the Federal Highway Administration, a metropolitan planning organization, or major local public works agency. KYTC's assessment of staff capabilities and overall performance on previous work known to Cabinet staff, including quality of work and timely completion, will also be considered.

Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project.

In addition, a minimum of one (1) report by the firm shall be submitted showing evidence of the above requirements. The firm shall provide a listing of all equipment available for the development of product deliverables; including hardware and software, and demonstrate the firm's knowledge and previous use of data collection, mapping, and/or other equipment and programs, as needed.

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#### TRAVEL DEMAND AND SIMULATION MODELING

A firm shall provide evidence to the Kentucky Transportation Cabinet of:

- Knowledge and experience in the development of comprehensive regional, county, and community travel demand models.
- Knowledge and experience in the development and analysis of existing and future networks.
- 3. Knowledge and experience in the development and analysis of simulation models for traffic operational studies.
- 4. Knowledge about the current KYTC Microsimulation Guidelines document and the ability to use the software specific seed files provided with the document.
- Availability of and experience with state-of-the-art traffic modeling software such as our preferred software, TransCAD (a Caliper product), with Vissim as the only alternative software option.
- 6. Availability of and experience with state-of-the-art simulation modeling software such as our preferred software, TransModeler (a Caliper product).
- Experience in the development and calibration/validation of traffic demand or simulation models.
- 8. Availability of GIS software and experience with mapping and transportation related applications.
- Ability to collect/acquisition, process, analyze, and present population and socioeconomic travel demand model related data.
- 10. Ability to collect traffic data that may be necessary for the purpose of model calibration. Data shall be in a format that is compatible with the Cabinet's existing database.
- 11. Experience in the use of traffic demand models
  - a) For analysis of existing and future networks;
  - b) For development of traffic operational plans
  - c) For creation of long-range transportation plans
- 12. Sub-consultants shall be pre-qualified in their proposed work.

Information relating to past experience in those areas listed above shall be submitted for the firm's current staff. This information should include applicable education, training, and work experience. The employees in the firm primarily responsible for the project should be identified and their roles should be clearly explained.

Qualifying experience should be within the last five (5) years and the work should have been performed for the Kentucky Transportation Cabinet, another state highway agency, the Federal Highway Administration, a metropolitan planning organization, or major local public works agency. KYTC's assessment of staff capabilities and overall performance on previous work known to Cabinet staff, including quality of work and timely completion, will also be considered.

Projects shown in a firm's experience that are not for the Kentucky Transportation Cabinet shall include the name of an individual directly responsible for the project, and any performance evaluations or other documentation received at the conclusion of the project.

In addition, a minimum of one (1) report by the firm shall be submitted showing evidence of the above requirements. The firm shall provide a listing of all equipment available for the development of product deliverables; including hardware and software, and

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demonstrate the firm's knowledge and previous use of data collection, mapping, and/or other equipment and programs, as needed.

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## PEDESTRIAN & BICYCLE FACILITY PLANNING & DESIGN

A firm shall provide evidence to the Kentucky Transportation Cabinet of:

- 1. Firm Experience: The level of knowledge and experience shall be demonstrated by providing information about projects in all of the categories listed below. It is helpful to include the role of the firm and some detail about pedestrian and bicycle facility planning or design aspect of the project. Also, include experience current staff has had on projects with another firm or agency. For work performed for clients other than the Kentucky Transportation Cabinet, include the contact information of the individual directly responsible for managing the project.
  - a. Master Planning: Creation of a city, county, or regional master plan for bicycle or pedestrian facilities.
  - b. Roadway Project Scoping: Involvement in the process of examining the pedestrian and bicycle needs as part of corridor study screening and final determination on the appropriate pedestrian and bicycle facilities.
  - c. Roadway Project Design: Design of bicycle lanes, shared-use paths, sidewalks and other pedestrian and bicyclist amenities as part of a roadway or highway design project.
  - d. Streetscape Project Planning and Design: Pedestrian design that fits the urban context and includes pedestrian amenities in addition to sidewalks.
  - e. Off-road Project Planning and Design: Planning and design of standalone shareduse paths and other amenities, not included in a roadway project.
  - f. Other Experience: specialized pedestrian and bicycle design such as that in private development or local planning and zoning standards that demonstrates the firm's understanding of pedestrian and bicycle facility planning and design. Performance evaluations from previous work are helpful.
- 2. Staffing: The number of professionals, their direct experience, and their knowledge should be demonstrated as part of the application. The following information is required:
  - a. List all planners, engineers, landscape architects, and other professionals involved in pedestrian and bicycle facility planning and design. Indicate whether full or part time. For each staff member, include the following:
    - i. Name
    - ii. List educational, professional and relevant training credentials.
    - iii. List applicable projects and the staff member's direct role on each project. Projects from a previous company or agency may be applicable.
    - iv. List years of experience in pedestrian and bicycle planning and/or design.
    - v. Other information that demonstrates their knowledge in pedestrian and bicycle facilities.
    - vi. The firm shall have at least one (1) Professional Engineer licensed in KY and that has worked on or supervised a bicycle and pedestrian facility.
- 3. Equipment & Software: List any specialized equipment or software owned by the firm that has been used as part of applicable projects and the staff that has expertise for each.

(REVISED 12/19)

# Division of Right of Way & Utilities (502-564-3210)

### Right of Way Acquisition Services and Relocation Services

The Division Right of Way and Utilities has established the following consultant prequalification criteria for Right of Way Acquisition Services and Relocation Services.

Right of Way Consultants - In order to respond to advertised projects, a firm must submit their request to Professional Services and become pre-qualified by the Division Of Right of Way prior to the response due date. Criteria for being placed on the Cabinet's pre-qualified list of Right of Way Acquisition consultants are as follows:

Firm: A firm shall have a Project Manager, a Level III Relocation Agent, and at least two (2) buyers who are on staff or committed to working exclusively for the firm. One (1) of these buyers must meet the minimum requirements of a Level III Agent. The second buyer may be a Level I, or Trainee.

Project Manager: A firm shall have a Project Manager who is either on staff or committed to working exclusively for that firm. To qualify as Project Manager, the individual must have a minimum of six (6) years of experience in managing complex Right of Way acquisition, relocation, and a general knowledge and understanding of appraising under the laws of eminent domain, with demonstrated management skills. The project manager must also possess a clear understanding of current KYTC Right of Way Policies and Procedures and Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). The Acquisition Branch Manager and Relocation Branch Manager will review all requests for Project Manager Status and a pregualification questionnaire must be completed before approval is given. In addition, three (3) hours of Continuing Education on a Right of Way related topic must be completed prior to start of the questionnaire. The completion certificate of Continuing Education must be presented prior to taking the exam. A firm may have more than one prequalified Project Manager on staff but they shall not perform dual roles on an assigned project; therefore, he/she cannot appraise, acquire, or relocate Right of Way parcels on the same project in which they are managing. The status of a Project Manager will be effective for a two (2) year period. After the two (2) year period, a Project Manager must requalify to have active status.

**Project Manager Trainee:** is an individual who has six (6) years of experience in complex Acquisitions, Relocation and a general knowledge and understanding of appraisals but has no experience in managing complex Right of Way projects. A Project Manager Trainee must work directly under an approved KYTC Project Manager and successfully manage multiple complex projects to be considered for Project Manager status.

Level III Acquisition Agent: is an individual with a minimum of four (4) years of recent experience in buying under the laws of eminent domain and capable of handling multiple complex acquisition issues.

Level II Acquisition Agent: is an individual with a minimum of two (2) years of recent experience in buying under the laws of eminent domain and capable of handling complex acquisition issues.

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Level I Acquisition Agent: is an individual with a minimum of one (1) year of experience in buying under the laws of eminent domain and capable of handling minor acquisitions and non-complex issues.

Acquisition Agent Trainee: is an individual who meets the minimum qualifications but has no experience in acquiring right of way under the laws of eminent domain. To be considered as a trainee, an individual must be a graduate of a college or university with a bachelor's degree. Experience in writing real estate appraisals, Right of Way negotiations, or relocation assistance, all of which must have been under the laws of eminent domain, and work directly under a Project Manager and/ or a Level III Buyer for a period of three (3) years, will substitute for the required education on year-for-year basis.

Relocation Assistance Level III Relocation Agent: is an individual with a minimum of four (4) years of recent experience in Relocation Assistance under the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970, as amended, and capable of handling multiple complex residential and non-residential relocation issues. This includes project management and review of projects where these complex residential and non-residential relocation issues existed.

Level II Relocation Agent: is an individual with a minimum of two (2) years of recent experience in Relocation Assistance under the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970, as amended, and capable of handling complex relocation issues.

**Level I Relocation Agent:** is an individual with a minimum of one (1) year of experience as a Relocation Agent Trainee under the laws of eminent domain and capable of handling minor relocation files and noncomplex issues.

Relocation Agent Trainee: is an individual who has no experience in relocation under the laws of eminent domain and meets the requirements of a Level I Acquisition Agent. To be considered as a trainee, an individual must be a graduate of a college or university with a bachelor's degree. Experience in Right of Way acquisitions, all of which must have been under the laws of eminent domain and work directly under a Project Manager and/ or a Level III Relocation Agent for a period of three (3) years will substitute for the required education on year for year basis.

 When submitting prequalification applications or renewals, provide a detailed resume that satisfies the requirements needed for the position being applied for (Education, years of experience, number of parcels acquired/relocated, type/complexity of parcels relocated, name and item number of project along with time frame).

## Example:

John/Jane Doe 1-1234.00 - approximate start and end date of project 225 total project parcels John/Jane Doe acquired 87 parcels including 47 Appraisals, and 40 MAR's John/Jane Doe relocated 23 parcels including 15 commercial, 5 residential, 3 misc. move

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All Independent Fee Acquisition Buyers or Relocation Assistance Persons must be associated with only one (1) qualified firm in order to be considered for prequalification. A Fee Acquisition and/or Relocation Assistance Person may work as a Sub Consultant for another prequalified firm on a project by project basis upon receiving prior approval from Central Office Right of Way by request from the Consulting Firm who was awarded the project.

For any individual or firm proposed to perform work in any of the above disciplines who is not a direct salaried employee or a subsidiary, there must be a signed letter of intent included in the submission.

If there is any change in staff, the Consultant is to notify KYTC Central Office Right of Way immediately.

**INSURANCE:** Vendors must have Workers' Compensation and Liability Insurance as required by the Division of Professional Services. (For more information, see the *Prequalification Actions* on page 5 above).

## **Continuing Education Requirement**

All Consultant Project Managers, Acquisition Agents and Relocation Agents shall complete three (3) hours of Continuing Education on a Right of Way related topic each year. Completion Certificates shall be submitted to the appropriate Branch Manager by December 31 of each year.

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# Division of Structural Design (502-564-4560)

# SPANS LESS THAN 500 FEET (INCLUDING CULVERT AND RETAINING WALL DESIGN)

A firm must employ a minimum of two (2) full-time (as defined by eligibility to participate in the firm's benefits programs) licensed professional engineers that are directly involved in structural design for the firm. Part-time employees may not be used to address the basic requirements for full-time staff but may be shown as a part of the total staff size.

One (1) of the full-time employees must be a professional engineer licensed in Kentucky. The engineer submitted for prequalification must be directly involved in structural design with the firm. The licensed professional engineer must have experience in structure design as demonstrated by the successful design completion of at least five (5) projects in the last 10 years. Submit a copy of five (5) different sets of bridge, retaining wall, or culvert plans finished in the past 10 years showing the Engineer's name in the title block of the title sheet as the main design engineer for the project. At least two (2) of those sets of plans must show bridge beam design experience. At least one (1) of the plan submittals must show retaining wall experience. It is preferable that one (1) of the plan submittals show culvert design experience.

The second full time employee must be an Engineer in Training (EIT) or, preferably, a registered professional engineer. Submit proof of EIT certification or PE licensure (State of Registration and Registration Number). Submit at least three (3) separate plan sets completed in the past six (6) years with descriptions of significant work completed on the projects. Checking design work for someone else as shown in title blocks may be considered adequate.

#### Required Submittals:

- Resumes for the two (2) required engineers along with proof of licensure or a valid Engineer in Training Certificate.
- 2. Copies (.pdf) of the five (5) different plan sets discussed above for the Professional Engineer Licensed in Kentucky.
- 3. Copies (.pdf) of the three (3) different plan sets discussed above for the second full time employee along with a detailed description of the work that was performed. If the name in the title block designated as the main designer is that of the second employee the detailed description is not needed.
- All additional forms and information required by the Division of Professional Services.

Firms will be required to submit plans every two (2) years for prequalification. If either of the named employees leaves the firm, immediately notify the Division of Professional Services of the change and resubmit an updated application for consideration. Do not submit more than the required number of plan sets.

Plans will preferably be submitted electronically via CD, flash drive, or a link to an FTP site. Electronic Plan sets should be in a .pdf format. Plans can be submitted in hard copy format but that is not preferred.

(REVISED 1/20)

#### SPANS GREATER THAN 500 FEET

A firm will employ a minimum of four (4) full-time (as defined by eligibility to participate in the firm's benefits programs) licensed professional engineers that are directly involved in structural design. Part-time employees may not be used to address those basic requirements for full-time staff but may be shown as a part of the total staff size.

Two (2) of the full-time employees must be professional engineers licensed in Kentucky.

The professional engineers submitted for prequalification must be those that will be directly involved in the design of any spans greater than 500 feet. Some combination (one or more) of the licensed professional engineers responsible for the main span must have experience in structure design as demonstrated by the successful design completion of at least two (2) projects with spans greater than 500 feet in the past 15 years. Submit at least two (2) sets of bridge plans with 500+ foot spans clearly showing the name in the title block of the title sheet as the main span design engineer for the project as one of the four (4) engineers submitted for prequalification. Submit at least two (2) different sets of any other bridge plans showing any reasonably applicable experience for each of the four (4) engineers. This will be required every other year. Please do not submit more than eight (8) sets of bridge plans (two per engineer). Prequalification for Spans Greater than 500 Feet automatically qualifies the firm for prequalification for Spans Less than 500 feet. Alternate justification for complicated structural design experience (in lieu of sufficient experience in 500 foot spans) may be considered on a case-by-case basis. The final determination in review of the relative complexity of the design and its applicability to this prequalification is up to the Division of Structural Design

# Required Submittals:

- 1. Resumes for the four (4) required engineers along with proof of licensure in Kentucky for at least two (2) of the engineers and proof of licensure in another state(s) for the other two (2) engineers.
- Copies (.pdf) of the two (2) different plan sets for spans greater than 500 feet discussed above for the Professional Engineer(s) and copies (.pdf) of the six (6) different plan sets of less complex structures discussed above. There will be a total of eight (8) plan sets submitted (two per engineer) in .pdf format.
- 3. All additional forms and information required by the Division of Professional Services.

Firms will be required to submit plans every two (2) years for prequalification. If any of the named employees leaves the firm, immediately notify the Division of Professional Services of the change and resubmit an updated application for consideration.

(REVISED 1/20)

# Division of Structural Design - Geotechnical Branch (502-564-2374)

Complete up to date criteria for Geotechnical Services can be found in the Geotechnical Guidance Manual - Section GT 902

#### **GEOTECHNICAL DRILLING**

**EXPERIENCE:** The vendor must provide evidence of experience in the last five (5) years performing drilling services for highway projects (roadways and bridges). The evidence shall include projects illustrating this type of experience, with references (agency, project engineer, or consultant) with addresses and phone numbers.

**EQUIPMENT:** The vendor must provide a list of available equipment (drill rigs and accessories) for soil sampling and rock coring. The vendor must have at least one (1) drill rig equipped with an automatic hammer in order to be prequalified.

