

Elizabeth, Illinois Railroad History Recollections



In 1964, my parents moved the family from the Chicago suburb of Lombard, Illinois to Elizabeth, Illinois. I was in the 4th grade and graduated high school in Elizabeth. Born and raised for the first 10 years of my life at 500 Grove Lane in Lombard, I was born into railroading because of my Grandfather Leslie Gaskill. He worked for the Chicago Transit Authority in Chicago and was a well known model railroader in the Midwest region. I played with toy trains since the of age 2. During my growing years I became keenly aware of the real railroads just about every time I was able to travel around the Chicagoland area with my parents or grandparents. At 500 Grove Lane, the Chicago Great Western (CGW) main line passed by our house only $\frac{1}{4}$ mile away to the south. I could hear those big long trains pass by every morning on my way to school and see them in the distance heading west. In fact, the property between my home and the mainline was owned by Commonwealth Edison with a spur that was serviced by the CGW.

It was ironic to find out that after moving to Elizabeth on the old Buford Farm just off of Terrapin Ridge, below and immediately west of Derinda Road, the CGW followed me all the way out to these hills. It did not take long to figure out that the same trains going through Lombard were the same that passed through Elizabeth on there way to Oelwein, Iowa. I confirmed this with an expert, my Grandfather. I knew well the CGW line from Lombard going through Villa Park, Elmhurst and on into Chicago. I did not know the line at that age in my life that ran west of Swift Road in Lombard and into Glen Ellen, St. Charles and onto Sycamore. I never imaged it was going to follow me around for years to come. Today the right-of-way is known as the Illinois Prairie Path and Great Western Trail System.

When catching the school bus for school in Elizabeth I would often run the ½ mile driveway up to the school bus stop to view a CGW going by before the bus arrived. The rail line coming out of Woodbine came up on the base of Terrapin Ridge snaking along the base into the town of Elizabeth. I think it was Ed Young that owned the roadside scenic lookout point and it was perfect for looking down on those heavy trains as they went roaring through the countryside. The trains most often were pulled by a standard Electro Motive Division F3s & F4s also known as covered wagons in multiple units of 6 consisting of 2 A and 4 B configurations. The railroad also ran GP30s and SD40-2 units, plenty of horse power to conquer the grades.

It was not long after moving to Elizabeth I undertook my first model railroad layout project. I built the benches in the basement, drew out the tracks on the table top complete with 90 degree curves while waiting for my Grandfather to bring out the track and ease the radius of my curves. I was going to model it after the CGW. I was always eager to learn more about the railroad. In fact, my Dad contracted with Mr. Lawrence Mitchel, a well known farmer in the Elizabeth area, to graze his cattle on the farm land and bail hay in the summertime. I recall asking Mr. Mitchel about the railroad. When he was a young farmer, he told me that he used to load his cattle on the CGW and take them into the Chicago stock yards to market. There were cattle loading pens along the siding in town just south of what was then the Kent feed mill owned by Charles Grube's family, a classmate if my memory serves me right. Mr. Mitchel after loading his livestock would ride in the Caboose into Chicago. This was in the days before the trucking industry entered the livestock transportation business and probably when he was a young farmer just getting started.

I can always remember when I urged my Dad to drive like a maniac into town on Route 20 from Terrapin Ridge just to chase the trains. They moved along at a pretty good clip. I was always trying to ask the kids at school about those trains but no one really had an interest or cared much about them. The only thing that was a mystery or rumored was a tunnel. It was only hearsay because it was so remote none of the kids ever saw it and it was not exactly a landmark. It took many years before I actually went out and made my own discovery.

It just so happen that a friend from school by the name of David Bishop and his family lived right along the right-of-way south of town across from Breeds livestock auction market. The trains would rumble by his house all the time. We even ventured out on to the tracks to look for old insulators. We investigated a concrete battery well that was sunk in the ground along side the tracks used in the old days for the signaling system. Since the main line was mostly single trackage, signaling was very important in governing railroad operations. At the time we climbed down into the structure, it appeared these were not being used any longer, however the battery glass bottles and porcelain jars with wiring was still intact. There were no locks securing the structure. As I recall this was located maybe 300 yards west of the grade crossing fronting the Bishop residence. A similar battery well graphic follows from Everett Edgar King's book on Railway Signaling :

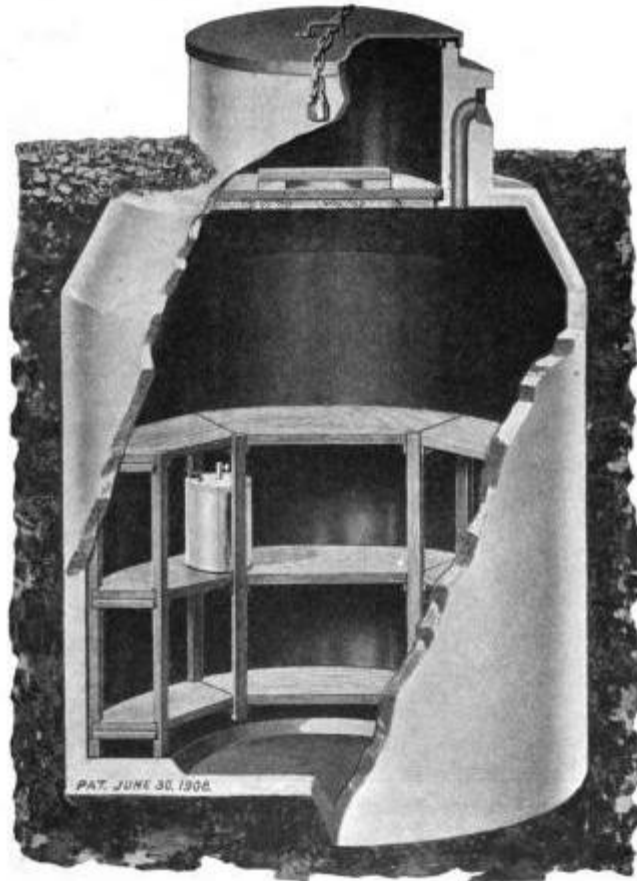


FIG. 166.—Massey 80-cell battery well.

Between my grade school and high school years I took excursions with my Grandfather out to Galena to view the Illinois Central, East Debuque to see the train action in that area and Savannah where the Chicago Burlington & Quincy, later known as the Burlington Northern and Milwaukee Road crossed paths. In the CB&Q yards were historic icing facilities and a rather large quantity of old retired steam locomotives stored there until they eventually went to the scrap yards. During these years I recall riding the Empire Builder once with my family for a vacation in Chicago to visit the museums and once with my Uncle to Aurora, Illinois. I also road into Chicago one time on the Milwaukee Road from Savannah. The Empire Builder was absolutely fabulous.

Consequently, I did not pay as much attention to the CGW until the CGW merger with the Chicago North Western Railway in 1967. By that time there was a very good chance that the Chicago North Western (CNW) with the approval of the Interstate Commerce Commission would abandon the CGW. By this time my Grandfather and I started taking color slide photos of the railroad just prior to the CNW tearing up the tracks followed by photos of the actual progress of tearing up the rails. In the winter of 1972-1973, I finally made the effort to locate and photograph the Winston Tunnel right after the tracks were removed and before the portal entrances were secured.

History can be so boring for some folks. In order to make this story interesting, we will take a view from space with satellite imagery integrated with the CGW photos from my small collection of railroad memories. Most of my photos are 35mm color slides that I have scanned to share them with a wider audience. Given that the majority of railroading literature focus on the major hubs like Chicago for rail buffs, I have always found small town railroading most fascinating whether that be a bridge, grain elevators, interchanges or tunnels.

A good starting point for those not familiar with the geography of North West Illinois is to first give you the big picture with regard to the real estate. The history of Elizabeth is connected to the Winston Tunnel because it was serviced by CGW crews from Elizabeth. What makes the Corn Belt Route so interesting from Stockton, Illinois to Dubuque, Iowa is the geography and its interchange relationship with other railroads. The following is a map to give you the general idea and layout:



Specifically, Elizabeth to Galena Junction is the area of focus that we will concentrate on to bring this history back to life if you will. And very recently, the satellite must have done a fly by for Google because from Rodden west the imagery has improved drastically and from Rodden east to Elizabeth it is still the old satellite photos that are green and grainy when using Google Earth. I have found that the imagery seems to be better with Google than the imagery from the Microsoft Virtual Earth.

Galena Junction Maps, Facts & Features



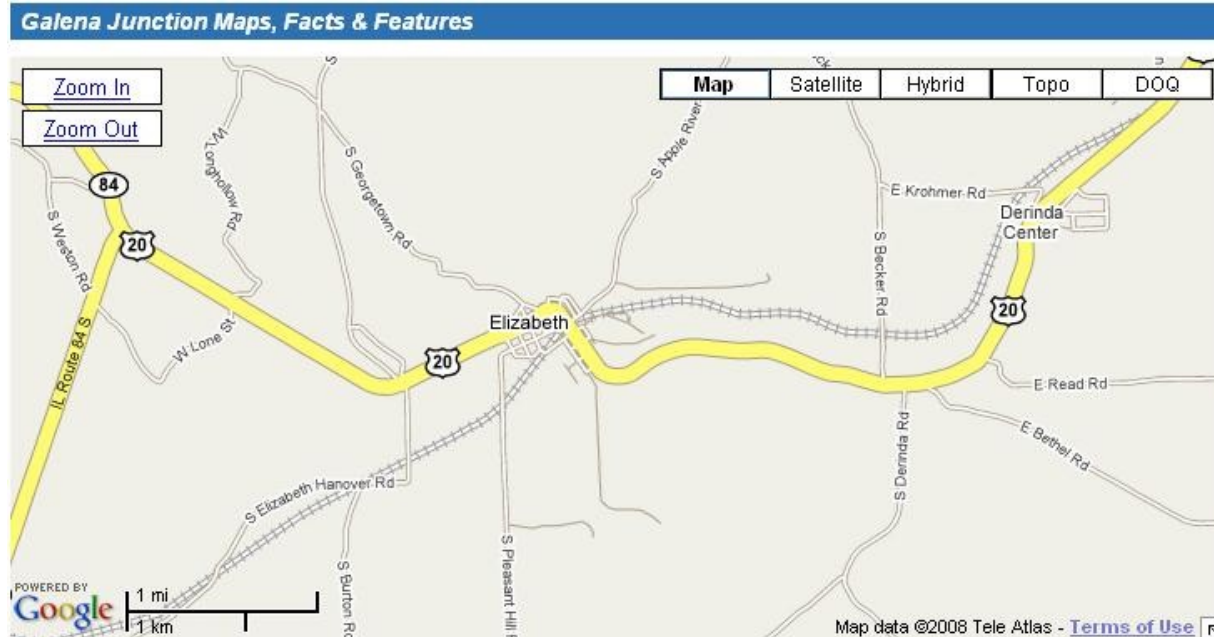
Many years ago I would view the very early satellite imagery on the Internet and trace the old rail line across the Illinois hill country. They were black and white images and yet the resolution was very good surprising even myself at the time how easy it was to take a hike from outer space and follow the entire length of the CGW through Jo Daviess County. Today I am even more thrilled with the ability to zoom in so close with spectacular details. It is the next best thing to being on the ground. Of course if you were not familiar with the railroad it would be easy to overlook if just passively browsing the countryside. An example of the kind of terrain follows in this next shot:

