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Exhibit A: Scope of Work 2012 Statewide On Call Construction Management and Inspection Services, Change Order Management and Scheduling Agreement Y-XXXX

A. General Scope of Work

The work under this AGREEMENT shall consist of performing services related to On-Call Construction Management and Construction Inspection Services, Change Order Management and Scheduling as herein defined and necessary to accomplish individual tasks (“task orders”) issued by the STATE. The scope of this AGREEMENT includes work which may support either Design Bid Build (DBB) or Design Build (DB) contracting methods.

Services under this AGREEMENT may be requested for any region, and take place anywhere in the State of Washington. Consistent with performance based contracting methodologies and the State Administrative and Accounting Manual (SAAM), a “second tier” competitive process may be employed prior to execution of a task order. See Exhibit A, Attachment 1 for “second tier” selection procedures (NOT ATTACHED TO THE ADVERTISEMENT VERSION OF SCOPE).

Note: For all descriptions of services below, the DB specific services are noted as they vary from DBB services. All other services apply to both DBB and DB.

The CONSULTANT shall furnish all services and labor necessary to accomplish these tasks, and shall provide all materials, supplies, equipment, and incidentals, except as designated elsewhere in the AGREEMENT, necessary to prepare and deliver to the STATE the construction management and/or construction inspection services and/or other related deliverable item(s) requested by the STATE. It is noted that STATE construction may occur during daylight hours, nighttime hours, or weekend hours, or any combination thereof, and schedules for personnel will be discussed on a task order by task order basis.

The STATE is not obligated to assign any specific number of tasks to the CONSULTANT, and the STATE’S and CONSULTANT’S obligations hereunder are limited to tasks assigned in writing. The STATE may require the CONSULTANT to perform all work on a project, or provide individuals to supplement existing STATE teams. Task orders may include, but are not limited to:

A.1 Construction Management Services

Construction management services are performed by licensed engineers who administer a project office covering one or more transportation construction projects. The following equivalent STATE service levels are provided for reference only: Transportation Engineer 4 (Assistant Project Engineer) and Transportation Engineer 5 (Project Engineer). Professional Engineer licenses are required for both of these levels and equivalents. For DB contracts, it is desirable for these levels of Construction Management Services to have DB experience.

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DBB and DB services may include but are not limited to:

- Supervise, offer supervisory support and manage engineers and engineering technicians responsible for administering multi-million dollar transportation construction projects.
- DBB: Per the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, Section 1-05.1, Authority of the Engineer, the CONSULTANT, as appropriate, shall assume the authority of the engineer as outlined and as referred to in any task order documents and in conformance with the Washington State Department of Transportation (WSDOT) Construction Manual M41-01, Section 1-2.2, Administration, Project Engineer's Relationship and Responsibilities.
- DB: Refer to Chapter 1, Section 1-05.1, of WSDOT's DB Request for Proposal for definitions of the Authority of the Engineer.
- DB: The duties at the Transportation Engineer 4 level may be supplemented to include Design Manager. This position reports directly to the Project Engineer, and is responsible for overseeing the DB's design effort and coordination of WSDOT design reviews.
- Manage and administer construction contract changes in accordance with the contract, and STATE policies and procedures.
- Apply policies, procedures, guidelines, standards and regulations, including environmental regulations.
- Provide innovative leadership and management for traffic control, personnel resource management and budget constraints.
- Develop work load projections, and organize staffing for multiple shifts and changing workloads.
- Manage the construction budgets and authorize monthly payments to the contractor(s).
- Communicate with internal and external customers, STATE management, property owners, and stakeholders, as defined in the specific task orders.
- Monitor the contractor's compliance with the plans and specifications, and organize and plan the work of CONSULTANT and/or STATE personnel as needed to anticipate and avoid problems, and fulfill contract obligations.
- Acquire all project documents from the contractor and other sources for all projects. Maintain organized project records of all documents such that documentation requirements as outlined in the WSDOT Construction Manual M41-01 are met for the project, including any federal documentation requirements for federally funded projects.
- Monitor contractor operations such that the CONSULTANT and STATE crews and the traveling public are protected.
- Review and comment on contractor schedules.
- Provide direction on issues that arise within established authority levels of the position.
- Other related services as requested by the STATE.

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A.2 Construction Inspection Services

Construction inspection services are performed by personnel who assist in various ways in administering one or more transportation construction projects. The following equivalent STATE service levels are provided for reference only: Transportation Engineer 3 (Chief Inspector, Office Engineer, Environmental Compliance Manager), Transportation Engineer 2 (Materials Engineer, Inspectors, Assistant Office Engineer, Survey Party Chief, Environmental Compliance Inspector), Transportation Engineer 1 / Transportation Technician 3 (Assistant Inspectors, Office Support, Materials), and Transportation Technician 2 and Transportation Technician 1 (materials testers, inspection aides, documentation, traffic control, other duties). Professional Engineer licenses are not required for these levels or their equivalents, though are considered desirable for the top two levels or equivalents. Please see Section E below for an understanding of what will be required for those staff who will be doing materials testing.

