



The AT&SF RAILROAD SHOPS AND OPERATIONS at San Marcial, New Mexico



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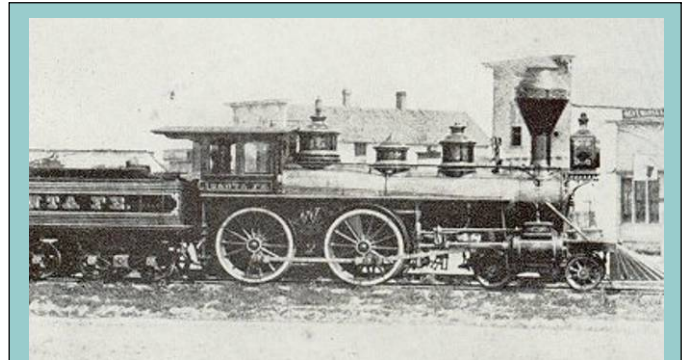


Photo: Kansas City Historical Society
“The Santa Fe,” engine no. 35, pulled the first passenger train from Kansas City to California in 1881, with a coal and water stop at San Marcial.

1. History of AT&SF and San Marcial Yards

The Atchison, Topeka and Santa Fe (AT&SF) Railroad – the “Santa Fe” – began construction in 1870 to compete with the Union Pacific railroad – the only transcontinental railroad at the time. AT&SF reached Raton Pass and Las Vegas, NM in 1879; Socorro and San Marcial in May and June 1880, and arrived at Deming, NM on March 8, 1881 to connect with the Southern Pacific rails to California. By 1882, the Santa Fe line extended from Chicago to San Francisco to become the nation’s second transcontinental railroad. AT&SF had built 550 miles of railroad through New Mexico in about two years.

In 1994, AT&SF merged with the Burlington-Northern railroad to become the Burlington Northern and Santa Fe, changing their name in 1996 to simply “BNSF Railroad.” BNSF now has 32,500 miles of trackage and three transcontinental routes, much of it trackage of the former Santa Fe Railroad.

From 1880–1929, San Marcial was an important railroad town to the Santa Fe Line.

Why San Marcial, NM? – The rail distance from Topeka, KS to Los Angeles, CA was right at 2,000 miles. AT&SF wanted to build a major maintenance facility about half-way along their route. San Marcial was chosen, being at mile post 1005 on the Santa Fe line. San Marcial was also selected where the railroad would cross to the east side of the Rio Grande for the shortcut through the Jornada del Muerto, rather than the longer and more arduous route along the river.

Shortly after the railroad arrived in San Marcial, construction began on the rail yards, shops and offices. By 1885, San Marcial had a depot, rail yards, machine shops, a roundhouse and turntable, coaling chutes, and other facilities. Due to this concentration of rail facilities, San Marcial was designated the Southwest District Headquarters, an important distinction. The small farming village suddenly exploded into a major rail town. The railroad employed around 400 people living in San Marcial, and others on the section crews. The population of San Marcial was 742 in 1895, swelling to nearly 2,000 by 1910 – making it the 2nd largest town in Socorro County.



Photo: Paul Harden
San Marcial today





Photo: Kansas City Historical Society
The standard engine in AT&SF freight service from 1880–1910 was the 4-4-0 type engine

2. San Marcial Operations

As the District Headquarters, San Marcial was responsible for virtually all aspects of AT&SF operations in southern New Mexico. Facilities at Las Vegas, NM and Trinidad, CO maintained the railroad in northern New Mexico. South of Albuquerque to Deming and El Paso, and some of the mainline to California, was administered out of San Marcial.

A large 2-story wood frame building served as the depot and freight offices on the ground floor, and Division offices on the 2nd floor. Around 1910, another structure was built to house additional offices for the Division Headquarters and the shops. (After the 1929 flood, portions of the depot was moved to Hatch, now used as the library building).

For much of its life, there were at least three freight trains and one passenger train daily between Albuquerque and El Paso and Deming, plus the transcontinental traffic until the mainline was routed through Abo Pass after 1908–1910.

Passenger trains ran daily departing from both Albuquerque and El Paso about 10 p.m. and meeting



Photo: SCHS, Ralph Lane Collection
San Marcial Depot and District offices, circa. 1918

half-way at San Marcial. The westbound train departing Albuquerque arrived Socorro at 12:45 a.m. for a passenger and express freight stop (such as the mail and money transfers) and take on water. Departing Socorro it arrived at San Marcial at 1:20 a.m. Thirty minutes later, the east train from El Paso would arrive.

The two passenger trains remained in San Marcial for about an hour as the tired engines were removed from service and replaced with new locomotives – their tenders freshly coaled and watered. The train engineer, fireman, brakeman and conductor also changed shifts at San Marcial, where the train crews and their families lived. At 2:30 a.m., the westbound train pulled out of the station for El Paso followed shortly by the eastbound train departing for Albuquerque with their fresh engines and crews.

Some of these passengers were on prolonged trips to Los Angeles or Chicago destinations. Often, these passengers would disembark for a night's sleep at the nearby Harvey House to continue their trip the following evening.

This midnight and early morning daily passenger train down the Rio Grande, occurring in the dead-of-night, is the reason why historic photos of the passenger service are virtually non-existent. What photos exist are those of daytime special passenger trains.



Photo: SCHS, Ralph Lane Collection
San Marcial freight yard, circa. 1912

Freight trains operated in a similar manner to the passenger service in that most engines and the crews changed at San Marcial. Some of the engines on the manifest freight trains began their journey in Trinidad, CO, climbing over Raton Pass with a helper engine before arriving at San Marcial. The “hot” engines with 400 miles on them, were shuffled to the roundhouse for regular maintenance, lubrication, and cleaning. Most engines were returned to service the next day unless repairs were needed.