**PERSONNEL:** Drill crew supervisors must be experienced in the obtaining rock cores for rock cut slope and bridge foundation design, performing rock line soundings, performing standard penetration tests, obtaining thin-walled tube samples, obtaining disturbed soil samples, and installing cased observation wells.

Evidence must be provided that the drill crew supervisors have a minimum of three (3) years' experience in the above-mentioned operations for highway projects (roadways and bridges). A drill crew supervisor is defined as the person on the drill crew field party who is responsible for the drilling operations mentioned above.

**INSURANCE:** Worker's Compensation and Liability Insurance as required by the Division of Professional Services.

#### **APPLICATION REQUIREMENTS:**

- 1. Complete Pages 2 4 of <u>TC 66-209 form</u>. Pages 3 and 4 should reflect equipment and personnel that will be used on Kentucky highway projects. Provide personal history statements for drill crew supervisors included on Page 4.
- 2. Attach proof of above-referenced insurances.

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#### **GEOTECHNICAL ENGINEERING**

#### FIRM REQUIREMENTS:

- A firm permit issued by the Kentucky Board of Licensure for Professional Engineers and Land Surveyors.
- Sufficient geotechnical engineering experience by the firm, as demonstrated by having performed geotechnical engineering on a minimum of three (3) transportation projects (or other projects where related engineering tasks were performed) in the last five (5) years.
- MicroStation CADD software.

#### PERSONNEL REQUIREMENTS:

- At least one (1) Professional Engineer licensed in Kentucky who is an in-house employee of the firm with a minimum of three (3) years of geotechnical engineering experience applicable to the design and/or construction of highway facilities (demonstrated by performing tasks included on Page 3 of the <u>TC 66-210 form</u>). The firm will be required to assign at least one full-time in-house employee meeting these requirements to actively participate in KYTC geotechnical projects in the capacity of Project Manager, Project Engineer, etc.
- At least one (1) Professional Geologist licensed in Kentucky who is an in-house employee of the firm with a minimum of three (3) years' of engineering geology experience applicable to the design and/or construction of highway facilities (demonstrated by performing tasks included on Page 3 of the TC 66-210 form).
- Staff with sufficient experience to perform geotechnical engineering tasks for KYTC, as demonstrated by experience in a minimum of nine (9) of the 12 areas of "conventional" experience included on Page 3 of the <u>TC 66-210 form</u>. (Seismic experience is not required.)
- A minimum of one (1) CADD technician proficient with MicroStation. Professional Engineers or Professional Geologists may not be used to satisfy this requirement.

### **APPLICATION REQUIREMENTS:**

- Complete Page 2 of the <u>TC 66-210 form</u> and <u>provide supplemental detailed project</u> <u>descriptions</u> for a minimum of three (3) of the projects completed by the firm included in the summary.
- Complete Page 3 of the <u>TC 66-210 form</u> and <u>provide resumes of personnel needed</u> to meet the minimum requirements above. All personnel experience need not be with the current employer.
- 3. A firm may subcontract laboratory testing and/or field drilling operations to firms prequalified in the applicable area(s). A firm may also subcontract specialty work in areas not covered by prequalification. All subcontracting is subject to the prior approval of the Division of Professional Services and the Geotechnical Branch.
- 4. For details regarding Licensure and Firm Permits, refer to:
  - Kentucky Board of Licensure for Professional Engineers and Land Surveyors, which can be found at the following website: <a href="http://kyboels.ky.gov">http://kyboels.ky.gov</a>
  - Kentucky Board of Registration for Professional Geologists, which can be found at the following website: <a href="http://bpg.ky.gov/Pages/default.aspx">http://bpg.ky.gov/Pages/default.aspx</a>

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#### **GEOTECHNICAL LABORATORY TESTING**

**LABORATORY REQUIREMENTS:** Accreditation by the AASHTO re:source (formerly AMRL) for the following AASHTO test Methods: R58, T88, T89, T90, T99, T100, T193, T208, and T265. The Geotechnical Branch will verify accreditation on the AASHTO re:source website during the prequalification review.

Management and staff meeting the requirements for AASHTO R18 accreditation and with experience performing all the above-referenced tests.

A loading device with a movable head or base such that it is capable of applying a compressive load up to 60,000 lb. (267 kN), as required for the compaction portion of KM 64-501 (the Kentucky Method for performing the California Bearing Ratio Test).

#### APPLICATION REQUIREMENTS:

- Complete page 2 of the <u>TC 66-211 form</u> and <u>provide resumes of key personnel</u> identified in the laboratory's Quality Manual (e.g. Technical Manager, Supervising Laboratory Technician, and Quality Manager).
- 2. Identify the location(s) of lab(s) to be used on KYTC Projects.
- 3. Provide a description and laboratory location of the above-referenced loading device. Include the make, model, load capacity, etc., and a statement that it meets the requirements above. This device must be located at a laboratory that is accredited for AASHTO T193.
- 4. In addition to the above-referenced test methods, the Geotechnical Branch considers AASHTO re:source accreditation for T216, T296, and T297, and the capacity to perform the Unconfined Compressive Strength of Rock, Slake Durability, and Jar Slake tests to be highly desirable. Although these tests are not required for prequalification, the Geotechnical Branch strongly recommends that labs be accredited for and/or have the ability to perform these tests.
- The Resilient Modulus Test (AASHTO T 307) is optional for prequalification. This
  test is being phased in as the preferred subgrade test as part of the transition to
  the new KYTC Pavement Design Method. All test requirements will be in
  accordance with KYTC design policy. Additional guidance will be forthcoming.
- Although not generally required to be submitted for prequalification, the Geotechnical Branch may request accreditation documents such as Quality Manual, On-Site Assessment Reports, Proficiency Sample Test Results, etc. Please be prepared to provide such documents upon request.
- 7. For detail regarding laboratory accreditation, refer to:
  - AASHTO re:source, which can be found at the following website: <a href="http://aashtoresource.org">http://aashtoresource.org</a>

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# Division of Traffic Operations (502-564-3020)

**TRAFFIC ENGINEERING** - The firm must have a minimum of one (1) licensed professional engineer licensed in Kentucky who can demonstrate experience in the field of traffic engineering. The following is a list of subjects in which a qualified traffic engineer would be knowledgeable:

- · Traffic Flow Theory
- Urban Operations
- · Geometric Design
- Crash Analysis
- Transportation Site Impact Analysis
- Isolated Traffic Signal and Signal System Operations
- Highway Capacity
- · Parking Studies and Characteristics
- Intersection Control (Non-Signalized and Signalized)

Prospective firms shall provide proof of past experience in the subjects identified in the above list. Additionally, they must provide evidence of ownership of traffic engineering software that demonstrates the firm's capabilities relative to this discipline. Firms are encouraged to list training that individuals identified as Traffic Engineers have taken that is relevant to the field of Traffic Engineering.

In an effort to ensure better quality and consistency in traffic impact studies, firms seeking prequalification in Traffic Engineering Services shall be required to enroll and successfully complete a <u>mandatory</u> course offered by the Kentucky Transportation Center (KTC). Consultants wishing to be prequalified in Traffic Engineering Services will have to submit proof that at least one (1) licensed professional engineer, identified by the firm as a Traffic Engineer, has completed the Traffic Impact Study course.

<u>Effective January 1, 2022</u>, consultants will be required to renew their certification in the KTC Traffic Impact Study course every four (4) years in order to maintain their prequalification status in Traffic Engineering Services. Firms will also be required to submit their course completion certificate when submitting a traffic impact study to the Cabinet for review.

This mandatory course is currently offered by the Technology Transfer (T2) Program at the University of Kentucky. This class will be a "virtual" class offering and will be available one (1) week per month throughout each calendar year. There is no minimum class size requirement. Information regarding scheduling for this training course can be obtained by visiting www.kyt2.com or by calling (800) 432-0719 or (859) 421-2567.

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#### **ELECTRICAL ENGINEERING TRAFFIC SIGNALS**

The firm must have a minimum of one (1) professional engineer licensed in Kentucky who can demonstrate experience in the design of traffic signals (span wire and mast-arm). Qualifying experience must be within the last five (5) years. Projects included in the firm's list of experience that were not completed for the Kentucky Transportation Cabinet shall include contact information for an individual from the organization for whom the plans were prepared. Any performance evaluations/documentation received at the conclusion of the project shall also be included.

Firms shall be required to submit traffic signal plans previously designed by the professional engineer on record. Submitted plans and supporting documentation shall include one (1) span-wire design and one (1) mast-arm design (in PDF format). Each one of the plans shall be stamped by the professional engineer on record. Submit only PDFs which pertain to traffic signals of detail sheets, plan view sheets, and sheets stamped by the engineer. Additionally, they must submit a list of employees who will be using SALSA. Please note new users as well as deletions to user list.

The firm is required to have a conference call or a meeting with the Division of Traffic Operations to discuss current requirements for traffic signals in construction and permit projects. This requirement should be completed before the initial paperwork is submitted to Professional Services.

If the firm does not have experience in either span-wire and/or mast-arm design, the firm may submit sample projects to show that they have the ability to perform satisfactory traffic signal design. The firm can contact the Division of Traffic Operations to discuss details of the sample projects before (re)submission to Professional Services. This option may also be utilized if the Division of Traffic Operations deems that the span-wire and/or mast-arm plans initially submitted by the firm are not adequate. The sample designs and documentation shall be turned in with the (re)submittal to Professional Services.

(REVISED 1/20)

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#### **ELECTRICAL ENGINEERING ROADWAY LIGHTING**

A firm must have a minimum of one (1) professional engineer licensed in Kentucky who can demonstrate experience in the design of roadway lighting (conventional and highmast) including, but not limited to: lighting layout, photometric analysis, and voltage drop calculations. Qualifying experience must be within the last five (5) years. Projects included in the firm's list of experience that were not completed for the Kentucky Transportation Cabinet shall include contact information for an individual from the organization for whom the plans were prepared. Any performance evaluations or other documentation received at the conclusion of the project shall also be included.

Firms shall be required to submit roadway lighting plans previously designed by the professional engineer on record. Submitted plans shall include one (1) conventional lighting design and one (1) high-mast lighting design (in PDF format). Each one of the plans shall be stamped by the professional engineer on record. Submit only PDFs which pertain to roadway lighting of detail sheets, plan view sheets, and sheets stamped by the engineer.

The firm is required to have a conference call or a meeting with the Division of Traffic Operations to discuss current requirements for roadway lighting in construction and permit projects. This requirement should be completed before the initial paperwork is submitted to Professional Services.

If the firm does not have experience in either conventional and/or high-mast lighting design, the firm may submit sample projects to show that they have the ability to perform satisfactory lighting design. The firm can contact the Division of Traffic Operations to discuss details of the sample projects before (re)submission to Professional Services. This option may also be utilized if the Division of Traffic Operations deems that the lighting plans initially submitted by the firm are not adequate. The sample designs and documentation shall be turned in with the (re)submittal to Professional Services.

Firms shall verify ownership of the latest available version of AGI32 software by Lighting Analysts Incorporated. Firms will be required to submit documentation for AGI32 software training that the professional engineer registered in Kentucky with demonstrated experience in roadway lighting design has attended a minimum of seven (7) hours of training in AGI32 software in the past, and either the licensed engineer or another member of the firm's technical staff has attended the required AGI32 software training hours (minimum of 7 hours) within five (5) years of the renewal date.

(REVISED 1/20)

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# Division of Traffic Operations Intelligent Transportation Systems (ITS) Branch (502-564-3020)

#### **ITS: Architecture Development**

Concept – Niche service consultant who can take a vision of concept and develop an ITS architecture.

This category of work is defined as the research, planning, design and development of ITS Architectures for multi-state, statewide, regional, corridor, or project planning. A firm petitioning to become prequalified in this area shall demonstrate competence in and be capable of providing the following:

- Identification of key stakeholders and their interrelationships including data collection and analysis;
- · Description of the required activities or functions;
- Description of the interconnections and interdependencies between functions;
- · Definition of a blueprint for the integration of all systems; and
- · Completion of proposed architecture.

#### The firm shall employ:

- A minimum of one (1) professional engineer with a background in transportation and traffic engineering and experienced in the activities associated with the researching, planning, designing, and development of ITS Architectures who maintains the appropriate technology awareness and proficiency;
- Additional professionals with backgrounds in electrical and systems engineering, human factors, public relations, group facilitation, computer science, and systems integration sufficient to perform the contracted services who maintain the appropriate technology awareness and proficiency;
- Additionally, the firm shall have a member of the project team who has completed
  the four USDOT ITS Architecture Use & Maintenance training courses or updated
  equivalents. The firm should own and have used the Turbo Architecture.

(REVISED 1/17)

#### ITS: System Design, Deployment and Integration

**Concept** - Full service consultant who can take a study, concept or design and develop/build an application/project to maturity and continue to operate the system.

A firm petitioning to become prequalified in this area shall demonstrate competence in, and be capable of providing the following technical capacity, necessary engineering and related services in each of the following areas:

- Emergency Technologies
- Project Design
- Systems Engineering Analysis
- Project Management
- · Systems Integration and Communications
- Project Installation
- Project Management
- Project Equipment Procurement
- Software/Development/Modification
- Operations
- Training

### The firm shall employ:

- A minimum of one (1) professional engineer with a background in transportation/traffic engineering and experienced in the activities associated with the development, management and operations of related advanced transportation technologies, and who maintains the appropriate technology awareness and proficiency.
- Additional professionals with backgrounds in electrical and/or systems engineering, human factors, computer science, system communications and systems integration sufficient to perform the contracted services, and who maintain the appropriate technology awareness and proficiency.

The firm must show a capability/understanding of the:

- Problem areas and risk factors and their interrelationships
- · Required activities or functions to complete a design
- National and KYTC design and ITS Standards
- · Integration and development of the system
- Deployment of the technology system
- Additionally, the firm shall have a member of the project team who has completed the four USDOT ITS Architecture Use & Maintenance training courses or updated equivalents.

(REVISED 1/17)

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#### ITS: System Maintenance, Management and Operations

Concepts – Full Service consultant who can Maintain, Manage, and Operate Existing Systems.

This category of work is defined as the management and operation of advanced transportation/technology systems.

A firm petitioning to become prequalified in this area shall demonstrate competence in and be capable of providing the following:

- Actions necessary for the proper functioning of the system and integration new assets as needed (Operations);
- Actions performed on an as-needed basis (Response Maintenance);
- Actions performed on a regularly scheduled basis (Preventative Maintenance);
- Actions invoked to correct a recurring problem (Design and System Modification);
   and
- Resources allocated for the proper functioning of the system (Management).

# The firm shall employ:

- A minimum of one (1) Professional Engineer licensed in Kentucky with a background in transportation and traffic engineering, is experienced in the activities associated with the management and operation of transportation technology/systems, and who maintains the appropriate technology awareness and proficiency;
- Additional professionals with backgrounds in electrical and system engineering, transportation and traffic engineering, human factors, system communications, computer science, and systems integration sufficient to perform the contracted services, and who maintain the appropriate technology awareness and proficiency;
- Additionally, the firm shall have a member of the project team who has completed the four USDOT ITS Architecture Use & Maintenance training courses or updated equivalents.

(REVISED 1/17)

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#### ITS: Technology/System Evaluation

**Concept** - Niche service Consultant who can research and evaluate advanced technology/systems.

This category of work is defined as the independent research and evaluation of advanced transportation technology/systems in accordance with applicable project evaluation guidelines.

