

VIII. CONSTRUCTION PROCUREMENT

This section only applies to Infrastructure Projects. Infrastructure projects are those that involve any ground disturbance or that involve an existing structure. Examples include sidewalks, streetscape projects, installing signs, restoration of historic buildings, and any major construction project.

Once design plans, LDRC and LPA-PDC are complete and have been approved, the LPA must submit its Engineers Estimate (EE) to the Administering Office. The EE is not simply the estimate used in applying for the project award, as discussed in **Chapter V**. The Administering Office will request authorization of the construction phase funds in the same amount indicated in the EE. The LPA may not advertise the project for bid or begin work on the project until it has received a Notice to Proceed in writing from its Administering Office indicating that the funding authorization has been completed¹ and that the bid proposal, discussed below, is approved.

“The engineer’s estimate should reflect the amount that the contracting agency considers fair and reasonable and is willing to pay for performance of the contemplated work. Under-estimating causes project delay while additional funding has to be arranged to meet the contract costs. On the other hand, over-estimating causes inefficient use of funds that could be used for other projects. In addition, the engineer’s estimate serves as the benchmark for analyzing bids and is an essential element in the project approval process.”

Source:

<http://www.fhwa.dot.gov/programadmin/contracts/ta508046.cfm>

VIII.1 Bid Proposal

The LPA must prepare a document describing the project on which the contractors will make their bids (“Bid Proposal”). Once a contractor makes a bid it will be bound to perform the requirements in the Bid Proposal if it is selected for the project. The contractors’ bids are also referred to as Bid Proposals, but the term Bid Proposal in this section refers to the one prepared by the LPA.

A checklist of all items which must be contained in the Bid Proposal can be found here:

<https://transportation.ky.gov/Program-Management/Documents/LPA8%20-%20Attach%201%20-%20Construction%20Procurement%20Checklist.pdf>

A copy is provided as an attachment to this chapter.

In the Bid Proposal, among other items outlined in the above referenced checklist, the LPA must:

- inform the bidding contractors of any requirements that could cause a bid not to be considered.²
- include the language found in Form FHWA-1273 “Required Contract Provisions, Federal-aid Construction Contracts” in all of its Bid Proposals.³ This language must be included in its most current version, without any modifications. The same language must be included in all subcontracts entered into by the prime contractor.⁴ This form can be found here: <http://www.fhwa.dot.gov/programadmin/contracts/1273.cfm>

A copy is provided as an attachment to this chapter.

¹ 23 CFR 635.112

² 23 CFR § 635.112(h)

³ 23 CFR § 633.102

⁴ 23 CFR § 633.102(e)

- include Equal Employment Opportunity (“EEO”) provisions which will be applicable to construction contracts and related subcontracts of \$10,000 or more.⁵
- include any applicable federal and state minimum wage rate requirements.⁶
 - If a project is fairly estimated to cost more than \$250,000, federal and state wage rates apply and should be included in the bid proposal.
 - State wage rates can be requested here:
<https://labor.ky.gov/standards/Pages/Current-Wage-Rates.aspx>
 - Federal wage rates can be found here:
<http://www.wdol.gov/dba.aspx>.
 - The bid proposal should include a statement that the higher of the two for any classification must be paid.
 - If a project is fairly estimated to cost \$250,000 or less, only federal wage rates apply and should be included in the bid proposal.
 - As mentioned above, Federal wage rates can be found here: Federal wage rates can be found here:
<http://www.wdol.gov/dba.aspx>.
- include a non-collusion provision which states: “Each bidder shall file a statement executed by, or on behalf of the person, firm association, or corporation submitting the bid certifying that such person, firm, association or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. Failure to submit the executed statement as part of the bidding documents will make the bid non responsive and not eligible for award consideration.”
- provide the “Required Affidavit for Bidders, Offerors, and Contractors” to each prospective bidder.⁷ The bidder awarded the contract will be required to provide a signed and notarized copy of the affidavit at the time the contract is signed.⁸
- incorporate by reference KYTC’s Standard Specifications for Roadway and Bridge Construction (“Spec Book”). This is true even if the project is not for the building of Roadways or Bridges. The Spec Book contains procedures and requirements that apply to all infrastructure projects.⁹ Any special provisions, project notes or deadlines indicating a deviation from the standards contained in the Spec Book or containing requirements not discussed in the Spec Book must also be included in the Bid Proposal. The language in the Bid Proposal will govern over all of the other contract documents and the Spec Book.

⁵ This language is required by 23 USC § 12101, et seq., 28 CFR § 35, 29 CFR § 1630, 41 CFR § 60 and Orders of the Secretary of Labor.

