

Kentucky Transportation Cabinet (KYTC)

DESIGN BUILD

Request for Proposal (RFP)  
November 1<sup>st</sup>, 2013

Contract No. 13-9004 State Project # FD04 SSP 100 0914 009-014

County Pulaski Route KY 914

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## 1. PROJECT IDENTIFICATION

Contract No. 13-9004 State Project # FD04 SSP 100 0914 009-014

County Pulaski Route KY 914

Local Route Name: Somerset Southeast Bypass

- 1.1 Existing Plans and Aerial Mapping:** Existing plans, Digital Ortho Photographs & Aerial Mapping, and Preliminary Design files of the subject project are available for review at the following ftp site under the folder name: 08-119 KY 914 Widening:

<ftp://kytcftp.kytc.state.ky.us/08-119%20KY%20914%20Widening/>

Username: kytc\transportation  
Password: bigfiles

Somerset Southeast Bypass – KY 914  
FD04 SSP 100 0914 009-014

The existing plan set is NOT as-built plans. The Design-Build Teams (DBT(s)) are advised to verify the preceding referenced plans to determine if they accurately depict existing field conditions.

Upon request, the District 8 Design Office shall provide the DBT(s) with Digital Ortho Photographs and aerial mapping of the project corridor as a set of 1 CD and 1 DVD. The DBT will be responsible for any supplementary survey work that may be necessary if the coverage provided is deemed insufficient. The preliminary plans provided are for informational purposes only, and are not meant to be considered a “final design”.

## 2. PRE-PROPOSAL MEETING

This pre-proposal meeting is to discuss and clarify all issues that the project may have.

Location: Department of Highways District 8 Office, 1660 South Highway 27, Somerset KY

Date: November 15, 2013

Time: 10:00 a.m. Eastern Time

The meeting is mandatory for contractors and consultants who intend to be leads on a DBT.

## 3. ADDENDA PROCESS

All questions prior to the award shall be directed to:

Name: Ryan Griffith, P.E., Director, Division of Construction Procurement

Phone Number: 502-564-3500 Fax: 502-564-8961

Email: [Ryan.Griffith@ky.gov](mailto:Ryan.Griffith@ky.gov)

Or see the website at: <http://transportation.ky.gov/Construction-Procurement/Pages/default.aspx>

Addenda to this solicitation may be necessary prior to the closing date and will be furnished by mail, email, or the web to all prospective Teams if prior to receipt date and to all DBTs determined to be eligible for award if after receipt date. The KYTC will respond to questions that are received by 4:00 pm (Eastern Time) 7 days prior to the technical proposal submittal. The responses will be posted 3 days prior to the submittal deadline.

**4. PRE-QUALIFICATION OF DESIGN-BUILD TEAM (DBT)**

It is required that the bidder be a KYTC pre-qualified Contractor who has engaged the services of a KYTC pre-qualified Design Consultant Team to perform *all* the design and construction work required in this RFP. If the Design Consultant(s) submitted does not meet all the required qualifications, KYTC may reject the DBT's proposal. All sub consultants and subcontractors utilized by the DBT on this project shall be pre-qualified to perform work for KYTC or their services shall not be allowed.

**4.1 Contractors Prequalification**

Consistent with Section 102.01 of Kentucky's 2012 Standard Specifications for Road and Bridge Construction ("Standard Specifications"), all organizations and individuals bidding on Department of Highways ("Department") projects and accepting subcontracts on Department projects shall apply for and receive Department prequalification and possess a Certificate of Eligibility as provided in regulations published by the Department according to KRS 176.140. The lead entity for the DBT must be prequalified prior to submission of the Letter of Qualifications. Organizations and individuals providing other services shall be prequalified and possess a Certificate of Eligibility prior to performing the work.

**4.2 Professional Services Prequalification**

The DBT shall provide all necessary services to design and construct all permanent and temporary portions of the project. Work shall conform to current KYTC, federal, and AASHTO standards, practices, policies, guidelines and specifications where applicable. Additional documents identified within the scope of work will be provided under separate cover as part of the contract documents. KYTC standards, practices, policies, guidelines and specifications shall control in case of a conflict. The standard of care for all such services performed or furnished under this Agreement shall be the care and skill ordinarily used by members of the engineering profession practicing under similar conditions at the same time and locality.

Design firms prequalified shall perform only those tasks which they are prequalified to complete. The design team will need to have KYTC prequalifications in a variety of disciplines in order to perform. KYTC prequalifications shall include but not be limited to:

Structure Design	Spans Under 500 Ft
Geotechnical	Laboratory Testing Services
Geotechnical	Drilling Services
Geotechnical	Engineering Services
Roadway Design	Rural Roadway Design
Roadway Design	Surveying
Traffic Engineering	Electrical Engineering Traffic Signal Services

Design firms shall be sufficiently staffed and capable of performing the required work on this contract. These design firms may be subcontractors responsible for the design and engineering of the project.

There may be multiple consultants working on the DBT; however one consultant shall be designated as the Lead Designer. The DBT shall include qualified engineers and surveyors to be in direct responsible charge of engineering and surveying endeavors and who are professionally registered in the state of Kentucky. Designs prepared for the project shall be signed and stamped by a licensed Kentucky Professional Engineer. To qualify for selection, interested DBTs shall be prequalified through KYTC for the performance of the work. Prequalification requirements pertaining to licensure will be required prior to submission of the Technical Proposal. Services that require prequalification may only be performed by firms that are prequalified for those services at the time of performance of the services.

**5. DESIGN BUILD TEAM'S CONSULTANT**

The DBT shall name the lead Design Consultant. The DBT shall submit a letter of qualifications by December 6, 2013 which identifies team members and pre-qualification categories. Consultant names and addresses must be the same as that on file with the Department.

## **6. RESTRICTIONS ON PARTICIPATION IN DESIGN-BUILD CONTRACTS**

To facilitate this procurement, various rules have been established and are described in the following paragraphs.

### **6.1 Campaign Finance Law Statement Pursuant to KRS 45A.110 and KRS 45A.115**

Each member of the DBT shall certify that neither he/she nor any member of his/her immediate family having an interest of ten percent (10%) or more in any business entity involved in the performance of this project, has contributed more than the amount specified in KRS 121.056(2), to the campaign of the gubernatorial candidate elected at the last election preceding the date of this solicitation. Each member of the DBT further swears under the penalty of perjury, as provided by KRS 523.020, that neither he/she nor the company which he/she represents, has knowingly violated any provisions of the campaign finance laws of the Commonwealth, and that the award of a contract to him/her or the company which he/she represents will not violate any provisions of the campaign finance laws of the Commonwealth.

A Commonwealth of Kentucky sworn statement regarding campaign financing laws shall be completed and signed by an authorized agent of the DBT and submitted with the Price Proposal on by January 31<sup>st</sup>, 2014.

### **6.2 CONFLICT OF INTEREST:**

The DBTs certify, by the signatures of duly authorized representatives, that they are legally entitled to enter into this solicitation and contract and that they shall not be violating, either directly or indirectly, any conflict of interest statute under KRS Chapters 45A or 11A or ethical provisions under KRS Chapter 11A. Forms shall be signed and submitted by an authorized agent of the DBT with the Price Proposal on January 31<sup>st</sup>, 2014.

### **6.3 No Contingent Fees**

No person or selling agency shall be employed or retained or given anything of monetary value to solicit or secure this contract, excepting bona fide employees of the DBT or bona fide established commercial or selling agencies maintained by the DBT for the purpose of securing business. For breach or violation of this provision, the KYTC shall have the right to reject the proposal, annul the contract without liability, or, at its discretion, deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

### **6.4 Restrictions on Communications with KYTC Staff**

From November 1, 2013 until a contract is awarded, proposers are not allowed to communicate with any KYTC staff concerning this project except:

- During the Pre-Proposal Conference with KYTC staff present; or
- Via written questions to those specified in Section 3.

For violations of this provision, KYTC may reject the proposal.

### **6.5 Proposal Preparation**

The DBT shall follow any pertinent sections of this RFP, in the preparation of the proposal. Failure to provide any of the data required may result in the proposal being excluded from further evaluation.

### **6.6 Payment and Conditions of Stipend**

Subject to the conditions of the RFP, KYTC will provide a payment of \$18,000 to each non-selected, responsive DBT. The term "payment" as used in this section shall mean \$18,000.

By submitting its Technical Proposal for this project, the DBT forms a contract and agreement for its technical proposal and conceptual design with the KYTC. Furthermore, by submitting its Technical Proposal for this project, the DBT acknowledges that it is eligible for payment if the DBT's proposal is not selected. The payment will be payable by the KYTC to the DBT after KYTC enters into contract with the successful DBT, unless payment is waived by the unsuccessful DBT.

The payment shall be due only if the DBT submits a Technical Proposal that is responsive to the RFP as defined herein. The payment shall be full and final consideration for all documents submitted in the Technical Proposal. Except for that intellectual property developed apart from or prior to DBT commencing work on the Technical Proposal for this project, KYTC shall retain an undivided joint interest in all rights and intellectual property submitted with the Technical Proposal.

If Technical Proposals have been submitted, but the KYTC does not Award the contract, all responsive DBTs shall receive a payment, unless payment is waived by the DBT. If the KYTC withdraws the contract prior to Technical Proposal submission, no payment shall be made.

An unsuccessful DBT, who otherwise qualifies for the payment, may elect to waive the payment within 10 days of the KYTC's award decision and retain its rights to its Technical Proposal. By accepting payment of the Stipend, DBTs agree to waive all claims and causes of action against the KYTC related to the project in any way.

#### **6.7 Disposition of Proposals**

All proposals and preliminary plans become the property of the Commonwealth of Kentucky unless an unsuccessful DBT waives the stipend payment to retain its rights to its technical proposal as identified in section 6.6. The successful proposal shall be incorporated by reference into the resulting contract.

#### **6.8 Bonding Requirements**

A 5% bid proposal guaranty per Section 102.09 of the Standard Specifications shall be required to bid this project.

#### **6.9 Team Response and Proprietary Information**

The KYTC shall not disclose any portion of any proposal prior to contract award to anyone outside the KYTC, other than representatives of the federal government, if required, and the members of the Awards Committee or their designates. After a contract is awarded in whole or in part, the KYTC shall have the right to duplicate, use, or disclose all proposal data, except proprietary data as described below, submitted by DBTs in response to this solicitation as a matter of public record. Although the KYTC recognizes the DBT's possible interest in preserving selected data which may be part of a proposal, the KYTC must treat such information provided by the DBT pursuant to Kentucky's Open Records Act, KRS 61.870 *et seq.*

Information areas which normally might be considered proprietary must be limited to: individual personnel data, customer references, selected financial data, formulae, and financial audits, which if disclosed would permit an unfair advantage to competitors. If a proposal contains information in these areas that a DBT declares proprietary in nature, each sheet containing such information shall be clearly designated as proprietary at the top and bottom of the page and shall be submitted under separate cover marked "PROPRIETARY DATA". Proposals containing information declared by a DBT to be proprietary, either in whole or in part, outside the areas listed above, may be deemed unresponsive to the solicitation and may be rejected.

Except as provided in Section 6.6, the KYTC shall have the right to use all ideas, or adaptations of those ideas, contained in any proposal received in response to the solicitation. Selection or rejection of the proposal shall not affect this right.

#### **6.10 Proposal Addenda and Rules for Withdrawal**

Prior to the date specified for receipt of offers, a submitted proposal may be withdrawn by submitting a written request for its withdrawal to the Director of the Division of Contract Procurement. Withdrawal of

the proposal by the DBT shall forfeit any payment of the stipend that the DBT may have been entitled to receive.

The KYTC shall accept addenda, revisions, or alterations to its proposal from any DBT until close of business (c/o/b) on the due date. Unless requested by the KYTC, the KYTC shall not accept any unsolicited addenda, revisions, or alterations to any proposal after the c/o/b on the due date. If the KYTC issues an addendum to the solicitation after c/o/b on the due date, then any DBT may respond. A DBT's response shall precisely respond to the contents of the Commonwealth's addendum.

The KYTC reserves the right to request clarification or additional information.

### 6.11 Technical & Price Proposal Submission Requirements

The submittal process will involve a 2 step process (Technical and Price Proposal) and below is a schedule of dates for the submittal:

<i>Date</i>	<i>Submittal</i>
November 1, 2013	Request for Proposals
November 15, 2013	Pre-Proposal Meeting (Mandatory)
December 6, 2013	Letter of Qualifications Due
January 10, 2014	Last Day for Questions
January 17, 2013	Technical Proposals Due
January 31, 2014	Price Proposals Due
February , 2014	Project Award
August 1, 2015 or before	Substantial Completion Date

#### **Technical Proposal**

A DBT may submit only one proposal. The format and content are as specified. Alternate proposals shall not be allowed. Each proposal shall be prepared simply and economically, providing a straightforward, concise description of the DBT's ability to meet the requirements of this solicitation. Fancy bindings, colored displays or promotional materials shall receive no evaluation credit. Emphasis shall be on completeness and clarity of content. The KYTC retains the right to request, receive and consider additional information and clarifications throughout the evaluation process.

DBTs shall submit one (1) original and ten (10) copies of the technical proposal and any preliminary plans under a single sealed cover. The DBTs shall also submit a CD, DVD, or thumb drive containing the Technical Proposal and all supporting documentation in Portable Document Format, PDF. Proposals shall be received no later than 4:00 p.m., Eastern Standard Time, on 1-17-2014. The KYTC shall reject any proposal received after 4:00 p.m. , Eastern Standard Time, on 1-17-2014 and shall return it unopened to the proposer. In order to be considered, the original proposal shall be signed in blue ink by an authorized representative of the DBT.

The proposal shall be clear and concise, and provide the Scoring Committee with an understanding of the DBT's ability to undertake and complete the proposed work in a thorough manner. The proposal is limited to 25 pages 8.5" by 11" which will include resumes, similar projects, project schedule, and technical write-up. The DBT may provide unlimited 11" by 17" pages for supporting details and graphics (ie plan sheets, profiles, etc). A page is defined as an 8.5" by 11" or 11" by 17" sheet which contains text, pictures, graphs, charts, plan sheets, or any other graphics. An 11" by 17" sheet shall not contain only text but shall contain pictures, graphs, charts, plans, or other graphics. Any preliminary plans shall be

completed with a readable scale on 11" by 17" sheets. The proposals shall either be mailed or hand delivered by 4:00 PM (EST) on January 17, 2014 to:

Mr. Ryan Griffith, P.E., Director  
Division of Construction Procurement  
200 Mero Street, 3<sup>rd</sup> Floor  
Frankfort, KY 40622

The outside cover of the package containing the proposal shall be marked:

Technical Proposal for  
Pulaski County - Somerset Southeast Bypass  
Item No. 8-119.00  
Design-Build: FY 2014 Design Build #4

### **Price Proposal**

The total price offered by the DBT for its proposal for all work specified in the Contract is referred to herein as the "Price Proposal".

