



# Sunrise Herald

June 2022 Volume 15, Number 6

## Sunrise Division Officers

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## Layout of the Month

This month's two photographs of the Sunrise Division's modular HO scale layout were taken at the Rocky Mountain Train Show on April 2 and 3, 2022.

**Layout photographs needed for the Sunrise Herald.**



## June Meeting Notes

Signing in to the hybrid meeting began about 6:45 p.m. on June 2, 2022. The meeting began at 7:07 p.m. with 15 participants in attendance at the church and 3 attending via Zoom. The meeting began with introductions followed by Announcements, Tool Time, Show 'n' Tell, and the Clinic, all of which are reported on in greater detail in this edition. The meeting concluded at 8:43 p.m.

## Next Meeting

The next meeting will be Thursday, July 7, 2022 in person at Holy Love Lutheran Church, 4210 S Chambers Road, Aurora, Colorado. Mask wearing is optional for all attendees. The meeting will start at 7:00 p.m. The meeting will also be streamed on Zoom with sign-in between 6:30 and 7:00.

## URLs of the Month

This month there are two YouTube videos of Japanese railways.

Japan: Trains in Tokyo - Not Just Shinkansen  
<https://www.youtube.com/watch?v=Ze4AIRSiG7I>

Freight trains Japan[Compilation]  
[https://www.youtube.com/watch?v=J-Xv5TkC\\_LU](https://www.youtube.com/watch?v=J-Xv5TkC_LU)

## Upcoming Tool Time

Pogo Pins—Larry Stephens

## Upcoming Clinic

Soldering Irons, Tips and Techniques—Larry Stephens

## Upcoming Show 'n' Tell Themes for 2022

**July**-Prototype Project  
**August**-1970's Era  
**September**-Mining  
**October**-Steam  
**November**-2000's Era  
**December**-Holiday Theme

## Announcements

**In an attempt to reduce problems, we continue to ask that Show 'n' Tell photos, Clinic presentations, and Tool Time photos be taken before the meeting and sent to Gary Myers ([garymyers06@comcast.net](mailto:garymyers06@comcast.net)) for presentation at the meeting and to the editor for inclusion in the Sunrise Herald ([rlhoch422@gmail.com](mailto:rlhoch422@gmail.com)).**

The Foothills Society of Model Railroaders swap meets have resumed at Green Mountain Presbyterian Church, 12900 W. Alameda Pkwy, Lakewood, CO. The meets are held on the third Saturday of odd numbered months.

Rail Fair at the State Fair Grounds (TECO Train Expo Colorado, Pikes Peak Region) October 15 and 16, 2022.

The opening of the Cumbres & Toltec Scenic Railroad has been delayed until Friday, July 1<sup>st</sup> due to the dry conditions and the risk of fire.

## Module Update

Larry Stephens sent this report to be included in the Herald.

*The axle has been replaced (kudos to Adam and Chuck for fitting the axle under the trailer). The axle was from a different manufacturer. It has an adjustable spindle arm that that can be set in different positions, six degrees apart. This will allow our trailer to be set up for our weight better than a fixed degree axle would.*

*Electrical work has been done on the trailer (Adam and William, in charge). It required removing all of the interior wood. Lights now work, including the inside light, which hasn't worked in the last ten years. Adam placed some rubber floor, he volunteered, that now covers the entire floor. This should help keep the modules from sliding and to have a better ride.*

*Some module detail work has been started, most notably, that Grant is doing a complete redo of the steel fabrication plant including a new over-head crane.*