Galena Junction Maps, Facts & Features



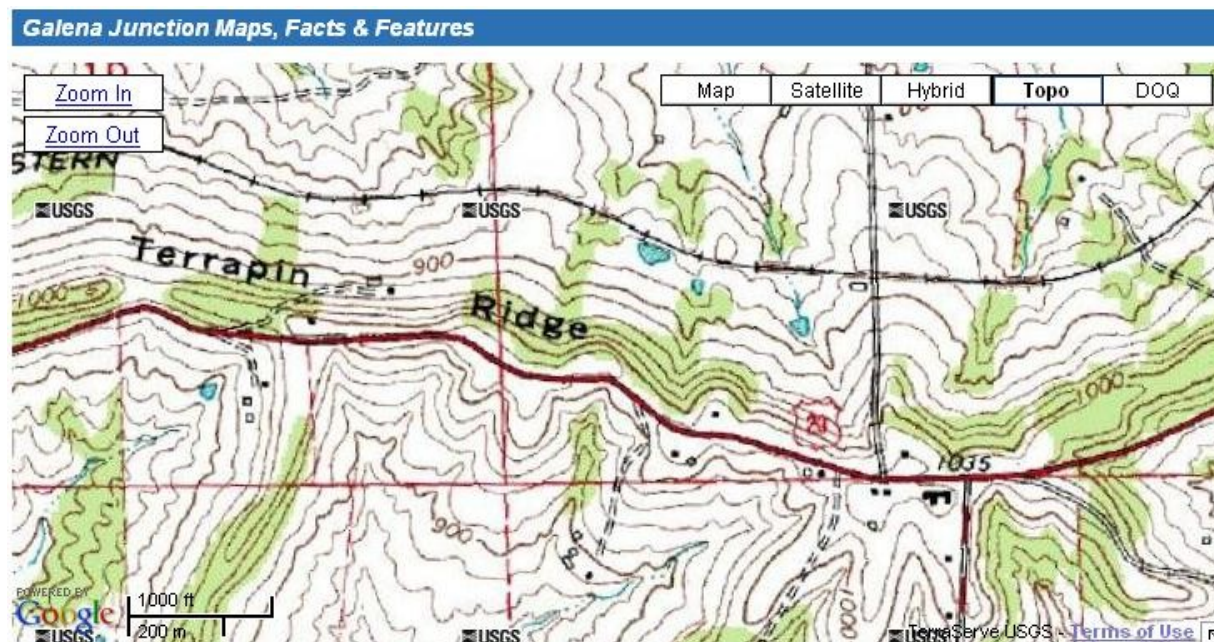
Lets start from the beginning. And that would be from my home base on the farm 2 miles east of Elizabeth on Route 20. When traveling from Woodbine, Il. West to Elizabeth you knew you were on Terrapin Ridge as soon as your car encountered the steep grade where the Ridge at Derinda Road reach

an elevation of 1,035 feet. Route 20 ran along the top of the ridge half way into town. Referring to the road map below:

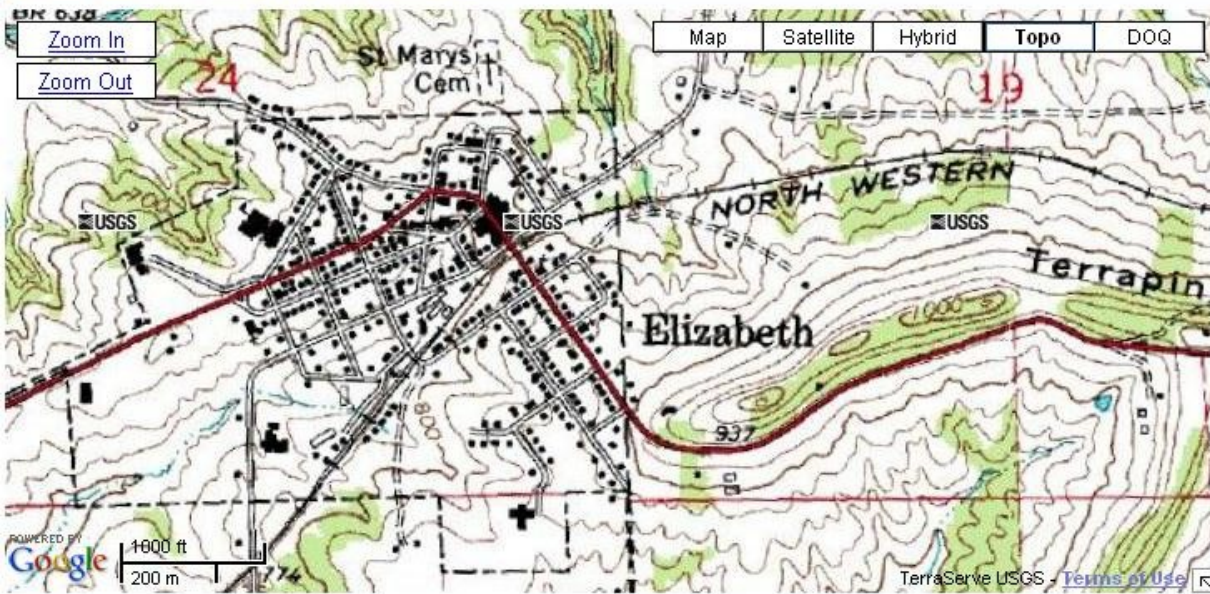


If you see S. Becker Rd. T-Boning Route 20, my Mom & Dad's farm entrance (i.e., ½ mile driveway) was located just south of Route 20 across from Becker Rd. and a little west of Derinda Rd. Ed Young's scenic overlook was just west of Becker Rd on the north side of Route 20. You could see all the way into Wisconsin and even Scales Mound on a clear day. The CGW went under Becker Rd. and I remember when we moved out to the farm in 1964 there was a cattle yard loading chute that was used when the rail line still transported livestock to the Chicago Stock Yards on the west side of Becker Rd next to the gravel road overpass. The school bus stop was right there at the top of the ridge too.

Now let's look at topographical maps of Terrapin Ridge and Elizabeth.



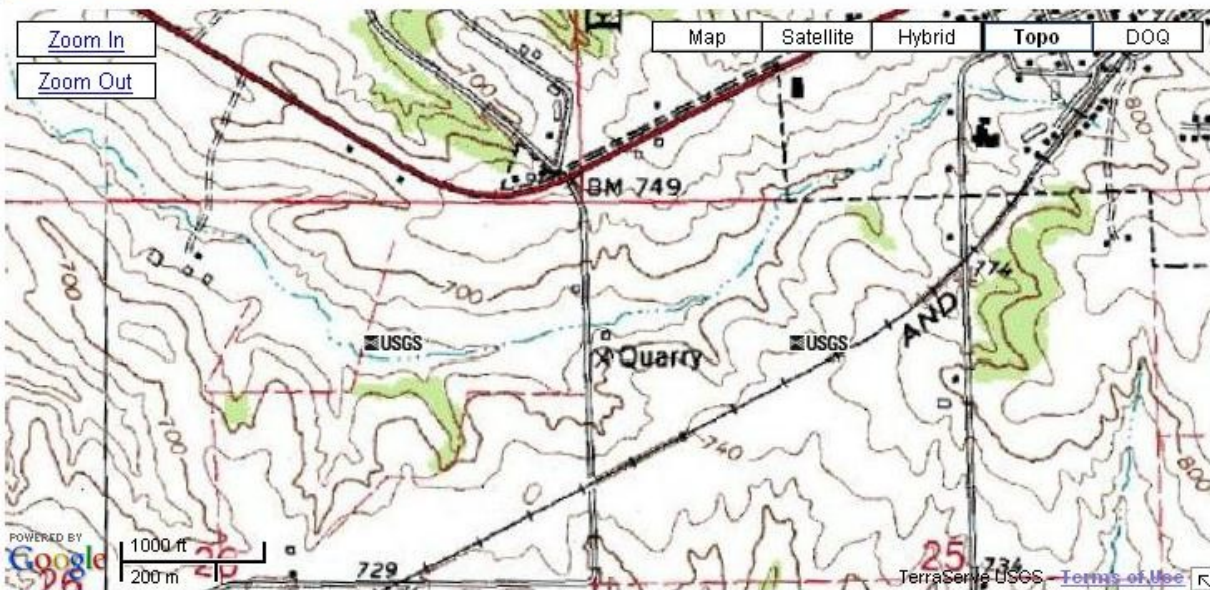
Galena Junction Maps, Facts & Features



Elizabeth was at 800 ft. elevation and the CGW took the path of least resistance through the hilly area. At this point it would do us well to follow this relief map all the way out to Galena Junction to show where it goes prior to viewing the satellite photos. Of course you can go on Google and take this tour by holding the left mouse button down and dragging the map so you can more easily view it contiguously.

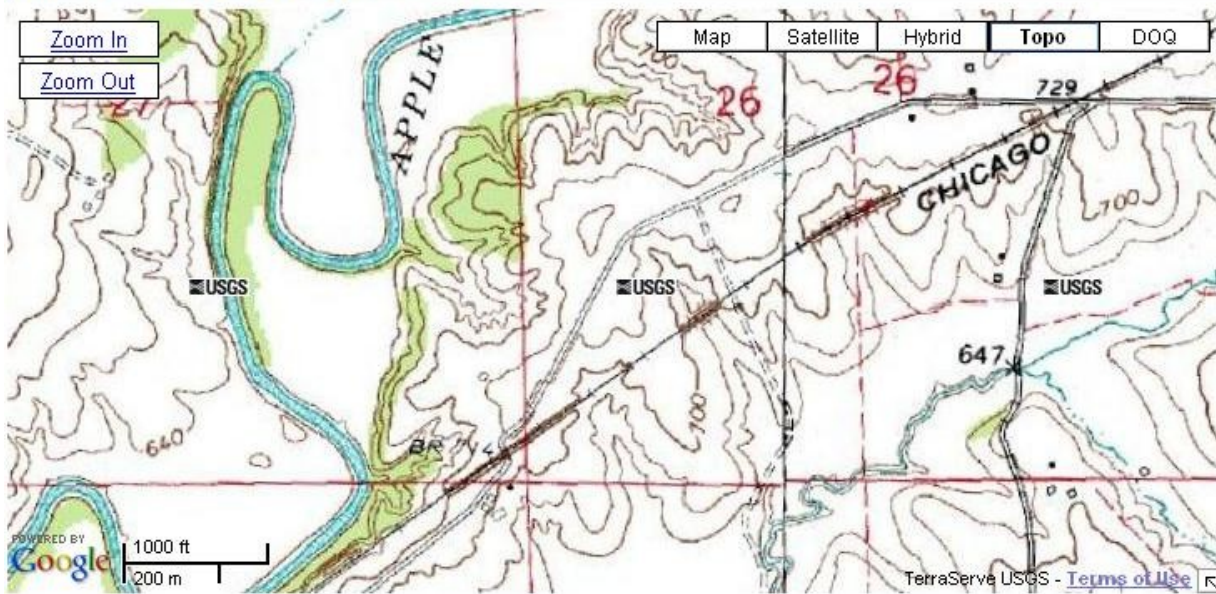
The next 3 views are from Elizabeth to North Hanover.