Provide a hardcopy Price Proposal bearing original signature(s) by an authorized employee of the DBT. All other methods of submitting the Price Proposal shall be considered non-responsive and ineligible for Award.

Provide a Bid Bond. The KYTC Bid Bond form is available on-line at:

<http://transportation.ky.gov/Organizational-Resources/Forms/TC%2014-14.pdf>

or by contacting the KYTC at 502-564-3500. Each DBT shall submit a Bid Bond with its proposal in the amount of at least five percent of the Price Proposal, issued by a surety meeting the requirements of the contract. Alternatively, DBTs may submit cash, a certified check, or a cashier's check payable to KYTC in this amount. A Bid Bond shall not be conditioned in any way to modify the minimum five percent required. Proposals that fail to include a Bid Bond or cash deposit in compliance with this subsection shall be deemed non-responsive and shall be rejected by KYTC. This bond shall be submitted with the Price Proposal in the same sealed envelope and will not be opened until completion of the review of the Technical Proposals. The DBT shall supply all necessary certifications noted in Appendix L with the Price Proposal.

KYTC shall not accept Price Proposals by facsimile or electronic transmission. Any Price Proposal that fails to meet the deadline or delivery requirement shall be rejected and returned to the DBT without having been opened, considered, or evaluated. The KYTC shall not be responsible for a late Price Proposal due to failure of the DBT to allow sufficient time for delivery of the Price Proposal.

KYTC shall not open the Price Proposal until the completion of the evaluation of the Technical Proposals.

Sealed Price Proposals shall be submitted by mail or hand by 2:00 PM (EST) January 31, 2014 to:

Mr. Ryan Griffith, P.E., Director  
Division of Construction Procurement  
200 Mero Street, 3<sup>rd</sup> Floor  
Frankfort, KY 40622

The outside cover of the package containing the proposal shall be marked:

Price Proposal for  
Pulaski County - Somerset Southeast Bypass  
Item No. 8-119.00  
Design-Build: FY 2014 Design Build #4

**6.12 Acceptance of Proposals**

All proposals properly submitted shall be accepted by the KYTC. However, the KYTC reserves the right to request necessary amendments which may become part of the DBT's proposal; reject all proposals; reject any proposal that does not meet mandatory requirements; or cancel this solicitation, in the best interest of the KYTC. For comparison purposes, the Awards Committee will prepare a cost estimate based upon information provided by the DBT in the proposal submittal. For acceptance purposes, the KYTC may use this estimate to accept or reject any or all proposals.

The KYTC also reserves the right to waive minor irregularities in proposals providing such action is in the best interest of the KYTC.

If the KYTC waives minor irregularities, such waiver shall in no way modify the solicitation requirements or excuse the DBT from full compliance with the specifications and other contract requirements if the DBT is awarded the contract.

**6.13 Protests**

The Secretary of the Kentucky Transportation Cabinet, or his designee, shall have authority to determine and resolve protests and other controversies of actual or prospective DBTs in connection with the solicitations or selection for award of a contract.

Except as provided in Section 6.6, any actual or prospective DBT, who is aggrieved in connection with solicitation or selection for award of a contract, may file a protest with the Secretary of the Transportation Cabinet. A protest or notice of other controversy must be filed promptly, and in any event within two calendar weeks after such aggrieved person knows or should have known of the facts giving rise thereto. All protests or notices of other controversies must be in writing to:

Secretary, Transportation Cabinet  
c/o Steve Waddle, State Highway Engineer  
200 Mero Street; 6<sup>th</sup> Floor  
Frankfort, KY 40622

The Secretary of the Kentucky Transportation Cabinet shall promptly issue a decision in writing. A copy of that decision shall be mailed or otherwise furnished to the aggrieved party and shall state the reason for the decision. The decision by the Secretary of the Kentucky Transportation Cabinet shall be final.

**6.14 Equal Employment Opportunity Act**

The Equal Employment Opportunity Act of 1978 applies to all State government projects with an estimated value exceeding \$250,000.

**6.15 Employment Wage, Record, and Insurance Requirements**

See Appendix F for applicable requirements. It is understood and agreed to by the DBT that the Prevailing Wage Schedule for compensation to employees for the work categories and occupations for the county for which this project is located shall be strictly adhered to.

**6.16 VIOLATION OF TAX AND EMPLOYMENT LAWS:**

KRS 45A.485 requires the DBT to reveal to the KYTC, prior to the award of a contract, any final determination of a violation by the DBT within the previous five (5) year period of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341, and 342. These statutes relate to the state sales and use

tax, corporate and utility tax, income tax, wages and hours laws, occupational safety and health laws, unemployment insurance laws, and workers compensation insurance laws, respectively.

To comply with the provisions of KRS 45A.485, the DBT shall report any such final determination(s) of violation(s) to the KYTC by providing the following information regarding the final determination(s): the KRS violated, the date of the final determination, and the state agency which issued the final determination.

KRS 45A.485 also provides that, for the duration of any contract, the contractor shall be in continuous compliance with the provisions of those statutes which apply to the contractor's operations, and that the contractor's failure to reveal a final determination as described above or failure to comply with the above statutes for the duration of the contract, shall be grounds for the KYTC's

DBT shall identify one of the following with its Price Proposal submitted on December 19<sup>th</sup>, 2013.

           The DBT has not violated any of the provisions of the above statutes within the previous five (5) year period.

           The DBT has violated the provisions of one or more of the above statutes within the previous five (5) year period and has revealed such final determination(s) of violation(s). A list of such determination(s) is attached.

#### **6.17 FHWA 1273 (NOT APPLICABLE)**

#### **6.18 ACCESS TO RECORDS**

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 (Appendix K).

#### **6.19 RECIPROCAL PREFERENCE**

Reciprocal preference to be given by public agencies to resident bidders  
By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status and submit with their price proposal. The Affidavit can be found as Appendix I.

#### **6.20 REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to KRS 176.085(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. 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. 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 register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

#### **6.21 Executive Branch Code of Ethics**

See Appendix J for restrictions relating to former KYTC employees.

### **7. PROJECT DESCRIPTION**

The project is the widening of the Somerset Southeast Bypass (KY 914) to its ultimate typical section between mile points 9.65 and 13.301, a total length of 3.651 miles.

### **8. GENERAL PROVISIONS FOR THE SCOPE OF WORK**

The DBT shall provide for the engineering services, design, and preparation of detailed construction plans for the construction of the proposed project. The DBT shall also provide services as described in Section 11 for the acquisition of right-of-way necessary to construct the proposed project and shall provide for the relocation of utilities impacted by the proposed project as described in Section 12. Further, the DBT shall provide for the furnishing of materials, construction and completion in every detail of all the work described in this RFP in order to fulfill the intent of the contract.

#### **8.1 Governing Regulations**

All services, including but not limited to survey, design and construction work, performed by the DBT and all subcontractors, shall be in compliance with all applicable AASHTO Design Standards, KYTC Department of Highway's Standard Specifications for Road and Bridge Construction, Standard Drawings, Manuals and Guidelines. As a part of the DBT's technical proposal submittal, a general schedule outlining the items listed in Section 18.1 of the RFP. A comprehensive schedule detailing all project milestone dates must be prepared for Department review and approval within 30 days of the award of the contract. This schedule shall show all major design, right of way, utility and construction activities and the critical path to completion.

In addition, the DBT shall be required to furnish the Department with a complete breakdown of the lump sum bid items established for this project at the time of submittal of the DBT price proposal. This breakdown of bid items shall be compatible with Sitemanager. In order to document how the lump sum bid price was determined, the DBT must supply, using standard KYTC bid item codes whenever possible, quantities, units, and prices to support the lump sum bid submitted. Any non-standard bid items used must be thoroughly explained in the bid proposal. The breakdown shall include materials to be used in the work, and shall be in sufficient detail to provide KYTC with a means to check partial payment requests.

The fact that the bid items for this Design-Build project are general rather than specific shall not relieve the DBT of the requirement that all work performed and all materials furnished shall be in reasonable conformity with the specifications. The DBT's Consultant shall reference in the plans the appropriate Construction and Material Specifications Item Number for all work to be performed and all materials to be furnished.

It will be the responsibility of the DBT to acquire and utilize the necessary KYTC manuals that apply to the design, right of way, utility and construction work required to complete this project.

## 8.2 Lump Sum Bid Items

For this project, a single “all-inclusive” Lump Sum bid item is to be utilized. The components that are to be incorporated in this bid item shall include but are not limited to:

Design:	DBT shall furnish units used to prepare project design. See appropriate sections
Environmental In Lieu Fees	See Section 10
Right of Way Acquisition Services:	See Section 11
Utility Relocation:	See Section 12
Grade & Drain:	See Appropriate Sections
Asphalt Paving:	See Appendix A
Structures:	See Section 16
Traffic Signals:	See Section 17

The DBT shall provide supplemental cost information and supporting documentation of those costs for each of the components listed. The sum of the individual component costs shall equal the value of the “all-inclusive” single lump sum bid item for the project. Certain aspects and requirements for each of these items are discussed in the following sections. Some components are discussed in multiple sections due to the nature of the work involved. As stated previously, the intent of this “all-inclusive” single lump sum bid item is to incorporate all features of the project into this bid item. Please be advised that three percent (3%) of the total lump sum bid price shall be used as the Demobilization cost for this project.

In addition the DBT shall provide a separate estimated cost of the right-of-way acquisition. This estimate should not include services for right-of-way acquisition as these services as described in Section 11 are to be included in the lump sum bid as described above. KYTC will utilize this estimate to authorize Right-Of-Way funds for acquisition and relocation costs not right-of-way services.

## 8.3 Basis of Payment

All items covered by Construction and Material Specifications, Supplemental Specifications, Proposal and Special Provision notes with unit price as a basis of payment shall be included in the Lump Sum bid item established for the project. “In progress” payments for the project shall be made utilizing the supplemental cost information supplied for each of the components identified as parts of the “all inclusive” single Lump Sum bid item.

Contrary to the Standard Specifications, payment schedule for Mobilization will be as follows:

- 1) 1<sup>st</sup> 50% payment will be made on first pay estimate that Contractor’s total earned value on actual roadway construction items, other than Mobilization, exceeds \$10,000 and
- 2) the 2<sup>nd</sup> 50% payment will be made on first pay estimate on which the Contractor has earned 5 percent or more of the Contract amount on construction items, excluding Mobilization

## 8.4 Final Payment

In addition to the normal requirements in Sections 105.12 and 109 of the Standard Specifications, the DBT shall prepare and submit the following prior to the request for final payment:

1. All original project files and notes utilized in the preparation of the survey, design and construction of the project.
2. As-Built Plans as required below.

## 8.5 As-Built Plans

A. General: At the completion of the work, prior to final acceptance of the construction, the DBT shall furnish KYTC Electronic As-Built Plans of the construction. When the As-Built Plans are completed, the DBT’s Consultant shall professionally endorse (sign and seal) the title sheet.

As-Built Plans shall be prepared and submitted in accordance with Chapter 200 of the KYTC Highway Design Manual.

In addition to the information shown on the construction plans, the As-Built Plans shall show the following:

1. All deviations from the original approved construction plans which result in a change of location, material, type or size of work.
2. Any utilities, pipes, wellheads, abandoned pavements, foundations or other major obstructions discovered and remaining in place which are not shown, or do not conform to locations or depths shown in the plans. All underground features (including utilities that have been relocated as a part of the project) shall be shown and labeled on the As-Built Plans (Quality C) in terms of station, offset and elevation.
3. The final option and specification number selected for those items which allow several material options under the specification (e.g., conduit).
4. Additional plan sheets may be needed if necessary to show work not included in the construction plans.

The Plan index shall show the plan sheets which have changes appearing on them.

Once KYTC has approved the As-Built Plans, the original tracings and the associated electronic files shall be delivered to the Project Manager for final processing. Acceptance of these plans and delivery of the original tracings and the associated electronic files shall be approved by the Project Manager prior to the work being accepted and the final estimate approved.

B. CADD Files shall be supplied by DBT:  Yes  No

All CADD standards shall be in accordance with the KY CADD Standards Version 3.09.

#### **8.6 Pre-Design-Preconstruction Conference**

The DBT shall attend a mandatory Pre-Design-Preconstruction Conference to be scheduled upon award of the contract.

#### **8.7 KYTC Contacts**

Communication:

All communication during design and construction shall be with KYTC's Project Manager. All submittals identified elsewhere in this document shall be simultaneously sent to the KYTC's Project Manager and to the other KYTC personnel.

District Project Manager: William Chaney

Phone number: 606-677-4017 Email: william.chaney@ky.gov

At the Pre-Design-Preconstruction Conference, the DBT shall name a Project Manager who will act as a liaison between the DBT and KYTC.

#### **8.8 Entry on Private Property**

Prior to performing any project development work, the awarded DBT shall send notification letters indicating the date and duration of entry to any affected property owners no less than forty-eight (48) hours nor more than thirty (30) days prior to the date of entry. The DBT shall forward copies of all notification letters distributed to KYTC's Project Manager. Any subsequent claims for compensation due to damages incurred during the project development phase will be negotiated between the DBT and the affected property owners.

### **9. HAZARDOUS MATERIALS**

KYTC is unaware of any hazardous or contaminated materials within the project limits. However, the DBT is advised that any hazardous materials or contaminated areas encountered as a part of the design and construction

of the project shall be the responsibility of the DBT to identify, take responsibility for, and take the appropriate steps to dispose of said materials in accordance with all laws and regulations.

Should the DBT encounter hazardous or contaminated areas on the project, the DBT shall prepare a Contaminated Materials Management Plan (CMMP) to address the methodologies to be employed by the DBT to minimize the disturbance of contaminated materials and to dispose of any contaminated materials encountered by the DBT as the result of the DBT's design and construction. KYTC shall retain status as "generator" of all wastes regulated under federal RCRA and applicable state laws. It shall be the DBT's responsibility to identify, handle, manage and, if necessary, dispose of, all contaminated materials in accordance with all applicable local, state and federal regulations. It is understood that wherever practicable, contaminated materials shall be managed on the construction site.

DBT shall have both the responsibility and authority to conduct any additional environmental assessment and/or testing it deems necessary to identify, handle, manage, transport and dispose of contaminated materials encountered during construction, within the confines of local, state and federal environmental statutes, regulations and ordinances. All environmental data collected shall be retained for KYTC review and be made available, if requested.

The DBT shall be solely responsible for the health and safety of its own employees with regard to contaminated materials. DBT shall be liable for any loss or damage incurred by its employees or third parties as a result of its management, handling or improper disposal of contaminated materials. DBT shall indemnify KYTC for any damages incurred there from.

