Chicago & North Western Historical Society

MODELER

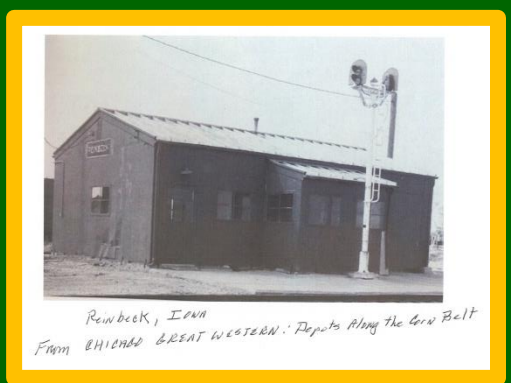
Volume 13, Number 2

October 2021

C&NW's First Diesel

C&NW Standard Depot #2

CGW Depot Prototypes



C&NWHS MODELER Volume 13, No. 2

Bill of Lading

October, 2021

An Invitation to join the CNW Historical Society

The CNWHS is an independent non-profit educational corporation. The Society's purpose is to foster interest, research, preservation, and the distribution of information concerning the C&NW and related roads. Its membership is spread throughout the United States and numerous foreign countries, and its scope includes all facets of the CNW. Currently the Society has close to 3000 registered members. Members regularly receive a variety of information including a quarterly publication: NWL.

North Western Lines (NWL) is dedicated to the publication of articles and news items of historical significance. Other Society publications include monographs, calendars, equipment rosters, and reprints of original CNW source material. This publication makes otherwise unobtainable data available to the membership at reasonable cost. Membership in the Society is a vote of support and makes all of the Society's work possible. It provides those interested in the CNW with a legitimate, respected voice in the railroad and historical communities. By working together, individuals interested in CNW are able to accomplish much more than by individual efforts. No matter how diverse your interests or how arcane your specialty, others share your fascination with CNW and affiliated railroads.

The Archives Committee of the C&NWHS is very active and maintains a large collection of the C&NW and related roads. For more information see the CNWHS web site.

Merchandise related to the C&NW, as well as back issues of NWL, Car kits and structure kits for modeling are offered through the CNWHS web site.

Chicago and North Western Historical Society Modeler is a publication of the CNW Historical Society (CNWHS) for the purpose of disseminating CNW modeling information.

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Apologies if I have inadvertently omitted anyone. Any person left out is entirely the fault of the editor.

THERE ARE MORE THINGS IN HEAVEN AND EARTH, HORATIO, THAN ARE DREAMT OF IN YOUR PHILOSOPHY

by Michael Mornard

-- Shakespeare, “Hamlet,” Act 1, Scene 5

Being the editor of NWL Modeler has been interesting in ways I never thought of. For one thing, of course, I get to see some amazing model work, and some fascinating prototype information. Dave Casey’s article on his #2 Depot has an example of another interesting tidbit of data.

Dave mentions finding a kit for a C&NW style train order board. Well, I don’t know about you, but I had absolutely no idea that anybody produced that model. Likewise, in the article on the C&NW’s first diesel, the late Don Cope mentions Micro Mark’s “Same Stuff,” which is a duplicate of Tenax 7R. This brings me to the theme of this issue’s editorial.

Briefly – what’s out there? Sure, we have the Walthers catalog and the major magazines to let us know what the large manufacturers are up to. But as laser cutting and 3D printing have become more affordable and more common, we are seeing a revival of the “garage enterprise” level of manufacturer. These entrepreneurs are often quite talented and skillful, but they are sometimes too small to afford any real publicity, leaving us to find out about them by accident, or at a train show, or when reviewing an article.

So, my entreaty to you, Gentle Readers, is this: please, please tell us about what you’ve found. Whether it’s a unique C&NW item or just something generally useful, we want to know about the small manufacturers, the quiet voices we don’t usually hear. There are amazing things out there in laser cut wood, in etched brass, and even files for 3D printing in places like Shapeways.

But there’s too much for any one person to find alone, and what a happy thing that is.

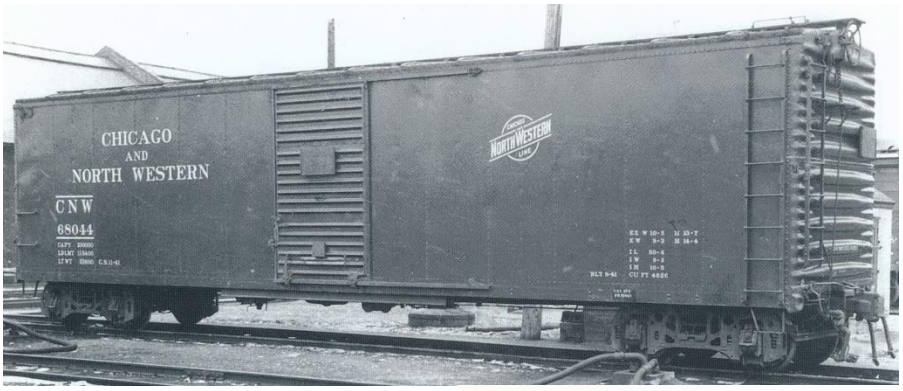
So let’s all spread the word and talk about things that will make each other say, “I didn’t know somebody made that!”

Also, “Happy Valentine’s October Issue…”

NEW PRODUCT ANNOUNCEMENT

Protocraft has announced another O scale C&NW boxcar model in brass. This offering is the 50' baggage-express box car C&NW Series 68000-68049 with 6' Youngstown doors, Viking roof, steam lines and Allied Full Cushion high speed trucks; alternate rivet panels. These cars were painted passenger car green with lettering in DULUX yellow.

A further version of this car is C&NW Series 68050-68998 for general freight service without steam lines, Universal Power hand brakes and running on Barber Stabilized 50-ton trucks. Neither of these cars have been done in O scale brass before. They are both $358 each and can be ordered in O gauge or Proto:48



CHICAGO & NORTH WESTERN'S FIRST DIESEL

By Ron Christensen

In 1926 American Locomotive Company built the car body for a diesel locomotive, powered by an Ingersoll Rand 300 HP diesel engine. General Electric made the electronic equipment and traction motors for this revolutionary locomotive.

The Chicago & North Western purchased three of these small locomotives, numbered 1000, 1001 & 1002 to be used for switching duty in the passenger yards.
One of these locomotives is on display at the Henry Ford Museum.

References
Chicago and North Western in Color Volume 1: 1941 – 1953 by Lloyd Keyser. Page 11 & 75

Chicago and North Western Power by Patrick C. Dorin. Page 172
https://www.cnwhs.org/ageir/cnwageir.html

Chicago & North Western #1000 photographed at Green Bay in 1955 by T. Wilson.

Archive collection

A 1936 Brady Photo of No.1001. Archive collection

Photo taken by Manashalen, of C&NW #1002 in1952. Archive collection

The Model

By Don Cope and Ron Christensen

Model Die Casting Inc's. Roundhouse Products manufactured a model patterned after the prototype box cab locomotive. The locomotives, which were made as track cleaners, were noisy engines and required a good mechanic to keep them running.

Don Cope, a good friend, has several of these box cabs. In his case they are lettered for the New York Central. I asked him if he would rebuild one for me and this is his story about the upgrading of the model.

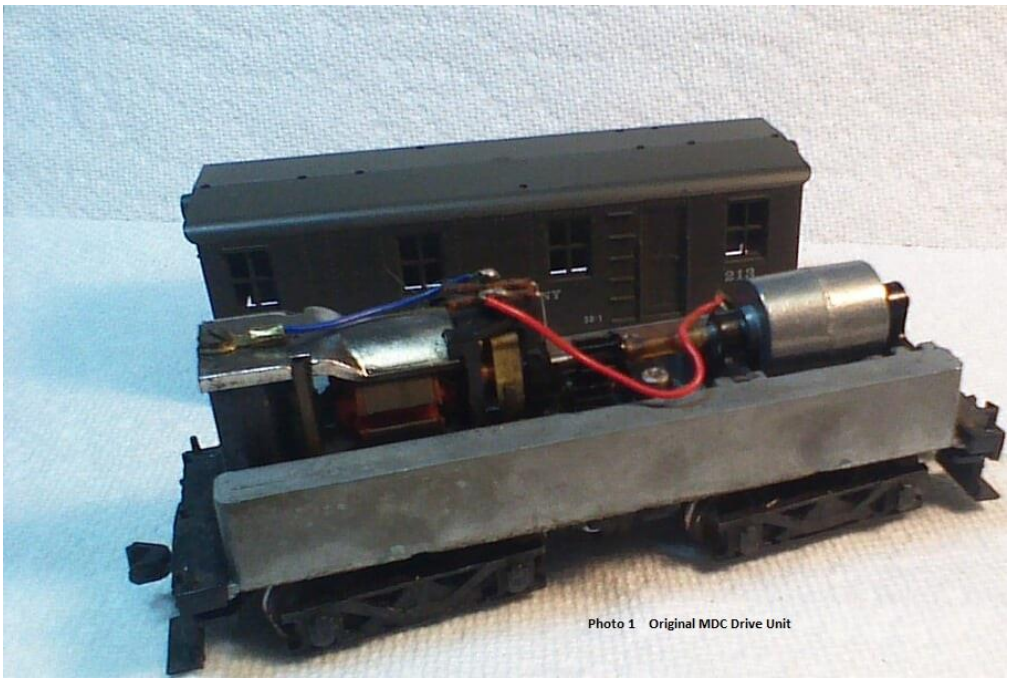


Photo 1 Original MDC Drive Unit

The original drive unit

Drive and Decoder Modifications By Don Cope (1949-2019)

First I removed the motor, center gear housing and end track cleaners. The model was stripped of paint and window glass that had been installed by a previous modeler.

