

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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September 19, 2012

07-LA-5-29.4/31.6

07-1218W4

Project ID 0700021119

ACIM-005-3(078)N

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN LOS ANGELES COUNTY IN BURBANK FROM WEST MAGNOLIA BOULEVARD OVERCROSSING TO 0.3 MILE NORTH OF BUENA VISTA STREET/WINONA AVENUE UNDERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Thursday, October 4, 2012.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book, the Federal Minimum Wages with Modification Number 10 dated 09/14/2012, and the Amendments to the Standard Specifications.

Project Plan Sheets 566, 567, 575, 621, 751, 758, 760, 761, 794, 799, 801, 809, 814, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 894, 900, 904, 924 and 926 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 761A, 775A, 810A, 834A, 843A, 846A, 848A, 848B, 852A, 868A, 870A, 870B, 872A, 872B, 872C, 872D, 876A, 876B, 876C, 876D, 876E, 877A and 881A are added. Copies of the added sheets are attached for addition to the project plans.

In the Notice to Bidders and Special Provisions, in the "STANDARD PLANS LIST," the following Standard Plans are added:

"B15-14, B15-15, S-35 and S-36."

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In the Special Provisions, Section 10-1.42, "EARTHWORK," the following paragraph is added after the last paragraph.

"Pervious backfill (retaining wall) shown on the railroad plans will be measured and paid for as pervious backfill materials."

In the Special Provisions, Section 15-1.01, "TEMPORARY SIGNAL SYSTEM," is revised as attached.

In the Special Provisions, Section 15-1.02, "TRAFFIC SIGNALS, SIGNING AND STRIPING WORK (CITY OF BURBANK)," is revised as attached.

In the Amendments to the Standard Specifications, Sections 3-1.06–3-1.08, "RESERVED," are replaced with the following sections:

"3-1.06 FORM FHWA-1273

For a federal-aid contract, form FHWA-1273 is included with the Contract form in the documents sent to the successful bidder for execution. Comply with its provisions. Interpret the training and promotion section as specified in section 7-1.50A.

3-1.07–3-1.08 RESERVED"

In the Amendments to the Standard Specifications, Section 3-1.09, "CONTRACT EXECUTION," in the first paragraph, the introduction to the list is revised as follows:

"The successful bidder must sign the contract and return it, including the attached form FHWA-1273, to the Office Engineer along with:"

In the Amendments to the Standard Specifications, Section 7-1.50A, "general," is revised as follows:

"7-1.50A General

Section 7-1.50, "Federal Laws for Federal-Aid Contracts," includes specifications required in a Federal-aid construction contract and applies to a Federal-aid contract.

A copy of form FHWA-1273 is included in Section 7-1.50B, "FHWA-1273." The training and promotion section of section II refers to training provisions as if they were included in the special provisions. The Department specifies the provisions in section 7-1.11D of the Standard Specifications. If a number of trainees or apprentices is required, the Department specifies the number in the special provisions. Interpret each FHWA-1273 clause shown in the following table as having the same meaning as the corresponding Department clause:

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FHWA-1273 Nondiscrimination Clauses

| FHWA-1273 section | FHWA-1273 clause | Department clause |
|------------------------|--|---|
| Training and Promotion | In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. | If section 7-1.11D applies, section 7-1.11D supersedes this subparagraph. |
| Records and Reports | If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. | If the Contract requires on-the-job training, collect and report training data. |

In the Bid book, in the "Bid Item List," Items 89, 92, 94, 102, 105, 106, 108, 109, 147, 148, 157, 159, 164, 165, 166, 167, 176, 191, 192, 201, 273, 274, 287 and 305 are revised as attached.

To Bid book holders:

Replace entire pages 7, 8, 9, 10, 11, 12, 13, 15, 16, 17 and 18 of the "Bid Item List" in the Bid book with the attached revised pages 7, 8, 9, 10, 11, 12, 13, 15, 16, 17 and 18 of the Bid Item List. The revised Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum, attachments and the modified wage rates are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/07/07-1218W4

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

15-1.01 TEMPORARY SIGNAL SYSTEM

The temporary signal system (TSS) shall consist of installing and maintaining temporary traffic signal and lighting for traffic control in conformance with the details shown on the plan entitled "RR - Temporary Traffic Signal Modification Plan," the provisions in "Maintaining Traffic" of these special provisions, the provisions in Section 86, "Electrical Systems," of the Standard Specifications, and these special provisions.

The provisions in this section shall not relieve the Contractor from the responsibility to provide the additional devices or take the measures as may be necessary to conform to the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications.

Materials and equipment to be used in the temporary signal system shall be either new or used suitable for the intended use.

Each signal face shall be oriented to be clearly visible to traffic approaching from the direction which the signal is intended to control.

OPERATION

Temporary signal system shall operate at nominal 120 V(ac). Lighting shall operate at 120 V(ac) or 240 V(ac).

Unless otherwise directed by the Engineer, the system shall be operated on a continuous 24-hour basis except for the periods when it is necessary to control traffic by flaggers.

Timing of a temporary signal system will be performed by the City of Burbank.

MAINTAINING TEMPORARY SIGNAL SYSTEM

Maintaining a temporary signal system, except the controller assembly, shall be the responsibility of the Contractor.

If components in the temporary signal system are damaged, displaced or cease to operate or function as specified, from any cause during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location. Components shall include signs, flashing beacons, and signal equipment.

In the event the temporary signal system is out of operation, for any reason, the Contractor shall provide flaggers, at the Contractor's expense, to maintain traffic control until the traffic signals are returned to service.

CONDUIT

At those locations where conduit is to be installed under pavement, if delay to vehicles will not exceed 5 minutes, conduit may be installed by the trenching in pavement method in conformance with the provisions for "Trenching in Pavement Method" in Section 86-2.05C, "Installation," of the Standard Specifications and these special provisions.

CONDUCTORS AND WIRING

Conductors shall be the types specified in Section 86-2.08, "Conductors and Cables," of the Standard Specifications or shall be Type UF cable of the size and number of conductors shown on the plans. Minimum conductor size shall be No. 12.

Where conductors are to be placed across paved areas, the conductors shall be placed in conduit or in slots cut in the pavement as specified for inductive loop detectors in Section 86-5.01A(4), "Installation Details," of the Standard Specifications, including placing sealant over the conductors, or the conductors shall be suspended at least 25 feet above the roadway.

Conductors to be placed outside of paved areas shall be placed by one of the following methods:

1. Direct burial method with Type UF cable installed at a minimum depth of 24 inches below grade.
2. Placed in new or existing conduit. If Type 1 or Type 2 new conduit is used, the minimum depth shall be 12 inches. If Type 3 new conduit is used, the minimum depth shall be 18 inches.
3. Suspended from wood poles with a minimum clearance at any point of 10 feet. Conductors on the pole within 10 feet above ground shall be enclosed in a Type 3 or Type 4 conduit.

Conductors to be placed across structures shall be placed in a Type 1, Type 2 or Type 3 conduit. The conduit shall be installed on the outside face of the railing and secured by a method determined by the Engineer.

Conductors to a terminal compartment or signal head on a pole may be spliced to through conductors of the same phase in a pull box adjacent to the pole. Conductors or cables shall not be spliced except in pull boxes or in NEMA Type 3R enclosures.

BONDING AND GROUNDING

Flashing beacons, signal heads, standards with metal bases and the controller cabinet shall be mechanically and electrically secure to form a continuous system effectively grounded by the grounding conductor.

SERVICE

The following method shall be used to provide power for the TSS:

1. Obtain commercial power from an existing utility company.

COMMERCIAL POWER

Commercial power shall be 120 V(ac) or 120/240 V(ac). Power sources shall be protected in locked enclosures. The Contractor shall provide keys to all locks to the City of Burbank.

Power shall not be obtained from private parties, other than a direct connection to a utility company service point.

Electrical power shall not be used from existing highway facilities, except when approved in writing by the Engineer.

The Contractor shall make arrangements with the utility company for providing service.

CONTROLLER ASSEMBLY

The Contractor shall furnish and install controller assembly. The City of Burbank will maintain all controller timing once controller assembly is installed.

DETECTORS

Loop detector sensor units will be state-furnished as part of the controller assembly.

Loop detector lead-in cable shall be Type B.

SALVAGING SIGNAL SYSTEM

Upon completion of the work requiring traffic signals, as determined by the Engineer, State-furnished components of the temporary signal system shall be salvaged and delivered to the City of Burbank Yard at 124 South Lake Street, Burbank, CA 91502.

Other materials and equipment shall become the property of the Contractor and shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Materials Outside the Highway Right of Way," of the Standard Specifications. Pole holes shall be backfilled.

Conductors placed in slots across paved areas as specified herein, when no longer required, shall be abandoned in place when determined by the Engineer. Direct buried conductors, installed 12 inches or more below the ground surface, and conduit may be abandoned in place.

