

that have the potential to interfere with the Work or with train operations. The Contractor shall relocate stored products, equipment, and materials that interfere with train operations, public and private utilities, or visibility at railroad crossings. Materials and equipment shall not be so piled, stored, or parked when not in use.

- F. The Contractor shall adhere to the noise levels and hours of the City of Anaheim Municipal Code, except as provided and approved in the SSWP and approved City of Anaheim Director of Public Works or City of Anaheim Building Official.
- G. The Contractor shall be responsible for coordinating its Work with all property owners affected by the Contractor's operations. The Contractor shall protect the general public and residents within Worksite boundaries from Work-related activities, and shall not unnecessarily inconvenience those persons by Work activities.
- H. The Contractor shall submit the proposed location of staging areas for the Authority and SCRRA's approval.
- I. As necessary, the Contractor will preserve and relocate railroad signs (mileposts, speed limits, "no trespassing" signs, station signs, crossing whistle signs, etc.) during the full period of construction. Signs shall be maintained during construction or restored upon completion of the Work, in accordance with the requirements of Section 01 35 23, OCTA Site Safety Requirements. The Contractor shall protect at-grade crossing warning signs and shall coordinate the schedule for relocation or revision of Crossing warning signs and signals by Others, if necessary.
- J. The Contractor will preserve drainage facilities throughout the duration of the Work so that there is no pending or accumulation of water in any Worksite area, there is no flow of water diverted toward the track or out of normal drainage channels, and all culvert inlets and outlets are kept free of debris.
- K. Except where specifically designated in the design of the Work, the Contractor will preserve the ability of maintenance Contractors to access the Right of Way using highway vehicles. If the original right-of-way roads become blocked with the Contractor's materials, equipment, or excavations or spoils, alternate routes must be arranged.
- L. The Contractor will preserve existing right-of-way fences and walls, and will replace any such fences or walls damaged during the work to the satisfaction of the owner(s) of the fences or walls.

1.9 WORK ZONE LIMITATIONS OF SITE

- A. The Contractor shall perform all work within the OCTA railroad right-of-way and City roadway right-of-way as shown on the Contract Drawings. The Contractor shall coordinate available space with the Authority and other entities needing access and space so as to produce the best overall efficiency in performance of the total Work of the Project.
- B. The Contractor shall schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site, with minimal

disruption to the adjoining property owners, use of public facilities, and SCRRA operations. Pick-up and delivery requiring vehicular traffic adjacent to tracks shall be performed only during normal working hours, and as approved by the Authority.

1.10 WORK WINDOWS

- A. The time limits for all types of Work Windows include the time for the SCRRA Contractor to restore and test the signal and communication system and for SCRRA to run test trains before the start of trains operations; therefore, the full duration of the Work Window is not available for the use of the Contractor. The SSWP shall designate both the time at which the Contractor must make the track ready (in full compliance with the FRA Track Safety Standards and with the SCRRA Track Maintenance and Engineering Instructions) for the passage of trains, and the remaining time within the Work Window that will be required for the signal and communications system restoration. The SSWP shall be prepared and submitted in accordance with the Work Window requirements shown in the Project Specifications.
- B. Notify SCRRA sixty (60) days in advance for any work window that will require modifications to PTC critical features to allow SCRRA the time required for planning a cut-over window within the PTC network schedule, survey, creation and testing of a revised subdivision file, critical feature site validation and final implementation into service of the subdivision file.
- C. To accompany 60-day advance notification, provide to the SCRRA Project Manager plans clearly detailing and listing all changes that will be made to system critical features in each Work Window and an accompanying work plan detailing how the work will be undertaken
- D. The Contractor's Railroad Construction Project Manager or the Railroad Track Construction Manager shall personally inspect the track within the Work Window prior to the restoration of train service; confirm with SCRRA that the track is in full compliance with the above standards and establish the speed at which trains will operate upon restoration of the service.
- E. The Contractor does not have exclusive rights to the Work Windows. The Contractor may have to share these Work Windows with other Contractors and SCRRA's maintenance forces as described in the General Conditions.
- F. The Contractor shall not perform any fieldwork during three annual designated holidays. Fieldwork shall not include receipt or delivery of materials or equipment or work performed in field offices. The designated holidays are Labor Day, Thanksgiving Day and Christmas Day.

During these periods, SCRRA will not have the resources (labor and equipment) or construction management personnel to issue track bulletins or to support, inspect, or oversee the Contractor's Work.

- G. The Contractor will be allotted up to one (1) 16-hour Exclusive Track Work Window, one (1) 24-hour Exclusive Track Work Window, two (2) 48-hour Exclusive

Track Work Windows. Weekday Form B Windows will be made available to the Contractor where possible, unless the requested work window conflicts with previously scheduled SCRRA construction & maintenance operations, special events, or emergency repairs.

- H. Refer to Section 4.4 of SCRRA Form 37 – Rules and Requirement for Construction on SCRRA Right-of-Way for procedures for Requesting Work Windows
- I. Work windows that apply to this project are as follows:
 - 1. Monday through Friday:
 - a. Form B available 6:00 AM to 6:00 PM, Monday through Friday.
 - b. No track access will be allowed on Monday mornings from 2:30 AM to 4:30 AM. This period will not be available for track access regardless of signal testing work actually in progress at the work site.
 - 2. 16-hour Period Exclusive Track Work Window
 - a. One 16-hour Track Work Window will be available during the contract duration, from Saturday 9:00 PM to Sunday 1:00 PM. The 16-hour window will be available on a weekend as approved by Metrolink (SCRRA).
 - 3. 24-hour Period Exclusive Track Work Window
 - a. One 24-hour Track Work Window will be available during the contract duration, from Saturday 9:00 PM to Sunday 9:00 PM. The 24-hour window will be available on a weekend as approved by Metrolink (SCRRA).
 - 4. 48-hour Period Exclusive Track Work Window
 - a. Two 48-hour Exclusive Track Work Window will be available on two separate weekends during the contract duration, from Friday 9:00 PM to Sunday 9:00 PM. This 48-hour window is available starting the first weekend of April to the last weekend of September.
 - 5. Additional Requirements and Notes that pertain to work windows:
 - a. SCRRA Commuter service begins at 5:36 AM each weekday.
 - b. No construction work shall be performed during the following periods when Construction Management staff, or SCRRA furnished labor or equipment are not available:
 - 1. New Year's holiday
 - 2. Good Friday and Easter weekend