A firm petitioning to become prequalified for ITS Technology/System Evaluation shall employ:

- A minimum of one (1) Professional Engineer with a background in transportation and traffic engineering, is experienced in the activities associated with the researching, planning, designing and development of ITS projects and new technologies, and who maintains the appropriate technology awareness and proficiency;
- Additional Professionals with backgrounds in electrical and systems engineering, human factors, transportation planning, group facilitation, system communications, computer science and systems integration sufficient to perform the contracted services, and who maintain appropriate technology awareness and proficiency;
- The firm must have access to and the ability to use tools such as the ITS
  Deployment Analysis System (IDAS) model. Additionally, the firm shall have a
  member of the project team who has completed the four USDOT ITS Architecture
  Use & Maintenance training courses or updated equivalents.

(REVISED 1/17)

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# Office of Transportation Delivery (502-564-7433)

# Transit Technical Studies, Management, and Marketing/Advertising

A firm must reflect experience and/or knowledge (listing current or past projects) in the area of public transportation and/or mass transit operations such as fixed/deviated fixed or demand route systems (rural and urban populations) general public and specialized; technical transit planning, transit advertising/marketing, transit management, planning onboard and intercept surveys, scheduling/modeling; area wide and route planning, transit environmental assessments, transit studies. The firm must demonstrate financial capacity and identify key staff who will work on transit projects.

(REVISED 1/17)

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Kentucky Transportation Cabinet Department of Highways Division of Professional Services

TC 40-17 Rev. Nov 2020

#### CONTRACT MODIFICATION

AGREEMENT NO. OLD CH. NO. AgreementNumber ITEM NO. COUNTY **FUNDING** DOC NO CONTRACT MOD. NO.

CONSULTANT ROAD NAME

ACTIVITY NO.	GENERAL WORK DESCRIPTION	TYPE OF PAYMENT	AMOUNT INCREASE	AMOUNT DECREASE	
1					
This Contract Modification increases the maximum amount payable under this Agreement to \$					
		Totals	\$0	\$0	
	Amount Increase:	\$0			

#### REASON FOR MODIFICATION, WORK DESCRIPTION AND REVISED SCHEDULE FOR MILESTONES:

This contract modification provides for additional project scope along Route in County.

Revised time schedule is as follows:

Joint Inspection Plans DATE % Right of Way Plans DATE % Documents

#### Funding-Out Clause:

Not withstanding any contrary provision of the agreement, each payment obligation of the Cabinet created by the agreement is conditioned upon the availability of funds that are appropriated or allocated for the payment of the services. If such funds are not allocated, or the Legislature fails to authorize the Biennial Highway Construction Plan by the end of any fiscal biennium, this agreement will be automatically suspended by the Cabinet at the end of the period for which funds are available. The Cabinet will notify the consultant upon authorization of the Legislature that the agreement is officially restarted. No penalty shall accrue to the Cabinet in the event this provision is exercised, and the Cabinet shall not be obligated or liable for any future payments due or for any damages as a result of suspension under this section

The Consultant certifies that neither he nor any member of his immediate family having an interest of 10 percent or more in any business entity involved in the performance of this contract contributed more than the amount specified in KRS 121.056(2) to the campaign of the gubernatorial candidate elected in the election last preceding the date of this contract.

Payments shall not be authorized for services rendered after a Government Contract Review Committee disapproval, unless the decision of the Committee is overridden by the Finance and Administration Cabinet or Agency Head, if the Agency has been granted delegation authority by

All provisions of the original agreement and Federal Executive Order 11246 shall apply unless specifically revised by this Contract Modification or prior modifications.

If approved by the Transportation Cabinet, the undersigned consultant agrees to do the work outlined above and to accept as payment in full the basis of payment set forth herein.

Bidder, Offeror, or Contractor Mandatory Representations Compliance with Commonwealth Law
The contractor represents that, pursuant to KRS 45A.485, they and any subcontractor performing work under the contract will be in continuous compliance with the KRS chapters listed below and have revealed to the Commonwealth any violation determinations within the previous five (5) years:

KRS Chapter 136 (Corporation and Utility Taxes) KRS Chapter 139 (Sales and Use Taxes) KRS Chapter 141 (Income Taxes) KRS Chapter 337 (Wages and Hours) KRS Chapter 338 (Occupational Safety and Health of Employees) KRS Chapter 341 (Unemployment Compensation)
KRS Chapter 342 (Workers' Compensation)

## Boycott Provisions

If applicable, the contractor represents that, pursuant to KRS 45A.607, they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. Note: The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472

Prepared by the Division of Professional Services

Click here to enter text.

02/23 Page 1 of 2

**PS-9008** 

Kentucky Transportation Cabinet Department of Highways Division of Professional Services

TC 40-17 Rev. Nov 2020

#### **CONTRACT MODIFICATION**

<u>Lobbying Prohibitions</u>
The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in <u>KRS 11A.236</u> during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to <u>KRS 45A.328</u>, they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

Consultant Info: Consultant Name ConsulantAddress ConsutantCityState	
Approvals:	
ConsultantApproval	
KYTCProjectManager	
PSDirector	
ASHE	
SHEI	
Secretary	

TC 40-2

TEAM KENTUCKY
TRANSPORTATION CABINET

# KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

Rev. 12/2022 Page 1 of 1

CABINET ENGINEERING AND RELATED SERVICES FEE PROPOSAL				
SECTION 1: PROJECT INFORMATION				
DATE: COUNTY:			ITEM #:	
PROJECT:				
DESC:				
SECTION 2: BUDGET INFORMATION				
FEE CONSIDERATIONS  PROPOSED HOURS  NEGOTIATED AVERAGE HOURS  RATE				ESTIMATED COST
				\$ -
				\$ -
				\$ - \$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL PRODUCTION HOLIPS & DAVROLL				\$ -
TOTAL PRODUCTION HOURS & PAYROLL				\$ -
		OVERHEAD	( %)	\$ -
		PROFIT	( %)	\$ -
	С	OST OF MONEY	(%)	\$ -
DIRECT COS	TS			AMOUNT
TOTAL DIRECT COSTS			\$ -	
SUBCONSULTANTS			AMOUNT	
		TOTAL SUBCOI	NCI II TANTO	\$ -
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			TOTAL FEE	ė
			TOTAL FEE	\$ -
*Rounded to the nearest dollar				
FIRM NAME: SIGNED BY:				
	CONSULTANT SIGNATURE TITLE			
CONSULTANT SIGNATURE		TITLE		DATE
CONSULTANT SIGNATURE		TITLE		DATE

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KENTUCKY.		Kentucky	Kentucky Transportation Cabinet	n Cabinet				TC 40-408
	NGINEERING	DIVISION AND ENGINE	Division of Professional Services INGINEERING-RELATED SERV	I services TED SERVICES	Division of Professional Services ENGINEERING AND ENGINEERING-RELATED SERVICES PAY ESTIMATE	ш		06/2014
KYTC Contract Number			Funding		Federal No.	State No.	Item No.	Estimate No.
Concentent Name and Address			Diograf	Intoice Date		T. Wooding	Defeative Date of Notice to Beain Woods	dia Woult
Consultant Ivalie and Address			HIVOR	e Date		Work M	Enecuye Date of Pouce to Begin Work Work May Not Begin Before This Date	giii work This Date
			County/Rout	County/Route/Mile Point			For Work Done	
							Through	
Description of Work	Method of Fee	Total Contract	Total % Prev. Est.	% This Est.	Total %	Previous Earnings	Earnings This Estimate	Total Earnings to Date
	Page 1	00.00				0.00	0.00	0.00
	Page 2	ı				1	1	t
Miscellaneous Information	Totals	-				0.00	0.00	0.00
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		I certify the amou	I certify the amounts in this estimate are accurate.	are accurate.		Less Pred Total	Less Previous Earnings Total This Estimate	0.00
DBE Portion of Estimate		Consultant Signature					•	
		KYTC Project Manager	ger					

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# KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

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	"EX PARTE" DISCLOSURE
PROFESSIONAL EI	NGINEERING AND RELATED SERVICES SELECTION COMMITTEE
SECTION 1: PROJECT INFORMATION	
ITEM#	PROJECT DESCRIPTION
COUNTY	ROUTE
SECTION 2: NO-CONTACT CERTIFICAT	I TION
l,_	, as
	Member, Governor's Pool
	Member, Secretary's Pool
	Member, User Division
Bulletin for Engineering and Related time of this selection committee m meeting or other authorized public r	oncerning the above project with any firms that responded to the Procurement Services for this project from the time of the distribution of the bulletin until the eeting. The sole exception to this being the possible holding of a pre-submittal neeting for this project held under the supervision of the Transportation Cabinet's final Selection interviews as permitted in KRS 45A.800 to KRS 45A.835.
SIGNATURE	DATE
	tion from the above statements, you shall report it immediately to the Director of or other appropriate authority within the Transportation Cabinet
SECTION 3: EQUAL OPPORTUNITY CEI	RTIFICATION
As a member of the Selection Comm	nittee:
I, Commonwealth were given equal	, certify that responding firms in all regions of the opportunity to be selected.
SIGNATURE	DATE
<b>NOTE:</b> You must sign and return th committee members at this selection	is form to the Secretary of the Committee so they may be disclosed to the other on committee meeting.

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# **GENERAL PROVISIONS**

#### I. TERMS OF REFERENCE

- A. The term "Consultant" shall mean, and include, the consulting engineer or the authorized representative.
- B. The term "Engineer" shall mean, and include, the State Highway Engineer or the authorized representative.
- C. The term "Cabinet" shall mean, and include, the Commonwealth of Kentucky, Transportation Cabinet, Department of Highways, or its authorized representative.
- D. The term "Federal Highway Administration" (FHWA) shall mean, and include, the Federal Highway Administrator, United States Department of Transportation, or authorized representative.

#### II. AUTHORITY OF THE ENGINEER

- A. All work under this Agreement shall at all times be subject to the general supervision and direction of the Engineer and shall be subject to his or her review and approval.
- B. The Consultant shall report to the Engineer on a monthly basis and provide Progress Reports, which describe the work preformed on each task. The Consultant shall prepare and present such information, studies, recommendations, and supporting analyses; as may be pertinent and necessary, or as may be requested by the Engineer to enable him or her to pass critical judgment on the features of the work. The Consultant shall make such changes, amendments, or revisions in the detail of the work as may be required by the Engineer. When alternates are being considered, the Engineer shall have the right of selection.
- C. At the request of the Engineer, the Consultant, during the progress of the work, shall furnish such maps, portions of plans, and other information or data in such detail as may be required to enable the Engineer to carry out, or to proceed with, related phases of the project and to enable the Engineer to furnish information to the Consultant which may be needed to proceed with work.
- D. Conferences shall be held at the request of either party and may include visits to the site and inspection of the work at any time. All conferences, inspections, site visits, etc., shall be scheduled at reasonable times and locations.

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- E. The work under this Agreement shall be subject to the approval of the FHWA when the project is to be financed in whole, or in part, with Federal Aid funds. FHWA shall have the right to participate in conferences between the Consultant and the Engineer and to participate in the review of examination of the work in progress.
- F. The Consultant shall maintain a local office in Kentucky, or at a location which shall be acceptable and convenient to the Engineer and FHVVA for the purpose of reviewing the design and progress of this project at any time. Such office shall be staffed on a full-time basis with a competent engineer licensed to practice in the Commonwealth of Kentucky and adequate staff to ensure that the services in this Agreement are fulfilled. The licensed engineer may be furnished by the Consultant or the sub-consultant.
- G. The Consultant Engineering Firm shall be appropriately licensed with the Kentucky State Board of Licensure for Professional Engineers and Land Surveyors.
- H. Compliance with all of the foregoing shall be considered to be within the purview of this Agreement and shall not constitute a basis for additional or extra compensation.

#### III. GENERAL SCOPE OF WORK

- A. The location of this project shall generally be as recommended on the attached project map, but the final location of the alignment will be the result of the studies to be made by the Consultant.
- B. The Consultant shall furnish all engineering and engineering-related services and labor necessary to conduct and complete the work. They shall also furnish all materials, equipment, supplies, and all incidentals except those which are specifically designated in this Agreement to be furnished by the Cabinet.
- C. Upon the direction by the Engineer, the Consultant shall direct inquiries to other agencies of government and to public and private utilities regarding information that may affect the design of this project. As directed by the Engineer, the Consultant shall obtain information pertaining to existing or proposed facilities and obtain all necessary permits.
- D. The Consultant shall perform all phases of work described in this Agreement in conformance with the policies, criteria, and standards of the Cabinet and FHWA in effect on the date of the execution of this Agreement; except as provided in ARTICLE XI, "Extra Work or Fee Adjustment."
- E. During the course of performing the work covered by this Agreement, the Consultant may encounter unusual physical conditions or problems that warrant special design or treatment. The Consultant shall evaluate the problem and furnish the Engineer with his or her analyses and recommendations concerning these conditions.

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- F. Key Personnel The Consultant's work shall be performed and directed by the key personnel identified in the proposal presentations by the Consultant. Any changes in the indicated personnel shall be subject to review and approval by the Engineer.
- G. Progress Reporting The Consultant shall report to the Engineer on a monthly basis and provide written progress reports which describe the work performed on each task. Progress reports shall be delivered to the Engineer concurrently with the monthly invoice. Judgment on whether work of sufficient quality and quantity has been accomplished will be made by the Engineer by comparing the reported percent complete against actual work accomplished.
- H. Ownership of Documents All data collected by the Consultant, and all documents, notes, and reports collected or prepared in connection with these services, shall become the property of the Cabinet; and the Cabinet shall not be restricted in any way in its use of such material. Upon final approval of any document, the original, camera-ready manuscript, including exhibits, shall be furnished to the Engineer in both paper form and electronic form.

#### IV. ITEMS OF WORK

#### A. ALIGNMENT LOCATION STUDIES

- 1. Alignment Location Studies shall consist of conducting investigations, studies, or reconnaissance of an area between the approximately designated termini upon which a determination for the locations of the highway can be made.
- Alignment Location Studies shall include the presentation of feasible alternate locations, including a description of each location presented. The feasible alternates shall be presented on a map drawn to a suitable scale and shall portray the approximate alignment and profile; topographical, geological, and cultural features which may have an influence on geometrics of the highway; and costs of right-of-way, construction, future operation, maintenance, and traffic service. The maps shall be accompanied by a report supplementing the information and comparative estimates of cost based on approximations of the quantities of the major items of construction and right-of-way costs. The estimates of cost for bridges shall be based on the approximate quantities of the items, rather than on the surface area of the roadway.

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#### B. ENVIRONMENTAL STUDIES

#### GENERAL SCOPE OF WORK

- a. The Consultant shall perform, or cause to be performed, those services required for consideration of all social, economic, and environmental effects; as well as mitigation required by the FHWA and/or Cabinet and the required environmental assessments, reports, and other required documentation.
- b. All work performed by Consultants in the environmental phase is governed primarily by the National Environmental Policy Act of 1969; FHWA Final Rule on Environmental Impacts and Related Procedures (23 CFR Part 771) and (49 CFR Part 662); Federal Endangered Species Act of 1973; Clean Water Act of 1977; Department of Transportation Act, Section 4(f); Federal Clean Air Act; and Section 106 of the National Historic Preservation Act.
- c. In order to identify and evaluate all potential impacts which the project will have on the environment, the Consultant may be asked to perform the following studies: an environmental overview to develop viable alternatives in consideration of the potential for social, economic, and environmental impacts; base studies including Terrestrial and Aquatic Ecosystems Analysis, Noise Analysis, Air Quality Analysis, Socioeconomic Impact Analysis, Architectural and Historic Resource Analysis, Archaeological Resource Analysis, and an analysis of Underground Storage Tanks/Hazardous Materials. The Cabinet will furnish the Consultant with a copy of the General Scope of Services for Project Environmental Requirements.
- d. All base studies will be reviewed by the Cabinet, Division of Environmental Analysis. Approved base studies will be incorporated by the Consultant into appropriate environmental document(s). Procedures for review and approval of documents are contained in the Cabinet's <u>General Scope of Services for</u> <u>Project Environmental Requirements</u>.