PAYMENT

The contract lump sum price paid for temporary signal system shall include full compensation for furnishing all labor, tools, materials, and equipments for a temporary signal system including, but not limited to, signal heads, mast arms, luminaires, wood poles, conductors, and hardware, incidentals, and for doing all the work involved in installing, maintaining, and removing the temporary traffic signal, lighting, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

15-1.02 TRAFFIC SIGNALS, SIGNING AND STRIPING WORK (CITY OF BURBANK)

GENERAL

Summary

Portland Cement Concrete sidewalk shall be constructed in accordance with applicable Standard Drawings and per Subsection 303-5 entitled "Concrete Curbs, Walks, Gutters, Cross Gutters, Alley Intersections, Access Ramps and Driveways" of the Standard Specifications for Public Works Construction (SSPWC), except as specified herein.

Forming shall include AC removal, replacement, grading and sawcutting necessary to build forms for concrete construction.

Sidewalks shall be 3-1/2 inches minimum thickness. On grades of 6 percent or less, they shall be given a rotary sweat finish with a steel trowel. Score lines shall be spaced at approximately 2 feet 6 inches, and shall match existing score lines.

SALVAGING EQUIPMENT

Existing traffic signal, street lighting equipment, and foundation shall be removed unless otherwise specified. Removed equipment shall be salvaged and delivered to City Yard at 124 South Lake Street, Burbank, CA 91502. Existing conduits not to be reused shall be abandoned. The Contractor shall dispose of foundations, and conductors.

ENVIRONMENTAL COMPLIANCE

The Contractor shall not discharge or permit to be discharged to a street, channel, river, storm drain, or appurtenances thereof, a non-rain water or other fluid substance from the project or from operations pertaining to the project site without first securing a valid National Pollutant Discharge Elimination System (NPDES) permit unless the discharge is specifically listed as exempt or conditionally exempt in the most current list issued by the Regional Water Quality Control Board, Los Angeles Region.

The Contractor shall implement necessary Best Management Practices (BMPs) to ensure that conditionally exempt discharge meets current requirements of the Regional Water Quality Control Board and the City of Burbank.

The City of Burbank may prohibit or restrict any discharge if, in its discretion, the discharge is polluting, unsafe, or causes a nuisance condition to be created.

The Contractor shall reduce the discharge of pollutants in storm water runoff to the maximum extent practicable by the effective implementation of appropriate BMPs. The following are the minimum requirements:

1. Sediments from areas disturbed by construction shall be retained on site and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities, or adjacent properties via runoff, vehicle tracking, or wind.
2. Construction-related materials, wastes, spills, or residues shall be retained at the construction site to minimize transport from the work area to streets, drainage facilities or adjoining properties via vehicle tracking, runoff, or wind.

Non-stormwater runoff from equipment and vehicle washing shall be contained at project sites.

Erosion form slopes and channels shall be controlled by implementing an effective combination of BMPs, such as limiting grading scheduled during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering erosion susceptible slopes.

The selection, submittal, and adherence to BMPs are the responsibility of the Contractor. The selected BMPs must be submitted to and approved by the City of Burbank prior to performing any operation under this contract which will disturb or expose soil, including, but not limited to: excavation, grading, demolition, clearing and grubbing, pavement removal, etc.

Construction activity that results in soil disturbances of less than one acre is subject to the General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) if the construction activity is part of a larger common plan of development that encompasses one or more acres of soil disturbance or if there is significant water quality impairment resulting from the activity.

If it is determined that the entire site consists of one acre or greater, the Contractor shall file a Notice of Intent (NOI) with the State to comply with the terms of the General Permit, and must provide proof of a Waste Discharge Identification (WDID) Number to the City of Burbank prior to the issuance of a grading permit. The preparation, submittal and adherence to NOIs, Storm Water Pollution Prevention Plans (SWPPPs), Wet Weather Erosion Control Plans (WWECPs), and Contractor Self-Inspection Forms are the responsibility of the Contractor.

The City of Burbank may restrict the continuation of work if it is determined that the Contractors have not met the NPDES requirements.

TRAFFIC SIGNALS SYSTEMS

Equipment, materials, and components for traffic signal and communication systems, and the installation thereof, shall conform to Section 86, "Electrical System," of the Standard Specifications, except as noted in the special provisions and on the plans.

MAINTAINING EXISTING SYSTEMS

Maintenance of existing traffic signal and safety lighting systems shall be in accordance with Section 86-1.06, "Maintaining Existing and Temporary Electrical Systems," of the Standard Specifications, except as modified or supplemented herein.

Temporary mast arm signal standards shall be installed whenever the existing mast arm indication will be inoperative for more than eight hours. Where there are no existing mast arm standards, temporary Type 1 standards may be used. Temporary standards shall be as shown in the Standard Plans.

Prior to initial turn-on of new or modified signal systems, equipment, signal displays, and loop detectors as shown on the Plans and called for in the Special Provisions, shall be installed and operable. The initial turn-on shall be made between 9:00 a.m. and 2:00 p.m. on a day not followed by a Saturday, Sunday, or legal holiday, unless otherwise approved by the Engineer. Notification shall be given to the Engineer 48 hours preceding the turn-on day.

Full compensation for temporary signal operation shall be considered as included in the contract lump sum price paid for temporary signal system and no additional compensation will be allowed therefor.

MATERIAL AND EQUIPMENT STORAGE

The Contractor shall comply with the requirements of Section 6-1.03, "Storage of Materials," of the Standard Specifications, except as modified or supplemented herein.

Spoils from foundation excavation shall be immediately removed from the project site. Traffic signal standards and mast arms shall not be delivered to the project site prior to the day of erection. Overnight storage of materials removed or to be incorporated into the construction, shall not be permitted on the traveled roadway surface.

EXCAVATION AND BACKFILL

Excavation and backfill shall be in accordance with Section 86-2.01, "Excavating and Backfilling," of the State Standard Specifications, except as modified or supplemented herein.

At intersections, standards shall be erected, foundations capped and surfaces restored within 6 weeks of commencing excavation or breaking concrete. Foundations for controllers are exempt from the above.

The cost of excavating and backfilling shall be considered included in the contract bid price for the item requiring the excavation and backfill.

FOUNDATIONS

Foundations shall be in accordance with Section 86-2.03, "Foundations," of the Standard Specifications, except as modified or supplemented herein.

The Contractor shall locate substructures prior to construction. Hand-dig foundation until clear of obstruction. Coordinate pole installations with overhead Utility or Substructures owners.

Fly ash substitutes and admixtures shall not be permitted.

When existing foundations are removed, the entire foundation shall be completely removed.

STANDARDS, STEEL PEDESTALS AND POSTS

Standards, Steel Pedestals and Posts shall be in accordance with Section 86-2.04, "Standards, Steel Pedestals and Posts," of the Standard Specifications, except as modified or supplemented herein.

The base plate shall be of steel conforming to the requirements of American Society for Testing and Materials (ASTM) A36.

Signal Poles, Controller Cabinet and Service Cabinet locations shall be identified by the Engineer in the field. The Contractor shall perform preliminary striping layout prior to loop detector layout.

The contract lump sum price paid for furnish and install traffic signal system complete includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in furnish and install traffic signal system complete, including furnishing and installing traffic signal poles and foundations, as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

TRAFFIC SIGNAL CONDUITS

Conduit shall be in accordance with Section 86-2.05, "Conduit," of the Standard Specifications, except as modified or supplemented herein.

Conduit and fittings shall be hot-dipped galvanized rigid steel type in accordance with Section 86-2.05A, "Material," of the Standard Specifications.

The minimum diameter of conduit: From a signal standard to the adjacent pull box shall be 2 inch.

Conduit runs shall be 3 inch diameter hot-dipped galvanized rigid steel, unless otherwise noted on the plans.

Conduit shall be placed to a depth of not less than 30 inches nor more than 60 inches below the flow line grade, except that conduit placed behind a curb shall not be less than 18 inches nor more than 36 inches below top of curb, and conduit placed under railroad tracks shall not be less than 60 inches below bottom of ties. Series street lighting conduit behind a curb shall be placed to a depth of not less than 24 inches.

Conduit ends terminating in the controller cabinets, pull boxes and standards shall be securely packed with an approved sealant after conductors are installed to prevent moisture intrusion.

Conduits shall be installed by jacking or drilling method unless otherwise called out on the Plans or directed by the Engineer. No Rock wheel allowed.

Polyethylene conduit shall be Schedule 80 and manufactured from high density, extra high molecular weight polyethylene. The material shall meet the requirements of National Electrical Manufacturers Association (NEMA) TC 7 and shall be listed in Plastic Pipe Institutes PPI TR 4. The conduit shall be manufactured in accordance with the dimensional requirements of ASTM D3035, ASTM F714, or NEMA TC 7.

Rigid steel conduit shall be hot-dipped galvanized rigid steel type meeting the requirements of Section 86-2.05A, "Material," of the Standard Specifications.

The material used to fabricate bends for fiber optic conduit runs shall meet the burn-through and friction requirements identified in the Testing section of this section.

Conduit runs across streets or greater than 50 feet in length may be High Density Polyethylene HDPE and installed using the directional boring method. Conduit runs of less than 50 feet in length, except for runs across streets, shall be rigid steel and installed via trenching unless otherwise approved by Engineer

During shipping and while on the job site, the open ends of all runs of conduit shall be sealed with removable caps to prevent the entry of rodents, dirt, sand, water, and other foreign materials. These caps shall be removed only when the Contractor is in the act of joining sections together, testing, or pulling cable. The open ends shall be immediately recapped after completion of these activities. For the conduits that are to remain empty, pull rope shall be attached to the removable caps without compromising the seal, and the caps shall be left in place.