3. Memorial Day weekend
 4. July 4th holiday and weekend (three-day weekend)
 5. Labor Day holiday and weekend
 6. Thanksgiving week and holiday weekend
 7. Christmas Eve, Christmas day, Christmas week
- c. 16-hour, 24-hour, and/or 48-hour Exclusive Track Work Windows will not be allowed on consecutive weekends.
 - d. Track Work Windows will not be allowed on the day of the following special events unless otherwise allowed by the Authority:
 1. Angels Home Game Opener
 2. Angels vs. Padres Games
 3. Fullerton Railroad Days – typically the first weekend of May
 - e. SCRRA contract forces performing signal installations as part of signal cutovers will require Exclusive Track Work Windows. The Contractor shall coordinate with the signal related Exclusive Track Work Windows and allow for at least 3 weeks after the cutover window before working within another Exclusive Track Work Window unless otherwise approved by SCRRA and the engineer.
 - f. The Contractor shall make requests for all work windows in accordance with the latest version of SCRRA Form 37.
 - g. The start time for Track Work Windows is an average start time dependent on location and train on-time performance and may vary by 30 minutes either direction.
 - h. The Contractor shall allow sufficient time within the Exclusive Track Work Window period to allow for Ballast Stabilizing and signal work activities like point protection and signal wire bonding by SCRRA contract forces. Ballast stabilizing typically needs 1 hour to be reserved within the window. Contractor shall provide 6 hours between the end of Exclusive Track Work Windows and the scheduled start of SCRRA Commuter service. This 6 hour period shall be for the sole use of the SCRRA Signal forces and SCRRA Maintenance and Operations forces.

J. Grade Crossing Roadway Closures

1. The Contractor shall request work windows requiring partial or full roadway closure of the La Palma Avenue or Tustin Avenue crossings at least three (3) weeks in advance. Requests shall be made in writing to the Agency's Resident

Engineer, who will coordinate approval of the proposed work windows with the City of Anaheim.

2. The Contractor may only perform one Full Closure each for La Palma Avenue and Tustin Avenue roadways. The closures will be a weekend closure as listed below. Full Closures will not be allowed at the two crossings at the same time.
3. Partial closure of the two crossing roadways shall not occur at the same time unless otherwise approved in writing by the City.
4. Contractor shall assume that proposed roadway related work windows will be limited to the following hours:

- a. Weekday Partial Closure:

Monday through Friday – 8:30 AM to 3:30 PM

- b. Weekend Full Closure:

Friday 11:05 PM through Monday 4:35 AM

1.11 SSWP – GENERAL CONTRACTOR REQUIREMENTS

- A. All work with the potential to impede the normal functioning of any part of the Operating System shall include a detailed SSWP showing schedule of events, indicating the expected hourly progress of each activity that has duration of one hour or longer. The schedule shall include a time at which each activity planned under the SSWP and the requested Work Window will be completed, and the total duration of all the construction activities shall be less than the approved Work Window. Failure of the Contractor to complete the scheduled activities by the planned time or to put in place an approved contingency plan may adversely affect the operations of scheduled trains.
- B. The Contractor's SSWP shall conform to the requirements detailed in the SCRRA Site Specific Work Plan Scope. The Contractor shall submit a completed copy of SCRRA's SSWP Checklist. Both of these documents are included in the link "Site Specific Work Plan (SSWP)" located online at <https://metrolinktrains.com/about/agency/engineering--construction/> in the Right-Of-Way Encroachments section.
- C. The SSWP shall include at minimum the information specified below.
 1. The SSWP shall include scope, brief schedule, location, equipment, material and staging, schedule, haul routes, safety plan, contingency plan, worksite representative, emergency response plan, excavation plan, boring and jacking plan, drilling and pile driving plan, falsework plan, temporary traffic control plan, pedestrian ADA access, and bicycle route detour.
 2. All activities necessary to perform construction activities within the Operating Envelope, including use of stations, tracks, signals, proposed storage areas and any other railroad facility.

3. A description of any proposed changes in the Operating System between start and finish of the work, including any requested Work Windows.
 4. A schedule of the work, showing each activity and where and how it affects normal operation of the Operating System. This schedule shall integrate and allow for the necessary work of the Signal and Communication forces. Each activity in the plan shall include all labor, materials, and equipment required to complete the activity within the SCRRA allotted time period. The Contractor shall identify on the schedule all SCRRA furnished labor, equipment and materials.
 5. The Contractor shall have SCRRA approved Contingency plans for putting the Operating System back in operation in case of an emergency, or in case the Contractor fails to perform and complete the work on time. The contingency plans shall address the various stages of activities necessary to restore the System.
 6. List all of the approved proposed work plans to be performed under the SSWP, and provide the name(s) and number(s) of the Contractor's supervisor(s) in charge of the SSWP tasks.
- D. The SSWPs must be of sufficient detail, clarity, and organization to permit easy review and approval by the Authority and SCRRA before the proposed work is performed. The SSWP shall be submitted and approved prior to starting work. The Contractor shall anticipate obtaining approvals from the Authority and SCRRA as follows:
1. At least 14 calendar days prior to start of the work within the Operating Envelope for work other than signal or third-party activity.
 2. At least 30 calendar days prior to the start of work for work involving signal or third-party installation or work requiring Exclusive Work Windows.
- E. The Authority may request explanations and changes to the SSWP to conform the SSWP to the requirements of the Contract Documents. If the SSWP is not acceptable, the Contractor shall revise the SSWP to make it acceptable. The Contractor is responsible for submitting a revised SSWP with sufficient time for to allow seven days for OCTA and SCRRA to perform a review of the revised SSWP and the Contractor to correctly address the comments and resubmit the revised SSWP at least seven days in advance of any work that affects the Operating System.
- F. The Contractor will be informed if the SSWP is acceptable not less than seven calendar days prior to the scheduled start of work within the Operating Envelope. Once the plan is accepted, the Contractor shall assemble the resources necessary to perform the work represented by the SSWP, so that necessary resources are available one calendar day before the work is to be accomplished, thereby demonstrating to the Authority the readiness of the Contractor to perform the Work. At this time, the Authority will make a final decision as to whether or not the Work is to proceed as planned or be canceled.

1.12 SSWP – SPECIAL CONTRACTOR REQUIREMENTS

- A. The Contractor's construction activities that affect the Operating System including tracks, grade crossings, bridges, stations, public highways, and related facilities in active service shall be subject to the following requirements:
1. The Contractor shall provide sufficient personnel, equipment, materials, and all other resources necessary to return the affected facilities to full service upon the conclusion of the approved "Work Window."
 2. The Contractor shall perform the Work expeditiously and continuously, with no gaps or breaks in the work activities or substantive reductions in the labor force, equipment, and materials necessary to construct, reconstruct, or repair the affected facility to full service upon the conclusion of the approved "Work Window."
 3. The size and scope of the affected facilities within the Operating System, (e.g., tracks, bridges) removed shall not exceed the Contractor's capacity to conservatively return the facility to the required level of service within the approved "Work Window."
 4. The Contractor shall take all appropriate and reasonable measures to perform work activities and tasks located outside of the Operating System to effectively reduce the amount of time and effort required during the approved "Work Window." These appropriate and reasonable measures shall include but not be limited to preconstruction and preassembly of track turnouts, panels, and pre-staging of track materials and equipment at work sites.
 5. Backup or Emergency Plan: The Contractor shall include in the SSWP a "backup or contingency" plan and the necessary resources (labor, equipment, materials, etc.) to assure the Authority that all appropriate and reasonable measures are available for the return of the affected facility to full service upon conclusion of the approved "Work Window."
 6. When not in use, materials and equipment shall not be piled, stored, or parked, closer than 20 feet horizontally from the centerline of the nearest operating track, or within 250 feet of an open grade crossing.
 7. The placement of piles, forms, braces, shoring, false work, excavation, or other construction supports shall be in accordance with the current SCRRA shoring requirements. Temporary overhead structures shall be a minimum of 22 feet 6 inches above top of rail in accordance with CPUC requirements. Temporary overhead structures less than 22 feet 6 inches above top of rail must have an exemption, in advance from the CPUC, and approval of SCRRA.
 8. In general, open excavation areas shall be protected per OSHA regulations and by walkways with handrails no closer than 8 feet 6 inches horizontally from the nearest operating track, if tangent, and 9 feet 6 inches if the track is curved. Furthermore, the walkways shall be no less than 3 feet wide unless