⁶ 23 CFR § 635.117(f); 40 USC § 3142 et seq.: KRS § 337.505, 530, and 540; 803 KAR 1:045, 1:055, and 1:085. The Federal Prevailing Wage requirements only apply to those projects which cost more than \$2,000. For Transportation Enhancement projects, it is only necessary to include these wage rate requirements when the project is a federal-aid highway project or where it is located on federal-aid highway right of way. The state wage requirements apply to all projects with a total cost over \$250,000.

⁷ 23 CFR § 635.112(f). The affidavit form can be found at <http://transportation.ky.gov/Contract/cont%20proc%20guidance%20manual.pdf>, Exhibit CP-9010.

⁸ The form for this affidavit can be found in the Forms Library

⁹ These requirements include procedures concerning how to deal with traffic details of the project, inspection requirements, materials testing, disposal of hazardous materials and many other items.

- include utility and railroad impact notes. If there is no impact to any railroad, the following should be included: “There are no railroad facilities or property associated with this project.”
- include a CAP section. The Bid Proposal is the document governing the contractual relationship between the LPA and the contractor so all commitments and promises must be included in it to ensure they are kept during the construction phase of the project. The Bid Proposal must also include time and completion date requirements.
- include a progress schedule which will identify controlling work items.¹⁰ The bidder that is awarded the contract will not be allowed progress payments until the controlling work items are completed.
- include a requirement that all bidders provide with their bids a signed and notarized certification stating that the contractor will take affirmative action to seek out and consider Disadvantaged Business Enterprises (DBEs) as potential subcontractors and that the contractor has made contact with potential DBE subcontractors; has affirmatively solicited their interest, capacity, and prices; and has documented the result of such contacts.
- include a requirement, on all contracts that exceed \$40,000, that the contractor provide a 5% bid bond, a 100% payment bond and a 100% performance bond (which will replace the bid bond after award and contract execution) for the project.¹¹ *It is recommended that the LPA require the contractors to provide these bonds on all projects, not just those over \$40,000, as required by law.* The bid bond will ensure that the LPA is compensated if the contractor is awarded the bid and then refuses to execute the contract. The payment bond will ensure that those providing material, labor and supplies to the contractor are paid, preventing those suppliers from filing liens against the project. The performance bond will protect the LPA against any harm occurring as a result of the contractor’s performance.
- include all other insurance requirements, particularly the requirement that if the project affects a railroad (discussed further in **Section VI.2.**), the contractor must have Railroad Liability Insurance.¹²

If any of the required language or items are not included in the bid proposal, the amounts due under any awarded contracts will not be eligible for federal reimbursement. All required language must be included without modification.

VIII.2 Disadvantaged Business Enterprise (DBE) Goal

LPAs awarding contracts on federally funded projects must meet requirements to allow Disadvantaged Business Enterprises (DBEs) to participate in the project.¹⁵

To qualify as a DBE the contractor or subcontractor must be included in the Certified DBE Directory found here: <http://transportation.ky.gov/Civil-Rights-and-Small-Business->

¹⁰ Spec Book 108.02

¹¹ KRS § 45A.185 and KRS § 45A.190

¹² The other types of insurance that KYTC requires are Commercial General Liability, Liability for Products and Completed Work, Personal and Advertising Liability, Auto, Employer Liability, Liability for Bodily Injury and Disease, and Workers Compensation.

¹⁵ 23 CFR § 365.107 and 49 CFR § 26

Development/Pages/Certified-DBE-Directory.aspx. All of KYTC's prequalification requirements apply to DBEs. Certified and Prequalified DBEs can be found here:

<http://transportation.ky.gov/Civil-Rights-and-Small-Business-Development/Pages/Certified-and-Prequalified-DBEs.aspx>.

For a hard copy of the current lists, the LPA should contact the Administering Office.

All LPA projects will be assigned a DBE goal by KYTC. The LPA must ask its Administering Office for a DBE goal as soon as possible after the design plans and EE are complete. The Administering Office will obtain a DBE goal from the Office of Civil Rights and Small Business Development and provide it to the LPA. The LPA must include the DBE goal in its bid proposal. The DBE goal indicates what percentage of the project cost must be awarded by contract to a DBE.

As mentioned above, bid proposals must include a requirement that all bidders provide with their bids a DBE certification. Without this certification, bids must be considered non-responsive and shall not be considered.

Expenditures to a DBE contractor may only be counted toward the DBE goal if the DBE is performing a commercially useful function on the contract.¹⁶ And, if a contractor uses a materials supplier to meet the DBE goal, only 60 percent of the total paid to the materials supplier may be counted toward the DBE goal.