Train crews would take an eastbound freight to Albuquerque, then work the next westbound train to return to San Marcial to complete an 8-hour (or more) shift. Likewise, on eastbound freights from El Paso or Deming, the crews would layover in San Marcial. El Paso and San Marcial had layover quarters for the railroad crews.

Section Crews – In addition to the train crews and those working at the San Marcial shops and yards, San Marcial, as the District Headquarters, also supervised a team of workers known as Section Crews. These were workers that constantly patrolled the tracks and performed needed maintenance, such as track alignment, replacing bad ties or ballast, elevating the track beds in flood prone areas, maintaining switches and the sidings, and the like.

This work was normally conducted many miles away from San Marcial. As a result, the railroad built “section houses” for housing the men in the remote locations. Section houses near San Marcial were built at Sabinal, La Joya, Socorro, Lava Station and Engle. A section house and crew were normally responsible for 20-miles of track, a section, or 10 miles of track in both directions from the section house.

Typically, a Section Crew consisted of 6–12 men, or more depending upon the work being done. They would “work the rails” and live in the Section house

R D	or Siding (Feet)	Station Nos.	Mile Post	MAIN LINE STATIONS	Rule 4.3	Type of Oper.	Line Segment	to Next Stn.	to A R D
		40015	915.0	EAST ISLETA				7.8	
		40010	922.8	LOS LUNAS		CTC		0.9	
			923.7	CP LOS LUNAS				3.7	
		40005	927.4	CHIOE		TWC		5.0	
			932.4	BELEN JCT.	R			0.7	
		40004	933.1	BELEN	BCPRT	8 MT CTC		1.3	
			934.4	EL PASO JCT.				8.1	
		29785	942.5	SABINAL				11.0	
7,790		29780	953.5	LA JOYA				24.3	
4,147		29765	977.8	SOCORRO	PT	TWC		10.4	
		29760	988.2	SAN ANTONIO				16.9	
6,004		29745	1005.1	SAN MARCIAL				7.2	
		29740	1012.3	POPE				9.1	
		29735	1021.4	LAVA			7300	21.7	
		29725	1043.1	EAST ENGEL		DT		1.8	
			1044.9	WEST ENGEL		TWC		28.8	
		29705	1073.7	GRAMA				5.9	
		29700	1079.6	RINCON	PT			7.7	
7,590		29660	1087.3	TONUCO				8.4	
		29645	1095.7	MEDLER		TWC		5.4	
		29630	1101.1	LEASBURG				11.4	
		29600	1112.5	LAS CRUCES				2.5	
		29590	1115.0	MESILLA PARK				8.9	
8,393		29580	1123.9	MESQUITE, NM				15.9	
		29540	1139.8	VINTON, TX				2.6	
		29530	1142.4	CANUTILLO				12.7	
		29500	1155.1	EL PASO	BCPRT			240.1	

Source: BNSF Belen-El Paso Route (2004)

BNSF table showing distances between stations and sidings and mile post number.

for about a week at a time, then return to their families in San Marcial for several days off.

The AT&SF section houses were narrow and long single story buildings, much like a modern day motel. An end room served as a common kitchen. Two men lived in a room with a wood or coal stove for heating. Two rooms shared a chimney for their heating stoves.



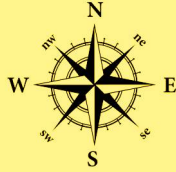
Photo: Paul Harden
Remnants of the San Marcial Division Section House at Lava Station (AT&SF milepost 1021.4) 16 mi. south of San Marcial.



Photo: Paul Harden
Drone photo of the Lava Station Section House and water tank foundation, looking north towards San Marcial.

North, South, East or West?

Train Directions – As a side note, all trains between Raton Pass and El Paso were north or southbound. However, in Santa Fe railroad language, train travel was only either east (towards Topeka) or west (towards California). Thus, northbound trains through San Marcial were actually EAST trains (as in the Train Order example to the right), and southbound trains were WEST trains.



The AT&SF section houses were very distinctive by their cluster of chimneys for a small building.

Today, the section house at Lava Station on the Armendaris Ranch, 16 miles south of San Marcial, still stands. The section house at Sabinal has been converted into a home. The others are long gone.

Freight & Stock Yards – The primary purpose of the San Marcial facilities were a refueling and maintenance facility on the Santa Fe line. However, it quickly became popular as an area shipping point for cattle and goods, shipping gold and lead ores from the Rosedale mines to the Asarco smelter in El Paso, and lumber from the Magdalena mountains. Supplies and soldiers arrived at San Marcial for nearby Fort Craig until it closed in 1887.

This demand for shipping freight, cattle, lumber, and ore seemed an unexpected surprise to the railroad. As a result, a substantial stock yard and ore shoots for the Rosedale mines were built south of the depot (near the roundhouse). Ore was brought to San Marcial from Rosedale, about 25 miles away in the San Mateo mountains, via wagons, converting to trucks in the 1920s. The freight service in and out of San Marcial became a significant source of revenue for the railroad and led to the town's growth.

Telegraph Office – was an important function at San Marcial, as it was at any train station. The station telegraphers handled all communications for the railroad. Most important were the "Train Orders," issued by the Albuquerque, San Marcial or El Paso dispatcher or train master that controlled all train movements throughout the district. An engineer did not move a train without a written copy of the Train Orders in his hand. Train Orders told the engineer exactly when to depart and arrive at various destinations, which siding to enter to allow the passage of another train, special speed limits in effect, and other items for the safe travel of the trains.

