



**METROLINK**



## **SCRRRA FORM 37**

# **RULES AND REQUIREMENTS FOR CONSTRUCTION ON SCRRRA RIGHT-OF-WAY**

**January 2017**

**TABLE OF CONTENT**

**1.0 GENERAL ..... 1**

    1.1 Purpose ..... 1

    1.2 Definitions ..... 1

    1.3 Acronyms ..... 2

    1.4 General Requirements of the Contractor ..... 3

    1.5 Submittals ..... 4

    1.6 Reimbursement of Costs and Expenditures ..... 8

**2.0 SCRRA SAFETY SERVICES ..... 8**

    2.1 SCRRA Employee-In-Charge (EIC) ..... 8

    2.2 Right to Challenge Sufficiency on On-Track Safety ..... 9

    2.3 Work Requiring Protection of Track and Operations ..... 9

**3.0 CONTRACTOR SAFETY REQUIREMENTS ..... 10**

    3.1 Contractor General Safety Requirements ..... 10

    3.2 Personnel Protective Equipment ..... 12

    3.3 Maintenance of Work Area ..... 13

    3.4 General Precautions When Working Near Electrical Conductors ..... 13

    3.5 Safety Training and Communication ..... 14

    3.6 Emergency Response and Accident Reporting ..... 15

**4.0 TRACK OCCUPANCY AND WORK WINDOWS ..... 16**

    4.1 Description of Location and Traffic ..... 16

    4.2 Coordination with Rail Traffic ..... 17

    4.3 Work Windows and Track Access ..... 17

    4.4 Requesting Work Windows ..... 19

    4.5 Project Specific Work Windows ..... 21

    4.6 Extraordinary Work ..... 21

    4.7 Track Back In Service ..... 22

    4.8 SCRRA Service Impacts and Damages ..... 22

**5.0 CONSTRUCTION ..... 23**

    5.1 Demolition and Removal ..... 23

    5.2 Storage of Materials and Equipment ..... 24

    5.3 Excavation and Backfill ..... 25

    5.4 Shoring and Support of Excavation ..... 26

    5.5 Drilling and Pile Driving ..... 27

    5.6 Boring and Jacking ..... 27

    5.7 Temporary Structures ..... 28

    5.8 Hoisting Operations ..... 28

    5.9 Clearances ..... 30

    5.10 Temporary Vehicular Traffic Control ..... 31

    5.11 Performance Bond ..... 32

Rules and Requirements for Construction on SCRRA Right-of-Way

**6.0 UTILITIES..... 32**

6.1 Protection of Underground Facilities ..... 32

**7.0 HAZARDOUS AND CONTAMINATED MATERIALS ..... 34**

7.1 Discharge ..... 34

7.2 Notification, Control and Disposal ..... 34

**8.0 INSPECTION AND OBSERVATION..... 34**

8.1 Site Inspections by SCRRA and Others..... 34

8.2 SCRRA Efficiency Testing ..... 35

8.3 Scope of Inspections and Observations..... 35

**9.0 CLEANING AND RESTORATION ..... 35**

9.1 Cleaning of Right-of-Way..... 35

**EXHIBITS**

Exhibit A Site Specific Work Plan (SSWP) - Scope of SSWP..... 36

Exhibit B Site Specific Work Plan (SSWP) Checklist ..... 38

Exhibit C Construction Submittal Checklist..... 42

Exhibit D Sample Site Specific Work Window ..... 43

Rules and Requirements for Construction on SCRRRA Right-of-Way

**1.0 GENERAL**

**1.1 Purpose**

- A. The rules and requirements are adopted to protect the Southern California Regional Rail Authority’s (SCRRRA) operations, including the proper manner of protecting the tracks, signals, fiber optic cables, pipe lines, other Right-of-Way, and tenants or licensees upon, adjacent to, across (under, and/or over), and along SCRRRA and Member Agency Right-of-Way during the construction and/or maintenance activities on or adjacent to the Right-of-Way.
- B. The information in this document is intended to improve communication and cooperation on construction and improvement projects that may involve the railroad Right-of-Way. The goal of SCRRRA is the facilitation of a safe work environment for its employees, Contractor’s employees, and for the public.
- C. SCRRRA must give careful consideration to anything that could adversely affect customer service, funding shortfalls for the services provided by SCRRRA for use of railroad Right-of-Way, and risk to railroad operation.

**1.2 Definitions**

Contractor	Contractor is an individual, firm, third party, partnership or corporation, or combination thereof, private, municipal or public, including joint ventures, retained by SCRRRA or another public entity to provide construction or maintenance services which may impact Right-of-Way and who is referred to throughout this document by singular number and masculine gender.
Member Agency	The county transportation agency whose property is directly affected by the Project. SCRRRA Member Agencies include: the Los Angeles Metropolitan Transportation Authority (METRO), the Orange County Transportation Authority (OCTA), the Riverside County Transportation Commission (RCTC), the San Bernardino Associated Governments (SANBAG) and the Ventura County Transportation Commission (VCTC).
Operating Envelope	An imaginary line, measured 20 feet horizontally from the rail on the track on which trains or “on-track” equipment operate or may potentially operate. The Operating Envelope also includes the width and length of any active station platform. This imaginary pair of lines, which define the outside boundaries of the Operating Envelope, extend vertically up and down infinitely.
Operating System	Includes but is not limited to the tracks on which trains and on-track equipment operate or may potentially operate, and in addition any facilities closely related to the operation of the railroad system including signal and communication masts, bridges, poles, cables, and houses, track bridges, tunnels, culverts, grade crossings and station platforms.”

Rules and Requirements for Construction on SCRRRA Right-of-Way

Project	The work (products, materials, facilities and improvements as required by the contract) to be performed pursuant to the contract documents.
Public Agency	Public Agency is defined to mean (i) the federal government and any agencies, departments or subdivisions thereof, and (ii) the State of California or any other state, and any Public Agency, city, city and Public Agency, district, public authority, Public Agency, joint powers, municipal corporation, or any other political subdivision or public corporation therein.
Right-of-Way	Right-of-Way is defined herein to mean the real and/or personal property of SCRRRA or Member Agency(s).
SCRRRA	Southern California Regional Rail Authority (SCRRRA) is a five-county joint powers authority, created pursuant to California Public Utilities Code Section 130255 and California Government Code Sections 6500 et seq., to build and operate the “METROLINK” commuter train system. The five-county member agencies are: Los Angeles County Metropolitan Transportation Authority (“METRO”), Ventura County Transportation Commission, Orange County Transportation Authority, San Bernardino Associated Governments, and Riverside County Transportation Commission. SCRRRA builds, operates and maintains a commuter rail system in the five-county area on rail rights-of-way owned by the member agencies.
SSWP	Site Specific Work Plan (SSWP) is a program, plan, and schedule prepared and submitted by the Contractor and approved by SCRRRA that accurately describes and illustrates the manner in which work within the Right-of-Way will be accomplished; the impacts on any elements of the Right-of-Way, SCRRRA operations, SCRRRA facilities; and the manner in which work will be accomplished with SCRRRA allotted work windows.

**1.3 Acronyms**

The following acronyms are used in this document:

AASHTO	American Association of State Highway and Transportation Officials
ANSI	American National Standards Institute
	American Public Works Association
AREMA	American Railway Engineering and Maintenance of Way Association
ASTM	American Society for Testing and Materials
BNSF	Burlington Northern & Santa Fe Railway
Caltrans	California Department of Transportation

Rules and Requirements for Construction on SCRRRA Right-of-Way

CPUC	California Public Utilities Commission
DOC	Dispatch and Operations Center
EIC	Employee-In-Charge
FRA	Federal Railway Administration
METRO	Los Angeles County Metropolitan Transportation Authority
MUTCD	Manual of Uniform Traffic Control Devices
OCTA	Orange County Transportation Authority
OSHA	Occupational Safety and Health Administration
PPE	Personnel Protective Equipment
PTC	Positive Train Control
RCTC	Riverside County Transportation Commission
SANBAG	San Bernardino Associated Governments
SCRRRA	Southern California Regional Rail Authority
SSWP	Site Specific Work Plan
UPRR	Union Pacific Railroad
VCTC	Ventura County Transportation Commission
WATCH	Work Area Traffic Control Handbook

**1.4 General Requirements of the Contractor**

- A. All railroad tracks within and adjacent to the Project site are to be assumed active and rail traffic over these tracks must be maintained throughout the Project. Rail traffic may include both through trains and switching moves to local customers. SCRRRA and other railroad traffic and operations can occur continuously throughout the day and night on these tracks and may not be interrupted except as approved by SCRRRA and the other operating railroads using the tracks. The Contractor shall coordinate and schedule the work so that construction activities do not interfere with rail operations.
  
- B. The Contractor, and its sub-contractors of any tier (collectively referred to as the Contractor), must coordinate its work with SCRRRA during construction of the Project when any of the following conditions are present:
  - 1. Where work is performed on the Right-of-Way of SCRRRA;
  - 2. When the work is over or under or adjacent to the tracks of SCRRRA;
  - 3. When excavations are performed within 30-feet of the centerline of the nearest track; or
  - 4. When the work has the potential to foul (obstruct) any track or reduce any clearance below the allowable minimum.
  
- C. The Contractor may not move, relocate, remove, obstruct, or otherwise interfere with any railroad tracks, signals, cables, signs, flags, or other railroad facilities, or any service or connection to any railroad facility. All work on SCRRRA tracks, signals, communication equipment, and other railroad facilities must be performed by SCRRRA.
  
- D. The Contractor's ability to enter Right-of-Way is subject to the absolute right of



## Rules and Requirements for Construction on SCRRA Right-of-Way

SCRRA to cause the Contractor's work on Right-of-Way to cease if, in the sole opinion of SCRRA, the Contractor's activities create a hazard to Right-of-Way, or SCRRA employees, or SCRRA operations, or any combination thereof.

- E. The Contractor shall inform itself of the expected train movements over the tracks in the vicinity of the work prior to developing its plans for any portion of the work. The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains.
- F. The Contractor shall obtain permission in writing from 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.
- G. The Contractor shall perform no work on Right-of-Way until all its employees, including sub-contractors of any tier, have attended and passed the safety orientation class described in SCRRA Form 6, "Temporary Right-of-Entry Agreement".
- H. The Contractor shall adequately supervise all work performed by its employees and Subcontractors. Subcontractors of any tier, suppliers, owner-operators, and invitees of the Contractor are not recognized as such by SCRRA and are to be considered as employees of the Contractor for the purpose of carrying out the Contractor's obligations while working on, over, or adjacent to Right-of-Way.

## 1.5 Submittals

- A. Whenever work is performed within the vicinity of Right-of-Way, or when work may affect the operation or safety of trains, or for temporary or short-term uses of Right-of-Way, appropriate right-of-entry agreements and the method of performing the work shall first be submitted to SCRRA Representative for approval. SCRRA Form No. 4, "Agreement for Moving Oversized Loads Over Highway-Rail Grade Crossings" for the movement of oversize vehicles over the crossings; SCRRA Form No. 5, "Indemnification and Assumption of Liability Agreement" for temporary uses of rights of way (such as surveying activities and shallow geotechnical investigations); and SCRRA Form No. 6, "Temporary Right-of-Entry Agreement" for projects involving construction shall be submitted to SCRRA for review and approval.
- B. SSWP:
  - 1. All work with the potential to impede the normal functioning of any part of the Operating System shall include a detailed SSWP's 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

## Rules and Requirements for Construction on SCRRA Right-of-Way

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.

