LS-CTG
Coal & Gravel Trestle Kit



This kit produces a highly detailed model of a prototype structure found all across the country. Trestles such as this were often placed just off the mainline to serve coal and fuel oil dealers and often provided gravel as well.

Preparation

Take a moment to familiarize yourself with the parts. Assembly is fairly simple and straightforward. Many of the major parts are pre-colored allowing assembly and weathering.

There are several styles of installation of these trestles. Some are installed parallel to the mainline with a retaining wall on the mainline side and product is served from just one side. Another style simply angles off from an elevated mainline with access to the product from both sides. The third style is an isolated industry where the rail line gradually increases to the trestle height - these are usually shorter trestles.

NB - the expansion kit girder(s) (if used) must be installed at the beginning of the trestle! The base girder set has a notched plate that fits around the end pier's raised panel, which is where the bumper mounts.

- Piers (concrete color) – weather to represent bare concrete stained by years of traffic. Note that the wing walls can be placed on either side to define the angle and can be installed from the sides or the back of the primary pier.
- Girder Set (black) - supports the ties. Usually black or dark gray and often heavily rusted.
- Tie Strips (brown & black) - these are supported by the girder sets. The tie plates/spikes can be weathered to appear rusted. The ties should be given a heavy black wash to represent years of accumulated coal dust. Use flex-track on the approach, with ties landing on the primary pier. Glue the rails onto the tie plates.
- Bumper (black) - keeps cars from rolling off the end of the trestle. Should be heavily weathered with rust.
- Walkways and railings (oak tan) - provide access to the hopper release mechanism from either side of the trestle. Stairs or a ladder (optional) can be placed at the end of the trestle. You can give these parts a woodgrain appearance by sliding them softly on coarse (120 grit) sandpaper. The scratches will hold a wash and weathering solution to provide a more worn appearance.

Assembly

- Paint the parts as suggested. Any plastic-compatible paint can be used. Avoid getting paint on surfaces that will be glued!
- Glue parts with a medium-viscosity plastic cement such as Model Master Liquid Cement. Remove paint from any mating surfaces before gluing.

Piers and Girders

Start by positioning the primary pier on your layout or base. Add the wing walls as needed - they can be glued to either the back or the sides of the primary pier depending on your terrain requirements. The girder sets will define the positioning of the remaining piers. Use a straight-edge to align the piers and the girder set to align the spacing. The plate on the bottom of the girder set should rest squarely centered on each pier. Use the longer base piece for alignment, but do not glue it in place.

If you have purchased bay expansion set(s), the girder sets from the expansion set(s) are installed first, followed by the combined 4-bay girder set. The expansion girder has a plate on the side that faces the main pier, and the other side sets onto the base plate of the next girder set. The 4-bay base set has a notched base plate on the end that sits on the end pier.

Make sure the piers are secure and in-place before proceeding. This is a good time to weather the piers and install piles of coal and/or gravel between the piers. Pre-weathering the girder sets is a good idea before gluing them to the piers.

Ties & Walkway

If you are installing an expansion bay, position the tie section with the small spacer tabs facing the base tie section. Secure the pieces with a drop of cement and allow to dry.

The handrails can be attached to either the side of the tie facing the end pier or the end of the tie - decide on this option before installing the walkways to ensure you leave the proper space.

The walkway sections have cross-support boards - these face down! It is easier to install the walkway sections now before adding the railings. Start from the main pier end and test fit - the walkway should fit between the extended ties and allow the end of the next section to split the tie where they meet. Apply a drop of cement to the ties and install the walkways, keeping them set back from the end of the tie at least the thickness of the handrail posts.

There are 2 styles of handrail sections - each in a Left and Right configuration. The section with 5 vertical posts is installed on the tie section closest to the main pier. All handrail sections are installed with the posts on the outside (away from) the walkway. Once the first set of handrails is secure, continue to add the remaining handrail sections. You may need to file or sand the ends of the handrails on these to obtain a perfect fit, particularly if installing the posts on the side of the ties. Apply a drop of solvent cement where the handrails meet the prior set.

Once the handrails and walkways are installed, the tie strip will be more rigid and can be installed on the girder sets.