This was especially important south of San Marcial

Photo: SCHS, Roy Carrero Collection

An example of a Train Order informing the engineer of an "extra" (an unscheduled train) exactly where and when to be to allow the safe passage of a manifest (scheduled) train.

to Rincon (north of Las Cruces) where the route passed over 80 miles of remote single track through the Jornada del Muerto. It was vitally important to ensure a train had clear passage through the Jornada. When two trains met on a single track head-on, the outcome was not pretty and expensive to the railroad.

Often, there were both east and westbound trains passing through the Jornada. One engineer was given Train Orders to pull into a specified siding to allow the other train safe passage through. The sidings at Engle and Lava Station were used, the only two stations with a telegrapher (and a water tank for thirsty engines). The telegrapher would report the arrival or passage of each and every train to the dispatchers at San Marcial and along the line to verify the location and movement of all trains. As a result, there were few mishaps or accidents in the San Marcial District due to the railroad telegraphic network and the trusty telegraphers.



Photo: NMSU Photo Archives

Job one for railroad telegraphers was keeping track of train movements. When two trains met on the same track – it was not a pretty sight.



Photo: SCHS, Ralph Lane Collection
San Marcial maintenance shops and roundhouse, looking northeast, ca. 1919

3. San Marcial Maintenance Division

The Santa Fe railroad facilities at San Marcial were established primarily as a maintenance and overhaul facility. Steam locomotives require frequent maintenance. The Federal Railroad Administration (FRA) has the "1472 Rule," requiring a full inspection every 1,472 days of engine use – a rule still in effect today for steam locomotives and excursion railroads running steam. This requires a complete rebuild and overhaul of the boiler, flue pipes and other engine components every 12–18 months of service to ensure the steam engine is operating properly and safely. The 1,472 days is based on the number of days the engine is under steam pressure, not calendar days.

The 1472 Rule work, complete engine rebuilds, and other needed repairs and maintenance were performed at San Marcial.

The Belen cut-off through Abo Canyon and the new mainline to California via Kingman, AZ were completed beginning in 1908. This was to reduce the bottle-neck mainline rail traffic over Raton Pass and down the Rio Grande. The large Santa Fe Railroad maintenance shops in Albuquerque were built 1912–1920 to meet the growing demand for engine maintenance and overhauls from the increased mainline rail traffic through New Mexico. However, San Marcial remained a busy and important maintenance facility for the continued mainline traffic still rolling down the Rio Grande to El Paso and Deming to California.

Maintenance Shops performed all general maintenance, major repairs, and the 1472 Rule overhauls of the locomotives. The San Marcial shops were extensive with the best lathes, milling machines, forges, and other machinery powered by their own steam power plant.

Beginning in 1912, the shops were electrified for better lighting and motor driven machinery.

These machines fabricated engine components, casting metal parts, remachined axles, bearings and drive wheels, boiler work, plus tool and die making, all to support the maintenance needs of the railroad. The shops were a busy place. Most documentation states San Marcial employed around 400 people with the majority working in the maintenance shops and the yards.

One of the distinctive maintenance facilities at San Marcial were the Roundhouse and turntable.

The Round House is a building with a semicircular shape used by railroads for servicing and storing locomotives. They are usually associated with a turntable. At San Marcial, the roundhouse consisted of 19-stalls for servicing locomotives and their tender, or other rolling stock requiring maintenance attention.

When an arriving engine was taken out of service for general maintenance, it was placed into one of the stalls of the roundhouse for the needed work to be performed. This generally involved cleaning the ash pit under the fire box, lubricating pertinent bearings, axles, and the timing valves, checking the steam and air system for leaks, proper operation of the gauges, and other checks. This work took a couple of hours, usually keeping a fire in the fire box so the engine wouldn't go "cold." (Firing up a cold engine for sufficient steam pressure can take 2–3 hours). A trap door in the roundhouse ceiling is opened to allow the locomotive exhaust to escape when servicing a hot engine.

Once the maintenance actions are completed, the engine is backed out of the roundhouse where it is cleaned and washed with fire hoses, or using hot

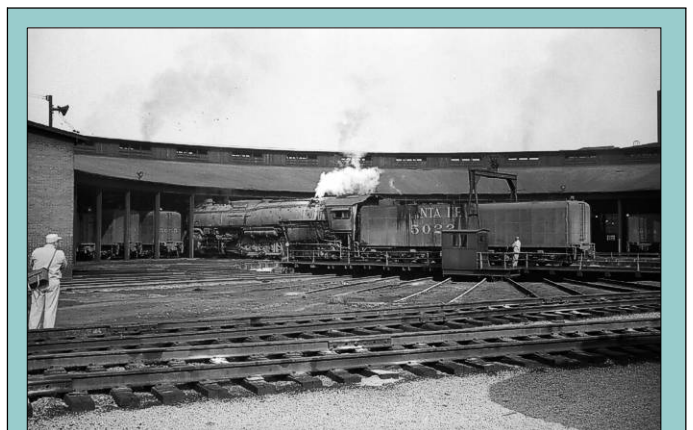


Photo: Don Kaiser, AT&SF Columbus Railroad Society
AT&SF roundhouse and turntable similar to the arrangement and appearance at San Marcial.



NMSU Library / Archives & SC

Photo: NMSU Photo Archives [Image #03620017]

Inside the San Marcial roundhouse. Collection states photo taken in 1885, shortly after being built.