2. The Contractor shall refer to SCRRA's Site Specific Work Plan Scope of SSWP (Exhibit A) prior to submitting SSWP. The Contractor shall submit SCRRA's SSWP Checklist (Exhibit B).
3. The SSWP shall include at minimum the information specified below.
  - a. The SSWP shall include scope, brief schedule, location, equipments, 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, and temporary traffic control plan.
  - b. 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.
  - c. A description of any proposed changes in the Operating System between start and finish of the work, including any requested Work Windows.
  - d. 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 SCRRA allotted time period. The Contractor shall identify on the schedule all SCRRA furnished labor, equipment and materials.
  - e. 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.
  - f. 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.
  - g. Plans showing all the existing underground and overhead utilities, including SCRRA's signal and communications cables when the excavation, boring and jacking, and drilling & pile driving work is within twenty feet of railroad tracks. The plans will show the actual locations of utilities based on potholing operation.



## Rules and Requirements for Construction on SCRRA Right-of-Way

4. The SSWPs must be of sufficient detail, clarity, and organization to permit easy review and approval by 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 SCRRA as follows:
    - a. At least 14 calendar days prior to start of the work within the Operating Envelope for work other than signal or third-party activity.
    - b. At least 30 calendar days prior to the start of work for work involving signal or third-party installation.
  5. SCRRA 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 that can be reviewed and approved by SCRRA at least seven days in advance of any work that affects the Operating System.
  6. 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 SCRRA the readiness of the Contractor to perform the work. At this time, SCRRA will make a final decision as to whether or not the Work is to proceed as planned or be canceled.
- C. The Contractor shall provide a detailed construction schedule to SCRRA for review and approval prior to commencement of work within or adjacent to the Right-of-Way. The Contractor shall use activity codes to identify specific activities that involve work within or adjacent to Right-of-Way. Activities that involve working within reduced clearances must also be identified by a unique activity code. This schedule shall be updated for all critical events as necessary but not less than monthly so that site visits may be scheduled at the appropriate times. A copy of each schedule update shall be furnished to SCRRA. The Contractor shall also furnish SCRRA, at the beginning of each week, with a look-ahead schedule projecting the Contractor's activities for three weeks in advance of the week in which the look-ahead schedule is issued.
- D. For major construction projects, the Contractor shall submit, as soon as possible, but no later than 20 working days after a Notice to Proceed (NTP) with any portion of the work, for SCRRA's review and approval, a document control plan. The document control plan shall describe and illustrate the process (including roles, responsibilities, and contact information) by which the firms and individuals responsible for submitting, reviewing, and approving all submittals from the Contractor to the local agency, will manage the flow of submittals and

## Rules and Requirements for Construction on SCRRRA Right-of-Way

information. The document control plan must also include a master list of submittals. A preliminary list of submittal is included in Exhibit C. The Contractor shall also submit, not later than 20 working days after the NTP, a testing and inspection plan that identifies the tests and inspections required, the point during construction at which each test or inspection is to be performed, and the entity responsible for performing each test or inspection on both temporary and permanent work.

- E. Construction submittals requiring SCRRRA approval, and Requests for Information (RFI) requiring a reply from SCRRRA, must be forwarded to the Public Agency who in turn will forward to SCRRRA Representative. Unless waived by SCRRRA, all submittals made to SCRRRA must bear an approval stamp indicating the acceptance of the submittal by the Public Agency, and include a statement that the submittal conforms to the requirement and standards of SCRRRA included with the Contract. Where required by SCRRRA rules, standards, guidelines, and other requirements, the Contractor shall submit plans, calculations and other documents prepared under the direction of a Registered Professional Engineer licensed to practice in California.
- F. The Contractor shall submit general insurance and railroad protective insurance certificates to SCRRRA as a part of SCRRRA Form No. 6, "Temporary Right-of-Entry Agreement". The Contractor shall maintain all insurance in full force during the time that its work is performed on or adjacent to Right-of-Way. SCRRRA forms, manuals and guidelines are available on its website [www.metrolinktrains.com](http://www.metrolinktrains.com) (About Us, Engineering and Construction).
- G. No work shall take place within Right-of-Way until appropriate right-of-entry agreement, SSWP, schedule, and document control plan have been reviewed and approved by SCRRRA. If a change occurs in the process, involvement of firm, or individuals named in the document control and SSWP, the Contractor shall immediately revise the document control and SSWP and submit the changes for approval.
- H. SCRRRA shall be allowed 20 working days for review of all submittals. Upon written approval by the Public Agency, the Contractor may make the submittals directly to SCRRRA Representative and the Public Agency simultaneously. However, SCRRRA will not approve any submittal for which the approval of Public Agency is required until the Public Agency has first reviewed and approved the Contractor's submittal.
- I. SCRRRA's review and approval of the Public Agency's or the Contractor's plans in no way relieves the Public Agency and Contractor from their responsibilities, obligations or liabilities under the Contract between the Public Agency and the Contractor, or SCRRRA Form 6, "Temporary Right-of-Entry Agreement". SCRRRA's review and approval will be given with the understanding that SCRRRA makes no representations or warranty as to the validity, accuracy, legal compliance or completeness of the designs prepared by Public Agency or the Contractor, and that any reliance by the Public Agency or the Contractor with respect to such designs is at the risk of the Public Agency and the Contractor.

## Rules and Requirements for Construction on SCRRA Right-of-Way

**1.6 Reimbursement of Costs and Expenditures**

- A. The Contractor agrees to reimburse SCRRA or any Member Agency and/or any Operating Railroad for all cost and expense incurred by SCRRA or Member Agency in connection with work and safety services, including without limitation the expense of engineering plan review, administrative costs to process approvals and agreements, annual overhead rates, safety training, utility markings, and SCRRA EIC and protective services as SCRRA deems necessary. The Plan review, administrative, safety training, and utility marking costs and fees paid to SCRRA as a part of the Right-of-Entry are not refundable.
- B. The cost of SCRRA provided services are shown SCRRA's Schedule of Fees. This table is available on SCRRA's website. The direct link to the Schedule of Fees is as shown below.

[http://www.metrolinktrains.com/pdfs/EngineeringConstruction/SCRRA\\_ROE\\_Schedule\\_of\\_Fees\\_08.10.16.pdf](http://www.metrolinktrains.com/pdfs/EngineeringConstruction/SCRRA_ROE_Schedule_of_Fees_08.10.16.pdf)

- C. SCRRA will provide the cost of all SCRRA services based on Contractor's input. Prior to commencement of work, the Contractor shall provide deposit representing the estimated expense to be incurred by SCRRA and Member Agency in connection with said work. As the work progresses, SCRRA may require additional progress payments as the scope of work changes or becomes clearer. SCRRA may discontinue services to Contractor pending receipt of progress payments. The deposit and progress payments shall be applied to SCRRA's and Member Agency's actual costs and expenditures. The Contractor shall be responsible to pay any amount exceeding the above payments upon receipt of notice or invoice by SCRRA.

**2.0 SCRRA SAFETY SERVICES****2.1 SCRRA Employee-In-Charge (EIC)**

- A. Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by the Contractor within or adjacent to the Right-of-Way of SCRRA must be in compliance with this Form 37 and the requirements of SCRRA Form 6, "Temporary Right-of-Entry Agreement".
- B. SCRRA Employee-in-Charge (EIC) is responsible for on-track safety anytime that work is underway on or adjacent to the track. Services of an EIC will be provided by SCRRA using railroad personnel trained and qualified under the rules of the Federal Railroad Administration and qualified to work on SCRRA Subdivision on which they will be providing services. All persons acting as an EIC will be furnished through SCRRA. Personnel of the Contractor may not provide an EIC or perform flagging or other protective services for railroad operations. No work may begin until the EIC is present at the work site and proper protection has been provided.
- C. The EIC will provide job briefings and safety protection to assure the contractor a

## Rules and Requirements for Construction on SCRRRA Right-of-Way

safe work environment and the safe passage of trains. The EIC will conduct job briefings at the start of every work shift and every change of conditions affecting roadway worker safety during a work shift. The EIC has the authority to temporarily or permanently halt work or to temporarily or permanently remove employees of the Contractor from the Right-of-Way in order to assure the work is conducted safely. The Contractors' employees must comply immediately with all instructions of the EIC involving work within or affecting the Right-of-Way of SCRRRA.

**2.2 Right to Challenge Sufficiency on On-Track Safety**

- A. The employees of the Contractor may, during the job briefing process, request clarification of the protection against trains being provided by the EIC. If an employee of the Contractor does not believe that the protection against trains is sufficient, the employee may at any time, in good faith, challenge the form of protection established by the EIC and must remain clear of all tracks until the challenge is resolved. Federal regulations and SCRRRA rules require that the EIC, Contractor supervisor and SCRRRA supervisor must resolve the challenge before work can begin. A Good Faith Challenge Form must be completed by the parties involved.
- B. If the Contractor disagrees with any instructions from the EIC, the contractor and contractor employees must immediately clear the tracks to a safe location. After employees are clear of tracks, the contractor may contact the EIC's supervisor to resolve any disagreement over the instruction provided.

**2.3 Work Requiring Protection of Track and Operations**

- A. The Contractor must request and arrange for an EIC, inspector, or other protective services from SCRRRA for the following conditions:
  - 1. When the Contractor's work activities are within the Right-of-Way of SCRRRA.
  - 2. When the Contractor's work activities are located over or under a track or tracks.
  - 3. When cranes, pile drivers, drill rigs, concrete pumps, or similar equipment positioned outside of the Right-of-Way could foul the track in the event of tip-over or other catastrophic occurrence.
  - 4. When in the opinion of SCRRRA it is necessary to safeguard the employees, trains, engines and facilities of SCRRRA.
  - 5. When any excavation is performed below the elevation of the track sub-grade, or track or other railroad facilities may be subject to movement or settlement.
  - 6. When work in any way interferes with the safe operation of trains at timetable speeds.
  - 7. When any hazard is presented to railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
  - 8. When clearing, grubbing, grading, or blasting is in proximity to the Right-of-Way which, in the opinion of SCRRRA or representative of an SCRRRA

## Rules and Requirements for Construction on SCRRA Right-of-Way

- member agency, may endanger the Right-of-Way or operations.
9. When street construction and maintenance activities, located within the Right-of-Way or in the vicinity of the highway-rail grade crossing, requiring temporary work area traffic control, which may affect or create unsafe conditions for employees, public, trains and vehicles.
- B. The services of an EIC are generally provided by one employee. However, additional personnel may be required to protect the facilities and operations of SCRRA, if deemed necessary by SCRRA representative or other authorized SCRRA employee. The maximum shift duration for one EIC is 10 hours. Under "Form B" protection, the 10 hours includes 8 hours of the Contractor work and two (2) hours to install and remove Form B flags. The Contractor shall not be allowed to work within the Operating Envelope during the 2-hour flag installation and removal. The minimum shift duration for flagging services is four (4) hours. If the Contractor desires to perform activities requiring an EIC that are longer than 10 hours' duration, then the Contractor shall coordinate with SCRRA to schedule multiple EICs for said Work.
- C. The estimated cost for one (1) EIC is \$1,500 for an eight (8) hour basic day plus two hours of overtime (10 hours total). The estimated cost for each EIC includes vacation allowance, paid holidays, railroad and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging, and supervision. However, the rate for an EIC in effect at the time of performance of the work by the Contractor hereunder will be used to calculate the actual costs of the services of an EIC pursuant to this paragraph. Billing will be on an actual cost basis.
- D. The Contractor shall call the phone number provided with the executed copy of SCRRA agreement, a minimum of 15 working days in advance of the date that services of an EIC will be required. An EIC will not be scheduled until the Contractor has executed SCRRA agreement and the Contractor has attended the required safety training.

