Aberfoyle Junction II

A new version of a great O scale layout

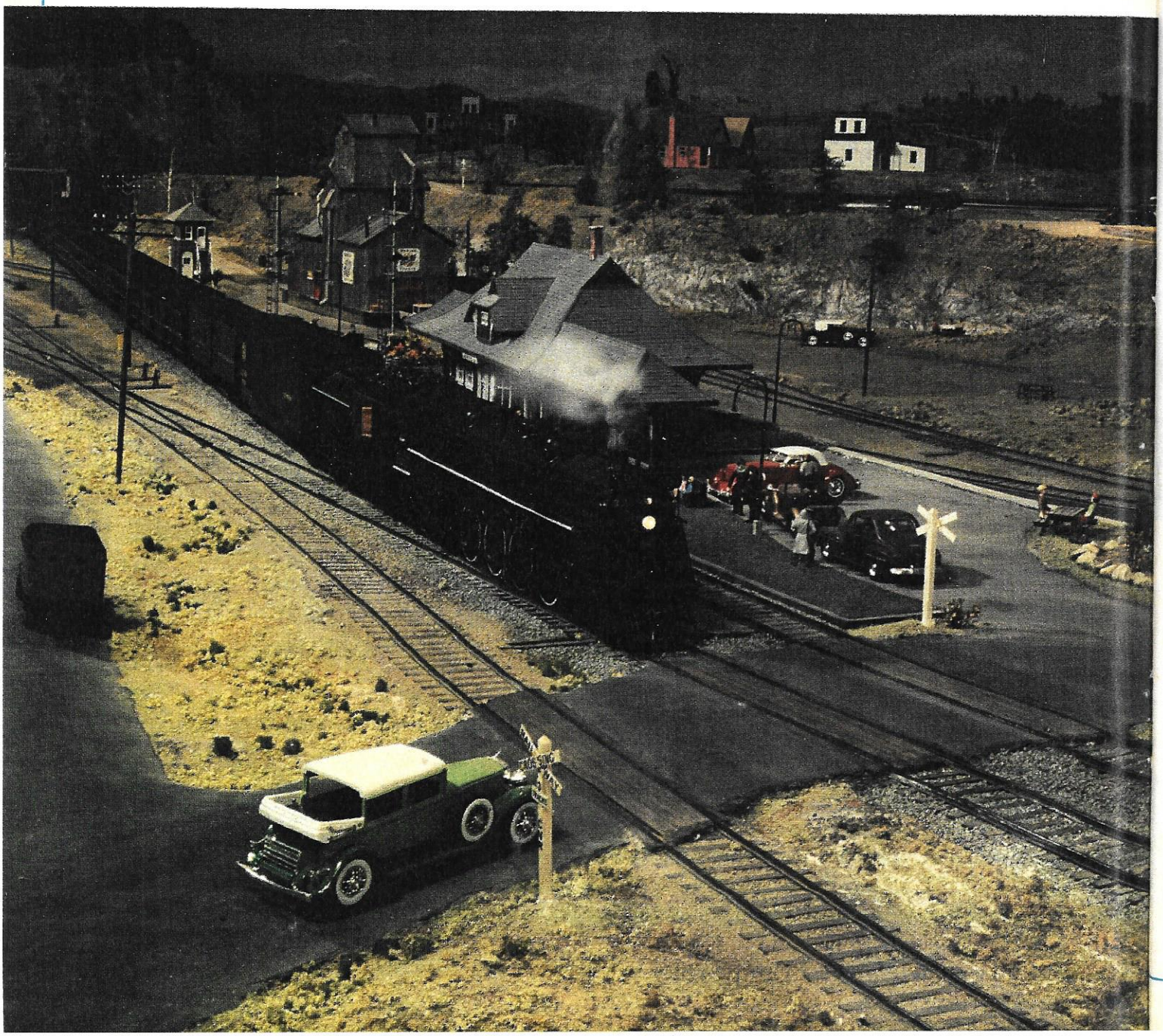
BY PETE MOFFETT
PHOTOS BY THE AUTHOR

ABERFOYLE JUNCTION. The name may sound familiar if you've been reading MODEL RAILROADER for a few years. Jim Hediger presented a visit to that "first-rate Canadian O scale layout" in MR's March 1979 issue, but since Jim's visit there have been some dramatic changes.