otherwise shown on the Contract Drawings and approved as a Design Variance by SCRRA), and the handrails shall be no less than 3.5 feet high and capable of withstanding 250 pounds of lateral force.

- B. Specifically, with regard to track construction, reconstruction, and rehabilitation activities involving active tracks, the Contractor shall be subject to the following requirements:
9. Track construction and reconstruction activities involving main track Operating System shall be limited to what the Contractor could reasonably accommodate, given the Contractor's capability and SCRRA furnished resources. The Contractor must fully complete all work within an approved SSWP segment, including all spiking, anchoring, surfacing to final line and grade, dynamic stabilizing, distressing, and welding before initiating Work on another location within the Project limits.
 10. All turnouts installed on active tracks shall be constructed and installed as panels. All turnout panels shall be fully complete and inspected and approved for installation by the Authority and SCRRA two weeks prior to the scheduled installation.
 11. At all times, the Contractor shall maintain an adequate quantity of ballast to finish the next two weeks of track construction activities requiring ballast. This stockpile shall be provided as approved in the Contractor staging plan so that it is in close proximity to the Work site, or in rail cars under load.
 12. SCRRA will provide dynamic track stabilization as needed for the Project. The Contractor shall coordinate with SCRRA for the performance of dynamic track stabilization on all tracks that have been significantly disturbed (i.e., ties or ballast removed).

1.13 TRACK BACK IN SERVICE

- A. At the end of each Work Window shown in the approved SSWP, the Contractor shall return all tracks to Class 5 as defined by FRA guidelines. If the track does not meet Class 5 specifications, a slow order (Form A) will be issued. It is the intent of the Contract Documents that Main Line Slow Orders only be allowed on a very limited basis. See Section 01 35 15, Maintenance and Protection of Railroad Traffic, or the Specifications for the number of allowed speed restrictions.
- B. The time of train delays caused by the Contractor's operation will be calculated as in Section 01 35 15, Maintenance and Protection of Railroad Traffic. The Contractor shall include all slow order (Form A) requests in his proposed SSWP. All slow orders shall be subject to the approval of the SCRRA.
- C. SCRRA will require final inspection before train service can resume on tracks previously taken out of service.
- D. Allowing train service on reconstructed or shifted track at the end of each approved Work Window is not considered beneficial occupancy or final acceptance. The

Contractor shall remain fully responsible for any loss or damage arising from the Contractor's activities under this Contract.

- E. If further adjustments or repairs are required to provide the appropriate track standards as defined herein, the Contractor shall, immediately perform the necessary work at no additional cost to the Authority. In the event the Contractor is not available to make the appropriate adjustments or repairs, SCRRA Maintenance Forces will complete the Work and the Contractor will be responsible for all associated direct and indirect costs, as well as any time associated with such adjustments or repairs.
- F. Rail Service Interruptions shall be considered an unauthorized delay to the SCRRA's train operations, and Rail Service Interruption Assessments will be made in accordance with the Contract when any of the following occurs:
 - 1. The Contractor's construction operations exceed the approved Work Window time limits specified in an approved SSWP.
 - 2. The Contractor exceeds the total allowable Slow Order Delay Time described in Section 01 35 15, Maintenance and Protection of Railroad Traffic.
 - 3. The Contractor exceeds the maximum number of Slow Orders as prescribed in Section 01 35 15, Maintenance and Protection of Railroad Traffic.
 - 4. The Contractor's construction operations working under an approved Form B Work Window result in the stoppage of a scheduled train. In this case, the delay shall be calculated from the time the train is stopped at the working limits until the train has completely passed through the working limits.
 - 5. The Contractor has not restored the track to Class 5 standards.

1.14 INSPECTION PRIOR TO PLACING TRACK BACK IN SERVICE

- A. The Contractor shall have qualified personnel at each distinct work site to ensure that all tracks are constructed to the required specifications. The Contractor shall perform a track inspection and determine its classification and conformance with the approved SSWP.
- B. The Authority and SCRRA shall furnish staff for the final inspection required in order to place track and bridge facilities in service for the SCRRA's use at the end of the Work Window.
- C. The Contractor shall schedule his operations to allow for the necessary inspection and any remedial work required in order to place the tracks and signal system back in service at the prescribed time.
- D. If the track does not meet Class 5 standards due to track or bridge construction irregularities (e.g. gage, distressing, cross level, surface, profile, alignment,

improper CWR temperature, loose fasteners, missing components), the track will be slow ordered to the next lower class with which it complies (according to the FRA guidelines).

- E. The SCRRA reserves the right to have its Maintenance Contractor perform remedial work to return the track to Class 5. In addition to the assessment cost noted in the paragraphs above, the costs to perform the remedial work will be deducted from the Contractor's progress payment.
- F. No additional time will be allowed for completion of the work in the event that the SCRRA is required to perform the remedial work to return the track to Class 5.

1.15 WORKS BY OTHERS

The Contractor may be required to interface with other contractors, utility companies, public agencies, private companies, and railroad forces. This interface shall be provided in accordance with the General Conditions and Section 01 14 16, Coordination with SCRRA. In addition, routine or emergency maintenance of existing SCRRA facilities may occur during the progress of the Work. Such activities shall have priority and the Contractor shall make efforts to minimize interference where possible.

1.16 RULES FOR WORKING WITHIN RIGHT-OF-WAY

- A. The Contractor's and Subcontractor's employees must be qualified under the current SCRRA Roadway Worker Policies and 49 CFR 214, Railroad Workplace Safety, before being permitted to work on the right-of-way.
- B. The SCRRA EIC will conduct job briefings as required under the Roadway Worker Policy Manual at the following intervals:
 - 1. Start of every work shift
 - 2. Every change of conditions affecting Roadway Worker safety during a work shift
- C. The Contractor shall immediately execute all verbal and written directives of the Authority or the SCRRA EIC.
- D. Refer to Section 01 14 16, Coordination with SCRRA, for rules governing Work adjacent to active tracks.
- E. Unless otherwise specified in the Specifications, SCRRA EIC services are required for all Work on railroad right-of-way.
- F. Refer to Section 01 35 23, OCTA Worksite Safety Requirements, and the SCRRA Roadway Worker Protection Regulations, incorporated as Section 214.3 of the SCRRA *On-Track Safety Instructions*, for any clarifications or additional requirements.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 14 00

SECTION 01 14 16 COORDINATION WITH SCRRA

PART 1 – GENERAL

1.1 SUMMARY

This Section outlines the requirements for coordination with the SCRRA and related railroads for Work performed on the railroad right-of-way.