### **3.0 CONTRACTOR SAFETY REQUIREMENTS**

#### **3.1 Contractor General Safety Requirements**

- A. The Contractor shall comply with the provisions of all local, State, and Federal regulations; with all applicable Specifications, standards, and recommended practices; and with SCRRA policies, procedures and requirements. Where the State and Federal regulations have differing requirements, the Contractor shall comply with that which is more stringent.
- B. Safety takes precedence over deadlines, production schedules, and all other considerations. When uncertainty arises, take the safest course. Remember that accidents are often the result of carelessness, unsafe practices, lack of attention, and complacency.



## Rules and Requirements for Construction on SCRRA Right-of-Way

## C. The following rules must be followed at all times:

1. Using, possessing, or working under the influence of alcohol or drugs is not permitted anywhere on Right-of-Way. This includes prescription drugs that cause drowsiness or otherwise impair a person's ability to perform an assigned task. SCRRA may require employees of the Contractor to submit urine or other toxicological samples to be used for drug and alcohol testing after an accident or incident occurring within the Right-of-Way.
2. Any employees, agents or invitees of Contractor or its sub-contractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from Right-of-Way and subsequently released to the custody of a representative of the Contractor's management. An employee removed for violation of the drug or alcohol policy will not be permitted future access to the Right-of-Way.
3. SCRRA may require employees of the Contractor to submit urine samples for drug and alcohol testing after an accident or incident.
4. The use or possession of unauthorized radio equipment is prohibited. The use of personal radios (including IPod, MP3 players, and similar devices), and cell phone ear pieces while working is prohibited.
5. The use of cellular phones within 25-feet from the nearest rail is prohibited.
6. Horseplay, physical altercations, running or jumping is prohibited.
7. Firearms or other deadly weapons, including knives are prohibited.
8. Work on public streets, roadway crossings, and highway bridges must conform to the California Vehicle Code and the standards given in the California Manual of Uniform Traffic Control Devices, and must be performed with due regard for the convenience and safety of the public.
9. Only authorized employees are allowed on engines, cars, cabooses, track cars or other railroad equipment.
10. Contractor employees must exercise care to prevent injury to themselves or others.
11. Employees must be alert and attentive at all times when performing their work.
12. Any defective tools, machinery and equipment are prohibited from use on Right-of-Way and, if found, must be removed immediately.
13. When on or near the tracks, the following precautions must be taken:
  - a. Keep clear of all tracks unless the EIC has provided a job briefing and identified the On-Track Safety protection in effect. No work may begin until the EIC is present at work site and a job briefing has been conducted.
  - b. Always look both ways before crossing tracks. Always step over the rails when crossing the tracks. Never walk, stand, or sit on the rails. The rail surface can be extremely slippery.
  - c. Always face the direction from which the train or on-track equipment is approaching.
  - d. Avoid track switches. The switch points are controlled from a remote location, can move unexpectedly, and exert enough force



## Rules and Requirements for Construction on SCRRRA Right-of-Way

- to crush ballast rock. Stand 150 feet from track switches when trains are approaching. Stay away from any other railroad device with which you are not familiar.
- e. Always walk single file when crossing the tracks in a group.
  - f. Never stand between adjacent tracks in multiple track territory when a train is passing.
  - g. Always cross at least 20 feet away from the end of equipment: i.e. engines, railroad cars, or on-track equipment
  - h. Do not pass between standing locomotives, railroad cars or on-track equipment when there is less than 50 feet between the equipment.
  - i. Never cross tracks by going underneath, over or through cars, engines or on-track equipment.
  - j. Work is not allowed within 50 feet of the track centerline while trains are passing the work site. Always stand as far back as possible to prevent injury from flying debris or loose rigging.
  - k. Always visually inspect all passing trains. If you detect a dangerous condition, inform your EIC or watchman immediately. The EIC or watchman will notify the train crew.
  - l. Always stop equipment while a train is passing through your working limits. No movement will be allowed toward an approaching train that would cause the engineer to believe the track might be fouled.
  - m. Trains travel faster than they appear and are relatively quiet. Trains may operate with cab car forward. You should not rely on past experiences to determine train schedule. Train schedules are unpredictable and are subject to changes and/or delays.
- D. Always expect a train on any track at any time. Trains may stop, reverse direction, set out cars, or run around stopped trains without notice. Expect movement of locomotives, railroad cars or on-track equipment on any track in either direction at any time.

### 3.2 Personal Protective Equipment

- A. All persons working on, over, or under Right-of-Way must be equipped with personal protective equipment meeting applicable OSHA and ANSI specifications. Personal protective equipment must be appropriate for the task performed. Employees, subcontractors, suppliers, agents or invitees of Contractor shall possess the following minimum equipment while on the right-of way:
- 1. Safety glasses with side shields conforming to ANSI Z87.1 - Occupational and Educational Personal Eye and Face Protection Devices;
  - 2. Protective Helmets (Hard Hats) conforming to ANSI Z89.1 - Requirements for Protective Headwear for Industrial Workers, Type I or II, Class G or E;
  - 3. Safety shoes with hardened toes conforming to ANSI Z41.1 – Personal Protection - Protective Footwear. Shoes must lace above the ankle and have a defined heel;

## Rules and Requirements for Construction on SCRRRA Right-of-Way

4. High visibility ORANGE (and only orange) retro-reflective work wear. (Green and Red shirts, vests, or other outerwear are not permitted within Right-of-Way because of the use of the same colors for signals to trains).
  5. SCRRRA railroad safety training card in possession.
- B. Hearing protection, face and eye shields, fall protection, gloves, and respirators must be worn as required by State and Federal regulations.

**3.3 Maintenance of Work Area**

- A. The Contractor must not pile or place any materials, articles, or equipment, nor park any machinery or equipment within Right-of-Way, or closer than 25'-0" to the center line of the nearest track, or in a manner that blocks access to SCRRRA facilities and equipment. Soil, aggregates, or other similar loose materials must be covered to prevent migration of the material toward the track. Dust or blowing soil or debris must be controlled in accordance with South Coast Air Quality Management District Rule No. 402 and Rule No. 403.
- B. Materials, machinery or equipment must not be stored or left within 250 feet of any highway railroad at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. For construction on Right-of-Way the Contractor must establish a storage area with concurrence of SCRRRA prior to beginning work, or as part of a site specific work plan.
- C. Machines or vehicles must not be left unattended with the engine running. Parked machines and equipment must be turned off and must be in gear with brakes set. If equipped with blade, pan or bucket, the blade, pan or bucket must be lowered to the ground. All machinery and equipment permitted to be left unattended on Right-of-Way must be left inoperable and secured against movement. Do not park vehicles over vegetation that might be ignited by the heat from the vehicle's exhaust system.
- D. The Contractor must not create and leave any conditions at the work site that would interfere with stormwater drainage. Any work performed over water must meet all Federal, State and Local regulations.

**3.4 General Precautions When Working Near Electrical Conductors**

- A. All wires and cables must be considered to carry electric current at high voltage and to be dangerous unless informed to the contrary by proper authority. When using temporary power cords, cords must never be placed over the rails, and employees must not place any metal objects across the rails.
- B. For all power lines the minimum clearance between the lines and the top of the rail must be as shown below:

Rules and Requirements for Construction on SCRRA Right-of-Way

ITEM	MINIMUM CLEARANCE
Electric wires carrying less than 750 volts	27' 0"
Electric wires carrying 750 volts to 15,000 volts	28'-0"
Electric wires carrying 15,000 volts to 20,000 volts	30'-0"
Electric wires carrying more than 20,000 volts	34'-0"

- C. For all power lines the minimum clearance between the lines and any part of the equipment or load must be as shown below:

ITEM	MINIMUM CLEARANCE
Electric wires carrying less than 200 KV	15' 0"
Electric wires carrying 2000 KV to 350 KV	20'-0"
Electric wires carrying 350 KV to 500 KV	25'-0"
Electric wires carrying 500 KV to 750 KV	35'-0"
Electric wires carrying 750 KV to 1000 KV	40'-0"

- D. If Cal/OSHA, CPUC, and/or the utility owners clearance requirements are more restrictive than those shown herein than the most restrictive clearances shall apply.
- E. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means. When the height of overhead wire lines cannot be determined from the available records, the actual height must be determined by field survey.
- F. All damage to the Right-of-Way, facilities, or property of SCRRA, or any accident or incident within SCRRA right-of-way, or any hazard noticed on passing trains must be reported immediately to the railroad EIC, if an EIC is present, or in the absence of a railroad EIC, to SCRRA's Dispatch and Operations Center (DOC) at (888) 446-9715 or (909) 596-3584. Any vehicle or machine which comes in contact with the track, signal equipment, structure or other railroad installation or facility, regardless of the force of the impact, may result in the derailment of a train and must be reported immediately to SCRRA representative and to the EIC, if an EIC is present, or in the absence of a railroad EIC, to DOC.

**3.5 Safety Training and Communication**

- A. All personnel working on, over, or adjacent to Right-of-Way must attend a railroad safety training class and pass an examination covering the information presented in the class. Persons not regularly employed on the Project, or at the Project site only intermittently, are not exempted from this requirement.

## Rules and Requirements for Construction on SCRRA Right-of-Way

- B. Before beginning any task on the Right-of-Way of SCRRA, a thorough job safety briefing must be conducted with all personnel involved with the task. The briefing must include the Contractor's job hazard analysis, its plan for conducting the work, and the procedures the Contractor will use to prevent its employees, sub-contractors, suppliers, agents or invitees from moving any equipment adjacent to or across any SCRRA tracks without the appropriate protection for the Contractor and the railroad operations. Additional job safety briefings must be conducted anytime that the job tasks, or conditions affecting the job tasks, change or are revised.
- C. When Contractor employees are required to work on Right-of-Way after normal working hours or on weekends, the Public Agency and SCRRA Representatives must be notified. A minimum of two Contractor employees must be present at all times. If work is within or near Right-of-Way an EIC will be required, and a representative of the Public Agency must also be present on the Project site.
- D. The Contractor shall develop and provide an emergency action plan indicating the location of the site, contact names and phone numbers, directions for access to the site, instructions for emergency response, and location of the nearest hospitals. The plan must also cover the Contractor's means of preventing fires arising from the Contractor's operations, and the Contractor's methods of fire suppression. The plan must also include the local direct phone numbers and locations of the nearest fire and police departments. Phone numbers for utility and SCRRA emergency response must be obtained from SCRRA representative prior to the start of any work and must be posted at the job site.

### 3.6 Emergency Response and Accident Reporting

- A. Prior to starting work, the Contractor must provide the EIC with the emergency phone numbers for the Project. At a minimum, phone numbers must be provided for paramedics, fire, police, utility response, SCRRA Representative, Contractor Superintendent, Dispatch and Operations Center (DOC), and the Metrolink Signal emergency number. A map and directions to the site must be immediately available for the use of the EIC.
- B. In emergency situations the following apply:
  - 1. Immediately report to the EIC any accidents, personal injuries, defects in tracks, bridges, signals, utilities or communication facilities or any unusual condition that may affect the safe operation of the railroad.
  - 2. When a person is injured, stop work and ensure everything possible is done for the injured person. Also take the following immediate action: Notify the fire, police, or paramedics as appropriate, and notify the Metrolink Dispatch and Operations Center (DOC); provide an individual or individuals to guide emergency response personnel to the site; make sure that all access ways are cleared for emergency vehicle access; and immediately report to the EIC any accidents, personal injuries, defects in tracks, bridges, signals utilities or communication facilities or any unusual condition that may affect the safe operation of the railroad.