Conduits installed in parkway areas shall be routed beneath sidewalk when possible.

Occupied conduit ends terminating in controller cabinets, splice vaults, pull boxes and standards shall be securely packed with an approved sealant after conductors are installed.

FIBER OPTIC CONDUIT

When obstructions are encountered during installation and fiber optic conduit cannot be economically located elsewhere, the obstruction shall be bypassed by deflecting the conduit at a rate of at least 10:1. Minimum 3 feet radius, maximum 90° bends may be used to avoid obstructions at locations where 10:1 deflection is not possible, provided the least degree bend needed to clear the obstruction is used. Flexible bends may be utilized when needed to facilitate proper location of the fiber optic conduit, only at locations approved by the Engineer. Fiber optic conduit runs between any two pull boxes/splice vaults shall not employ more than 4 bends, or exceed an angular sum of 270 degrees.

Fiber optic conduit shall enter through the bottom of pull boxes and splice vaults with a minimum 3 feet radius sweep and at an angle of 45° or less measured along natural grade. The conduit ends shall protrude a minimum of 2 inch above the bottom of the pull box or splice vault.

Fiber optic warning tape shall be installed above fiber optic conduit installed in open trenches. The message side shall face up. Fiber optic conduit warning tape shall bear the words "FIBER OPTIC CABLE BURIED BELOW" or approved equivalent in black letters on an orange background, or approved equivalent.

Locator wire shall be installed in fiber optic conduit to facilitate locating underground fiber optic cables. Only one locator wire is needed in each trench or for multiple conduits grouped close together. Locator wire is not required when the trench contains metallic conduit or bond wire. Connect locator wires at pull boxes and splice vaults. Locator wire shall be #18 or larger and may be bare or jacketed, solid or stranded. If bare wire is used, then only solid wiring shall be used.

DIRECTIONAL BORING

The drilling system shall utilize small-diameter fluid jets to fracture, and mechanical cutters to cut and excavate the soil as the drill head advances forward. The drill head shall be sized to produce an average hole diameter of 4 inch or less. If boring fluids are used to lubricate the drilling head, the fluids shall consist of a mixture of bentonite and water or polymers and additives unless otherwise approved by the Engineer.

Minimum pressures and flow rates shall be used during drilling operation so as not to fracture the subgrade material around and/or above the bore. Uncontrolled jetting (where the primary purpose is to use fluid force to erode soil for creation of the final bore hole diameter) is prohibited.

Locate, record, and correct the path of the drill head a minimum of every 10 feet.

Use a backreamer sized no larger than one half inch greater than the outside diameter of the conduit to install the conduit.

The backreamer shall inject bentonite slurry (or approved equivalent) to fill voids in the hole while pulling conduit through. The bentonite slurry shall be designed and certified by the manufacturer specifically for preserving the integrity of the soil and preventing collapse during and following directional boring

The entire length of directional bored conduit shall be installed without coupling, splices, or joints (i.e. it shall be one continuous piece from pull box/splice vault to pull box/splice vault) unless otherwise permitted by the Engineer.

Except for rises at the beginning and end of a run, conduit that is installed by directional boring shall be placed to a depth of not less than 96 inches nor more than 144 inches below the flow line grade or top of curb unless otherwise approved by the Engineer. Conduit placed under railroad tracks shall not be less than 144 inches below bottom of ties.

TRENCHING

Trenched conduit shall be placed to a depth of not less than 30 inches nor more than 60 inch below the flow line grade, except that conduit placed behind a curb shall not be less than 18 inches nor more than 36 inches below top of curb, and conduit placed under railroad tracks shall not be less than 60 inches below bottom of ties. Series street lighting conduit behind a curb shall be placed to a depth of not less than 24 inches.

TESTING

Conduit and bends used for conduit runs that are identified on the plans to contain fiber optic cables shall be certified to meet the following requirement for burn resistance and friction:

- A. Burn resistance: Perform the burn resistance test on a 90°, 3 feet radius conduit or bend wrapped around and secured to a rigid form. Thread an appropriate length of 0.25 inch diameter braided polyethylene rope through the conduit and sew the ends together to create a continuous loop. The loop of rope shall be wrapped around a powered capstan and drawn away from the conduit at a rate of 100 feet per minute. The sample shall not burn through within 90 minutes.
- B. Friction: Fiber optic conduit and bends shall have a coefficient of friction of 0.09 or less when tested in accordance with Bellcore GR-356.

VEHICLE SIGNAL FACES

Vehicle signal heads shall be in accordance with Section 86-4.01, "Vehicle Signal Faces," and Section 86-4.04, "Backplates," of the Standard Specifications, and Section 10-3.16, "Light Emitting Diode Signal Module," of these special provisions except as modified or supplemented herein.

All vehicular indications shall have 12-inch lenses, full circle visors, and louvered backplates.

Traffic signals faces, all traffic signal sections, shall utilize light emitting diode signal modules. Each light emitting diode (LED) signal module shall consist of an assembly that utilizes light emitting diodes as the light source. The LED module for circular and arrow indications shall be compliant to the latest ITE LED Specifications, Vehicle Traffic Control Signal Heads - Part 3: Light Emitting Diode (LED) Vehicle Arrow Signal Modules, published January 2005 (or more current edition) and ITE LED Circular Signal Supplement Purchase Specification, published January 2008 (or more current edition).

Plastic signal sections, lenses, visors and backplates shall not be used. Minimum height shall be 10-feet from the bottom of the bracket to roadway sidewalk or median grade.

Backplates are to be formed in two sections and bolted together, thus permitting installation after signal heads are in place. In fabricating backplates, the inside vertical edges, adjacent to the signal head, shall be bent back forming mounting brackets for attaching to the signal head.

PEDESTRIAN SIGNAL HEADS

Pedestrian signal heads shall be in accordance with Sections 86-4.06, "Pedestrian Signal Faces," of the Standard Specifications, and 10-3.19, "Light Emitting Diode Pedestrian Signal Face Module," except as modified or supplemented herein.

All pedestrian signal heads shall be modular with international symbols and conform to the following specifications:

1. The maximum overall dimension of the signal shall be 18-1/2 inches wide, 18-3/4 inches high, and 9 inches deep, including Z-crate type visor and hinges.
2. Pedestrian Signal Face: All new pedestrian signal faces shall be Type "A".
3. Z-Crate Visor: Each signal shall be provided with a Z-crate type visor designated to eliminate sun phantom. Under strong ambient light conditions, the message shall "Blankout" when the signal is not energized.
4. Housing: The housing case shall be a one-piece corrosion resistant aluminum alloy die casting complete with integrally cast top, bottom, sides and back. Four integrally cast hinge lug pairs shall be provided for operation of a swing-open door.
5. Maintenance Features: The case and door frame when properly mated to other pedestrian signal components and mounting hardware shall provide a dust-proof and weatherproof enclosure, and shall provide for easy access to and replacement of all components. In order to facilitate installation and maintenance, the signal shall be designed so that all components are readily accessible from the front by merely opening the signal door.
6. Door Frame. The door frame shall be one-piece corrosion-resistant aluminum alloy die casting, complete with two hinge lugs and two latch slots cast for each door. The door shall be attached to the case by means of two Type 304 stainless steel spring pins. Two stainless steel hinge bolts with captive stainless steel wing nuts and washers shall be attached to the case with the use of stainless steel spring pins. Hence, latching or unlatching of the door shall require no tools.

Minimum height shall be 7-feet from the bottom of housing to sidewalk grade. The upraised hand and walk unit shall be LED Modules. Pedestrian signal faces shall be countdown type, meet the requirements of the ITE Pedestrian Traffic Control Signal Indicators-Light Emitting Diode (LED) Signal Modules, dated February 2011 (or the latest edition). The LED countdown module shall be compatible with all types of traffic controllers. The countdown timer module shall have a microprocessor capable of setting its own time when connected to a traffic controller. The LED countdown module shall consist of a double overlay message combining the graphic symbols of a hand and walking man and two 7 segment digits.

PEDESTRIAN PUSH BUTTONS

Pedestrian Push Button Assemblies shall be in accordance with Section 86-5.02, "Pedestrian Push Button Assemblies," of the Standard Specifications, except as modified or supplemented herein.

Pedestrian push buttons shall be Type "B".

Pedestrian push button signs shall conform to the details shown on the plans.

PULL BOXES AND SPLICE VAULTS

Pull boxes, splice vaults, covers and extensions shall be in accordance with Section 86-2.06, "Pull Boxes," of the Standard Specifications and these special provisions.

Pull boxes, covers and extensions shall be precast reinforced Portland Cement Concrete (PCC) except when noted otherwise. Plastic pull boxes shall not be used.

Pull box and splice vault covers shall be marked "Traffic Signal". The marking shall be clearly defined and uniform in depth and may be placed parallel to either the long or short side of the cover. Covers shall be marked in accordance with Section 86-2.06B, "Cover Marking," of the Standard Specifications.

Pull boxes or splice vaults shall not be installed in part of a driveway, curb ramp or other traveled way unless authorized by the Engineer.

Pull boxes and splice vaults shall be installed in sidewalk areas where possible.

Unless otherwise specified or provided herein, pull boxes shall be Size No. 6 with extension (6E).