Galena Junction Maps, Facts & Features



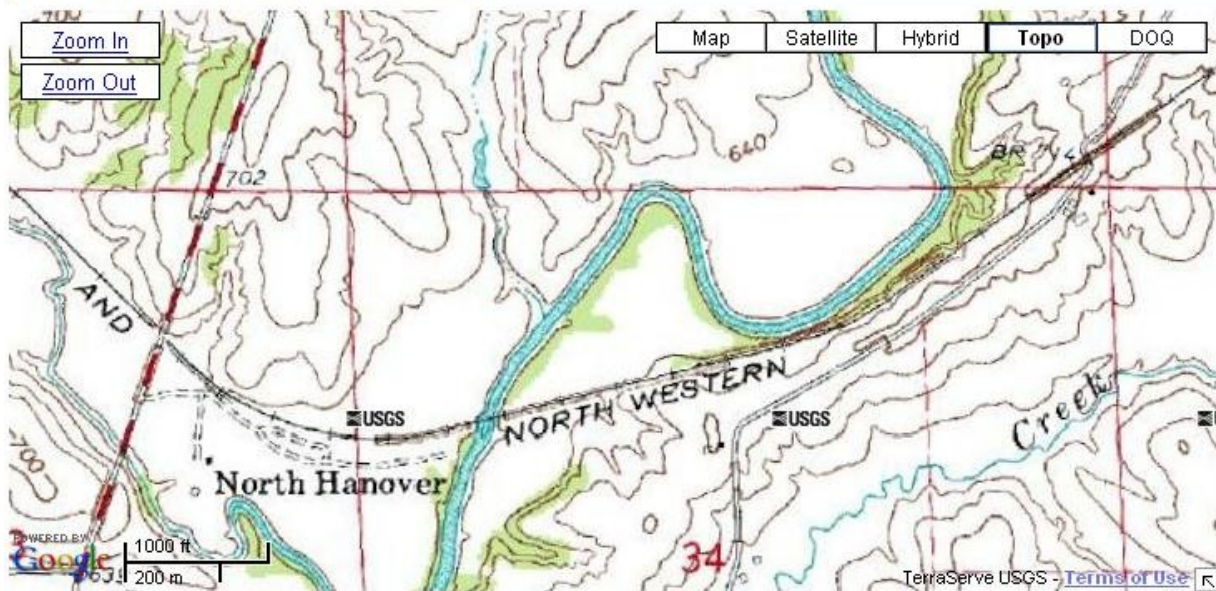
Above is the S. Elizabeth/N. Hanover Rd. with the Quarry just north of the tracks. Next is the Apple River coming into the North Hanover area.

Galena Junction Maps, Facts & Features



After getting my drivers license I would barrow my Dad's pickup truck and explored down most of these back gravel roads to get good views of the right-of-way. Next is North Hanover.

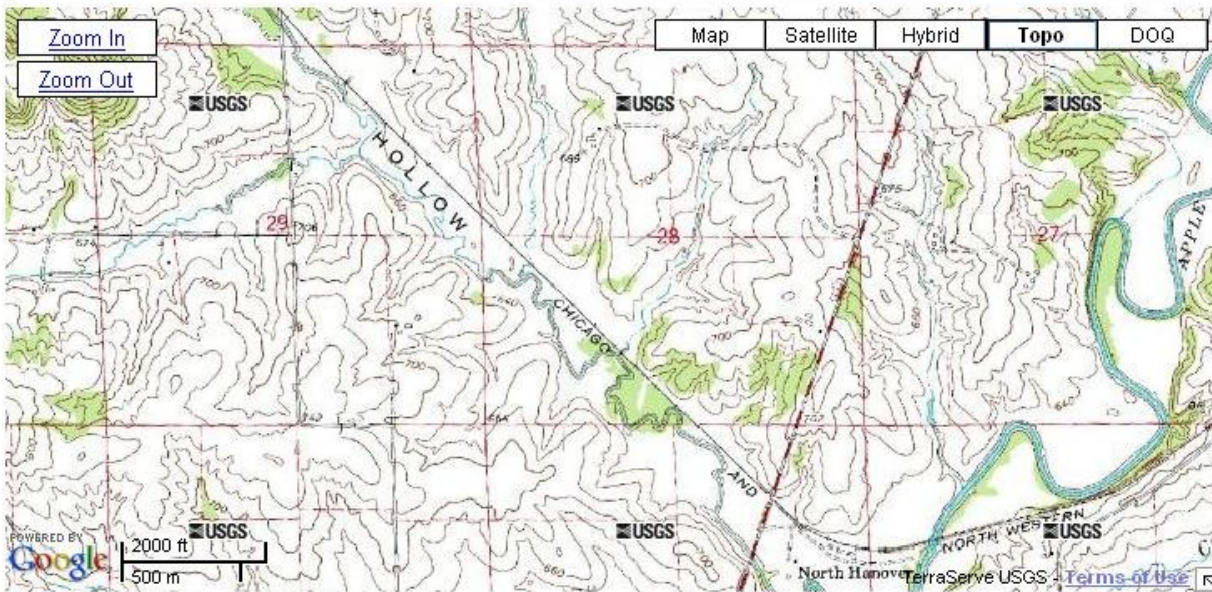
Galena Junction Maps, Facts & Features



The CGW crosses the Apple River. It then crossed under Route 84. Just north of this location was the local saw mill owned by my Dad's friend Roland Siemen.

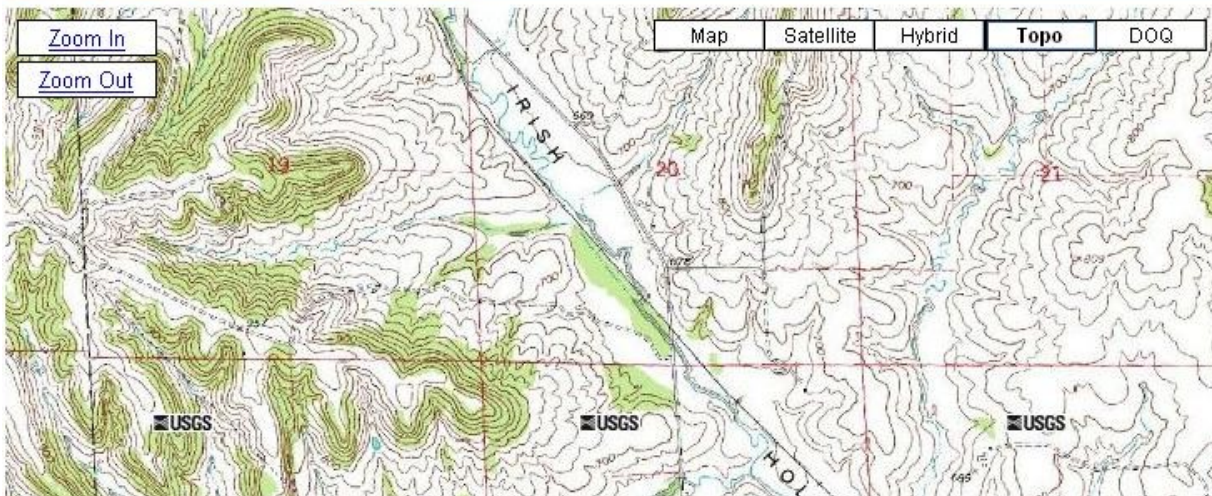
The next series of maps shows the railroad route from North Hanover to Winston Tunnel. The tunnel was approximately 9 miles from Elizabeth.

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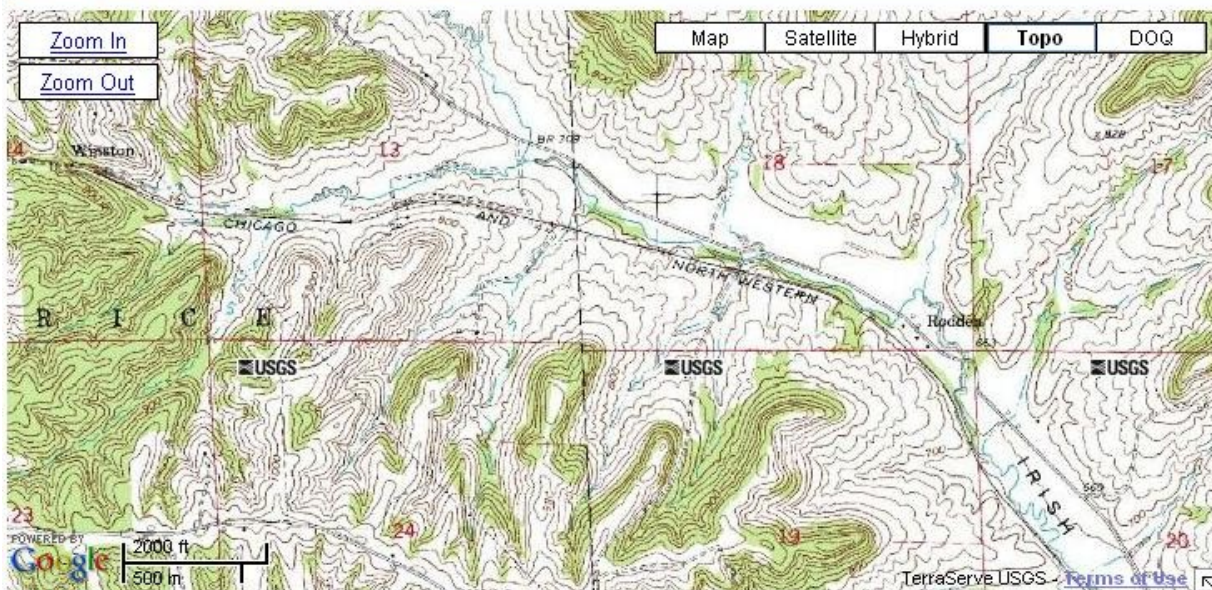


Next up is the line out to Irish Hollow stretch just outside of Rodden.

