N-Circle Railroad Update 33 – March 24, 2026

Finishing a 3-D Printed Post Office Structure

After completing the challenging laser-cut wood structure kits of the previous three N-Circle Updates, it was time for some easier modeling! I actually worked on these buildings in parallel with completing the laser-cut wood buildings for the NWV modules of those three Updates.

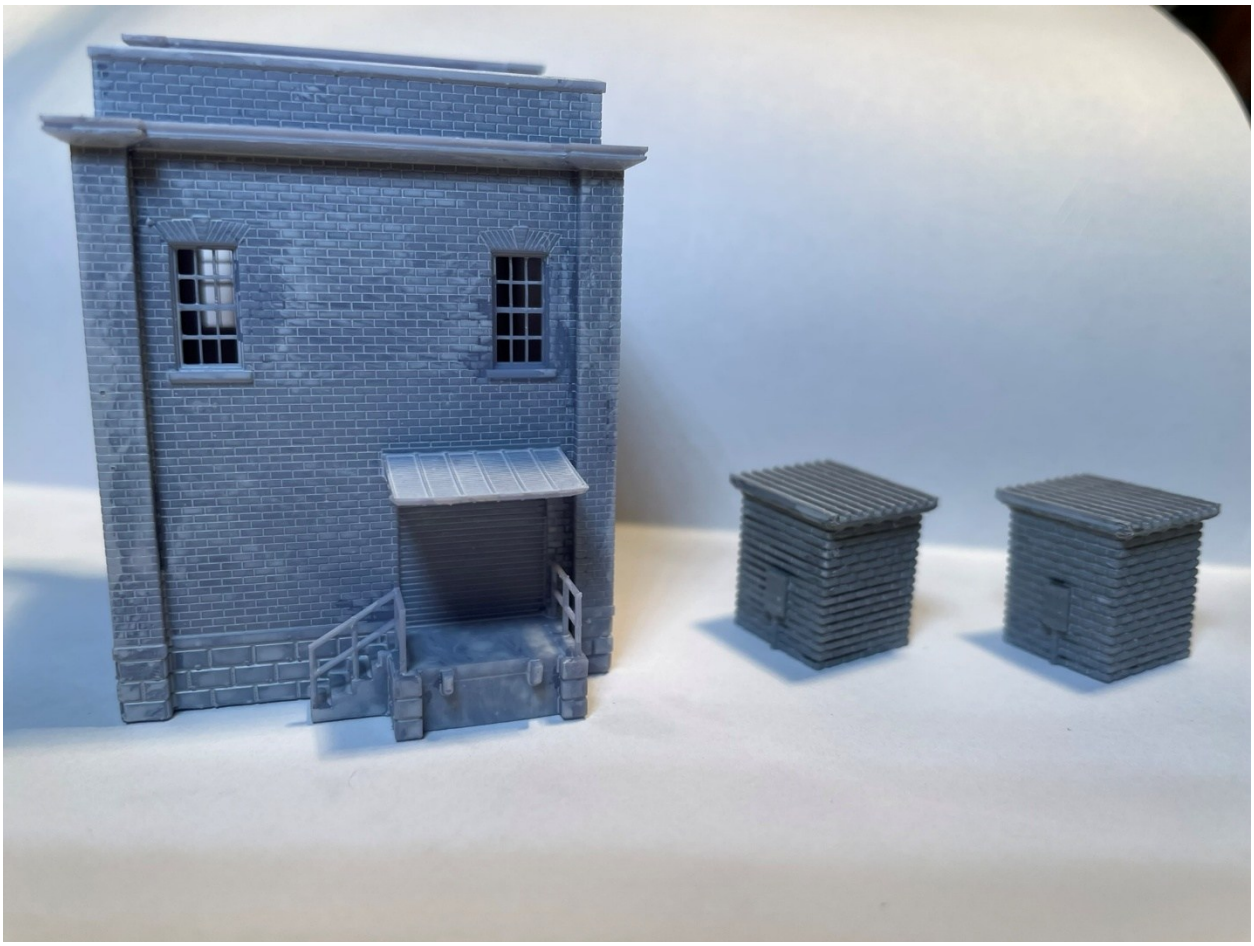
I wanted a post office building for the 1950s period of the N-Circle layout and found a nice 3-D printed plastic one to fit the intended space on eBay made by Mr. Craft Structures.