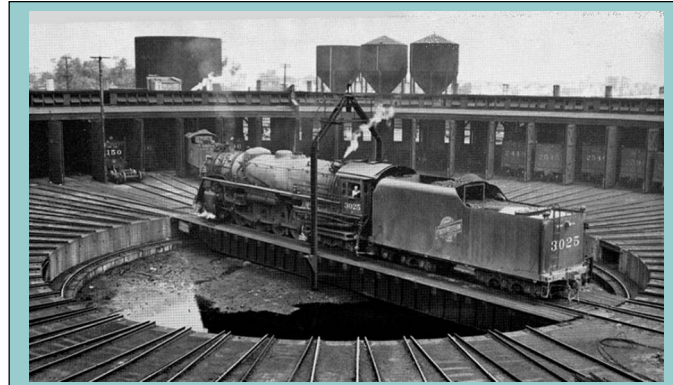


Photo: Industrial Scenery

A locomotive on the turntable being turned at the roundhouse similar to the San Marcial installation.

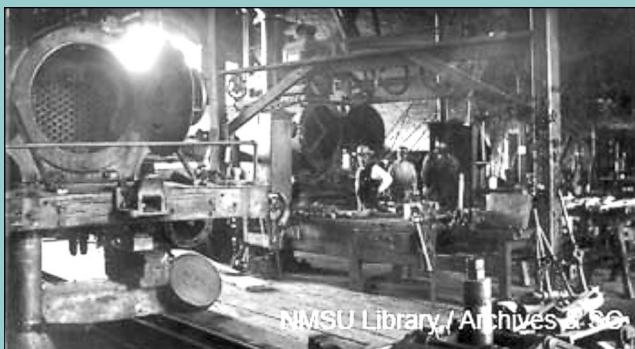
water from the engine's boiler. Once cleaned, the engine is placed back on the yard trackage and moved to the coaling bin and water tank to fill the tender with coal and water. It is again ready for service, and may well be pulling a freight train out of the yards within an hour or two or placed in a reserve status.

The roundhouse was also used for more extensive monthly maintenance, repairs, and for the 12-18 month 1472-Rule overhauls. Regular rolling stock, such as passenger coaches, freight cars, or a caboose, were also sent to the roundhouse when repairs were needed.

Most roundhouses were constructed of brick walls to support the wood roofs, overhead cranes, and other internal structures. San Marcial is unique in that the walls were built from local stone and cement (vs. brick). Documentation suggests the roundhouse was likely built in 1883, and photos verify it was built and in operation by 1885. Like all the AT&SF shops at San Marcial, the roundhouse was destroyed in the 1929 floods. (See Sect. 4, page 7).

A Railroad Turntable is a device for turning locomotive engines or cars around in tight spaces. For example at San Marcial, an engine from El Paso could be "turned around" on the San Marcial turntable to return to El Paso. The turntable was also used to position an engine into one of the 19 maintenance stalls in the roundhouse. The turntable was long enough to hold an engine and her tender.

Turning an engine was tricky business. The turntable was pivoted in the center. An engine was positioned on to the turntable to balance the weight on both sides of the pivot, which varied from engine to engine. Chocks were placed on the driver wheels and the brake lines bled for full braking power. A device was normally placed on the throttle to prevent any accidental leakage of steam into the drive cylinders before the turntable was moved. Failure to follow these procedures could result in the engine to "creep" forward and derail, or worse, fall into the turntable pit or topple off the turntable.



NMSU Library / Archives & SC

Photo: NMSU Photo Archives [Image # 03620018]

Inside the San Marcial roundhouse performing an engine boiler rebuild, ca. 1918



Photo: Friends of the Cumbres & Toltec Scenic Railroad

D&RGW engine #485 was a total loss and scrapped after rolling into the turntable pit at Salida, CO.

The photo on page 6 shows the result of a turntable mishap. In this case, the D&RGW narrow gauge engine had just received her 1742 Rule complete overhaul in the shops at Salida, CO in December 1953. It had just been fired up and moved out of the shop. The engine had not been properly chocked or chained to prevent accidental movement. A leaky throttle caused the engine to creep forward along the track leading to the turntable, which was

not in proper position. The engine struck the side of the misaligned turntable, causing it to derail, and engine 485 (a Baldwin K-36 4-8-4 narrow gauge engine) tumbled into the turntable pit. The frame was severely bent and the engineer's side drive cylinder cracked open, causing the D&RGW to declare it a complete loss. It was scrapped in 1955.

There is no documentation to suggest such an incident ever occurred at San Marcial.

4. The 1929 Flood: Destruction of San Marcial and the AT&SF Yards

Rio Abajo Flood History

An attempt to tame the Rio Grande began in the 1920s with the construction of levies and conveyance channels. The diversion dams at Isleta and San Acacia were built later in 1934. Prior to that, the river had virtually no flood control and ran dry in some years and flooded in others as the river dictated.

The San Marcial/Valverde area has been flood prone throughout its history. Floods caused the abandonment of Fort Conrad (north of San Marcial) in 1857 to establish Fort Craig on higher ground. The village of San Marcial was destroyed by a flood in 1866, with flooding every few years following.

A major flood in 1920 caused significant damage to the area, inundating hundreds of acres of crops. Silt from these floods had raised the river bottom to the elevation of the fields. This caused levies to be built from Valverde to San Marcial, along both sides of the river, to protect the towns and the fertile fields from future flooding.

1929 San Marcial flood summary

The 1929 floods along the Rio Grande were the result of two periods of heavy monsoon rains in August and September. The widespread rains overwhelmed the Rio Grande from excessive flows in the river and the tributary arroyos.