Reinforcement for concrete pull boxes shall be bar reinforcement or 3/4-inch mesh, No. 20 U.S. gage minimum, hardware cloth.

Covers shall be provided with at least one recessed lifting bolt or bar as shown in the Standard Plans. The lifting bolts or bars shall be designed so as not to provide a path for electrical current to follow through the lid.

Delete grout requirement in bottoms of pull boxes and splice vaults. Pull boxes and splice vaults shall be installed in accordance with American Public Works Association (APWA) Standard Plan No. 460-0.

New pull boxes located in roadways, driveways or anywhere within 50 feet of a railroad track centerline shall be traffic-rated pull boxes with steel covers and special concrete footings regardless of any designation otherwise on railroad plans. Steel cover shall have embossed non-skid pattern. Other pull box requirements are as indicated on the railroad plans and other contract documents.

Conductors and wiring shall be in accordance with Sections 2.08, "Conductors and Cables," and 2.09, "Wiring," of the Standard Specifications, except as modified or supplemented herein.

Stranded and braided conductors shall be terminated with approved terminal lugs that shall then be soldered to the conductors.

The insulation for multiple circuit conductors shall be Type THW.

The Contractor may install signal cable in lieu of individual conductors.

Twisted pair signals interconnect cable (SIC) shall meet the requirements of the Rural Utilities Service (RUS) Specification PE-22. Two turns of SIC shall be provided in intermediate pull boxes; 50 feet of SIC shall be provided in fiber optic pull boxes and splice cabinets.

Splicing is allowed only in pull boxes for the signal cables. The cable shall feed directly from one conduit to the next without any extra cable coiled in pull box, except where pull box is next to the controller, a minimum of three feet of slack shall be provided unless otherwise called out on the plans.

The splices between the stranded and solid wire shall be made by careful cleaning of the bare conductors, twisting the wires together for a good mechanical bond, applying a non-corrosive paste flux to the conductors and then applying heat to the conductors so that when solder is applied to the conductors, it will completely melt and flow into voids. A wire nut shall then be encapsulated within an epoxy pack to form a complete waterproof connection.

For signal standard with luminaries, a fused disconnect spliced connector shall be installed in each pull box adjacent to the standard and shall be readily accessible in the pull box regardless of whether the ballast is remote, or is integral with the luminaire. The connector shall have no exposed metal parts.

Fused splice connectors shall not be used in series circuits. Fuses shall be standard midget, ferrule type and shall be rated as follows:

- 5 amperes for 150-watt lamps
- 5 amperes for 200-watt lamps
- 10 amperes for 250-watt lamps
- 10 amperes for 310-watt lamps
- 10 amperes for 400-watt lamps

28 conductor signal cable shall be the standard type.

Prior to splicing new twisted cable to existing twisted cable, the Contractor shall test of the continuity of the existing cable and identify any anomalies to the Engineer. Following installation, splicing, and installation of connectors to the twisted pair cable, the Contractor shall measure and record the loop resistance and insulation integrity of the circuit. The measured values shall not deviate from the calculated values by more than ten percent.

Bonding and grounding shall be in accordance with Section 86-2.10, "Bonding and Grounding," of the Standard Specifications and these special provisions.

A separate equipment grounding conductor shall be installed to connect the equipment grounding terminal/bus of the traffic signal controller cabinet to the terminal/bus to which the grounded service conductor is connected in the traffic signal service.

The equipment grounding conductor shall be a Type "THWN", No. 8 AWG or larger, stranded copper wire continuously GREEN in color and shall be unspliced and continuous from the service to the traffic signal cabinet.

Bonding in the pull box shall have #8 AWG solid copper bare wire.

PAVEMENT DELINEATION

Signing and striping shall conform to the California Manual on Uniform Traffic Control Devices (MUTCD) latest edition.

Conflicting striping and pavement marking shall be removed per Cal/OSHA Standards Rules.

Pavement striping and markings shall be 2-coat paint, unless otherwise noted. White and yellow longitudinal pavement striping and markings shall be done with Long Line Ribbon Striper.

PAINTING

Painting of electrical equipment and materials shall be in accordance with Section 86-2.16, "Painting," of the Standard Specifications except as modified and supplemented herein.

Painted equipment which has been relocated shall be repainted. Pedestrian Signals and Vehicle Signal Heads except backplates are to be painted gloss black, unless otherwise specified.

CONTROLLER ASSEMBLIES

Controller Assemblies shall be in accordance with Section 86-3.01, "Controller Assemblies," of the Standard Specifications, except as modified or supplemented herein.

Conform to City of Burbank, Traffic Signal Controller Specification, State 170E or equivalent.

The Contractor shall furnish and install inductive loop detector sensor units and switch packs necessary to complete the traffic signal modifications as shown on the railroad plans.

Input and output devices shall conform to the requirements for Model 200, Model 204, Model 222, Model 242 and Model 252 in said "Transportation Electrical Equipment Specifications (TEES)", issued by the State of California, Department of Transportation, and latest addendum thereto.

Detector assignments shall be coordinated with the Engineer.

The minimum warranty for the traffic signal controller, equipment and materials shall be for a period of one year from the date of installation and primary operation of equipment, but not to exceed 2 years from date of receipt of final shipment of the equipment specified in the contract. Agency inventory and use records shall be accepted for determination involving vendor's liability within specified warranty period.

Repair under the warranty, turn around time, shall not be more that 30 calendar days after receipt of failed item.

CONTROLLER CABINETS

Controller cabinets shall be in accordance with Section 86-3.04, "Controller Cabinets," of the Standard Specifications, except as modified or supplemented herein.

Controller cabinet shall be Model 332 Cabinet.

The cabinet and doors shall be fabricated from 0.125-inch minimum thickness sheet aluminum. Exterior seams for the cabinet and doors shall be continuously welded. The color shall be anodized aluminum.

The cabinet shall be equipped with one fluorescent lighting fixture mounted inside the back top portion of the cabinet. A door actuated switch shall be installed to turn the cabinet light on when door is opened.

Cabinets shall be provided with a lock compatible with existing City Corbin #2 lock.

Each cabinet shall equipped with an envelope between the controller and input file for plans and record drawings.

Each cabinet shall be equipment with a red monitoring kit.

TESTING

Section 86-2.14, "Testing," of the Standard Specifications and these special provisions.

New signal controllers and cabinets shall be delivered to the City of Burbank, Traffic Signal Lab, 124 South Lake Street, Burbank, California, 91502, 14 days prior to installation for shop testing. Contact City of Burbank, Traffic Signal Manager at (818) 238-3974 to schedule the delivery.

A megger test at 500 volts DC shall be made on each circuit between the circuit and a ground. The insulation resistance shall not be less than 10 megaohms on circuits, except for inductive loop detector circuits which will be tested for continuity, circuit resistance and insulation resistance at the pull box before filling slots. After splicing, test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location. The loop circuit resistance shall not exceed 0.5 ohms plus 0.35 ohms per 100 feet of lead-in cable. The insulation resistance shall be performed between each circuit conductor and ground. The insulation resistance shall not be less than 100 megaohms.

INDUCTIVE LOOP DETECTORS

Circular inductive loop detector installation shall conform to Section 86-5 of the Standard Specifications and these special provisions.

The loop wire shall be of a double-insulated type, and shall comply to specifications for the Standard Type 2 traffic loop wire. The tubing shall have an outside diameter of 0.27 inch. It shall be of a continuous and unspliced conductor, and shall be wound 3 turns in a clockwise direction into the sawcut by hand when the sawcut width is approximately 0.375 inch, or shall be preformed and stacked for insertion into the sawcut when the sawcut width is approximately 0.500 inch. The preformed loop shall consist of 3 turns of loop wire stacked in a circle 6 feet in diameter. Each turn shall be laid on top of another and be secured so when it is placed in the sawcut it will remain in place and not drop in the slots. Loop wires in the home run slot shall be twisted in one direction only with at least 2 turns per foot.

Loop detector lead-in cable shall be Type B. Shields shall be connected to ground on the input panel in the 332 cabinet.

Inductive loop detector expansion joint shall be installed where a loop wire saw cut crosses a pavement type change or where vertical pavement fracture may occur as determined by the Engineer.

INSTALLATION

Inductive loop detector installation shall be in accordance with Section 86-5.01A(4), "Installation Details," of the Standard Specifications, and APWA Standard Plan No. 435-0, except as modified or supplemented herein. Slots for round traffic signal loop detectors shall be 6 feet in diameter and 0.375 inch to a maximum of 0.500 inch in width, and 4 inches in depth. The slots shall be either core drilled or cut by the use of "Circular Loop Cutter" machine. This machine must be so configured that, once started, it will continue to cut a circle without any overlap, and able to circumscribe a six-foot-diameter round loop without being raised or repositioned. This method of installation shall not cause any additional holes to be placed in the pavement for the purpose of anchoring the installing machine.

Home runs shall be saw cut to the appropriate pull box, and shall be 0.5 inch in width by 5 inches in depth. In addition, home runs shall be routed along the lane lines, limit lines, and crosswalk lines when applicable.

