

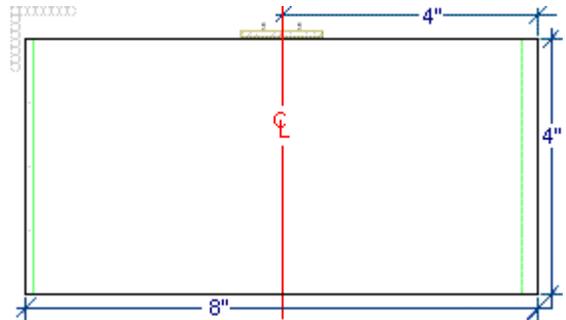
Free-MOn30 Interface Plate Scenic Profile:

Revised: February, 2008: *This document contains live HTML links.*

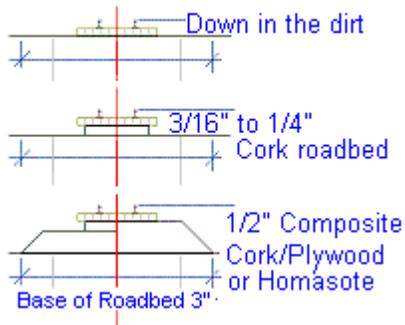
By: **Ron Wm. Hurlbut**

On30 Module builders are encouraged to be creative, and it starts by breaking out of the Domino box of rectilinear modules by creating a scenic profile at the interface plate.

The first diagram shows a “Bare-Bones” minimal interface plate and the rest grows outward from there.



Roadbed Profiles



A narrow gauge “Down in the Dirt” roadbed may be desirable to most On30 Modellers, but the world isn't flat, so some scenic profile is in order.

A minimal roadbed will help to lift the track above the “Plywood Plains” and “Foam Flats”.

Use a deeper roadbed to lift the track further out of the dirt.

A "Composite" roadbed is built-up with cork and plywood, or can be made from other materials like Homasote or splines.

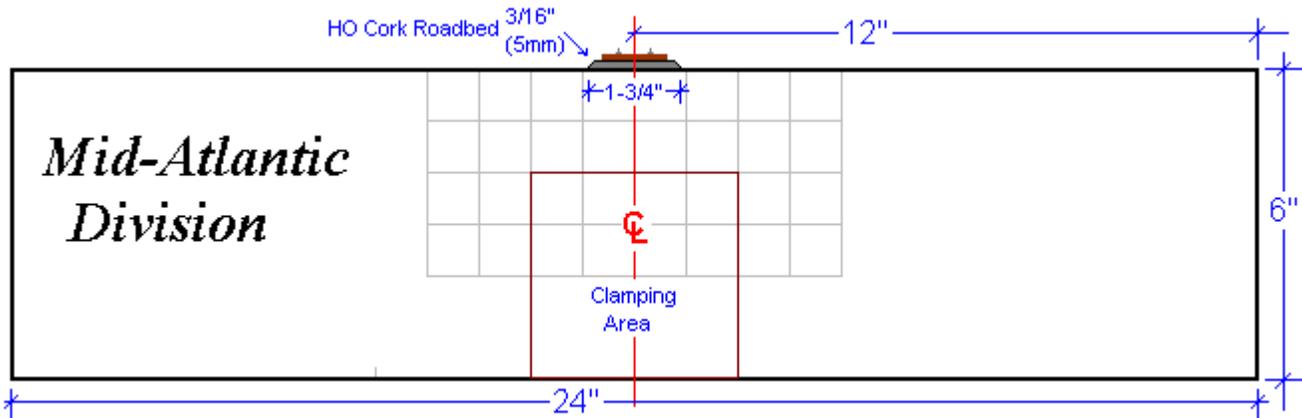
In O Scale, one-half-inch is only 2-feet which may seem like a lot, but with other contours in the scenic landscape, the roadbed will become a subtle feature.

Half-inch thick Homasote is an ideal roadbed, especially for hand laid track. A built-up roadbed of 5mm (3/16”) cork on top of 7mm (5/16”) plywood cookie-cutter roadbed is also ideal. This can be supported with 1-1/2-inch or 2-inch thick extruded foam board or a lattice with risers. Although it is not often applied on modules, spline roadbed can also be used.