# 2. ADDITIONAL GUIDANCE

a. Project Schedule - Within ten (10) days after the Notice to Proceed, the Consultant shall provide a schedule of calendar deadlines for environmental documents and approvals, accompanied by an anticipated payoff curve. The Engineer shall review the schedule, modify as necessary, and return it to the Consultant.

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- b. Key Personnel The Consultant's work shall be performed and directed by the key personnel identified in the proposal presentation by the Consultant. Any changes in the indicated personnel shall be subject to review and approval by the Engineer.
- c. Progress Reporting The Consultant shall report to the Engineer on a monthly basis and provide written progress reports which describe the work performed on each task. Progress reports shall be delivered to the Engineer concurrently with the monthly invoice. Judgment on whether work of sufficient quality and quantity has been accomplished will be made by the project manager by comparing the reported percent complete against actual work accomplished.
- d. Correspondence Copies of all written correspondence, including email, between the Consultant and any party pertaining specifically to the environmental study shall be provided to the Engineer for their records within one (1) week of the receipt of mailing of said correspondence.
- e. Special Conditions The Consultant shall completely evaluate all alternatives and endeavor to avoid any involvement with those lands as defined in Section 4(f) of the Department of Transportation Act of 1966. However, if an involvement with Section 4(f) lands is unavoidable, then the required Section 4(f) statement shall be included within the environmental document prepared (to be self-contained to the extent practicable) as provided by 23 CFR 771. Separate negotiations will be conducted for this extra work and a contract modification will be processed.
- f. Ownership of Documents All data collected by the Consultant and all documents, notes, and reports collected or prepared in connection with these environmental services shall become the property of the Cabinet; and the Cabinet shall not be restricted in any way in its use of such material. Upon final approval of the final environmental document; the original, camera-ready manuscript, including exhibits, shall be furnished to the Engineer.
- g. Accuracy of Work The Consultant shall be responsible for the accuracy of his or her work and shall promptly make necessary revisions of corrections resulting from errors and omissions on his or her part without additional compensation. Acceptance of the work by the Engineer will not relieve the Consultant of the responsibility for subsequent correction of any such errors and the clarification of any such errors and the clarification of any ambiguities and the supplying of any omissions.

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- h. Acceptability of Work Acceptability of environmental services performed by the Consultant shall be determined by the Division of Environmental Analysis. Payment will only be made to the contractor upon approval of work by the Division of Environmental Analysis.
- i. Benchmarks, Payments, and Schedules Payments for environmental services shall be made based on adequacy of work received and percentage of completion, utilizing the Division of Environmental Analysis' Criteria for Pay Estimate Approval; copies of which were explained and provided at the Scoping Meeting to the Consultant. The Consultant will prepare a project completion schedule and submit to the Engineer for approval.

#### C. SURVEYS

- Surveys shall be complete with respect to detail and to such degree of
  precision and accuracy as is necessary to develop the plans for the
  design of the project to the usual standards of the Cabinet, to yield the
  data necessary for the computation of the quantities of the several items
  of work embraced in the construction of the project, and to yield the
  physical information necessary for the acquisition of right-of-way.
- 2. The Consultant shall prepare special studies and analysis of the horizontal and vertical alignment so as to establish the most economical and beneficial alignment.
- 3. The alignment shall be established for a minimum distance of approximately 600 meters beyond the termini of this project whenever feasible.
- 4. The Consultant shall meet with the engineers of adjoining Design Sections to coordinate the design and obtain any information necessary to establish the horizontal and vertical alignment, grade, and elevation with adjoining sections.
- 5. When services include the design of a divided multi-lane facility, the Consultant shall make sufficient studies of the topography and other elements of design to determine the feasibility of separate and independent roadways, both horizontally and vertically. When directed by the Engineer, the Consultant shall prepare plans for separate and independent roadways.
- 6. The degree of accuracy for the horizontal and vertical alignment shall be established within the limits of third order accuracy or greater.
- 7. The vertical alignment shall be tied to National Geodetic Survey (NGS) bench marks for elevation; except that for interstate projects, the horizontal and vertical alignments shall be tied to National Geodetic Survey (NGS) stations for positions and elevations.

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- 8. The Cabinet will furnish the Consultant with the most current copy of the Cabinet's <u>Division of Highway Design Guidance Manual</u> and a copy of the Cabinet's <u>Drainage Design Guidance Manual</u>. Said manuals are incorporated herein and made a part hereof as though copied at length herein. The Contractor is bound to follow any and all procedures and/or criteria in said manuals. Failure to utilize proper criteria or procedures in these manuals may, at the Engineer's discretion, result in penalties or payment withholding to the Consultant. The Cabinet will furnish a sample Drainage Folder and sufficient forms, including covers, for the assembly of Drainage Folders. The Cabinet will furnish a copy of the Standard Drawings. The Cabinet will also furnish one (1) copy each of the Cabinet's standard title sheet, first plan sheet, and first cross section sheet.
- After all services contained in this Agreement have been completed, the complete original survey notes shall be furnished to the Cabinet and any notes furnished to the Consultant by the Cabinet shall be returned to the Cabinet.
- Cross section notes shall be in a form that is acceptable to the Cabinet's Division of Highway Design, in accordance with the Cabinet's Instructions for Filling out Cross Section Sheets.
- 11. If the Consultant is to provide aerial surveys and photogrammetry, the Cabinet's <u>Specifications for Aerial Surveys and Mapping by Photogrammetric Methods for Highway Design</u> shall apply. When aerial photography is used in connection with this Agreement, the Consultant shall furnish to the Cabinet the film negatives and one (1) set of contact prints. When stereophotography is used, the auto positive plates and the ground control applicable to them shall be made available to the Cabinet on an indefinite loan basis.

# D. GEOTECHNICAL SERVICES

- 1. The Consultant shall perform drilling and sampling testing analysis in accordance with the Cabinet's <u>Geotechnical Guidance Manual</u>.
- The Consultant shall make necessary geotechnical investigations to provide appropriate recommendations with regard to embankment and structure foundations; cut and embankment slopes; problem areas such as potential slides, subgrade stabilization, and ground modification; and materials to be encountered during construction. Also, it shall include any other related work deemed necessary for the best design of the roadway structures.
- Investigations shall include subsurface explorations necessary to establish the position and extent of rock in excavation areas, and recommendations for treatment of explored areas.
- 4. Investigations shall include the inspection of all drill data, cores, tests, and performance analysis necessary for the Consultant to provide recommendations for structures including, but not limited to, type of foundation, bearing elevations and estimated allowable bearing pressures

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for soil or rock, estimated test pile length and capacity, negative skin friction, material and construction specifications, and consolidation potential. The recommendations shall be in letter form with drill data on subsurface data sheets.

- 5. Investigations shall include the inspection of all drill data, cores, tests, and performance analysis necessary for the Consultant to provide recommendations for retaining walls. The analysis shall include slope stability, bearing capacity, sliding, and overturning. All drill data shall be depicted on retaining wall stability sections that will be incorporated in the roadway plans.
- 6. All data, including cores, shall be clearly indexed, tagged, or marked and then submitted to the Cabinet at a location designated by the Engineer together with log and field book records. The cores shall be boxed in a manner that will permit the Cabinet to store the materials in a retrievable manner.

#### E. PLANS

#### GENERAL

- a. The Engineer will designate the basic premises and criteria for the design. Plans shall be developed to the extent that is practical and feasible in accordance with, or be coordinated to, the current edition of the Cabinet's <u>Standard Specifications for Road and Bridge Construction</u>. Plans for temporary and permanent railroad bridges, when included in this Agreement, shall be designed in accordance with the pertinent specifications of the American Railway Engineering Association, except that to the extent coverage is provided in the Cabinet's <u>Standard Specifications for Road and Bridge Construction</u>; the provisions of the latter with regard to construction, workmanship, and materials shall apply.
- b. The plans shall be designed in accordance with the principles set forth in the current edition of A Policy on Geometric Design of Highways and Streets of the American Association of State Highway and Transportation Officials and in accordance with the Cabinet's Division of Highway Design Guidance Manual and Standard Drawings for roadway design to the extent that such principles are applicable and not in conflict with other specific instructions or requirements of the Engineer.
- c. Plans shall be prepared with respect to detail and mode of presentation in a manner that is in conformance with customary practices of the Cabinet for plans prepared by its own staff. Plans shall be prepared on sheets furnished by the Cabinet. If reproductions are employed, .004 of an inch or greater thickness mylar film shall be used. The Cabinet will not furnish reproduction materials.
- d. The plans shall be prepared with such precision, and in such detail, as to permit the convenient layout in the field for construction and other purposes with the customary degree of

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accuracy. They shall also be of such character as to provide for the production of an accurate estimate of quantities for all pertinent items of work to be performed in the construction of the project.

- e. The scales to be used, lettering, and general delineation of the plans shall be such as to provide readily legible reproductions when the plans are reduced to one-fourth of their original size.
- f. The Consultant shall prepare sketches or preliminary plans with reproductions thereof to be furnished to the Engineer of situations or locations that may require special study or treatment prior to the determination of the final design.
- g. The Consultant shall furnish other pertinent information and data with respect to the plans and design as the Engineer may request.
- h. The Consultant shall make such revisions, changes, or amendments to the plans as the Engineer may require.
- i. The Consultant shall prepare all plans, specifications, and estimates in such form that separate construction contracts can be let in accordance with the approved recommendations of the preliminary studies, and such subsequent decisions as the Engineer may deem appropriate. The Consultant shall prepare an estimate of cost of each of the bid items required by the plans.
- j. All plans, except structure plans, shall be drawn on Polyester drafting film or its equivalent.
- k. If drafting film is used, the film shall be standard plan sheet size and its thickness shall be .004 of an inch or greater.
- I. Plans shall include soil profile, cut, and embankment stability section sheets, in accordance with the Cabinet's <u>Geotechnical</u> Guidance Manual.
- m. Plans shall be subject to review and examination by the Engineer. Such review and examination may be made on the project site.
- n. The front sheet of each separate set of plans shall bear the professional seal and signature of a responsible member of the Consultant's firm.
- o. The original tracings of all sheets comprising the set of plans, together with pertinent reports, drawings, books, notes, studies, memoranda, and other data pertaining to the project including an index of these items and sufficient references for future retrieval of data input and output from machine processed computations, shall be delivered to the Cabinet and shall become the property of the Cabinet.
- p. The Consultant shall submit any special notes and other pertinent information related to the project along with the final plans.

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#### 2. ROADWAY PLANS

- a. Roadway plans shall consist of a title sheet, sheets showing the estimate of quantities, miscellaneous quantities, typical sections, special sections, special details (other than standard details available from the Cabinet's stock), special layout plan and profile and detail cross sections.
- b. All horizontal and vertical scales necessary for any aspect of the project plan development shall be in accordance with scales to be established at the Pre-Design Conference to be held on the project after the Consultant selection.
- c. Because of the limited space in which to show all pertinent soil information (soil profile, cut and embankment stability sections), sheets shall be prepared such that:
  - The scale used for the cut and embankment stability sections will permit the entire section to be plotted on a sheet without the use of match lines. Where possible, more than one section shall be depicted on a sheet.
  - The original soil profile sheets shall be submitted to the Division of Materials by the designer. The ground line elevations, percent grades, P.I. elevations, and length of vertical curves shall be shown, but the finished grade elevations need not be shown.
- d. The Consultant shall show the present and projected Average Daily Traffic (ADT), including the Daily Hourly Volume (DHV), and shall show the directional flow and percent of trucks during the Daily Hourly Volume (DHV) for the mainlines, crossroads, frontage roads, service roads, and blocked roads as furnished by the Engineer. Interchanges shall show the traffic pattern indicating thereon the projected Average Daily Traffic (ADT) and Daily Hourly Volume (DHV) for all movements.

#### 3. STRUCTURE PLANS

- a. The Consultant shall make economic studies, detailed cost estimates and drawings of different and feasible types of structures, and justification for the selection of a particular type and design.
- b. Structure plans shall be developed on a CADD system using mylar film, or its equivalent, with a thickness of .004 of an inch or greater. If photographic reproductions are employed, mylar film or its equivalent shall be used and its thickness shall be .004 of an inch or greater.
- c. Structure plans shall consist of plans for reinforced concrete box culverts, rigid frame culverts, arch culverts, pedestrian tunnels, vehicular tunnels, highway grade separation bridges, railroad

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grade separation bridges, pedestrian bridges, stream crossing bridges, crib walls, retaining walls, and any special structures required by the highway design which are not included as incidental structures in the road plans. Plans for sign structures shall be required only when so stated elsewhere in the Agreement; however, conduit installations for future signing and lighting where necessary must be included in the structure plans and where overhead sign structures and lighting standards or under-bridge lighting must be located on the bridge structures, provisions for the attachment of these items to the bridge structure must be included in the structure plans.

- d. Structure plans shall be designed in accordance with the most current <u>Standard Specifications for Highway Bridges</u> published by the American Association of State Highways Officials, including interim revisions and including modifications to the design specifications, as required by any special type of structure design standards of the American Railroad Engineering Association in effect at the time such design is undertaken; subject however, to the approval of the railroad company involved.
- e. The Cabinet will furnish the Consultant with the most current copy of the Cabinet's <u>Division of Bridge Design Guidance Manual</u> and with copies of Standard Drawings which apply to the work. When required, the Cabinet will furnish a supply of drafting film consisting of 22" x 36" plan sheets preprinted with the standard title block.
- f. Structure plans shall be fully dimensioned and shall include complete construction elevations satisfactory to the Engineer for the constructing of the bridge substructure and superstructure, and these elevations shall include all necessary dead load camber.
- g. Structure plans shall include schedules of bar steel reinforcement. Such schedules shall provide all of the necessary detail required for the fabrication of reinforcement without the necessity of making separate shop drawings for that purpose.
- h. Structure plans involving the use of structural steel shall contain such detail of the structure steel that shop detail drawings can be prepared without additional design being necessary.
- i. When the Consultant has completed the preliminary layout of a bridge structure showing plan elevations, typical cross section, and all pertinent data that shall appear on the first sheet of the completed structure plans, two (2) or more prints as required shall be submitted to the Engineer for review. If the structure survey is made by the Consultant, copies or reproductions of all the structure survey data shall be submitted to the Engineer with the preliminary layout. The Engineer will review this preliminary layout and return one (1) print to the Consultant showing any requested revisions.

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- j. Along with the final detail structure plans, the Consultant shall submit one (1) indexed copy of reproduction of the structure design computations, geometric computations, and quantity computations for the Cabinet's review and permanent file. The copy of the computation submittal shall include sufficient references for future retrieval of data input and output from machine processed computations.
- k. In connection with, and as a part of, the work embraced in the preparation of structure plans, the Consultant shall prepare and furnish to the Cabinet specifications for items of work included in the plans which are not covered by the standard specifications of the Cabinet, and such amendments to, or revisions of, the standard specifications as required to cover properly the work contemplated by the plans. For the design of either unusual or long-span structures, the Consultant shall prepare modifications to the American Association of State Highway Officials' Standard Specifications for the most current copy of the Design of Highway Bridges.
- I. The Consultant shall be required, when bridges spanning navigable waters are included in this Agreement, to furnish the original set of tracings and four (4) sets of prints properly marked in colored ink to accompany the Engineer's application to applicable agencies for permission to build the structure.
- m. When the roadway plans are to be prepared by someone other than the Consultant; the Cabinet and the Consultant shall provide each other with the necessary pertinent information to effect the proper correlation between the roadway plans and the structure plans.
- n. The Cabinet will furnish the Consultant with an adequate supply of the necessary printed form sheets for use in producing the required plans such as data forms, title sheets, and film on which structure plans are to be prepared when required.
- o. When checking of drawings is a part of this Agreement, the Consultant shall check shop drawings submitted by the contractor during the construction phase of the work. The check shall consist of reviewing the shop drawings and recommending any modifications necessary for conformance to the design requirements of the contract plans and specifications. The checking of shop drawings shall be performed in accordance with engineering practices acceptable to the Cabinet. The items reviewed shall include, but are not limited to, design, materials, specifications, material shapes and sizes, connections, and welding procedures. Modifications shall be marked on all of the various copies of the shop drawings submitted and returned with disapproval of the submittal. This process shall continue until all shop drawing submittals have been approved. The Consultant

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shall be responsible for providing a prompt review and response to each of the various submittals of shop drawings for checking.