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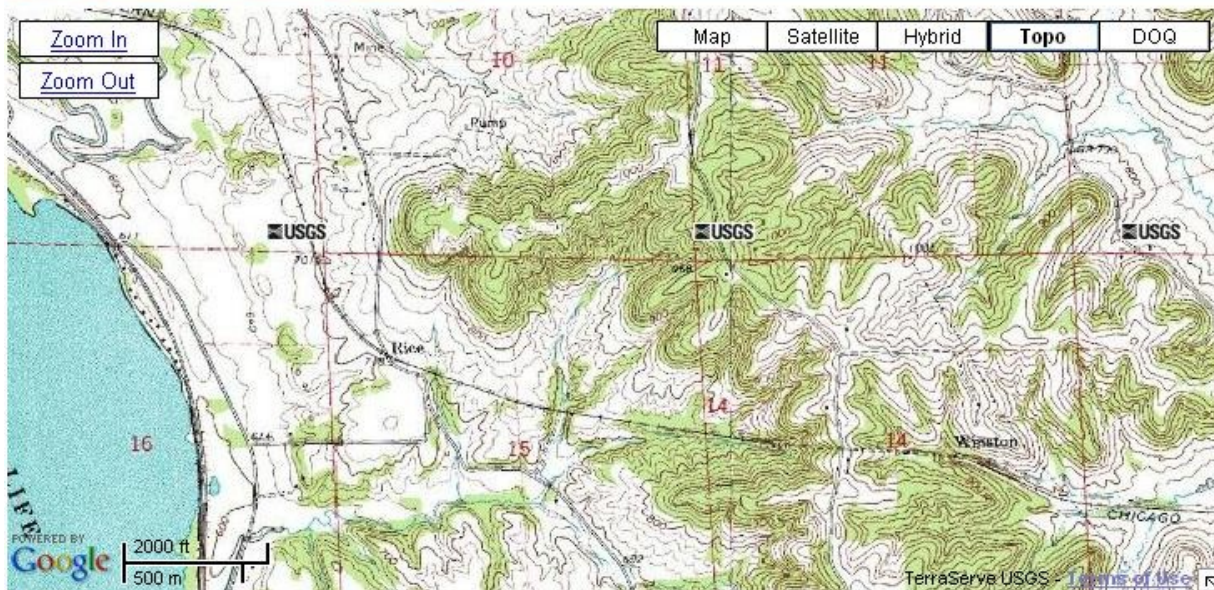
Galena Junction Maps, Facts & Features



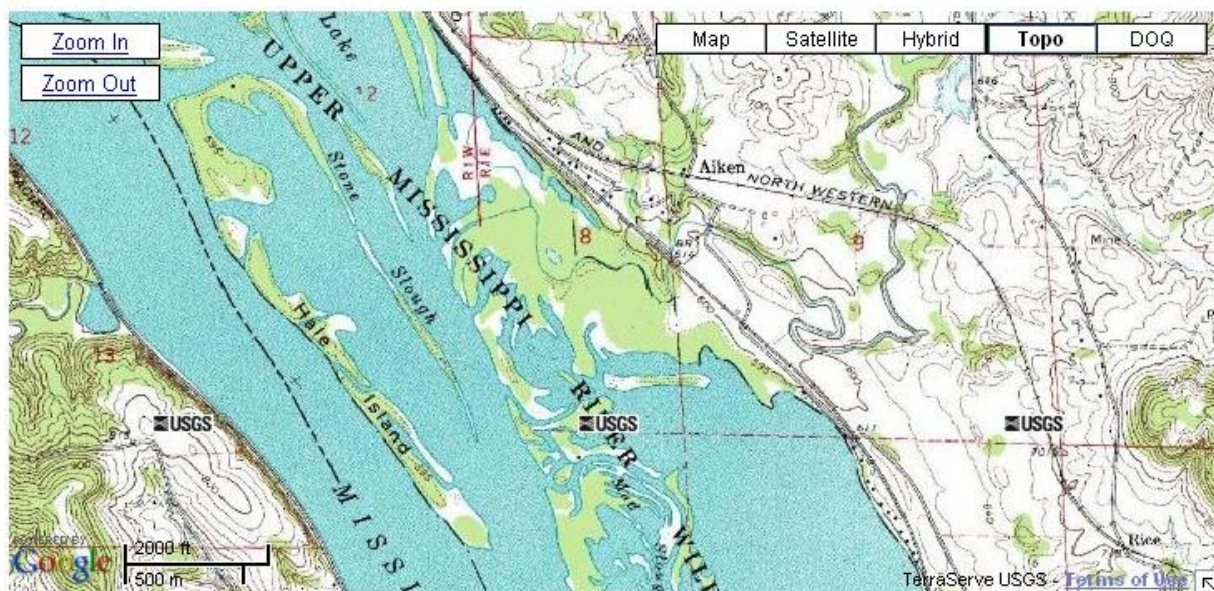
It is important to remember to cross reference the relief maps when tracing the rail line using just satellite images because it is fairly easy to get lost in those hills especially when you start zooming in and out followed by relocating the image. There are not any major landmarks to go by and even if you are near the Mississippi River it can look very remote.

The next series of relief maps are from Winston Tunnel to Rice, to Aiken, to Galena Junction and finishing at Portage. Between Galena Junction and Portage CGW interchanges along side the CB&Q connecting to the Illinois Central coming out of Galena, Illinois.

