

Union Pacific Railroad - Public Projects Check Sheet

Project Name/ Date:

This check sheet must be filled out and included with all plan submittals. **Any requested exceptions must be submitted in a separate document with details regarding the necessity of the exemption requested.**

Yes/ No/NA	Description	Plans %	Comment
General			
	UPRR standard line styles & Symbols are used.	10%	
	Consultant has reviewed and acknowledged the Public Project Guidelines document.	10%	
	Scale, North Arrow are present on each sheet.	10%	
	Title block - Sub., MP Limits, City, State, Project Desc., Sheet Contents & Numbers shown on each sheet.	10%	
	Plans are based on survey Data. Datum is indicated on plans.	10%	
	Industries will remain connected during all phases.	10%	
	Submittal % and Date shown on plans. Note UPRR will determine plan % during plan review.	10%	
	Mainline stationing should coincide with VAL map stationing if available.	10%	
	Provide project schedule with each submittal.	10%	
	Provide electronic CAD design files with each submittal.	10%	
	Font size used is 1/10th inch or 10 foot height on 100 scale drawing.	10%	
	Include "Survey completed date" below the survey datum table on page 3 of the general sheets.	10%	
	UPRRs general notes are incorporated into plans. (available in .cel files found in UPRR Std. files)	25%	
	PUC requirements shown and noted in plans.	25%	
	Include Note: UPRR General Conditions and Specifications will be followed unless project specifications exceed and deviations are approved by UPRR Engineer.	25%	
	Note UPRR specifications will be used in their entirety, in their original format for all work on UPRR ROW. Any additional project specifications must be submitted for review.	25%	
	Submit Geotechnical report for UPRR review	25%	
	Plans include Quantity Summary table separated out by UPRR & Contractor. Template is available on the UPRR website	25%	
	25% site review is complete, plans are submitted with site review comments incorporated.	30%	
	Plans clearly indicate who is providing materials (UPRR or Contractor)	30%	
	Project Specifications submitted along with plans for review	90%	
	Plans incorporate all of UPRR comments.	90%	

Plan View

	Mile posts are based on the mile locations from the Valuation Maps, mile markers are the actual signs in the field. Both mile posts and mile markers (if present) are required to be annotated in the plans.	10%	
	Strip map format is acceptable for 10% submission only.	10%	
	Existing Tracks labeled with zts numbers and Prop. tracks with alpha-numeric names (Ex: Track A, Track B). Shoofly tracks should be named using their existing number/ name. (Ex. Track 24 Shoofly or Mainline 1 Shoofly).	10%	
	Track name, rail weight, tie type and speed labeled for each track on each plan sheet as follows. Ex. "Trk Name, Rail Weight, Tie Type, Proposed Speed"	10%	
	Plan sheets shown and organized by phase	10%	
	Tangent distances meet requirements per STD DWG's 0018.	10%	
	Facing Point Turnout distances meet requirements per STD DWG's 0017.	10%	
	Degree of curve and stationing of PS, PSC, PCS & PT labeled on all curves.	10%	
	Body of horizontal curves are concentric wherever possible.	10%	
	Superelevation and spirals calculated per UPRR STD DWG's 0021, 0023 & 0019 (1" Freight, 3" Pass.). Spirals rounded up to the closest 5' increment when possible.	10%	
	Horizontal curve lengths are equal to or greater than 100'. Greater than 60' is acceptable for yard tracks only.	10%	
	Curve #, delta, radius (R), degree (D), spiral length (S/L), superelevation, design speed and tie plate type shown on plan view near each corresponding curve.	10%	
	Edge of crossing to point of switch is greater than 120' (300' preferred).	10%	
	Point of tangent to point of switch or point of frog is 200' or greater per UPRR Std. DWG 0018.	10%	
	Distance between point of switch and bridge abutment must be a minimum of 500' when diverging track does not cross the bridge. Distance may be reduced to 100' if the bridge has a walkway and handrail.	10%	
	Distance between point of switch and bridge abutment must be a minimum of 300' when diverging track does cross the bridge.	10%	
	Bridges need 100' of tangent track past outside edge of abutment.	10%	
	Turnouts and Derails are shown and labeled per "Public Projects Guidelines" document.	10%	
	HST(Hollow Steel Ties) called out on turnouts where required per STD DWG 0080	10%	
	Turn Out Applications have been verified per STD DWG 0080.	10%	
	20' track centers needed for crossovers per STD DWG 0080.	10%	
	Derail Applications & placement have been verified per STD DWG 2000.	10%	
	Utilities are shown and labeled (Underground and overhead). Impacts are identified on plans.	10%	
	Track centers are dimensioned - 20' required for new, future or re-aligned tracks. 15' min. for temp shoofly tracks.	10%	
	Bridges are designed for 20' track centers and future(s) track as required.	10%	
	Future track locations are shown on plans.	10%	
	UPRR ROW Ex. & Prop. shown and labeled. (Dimensioned from CL of Main Track 1)	10%	
	Road crossings shown and labeled per "Public Projects Guidelines" document.	10%	
	Drainage structures shown and labeled per "Public Projects Guidelines" document.	10%	
	Existing Signals, Signal Houses or other signal equipment is shown and labeled.	10%	
	Timetable direction and Station is shown on side of project/ sheet.	10%	

