

Model Railroad Planning

2020

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On the cover: Canadian Pacific and Burlington Northern units are lined up for servicing on Mark Dance's N scale Columbia & Western Railway. Photo by Mark Dance

Photos, clockwise from above: David P. Morgan Memorial Library collection; Brian Moore; Paul J. Dolkos; Ian Stronach; E. Gerlits photo, Chuck Conway collection; Gordon Lafleur



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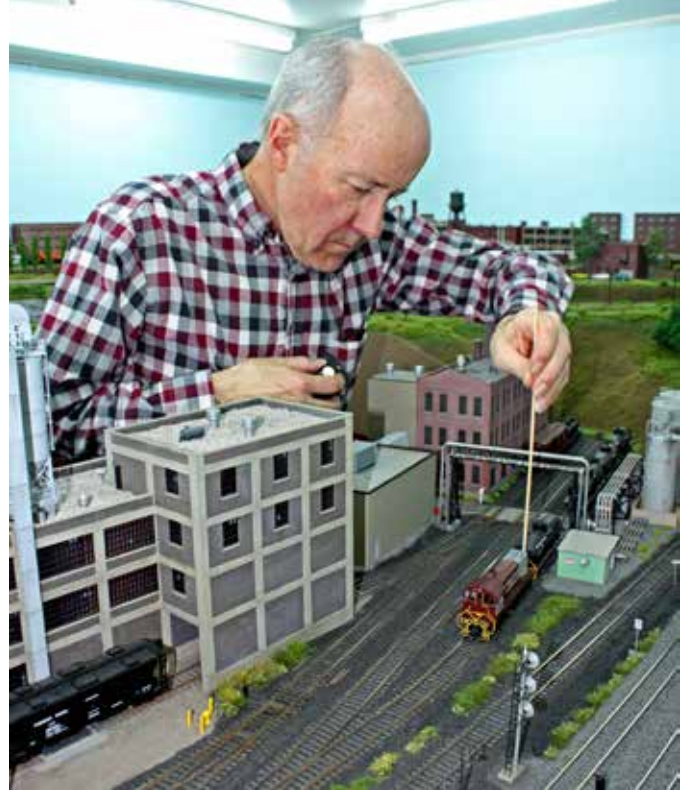
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All the layout's

Focal points become sets, structures become props

By Joe Smith//Model photos by the author



Model railroad layouts depicting a highly detailed single town or location are popular in the United Kingdom. These standalone layouts are often built small and portable for display on the exhibition circuit in the U.K. Operation consists of rolling stock entering the modeled location from hidden staging. It operates within the scene, then exits once tasks have been

completed or a time segment has been reached. Often, these operations will be repeated with additional groups of rolling stock performing different prototypical moves.

For the average modeler living in the U.K., layout space can be limited. These single-scene layouts therefore solve the age-old model railroader's problem of lack of space.

I've admired the concept of these layouts in the pages of U.K. modeling magazines and internet videos. I especially admire the clever small layouts that have been designed and wonderfully illustrated by Iain Rice. His designs have appeared in many Kalmbach publications, including this and previous MRP editions. My personal favorites are his shadowbox dioramas.

a stage

I Recently delivered Electro-Motive Division FL9 locomotives arrive at the Danbury, Conn., station with train No. 143, the *Mahaiwe*, from Pittsfield, Mass. The scene is part of Joe Smith's HO scale layout, which is designed in a series of theater-like "sets."



A shadowbox diorama draws the viewers attention into a static display confined within defined parameters. By adding animation to a shadowbox, it becomes theater.

A different form of "staging"

The above was a sidebar title by Iain Rice that appeared in MRP 1999. His comments converted my thinking of

these single-location display layouts in the U.K. as not just small layouts, but also worthy of consideration as theatrical stage presentations.

The front of a shadowbox forms the proscenium arch that frames that stage. The sets on the stage are the structures and scenery that modelers build. These sets support and visually enhance the script, or operating

scheme, by identifying or suggesting a location and era. When we add operating scale model trains performing as the actors on the stage within a set, the shadowbox becomes a live theatrical performance.

A freelance modeler has the complete freedom to be the playwright, choose an era, design and build the stage set, and direct the scale model

Shadowbox theater



In keeping with the theatrical theme of this article, the accompanying five photos are one operational “act” within the Danbury, Conn., “set.” Danbury is the northernmost end of the New Haven electrified tracks.

