

# **Work Plan for Utilizing Basic Ordering Agreement Contracting to Implement Federally Funded Pedestrian and Bicycle Safety and Accessibility Programs in Fairfax County, Virginia**

## **Purpose**

The purpose of this work plan is to outline the Basic Ordering Agreement Contracting (BOA) approach the Fairfax County Department of Transportation (FCDOT) and the Department of Public Works and Environmental Services (DPWES) wishes to utilize in delivering a variety of federally funded Transit, Pedestrian and Bicycle programs throughout the County. These programs include:

- Route 50 Pedestrian Improvement (RT50) Program,
- Richmond Highway (US Route 1) Pedestrian and Transit Improvements (RHPTI),
- Dulles Corridor Bicycle and Pedestrian Access (DCBPA) Program,
- Reston Metrorail Access Group (RMAG),
- Tysons Metro Station Access Management (TMSAM) Program, and the
- Safe Routes to School (SRTS) Program.

In the coming months, the above active programs are expected to grow as additional projects are identified within each program. Also, new programs are anticipated to be implemented including:

- Reston Metrorail Access Group-Phase II (RMAG-II), and the
- Herndon Metrorail Station Access Management (HMSAM) Program

The majority of these programs (DCBPA, RMAG, TMSAM, RMAG-II, and HMSAM) are directly related to providing improved pedestrian and bicycle access to the new transit stations on the Washington Metropolitan Area Transit Authorities (WMATA) Silver Line. Phase I of this new line began revenue service operations on July 26, 2014. Phase II which extends the Silver Line an additional 11.4 miles from the Wiehle-Reston Station into Loudon County with a station located at the Dulles International Airport is currently in design and is scheduled to begin operations by 2018. While the funding mechanisms for the RMAG-II and HMSAM programs have yet to be identified, they are included in this work plan in anticipation that they may receive some form of federal funding in the coming years.

With Phase I of the Silver Line already in operation, expediting completion of improved Pedestrian and Bicycle access to these stations and the surrounding areas is imperative and a high priority for the County and region.

## **Scope of Work**

As noted, these programs provide improved Pedestrian and Bicycle safety and access to areas throughout Fairfax County. Each program contains multiple projects and may include one or more of the following types of projects:

- Sidewalks and/or multi-purpose trails which provide improved pedestrian and/or bicycle access by completing new links or closing missing links within the existing system;
- Pedestrian intersection Improvements which provide new or improved ADA compliant crosswalks, including pedestrian signalization, and median refuges;
- Bus Stop safety and accessibility improvements which provide ADA compliant access to existing and new bus stops throughout the County;
- “Road Diets” for inclusion of on-road bicycle facilities along the existing roadway network;
- Construction of new bike lanes or accommodations for bicycles along existing roadways;
- Bicycle network way-finding signage;
- *And/or Roadway “Spot” improvements, inclusive of new or modified turn lanes, traffic signal reconstruction and/or modifications; medians, islands and ancillary roadway safety improvements.*

Individual projects can range from installation of a simple bus stop loading pad, to over one mile of new sidewalk or multi-purpose trail. *The scope of work for individual projects within these programs may include one or more of the following construction activities:*

- *Clearing and Grubbing;*
- *Earthwork (regular and borrow excavation);*
- *Concrete sidewalks, curb ramps, and ADA curb cut ramps;*
- *Asphalt multi-purpose trails;*
- *Concrete Curb and/or Curb and Gutter;*
- *Roadway paving (including aggregate or stabilized sub-base, and various types/layers of asphalt cement pavement) including minor restoration, paved shoulder(s), milling and overlay of existing pavement, new pavement for extended, modified or new turn lanes;*
- *Concrete or raised grass medians and/or islands;*
- *Storm drainage improvements including inlets, pipe systems, underdrains, storm water management facilities (retention/detention ponds, bio-retention basins, low impact development facilities, underground storage/treatment facilities, etc.) , and miscellaneous ditch/channel grading and protection;*
- *Pavement markings and signage;*

- *Traffic signal installation and modifications (complete new signal installations and/or modifications to existing systems);*
- *Handrails, fences, railings and guardrail;*
- *Concrete gravity, reinforced concrete; pre-cast and other special design retaining walls;*
- *Pre-fabricated pedestrian/bicycle bridges, and cast –in-place or pre-cast abutments;*
- *Minor utility relocations or adjustments for water mains and service lines, valves, meters, and fittings, and sanitary mains, laterals, and cleanouts;*
- *Erosion and Sediment Controls;*
- *Maintenance of traffic and Traffic Management;*
- *Site restoration (seeding, mulching, sodding, minor landscaping);*
- *And, miscellaneous ancillary items not included above.*

To date, more than 69 individual projects have been identified within the various programs. These projects are in various stages of plan development, some are just beginning design while others have advanced to the Right-of-Way acquisition phase, and some are either ready for construction authorization or will be in the next few months.