DBT shall assure that all contaminated materials requiring off-site disposal are transported and disposed of in accordance with applicable local, state and federal laws in a regulated facility approved by KYTC. The DBT shall be responsible for manifesting and gaining approval for disposal of each shipment of contaminated materials designated for disposal at a regulated facility. DBT shall retain copies of all manifests and associated documentation for review by KYTC upon request.

## **10. ENVIRONMENTAL**

### **10.1 Permits:**

The DBT shall be responsible for obtaining all required permits from the appropriate Federal, State, and Local Government agencies having jurisdiction over all work related to the project.

### **10.2 Waterway Permits**

The DBT shall be aware of Clean Water Act permits issued by the US Army Corps of Engineers (USACE) and the Kentucky Division of Water (KDOW) as may apply to the Work. This shall include both Nationwide and Individual USACE Section 404 permits, KDOW section 401 Individual Water Quality Certifications and KDOW Individual Kentucky Point Source Elimination System (KPDES) Section 402 permits. The level of permit required, either a Nationwide or Individual 404, 401, or 402 is determined by the amount of impact to "waters of the US", (i.e., acreage of fill activities in a stream or wetland or linear feet of work in a stream) and in some cases the KDOW designation of waters impacted. All individual 404 Permits require 401 Water Quality Certification. 404 Nationwide Permits are activity specific permits used to authorize specific types of project activities having only minor impacts. Projects with more than minor impacts require individual review by the USACE and the KDOW.

The DBT shall minimize water impacts to meet the requirements of USACE Nationwide permits and KDOW General Certifications and avoid the need for Individual 404 Permits and 401 Water Quality Certification, if practicable. A description of the various Nationwide Permits for the State of Kentucky

can be found at the USACEs' web site. The DBT shall also be aware of the Kentucky Division of Water (KDOW) Special Use designations listed in the Kentucky Administrative Regulations. Impacts to such designated waters may require an Individual Section 402 Kentucky Pollution Discharge Elimination System (KPDES) permit.

The DBT is advised that coordination and approval of Individual waterway permits may take 9 to 12 months. Therefore, it is imperative that the DBT identify permit needs at the earliest stages of project development. The development of all Section 401, 402 and 404 permitting documents, as appropriate, shall be the responsibility of the DBT. The applicant for all permits shall be the "Kentucky Transportation Cabinet." The DBT shall submit permit applications to the KYTC Division of Environmental Analysis (DEA), for review and submittal to the appropriate permitting agency. DEA shall review all DBT submittals within 14 days after receiving the information. At no time, shall the DBT coordinate waterway permit issues directly with the permitting agencies unless directed to do so by KYTC's Project Manager. The DBT shall be responsible for complying with all provisions set forth in the Permits. This shall include any costs or in-lieu fees associated with the permits. Please see Appendix C for additional information regarding Nationwide permit conditions.

### **10.3 Kentucky Pollutant Discharge Elimination System Permit (KYR10) and Best Management Practices (BMP) Plan**

Projects that are not required to have a Section 402 Individual KPDES permit, must request coverage under the program's General Construction Storm Water Permit (KYR10). The DBT must submit to KYTC's project manager a BMP plan for the project and receive approval prior to beginning work. All temporary erosion control is the responsibility of the DBT. The DBT will be responsible for filing the Notice of Intent (NOI) with the Kentucky Division of Water requesting coverage under the KYR10 permit. The DBT will be responsible for all required monitoring and recordkeeping during construction activities.

## **11. RIGHT OF WAY (ROW)**

### **11.1 GENERAL REQUIREMENTS**

It is the intent of KYTC that this project be constructed within the limits of the existing right of way. The DBT shall be responsible for determining additional right of way needs (including easements for drainage, erosion control, utility relocations, and maintenance of traffic) that their design requires.

The DBT shall stake and flag all existing and proposed right of way and easements needed in the field prior to the start of construction. The DBT shall maintain these markings throughout the duration of the project.

The following sections outline the DBTs responsibilities for acquisition of additional right of way if deemed necessary.

### **11.2 DESIGN BUILD TEAM CONFLICT of INTEREST**

If at any time, the DBT or to the best of the DBT's knowledge, any DBT-Related Entity directly or indirectly: (i) acquires or has previously acquired any interest in real property likely to be parcels of the Project Right-of-Way or the remainders of any such parcels; (ii) loans or has previously loaned money to any interest holder in any real property likely to be a Project Right-of-Way parcel and accepts as security for such loan the parcel, or the remainder of any such parcel that is not a whole acquisition, or (iii) purchases or has previously purchased from an existing mortgagee the mortgage instrument that secures

an existing loan against real property likely to be a Project Right-of-Way parcel, or the remainder of any such parcel, the DBT shall promptly disclose the same to KYTC. In the case of acquisitions, loans or mortgage purchases that occurred prior to the execution of the Agreement, such disclosure shall be made within ten (10) days after execution of the Agreement.

In the event that the DBT, or any subsidiary or parent company of the DBT, acquires a real property interest, whether title or mortgage, in parcels of the Project Right-of-Way, the real property interest acquired or a release of mortgage as the case may be, shall be conveyed to the State of Kentucky, without the necessity of eminent domain.

The DBT shall not acquire or permit the acquisition by the DBT or any DBT-Related Entity of any real property interest in a Project Right-of-Way parcel, whether in fee title or mortgage, for the purpose of avoiding compliance with the laws, practices, guidelines, procedures and methods described.

### **11.3 CLEARANCE/DEMOLITION of PROJECT RIGHT-OF-WAY**

The DBT shall be responsible for the clearance/demolition of buildings that are within the project right of way limits. Prior to demolition of any improvements, the DBT shall obtain photographs of the property and all improvements. The DBT shall also have photos of any other items of dispute in and of a quality suitable for presentation as evidence in court. Following acquisition or possession of any parcel of Project Right-of-Way, the DBT shall:

- A. Follow property management guidelines for KYTC.
- B. Secure and protect the buildings, improvements and fixtures on the Project Right-of-Way until they are disposed of or demolished. DBT shall board-up, mow, and winterize as required by KYTC or applicable Law.
- C. Coordinate with the owner and occupants to assure the clearance of personal property from the Project Right-of-Way, as applicable.
- D. Provide for any insect and rodent control and initiate extermination as required to protect the adjacent properties and rid the Project Right-of-Way from infestations.
- E. Secure Governmental Approvals required for demolition and environmental surveys or tests, and notify KYTC in writing of all such activities.
- F. The DBT shall be required to prepare necessary documentation for disposal of improvements, including the coordination and disposal of all contaminated or hazardous materials encountered, fixtures, and buildings in accordance with applicable Laws.
- G. Provide written notification to KYTC of any real and/or personal property remaining on the Project Right-of-Way after vacated by the occupants and not acquired as part of the acquisition.
- H. Terminate all utility service(s) when appropriate.
- I. Process all required forms, documents and permit applications in order to proceed with the timely demolition or removal of any and all improvements, buildings and fixtures located within the Project Right-of-Way, as applicable.
- J. Demolish and/or remove all improvements.
- K. Notify KYTC upon completion of the demolition and clearance of the Project Right-of-Way, as applicable.
- L. DBT shall be responsible for demolition and removal of all billboards impacted by the project.

### **11.4 PROCUREMENT of RIGHT-OF-WAY**

The DBT shall be responsible for all services and costs necessary to properly obtain the Right-of-Way and/or easements needed to complete the project except for the purchase price of the property, which KYTC shall retain responsibility for.

This Section sets forth the Right-of-Way activities and applicable requirements to perform the work assigned to the DBT as well as pre-acquisition and acquisition activities to be performed by KYTC. The DBT shall provide all services necessary to acquire title to the Project Right-of-Way and/or easements, in form and substance acceptable to KYTC, in the name of the Commonwealth of Kentucky. This shall include coordination of relocation of displacees and clearance/demolition of the improvements from the Project Right-of-Way, as more fully described in the following sub-sections.

Except as otherwise set forth in the Agreement, the DBT's Project Right-of-Way staff and/or Contractors shall function as independent contractors while acquiring Project Right-of-Way, and not as an agent, representative, or employees of KYTC.

#### **11.4.1 Standards for Right-of-Way Acquisitions by the DBT**

The DBT shall acquire Project Right-of-Way in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act, otherwise referenced as the UNIFORM Act, as well as applicable state and federal Law and the practices, guidelines, procedures, and methods contained in the following as it pertains to Right-of-Way:

A. KYTC *Right of Way Manual and Relocation Assistance Manual (Kentucky properties)*

Pursuant to the applicable federal regulations, the DBT shall (i) acquire Right-of-Way parcels for the Project on behalf of KYTC, but without the direct participation of KYTC, subject to KYTC rights of review, approval, and audit; (ii) certify acceptance of the KYTC *Policies and Procedures*; (iii) provide adequate access to all occupied properties; and (iv) maintain utility service to occupied properties until relocation is complete.

#### **11.4.2 Software Requirements for Right-of-Way Acquisitions by the DBT**

The DBT shall employ software that is compatible with the software in use by KYTC, or fully transferable to the KYTC system. The DBT must supply and maintain a web-based, parcel-by-parcel database that incorporates the fields and information required by KYTC. The DBT must maintain and participate in the KYTC Right-of-Way and Utilities Management System (RWUMS) for appraisal, appraisal review and acquisitions, and any other required Right-of-Way tracking system required by KYTC or otherwise agreed to by the parties. The database shall be fully accessible to persons authorized by KYTC.

#### **11.4.3 DBT's Right-of-Way Acquisition Plan**

The DBT shall prepare a Right of Way Acquisition Plan prior to the start of any right of way activities. The Right-of-Way Acquisition Plan shall be submitted to KYTC for approval prior to beginning any of the activities identified in the plan.

The Right-of-Way Acquisition Plan shall clearly present the DBT's methodology to be used to secure the Right-of-Way needed to construct the Project. The Right-of-Way Acquisition Plan shall set forth DBT's organization, including names, titles and qualifications of Project Right-of-Way personnel, integration of the Project Right-of-Way schedule into the Project Schedule, interface between design and Project Right-of-Way activities, documentation and reporting, quality control procedures, and quality review standards.

The Right-of-Way Acquisition Plan shall contain, at a minimum, the following:

- A. The name of KYTC approved title attorneys to be used for title services.
- B. The name and qualifications of the proposed Right-of-Way Acquisition Manager (AM).

- C. The resumes and qualifications for appraisers, appraisal reviewers, relocation agents, negotiators, real estate attorneys, property management agents, approved condemnation attorneys, and Right-of-Way personnel who shall have the minimum qualifications and experience specified in the KYTC Right-of-Way Manual.

The Right-of-Way Acquisition Plan shall establish the specific means by which the DBT shall:

- A. Provide sufficient personnel to achieve, in accordance with the Project Schedule, the goals and milestones established for Project Right-of-Way acquisition, relocation assistance, appraisals and appraisal review, and clearance/demolition of the improvements from the Project Right-of-Way.
- B. Provide administrative support.
- C. Provide for non-English speaking, visually impaired, or hearing impaired translation, as necessary.
- D. Provide documentation and reports.
- E. Produce and distribute acquisition and relocation brochures as approved by KYTC.
- F. Establish, implement, and maintain quality control procedures and quality review standards for the acquisition for Project Right-of-Way.
- G. Prevent fraud, waste, and mismanagement.
- H. Provide methods for dispute resolution.

#### **11.4.4 Schedule and Review Procedures for the Right-of-Way Acquisition Plan**

The Project Schedule shall indicate the date to begin the acquisition of the Project Right-of-Way and the anticipated completion date of acquisition activities for each parcel. KYTC shall be advised of all properties and temporary rights or interests in real property to be acquired by the DBT. In developing the Project Schedule, the DBT shall give priority to the acquisition of parcels that have significant impact on the Project Schedule and/or affect the Critical Path as so indicated. The monthly status reports shall provide updated projections for the acquisition date of each parcel.

Prior to beginning acquisition of a parcel, the DBT shall submit a complete Acquisition Package for said parcel. The Acquisition Package shall be prepared in accordance with the UNIFORM ACT as well as the KYTC Right-of-Way Manuals. Also, any unusual issues with the parcel shall be denoted. The submittal shall be made to the Project Manager for KYTC or their designee. Upon approval of the parcel Acquisition Package by KYTC, the DBT is released to acquire the parcel. KYTC shall retain all submittals as reference documents only. Submittal of the Acquisition Package to KYTC does not release the DBT from any responsibilities regarding the lawful performance of the acquisition of the Right-of-Way as defined by the RFP and other applicable laws and regulations. No adjustments to the Project Schedule shall be allowed due to this requirement.

The DBT is advised that for scheduling purposes, KYTC will be allowed up to 30 Calendar Days to process payments to respective property owners once the acquisition process has been completed and submitted to KYTC for execution.

#### **11.4.5 Project Scope of Services for Right-of-Way Acquisitions by the DBT**

The DBT shall complete all administrative activities and prepare all documentation sufficient for the DBT to acquire the Project Right-of-Way. The DBT shall provide all Project Right-of-Way

maps and surveys, appraisals, legal descriptions, acquisition documentation, requests to acquire Project Right-of-Way, condemnation-related activities, and funding/closing procedures. The DBT shall use only those attorneys that are on KYTC's Office of Legal Services statewide contract list for title reports, closings, and condemnation. Except as otherwise authorized by applicable State and federal policy and regulations for early acquisition and approved by KYTC, the DBT shall not proceed with acquisition of the Project Right-of-Way until Right-of-Way maps and legal descriptions for the applicable constructible segment as established by the logical termini of the Project have been prepared and approved by KYTC. KYTC shall provide a separate release for each approved segment. Further, the DBT shall not commence any negotiations with landowners nor shall KYTC begin eminent domain procedures until the Acquisition Package from the Right-of-Way AM for that particular parcel has been submitted and approved by KYTC.

If the DBT and the landowner cannot negotiate an agreed-upon purchase price, the DBT shall advise KYTC that the DBT has elected to commence acquisition of the property through eminent domain procedures. The DBT shall not be permitted to commence any condemnation action through the statutory procedure without the express written consent of KYTC. Consent may be withheld by KYTC at their sole and absolute discretion.

The DBT shall not begin construction on any parcel of real estate unless property rights for the parcel have been conveyed and recorded in favor of KYTC, possession has been obtained through eminent domain procedures or a Consent and Release Agreement has been validly executed and delivered by all necessary parties to KYTC.

#### **11.4.6 Acquisition Process Summary for Right-of-Way Acquisitions by the DBT**

The DBT's major activities with respect to the acquisition of the Project Right-of-Way are:

- A. Project Right-of-Way surveying and mapping
- B. Title services
- C. Appraisal services
- D. Appraisal review
- E. Negotiations
- F. Closing services
- G. Relocation assistance
- H. Condemnation support services
- I. Clearance and demolition of Project Right-of-Way
- J. Environmental due diligence
- K. Documentation and document control
- L. Progress reports
- M. Project Right-of-Way administration and management
- N. Project Right-of-Way quality management
- O. Preparation of the acquisition packet for approval
- P. Obtaining rights of entry, as necessary

#### **11.4.7 Right-of-Way Personnel Qualifications**

DBT Right-of-Way personnel qualifications shall meet minimum standards set out in KYTC Right-of-Way Manuals.