## Rules and Requirements for Construction on SCRRRA Right-of-Way

3. If equipment was involved in the incident, it must not be moved until examined to ensure the equipment was in proper working condition, unless movement is necessary to prevent further injury or risk to persons or property.
  4. In case of personal injury, loss of life, or damage to property, the EIC must immediately document the names, addresses and occupation of all persons involved, including all persons at the scene regardless of whether these persons give a statement about the incident. This information should be included in the incident reports. The Contractor's cooperation with, and assistance to, the EIC is a requirement of accessing Right-of-Way.
  5. If an incident causes personal injury or death, all tools, machinery and other equipment involved, including premises where such accident occurred must be promptly inspected by the EIC. Tools, equipment and machinery must be secured until the EIC, Safety Officer, or other competent person has completed an inspection. A report of such inspection, stating the conditions found and names of persons making the inspection must be promptly forwarded to SCRRRA and the supervising officer of person making the inspection.
- C. Information concerning incidents or personal injuries occurring to persons who are not employees, must not be given to anyone except authorized representatives of SCRRRA or an officer of the law.

#### **4.0 TRACK OCCUPANCY AND WORK WINDOWS**

##### **4.1 Description of Location and Traffic**

- A. The Contractor shall obtain permission in writing from SCRRRA for movement of equipment on track or across tracks at locations other than public crossings. Such permission may not necessarily be granted. Damages to the track structure will be repaired at the Contractor's sole expense.
- B. The mainline tracks, within the limits of Project site, are under direct control of SCRRRA dispatcher. No track shall be fouled without authorization and presence of an SCRRRA EIC on the scene. 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 SCRRRA. 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 SCRRRA.
- C. Positive Train Control (PTC) is in effect for PTC-equipped trains on all main line tracks, controlled sidings, and tracks as designated by SCRRRA Timetable. The purpose of a PTC System is to prevent train-to-train collisions, over speed

## Rules and Requirements for Construction on SCRRA Right-of-Way

accidents, incursion into work zones, and movements through a misaligned switch by requiring automatic control systems to override mistakes by human operators. Accurate and up-to-date reporting of field work activity, especially activity that result in changes in signal and track assets, Track Charts, Composite Maps, PTC database is important for safe railroad operations. The Contractor shall work with SCRRA personnel to coordinate and follow the Change Request Process for all changes that affect the PTC system at the beginning of the Project. This will allow SCRRA to communicate to the Contractor any risks, impacts, additional tasks, or constraints to the Project so the Contractor can better plan the work without affecting the Project or the SCRRA PTC system.

#### 4.2 Coordination with Rail Traffic

- A. The Contractor's operations are subordinate to the operation of trains on Right-of-Way, whether passenger or freight. All work upon Right-of-Way shall be done at such times and in such a manner as to not interfere with or endanger SCRRA Operations. SCRRA will strive to cooperate with the Contractor such that the work may be handled and performed in an efficient manner. However, the Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event its work is delayed by rail operations.
- B. All forecasts of train traffic and schedules are approximate. The public time table or schedule shall be used for planning purposes only and shall not be used for scheduling actual work in the vicinity of the railroad tracks in the absence of a railroad EIC. SCRRA, UPRR, BNSF, and Amtrak may run additional trains as needed to perform their respective obligations. The operation of extra and special trains will be at sole discretion of SCRRA. The Contractor's work may be halted or delayed whenever necessary to accommodate train service.
- C. Persons acting as an EIC are generally dispatched to projects in the order requested. An EIC may not be available at all times without advance notice. The Contractor is encouraged to schedule the services of an EIC or inspector a minimum of 15 working days in advance of any planned operation to avoid delay. Any work to be performed by the Contractor, which requires services of an EIC or inspector, shall be deferred until an EIC or inspector is available at the job site.

#### 4.3 Work Windows and Track Access

- A. All work on, over, or adjacent to the tracks must be coordinated with SCRRA, and the Contractor's work is subject to SCRRA operating rules for work on main tracks and other than main tracks. Project Specific Work Windows shall be obtained from SCRRA. The Project Specific Work Window hours and days are not included here in this document and shall be obtained from other project related documents.
- B. Work Window: A period of time with specific beginning and ending time and durations for which the track, signals, bridges and other Operating System elements within the Operating Envelope are temporarily removed from service or modified in some other manner and train and other operations suspended or modified to allow construction or maintenance work to occur. Written authority



## Rules and Requirements for Construction on SCRRRA Right-of-Way

from SCRRRA and an approved Site Specific Work Plan (SSWP) is required before the Contractor is granted a Work Window. The Contractor's Work Window shall have specific geographic limits, which are defined in the approved SSWP. Modifications or suspension of train and on-track equipment movements resulting from a Work Window involves written changes to the Railroad's Rules of Train and On-Track Equipment Operations.

- C. Exclusive Track Window: An approved Work Window in which no train movements (except the Contractor or SCRRRA work trains or equipment under control of the EIC, per the SSWP) will operate on any track within the window limits. The Contractor may dismantle, remove, reconstruct, or otherwise obstruct tracks within the limits of such a window. This Work may be protected by track out of service, track and time limits, or by Form B Track Bulletin.
- D. Limited Track Window: An approved Work Window for some, but not all tracks within a general Work area (e.g. one track remains for operation of trains, other tracks are available for the Contractor's Work). Movement of trains over the track(s) of a Limited Track Window is under the control of the EIC who will not authorize train movement unless and until the Contractor personnel and equipment are clear of the operating track. The Contractor may remove, construct, or obstruct only the track designated by the SSWP and must arrange the Work so that trains can operate without delay on the remaining track(s) in the Work area. This Work may be protected by track out of service, track and time, or by Form B Track Bulletin.
- E. "Form B" Work Window: An approved Work Window in which passenger, freight and all other trains and on-track equipment movements can be prohibited from entering the defined limits of a segment of track. The "Form B" Work Window does not allow the Contractor to remove from service or modify the tracks, signals, bridges, stations or other elements of the Operating System in a manner, which will delay or in any way affect the safe operation of the trains. The "Form B" Work Window allows the Contractor the ability to enter the Operating Envelope and perform construction activities subject to the conditions above. An Employee-in-Charge/Flagman from SCRRRA will exercise strict control over the Contractor's construction activities in conjunction with Roadway Worker Protection requirements, to assure that the Contractor's activities do not delay or impact train service.
- F. Track and Time: An approved Work Window in which the Dispatcher will authorize men and equipment to occupy a track or tracks within limits for a certain time period. The Dispatcher authority shall include authority number, track designation, limits and time. Movements may be made in either direction within the specified limits until the limited are released.
- G. No construction work shall be performed during the New Year's Day, Memorial Day, Independent day, Labor Day, Thanksgiving days, and Christmas day holiday and weekends when Construction Management staff, or SCRRRA furnished labor or equipment are not available unless approved in advance and in writing by SCRRRA.

## Rules and Requirements for Construction on SCRRA Right-of-Way

- H. 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.
- I. Contractor must comply with any regulatory restrictions to hours of operation or other restrictions in operations during specific Work Windows.
- J. Contractor shall coordinate with SCRRA signal forces and allocate the required time and number of hours within these work windows for SCRRA signal work. Within the time limits of each work window, the Contractor shall allow time for SCRRA’s signal forces to restore and test the signal and communication system before the operation of trains, 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 track ready (in full compliance with the FRA Track safety Standards and with SCRRA’s Track Maintenance and Engineering Instructions) for the passage of trains, and SCRRA crew time within the work window that will be required for the signal and communications system restoration.
- K. Railroad services are important to SCRRA, freight railroads, and passengers. Any disruptions or delays affect everyone. SCRRA would like to coordinate all work in the right-of-way so that delays are minimized. The Contractor may have to share Work Windows with other contractors and SCRRA’s maintenance forces. If there is another Work Window for another project in the vicinity of this project work, SCRRA will request the Contractor to coordinate and schedule the work with the other work and the Contractor shall agree to do the construction simultaneously under the same Work Window. This may result in overtime work and the Contractor shall be responsible to pay the additional cost.
- L. SCRRA may require that certain facilities and areas be used concurrently by the Contractor and others. The Contractor shall afford access and cooperate with other contractors, including coordinating its Work with the work of these other labor forces and equipment, including employees of the SCRRA and its authorized representatives, other contractors and subcontractors, utilities working at or adjacent to the Worksite, operating trains, or personnel inspecting or maintaining the railroad during the Contractor’s period of performance for execution of the Work. The Contractor shall cooperate and communicate with any contractor performing work that may connect, complement, or interfere with the Contractor’s work, and make a good-faith effort to resolve any disputes or coordination problems with such contractor(s). The Contractor shall not be entitled to additional costs for coordination or concurrent use of any Worksite.

#### 4.4 Requesting Work Windows

- A. The Contractor shall make requests in writing to SCRRA Representative not less than twenty-five (25) working days prior to commencing work in connection with approved work when the work will be performed within Right-of-Way under Form B Work Window or Limited Track Window. The Contractor shall provide written notice and submit its SSWP to SCRRA Representative a minimum of seventy-five (75) working days prior to the scheduled track cutovers or Exclusive Track

## Rules and Requirements for Construction on SCRRA Right-of-Way

Window. The Contractor shall provide written notice to SCRRA Representative a minimum of ninety (90) working days prior to the scheduled complete Street and highway-rail grade crossing closures. The time to perform work during the complete Street and highway-rail grade crossing closures will be shared between the Contractor and SCRRA forces. All work shall be performed in accordance with previously approved SSWP.

- B. Work window shall include a detailed 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 work window 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. The work window shall include the information specified below:
1. All activities necessary to perform construction activities within the operating envelope, including use of stations, sidings, and proposed storage areas.
  2. A description of any proposed changes in the operating system between start and finish of the work, including any requested work windows.
  3. 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.
  4. 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.
  5. List all of the approved proposed work plans to be performed under the work window, and provide the name(s) and number(s) of the Contractor's supervisor(s) in charge of the tasks.
  6. The work window must be of sufficient detail, clarity, and organization to permit easy review and approval by the SCRRA before the proposed work is performed.
- C. SCRRA may request explanations and changes to the work window to conform the work to the requirements of SCRRA. If the work window is not acceptable, the Contractor shall revise the window to make it acceptable. The Contractor

## Rules and Requirements for Construction on SCRRRA Right-of-Way

shall be responsible for submitting a revised work window that can be reviewed and approved by the SCRRRA.

- D. No Exclusive Track Window will be allowed during the Metrolink "Holiday Train" weekend. This event is tentative scheduled between the Thanksgiving holiday and the Christmas holiday. The Contractor shall coordinate with Metrolink when this event will be scheduled.
- E. All required signal and track testing by the Contractor and SCRRRA shall be completed by the end of the Exclusive Track Window.
- F. The start time for work windows is an "average" start time dependent on location and train on-time performance, and may vary by 30 minutes either direction.
- G. Scheduling of work windows, SCRRRA EICs and watchmen, and signal support forces during track construction will be strictly controlled by SCRRRA and documented in the Contractor's SSWP and three-week look-ahead schedule. Work Window activities not coordinated in the weekly construction meetings and documented in the look-ahead schedules will not be supported by authorization of work windows.
- H. The Contractor is strongly encouraged to work additional shifts as required to finish the Work within the contract time. There shall be no additional payment for night work, weekend work and overtime required for working around live track.