DBB and DB services may include but are not limited to:

Chief Inspectors

- DBB: Field assistance for the Project Engineer, supervising all phases of inspection on various types of highway construction projects.
- DB: Provide assistance to the Project Engineer, ensuring that the DB contractor fulfills the requirements outlined in WSDOT's DB Request for Proposal. This position provides oversight and verification of the DB contractor's work, for both design and construction.
- Assist with field design modifications and clarify contractor questions on construction projects.
- Review pay notes.
- DB: Ensure DB contractor is providing accurate and appropriate justification for contractor payments, as outlined in WSDOT's DB Request for Proposal.
- Full supervision of CONSULTANT and STATE field staff as appropriate.
- Provide assistance in coordinating construction impacts with Regional Traffic Section.
- Respond to questions from property owners and the public.
- Monitor contractor operations such that the CONSULTANT and STATE crews and the traveling public are protected.
- Train subordinates in all phases of project inspection.
- Provide Environmental Compliance services on complex projects, including ensuring permits and regulations are followed, BMPs are proper and in place, documentation is appropriate and environmental documents are updated during project progress.
- Supervise Environmental Compliance inspectors and review documentation including pay notes.

Office Engineer

- Prepares Change Orders and cost estimates.
- Supervises office staff.
- Supervises contract documentation requirements.
- Supervises contractor payment processing.

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- DB: Works with DB contractor and STATE staff to ensure the DB contractor provides required project documentation in a timely manner for both design and construction activities.
- Helps ensure timely project closeout.

Materials Engineer

- Ensure material used in construction projects meets construction requirements by processing contractor's requests for approval, analyzing field test data, and resolving materials documentation deficiencies at the end of construction.
- DB: See Chapter 2, Section 2.25 of DB Request for Proposal specific to the project for materials to be tested and documented by WSDOT. The DB contractor is responsible for quality control and quality assurance on all other aspects of materials testing work. For materials not reserved to WSDOT testing, provide quality verification functions and guidance to the DB contractor in interpreting WSDOT documentation requirements.
- Supervise staff performing materials testing and documentation.

Other Assisting Staff

- Perform tests on materials used for construction per the WSDOT Construction Manual, M41-01. Must be STATE qualified to perform these tests. Qualification testing will be provided to the staff personnel when task is under negotiation. See Section E below titled "Materials Tester Qualification Process." The STATE will not provide training. Materials testers must be available to meet required testing frequency of the project assigned. In addition, materials testers must be able to track quantities of materials to ensure testing is done at the required intervals. (Note: even though DB contractors are responsible for the majority of materials testing, for those items which are reserved to WSDOT, all requirements remain in effect.)
- Prepare calculations and notes for monthly payments, or assist in such work.
- DB: Assist in preparing the required justification for making DB contractor payments.
- Prepare cost estimates, or assists in such work.
- Prepare all documents necessary for contract change orders.
- Process Force Account payments.
- Certification as Traffic Control Supervisor. Traffic Control Supervisors must have current certification as Traffic Control Supervisors. Current documentation will be checked by the STATE prior to any authorization of the CONSULTANT services. The STATE will not provide training. (TCS is not typically a STATE position under DB contracts.)
- Perform traffic control duties as requested. Traffic control personnel must have a current Washington State flagging card. Current documentation will be checked by the STATE prior to any authorization of the CONSULTANT services. The STATE will not provided training.
- Act as assistant inspector under the direction of the Chief Inspector.
- Act as Environmental Compliance inspector, including ensuring permits and regulations are followed, BMPs are proper and in place, documentation is appropriate, pay notes are issued, and environmental documents are updated during project progress.

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- DB: Provide quality audits and verification under the direction of the Chief Inspector and in accordance with the Quality Management Plan in Chapter 2, WSDOT DB Request for Proposal for the specific project. Fill out audit and non-conformance reports as required and input audit information into WSDOT databases as required.
- Provide survey party members if necessary for construction projects.
- Provide basic assistance in ticket taking, survey crew work, materials testing, and vehicles weighing at scales.
- Assist in preparation of project documentation.
- Other related work, as needed by the STATE.

A.3 Scheduling Services

Construction scheduling services are performed by personnel knowledgeable in complex construction activities and experienced with project control software necessary to assist the STATE in review of the contractor's schedule. The following equivalent STATE service levels are provided for reference only: Transportation Engineer 3 (Construction Scheduler), Transportation Engineer 2 (Assistant Construction Scheduler), Transportation Engineer 1 / Transportation Technician 3 (Office Support), and Transportation Technician 2 and Transportation Technician 1 (documentation, other duties). Professional Engineer licenses are not required for these levels or their equivalents, though are considered desirable for the top two levels or equivalents. Some construction schedule development for design (PS&E) may be requested during final PS&E.