#### **11.4.8 Documentation, Reporting and Legal Responsibilities for Right-of-Way Acquisitions by the DBT**

The DBT is responsible for preparing all specific reports and supporting documentation for review and approval during the acquisition process required by the UNIFORM ACT, all applicable laws and regulations, and the *Policies and Procedures* for KYTC, as required. At the sole discretion of KYTC, should evidence be presented or it is suspected that the DBT is not following all laws and regulations in regards to the procurement of Right-of-Way for the Project, KYTC reserves the right to audit the DBT's Project documentation to verify contract requirements are being met. No adjustments to the Project schedule shall be allowed due to performance of an audit. If evidence is found that the DBT has failed to conform with all applicable laws and requirements established for the procurement of Right-of-Way as detailed in the RFP for this Project, the DBT may be subject to litigation and penalties as determined by a Court of Law in Kentucky. By submittal of a Proposal for this Project, the DBT acknowledges and agrees that the sole responsibility for the lawful procurement of Right-of-Way for this Project is the DBT's. Further, any delays, work stoppages, or financial penalties resulting from a failure to comply with all applicable laws and requirements for the lawful procurement of Right-of-Way for this Project are the responsibility of the DBT and the DBT agrees to hold harmless KYTC.

All correspondence with KYTC and property owners relating to acquisition of real property shall include a heading with the following information (at a minimum):

- A. County/State
- B. Project – Item Number Highway Designation
- C. Parcel number
- D. Name of record owner(s)

In administering and managing its Project Right-of-Way activities, the DBT shall:

- A. Maintain parcel records on file of all aspects of the acquisition process in accordance with KYTC requirements and applicable Law. Each parcel file shall include all documents required by the KYTC Right-of-Way Manuals as applicable and the UNIFORM ACT.
- B. Provide monthly summaries for the cost of Project Right-of-Way acquisition and related relocation assistance including amounts authorized and amounts paid on a parcel-by-parcel basis as requested by KYTC.
- C. Maintain and electronically transmit to KYTC, in a format acceptable to KYTC, bi-monthly status reports including appraisal, acquisition, and relocation status of all parcels and activities related to Project Right-of-Way.
- D. Input and update parcel status in KYTC approved web-based tracking system or as directed by KYTC.

#### **11.4.8 Responsibilities of the DBT for Right-of-Way Acquisition by the DBT**

The DBT shall be responsible for the costs of all services and preparation of all documentation for all Project Right-of-Way acquisition, easement acquisition, permitting, and related relocation assistance for the Project. The work related to Project Right-of-Way acquisition includes mapping, surveying, environmental assessment, testing and remediation, appraisal, appraisal review, negotiation, acquisition, clearing of title, closing of acquisitions, and condemnation support, including expert witnesses as required by KYTC's Office of Legal Services for all condemnation proceedings. The DBT shall also be responsible for all exhibits, transcripts, and photos associated with condemnation services and proceedings required by KYTC's Office of Legal Services, including but not limited to jury trials, all pre-trial motions, discovery, appeals, relocation assistance, and clearance/demolition of improvements, as required.

The DBT shall be responsible for the costs of acquisition and documentation for the acquisition of any temporary right or interest in real property not necessary for the Project but that the DBT deems advisable to acquire for work space, contractor lay-down areas, material storage areas, borrow sites, or any other convenience of the DBT. Except as otherwise authorized by Law for temporary areas necessary for construction of the Project, KYTC shall not be obligated to exercise power of eminent domain in connection with the DBT's acquisition of any such temporary right or interest, and KYTC shall have no obligations or responsibilities with respect to the acquisition, maintenance, or disposition of such temporary rights or interests.

#### **11.4.9 Review Responsibilities of KYTC for Acquisition Packages**

KYTC shall have the following responsibilities with acquisition of Project Right-of-Way:

- A. Upon receipt of a complete Acquisition Package prepared by the DBT's Right-of-Way AM, KYTC will review the package for completeness. KYTC will complete this review and approval in no longer than two (2) business days.
- B. KYTC will provide the DBT with a maximum amount that can be used as an administrative settlement for each parcel. Any increase to the approved amount shall require additional documentation.

#### **11.4.10 Responsibilities of the DBT and KYTC Office of Legal Services for use of Condemnation for Eminent Domain for Right-of-Way Acquisitions by the DBT**

KYTC and KYTC's Office of Legal Services shall have the following responsibilities in connection with acquisition of Project Right-of-Way in regards to use of State's right for condemnation for eminent domain:

- A. Upon receipt of a complete condemnation package from the DBT, KYTC shall coordinate with the KYTC Office of Legal Services to review the condemnation package. KYTC shall deliver the complete condemnation package to the KYTC Office of Legal Services within five business days after receipt from the DBT.
- B. Upon receipt of the condemnation package by the KYTC Office of Legal Services, the office shall have 20 business days to approve the condemnation package and determine if is acceptable to move forward with filing of the condemnation suit. If condemnation package is acceptable, the KYTC Office of Legal Services shall issue an executive order authorizing the DBT to file the condemnation suit on behalf of the State. The KYTC Office of Legal Services reserves the right to request that the DBT revise the condemnation package as required prior to approval in order to meet all legal requirements for the filing of condemnation suits for eminent domain. All re-submittals required from the DBT shall be approved in 20 business days.
- C. KYTC will return the approved condemnation package and executive order authorizing the DBT to file suit on behalf of the State to the DBT within five business days after receipt of the approved condemnation package from KYTC's Office of Legal Services.

The DBT shall be responsible for filing the condemnation suit for eminent domain on behalf of the State upon receipt of the approved condemnation package and executive order at their earliest convenience.

#### **11.4.11 Additional Reporting Requirements for Right-of-Way Acquisitions by the DBT**

In addition, the DBT shall provide the following reports and electronic files:

- A. Monthly Parcel Report: DBT shall provide a report, prior to the first of the month, listing all parcel deletions, parcel additions, and parcel splits.
- B. Monthly Progress Report: DBT shall provide a report of all survey activity that occurred over the previous month, including a two-week look ahead of anticipated survey activity.
- C. CAD Files: The DBT shall provide digital CAD files in MicroStation format which include: property lines and/or existing Right-of-Way lines, as surveyed; proposed Right-of-Way lines; parcel numbers; resource files; level assignments; and plot files. DBT shall submit CAD files prior to submitting the first Acquisition Package and provide updates as needed.

#### **11.4.12 Title Services for Right-of-Way Acquisitions by the DBT**

With respect to title services, and in compliance with KYTC Policies and Procedures, the DBT shall:

- A. Complete titles as directed by Right-of-Way manuals and legal services in KY.
- B. Select and contract with one or more title attorneys that are on KYTC's Office of Legal Services statewide contract list. The DBT shall be responsible for obtaining a five-year sales history, a preliminary title commitment or preliminary title report, and, if necessary or appropriate, copies of all underlying documents and a plot of all easements, including existing Utility property interests, referenced therein for each parcel (including fee acquisitions, slope easements, other drainage and roadway Right-of-Way or easements and abandonment of Utility easements) to be acquired by KYTC for the Project. Each title report shall be dated not more than 30 days prior to the date of submittal to KYTC of the Acquisition Package for such parcel. The DBT shall, at its own cost, review each title report to ensure that it complies with the format required by the Right-of-Way Manual for KYTC. The DBT shall, at its own cost, retain the services of a real estate attorney, licensed and approved by KYTC, to be available for title support and acquisition assistance. All title reports must be in the following required format (format as required by KYTC's Office of Legal Services): clearly indicate which exclusions and exceptions shall be deleted upon acquisition of the subject parcel, and clearly indicate any required deliverables to the title attorney to clear identified exclusions and exceptions. Title reports shall be in accordance with KYTC's Right-of-Way Manual. The DBT shall notify the title attorney, by letter, which exceptions may be removed, including easements that: (a) are appurtenant to and/or of benefit to the parcel but not included in the parcel to be acquired, and (b) are a burden on the parcel and not acceptable.
- C. Review the preliminary title commitment or report to ensure that all current owners of record title are contacted and that negotiations or condemnation actions are conducted with all appropriate parties.
- D. Work with the current owners of record title to each parcel or interest in a parcel or their designee and all other appropriate parties to clear any title exceptions or exclusions not acceptable to KYTC.
- E. Ensure that all Project Right-of-Way shall be acquired in fee simple absolute or easement interest as appropriate, free and clear of any and all liens and encumbrances. Title to the Project Right-of-Way shall be in the name of the Commonwealth of Kentucky.

#### **11.4.13 Appraisals for Right-of-Way Acquisitions by the DBT**

The DBT shall provide KYTC with fair market value appraisals prepared by appraisers meeting the minimum qualifications established herein. All appraisals shall be prepared in conformance with applicable law (including the UNIFORM Act), and in accordance with professional

appraisal methods and KYTC standards for all parcels to be acquired. The DBT shall select appraisers from KYTC list of approved fee appraisers.

#### **11.4.13.1 Appraisal Review for Right-of-Way Acquisitions by the DBT**

All necessary review appraisals shall be prepared in conformance with applicable law (including the UNIFORM Act), and in accordance with professional appraisal methods and KYTC standards for all parcels to be acquired. The DBT shall select review appraisers from KYTC's list of approved fee appraisers.

#### **11.4.14 Project Right-of-Way Acquisition Package Approval for Right-of-Way Acquisitions by the DBT**

Acquisition Packages submitted by the DBT to KYTC will include the following items, prepared for each parcel in accordance with the requirements of this section or Right-of-Way manual:

- A. A cover sheet setting forth the following information for each parcel.
  - a. County/State Project item number
  - b. Parcel number and number of parts
  - c. Name of owner
  - d. Extent of acquisition (partial or whole acquisition)
  - e. Type of conveyance (fee, easement, etc.)
- B. A complete legal description of the parcel adequate to effect the desired acquisition of the parcel, signed and sealed by a Registered Land Surveyor. A legal description and parcel plat is required for each parcel. Control of access shall be addressed in all legal descriptions. All descriptions shall be in recordable form and shall be prepared in a form and manner acceptable to KYTC in all respects.
- C. A title report, current within 180 Days, including copies of all documents identified in the exceptions listed therein and a plot of all easements identified therein. The Acquisition Package shall include the DBT's analysis of each preliminary title report or title commitment to determine potential problems and proposed methods to cure title deficiencies. The DBT shall perform title curative work. The DBT shall include copies of all curative documents in the Acquisition Package.
- D. A copy of the appraisal report; review appraisal report; and all supporting documentation, review, and supporting documents.
- E. A real/personal property report detailing what items making up each parcel are classified as real estate, tenant-owned improvements, or personal property. Particular attention shall be paid to items that have questionable classifications.
- F. Replacement Housing Calculations, notification of business eligibility, completed displacee interviews, all comparables used in estimating the Replacement Housing Calculations, and letter to displacee(s) explaining Replacement Housing Calculations. Calculations and replacement housing benefit package shall be prepared and reviewed by a qualified consultant, in conformance with KYTC standard relocation procedures and State and federal laws and regulations.
- G. The proposed initial offer letter, MOU, deed, and any other documents, which shall be prepared by the DBT as required.

Upon approval of the Acquisition Package from the DBT Right-of-Way AM by KYTC, the DBT may proceed with the offer to the property owner.

#### **11.4.15 Right-of-Way Negotiations for Right-of-Way Acquisitions by the DBT**

The DBT shall conduct all negotiations in accordance with the KYTC Right-of-Way Manual.

#### **11.4.16 Relocation Assistance for Right-of-Way Acquisitions by the DBT**

The DBT shall coordinate and perform the administrative requirements necessary to relocate any occupants from Project Right-of-Way. All work prepared by the DBT with respect to relocation assistance shall be performed in accordance with the KYTC Right-of-Way Manual.

KYTC will be responsible for the payment of all appropriate relocation costs for the respective parcel.

#### **11.4.17 Closing Services for Right-of-Way Acquisitions by the DBT**

For purposes of closing services, the DBT shall:

- A. Prepare the escrow agreement and closing documents, including a closing memorandum identifying all parties involved in the closing, and listing all documents to be executed and/or delivered in connection with the closing.
- B. Select and contract with one or more attorneys that are on KYTC's Office of Legal Services statewide contract list to perform closings. Attend closings; provide curative documents and exhibits as required and in conjunction with the applicable title attorney. Confirm that all conditions to closing are satisfied.
- C. Coordinate with the applicable title attorney to obtain an updated title commitment within 24 hours prior to closing and provide an approved updated title commitment within 30 Days following closing and transmit the same to KYTC.
- D. Obtain and deliver to KYTC one certified copy of each instrument of conveyance immediately after closing to KYTC within five business days after receipt. Cause to be delivered to KYTC a copy of the recorded deed within 10 business days after the attorney receives the recorded deed.

#### **11.4.18 Condemnation for Right-of-Way Acquisitions by the DBT**

The DBT shall be responsible for all aspects for the filing and execution of condemnation suits for the acquisition of Right-of-Way as part of an approved ITC, including the preparation of all documentation required, and attorneys' expenses needed for obtaining clear title to each parcel authorized for condemnation of the Project. The DBT shall use only those attorneys that are on KYTC's Office of Legal Services statewide contract list to perform condemnation services. The KYTC Office of Legal Services reserves the right to review and approve the condemnation package prepared by the DBT prior to the filing of a condemnation suit for eminent domain. In order to expedite review by the KYTC Office of Legal Services, the DBT shall provide the following information in the condemnation package:

- A. Provide records that the DBT has negotiated in good faith, in accordance with the UNIFORM ACT and the Right-of-Way Manual for KYTC. Document the reason(s) for condemnation including recommendations for property closure.
- B. Conduct all eminent domain-condemnation activities in accordance with the policies and procedures as described in the Right-of-Way Manual for KYTC, and all other applicable laws and regulations.
- C. After non-response or upon receipt of a copy of the rejected final offer from a property owner or other property right holder entitled to compensation, request an updated title report from the title attorney issuing the original title commitment.
- D. Use the information from the title report to join all parties having a property interest. Spouses of property holders with compensable rights must also be joined.