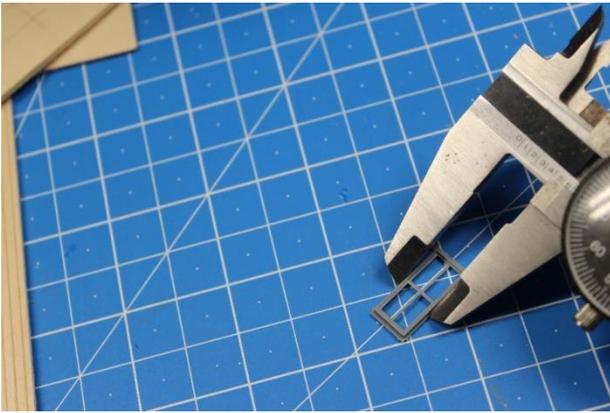
Larry

## Tool Time

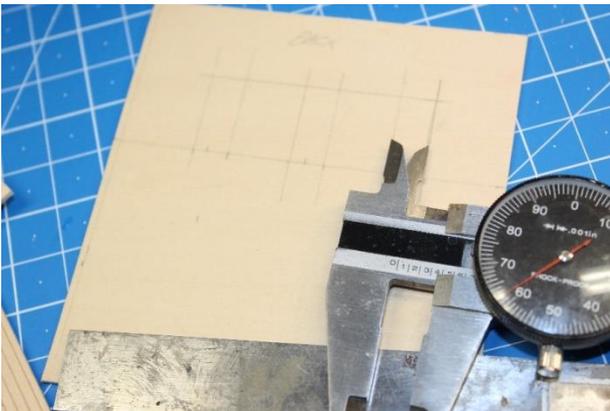
Stu Jones gave two Tool Time presentations: the first on cutting window openings and the second on roof assembly jigs. Here are his presentations in their entirety:

### *Cutting Window Openings*

*For years I cut window openings by measuring the inside of the window with a scale rule, then transferring that measurement to the wall where I wanted to install the window. Invariably I cut the opening too small so when I tried to fit the window casting into the opening, I had to do a lot of trimming to install the window. Then I had an inspiration: why not use my calipers to measure the exact size of the window.*



*I could then use the calipers to transfer the width or height of the casting on to my wall section. (In this photo, I had already done this and drawn the window outline.)*

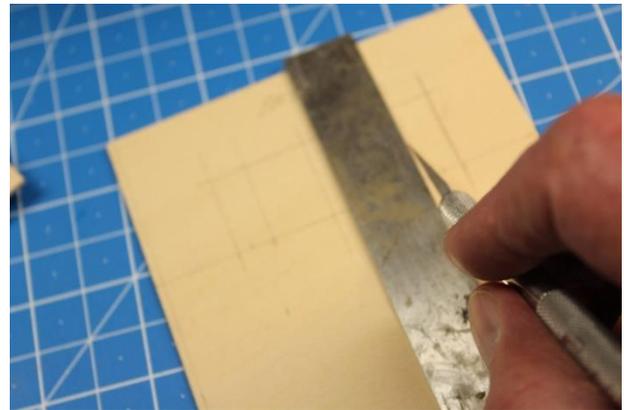


*I drew the window dimensions on the back side of the wall section where the outside texture of the wall would not distort the lines. I used a*

*machinist square to ensure that the lines were parallel to the wall edges.*



*I used the same square to cut the window openings. I cut from the back to ensure a cleaner opening and always cut from the inside of the window in case my hobby knife strays from the edge of the straightedge.*



*The result is an exact-sized opening. I use the same technique to cut the glazing from clear acrylic, but here I make the glazing slightly undersize so that it won't bind on the building walls when I inserted the windows. For many projects, I use Tichy Train Group windows. In HO scale they provide at least 80 different selections in various sizes and styles. It is easy to order from [www.tichytraingroup.com](http://www.tichytraingroup.com) and the order will be processed quickly.*

### *Roof Jigs*

*I hadn't planned on showing this second tool, but it had recently arrived and I had just used it. It is a set of roof template jigs from Micro Mark.*