Aberfoyle Junction I, the layout Jim photographed, was built in the upper floor of an old building at a flea market in Aberfoyle, about 30 miles west of Toronto, Ontario. It was dismantled in November, 1982, in preparation for a move to larger quarters. The club had obtained property about half a mile south of the flea market and built a new building for its layout, a 40 x 100-foot steel quonset hut.

The concrete floor was poured and the steel roof erected before the old layout was dismantled, so it could be moved right into the new building. After the building's wiring and plumbing were installed and the drywall put up, the new track plan was drawn right on the concrete floor and construction of Aberfoyle Junction II began.

The new layout is designed to run around the outside walls of the building with a central control tower for the operators. There's a lot of space for people to move around and see the layout, but the engineers can still see the whole system above the visitors' heads.



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The building's only post supports the control tower, and the operators' platform is high enough to let people walk under it. The average aisle width is 12 feet, and it's possible to accommodate 100 visitors at a time and not have them feel crowded.

The layout area is 38′-0″ x 83′-6″, and the remainder of the building is a lounge area for the members. The lounge also doubles as a workshop when the layout is not on display.

CONSTRUCTION AND CONTROL

Layout construction followed the traditions established with the first layout. L-girders were assembled right on top of the track plan drawn on the floor. The girders were raised, legs were bolted on, and the spline roadbed was built on top. The club uses the technique of thin stringers separated by small blocks; this roadbed gives natural easements and superelevation.

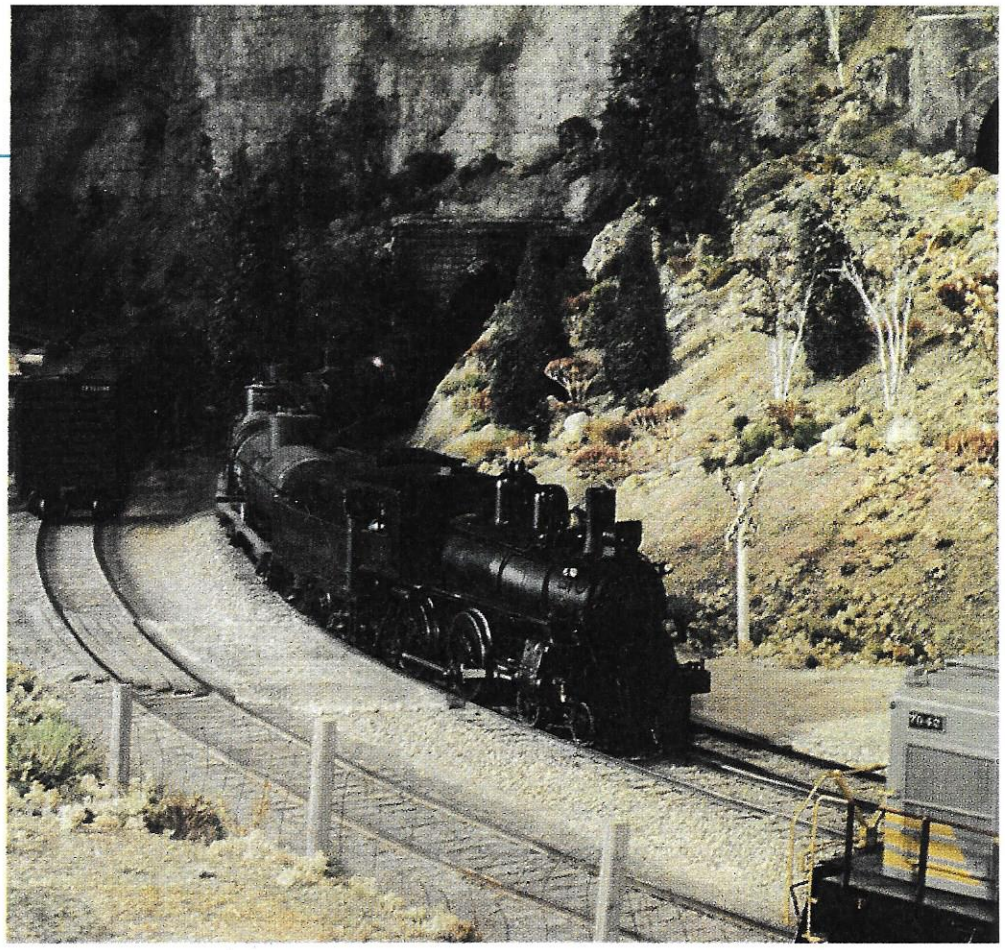
Planning and laying the track was mainly the work of Frank Dubery, although Frank is quick to point out that everyone pitches in when there's work to be done. The track is handlaid with steel rail on basswood ties. Spurs and sidings are laid with Code 100 rail, which represents 75 lb. rail in O scale. The Canadian Pacific Ry. main line is laid with Code 125 rail, equivalent to 100 lb. rail, and the Canadian National main is laid with Code 148, modeling 135 lb. rail.