First Flood — August 13, 1929

Heavy monsoon rains fell over the region August 8–13. Excessive drainage from the Rio Chama, Rio Puerco, and Rio Salado watersheds, and Socorro area arroyos, overwhelmed the already high waters in the Rio Grande. The river became dammed by debris at the San Acacia highway bridge about midnight. This was noticed by the railroad telegrapher at the San Acacia station, who began alerting the townspeople to flee and telegraphed the warning to the downstream towns, no doubt saving many lives. At 2 a.m., the San Acacia bridge gave way, releasing the debris, and sent an 8-foot wall of water down the Rio

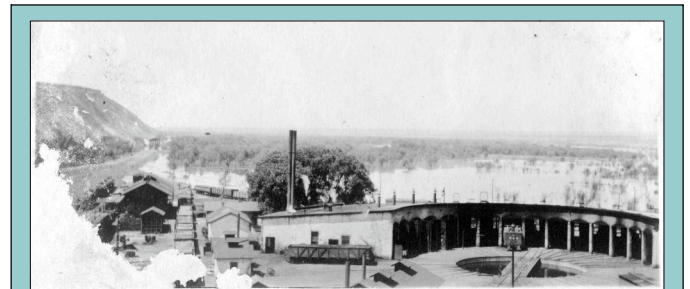


Photo: SCHS

San Marcial shops and roundhouse waiting for the flood waters to recede following the first flood.

Grande. This flood surge caused flooding and damage at Polvadera, Lemitar, Socorro, San Antonio and Guadalajara before reaching San Marcial.

Flood waters began rising around Valverde and San Marcial early morning. Levies broke in several places at Valverde and Tiffany, flooding the towns and farm lands. Soon, the entire basin north of Black Mesa to Valverde (on the east side of the river) was submerged. While the levies at San Marcial held, the continuing rising floodwaters breached the levies until San Marcial was inundated under 4–5 feet of water and silt. Rio Grande flow at the San Marcial railroad bridge peaked at 47,000 cu. ft. per second (cfs). Flood stage is considered 10,000 cfs or higher.

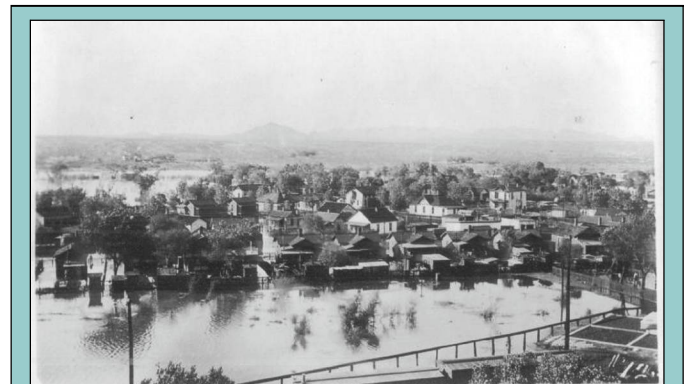


Photo: SCHS

San Marcial sat in water for over two weeks until the levy was opened to allow the flood waters to drain.

Once the floodwaters along the river began to recede, the levies “protecting” San Marcial became a curse by preventing the waters from draining back into the river. San Marcial became a bath tub and sat in floodwaters for over two weeks. Normal monsoon rains continued, the saturated ground a constant muck to make access to San Marcial nearly impossible except by boat or wading through waist deep water and mud.



Photo: SCHS

Shoring up walls in a desperate attempt to save their town from further damage after the first flood.

Finally, some of the townspeople and railroad workers intentionally broke the levy near the railroad yards to allow San Marcial to drain. It took several days for the flood waters to drain into back into the river, leaving the higher parts of the town dry, but buried in two feet or more of silt. Other portions of San Marcial remained submerged, those areas below the river level and thus unable to drain.

As the town drained, townspeople began returning to their homes to salvage what they could and to contemplate whether or not to rebuild. Period photos show businesses attempting to shore up their buckling walls and salvaging their inventories. The



Photo: SCHS

Destroyed San Marcial machine shop after the first flood with 3–4 feet of silt in the shop buildings.



Photo: SCHS, Powell Collection

2nd flood: River water rushing through the break in the levy to flood San Marcial and the rail yards.

Harvey House, depot, railroad shops and machinery were also buried under several feet of silt. Railroad auditors arrived to determine the cost of replacing the destroyed machinery and rebuild the shops.

Second Flood — September 23, 1929

About a month after the August flood, unusually heavy monsoon rains returned to the region, causing the Rio Grande to again reach flood stage on September 23. The silt buildup in the river, raising the river bed, caused worsening widespread flooding from Valverde to Black Mesa, including the farming village of La Mesa. For three days, flow down the river exceeded 35,000 cfs. The levies at San Marcial held, however, the break in the levy made to drain the town from the August flood caused torrents of rushing water to enter the town. The flood waters in San Marcial began to quickly rise. As the flooding continued, the inrush of flood waters from the river became so great, the swift current completely leveled the Santa Fe railroad shops and facilities, including collapsing the rock walls of the roundhouse. Rail yard trackage was washed away, derauling rolling stock and one engine.



Photo: SCHS, Powell Collection

AT&SF shops and roundhouse being swamped by the levy break during the second flood. Later in the flood, the shops and roundhouse collapsed.

