

# **BID FORM – ELECTRICAL - BID PACKAGE 11**

## **BIDDER**

Bidder's Firm Name: \_\_\_\_\_

Address: \_\_\_\_\_

Mailing Address

City

State

Zip

\_\_\_\_\_

Street Address

City

State

Zip

Bidder's Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Email: \_\_\_\_\_

California Contractors State License Board No: \_\_\_\_\_ Class Type: \_\_\_\_\_

## **1. BID**

**1.1** Bidders shall include in their bid the cost of providing all labor, material, equipment, supervision, services, taxes, insurance, licenses, fees, overhead and profit, etc. necessary or incidentally required to complete the subcontract work including, but not limited to, the attached scope of work and clarifications and in accordance with the contract documents and specifications included with this bid package. Each line item shall include G.C.'s and Fee.

**1.2** It is understood that this Bid shall remain in effect, and may not be withdrawn, for a period of ninety (90) days from the date that bids are due to be received.

## **2. BID DETAIL**

### **Division 26**

Electrical Systems \$ \_\_\_\_\_

Equipment - Medium / Low Volt Switchgear \$ \_\_\_\_\_

Equipment - Lighting Fixtures \$ \_\_\_\_\_

### **Division 27**

Communications \$ \_\_\_\_\_

Common Use Systems \$ \_\_\_\_\_

Paging Systems \$ \_\_\_\_\_

**Division 28**

Access Control and Alarm Monitoring System \$ \_\_\_\_\_

Video Surveillance \$ \_\_\_\_\_

Fire Detection and Alarm \$ \_\_\_\_\_

Temporary Power and Lighting \$ \_\_\_\_\_

SITA Cost for Programming and Set-up \$ \_\_\_\_\_

Payment and Performance Bond \$ \_\_\_\_\_

Cost of Maintenance, Operations, and Additional Warranty  
Covering period up to Project Final Acceptance dated Dec 2013 \$ \_\_\_\_\_

Cost of Standard Contract Warranty which commences  
Upon Project Final Acceptance dated December 2013 \$ \_\_\_\_\_

<b>NORTH AND SOUTH CONCOURSE TOTAL BID PRICE</b>	<b>\$ _____</b>
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ADD ALTERNATE #1: Provide monthly rate for Maintenance, Operations,  
and Warranty if Final Acceptance is extended past December 2013  
(complete, including overhead, insurance and profit) \$ \_\_\_\_\_

### **3. BASIS OF AWARD**

3.1 Basis of award shall be “North and South Concourse Total Bid Price.”

### **4. SCHEDULE ACKNOWLEDGEMENT**

4.1 Bidders are instructed to include all necessary overtime and/or shift work to accommodate the Schedule (Exhibit F).

4.2 Bidder acknowledges he/she has reviewed the contractor’s proposed project schedule and is able to complete the subcontract work in accordance with schedule requirements.

### **5. INSURANCE AND BOND ACKNOWLEDGEMENT**

5.1 Bidder shall comply with Instructions to Bidders and sample Subcontract.

5.2 Bidder will be required to obtain a payment and performance bond. Bidder certifies that he is able to provide a payment and performance bond for this project and that cost is included.

5.3 Bidder shall comply with the Insurance Requirements under Prime Contract (Exhibit N), OCIP Requirements (Exhibit J), and WAJV Insurance Requirements (Exhibit D).

5.4 Any engineering required for project will include minimum \$5 million dollars in Professional Liability insurance.

### **6. CONTRACT FORMS**

6.1 If awarded the subcontract for this scope of work, bidder agrees to execute Walsh Austin JV's Subcontract Agreement or Purchase Order without modifications.

6.2 Bidder has provided the required Subcontract Bid Bond equal to 10% of the total amount of the Bid Price.

6.3 Bid Bond is valid for a period of ninety (90) days from the date that bids are due.

### **7. MBE/WBE PARTICIPATION**

WAJV strongly encourages MWBE participation in the project.

**The minimum established goal for this bid package is 25%**

7.1 Percentage of Total Base Bid Price that the bidder will contractually commit to utilizing certified M/WBE business in the performance of the work. \_\_\_\_\_%

**Note: Good Faith Documentation is not required if the percentage of M/WBE commitment is equal to or higher than the minimum goal. If the percentage is less than the minimum goal, bidder must submit Good Faith Effort Documentation.**

7.2 The percentage of M/WBE commitment above is less than the minimum goal identified by WAJV. Therefore, in accordance with the Bid Package Documents, bidder has provided all required Good Faith Documentation with the bid submission.