VIII.3 Additive and Deductive Alternates

The LPA may include additive alternate bidding to achieve a maximum amount of its project scope within the available budget. The LPA should identify a base set of items that is the least amount of work that will be considered for award. Next, the LPA should group additional work that would be desired, if funds are available. The additional work should be grouped in workable units or alternates. These alternates should be prioritized with the highest or most desirable listed as "A", then "B" as the next most desired, and so on. The alternate priority or preference order should be shown in the bidding documents.

The bidder submitting a bid with the most added alternates (in order of priority established by the LPA in the bid proposal) not exceeding the contract award limit will be considered for award. If more than one bidder submits a bid under the contract award limit for the same number of alternates, the bidder with the lowest total bid for the base set of items and those alternates will be the bidder considered for award. If all bids exceed the contract award limit, the bidder with the lowest bid for the base set of items will be considered for award.

Similarly, the LPA can use deductible alternates in its Bid Proposal. The LPA will define the work items for the project in the Bid Proposal. It will then indicate which bid items or groups of bid items can be dropped from the project and in which order, in the event the bids received exceed the amount of funds available. If more than one bidder is able to provide all of the bid items within the budget, the project will be awarded to the lowest bidder. If only one bidder is able to provide all bid items within the budget, the project will be awarded to that bidder. If there are no bidders that can provide all of the bid items within the project budget, the LPA will look at the bids,

¹⁶ The DBE's participation counts as a commercially useful function if it meets the requirements in 49 CFR § 26.55(c). The DBE's participation is evaluated during the construction process as discussed in Section IV.1.

eliminating descending groups of deductible bid items one at a time, and determine if there are any bidders that can provide those bid items within the project budget. If more than one bidder can provide the same number of bid items within the project budget the contract will be awarded to the lowest bidder for those bid items.

The LPA must receive KYTC concurrence before awarding any project.

VIII.4 Inspection Plan

Once construction begins, the LPA will have to inspect the project on a regular basis to ensure that it is progressing as the contract and the legal requirements dictate (see **Chapter IX**). Before the project can be let for bidding, the LPA must determine whether it will do the inspections in-house or hire a consultant to perform the construction inspection services. If the LPA is to complete the inspections with in-house staff, it must have a regular staff person who is qualified to inspect the type of project being constructed. The LPA must send the proposed in-house inspector's resume to the Administering Office for approval. To hire a consultant the LPA must follow the Professional Services Procurement procedures outlined in **Chapter V**. The LPA must obtain approval of its inspection plan from the Administering Office prior to letting the contract for bid. The LPA should request from its Administering Office an example inspection plan, relevant to its project, if needed.

VIII.5 Project Letting Process

At least 21 days before the contract letting date, the LPA is required to make the project plans and specifications available to the public.¹⁸ In rare cases, with KYTC and sometimes FHWA approval, a reduced advertisement period may be acceptable for certain projects, including some projects not within the right-of-way of a public highway.¹⁹ For all projects, the LPA must provide adequate notice to the public that the plans and specifications are available. This may include posting notice in a newspaper or on the internet, either on the LPA's website or on KYTC's website.²⁰ No advertisement may be posted without approval from the Administering Office.

The LPA must submit the EE, the Bid Proposal, the design plans as approved by the District LPA Coordinator and the state historic preservation coordinator, if applicable; the inspection plan, the bid advertisement, the LDRC, and the LPA-PDC (collectively, the "Construction Procurement Packet") to the Administering Office in order to obtain the required authorization from KYTC and FHWA prior to advertising the project for bid.

Once the LPA receives approval of its Construction Procurement Packet from KYTC and FHWA and a formal notice to proceed to advertise (always after construction funds are authorized) it may post its advertisement and begin making its Bid Proposal and the design plans and specifications available to potential bidders.

VIII.6 Bid Evaluation

¹⁸ 23 CFR § 635.112(b)

¹⁹ 23 CFR 635.112

²⁰ KRS § 45A.080(3). To post the notice on KYTC's website, the LPA must submit it to its Administering Office.

During the time the bid is advertised, and up until the time the bids are announced, the LPA may accept sealed bids, but must not open them until the close of the advertising period. The LPA must screen bidders during this time to ensure that contractors are prequalified with KYTC for any prequalification categories outlined in the Bid Proposal. The LPA can find KYTC prequalified contractors here:

<http://transportation.ky.gov/Construction-Procurement/Pages/default.aspx>

(See “Prequalified Contractors List”). If a contractor is not listed, the LPA must contact the KYTC Division of Construction Procurement to verify prequalification status (i.e., do not assume the list is correct; the contractor may have recently received prequalification status).