#### 4. SURFACING PLANS

- a. The Consultant shall provide the Cabinet with all necessary plan and profile sheets including surfacing details; layout or title sheets; typical section sheets; summary sheets including quantities for all mainlines, ramps, connectors, cross roads, service roads, or frontage roads; and all detail sheets that are necessary to complete the surfacing plans.
- b. When required by the Engineer, the Consultant shall prepare complete surfacing plans separate from the grade and drain plans. The plans shall include all features necessary, in accordance with the standard practices of the Cabinet, to provide plans sufficient for surface construction contracts separate from grade and drain construction contracts.

#### LIGHTING PLANS

- a. The Consultant shall prepare plans covering all the necessary lighting of this project, as designated in the "Special Provisions."
- b. These lighting plans shall be prepared in accordance with standard practices and specifications as shown in the most current copy of the <u>American Standard Practice for Roadway Lighting</u> and in accordance with the American Association of State Highway and Transportation Officials policy booklet known as <u>An Information Guide for Lighting Controlled Access Highways</u>.

#### RIGHT-OF-WAY PLANS AND DEED DESCRIPTIONS

- a. Preliminary Right-of-Way Plans One (1) reproducible set for right-of-way plans, so labeled, shall be furnished at the time of the preliminary line and tentative grade inspection.
- b. Final Right-of-Way Plans One (1) reproducible set of final right-of-way plans shall be furnished.
- c. All Right-of-Way plans shall be prepared according to instructions set out in the <u>Division of Highway Design Guidance Manual</u>, revisions thereto, or applicable "Design Memorandums."
- d. Deed Descriptions This Agreement shall include the writing of legal descriptions for right-of-way to be acquired and the right-ofway for the project. Descriptions shall be by metes and bounds or may be developed around a properly or suitably described referenced line such as the centerline of the highway improvement, or in the case of platted property by suitable reference to the platted area, as determined by the Engineer. The Cabinet shall specify the medium at the Pre-Design Conference.

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#### 7. UTILITY PLANS

A separate set of plans may be required to show existing and relocated utilities on the project. Final right-of-way plans shall be sufficient for use as utility plans.

A separate set of reproducible plans shall be provided for the use of the utility section.

#### V. JOINT INSPECTION

#### A. PRELIMINARY LINE AND GRADE INSPECTION

The Consultant shall set all necessary stakes and markings on the mainline, crossroads, and other surveys as required by the Engineer for the preliminary line and grade inspection. When preliminary plans have been completed, a joint field inspection for approval of the alignment and tentative approval of the grade will be made by the Engineer and the Consultant; and if the project is an interstate route, also with FHWA.

#### B. FINAL JOINT INSPECTION (Plans-in-Hand)

When roadway plans and structure plans have been developed to a stage sufficient to conduct a comprehensive field inspection, a final joint inspection will be made and changes requested at that time shall be made by the Consultant without additional compensation; provided they are not beyond the original intent of this Agreement.

# C. REVIEW AND APPROVAL

- 1. Reviews and approval action taken prior to receipt of the final plans will be based on the best information available; and the approval action taken at the time will be given with the understanding that any revisions necessary to provide a satisfactory and properly integrated set of completed plans, specifications, and estimates will be made prior to the granting of final approval of the services to be provided under the purview of the Agreement.
- Changes required in order to provide a satisfactory and properly integrated set of plans, specifications, and estimates because of an oversight on the part of the Consultant should be made without additional compensation.

#### VI. NOTICE TO PROCEED

The Consultant shall not begin work on this project prior to the date of a written Notice to Proceed from the Engineer. Upon receipt of notice to begin work, the Consultant shall

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notify the Engineer in writing of its authorized representative who shall act as project engineer and liaison representative between the Consultant and the Cabinet.

#### VII. NOTICE OF APPROVAL OF PAYMENT

The Consultant shall not submit invoices for payment to the Engineer prior to the date of a written Notice to Bill from the Cabinet. Upon receipt of the Cabinet's letter authorizing the Consultant to submit Engineering and Engineering Related Services Pay Estimates, the Consultant shall notify the Cabinet, in writing, those personnel authorized to sign the Pay Estimates. If, at any time during the life of this contract, the project engineer or authorized representative changes, the Consultant shall immediately notify the Cabinet in writing.

#### VIII. TIME OF COMPLETION

The Consultant shall complete the services contained in this Agreement within the specified times of completion. The time of completion listed herein, either for all services or for each phase of work, shall be construed to begin ten (10) days after the date of the notice from the Engineer to proceed with the work. The allotted time shall not be extended because of any unwarranted or unavoidable delay attributable to the Consultant, but may be extended by the Engineer in the event of a delay attributable to the Engineer, or because of an unavoidable delay caused by an act of nature, war, government, or other conditions beyond the control of the Consultant.

#### IX. PROGRESS REPORTS

Monthly progress reports shall be submitted to the Cabinet by the Consultant on forms to be furnished by the Cabinet. The progress reports shall show the latest status of progress of the various phases and shall be submitted at the end of every calendar month after the initial Notice to Proceed was issued by the Cabinet. Failure of the Consultant to provide said reports may result in a delay in payment.

# X. PAYMENT

- A. The total payment for services contained in this Agreement shall be shown on the face of the Agreement and shall be considered full compensation for work performed or services rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work.
- B. The Consultant shall submit invoices to the Cabinet no more than once a month during the progress of work for partial payment for the work completed to date. These invoices shall represent the value of the partially completed work based on the proportion which its approved percent of completion bears to the total cost or the total estimated cost of the fully completed work.

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Invoices must be reconciled with the progress reports and the percent of completion shown on the invoices shall be limited to the approved percent of completion shown in the Agreement and on the progress reports. The invoices will be checked by the Cabinet and when approved, payment will be made in an amount equal to the value of the completed work less any amounts previously paid, unless otherwise specifically agreed to in the Agreement.

- C. After completion of all services contained in the Agreement and acceptance by the Engineer and after the Cabinet has received all plans, maps, reports, notes, and other related documents required by this Agreement, the Consultant will be paid an amount equal to one hundred percent (100%) of the total Agreement fee, including any adjustments and less any amounts previously paid. When checking of shop drawing services are included in the Agreement, they shall be considered for payment purposes as being entirely separate from design services and shall not affect any payments for design services, including payments of any amounts retained on the design services. Payment for checking of shop plans are to be invoiced to the Division of Bridge Design for payment.
- D. When plan completion or presentation for any single phase of the work has not met the scheduled milestone finish date based on the calendar day time limits outlined in the Pre-Design Conference Minutes and Negotiation Minutes referenced in the "Special Provisions", all invoice approvals and payments will be deferred until that phase of the work has been completed or until after a formal application in writing for extension of contract time has been approved by the Cabinet.

### XI. EXTRA WORK OR FEE ADJUSTMENT

- A. The Cabinet may desire to have the Consultant perform work or render services in connection with this project other than provided by the expressed intent of this Agreement. Such work shall be considered as "Extra Work", subject to a change order, supplemental to this Agreement, setting forth the character and scope thereof and the compensation thereof. Work under such change orders shall not proceed until written authorization has been given by the Engineer.
- B. Should the Engineer find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised; the Consultant shall make such revisions as directed in writing by the Engineer. This work shall be considered as "Extra Work" and shall be paid as such.
- C. "Extra Work" shall be paid for by the Cabinet on the basis of a fixed fee, the amount of which shall be determined by negotiation. The Engineer shall have the right to negotiate alternate methods of payment for "Extra Work" if the Engineer determines that the fixed fee basis is not feasible. If federal funds are to participate in the cost of "Extra Work", the method of payment shall be in accordance with FHWA requirements.
- D. In the event the Engineer and the Consultant are unable to agree upon the amount of payment for "Extra Work", then the amount of such payment shall be determined as set forth in ARTICLE XIII, "DISPUTES", of this Agreement.

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#### XII. ACCURACY OF CONSULTANT'S WORK

- A. The Consultant shall be responsible for the accuracy of all calculations, reports, estimates, and information prepared by either the prime consultant, or subconsultant. The Consultant shall require all sub-consultants to meet all applicable Cabinet requirements and standards. By submission of the calculations, reports, estimates, and information to the Engineer; the Consultant is verifying to the Engineer that all work is accurate and has been checked by the prime consultant or checked by the sub-consultant.
- B. The Consultant shall promptly make necessary revisions or corrections resulting from errors, omissions, or negligent acts without additional compensation. Acceptance of the work by the Engineer will not relieve the Consultant of the responsibility for subsequent correction of any such errors or omissions, or for clarification of any ambiguities.
- C. At any time during construction or during any phase of work performed by others based on data provided by the Consultant, the Consultant shall confer with the Engineer when necessary for the purpose of interpreting the information secured and/or to correct any errors and/or omissions made by him or her. The Consultant shall prepare any plans or data needed to correct his or her errors and/or omissions without added compensation, even though the Consultant may have received final payment. The Consultant shall give immediate attention to these changes to minimize delay.
- D. If any negligent errors, negligent omissions, and/or negligent acts are made by the Consultant in any phase of the work, the correction of which may require additional field or office work; the Consultant will be promptly notified and will be required to perform such additional work as may be necessary to correct these negligent errors, negligent omissions, and/or negligent acts without undue delay and without additional costs to the Cabinet.
- E. The Consultant shall be responsible for any damages incurred as a result of the Consultant's negligent errors, negligent omissions, and/or negligent acts and for any losses or cost to repair or remedy construction as a result of the Consultant's negligent errors, negligent omissions, and/or negligent acts. Acceptance of the work will not relieve the Consultant of the responsibility for subsequent correction of any such negligent errors, negligent omissions, and/or negligent acts or of his or her liability for loss or damage resulting therefrom.
- F. Disputes between the Consultant and Cabinet concerning the responsibility of the Consultant under this section, may be resolved utilizing Alternative Dispute Resolution (ADR) methodologies; to include negotiation between the Engineer and the Consultant, or non-binding mediation.

#### XIII. DISPUTES

- A. Except as otherwise provided in this Agreement; all disputes arising under, or relating to, this Agreement shall be resolved under this clause.
- B. "Claim", used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a

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- sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract.
- C. A claim by the Consultant may be made in writing and specifically stating in detail the relief requested and submitted to the Engineer for a written decision prior to submission of the Final Pay Estimate. A claim by the Cabinet against the Consultant shall be subject to a written decision by the Engineer.
- D. The Engineer's decision shall be final unless the Consultant appeals in writing to the Secretary of Transportation within ten (10) working days of the date of the Engineer's decision.
- E. When a claim by the Consultant is submitted to the Secretary of Transportation, or a claim by the Cabinet is presented to the Consultant, the parties, by mutual consent, may agree to use Alternative Dispute Resolution (ADR) methodologies; to include negotiation between the Engineer and the Consultant, or non-binding mediation.
- F. If the parties do not agree to use alternative means of dispute resolution, the Secretary shall make his final decision in accordance with Subsection XIII (G).
- G. If the parties do not agree to use ADR, the Secretary of Transportation shall decide the claim within thirty (30) days or notify the Consultant when a decision will be made. The Secretary of Transportation's decision shall be final unless determined by a court of competent jurisdiction to be fraudulent, capricious, arbitrary, or so grossly erroneous as to imply bad faith. Any appeals to the court from the Secretary's decision shall be filed in Franklin Circuit Court within ten (10) days of the Secretary's decision.
- H. The Consultant shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under, or relating to, this contract, and comply with any decision of the Engineer.

### XIV. LEGAL RESPONSIBILITIES

- A. The Consultant shall familiarize themselves with, and shall at all times comply with, all federal, state, and local laws, ordinances, and regulations which in any manner affect the services of this Agreement.
- B. The Consultant shall indemnify and save harmless the Commonwealth of Kentucky and all of its officers, agents, and employees from all suits, actions, or claims to the extent they arise from the Consultant's negligent performance of the Scope of Services described in the Agreement or any nature whatsoever incurred in the construction as a result of the negligent design of the project, or any injuries or damages received by any person, persons, or property which suits, actions, claims, injuries, or damages result from the negligence of the Consultant, or any of their sub-consultants, in prosecuting the work under this Agreement.

#### XV. SUBLETTING OR ASSIGNMENT

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- A. The Consultant shall not subcontract more than fifty percent (50%) of the work, based upon dollar value, to be provided under this Agreement unless approved by the Cabinet.
- B. The Consultant shall not attempt to perform any services contained in this Agreement for which he or she was not been pre-qualified by the Cabinet's Consultant Pre-qualification Committee. Any services for which the Consultant has not been pre-qualified by the Cabinet shall be sublet or assigned to a consultant who has been pre-qualified.
- C. The Consultant shall obtain written approval prior to subletting or assigning any services contained in the Agreement. Consent to sublet or assign any part of this Agreement shall not be construed to relieve the Consultant of any responsibility for compliance with the provisions of this Agreement.

### XVI. TERMINATION OF AGREEMENT

- A. The Engineer reserves the right to terminate the Agreement at any time upon a fourteen (14) day written notice to the Consultant.
- B. In the event the Agreement is terminated by the Engineer without fault on the part of the Consultant, the Consultant shall be paid for the work performed, or services rendered; an amount bearing the same ratio to the total Agreement fee as the amount of work completed, or partially completed, and delivered to the Engineer is to the total amount of work provided for herein, as determined by mutual Agreement between the Engineer and the Consultant. The Consultant shall be paid for any negotiated direct costs incurred or for which the Consultant is obligated to make all or partial payment. The Consultant shall be paid a demobilization fee equal to ten percent (10%) of the remaining balance of the contract not to exceed Twenty-Five Thousand Dollars (\$25,000).
- C. In the event the services of the Consultant are terminated by the Engineer for fault on the part of the Consultant, the Consultant shall be paid reasonable value of the work performed on services rendered and delivered and the amount to be paid shall be determined by the Engineer.
- D. Delays grossly affecting the completion of the work within the time specified for completion attributable to, or caused by, one of the parties hereto may be considered as cause for the termination of the Agreement by the other party.
- E. In the event of the death of any member or partner of the Consultant's firm, the surviving members shall complete the work unless otherwise mutually agreed upon by the Engineer and the survivors.
- F. In the event the Consultant shall terminate the Agreement because of gross delays caused by the Engineer, or should the survivors of the deceased member or partner of the Consultant's firm be allowed by the Engineer to terminate this Agreement, the Consultant shall be paid as set forth in Paragraph B.
- G. If the Agreement is terminated prior to completion of the work, as herein before provided, the Consultant shall be released from all obligations that have been agreed upon in the Agreement, except requirements contained in ARTICLE XII,

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"ACCURACY OF CONSULTANT'S WORK", and ARTICLE XIV, "LEGAL RESPONSIBILITIES", of this Agreement.