There are two ways to repower this locomotive. A decision had to be made between the Bachmann center cab chassis or a NorthWest Short Line Stanton Drive. The Bachmann drive fits well but the wheel and truck side-frames are not correct. The NWSL Stanton drive was recommended as the original truck side- frames can be used. My choice was the Stanton Drive. Two Stanton drives can be installed but in my case only one was used.

The chassis of the locomotive was then clear to add weight and decoder.

Frame Modification

After removing the old motor, drive gear and front and rear trucks, it was time to drill out the frame for the Stanton drive. I used a 5/64” bit and centered the single hole so the drive was in the correct position. I then drilled 2 5/32” (1 each side) holes for the wires to be soldered on the rear truck (see photo). The wires are for the rear truck pick up. These holes go on the edge of the frame where the metal is thicker. A drill press makes this very easy, although it can be done by hand. I filed and smoothed the edges of the two rear holes so the wires won’t rub on sharp edges, then painted the frame flat black. Painting made a big difference on how the finished model looks.

Shown is the modified frame showing the new holes.

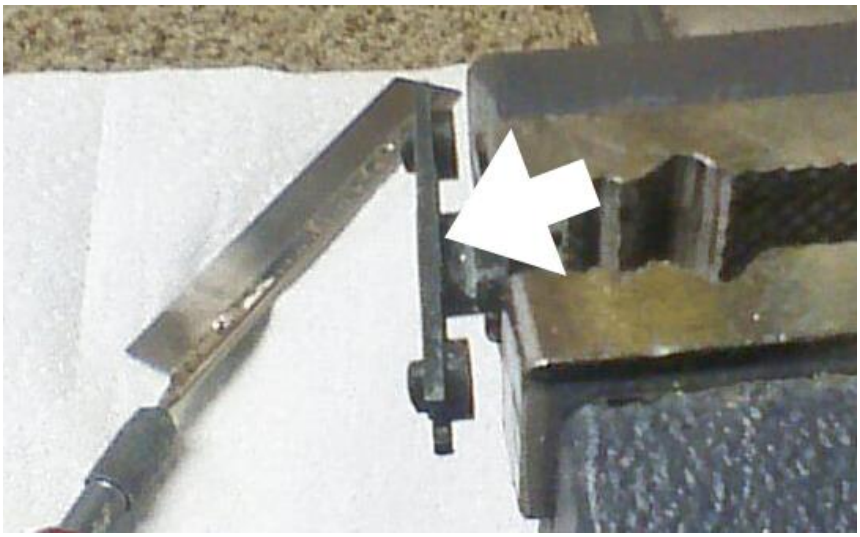
Unpowered Truck

Now I could move on to the trucks. We used the original rear truck but with a slight modification. First we needed to remove the shaft with the two worm gears. We gently spread the truck and popped the shaft out. We also needed to clip off the phosphor bronze wipers just below the bend, making sure to leave enough to solder on a 4” piece of wire - red on the left side, black on the right side. This truck was done.

This photo shows the rear truck modification and the removed worm.

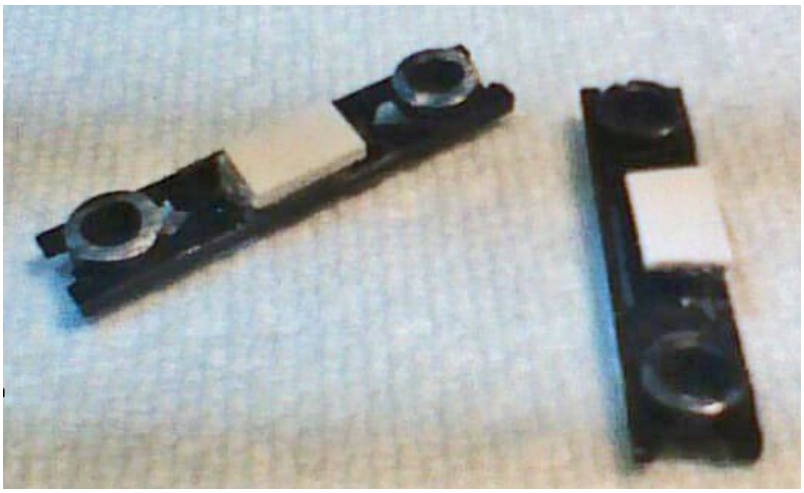
Powered Truck

The Stanton drive truck doesn't have side frames, so I used the frames from the truck that was removed. Carefully pry the side frames from the truck. You won't need what is left of this truck. I first pried out the two bronze bearings and then, with a razor saw, cut off the plastic center post that attached the side frame to the base. You can put the side frame in a vise to hold it. Next, I cut off the two plastic bearing holders flush with the backside of the side frame. They cut pretty easily; just make sure to not angle the cut.



Shown is the cut area where the side frames are cut off the unused truck.

Then I cut two pieces of .040 x 1⁄4" styrene, making the shim pads the same size as the cut-off center post. These were glued (using five minute epoxy) to the cut just made in the side frames. Hold the side frames up to the drive and make sure there is a space between the drive wheels and the side frames. If they touch the wheels you need to add another shim. Try using .010 styrene. The side frame now can be glued to the post on the Stanton drive. Do one at a time and use Liquid Weld plastic cement. The Stanton drive is made from a plastic that can be welded. Don't put them on upside down.

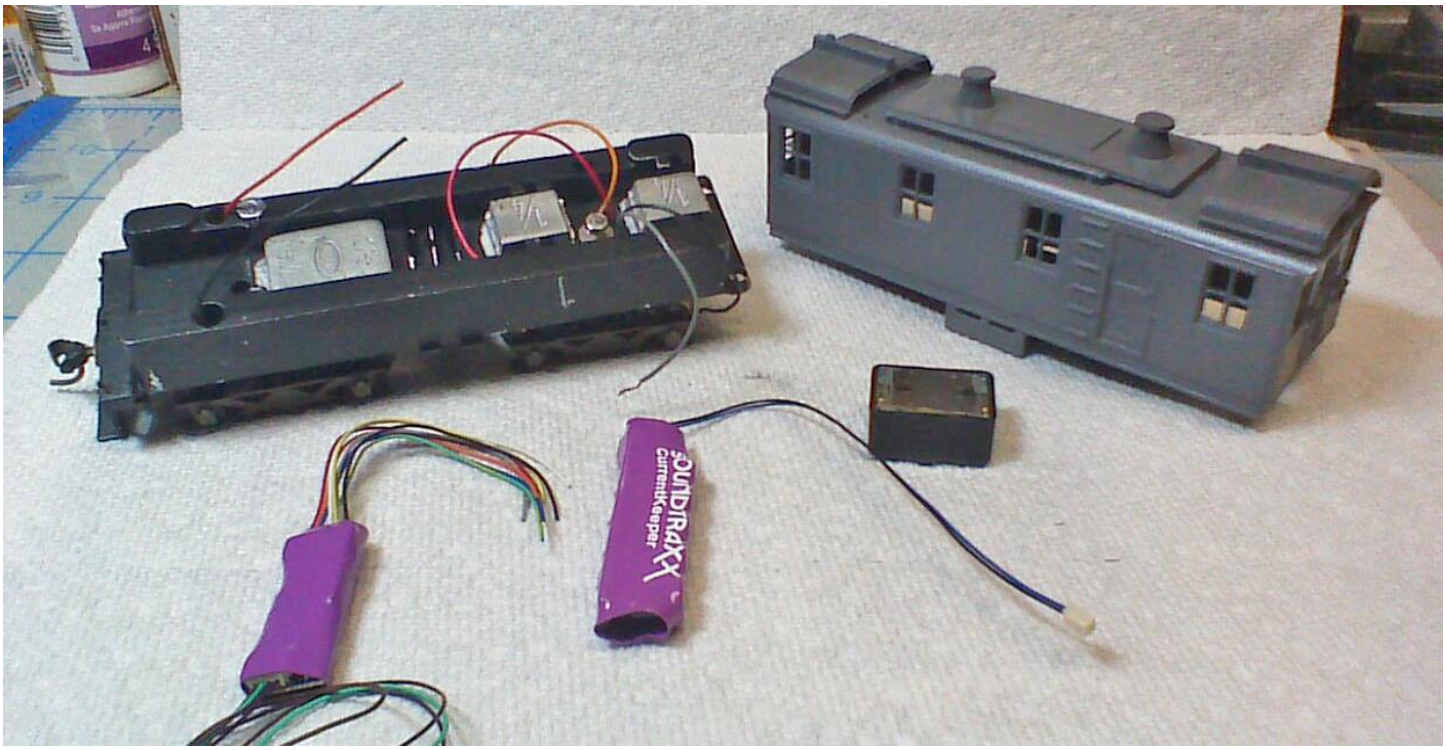


Pads were epoxied to the back of the cut off side frames. They will now be glued with Micro Mart Same Stuff to the Stanton Drive.