1.2 RELATED REQUIREMENTS

- A. Section 01 11 16, Work by SCRRA
- B. Section 01 14 00, Work Restrictions
- C. Section 01 35 15, Maintenance and Protection of Railroad Traffic
- D. Section 01 35 23, OCTA Worksite Safety Requirements

1.3 REGULATIONS FOR WORKING WITHIN RAILROAD RIGHT-OF-WAY (ROW)

- A. Upon award of this Contract Work, the most current edition of each of the following publications shall apply to the Contractor's work. The Contractor shall comply with all requirements from the Railroad Operators, CPUC, FRA and all other governing entities. These requirements may include the following:

SCRRA	Safety and General Rules for All Employees
SCRRA	Roadway Worker Protection Regulations, Section 214.3 of the SCRRA On-Track Safety Manual
SCRRA	Bridge Worker Safety
SCRRA	Track Maintenance, Right-of-Way and Structures Engineering Instructions
SCRRA	Engineering Standards
SCRRA	Regulation Governing Contractors and Others Working on SCRRA Property
SCRRA	General Code of Operating Rules for Maintenance of Way
SCRRA	Current Timetable
SCRRA	Current Schedule of Trains
SCRRA	Form 37, Rules and Requirements for Construction on SCRRA Property

SCRRA	Excavation Support Guidelines
AMTRAK	Current Schedule of Trains
CPUC	General Orders 26D and 118
FRA	Track Safety Standards: Title 49 CFR 213
FRA	Roadway Worker Standards: Title 49 CFR 214.

- A. In addition, the Contractor shall comply with the most current edition of the *AREMA Manual for Railway Engineering* for standards of construction not fully explained by the above regulations or these Specifications. Possible conflicts between publications identified in this Section shall be brought to the attention of the SCRRA, who will make a determination as to the direction that the Contractor should follow.
- B. In the event additional Work is being performed by others, on or adjacent to the Worksite for this Contract, the Contractor shall coordinate the Work with other activities in order to avoid conflicts.

1.4 COORDINATION

- A. All Work within or adjacent to the Authority's Right-of-Way shall, at a minimum, meet the above regulations and be coordinated through the Authority. The Contractor shall cooperate and coordinate the Work as necessary in the most efficient manner for the execution and completion of the Work. If there is a conflict between SCRRA and other railroad's Rules and Regulations, the Contractor shall follow the SCRRA's direction as to which set of rules shall prevail. The Contractor shall coordinate its work so it does not interfere or otherwise delay the work performed by SCRRA's forces.
- B. Track will be used both for passenger and freight operations. The SCRRA dispatches all train traffic. The Contractor's Work shall be scheduled to provide minimal interference with all train traffic; in particular, Work will not be permitted to delay any trains. Requirements for slow orders through Work zones are contained elsewhere in these Specifications.
- C. The Contractor activities shall not delay any trains except as approved in advance by SCRRA.
- D. The Contractor should participate in the jobsite visit prior to submittal of bids to assess the level of train activity. Some schedule variations should be anticipated during the Project due to normal growth and train schedule refinement by SCRRA and other operators.
- E. SCRRA EIC will obtain track Authority directly from the SCRRA dispatcher. The Contractor shall not coordinate with the SCRRA dispatcher.
- F. Signal cutover work will be performed by SCRRA.

- G. The Contractor's work shall be coordinated with the Authority and SCRRA in accordance with Section 01 14 00, Work Restrictions, which establishes procedures and lead times required for SCRRA provided labor, including EIC.
- H. The Contractor must make arrangements to remove all on-track equipment from the Main Track in order to pass trains as specified in Section 01 14 00, Work Restrictions. The Contractor may not assume that its equipment can be placed or stored in spur tracks or sidings unless approved in advance by SCRRA.

1.5 GENERAL REQUIREMENTS

- A. The Contractor shall obtain permission in writing from the SCRRA for movement of equipment on track or across tracks at locations other than public crossings. Such permission may not necessarily be granted. If it is granted, the Contractor shall comply with any condition required such as, but not limited to, the bridging of rail and protection of ballast section. Damages to the track structure will be repaired at the Contractor's sole expense.
- B. The mainline tracks, within the limits of Work, are under direct control of the SCRRA Dispatcher. No track shall be fouled without authorization and presence of an SCRRA EIC on the scene.
 - 1. For all Work with the potential to foul the track, the Contractor shall allow sufficient time in his work schedule for the EIC to clear trains. Up to 15 minutes may be required for the EIC to clear each train, during which time the Contractor must not foul the track. Such time required to clear scheduled trains shall not be an acceptable reason for submitting contract change requests or delay claims to OCTA.
 - 2. Scheduled trains may be up to 15 minutes behind schedule, and such tardiness will not be an acceptable reason for submitting contract change requests or delay claims to OCTA.

1.6 WORK AFFECTING THE EXISTING COMMUNICATIONS AND SIGNAL SYSTEMS

- A. Track within the Work limits will be in use for high-speed freight and passenger train operations throughout the construction period. Train movements are governed by signal systems and the Contractor shall take no action which would:
 - 1. Directly or indirectly result in an unsafe condition (e.g., false clearing of a signal, failure to detect train occupancy or an open switch point, unauthorized unlocking of a switch, failure to activate a highway grade crossing warning system, or any degradation of signaling system).
 - 2. Cause delay to any train (e.g., display of a signal aspect less permissive than track conditions allow, obstruction of right-of-way).
 - 3. Cause an improper activation or deactivation of a highway grade crossing warning system.