**8. OTHER SUBCONTRACTORS**

8.1 Provide a list of all intended use of sub tier contractors with a description of their scope.

- a.) \_\_\_\_\_
- b.) \_\_\_\_\_
- c.) \_\_\_\_\_
- d.) \_\_\_\_\_
- e.) \_\_\_\_\_
- f.) \_\_\_\_\_

**9. ADDENDA ACKNOWLEDGEMENT**

Bidder acknowledges receipt and inclusion of the following Addenda:

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_

Post Bid Addendum No. \_\_\_\_ Dated \_\_\_\_

**10. SIGNATURE**

By signing this Bid Package, you are legally authorized to commit all resources of the company and are committing to the terms and conditions stated herein. Your signature commits your acceptance and compliance with all Sections, Exhibits and Addenda to this Bid Package.

On \_\_\_\_\_, 2010, Bidder’s duly authorized officer approved and submitted this bid.

Bidder’s Firm Name: \_\_\_\_\_

By: (Signature) \_\_\_\_\_

(Typed Name) \_\_\_\_\_

As its: (Position/Title) \_\_\_\_\_

## 11. SCOPE OF WORK – ELECTRICAL

Precedence:

It is understood the *Work* to be performed under this Agreement including the terms and conditions thereof, is as described in Exhibit A, Terms and Conditions together with the following Exhibit B, Scope of Work, which are intended to complement same. However, in the event of any inconsistency, Exhibit A shall govern.

### EXHIBIT "B"

#### Scope of Work

#### PROJECT OVERVIEW:

The Tom Bradley International Terminal Modifications – Bradley West Concourses are made up of the North and South Concourses and 14 new gates.

#### SCOPE OF SUBCONTRACTOR'S WORK:

WRK. 01 This Scope of Work is intended to define, but not limit, the scope of work to be performed by Subcontractor. The Scope of Work shall include all necessary submittals, shop drawings, coordination with all other trades, permits, taxes, insurance, labor, materials, equipment (cranes, boom lifts, scissor lifts, etc.), tools, layout (including penetrations, sleeves, block-outs), supervision, scaffolding, trucking, freight, delivery, testing, start-up, commissioning assistance for 3rd party commissioning agent, and all other related services required for the complete performance of the Electrical system and related work for this project as indicated on the Contract Drawings (See Exhibit C for the entire list of Contract Drawings and Documents).

Items not shown on contract drawings or indicated in other contract documents but reasonably inferable from the contract documents or necessary to the integrity of the Subcontract Work are included in the Subcontract Work.

Subcontractor shall complete all Electrical Work in accordance with the Technical Specifications and in conformity with the contract, drawings and other documents listed in Subcontract Exhibit C attached hereto as applicable to this scope of work and specifically Specification Sections:

- 26.0000 - Electrical (All Sections)
- 27.0000 – Communications (All Sections)
- 28.0000 - Electronic Safety and Security (All Sections)
- 01.1000 - Summary
- 01.7419 - Construction Waste Mgmt. and Disposal
- 01.7700 - Closeout Procedures
- 01.7839 - Project Record Documents
- 01.7900 - Demonstration and Training
- 01.8100 - Commissioning
- 01.8113 - Sustainable Design Requirements
- 01.8119 – Indoor Air Quality Requirements

WRK. 02 (deleted)

WRK. 03 The Electrical system will be in compliance with all applicable codes and life safety requirements.

WRK. 04 Hours of Work: The project may be available 24 hours a day, Monday through Sunday or as otherwise determine by Contractor. Contractor reserves the right to modify the work hours and schedule as required. Subcontractor includes all costs for standby trades when Subcontractor chooses to work beyond modified working hours.

WRK. 05 Mock-ups: All costs associated with "mock-up" work (where applicable) required to coordinate Subcontractor's work with that of another subcontractor are included. The intent of such mock-ups includes, but is not limited to, establishing final design, construction sequencing, dimensions, coordination and quality of the workmanship that are to be continued and expected once said mock-ups have been approved by the Architect, Consultants, Owner and Contractor. Mockup inspection and testing by others.