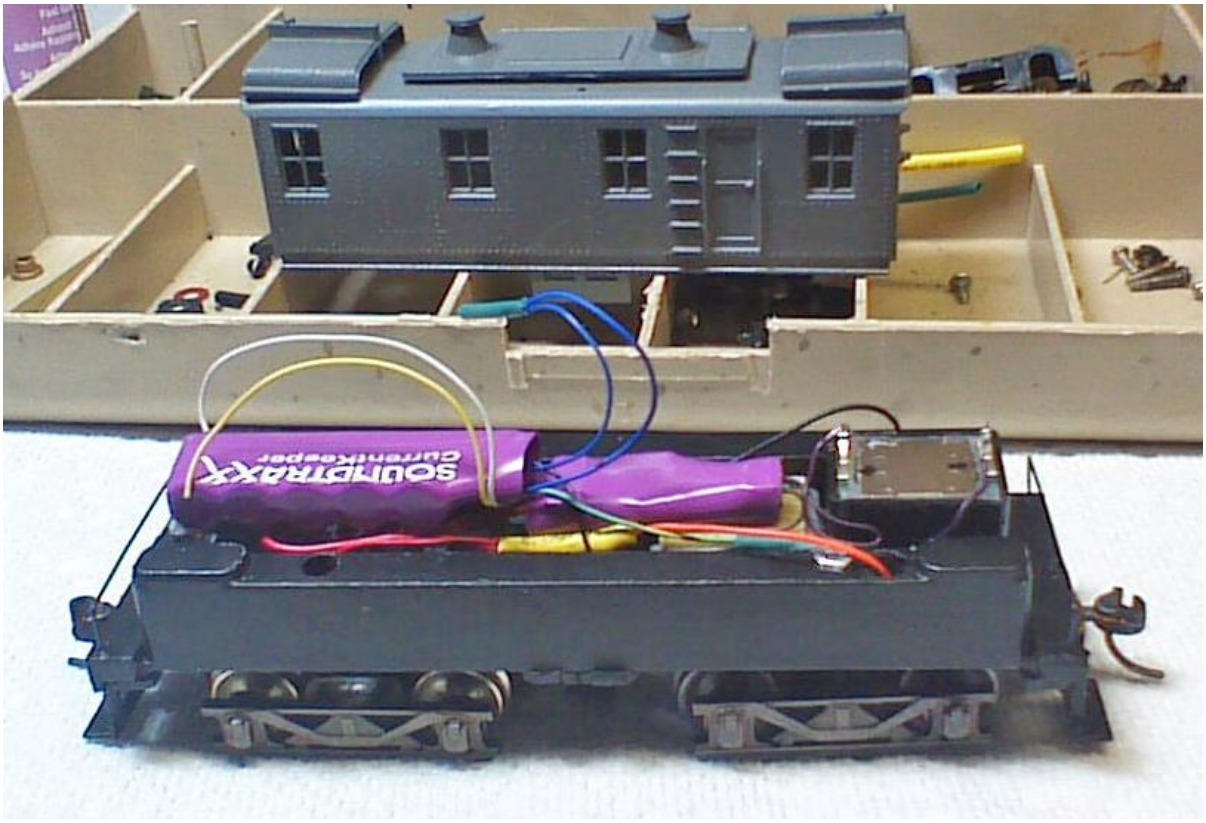
I waited for the first one to cure before working on the other side. One note of caution, handle the truck from the center. If you squeeze the ends of the side frames, you WILL pop them off of the Stanton drive as there is not a lot of surface area for the glue attachment. If that happens, just weld them back on.

Next I put the frame together. I installed the rear truck swivel plate and snapped the truck in after starting the wires through the two holes previously drilled - red wire on the left. I then installed the Stanton drive threaded post through the 5/64” hole in the front of the frame- red wire on the left - before putting the metal washer on and then the two nuts. The second nut is supposed to keep the first one from loosening. I put a drop of ACC on top to keep it in place. I tightened until the truck swivels freely but just slightly moves from side to side. Next I added four 1⁄4 ounce weights - two in front of the Stanton drive post and two behind it. They fit perfectly. I also put one in the rear slot of the frame. Keep it as far forward as possible so the speaker has room to fit if you do a sound decoder. I won’t go into wiring up a decoder and current keeper other than to say that the Stanton drive is color coded and you simply hook all the red wires together, the black together and the same with the gray and orange. The Tsunami2 decoder has an AlCo sound. To my knowledge, no manufacturer is making an Ingersoll Rand diesel sound.

My box cabs run great and this really is an easy project to make use of a vintage locomotive.



With the frame and truck work done, it is time to install the electronic equipment.



My part is done.

Body work by Ron Christensen

With the locomotive running perfectly, it was time to do some minor bodywork.

I had observed Don's other locomotives and how he had removed the cast-on grab irons, which really made the locomotive look better. The molded-on grabs were cut off using a number 17 Xacto blade, with the corners filed so the blade would not gouge the plastic. The prototype picture showed six grabs on the side and that was what the model had. Grab irons were found in my parts draw that where the same width as the cast on grab irons.

The handrails by the doors were also removed and replaced with .012 brass wire. Radiators on the model are too close to the ends, so they were moved back to the centerpiece, leaving room for the lights. The original light castings that came with the model were used. LEDs were installed in the plastic castings.

The lead photo in the web story (https://www.cnwhs.org/ageir/ cnwageir.html) shows the two vents or exhausts that the original model had. Later pictures show that the C&NW changed these to mufflers. Most pictures do not show the roof well, but from the side views all seem to be a bit different. Using

modelers license, I duplicated mufflers shown in the picture in *Chicago and North Western in Color Volume 1.* The mufflers were made from .154 diameter brass tube that I had, with plastic piping from a Walthers pipe kit. After studying more pictures I decided plastic pipe would also make believable mufflers. The lights, a vent, grab irons, a whistle and the mufflers completed the roof. Painting and decals finished the job. I choose locomotive 1001 because I had several photos. Locomotive 1001 had at least two paint schemes. After trying to fit a Microscale code 87-963 switcher striping decal set on, I changed my mind and choose the simpler paint scheme. If you choose to have the chevrons, I would suggest painting them.

Done.

Parts list

Model Die Casting, Roundhouse Track Cleaner locomotive
NorthWest Short Line Stanton Drive 1215 Item #39229-4, 76” wheel base 38”/110 wheels
Soundtraxx Tsunami2 TSU-1100, 885003 AlCo Digital Sound Decoder
Soundtraxxx 810140 CurrentKeeper
TDS SuperSonic Small 18x13 mm Speaker enclosure (sugar Cube)
TDS SuperSonic Small 18x13mm Speaker
Miniatronics Corp 3mm Yeloglo White LEDs
BLMA Models HO 18” grab irons from the parts bin
BLMA Models driling gauge for grab irons
Microscale code 87-962 switcher decal set

THREE STRUCTURES AND TWO SEMAPHORES or, WHAT I DID TO KEEP MY SANITY DURING THE PANDEMIC – PART 1

by Dave Casey

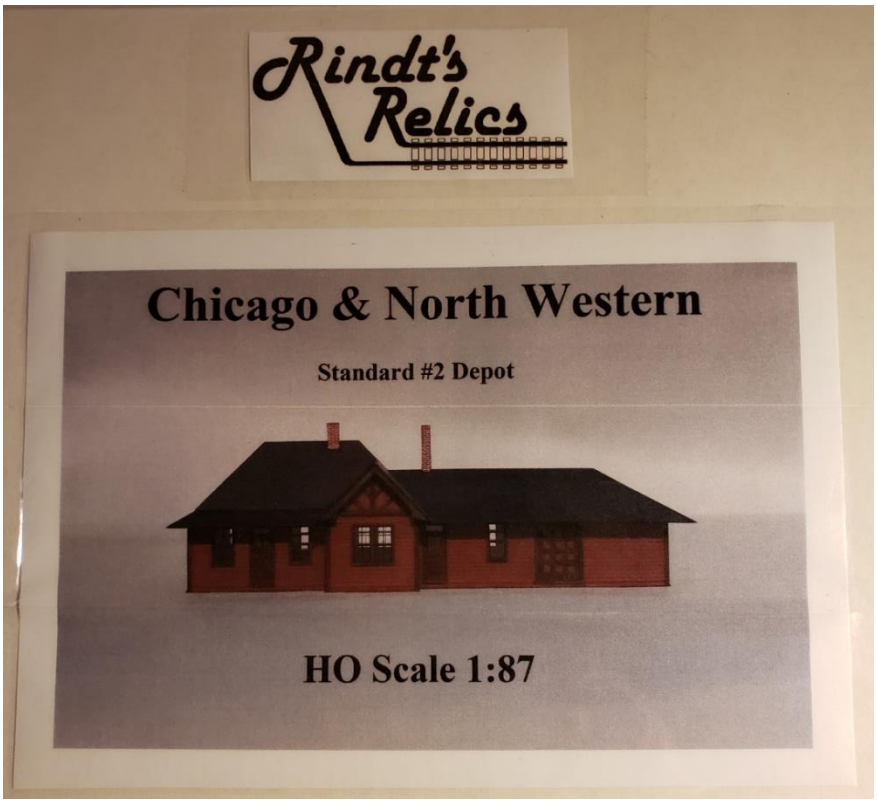
Photo captions by Ye Editor

It seems folks approached the 2019/2020 pandemic in differing ways. For me, I decided to take out a few of those old HO model kits that I had picked up at various train shows, dust them off, and build them.