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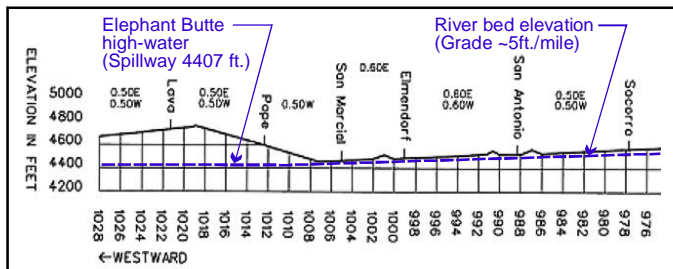
Furthermore, the headwaters of Elephant Butte Reservoir, filled to capacity from the August and September flooding, began flowing into San Marcial from the south, causing the river to flow “backwards.” The town was once again submerged under several feet of water. San Marcial was now part of Elephant Butte Reservoir and remained submerged until spring of 1930. By then, water logged adobe and concrete walls had melted and many buildings had collapsed under their own weight, including most of the AT&SF buildings. Most of San Marcial was gone.

The final kiss-of-death was reported in the Nov. 2, 1929 *Socorro Chieftain* newspaper:

“AT&SF has made the decision to abandon San Marcial. This means the stock yards, maintenance shops and the round house will be abandoned and not be rebuilt. All of the workers are being assigned to either Belen or El Paso, a payroll loss to Socorro County of \$12,000 monthly.

Without the commerce of the railroad, there was no San Marcial and little incentive to rebuild the town. The 1930 census showed only a handful of hearty souls still living in the area.

Due to the actions of the railroad telegraphers warning the towns along the river, there were no known deaths (possibly one in Lemitar) resulting from the 1929 floods. AT&SF loaded up many of the trains in the yard with residents and evacuated those with no other transportation saving many lives.



Source: BNSF Belen-El Paso Route (2004)

Track elevation chart from about Engle to Socorro, clearly showing San Marcial at the low point of the line and follows the river elevation from Socorro.

Two San Marcial Legends

San Marcial Bank. A common story is how the Bank of San Marcial’s vault is buried somewhere under the mud with \$100,000 in cash. Treasure hunters have been found over the years digging for the loot. It is well documented all \$138,000 in the bank was removed during the flood and temporarily deposited in an El Paso bank.

The Dec. 21, 1929 *Socorro Chieftain* reported after credits and embezzlement amounts were deducted, State Bank Examiner Lawrence Tamme certified \$107,000 in receivership to be distributed to the depositors, including AT&SF funds. During the flood, the bank’s \$138,000 in cash was removed by Assistant Cashier David Baca, who pocketed \$29,000 prior to delivering the cash to El Paso – the amount of the embezzlement cited above. He later voluntarily surrendered and returned the stolen money, receiving a light sentence for his temporary loss in judgement.



Photo: SCHS
The Bank of San Marcial

The financial losses in San Marcial were immeasurable, but not due to the bank.

Lost Engine. Another local legend states an engine tipped over and was partially buried in the mud. Rather than salvaging the engine, AT&SF buried it somewhere near the roundhouse. Treasure hunters have searched for this buried gem for years.

The only engine that suffered damage during the flood was engine #1859, a Baldwin “Prairie” class 2-6-2 used for “mainline power.” Floodwaters washed out the tracks causing the engine to tip over into the mud. It was quickly salvaged as shown in the photos. It was “cold” – no fire in the box. Why it was left in San Marcial and not towed to safety is not known. The engine received no frame or drive cylinder damage, mostly cosmetic. The cab was rebuilt and other repairs, returning the #1859 back into mainline freight service out of Belen. It was later used as a helper engine on Abo Pass until the engine was scrapped in the 1950s.



Photos: SCHS
Locomotive #1859 derailed into the mud during the flood and quickly salvaged by AT&SF crews.

Due to the several hours of warning of the approaching flood, AT&SF was able to remove most all rolling stock from the yards before the floodwaters struck. There are no engines, parlor cars, caboose or other rolling stock buried at San Marcial.

5. Maps and Images of San Marcial and the Railroad

This section contains maps and other data products on San Marcial, the 1929 flood, and the Santa Fe railroad facilities at San Marcial.

Assessor's Office and Middle Rio Grande Conservancy District) onto a present day USGS 7.5 min. San Marcial topo map. Little remains of San Marcial today. The map gives a fairly accurate portrayal of where San Marcial and pertinent features once stood.

San Marcial Map – The following map was constructed by superimposing a pre-1929 land owner map and survey map (Socorro County Court House,



Map by Paul Harden

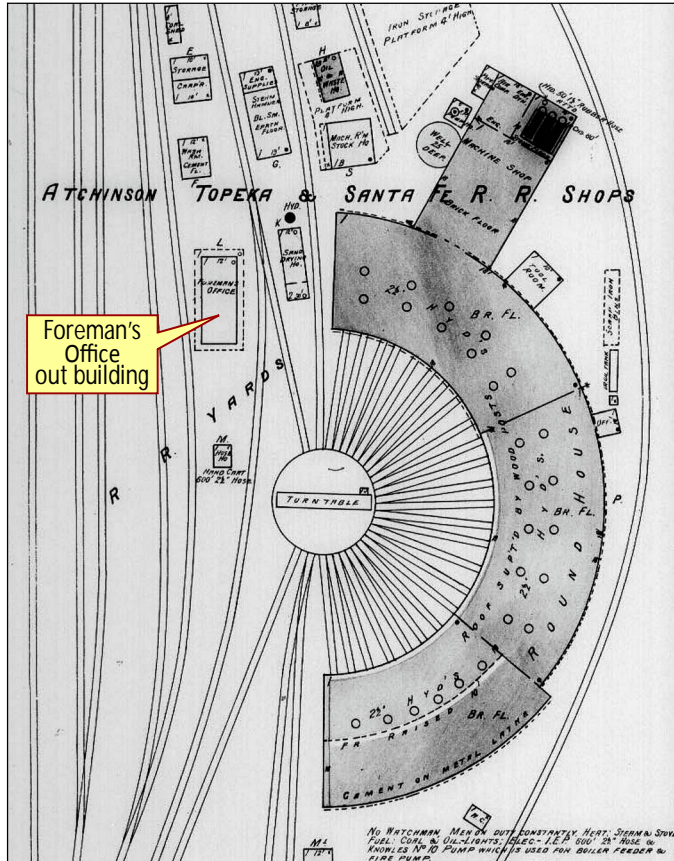


Image: Kansas City Historical Society, AT&SF Archives
Part of AT&SF engineering drawings of their "standard" roundhouse, turntable and shop plan. Appears very similar to San Marcial arrangement from known documentation. Note standard location of the "Foreman's Office."