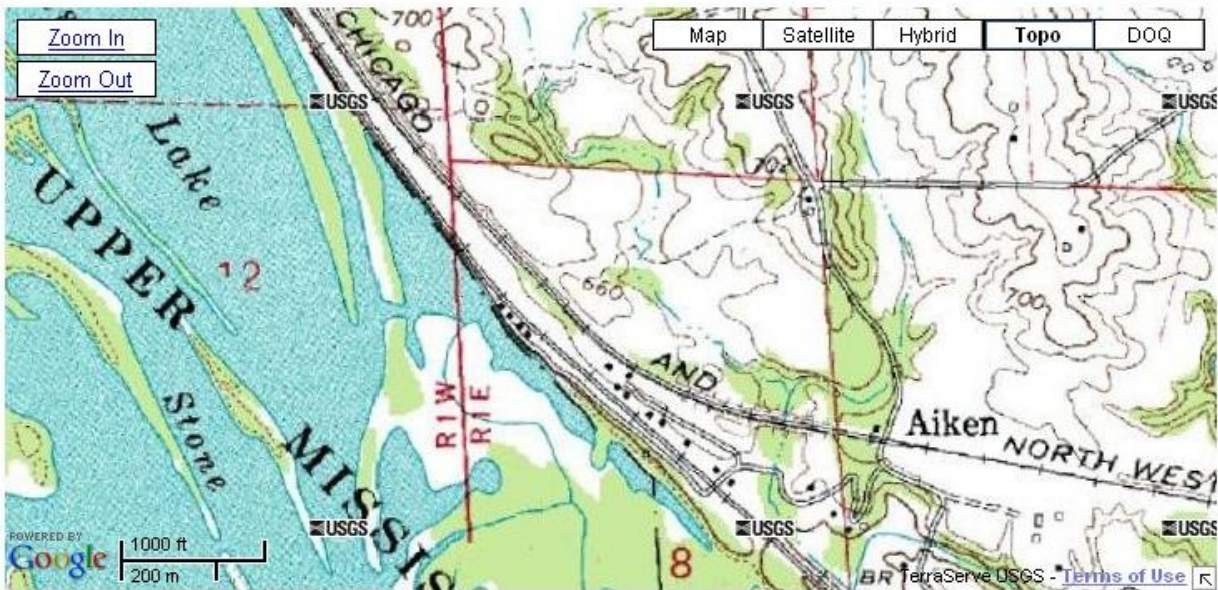
Galena Junction Maps, Facts & Features



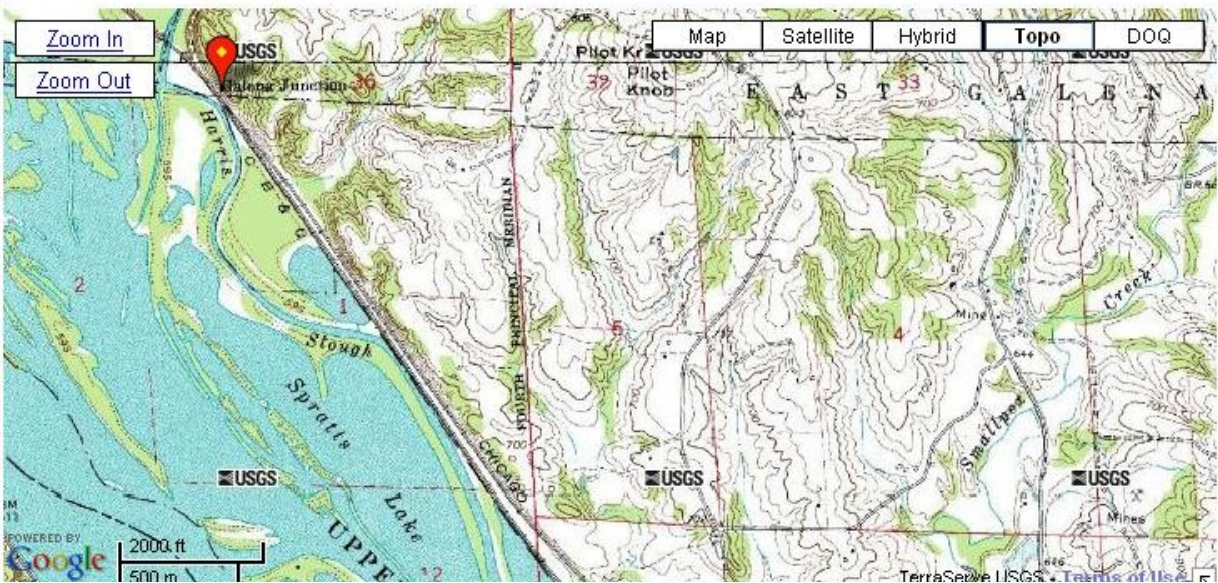
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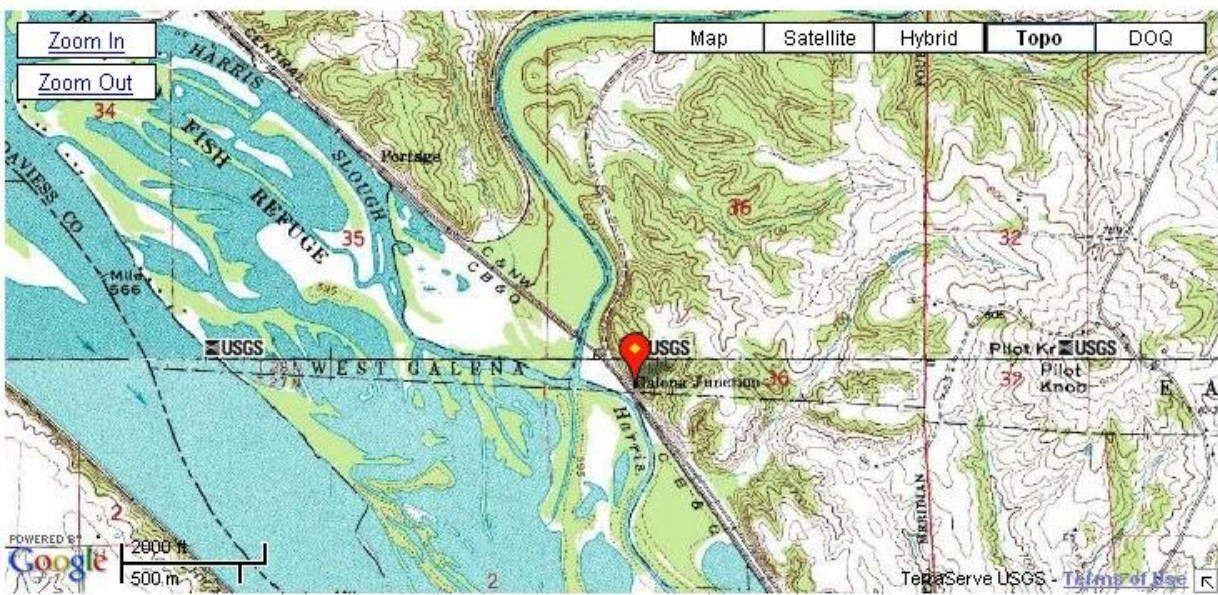
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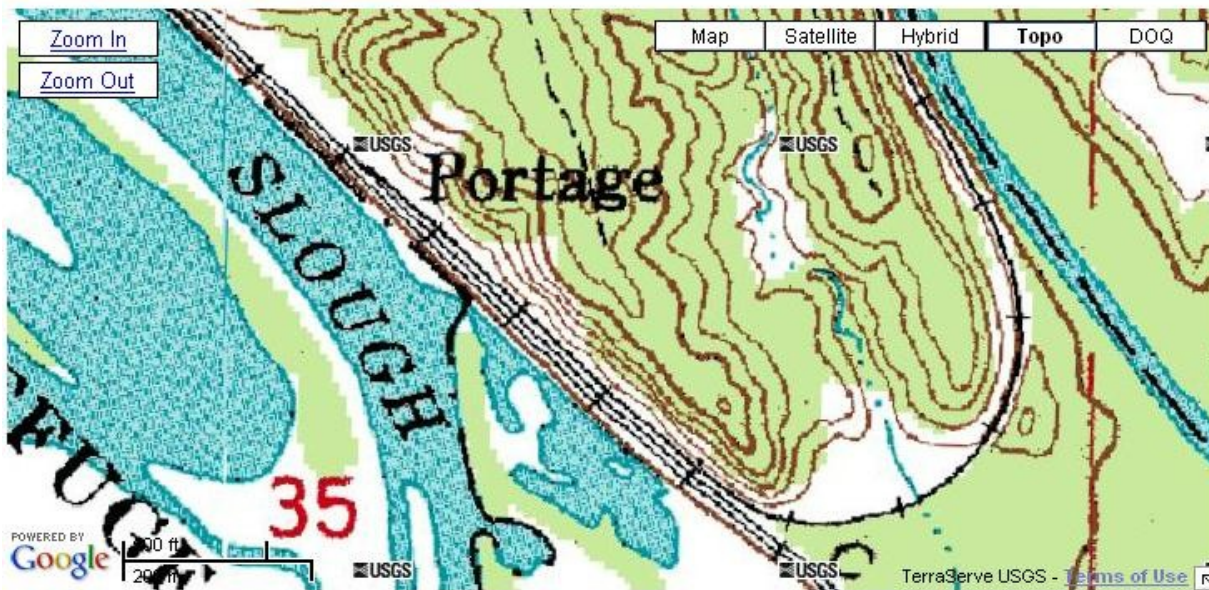
Galena Junction Maps, Facts & Features



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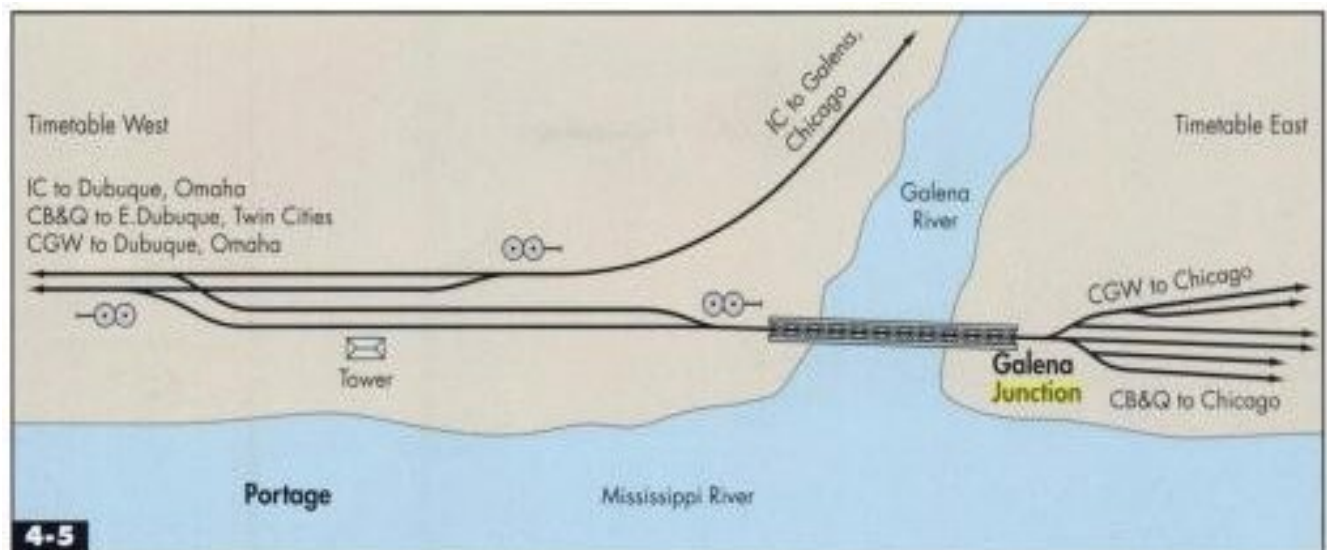


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The CGW commenced using trackage rights on the Illinois Central from Portage on north to East Dubuque, Illinois. The CB&Q parallel trackage going south would turn east toward Chicago at Savannah, Illinois and it was just beautiful country along the Illinois side of the river with Bluffs. Just west of North Hanover was the Chestnut Ski Lodge located right on the Mississippi and a boat launch called Blandings Landing. The fishing was good in those back waters.

This is drawing from Jeff Wilson's book *The Model Railroader's Guide To Junctions*.



With a great shot of the interlocking operations in which the CGW action took place.

Where lines meet



The importance of railroad interchanges could not be over stressed no matter how remote. For example in this Elizabeth Weekly News report a couple of wrecks resulted in rerouting trains over the Illinois Central RR.

August 4, 1915 Volume XXIII Number 48

RAILROAD There was a wreck on the C.G.W.R.R. near the tunnel at Winston. However it was a no serious nature as only a few cars were derailed. The wrecker was called from Stockton and had the track cleared by 10 o'clock. No. 2 went over the I.C.R.R. to Freeport and from there returned to their own road. No one was injured.

July 26, 1916

The west bound Chicago Great Western local due here at 1:35 p.m. was derailed last Wednesday afternoon. The cause of the derailment was a poor track caused by the expansion of the rail due to the extreme heat. The train, being late, was hastening along with its switching and the engine was crossing the switch east of the Main St. bridge when the accident occurred. Unfortunately, the wheels slipped from the rails near the west bound track while the cars were on the east bound division, blockading both tracks. This caused the evening train, No. 4 to go over the Illinois Central tracks and also disappointing sever Elizabeth travelers. The wrecker was called from East Stockton and several extra working crews were summoned. At about 7 o'clock the engine was again on the track the track being quickly repaired. The engine was held here a few hours and then taken to the shops for repair, while the train was taken through

to Dubuque.

Reading into the history of railroading does not take a person long to realize how important it was to the economy of the county and the dependencies people had on it for their main means of travel. The bird's eye view of the farms, resources and small communities from satellite imagery is remarkable. And, if you think people had environmental concerns in the 70's and today, you can reference back the 30's & 40's when Sedimentary Surveys were done on the Galena River, surrounding basins and tributaries. Think if they had the aid of imaging technology to monitor soil erosion problems back then. See <http://www.pazten.wr.usgs.gov/vigil/galena/notes.html>.

In my case, I could not remember for the life of me how I navigated in the car out to Winston Tunnel. I kept thinking we drove to S. Rocky Hill Rd. and parked just on top of the tunnel. That conflicted with my recollection on how we explored the entire landmark from top to bottom, east and west. Then, when I was viewing the satellite photos and zoomed in I recalled correctly that we drove out to Rodden, parked the car and hiked the rail line toward the eastern entrance of the tunnel. Thus, with the imagery I think you can come away with a real good feel for the lay of the land without actually trekking out there on foot.

Without the Winston Tunnel, the CGW would not have been possible through this region so we are going to start with tunnel area and finish up in Elizabeth. Notice, although subtle, some of the railroad artifacts captured in the photos. The next aerial is an overhead shot of the tunnel. To make it easy to identify the location of the tunnel I placed a red dot showing the east portal entrance of the tunnel immediately above the dot. You can easily see the cut into the hill leading up to the entrance. The cut had stone laid embankments. The middle red dot is the approximate location of a large air shaft for ventilation of the tunnel. The third or left most red dot shows the west portal entrance of the tunnel immediately above the dot.

Galena Junction Maps, Facts & Features



S. Rocky Hill Rd. crosses over the tunnel north and south centered between the portals on an overhead view such as the satellite depicts. This is to give you some orientation before we zoom up for closer some closer looks.

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Keep your eye on the tunnel.

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The right-of-way from the west end of the tunnel is pretty well over grown now with trees and vegetation.

The east entrance shows a slight curvature of the track prior to going into the tunnel. We will start zeroing in on the east portal.

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A center shot is next.

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Now, zooming in further on the west portal.

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You are almost on the ground now!

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The next graphic is a photo leading up to the east entrance of the tunnel. On the day I visited the site, it was winter, cold, damp and extremely overcast. The daylight conditions were not optimal even though it was around 12 noon.



This is a photograph of the east portal entrance to the tunnel. We actually walked from Rodden which I believe is close to mile post 150. Unfortunately, my camera did not work inside the tunnel when we walked from the west entrance to the east end. One of my 3 buddies with me that day (Roger Haynes) did take photos of the inside of the tunnel. His photos turned out but I lost track of him and never asked for copies from him. As I recall, midway through the tunnel there was water and ice built up just as you can see on the embankments in the above photo. We guessed it was water intrusion from where the air shaft would have been located above the arch. Some of the brick work lining the arch were coming unglued as a result of the frost. Otherwise, we thought the tunnel was still in pretty good shape. Walking through was very difficult as it appeared that crews did not do a very good clean up job after taking the rails out.