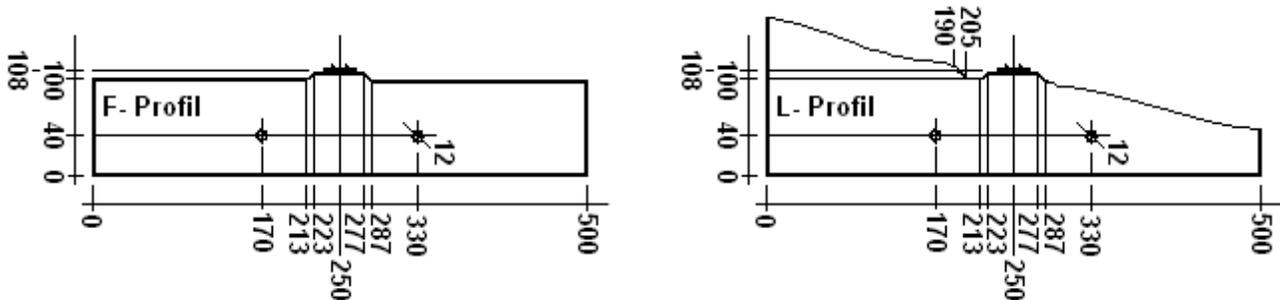
Ready made flex track and turnouts for On30/Oe/O16.5 are available from both Peco and Micro Engineering for those who want a quick and ready track instead of hand laying. Hand laid track needs a firm roadbed but ready made track can be laid directly on extruded foam board which is easy to shape and contour to form a roadbed profile.

The top edge of the Interface Plate can be cut and contoured to include the shape of the roadbed and a scenic profile, or else the roadbed itself can sit on top of the interface plate. The quarter to half-inch thick roadbed is exposed and vulnerable to damage but Homasote or other composite is tough enough to take the occasional knock. It is only a small section that is exposed and odds are that the outside corners of the module will receive more abuse than what is at the middle of the interface plate. Also, many modellers employ carry plates which protect the module ends when they are being transported or stored.

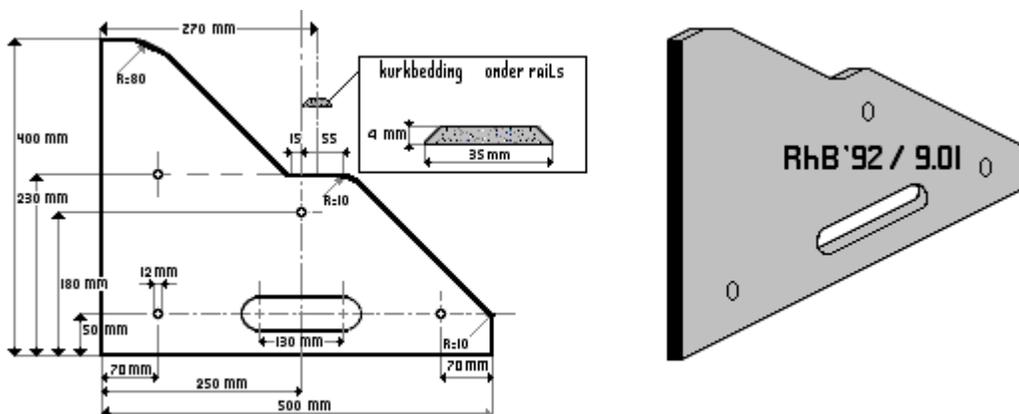
The *Mid-Atlantic Division Free-Mon30* group has chosen a flat scenic profile with an HO cork roadbed on a 24-inch wide by 6-inch deep interface plate. The HO Cork roadbed is a nominal 1/4-inch thick but is actually 5mm which is closer to 3/16-inch thick by 1-3/4-inch wide with 45 degree beveled shoulders. The HO Cork roadbed elevates the track a scale 9-inches.



The European *Fremo module standards* apply scenic profiles to their interface plates. The *Oe module interface plates* are 50cm wide which is roughly 20-inches. Oe is roughly equivalent to On30, using the same 16.5mm gauge track with 7mm [1:45] scale models instead of 1/4" [1:48] scale models. The flat "F-profil" raises the roadbed above the surrounding landscape and there's a gentle slope "L-Profil" with a raised roadbed as well.



An even more dramatic Fremo scenic profile is used in Europe for modelling the meter gauge *Rhätische Bahn (RhB)* railroad in Switzerland in HOM with the European *Fremo module standards*.