As background, I enjoy many facets of model railroading including modeling, operations and occasionally railfanning. But like so many others (I guess), once I had my benchwork completed and track laid, I was anxious to just get started with operating and bringing the layout to life.

Thus, to make operating realistic, I needed to plant some industries and railroad facilities quickly with whatever I had on hand that would suffice. At that time, my structures were generally plastic – either as kits or built-ups, but they served the purpose, even if temporarily.

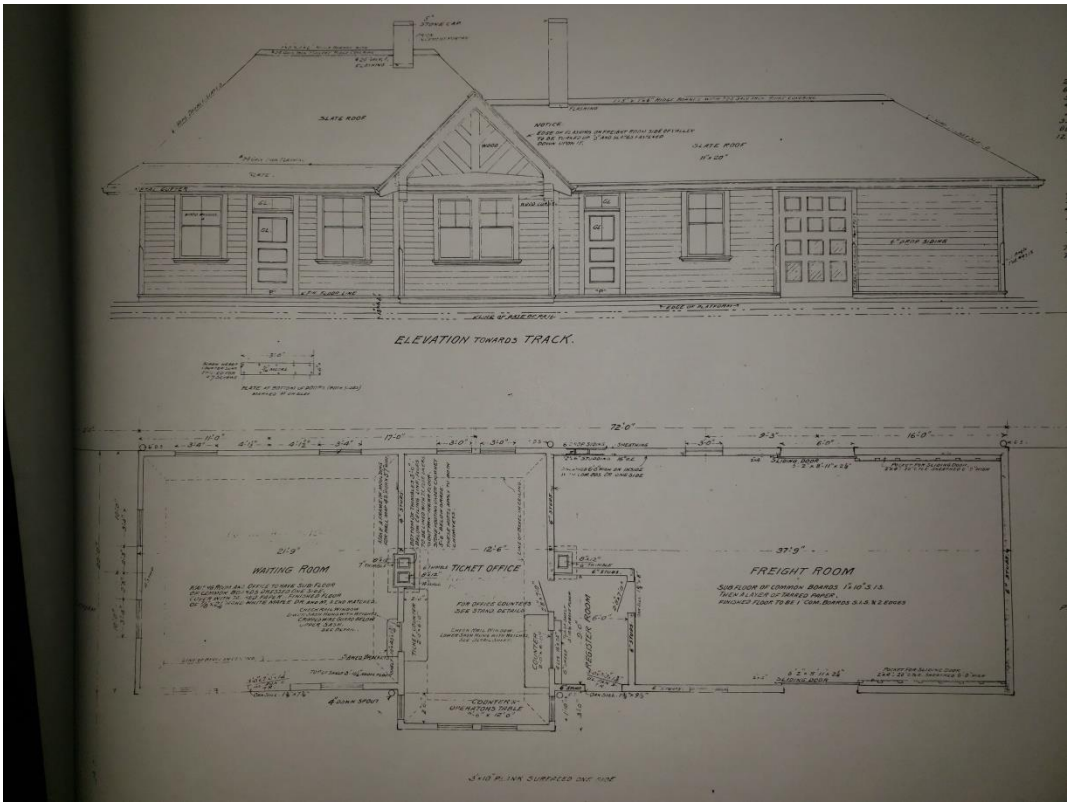
Now that I've had over a decade of operating sessions and consider the layout to be about 80 % complete, I'm looking to "fine tune" some of those structures using wood kits – either laser cut or scratchbuilt.



Part 1: Since I have way too many pics and text to cover all the structures here, this article will focus only on the C&NW Standard Depot #2 and the Semaphore signal(s) created for the station. (Check future issues for the Interlocking Tower and Crossing Shanty articles.)

Dusting off the C&NW Standard #2 Depot first; this kit was purchased several years ago at the Madison (WI) Annual Train Show and finally needed to be brought to life.

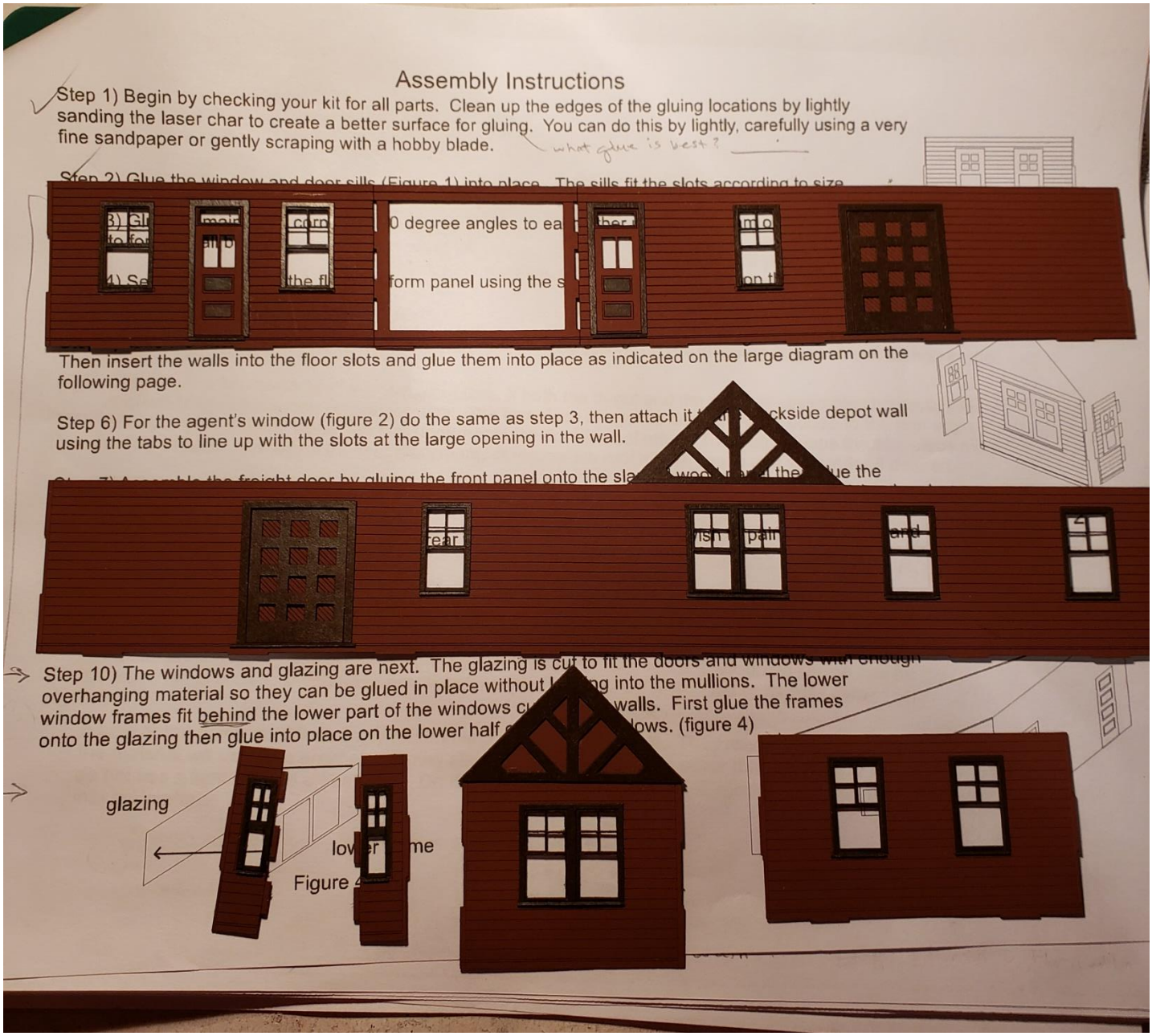
To assist in my construction, I was able to locate a blueprint from the Lake States archives in Baraboo (WI). It turned out the kit mimicked the print to a tee.



After spraying the base with Rustoleum flat gray, I proceeded with the addition of a foam core foundation. I thought this necessary since the material supplied for the kit was a thin hardboard.

Scribing block detail into the foam foundation, followed by painting.

For the walls, I again sprayed gray primer followed by flat red primer as the final color. I painted the window frames and trim pieces brown (Rustoleum Satin Expresso). Prior to wall construction, I trimmed the window and door glazing and glued it to the frames using Testors Clear Parts cement. I then installed them using Aleene's Tacky Glue.



Walls painted and windows, doors painted and installed

With the basic painting and windows done, I began the wall construction. This was where I encountered my first warping issue as you can see with the side pieces.

Uh-oh!

To remedy the problem, I installed Plastruct “L” beam material at the baseboard of the whole structure along the bottom of the walls, held with Aleene’s Tacky Glue.. I didn’t need to add support at the ceiling level since the finished roof would accomplish that.