Loop shall be installed on the same day in which the loop slots are cut, including placement of the loop conductors and sealant. Slot shall be completely dried before the loop conductors are installed. Loop sealant shall be Asphaltic Emulsion Sealant in accordance with the Standard Specification. Pouring sealant into the sawcut will only be permitted if the loop saw cut is 0.5 inch wide.

Residue resulting from slot cutting operations shall not be permitted to flow across shoulders or lanes occupied by public traffic, and shall be removed from the pavement surface. Water and slurry shall be vacuumed out, leaving a clean and dry loop area. This vacuumed water shall be dumped in a private dumpsite, and it will not be allowed in catch basins and storm drains.

The Contractor shall obtain approval of exact loop location prior to final placement. The locations of the loops and beginning loop wires shall be pre-marked for inspection before cutting and installation.

Stub out conduits for loop detectors shall be inserted next to the gutter edge in the street, be a minimum of 1.5 inches in diameter, and installed at a minimum depth of 8 inches from the top of the pavement. Duct seal shall be used at the end of the conduit during loop installation. Loop sealant is not allowed in the conduit. The end of future loop stub out shall be exposed for inspection and backfill with sand and cold patch.

The exact location of each stub out shall be marked with a concrete nail driven into the top of the curb. The concrete nail shall have red top.

The Contractor shall obtain approval of exact loop location prior to final placement. The locations of the loops and home runs shall be pre-marked for inspection before cutting.

The job site shall be cleaned and debris removed from City of Burbank property daily, leaving the City of Burbank premises clean. Debris shall be disposed of in accordance with applicable laws, rules, and regulations covering disposal of material.

WARRANTY

Materials and workmanship to be guaranteed for 12 months after acceptance.

RAILROAD/TRAFFIC SIGNAL INTERCONNECTION

Signal interconnect connection shall be per details as shown on the plans.

The serial cable shall be installed for functioning under IEEE 1570 communication protocol to report traffic signal health and to provide railroad to traffic signal preemption. Final tie-in of the serial cable to the railroad signal house will be performed by the railroad.

Traffic signal controller assemblies shown on the plans to be installed with Railroad/Traffic Signal Interconnection shall be designed and constructed to accommodate both specified connections (railroad preemption relay and IEEE 1570 serial connection). The serial connection will be the primary source of information to provide RR preemption. If the serial connection is compromised, the hard wire relay connection will take over and provide RR preemption information to the traffic signal controller until the serial connection can be reestablished.

The traffic signal controller assembly and controller cabinet shall be compatible with the RR's ISPI controller unit and deliver the necessary traffic signal phasing operation requirements detailed shown on the plans.

UNINTERRUPTIBLE POWER SUPPLY AND BATTERY BACKUP SYSTEM

General

UPS/BBS Systems shall be designed to provide at least eight (8) hours of emergency power and shall meet or exceed the requirements specified in the Caltrans (Office of Testing and Technology Services) "Specification for Battery Back-up System For Traffic Signals utilizing Light Emitting Diodes (LED) Traffic Signal Modules" (July 2004). System shall include cabinet, UPS System, inverter, power transfer switch (PTS), manual transfer switch, batteries, and all internal components, accessories, tie-ins, fittings, conduit, conductors, footings and mounting hardware, labor tools, materials, equipment, and incidentals necessary to successfully install a fully functioning and remote notifying UPS system. The Contractor shall require to submit drawings and details to the City of Burbank for approval.

UPS/BBS systems shall be SP Series universal UPS system and shall meet the requirements specified below:

1. Cabinet: UPS system shall be SP Series UPS Cabinet, Style 2 (48"x22"x10"), :
 - 1.1. Cabinet shall be NEMA 3R rated and manufactured to Caltrans Standards.
 - 1.2. Cabinet shall be manufactured from ¼" thick 5052-H32 aluminum.
 - 1.3. External hardware and door handles shall be stainless steel.
 - 1.4. Cabinet shall be watertight. Door shall seal with a neoprene gasket.
 - 1.5. Lock keying requirements shall be specified by the City of Burbank Engineer prior to ordering of the cabinets by the Contractor.
2. UPS Equipment:
 - 2.1. UPS system equipment shall be SP Series universal UPS system . UPS system shall include accessory power interface module for the system design).
3. Batteries:
 - 3.1. UPS system batteries shall be Outpost Series AGM VRLA batteries for traffic applications, .

TRAFFIC SIGNAL PROGRAMMING

The Contractor shall be responsible for arranging and furnishing traffic signal controller system programming for each controller assembly. Programming shall be conducted by a technical representative of the manufacturer of the traffic signal control equipment. The representative shall be fully-qualified to work on the controller assembly equipment. Pre-Installation of the controller shall consist of loading the latest City of Burbank approved firmware and City of Burbank supplied timing plan, and bench testing the controller for a minimum of 24 hours before traffic signal turn on. A manufacturer certified technician shall install controller in the traffic signal cabinet and verify operation within the cabinet. The technician shall then bring signal to full colors and verify signal operation including the walking of the intersection and observing all directions of traffic and pedestrian and bike buttons operation, and RR Preemption operations. The manufacturer and City of Burbank shall be notified at least 30 working days prior to intersection turn-on. Programming performed by the Contractor's personnel under the direction of the manufacturer does not meet these criteria.

TRAFFIC CONTROL, PUBLIC CONVENIENCE AND SAFETY (BURBANK)

General

Unless otherwise permitted by the Engineer, the Contractor shall conform to the requirements specified herein for movement of traffic through the construction areas of this project. The Contractor shall provide advance warning signs, flashing arrow boards for detours and lane closures, temporary construction signs, flagmen, channelizing devices (temporary striping tape or delineators), barricades, pavement markings, temporary traffic striping, lighting devices, work zone upkeep and maintenance, etc., in accordance with the California Manual of Uniform Traffic Control Devices (MUTCD), 2006 Edition, as directed by the Engineer.

The Contractor shall conduct operations to offer the least possible obstruction and inconvenience to the public, and shall have under construction, no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public.

Work area traffic control shall conform to methods and devices described in the Standard Specifications; California Manual of Uniform Traffic Control Devices (MUTCD), 2006 Edition, and the California Administrative Code Title 8 (Safety Orders); except as modified and supplemented herein.

If the Contractor fails to provide and install signs or traffic control devices required hereby or ordered by the Engineer, the Engineer may cause such signs or traffic control devices to be placed by others. Related costs will be charged against the Contractor, and deducted from the next progress payment.

The Contractor shall submit a traffic control plan for approval prior to start of work for conditions not covered by the California Manual on Uniform Traffic Control Devices Manual. Revisions to the traffic control plans or requirements shall be approved by the Engineer.

The Contractor shall provide 3 Changeable Message Sign (CMS) boards one week prior to the start of construction and throughout the project.

Flashing arrow boards are mandatory for lane closures on major streets. They shall operate until traffic control is removed.

Travel lanes shall be open between 5:00 a.m. and 8:30 a.m. and between 3:30 p.m. and 9:00 p.m. One travel lane in each direction shall be open at between 8:30 a.m. and 3:30 p.m. Traffic lanes shall be open before and after work hours. Work areas shall be left in a safe and secure condition before and after work hours.

Barricades shall be equipped with flashing/steady burn warning lamps at night. Cones, delineators, barricades, and "temporary railing (Type K) shall be reflectorized.

Traffic control shall be maintained in their proper position and shall be repaired, replaced, or cleaned as necessary to preserve their appearance and continuity. Devices not part of the required traffic control or detours shall be removed from the view of the traveling public immediately.

The Contractor shall notify MTA Stops and Zones Dispatcher) at (818)238-5359 and other affected transit services at least 3 working days prior to construction.

Where necessary, properly post City-issued and approved "TEMPORARY NO PARKING ANYTIME" signs at least 48 hours before start of work. The Contractor shall notify the Burbank Police Department at 818-238-3100 immediately upon posting signs. These signs must clearly state the dates and time restrictions, and if restrictions apply to weekends.

Vehicular and Pedestrian access to adjacent properties shall be provided. Closed sidewalks shall be posted with "SIDEWALK CLOSED" signs at each approach to the closure and an approved alternate route provided. A minimum walkway width of 36 inches must be maintained at all times for safe pedestrian passage on pedestrian routes.

Vehicle detectors damaged by the work shall be replaced to the standards of the City Public Works Department.

The Contractor shall notify adjacent residents and businesses at least 5 days in advance of start of excavation and prior to driveway closures that will affect their property or access to property.

The Contractor shall cover conflicting parking control signs in the vicinity of the project, as directed by the Engineer. Covers shall be provided by the Contractor, and shall be removed by the Contractor at the direction of the Engineer. The use of tape to cover existing parking control signs will not be allowed.

The Contractor shall provide, install, and maintain warning, regulatory, and construction signs. Cross streets to be affected shall have "DETOUR" signs posted at the last intersection prior to entering the work area. "NO PARKING" signs shall be installed at the work site intersection to permit turn-around in the event vehicles enter the restricted area.

The Contractor shall be required to backfill open trenches before the end of each working day and set up barricades along the excavation edges as directed by the Engineer. Open trenches will require approval of the Engineer and shall be fenced or steel-plated in a manner approved by the Engineer.

The Contractor shall provide temporary painted striping and markings in areas where full width cold planning has been specified on the plans. Existing striping within the rubberized hot mix asphalt (gap graded) overlay limits as shown on the plans may be painted over with black paint per City requirements for temporary striping, in lieu of removal per City of Burbank and CalOSHA Standards.