While recently purchasing vehicles from igMakes on eBay, where I have purchased many vehicles previously, I added a pair of simple brick trackside shacks to the order. These can be used anywhere, not necessarily just as railroad buildings.

Here we see the front and rear of the structures after applying a light coat of Vallejo grey primer paint and before doing any finishing work

N-Circle_26-01-09_PostOffice_1

N-Circle_26-01-09_PostOffice_2



All the windows, doors, trim, stairs and loading dock details are cast as one piece. Therefore, there are no instructions with 3-D printed kits – you just paint them!

Two coats of Polly-Scale Boxcar Red paint applied with a brush were required to adequately cover the bricks. I then used the Vallejo grey primer thinned with water for mortar between the bricks. When first brushed on with a micro-brush, it sank into the cracks between the bricks and produced a nice look. But after it dried, the color faded and was barely noticeable. Therefore, I went over the walls a couple of times. The mixture was thin enough that it did not adhere to the faces of the bricks much, so I did not have to rub the excess off the surfaces.

I painted all the doors and windows and roof trim with acrylic Polly-Scale Reefer White paint, using the sharp end of a wood toothpick for most of this work – any paint brush would be too wide to handle most of these details. I did use a micro-brush for the wider areas around the roof edge and the front doors.

The primary challenge of this kit was: How to finish the Post Office sign? It is molded as recessed lettering in the panel under the front roof. After an initial coat of white paint on the panel I went over it with a wash of watered-down dark grey paint to fill the recessed lettering, then wiped off the surface with a paper towel. After repainting the surface later with another coat of white and removing some of the paint in the grooves with a metal clothing pin it looked “okay,” the lettering is fairly distinct against the white panel, as seen here..