Bracing the walls to eliminate warping

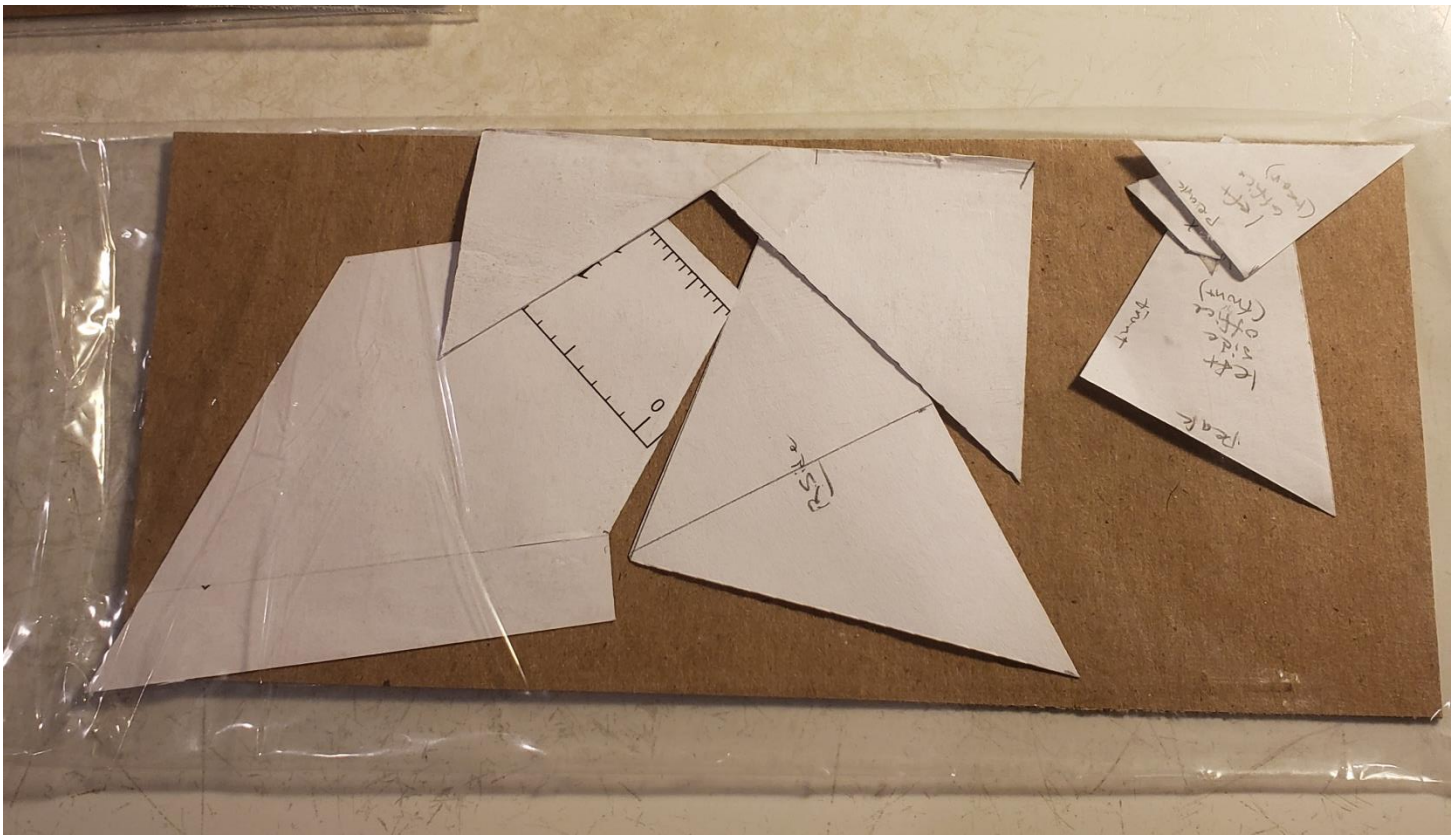
When adding a wood floor to the waiting room and office area, I again had a warping issue. This time it was an “operator’s error” since I tried using Titebond wood glue to secure the wood floor (Northeastern Scale Lumber) that I had stained with Minnwax Jacobean. After an overnight under weights, I reinstalled the flooring using old reliable Walters GOO. Once the floor was secured, I added the kit office walls (front to rear), plus a couple of walls that created a freight room entry plus a bathroom in the back (not part of the kit).

Floor warp corrected, floor replaced, walls installed. Coming along nicely!

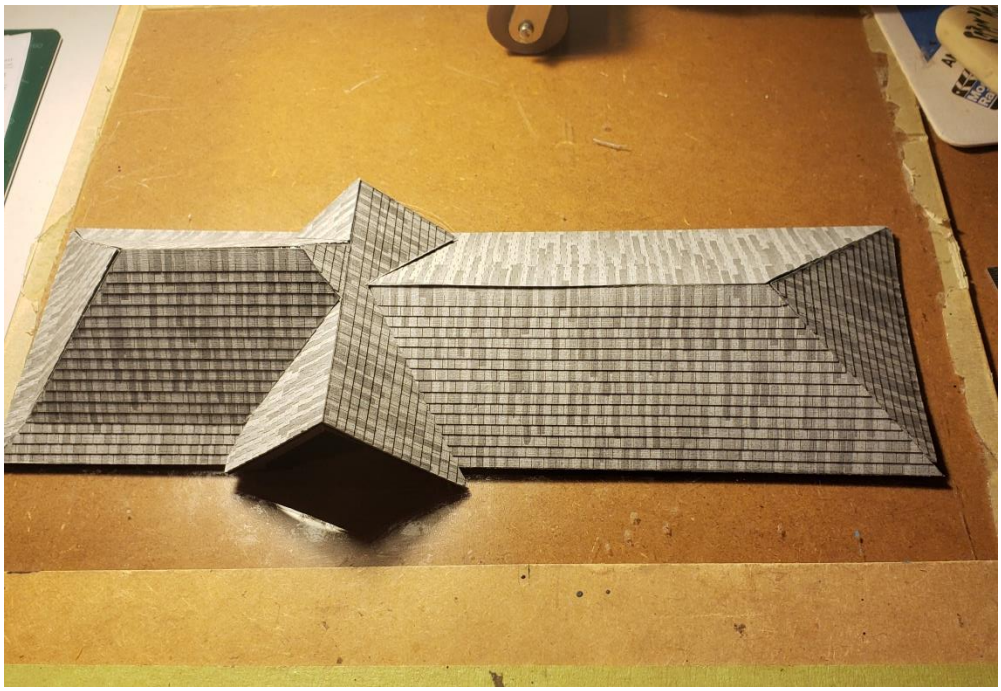
(Editor’s Note: I love that floor!)

I now tackled the roof which I had primered with flat black paint. The main roof went together rather easily, the crown a bit more challenging. Once glued using Aleene’s Tacky Glue, I test fitted the roof to the walls and the fit was on the button other than a slight modification for the added interior walls.

Next, it was time to add roofing. I used the Northeastern Scale Lumber Gray Slate shingles by making paper templates first to ensure the proper fit.



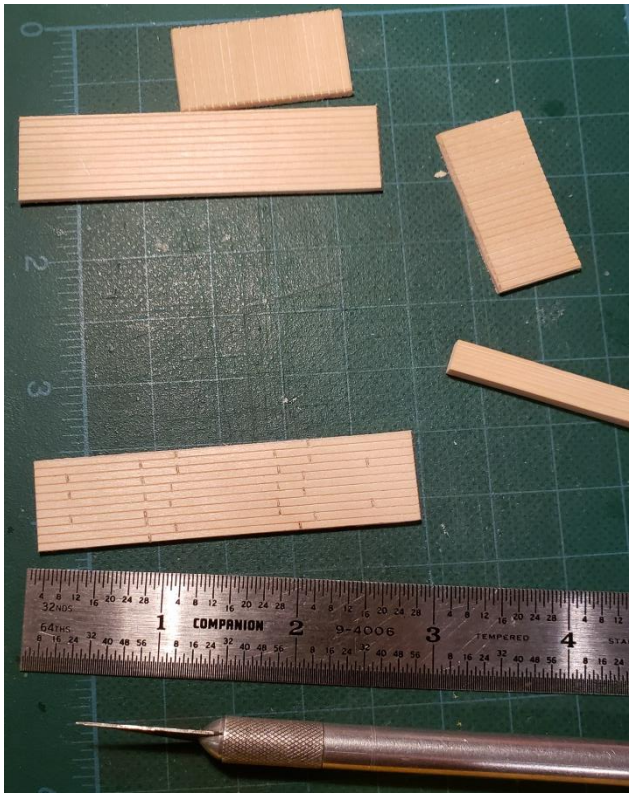
Using Aleen's Tacky Spray, I attached the shingles to the roof carefully.

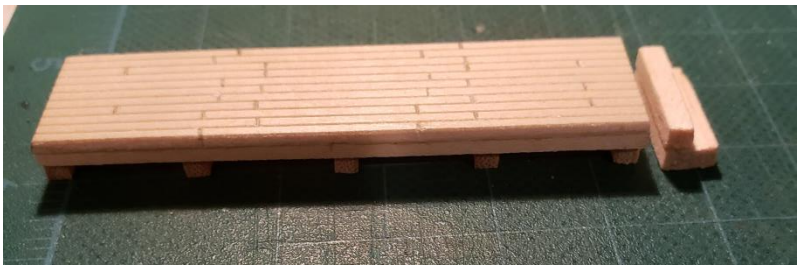


After painting and using mortar washes, I installed the two chimneys in the appropriate places. Later, I added stoves and piping under the chimney locations.

The kit makes a very handsome depot. But wait, there's more!

Using more of the Northeastern Scale Lumber, I fabricated a deck that would compensate for the additional height of the foundation.





Also, I added a dock bumper for the rear freight door. Of course, REA signing was also needed on the outside walls on the freight end.

One of my favorite parts of structure modeling is adding interiors. I added a variety of interior detail parts to the waiting room, office, and freight room. That included waiting room benches and stove, office desk & chair, freight room boxes & packages plus a stove and bench.