The Contractor is required to schedule his work so that all concrete work areas (sidewalks, driveways and pedestrian curb ramps) are poured and finished, including repair of damages, prior to the end of work on each Friday.

Work shown on plans within the SCRRA/MTA Right-of-Ways, shall meet requirements from SCRRA/MTA; Rules and Requirements for Construction on Railway Property, General Safety Regulations for Contractors, and:

- A. SCRRA Design Criteria Manual
- B. SCRRA Form 4 Agreement for Moving Oversized Loads
- C. SCRRA Form 5 Indemnification and Assumption of Liability Agreement
- D. SCRRA Form 6 Temporary Right of Entry Agreement
- E. SCRRA Form 36 Right of Way Encroachment Approval Procedures
- F. SCRRA Form 37 Rules and Requirements for Construction on Railway Property
- G. Schedule of Fees
- H. SCRRA General Safety Regulations for Contractors
- I. SCRRA Right of Way Encroachment Application
- J. SCRRA Train Traffic Information
- K. UPRC Contractor's Right of Entry Agreement (Exhibit B)
- L. UPRC Contractor's Insurance Requirements (Exhibit C)
- M. UPRC Minimum Safety Requirements (Exhibit D)

Payment for railroad flagging will be paid directly to SCRRA by the Contractor.

During working hours, if construction operations require parking restrictions, the Contractor shall post City of Burbank "NO PARKING" signs no earlier than 96 hours and no later than 48 hours in advance of commencing work on each street, and they shall be placed at regular intervals. "NO PARKING" signs shall be supplied by the City of Burbank to the Contractor.

The following information shall appear on each posted "No Parking" sign:

- A. Dates sign is in effect.
- B. Time period sign is in effect
- C. Reason for posting (such as paving, excavation, construction, etc.).
- D. Date and time the sign was posted.

The following shall apply to each "NO PARKING" sign:

- A. Signs shall not be posted more than 50 feet apart.
- B. Signs shall not be posted on private property.
- C. Signs shall be posted within the parkway area or as close to the roadway as practical.
- D. Signs may be posted (no staples or nails) on standard or tree within the parkway, except that, in the absence of such items, signs may be attached to traffic barricades.
- E. Immediately upon posting signs, the Contractor shall notify Burbank Police Department at (818) 238-3100.
- F. Signs shall not be revised for subsequent streets or dates.
- G. Signs shall only be posted on one side of block at a time.

Time or date on the sign shall include only the period during which the operations occur. Unnecessary parking restrictions will not be allowed. The Contractor shall obtain the Engineer's and City of Burbank Inspector's approval of information on the signs prior to posting.

Full compensation for "No Parking" signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.

BID ITEM LIST
07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 81 | 024090 | TRACKBED EXCAVATION (PETROLEUM HYDROCARBON COMPOUNDS AND METALS) | CY | 21,400 | | |
| 82 | 190106 | ROADWAY EXCAVATION (TYPE Z-3) (AERIALY DEPOSITED LEAD) | CY | 3,390 | | |
| 83 | 190107 | ROADWAY EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD) | CY | 21,600 | | |
| 84 | 190108 | ROADWAY EXCAVATION (TYPE Y-2) (AERIALY DEPOSITED LEAD) | CY | 2,750 | | |
| 85 | 190110 | LEAD COMPLIANCE PLAN | LS | LUMP SUM | LUMP SUM | |
| 86 | 190111 | ADL BURIAL LOCATION REPORT | LS | LUMP SUM | LUMP SUM | |
| 87 | 024091 | ROADWAY EXCAVATION (PETROLEUM HYDROCARBON) | CY | 25,400 | | |
| 88 | 024092 | ROADWAY EXCAVATION (PETROLEUM HYDROCARBON AND AERIALY DEPOSITED LEAD) | CY | 370 | | |
| 89 (F) | 043923 | STRUCTURE EXCAVATION (PETROLEUM HYDROCARBON AND AERIALY DEPOSITED LEAD) | CY | 5,637 | | |
| 90 (F) | 044017 | STRUCTURE EXCAVATION (PETROLEUM HYDROCARBON) | CY | 548 | | |
| 91 (F) | 044018 | STRUCTURE EXCAVATION (VOLATILE ORGANIC COMPOUNDS, PETROLEUM HYDROCARBONS AND METALS) | CY | 4,100 | | |
| 92 (F) | 192003 | STRUCTURE EXCAVATION (BRIDGE) | CY | 31,865 | | |
| 93 (F) | 192025 | STRUCTURE EXCAVATION (CULVERT) | CY | 1,404 | | |
| 94 (F) | 192037 | STRUCTURE EXCAVATION (RETAINING WALL) | CY | 88,704 | | |
| 95 (F) | 024093 | STRUCTURE EXCAVATION (AUSTIN VAULT) | CY | 3,055 | | |
| 96 (F) | 192054 | STRUCTURE EXCAVATION (TYPE Z-3) (AERIALY DEPOSITED LEAD) | CY | 990 | | |
| 97 (F) | 192057 | STRUCTURE EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD) | CY | 6,504 | | |
| 98 (F) | 192058 | STRUCTURE EXCAVATION (TYPE Y-2) (AERIALY DEPOSITED LEAD) | CY | 1,430 | | |
| 99 | 024094 | TEMPORARY SHORING FOR UNDERPASS EXCAVATION | SQFT | 42,800 | | |
| 100 (F) | 024095 | FILTER MEDIA (SAND BED) (AUSTIN VAULT) | CY | 190 | | |

BID ITEM LIST

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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 101 (F) | 024096 | STRUCTURE BACKFILL (AUSTIN VAULT) | CY | 469 | | |
| 102 (F) | 193003 | STRUCTURE BACKFILL (BRIDGE) | CY | 24,050 | | |
| 103 (F) | 193004 | STRUCTURE BACKFILL (CULVERT) | CY | 623 | | |
| 104 (F) | 193006 | STRUCTURE BACKFILL (SLURRY CEMENT) | CY | 2,538 | | |
| 105 (F) | 193013 | STRUCTURE BACKFILL (RETAINING WALL) | CY | 134,971 | | |
| 106 (F) | 193030 | PERVIOUS BACKFILL MATERIAL | CY | 4,511 | | |
| 107 | 198010 | IMPORTED BORROW (CY) | CY | 279,000 | | |
| 108 | 043924 | LIGHTWEIGHT FILL (EPS BLOCK) | CY | 3,890 | | |
| 109 | 043925 | GASOLINE RESISTANT GEOMEMBRANE | SQYD | 3,400 | | |
| 110 | 200001 | HIGHWAY PLANTING | LS | LUMP SUM | LUMP SUM | |
| 111 | 204099 | PLANT ESTABLISHMENT WORK | LS | LUMP SUM | LUMP SUM | |
| 112 | 208000 | IRRIGATION SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 113 (F) | 208026 | 2" SUPPLY LINE (BRIDGE) | LF | 299 | | |
| 114 | 208304 | WATER METER | EA | 2 | | |
| 115 (F) | 208738 | 8" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT | LF | 695 | | |
| 116 (F) | 208739 | 10" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT | LF | 990 | | |
| 117 | 024097 | AGGREGATE BASE CEMENT SLURRY | CY | 1,040 | | |
| 118 (F) | 260210 | AGGREGATE BASE (APPROACH SLAB) | CY | 31 | | |
| 119 | 260303 | CLASS 3 AGGREGATE BASE (CY) | CY | 96,000 | | |
| 120 | 024098 | CRUSHED MISCELLANEOUS BASE | CY | 760 | | |

BID ITEM LIST
07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 121 | 280000 | LEAN CONCRETE BASE | CY | 51,700 | | |
| 122 | 024099 | LEAN CONCRETE BASE RAPID SETTING | CY | 3,840 | | |
| 123 | 043926 | FURNISH HOT MIX ASPHALT (CHANNEL) | TON | 124 | | |
| 124 | 043927 | PLACE HOT MIX ASPHALT (CHANNEL) | SQYD | 735 | | |
| 125 | 390131 | HOT MIX ASPHALT | TON | 47,900 | | |
| 126 | 390137 | RUBBERIZED HOT MIX ASPHALT (GAP GRADED) | TON | 640 | | |
| 127 | 391007 | PAVING ASPHALT (BINDER, GEOSYNTHETIC PAVEMENT INTERLAYER) | TON | 1 | | |
| 128 (F) | 393004 | GEOSYNTHETIC PAVEMENT INTERLAYER (PAVING FABRIC) | SQYD | 5,075 | | |
| 129 | 394060 | DATA CORE | LS | LUMP SUM | LUMP SUM | |
| 130 | 394073 | PLACE HOT MIX ASPHALT DIKE (TYPE A) | LF | 740 | | |
| 131 | 394074 | PLACE HOT MIX ASPHALT DIKE (TYPE C) | LF | 800 | | |
| 132 | 394075 | PLACE HOT MIX ASPHALT DIKE (TYPE D) | LF | 3,370 | | |
| 133 | 394076 | PLACE HOT MIX ASPHALT DIKE (TYPE E) | LF | 4,580 | | |
| 134 | 394077 | PLACE HOT MIX ASPHALT DIKE (TYPE F) | LF | 1,800 | | |
| 135 | 397005 | TACK COAT | TON | 31 | | |
| 136 | 401050 | JOINTED PLAIN CONCRETE PAVEMENT | CY | 79,100 | | |
| 137 | 024100 | JOINTED PLAIN CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) | CY | 6,290 | | |
| 138 | 404092 | SEAL PAVEMENT JOINT | LF | 281,000 | | |
| 139 | 404093 | SEAL ISOLATION JOINT | LF | 1,500 | | |
| 140 (F) | 406050 | DOWEL BAR (DRILL AND BOND) | EA | 8,426 | | |

