



Contractor Interface with Rail Operations

PART 1 - GENERAL

1.01 DESCRIPTION

Outline for Contractor's interface with Capital Metro Railroad's operating system, including track work, train control, and communications.

1.02 DEFINITIONS

- A. Capital Metro Railroad:** is a public agency in Austin, TX that provides commuter and freight rail transportation, which operates in conjunction with an excursion railroad, named the Austin Steam Train Association (ASTA).
- B. Railroad Contractors:** Any person, company, or identity that is under contract with Capital Metro, performing various activities on the railroad Right of Way.
- C. Third Party Contractors:** Any person, company or identity, performing various activities on Capital Metro property, or on the railroad Right of Way.
- D. 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, signal houses, tunnels, culverts, grade crossings and station platforms and facilities.
- E. Operating Envelope:** Anywhere within Capital Metro Railroad property including any area that is an essential component of the operating system.
- F. Work Windows:** A designated period of time with a specific beginning and ending time for which the track, signals, bridges and other Operating System elements within the Operating Envelope are modified or temporarily removed from service to allow construction or maintenance work to occur. Written authority from Capital Metro Railroad, and an approved Weekly Site Specific Work Plan (SSWP), is required before a 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. These written changes are known as Track Bulletins and are categorized as follows.
 - **Multiple Track Window:** An approved Work Window in which passenger/ commuter and freight train service on two or more adjacent main tracks is suspended or halted. However, trains and on-track equipment associated with construction and maintenance activities may still operate on the tracks with suspended service but subject to the control of the Employee-in-Charge/ Flagman. Within rail corridors with three or more main tracks passenger/ commuter and freight train service may operate on the remaining main tracks subject to "Form B" restrictions. A "Form C" Track Bulletin will be issued by the Owner's Railroad Contract Operator/ Operating Railroad of Record to suspend or modify the train service on the two or more adjacent main tracks.

1.02 DEFINITIONS Cont'd

- **Single Track Window:** An approved Work Window in which passenger/ commuter and freight service on a single main track is suspended or halted. However, trains and on-track equipment associated with construction and maintenance activities may still operate on the single main track with suspended service subject to the control of the Employee-in-Charge/ Flagman. Additionally, passenger/ commuter and freight train service will operate on the single main track or main tracks remaining in service subject to "Form B" restrictions. A "Form C" Track Bulletin will be issued by the Owner's Railroad Contract Operator/ Operating Railroad of Record to suspend or modify the train service on the single main track removed from service. The limits of Single Track Windows will be a segment of track situated between the two nearest crossovers (universal or single). Single Track Windows within a track segment will not be allowed to extend beyond the limits of the two nearest crossovers, and in the case of more than one Single Track Window construction work will not be allowed on two adjacent track segments.

- **"Form B" Work Window:** An approved Work Window in which passenger/ commuter, 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 the Contract Operator or Agency 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.

- **"Track and Time" Work Window:** A period of time on a particular segment of track for which the Control Operator (Train Dispatcher) grants exclusive usage to a qualified employee of the Railroad.

- (1) Track and Time will be granted by the Train Dispatcher specifying the authority number, track limits and time. An employee (Flagman) granted Track and Time may occupy a track or tracks within the specified limits for the time period authorized. The limits of Track and Time are normally designated by Control Points (CPs). Track and Time is not normally used to protect work or trains for extended periods of time unless there are no other means readily available to do so.

G. Work Plan (WP): A document submitted by the Contractor, detailing the activities associated with a particular element of work. The Work Plan must include a description of the activity as well as the number of men and a list of the equipment required in the performance of the activity.

H. Site Specific Work Plan (SSWP): A program, plan, and schedule prepared and submitted by the Contractor **three weeks** (21 Days) prior to the proposed work and approved by Capital Metro, that accurately describes and illustrates the manner in which Work within the Operating Envelope will be accomplished, the impacts on any elements of the Operating System and the manner in which Work will be accomplished with the allotted Work Windows or protected period.

I. Site Specific Safety Plan - A site specific safety plan is a documented procedure that is designed to cover the hazards with a high chance of occurrence.