Baggage room with stove, coal bin, and scuttle

Agent's office and waiting room stove

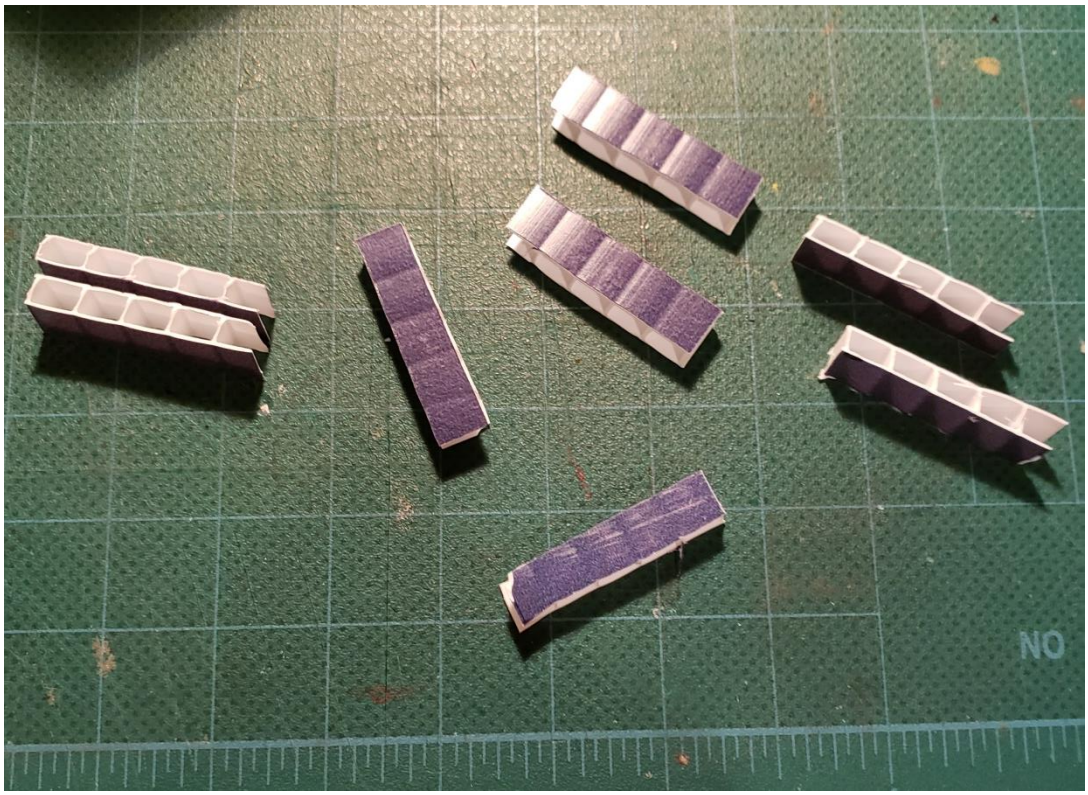
Waiting room with benches and stove

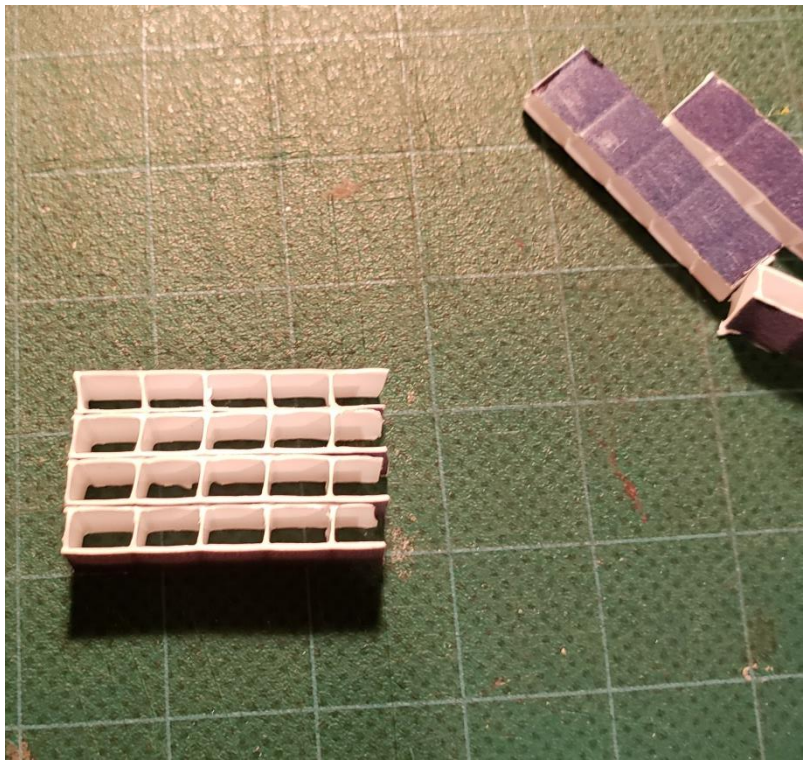
As per the plans, the baggage room has a stove but the agent's office doesn't. Gee, nice to feel wanted!

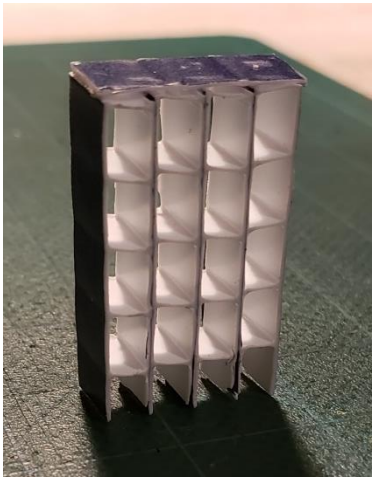
Don't' blame the builder, blame the railroad!

It's important to keep up standards.

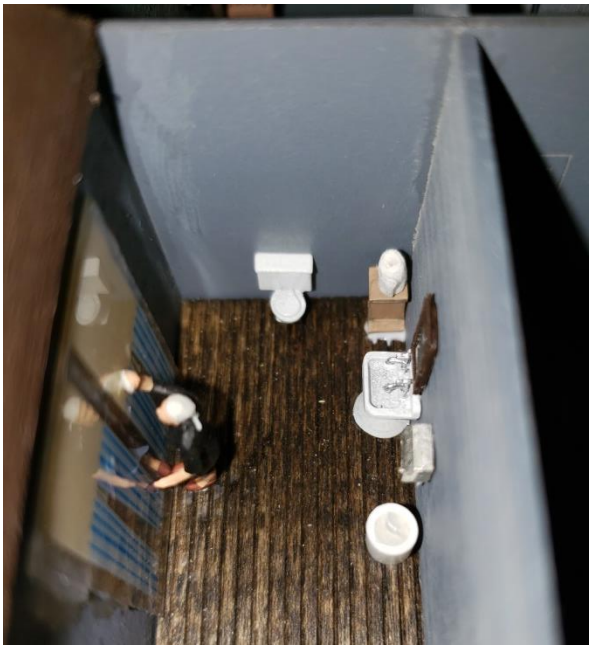
The office pigeonhole cupboard was fabricated using corrugated plastic from an old political yard sign.







After waiting for a backorder, my bathroom fixtures finally arrived and were installed in the room behind the office.



But what's a depot without people? I next added figures (mostly Preiser) to all rooms in the depot including a woman washing the windows in the toilet.

The agent is hard at work as the waiting room fills up

Plenty to keep the baggage smasher busy as well.

The interior detail shows the bustling hub of the community.

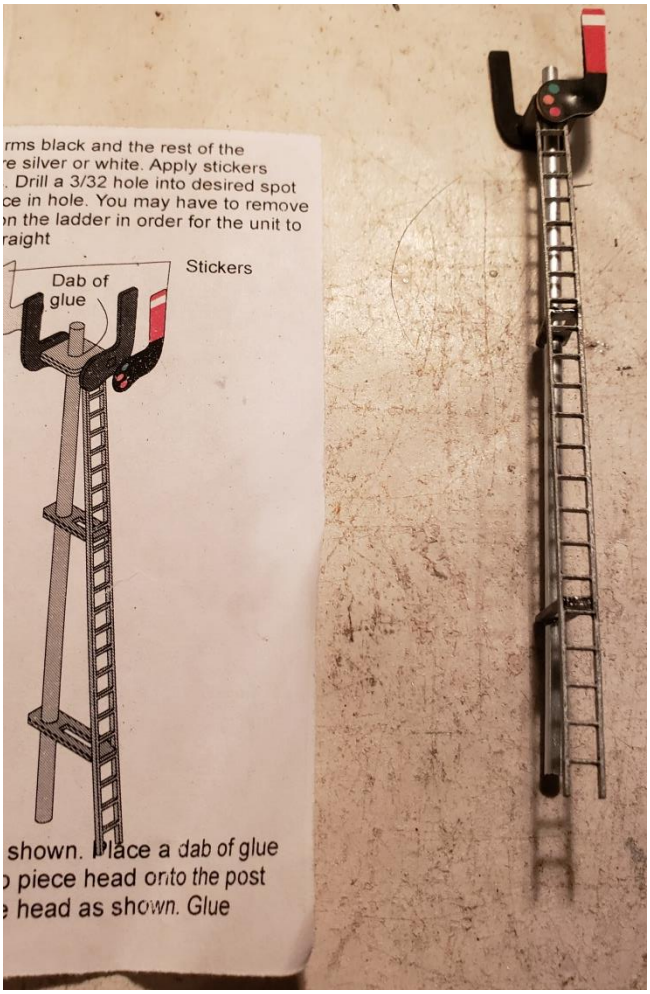
With the basic depot completed, it now needed to be planted and the exterior attended to. That’s where the Semaphore Signal comes into the picture.