#### 4.5 Project Specific Work Windows

Number of project specific Form B Work Windows, Exclusive Track Windows, Limited Track Windows, Track and Time Window, and hours of operation will be decided and agreed to between SCRRRA and the Contractor for each individual project and will be included under separate cover. A Sample Project Specific Work Window is included in Exhibit D which can be used as a guide for any specific work by the Contractor.

#### 4.6 Extraordinary Work

- A. Should an unsafe condition arise from, or in connection with, the Contractor's work on this Project which requires immediate and extraordinary actions to be taken to protect operations and facilities of SCRRRA, or facilities of others within the Right-of-Way, the Contractor shall undertake such actions. There will be no extra payment to the Contractor for this action. If, in the judgment of SCRRRA, such actions are insufficient, SCRRRA with its own forces may perform the work to protect operations and facilities. Such actions will be at the sole discretion of the SCRRRA and shall be at the Contractor's expense and without cost to SCRRRA. SCRRRA shall have the right to order the Contractor to temporarily cease operations in the event of an emergency or SCRRRA may unilaterally terminate work under the contract. An unsafe condition is defined as creating a track condition which does not meet the FRA Track Safety Standards for Class of Track, willful damage to facilities or material, or any other unsafe condition for trains, employees, passengers or the public, at the sole determination of the SCRRRA.

## Rules and Requirements for Construction on SCRRRA Right-of-Way

**4.7 Track Back In Service**

- A. Prior to any track work window, Contractor's track work that is to be placed into service during the work window shall be completed to Class 5 as defined by FRA guidelines. At the end of each track work window shown in the approved SSWP, all tracks must be completed to Class 5 as defined by FRA guidelines. Contractor shall furnish all necessary labor and equipment to comply with this requirement. SCRRRA will perform an inspection and will approve the condition of the tracks before train service can resume on tracks previously out of service. Contractor shall include in its SSWP, and shall prosecute its work so as to allow ample time for inspection by SCRRRA, and an allowance for correction of any deficiencies prior to the end of the scheduled work window. Allowing train service on reconstructed or shifted track at the end of each approved work window is not considered beneficial occupancy or final acceptance of the work. Contractor shall remain fully responsible for loss or damage arising from Contractor's activities under this contract.
- B. If further adjustments or repairs are required to meet appropriate FRA and SCRA track standards, and Contractor has failed to comply with those requirements, SCRRRA forces will immediately perform the necessary remedial work and make appropriate adjustments or repairs, and Contractor shall be responsible for the direct and indirect cost of the remedial work, and the possible assessment of rail service slow orders, interruption, and disruption damages.

**4.8 SCRRRA Service Impacts and Damages**

- A. Rail service slow orders, interruptions and disruptions shall be considered an unauthorized delay to passenger and freight operations, and rail service damage assessments will be made when any of the following occurs:
1. Contractor's construction operations exceed the approved work window time limits specified in an approved SSWP.
  2. An unplanned and/or unapproved slow order occurs as result of Contractor's required work or normal operations.
  3. Contractor's construction operations working under an approved Form B work window result in the stoppage of a scheduled train (i.e., a train operating within the time arranged in the SSWP). 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.
  4. Contractor has not restored the track to Class 5 standards.
  5. Contractor's construction operations cause an unplanned train stoppage.
- B. Rail service slow orders, interruptions and disruptions, and other damages asserted by SCRRRA are determined as follows.



Rules and Requirements for Construction on SCRRRA Right-of-Way

1. Loss of Revenue due to service interruptions or disruptions: Actual loss of revenue in accordance with delay provisions of service contracts.
2. Slow Order: When train speed is restricted to a lower speed than the operating maximum timetable speed allowed in accordance with SCRRRA operating rules because of an unplanned and/or unapproved slow order, the damages are calculated in accordance with the formulas and example below.

**Example:**

- Operating maximum timetable (unrestricted) speed: 25 mph (144 sec per mile).
- Slow Order speed restriction: 15 mph (240 sec per mile).
- Length of restriction: 1.5 miles (distance between green flags of speed restriction).
- Distance train operates at restricted speed: 1.6 miles (1.5 miles plus length of train).
- Time of unrestricted train: 1.6 miles x 144 sec per mile = 230 seconds.
- Time of restricted train: 1.6 miles x 240 sec per mile = 384 seconds.
- Slow Order delay: 384 - 230 = 154 seconds = 2.57 minutes, rounded up to 3 minutes.
- Slow Order damages: 3 minutes x \$50.00 per minute = \$150.00 for subject train.

3. Rail Service Interruption: \$50.00 per minute, or portion thereof, for each minute of delay for each train delayed as determined by SCRRRA. The maximum cost for rail service interruption will be \$1,000.00 for each train per day, and a cumulative daily maximum of \$20,000.00 per day.

Example: 55 minute delay x 2 trains x \$50.00 = \$5,500.00

4. Rail Service Disruption – Actual cost of alternative passenger transportation. Estimated cost can be calculated as \$500.00 per bus trip for each bus trip required to transport passengers around the out-of-service track as determined by SCRRRA. The maximum cost for rail service disruption will be \$50,000.00 for one day. The cost will be reduced to \$25,000.00 if at least one track is put in operation.

Example: 500 passengers / 50 passengers per bus = 10 bus trips, 10 bus trips x \$500.00 per bus trip = \$5,000.00

- C. SCRRRA damages noted above are additive and cumulative, and there is a possibility that the Contractor could be responsible for more than one type of assessment.

**5.0 CONSTRUCTION**

**5.1 Demolition and Removal**

- A. Where structures over or adjacent to the tracks are to be demolished, the tracks must be protected from damage during the demolition. The Contractor may employ either of the following methods:



## Rules and Requirements for Construction on SCRRRA Right-of-Way

1. During demolition of a bridge deck or overhead structure, a protection shield must be erected over the track to catch falling debris. The protection shield shall be supported from girders or beams and shall not be lower than the allowed temporary clearance from the top of rail. The deck must be removed by cutting into sections and lifting out. All cranes, hoists, winches, and hardware used in connection with the demolition are to include a factor of safety of 150% in addition to the safe working load of the equipment or hardware. Large pieces of deck or other portions of the structure must be handled individually and must not be allowed to fall on protection shield or onto the ground.
  2. When an overhead protection shield cannot be installed due to limited clearance or type of superstructure, the track may be protected by timber mats placed over the track structure, subject to approval by SCRRRA. Timber mats shall be made in sections such that they may be lifted in and out as a unit quickly. Mats must not rest on ties or rails. Geofabric or canvas must be placed over the track structure to keep the ballast clean. The mats and ballast protection are to extend 25-ft beyond the existing limits of the overhead bridge or structure. Equipment used in demolition operations may not be operated on or over unprotected track. Blasting will not be permitted to demolish a structure over or within railroad Right-of-Way.
- B. The Contractor shall submit detailed SSWP and plans of the protection shield or the timber mats to SCRRRA Representative for approval prior to the start of demolition. The plans shall also indicate the location and capacity of the proposed cranes and estimated lifting loads. The lifting plans shall be prepared by a Registered Professional Engineer and shall bear his seal and signature.
- C. The Contractor shall provide timely communication to SCRRRA Representative when scheduling the demolition-related work so that the representative or their designee may be present during the entire demolition procedure.
- D. At any time during demolition activities, SCRRRA Representative may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or SCRRRA facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the satisfaction of SCRRRA Representative. SCRRRA shall not be responsible for any additional costs or time claims necessitated by the above events.

## 5.2 Excavation and Backfill

- A. All excavations must be conducted in compliance with applicable law and regulations and, regardless of depth, must be shored when within the zone of influence from the railroad loading, or when necessary to protect structures, facilities, or personnel. Shoring for excavations must comply with SCRRRA "Excavation Support Guidelines." Any excavations, holes or trenches on Right-of-Way must be covered, guarded and protected when work is not actively

## Rules and Requirements for Construction on SCRRRA Right-of-Way

prosecuted. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that SCRRRA employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be backfilled as quickly as practicable.

- B. The Contractor shall submit a plan showing the limits of all excavations within the Right-of-Way of SCRRRA, and the method of support when support is required. The Contractor shall not make any excavations on Right-of-Way, or within the zone of railroad load influence as defined in Figure 2-1 of SCRRRA "Excavation Support Guidelines", until the Contractor's excavation plan, its plans and calculations for the support of the excavation, and SSWP are approved in writing by SCRRRA.
- C. Open excavation areas shall be protected per OSHA regulations and by walkways with handrails no closer than 8 feet 6 inches horizontally from the centerline of 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, and the handrails shall be no less than 3.5 feet high and capable of withstanding 250 pounds of lateral force.
- D. The Contractor must cease all work and notify SCRRRA immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the utility owner immediately. The Contractor shall not perform any work if there is any doubt about the location of underground cables or lines of any kind until the exact location of the underground facilities has been determined. There will be no exceptions to these requirements.
- E. The Contractor shall compact all backfill within Right-of-Way to a minimum of 90 percent of maximum standard density in accordance with AASHTO T-99 or ASTM D-698. Where it becomes necessary to excavate beyond the normal lines of excavation to remove boulders or other interfering objects, the voids remaining after such materials are removed must be back-filled with suitable material approved by SCRRRA. The material obtained from the Project excavation may be used as fill or backfill, provided that all organic material, rubbish, debris, large rocks, and other deleterious or objectionable materials are removed. Any excess material must be disposed of hauling off-site. The excess material must not be piled-up or scattered on the Right-of-Way.
- F. The Contractor shall perform excavation and grading so that the finished surfaces are in uniform planes with no abrupt breaks in surface and having positive drainage on the Right-of-Way away from the track structure, and to approved catchment areas.

### 5.3 Storage of Materials and Equipment

- A. Materials and equipment shall not be stored where they will interfere with SCRRRA operations, nor on the right-of-way without first having obtained

## Rules and Requirements for Construction on SCRRRA Right-of-Way

permission from SCRRRA. The permission will be with the understanding that SCRRRA will not be liable for damage to such material and equipment from any cause and SCRRRA may move or require the Contractor to move, at Contractor's expense, such material and equipment.

- B. All construction machinery that is left parked near the track unattended shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify, and save SCRRRA and member agencies, harmless from and against all losses, costs, expenses, claim or liability arising out of or incident to the Contractor's failure to immobilize the construction machinery.

#### 5.4 Shoring and Support of Excavation

- A. Shoring, cribbing and sheeting designed to support excavations or embankments shall be designed to support all lateral forces caused by the earth, vehicular traffic, construction equipment, temporary and permanent structures, and other surcharge loads in the vicinity of the excavation. Support or shoring located on Right-of-Way, or within the zone of influence from railroad loading, shall conform to SCRRRA Excavation Support Guidelines. Designs for all temporary structures supporting tracks, or excavations adjacent to the tracks and within the zone of influence from railroad loading, shall include railway surcharge loading imposed by a Cooper E-80 live load. Any excavation adjacent to track must be covered and provide a uniform path and include with standard handrails when work is not actively underway.
- B. The Contractor shall submit a detailed SSWP drawings and supporting calculations for any temporary support of excavation for SCRRRA review and approval. For the installation of temporary or permanent shoring systems, including soldier piles and lagging, or interlocked steel sheeting on or adjacent to Right-of-Way, lateral deflection of the shoring system plus top of rail monitoring is required. The frequency of monitoring must comply with SCRRRA Excavation Support Guidelines, Section 9.0, and Track Monitoring. The monitoring program must identify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. The Contractor must submit the monitoring program for the track, roadbed, and shoring for review and approval prior to starting work.
- C. The monitoring survey data must be collected at the approved frequency and immediately furnished to SCRRRA Representative for review. If SCRRRA determines that any movement has occurred in the track or supporting structure, SCRRRA will notify the Contractor and the Contractor shall immediately take all necessary steps to correct the movement or settlement. SCRRRA, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, or to have the excavated area immediately backfilled, or to perform additional investigations to determine what corrective action is required, or any combination thereof. SCRRRA may modify the survey locations and monitoring frequency as it deems necessary during the Project. Any corrective action required by SCRRRA or performed by SCRRRA, including the monitoring of corrective action of the Contractor, will be at the cost and expense of the

## Rules and Requirements for Construction on SCRRA Right-of-Way

Contractor.