Number 8 is the minimum used for turnout frogs, 60″ is the minimum curve radius, and 1¼ percent is the maximum grade. Kadee couplers are used exclusively, and the members are proud to report that they have never had one break.

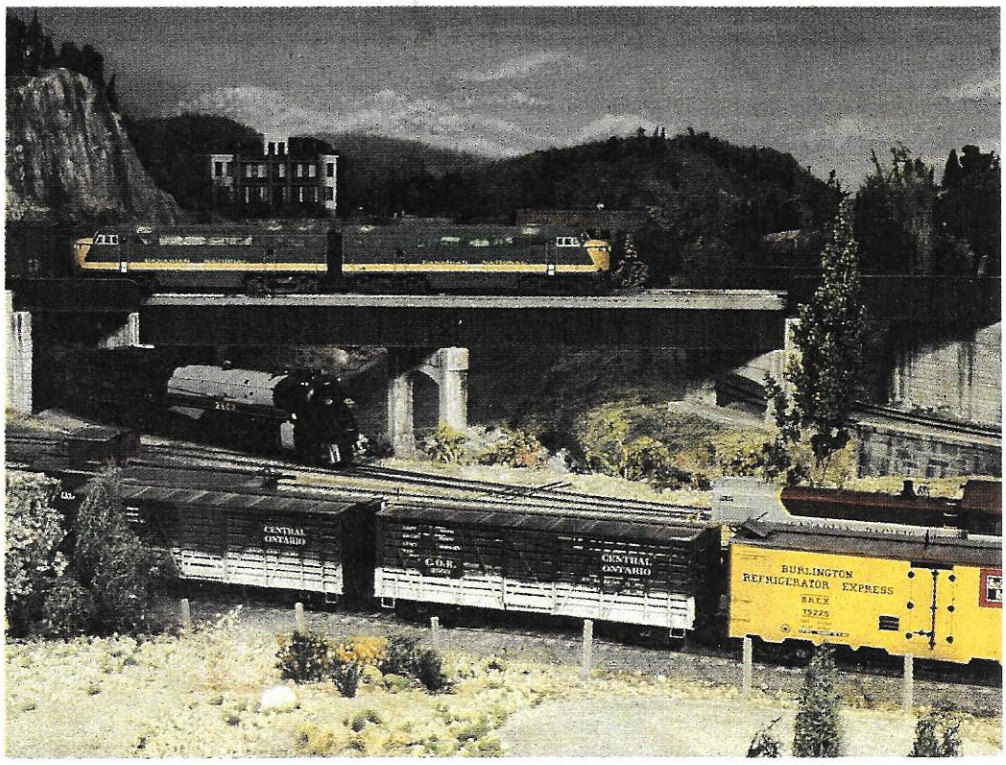
The layout wiring and control panels are under the direction of Chuck Bard, without whose expertise no train would move. The club uses engineer cab control, with each engineer manually selecting blocks for his train. The throttles are Variac brand variable autotransformers, with rectifiers to deliver DC to the track. Each section of rail has a feeder to a bus below the roadbed, so that electrical continuity does not depend on rail joiner connections.

A relay system controls the electrical feed to Kelso Yard so that any of four road cabs can be connected to the yard tracks. This lets a mainline engineer take a train in or out of the yard while switchers run from yard cabs continue working independently.

A remote control panel for the CPR is installed in the mezzanine at the end of the layout room, and control of the CPR can be switched from the tower to the