After the contract letting closes, the LPA is required to publically announce each responsive bid and the EE either by reading them aloud in an advertised public setting or by posting them on a website available to the public at large. A responsive bidder:

- has the capability in all respects to perform fully if it were to be awarded the contract and the integrity and reliability which will assure good faith performance; and
- has submitted a bid under KRS § 45A.365 which conforms in all material respects to the invitation for bid, so that all bidders may stand on equal footing with respect to the method and timeliness of submission and as to the substance of any resulting contract.

The individual bid items on the EE are to remain confidential. Only the total cost from the EE may be announced publically. Before announcing any particular bid, the LPA representative must ensure that all required affidavits, certifications, and bonds are included in the contractor’s bid packet. It must also ensure that all bid items indicate a price and that all bid items in the proposal are included in the bid. If there were any addendums to the Bid Proposal after the contract was let for bidding, the LPA must ensure that these addendums are acknowledged in the bid. If these criteria are not met or if a bidder is not prequalified the bid is not responsive and the LPA must not read or post it.

Once all of the bids are read and after KYTC concurrence, the contract is to be awarded to the lowest responsive bidder, unless, upon further examination, the LPA determines that the bidder was not responsive.

After the bids are posted on the web or read in public, the LPA:

- must compare the lowest bid to the EE to ensure that the bid was not more than 5% above the estimated project cost. The LPA should work with its Administering Office to examine bids when the lowest bid is more than 5% above the estimated project cost. In some cases, if justifiable, and with KYTC approval, these projects may be awarded.
- must ensure that the contractor or subcontractors are not federally debarred or suspended. The LPA can determine this by accessing the following web address:
<https://www.sam.gov/portal/SAM/#1>
- must compare the individual bid items on the EE to the bid items in the lowest bid to ensure the bid is not materially or mathematically unbalanced.²¹ The EE can also be used to ensure that the bid does not charge an unreasonable amount for any particular bid item.

²¹ A mathematically unbalanced bid is one containing lump sum or unit bid items which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs, which he/she anticipates for the performance of the items in question.

- must examine the lowest bid to ensure that the DBE goal was met and that the plan to meet it is feasible and requires the DBEs to perform a Commercially Useful Function. The DBE that will perform work or supply materials to meet the goal must meet all of the certification and prequalification criteria discussed in **Chapter VIII**.

If the lowest bid is determined to be unresponsive, the LPA must examine the next lowest bid to determine its responsiveness.

VIII.7 Awarding the Contract

Prior to awarding the contract, the LPA must submit all of its bid tabulations and analysis, discussed in the previous section, to the Administering Office for review. If the Administering Office reviews the bids and concurs with the LPA’s selection, it then certifies that the LPA followed the selection process and provides the LPA with approval to award the contract.

The LPA must send the successful bidder the project construction contract.²² The Contractor must return the signed contract along with a signed “Required Affidavit for Bidders, Offerors and Contractors” for each of its subcontractors along with its performance bond, payment bond, and proof of insurance.

For smaller construction projects, not located on the national highway system, the LPA may avoid most of the construction procurement process. If the labor and materials together will total less than \$40,000, it may solicit quotes from three or more contractors and award the contract to whomever’s price is the lowest. If the labor and materials together will total less than \$20,000, the LPA may obtain one quote from a contractor and, if the price quoted is satisfactory, the LPA may award the contract.²⁴ The construction project may not be artificially divided so as to constitute a small purchase.²⁵

VIII.9 Construction Performed by Local Forces

Federal statute requires that construction shall be done by a party hired as a result of competitive bidding.²⁶ In rare circumstances, an LPA may have reason to request that it be able to use its own employees to construct a portion of its project; in order to do so, it must demonstrate

For more information regarding force account labor please see:

<http://www.fhwa.dot.gov/legisregs/directives/orders/50601.cfm>.

A bid is materially unbalanced if there is a reasonable doubt that award to the bidder submitting the mathematically unbalanced bid will result in the lowest ultimate cost.

²² See sample in Forms Library. There is language that must be included in the contract between the LPA and the contractor so it is important that the LPA does not change the language in the form except as necessary for the individual project specifications.

²⁴ KRS § 45A.100; FAP 111-55-00; 200 KAR 5:302, Section 2

²⁵ KRS § 45A.100(2)

²⁶ 23 CFR § 635.204

that this is a more cost effective alternative. To do this the LPA must submit a request to its Administering Office identifying and describing the project and the kind of work to be performed, the estimated costs, the estimated federal funds to be provided, and the reason or reasons that force account for such project is considered cost effective.²⁷ KYTC will review the request, make recommendations and submit to FHWA for approval, per Stewardship Agreement. Any approved decision to use local forces should be described in the bid proposal.

²⁷ 23 CFR § 635.204(c) and 23 CFR § 635.205