Proposed Rail section on mainlines with curves greater than 6 degrees must be 136# HH.	10%	
Curves 3 degrees or greater shall callout tie plate type in curve annotation per the Track Maintenance Field Handbook Section 3.4.4. Qty of special tie plates to be included in quantity summary matrix.	10%	
All plans with temporary shooflies need to include track geometry for final alignment	10%	
Project meets current requirements for Temporary Clearance Envelope.(See Joint BNSF Railway and UPRR Guidelines)	10%	
All proposed crossings shall be precast concrete. Size to be determined based on vehicle traffic. See UPRR STD DWG 0322, 0324, 0326, & 0328.	10%	
All tracks with the exception of industry tracks, yard tracks and yard leads need to have spirals.	10%	
Each track must have its own plan and profile sheet	25%	
Signal pads shown. (if new signals our signal houses are required)	25%	
Buildings or structures adjacent to any track work shown and labeled.	25%	
Construction Notes including delineation of work shown per "Public Projects Guidelines" document.	25%	
Turnout walkways and construction pads details included.	25%	
Transition Rail/ tie locations are identified on plans and are not located in horizontal curves. Include station label.	25%	
Grading Cut/ fill lines shown on plans. (refer to Abbreviations & Legend sheet for style)	25%	
Drainage flow paths with direction arrows shown. (refer to Abbreviations & Legend sheet for style)	25%	
Culverts 48" or greater need to be reviewed by UPRR Structures. Provide evidence of coordination.	25%	
Proposed/ modified tracks must maintain 25' from the centerline of track to edge of pier when possible or meet the pier protection requirements as detailed in the Joint BNSF Railway and UPRR Guidelines.	25%	
Structure supporting member 18' or closer has been reviewed for potential Inside guardrail requirements per STD DWG 4001.	25%	
Note added to the plans to have the contractor construct a Geoweb Bridge Transitions (on Permanent Structures) per UPRR STD DWG 0090. This will be confirmed by the UPRR Track/ Civil manager at the 25% site visit.	25%	
RCP pipes have been submitted to UPRR Structures reviewer. Note that use of RCP's is discouraged.	25%	
Transition zones are provided for turnouts per UPRR STD DWG 0270.	25%	
Proposed Signals, Signal Houses or other signal equipment is shown and labeled.	30%	
Grading Cut/ fill lines include turnout pad locations, walkways and signal/ signal cabin locations	90%	
Grading plan may be required by UPRR based on project circumstances	90%	

Profile

Profiles shown above plan view for each track within the project.	25%	
Vertical curves and tangents must be 100' or greater per AREMA Chapter 5, Section 3.6	25%	
Existing Top of Rail shown 1000' on each side of structure or 200' past the end of the proposed project	25%	
Proposed and existing/shoofly top of rail Profile elevations displayed every 100'.	25%	
Road crossings shown and labeled per "Public Projects Guidelines" document.	25%	
Drainage structures shown and labeled per "Public Projects Guidelines" document.	25%	
Turnouts and Derails shown and labeled per "Public Projects Guidelines" document.	25%	
Turnouts and switch point Derails are outside vertical curves.	25%	
Utilities shown and labeled (Underground and overhead).	25%	
Vertical curve design (V/L) conforms to STD DWG 0016.	25%	
Retaining walls (When required and approved by UPRR) that parallel tracks are shown on the profile.	25%	
Point of Switch Elevations match on corresponding profiles.	25%	
Track raises for new underpasses are not acceptable.	25%	
Proposed profiles show existing tracks within 13' of a proposed track. Proposed track cannot conflict with the existing track (vertically). Grade changes will need to be evaluated for raise/ lowering.	25%	
Grade changes within shifts/ tie ins must no more than -.1' lower or .5' higher than the existing track(s).	25%	
Show plan and profile for at grade crossings (Profile of roadway).	25%	

Typical Sections

Typical sections coincide with UPRR STD DWG 0001, 0002 and or 0003.	25%	
Typical sections provided for all phases of the project.	25%	
Typical sections shown cover the entire project (Verify stationing)	25%	
Proposed roadbed grading will start at exactly 10' from the centerline of the existing track. 10' dimension displayed on typical sections.	25%	

Phasing

Track by track phasing schematic and narrative included with activity description notes. (See Guidelines document for Phasing plan example)	25%	
If project includes ballast deck bridges add a note to the phasing plans to have the contractor pre-ballast the bridge prior to track construction.	25%	
Phasing activities and division of labor match construction notes in the plan view. (track construction locations, turnouts being installed etc.)	25%	

Cross Sections

Cross sections for all phases should typically reference existing mainline stationing.	25%	
Cross Sections of entire project and 200' past the end of project are shown.	25%	
Show UPRR ROW & any construction easements.	25%	
Top of Rail elevations match profile.	25%	
Impacting utilities are shown (Include special sections if needed).	25%	
Prop. and Ex. Top of Rail, Grade Breaks and Ditch Flowline elevations shown per "Public Projects Guidelines" document.	25%	
Ditch drainage has been verified & shown using flow arrows.	25%	
Standard ditch provided per UPRR STD DWG 0001/ 0002 or an H&H report is provided and drainage meets requirements as outlined Section 4.5.2 of the Joint BNSF Railway and UPRR Guidelines.	25%	
Special sections needed at roadways, drainage structures and other key points are shown.	90%	

Date: 12/1/2021