Part 2.

After a fair amount of searching, I located a train order signal for the depot which was an Osborn Model Kit (RRA-1057) made in Canada that I had spotted on a friend's layout. This was listed as a "Classic HO station order board" semaphore, so I thought I was in good hands.

The kit was very basic, to say the least. There are seven parts including an aluminum post with sleeve, a ladder with supports, brass wire, and the sign board with stickers (they call them "decals").

The first step is to locate where the 1/32" holes are to be drilled for the sign board and drill them 1/8" from the top of post. Then I worked the brass wire through the holes and bent them 90 degrees in opposite directions.



Having finished that, I now painted the ladder and supports aluminum, plus the sign boards flat black. Once the paint was dry, I attached the colored stickers to the boards and attached the ladder and supports to the post using CA glue.

Next, I positioned the sign boards and glued them to the support. A sleeve for the bottom of the post was included in my first kit, but not the second. It is optional but finishes off the bottom nicely. A substitute base could be a toothpick stuck into the bottom of the post if you are planting this into foam core.

The signal was then mounted in front of the Standard #2 depot and posted on my Facebook Group – *C&NWCenWIDivRR* (new members are welcome as long as you understand the criteria).

So, all was well with the world until I was “put on notice” from a certain nitpicker (to be nameless) that the signal was not, in fact, a C&NW system signal, after all. STOP THE PRESSES and pray for redemption, I thought!

Editor’s note: The Nameless Nitpicker wishes it to be known that he really didn’t give a bean about the train order signal, he just couldn’t resist an opportunity to give the author some grief.

After all, what are friends for?

Alas (the editor loves that word), I was once again on a search for a prototypical semaphore signal which, up to now, was elusive. But, luckily, it was not that long after being chastised for an inappropriate signal that I spotted what appeared to be a genuine C&NW train order signal on a FB posted layout. After contacting the owner of the layout, I was delighted to hear that I could order that HO product from his company. Things were looking up as I received the signal kits (two per package) a few days later.

(Editor's Note: HRM Laser Models, kit HRM-40)

I spent a few minutes comparing the kit to the prototype and found it to be quite accurate.

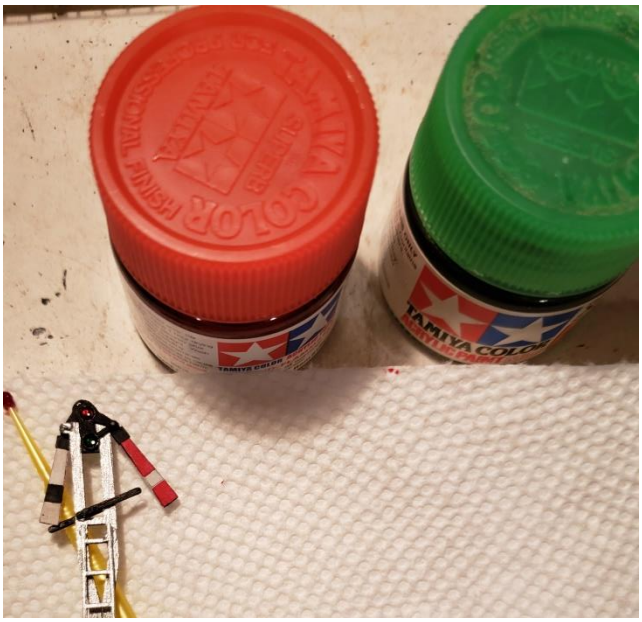
Using the isometric diagram combined with the general instructions, I proceeded with assembly. All the parts were there, however, I did notice a slight warping of the wood mast. A couple days under some heavy books helped straightened this out a bit.

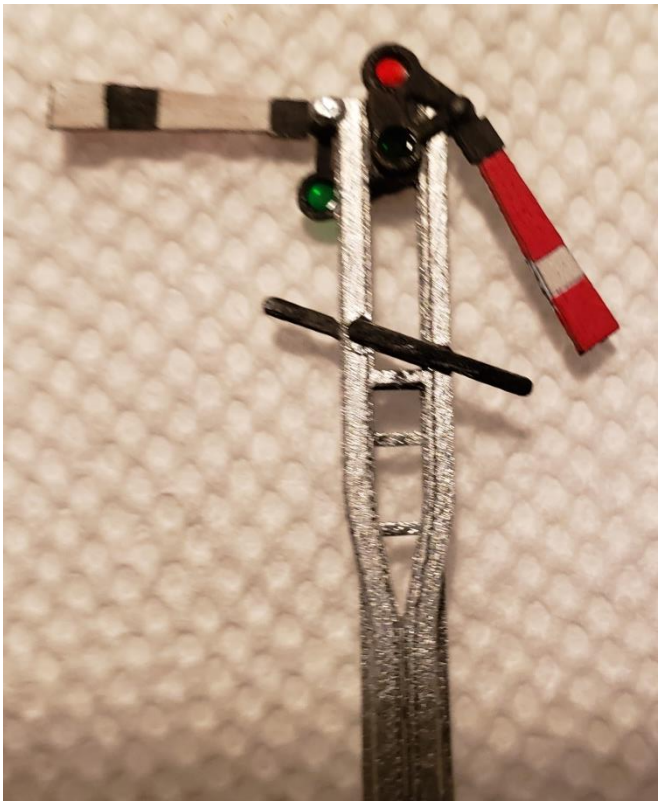
Next, I painted the mast and ladder aluminum while using concrete color on the base. The throw arms were painted flat black and the blades flat white. Using the laser guidelines, I finished painting the blades with red stripes on the front and black on the reverse.

After painting was complete, I assembled the signal using Aleen's Tacky Glue and Titebond. The blades were held in place with pins, and I elected to glue (CA) only one end to the blade leaving the other as a pivot point.

The blades had open holes where the lens should be, so I decided to make my own-colored lens using Testors Clear Part Cement. Dragging the cement across the holes, I had clear lenses.

After drying overnight, I applied Tamiya's Clear Red (X-27) and Green (X-25) to the appropriate openings. A medium Micobrush worked well in applying the colors.





After touching up a few areas, the signal was complete and ready to be put to work.

I secured the signal in front of the Standard #2 Depot office. The signal, along with the other outside features, helped to bring the scene together and now awaits the train traffic.

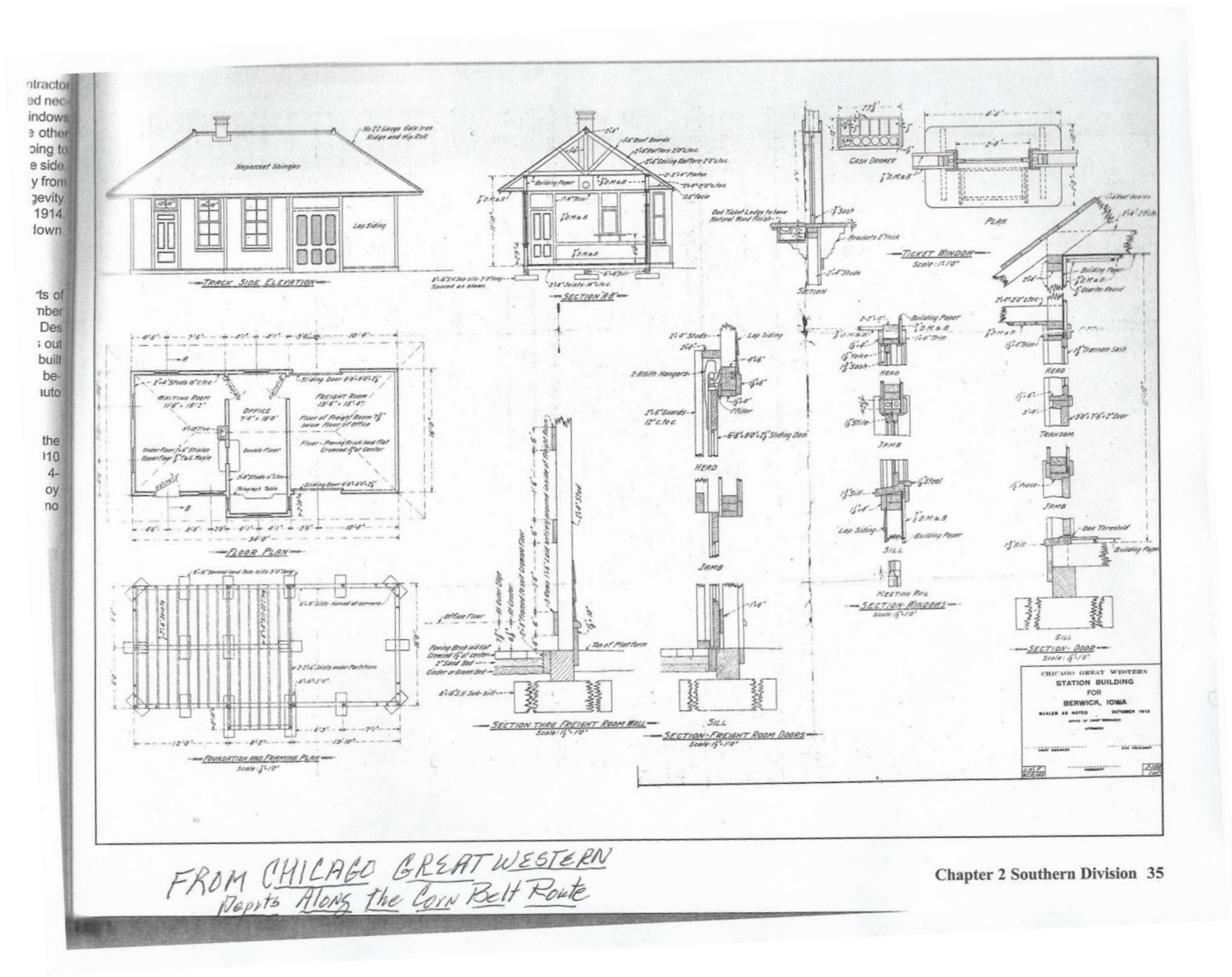
Stay tuned in a future issue where I will tackle both a C&NW Interlocking Tower plus a Crossing Shanty as *Part 2* of “Three Structures & Two Semaphores”.