- E. Prepare a condemnation packet containing two copies each of the following documents:  
Report Form indicating all joined parties in the suit, negotiation logs, the updated title report not more than 90 days old, appraisal receipt acknowledgment, pre-appraisal contact sheet, signed and sealed field notes, parcel sketch, bisection clause and access clause exhibits (if necessary), final offer letter reflecting latest appraisal, any correspondence sent by the DBT or from the owner of the compensable interest or representatives, one copy of the appraisal report not more than 90 days old, and proof of good faith negotiations. Submit two complete condemnation packets to the KYTC Right-of-Way Administrator.
- F. Send a copy of the complete petition to the title attorney and confirm with the title attorney that the appropriate parties were joined in the case and that no changes in title have occurred since the original litigation guaranty was issued.
- G. Upon approval of the Condemnation Package by the KYTC Office of Legal Services, file the petition for condemnation with the appropriate court clerk after a determination that a timely settlement is not feasible.
- H. Be responsible for the all services and other duties required for the successful prosecution of the suit, including attendance in court and filing necessary documents to complete all eminent domain proceedings. This may include appearances at pre-commissioner's hearing preparations, special commissioner's hearings, and subsequent proceedings including jury trials and related proceedings.
- I. Provide written monthly updates as to the parcel status to the KYTC Right-of-Way Administrator throughout the process.
- J. Serve in person a "Notice of Hearing or Trial" at least 11 days prior to the date of the special commissioners' hearing, trial, or other hearings and notice requirements as directed or authorized by the court.
- K. Call and send reminder letters two to three weeks in advance of any hearing to the KYTC Right-of-Way Administrator such that KYTC is kept appraised of the progress of the court case.
- L. Make payment to all commissioners involved in the hearing and include payment for commissioners as part of general Project Right-of-Way services.
- M. Schedule and pay for all court related expenses including, but not limited to, court reporter services, transcription costs, mediation fees, expert witness fees, exhibits, and exhibit workbooks as required for the successful prosecution of the case. All documents and exhibits used in the special commissioner's hearings shall be retained as part of the Project records.
- N. File in a timely manner and provide proper service of objections after completion of the special commissioner's hearing as required. Within three days after objections have been filed, the DBT, at its cost, shall order transcripts of such hearing and provide said documents to the KYTC Right-of-Way Administrator.

## **12. UTILITIES**

### **12.1 GENERAL REQUIREMENTS**

A number of existing utilities are located within or in the vicinity of the Project Right-of-Way, some pursuant to statutory rights and some pursuant to property rights. During the initial two-lane construction phase of the Somerset Southeast Bypass, conflicting utilities were relocated outside of the assumed ultimate four-lane disturbed limits, so it is KYTC's belief that utility relocations should be minimal. However, RECC has subsequently placed a number of poles on the right of way that may require relocation, and it is acknowledged that the potential for conflicts with water, sewer, gas, and/or electric/cable/telephone exist at the major crossings of KY 769 and KY 192. The DBTs

are advised it is their responsibility to locate all utilities and take into account impacts their design creates.

This Section establishes procedures and requirements for adjusting utilities, if deemed necessary, including such processes as coordination with utility owners, administration of the engineering, construction, and other activities necessary for utility adjustments, and required documentation.

The DBT shall cause all utility adjustments necessary to accommodate construction, operation, maintenance and/or use of the project, in both its initial configuration and in its ultimate configuration. The DBT shall be responsible for preparing and executing all agreements with the utility owners impacted by the project. Some utility adjustments may be performed by the utility owner with its own forces and/or contractors and consultants (i.e., utility owner-managed); all others shall be performed by the DBT with its own forces and/or contractors and consultants (subject to any approval rights required by the utility owner for those working on its facilities) (i.e., DBT-managed). The allocation of responsibility for the utility adjustment work between DBT and the utility owners shall be specified in the Utility Agreements executed by the DBT with the respective utility owner. All costs associated with the design, right-of-way (utility easement) and relocation of utilities for this project shall be the responsibility of the DBT. The DBT shall clearly demonstrate in the schedule prepared for the project how the utility relocation work is to be accomplished. No contract time extensions shall be granted to the DBT due to relocation of utilities for the project.

The DBT's obligations regarding reimbursement to utility owners for all costs of utility adjustment work shall be as set forth in the Utility Agreements prepared for the project by the DBT and in conformance with FHWA's *Program Guide for Utility Relocation and Accommodation for Federal-Aid Projects*. In general, in order to facilitate the timely relocation of the utilities for the Project, KYTC has advised all respective utility companies thought to be potentially impacted by the project that the costs associated with utility relocation work shall be reimbursed to the respective utility owner by the DBT. This includes both public and private utilities. However, as per FHWA's *Program Guide for Utility Relocation and Accommodation for Federal-Aid Project*, any "betterments" to the utilities made as part of the relocation work are not eligible project expenses and shall not be included in the project costs. The DBT and the respective utility owner shall clearly demonstrate in the agreements prepared for the project how any "betterments" planned for the Utility facilities during the relocation work are paid for using non-project funds. The DBT shall be responsible for strictly adhering to this requirement. Should it be determined that project funds have been used for betterment of the utility facilities without prior approval by KYTC, an amount equal to the cost determined to be expended upon betterment of the utility facilities relocated for the project shall be deducted from the DBT's contract amount.

This Section does not address utility services to the project. Utility services to the project shall be the subject of separate agreements between the DBT and utility owners.

#### **12.1.1 When Utility Adjustment is Required**

A utility adjustment may be necessary to accommodate the project for either or both of the following reasons: (a) a physical conflict between the project and the utility; and/or (b) an incompatibility between the project and the utility based on constructability, future operation, safety, and maintenance. The physical limits of all utility adjustments shall extend as necessary to functionally replace the existing utility, whether inside or outside of the project right-of-way. Section 12.2.4.2 contains provisions that address the acquisition of easements for utilities to be installed outside of the project right-of-way.

Utilities may remain in their existing locations within the project right-of-way if the existing location shall not adversely affect the construction, operation, safety, maintenance and/or use of the project.

## **12.1.2 Certain Components of the Utility Adjustment Work**

### ***12.1.2.1 Coordination***

The DBT shall communicate, cooperate, and coordinate with KYTC, the utility owners, and potentially affected third parties, as necessary for performance of the utility adjustment work. The DBT shall be responsible for preparing and securing execution of all necessary agreements.

Please be advised that the utility owner, as part of the review and comment for the Utility Agreement by KYTC, shall be responsible for obtaining an *Encroachment Permit* for all utility relocation work to be done within the public right-of-way. The DBT shall be responsible for all coordination needed to ensure that the *Encroachment Permits* and any other approvals needed from the appropriate regulatory agencies are received and approved by the proper authority prior to any utility relocation work within the public right-of-way taking place.

### ***12.1.2.2 Betterments***

The utility owner shall be reimbursed only for the cost of constructing the most economical type of facilities that satisfactorily meet the service requirements of the former facilities unless the utility owner specifies a lesser replacement. Please see KYTC Policy Manuals and FHWA's *Program Guide for Utility Relocation and Accommodation for Federal-Aid Projects* for additional requirements in this regard. If the utility owner proposes to include enhancements or "betterment," all costs associated with the betterment are the responsibility of the utility owner and shall not be included in the project cost. The DBT shall perform all coordination necessary to ensure that any utility betterment planned for the project by the utility owner is adequately addressed in the utility agreement and properly documented in the encroachment permit prior to beginning the relocation.

### ***12.1.2.3 Protection in Place***

The DBT shall be responsible for Protection in Place of all utilities impacted by the project as necessary for their continued safe operation and structural integrity.

### ***12.1.2.4 Abandonment and Removal***

As applicable to work being performed by the DBT, the DBT shall make all arrangements and perform all work necessary to complete each abandonment or removal (and disposal) of a utility in accordance with the approved utility agreement. The DBT shall obtain governmental approvals and consent from the affected utility owner and any affected landowner(s) or shall confirm that the utility owner has completed these tasks.

### ***12.1.2.5 Service Lines and Utility Appurtenances***

As applicable to work being performed by the DBT, whenever required to accommodate construction, operation, maintenance, and/or use of the project, the

DBT shall cause Service Line Adjustments and Utility Appurtenance Adjustments. On completion of these, the DBT shall cause full reinstatement of the roadway, including reconstruction of curb, gutter, sidewalks, and landscaping, whether the utility adjustment work is performed by the Utility Owner or by the DBT.

***12.1.2.6 Early Adjustments (Not Applicable)***

***12.1.2.7 Agreements between the DBT and Utility Owners***

Except as otherwise stated in this Section or in the Agreement, each utility adjustment shall be specifically addressed in a utility agreement. The DBT is responsible for preparing, negotiating, and obtaining execution by the utility owners, of all utility agreements (including preparing all necessary exhibits and information about the project, such as reports, plans, and surveys). A utility agreement is not required for any utility adjustment consisting solely of protection in place in the utility's original location within the project right-of-way, unless the utility owner is being reimbursed for costs incurred by it on account of such protection in place.

***12.1.2.8 Utility Agreements***

The DBT shall enter into one or more utility agreements with each affected utility owner to define the design, material, construction, inspection, and acceptance standards and procedures necessary to complete utility adjustments, as well as to define the DBT's and the utility owner's respective responsibilities for utility adjustment costs and utility adjustment activities such as design, material procurement, construction, inspection, and acceptance. A utility agreement may address more than one utility adjustment for the same utility owner. Additional adjustments may be added to an existing utility agreements by a utility agreement amendment.

The DBT shall prepare each utility agreement using KYTCs standard form or a similar document approved by KYTC. Promptly following issuance of a notice to proceed, the DBT shall begin negotiations with each affected utility owner to reach agreement on one or more utility agreements. The DBT shall use good faith efforts to finalize a utility agreement with each affected utility owner within a reasonable time period after issuance of NTP. Each utility agreement (including the utility adjustment plans attached thereto) shall be subject to KYTC review and comment as part of the utility agreement /encroachment permit approval process.

***12.1.2.9 Utility Agreement Amendments***

Modification of an executed utility agreements or any component thereof shall be addressed using a utility agreement amendment. A utility agreement amendment may be used only when the allocation of responsibility for the utility adjustment work covered by that utility agreement amendment is the same as in the underlying utility agreement; otherwise, an additional utility agreement and new encroachment permit shall be required.

Each utility agreement amendment (including any utility adjustment plans attached thereto) shall be subject to KYTC approval as an amendment to the original encroachment permit.

### **12.1.3 Recordkeeping**

The DBT shall maintain construction and inspection records in order to ascertain that utility adjustment work is accomplished in accordance with the terms and in the manner proposed on the approved utility adjustment plans and otherwise as required by the applicable utility agreement(s). The DBT may use the modified KYTC Utility Relocation Progress Report.

## **12.2 ADMINISTRATIVE REQUIREMENTS**

### **12.2.1 Standards**

All utility adjustment work shall comply with all applicable laws, agency *Encroachment Permit* requirements, this RFP, regulatory agency approvals, the applicable utility adjustment standards, and the requirements as set forth in the utility company standards and specifications.

### **12.2.2 Communications**

#### *12.2.2.1 Communication with Utility Owners: Meetings and Correspondence*

The DBT is responsible for holding meetings and otherwise communicating with each utility owner as necessary to accomplish in a timely manner the utility adjustments necessary to construct the project. KYTC will participate in these meetings if requested by the utility owner or the DBT, or otherwise as deemed appropriate in order to facilitate the progress on the project.

At least five business days in advance of each scheduled meeting, the DBT shall provide notice and an agenda for the meeting separately to KYTC and the appropriate utility owner. The DBT shall prepare minutes of all meetings with utility owners and shall keep copies of all correspondence between the DBT and any utility owner. Copies of these meeting minutes shall be forwarded to KYTC for the project files within one week following the respective meeting.

### **12.2.3 Utility Adjustment Manager**

The DBT shall provide a utility adjustment manager with appropriate qualifications and experience for the utility adjustment work required for this project.

The utility adjustment manager's (UM) primary work responsibility shall be the performance of all the DBT's obligations with respect to utility adjustments. The UM shall be authorized by the DBT to approve all financial and technical modifications associated with utility adjustments and modifications to the utility agreement.

### **12.2.4 Real Property Matters**

The DBT shall provide the services described below in connection with existing and future occupancy of property by utilities.

#### *12.2.4.1 Documentation of Existing Utility Property Interests*

It shall be the DBT's responsibility to determine **all** existing utility property interest within the project right-of-way claimed by any utility owner.

#### **12.2.4.2 Acquisition of Replacement Utility Property Interests**

The DBT shall be responsible for working with each utility owner for acquiring any replacement utility property interests that are necessary for its utility adjustments. The DBT shall have the following responsibilities for each acquisition:

- A. The DBT shall coordinate with, and provide all project information needed to each utility owner as necessary for the utility owner to identify any replacement utility property interests required for its utility adjustments.
- B. If the DBT and/or DBT subcontractors assists a utility owner in acquiring a replacement utility property interest, the DBT shall ensure that the following requirements are met:
  - a. The files and records must be kept separate and apart from all acquisition files and records for the project right-of-way.
  - b. The items used in acquisition of replacement utility property interests (e.g., appraisals, written evaluations, and owner contact reports) must be separate from the purchase of the project right-of-way.
- C. The DBT shall reimburse the utility owner for all replacement utility property interests required for its utility adjustments. No betterment in terms of property interest shall be paid for using project funds.

#### **12.2.5 Documentation of Requirements**

The DBT shall prepare, and obtain execution by the utility owner of (and record in the appropriate jurisdiction, if applicable), all agreements including all necessary exhibits and information concerning the project (e.g., reports, plans, and surveys). Each agreement shall identify the subject utility(ies) by the applicable *Encroachment Permit Number* and shall also identify any real property interests by parcel number or highway station number or by other identification acceptable to KYTC.

### **12.3 DESIGN**

#### **12.3.1 DBT's Responsibility for Utility Identification**

The DBT bears sole responsibility for ascertaining, at its own expense, all pertinent details of utilities located within the project right-of-way or otherwise affected by the project, whether located on private property or within an existing public right-of-way, and including all service lines.

#### **12.3.2 Technical Criteria and performance Standards**

All design plans for utility adjustment work, whether furnished by the DBT or by the utility owner, shall be consistent and compatible with the following:

- A. The project as designed and constructed
- B. Any utilities remaining in, or being installed in, the same vicinity
- C. All applicable governmental approvals/permits
- D. Private approvals of any third parties necessary for such work
- E. KYTC Policies and Procedures as set forth in Kentucky's State Utility and Rail Guidance Manual and as specified in the approved utility agreement.

The DBT shall be responsible for validating that all utility adjustments performed as part of this project adhere to these criteria.

### **12.3.3 Utility Adjustment Plans**

Utility adjustment plans, whether furnished by the DBT or by the utility owner, shall be signed and sealed by a registered Professional Engineer (PE), if required by the utility owner, regulatory agencies, or KYTC.

#### ***12.3.3.1 Plans Prepared by DBT***

Where the DBT and the utility owner have agreed that the DBT shall furnish a utility adjustment design, the DBT shall prepare and obtain the utility owner's approval of plans, specifications, and cost estimates for the utility adjustment (collectively, "Utility Adjustment Plans") by having an authorized representative of the utility owner sign the plans as "reviewed and approved for construction." The Utility Adjustment Plans (as approved by the utility owner) shall be attached to the applicable utility agreement and estimate, which shall serve as the appropriate *Encroachment Permit* application submitted for KYTC approval. Please be advised that the utility company is ultimately responsible for execution of the utility agreement, regardless of who prepares the plans. The DBT is responsible for facilitating this process in a manner such that all requirements are adequately addressed and commitments fulfilled in accordance with all provisions set forth in the contract documents.