4. Be contrary to directions given by SCRRA or the SCRRA Dispatcher.
- B. Existing overhead and buried communications and signaling cables and track wires are located at various locations along and across the Right-of-Way. The Contractor shall take all steps necessary to protect active cabling from damage during the Work. Specific utilities associated with the Work of this Contract are detailed in the Plans and Specifications. The minimum precautions to be taken by the Contractor to protect communications and signaling cables are as follows:
1. All personnel working in the vicinity of communications and signaling equipment and cabling shall be instructed by SCRRA in proper procedures for working around such equipment. Any Contractor personnel found not to be taking proper precautions will be barred from the Work site.
 2. At least 14 days before performing any excavation Work, the Contractor shall contact SCRRA to schedule a signal department mark-out. The Contractor shall call the SCRRA's "Call Before You Dig" number prior to commencing work at (909) 592-1346 during normal business hours. In case of emergencies involving SCRRA signal or communication facilities, the Contractor shall call (888) 446-9721. The exact location of communications and signaling cables shall be determined by a careful examination of site and hand potholing. The Contractor may utilize a search coil to determine the general vicinity of buried cabling. All such aforementioned locating activities shall be performed in the presence of SCRRA.
 3. It is the responsibility of the Contractor to make arrangements directly with utility companies involving the protection, encasement, reinforcement, relocation, replacement, removing or abandonment in place of non-railroad facilities affected by the Project. OCTA has no obligation to supply additional OCTA right-of-way for non-railroad facilities affected by this Project, nor does OCTA have any obligation to permit non railroad facilities to be abandoned in place or relocated on OCTA's right-of-way. Any facility or utility that crosses OCTA right-of-way must be covered under an agreement or license obtained through OCTA including, without limitation, any relocation of an existing facility or utility.
 4. SCRRA will rearrange its communications and signal lines, grade crossing warning devices, train signals, tracks and facilities that are in use and maintained by SCRRA forces in connection with its operation. This work by SCRRA will be done by its own forces or by contractors under a continuing contract and is not a part of the work under the Contract for the construction of the Project. The Contractor must allow sufficient time in its schedule to permit SCRRA to issue the necessary task orders to its contractors order material, and perform any necessary work.
 5. All communications and signaling cables proximate to the Work shall be physically located by means of potholing with hand tools. Excavation by hand tools shall be done by skimming soil in small increments, rather than by digging straight down with the point of a shovel. All such locating activities shall be performed in the presence of SCRRA.

- C. Excavation by machinery will be allowed only where the preceding precautions have been taken, as approved by SCRRA, to ensure that existing cabling is not at risk of being damaged.
- D. Where the placement of existing cabling interferes with placement of track work, or where cabling is at risk of damage from track work, the Contractor shall request such cabling be relocated or protected by SCRRA forces.
- E. The relocation of cables may require delays of up to 72 hours after SCRRA has been notified of conflicts. Such delays will not be grounds for the Contractor submitting a claim for extension of the Contract Time. The Contractor shall coordinate its work so it does not interfere or otherwise delay the work performed by SCRRA's forces.
- F. The relocation of active cable will be performed by SCRRA forces.

1.7 COMPLETION MILESTONES

- A. OCTA requires that this contract interface with the SCRRA signal installation contractor. OCTA has established an intermediate milestone where the contractor will complete a portion of the Work so that the SCRRA signal installation contractor can perform their Work where it involves this Contract. The following lists the Milestone and the required completion date measured from the date of Notice To Proceed (NTP) for this contract.

MILESTONE	COMPLETION DATE AFTER NTP
Intermediate 1	60 calendar days

- B. Intermediate Milestone 1
 - 1. Contractor shall install insulated joints in accordance with SCRRA's Engineering Standard 2504 "PREFABRICATED BONDED INSULATED JOINT" and the Contract Drawing T1 Phase 1B.
 - 2. Contractor shall remove existing bushes (landscaping) and restore conflicting irrigation pipe in 4' x 10' area at location as shown on Contract Drawing C3. This work is required for the Metrolink Signal Contractor to complete all work required in Phase 1B.

1.8 LIQUIDATED DAMAGES

- A. The Contractor shall pay to OCTA the sum listed in the table below per day for each and every calendar day's delay in finishing the Intermediate Milestone as described in Part 1.7 of this Section in excess of the milestone completion date.

MILESTONE	LIQUIDATED DAMAGES
Intermediate 1	\$3,000 per calendar day

- B. Should the Contractor fail to maintain the progress of the Work in accordance with the Progress Schedule required in these Specifications, additional overtime and/or additional crews will be required to the extent necessary to ensure that the progress conforms to the above-mentioned schedule and that the Work will be completed within the time limit specified. Any and all costs or impacts whatsoever incurred by the Contractor associated with maintaining the progress of the Work in accordance with the progress schedule shall be the sole responsibility of the Contractor.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 14 16

SECTION 01 14 19 COORDINATION WITH UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

This Section outlines requirements and provisions regarding the Contractor responsibility for coordination with all utility companies to ensure that all utilities are clearly marked, protected for the duration of the construction activities or relocated.

1.2 RELATED REQUIREMENTS

- A. Section 01 33 00, Submittal Procedures

1.3 SUBMITTALS

- A. Where required by the Contract Documents, the Contractor shall prepare Shop Drawings showing existing utility information and the installation of any utility protection facilities or features to be established on the site prior to initiating construction, maintained for the duration of construction and removed upon completion of construction. This submittal information to the local utility and to the Authority shall identify all necessary Work to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction.
- B. The Contractor shall coordinate with all Utilities and authorities having jurisdiction over these facilities and shall remove and relocate existing utilities and equipment whenever an existing installation interferes with new construction. Carefully examine each location and make arrangements in advance with the Authority to ensure that construction has a minimum impact on the daily operations of the Authority.
- C. Where required by a utility owner or an authority having jurisdiction over an underground facility, within 15 calendar days of the effective date of the Notice to Proceed, the Contractor shall submit a "Potholing Plan" consisting of a plan, schedule, and sequencing to identify and investigate by vacuum potholing all underground utilities and facilities. The Authority will review and comment on the plan within 10 calendar days of receipt.
- D. The relocated utilities shall be specifically identified in the record documents. The types of material and methods of relocation and reconnection of utilities shall match the existing unless otherwise noted.
- E. The Contractor shall furnish the Authority copies of all utility required permits or approvals obtained prior to starting Work at or adjacent to the utility facilities.

PART 2 – PRODUCTS (Not used)**PART 3 – EXECUTION****3.1 GENERAL**

Before commencing work, the Contractor shall notify Dig Alert at 811 or 1-800-422-4133, 72 hours in advance of excavation and advise the Authority of Dig Alert Identification number two working days before excavation begins. Before commencing work, the Contractor shall also notify utility companies which have underground facilities within the limits of the Work, but which do not participate in Dig Alert, in accordance with each utility's notification requirements, and have them locate and mark the facilities within the area of excavation. The Contractor shall keep marking current in accordance with the requirements of Dig Alert and the other utility companies.

SCRRA is not a member of Underground Service Alert (DigAlert) and SCRRA signal and communication lines must be located by contacting the SCRRA Signal Department. The Contractor shall contact the SCRRA Signal Department for an initial signal mark-out, signal mark-out restoration at disturbed areas, and updates to the signal mark-out. Refer to Section 01 14 16, Coordination with SCRRA for additional details.

3.2 POTHOLING FOR SUBSURFACE UTILITIES AND FACILITIES

Where required by a utility owner or an authority having jurisdiction over an underground facility, within 30 calendar days of the effective date of the Limited NTP and after Authority's approval of the Contractor's "Potholing Plan", the Contractor shall mobilize not fewer than two (2) separate potholing crews. These two or more potholing crews will work on a continuous basis to identify, locate and verify the location of underground utilities at all project locations. It is the Contractor's responsibility to submit the Potholing Plan and obtain the Authority's approval within this time period.

