

18. Railroads and Third-Party Agreements

18A. General

Conduct all work necessary to meet the requirements in this section, and satisfy all functional needs and characteristics of the Work, including providing agreements with the railroads, coordinating and obtaining approval of Work on, above or affecting railroad right of way and all existing, new, or future at-grade or grade-separated crossings of railroads right of way.

18B. Standards

Design and construct all Railroad crossing Work, and Work within the Railroad Right of Way, in accordance with the requirements of the standards listed by priority in Table 18B-1 (Standards for Railroads).

18B - 1. Prioritization Table

STANDARDS FOR RAILROADS				
Priority	Author or Agency	Title		
1	UDOT	Special Provisions Included in Exhibit A		
2	AREMA	Manual of Railway Engineering		
3	FHWA	Manual on Uniform Traffic Control Devices		
4	UPRR	Standards for Bridge Construction		
5	UPRR	Guidelines for Temporary Shoring		
6	UPRR	Requirements for wireline/pipeline encroachments and crossings (Current Revision)		
7	UTA	UTA Standards for Bridge Construction		
8	Local Jurisdiction	Design Standards, Details and Specifications		
9	UDOT	UDOT Plan Sheet Development Standards		

TABLE 18B - 1 Standards for Railroads

18C. Requirements

18C - 1. Railroad Corridors and Company Interests

The Railroad corridors and Company interests are identified as follows:



18C - 1.1. Contact Persons After Award of the Contract

The Design-Builder shall coordinate and coorperate with UPRR and the UTA Railroads for all Work upon, over or under the railroads Right-of-Way or Work that may impact current or future railroads operations.

The primary UPRR point of contact for this Project is:

Jim Marshall Manager Special Projects, Public and Private Union Pacific Railroad Company 280 South 400 West, Suite 250 Salt Lake City, UT 84101 (801) 212-2783

For UPRR flagging services, contact:

Bill Ince Project Coordinator Union Pacific Railroad Company 280 South 400 West, Suite 236 Salt Lake City, UT 84101 (801-212-3939

The primary contacts for UTA are:

Brian Atkinson Property Administrator Utah Transit Authority 669 West 200 South Salt Lake City, UT 84101 (801) 262-5626

Crosby Mecham Manager, Facilities Design and Construction Utah Transit Authority 669 West 200 South Salt Lake City, UT 84101 (801) 237-1927

18C - 2. Railroad Agreements

Obtain Contract Right of Entry Agreement.



Submit a copy of the executed agreement and the insurance policies, binders, certificates and endorsements set forth therein to the Department prior to commencing work on UPRR property.

18C - 3. Insurance

Do not begin work upon or over UPRR's Right-of-Way until UPRR has been furnished the insurance policies, binders, certificates and endorsements required by the "Contractor's Right-of-Entry Agreement" and UPRR's Designated Representative has advised the UDOT that such insurance is in accordance with the Agreement. The required insurance will be kept in full force and effect during the performance of work and thereafter until Design-Builder removes all tools, equipment, and material from UPRR's property and cleans the premises in a manner reasonably satisfactory to UPRR. For the benefit of the Design-Builder and the Insurer(s), the current railroad traffic in the Project area is available from the UPRR's Designated Representative.

18C - 4. Railroad Worker Protection Training

All entities performing work within the Commuter Rail Corridor are required to receive Roadway Worker Protection Training from the Salt Lake City Commuter Rail Constructors (CRC). Request training by contacting Kerry Hurd or Steve Pollock (801) 779-0994.

All entities performing work within the UPRR ROW must complete the UPRR course "Orientation for Contractor's Safety", and be registered prior to working on UPRR property.

18C - 5. Design and Construction Submittals

Submit 4 sets of construction documents including materials, reports, test data, and procedures to the railroads for approval. Allow a minimum of four (4) weeks for review and approval. Submittals to the UPRR shall be made to the UPRR Manager Special Projects, Public and Private, unless otherwise directed by the Railroad.

Items in Table 18G-1 shall be submitted to the railroads for both railroad overpass and underpass work, as applicable.

The details of the construction affecting the UPRR tracks and property not already included in the Contract Plans will be submitted to UPRR's Designated Representative for UPRR's review and written approval before such work is undertaken. The Design-Builer shall allow for a minimum of four (4) weeks review.

18C - 6. As-Built Submittals

As-Built Records shall be submitted to the UPRR within 60 days of completion of the structures. These records will consist of the following items:

- Overpass projects:
 - Electronic files of all structure design drawings with as-constructed modifications shown, in approved CAD or Acrobat .pdf format
 - o Hardcopies of all structure design drawings with as-constructed modifications shown
- Underpass projects:



- o Hardcopies of all structure design drawings with as-constructed modifications shown
- o Final approved copies of shop drawings for concrete and steel members
- o Foundation construction reports
- o Compaction testing reports for backfill at abutments

18C - 7. Maintenance of Railroad Facilities

Maintain all ditches and drainage structures free of silt or other obstructions which may result from Design-Builder's operations; to promptly repair eroded areas within UPRR's right of way and to repair any other damage to the property of UPRR, or its tenants. All such maintenance and repair of damages due to the Design-Builder's operations will be done at the Design-Builder's expense.