CGW DEPOT PROTOTYPES

By Robert Baudler/Photos by Author or as noted

Editor's note: These photographs were intended to be included in Robert's article in the last issue. The fault is entirely mine.

Baxter, IA May 1956



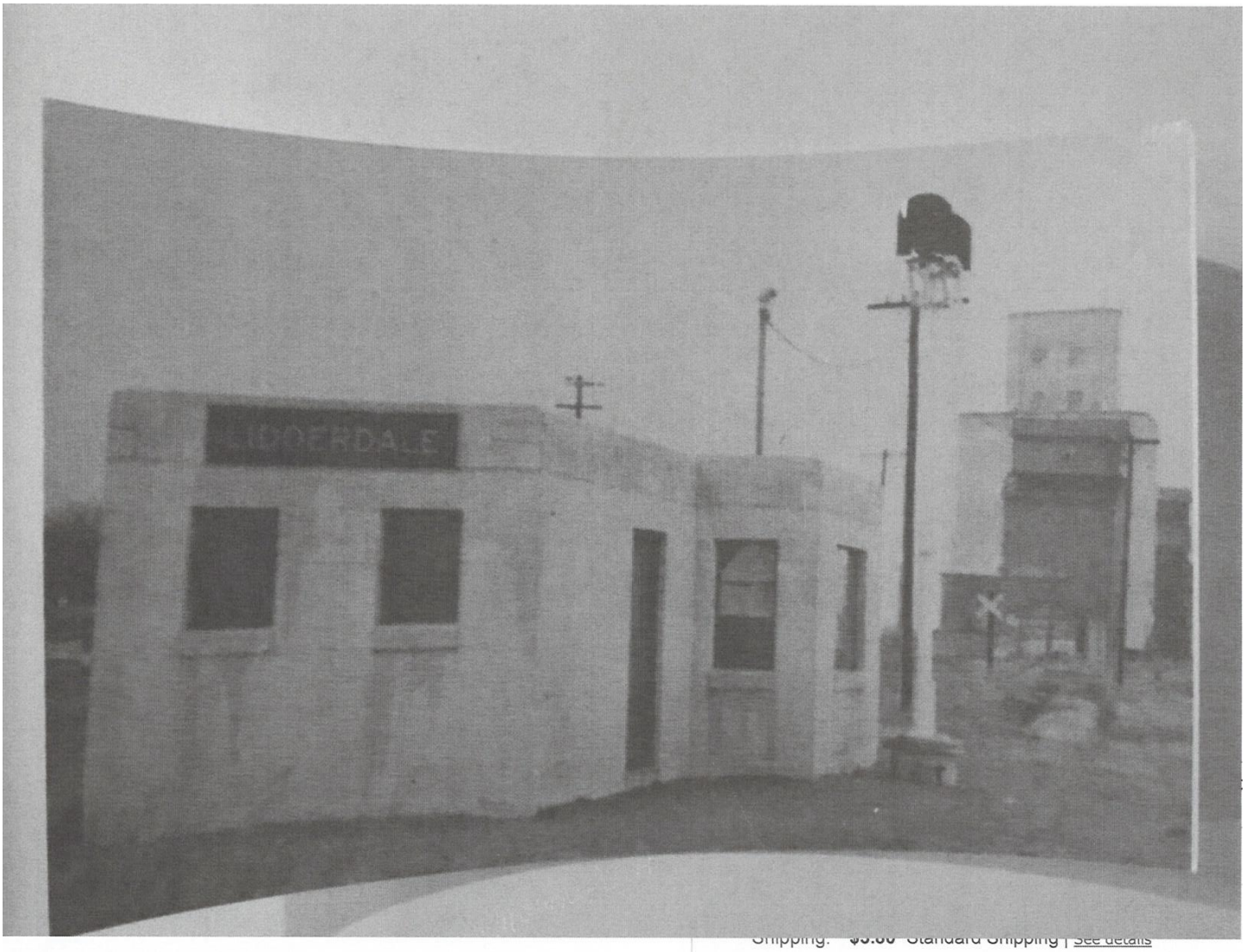
Berwick, IA

From the book *Chicago Great Western Depots along the Corn Belt Route*

Cedar Falls, IA Charles Bohi photo

Elmhurst, IL
August 1962

Photographer unknown



Shipping: $5.00 Standard Shipping | See details

CBW Depot Lidderdale, IA

Lidderdale, IA

Photographer unknown

CHICAGO GREAT WESTERN RAILWAY DEPOT

MC INTIRE, IOWA

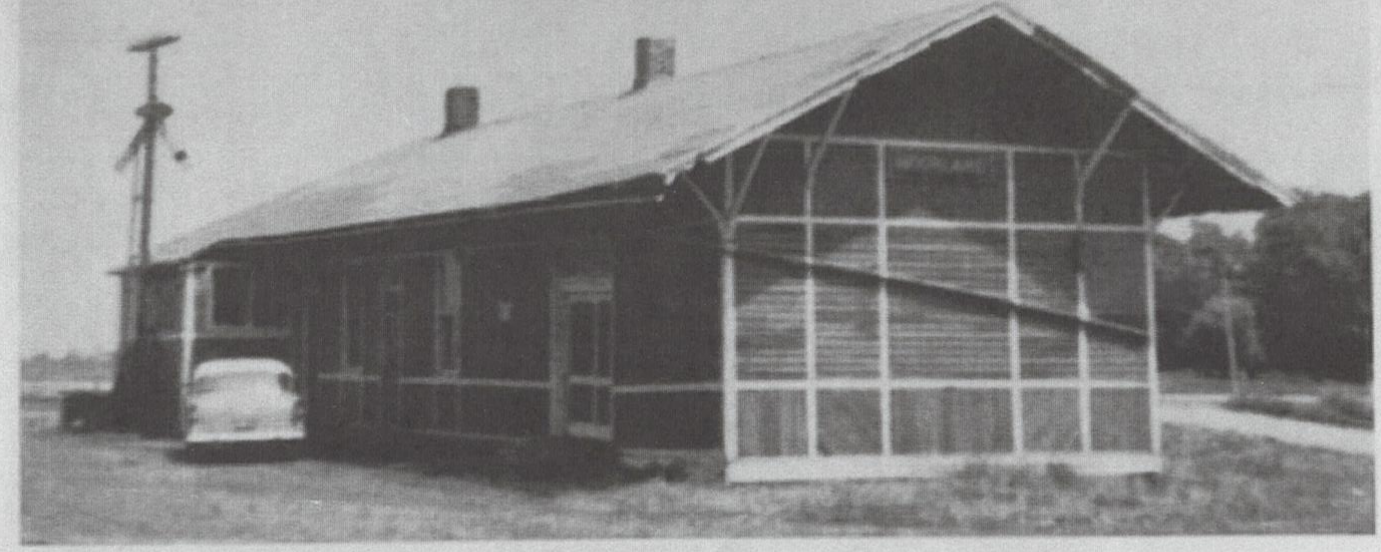
FIRST DEPOT WHERE BRANCH LINE CROSSED THE ST PAUL TO OELWEIN MAIN LINE

Photo from James Rueber collection published in

DEPOTS ALONG THE CHICAGO GREAT WESTERRN

McIntire, IA rebuilt depot
Alex Reyes photo

Moorland, IA
Charles Bohi photo



Above and below: At the M&StL crossing in Moorland, Iowa, there was a CGW depot that was CGW (MC&FD) owned, probably because the CGW was the second railroad through there. Inside the building there was an interlocker room with a raised floor. On the wall there was a framed manipulation chart for use in controlling the interlocking plant. It is not known if the depot agent was also the interlocking man, but that would have saved an extra salary. Not included in the photo was a 10 by 12' motor house for the interlocking. The depot in the photo is not sagging, probably because it had a concrete foundation. Of equal interest in the accompanying plan is the living quarters for the agent. While there is a kitchen, there are no plumbing facilities, and the agent has to use the 5 by 9', two-compartment outhouse in the same structure as the coal bin. *Charles Bohi photo,*

CHICAGO GREAT WESTERN RAILROAD

DEPOT at PERU, IOWA

H. Roger Grant

Reinbeck, IA

Reinbeck, IOWA
From CHICAGO GREAT WESTERN: Depots Along the Corn Belt

From the book *Chicago Great Western Depots along the Corn Belt Route*