Unless otherwise specified in the applicable utility agreement(s), all changes to utility adjustment plans previously approved by the utility owner (excluding estimates, if the utility owner is not responsible for any costs) shall require written utility owner approval. The DBT shall transmit any KYTC comments to the utility owner and shall coordinate any modification, re-approval by the utility owner, and re-submittal to KYTC as necessary to obtain KYTC approval, as applicable.

#### ***12.3.3.2 Plans Prepared by the Utility Owner***

For all Utility Adjustment Plans to be furnished by a utility owner, the DBT shall coordinate with the utility owner as necessary to confirm compliance with the project plans, including possible changes being proposed by the DBT. Those utility adjustment plans shall be attached to the applicable utility agreement and estimate, which shall serve as the appropriate *Encroachment Permit* for KYTC approval. The DBT shall be responsible for coordination with the utility company to ensure that all KYTC comments to the utility owner are adequately addressed in the design and construction of the project, including, any modification, re-approval by the utility owner and re-submittal to KYTC as necessary to obtain KYTC approval.

#### ***12.3.3.3 Design Documents***

Each proposed utility adjustment shall be shown in the design documents, regardless of whether the utility adjustment plans are prepared by the DBT or by the utility owner.

#### ***12.3.3.4 Certain Requirements for Underground Utilities***

Casing as specified in accordance with the KYTC Permits Manual and the KYTC Utilities Manual shall be required for use on the project, where applicable.

### 12.3.3.5 *Utility Agreement Submittals*

Each utility adjustment shall be addressed in a utility agreement prepared jointly by the DBT and the utility owner and submitted to KYTC for review and comment. The DBT shall coordinate with the utility owner to prepare all components of each utility agreement. Completion of the review and approval process for the applicable utility agreement, as well as issuance of any required KYTC approvals, shall be required before the start of construction for the affected utility adjustment work.

In its sole discretion, KYTC has the authority to approve the placement of utilities within project right-of-way. It shall be the responsibility of the DBT to work with the utility owner to prepare all required documentation to be included with each subsequent utility agreement submittal.

The DBT shall arrange for the utility owner to execute each utility agreement and subsequent *Encroachment Permit* required to do the work on the Project.

Provisions governing the procedure for and timing of utility agreement submittals are in Section 12.5 (Deliverables).

All utility adjustments covered by the same initial utility agreement may be addressed in a single *Encroachment Permit*. Please refer to the KYTC Encroachment Permit Manual for additional information. In general, the utility agreement *package* required for each utility relocation shall include:

- A. *Encroachment Permit* application (KYTC).
- B. Utility agreement (executed between the DBT and the Utility Owner).
- C. Utility adjustment plans and specifications as referenced in the utility agreement.
- D. Roadway plans and profile and/or structure plans and X-sections clearly indicating existing and proposed utility location. For utilities deemed acceptable to remain in place by the utility owner and the DBT, the location of the utility, both horizontally and vertically, along with any special construction requirements or protection needed to prevent damage to the facility during construction of the project, must be clearly defined.
- E. Utility relocation cost estimate as defined in the utility agreement including definition and separation of any betterment proposed.
- F. Six complete utility agreement *packages* as described herein or as directed by KYTC. Once review and comment is complete, three copies shall be returned to the DBT and utility company for their use.

## 12.4 CONSTRUCTION

### 12.4.1 General Construction Criteria

All utility adjustment construction performed by the DBT shall conform to the requirements listed below. In addition, the DBT is responsible for verifying that all utility adjustment construction performed by each utility owner conforms to the requirements described below. In case of nonconformance, the DBT shall cause the utility owner (and/or its contractors, as applicable) to complete all necessary corrective work or to otherwise take such steps as are necessary to conform to these requirements.

- A. All criteria identified in Section 12.3 (DESIGN).
- B. The utility adjustment plans and agency requirements included in the *Encroachment Permit* approved by KYTC.
- C. Approved utility agreement amendments.
- D. All project safety and environmental requirements.
- E. Erosion prevention and sediment control requirements.
- F. Easement acquisition procedures.

#### **12.4.2 Inspection of Utility Owners Construction**

The DBT shall set forth procedures for inspection of all utility adjustment work performed by utility owners (and/or their contractors) to verify compliance with the applicable requirements described in Section 12.4.1 (General Construction Criteria). The inspection shall validate that the utility work adheres to the above criteria, is as designed, and conforms to the approved utility agreement and any approved amendments.

#### **12.4.2 Scheduling Utility Adjustment Work**

The utility adjustment work (other than construction) may begin at any time following issuance of an encroachment permit number. The DBT shall not arrange for any utility owner to begin any demolition, removal, or other construction work for any utility adjustment until all of the following conditions are satisfied:

- A. The utility adjustment is covered by an executed utility agreement (and any conditions to commencement of such activities that are included in the utility agreement have been satisfied);
- B. Availability and access to affected replacement utility property interests or public right-of-way have been obtained.
- C. If any part of the construction work for the utility adjustment shall affect the project right-of-way, then approvals from the KYTC shall be received.
- D. The review and comment process has been completed and required approvals have been obtained for the *Encroachment Permit* covering the utility adjustment.
- E. All governmental and permitting approvals necessary for the utility adjustment construction have been obtained, and any pre-construction requirements contained in those approvals have been satisfied.
- F. The DBT has verified that all utility adjustments address the project needs and are not in conflict with one another.
- G. The DBT has conducted a preconstruction joint utility meeting to schedule and plan all utility owner adjustments. KYTC shall be invited to attend this meeting.
- H. All other conditions to that work stated in the RFP have been satisfied.

#### **12.4.3 Standard of Care Regarding Utilities**

The DBT shall carefully and skillfully carry out all work impacting utilities and shall mark, support, secure, exercise care, and otherwise act to avoid damage to utilities. At the completion of the work, the condition of all utilities shall be equivalent to their use and function prior to construction.

#### **12.4.4 Emergency Procedures**

The DBT shall provide emergency procedures with respect to utility adjustment work. The DBT shall obtain emergency contact information from, and establish emergency procedures with, each utility owner.

#### **12.4.5 Utility Adjustment Field Modifications**

The DBT shall establish a procedure to be followed if a utility adjustment field modification is proposed by either the DBT or a utility owner, after the utility agreement (which includes the utility adjustment plans) has been approved. The procedure shall contain, at minimum, the following processes:

- A. The utility owner's review and approval of a utility adjustment field modification proposed by the DBT, or the DBT's review and approval of a utility adjustment field modification proposed by the Utility Owner.
- B. Submittal of plans for the proposed utility adjustment field modification to KYTC for its approval.
- C. Transmittal of utility adjustment field modifications to the appropriate construction field personnel.
- D. Inclusion of any utility adjustment field modifications in the record drawings for the Project.

The DBT shall cause the procedure to be followed for all utility adjustment field modifications, whether the construction is performed by the DBT or by the utility owner.

#### **12.4.6 Switchover to New Facilities**

After a newly adjusted utility has been accepted by the utility owner and is otherwise ready to be placed in service, the DBT shall coordinate with the utility owner regarding the procedure and timing for placing the newly adjusted utility into service and terminating service at the utility being replaced.

#### **12.4.7 Record Drawings**

The DBT shall provide record drawings to each utility owner for utilities adjusted by the DBT, in accordance with the applicable utility agreement(s).

The DBT shall provide As-Built Record Drawings to KYTC (regardless of whether design and/or construction of the subject utilities was furnished or performed by the DBT or by the utility owner). These drawings shall show the location of, and label as such, all abandoned utilities and shall show and label all other utilities, whether remaining in place or relocated, located within the project right-of-way, or otherwise impacted by the project. The DBT shall provide the record drawings for each adjustment to KYTC not later than 90 days after the utility owner accepts the adjustment.

#### **12.4.8 Maintenance of Utility Service**

All utilities shall remain fully operational during all phases of construction, except as specifically allowed and approved in writing by the utility owner. The DBT shall schedule utility adjustment work in order to minimize any interruption of service, while at the same time meeting the project schedule and taking into consideration seasonal demands.

#### **12.4.9 Traffic Control**

The DBT shall be responsible for the coordination of all traffic control made necessary by the utility adjustment work, whether performed by the DBT or by the utility owner. Traffic control for utility adjustments shall be coordinated with, and subject to approval by, the local agency(ies) with jurisdiction. Traffic control shall comply with the guidelines of the MUTCD and of Section 14 (Maintenance of Traffic) of this RFP document. Delegation of responsibilities regarding who performs the traffic control operations during the utility adjustment work shall be included in the utility agreement.

#### **12.4.10 Unknown Utilities**

If during construction, the DBT uncovers a utility facility that the respective utility company did not know existed, the DBT is to bring this to KYTC's attention immediately. KYTC will review the situation with the respective utility company and the DBT to determine the best course of action to minimize impacts to the utility facility and the project schedule. If it is determined by KYTC that establishing the presence of the unknown utility was not possible by the DBT during the procurement phase, KYTC will consider this a changed condition and work with the DBT and the utility company to make the appropriate adjustments for cost as part of a change order. The project schedule shall only be revised if it can be demonstrated to the satisfaction of the KYTC that the unknown utility conflict has materially affected the critical path for the project.

### **12.5 DELIVERABLES**

The DBT shall provide all submittals described in this section to meet the project schedule, taking into account KYTC-designated review and response time. For this Project, KYTC requires 10 business days for review, comment, or approval of Encroachment Permits, provided that all required documentation is included with the *Encroachment Permit* submittal. At the sole discretion of KYTC, if it is determined that additional information is required in order to review and process the *Encroachment Permit* for approval, the DBT shall revise the encroachment permit application to include the required revisions or missing information as identified by KYTC, and said agency shall have 10 business days from the date of re-submittal for review and comment.

#### **12.5.1 DBT's Utility Tracking Report and Project Coordination Requirements**

The DBT shall maintain a utility tracking report in tabular form, listing all utilities located within the project right-of-way or otherwise potentially affected by the project. The utility tracking report shall include sufficient information regarding all factors needed to reasonably determine the status of each utility to be relocated as part of the project. The DBT shall submit the utility tracking report to KYTC and update it monthly. The DBT shall facilitate, at a minimum, quarterly utility company status meetings to discuss any project issues and to update KYTC on the progress being made on the project.

#### **12.5.2 Utility Companies Contacts**

See Appendix D

### **13. RAILROADS (NOT APPLICABLE)**

### **14. DESIGN AND CONSTRUCTION REQUIREMENTS: MAINTENANCE OF TRAFFIC (MOT)**

Maintenance of Traffic (MOT) Special Provisions in addition to the Governing Regulations listed in Section 8.1 of this document: The DBT shall submit an approach for MOT for the project that incorporates the elements listed as well as propose any innovative ideas that may expedite the work. A Traffic Management Plan will need to be submitted and approved.

**14.1 General:** All temporary MOT devices shall comply with the National Cooperative Highway Research Program (NCHRP) 350 Hardware report.

#### **14.2 MOT Restrictions:**

All maintenance of traffic procedures shall be in accordance with MUTCD. No lane closures will be allowed during the observance of all National Holidays identified in Section 101 of the Standard Specifications, including the adjoining weekend (Saturday and Sunday). Additionally, the same restriction shall be placed on the weekend of Lake Cumberland's "Poker Run". This

weekend is typically the weekend following Labor Day, but that date is subject to change. It is the responsibility of the DBT to work around this event whenever it does occur. Under special circumstances, KYTC reserves the right to restrict the use of lane closures due to unforeseen special events. In principle, the DBT shall maintain the current lane configuration (or better), for the life of the project including access to all adjoining properties. Suggestions for additional working hours may be proposed by the DBT to KYTC as a part of the DBT project proposal. Construction operations using shoulder closures may be allowed during all daylight hours (except holidays and other days specified above) provided any resulting temporary drop-off conditions and signing requirements are adequately addressed. In general, any drop-off condition 4" or less shall be protected by barrels or delineators spaced every 40 feet. Drop-offs greater than 4" shall be wedged with DGA or other suitable materials on a 3:1 or greater slope in conjunction with barrels spaced every 40 feet. If a positive separation of 8 feet desirable (5 feet minimum if approved by the Engineer) or greater can be achieved between traffic and the drop-off, no wedging will be required. Temporary drop-offs during working hours that construction operations are taking place should be kept to a minimum. Drop-offs greater than 4", resulting from excavations directly adjacent to traffic (with no positive separation), shall be limited to 500 feet in length. The intent of this requirement is to keep the temporary "wedging operation" in close proximity to the work to promote safety for the motorist.

The DBT shall submit the MOT plan to KYTC for approval. The KYTC will approve or provide comments within 14 calendar days.

**Blasting Operations:** During blasting operations, the traffic may be halted for a maximum of 20 minutes per hour to allow for the execution of the "shot" and to allow for removal of rock fragments and debris. Blasting will not be permitted between the hours of 7:00 AM to 9:00 AM and between 3:00 PM to 6:00 PM.

The contractor, when using explosive charges of any kind for the purpose of excavating, removal, etc., on this project, shall halt all traffic a safe distance on either side of the impending explosion.

The contractor shall have suitable equipment at the site and in a running mode for the purpose of cleaning the existing pavements of all debris. After the blast, the contractor shall immediately inspect the pavement for any debris that may pose a hazard to traffic before allowing traffic to proceed on the affected section of road.

When blasting, the Contractor shall halt traffic, blast, clean the existing pavement, and return traffic to normal operation within a maximum of 20 minutes. Any delay longer than 20 minutes will result in Special Liquidated Damages being cumulatively applied according to the following rates:

1 Minute – 15 Minutes	\$1,000
	Plus
16 Minutes – 30 Minutes	\$1,500
	Plus
31 Minutes – 45 Minutes	\$2,000
	Plus
46 Minutes – 60 Minutes	\$2,500
	Plus
61 Minutes – 90 Minutes	\$3,500
	Plus
91 + Minutes	\$5,000 per additional 30 minute interval or fraction thereof

**15. DESIGN AND CONSTRUCTION REQUIREMENTS: LOCATION & DESIGN**

Location & Design Special Provisions in addition to the Governing Regulations listed in Section 8.1 of this document.

**15.1 Survey:**

All project survey requirements shall be in accordance with Section 300 of the KYTC Design Manual. Placement of proposed Right of Way monuments, in accordance with KYTC standards, shall be required on this project. Placement of all proposed Right of Way monuments shall be performed by a Registered Surveyor, with a current registration, recognized by the Kentucky State Board of Registration for Professional Engineers and Surveyors. Costs associated for this item shall be borne by the DBT.