18C - 8. Site Inspections by Railroad Representatives

In addition to the office reviews of construction submittals, site inspections may be performed by the railroads at significant points during construction, including: pile driving, drilling of caissons or drilled shafts, reinforcement and concrete placement for railroad bridge substructure and/or superstructure, erection of precast concrete or steel bridge superstructure, placement of waterproofing (prior to placing ballast on bridge deck) and completion of the bridge structure.

Site inspection is not limited to the milestone events listed above. Site visits to check progress of the work may be performed at any time throughout the construction.

18C - 9. Flaggers Representatives, Conductors or Watch Person

Work within, over or affecting, the railroad ROW, shall not commence until the railroad Flagger is available at the job site. Coordinate with the railroads to provide the adequate number of flag persons to accomplish the work

UPRR representatives, conductors, or watch persons shall be provided by UPRR at expense of the Design-Builder as follows:

(1) When any part of any equipment is standing or being operated within 25 feet, measured horizontally, from centerline of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.

(2) For any excavation below elevation of track subgrade if, in the opinion of UPRR's Designated Representative, track or other UPRR facilities may be subject to settlement or movement.

(3) During any clearing, grubbing, excavation or grading in proximity to UPRR facilities, which, in the opinion of UPRR's Designated Representative, may endanger UPRR facilities or operations.

(4) During any Design-Builder's operations when, in the opinion of UPRR's Designated Representative, UPRR facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.



When the construction operations of both UDOT and UTA are concurrent, the flagging will be coordinated to meet the needs of both parties, and the costs will be shared, in accordance with terms of the UTA/UDOT Intergovernmental Agreement

18C - 10. Walkways Required

Provide an unobstructed continuous walkway suitable for trainman's use in walking along trains, along the outer side of each exterior track or multiple operated track, and on each side of single operated track.

- Extend walkway to a line not less than twelve feet from centerline of track.
- Remove any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while UPRR's flagman service is provided, before the close of each work day.
- Provide railings over open excavation areas when in close proximity of track. Railings shall not be closer than 8.5 feet horizontally from center line of tangent track or 9.5 feet horizontally from centerline of curved track.

18C - 11. Communications and Signal Line

Modifications to the communications and signal lines, grade crossing warning devices, train signals and tracks, and facilities will be performed by railroad forces at the expense of the Design-Builder.

18C - 12. Traffic Control

Submit MOT Plans to the railroad for all Work in, above or affecting the Railroad Right of Way.

18C - 13. Construction Excavations

Contact UPRR's "Call Before Your Dig" at least 48 hours prior to commencing work at 1-800-336-9193 during normal business hours (6:30 a.m. to 8:00 p.m. central time, Monday through Friday, except holidays - also a 24 hour, 7 day a week number for emergency calls).

If a telecommunications system or utility is buried anywhere in the RR Right of Way, coordinate with UPRR and the Telecommunication and Utilities Company(ies) to arrange for relocation or other protection of the system prior to beginning any work in the RR Right of Way.

18C - 14. Cleaning of Right-of-Way

Upon completion of the Work, promptly remove from the Railroad right-of-way all tools, implements, and other materials; and leave the Right-of-Way in a clean and presentable condition to satisfaction of the railroad.

On a daily basis remove from the Railroad Right-of-Way all tools, implements, and other materials and leave the Right-of-Way in a clean and presentable condition to satisfaction of the railroad.

18D. Third Party Agreements

18D - 1. Compliance with all Third Party Agreements

Comply with all Third Party Agreements entered into between the Department and any Third Parties at the Design-Builder's expense.



18E. Submittals

Submit all design and information submittals for UPRR to:

Jim Marshall

Manager, Special Projects, Public & Private Union Pacific Railroad 280 South 400 West, Suite 236 Salt Lake City, UT 84101 P. 801-212-2783 F. 402-233-3066 E. jmarshal@up.com

Submit all design and information submittals for UTA to:

Steve Meyer, P.E. Manager of Engineering and Construction, Commuter Rail Utah Transit Authority 669 West 200 South Salt Lake City, UT 84101 P. 801-236-4700 E.<u>smeyer@rideuta.com</u>

18E - 1. Submittal Table

Information for this table will be provided in an addendum

Deliverable	For Approval	Schedule
Contract Right of Entry	No	Prior to Work within Railroad ROW.