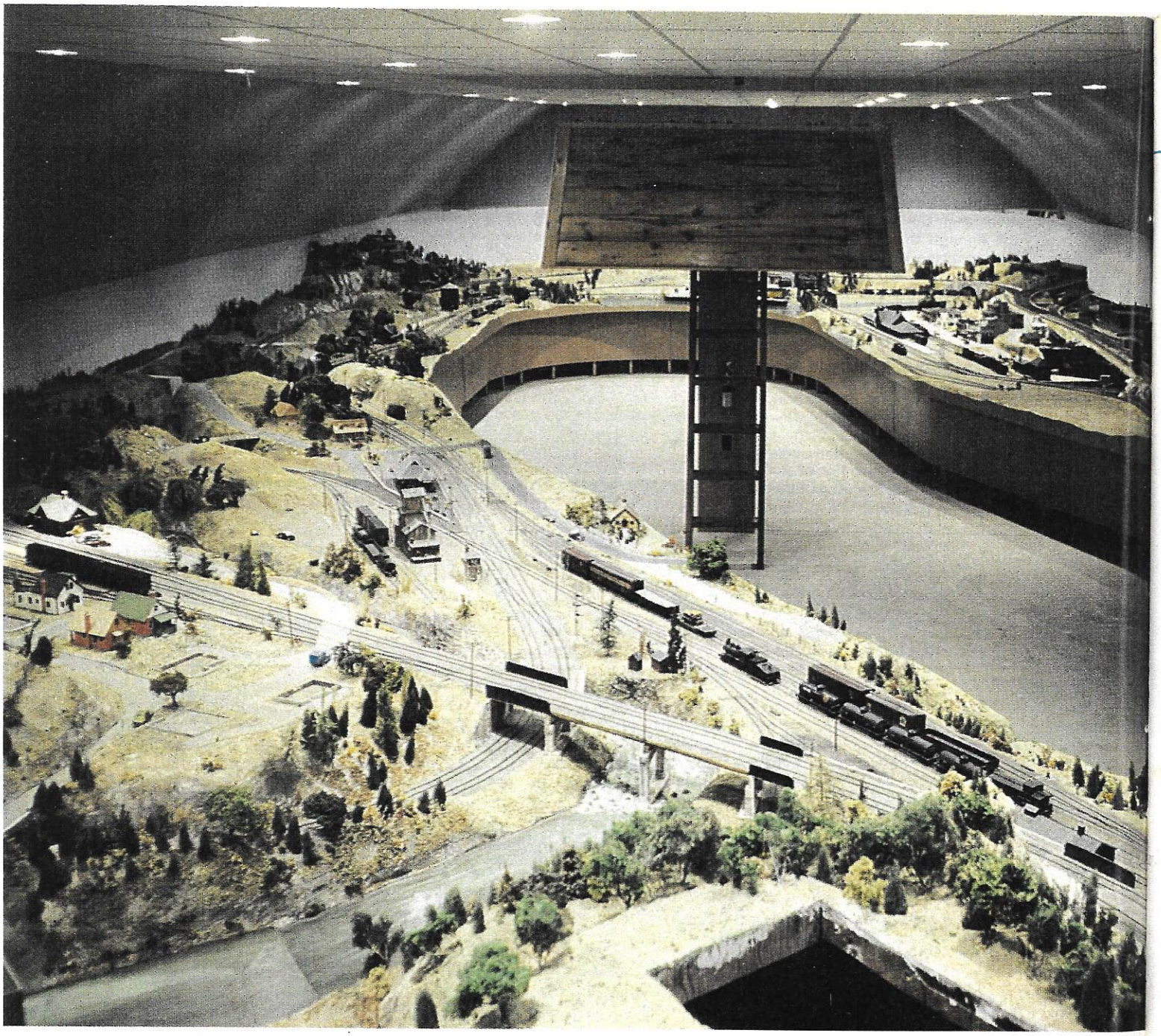


2. It wasn't just big, modern engines that lasted to the end of the steam era in Canada. Canadian Pacific Ry. A2q class no. 144 rounding the curve into the Aberfoyle Jct. yard represents the small locomotives that found safe niches on lightly built branch lines. This 4-4-0 was scratchbuilt by custom builder Bill Lenoir.



3. Looking over the interchange yard at Aberfoyle Junction, Craig Webb's modified AHM C-Liners take the CNR high line as Chuck Bard's CPR Royal Hudson inches along towards the junction.

1. Left. The O scale Aberfoyle Junction system takes its name from this focal point. Chuck Bard's scratchbuilt Canadian National Rys. class U-2-c Northern no. 6153 heads east through the junction with a green and black CNR passenger consist scratchbuilt by Craig Webb.



4. This is the overall view of the club room from the end gallery where the remote control panel for the CPR main will be installed. Aberfoyle Jct. interchange yard is just beyond the bridges in the foreground, and beyond that is the elevated control tower in the middle of the viewing area.

remote panel with the flip of a switch. This takes some of the congestion out of the tower during an open house. The control tower can accommodate four engineers in comfort, but it can get a bit crowded on a busy day, and the remote panel provides welcome relief.