Arriving at the east entrance, we decided to scale the embankment and hike over the ridge to the west end of the tunnel. It was pretty rough terrain, heavily wooded really no guidance other than our intuition for a sense of direction to head. On the way over the top we found the site where the air shaft was that had been built to provide ventilation. In the days of steam, the heat and exhaust was very stifling to crews. As we made our way, the next photograph was taken while I was sitting on top of the east portal facing east toward Elizabeth.



As I mentioned earlier, the day we visited was very dark and gloomy. I would have loved to see a train approaching from this angle.

Walking down the west side of the ridge we slide down the embankment in front of the west portal.



If you look closely on this gloomy day, you can just barely see daylight at the east end of the tunnel. It was a very dark walk through the tunnel. When Roger was flashing photos inside, we were going “Wow”.

Crews quarters were located on the north side of the tracks as captured in the next shot.





The last 2 photos are of the same shot. The photo shop that did the scans for me for some reason took 2 scans.

For some reason, we decided to continue walking the CGW main line west toward Rice even though there was obviously nothing out there, or so we thought. To our delight we came across a relatively large iron bridge that spanned a wide and rather deep ravine although it was more like a valley. Even though the tracks were gone, we walked across it. I tried to figure out how I could get a photograph of this impressive structure which complemented the tunnel. My memory is vague on this but I thought I found a builders plate with a date of 1938. I could be wrong on this and thinking of another bridge on another railroad.

Once across the bridge we were amazed a second time by sighting the Mississippi River. Since our knowledge of the geography was pretty lacking we thought it might also be the Galena River. I think we finally settled on thinking it was the Mississippi River back water channels. Being in the middle of winter there was no barge traffic and we did not think it was the main channel. The countryside was larger than life and really took my breathe away at the time. This encounter was very satisfying.

Oh, did I mention that I did get 1 photo of the bridge. Well I did and at great physical effort too. I decided that the only way to capture the perspective of the bridge was by taking a shot from the side. So I climbed down the west side of the bridge and hiked north up the valley until I was satisfied that I could see the length of the bridge in the viewer. Enjoy!



While the details are not as good embedded in this document, the scans are all 2972x2000 and look much better in a graphics program for viewing. The house in the foreground gives you an idea of the scale. I had to stand way back to get the shot. I am actually shooting toward the south/southwest direction. A short distance beyond the end of the bridge the tracks start turning north and on into Rice.

Needless to say, I was a little behind my friends after having to climb back up to the top of the bridge. Once I was on the east end of the bridge I took another photo facing east toward the west portal. You can see mile post 153 so I would estimate it was roughly $\frac{1}{2}$ mile back to the tunnel.



Heading back to the tunnel it was getting time to go. This shot is the half way point between the bridge and the west tunnel entrance.



The next shot is the approach to the west tunnel entrance for east bound trains.



At the begin of our transit through the tunnel going from west to east, I took this last photo standing just inside the tunnel facing west. It is nicely framed with the crew quarters buildings on the right.



After taking about 30 minutes to make our way through the tunnel and safely coming out of the east portal, the next photograph is our arrival at the east end of the tunnel portal looking out prior to our exiting.



From this scene we departed the Winston Tunnel area heading back to our car on that lonesome gravel road in Rodden.

Elizabeth, Illinois played a role in the history of the CGW with the nearest station for passengers and a few crew that had to maintain tunnel operations. The next series of slides is about the CGW before, during and after abandonment. My Grandfather parked his 327 Chevy Impala in the parking lot of Hoskins Lumber Company and we started shooting more pictures.



By this time Jo Carroll Electric was using the station for storing equipment. The CGW tracks were still in use. So we took our own walking tour because by this time we knew it was only a matter of time before the Chicago North Western would be tearing the tracks up.



The above photograph is looking west with the US Route 20 highway bridge to our back. Notice the station platform is still in good shape.

Standing on the west end of the station platform facing west in the direction of the Winston Tunnel, you can see the switch stand to service the siding in town. In the distance is the street crossing signals and just beyond that to the left side of the tracks are the sheds where the railroad stored the hand cars for traveling to the tunnel from Elizabeth.



Oh! You wanted to see those sheds?



The next photograph is a view from the Elizabeth station at US Route 20 Highway bridge when the CGW would be coming into town.



And when you arrived at the station...



Well, the wrecking crew is about to enter town with some motive power to boot.





The next photograph shows a crank parked on the siding in Elizabeth. Abandonment was started from the west starting from Galena Junction. Thus, staging for the clean up was taking place in Elizabeth.



Work in progress in the next slides.





Well that was the final assault. Here we are looking at the Elizabeth station after the tracks were removed. A few crew and equipment is in the distance. You may also see some other Elizabeth landmarks such as St. Mary's Church steeple in the background.





I guess that is what they call progress.

The main line, siding and switch stand is gone in the next shot.



Final photograph of the main line to Winston Tunnel passing by the empty sheds.



Well, this little project has been on my project list for a long time. I hope people can enjoy this corner of Illinois and some history. My slides were taken some 35 years ago. The date on the slide frames indicate that these were developed by Kodak in January and February of 1973.

ADDENDUM

INTERESTING HISTORICAL ARTICLE

The Hole in Stickney's Pocketbook - CGW's Winston Tunnel

By Jerry Huddleston

The afternoon of October 31, 1971 was sunny and warm in Jo Daviess County. Chicago & North Western Railway Extra 121 West, GP7 121 running light, coupled a single boxcar at Galena Junction, Illinois and returned east on the former Chicago Great Western Railway main line. Engineer Delbert Hatton notched forward the throttle on the 1-percent grade out of Aiken, Illinois. The train disappeared into the west portal of the Winston Tunnel. Once inside the tunnel, the geeps rocking headlights revealed the cracked and worn lining. The sound of the EMD 567-series engine reverberated in the cab; and the field shunt contactors clicked in the electrical cabinet. A few minutes later the train reappeared from the east portal. Engineer Hatton notched back the throttle as the train continued on a gentle curve downgrade to Stockton, Illinois.

Next year, scrappers arrived and dismantled 70 miles of the former CGW main line from Galena Junction to Byron, Illinois. The C&NW considered the route superfluous as the parallel C&NW main line was barely 30 miles to the south. The railroad added a fence to both portals to keep trespassers out of the abandoned tunnel. Over the years, the portals and approaches were covered with weeds and trees, portions of the bore collapsed, and water covered much of the floor. The tunnel remains today, seductively frightening, even with powerful D-cell flashlights. But now, only the ghosts of trains continue to pass through the tunnel.

In the Spring of 1886, surveyors from A.B. Stickney's Minnesota and Northwestern Railroad hiked the exceedingly rugged and snake-infested countryside of Jo Daviess County to locate a 50 mile route from South Freeport, Illinois to the Mississippi River near Dubuque, Iowa. Wild pigeons flitted overhead and shrubs scratched the arms and legs of the survey party as they crossed the rolling hills and limestone bluffs. Earlier, line location for the Forest Home, Illinois to South Freeport segment had posed few problems. The first 27 miles from Forest Home to St. Charles, Illinois followed the grade of the ill-fated Chicago, St. Charles, & Mississippi Air Line, which never turned a wheel, and included useable bridge piers at the Fox River. From St. Charles the line would continue in a northwesterly direction to South Freeport crossing undulating prairie, hardwood groves, and wetlands.

Because construction costs in the rugged countryside of Jo Daviess County would be extremely expensive, the railroad first constructed the Forest Home to South Freeport segment and acquired rights on the Illinois Central Railroad from South Freeport (which the IC referred to as Dunbar) to Dubuque for one year. M&NW engineers knew that an expensive half-mile long tunnel near the Mississippi River would have to be built. The alternative of making an open cut was hardly a better idea, as enormous volumes of waste would be created. The tunnel would be the longest bore in Illinois.

By the following Spring the M&NW had completed the Forest Park to South Freeport segment and trains ran from Chicago to Dubuque detouring over the IC. Several crews of Shepard, Winston, & Company began to carve up the rough terrain of Jo Daviess County. Stickney's Minnesota Loan & Debenture Company, which had an agreement with the M&NW, controlled the project. Shepard, Winston, & Company won the contract to build the tunnel and the railroad from South Freeport to the Mississippi River while subcontractors obtained some related jobs.

Shepard, Winston, & Company employed 354 laborers to hand dig the half-mile, 2,440-foot tunnel. Crews labored around the clock for almost an entire year to build the tunnel. Many local farmers short on cash also joined the laborers. The "sandhogs" dug from both the east and west portals and from a 198-foot vertical shaft sunk from the crest of the hill to the center of the tunnel. Temporary tracks were constructed to cart clay and dirt from the bore.

Engineers initially believed that the bluff where the tunnel was to be constructed was made of solid rock because a thick layer of limestone was found on top of the hill. However, after work began, the "solid rock" was found to be mostly hard blue shale. While solid when first exposed, the rock rapidly decomposed when exposed to air and water. Naturally, construction of the tunnel was very dangerous. Scores were injured, and on March 12, 1887, John Hill, a 31-year-old Finnish immigrant laborer, was killed while digging the west portal.

The Dubuque Daily Times of August 31, 1887 reported: "It is next to impossible to drive the tunnel, which runs through a bed of blue clay, which can not be worked with picks, and on which blasting has little effect...The tunnel, when completed, if the time ever comes when it is completed, will be the longest tunnel in the state, and as the blue clay when exposed to the air becomes a rotten shale rock, which crumbles to pieces, the tunnel will have to be strongly arched from one end to the other. The cost of the tunnel will probably exceed the cost of grading fifty miles of any part of the road."

The tunnel was originally lined with 12 x 12 inch timbers spaced 4 feet apart. The walls behind the timbers were lined with stone up to the spring line of the arch, which rested on steel beams. A thick arched floor was built of Cyclopean Concrete.

A few years later, a second set of the same size timbers was added inside the original set when the first set showed signs of decay. The supplemental timbers were spaced 1 to 4 feet in different parts of the tunnel.

A crude hotel was hastily constructed to house the tunnel workers. A local resident described Gallagher's Hotel as "little more than a tar paper shack" built near the east portal on the south side of the tracks. The pious farmers of Irish Hollow avoided the hotel as it earned a reputation for intemperance and prostitution. The hotel mysteriously burned after construction of the tunnel was complete. At least one man was reported to have perished in the fire.

Two small stations were constructed near both portals of the tunnel to control movements through the tunnel. Both stations resembled flagman's shanties rather than of standard M&NW depots. While Winston Station was built at the east end of the tunnel, Rice Station was built about 1.5 miles from the west end of the tunnel. Both stations were located by the railroad to provide access to local roads.