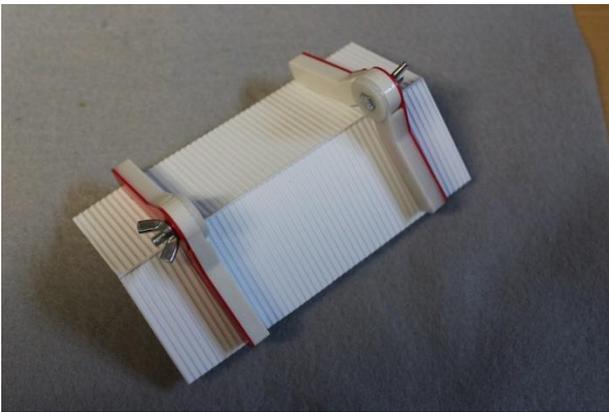
## Show 'n' Tell

This month's Show 'n' Tell subject was 1940's Era.

Rich Flammini showed these 1940's vintage Tootsietoy metal fire trucks that he played with as a young boy.



*The set of two consists of two parts each. The outer or top brace is a hinged piece that can be adjusted to any angle and held in position with a wing nut. The inner or bottom brace has a flexible hinge that snaps into the top brace and is held in place with strong magnets.*



*The roof pieces, or whatever you are gluing or cementing together is simply held securely between the top and bottom braces. The magnets allow you to position the two pieces together until you get a correct fit. You can now apply the glue or cement to attach the pieces. There is room beneath the hinges to insert a crown fitting and cement or glue that in place*



Stu Jones presented this:

*This submission for 1940s Show and Tell is a D&RGW class GS 70-ton gondola. Class GS stands for General Service. These were drop-bottom gondolas where the car bottom consisted of doors that would drop from the center to facilitate unloading. Notice the rod along the bottom outside. This rod contained chains that would roll-up to lift and close the bottom doors in preparation for the next load.*

*The Rio Grande started ordering these cars in the 1920s and 30s and by the 1940s had a fleet of about 7000 cars. Most GS gondolas were of 40 and 42-foot length and rated about 50-tons. I think these 46-foot, 70-ton cars were the largest ever built. Notice that the sides sloped toward the bottom to facilitate unloading. The Rio Grande used them for a variety of loads, including coal, limestone and even sugar beets. In fact, the Rio Grande did not own any hopper cars until the 1950s.*

*Most Western railroads preferred and owned GS and other gondolas over hopper cars until later years because of their versatility. Bill Johnson pointed out that one reason was that they were often unloaded by shoveling the loads by hand, hence the lower sides. Labor before the Second World War was cheaper than building special purpose unloading facilities.*

*I built four of these cars for the Lockheed-Martin D&RGW Scenic Lines from laser-printed kits, then decided to scratch build this car for my own layout. I embossed the rivet detail onto 0.010 thick styrene sheets, then laminated the sheets onto 0.030 styrene to build the car. The prototype*

*cars and the kits had Vulcan trucks that are not otherwise available, so this car has Bettendorf friction-bearing trucks.*



Gary Myers showed these slides:

Show n Tell June 2022 - 1940s Era  
D&RGW EMD NW-2 #100- Gary Myers



In 1941, the Rio Grande experimented with several new diesel switchers. They purchased one EMD unit, a NW-2 which was re-numbered #100. This is a HO KATO which has been lightly weathered and DCC added.

Show n Tell June 2022 - 1940s Era  
MP Heavy Mikado #1460- Gary Myers



In 1942, the Rio Grande borrowed Heavy Mikados from the Missouri Pacific. This is a Broadway Limited, with DCC & sound installed.

Show n Tell June 2022 - 1940s Era  
D&RGW PA-1 #600A- Gary Myers



Purchased in 1947 for the newcoming California Zephyr, the Rio Grande bought 2 sets of ALCO ABAs, (4) PAs and (2) PBs. The Black and Yellow livery lasted until the fall of 1949, which was repainted silver with an aspen leaf "grande gold" nose. This is a HO Proto 2000, waiting for sound DCC to be added.