DBB and DB services may include but are not limited to:

- Provide scheduling services to develop the STATE's version of the contractor's schedule, providing impact delay and time impact analyses, reviewing the contractor's schedule and/or other scheduling (development and maintenance of schedules) as needed using computer based scheduling program(s).
- DBB: Provide scheduling services as part of final PS&E to develop the STATE's version of the potential contractor's schedule for purposes of determining the critical path and working days.
- Review and provide comments as needed on contractor's initial CPM schedule and any subsequent re-submittals to ensure completeness, a sufficient level of detail to effectively manage the work, technical accuracy and fulfillment of contract special provisions.
- Provide project controls (scheduling) training as requested by the Project Engineer.
- Other related work, as needed by the STATE.

A.4. Change Orders

The CONSULTANT may be requested to assist the STATE in Change Order management, including documentation, review and processing documents related to Change Orders. Change Orders are often written at the Transportation Engineer 2 and equivalent level, with review and processing at higher levels.

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A.5. CONSULTANT Project Management

Project management for the purposes of this AGREEMENT consist of work related to:

- Invoicing to the STATE
- Progress reports with the invoices
- Work scheduling of CONSULTANT personnel in STATE offices
- Subconsultant management
- Project paper management and documentation

Payment for this aspect of work will be limited to 10% of the total amount authorized in writing unless otherwise negotiated.

B. STATE Provided Services

The STATE will provide for the CONSULTANT, as appropriate:

- A review of the STATE documentation flow necessary to track a construction project.
- Access to STATE programs as needed to complete the work.
- DBB: As needed, the CONSULTANT may be requested to do their work in a STATE office where access to STATE programs and project information is readily available. This item will be subject to negotiation based on what equipment the CONSULTANT needs to use and what the CONSULTANT has available (examples: field computer, other items) as well as various other parameters for this assignment. See Field Personnel section below for long term full time assignments.
- DB: The CONSULTANT may be assigned to a co-location office located close to the project and which includes both DB personnel and STATE project management personnel. The co-location requirements are defined in the WSDOT DB Request for Proposal for the specific project, and will be part of the negotiations for the specific task order. See Field Personnel section below for long term full time assignments.

C. Premium Overtime and Other Non-Standard Schedules

Many projects are completed using overtime and/or non-standard schedules. If the STATE deems it in its interest for the CONSULTANT to perform work on premium overtime, shift premium, or other non-standard basis, it may authorize such action in the applicable Formal Task Order Documents, or in a subsequent authorization letter to the CONSULTANT. Premiums shall not be burdened with overhead and fee, and shall be shown separately on the invoices.

D. Meeting Notice Requirements

The CONSULTANT shall attend various project related meetings as discussed in Section III of the ORIGINAL AGREEMENT and as requested by the STATE. Task Orders will define proper meeting notice for each project. If the meeting is prior to development of a task order document, and the CONSULTANT is given Notice to Proceed, the STATE will follow up with a task order document within 24 hours.

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E. Long Term Field Personnel

Personnel provided under this AGREEMENT shall be provided at field rates unless specifically authorized by the STATE for work performed from the CONSULTANT's offices. Specifics will be defined by each Task Order.

F. Materials Tester Qualifications Process

The materials tester qualifications process includes the following:

- When requested by the STATE, provide training records and documentation indicating the CONSULTANT staff member's level of proficiency in the applicable materials test procedures requested by the STATE. The individual must also be in possession of a certificate of training and safe use of nuclear moisture/density gauges, and possess a valid thermo luminescent dosimeter.
- Document that the CONSULTANT staff member is capable of operating the following equipment:
 - a. Troxler 3430 and/or 3450 Nuclear Moisture/Density Gauge
 - b. Brovold Gyrotory Compactor
 - c. Barnstead Thermoline Ignition Furnace
 - d. A manual or mechanical Sand Equivalency Shaker

Section 9 of the Construction Manual M41-01, available through the website at www.wsdot.wa.gov/fasc/engineeringpublications/manuals/construction.pdf, describes materials testing procedures and requirements for qualification. The CONSULTANT shall be responsible for training their staff in the various materials testing procedures. The STATE will qualify the CONSULTANT staff as follows:

- The STATE, when they request materials testing as part of the CONSULTANT services for a project, will review the documentation of training for the individual proposed by the CONSULTANT as a materials tester as noted above.
- If the STATE is satisfied that the individual is sufficiently trained in the performance of WSDOT test procedures, the STATE will contact the STATE's Regional Independent Assurance Inspection Office for an appointment for testing qualification. The STATE office will follow regional procedures to request the testing qualification for the CONSULTANT staff member.
- Qualification will consist of a closed book written examination, and observation by an Independent Assurance Inspector of the individual's ability to perform hands-on tests.
- If the CONSULTANT staff member fails a written and/or hands-on test, the staff member shall be refused work on the project. The CONSULTANT may or may not be offered the opportunity to offer a substitute staff member for qualification.
- If it is found that the CONSULTANT staff member is performing test procedures incorrectly or is misusing equipment, the CONSULTANT will be informed of the situation, and the staff member shall not continue to work on the task order.

G. Other Items

CONSULTANT staff will be required to provide their own vehicles in the field.