Potholing and subsurface utilities and facilities verification work shall be completed at least 30 days in advance of any excavation work within the limits of any construction. The intent of performing potholing and field verification of underground utilities well in advance of any relocation, protection or modification of utilities is to preclude any delays or disruption arising from utility relocation and allow for redesign and reissuance of plans and related Contract Documents. Accordingly, any failure on the Contractor's part to perform the potholing and field verification of utilities within the time frames listed above shall be sufficient cause to reject any claims by the Contractor for delays associated with utility relocations.

3.3 CONTRACTOR FIELD WORK REQUIREMENTS

- A. The Contractor shall provide personnel, equipment, temporary facilities, construction materials, tools, and supplies at the Work site at the time they are scheduled to be required for general utility location and protection requirements subject to the following requirements:
 - 1. The Contractor shall pothole and physically locate all utilities under Traffic/Pedestrian gate footing or within 2 feet of Traffic/Pedestrian gate footing.

2. The Contractor shall comply with Project permits and Environmental Documents and Permits.
 3. The Contractor shall notify the Gas Utility when excavating within 5 feet of any natural gas pipeline and schedule Utility personnel if required. The Contractor to hand-dig within 5 feet of any natural pipeline. All work within the SoCalGas easement(s) and/or within 10 feet of the pipeline(s) must be witnessed by a SoCalGas representative, and no work will be allowed without the SoCalGas representative on site.
 4. The Contractor shall notify the Utility providing electrical service when excavating within 5 feet of any energized electric facilities and schedule utility personnel as required. The Contractor to hand-dig within 5 feet of any energized electric facilities.
 5. The Contractor shall hand-dig within 3 feet of any telephone, cable television or fiber optic facilities.
 6. Contractor is to comply with all requirements by Utility which may be more stringent than described herein.
- B. Utilities and pipelines, unless otherwise indicated, shall be in operation during the construction work. The safe and proper handling of the utilities and pipelines is the responsibility of the Contractor. The Contractor shall be liable for any injuries, line breakage, damage to the line and damage to property. In addition, Contractor shall be responsible for and shall reimburse Authority or owner of the utility, or pipeline for all damages during construction and for any product (gas, oil or service) lost there from. Precautions must be taken to contain any possible oil spills. Any spillage of gas or oils shall be contained and if the material is not contained and causes damages or gets into natural drainage courses, the Contractor shall be solely responsible. Failure to respond within a reasonable time frame (herein defined as a maximum of four hours or sooner for emergencies as determined by the Authority or the Utility) will constitute cause for Authority to restore such utility damages and to deduct all costs of restoration from the next Progress Payment to the Contractor.
- C. At NTP or the project kick-off meeting, the Authority shall provide contact numbers for all entities to be contacted in case of emergency including signal and grade crossing problems and signal and communications cable locations. This will include the Authority Chief Dispatcher and the Metrolink Sheriff's Dispatcher. The Contractor shall ensure that Work Site personnel have immediate access to these contact numbers.

PART 4 - MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 14 19

EXHIBIT 1**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: City of Anaheim DPW – Jack & Bore Water Line Casing**Contact Person:** Robert Hoang, Project Manager, City of Anaheim Public Utilities Department**Address:** 201 S. Anaheim Blvd, Anaheim, CA 92805**Phone:** (714) 765-4229**Email:** RHoang@anaheim.net

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: City of AnaheimCity of AnaheimConstruction by: City of AnaheimCity of AnaheimInspection by: City of AnaheimCity of Anaheim☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES:

EXHIBIT 2**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: City of Anaheim DPW – Sewer Casing Extension**Contact Person:** Robert Hoang, Project Manager, City of Anaheim Public Utilities Department**Address:** 201 S. Anaheim Blvd, Anaheim, CA 92805**Phone:** (714) 765-4229**Email:** RHoang@anaheim.net

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: OCTAOCTA (reimbursed by City)Construction by: ContractorOCTA (reimbursed by City)Inspection by: City of AnaheimCity of Anaheim☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES: Design and construction funded by the City under the current agreement with OCTA

Contractor to perform construction of improvements and associated coordination as detailed in the Constrat documents and these specifications.

EXHIBIT 3**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 01 14 19

CONTACTS AND RESPONSIBILITIES

Name of Utility: City of Anaheim DPW – Relocate Water Lines**Contact Person:** Robert Hoang, Project Manager, City of Anaheim Public Utilities Department**Address:** 201 S. Anaheim Blvd, Anaheim, CA 92805**Phone:** (714) 765-4229**Email:** RHoang@anaheim.net

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: City of AnaheimCity of AnaheimConstruction by: City of AnaheimCity of AnaheimInspection by: City of AnaheimCity of Anaheim☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES: Excluding Jack & Bore Casings to be constructed by Contractor

EXHIBIT 4**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 01 14 19

CONTACTS AND RESPONSIBILITIES

Name of Utility: Southern California Edison (SCE) - Pole Relocation/Modifications**Contact Person:** Jennifer Ward, Project Manager, Southern California Edison**Address:** 1444 E McFadden Ave, Santa Ana, CA, 92711**Phone:** (714) 973-5418**Email:** jennifer.ward@sce.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: SCESCEConstruction by: SCESCEInspection by: SCESCE☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES:

EXHIBIT 4**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 01 14 19

CONTACTS AND RESPONSIBILITIES

Name of Utility: Southern California Edison (SCE) - Pole Relocation/Modifications**Contact Person:** Jennifer Ward, Project Manager, Southern California Edison**Address:** 1444 E McFadden Ave, Santa Ana, CA, 92711**Phone:** (714) 973-5418**Email:** jennifer.ward@sce.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: SCESCEConstruction by: SCESCEInspection by: SCESCE☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES:

EXHIBIT 5**PROJECT UTILITY RESPONSIBILITIES**

UTILITY RELOCATIONS/REARRANGEMENT

REFERENCE SPECIFICATION SECTION: 01 14 19

CONTACTS AND RESPONSIBILITIES

Name of Utility: Southern California Gas Co.**Contact Person:** Manuel Yep**Address:** 1919 S. State College Blvd., Anaheim, CA 92806**Phone:** (714) 634-3183**Email:** MYep@semptrautilities.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: The Gas Co.The Gas Co.Construction by: The Gas Co.The Gas Co.Inspection by: The Gas Co.The Gas Co.☐ Yes ☒ No Third Party Coordination and paid by: OCTA

NOTES:

SECTION 01 22 00 UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

This Section includes administrative and procedural requirements for Unit Prices. Unit Prices are amounts stated on the Schedule of Quantities and Prices that represent full compensation for furnishing all necessary labor, materials, tools, equipment and ancillary services necessary to complete all the Work covered by each item as required in the Contract documents.