Bob Hochstetter showed these Intermountain N scale models that represent the prototype EMD FT diesels. Built in July 1945, these drawbar connected units each produced 1,350 horsepower. An interesting feature is the large number on the side which was illuminated at night. The Missouri Pacific Railroad had 24 of these units.

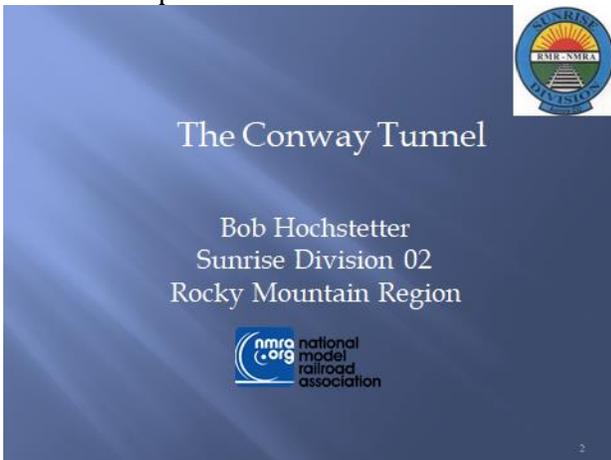


Dave Clifford showed his brass Mikado locomotive.



### Clinic

I (Bob Hochstetter) presented a clinic on constructing a tunnel for my N scale layout. The PowerPoint presentation is here:



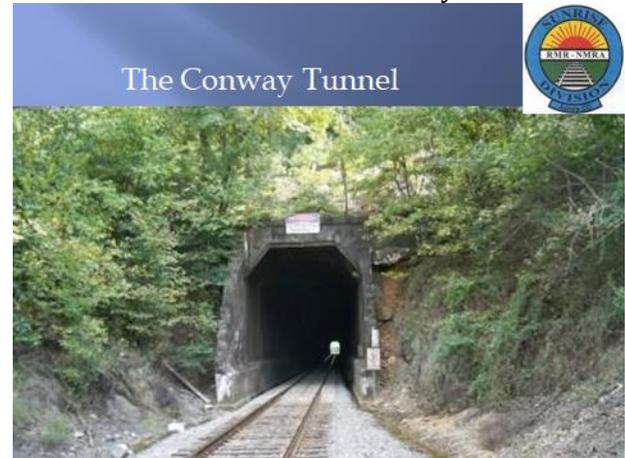
The layout is loosely based on the Missouri Pacific Railroad in Arkansas in 1958.



At one time, there were 14 tunnels on the entire Missouri Pacific Railroad system, five of which were in Arkansas. Four were on the White River Division which saw no passenger trains in 1958. However, one tunnel, the Conway tunnel on the Van Buren Subdivision did have passenger train traffic.



An internet search turned up this photograph of the Conway tunnel and I knew immediately that this was the tunnel that I should try to model.



I was taken by the fact that the outline of the tunnel looked much like the NMRA clearance gauge.



outline similar to the NMRA gauge

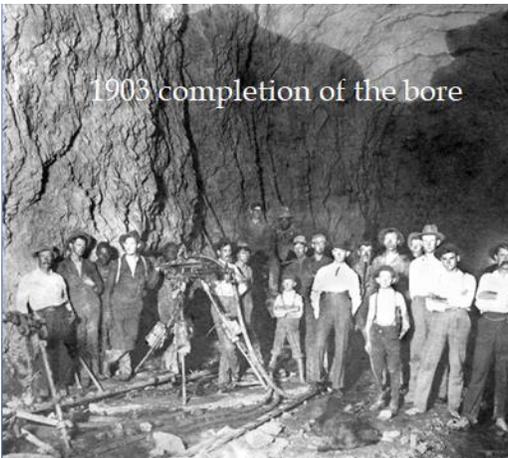
this tunnel through Cadron Ridge ( a hogback ridge of sandstone and shale, 5 miles long) near Conway, Arkansas