SCENERY

Scenery construction is both inexpensive and strong. The basic scenery support is thin-walled ½" electrical conduit. It is cheap and sturdy, and is easy to bend to the shape of the scenery profile. Bent to shape and attached to the benchwork, the conduit supports a grid of electrical wire with about a 3" mesh. The joints where wires cross are wrapped with smaller wire to hold the grid together, and newspaper is taped under the grid.

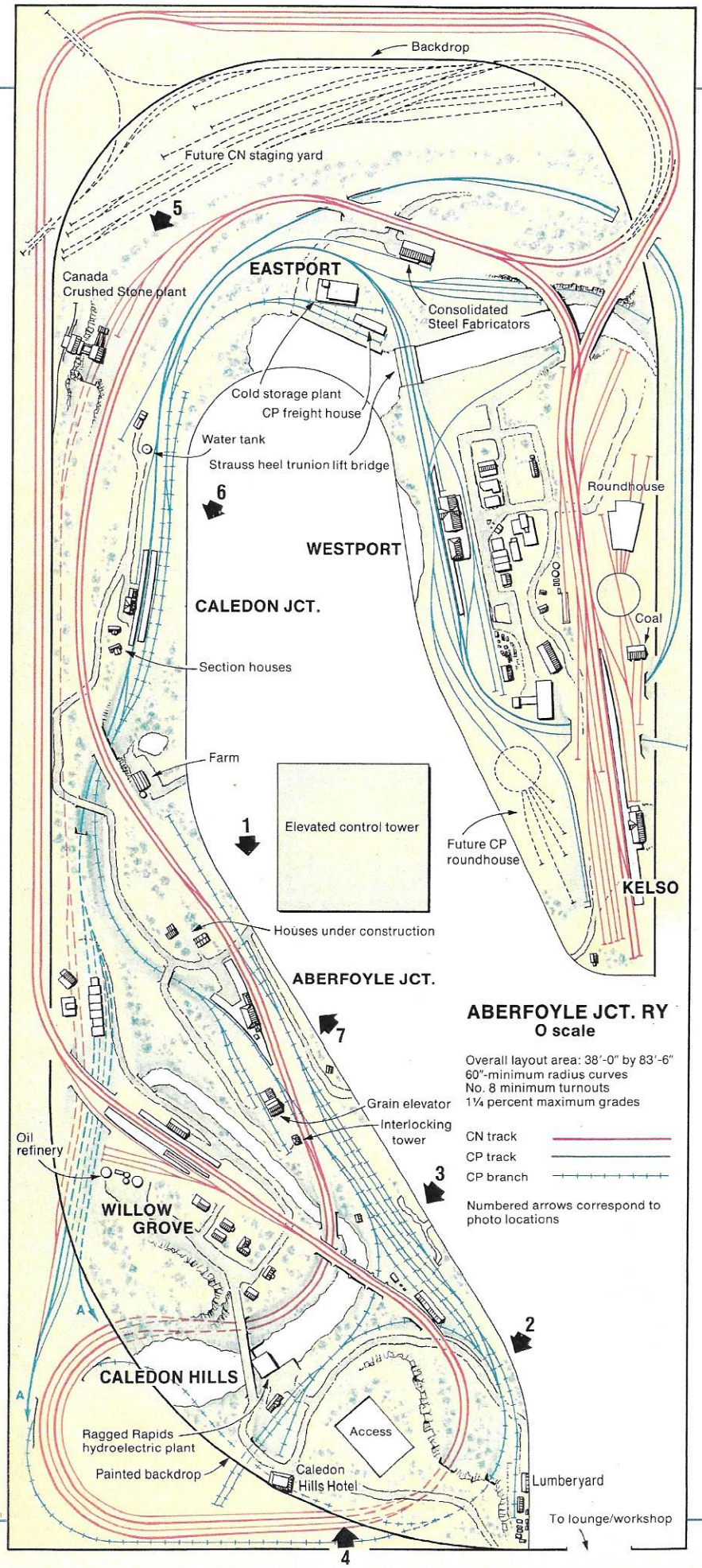
Next comes a hardshell mixture of paper towels soaked in dental plaster and gauging plaster. Once the hardshell has set, a ¼"-thick layer of Pollyfilla, a type of patching plaster available in Canada, is troweled on top. For grassy areas, the Pollyfilla is stippled with a brush to give a textured surface and to remove the trowel marks. Where there is to be a rock cut, the Pollyfilla is carved by hand.