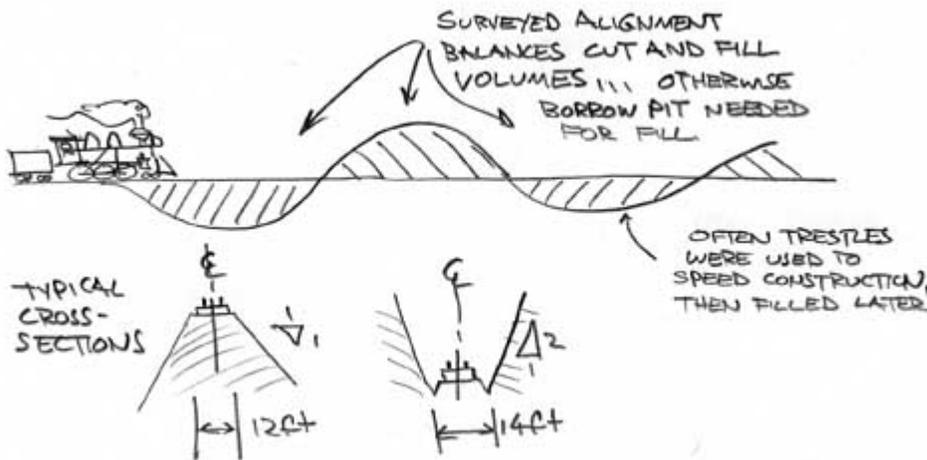
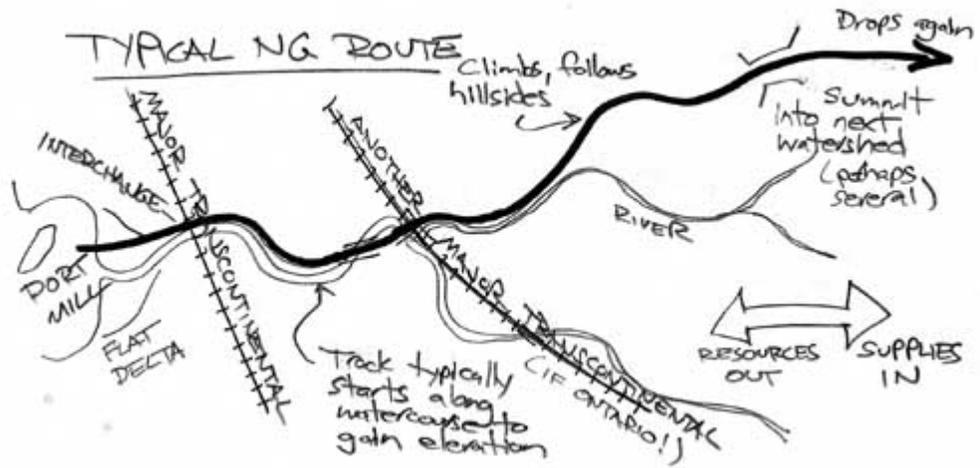


The dramatic Interface Plate scenic profiles used for Oe and HOm Fremo in Europe have inspired the members of the *Upper Canada & Algonquin Ry Module Group* in the Greater Toronto Area of Ontario Canada to adopt four separate scenic profiles that work together and represent the type of terrain that a narrow gauge railroad travels through.

Rob Hupfield drew these sketches to illustrate the type of terrain that we would apply to our modules and Chris Abbott drafted the final scenic profiles that we use.

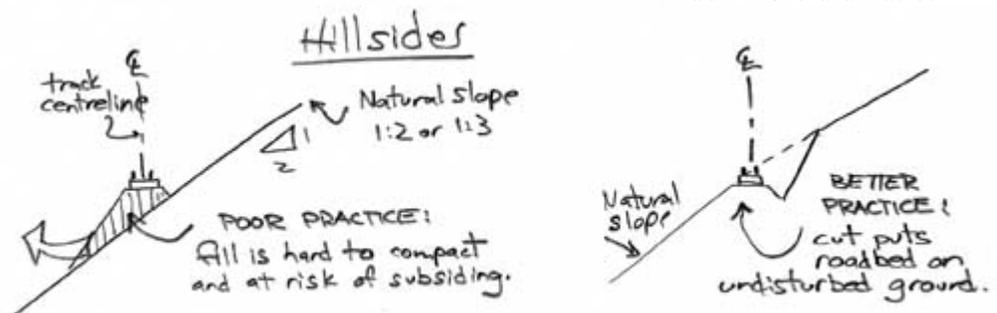
The map shows the routing that railroads take. Standard Gauge Transcontinental Railways travel overland

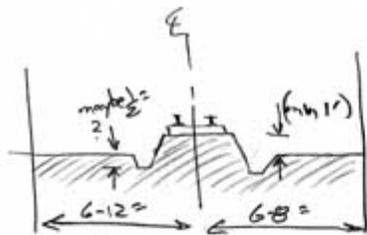
along the most direct route while the Narrow Gauge Railways follow ancient trade routes along river valleys from one water shed to the next. The Narrow Gauge Railways connect large bodies of water creating bridges between them by connecting with Steamships and barges at Ports. Narrow Gauge logging and mining railroads connect the camps with the Ports or interchange with Standard Gauge Railroads.