**LAX – Bradley West Gates – North and South Concourse**

SECTION THREE – BID FORM

- WRK. 06 Site Access: Subcontractor and its affiliates and sub-subcontractors shall limit equipment and vehicle usage to the Contractor designated ingress, egress and service areas. Upon request by Contractor, all equipment and material shall be removed from designated ingress, egress and service areas immediately. All unauthorized vehicles and/or non-compliant vehicles on the project site will be removed or towed at Subcontractor's expense. Subcontractor shall coordinate activities with any concurrent nearby projects, which are under construction, are planned for construction or later become known, in order to minimize cumulative traffic impacts due to lane closures or street excavation. Subcontractor shall bear the full responsibility and cost for trade permits, and all other traffic control associated with his deliveries to the satisfaction of Contractor, City of Los Angeles, and other agencies having jurisdiction.
- WRK. 07 Parking: No onsite parking will be provided for Subcontractor's labor force. Offsite parking and transportation to and from the project site shall be provided by the Contractor. Subcontractor is responsible for all employee travel time between any parking area or designated parking lots to and from the jobsite (specified for use by Contractor).
- WRK. 08 Site Loading: Subcontractor shall limit material and equipment loads on the structure to loads only specifically approved by the CMAR, including location, weight and dynamics. Any added re-shoring, etc. required to sustain Subcontractor anticipated material and equipment loading shall be the responsibility of this Subcontractor.
- WRK. 09 Temporary Site Offices: Subcontractor is not entitled to an on-site project office, but may be granted permission by Contractor for limited space at any time during the course of the project. Where granted, Subcontractor shall be responsible for providing and maintaining on-site trailers/jobsite offices, changing areas for their personnel, including all required utility connections and utility usage costs and material staging areas for Subcontractor's Work. Locations of the above must be reviewed and approved in writing by Contractor or as otherwise instructed by Contractor. Subcontractor includes the costs of relocation of his office/changing/storage areas and temporary utilities to allow the work of the following trades to proceed or as otherwise instructed by Contractor.
- WRK. 10 Scaffolding: Subcontractor includes all required scaffolding, working platforms, and other temporary works (including required permits) necessary for completion of his work in accordance with job progress and in compliance with the "SHE" manual.
- WRK. 11 Hoisting: Subcontractor shall make necessary arrangements to provide hoisting for all equipment and material associated with this scope of work and has included all OSHA approved equipment and methods required in performance of the Work.
- WRK. 12 Temporary Lighting & Power:
- a) Design, provide, install and maintain temporary electrical power and lighting in accordance with the overall project plan and schedule. The design shall be based on two systems: one for the North Concourse and the other for the South. Securely support equipment to existing structures or construct a rigid freestanding support for the equipment. Prior to the installation of the temporary power and lighting, provide a summary and design with single line drawing for the proposed system to the Contractor for review and acceptance. Design shall conform to all LEED requirements for temporary lighting and power as it applies to this project.
  - b) Power: The intent of the electrical power system is to provide adequate power for the typical project power needs and associated tools. Temporary construction power shall be designed in such a way as to have a maximum distance of 100' for any portable power cord from the point of overcurrent protection.  
Source shall be 480/277volt 3Ø 4wire 1,000 amp. from equipment located within the existing TBIT. The electric room locations are to be determined, for this purpose consider the distance to be 100' at two locations; one North the other South. Temporary power shall have distribution available for 480/277volt with transformer(s) to provide 208/120volt 3Ø 4wire power for power distribution ("spider box"). Spider boxes shall be located evenly spaced a crossed the various levels to meet the maximum 100' distance for portable power cords as stated above.
  - c) Lighting: Lighting Fixtures shall be a "Low Bay" style fixture mounted to the structure or ceiling as conditions allow. Lighting levels shall meet a minimum standard of 10 ft. candles/sq. foot. At locations which do not allow for the above style lighting, an alternative type shall be provided. All paths of egress shall have at the minimum OSHA / Code egress light levels. Lighting shall be adjusted, modified and/or increased as the project progresses. All temporary power sources shall be removed as directed by the contractor.
  - d) Specialized Equipment: Electrical contractor shall provide 3Ø power on temporary basis for the terrazzo finishing machines. Based on project schedule, this power source may be from the new building distribution system and shall be available throughout the concourse area. This shall include temporary cable, connectors and necessary protection.  
There shall be temporary power available (480volt 3Ø 3wire 120amps) to reach the elevator equipment rooms to allow for the installation of the elevators. The elevator power shall be adequate to operate two elevators located within each concourse (2 North and 2 South) at a time on temporary basis.