After the plaster has hardened, the scenery is stained with a wash of artists' oil colors. Then dyed sawdust and ground foam are added to provide the finished texture. Next come trees, hundreds of them made by Gwen Bard who also does the backdrop painting.

The layout has been built to an overall finish such that no particular area is more detailed than another. As a result, it all blends into a pleasing panorama. The club plans to go back over the layout after the major construction is complete and bring up the level of detail over the entire layout.

Craig Webb is a master at building structures and his model of the Canada Crushed Stone Co. is described in the article beginning on page 74. It uses empties-in, loads-out connecting tracks to add interest and realism to the freight operations. It's familiar to many visitors because its prototype is nearby in Dundas, Ont.

Another interesting operating feature is a working three-track Strauss heel



trunion lift bridge built by Chuck Bard. When the bridge is raised all trains using the CPR tracks must stop. A radio-controlled waterline boat model running on rubber wheels is planned to "sail" the river under the lift bridge.

Some other future projects include the installation of an operating semaphore system over the whole layout, and day-night transition lighting which will include lights in the buildings. Also being considered is a Toronto, Hamilton & Buffalo Ry. terminal built in the form of an add-on module which can be removed to display at conventions or shows, or to provide more room for visitors on show days.

A cityscape will be added behind the waterfront area, and a suburban backdrop of typical Railroad St. buildings will be added behind Kelso Yard. The CPR engine terminal at Westport will also be added on that end of the layout.

ENJOYING THE SHOW

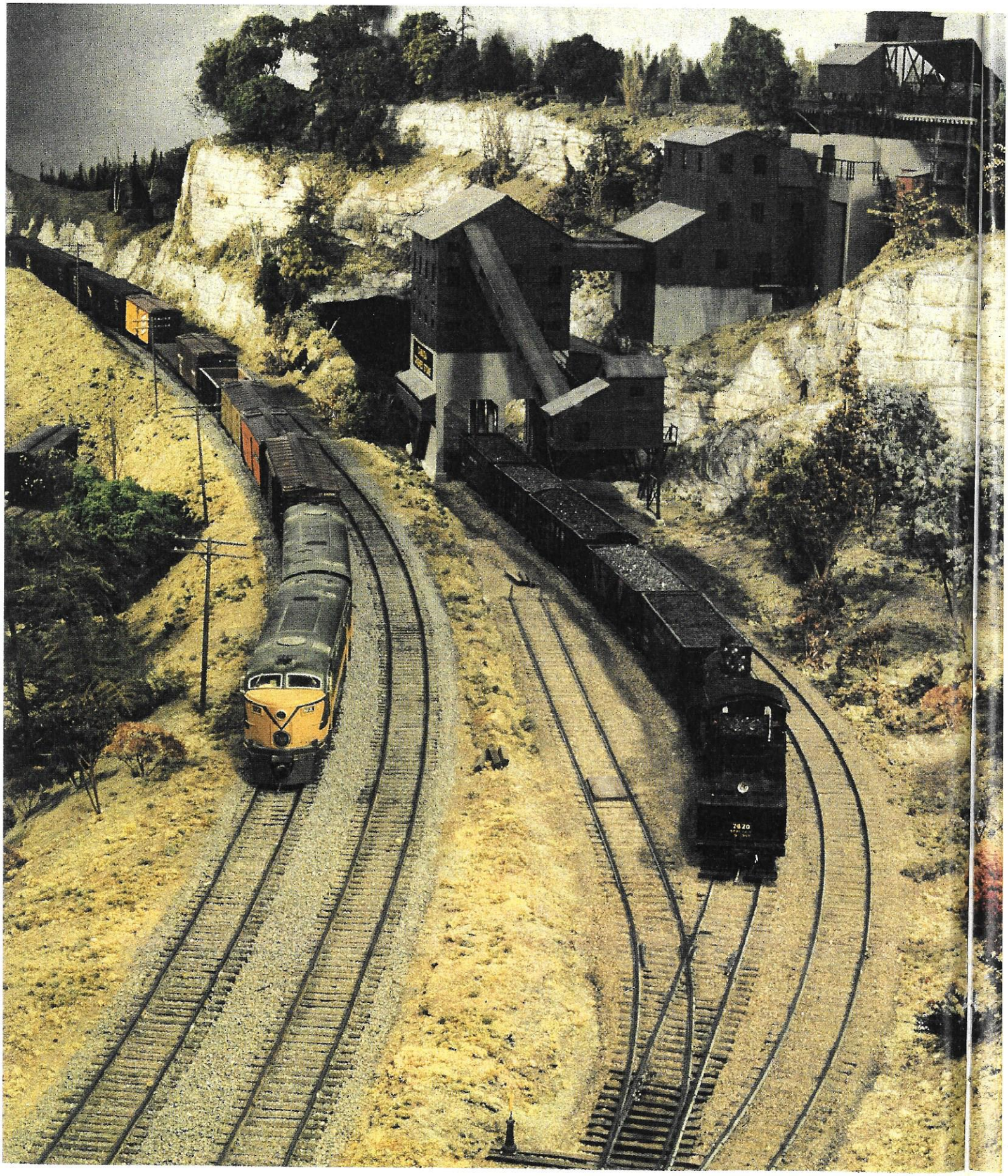
The main features of the new Aberfoyle Junction are the longer mainline runs and the expanded CPR main line. The new layout has much more scenery and many new buildings, and is designed to allow the members to display their locomotives and rolling stock — all either scratchbuilt or extensively modified kits — to good advantage. The engineers can bring trains out of the many hidden staging yards, show them off on the main lines, then park them offstage once more and bring out other complete trains.