1.2 RELATED REQUIREMENTS

- A. Section 01 21 00, Allowances
- B. Section 01 22 05, Lump-Sum Prices

1.3 PROCEDURES

- A. Unit prices include all necessary submittals, shop drawings, materials, labor, delivery or shipping charges, unloading or handling, insurance, installation costs, profit, all applicable taxes, and other direct and indirect expenses. Where Unit Price items require related Work specified in other sections of the Contract Specifications, but which is not specifically mentioned in the Unit Price description, the Contractor shall be responsible for and include all related work that is normally required for Work similar to the Unit Price item. Detailed descriptions and other provisions concerning Unit Price items are contained in other sections of the Plans and Specifications.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of Unit Prices. Methods of measurement and payment for Unit Prices are specified in those Sections.
- C. The Authority reserves the right to reject the Contractor's measurement of work-in-place that involves use of established Unit Prices, and to have this work measured by the Authority or an independent surveyor acceptable to the Contractor. If the Contractor's measurement is determined to be inaccurate, the Contractor shall bear the cost of this Authority quantity survey. If the Contractor's measurement is confirmed as accurate, the Authority shall bear the cost of the quantity survey.
- D. Specification Sections referenced in the Schedule of Quantities and Prices for each Unit Price describe requirements for materials, installation, and quality.

PART 2 - PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 22 00

SECTION 01 22 05 LUMP SUM PRICES

PART 1 - GENERAL

1.1 SUMMARY

This Section includes administrative and procedural requirements for lump sum prices which are amount(s) proposed by the Contractor and stated on the Schedule of Quantities and Prices for contracted amounts for materials, products, and operations to be provided in the envisioned scope of the Work. Lump sum prices include all necessary materials, labor, delivery or shipping charges, unloading or handling, installation costs, profit, all applicable taxes, and other direct and indirect costs.

1.2 RELATED REQUIREMENTS

- A. Section 01 22 00, Unit Prices
- B. Section 01 23 00, Options

1.3 PROCEDURES

Contractor performance of Work for which Contract lump sum payments will be made shall be listed in the approved Schedule of Values. Payment for each lump sum item provides full compensation for furnishing the labor, materials, tools, and equipment, and for performing all of the Work involved to complete the Work covered by each item and included in the Contract Documents.

Where lump sum price items require related Work specified in other Sections of the Contract Specifications, but which is not specifically mentioned in the lump sum price description, the Contractor shall be responsible for and include all related Work that is normally required for work of a similar nature to the item.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 22 05

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SECTION 01 24 13
VALUE ENGINEERING CHANGE PROPOSALS (VECP)

PART 1 – GENERAL

1.1 SUMMARY

This Section includes administrative and procedural requirements for Value Engineering Change Proposals (VECPs) by the Contractor. The Authority encourages the Contractor to submit VECPs whenever the Contractor identifies areas or instances in which improvements can be made, in order to achieve Project cost savings.

1.2 VECP REQUESTS

- A. This Section applies to the Contractor-developed and documented VECP that
 - 1. Requires a change to the Contract.
 - 2. Reduces the total Contract Price without impairing essential functions or characteristics of the Work, providing that it is not based solely on a Change in specified quantities.
 - 3. Results in an estimated total saving to the Authority equal or greater than \$1,000.
- B. At a minimum, the following information shall be submitted by the Contractor with each VECP:
 - 1. Description of the existing Contract requirements that are involved in the proposed Change.
 - 2. Description of the proposed Change, and all Specifications or Plans necessary for the complete evaluation of the proposed Change.
 - 3. Discussion of differences between existing requirements and the proposed change, together with advantages and disadvantages of each changed item.
 - 4. Itemization of the Contract requirements that must be changed if the VECP is accepted (e.g., drawing numbers and specifications).
 - 5. Justification for changes in function or characteristics of each affected item, and the effect of the Change on the performance of the end item.
 - 6. Date by which a Change Order adopting the VECP must be issued in order to obtain the maximum cost reduction, noting any effect on Contract completion time or delivery schedule.
 - 7. Cost estimate for existing Contract requirements correlated to the Contractor's Unit Price or lump-sum breakdown and the proposed changes

in those requirements, including costs of development and implementation by the Contractor.

- C. The Contractor shall submit VECPs to the Authority. The Authority will process proposals expeditiously, but shall not be liable for any delay in acting upon any proposal submitted pursuant to this Section. The Contractor may withdraw all or part of any VECP at any time prior to acceptance by the Authority, but will, at the sole discretion of the Authority, be liable for costs incurred by the Authority in reviewing the proposal. The decision of the Authority as to the rejection or acceptance of any VECP shall be at the sole discretion of the Authority.
- D. At its sole discretion, the Authority may accept, in whole or in part and by Change Order, any VECP submitted pursuant to this Section. Designs for accepted VECPs will be accepted by the Authority for incorporation into the drawings and specifications. Until a Change Order is executed authorizing the VECP, the Contractor shall remain obligated to perform in accordance with the Contract.
- E. If a VECP submitted by the Contractor pursuant to this Section is accepted, the Total Contract Price shall be adjusted based upon an equal sharing of the net savings by the Contractor and the Authority (50% Authority, 50% Contractor).
 - 1. Net savings are defined as gross savings less the Contractor's costs and less the Authority's costs.
 - 2. Estimated gross savings to the Contractor means the difference between the cost of performing the Work according to the existing requirement and the cost to perform the Work according to the proposed Change. In each instance, the Contractor's profit shall not be considered part of the cost
 - 3. The Contractor's costs means reasonable costs incurred by the Contractor in preparing the VECP and making the Change, such as cancellation or restocking charges.
 - 4. The Authority's costs means reasonable costs incurred by the Authority for evaluating and implementing the VECP, such as testing, redesign, and the effect on other contracts.
 - 5. The Contractor is not entitled to share in concurrent, collateral, or future contract savings. Collateral savings are those measurable net reductions in the Authority's costs of operation that result from the VECP, including maintenance, logistics, and Authority furnished property. Concurrent contract savings cover the reductions in the cost of performance of other contracts the Contractor is participating in, for essentially the same item resulting from a VECP submitted by the Contractor.
 - 6. The Contractor's profit shall not be reduced by application of the VECP.
- F. The Contractor shall include appropriate VECP provisions in all Subcontracts of \$25,000 or greater, and may include those provisions in any subcontract.

- G. Within the limits stated in the Contract, the Contractor may restrict the Authority's right to use any part of a VECP or the supporting data thereof in accordance with the terms of the following:
1. Data supplied pursuant to the Section entitled VALUE ENGINEERING CHANGE PROPOSALS (VECP) in this Contract shall not be disclosed to any outside person or agency, or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a VECP submitted under said Section.
 2. This restriction does not limit the Authority's right to use information contained in this VECP if it is or has been obtained, or is otherwise available, from the Contractor or from another source without limitations.
 3. If a VECP is accepted by the Authority after the use of the data in an evaluation, the Authority may duplicate, use, or disclose any data reasonably necessary to the full utilization of the VECP, as accepted, in any manner and for any purpose whatsoever; the Authority may allow others to do so as well.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 24 13

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SECTION 01 25 00 SUBSTITUTION PROCEDURES

PART 1 -GENERAL

1.1 SUMMARY

This Section includes administrative and procedural requirements for substitutions which are the Contractor proposed changes in products, materials, equipment, and methods of construction from those required by the Contract Documents after Contract Award.

