

UNION PACIFIC RAILROAD COMPANY TELECOM OPERATIONS ADDENDUM

Contractor Minimum Safety Requirements

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Union Pacific Railroad's Contractor Minimum Safety Requirements document is incorporated by reference.

Depending on the type of work and the work location, there are many specific safety regulations, including but not limited to OSHA, FRA, FMCSA requirements, that Union Pacific requires its Contractors to follow. Contractors should also be prepared to comply with all safety requirements found in their agreements to perform work for Union Pacific.

All Union Pacific rules and/or policies in effect at the time work is performed are controlling, including rules that are not listed in this document. Please refer to the applicable General Orders, and other official publications of policy or instructions. Contractor Personnel are responsible for knowing and complying with rules that apply to their particular job responsibilities.

TOWER WORK:

It is the responsibility of the contractor to have a written safety program and must conduct regular safety audits of its job sites by a competent person. The Contractor will provide documentation of audits to UNION PACIFIC.

The Contractor must provide a site-specific safety plan that includes rigging for construction for new tower and deconstruction of old tower that complies with ANSI TAI-1019-A, structural and RF safety procedures and fall protection requirements each specific job. Contractor is to provide this documentation to Union Pacific.

The Contractor must have a competent and qualified person at the project site who will conduct daily safety audits.

The Contractor must require pre-employment physical agility or physical fitness tests to determine ability to perform job tasks. The Contractor must provide drug screening of workers for unlawful use of controlled substances.

The Contractor must ensure that their tower climbers have been properly trained and understand OSHA regulations in the areas of fall protection and rescue. The Contractor must also conduct a hazard assessment to determine the requirements for personal protective equipment, including fall protection. The Contractor must maintain written documentation of all training as required and provide that to Union Pacific.

The Contractor must maintain good housekeeping at the job site.

ON TRACK & OFF TRACK WORK EQUIPMENT:

It is the responsibility of the Contractor-In-Charge to ensure that all on track and/or off track work equipment is in a safe condition to operate. There must be a written inspection process regarding daily, weekly and other periodic inspections for work equipment operated on Union Pacific property, including inspections mandated by FRA, AAR, OSHA and/or other government

agencies. In addition to the inspection process there must be a written maintenance process that includes timelines regarding resolution of safety sensitive defects. If, in the opinion of the Railroad Representative, any of the Contractor equipment is unsafe for use, the Contractor shall remove such equipment from the railroads property. The Contractor-In-Charge must ensure that there is a written training and qualification process for operators and support personnel regarding operation of such equipment. Written documentation of training and qualification must be carried by Contractor Personnel.

In addition:

- The operators of all work equipment must be properly trained and competent in the safe operation of the equipment. Operators must be:
 - Familiar and comply with OSHA regulations on lockout/tagout of work equipment.
 - Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
- The operators' manual, which includes instructions for safe operation, must be kept with each machine.
- Unless otherwise authorized by the designated Union Pacific representative, all
 unattended equipment is parked a minimum of 25 feet from any track and minimum of
 250 feet from any road crossing. Before leaving any equipment unattended, the operator
 must stop the engine and properly secure the equipment against movement.
- Cranes are equipped with three orange cones that will be used to mark the working area
 of the boom and load and the minimum clearances to overhead power lines. All
 overhead lines are considered to be high voltage.

WORKING AROUND LIVE TRACKS (RED ZONES):

Prior to beginning work on live track the Contractor-In-Charge must notify the designated Union Pacific representative and a job briefing must be conducted with the Union Pacific representative. Engineering Department Contractors are governed by FRA Roadway Worker Protection regulations, referenced in 49CFR214, Subpart C, which requires some form of On-Track Safety prior to fouling any track.

Red Zones are defined as that area within an arms length of the track, or any physical position, which places the person in a life-threatening situation. Any questions that arise related to working in the Red Zone should be directed to the designated Union Pacific representative.

ON TRACK SAFETY:

The Contractor is responsible for compliance with the Federal Railroad Administrations Roadway Worker Protection regulations (49CFR214, Subpart C) and UNION Pacific's On-Track Safety rules. Under 49CFR214, Subpart C, Contractors are responsible for the training and qualifications of their personnel on these regulations. Contractor Personnel must have

documentation of their training and qualifications while on the work site. At a minimum, each Contract worker must be trained as a Roadway Worker. Additional training and qualification requirements for the positions of Machine Operator, Lookout or Lone Worker must be met for those contractor workers performing those functions.

In addition to the instructions contained in FRAs Roadway Worker Protection regulations, all Contractor Personnel must:

- Maintain a distance of at least 25 feet to any track unless the railroads EIC is present to authorize movements.
- Wear an orange, reflectorized vest or similar orange, reflectorized workwear approved by the railroad's EIC. (High visibility safety apparel must be worn when working adjacent to a Federal highway.)
- Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor Personnel must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track.

77.5: GROUNDMAN:

The groundman is responsible for directing and safe-guarding all machine movements.

Before signaling boom or machine movement, the groundman must ensure the load, cab or boom will not come in contact with nearby wires, structures or other objects and persons.

78.8: OPERATING BOOMS NEAR POWER LINES:

Do not operate booms over power lines at any time. Do not operate booms under power lines unless proper clearance is maintained.

At stationary worksites, crane operators must place at least three (3) orange cones evenly spaced along the minimum clearance line to mark the minimum safe working distance to overhead power lines.

A. Operation Near Energized Lines

If booms must be operated near energized lines, maintain the minimum clearances listed in the table listed below. If proper clearance cannot be maintained, shut off the power and ground power lines before performing work.

Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet)
up to 50	10
over 50 to 200	15
over 200 to 350	20
over 350 to 500	25
over 500 to 750	35
over 750 to 1,000	45
over 1,000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).

Note: The value that follows "to" is up to and includes that value. For example, over 50 to 200 means up to and including 200kV

A groundman must be designated to observe equipment clearance and give timely warning for all operations when it is difficult for the operator to observe clearance.

B. In Transit

B. When in transit with no load and boom lowered, use the table below.

MINIMUM CLEARANCE DISTANCES WHILE TRAVELING WITH NO LOAD

Voltage	While traveling—minimum clearance distance
(nominal, kV,	(feet)
alternating current)	
up to 0.75	4
over .75 to 50	6
50 to 345	10
over 345 to 750	16
over 750 to 1,000	20
over 1,000	(as established by the utility owner/operator or registered
	professional engineer who is a qualified person with respect to
	electrical power transmission and distribution).

138.3.11: RIGGING LOADS:

A qualified worker must follow these requirements when rigging a load:

- 1. Make sure that slings, chains, wire rope, and other lifting devices conform to Union Pacific Rules 77.14.1 through 77.17.7. Contractors must comply with these rules and:
 - OSHA 1910.180 and 1926.550
 - ANSI B30.5-1968 and B30.5-1992
- 2. Determine the load angle factors, the number of slings to handle the load, and the rigging to be used.
- 3. Use tag lines according to Union Pacific Rule 45.1.
- 4. Safely handle wire rope, wire rope slings, and chains according to the manufacturer's recommendations and Union Pacific rules.