## 5.5 Drilling and Pile Driving

- A. The Contractor must take special precaution and care, in connection with drilling or driving piles or sheets adjacent to tracks, to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The Contractor shall submit detailed SSWP and plans of the Drilling and Pile Driving Operations to SCRRA Representative for approval prior to the start of drilling and pile driving.
- B. Pile driving must be carried out so that it does not interfere or endanger train operations. An EIC must be present whenever pile driving or drilling is underway in the vicinity of SCRRA track. Equipment must be positioned so that no part of machine swings over the track or infringes within 25-ft of the nearest rail without first obtaining permission from SCRRA and SCRRA has established an appropriate work window.
- C. Piles must be secured independently of the hammer or vibrator at all times while driving until sufficiently anchored in the soil such that the pile will stand without external support during the completion of the driving. Reinforcing steel cages or other internal structural supports in concrete structures must be designed to withstand all loads imposed in handling and setting. A crane must remain attached to the reinforcing steel cage until the reinforcing steel cage is guyed or braced to prevent movement unless it can be demonstrated that the cage or support will resist all loads which may be imposed without collapse or failing.
- D. Large diameter holes and shafts within the zone of influence from railroad loads must be cased to prevent caving and loss of support adjacent to the tracks. If caving occurs, the hole must immediately be filled until additional casing can be advanced in the hole before drilling is continued.

## 5.6 Boring and Jacking

- A. The face of all jacking and receiving pits shall be located outside of Right-of-Way, or a minimum of 25 feet from the center line of the nearest track, measured at right angle to the track, whichever is greater unless otherwise approved by SCRRA. The use of trench boxes may be permitted for jacking and receiving pits, however, trench boxes, shields, and hydraulic shores are not acceptable inside the zone of influence from railroad loading. Design of the temporary supports for the jacking and receiving pits must be conform to the requirements of SCRRA "Excavation Support Guidelines."
- B. Boring and jacking of casings and other conduits must conform to the requirements of SCRRA Engineering Standard ES5001 and ES5002. For any conduit that is bored or jacked under the track, the Contractor must guarantee the work against settlement for two years after the completion of the work
- C. The Contractor shall submit detailed SSWP and plans for jacking and boring

## Rules and Requirements for Construction on SCRRRA Right-of-Way

operations, including the design of temporary supports for the jacking and receiving pits, and track monitoring plan to SCRRRA Representative for approval prior to the start of any work.

**5.7 Temporary Structures**

- A. Formwork, falsework, guying, bracing, and other temporary structures must be designed to resist all imposed construction live and dead loads including wind and seismic loads. Railroad track, structures, equipment, or other railroad facilities may not be used to secure or brace temporary or permanent structures during construction.
- B. Designs for falsework above any tracks shall conform to SCRRRA Grade Separation Guidelines and the Caltrans Falsework Manual. Falsework over or adjacent to railroad tracks shall meet the requirements in the Caltrans Falsework Manual for falsework over traffic (traffic openings). The additional provisions stipulated the "Guidelines for Design of Falsework for Structures Over Railroad in Connection with Highway Grade Separation Construction," issued by the Southern Pacific Lines (Falsework Memo No. 7) shall be included in all designs of falsework over SCRRRA tracks. Collision posts are required.
- C. The Contractor shall submit a detailed SSWP and procedure for erecting and removal of the falsework spans over railroad tracks. Equipment used for the erection, or removal of structures over railroad facilities, shall have a minimum lifting capacity of one hundred-sixty seven percent (167%) of the lift weight (operational capacity limited to sixty percent (60%) of the tipping load or the boom structural load). The procedure shall indicate the capacity of cranes, location of cranes with respect to the tracks and estimated lifting loads. The erection procedure must be prepared by a California Registered Professional Engineer and shall bear his or her seal and signature. The procedure must be approved by SCRRRA.
- D. The Contractor shall furnish, to SCRRRA Representative, four sets of working drawings and a copies of the Contractor's plans illustrating and describing the details of construction affecting Right-of-Way and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, The Contractor shall also furnish two sets of structural calculations of any falsework, shoring or cribbing. A registered professional engineer licensed to practice in the State of California shall seal and sign all drawings and calculations. The Contractor shall not begin work until SCRRRA has reviewed and approved the plans.

**5.8 Hoisting Operations**

- A. The Contractor shall submit a detailed SSWP and procedure for any crane, mast, or boom operations, on, over, or adjacent to Right-of-Way to SCRRRA Representative for approval prior to the start of hoisting operations. The Contractor shall submit four (4) copies of the detailed procedure for erection of the proposed structures over or adjacent to SCRRRA's tracks or Right-of-Way. This procedure shall include a plan showing the locations of cranes, horizontally



## Rules and Requirements for Construction on SCRRA Right-of-Way

and vertically, operating radii, with staging locations shown, including beam placement on ground or truck unloading staging plan. Plan should also include the location of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions. No crane or equipment may be set on SCRRA rails or track structure.

- B. The following additional information must be included in the submittal as applicable:
1. All as-built bridge seats and top of rail elevations shall be furnished to SCRRA Representative for review and verification at least 30 days in advance of construction or erection, to ensure that minimum vertical clearances as approved in the plans will be achieved. Computations must be made for the weight of the materials, articles or equipment being lifted must be submitted. Computations shall be made from plans of the structural members being erected and those plans or sections thereof shall also be included in the submittal; the weight shall include the weight of concrete or other materials including lifting rigging.
  2. Crane rating sheets showing cranes to be adequate for 167% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted. Safety factors that are included by the manufacturer in the crane charts are not to be considered when determining the 167% additional capacity.
  3. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment. All specific components proposed for use shall be clearly identified and highlighted in the submitted documents. The safe working load capacity of the connecting equipment shall be 167% above the calculated weight of the pick.
  4. A complete written procedure is to be included that describes the sequence of events, indicating the order of lifts and any repositioning or reconnecting of the crane or cranes.
  5. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical sub tasks (e.g., performing aerial splices, installing temporary bracing, etc.) shall be furnished so that the potential impact to SCRRA operations may be assessed and eliminated or minimized.
  6. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
  7. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail or collision post will be required to be installed in a track where a temporary bent is located within fifteen (15) feet from the centerline of that track.
  8. The proposed erection procedure must be approved by SCRRA Representative prior to undertaking work on the Project.



## Rules and Requirements for Construction on SCRRA Right-of-Way

9. The Contractor shall provide timely communication to SCRRA Representative when scheduling the erection-related work so that SCRRA Representative may be present during the entire erection procedure.
10. At any time during construction activities, SCRRA Representative may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or SCRRA facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the satisfaction of SCRRA Representative. SCRRA shall not be responsible for any additional costs or time claims associated with such revisions.

**5.9 Clearances**

- A. The Contractor must not pile or store any materials, machinery or equipment closer than 25'-0" to the center line of the nearest SCRRA track, and only then with the permission of SCRRA. Materials, machinery or equipment must not be stored or left within 250 feet of any highway railroad at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. Prior to the start of work, the Contractor must establish a storage area with concurrence of SCRRA representative.
- B. Unless shown otherwise on the Contract Drawings and approved by SCRRA, the Contractor shall abide by the following temporary clearances during construction. The Contractor shall not place forms, materials, spoils, or other temporary construction, including bracing or work platforms, within the clear area defined below unless approved in writing by SCRRA:
  1. 15' -0" Horizontally at right angles from centerline of nearest track
  2. 22' -6" Vertically above the top of the highest rail
- C. At no time may the Contractor reduce the minimum clearances required by the California Public Utilities Commission (CPUC) General Order 26-D, or block or restrict the visibility of any signal or railroad warning device. Any infringement within the clearances established by General Order 26-D due to the Contractor's operations must be submitted to SCRRA and the operating railroads, and must not be undertaken until approved in writing by SCRRA, and until SCRRA has obtained any necessary authorization from the CPUC for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending approval by SCRRA, the operating railroads, or the CPUC as applicable.
- D. The temporary clearance requirements noted above shall also apply to all other physical obstructions including, but not limited to stockpiles of material, parked equipment, placement or driving of piles, and bracing or other construction supplies.
- E. Reduced temporary construction clearances, which are less than construction clearances defined above, will require special review and approval by SCRRA

## Rules and Requirements for Construction on SCRRA Right-of-Way

and, if less than the statutory minimum, the CPUC. Any proposed variance on the specified minimum clearances due to the Contractor's operations shall be submitted to SCRRA Representative and the Public Agency at least thirty (30) working days in advance of the work. No work shall be undertaken until the variance is approved in writing by SCRRA Representative.

- F. Parallel to the outer side of each exterior track of multiple operated tracks and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending in width not less than twelve feet (12') perpendicular from centerline of track, must be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during working hours must be covered, guarded and/or protected as soon as practicable. Walkways with railings shall be constructed by the Contractor over open excavation areas when in close proximity of track, and railings shall not be closer than 9'-0" perpendicular from the center line of tangent track or 10'-0" horizontal from curved track.

### 5.10 Temporary Traffic Control Plan

- A. The Contractor's operations which control traffic across or around SCRRA facilities shall be coordinated with and approved by both SCRRA and Public Agency, and shall be in compliance with Section 21400 et seq. of the California Vehicle Code and the California Manual of Uniform Traffic Control Devices (California MUTCD). Traffic control in the vicinity of highway - railroad grade crossings shall conform to the Section 6G-19 of the California MUTCD and SCRRA Standard ES4301. The Contractor shall perform no work at, or in the vicinity of a highway-railroad grade crossing without the presence of a railroad EIC, notwithstanding that the work of the Contractor may not be physically located on Right-of-Way.
- B. The Contractor shall submit detailed temporary traffic control plans to SCRRA for approval prior to start of work requiring traffic control. Contractor shall also obtain approval of the temporary traffic control plan from the Public Agency having jurisdiction over the public street within the work zone.
- C. The Contractor must comply with all traffic control signs and other devices within SCRRA facilities, and must observe a maximum speed limit of 20 mph within Right-of-Way. Disregard for posted traffic control signs and devices, or excessive speed within Right-of-Way may lead to revocation of access for the offending individual.
- D. SCRRA will not permit temporary at-grade crossings unless absolutely necessary and there is no practicable alternative route available to Contractor to access the Project site. Temporary crossings, if permitted, must conform to SCRRA Standard ES4302. All work at temporary crossings that lies between the rails and within 8.5 feet of the center line of the track on each side may be performed by SCRRA at the cost and expense of the Contractor.