Frank Dubery, the driving force behind the club, designed the layout to display Canadian prototype railroading in an era of brawny steam power in distinctively Canadian liveries hauling rolling stock equally unique. Aberfoyle Junction is set in rural Ontario in the mid to late 1950s, just about the time when steam was starting to give way to first-generation diesels in Canada. Big Northerns and Selkirks are the rule, but first-generation C-Liners and RS units can also be seen.

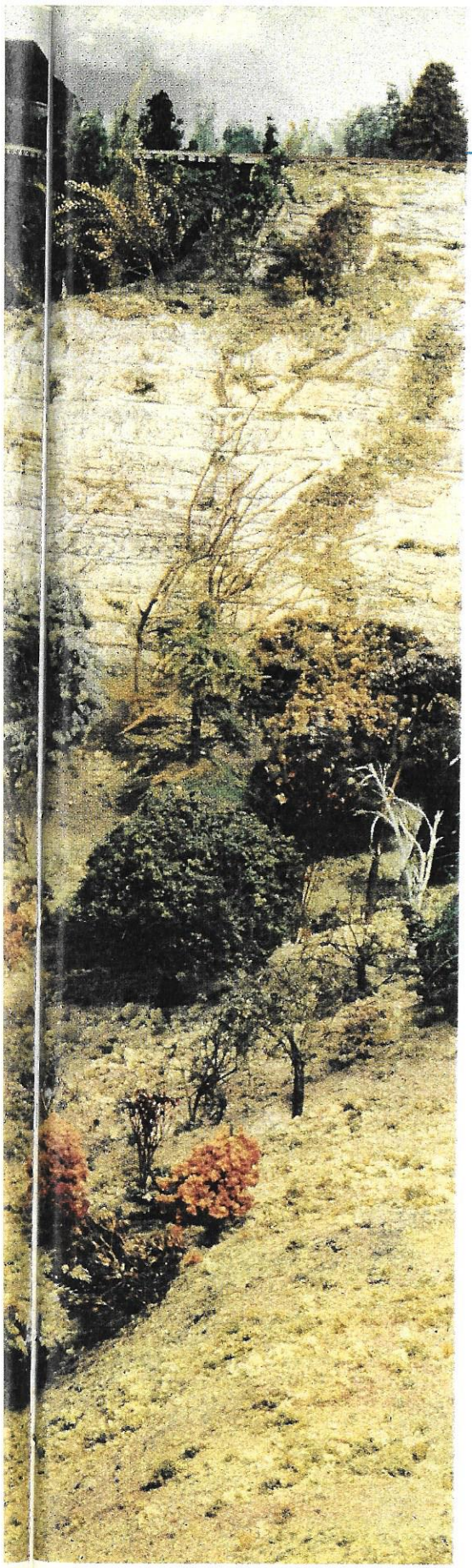
The mainline passenger steamers of the CNR wear their beautiful green livery pulling solid strings of green-and-black "varnish." On the CPR you can watch a Royal Hudson with crowns on the running boards pulling Tuscan smooth-side passenger cars. There are also lots of freight trains pulled by double-headed Northerns and Pacifics.