Image: Socorro County Courthouse, Assessor's Office
Portion of 1927 map of San Marcial showing location of Santa Fe (AT&SF) roundhouse, shops and offices.

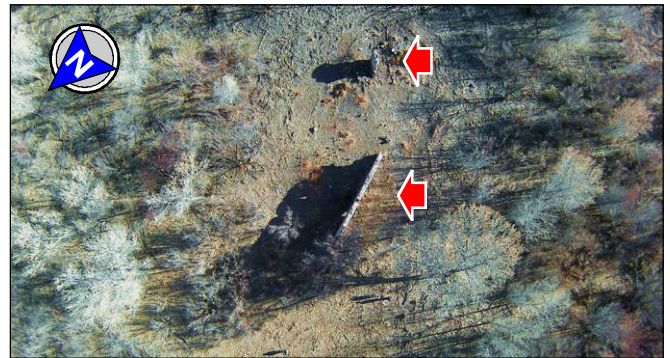
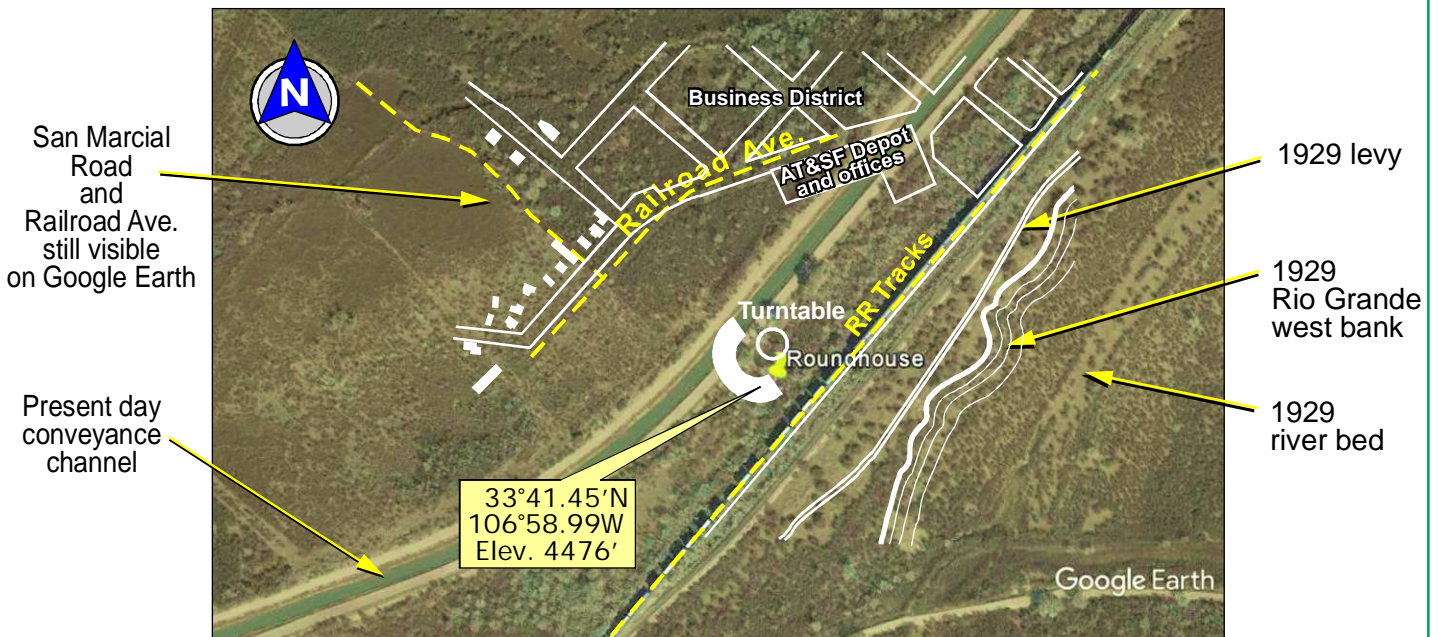


Photo: Craig Hennies
Drone photo of two existing roundhouse related wall sections at San Marcial.



1927 San Marcial map superimposed on 2016 Google Earth image

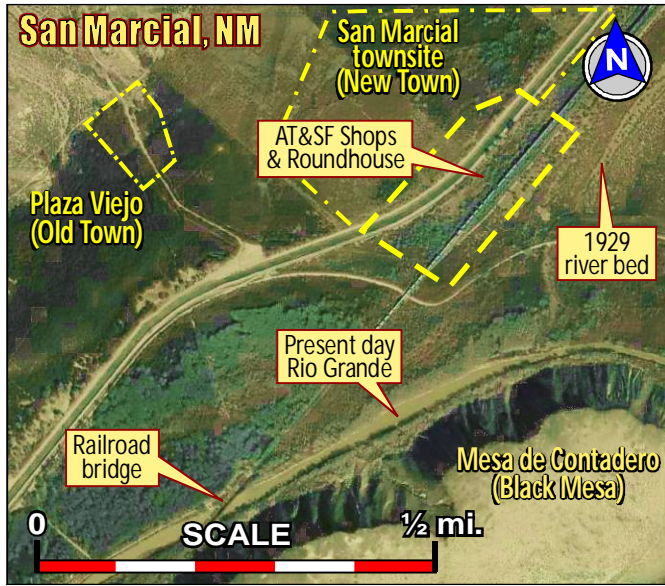


Photo: SCHS

San Marcial shops and roundhouse waiting for the flood waters to recede following the first flood. Photo taken from atop water tank, looking south.