The M&NW never ran a train through the Winston Tunnel because the railroad was acquired by another Stickney road, the Chicago, St. Paul, & Kansas City Railway, before the tunnel was completed in January 1888. The total cost of labor and materials for construction of the tunnel was more than \$600,000, which exceeded projections. The first train passed through the tunnel on January 20, 1888.

On March 1, 1888, the date M&NW rights ended on the IC, CStP&KC trains traveled the entire route from Chicago to Dubuque on home rails. Later in 1892, the CStP&KC was acquired by yet another Stickney road, the Chicago Great Western Railway.

The CGW initially believed that the vertical shaft sunk to the center of the tunnel during construction would provide adequate ventilation for trains that passed through the tunnel. Unfortunately, this proved false as the railroad began to receive reports that the intense heat and smoke of the slow moving locomotives boiled and choked crewman and passengers. A common remark was that crews emerged from the tunnel looking like "boiled lobsters." Some crews refused to go through the tunnel. Of course, the ventilation problem remained unresolved after the shaft was filled.

The ventilation problem grew worse as traffic levels increased through the tunnel. Several inexpensive methods were tested by the railroad. Engine crews soaked towels and wrapped them around their heads and hands and lie flat on the deck to lessen the discomfort. The railroad also increased the speed of the trains through the tunnel. Neither solution really worked.

Eventually the railroad decided to construct an expensive and complicated fan system at the west portal of the tunnel that was designed to push the smoke out ahead of the trains as they passed through the tunnel. A wooden shroud and fan duct were added to the west portal of the tunnel and a small brick building was constructed for the fan controls near the west portal on the north side of the tracks. The fan measured 14 feet in diameter and was powered by a 310 horsepower diesel engine. The fan was designed to create a 25-mph wind through the tunnel.

The railroad employed two fan house operators that each worked a 12-hour shift. After working a 12-hour shift for two weeks, the operators traded shifts. Both operators worked a long 18-hour shift when they traded shifts. No roads were constructed to the fan house, so operators had to either use a handcar or walk the tracks to work, leaving behind their cars at either Rice or Winston Station.

Local resident R. Merle Funston described how he entertained visitors to his family's small farm a half-mile north of the tunnel. "When visitors came to our house on Sunday afternoons, my brother and I would take them down to the fan house at the west end of the tunnel. This was a lonely place, so the fan operators were glad to have company and were glad to explain how the fan worked. If no trains were due, they would start the fan for us, and to demonstrate would throw a Sears Roebuck Catalog into the fan. It came out looking just like snow."

On occasion, the diesel engine that powered the fan failed to start causing considerable discomfort for the train crews. As a result, train crews often left an unhappy message with the dispatcher at either Stockton or Fairground Yard informing them that the fan did not operate. Although they were not always at fault, the train crews usually scorned the fan house operators.

Because of drainage problems and settlement of the second set of timbers the Winston Tunnel had to be extensively rebuilt only fourteen years after it was originally completed. The contract was awarded to Lorimer, Gallagher, & Walsh Construction Company to reline the tunnel with brick and concrete and rebuild the floor and approaches. In 1902 construction began and would continue day and night for two years.

Engineers had initially planned to remove both rows of plumb posts from the tunnel, but this proved impractical given the tenuous nature of the rock behind the posts. Instead, only the front row of plumb posts was removed, leaving the rear row intact, and a foundation for the wall was dug. It was necessary to undermine the rear plumb posts in order to lower the foundation to the required grade. In this space, 3-foot thick walls of concrete faced with brick were built up to the spring line of the arch.

Once the walls were completed, the grade was lowered between 1 and 3 feet through the tunnel and approaches. Sections of 150 feet were gradually worked down to the subgrade and a 6-inch layer of concrete was poured from wall to wall to seal out the water and mud. Also, new rails and ties were added to a foot of ballast.

Next, a four-ring brick arch was built below the original and supplemental timber arches and the space between the arch and timbers was filled with concrete. Centering for the 8 foot radius arch was made of 4 x 4 x ½ inch T-iron bent to a 7 foot 9 ½ inch radius (the T-iron was bent 2 ½ inches tighter to account for sagging). The T-iron was spaced 5 feet apart and supported by posts in the wall. The arch was bricked up and backfilled with concrete about 2 feet at a time in 40 to 50 foot sections. When a section was completed, and sufficient time was allowed for setting, workers moved forward on the next section.

The approach to the east portal was rebuilt in connection with the tunnel work. A 24 inch tile drain was set in concrete and extended from the east portal to the end of a 1000-foot cut designed to divert ground water away from the tunnel. Heavy masonry retaining walls were built on both sides of the long cut.

Because of limited workspace in the tunnel, work on the arch had to be done from scaffolding added to cars that also contained the workers and the material. The only material not on the cars was the material that was added to the tunnel. Mortar was mixed on the floor of the cars and passed up through trap doors; bricks were also tossed up from the floor of the cars.

Workers also had to contend with the heat and smoke from the locomotives of work trains and scheduled freight and passenger trains that passed through the tunnel daily. To minimize this danger, work trains pushed in the cars, cut them off at the work area, and then backed out. The cars were also backed out of the tunnel when freight and passenger trains arrived. The system's busiest main line, 25 scheduled trains passed through the tunnel daily, kept work trains running day and night. About 15,000 barrels of cement, 2,500,000 bricks, and 11,000 cubic yards of gravel were needed. Construction was completed without a serious accident.

Operations through the tunnel during construction were controlled by a specially installed staff system. Operators at Winston and Rice Station controlled access to the tunnel. When a train approached either of the stations, that station would signal the station on the opposite side of the tunnel. The opposite station would indicate if the track was clear. If the track was clear, the near station would hand the staff to the engineer. After passing through the tunnel "block" the engineer would hand the staff to the station on the opposite side of the tunnel, who finally signaled the near station.

The following rules applied: "An interlocking train staff system and signals have been erected at Winston and West Tower (Rice) which will govern the movement of trains through Winston Tunnel while it is undergoing repairs, the district between these points being considered a 'block'. No train, engine, push car, or hand car will be allowed to pass upon or through the block until they have a staff in their possession and the signals indicate 'proceed'. As soon as the block is clear the staff must be returned to the operator. Work trains permanently employed in this block may go upon the main track without train orders if they have a staff in their possession and signals indicate 'proceed'. Staffs will be delivered by operators to engineers and must be delivered by engineers to operators. The exchange of staffs between trains is forbidden." The railroad continued to use the staff system after construction was complete until the line received automatic block signals.

After Samuel M. Felton assumed control of the CGW in 1909, rehabilitation of the railroad began immediately. The railroad issued considerable amounts of securities to meet its financial obligations and provide the cash needed for improvements. The 240-mile Chicago to Oelwein main line received automatic block signals, new eighty-five pound steel rail, and double track between Kent, Illinois and Winston Station. About \$10 million were spent on improvements for the entire system.

Part of Felton's desire to rehabilitate the property included the possibility of relocating the main line in Northwestern Illinois. The never-ending maintenance for the tunnel, heavy grade out of Aiken, and the expensive toll exacted by the IC for using its Mississippi River Bridge at Dubuque, regularly caused trouble for the railroad. The most likely route would be build west from the main line near Elizabeth, Illinois directly to the Mississippi River; span it near Bellevue, Iowa and rejoin the main line near Dubuque. Prohibitive construction costs dampened management's enthusiasm although studies continued until the Second World War.

The Illinois National Guard dispatched troops to protect the strategic tunnel from seditious acts after the U.S. entered the First World War. A soldier was posted at both ends of the tunnel and the soldiers were based in troop cars parked on the Winston siding. Soldiers undoubtedly found this assignment prosaic, but were reassigned after only three months when the perceived threat had diminished.

The Winston Tunnel regularly needed repairs during its 84-year history. Ever-present ground water continually deteriorated the tunnel materials and the shale rock surrounding the bore. In 1912, the west portal was extended 60 feet with a non-reinforced concrete arch section backfilled with stone and in 1918, a 12 inch plain concrete floor was added to the tunnel. The replacement floor was twice as thick as the concrete floor added in 1902. New steel rails and wood ties were also added to a foot of ballast in the tunnel and approaches. These repairs were engineered to improve drainage in the tunnel. In 1944 and 1947, two sections of the tunnel totaling 1,266 feet from the east portal were reconstructed with 8 inch steel ribs set in concrete added flush to the walls and arch. A smaller section of 200 feet near the west portal was also reconstructed using the same materials. The steel rib and concrete lining replaced sections of the brick and concrete lining added in 1902.

Operators apparently considered the fan house job the most undesirable job on the railroad. The roadless location combined with wild stories about a ghost that haunted the tunnel made the job terrifying for many operators, particularly those negligent in their duties. The following account by Stockton operator C.W. Finch illustrates an incident at the fan house.

"One time the Chief Dispatcher at Stockton, Larry Ross, thought he would sneak up on an operator at the fan house who was often drunk on the job. This operator had caused so much trouble there, and in the past the chief had always failed in his attempts to catch the man drinking. This time Chief Ross hoped he would find the evidence necessary to dismiss the man.

The chief and four men left Stockton in an old 'Model-T' Ford about midnight and headed for the tunnel. It was a cold, autumn night, but accompanied by the usual gallon of drinking alcohol to ward off the chill, or perhaps in case of snakebite, they made the fifteen-mile trip without incident. When they arrived at their destination at the east end of the tunnel the last train was just passing through. The next one would not be along for three hours.

The chief and his men walked all the way through the tunnel. When they arrived at the fan house they shined a light through the window, sure they would catch the operator asleep, and they found the place empty. Ross unlocked the door with his switch key and walked inside. Although he found the place empty he could still smell the odor of pipe smoke and figured the man was around there somewhere, even though the man was nowhere to be seen.

Ross telephoned the operator at Rice, the next station west of the tunnel. This was the place where the man going on duty left his automobile and then climbed aboard a handcar and pumped himself to the job at the fan house, one mile away. The man being relieved would then take the handcar back to Rice and leave it for the next man coming on duty. Some of the men, however, had their own handcar and would keep it right at the fan house while at work.

The operator at Rice, thinking that the chief was back in his office at Stockton, informed him that the fan house operator had just left for Hanover, saying that he had to go because his wife was having a baby, but would be back in one hour. 'Hell, he isn't even married,' the chief snorted. 'The guy is down there somewhere in a tavern.'

While waiting for the operator to show up the chief and his men made elaborate preparations for his homecoming. They all wanted to give the man a good scare, and eagerly awaited his return.

A string was passed through a fork in the small tree next to the rear window of the office and attached to a small nail just above the window opening. A medium-sized nut tied on a small string two feet from the end so that when the string was relaxed it would allow the nut to bang up against the window in whatever manner the man on the other end of the string desired. They sat back and waited.