completed in 1903 by Arkansas prison system convicts

length 1,100 feet

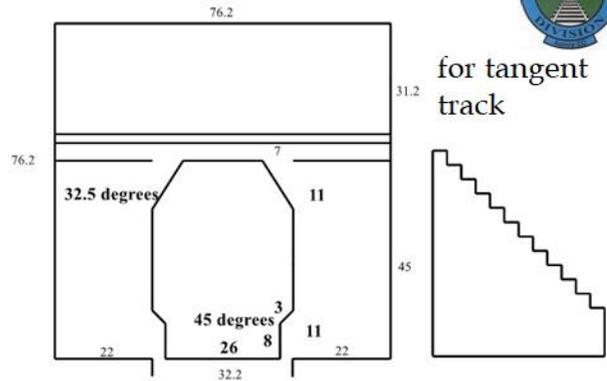
This is the earliest photo that I found of the tunnel.



1903 completion of the bore

In order to get the outline of the tunnel entrance correct, I consulted the NMRA website. On the website I found the dimensions and angulations for the NMRA gauge. These I drew in CADRAIL along with the tunnel face and my best guess for the retaining walls.

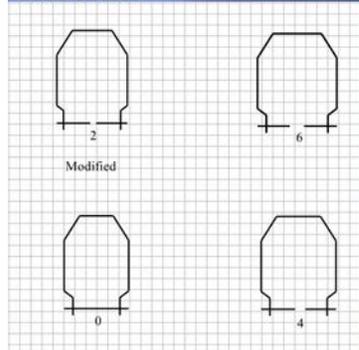
Bold are NMRA specifications



for tangent track

The NMRA clearance gauge is for tangent track. Since the tunnel is on a curve, I knew that the width needed to be increased but I did not know how much. I drew the dimensions in CADRAIL again but this time I increased the width by 2, 4 and 6 millimeters.

using the dimensions of the NMRA gauge, these were drawn using CADRAIL

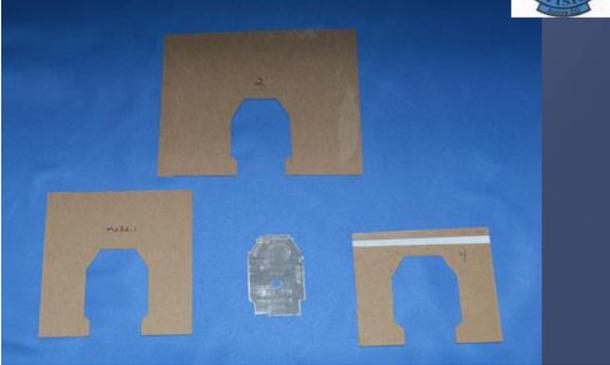


0 follows the gauge dimensions

2-6 increase the width by 2 mm. each time

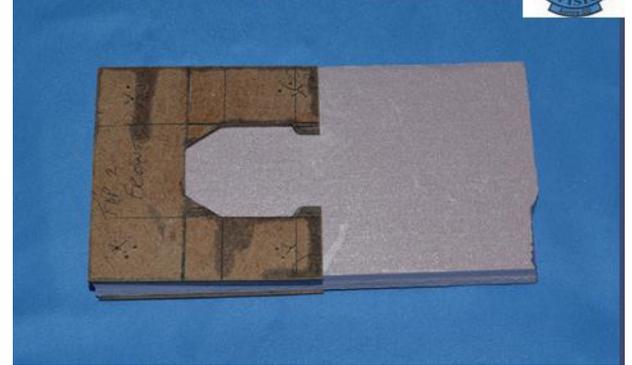
I transferred the dimensions to cardboard and ran a passenger train through each one before deciding on the 4 mm. increase.