### **Current Method**

The current method for delivering federally funded Transit, Pedestrian and Bicycle projects is to utilize the traditional design-bid-build approach. Contractors are procured through competitive sealed bidding for each project. This requires DPWES to submit complete bid documents to the Virginia Department of Transportation (VDOT) for review and approval prior to advertisement for construction. This review and approval period may range from 2-6 months depending on the size, type, location and complexity of a particular project. If approved, VDOT provides the County with an "Authorization to Advertise for Construction". Following approval to advertise and receipt of bids, DPWES is required to submit the results to VDOT for review and approval prior to actual award of the contract. This review period is typically 4-6 weeks. Upon VDOT approval to award, DPWES then forwards the contract to the County Executive who notifies the Board of Supervisors of the intent to award the contract to the successful bidder. Following approval of the County Executive, the Deputy Director of DPWES executes the contract.

The total time frame between submittal of bid documents to VDOT, through award and execution of the contract can range anywhere from 4 to 10 months.

The primary goal of this plan is to provide a mechanism that reduces the time frame from design completion to start of construction through the use of a BOA contract.

### **Basic Ordering Agreement (BOA)/Task Order Contracts**

A BOA is similar to and functions very much like a Job Order Contract (JOC) or an Indefinite Delivery/Indefinite Quantity (ID/IQ) contract. A comprehensive list of items of work and unit prices for those items is obtained through competitive bidding. This is sometimes referred to as the Price Book. When a project is identified, the appropriate items of work and accompanying unit prices are extracted from the Price Book and used to develop the cost for construction of that particular project, and a Task Order is executed. As additional projects are identified, additional Task Orders are executed for each specific project based upon the items of work required to complete the project.

Through approved State and Local Procurement legislation, over the past three years DPWES has utilized the BOA method of contract delivery on numerous locally funded Bus Stop Safety, Pedestrian, Bicycle and Intersection Improvement projects. These projects have ranged in size from \$5,000 up to \$500,000 in construction value, with the vast majority of these projects having a construction cost of under \$250,000. The dollar limit of these contracts is set by State and Local Procurement regulations and policies. Over the last three County fiscal years (July 1, 2011 through June 30, 2014), DPWES has completed 234 projects with a total construction value in excess of \$10,600,000. This includes over 172 Bus Stop improvements with a value of \$1,700,000 (average cost of approx. \$10,000 each) and 62 pedestrian and bicycle projects with a construction value in excess of \$8,900,000 (average cost of approx. \$145,000 each). DPWES currently has two BOA contracts in force; one for Bus Stop Safety and Accessibility projects and one for Pedestrian and Bicycle and general/spot roadway improvement projects. It should be noted that one contractor under DPWES's current BOA contracts is a certified Disadvantaged Business Enterprise (DBE), through VDOT's Disadvantaged and Minority Business Enterprise (DMBE) program.

The General Terms and Conditions, as well as any Special Provisions and Supplemental Conditions included in the BOA contract documents govern all Task Orders issued during the term of the BOA. Contracts are renewable for up to four additional one year periods, for a total maximum term of five years. However, DPWES has generally limited the term of these types of contracts to no more than three years (one year term with option to renew for up to two additional years).

The County has found that BOA contracts greatly improve the efficiency and timeliness of project delivery, on average reducing the time between design completion and the beginning of construction by three to four months. They greatly reduce administrative time and costs to projects during the construction procurement process, particularly for projects with relatively low total estimated construction cost. Also, in order to implement federally funded projects of this nature in a cost effective and efficient manner, the County has often decided to delay construction of one or more projects so that they can be bundled with other projects in order to provide sufficient overall project size/scope of work to entice qualified bidders and obtain reasonable bids. In addition, they provide a means to develop accurate budgets and estimates for current and future projects, and they provide the department with a means to effectively manage project funding requirements across numerous programs.