The DBT shall provide the following items prior to final acceptance of the As-Built Plans:

- a. Listing of all new monumentation, set, (horizontal and vertical) plotted on the As-Built Plans.
- b. Copies of all Deeds, Plats, Maps and other written evidence used to establish points related to the project including summaries of all parole evidence acquired as a part of the survey operation.

**15.2 Functional Classification of Roadway:** Rural Principal Arterial

**15.3 Design Speed:** 60 mph

**15.4 Pavement:** See Appendix A for thickness details

**Option A Compaction Required**

**Material Transfer Vehicle Required:** Yes  X  No \_\_\_\_\_

See Special Note for Materials Transfer Vehicle in the standard specifications.

**Asphalt Pavement Ride Quality Required:** Yes  X  No \_\_\_\_\_

See Section 410 of the standard specifications. Category A

**15.5 Typical Section:** See Appendix B

**15.6 Drainage Folder Required:** Yes  X  No \_\_\_\_\_

**15.7 Design Exceptions:**

Previously approved Design Exceptions:  None

The DBT shall advise of any proposed design features that do not meet the minimum design criteria. Due to the sensitive nature of the approval process for a Design Exception, it is a requirement that all design exceptions be submitted for consideration by the KYTC in writing no less than 21 days prior to submittal of the technical proposal. A detailed explanation of the justification for this exception must be provided with this request. All DBTs will be made aware of the request as well as approval or disapproval in writing. KYTC does not intend to approve design exceptions after the contract is awarded unless extreme and unforeseen circumstances can be demonstrated. The safety of the traveling public shall not be compromised by a design exception.

The following items need to be individually discussed for any requested design exception:

- A. Amount and character of traffic
- B. Type of project (e.g. new construction, 3R)
- C. Accident history relevant to the exception request
- D. Specific information pertinent to the type of exception being requested (i.e. deferral of bridge widening requests should address structural and function adequacy of existing bridge and project a future time for widening and etc.)
- E. Underlying reason for requesting exception
- F. Effect, if any, exception will have on other standards (i.e. design speed exception would affect requirements for grade, curvature, sight distance, etc.)
- G. Effect of the exception on the safety and operation of the facility

- H. Cost of attaining full standards (phrases such as obtaining the standard would be too “costly” or beyond the scope of the project are of little value in making a decision)
- I. Future improvements and their relation to the requested exception
- J. Any features which would tend to mitigate the deviation

**15.8 Fuel and Asphalt Adjustments:**

Fuel and asphalt price adjustments, as detailed in the Standard and Supplemental Specifications, will be applicable for this project. Payments are based on actual quantities placed per day rather than estimated values and the base “index” values used to determine price adjustments shall be based on the values for the first of the month for when the bid proposals are submitted to KYTC.

**15.9 Fencing:** Yes  X  No \_\_\_\_\_

The DBT shall be responsible for maintenance of existing Right of Way or Control of Access fencing. Any fence damaged or removed during construction shall be replaced with new fencing at the direction of KYTC’s Project Manager.

**15.10 Additional Description of Required Work**

All areas disturbed along residential properties shall be restored using seeding and protection. Approach roads and commercial entrances may require reconstruction. As a part of this reconstruction, as a minimum, existing widths and profile grades shall be maintained or improved upon. It is the intent of this contract to pave ALL entrances, on both the eastern and western side of KY 914, to the tie down point or to the right of way line. This may require work off the existing Right of Way and in accordance with Section 12 of this document.

The DBT shall ensure that each entrance within the project corridor retains at least the same level of ingress/egress that existed prior to any proposed improvements. This means that all existing access points within the project corridor will be directly accessible from both eastbound and westbound directions on KY 914. If an entrance is proposed to be moved, then it shall be moved to a location where it complies with the required 1,200’ spacing between consecutive entrances, and the profile grade is equivalent or better than the profile grade of the existing entrance. Additionally, the relocated entrance must be equivalently functional to the affected property owner. All median crossovers constructed with this project shall include left turn lanes designed according to KYTC policy.

All auxiliary lanes shall be designed according to current KYTC policy. However, under no circumstances shall the left turn lanes at any location be shorter than what is currently provided. The left turn lanes provided on KY 914 at the KY 769 and KY 192 intersections shall be offset 12’. An additional left turn lane (duel left turn lanes) will be required on KY 80 westbound leading to southbound KY 914 (See Appendix B). The additional left turn lane to be added to KY 80 westbound will be of equivalent length as the left turn lane currently in operation. Split phasing the signal at KY 80 will not be considered as an option.

Following completion of the grade work required with this contract, the existing driving lanes and shoulders shall be milled, and resurfaced using the appropriate asphalt mixture, to a depth of 1.5”.

All existing guardrail, eastbound and westbound, within the project limits shall be removed and replaced with this project.

**16. DESIGN AND CONSTRUCTION REQUIREMENTS: STRUCTURES**

**16.1 Structure Design / Advance Situation Folder**

The DBT shall have a consultant team member pre-qualified in Structure Design, Bridges under 500 feet. The DBT shall be responsible for preparing any structure plans required. The structure plans shall be developed in accordance with Division of Structure Design Guidance Manual

<http://transportation.ky.gov/Structural-Design/Pages/Downloads.aspx>). Review times shown in the Guidance Manual shall begin when a submittal is received. Submittals required shall be Advance Situation Folder, Stage 1 Preliminary Plans, Stage 2 Preliminary Plans, Stage 1 Final Plans and Stage 2 Final Plans. The structure plans shall be signed and sealed by a Licensed Professional Engineer. Structures may be submitted individually. The Division of Structural Design shall provide drawing numbers for each structure. The DBT shall present electronic copies in Portable Document Format, PDF of plans (sized to fit 22" by 36" paper) and calculations (sized to fit 8 1/2" by 11" paper) for all submittals to the Division of Structural Design. This shall be in addition to any required hard copies.

## 16.2 Existing Structures Identification and Data

Plans are available for the existing structures and on the established ftp site under the folder name: 08-119 KY 914 Widening

<ftp://kytcfp.kytc.state.ky.us/08-119%20KY%20914%20Widening/Old%20Highway%20Plans/Structures/>

Username: kytc\transportation  
Password: bigfiles

<u>Drawing #</u>	<u>Type</u>
23001	Double 8' x 4' RCBC
23002	Single 6' x 6' RCBC
23003	Single 7' x 7' RCBC

The project scope will require the extension of one of the Reinforced Concrete Box Culverts, RCBC 23002. The design and construction of the RCBC extension shall follow these documents. RCBC's 23001 & 23003 were previously constructed to the ultimate design length and may not need extending. However, should the need arise to extend these RCBC's for any reason, design and construction shall also follow these documents. The RCBCs shall be extended at the same opening size as the original.

## 16.3 Design and Construction Requirements of Structure

The design of the RCBC extensions shall follow the KYTC Structural Design Guidance Manual and AASHTO LRFD Bridge Design Specifications. If the proposed fill height of the extension does not exceed the fill height over the original RCBC, the DBT may elect to continue the original barrel design throughout the extended barrel without analysis using current LRFD code. In no case shall the extended RCBC barrel design be less conservative than the original RCBC barrel design. The plan set shall clearly show the limits of removal of the existing RCBC headwall and necessary portions of the barrel and show the method to connect to the existing barrel. The DBT may either dowel into the existing barrel or lap splice into the existing barrel reinforcement upon removing enough concrete to obtain a proper splice length in order to provide continuity to the existing barrel.

The construction of the RCBC extensions shall follow the KYTC Standard Specifications for Road and Bridge Construction. The DBT shall provide a 1" saw cut along the removal line before removing any of the existing concrete, careful not to cut existing rebar. The DBT shall use a structural adhesive as provided for in section 826 of the specifications for bonding the new concrete to the existing concrete.

## 16.4 Geotechnical, Foundations, Slopes and Walls

All geotechnical information needed by the DBT for roadway and foundation investigation and all geotechnical investigations necessary to prepare the DBT's bid shall be the responsibility of the DBT. The subsequent reports shall be submitted for review and approval by the Cabinet's Geotechnical Branch. Please allow 14 calendar days per submittal for this review.

1. The DBT's Geotechnical engineering firm shall be prequalified for Geotechnical engineering work (Engineering, Laboratory Testing and Drilling) in Kentucky.
2. Design shall be in accordance with AASHTO LRFD Bridge Design Specifications, latest edition, except where overridden by state design standards. All design shall use LRFD methods except where such methods are not provided for in the AASHTO design manual, or these requirements. Where state standards recommend ASD design methods, equivalent LRFD methods shall be used. Specific approval to use non LRFD methods is required
3. All geotechnical design and geotechnical explorations performed by the DBT shall be completed and submitted to KYTC in accordance with the latest copy of the KYTC Geotechnical Guidance Manual. The design shall be in accordance with the Guidance Manual except where overridden by these requirements. Meetings and submittals shall be in accordance with the Geotechnical Manual.

The DBT shall produce and submit a Foundation Analysis and Design Report for each structure and a Geotechnical Engineering Roadway Report for slopes and subgrade design. These reports shall include all engineering analyses and design recommendations.

4. If the DBT determines subsurface explorations are necessary to properly design and construct the work in accordance with KYTC requirements, the DBT shall perform the subsurface explorations and analysis at its own expense. The DBT shall selectively locate subsurface explorations on the basis of field observations, and design considerations. Location of explorations shall be as topography, site conditions, soil conditions, and design factors dictate.

The DBT shall provide all subsurface exploration plans and explorations to KYTC in accordance with the KYTC Geotechnical Manual.

5. All bridge loads must be supported by a deep foundation extended to bedrock or spread footings founded on competent bedrock.
6. Spread footings shall not be allowed for bridge foundations unless they are founded on competent bedrock. Spread footings for other structures shall be designed in accordance with the KYTC Geotechnical Guidance Manual, KYTC Structural Guidance Manual, AASHTO LRFD Bridge Design Specifications, and with applicable Special Notes located in the Appendix to this Project Scope document.
7. Acceptable driven pile types are:
  - Steel H-piles driven to bedrock

- Steel Pipe Piles (closed and/or open ended) driven to bedrock
  - Timber piles are not allowed for permanent structures.
8. Design drilled Shafts in accordance with the KYTC Geotechnical Guidance manual, KYTC Structural Design Guidance Manual, and AASHTO LRFD Bridge Design Specifications.
- Bell shaped shafts shall not be allowed.
  - Drilled shafts shall be constructed in accordance with the “Special Note For Drilled Shafts” located in the current edition of the “Kentucky Standard Specifications for Road and Bridge Construction”.
  - Drilled Shafts must be designed with shafts tips extended into bedrock.
  - The side resistance and end bearing components of axial geotechnical resistance in rock sockets may be combined only if the DBT geotechnical engineering team evaluates the results of load testing performed using the Osterberg method to confirm that the deformations required to mobilize the side resistance and end bearing components are compatible.
  - Because permanent casing is required for drilled shafts extending into bedrock, side resistance in soil and end bearing in rock cannot be combined

For shafts socketed into bedrock:

- Permanent casing is required.
  - The DBT shall use permanent casing that is 6 inches larger in diameter than the proposed rock socket diameter to the top of rock socket/bottom of permanent casing.
  - The DBT shall be responsible for providing subsurface exploration drilling to finalize the drilled shaft tip elevations. Additional drilling shall be required at each drilled shaft location in accordance with the Special Note for Drilled Shafts, current edition.
  - The DBT shall design the shafts neglecting any lateral resistance above the “Bottom of Permanent Casing” elevations and considering lateral resistance only in the uncased portions below the “Bottom of Permanent Casing” elevations.
  - The DBT shall perform lateral load analysis neglecting any lateral resistance above the top of the uncased rock socket.
  - The strength of the steel casing may be included in the structural resistance of the shaft to axial and bending loads. The thickness of the casing shall be reduced by the anticipated corrosion loss of the steel over the design service life of the structure.
9. Proposed alternative foundation systems not specifically allowed for in this criteria or in the KYTC Design Manuals may be used upon approval of KYTC.

If the DBT wishes to propose an alternative foundation system, they must submit a proposal to the KYTC for review. The proposal shall specifically address:

- Anticipated nominal resistance of the foundation elements (axial and lateral)
- Anticipated service load deflections of the foundation elements

- Estimated service life
  - Proposed design methods and resistance factors
10. The DBT shall design retaining walls in accordance with the KYTC Geotechnical Guidance Manual, KYTC Structural Design Guidance Manual, AASHTO LRFD Bridge Design Specifications, and with applicable Special Notes located in the appendix.
- The DBT shall design foundations for gravity retaining walls in accordance with the KYTC Geotechnical Manual. The gravity walls shall be constructed in accordance with KYTC Standard Drawing RGX-002. The geometry of the gravity walls may vary from the Standard Drawing only if approved by the Department.
  - Gabion basket retaining walls shall not be permitted for permanent construction.
  - Metal “Bin” type retaining walls shall not be permitted for permanent construction.
  - Only preapproved Mechanically Stabilized Earth (MSE) wall systems shall be used on this Project. See the Special Note for MSE retaining walls located in the Appendix H for preapproved systems. Only inextensible reinforcement shall be allowed.
11. Reinforced soil slopes shall not be designed at a slope ratio steeper than one (1) Horizontal to one (1) Vertical. Reinforced soil slopes shall be designed in accordance with design procedures presented in the latest version of Publication No. FHWA NHI-00-043, “Mechanically Stabilized Earth Walls and Reinforced Soil Slopes.”
12. The DBT shall be responsible for analysis and design of soil slopes. Slopes steeper than two to one (2H:1V) shall be reinforced. Slopes two to one (2H:1V) or flatter may require reinforcement or other remediation measures depending on soil conditions.
- Where embankment settlement is anticipated to exceed 3 inches in total settlement, the DBT shall submit an instrumentation plan for review to monitor settlement and determine when the pavement section can be placed.
  - All geotechnical instrumentation shall be left in place for future readings after the project has been completed. Instrumentation destroyed by the DBT shall be replaced at the DBT’s expense.
  - Pile cores shall be constructed in accordance with Kentucky Standard Drawings RGX-100 and RGX-105, meeting the material requirements of the current edition of Special Provision 69. It is recommended that the pile core and the adjacent embankment consist of similar materials to prevent migration of fines into or out of the pile core, and future settlement of the embankment. (i.e. Place soil embankment around a cohesive pile core, and rock or granular embankment around a granular pile core). If dissimilar materials are used, a Geotextile Fabric, Type IV, separator will be required between the pile core and embankment, in accordance with Sections 214 and 843 of the current Standard Specifications.
  - Slope protection will be required on bridge spill-thru slopes (at wet crossings) meeting the requirements of Sections 703 & 805 of the Standard Specifications for Road and Bridge Construction, current edition. The limits, size, and thickness of the slope protection shall be as specified in HEC 23. Place a Type I Geotextile Fabric, in

accordance with Sections 214 & 843 of the Standard Specifications for Road and Bridge Construction, current edition, between the embankment and the slope protection