① Train No. 140 – New York Grand Central Terminal to Pittsfield, Mass. – arrives at Danbury pulled by EP-3 motor 352. During a 10-minute stop, the motor and head express car will be cut off and replaced with diesel power. I scratchbuilt the EP-3 using styrene and powered it using a Bachmann GG1 chassis.

② Alco RS-2 503 has departed the station and is passing through Danbury Yard with train No. 140. The Kato Alco RS-2 was custom painted in New Haven’s second green-and-orange scheme. I scratchbuilt the Railway Post Office car on a shortened Branchline model with NH-style resin sides from Funaro & Camerlengo.

③ The switchman at interlocking SS-198 has lined the crossover to the inner loop track at Danbury station; motor 352 and express car are backing to the station. Signal station 198 was scratchbuilt from styrene.

④ The express car is being spotted on the inner loop track at the station. Express for the Danbury area will be unloaded; New York-bound express will be loaded later in



the day for departure. The converted troop sleeper express car is Walthers with NH-style brass car sides from Model Railroad Warehouse.

⑤ The 352 has been moved to the motor service area. The engine preparer is filling buckets with sand to replenish the motor’s sand bins. Boiler fuel and water will also be refilled before the return trip to New York. The water hoses, electrical cabinet, oil pump house, sanding tower, and fire hose cabinet were scratchbuilt; the sand tank is a modified NJ International model. – Joe Smith

train to be run on the layout. I set out to explore the possibilities of this concept within the space that was available for the new layout.

Back to the drawing board

The most obvious design choice for expanding the layout to include extra

set locations would be the addition of a peninsula that would be accessible from both sides, parallel to the long side of the room. The peninsula would allow a set location on each side with a scene depth of approximately two feet, leaving about a three-foot aisle width on both sides.

The original construction was designed to have multiple decks (though only one with scenery and lighting), and the supporting infrastructure for that was already in place. Adding a helix to and multi-decking the new peninsula would be a continuation of that design and allow four additional

Points of interest



Portable mountains. The long mountainsides that line the double-track main line around the basement walls are lift-out sections up to four feet long and two feet high. The sections have a tempered hardboard base with carved extruded-foam insulation board creating the slope. The ground cover is layers of earth, rock, ground foam, and static grass. The trees are Scenic Express SuperTree material. The trees aren't always tightly clustered, allowing bare earth and rock outcroppings to show through. The movable scenery sections provide quick access options for layout repairs and changes. Recently, when a service person had to get to an air-conditioner component, the mountainside was simply moved out of the way.

Control panels.

As Chris installed the switch machines in the bottom-deck staging yard, he couldn't decide on the best place to locate control panels. So he built the panels on a rolling assembly with casters. What might appear to be extra wiring is for turnout frog power; with the higher O scale amperage, Chris chose not to use the Tortoise by Circuitron switch-motor contacts.



Shaping the foam scenery. The Raven Red Ash Coal Co. mine yard is the one large industrial scene on the railroad. This view shows the drop ceiling that hides the florescent tubes and provides a finished look over the entire layout. Note how the mountain scenery is built up with 2"-thick extruded-foam insulation board. Initial shaping was done with a large kitchen knife. The final contour was created with a rotating brush in a power drill. This creates a mess with the dust and small granules thrown off by the drill



brush, but Chris likes the results. He erects a curtain around the work area that helps contain much of the debris.

Bridge abutment. With its unique rail reinforcements, this abutment is based on an N&W prototype in Bonsack, Va. Chris built the basic shape from wood covered with wood putty and painted a light concrete color. He then painted fine-grit sandpaper a darker gray shade and pressed it against the walls. Final weathering was done with India ink washes.



Rolling-stock vacuum cleaner.

Rolling stock on a layout still under construction can quickly gather a layer of dust. Brushing dust off 100 or more cars and locomotives, particularly larger O scale equipment, by hand would be time-consuming and move the dust off the models onto the floor or back into the air. So Chris created this vacuum unit. The smaller hose in the middle blows the dust off each piece as the train pulls through the unit. The two larger diameter hoses pull the loose particles into shop vacuums.