1.03 WORK PLAN (WP)

- A. The Contractor will prepare a detailed Work Plan for each and every task associated with the work that is required by the Contract or any associated Field Instructions or Change Notices. The Capital Metro Railroad Project Manager will provide directions and assistance to the Contractor in the preparation and submittal of the Work Plan.
- B. WP's shall include all activities necessary to perform construction tasks within the Capital Metro Railroad Right of Way, including use of stations, sidings, temporary construction easements and proposed storage areas.
- C. WP's shall include a description of any proposed changes to the Operating System between start and finish of the work, including any requested Work Windows.
- D. The WP shall conform to all other requirements applicable to the Contract Documents.
- E. The WP must contain a basic schedule of the work showing each activity and where and how it affects normal operation of the Operating System. Each activity in the plan shall include all labor, materials and equipment required to complete the activity within the Capital Metro allotted time period.
- F. **The WP must include Contingency Plans for putting the Operating System back in operation in case of an emergency or in case the Contractor fails to complete the work within the Work Window. The Contingency Plans shall address the various stages of activities to restore the System.**
- G. The WP's must be of sufficient detail, clarity and organization to permit efficient review by the Engineer and approval at least 10 calendar days before the proposed work is performed. The WP shall be submitted to the Engineer as follows.
 - a) At least **3 weeks** (21 calendar days) prior to start of the subject work within the Capital Metro Right of Way for work other than signal and overhead wire installation.
 - b) At least **30 calendar days** prior of the start of the work for work involving signal and overhead wire installation, such as signal system cutover, overhead wire involving third parties.
- H. Capital Metro may request explanations and changes to the WP to ensure that it conforms to the requirements of the Contract Documents. If the WP is not acceptable, Contractor shall revise the WP to make it acceptable. The Contractor is responsible for submitting a revised WP that can be reviewed and approved by Capital Metro at least seven (7) calendar days in advance of any work within Capital Metro Right of Way.
- I. The Contractor will be informed if the WP is acceptable not less than seven (7) calendar days prior to the scheduled start of work within the Capital Metro Right of Way. Once the plan is accepted, Contractor shall assemble the resources necessary to perform the work represented by the SSWP, so that necessary resources are available and ready for use, in general on the day which begins the week in which the work is to be accomplished. At this time, Capital Metro will make a final decision as to whether or not the work is to proceed as planned or will be canceled. The prime consideration will be the stage of readiness of the Contractor, which the Contractor shall demonstrate to Capital Metro.

1.04 WEEKLY SITE SPECIFIC WORK PLAN (SSWP)

- A. In addition to Work Plans, the Contractor shall submit a Site Specific Work Plan (SSWP) on a weekly basis **three weeks (21 calendar days)** in advance of the proposed work. The Contractor Representative, Resident Engineer or the Project Manager of each project must attend and represent their project at the weekly SSWP meeting. The meeting will be held weekly on Mondays at 11am located at the North Ops building 9315 Old McNeil Rd Austin, TX 78758, in the 225 Rail Conference Room. All SSWPs shall detail the proposed weekly events and activities, and include the Contractor's request for Work Windows. When the SSWP has been approved, an EIC and/or Flagman will be assigned to your project. Approval of a WP or SSWP by Capital Metro may require the placement of an appropriate protective divider (K-rail, Chain Link Fence) between construction operations and the operating system. Contractor shall furnish and install protective dividers as specified by Capital Metro. The Capital Metro Railroad Project Manager will provide directions and assistance to the Contractor in the preparation and submittal of the Site Specific Work Plan.
- B. The Contractor shall furnish all labor, materials, and equipment as required to perform and complete the work within the approved work window. The Contractor shall maintain the approved schedule in the SSWP.
- C. All work outlined in the SSWP 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 a duration of one hour or longer. The schedule shall include a time at which all activities planned under the SSWP will be completed. The SSWP shall also include the mobile phone numbers of individuals responsible for compliance with the approved SSWP. 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 Capital Metro Railroad. In the event that Capital Metro Railroad service is delayed by Contractor's actions, damage will be incurred and liquidated damages will be assessed.
- D. The SSWP shall be a plan that describes the activities necessary to perform the work within the Operating Envelope and indicates which Work Plans will be utilized. The plan shall explain each activity along with the proposed schedule to complete each item. Each activity in the plan shall include all material and equipment required to complete the activity within the scheduled time period.
- E. The SSWP shall also include contingency plans for putting the system back in operation in case of an emergency or in case the Contractor fails to perform and complete the work on time. Contingency plans shall address the various stages of construction.
- F. The contractor shall have a copy of the current Capital Metro Railroad schedule. Schedules are available at Capital Metro Railroad Stations or on the Internet at www.Capmetro.org
- G. The SSWP will be submitted to Capital Metro for review no later than the opening of the business day on the Monday three (3) weeks (21 Calendar Days) before the proposed start of work within the Capital Metro Railroad property. Capital Metro may request explanations and changes to the SSWP, if the plan is not acceptable, the Contractor shall revise the plan accordingly.
- H. The Contractor will be informed if the SSWP is acceptable not less than seven (7) calendar days prior to the scheduled start of work. Once the plan is accepted, the Contractor will be prepared to perform the work represented by the SSWP.
- I. References herein to weeks mean the week starting with Monday, and the next six (6) days of the proposed work schedule.