**LAX – Bradley West Gates – North and South Concourse**

SECTION THREE – BID FORM

- e) Maintenance: Test GFCI circuit breakers, GFCI receptacles, or other approved GFCI devices upon installation and on a regular basis in accordance with manufacturer recommendations. Maintain lighting fixtures to ensure all are operating in a safe manner. Meet all project safety requirements for the testing and maintenance of temporary power and lighting.
- WRK. 13 Utility Location: Subcontractor includes notification of all utilities and other regulatory agencies prior to beginning the Work for utility locations and assumes all responsibility for damage to said utilities if they occur as a result of the actions of this Subcontractor, his employees or any sub-subcontractors. Such notifications must be made with sufficient lead times so as not to delay the performance of Subcontractor's work in accordance with the project schedule.
- WRK. 14 LEED Training and PLA Orientation: Subcontractor will comply with all WAJV LEED training and PLA orientation as outlined in the contract documents.
- WRK. 15 Fire Watch: Subcontractor shall take necessary measures and safeguards to protect the work, including but not limited to providing a dedicated fire watch during and for at least 30 minutes or as required by CAL-OSHA after the use of welding or other such burning techniques or equipment used in the construction of the Work. For all other work, Subcontractor shall provide sufficient watchmen as necessary to ensure the safety of the site, general public and the proper protection of the work at all times. Subcontractor must follow the WAJV hot work permit requirements located in the "SHE" Manual and site office.
- WRK. 16 Flag/Watch Persons: Subcontractor will provide flagmen/watch persons as required for the safe access and egress from the jobsite of his vehicles and sub-subcontractor's vehicles including all required traffic control equipment. Subcontractor shall be responsible for maintaining the cleanliness of all access areas and care shall be taken so as not to deposit debris on the surrounding streets.
- WRK. 17 Advertising: No advertising shall be permitted anywhere.
- WRK. 18 Project is submitted for LEED Silver Certification. Subcontractor is responsible to comply with LEED requirements as defined in the Prime Contract General Requirements (including 01 35 43), Contract Document Specifications (including 01 81 13), and the LAWA Sustainable Airport Planning, Design & Construction Guidelines.
- WRK. 19 Provide necessary documentation for all construction trade relative LEED credits being pursued. Design LEED credit documentation is not included.
- WRK. 20 Subcontractor is responsible for coordinating and performing tie-ins as shown on Electrical Drawings for this scope of work.
- WRK. 21 Electrical Contractor to be responsible for furnishing access panels required by the Electrical system. Subcontractor includes detailed coordination drawings, for the access panel locations, field layout of the access panel locations and coordination with adjacent work. Access panels will be installed by others.
- WRK. 22 Subcontractor is responsible to provide any necessary task specific lighting for their scope of work.
- WRK. 23 Subcontractor shall provide all core drilling, concrete cutting, sleeving and roof penetrations as required for this scope of work. Subcontractor includes all x-ray, ultra sound, and other appropriate non destructive testing necessary prior to performing all coring, sleeving, trenching, chasing etc. No coring, cutting or destructive removal of the structure, building envelope or surrounding areas will be permitted until approved in writing by the CMAR. Subcontractor includes patching as required where Subcontractor has failed to make provision for insertions and penetrations in a timely manner. Subcontractor is responsible for protection of all Electrical penetrations.
- WRK. 24 Subcontractor to provide all O & M Manuals as required in a timely manner but no later than 75% completion of the subcontractors work.
- WRK. 25 It is the responsibility of Subcontractor to review all available information (design drawings, shop drawings, specifications, manufacturer's literature, etc) to verify that services and provisions provided by others are sufficient to meet the needs of the Electrical system and its controls and will allow them to function and be maintained as intended. Any information regarding materials and/or services to be provided by others are to be requested and reviewed in sufficient time as not to impact the progress of the project schedule. Coordinate work in conformance with "EXHIBIT F" and "EXHIBIT I" with sufficient time and all data as to allow for a full review of the documents prior to the commencement of any work.