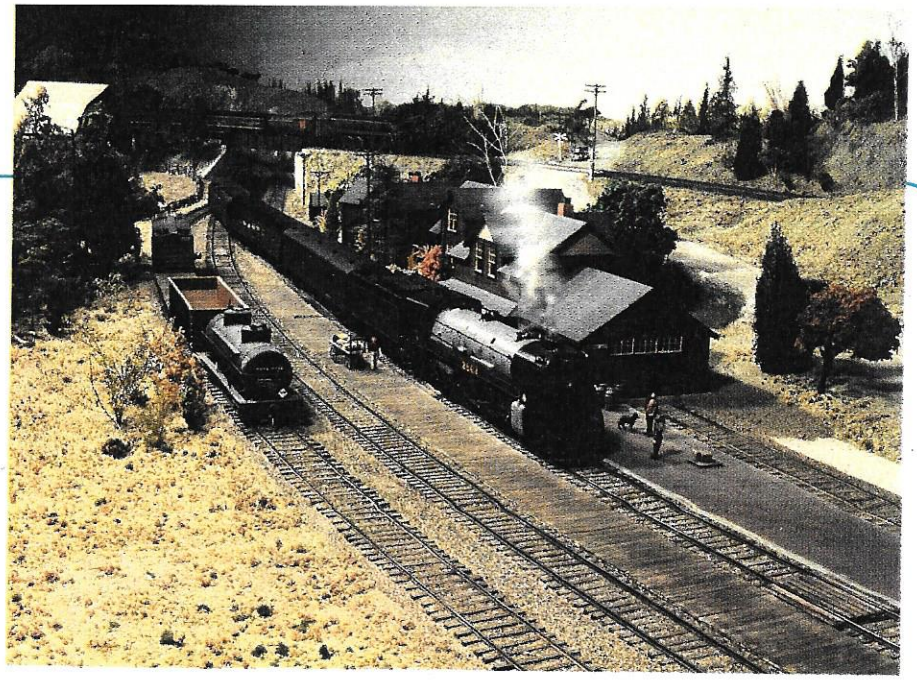
A visitor can wander around the layout and see many different facets of railway operation, or stay in one place and watch the show unfold at that point. For example, Aberfoyle Junction itself, where the CPR crosses the CNR, is the focal point of the layout. From this vantage you can watch passenger and freight trains of both roads, as well as switchers working in the interchange yard. In the background is the CN double-track main which is always busy.

The operation of the layout on a display day is geared to providing the visitors



5. This view along the CNR main line shows one of Aberfoyle Junction's major industries, the Canada Crushed Stone Co. The model lends a special note of authenticity for visitors who have seen the prototype in nearby Dundas, Ont. Craig Webb tells how he built the big rock crusher plant in the article beginning on page 74.





6. Aberfoyle Jct. is designed as a showcase for CPR and CNR railroading of the 1950s. At Caledon Junction a CPR Royal Hudson eases to a stop, while in the background a CNR U-4-a Northern crosses the CPR main. Again the engines are Chuck Bard's and the passenger cars Craig Webb's.

7. On the CNR's double-track main line through Aberfoyle Junction, Mountain no. 6060 with an eastbound passenger run meets Pacific no. 5155 on a westbound freight. Both engines are the work of Chuck Bard.

with a show. The operators try to provide a balance between mainline trains and yard switching. The stations along the line have spurs where diners and sleepers can be set out and picked up by mainline passenger trains.

The club plans to have four open house days in the spring and four in the fall. These shows earn the money to keep the layout operating and pay the bills. The landlord, Wayne Pfeiffer, is also a member of the club and has built a beautiful sound-equipped CPR 2-10-4 Selkirk, which is often seen on operating days pulling a long string of CPR passenger cars or a freight drag.

The members point out that although each of them has an individual specialty, they all help with every facet of layout construction, putting together their skills to produce a truly great model railroad.

The club's 1987 spring show dates are Saturday and Sunday May 2nd and 3rd, and Saturday and Sunday May 9th and 10th, from 10 a.m. to 6 p.m. each day. Aberfoyle Junction is not far from Toronto: take Highway 401 to Exit 299, then go north 1½ kilometers. Admission is $2 for adults and $.50 for children. You can call Frank Dubery at (519) 837-3837 for more information.

If you have a chance to visit on a show day, don't miss it. There is a lot of work yet to be done, but the layout is already a spectacular display. The club members are always building and you can come back again and again and see new additions to Aberfoyle Junction. ◘