### **BOA Contract Restrictions**

*It is the policy of Fairfax County DPWES and FCDOT that BOA contracts be restricted and limited to only those areas of work and expertise for which they are intended. Currently, DPWES manages multiple BOA contracts covering a wide range of construction services, with each BOA covering a specific type or area of construction. For example, DPWES has a BOA specifically for Transportation Improvements (Pedestrian, Bicycle and Roadway Spot Improvements); one for Storm Drainage/Water Resource infrastructure improvements (stream restoration, regional storm water management facilities, dam restoration, etc.); one for Wastewater construction, and others for various construction specialty areas. Transportation projects cannot be assigned to the Water Resources BOA contractor, or to any other BOA contractor. Likewise, the Transportation BOA contractor cannot be assigned Water Resources construction tasks or any other program tasks outside their area of expertise.*

*State law allows BOA type construction contracts to be shared across jurisdictional and political boundaries, provided language allowing this is included in the original construction contract advertisement and general conditions of the executed contract. It has been Fairfax County's policy to restrict BOA construction contract sharing across political boundaries and will NOT include such language in this proposed Transportation BOA contract.*

### **Proposal**

Under the Special Experimental Project No. 14 (SEP-14) Innovative Contracting Program, FCDOT and DPWES are seeking authorization to implement a BOA procurement program in order to

complete federally funded pedestrian and bicycle improvement programs throughout the County. The BOA will provide a flexible mechanism to implement projects expeditiously and in a cost effective manner. *The BOA will be utilized specifically for Transportation improvement projects within Fairfax County. In addition to federally funded projects, the successful BOA contractor would be eligible to construct locally funded projects at the discretion of FCDOT and DPWES. However, only Transportation projects will be assigned to the successful bidder.*

The BOA is built around the Fairfax County DPWES standard contract documents, which include Bidding Requirements and Conditions of the Contract, General Conditions, Special Provisions and Supplemental Conditions, and Technical Specifications. These standard documents have been reviewed on numerous occasions by VDOT staff for compliance with federal regulations and the VDOT Locally Administered Projects (LAP) manual. A Form of Bid (FOB), comprising a list of items of work and anticipated quantities of each that can be expected to be performed during a one year term will be developed and incorporated into the contract documents. The anticipated quantities are based upon historical averages and a review of potential future projects that may qualify to utilize the BOA procurement method. The BOA will be advertised and competitively bid based upon the items of work and estimated quantities contained in the FOB along with all other contract documents. The contract will be awarded to the lowest responsible and responsive bidder.

As projects are identified and advance to the construction phase, Task Orders are developed under the auspices of the conditions of the overall BOA contract. Items of work and estimated quantities for the particular project are identified and unit prices extracted from the Price Book. The total estimated construction cost is developed from these estimated quantities and unit prices and becomes the Task Order “contract” amount. Each Task Order is managed as if it was a standalone contract and includes a Notice to Proceed and Contract Completion Date. Liquidated damages are stipulated in the BOA contract and apply to all Task Orders.

Additional characteristics of the proposed BOA contract include the following:

- Generalized description of the Scope of Work anticipated under the contract;
- Task Order development/authorization procedures for each individual project;
- Task Orders are expected to range from \$5,000 to \$500,000 in construction value;
- Numerous task orders are expected, but there are no guarantees that any work will be awarded to the successful bidder;
- Contract is for a One-Year Term with option to renew for up to two additional one-year terms;

- Mutual agreement required between successful bidder and DPWES in order to renew (ensures quality work in order to renew);
- Unit prices in the “Price Book” are escalated at each renewal year based upon the *Engineering News Record* annual construction cost index 12 month inflation factor for the month ending just prior to expiration of the current year contract (date of Contract Award);
- All Federal procurement documents including Davis-Bacon Wage Rates, Debarment, DBE, and other provisions as required for a standard Design-Bid-Build procurement in accordance with the VDOT LAP manual;
- Federal documents, including Davis-Bacon Wage Rates are updated at least annually at the date of contract renewal;
- Fairfax County will act as Program Manager and administer the contracts in accordance with the VDOT LAP manual.

### **Task Order Development Procedures**

Once Fairfax County has executed a BOA with a contractor, they are available to perform work when assigned. The Task Order execution process begins with the identification of a project, an understanding of the general scope of work associated, and completion of the Design, and Right-of-Way (RW) phases of the project. The Design and RW phases are completed in accordance with the VDOT LAP Manual and VDOT provides general oversight of the entire process. The DPWES Project Manager may conduct a joint scoping meeting with the Contractor to review the proposed general scope of work and/or evaluate site conditions, and assess any unique features of the project.