BID ITEM LIST
07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 141 | 411105 | INDIVIDUAL SLAB REPLACEMENT (RSC) | CY | 900 | | |
| 142 | 413113 | REPAIR SPALLED JOINTS, POLYESTER GROUT | SQYD | 710 | | |
| 143 | 024101 | SEAL JOINT (EXISTING CONCRETE PAVEMENT) | LF | 28,400 | | |
| 144 | 420201 | GRIND EXISTING CONCRETE PAVEMENT | SQYD | 23,400 | | |
| 145 | 043928 | TIEDOWN ANCHOR | EA | 49 | | |
| 146 (F) | 477021 | MECHANICALLY STABILIZED EMBANKMENT, LOCATION A | SQFT | 18,191 | | |
| 147 (F) | 477022 | MECHANICALLY STABILIZED EMBANKMENT, LOCATION B | SQFT | 14,900 | | |
| 148 (F) | 477023 | MECHANICALLY STABILIZED EMBANKMENT, LOCATION C | SQFT | 7,488 | | |
| 149 (F) | 477024 | MECHANICALLY STABILIZED EMBANKMENT, LOCATION D | SQFT | 9,799 | | |
| 150 | 024786 | TEMPORARY SCREENING WALL | LF | 2,010 | | |
| 151 | 490411 | FURNISH STEEL PILING (PP 16 X 0.500) | LF | 8,130 | | |
| 152 | 490412 | DRIVE STEEL PILE (PP 16 X 0.500) | EA | 187 | | |
| 153 | 490550 | FURNISH 24" STEEL PIPE PILING | LF | 11,795 | | |
| 154 | 490555 | DRIVE 24" STEEL PIPE PILE | EA | 296 | | |
| 155 | 024102 | JACKED CASING - 60" OUTSIDE DIAMETER STEEL CASING | LF | 340 | | |
| 156 | 490601 | 16" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 10,511 | | |
| 157 | 490603 | 24" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 35,600 | | |
| 158 | 490604 | 30" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 18,573 | | |
| 159 | 490606 | 42" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 1,170 | | |
| 160 | 490609 | 60" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 133 | | |

BID ITEM LIST
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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|------------|-----------|--|-----------------|--------------------|------------|------------|
| 161 | 490780 | FURNISH PILING (CLASS 200) | LF | 7,380 | | |
| 162 | 490781 | DRIVE PILE (CLASS 200) | EA | 156 | | |
| 163 | 500001 | PRESTRESSING CAST-IN-PLACE CONCRETE | LS | LUMP SUM | LUMP SUM | |
| 164 (F) | 510051 | STRUCTURAL CONCRETE, BRIDGE FOOTING | CY | 5,226 | | |
| 165 (F) | 510053 | STRUCTURAL CONCRETE, BRIDGE | CY | 20,082 | | |
| 166 (F) | 510060 | STRUCTURAL CONCRETE, RETAINING WALL | CY | 31,000 | | |
| 167 (F) | 510072 | STRUCTURAL CONCRETE, BARRIER SLAB | CY | 1,181 | | |
| 168 (F) | 510080 | STRUCTURAL CONCRETE, APPROACH SLAB (RAILROAD) | CY | 114 | | |
| 169 (F) | 510085 | STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ) | CY | 290 | | |
| 170 (F) | 510086 | STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N) | CY | 625 | | |
| 171 (F) | 510087 | STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) | CY | 303 | | |
| 172 (F) | 510088 | STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N MODIFIED) | CY | 750 | | |
| 173 (F) | 510091 | STRUCTURAL CONCRETE (AUSTIN VAULT) | CY | 583 | | |
| 174 (F) | 510502 | MINOR CONCRETE (MINOR STRUCTURE) | CY | 338 | | |
| 175 | 510800 | PAVING NOTCH EXTENSION | CF | 225 | | |
| 176 (F) | 511035 | ARCHITECTURAL TREATMENT | SQFT | 356,866 | | |
| 177 | 511106 | DRILL AND BOND DOWEL | LF | 1,608 | | |
| 178 | 512354 | FURNISH PRECAST PRESTRESSED CONCRETE SLAB (TYPE SIV) | SQFT | 65,800 | | |
| 179 | 024106 | PRECAST CONCRETE FASCIA | SQFT | 7,230 | | |
| 180 | 024787 | EARTH RETAINING STRUCTURE (MSE WALL) | SQFT | 196,233 | | |

BID ITEM LIST
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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|------------|-----------|--|-----------------|--------------------|------------|------------|
| 181 (F) | 512510 | ERECT PRECAST PRESTRESSED CONCRETE DECK UNIT | EA | 206 | | |
| 182 (F) | 024107 | GRADE CROSSING PANELS | LF | 230 | | |
| 183 | 024109 | CUTOVER TRACK FROM MAINLINE TO SHOOFLY AND REVERSE | LS | LUMP SUM | LUMP SUM | |
| 184 | 515020 | REFINISH BRIDGE DECK | SQFT | 1,279 | | |
| 185 | 515041 | FURNISH POLYESTER CONCRETE OVERLAY | CF | 5,483 | | |
| 186 (F) | 515042 | PLACE POLYESTER CONCRETE OVERLAY | SQFT | 65,800 | | |
| 187 (F) | 518002 | SOUND WALL (MASONRY BLOCK) | SQFT | 93,101 | | |
| 188 | 519081 | JOINT SEAL (MR 1/2") | LF | 5,410 | | |
| 189 | 519091 | JOINT SEAL (MR 1 1/2") | LF | 203 | | |
| 190 | 519100 | JOINT SEAL (MR 2") | LF | 1,248 | | |
| 191 (F) | 520102 | BAR REINFORCING STEEL (BRIDGE) | LB | 7,345,157 | | |
| 192 (F) | 520103 | BAR REINFORCING STEEL (RETAINING WALL) | LB | 3,389,818 | | |
| 193 (F) | 520104 | BAR REINFORCING STEEL (AUSTIN VAULT) | LB | 137,540 | | |
| 194 | 024111 | BALLASTED TRACK | TF | 31,000 | | |
| 195 | 024112 | BALLASTED TURN-OUT | LS | LUMP SUM | LUMP SUM | |
| 196 | 024113 | WOOD TIES | EA | 6,700 | | |
| 197 | 024114 | CONCRETE TIES | EA | 8,860 | | |
| 198 | 024115 | RUNNING RAIL | TF | 31,100 | | |
| 199 | 024116 | BALLAST | CY | 13,200 | | |
| 200 (F) | 540101 | ASPHALT MEMBRANE WATERPROOFING | SQFT | 926 | | |

BID ITEM LIST
07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 201 (F) | 540104 | WATERPROOFING AND COVER | SQFT | 14,740 | | |
| 202 | 043929 | PUBLIC SAFETY PLAN | LS | LUMP SUM | LUMP SUM | |
| 203 (F) | 550110 | COLUMN CASING | LB | 76,134 | | |
| 204 (F) | 550203 | FURNISH STRUCTURAL STEEL (BRIDGE) | LB | 3,383,684 | | |
| 205 (F) | 550204 | ERECT STRUCTURAL STEEL (BRIDGE) | LB | 3,383,684 | | |
| 206 | 024117 | INSTALL BRIDGE MOUNTED VERTICAL CLEARANCE SIGN | EA | 4 | | |
| 207 | 560203 | FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY) | LB | 6,940 | | |
| 208 | 560204 | INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY) | LB | 6,940 | | |
| 209 | 560208 | FURNISH SIGN STRUCTURE (TUBULAR) | LB | 11,800 | | |
| 210 | 560209 | INSTALL SIGN STRUCTURE (TUBULAR) | LB | 11,800 | | |
| 211 | 560213 | FURNISH SIGN STRUCTURE (LIGHTWEIGHT) | LB | 21,400 | | |
| 212 | 560214 | INSTALL SIGN STRUCTURE (LIGHTWEIGHT) | LB | 21,400 | | |
| 213 | 560218 | FURNISH SIGN STRUCTURE (TRUSS) | LB | 278,000 | | |
| 214 | 560219 | INSTALL SIGN STRUCTURE (TRUSS) | LB | 278,000 | | |
| 215 | 560233 | FURNISH FORMED PANEL SIGN (OVERHEAD) | SQFT | 3,620 | | |
| 216 | 560244 | FURNISH LAMINATED PANEL SIGN (1"-TYPE A) | SQFT | 640 | | |
| 217 | 560245 | FURNISH LAMINATED PANEL SIGN (1"-TYPE B) | SQFT | 280 | | |
| 218 | 560248 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED) | SQFT | 1,660 | | |
| 219 | 560249 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED) | SQFT | 990 | | |
| 220 | 560251 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED) | SQFT | 180 | | |