Ties and Rails

Place the tie and walkway assembly onto the girder sets and check alignment. The rails should sit over each pair of girders in the girder set. Place a drop of plastic cement on the bottom of the ties directly under the tie plates, then flip it over and align it onto the girders. Apply some weight to hold the ties in position, being careful not to damage the spike detail. Strips of wood in the center and on the outside of each tie plate will raise the weight and help to apply even pressure to the entire assembly.

Bumper

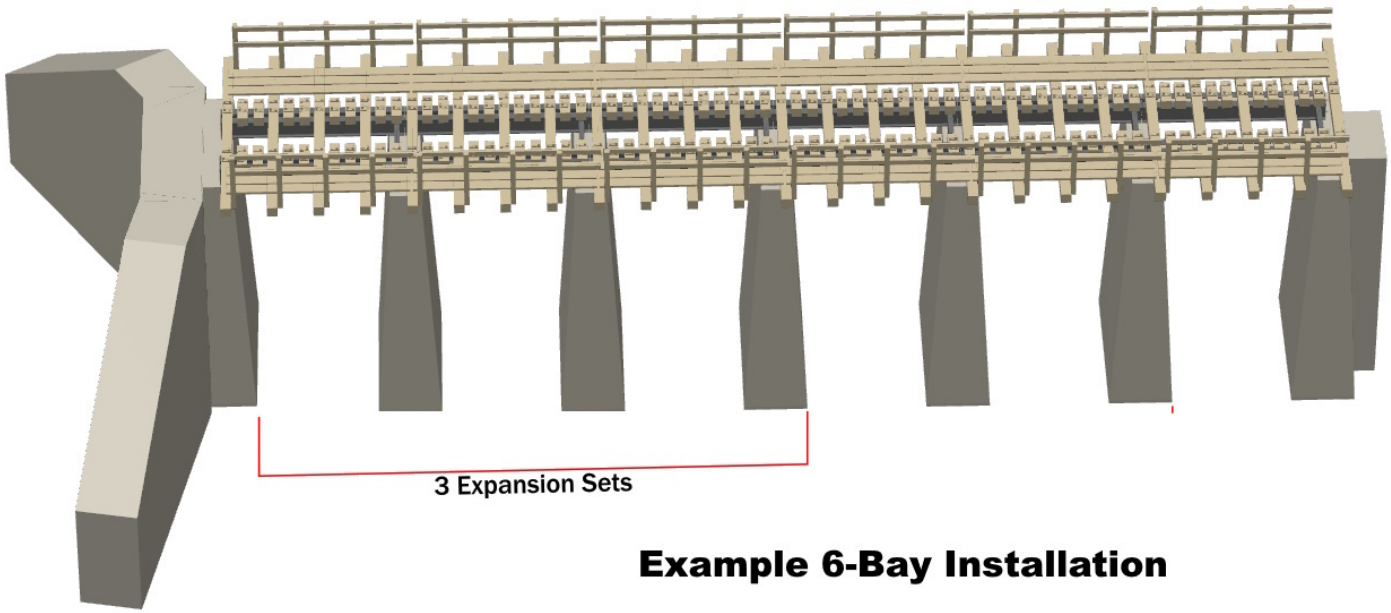
The bumper consists of two parts - the mount and frame and the cylindrical bumper plate. This style usually had a large spring inside the cylinder to help absorb any rough handling. Glue the bumper plate into the frame, then glue the frame to the end pier, ensuring the recessed section of the cylinder faces the car / coupler.