After the joint scoping meeting, the Project Manager provides the contractor with a set of drawings, permits, any special provisions for the Task Order and an engineer’s estimate based upon estimated quantities and unit prices extracted from the Price Book. The Task Order is reviewed to ensure that line items selected are most appropriate for the specific project. The contractor also reviews the scope of work, items of work and estimated quantities extracted from the Price Book. If the scope of work for a particular project includes an item of work that is not found in the Price Book, then a Change Order is negotiated with the Contractor for that specific item of work. If the work is of a nature that it may come up again on another project, then the negotiated unit price becomes part of the Price Book. Change Orders are developed in the same fashion as a Design-Bid-Build project wherein the County performs its own evaluation and due diligence of the estimated cost of the work, the contractor does the same and a final unit cost is agreed upon through negotiations. The final estimated total construction cost, as

determined from the agreed scope of work, items of work, and unit prices from the Price Book, and anticipated schedule for completion is agreed upon; a Task Order is authorized, and a Notice-to-Proceed is issued to the Contractor.

Historical data indicate Task Order Authorization and Notice-to-Proceed can be completed within one to two months of design approval versus the traditional design-bid-build process which can take from 4 to 10 months depending on the project. Instead of an extensive period developing bid documents and receiving VDOT "Authorization to Advertise," then going through the formal bid and award process, the construction Task Order procurement process can begin after RW clearance, and can be given a notice-to-proceed once all permits and VDOT are in hand.

During construction of each assigned Task Order, DPWES reviews all submittals, monitors and inspects the work, measures actual field installed quantities, and collects data and other information required for and by federal reporting requirements. The actual quantities measured in the field are the basis of payment to the contractor. Overruns in quantities, and changes in scope of work are handled by a traditional change order process, however, changes in unit prices for Price Book items are not allowed.

### **Compliance with Federal and State Regulations**

As noted above, the BOA contract will include all Federal procurement documentation. Record keeping and other documentation for each Task Order will be in compliance with Federal reporting requirements. Bid documents for the BOA contract will include the following:

- FHWA-1273 Required Contract Provisions, Federal Aid Construction Contracts;
- Reference to All VDOT Supplemental Specifications, Special Provisions and Special Provisions Copied Notes with any variances from VDOT standards and specifications covered in the BOA Special Conditions;
- VDOT Special Provision for Award and Execution of contracts on All federally funded projects;
- VDOT Special Provision for Subcontracting on All federally funded projects;
- VDOT Special Provision for Personnel Requirements for Work Zone Traffic Control;
- VDOT Special Provision for Predetermined Wage Rates (Davis-Bacon);
- Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246);
- VDOT Special Provision for DBE Program Requirements;

- VDOT Special Provision for Use of Domestic Material (“Buy America”)

In order to meet the DBE Program Requirements, and since specific projects are not identified in the bid documents, FCDOT and DPWES will work with the VDOT Civil Rights Division to establish a program wide Goal for DBE utilization. This goal will be included in the BOA Bid documents and all required contract forms will be included in the BOA solicitation. Based upon historical averages, and the program and project types included in this proposal, it is estimated that the program wide goal will range from 7 to 15% of overall construction costs. As noted previously, one of the current DPWES BOA construction contractors is a certified DBE. FCDOT and DPWES will ensure, in cooperation with VDOT, qualified and certified DBE contractors are afforded every opportunity to bid on the BOA contract. If there is sufficient interest from DBE firms, and if requested by FHWA or VDOT, the County could implement this program as a DBE set aside contract. However, based upon the history of our current BOA contracts, we do not feel this is necessary at this time.

Prior to advertisement of the BOA Contract, FCDOT and DPWES will provide copies of all bidding documentation to VDOT for review and approval. Award of and annual renewals of the BOA Contract will also be subject to VDOT review and approval.

### **Conclusion**

In summary, the BOA contracting method would enable Fairfax County to fast track projects by reducing the time frame between design completion and construction start by up to eight months. In addition this method reduces administrative time and costs which are inherent to the typical Design-Bid-Build process. The contractor would have an ongoing incentive to deliver quality projects to ensure future annual renewals, and the County will be able to manage program funding and scheduling requirements across a broad range of programs and projects that are of high priority and benefit to the residents and visitors to Fairfax County.