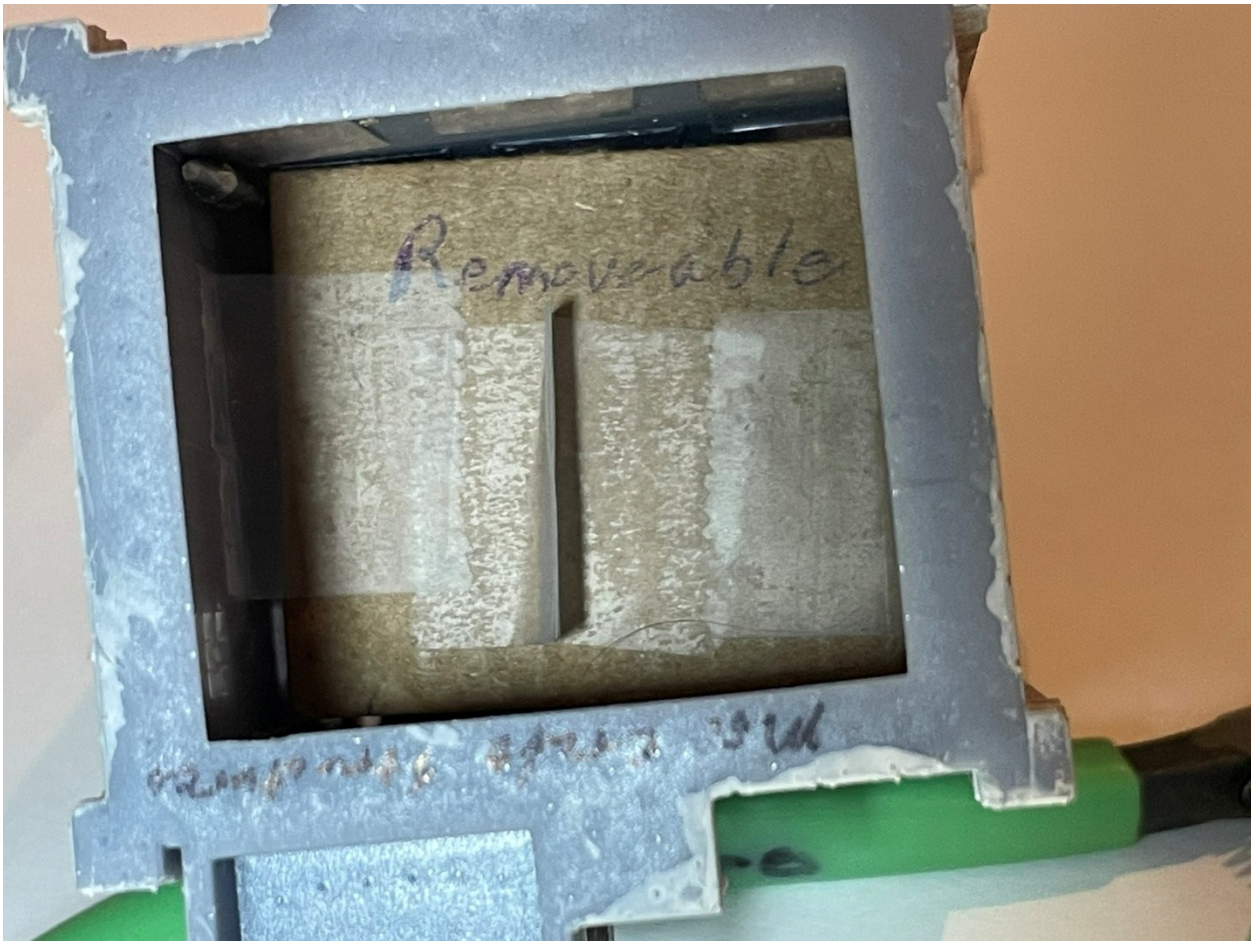
N-Circle_26-02-19_PostOffice_1

The challenge with a 3-D printed structure is how to paint the trim without getting paint on the walls. This structure has a lot of window and roof trim and I had many white smears on the walls that I later touched-up with the brick color.

I added window glazing, cutting rectangles of clear plastic leftover from previous kits to fit over each window. This was easy to do, reaching through the open bottom of the building and supergluing each in place, as the inside surfaces of the walls are smooth and level.

I also added an interior floor as a light block between the first and second story windows. It is held by plastic sprue pieces glued into the corners of the walls. I used a thin cardboard square attached with Scotch tape, in case I want to remove it someday to add lights. I made a tab in the center with folded tape to grab onto with needle-nose pliers to guide the plate into place. Note that I wrote “Removeable” on the underside to remind me of this later!

N-Circle_26-02-19_PostOffice_2



I created signs for both the 1950s and 1980s periods using decals from Dave's Art placed on squares of thin white styrene. The intent was to attach them to the building using double-stick tape, so they will be interchangeable when the operating period of the layout is changed. The signs for the opposite period will be stored in a plastic bag inside the base of the building.

N-Circle_26-03-05_PostOffice_Cropped

I had to re-glue the decals with white glue, as they did not adhere well to the tiny, shiny pieces of styrene. When completed, the styrene base for the small signs was too thick and didn't look good on the front of the building, so I set them aside and only used the large sign on the rear wall. Perhaps I will rework them at some point, but the front of the building does not really need more visual interest.

Here we see the front face of the completed structure

N-Circle_26-03-21_PostOffice_1

Then a side view.

N-Circle_26-03-21_PostOffice_2

Then a rear view, showing the detailing of the loading dock and the sign mounted on the wall.

N-Circle_26-03-21_PostOffice_3

And finally, the other side. This blank wall did not require much work…!

N-Circle_26-03-21_PostOffice_4

This post office building required about four and half hours to complete over 15 sessions, many short sessions to paint trim and then let it dry before doing another section. Obviously, this is a lot less time than required to build a structure before decorating it.