NMRA gauge and cardboard templates



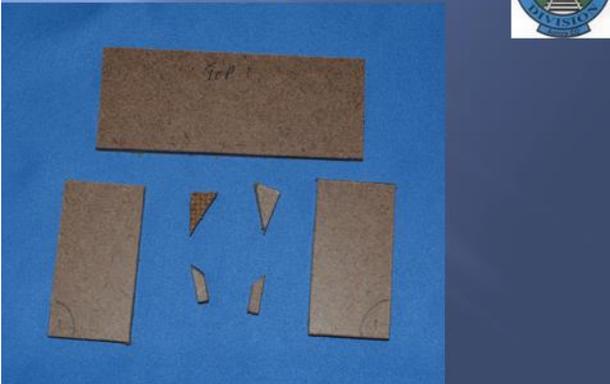
I sandwiched a piece of 1/2 inch foam between the templates and cut out pieces with a hot wire foam cutter.

1/2 inch foam sandwiched between the templates

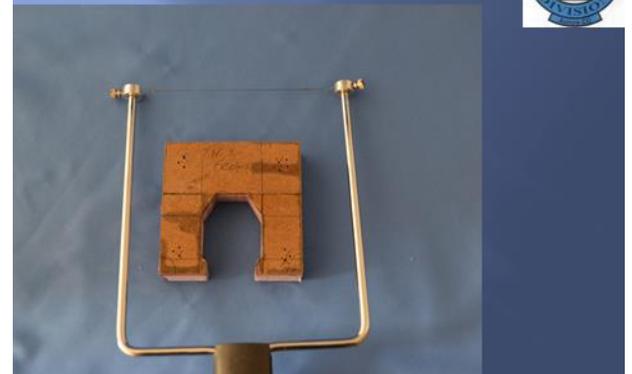


Next I cut pieces from tempered hardboard and glued them together to form two templates.

pieces cut from tempered hardboard



after cutting with the hot wire foam cutter



Front and back templates



1st section of the tunnel

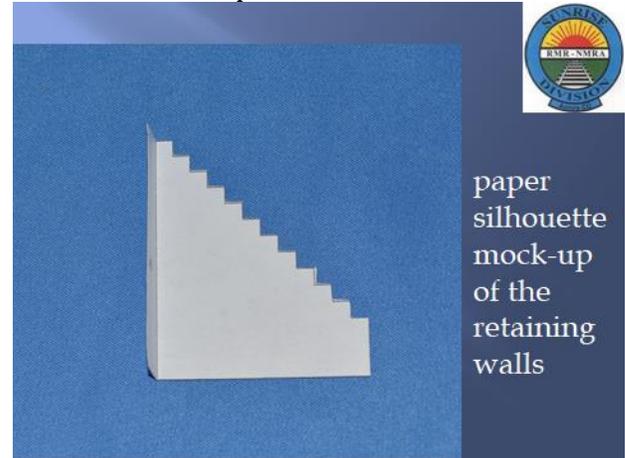


I arranged 13 pieces of foam over the track. I taped the left side of the pieces together and flared the right side to match the track curvature. After running a passenger train through the pieces and confirming that nothing hit the inside of the tunnel, I ran construction adhesive into the spaces on top and on the right side.



Spaces inside the tunnel were filled with Woodland Scenics Foam Putty. The interior was then painted flat black.

A paper mock-up was made of the retaining walls and tried in place.

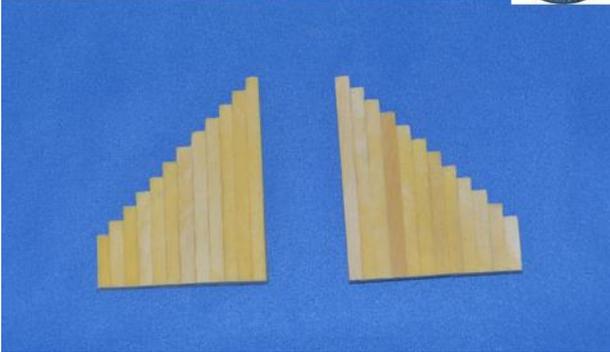


To form the retaining walls, a 1" x 2" pine board was ripped to 1/8" wide. This in turn was cut into 1/8" x 1/8" strips that were glued together with carpenters' glue.