**LAX – Bradley West Gates – North and South Concourse**

SECTION THREE – BID FORM

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- WRK. 26 Subcontractor recognizes that any use of the permanent building Electrical systems, prior to its final turnover and acceptance by Owner (LAWA), in no way relieves Subcontractor of any guarantees on the Electrical systems and controls. Prior to final turnover, any systems which have been used must be properly cleaned and/or refurbished as required by Contractor and to maintain equipment manufactures' warranties.
- WRK. 27 (deleted)
- WRK. 28 Subcontractor will not contact Inspectors directly. All inspections will be coordinated through the Contractor.
- WRK. 29 Spare parts, tools, as-built drawings, Owner training and all other close-out items required by the Contract Documents shall be submitted prior to substantial completion.
- WRK. 30 Subcontractor to provide and install all sleeves for the Electrical system.
- WRK. 31 Subcontractor includes sealing, caulking, fire-safing, flashing and counter flashing for all Electrical work and associated penetrations.
- WRK. 32 Subcontractor will be responsible for repair of fire-proofing that has been disturbed or damaged caused by installation of Subcontractor's work.
- WRK. 33 Contractor will provide one (1) line in each grid direction (i.e. 2 lines total) on each of the main building floors along with one (1) elevation benchmark. It is the responsibility of Subcontractor to transfer the lines and elevations around the building to perform their scope of the work.
- WRK. 34 Subcontractor includes all provisions required for phased building occupancy
- WRK. 35 Subcontractor shall cooperate with the on-site inspectors and shall afford full and free access to any and all parts of the work at anytime unless directed otherwise by Contractor or as would put any inspector or review authority in physical harm.
- WRK. 36 Penetrations in the roofing system are to be fully coordinated with the roofing and waterproofing subcontractors and specifications to ensure that a fully approved and warrantable roofing and waterproofing system is achieved.
- WRK. 37 Job site cleanup for subcontractors own work is to be carried out on a daily basis. Remove all waste and unwanted equipment and materials to a site location designated by Contractor.
- WRK. 38 Subcontractor shall provide shop drawings, field layout, templates and installs embeds for own housekeeping pads. Concrete to be furnished and installed by others.
- WRK. 39 Subcontractor shall provide all required seismic restraints with any required supporting calculations.
- WRK. 40 Comply with all requirements per specifications for vibration isolation for you own work.
- WRK. 41 For materials or equipment requiring testing during manufacturing or prior to shipment, Subcontractor shall give Contractor advance notification and provide written verification/certification that testing has been satisfactorily completed. Material shipped prior to having satisfactorily passed the required testing or prior to the receipt of written notice that such testing and inspection has been completed shall not be incorporated into the work.
- WRK. 42 Subcontractor shall be responsible for all costs associated with re-testing and re-inspection.
- WRK. 43 Subcontractor includes all pre-testing and functional acceptance testing of all systems. Prior to final demonstration to the Architect, Consultants, or Owner for acceptance, the systems must be fully tested and operational.
- WRK. 44 Prior to final turnover, all systems must be properly cleaned and/or refurbished, as required by Contractor and to maintain equipment manufacturers' warranties.
- WRK. 45 Subcontractor shall submit a "lock-out Tag-out" procedure for approval by WAJV and maintain the approved procedures during and after energization until turnover.



- WRK. 46 Subcontractor includes patching as required where Subcontractor has failed to make provision for insertions and penetrations in a timely manner.
- WRK. 47 Bidder shall provide all structural engineering as required for the installation of material and equipment for their scope. An original "wet stamped" document from a registered structural engineer licensed in the State of California shall be submitted and approved prior to the fabrication and installation of any material or equipment as it pertains to this scope of work.
- WRK. 48 Contractor to provide power to all equipment as shown on contract documents.
- WRK. 49 Where necessary, coordinate raceways and pathways within/through storefront, curtain wall, and door frames.
- WRK. 50 All rough electrical work must be installed to comply with and maintain WAJV concrete pour schedule.
- WRK. 51 Contractor must provide as-builts of any conduit in slabs or below S.O.G. prior to pouring. As-builts must be verified by WAJV.

EXCLUSIONS:

The following items are not included in this Subcontract and will be performed by others:

1. Factory Mutual Requirements
2. Independent field and shop testing of welds
3. Installation of duct detectors
4. Removal of excavation spoils
5. Concrete housekeeping pads
6. Building permit fees or utility service charges
7. Dumpsters
8. HVAC control devices
9. Plywood backboards
10. VFD's – Provided by others.
11. Section 275113, Part 1.1.B.8 – EXCLUDE "The Contractor shall hire the Installer responsible for maintenance of the existing TBIT Paging System to coordinate the linking of the new ACS and the existing TBIT ACS located in Room 2524."
12. Section 271333, Part 1.8.A.6 – EXCLUDE "All costs to support Service Provider's involvement in the project including their participation in identifying circuits, developing a circuit migration strategy and reestablishing LAWA and tenant connectivity requirements in new communications rooms over new cabling facilities shall be included in the Contractors work."