### 5.11 Performance Bond

Rules and Requirements for Construction on SCRRA Right-of-Way

- A. The Contractor must furnish a performance bond when any excavation, shoring and support of excavation, or boring and jacking of pipe and casing may affect the stability of the railroad facility or track(s), or settlement of the soil around a pipe, in the amount shown in the following table:

<b>Construction Activity</b>	<b>Bond Amount</b>
Excavation and shoring	\$180,000
36" Casing	\$120,000
42" Casing	\$140,000
48" Casing	\$160,000
54" Casing	\$180,000
60" Casing	\$200,000
66" Casing	\$220,000
72" Casing	\$240,000
Over 72" Casing	SCRRA Approval

**6.0 UTILITIES**

**6.1 Protection of Underground Facilities**

- A. Signal, communication, fiber-optic, petroleum, natural gas, electric power and other utilities are present in Right-of-Way. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits, danger to train operations, and release of potentially hazardous or flammable compounds. The Contractor must take special precautions and care in connection with excavating, shoring, and other subsurface construction to avoid damage to subsurface facilities.
- B. Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems, are present and located within the Project work area by calling the Southern California Underground Service Alert at 811. SCRRA is not a member of Underground Service Alert (DigAlert) and SCRRA signal and communication lines must be located by contacting SCRRA Signal Department.
- C. 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

## Rules and Requirements for Construction on SCRRA Right-of-Way

- to reject any claims by the Contractor for delays associated with utility relocations.
- D. When the excavation is within the approximate location of subsurface installation, the Contractor shall determine the exact location of the subsurface installations in conflict with the excavation by excavating with hand tools within the area of the approximate location of subsurface installations as provided by the utility companies and SCRRA in accordance with Section 4216.3 of California State law before using any power-operated or power-driven excavating or boring equipment.
  - E. The Contractor shall pothole and physically locate all utilities, including signal and communications lines, within two (2) feet of railroad vehicle or pedestrian gates to conform depth and lateral location. The Contractor to comply with all requirements of the utility companies which may be more stringent.
  - F. All underground and overhead wires must be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating. Individual owners of utilities may require that an inspector employed by the utility owner be present during any excavation near the utility.
  - G. In addition to calling the Southern California Underground Service Alert (Dig Alert), the Contractor shall call SCRRA's "Call Before You Dig" number at least 72 hours 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 signal and communication emergency phone line is staffed 24 hours a day, 7 days a week. If a telecommunications system is buried anywhere on or near Right-of-Way, the Contractor will coordinate with SCRRA and the telecommunication company to arrange for relocation or other protection of the system prior to beginning any work on or near Right-of-Way. Notice must be given to the freight railroads and fiber optic companies not less than 72 hours prior to work by calling to permit them to arrange for the location or protection of any lines under their control.
  - H. The SCRRA's Call Before You Dig number shall remain valid for not more than 28 calendar days from the date of issuance, and after that date shall require revalidation.
  - I. If, at any time during an excavation for which there is a valid SCRRA number, SCRRA signal and communications field markings are no longer reasonably visible, the Contractor shall contact SCRRA. Upon receiving timely notification or renotification, SCRRA will re-locate and re-mark, within two working days, the signal and communications lines that may be affected by the excavation to the extent necessary, at the Contractor sole cost and expense.
  - J. 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. SCRRA has no obligation to supply additional Right-of-Way for

## Rules and Requirements for Construction on SCRRA Right-of-Way

non-railroad facilities affected by this Project, nor does SCRRA have any obligation to permit non railroad facilities to be abandoned in place or relocated on Right-of-Way. Any facility or utility that crosses Right-of-Way must be covered under an agreement or license obtained through SCRRA including, without limitation, any relocation of an existing facility or utility.

- K. SCRRA will, if required, 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.

## 7.0 HAZARDOUS AND CONTAMINATED MATERIALS

### 7.1 Discharge

- A. Discharge, release or spill on Right-of-Way of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify SCRRA Representative of any discharge, release or spills in excess of a reportable quantity. The Contractor must not allow Right-of-Way to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.

### 7.2 Notification, Control and Disposal

- A. If the Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including any non-containerized commodity or material, on or adjacent to Right-of-Way, in or near any surface water, swamp, wetlands or waterways adjacent to the Right-of-Way, while performing any work on this Project, the Contractor must immediately: (a) notify the Public Agency's Resident Engineer and SCRRA Representative, of such discovery; (b) take safeguards necessary to protect its employees, sub-contractors, agents and third parties; and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

## 8.0 INSPECTION AND OBSERVATION

### 8.1 Site Inspections by SCRRA and Others

- A. In addition to the office reviews of construction submittals, site observations will be performed by SCRRA or its designee at significant points during construction as determined by SCRRA. Site visits to observe the progress of the work may be performed at any time throughout the construction process as deemed necessary by SCRRA.



## Rules and Requirements for Construction on SCRRRA Right-of-Way

- B. Federal or State representatives may also conduct inspections and tests to verify compliance with laws and regulations. SCRRRA maintains an Efficiency Testing program to verify the effectiveness of the Contractor's compliance with 49 CFR 214 – Railroad Workplace Safety regulations and SCRRRA third party work rules.

### 8.2 SCRRRA Efficiency Tests

- A. SCRRRA representatives may make inspections and conduct tests to judge the effectiveness of the safety training, and compliance with SCRRRA requirements. The Contractor shall cooperate with SCRRRA, Federal, and State representatives at all times. Disregard for, or failure to comply with, the requirements of 49 CFR 214 – Railroad Workplace Safety regulations, or SCRRRA third-party safety requirements may result in the removal of an offending individual from Right-of-Way. Egregious or repeated disregard for any safety rule or requirement may result in the termination of the Contractor's Right-of-Entry Agreement.

### 8.3 Scope of Inspections and Observations

- A. Inspections by SCRRRA will be for compliance with SCRRRA standards, guidelines, rules, and agreements, and will generally be limited to the work of the Contractor within or near Right-of-Way. Notwithstanding any inspection or site visit by SCRRRA, responsibility for compliance with the Contract between the Contractor and the Public Agency, local codes and ordinances, SCRRRA standards and guidelines, and for the inspection of temporary and permanent work and other work site inspections, resides with the Public Agency and the Contractor. SCRRRA by its inspections and comments makes no representations and offers no warranty as to the completeness, accuracy, degree of conformance to codes, compliance with the Contract or local codes or ordinances.

## 9.0 CLEANING AND RESTORATION

### 9.1 Cleaning of Right-of-Way

- A. The Contractor shall, upon completion of the work, promptly remove all of the Contractor's tools, implements and other materials whether brought upon the Right-of-Way by the Contractor or any sub-contractor, employee, supplier, or agent of the Contractor. The Contractor shall also restore the Right-of-Way of SCRRRA, and make arrangements with SCRRRA to restore the tracks, wire lines, signals, and other facilities of SCRRRA. The Contractor shall leave the premises in a clean and presentable state equal to or better than existed at the start of the Project work. All areas must be graded to drain away from the tracks, all fences or other barriers that have been damaged during the work, or removed to facilitate the work, must be replaced with new fencing of an equivalent character. Where the Project improvements intersect the natural flow of the runoff, the contractor shall provide facilities for the proper collection, conveyance, and disposal of water reaching the interfering improvement.



**EXHIBIT A**

**SCOPE OF SITE SPECIFIC WORK PLAN (SSWP)**

***All SSWPs shall be submitted in writing a minimum of 15 calendar days prior to the scheduled start of work within Right-of-Way. SCRRA will require a SSWP for all proposed work in or adjacent to Right-of-Way that affects the operation and safety of Metrolink passengers and trains. Provide detailed information on each task for SCRRA review and approval. A SSWP Checklist shall be submitted to SCRRA.***

TASK	DESCRIPTION
Contractor	Provide the name and address of the contractor.
Scope	Provide a brief description of the work. Description shall include all activities necessary to perform construction task within Right-of-Way, including use of grade crossings, main tracks, siding, stations, and proposed storage area.
Brief Schedule	List the project beginning and end dates, as well as time for the proposed activities.
Location	Identify the city, county, subdivision name, mile post limits, tracks, sidings of the proposed work activity.
Equipments	Identification of all equipment necessary for the successful completion of the work activities. All equipment shall be inspected, calibrated, and certified by the contractor for performing work in and around Right-of-Way. Provide plan illustrating locations of equipment during build-up of equipment.
Material and Staging	Identify all materials required for the completion of the work activity. Identify the placement of all personnel and material to allow for schedule adherence. Identify proposed haul roads, methods of separating construction vehicles from railroad operations, truck staging locations. Provide crane capacity, locations and positions during hoisting.
Schedule	Detailed summary of the work activity. All work with a potential to impact normal functioning of any part of the operating system shall include a detailed 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 all activities planned will be completed. Failure of the contractor to complete the scheduled activities by the planned time or to put in place an approved contingency plan may adversely impact the operations of SCRRA.
Haul Routes	Identify the routes that will be used by the trucks to deliver materials. Contractor will communicate with sub-contractors the safety of the railroad and adherence to safety procedures while delivering materials to the Right-of-Way.
Safety Plan	Identification of proper personnel protective equipment (PPE) and work area. Provide plan for safety training, utility notifications, work windows, and measures to perform work activities to effectively reduce the amount of time and effort required during the approved work windows identified and submitted.

Rules and Requirements for Construction on SCRRA Right-of-Way

Contingency Plan	Include back-up or contingency plans for putting the system back in operation in case of emergency or in case the contractor fails to perform and complete the work on time. Contingency plan shall address the various stages of construction.
Worksite Representative	Names, title, phones (office and cellular), e-mail address and date and time of availability.
Emergency Response Plan	Written procedures for responding to emergencies (phones, contact numbers, addresses and maps) for incident, police, ambulance, fire and medical (hospitals). Provide First-aid kit and fire extinguisher at the field location. Name, title and phones (office and cellular) of all responsible persons who can be contacted for emergency.
Utility Plans	Provide plans showing all the existing underground and overhead utilities, including SCRRA's signal and communications cables when the excavation, boring and jacking, and drilling & pile driving work is within twenty feet of railroad tracks. The plans will show the actual locations of utilities based on potholing operation.
Excavation Plan (If necessary)	Provide excavation support plans and calculations. Excavation plans shall meet Caltrans, OSHA, and SCRRA requirements. Refer to SCRRA's Excavation Support Guidelines.
Boring and Jacking Plan (If necessary)	Provide plans and profile of casing and carrier pipes. Provide details and calculations of boring and excavation. Soil boring data and analysis, track monitoring plans and pressure grouting plans shall be submitted. Refer to SCRRA's Engineering Standard ES5001 or ES5002.
Drilling and Pile Driving Plan (If necessary)	Provide plans of pile layout and developed elevation of finished structures.
Falsework Plan (If necessary)	Provide falsework installation, stripping and lowering plans and calculations for review and approval.
Temporary Traffic Control Plan (If necessary)	Submit temporary traffic control plans for any traffic control affecting grade crossings and disrupting normal operation of grade crossing protection. Temporary Traffic control plans shall meet CA MUTCD, WATCH and SCRRA requirements. Refer to SCRRA Temporary Traffic Control Guidelines and SCRRA Engineering Standard ES4301.
Storm Related identification, Prevention and Implementation Plan (If necessary)	Provide plans specific to jobsite that identifies potential hazards, implements preventive measures with timeline, and ways to handle emergencies related to storms.