1.04 WEEKLY SITE SPECIFIC WORK PLAN (SSWP) Cont'd

- J. All work within Capital Metro Railroad's property requires an SSWP approval by Capital Metro.
- K. No work will be permitted during weekday commute hours less than twenty-five (25) feet horizontally from centerline of the nearest rail until after 9:00 AM and prior to 3:30 PM. Work closer than twenty-five (25) feet from centerline of the nearest rail may require a night or weekend schedule. Some work performed more than twenty-five (25) feet horizontally from centerline of the nearest rail may be restricted (due to type of equipment being used with the potential to foul the track) to night and weekends when so required by the approved SSWP.
- L. Materials and equipment shall not be piled, stored or parked when not in use closer than twenty-five (25) feet horizontally from center line of nearest operating track.
- M. The placement of piles, forms, braces, shoring, false work or other construction supports shall be in accordance with any and all TXDOT requirements.
 - i. Temporary overhead structures shall have a minimum vertical clearance of 22 feet above top of rail.
 - ii Temporary overhead structures with proposed vertical clearance less than 22 feet above top of rail must have an exemption from and approval of Capital Metro Railroad.
- N. In general, open excavation areas shall be protected per OSHA regulations. Open excavation areas adjacent to operating tracks shall be covered when applicable and protected by walkways with handrails no closer than eight (8) feet, six (6) inches horizontally from the nearest operating track, if tangent, and nine (9) feet, six (6) inches if track is curved.

1.05 AVAILABILITY OF ACTIVE TRACKS:

- A. Active main line tracks and sidings are only available during Work Windows as approved by a Capital Metro Representative.
- B. The Contractor does not have exclusive rights to the Work Windows. The Contractor must share these Work Windows with other Contractors and current Owner's Contract Operator.

1.06 CURRENT AND FUTURE CORRIDOR TRAFFIC

The following is a general summary of train traffic in the rail corridor:

- A. Mainline - Current Owner Commuter Operations
 - 1. Weekday train service, both directions
 - Capital Metro Railroad commute service per current timetable
 - 4 to 6 freight trains between 11 AM to 5 AM
 - 2. Saturday train service, both directions
 - Capital Metro Railroad commute service per current timetable
 - 2 to 3 freight trains (Times may vary)
 - 3. Sunday train service, both directions
 - There is NO Capital Metro Railroad commute service on Sunday
 - 2 to 3 freight trains (Times may vary)

1.06 CURRENT AND FUTURE CORRIDOR TRAFFIC Cont'd

4. Special Event Service

- 12 additional Trains on Extended Weekend Service – Various events
- 6 additional Trains on Weekday Mid-day service – Various events

B. Mainline - Future Owner Commuter Operations

1. Owner's and other operator's commuter train traffic may vary in time and frequency over the course of the contract per published revisions to timetables.

1.07 SAFETY

- A. Employees of the Contractor scheduled or expected to perform work within Capital Metro Railroad Property are required to have successfully completed, within the last twelve (12) months, Capital Metro Railroad's Roadway Worker Protection training program. This program is provided through Herzog Trains Services Inc. (HTSI)...and all costs associated with the training are the responsibility of the Contractor. If employees of the Contractor are not qualified, the Contractor shall notify Capital Metro and its O&M contractor (HTSI) no less than 30 days before the project begins to get scheduled for a Roadway Worker Training Class.

HTSI Point of Contact for training – Brad Green – 512-389-7289

The Contractor shall forward to Capital Metro Railroad and the O&M contractor (HTSI) records of those successfully completing the course.