### XVII. CERTIFICATIONS

### A. SOLICITATION

The Consultant certifies that he or she has neither retained nor employed any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure the Agreement and that he or she has neither paid nor agreed to pay any company or person, other than a bona fide employee working solely for the Consultant, any fee, commission, percent, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach of noncompliance of this certification, the Cabinet shall have the right to terminate this contract immediately without liability or, in its discretion, to deduct from the contract price on consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

### B. SECURITY CLAUSE

The Consultant certifies that he or she shall not, at any time, release or divulge any information concerning the services covered by this Agreement to any person, or any public or private organization except the Engineer or FHWA, without prior approval of the Engineer.

### C. ABILITY

The Consultant certifies that he or she has, or will have, acquired sufficient employees, materials, and equipment to prosecute these services within the time limits as shown in this Agreement prior to the issuance of a Notice to Proceed, and further certifies that the present work load of the Consultant will not interfere with the completion of the services as outlined in this Agreement.

### D. EMPLOYMENT

During the period of a contractual Agreement with the Cabinet, the Consultant shall not engage any person who is an employee of the Cabinet as defined by KRS 18A.

### E. ACCESS TO RECORDS AND OWNERSHIP OF DOCUMENTS

The Consultant and his or her sub-consultants shall maintain all books, documents, papers, accounting records, and other evidence pertaining to cost incurred and make such materials available at their respective offices at all reasonable times during the contract period and for three (3) years from the date of final payment under the contract for inspection by the Cabinet, FHWA, or any authorized representatives of the federal government. Failure to maintain such

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records for three (3) years after the date of final payment may be grounds for the Cabinet to disqualify the Consultant from consideration for future engineering contracts for non-compliance with this paragraph. All data collected by the Consultant and all documents, notes, and reports collected or prepared in connection with these environmental services, shall become the property of the Department; and the Department shall not be restricted in any way in its use of such material. Upon final approval of the final environmental document, the original, camera-ready manuscript, including exhibits, shall be furnished to the Department.

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

### F. EQUAL EMPLOYMENT AND NONDISCRIMINATION

- The Consultant in the performance of this contract agrees to comply with Title VI of the Civil Rights Act of 1964; Transportation Cabinet regulations specified in Appendix A; and the Governor's Code of Fair Practices outlined in Appendix B.
- 2. The Consultant shall comply with provisions of the Kentucky EEO Act, KRS 45.560 45,640, on state funded contracts that exceed Five Hundred Thousand Dollars (\$500,000).
- 3. The Commonwealth of Kentucky is committed to a policy of providing equal job opportunities on public contracts and prohibiting discrimination based on race, creed, color, sex, age, religion, national origin, or disability in employment.
- 4. The utilization of minority architects and engineers and sub-consultants is encouraged, whenever possible, on public works contracts.

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For assistance in identifying minority consultants, respondents to this Request for Proposal may contact the Kentucky Office for Minority Business Enterprises, 2329 Capital Plaza Tower, Frankfort, KY 40601, or Office of Equal Employment Opportunity and Contract Compliance, Capitol Annex, Frankfort, KY 40601.

- 5. Unless exempted in accordance with KRS 45.590, the provisions of KRS 45.560 to 45.640, known as the Kentucky Equal Employment Act of 1978, shall be binding upon the selected architect or engineer and the resulting contract shall contain the provisions specified in KRS 45.570(2).
- 6. Any respondent not exempted from the affirmative action or reporting requirements of KRS 45.560 to 45.640 shall, within five (5) calendar days after being selected, submit to the Office of Equal Employment Opportunity and Contract Compliance, Finance and Administration Cabinet, through the purchasing agency, the information required by KRS 45.600, on forms provided by the purchasing agency, and submitted in the manner prescribed on the forms.

### G. DISADVANTAGED BUSINESS ENTERPRISES

In an Agreement financed in whole or part with federal funds, the Consultant shall comply with the federal requirements 49 CFR Part 23 as set out in Appendix C that is attached hereto.

### H. CONTRIBUTIONS TO CAMPAIGNS OF GUBERNATORIAL CANDIDATES

The Consultant certifies that neither he nor she, nor any member of his or her immediate family having an interest of ten percent (10%) or more in any business entity involved in the performance of this contract contributed more than the amount specified in KRS 121.056(2) to the campaign of the gubernatorial candidate elected in the election last preceding the date of this contract.

### APPENDIX A

During the performance of this contract, the Consultant for itself, its assignees, and successors in interest agree as follows:

- (1) Compliance with Regulations: The Consultant shall comply with the regulations of the Transportation Cabinet, Department of Highways, relative to non-discrimination in federal-assisted programs of the Transportation Cabinet, Department of Highways (Title 49, Code of Federal Regulations, Part 21, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) Nondiscrimination: The Consultant, with regard to the work performed after award and prior to completion of the contract work, shall not discriminate on the grounds of race, sex, color, or national origin in the selection and retention of

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sub-consultants, including procurement of materials and leases of equipment. The Consultant will not participate either directly, or indirectly, in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of Regulations.

- (3) Solicitations for Sub-consultants, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurement of material or equipment, each potential sub-consultant or supplier shall be notified by the Consultant of the Consultant's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, sex, color, or national origin.
- (4) Information and Reports: The Consultant shall provide all information and reports required by the Regulations or orders and instructions issued pursuant thereto and shall permit access and inspection to its books, records, accounts, other sources of information, and its facilities as requested.
  - Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to the Federal Highway Administration as appropriate and shall set forth what efforts it has made to obtain the information.
- (5) Sanctions for Noncompliance: In the event of the Consultant's noncompliance with the non-discrimination provisions of this contract, the Transportation Cabinet, Department of Highways, shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate including but not limited to:
  - a. Withholding of payments to the Consultant under the contract until the Consultant complies, and/or
  - b. Cancellation, termination, or suspension of the contract in whole or part.
- (6) Incorporation of Provisions: The Consultant shall include the provisions of paragraph (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, order, or instructions issued pursuant thereto. The Consultant shall take such action with respect to any subcontract or procurement as the Transportation Cabinet, Department of Highways, or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. In the event the Consultant becomes involved in, or is threatened with, litigation with a sub-consultant or supplier as a result of such direction, the Consultant may request the state to enter into such litigation to protect the interests of the state and in addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

### APPENDIX B

During the performance of this contract, the Consultant agrees as follows:

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(1) The Consultant will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age (over 40), or disability. The Consultant will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age (over 40), or disability. Such action shall include, but is not limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeships.

The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

- (2) The Consultant will state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (over 40), or disability in all solicitations or advertisements for employees placed by or on behalf of the Consultant.
- (3) The Consultant will send to each labor union or representative of workers with which he has a collective bargaining Agreement or other contract or understanding a notice to be provided advising the said labor union or worker's representative of the Consultant's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The Consultant will take such action with respect to only subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.
- (4) The Consultant will conform with the Americans with Disabilities Act, Public Laws 101-336.

### **APPENDIX C**

During the performance of the Agreement, the Consultant agrees as follows:

- (1) A Disadvantaged Business Enterprise (DBE), as defined in 49 CFR Part 26, shall have the maximum opportunity to participate in the performance of this Agreement as a prime consultant or a sub-consultant. The Disadvantaged Business Enterprise requirements of 49 CFR Part 26 shall apply to this Agreement.
- (2) The Consultant shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure the DBE has the maximum opportunity to compete for and participate in this Agreement as a sub-consultant.
- (3) Consultants shall not discriminate on the basis of race, color, national origin, sex, age (over 40), or disability in the award and performance of this Agreement.
- (4) Failure by the Consultant or sub-consultant to carry out the requirements set forth in 49 CFR Part 26 shall constitute a breach of contract and may result in termination of the Agreement.
- (5) When a Consultant, who has executed an Agreement with a DBE to perform a specified portion of the design work, encounters difficulties with the DBE and the

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DBE fails to complete the DBE Agreement; the Consultant shall be required to arrange for another prequalified and certified DBE (with prior Cabinet consent) to complete the balance of the previous DBE's contract work.

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### APPENDIX D

By signature on this Agreement the Consultant, being duly sworn, hereby certifies that, except as noted below, the "Consultant" or any person associated therewith in the capacity of owner, partner, director, officer, project director, manager, auditor, or any person involving the administration of federal funds:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years;
- Does not have a proposed debarment pending; and/or
- Has not been indicted, convicted, or has a civil judgment rendered against the
  "Consultant" by a court of competent jurisdiction in any matter involving fraud or
  official misconduct within the past three (3) years. Exceptions will not necessarily
  result in denial of selection but will be considered in determining Consultant
  responsibility. For any exception noted, attach information as to whom it applies,
  initiating agency, and dates of action. Providing false information may result in
  criminal prosecution or administrative sanctions.

### APPENDIX E

### CERTIFICATION FOR FEDERAL-AID AGREEMENT

The Consultant certifies, by signing and submitting this Agreement, to the best of his or her knowledge and belief, that:

- No federal appropriated funds have been paid, or will be paid, by or on behalf of the undersigned to any person for influencing or attempting to influence any officer or employee or any federal agency, a member of Congress, an officer or employee of Congress, or any employee of a member of Congress in connection with the awarding of any federal agreement, the making of any federal grant, the making of any federal loan, the entering into any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any federal agreement grant loan or cooperative agreement.
- 2. If any funds other than federal appropriated funds have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal Agreement, grant, loan, or cooperative Agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required

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certification shall be subject to a civil penalty of not less than Ten Thousand Dollars (\$10,000.00) and not more than One Hundred Thousand Dollars (\$100,000.00) for each such failure.

The Consultant also agrees by submitting his or her Agreement that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed One Hundred Thousand Dollars (\$100,000.00) and that all such sub-recipients shall certify and disclose accordingly.

### **APPENDIX F**

During the performance of the Agreement, the Consultant agrees to comply with applicable provisions of:

- 1. KRS Chapter 136 Corporation and Utility Taxes
- 2. KRS Chapter 139 Sale and Use Taxes
- 3. KRS Chapter 141 Income Taxes
- 4. KRS Chapter 337 Wages and Hours
- 5. KRS Chapter 338 Occupational Safety and Health of Employees
- 6. KRS Chapter 341 Unemployment Compensation
- 7. KRS Chapter 342 Workers Compensation

Any final determinations of a violation by the Consultant within the previous five (5) years pursuant to the applicable statutes above shall be attached to this Agreement.

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### **ELECTRONIC RESPONSE INSTRUCTIONS**

Firms interested in procurement of engineering and related services may submit a response to the Cabinet's announcement. Unless otherwise stated, any Consultant's Response to Announcement must be submitted electronically in PDF format. The page limits and designations for each Section explicitly stated throughout this document shall remain in effect.

### **ACCOUNT ACCESS:**

To be eligible to submit a Response to Announcement, the user from the prime firm must have access the Consultant Portal's Announcement Response widget.

- To establish a business account please visit <a href="https://kog.chfs.ky.gov">https://kog.chfs.ky.gov</a>
- To access the system visit https://apps.transportation.ky.gov/professionalservices

### **ELECTRONIC CERTIFICATIONS:**

Prior to uploading the Response to Announcement, each prime firm shall be verify the following, also directly within the Consultant Portal's Announcement Response widget.

- Prequalification Requirements
  - Each team shall satisfy the minimum prequalification requirements for each Response to Announcement. Atleast one member of the consultant's team shall be prequalified in each required area listed within the advertisement.
  - Prequalification areas satisfied by the prime will be listed. A prequalified subconsultant must be included for any areas not held by the prime.
  - o Contingent areas not required within the original submittal are not required.
  - Section 2 will still be required and will serve as the formal team assignments.
     If a subconsultant has been electronically inserted to satisfy prequalifications but that firm is not listed on Section 2, the response may be subject to rejection.
- Project Manager's Boot Camp Xpress (PMBCX) verification
  - If responding to a project-specific advertisement, the prime firm must assign a Project Manager who either has attended or is registered for the Cabinet's Project Manager's Boot Camp Xpress training course. For registration details, please contact Jeff Jasper at the Kentucky Transportation Center at jeff.jasper@uky.edu.
    - The Project Manager must be a user in the Consultant Portal.
    - The Project Manager listed on Section 3 and Section 4 will serve as the consultant's formal Project Manager. If the Project Manager listed in the firm's electronic response has not attended or registered for the Cabinet's PMBCX training course, the response will be subject to rejection.
  - o For a statewide service advertisement, there is no PMBCX requirement.
- Four Certifications will be certified upon electronic submittal
  - Certification of authorized submitter that information contained within is correct.
     Include typed name and title, the clause "I certify that the information included within this document is, to the best of my knowledge, correct as of the date indicated", the signature (one copy must have original signature, and the date)
  - Certification that the firm is currently registered with the Commonwealth of Kentucky in accordance with KRS 322.060 to perform the engineering services (or KRS 324A for appraisal services) needed for this project, and the firm's Kentucky Registration Number.
  - If Federal Funds are used, in accordance with Federal Acquisition Regulation
     52.209-5, the Vendor shall certify with bid response, that to the best of its

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- knowledge and belief, the Vendor and/or its Principals is (are) not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any State or Federal agency.
- In response to a legal opinion concerning the application of Official Order No. 102295, "Conflict of Interest", consultants responding to this advertisement are required to identify any potential conflicts of interest in regards to any financial or other personal interest in a project and/or any financial or other personal interest in any real property that may be acquired for a project. In the case that a potential conflict is identified, the consultant will be asked to recommend a solution in dealing with this conflict.

### **RESPONSE FORMAT:**

The electronic response shall follow the following format or may be deemed unresponsive:

- Each page must be 8-1/2" x 11" with single-space type no smaller than 10 point font and unless otherwise specified in the announcement bulletin, may contain graphics and photographs where applicable
  - A single 11" x 17" page may be substituted for two 8-½" x 11" pages
- Front and back covers are allowed for graphical content as well as a transmittal letter; however, information on the covers and transmittal letter is not required reading by Selection Committee members for evaluating the proposal.
- Bookmarks may be used to separate sections; however, other than identification on the tab, the tab page must be blank.
  - No writing, photos, graphs, etc, will be allowed on the tab pages other than section identification.
- This response will be a "stand alone" document. No additional information may be attached, linked via webpage, contain embedded files, or include any external references by other means.
- Subconsultant work should be shown within the same context of the prime consultant project team. No additional pages are permitted for subconsultant work unless specifically allowed for in the project advertisement.
- Firms must submit a current <u>Campaign Finance Law Compliance Form</u> for the prime submitting firm only, unless an annual form is already on file with the Cabinet

### **SECTION 1: BASIC PROJECT INFORMATION**

Unless otherwise stated in the advertisement, each response must include the following for each prime firm only:

- Firm Name, Address, and Telephone Number
- Firm's Contact Name and email address of individual responsible for this response to announcement
- Six-Year Plan Item Number and County (from advertisement bulletin) or service type if a Statewide advertisement
- Procurement Bulletin Number, Advertisement Date, and Response Due Date
- Location of office(s) where work for this project would be performed

### SECTION 2 (A-B): PREQUALIFICATION SERVICES & STAFF SUMMARY

To be eligible for selection, either the prime or a subconsultant must be prequalified in each service area listed within the Prequalification Requirements section of the advertisement. Prequalification eligibility of each submittal will be verified upon teaming arrangements.

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- List of services (from the KYTC Prequalification categories) firm and any subconsultant(s) will be performing for this project, and the status of prequalification (Prequalified, Submitted and Pending, or Prequalification Not Required)
- For services to be performed by the prime consultant, list the name(s) of the employee(s) intended to perform the work. For subconsultant services, only the firm name is required, although the employee(s) may also be listed. Additional resumes may be allowed for additional personnel if indicated in the bulletin.
- List of services not applicable for prequalification categories but which may be performed, and the name of the prime employee(s) or subconsultant firm name who intend to perform the work. This would apply to contingent services noted in italicized font of the Prequalification Requirements section.