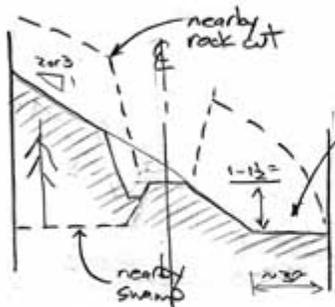
The right of way for the Standard Gauge railroad is a series of cuts and fills while a Narrow Gauge railroad clings to the side of valleys.

These engineering sketches lead us away from the typically flat interface plates that you normally find on modules and towards something much more dramatic.

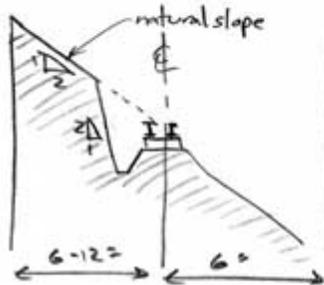




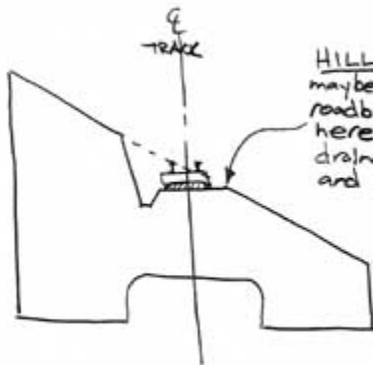
FLAT
 Roadbed still needs to be drained - raise ~ 12" with ditches.



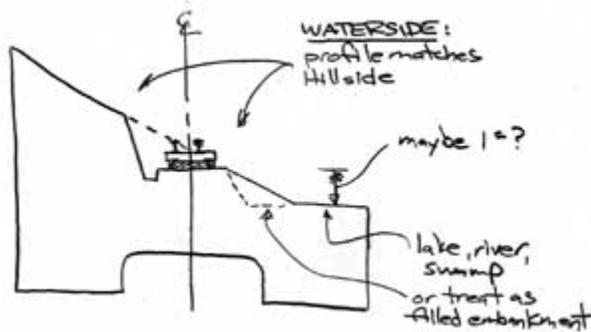
WATERCOURSE
 Swamp, river, lake, etc
 (dead trees due to flooding from railway embankment, etc)



HILLSIDE
 ← natural slope 1:2 or 1:3



HILLSIDE:
 maybe raise the roadbed up to here (no drainage prob, and no ditch!)



WATERSIDE:
 profile matches Hillside
 maybe 1=?
 lake, river, swamp or treat as filled embankment

It made sense that since the world is not flat, especially on the rugged Canadian Shield, that our interface plates should reflect this by having dramatic but realistic scenic profiles. These sketches illustrate how we arrived at the four interface plate scenic profiles. We designed "Flat" and "Hillside" profiles with and without water to one side.

When you start to carve a scenic profile into the overall interface plate, it can include part of the roadbed. This is how the Interface Plates for *the Upper Canada & Algonquin Ry.* are formed.

The Flat Interface Plate is profiled with a roadbed in the center with side ditches and the surrounding area is gently sloped away from the railway. The Flat with water has a depression to one side without a ditch on the water side.

The Hillside Interface Plate is profiled with a roadbed in the center and a ditch to the uphill side. There is no ditch to the down-hill or water side.

The Upper Canada & Algonquin Ry. has opted for a narrow interface plate. An overall width of 12-inches represents a scale 48 feet which is half of the usual 24-inch [96-scale-foot] width. We have found several advantages to using a narrower than usual Interface Plate. Some of the advantages are outlined in the *Interface Plate White Paper*.

Like the issues of mismatched Interface Plate widths and jogs in the fascia, there are also issues with mismatched scenic profiles. By using a narrow interface plate, the mismatch in the scenic profile is minimized and the few square inches of Interface Plate can easily be disguised with a scenic filler.