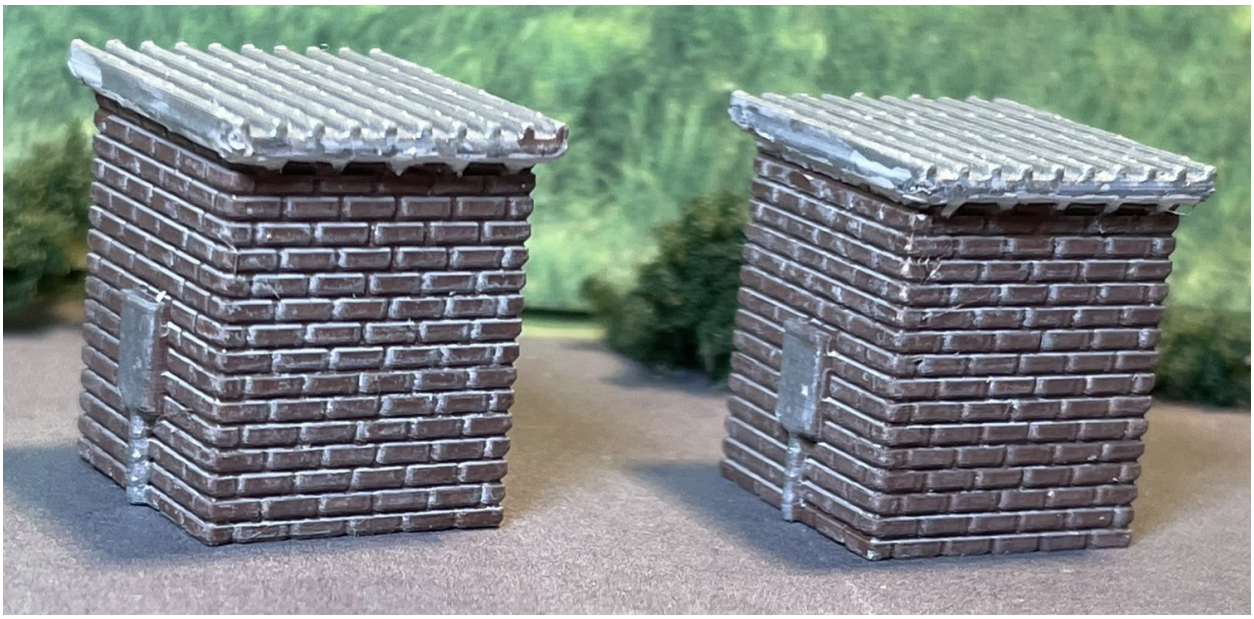
The post office will be placed at the corner of Main Street and Railroad Avenue, across from the passenger station and City Hall. I am in the process of creating a “Micro Scene” base to fill in this area around the Post Office, to be described in a future N-Circle Update.

Finishing 3-D Printed Trackside Shacks

The two trackside shacks of course were easy to finish – I applied a layer of Vallejo grey primer, then brick paint and a lighter mortar wash like for the Post Office. I later glued plastic “Keep Out” signs from Blair Line to the doors and added a spot of yellow paint on the utility box to look like a warning sign. Here we see the completed shacks.

N-Circle_26-02-28_TrackStructures_1_Cropped

N-Circle_26-02-28_TrackStructures_1_Cropped



Unfortunately, this very closeup photo exposes that one of the “Keep Out” signs isn’t quite straight, but this is not noticeable when on the layout.

These simple shacks required only about an hour and a half to complete over eight sessions, doing both together with most painting sessions shared with the Post Office. I will place them somewhere around the N-Circle layout, they are generic enough to be used in any railyard or industrial area. If they find a permanent home someday, maybe I will add more signage.

3-D Printed Plastic Kit Perspectives

These 3-D printed structures were much easier to finish than the wood kits of previous N-Circle Updates, and all the structural details are straight and square! Though 3-D kits do require a lot more care in painting; as one has to carefully paint the window and door trim without getting paint on the wall. That is one advantage of building a kit, the trim pieces can be painted separately before attaching them to the building. The Post Office has a lot of trim and I had many white smears on the walls that I had to touch-up with the brick color.

To me, the ideal 3-D printed kit casts pieces separately, so they can be painted individually before gluing them together, like the traditional plastic styrene kits. The house kit described in N-Circle Updates 26 and 29 allowed this, with the porch pieces produced separately. Ideally this would be done with window and door units also, though I have not seen this previously. I have seen vehicle kits where the wheels and truck bodies are cast separately and can be painted before assembly, so I believe that producers are beginning to understand this.

In the recent March 2026 issue of Model Railroader magazine, there is an article about building an HO Scale passenger station kit from Northwoods Models that does exactly this! The windows and trim pieces are provided separately and thus can be painted before attaching them to the building. From their website sooparts.tech it appears they make seven N-scale buildings

kits. They do not show the kit parts as delivered to indicate if they are done like the HO kit, maybe I will buy one to find out!

But I have seen 3-D printed kits from Outland models on eBay done this way now too. Here is a photo extracted from one of their listings.