BID ITEM LIST

07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 241 | 024127 | 6" GALVANIZED STEEL PIPE (DECK DRAIN) | LF | 100 | | |
| 242 | 024128 | 30" CONCRETE ENCASEMENT | LF | 50 | | |
| 243 | 024129 | STORM DRAIN PROTECTION FOR 18" REINFORCED CONCRETE PIPE | LF | 160 | | |
| 244 | 024130 | STORM DRAIN PROTECTION FOR 4'X2.5' REINFORCED CONCRETE BOX | LF | 140 | | |
| 245 | 024131 | 6" PERFORATED DRAIN PIPE | LF | 430 | | |
| 246 | 024132 | 8" PVC PIPE (SCHEDULE 80) | LF | 220 | | |
| 247 | 024788 | 12" CORRUGATED PERFORATED HIGH DENSITY POLYETHYLENE PIPE (UNDERDRAIN) | LF | 15,100 | | |
| 248 | 024789 | 2 1/2" GALVANIZED STEEL PIPE (DECK DRAIN) | LF | 190 | | |
| 249 | 024790 | 8" CORRUGATED PERFORATED HIGH DENSITY POLYETHYLENE PIPE (UNDERDRAIN) | LF | 10,000 | | |
| 250 | 024791 | 8" CORRUGATED PERFORATED HIGH DENSITY POLYETHYLENE PIPE | LF | 110 | | |
| 251 | 024134 | UNDERDRAIN CLEANOUT | LF | 220 | | |
| 252 | 024792 | 21" CONCRETE ENCASEMENT | LF | 65 | | |
| 253 | 024135 | 6" PLASTIC PIPE UNDERDRAIN PERFORATED (AUSTIN VAULT) | LF | 570 | | |
| 254 | 680903 | 6" NON-PERFORATED PLASTIC PIPE UNDERDRAIN | LF | 12 | | |
| 255 | 024136 | 18" HIGH DENSITY POLYETHYLENE DOWNDRAIN | LF | 85 | | |
| 256 | 024137 | FILTER FABRIC (AUSTIN VAULT) | SQYD | 440 | | |
| 257 (F) | 024138 | PERMEABLE MATERIAL (AUSTIN VAULT) | CY | 165 | | |
| 258 | 024139 | CORRUGATED STEEL PIPE DROP INLET | LF | 44 | | |
| 259 | 024133 | PARKWAY DRAIN | LF | 20 | | |
| 260 | 024140 | 24" DUCTILE IRON PIPE - FORCE MAIN PIPING | LF | 600 | | |

BID ITEM LIST
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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 261 | 024141 | 4" DUCTILE IRON PIPE - SUMP PUMP PIPING | LF | 620 | | |
| 262 | 719300 | MANHOLE | LF | 170 | | |
| 263 | 721810 | SLOPE PAVING (CONCRETE) | CY | 27 | | |
| 264 (F) | 024142 | GABION (AUSTIN VAULT) | CY | 33 | | |
| 265 | 024143 | MINOR CONCRETE (CURB, SIDEWALK, AND DRIVEWAY) | CY | 1,780 | | |
| 266 | 730045 | MINOR CONCRETE (GUTTER) (CY) | CY | 240 | | |
| 267 | 731502 | MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION) | CY | 270 | | |
| 268 | 731530 | MINOR CONCRETE (TEXTURED PAVING) | SQFT | 49,300 | | |
| 269 | 731623 | MINOR CONCRETE (CURB RAMP) | CY | 11 | | |
| 270 (F) | 750001 | MISCELLANEOUS IRON AND STEEL | LB | 44,870 | | |
| 271 (F) | 750041 | ISOLATION CASING | LB | 261,480 | | |
| 272 (F) | 750498 | MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE) | LB | 1,450 | | |
| 273 (F) | 750501 | MISCELLANEOUS METAL (BRIDGE) | LB | 97,278 | | |
| 274 | 024144 | BRIDGE DECK DRAINAGE SYSTEM (RAILROAD) | LF | 1,800 | | |
| 275 (F) | 750505 | BRIDGE DECK DRAINAGE SYSTEM | LB | 9,757 | | |
| 276 (F) | 024145 | MISCELLANEOUS METAL (AUSTIN VAULT) | LB | 230 | | |
| 277 | 024146 | HYDRODYNAMIC SEPARATOR | EA | 1 | | |
| 278 | 800320 | CHAIN LINK FENCE (TYPE CL-4) | LF | 380 | | |
| 279 | 800360 | CHAIN LINK FENCE (TYPE CL-6) | LF | 14,500 | | |
| 280 (F) | 043930 | CHAIN LINK FENCE (TYPE CL-6) (MODIFIED) | LF | 39 | | |

BID ITEM LIST
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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--------------------------------------|-----------------|--------------------|------------|------------|
| 281 | 802510 | 5' CHAIN LINK GATE (TYPE CL-6) | EA | 1 | | |
| 282 | 802601 | 14' CHAIN LINK GATE (TYPE CL-6) | EA | 1 | | |
| 283 | 802640 | 18' CHAIN LINK GATE (TYPE CL-6) | EA | 2 | | |
| 284 | 820107 | DELINEATOR (CLASS 1) | EA | 30 | | |
| 285 | 024147 | INSTALL MEDIAN MILEAGE PANEL | EA | 22 | | |
| 286 | 832003 | METAL BEAM GUARD RAILING (WOOD POST) | LF | 1,800 | | |
| 287 (F) | 833032 | CHAIN LINK RAILING (TYPE 7) | LF | 4,622 | | |
| 288 (F) | 833088 | TUBULAR HANDRAILING | LF | 990 | | |
| 289 (F) | 833142 | CONCRETE BARRIER (TYPE 26 MODIFIED) | LF | 482 | | |
| 290 (F) | 024148 | CABLE RAILING (AUSTIN VAULT) | LF | 438 | | |
| 291 (F) | 839521 | CABLE RAILING | LF | 17,111 | | |
| 292 | 839541 | TRANSITION RAILING (TYPE WB) | EA | 8 | | |
| 293 | 839581 | END ANCHOR ASSEMBLY (TYPE SFT) | EA | 7 | | |
| 294 | 839584 | ALTERNATIVE IN-LINE TERMINAL SYSTEM | EA | 8 | | |
| 295 | 839585 | ALTERNATIVE FLARED TERMINAL SYSTEM | EA | 4 | | |
| 296 | 839604 | CRASH CUSHION (REACT 9CBB) | EA | 1 | | |
| 297 | 839703 | CONCRETE BARRIER (TYPE 60C) | LF | 3,220 | | |
| 298 (F) | 839704 | CONCRETE BARRIER (TYPE 60D) | LF | 6,623 | | |
| 299 (F) | 043931 | CONCRETE BARRIER (TYPE 60D MODIFIED) | LF | 1,197 | | |
| 300 | 024149 | CONCRETE BARRIER (TYPE 60W MODIFIED) | LF | 6,380 | | |

BID ITEM LIST
07-1218W4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 301 (F) | 839717 | CONCRETE BARRIER (TYPE 732 MODIFIED) | LF | 164 | | |
| 302 | 024150 | CONCRETE BARRIER (TYPE 60E) | LF | 200 | | |
| 303 (F) | 043932 | CONCRETE BARRIER (TYPE 60A MODIFIED) | LF | 842 | | |
| 304 (F) | 043933 | CONCRETE BARRIER (TYPE 60C MODIFIED) | LF | 120 | | |
| 305 (F) | 839725 | CONCRETE BARRIER (TYPE 736) | LF | 1,526 | | |
| 306 (F) | 839726 | CONCRETE BARRIER (TYPE 736A) | LF | 665 | | |
| 307 (F) | 839727 | CONCRETE BARRIER (TYPE 736 MODIFIED) | LF | 2,241 | | |
| 308 (F) | 043934 | CONCRETE BARRIER (TYPE 736A MODIFIED) | LF | 7,669 | | |
| 309 (F) | 043935 | CONCRETE BARRIER (TYPE 60E MODIFIED) | LF | 278 | | |
| 310 (F) | 839731 | CONCRETE BARRIER (TYPE 736B) | LF | 4,728 | | |
| 311 (F) | 024151 | CONCRETE BARRIER (TYPE 60GE MODIFIED) | LF | 350 | | |
| 312 (F) | 043936 | CONCRETE BARRIER (TYPE 736SV MODIFIED) | LF | 920 | | |
| 313 (F) | 839734 | CONCRETE BARRIER (TYPE 736SV) | LF | 3,802 | | |
| 314 | 840504 | 4" THERMOPLASTIC TRAFFIC STRIPE | LF | 107,000 | | |
| 315 | 840505 | 6" THERMOPLASTIC TRAFFIC STRIPE | LF | 3,400 | | |
| 316 | 840506 | 8" THERMOPLASTIC TRAFFIC STRIPE | LF | 92,100 | | |
| 317 | 840508 | 8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3) | LF | 6,370 | | |
| 318 | 840515 | THERMOPLASTIC PAVEMENT MARKING | SQFT | 11,550 | | |
| 319 | 840521 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1) | LF | 2,410 | | |
| 320 | 840525 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12) | LF | 118,000 | | |