**EXHIBIT B**  
**SITE SPECIFIC WORK PLAN (SSWP)**  
**CHECKLIST**

Rules and Requirements for Construction on SCRRRA Right-of-Way

ITEM	YES	NO	N/A	IF NO, EXPLAIN
<b>Equipment</b>				
All equipment necessary for the work is identified?				
Procedures for all equipments to be inspected, calibrated and certified established?				
<b>Material and Staging</b>				
Materials required for work identified?				
Personnel required for work identified?				
Plan illustrating locations of materials and equipment during build-up of equipment and prior to hoisting submitted?				
Plan illustrating crane capacity, locations and positions during hoisting submitted?				
<b>Schedule</b>				
A schedule of the work, showing each activity and where and how it affects normal operation submitted?				
Detailed schedule indicating the expected hourly progress of each activity that has duration of one hour or longer submitted?				
All SCRRRA furnished services and time line identified on the schedule?				
<b>Haul Routes</b>				
Routes used by the trucks to deliver materials identified?				
Sub-contractors are communicated with haul routes, safety of the railroad and safety procedures while delivering materials to the Right-of-Way?				
Truck staging locations identified?				
<b>Safety Plan</b>				
Proper personnel protective equipment (PPE) identified?				
Safety training scheduled and completed?				
SCRRRA signal and communication cables located? Ticket number obtained?				
DigAlert ticket number obtained for the project?				
Work windows are identified for the constructions?				
Measures to perform work activities to effectively reduce the amount of time and effort required during the approved work windows identified and submitted?				
Worksite hazards identified?				
<b>Contingency Plan</b>				
Back-up or contingency plan and necessary resources (labor, equipment, materials) to assure that all appropriate measures are available for the return to full service submitted?				
Contingency plan addresses the various stages of work?				

Rules and Requirements for Construction on SCRRRA Right-of-Way

ITEM	YES	NO	N/A	IF NO, EXPLAIN
<b>Worksite Representatives</b>				
Name, title, phones (office and cellular), e-mail address, date and time of availability provided to SCRRRA?				
<b>Emergency Response Plan</b>				
Written procedures for responding to emergencies for incident, police, ambulance, fire and medical (hospital) submitted?				
First-aid kit and fire extinguisher will be located at field location?				
Name, title and phones (office and cellular) of all responsible persons who can be contacted for emergency provided?				
<b>Utility Plans</b>				
Plans showing all the existing underground and overhead utilities, including SCRRRA's signal and communications cables submitted?				
<b>Excavation Plans (If necessary)</b>				
Limits of excavation with slope lines indicated?				
Excavation support plans including calculations submitted?				
Type and models of equipment proposed for use submitted?				
Operational limits of equipment (including swing radius or overhang distance submitted?				
Plan and elevation illustrating location of equipment with respect to track submitted?				
Stock pile areas?				
SCRRRA Shoring Submittal Design Checklist as per SCRRRA Excavation Support Guidelines, Appendix A submitted?				
SCRRRA Shoring Submittal Review Checklist as per SCRRRA Excavation Support Guidelines, Appendix B submitted?				
Performance Bond submitted to SCRRRA				
<b>Boring and Jacking Plans (If necessary)</b>				
Plan and profile of casing and carrier pipe submitted?				
Location and size of jacking and receiving pits shown?				
Engineering details and calculations submitted?				
Soil boring data and analysis submitted for pipes equal or greater than 48" in diameter?				
Track monitoring plans submitted for pipes equal or greater than 48" in diameter as per Section 9, Track Monitoring of SCRRRA Excavation Support Guidelines?				
Boring, tunneling or jacking operation will be continuous without stoppage when the casing is 20 feet from the nearest track?				
Immediately after completion of jacking operation, the installation shall be pressure grouted?				
Boring and Jacking meet SCRRRA Engineering Standard ES5001 or ES5002 requirements?				
Performance Bond submitted to SCRRRA for pipes equal or greater in diameter than 36 inches?				

## Rules and Requirements for Construction on SCRRA Right-of-Way

ITEM	YES	NO	N/A	IF NO, EXPLAIN
<b>Drilling and Pile Driving Plans (If necessary)</b>				
Plan of pile layout and developed elevation of finished structure with intermediate excavation levels indicated?				
Type, model, location, operation limits of cranes submitted to SCRRA?				
Pick plan for hoisting of large or heavy materials submitted?				
<b>Falsework Plan (If necessary)</b>				
Plans of falsework and calculations submitted?				
Falsework erection plans submitted?				
Plans of stripping and lowering of falsework including schedule submitted?				
Methods of securing beams and stringers to bents submitted?				
SCRRA Falsework Submittal Checklist as per SCRRA Grade Separation Guidelines submitted?				
<b>Temporary Traffic Control Plans (If necessary)</b>				
Temporary traffic control plans submitted?				
Approval of Temporary traffic control plan obtained from local authority?				
Temporary traffic control plan meet CA MUTCD, WATCH and SCRRA requirements?				
Temporary traffic control plan meet SCRRA guidelines and Engineering Standard ES4301 requirements?				
<b>Storm Related identification, Prevention and Implementation Plan (If necessary)</b>				
Plans for tie-down and removal of material and small equipment for high winds?				
Plans to handle large amount of stormwater due to heavy rain, including diverting, cleaning drains, off-site and on-site impacts, and covering materials?				
Prevent stormwater damage and methods to prevent ponding submitted?				
Material or equipment creating dams to water runoff?				
Plans to handle landslides for on-site earthwork or from adjacent areas?				
Emergency contact numbers for storm related emergencies?				
Availability of equipment to cleanup storm debris and repair damage?				



**EXHIBIT C**

**CONTRACTOR SUBMITTAL CHECKLIST**

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>REFERENCES</b>
1.4 & 1.5	Temporary Right-of-Entry Agreement	Form No. 6, <a href="http://www.metrolinktrains.com/agency/page/title/engineering_construction">http://www.metrolinktrains.com/agency/page/title/engineering_construction</a>
1.4 & 1.5	Insurance Certificates	Form No. 6
1.5	Construction Schedule	Standard Specifications
1.5	Weekly Look-Ahead Schedule	Standard Specifications
1.5	Document Control Plan	Resident Engineer's Manual
1.5	Testing and Inspection Plan	Resident Engineer's Manual
1.5	Site Specific Work Plans	Form No. 37
4.0	Work Windows Requests	Form No. 37
5.1	Demolition and Removal Plans	Grade Separation Guidelines and Caltrans Falsework Manual
5.2	Excavation and Backfill Plans	Excavation Support Guidelines
5.4	Shoring and Support of Excavation Plans	Excavation Support Guidelines
5.4	Shoring and Support of Excavations Removal Plans	Excavation Support Guidelines
5.4	Track Monitoring Plan	Excavation Support Guidelines - Section 9.0
5.5	Drilling and Pile Driving Plans	AREMA and Caltrans
5.6	Boring and Jacking Plans	ES5001 and ES5002
5.6	Boring and Jacking Track Monitoring Plan	Excavation Support Guidelines, Section 9.0 and Design Criteria Manual Section 9.0
5.8	Temporary Structures Plans	Grade Separation Guidelines and Caltrans Falsework Manual
5.8	Falsework Design Plans	Grade Separation Guidelines and Caltrans Falsework Manual
5.8	Falsework Erection Plan	Grade Separation Guidelines and Caltrans Falsework Manual
5.8	Falsework Removal Plan	Grade Separation Guidelines and Caltrans Falsework Manual
5.9	Hoisting Plans	OSHA
5.10	Clearances	(CPUC) General Order 26-D and ES2101 & ES2102
5.11	Temporary Traffic Control Plans	California MUTCD, Temporary Traffic Control Guidelines, and ES4301
6.1	Underground and overhead utilities plans	California State Law 4216 and Underground Service Alert of Southern California

**EXHIBIT D****SAMPLE SITE SPECIFIC WORK WINDOW****1.0 WORK WINDOWS****1.1 Track Occupancy and Project Specific Work Windows**

Track Occupancy and work windows for this project must be coordinated with SCRRA. Work Windows that apply to this Contract are as follows:

- A. Most work within the SCRRA right-of-way or within 25 feet from centerline of active tracks shall be performed under Form B.

Only **XXX** Form B Work Window(s) will be allowed at any one time. Only one EIC and **00** Subgroup Coordinators for each Form B Work Window will be provided. Form B Work Windows will be available between the hours of **00:00** AM to **00:00** PM, Monday through Sunday.

The Contractor shall schedule and conform their work limits within the range of vision of the assigned EIC. If the Contractor's requested work limits are outside of the normal range of vision of the EIC due to curves, topography, or distance, SCRRA will furnish one or more Roadway Worker Protection (RWP) qualified Subgroup Coordinator suitable to the EIC. The railroad workers are subject to the Federal Hours of Service laws and shall not work in excess of 12 hours per shift, including travel time from crew designated headquarters to the work site.

- B. SCRRA will provide **XXX** Limited Track Windows, subject to the terms and conditions of the SCRRA Standard Specifications, the C&M Agreement, and as stated in this section. Limited Track Window will be available at night between the hours of **00:00** PM to **00:00** AM the following morning, Monday through Sunday.

- C. SCRRA will provide Exclusive Track Windows, subject to the terms and conditions of the SCRRA Standard Specifications, the C&M Agreement, and as stated in this section. The Exclusive Track Windows will be for the following period and activities:

1. **XXX** Exclusive Track Window(s) of **00**-hour will be available between the hours of **00:00** PM Friday night to **00:00** AM Monday morning for bridge construction.
2. **XXX** Exclusive Track Window(s) of **00**-hour will be available between the hours of **00:00** PM Friday night to **00:00** AM Monday morning on weekends for track cutovers. Contractor will perform all track cutovers

## Rules and Requirements for Construction on SCRRA Right-of-Way

and SCRRA signal forces will perform all associated signal work during the weekend Exclusive Track Windows.

3. **XXX** Exclusive Track Window(s) and full closures of the street and highway-rail grade crossing will be granted for **00**-hour between the hours of **00:00** PM Friday night to **00:00** AM Monday morning to perform all required grade crossing and street rehabilitation and construction, as well as the required track and signal cutovers. During each of the street and highway-rail grade crossing closures, SCRRA signal forces will prepare and install all necessary signal systems. The Contractor shall coordinate with SCRRA signal forces and allocate adequate time during each grade crossing closure for railroad signal cutover and testing before the road and track is returned to service. The Contractor shall furnish and install all street and track work and shall coordinate with SCRRA signal forces to ensure timely completion of all railroad work. During this period Contractor may perform other work, but that work shall not affect the signal circuits (i.e. no track welding, road surfacing, etc.). Work that is permitted during this time includes installation of concrete crossing panels, roadway grading, paving, stripping, traffic control devices and general site clean-up necessary to reopen street and highway-rail grade crossing to vehicular traffic.
- D. The execution of the work by the Contractor shall follow all the requirements and provisions shown in SCRRA's Standard Specifications Section 01 14 00.
- E. SCRRA shall furnish **00** signal persons per day to provide railroad signal construction forces to support the Contractor's track, bridge or station construction activities. Signal support is defined as any work that will interfere with the existing wayside signal system, and/or grade crossing warning system.

## 1.2 Daily Train Traffic Volumes

There are **XXX** main tracks with controlling signals at this project location. SCRRA, Amtrak, the BNSF Railway Company (BNSF) and Union Pacific Railroad (UPRR) operate trains over the tracks traversing the project location. The average train traffic on this route is **00** passenger trains and **00** freight trains for 24-hour period. The average train timetable speed is **00** mph for passenger trains and **00** mph for freight trains. Passenger trains include scheduled revenue trains as well as possible dead-head moves. Passenger train traffic is approximately limited to the hours between **4:00** am and **12:00** Midnight. Freight trains are operated 24 hours a day, seven days a week without regular schedules. In addition to freight service, extra freight trains may be operated as traffic warrants.