### **SECTION 3: PROJECT TEAM ORGANIZATIONAL CHART**

Include an organizational chart illustrating the project manager and appropriate project team members for this project. One paragraph of verbiage may also be included to further define the roles and interaction of the project team members. This should include relationships, lines of responsibility, and denote subconsultant involvement. If specifically noted within the advertisement, a single 8-½" x 11" page may be expanded to two 8-½" x 11" pages or a single 11" x 17" page.

### SECTION 4 (A-E): PROJECT TEAM MEMBERS RELATIVE EXPERIENCE (RESUMES)

Include the resumes of the project manager and other key project team members, including subconsultants, from Section 2. Only include resumes for team members with significant contributions to the project. Resumes may include but are not limited to education and experience, applicable technical training, personal photograph, responsibility for similar projects, familiarity with geographic area and resources, and special or unique experience. Unless otherwise listed within the advertisement, a total of five (5) pages (A-E) are permitted for these resumes.

### SECTION 5 (A-B): AVAILABLE TEAM WORKLOAD CAPACITY

Demonstrate the availability of key personnel and the status of the current workload associated with active KYTC contracts. This section will include two portions in either graphical or narrative form to portray available capacity.

<u>Section 5A:</u> The first (Section 5A) should include information on key project team members identified from Section 4 including key subconsultant team members. Charts and other illustrative tools may be used as necessary to demonstrate current commitments and availability of key team members to be assigned to the project, for the next 12 months.

<u>Section 5B:</u> The second section (Section 5B) will focus of the status of active KYTC Contracts. This section will include at a minimum the following information for all active KYTC projects, including work being completed as a subconsultant. Additional pages may be used to show all active contracts, if necessary

- Project Description
- Total Negotiated Fee
- Negotiated Fee for the Firm
- Negotiated Fee passed thru to Subconsultants
- Percent Complete as Reported on the Latest Invoice
- Balance Remaining in the Contract for the Firm
- Cumulative Total Balance Remaining in all Contracts for the Firm

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A firm may provide a narrative to explain how the project information relates to capacity.

- Include contracts that have been selected but have not received Notice to Proceed.
- Do not include contracts that have a remaining balance of \$5,000 or less.
- Projects that are not active should be listed but may be specifically noted
- A firm may include supplemental information regarding type of work (i.e. design vs right of way, etc.)
- Statewide contracts may discern the amounts authorized via Letter Agreement rather than the Master Agreement upset limit, if applicable
- Section 5B is required for the prime firm only, but information for subconsultant team members may be included at the responding firm's discretion.

Information provided may be verified by the Division of Professional Services by review of contract documents and/or invoices. It is intended that by providing this information as a part of the proposal the response document is a representation of workload and capacity for additional work. However, a selection committee member can question a firm's representation of their capacity and may request verification from the Division of Professional Services if the member is aware of workload that was not disclosed within the Consultant's proposal. If information is found to be inaccurate, the response may be returned to the firm without opportunity for selection.

### SECTION 6 (A-E): PROJECT TEAM RELATIVE EXPERIENCE (SIMILAR PROJECTS)

Describe five or more of the prime firm or subconsultant's most recent, similar type projects, and indicate the role of personnel identified on Section 2. Include the following similarities for each project: Agency for which work was performed, location, dates, project manager, evaluation score or comments, and project description (length, project type, approximate fee, etc.) Descriptions may also include familiarity with geographic area and resources, special or unique experience, and special or unique experience and equipment, and any evaluations or awards pertaining to the project. Unless otherwise listed within the advertisement, a total of five (5) pages (A-E) are permitted for these similar projects.

### SECTION 7 (A-C): PROJECT APPROACH

Provide a narrative that describes what your project team sees as the major challenges for this project and propose solutions when appropriate. Describe how your firm or project team is the most qualified to perform the services required for this project for the Kentucky Transportation Cabinet. At a minimum include discussion of your project team's intended approach to the problem, ability to meet the project schedule within available funding with current workload, project staffing, familiarity of project, and knowledge of Cabinet procedures. This narrative should also include the qualification, expertise and role of significant subconsultants and involvement of any special requirements (i.e. DBE firms). Unless otherwise listed within the advertisement, a total of three (3) pages (A-C) are permitted for the project approach with an additional page for DBE Participation Plan, if specifically noted in the advertisement.

### **INAPPROPRIATE CONTACTS**

After advertisement, prime consultant and subconsultant firms and their agents are prohibited from discussing the procurement bulletin projects with any selection committee members. If inappropriate contact with a selection committee member is made by a prime consultant, a subconsultant, or an agent, the prime consultant's response for the project may be returned and not considered by the selection committee for the project on which

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the contact was made. Depending on severity of the occurrence, inappropriate contact by a consultant or subconsultant can result in a loss of prequalifications for a period of time. The loss of prequalifications would prohibit the firm from submitting on future projects and may cause forfeiture of work on existing contracts.

### **RESPONSE FORMAT AND DUE DATE**

Pursuant to KRS 45A, the Cabinet intends to contract for engineering and/or related services. Prequalified consultant engineering firms desiring to provide these services should submit an electronic *Response to Advertisement for Engineering and Related Services* in PDF format for each project in which the firm is interested. Responses should be submitted directly to the <u>Consultant Portal</u>, unless otherwise specified. The response must be received no later than the response deadline identified with the project. Responses should follow the format as specified within this document.

### CONFLICT OF INTEREST

In response to a legal opinion concerning the application of *Official Order No. 102295*, *Conflict of Interest*, consultants responding to this advertisement are required to identify any potential conflicts of interest in regards to any financial or other personal interest in a project and/or any financial or other personal interest in any real property that may be acquired for a project. In the case that a potential conflict is identified, the consultant will be asked to recommend a solution in dealing with this conflict. The selection committee or the Director of the Division of Professional Services will determine whether to reject a Response to Advertisement based upon this conflict.

### PREQUALIFICATION REQUIREMENTS

To respond to a project, the project team must be prequalified in the specified areas by the response due date of the advertisement. If there are questions concerning prequalification, contact Mrs. Clairessa (Ressie) Hamilton at (502) 564-4555. Responses that do not meet all areas of prequalification will be ineligible.

### **PROJECT INQUIRES**

Up to four (4) working days prior to the submission deadline, a consultant may submit specific questions about the project in this Procurement Bulletin via e-mail to <u>Eric Pelfrey</u>, P.E., Director, Division of Professional Services, Transportation Office Building, 200 Mero Street, Frankfort, Kentucky 40622 Telephone: (502) 564-4555.

### **CHANGES AND UPDATES**

Please check the <u>Division's website</u> under the Questions and Corrections link for updates before submitting a response. Updates and formal responses to inquiries will be posted up to four (4) working days before the responses are due.

### **DBE PARTICIPATION**

The Transportation Cabinet hereby notifies all respondents that it will affirmatively ensure in any executed contract that certified Disadvantaged Business Enterprises will be afforded full opportunity to submit responses and participate as a subconsultant. The DBE respondents and subconsultants will not be discriminated against on the grounds of race, religion, color, national origin, sex, sexual orientation, gender identity, age or disability. If included within an advertisement, the consultant team shall include a DBE Participation Plan with their Response to Announcement to help the Department meet the 11.95% DBE goal established by FHWA. The DBE plan needs to demonstrate how DBE companies will be mentored or used to assist in the area(s) pertaining to the contract. An additional page

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may be allowed in the Project Approach (Section 7) to demonstrate this plan. Additional points will be considered in the Evaluation Factors for the DBE Participation Plan.

### CERTIFICATION REGARDING RESPONSIBILITY MATTERS

If Federal Funds are used, in accordance with Federal Acquisition Regulation 52.209-5, the Vendor shall certify with bid response, that to the best of its knowledge and belief, the Vendor and/or its Principals is (are) not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any State or Federal agency. "Principals", for the purposes of this certification, means officers, directors, owners, partners, and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager, plant manager, head of subsidiary, division, or business segment, and similar positions)

### REQUIREMENTS WITHIN THE ANNUAL PREQUALIFICATION PROCESS:

### REQUIRED AFFIDAVIT FOR BIDDERS OR OFFERORS

Click here for the current Campaign Finance Law Compliance Form

- A. In accordance with <a href="KRS 45A.110">KRS 45A.110</a> and <a href="KRS 45A.070(6)">KRS 45A.070(6)</a>, nor the entity which he/she represents, has knowingly violated any provisions of the campaign finance laws of the Commonwealth of Kentucky, and the award of a contract to the bidder or offeror or the entity which he/she represents will not violate any provisions of the campaign finance laws of the Commonwealth.
- B. The bidder or offeror swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and all subcontractors therein, are aware of the requirements and penalties outlined in <a href="KRS 45A.485">KRS 45A.485</a>; is properly authorized under the laws of the Commonwealth of Kentucky to conduct business in this state; is duly registered with the Kentucky Secretary of State to the extent required by Kentucky law; and will remain in good standing to do business in the Commonwealth of Kentucky for the duration of any contract awarded.
- C. The bidder or offeror swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sales and use tax imposed by <u>KRS Chapter 139</u>, and will remain registered for the duration of any contract awarded.
- D. The bidder or offeror swears and affirms under penalty of perjury that the entity bidding is not delinquent on any state taxes or fees owed to the Commonwealth of Kentucky and will remain in good standing for the duration of any contract awarded.
- E. The bidder or offeror swears and affirms under penalty of perjury that the entity bidding, is not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade, as defined in Executive Order No. 2018-905.
- F. The bidder or offeror swears and affirms that the entity bidding, and all subcontractors therein, have not violated any of the prohibitions set forth in KRS 11A.236 during the

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previous ten (10) years, and further pledge to abide by the restrictions set forth in such statute for the duration of the contract awarded.

### **EQUAL EMPLOYMENT OPPORTUNITY**

The selected consultant's obligation to comply with the Kentucky EEO Act (Act), KRS 45.560 – 45.640 on state funded contracts that exceed \$500,000:

- The selected consultant must submit the following documents in accordance with the requirements of the Request for Proposal—EEO-1: Employer Information Report, Affidavit of Intent to Comply, Employee Data Sheet and Subcontractor Report or a copy of the Kentucky EEO Approval Letter issued by the Finance and Administration Cabinet, Office of EEO and Contract Compliance.
- Failure to comply with the Act may result in non-award, withdrawal of award, cessation of contract payments, etc.
- The selected consultant may obtain copies of the required EEO documents from the Finance and Administration Cabinet's Office of Equal Employment Opportunity Contract Compliance website at the following address: https://finance.ky.gov/offices/Pages/equalOpportunity.aspx
- The selected consultant must advise each subconsultant with a subcontract of more than \$500,000 of the subconsultant's obligation to comply with the KY EEO Act. Further, the selected consultant is responsible for compiling EEO documentation from their subconsultants and submitting the documentation to the Finance and Administration Cabinet, Office of EEO and Contract Compliance.
- Failure to complete, sign and submit all required documents will delay the award/contract modification process as incomplete submissions will not be processed.
- Pursuant to <u>KRS 45.610(2)</u>, the Finance and Administration Cabinet, Office of EEO and Contract Compliance reserves the right to request additional information and/or documentation and to conduct on-site monitoring reviews of project sites and/ or business facilities at any point for the duration of any contract which exceeds \$500,000 to ascertain compliance with the Act and such rules, regulations and orders issued pursuant thereto.
- All questions regarding EEO forms or contract compliance issues must be directed to the Finance and Administration Cabinet, Office of EEO and Contract Compliance via e-mail: <u>Finance.ContractCompliance@ky.gov</u> or via telephone: (502) 564-2874.

KYTC will notify the Finance and Administration Cabinet, Office of EEO and Contract Compliance about any change order that increases the value of a contract above \$500,000. At a minimum, this notice should include the contract number, contract amount and contact information for the selected consultant. The Office of EEO and Contract Compliance will contact the selected consultant for required information.

The Finance and Administration Cabinet will maintain a list of approved vendors. This Web-based list will be available to State agencies and the general public. The Finance

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and Administration Cabinet will not accept compliance certifications from the federal government or other states. Only forms developed by the Finance and Administration Cabinet, Office of EEO and Contract Compliance will be accepted and processed. The Finance and Administration Cabinet will not pre-approve vendors. Unsolicited submittals will not be processed nor will unsolicited submittals be returned to the vendor. The Finance and Administration Cabinet, Office of General Counsel will contact KYTC General Counsel about any selected consultant that fails to comply with the Act. Finance and KYTC will determine the appropriate course of action for noncompliant selected consultants.

### REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 45A.480(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. Therefore, foreign entities should submit a copy of their certificate with their solicitation response. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception in its solicitation response. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can visit <a href="https://www.sos.ky.gov/Pages/default.aspx">https://www.sos.ky.gov/Pages/default.aspx</a> to register with the Secretary of State.

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Leg	islative Research Commission	i Personai Ser	vices Contract Proof	or necessity	/ P3-901	_
Orig	ginal Agreement <u>2004XX</u> Perso		earch Commission ntract Proof of Necessity	Document N	umber <u>PON2-XXX</u>	<u>&lt;&gt;</u>
	Transportation Cabinet		Department of h	Highways - Pro	ofessional Service	98
	Agency			Division, Branch, etc.		_
		YYY	Increase			
NOT	PE OF CONTRACT: Nev E: All questions must be answered fully ifically numbered item. Questions regar	Re Re	enewal (Re-negotiation is insufficient, additional pa	ges should be att		
1.	Name & Address of Contractor	:		Period of Co		
	Firm Name			_	with LRC	
	Address 1 Address 2		End Dat	e:Complet	ion	
3.	Explain work to be performed. (Be sp products to be prepared; reason for o			of service to be	delivered; reports or	
4.	Does an identified or anticipated reasolf yes, explain:	n now exist which wo	uld indicate a need to renew the	e contract for the suc	ceeding fiscal year?	
	B. Will the contract provide for cancellation	n by the Department	upon a maximum of 30 days or	less written notice to	o the contractor? $Y/N$	1
5.	FINANCIAL AND CONTRACT	T COST DATA				
	A. Total Projected Cost of Contract:					
	Source of Funds Federal: \$XXX B. If contract is supported by federal		ate: \$XX,XXX.XX	Local/Other: umber: and DFD/	\$ A number:	
	C. If contract is supported by state funds					D
	D. Was the contract cost included in N/A	n the original Budge	et Request? - YES - NO	If no, explain:	·	
	E. Describe in detail how the project	cted cost of the cor	tract was derived (attach pr	oposed budget w	hen applicable): N /	Α
	Original Agreemen	t Amount		\$ XXX,XXX	.00	
	Previous Request			\$X,XXX.XXX		
	This Request			\$ XXX,XXX		
	Total Revised Amo	unt		\$X,XXX,XXX	.00	
	F. Basis for Payment: Hourly: \$	per hour	G. Method of Payment:		ght Disbursement Account	
	Per Diem: \$	per day H. Fi	requency of Payment: XXX	Monthly Ouarte	selv.	
	Fee for Service: \$	per service		Upon Completic	•	

I. If an individual will the terms of contract require that the contractor be considered an "employee" of this Department for

Other - Explain

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XXX Other - Explain: Lump Sum

PS-9014

FICA purposes?

N/A

6. JUSTIFICATION FOR CONTRACTING WITH AN OUTSIDE PROVIDER TO PERFORM THE SERVICE.

The following questions should be addressed at a minimum:

What in-house method(s) were considered and why were potential in-house method(s) rejected? Is the part of such nature that: it should be done independently of the agency to avoid a conflict of interest; it requires unique or special expertise/qualifications; and/or legal or other special circumstances require use of an outside provider? If services are needed on a continuing basis, describe efforts made to secure services through regular state employment channels? Will agency personnel provide staff support services to the contractor?