When the operator finally appeared they could see that he was drunk as a skunk. As the fellow pushed his handcar away from the tracks he heard strange noises coming from the tunnel. The moans, groans, and other unearthly sounds soon had the man running for his office and he almost broke down the door in his haste to enter. He slammed the door shut and then immediately barricaded it with a chair. He seemed to be terrified. The chief and his men were delighted at their success.

When the man on the string started pumping away with his device, two shots and the sound of breaking glass echoed through the tunnel entrance as the man shot out the window. After a few more minutes of harassment he suddenly appeared in the doorway with his pistol firing madly as he raced for his handcar. The chief and the others hit the dirt as the bullets whined away in the darkness and ricocheted off the nearby cliff, but soon regained their feet when the man pumped madly away on his vehicle. He never came back.

After the chief and his men recovered from their hilarious laughter someone brought up the subject of the fan house job, which was now abandoned. Someone was going to have to protect this job. With nobody else around to take care of the job the chief ordered the second trick man at Stockton to finish out the shift. This man was one of the men who accompanied the chief to the tunnel and had previously worked his eight-hour shift at Stockton that night. He was not happy, to say the least.

He finally did consent to protect the job when the chief promised him that someone would drive over and pick him up when the shift was over and the day man relieved him. The chief returned with the others to Stockton.

In a week or so the man who had been frightened at the fan house showed up at Stockton to get his pay. He reported all sorts of fantastic stories about the Winston Tunnel ghost to anyone who would listen, and since the company was short of operators that day they had to put the man back to work, although he refused to ever work at the fan house again. His tales about the ghost became wilder and wilder as the years passed."

Major savings to the CGW came from dieselization in 1948. New diesel locomotives effused much less heat and smoke in the tunnel than old steam locomotives allowing the railroad to close the fan house. Workers removed the wooden shroud and fan duct, although the fan house remained intact. Earlier, both Winston and Rice Stations had been closed.

A young William N. Deramus III assumed control of the CGW in 1949 determined to improve the property. Because the railroad enjoyed relative economic prosperity with the post Second World War boom, Deramus had the cash he needed to modernize the plant. Between 1949 and 1951, capital expenditures for track, bridges, and structures totaled \$6.9 million and for equipment \$15.7 million.

Deramus also considered relocating the main line in Northwestern Illinois. In 1951, the CGW employed the Chicago engineering firm of DeLeuw, Cather, & Company to submit a field study and engineering report for an improved main line between MP 150, near Rodden, Illinois, about 13 miles west of Stockton, and MP 196, near Farley, Iowa. This required a survey of the entire area between the two endpoints to locate the most desirable route and included plans for all of the structures and bridges demanded along the line. The railroad specified that grades on the new line be limited to a maximum of .80 percent and that curves are limited to a maximum of 2 degrees, or 1 degree wherever possible, which would permit operations of 200-car trains at speeds in excess of 80 mph. After a preliminary field study the railroad quickly agreed to move the starting point east to MP 137, near Stockton, which would save an additional 4 miles between the field study endpoints.

Engineers were unable to find an inexpensive way to navigate the Mississippi River; bluffs rise sharply several hundred feet above the level of the river and numerous rivers and small streams crossed the rough undulating countryside of the survey area. Solid rock is on the surface in many places and between 6 and 20 feet of dirt, clay, and sand cover stratified and solid limestone along the entire route.

The proposed Stockton Air Line Railroad would run in a fairly straight line from Stockton to Farley. The airline was only 47.8 miles long between the endpoints, compared with 58.3 miles between the endpoints of the existing route. To maintain the maximum .80 percent grade, a 7,000-foot long, 221-foot deep cut would be needed at MP 148 near Rodden, the highest point of the line east of the Mississippi River. The proposed line would span the Mississippi River with a massive 6,165-foot bluff top to bluff top single-track bridge. The east abutment of the bridge would be located 1.5 miles north of Galena Junction and the west abutment would be near St. Donatus, Iowa. U.S. Highway 20 would also have to be relocated a total of 6,000 feet to accommodate the relocation.

The existing main line east of the river between Stockton and Galena Junction, including the Winston Tunnel, would be abandoned while the track west of the river between Farley and Dubuque would be retained to provide local service. A wye connection and a 1,400-foot siding would be constructed at MP 184.5 between the airline and the existing main line. New 115-pound welded rail, creosote ties, a foot of ballast, and automatic block signals would be added to the line.

The estimated cost of the Stockton Air Line Railroad was a staggering \$37,219,900. The prohibitive cost ended management's plans for major line relocation. Some CGW was suggested that "they could pay for CB&Q and IC trackage rights forever to cross the river and still come out ahead."

On August 12, 1956 the CGW annulled Chicago to Oelwein passenger trains, although Dubuque to Oelwein passenger trains continued until September 30, 1956, when the CGW received regulatory permission from the Iowa Commerce Commission.

In 1964, the CGW again employed the Chicago engineering firm of DeLeuw, Cather, & Company to submit an engineering report to either relocate the main line using an open cut or improve the existing tunnel and approaches to provide additional vertical clearance. The railroad required that any relocation considered be less than 5 miles in length and that the present tunnel vertical clearance of 18 feet, 6 inches, from the top of the rails to the bottom of the arch, be increased to 22 feet.

The Winston Tunnel had deteriorated considerably since it was last repaired in 1947. Salt, used to treat ice that accumulated on the floor of the tunnel during cold weather, had deteriorated the bottom of the walls, grade beams, and floor. Sections of the brick and concrete lining installed in 1902 was cracked and pushed out by ground water. The plain concrete floor added in 1918 was breaking up and parts had pushed up through the floor. Both portals were cracked and worn. The north retaining wall at the west portal was displaced and had been hastily shored up with timbers.

Engineers initially considered three possible alternatives to relocate the main line using an open cut: relocate the main line to the north of the tunnel, daylight the tunnel, or relocate the main line to the south of the tunnel. The 2.6-mile southern route was considered the most viable alternative. It provided lighter grades and fewer curves than northern route and would not have removed traffic from the main line during construction as daylighting the tunnel would have.

Further consideration was given to the possibility of improving the existing tunnel and approaches to provide additional vertical clearance. Engineers examined improving the tunnel and approaches with and without traffic. Lowering the floor and approaches was considered the most viable alternative because the floor needed repair and the arch and walls were in serviceable condition. Improvements would include replacement of the floor, approaches, and retaining walls and repair of the walls and portals. Finally, new rails, ties, ballast, and signals would be installed.

Based on this report the cost to relocate the main line using an open cut would be \$6,888,000, and the cost of improving the existing tunnel and approaches with traffic would be \$2,116,000, and without traffic \$1,648,000. The engineering firm concluded that relocating the main line could not be considered on a comparative economic basis with improvements made to the tunnel. Although the cost of improving the tunnel was certainly reasonable, the needed repairs were not made. New merger talks with the C&NW sealed the fate of the Winston Tunnel.

As the end of an independent CGW drew near, the railroad operated four daily Chicago to Oelwein time freights through the crumbling tunnel: #91 and #143 westbound; #90 and #192 eastbound. The operating philosophy was to hold for tonnage and move heavy tonnage trains, on one occasion 15,000 horsepower lugged 275 cars through the tunnel; however, most trains were 9,000 horsepower. IC operators who controlled CGW movements to the west of the tunnel between Portage, Illinois and Dubuque Junction referred to these prodigious freights as "mortgage lifters."

IC relief operator LaVerne Andreessen worked the second trick at East Dubuque, Illinois for three weeks in 1965. He described a visit with a CGW engineer, "one evening, the CGW called and asked if I would place #143 into the IC's Center Siding at East Dubuque. The train was, by CGW standards, relatively short, and fit quite easily. It was an easy thing for me to 'store' the train as the CGW did not want the train over into Dubuque on account of #90 either in town or due to arrive soon, so the East Dubuque meet was arranged. It was common for the CGW to arrange their own 'meets' on the CGW double track - by merely holding #143 at Galena Junction on their own track, and when #90 got ready to get out of Dubuque, the CGW would 'turn #143 loose' and the two would meet at track speed on the IC's double track between East Cabin and Portage approximately 12 miles to the east.

The IC's Center Siding had an electric switch on the east end, and the train could be routed from the westbound main through the electric switch, through a spring switch located at the south end of the center siding and put away. Upon leaving, I would use the 'armstrong' levers and let the train out of the north end of the siding. No problem - so I did so. I recall they arrived about 9:30 PM CST.

Shortly after the train came to a stop, the office door opened and in walked one George Green, bedecked in traditional engineman garb as I recall. We discussed a wide range of things as they were there for an hour or so. One yarn he told me was that in his earlier days with the railroad the CGW used to have pusher engines to help trains up through the Winston Tunnel. After shoving an eastbound up through the tunnel, it was great fun to drift back west and stop at the tunnel entrances in the Spring and look for recently awakened rattlesnakes warming themselves in the sunlight on the rapidly heating rock outcroppings. And, the crews would take the 'squirt hose,' which was used to clean up about the cab, and give the snakes a shot of hot water directly from the boiler. He said it would 'really get 'em riled up.' I am certain this also proved fatal to the snakes as well.

Now what prompted this yarn as I recall was his telling that a short while before arriving at East Dubuque, they had stopped at Galena Junction and set out a car for the CB&Q interchange. In the rapidly gathering darkness the brakeman opened a switch, thought he heard a noise, and as good braking practice would require, used his lantern to check the switch points. A rattlesnake had crawled into the closed portion of the switch points to keep warm due to the rail heat from the day's sunlight. The opened switch points caused the rattlesnake to fall down to the ties and ballast, and then stick its head and part of its body back up through the open switch points. The quick-thinking brakeman immediately lined the switch back to the direction it was, and managed to kill the snake by squeezing it in between the two-closed switch rails again. Now whether this yarn was true or not, I do not know. But, I do know that George Green was one hell of a story teller."

Proposed mergers of surrounding railroads would change the role of the CGW with these railroads. Management believed that bankruptcy would ultimately result if the CGW was isolated by friends and rivals and had to cover the constantly rising costs of labor and material alone. After considering merger with several railroads, the CGW found a determined suitor in the C&NW. Merger would yield substantial savings for both railroads and both railroads overwhelmingly backed the merger. An application for merger was filed with the Interstate Commerce Commission on November 13, 1964. The merger was delayed until July 1, 1968 because of regulatory opposition from shippers and other railroads.

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Bibliography

C. W. Finch, The CGW Winston Tunnel and its Ghost. Newell, IA, 1985.

R. Merle Funston, The Winston Tunnel and I. Newell, IA, 1983.

H. Roger Grant, The Corn Belt Route: A History of the Chicago Great Western Railroad Company. DeKalb, IL, 1984.

Phillip R. Hastings, Chicago Great Western: Iowa in the Merger Decade. Newton, NJ, 1981.

Robert P. Howard, Illinois: A History of the Prairie State. Grand Rapids, MI, 1972.