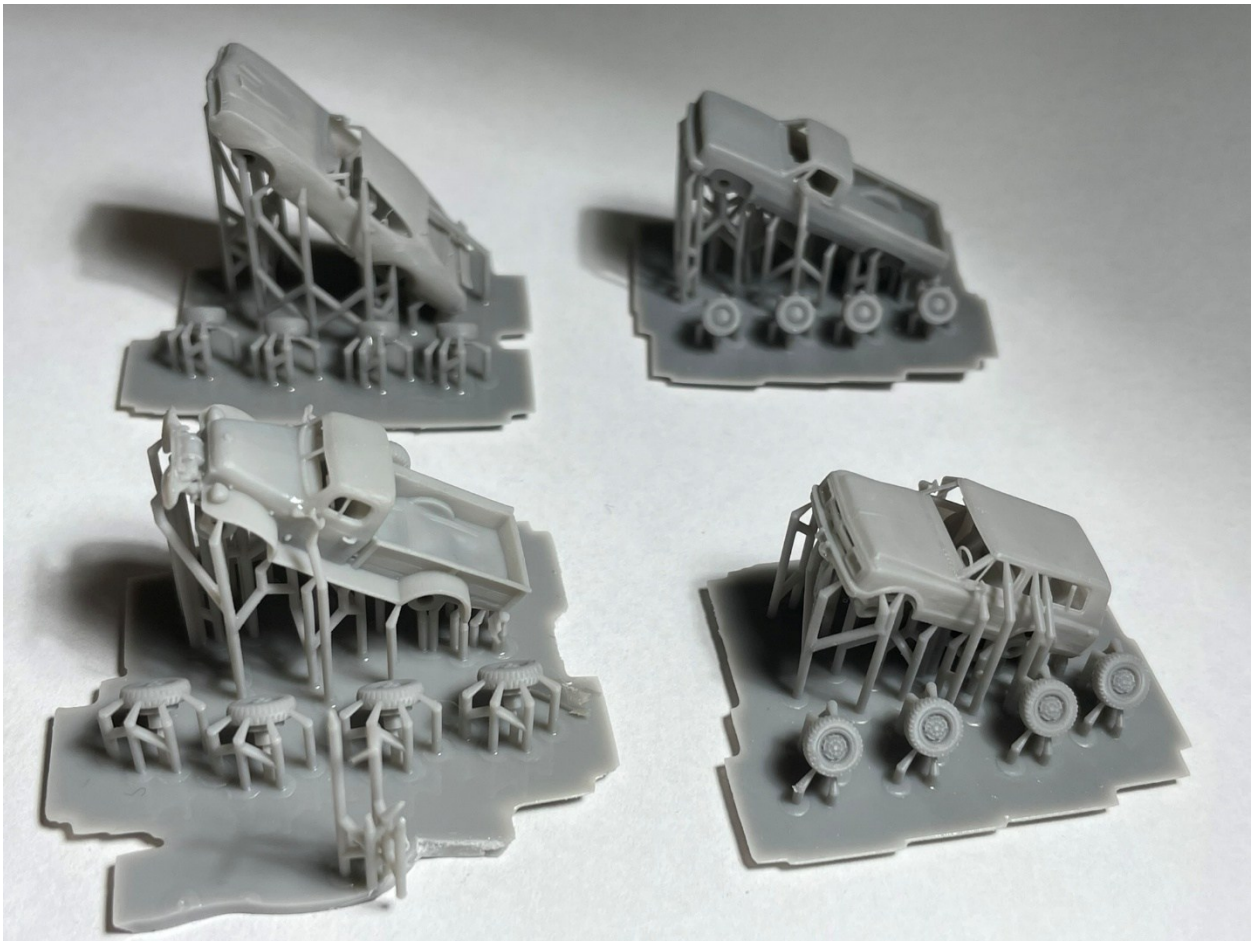
OutlandModels-Barn-2

Their photo of the assembled but unpainted model looks pretty good. Obviously, you would want to paint the detail pieces before assembling the structure to take advantage of having separate pieces to start.

OutlandModels-Barn-3

I recently purchased from Tennessee Pass Models a set of 3-D printed vehicles with separately printed wheels, as seen here.

TennesseePass_3D_2026-03-23



I have not worked with these vehicles yet, it appears the challenge will be how to cleanly cut away all of the sprue connection points. Stay tuned for a future N-Circle Update on this!

So, it appears this may be the way of the future: the finer detail of small add-on parts that can be obtained with 3-D printing than with the old-style molded styrene kits but with the easier assembly with glue than the fragile peel-and-stick parts with laser-cut wood kits. I'm in!