Details

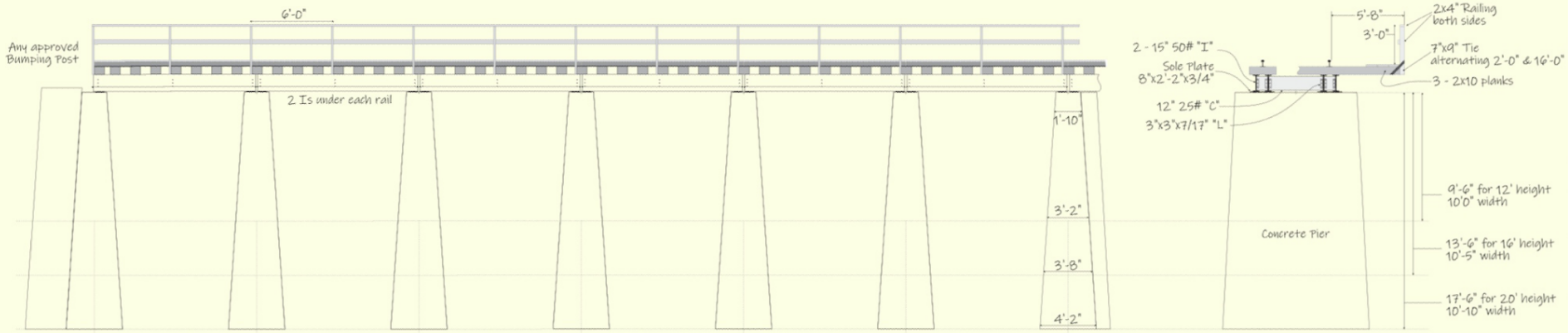
Since coal and gravel were dumped from the cars, placing a few lumps on the ties, girder lips, and even the top of the piers would be a nice detail.

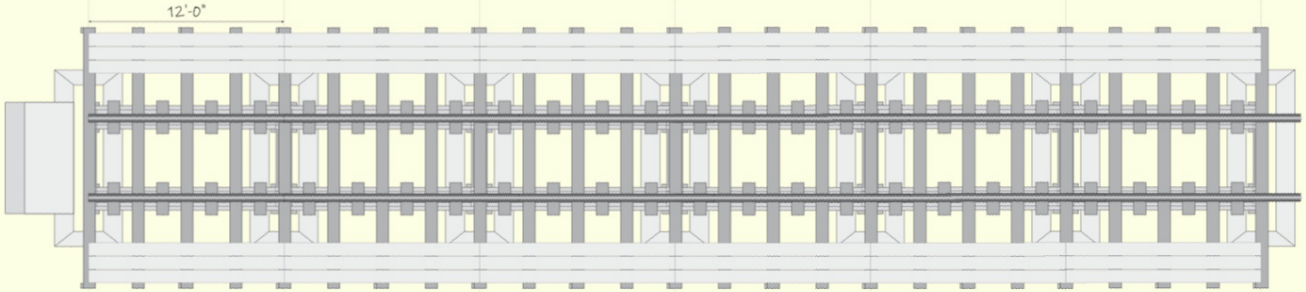
Coal and gravel were a heavily manual operation before the 1960's, so plenty of shovels, some pails, and a small conveyor that loaded the delivery trucks would be appropriate. Some trestles - especially larger ones - served different grades of material, and those grades would be identified by signs hanging from the girders or painted directly onto the piers.

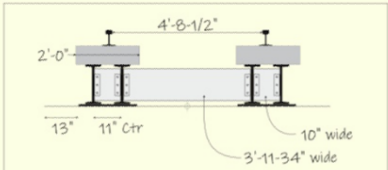
This was a dusty/dirty industry and the structure and surrounding yard should reflect that!



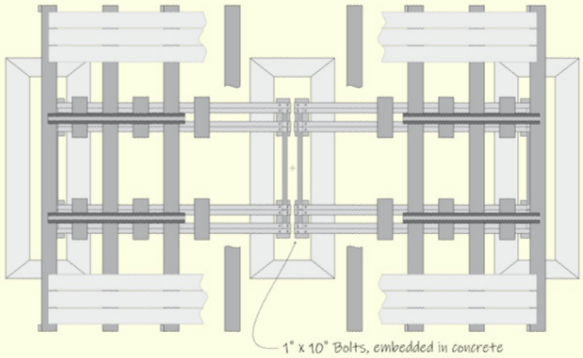
Example 6-Bay Installation







Detail of I-Beam Crossmembers



Detail of I-beam Crossmembers

Craftsman

Concrete & Steel Coal Trestle

Drawn By: Glenn Barnas
Date: 11/23/1937*
Dwg. #: 071123-A
Scale: 1:87.1 (HO) / 3.5mm/foot

Supervisor

*Drawn 11/23/2007 GBarnas. Card Draws Updated 4/16/2024 in Inkscape