1.2 RELATED REQUIREMENTS

- A. Section 01 23 00, Options
- B. Section 01 33 00, Submittal Procedures
- C. Section 01 40 00, Quality requirements
- D. Section 01 60 00, Product Requirements

1.3 SUBSTITUTION FOR SPECIFIED PRODUCTS

The Contract Documents, including Contract Drawings, and Specifications have been prepared to complement and accommodate certain specified equipment, products or systems, and any modifications, adjustments, or redesign required to assimilate any Authority approved substitution of "or equal" (and "or substantially equivalent") equipment, products, or systems shall be at the Contractor's sole expense. The Contractor shall provide a complete and workable application and shall satisfy design criteria and aesthetic values to the sole satisfaction of the Authority. The Contract Time for completion of the Work specified in the Contract Documents shall not be affected by any circumstances whatsoever arising from the provisions of this Specification.

1.4 EQUALS

Except as may be provided in the Special Conditions, or stated otherwise in the various sections of the Specifications, whenever any material, product, thing, or service is specified or indicated in the Contract Documents by brand, trade, patent, or proprietary name or by the name of the manufacturer, the item so specified or indicated shall be deemed to be followed by the words "or equal."

If the Contractor submits an "or equal" item, the Contractor must submit sufficient data to the Authority to substantiate the specific characteristics and qualities that make the "or equal" item the equivalent, as described in the paragraph below. The Contractor shall furnish such substantiating data or arrange for any necessary tests to verify the equivalent qualities of the "or equal" item at the Contractor's sole expense.

The Authority, in its sole discretion, shall determine whether the substantiating data demonstrates that an “or equal” item is equivalent in all respects to the item specified in the Contract Documents. If the Authority determines that the “or equal” item has not been substantiated to be equivalent in all respects, the item specified in the Contract Documents shall be furnished and installed by the Contractor, without modification of the cost proposal amount or Contract Documents.

1.5 SUBSTITUTION REQUESTS

- A. The Contractor shall submit four copies of each request for consideration identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Contract Drawing numbers and titles. Indicate type of substitution:
1. Substitutions for Cause: Changes proposed by the Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 2. Substitutions Required Because of Federal Government Restrictions: Changes proposed by the Contractor that result from Federal Government restrictions or other causes growing out of the national defense or war programs.
 3. Substitutions for Lack of Availability: Changes proposed by the Contractor because certain materials or equipment specified are entirely unobtainable or not obtainable in sufficient quantities or within a reasonable time.
 4. Substitutions for Convenience: Changes proposed by the Contractor or the Authority that are not required in order to meet other Project requirements, but may offer advantage to the Contractor or the Authority.
- B. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
1. A statement indicating why the specified product or fabrication or installation cannot be provided, if applicable.
 2. Coordination information including a list of changes or revisions needed to other parts of the Work and to construction performed by the Authority and separate Contractors—that will be necessary to accommodate the proposed substitution.
 3. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Include an annotated copy of the applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 4. Product data, including drawings and descriptions of products and fabrication and installation procedures.

5. Samples, where applicable or requested.
 6. Certificates and qualification data, where applicable or requested.
 7. A list of similar installations for completed projects, with project names and addresses and the names and addresses of pertinent Engineers and Authorities.
 8. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
 9. Research reports demonstrating compliance with building codes in effect for the Project, from recognized testing laboratories or agencies, technical trade associations, and code authorities.
 10. A detailed comparison of the Contractor's construction schedule using the proposed substitution with products specified for the Work, including the effect on the overall Contract Time. If the specified product or method of construction cannot be provided within the Contract Time, include a letter from the manufacturer, on the manufacturer's letterhead, stating the date of receipt of the purchase order and attesting to the lack of availability or delays in delivery.
 11. Cost information, including a proposal of change (if any) in the Contract Price.
 12. The Contractor's certification that the proposed substitution complies with requirements in the Contract Documents, except as indicated in the substitution request; is compatible with related materials; and is appropriate for the indicated applications.
 13. The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of any failure of the proposed substitution to produce indicated results.
- C. Authority's Action: If necessary, the Authority will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. The Authority will notify the Contractor of acceptance or rejection of a proposed substitution within 14 days of receipt of request, or within seven days of receipt of additional information or documentation (whichever is later).
1. Forms of Acceptance: Change Order, Construction Change Directive, or Engineer's Supplemental Instructions for minor changes in the Work.
 2. Use the product specified if the Authority does not issue a decision on use of a proposed substitution within the time allocated.

PART 2 - PRODUCTS**2.1 SUBSTITUTIONS**

- A. Substitutions for Cause, Federal Government Restrictions or due to Lack of Availability: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to the time required for preparation and review of related submittals.

The Authority will consider the Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, the Authority will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution is consistent with the Contract Documents and will produce the indicated results.
2. Requested substitution provides sustainable design characteristics that specified product provided.
3. Substitution request is fully documented and properly submitted.
4. Requested substitution will not adversely affect the Contractor's construction schedule.
5. Requested substitution has received necessary approvals of authorities having jurisdiction.
6. Requested substitution is compatible with other portions of the Work.
7. Requested substitution has been coordinated with other portions of the Work.
8. Requested substitution provides the specified warranty.
9. If the requested substitution involves more than one Contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all Contractors involved.

- B. Substitutions for Convenience: The Authority will consider requests for substitution if received within 45 days after the Notice of Award. Requests received after that time may be considered or rejected at the discretion of the Authority. The Authority will consider the Contractor's request for substitution when the conditions below are satisfied. If the following conditions are not satisfied, Authority will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Authority a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Authority must assume. The Authority's additional responsibilities may include compensation to the Authority for

redesign and evaluation services, increased cost of other construction by the Authority, and similar considerations.

2. Requested substitution does not require extensive revisions to the Contract Documents.
3. Requested substitution is consistent with the Contract Documents and will produce the indicated results.
4. Requested substitution provides sustainable design characteristics that the specified product provided.
5. Substitution request is fully documented and properly submitted.
6. Requested substitution will not adversely affect the Contractor's construction schedule.
7. Requested substitution has received necessary approvals of authorities having jurisdiction.
8. Requested substitution is compatible with other portions of the Work.
9. Requested substitution has been coordinated with other portions of the Work.
10. Requested substitution provides the specified warranty.
11. If requested substitution involves more than one Contractor, the requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all Contractors involved.

PART 3 - EXECUTION (Not used)

PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION 01 25 00