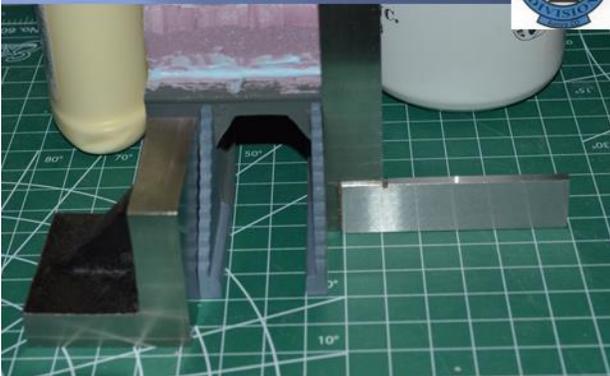


After trimming to the correct length, the retaining walls were cemented to the tunnel face.

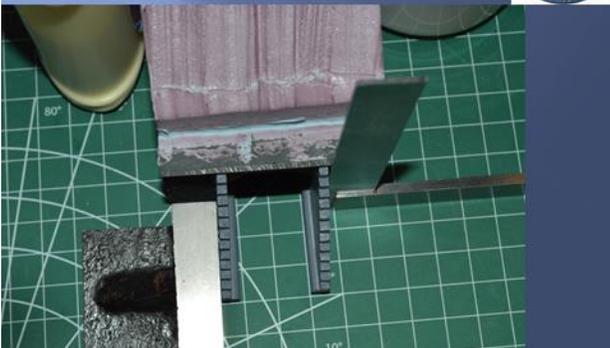
trimmed to correct length



cemented to the tunnel face at the workbench



as seen from above



the tunnel cemented to the roadbed



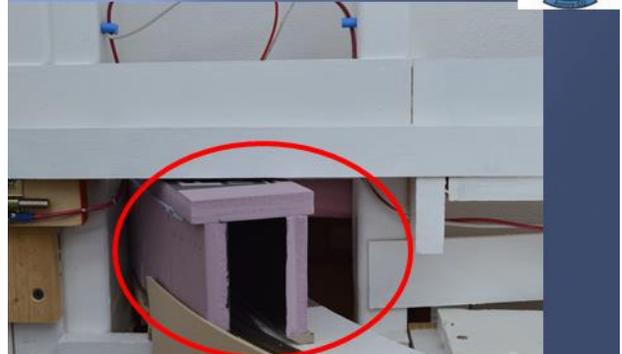
A hill was formed around the tunnel (obviously not completed yet).

forming the hill around the tunnel



In order to prevent light from coming through the tunnel, a tunnel was formed in the hidden staging area.

tunnel in hidden staging



There is still much to do but I think that the tunnel has the feel of the prototype even if it is not an exact replica.

scenery still a ways to go



Oops. It was only after completing the tunnel that I came upon this photo. While it was obviously taken before 1958, it does show the shape of the tunnel as it was in 1958. The current shape of the tunnel only dates from 1989 but after spending the time to do this, I do not intend to replace it.



oops

Pueblo Model Railroad Association  
Promoting Scale Modeling Since 1984

**Rail Fair at the State Fair Grounds**

**October 15 & 16, 2022**  
**Sat 9-4:30 \* Sun 10-4**

Livestock Pavilion  
@  
State Fair Grounds  
1001 Beulah Ave  
Pueblo, CO 81004

**Vendors!**  
**Contact Mike Peck (719) 640-2076**  
**[mmp85trainnut@hotmail.com](mailto:mmp85trainnut@hotmail.com)**