Consultant presently performing engineering services on this project under the original agreement.

7. Name and address of other provider(s) considered to perform the service:

SEE ITEM NO. 6

8. Basis for selection of the proposed contractor (explain process used in making decision, i.e., solicitation of proposals, bids, references, and evaluation criteria applied):

SEE ITEM NO. 6

9. Planned supervision and monitoring of the contractor's performance:

A. Name and Title of Responsible Person: ....., Chief District Engineer
Office and Location: Department of Highways, District X
Address 2
Telephone Number: (XXX)-XXX-XXXX

B. Describe the monitoring activities, both programatic and fiscal, which will be performed <u>including</u> the manner in which monitoring needs will be addressed in the contract to facilitate this activity:

N/A

SIGNATURES:

PREPARED BY: ...... DATE: XX-XXXXX

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### KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF PROFESSIONAL SERVICES

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### LISTING OF RESPONDING FIRMS

SECTION 1	: PROJECT INFORMA	TION		
PROCUE	REMENT BULLETIN #	DATE	ITEM #	SHEET
				of
	COUNTY		PROJECT	·
SECTION 2	: RESPONDING FIRM	S		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
	: CERTIFICATION			
		neet the prequalification require re received in a timely manner		
SIGNATUF	RE		DATE	

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Division of Structural Design Geotechnical Branch TC 66-209 Rev. 01/17 Page 1 of 4

### PREQUALIFICATION REQUIREMENTS FOR GEOTECHNICAL DRILLING SERVICES

### I. Experience

The vendor must provide evidence of experience in the last 5 years performing drilling services for highway projects (roadways and bridges). The evidence shall include projects illustrating this type of experience, with references (agency, project engineer, or consultant) with addresses and phone numbers.

### II. Equipment

The vendor must provide a list of available equipment (drill rigs and accessories) for soil sampling and rock coring. The vendor must have at least one drill rig equipped with an automatic hammer in order to be pregualified.

### III. Personnel

Drill crew supervisors must be experienced in obtaining rock cores for rock cut slope and bridge foundation design, performing rock line soundings, performing standard penetration tests, obtaining thin-walled tube samples, obtaining disturbed soil samples, and installing cased observation wells. Evidence must be provided that the drill crew supervisors have a minimum of 3 years experience in the above-mentioned operations for highway projects (roadways and bridges). A drill crew supervisor is defined as the person on the drill crew field party who is responsible for the drilling operations mentioned above.

### IV. Insurance

Worker's Compensation and Liability Insurance as required by the Division of Professional Services.

### V. Application Requirements:

- 1. Complete Pages 2 4 of this form. Pages 3 and 4 should reflect equipment and personnel that will be used on Kentucky highway projects. Provide personal history statements for drill crew supervisors included on Page 4.
- 2. Attach proof of the above-referenced insurances.

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# KENTUCKY TRANSPORTATION CABINET Division of Structural Design Geotechnical Branch

SUMMARY OF HIGHWAY PROJECTS COMPLETED IN THE LAST 5 YEARS FOR WHICH THE FIRM PROVIDED GEOTECHNICAL DRILLING SERVICES

Client (Include Address & Phone)				
Estimated Drilling Units k Coring Soil Profile (feet) (miles)				
Estimated D Rock Coring (feet)				
Dates Performed				
Type of Project (Roadway or Bridge)				
Project Location (County & State)				
Project Name				

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Division of Structural Design Geotechnical Branch TC 66-209 Rev. 01/17 Page 3 of 4

### **SUMMARY OF DRILLING EQUIPMENT**

1.	Drill Rigs				
		Type (truck, skid, or track)	Make	Model	Year
		Type (truck, skid, or track)	Make	Model	Year
		Type (truck, skid, or track)	Make	Model	Year
		Type (truck, skid, or track)	Make	Model	Year
2.	Core Barrels				
		Type (wireline or conventional)	Diameter		Length
		Type (wireline or conventional)	Diameter		Length
		Type (wireline or conventional)	Diameter		Length
		Type (wireline or conventional)	Diameter		Length
3.	Standard Penetration				
J.	Hammers	Type (standard, safety, or automatic)			
		Type (standard, safety, or automatic)			
		Type (standard, safety, or automatic)			
		Type (standard, safety, or automatic)			
4.	Split Barrel Samplers	Diameter	Length		Type of Shoe
		Diameter	Length		Type of Shoe
		Diameter	Length		Type of Shoe
		Diameter	Length		Type of Shoe
5.	Thin-Walled Tube				
5.	Samplers	Diameter	Length		
		Diameter	Length		
		Diameter	Length		
		Diameter	Length		

6. List other equipment such as pumps, augers (hollow or solid), casing, floating equipment (barge), etc. Please use additional sheets as necessary.

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Division of Structural Design Geotechnical Branch

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SUMMARY OF DRILLING PERSONNEL EXPERIENCE

				AREAS OF EXPE	ERIENCE (Indica	AREAS OF EXPERIENCE (Indicate all that apply):		
Name	Years of Drilling Experience	Drill Supervisor	Drill Helper	Rock Coring	Soil Profile Drilling and Sampling	Performing Standard Penetration Tests	Obtaining Thin Walled Samples	Installing Cased Observation Wells
Provide personal history statements for Drill Crew Supervisors.	ements for Dr	ill Crew Superv	isors.					

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Division of Structural Design Geotechnical Branch TC 66-210 Rev. 01/17 Page 1 of 3

### PREQUALIFICATION REQUIREMENTS FOR GEOTECHNICAL ENGINEERING SERVICES

### I. Firm Requirements

- A. A firm permit issued by the Kentucky Board of Licensure for Professional Engineers and Land Surveyors.
- B. Sufficient geotechnical engineering experience by the firm, as demonstrated by having performed geotechnical engineering on a minimum of 3 transportation projects (or other projects where related engineering tasks were performed) in the last 5 years.
- C. MicroStation CADD Software.

### II. Personnel Requirements

- A. At least one Professional Engineer licensed in Kentucky who is an in-house employee of the firm with a minimum of 3 years of geotechnical engineering experience applicable to the design and/or construction of highway facilities (demonstrated by performing tasks included on Page 3 of this form). The firm will be required to assign at least one full-time in-house employee meeting these requirements to actively participate in KYTC geotechnical projects in the capacity of Project Manager, Project Engineer, etc.
- B. At least one Professional Geologist licensed in Kentucky who is an in-house employee of the firm with a minimum of 3 years of engineering geology experience applicable to the design and/or construction of highway facilities (demonstrated by performing tasks included on Page 3 of this form).
- C. Staff with sufficient experience to perform geotechnical engineering tasks for KYTC, as demonstrated by experience in a minimum of 9 of the 12 areas of "conventional" experience included on Page 3 of this form. (Seismic experience is not required.)
- D. A minimum of one CADD technician proficient with Microstation. Professional Engineers or Professional Geologists may not be used to satisfy this requirement.

### III. Application Requirements:

- Complete Page 2 of this form and <u>provide supplemental detailed project descriptions</u> for a minimum of three (3) of the projects completed by the firm included in the summary.
- Complete Page 3 of this form and <u>provide resumes of personnel needed to meet the</u>
   <u>personnel requirements above.</u> All personnel experience need not be with the current
   employer.
- A firm may subcontract laboratory testing and/or field drilling operations to firms prequalified
  in the applicable area(s). A firm may also subcontract speciality work in areas not covered
  by prequalification. All subcontracting is subject to the prior approval of the Division of
  Professional Services and the Geotechnical Branch.
- 4. For details regarding Licensure and Firm Permits, refer to:

KY Board of Licensure for Professional Engineers and Land Surveyors
KY Board of Registration for Professional Geologists htt

http://kyboels.ky.gov/ http://bpg.ky.gov/Pages/default.aspx

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Provide detailed project descriptions for a minimum of 3 projects.

### KENTUCKY TRANSPORTATION CABINET

Division of Structural Design Geotechnical Branch

IN THE LAST 5 YEARS FOR WHICH THE FIRM PROVIDED GEOTECHNICAL ENGINEERING SERVICES SUMMARY OF TRANSPORTATION (OR RELATED) PROJECTS COMPLETED

Project Location (County & State)	Description of Work Performed	Dates Performed	Key Personnel	Client (Include Address & Phone)	Approximate Fee

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seudo-Static Slope Stability Analysis

# KENTUCKY TRANSPORTATION CABINET

Division of Structural Design

Geotechnical Branch

SUMMARY OF PROFESSIONAL PERSONNEL EXPERIENCE

PERSONNEL

AREAS OF EXPERIENCE (Indicate all that apply):

CIEVOL	Se	eismic Settlement Analysis								
١	Liq	iquefaction Analysis								
L		quivalent Linear 1-D Site Response nalysis								
Ī	Wr	riting Geotechnical Reports								
		eveloping Geotechnical Laboratory esting Plans								
		eveloping Subsurface Exploration lans								
1.		reparing Geologist Rock Core Logs								
Į	Ro	ock Cut Slope Design								
I A IACITIATIVIACO	Re	etaining Wall Analysis								
	Be	earing Capacity Analysis								
ľ		egative Skin Friction Analysis								
l	Wa	/ave Equation/ Driveability Analysis								
l	De	eep Foundation Analysis								
l	Se	ettlement Analysis								
	Slo	lope Stability Analysis								ents
Γ	Mic	licroStation								iren
Γ	Ye	ears of Geotechnical Experience								redu
		CADD Technician and Other Staff (Include Classification)								needed to meet the experience requirements.
		PG License No. & State								ded to meet
		PE License No. & State								
		Name								Provide resumes of personnel

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Division of Structural Design Geotechnical Branch TC 66-211 Rev. 01/17 Page 1 of 2

### PREQUALIFICATION REQUIREMENTS FOR GEOTECHNICAL LABORATORY TESTING SERVICES

### I. Laboratory Requirements

- A. Accreditation by the AASHTO Materials Reference Laboratory (AMRL) for the following AASHTO Test Methods: R58, T88, T89, T90, T99, T100, T193, T208, and T265. The Geotechnical Branch will verify accreditation on the AMRL website during the prequalification review.
- B. Management and staff meeting the requirements for AASHTO R18 accreditation and with experience performing all the above-referenced tests.
- C. A loading device with a movable head or base such that it is capable of applying a compressive load up to 60,000 lb. (267 kN), as required for the compaction portion of KM 64-501 (the Kentucky Method for performing the California Bearing Ratio Test).

### II. Application Requirements:

- 1. Complete Page 2 of this form and <u>provide resumes of key personnel</u> identified in the laboratory's Quality Manual (e.g. Technical Manager, Supervising Laboratory Technician, and Quality Manager).
- 2. Identify the location(s) of lab(s) to be used on KYTC projects.
- 3. <u>Provide a description and laboratory location of the above-referenced loading device.</u> Include the make, model, load capacity, etc., and a statement that it meets the requirements above. This device must be located at a laboratory that is accredited for AASHTO T193.
- 4. In addition to the above-referenced test methods, the Geotechnical Branch considers AMRL accreditation for T216, T296, and T297, and the capability to perform the Unconfined Compressive Strength of Rock, Slake Durability, and Jar Slake tests to be highly desirable. Although these tests are not required for prequalification, the Geotechnical Branch strongly recommends that labs be accredited for and/or have the ability to perform these tests.
- Although not generally required to be submitted for prequalification, the Geotechnical Branch may request accreditation documents such as the Quality Manual, On-Site Assessment Reports, Proficiency Sample Test Results, etc. Please be prepared to provide such documents upon request.
- 6. For details regarding laboratory accreditation, refer to:

  AASHTO Materials Reference Laboratory

http://aashtoresource.org

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# KENTUCKY TRANSPORTATION CABINET

Division of Structural Design

Geotechnical Branch

# SUMMARY OF GEOTECHNICAL LABORATORY PERSONNEL EXPERIENCE

Slake Durability & Jar Slake  UC Strength of Rock  AASHTO T297  CU Trx w/ PP Measurements  AASHTO T296  UU Triaxial  AASHTO T216  1-D Consolidation			
UC Strength of Rock  AASHTO T297 CU Trx w/ PP Measurements  AASHTO T296 UU Triaxial AASHTO T216			
AASHTO T297 CU Trx w/ PP Measurements  AASHTO T296 UU Triaxial AASHTO T216			
AASHTO T297 CU Trx w/ PP Measurements  AASHTO T296 UU Triaxial AASHTO T216			
AASHTO T296  UU Triaxial AASHTO T216			
UU Triaxial AASHTO T216			
AASHTO T216	+		
<del>                                    </del>	1		
O O O O O O O O O O O O O O O O O O O			
AASHTO T265			
AASHTO T208  UC Strength of Soil  AASHTO T100  AASHTO T100  AASHTO T100  Specific Gravity  AASHTO T99  Moisture-Density  AASHTO T89, T90	_		
AASHTO T208			
UC Strength of Soil	╀		Ц
5  AASHTO T193			
California Bearing Ratio	╀		Н
AASHTO T100			
Specific Gravity	╁		$\vdash$
AASHTO T99			
Moisture-Density	╁		$\vdash$
AASHTO T89, T90			
Liquid and Plastic Limits  AASHTO T88	╁		$\vdash$
Particle Size Analysis			
AASHTO R58	+		
Dry Preparation of Samples			
	T		
Lab Technician			
Supervising Lab Technician			
Years of Geotech and/or	╀		$\vdash$
Construction Materials			
Testing Experience	+		H
ي			
Name Name			

Include only personnel in lab(s) to be used on KYTC projects. Provide the resumes of key personnel identified in the lab's Quality Manual.

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			PROJI	ECT AUT	HORIZA	TION				PACKETID
CONTRACT ID EMA	RS PROC	GRAM CODI	Ē						AU	THORIZATION NO
It is herel	by ordered	that the pro	ject herein describ	ed be under	taken and a	accompli	shed within the	e funding le	vel au	thorized.
PROJECTID		PROJECTIE	NUMBER	FEDERAL I	PROJECT NI	UMBER	6 YR PLA NUMB			YR PLAN ITEM ARENT NUMBER
PROJECT TYPE			PROJECT LEN	GTH	NUM	IBER OF	- BRIDGES		SY	/STEMS
PROJECT PHASE	PLANNI	NG	DESIGN	ı		RIGHT O	F WAY	UT	ILITIES	3
& RESPONSIBILITY	CONST	RUCTION	TITLE C	EEDED TO:		MAINTEN	NANCE	ОТ	HER	
FUNDING & TIME	PARTIC	PATING AGE	NCIES							
ACCOUNTABILITY	FEDERA	\L	STATE		1	LOCAL		ОТ	HER	
			REQUESTED	FUNDS FOR	THIS AUTH	ORIZATIO	ON			
ITEM NUMBER	PHASE	FUND	PROGRAM		CAL YEAR RAL STATE		EDL APPR CODE	CURRE	NT FU	NDING REQUEST
							Curren	t Funding	Req	uest Total:
			AUTHORIZATI	ON SUMMAR	Y FOR THIS	10-1 SEF	RIES			
PHASE					TC	OTAL AU	THORIZATION	TO DATE (I	NCL. C	URRENT REQUEST
Planning										
Design										
Right-of-Way										
Utilities										
Construction										
Non-Highway										
Total:										
REMARKS:										
Project Approval R	ecom men	ided Bv.			Signed and	d Annro	ved Bv.			

AUTHORIZATION LOCATION

# COUNTY DIST FACILITY NAME ROUTE LENGTH SCOPE
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