- B. **Roadway Worker Protection Act:** Contractor shall at all times comply with provisions of the Federal Rail Administration Regulation 49CFR214 (Roadway Worker Protection).
- C. **Site Specific Safety Plan:** The contractor is responsible to develop a site specific safety plan before the project begins and must be approved by Capital Metro.
- D. **Site Safety Officer:** The contractor is responsible to provide a site safety officer and the individual must be approved by Capital Metro.
- E. **Safety Incident Reporting Level** – The different levels of coordination and reporting of any construction related safety incident with Capital Metro, O&M Contractor (HTSI) and the Contractor working on the RIGHT OF WAY. (Appendix C)
- F. **Zero Tolerance:** The Capital Metro Railroad Zero Tolerance Policy is attached and made a part hereof.



Zero Tolerance Procedure On Track Safety (OTS) Rules Enforcement

Every individual performing work on the Capital Metro Right-of-Way is both entitled to and responsible for a safe working environment. The objective of this “Zero Tolerance Procedure” statement is to establish clear and concise standards for Roadway Worker Protection (RWP) compliance on the Capital Metro Railroad system.

This is a minimum requirement and any supervisor or manager of any group or organization working on the Capital Metro Right of Way may set more stringent standards for their own employees.

A. General

1. The Zero Tolerance Procedure applies to all employees and contractors of Capital Metro or any other entity entering upon the Capital Metro Railroad Right-of-Way for the purpose of performing work as a Roadway Worker.
2. The EIC will be responsible for overseeing the enforcement of Capital Metro Railroad RWP requirements and all other applicable right-of-entry requirements for workers in his group. The EIC will not allow anyone to work within his/her workgroup until all RWP requirements are met.

B. Roadway Worker Protection Infraction

Individuals who are determined to be non-compliant with Capital Metro Railroad’s RWP requirements will be subject to the following procedures:

- First infraction – A written notice will be delivered to the non-compliant individual, and the individual’s supervisor. A copy will be forwarded to the appropriate Capital Metro Rail Manager. The individual or work group must leave the Right-of-Way until the reason for the infraction is corrected.
- Second infraction – The individual or work group will be banned for 5 days from the Capital Metro Railroad Right-of-Way with re-training within 7 days of infraction. Notification procedures will be the same as with the first infraction.
- Third infraction – The individual or work group will be banned for 1 year from the Capital Metro Railroad Right-of-Way. Notification procedures will be the same as with the first infraction.
- Fourth infraction – The individual or work group will be permanently banned from Capital Metro Railroad Right-of-Way. Notification procedures will be the same as with the first infraction.

Any infraction in which the individual cannot provide evidence of training will result in immediate removal from Capital Metro Right-of-Way.

Each infraction will be automatically removed from Capital Metro Railroad records 3 years from the date of occurrence.

Zero Tolerance Procedure

On Track Safety (OTS) Rules Enforcement

C. Accountability

Infractions to this procedure will be referred to and handled by Capital Metro Department of Safety and Risk Management. Refer by phone immediately, and then written follow up within 24 hours to the Project Manager and Capital Metro Rail representative.

Corrective actions or other follow up resulting from infractions covered by this procedure are the responsibility of the Project Manager, reporting back to Capital Metro Rail representative.

SCOPE OF SSWP

All SSWPs shall be submitted in writing a minimum of **3 weeks** (21 calendar days) prior to the scheduled start of work within the Capital Metro Right-of-Way. Capital Metro will require a SSWP for all proposed work in or adjacent to Capital Metro Right-of-Way that affects the operation and safety of Capital Metro passengers and trains. Provide detailed information on each task for Capital Metro review and approval. Please include the following tasks when creating your SSWP.

TASK	DESCRIPTION
Contractor	Provide the name, phone # and address of the contractor.
Work Site Representative	Names, title, phones (office and cellular), e-mail address and date and time of availability
Scope	Provide a brief description of the work. Description shall include all activities necessary to perform construction task within Capital Metro 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.
Equipment	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 Capital Metro Right-of-Way. Provide plan illustrating locations of equipment during buildup 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 half hourly progress of each activity that has duration of one half 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 Capital Metro.
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.
Site Specific Safety Plan	Identification of Safety Officer and the hazards with high chance of occurrence. 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.
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.

SCOPE OF SSWP

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.
Excavation Plan (If necessary)	Provide excavation support plans and calculations. Excavation plans shall meet OSHA requirements.
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.
Drilling and Pile Driving Plan (If necessary)	Provide plans of pile layout and developed elevation of finished structures.
False work Plan (If necessary)	Provide false work 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.