- The subgrade should be constructed in accordance with the pavement design specifications. For a chemically stabilized subgrade a minimum preliminary CBR design value of 3.0 (**CBR valued will be decided after soil testing is complete**) is recommended for the soil beneath the chemically stabilized subgrade. Chemical treatment for the top 8 inches of subgrade is recommended (**Stockpiling of soil may be required**). The appropriate chemical for treating the soil types encountered on this project **shall be determined after soil testing is complete**. It is suggested that 6 percent, by dry mass, be utilized to determine plan quantities, using an average dry density **to be determined after soil testing is complete**. The chemical shall be applied in accordance with Section 208 of the current edition of Standard Specifications for Road and Bridge Construction. Where chemical stabilization is not feasible (cross over's, tie-in's, etc...) a minimum of 1 foot of Kentucky Coarse #2's, 3's or 23's shall be used. The granular material shall be wrapped with Geotextile Type IV fabric.
- All open sinkholes and/or solution cavities within the limits of construction, whether shown on the plans or not, **that are not used for drainage purposes**, shall be filled and/or capped in accordance with Section 215 of the Standard Specifications for Road and Bridge Construction, current edition. The Sepia Drawing "Treatment of Open Sinkholes" provides guidance on capping sinkholes, and shall be included in the plans. Specific sinkholes needing this treatment shall be investigated during drilling as outlined in the geotechnical manual, and shall be listed in the geotechnical notes.
- Sinkholes/solution features, **which will be used for drainage purposes**, shall have mitigation procedures shown on the plans. Special care shall be exercised during construction to prevent siltation of the sinkholes. Specific sinkholes needing this treatment shall be investigated during drilling as outlined in the geotechnical manual, and shall be listed in the geotechnical notes.
- All Sinkholes identified by the Project Design Team and any required mitigation will be shown on the plans. **Any sinkhole required for drainage purposes, and not located on state owned right of way or permanent drainage easement, shall be purchased as fee simple r/w, as detailed in Section 11**. Any sinkholes, whether depicted on the plans or not, that are located within 100 feet of the proposed right-of-way, and are to be used for drainage purposes, shall be cleaned just prior to final dressing, as directed by the Engineer. Sinkholes located over 100 feet from the proposed right-of-way that are used for drainage purposes will be reviewed by the Project Design Team to determine if mitigation will be required. Mitigation shall consist of the use of permanent Erosion Control Devices such as silt checks, silt traps, sedimentation basins, etc., to filter the water runoff from the highway before it enters the sinkhole. Special care shall be exercised during construction to prevent siltation of any sinkhole, especially those which are to be used for drainage purposes.
- Where a sinkhole is to be used for drainage purposes, the designer shall provide appropriate mitigation measures as outlined in section "Drainage to Significant Resources" in the Drainage Manual. This may include the use of vegetated channels, grass-lined swales, interceptor ditches, containment basins, etc. as designated in the Manual.

- The appropriate design details for controlling the water flow will be determined by the designer and specified in the plans for the sinkholes identified during the design phase of this project. The water quality mitigation must occur prior to entering a blue line stream.
- Any ponds located within project limits shall be drained and mucked out a minimum of 3 feet. This material shall just be limited to final dressing of slopes. Stabilization may also be required.
- Some areas of deep organic soils may be encountered. The organic material shall be removed. This material shall just be limited to final dressing of slopes.
- If springs are encountered during construction proper mitigation procedures shall be followed to allow for positive drainage.
- Working platforms for Embankment or subgrade construction, consisting of limestone, may be needed in some areas.
- Foundation embankment benches and longitudinal perforated pipe underdrains shall be constructed in accordance with Standard Drawings RGX-010 and RDP-006. If stability is a concern the benches shall be constructed one at a time beginning with the lowest bench. Each bench shall be backfilled prior to excavation of the next bench. This procedure shall be followed to help maintain stability of the existing slopes in these areas.

13. Excavation support methods may be required. A dewatering method may be needed in some areas. The DBT shall be responsible for the stability of any excavations or temporary cuts. Protection of adjacent structures and utilities is the responsibility of the DBT. The DBT shall be responsible for any damage to the existing infrastructure. Any damage shall be repaired immediately.

## **17. DESIGN & CONSTRUCTION REQUIREMENTS: PERMANENT TRAFFIC CONTROL**

**17.1 Pavement Markings and Delineators Special Provisions** in addition to the Governing Regulations listed in Section 8.1 of this document:

**A. Pavement Markings:** Yes   X   No \_\_\_\_\_

The DBT shall provide all pavement striping, intersection markings, and lane markings in accordance with the MUTCD and applicable KYTC Standards. The DBT shall provide striping plans no later than the final plan submittal stage for review and approval by KYTC.

**17.2 Signing Special Provisions** in addition to the Governing Regulations listed in Section 8.1 of this document: All temporary signing shall be provided by the DBT for this project. The DBT shall provide permanent sign plans at the joint inspection stage for information only. KYTC will install the permanent signage.

**17.3 Existing Signalization – See Appendix E**

## **18. SELECTION CRITERIA**

**The DBT shall be required to provide the KYTC two separate submittals for the project. The first submittal shall be a technical proposal and the second submittal shall be a price proposal. The Scoring Committee will evaluate the technical proposal and provide a score to the awards committee. The price proposal shall be submitted after the scoring committee has completed scoring the proposals and the awards committee shall establish an overall score. The KYTC's Project Awards Committee shall select the winning Design Building Team for this project and the award shall be made accordingly. The bids shall be opened on January 31, 2014 and the award shall be made in February 2014.**

### **18.1 Technical Proposal (40 Points)**

#### **A. Schedule / Capacity (20 Points)**

The DBT shall establish a substantial completion date for the project which shall be no later than August 1, 2015. Early substantial completion date of the project is preferred and liquidated damages shall apply on the date submitted by the DBT as part of his submittal. If the project is not completed by DBT's designated date, liquidated damages per Section 108.09 of the Standard Specifications shall be applied for each calendar day including weekends and holidays. Contrary to current specifications, liquidated damages, in the amount of \$5,000.00/per day shall be assessed through the winter months and during any times when a work item cannot be pursued due to seasonal limitations.

The Scoring Committee shall evaluate the ability of the DBT to complete the project based on the following:

- **Proposed Schedule (20 points)** (see Section 8.1) submission shall include a CPM schedule to clearly demonstrate the DBT approach with the following specific dates (at a minimum):

#### Phase II

- 1) Final Plans-in-Hand and Drainage Inspection Date:
- 2) Maintenance of Traffic Plan Submittal Date:
- 3) Submittal of Review Plans Date:
- 4) Final Plan Submittal Date (see also "Buildable Units" Section 20):
- 5) Construction Start Date:
- 6) Substantial Completion Date:

- **Capacity (5 Points)** Current projects and availability of DBT members (Switching of team members after the award of this project shall only be allowed upon written approval by the KYTC.)

#### **B. Innovation / Project Management (15 Points)**

This section shall contain information about the DBT's proposal for completing the project. The Scoring Committee shall evaluate based on the following:

- Design Quality & Qualification
- Innovative Construction Proposal
- Project Management & Coordination

### **18.2 Evaluation of Mandatory Requirements**

The Scoring Committee members shall evaluate and score the technical proposal. This evaluation shall be based on the information contained in the DBT's technical proposal concerning the DBT's Schedule/Capacity and Innovative/Project Management Ideas.

### **18.3 Price Proposal (60 points)**

Price Proposals are qualified based on sections 6.11, 8.1 and 8.2 and evaluated on the basis of Section 18.4:

- Price Proposal (Lump Sum Bid) 60 points

### **18.4 Value Based Formula Used for Selection**

Scoring of the Technical Proposal and Price Proposal plan shall be combined using a normalized weighted formula as follows:

$$SB = 100 [0.40 (TB/TH) + 0.60 (PL/PB)]$$

Where

PB = DBT's Price Proposal

PL = Lowest Price Proposal (all DBTs)

TB = DBT's Technical Proposal Score

TH = Highest Technical Proposal Score (all DBTs)

The DBT's Overall Score (SB) will be rounded to a tenth of a point. Rounding of Scores to the nearest tenth of a point will be accomplished by the round-up method: e.g., 75.45, 75.46, 75.47, 75.48, and 75.49 would be rounded up to 75.5; and 75.41, 75.42, 75.43, and 75.44 will be rounded to 75.4. The DBT with the highest overall score shall be recommended to the KYTC Awards Committee for Contract Award. In the event that two or more DBTs achieve the same rounded final score (SB), the "tied" DBT with the lowest Price Proposal (PB) shall be recommended to the KYTC Awards Committee for Contract Award. The KYTC Awards Committee has final authority to determine the best interests of the KYTC in awarding (or not awarding) the contract.

## **19. PLAN SUBMITTALS AND REVIEW REQUIREMENTS**

- 19.1 Quality Control:** The DBT, upon selection by the Awards Committee, shall be responsible for the professional quality, technical accuracy and adherence to the Governing Regulations listed in section 8.1 of this document, for all plan submittals required under this contract.

The DBT shall immediately notify the Department of any apparent discrepancy between the various design and construction manuals and this RFP.

Unless stated otherwise, review comments do not revise the scope or intent of the project and do not constitute a request for changes beyond the current contracted Scope of Services.

In the event the Department determines that any required submission is incomplete, contains inaccuracies which preclude a meaningful review, or does not adhere to the Governing Regulations listed in section 8.1 of this document, the Department shall advise the DBT of the short comings and direct the DBT to revise and resubmit the plan. No time extension shall be granted as a result of such action. The Department shall schedule a review meeting or issue review comments as appropriate.

In the event the DBT believes that any review comment, or orders issued by the Department, require a change to the scope of the agreed work, the DBT shall first contact the Department for clarification and shall, within 10 days of receipt of the comments or orders, provide written notice to the District Project Manager and Project Engineer concerning the reasons why the DBT believes the scope has been changed.

- 19.2 Major Design Decision:** Separate submittals for concurrence with major design decisions are required. Major design decisions involve significant utility relocation, unforeseen acquisition of right of way, traffic operation or geometric decisions that involve two or more viable solutions, and any other decision that impacts the public, operation of the facility or future maintenance.

When the DBT becomes aware of additional decisions during the course of the design, they shall advise KYTC's Project Manager in writing.

- 19.3 Final Plans In Hand Review Submission:** For each Buildable Unit, the Consultant shall submit Final Plans In Hand detailed design plans as per the KYTC Design Manual for review. All submissions shall be shown on the required Progress Schedule. The Department shall have 14 calendar days from receipt to review complete submissions. This review time shall be shown on the required Progress Schedule. Following the review, the Department will return to the DBT marked plans noted 'ACCEPTED', 'ACCEPTED AS NOTED' or 'NOT ACCEPTED'. The DBT shall correct errors, incorporate changes,

perform investigations and make related changes to the plans and supporting documents prior to submitting construction plans.

**Plan Review Distribution Table:** The DBT shall supply half size (11"x17") paper prints simultaneously to the parties indicated below along with an electronic pdf version. Each affected utility company shall receive one full size (22"x34") plans:

	Number of half size sets
KYTC District Office with PDFs on CDs	3
KYTC Central Office	3

**19.4 Construction Plans:** After the review comments for the final plan review submission have been complied with, and following approval of the design documentation, the DBT shall prepare plan sets for use during construction. All review comments shall be resolved in writing by the DBT to satisfaction of the Department before DBT submits the construction plans. Each plan sheet shall have its last revised date noted on the sheet and clearly marked 'Approved For Construction'. Physical construction shall not begin until the plans marked 'Approved For Construction' (by the Project Manager) are delivered to each party on the Plan Distribution Table below. KYTC will comment on these plans within 14 working days of their submission by the Project Manager. No time extensions shall be approved by the Project Manager if the plan distribution is not completed and project delays occur as a result.

**Plans Distribution Table:** The DBT shall supply full size (22"x35") and/or half size (11"x17") paper prints and electronic pdf version of each plan submission simultaneously to the parties indicated below:

	Number of full size sets	Number of half size sets
KYTC District Office	4	4
KYTC Central Office		3

## 20. BUILDABLE UNITS (BU)

**Definition:** Buildable Units are portions of the projects which can be designed, reviewed and built with only limited controls and assumptions coming from the design of other portions of the project. Often a Buildable Unit will be defined by a geographic area within the plan, but it may also be defined by types of work or construction stages which may require or permit similar, nearby work to be divided into separate Buildable Units. All Buildable Units shall summarize the materials required to construct that portion of the project. The summary shall include the Construction and Material Specifications Item Number, and a description of the materials to be used.

**General:** The DBT may break the project work into two or more separate BU which can be progressed through design and construction with minimal or known effect on each other and/or which can be dealt with sequentially such that sufficient data is available for design and review of each BU. In order that the design and construction of one BU may proceed without significant approved information from an associated BU, the DBT may develop and propose assumptions which will allow for the first BU to proceed through design and/or construction. These assumptions shall be submitted for review and comment but their accuracy and effort upon the final design are the sole responsibility of the DBT. Should error in these assumptions result in additional work, remedial work or other changes to assume an acceptable design or should they result in the need to remove work and substitute additional work, the DBT shall be responsible for all such costs including, removal of unacceptable materials from the site, modification, additional work, repairs, etc. as necessary to produce an acceptable result.

If the DBT elects to develop Buildable Units, the DBT shall prepare, for review by the Department, a table of Buildable Units for the project with each BU described in detail. This table of Buildable Units will be approved or comments given within 14 calendar days after the submission. If the table is approved, the DBT shall modify the Progress Schedule to show a separate group of activities for BU and these activities shall encompass all of the

design and construction work in each BU. Work activities shall be further separated in the Progress Schedule to show a meaningful completion status (i.e. separate activities comprising the placement of a bridge deck on steel beams shall describe; shoring, form building, steel placement, placement of conduit & joints, pouring concrete, forming parapets, pouring or slip forming parapets, provision of membranes, provision of wearing surfaces, curing, repair, form removal, cleaning, etc.)

The Final Review Submission and construction plans shall specifically be identified by the Buildable Unit code. If the design of a BU requires input information from an adjacent or related BU, the source for that information in previously approved plans shall be cited or the DBT shall provide an estimated value of the data. The input data shall also be carefully identified. In the same way any assumption, calculations or results from the stage and BU which are used as input to another BU to verify previous assumptions. Should assumptions not match values calculated later, the DBT shall re-analyze all affected components and determine appropriate changes. Should those elements have already been constructed, the DBT shall recommend repairs, adjustments, modifications or replacement of the existing work as necessary to comply with the Scope of Work. All costs for re-design, re-submission, modifications, removals, disposal of materials and new work needed to remedy the project and bring it to compliance shall be borne by the DBT and no time extensions shall be approved for this.

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