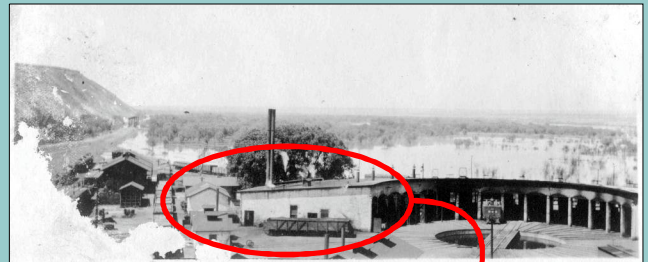


Photo: NMSU/Herbert Yeo Collection [image #00940131]

1937 flood photo which Herbert Yeo describes as "the roundhouse ruins from the 1929 flood." Ruins in 2018 appear little changed from the 1929 ruins.



Photo: NMSU/Herbert Yeo Collection [Image #00940107]

1937 aerial photo, looking southwest, showing remnants of the San Marcial roundhouse, shops and water tank.

6. Identification of Roundhouse Ruins

Analysis of historic photos from the 1929 and 1937 floods and pre-1929 San Marcial maps indicate the large existing wall segment is a portion of the roundhouse northeast end wall, and the smaller wall section was the back (south) wall of the Foreman's Office out building. From the 1937 photos, it appears the standing portion of the wall for stall #1 had collapsed before the 2018 visit and photos.

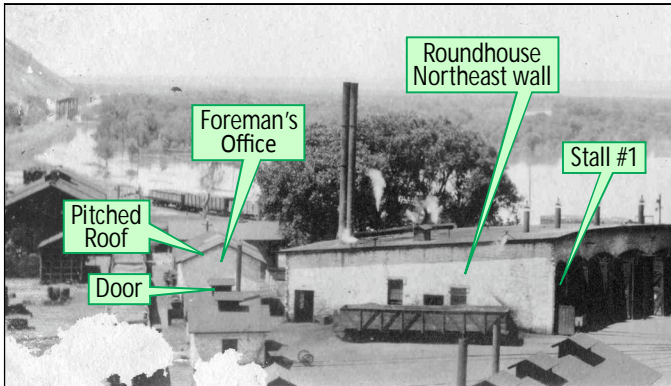


Photo: SCHS
After the 1st 1929 flood showing the roundhouse and shop out buildings, looking south.

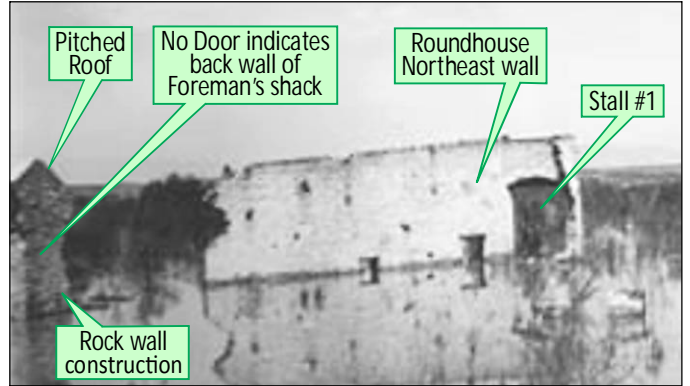


Photo: NMSU/Herbert Yeo Collection [image #00940131]
Roundhouse was destroyed in the 2nd 1929 flood. Appearance of ruins during 1937 flood, looking south.

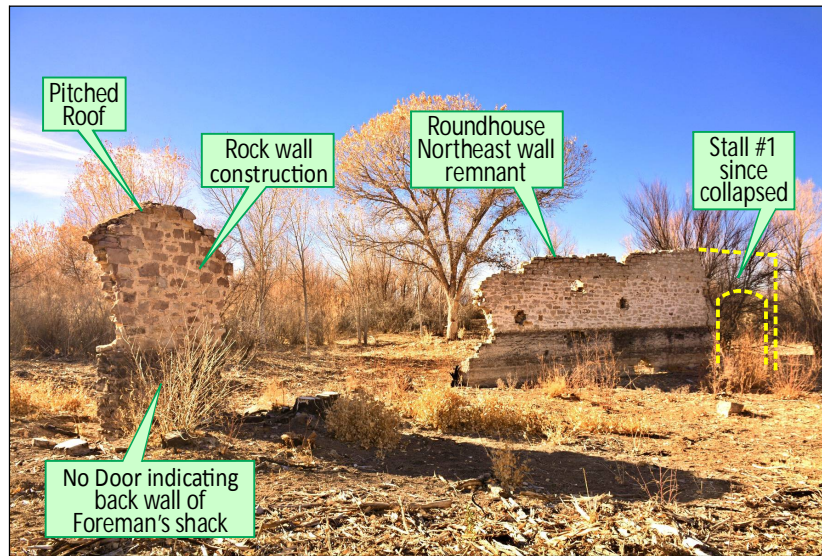
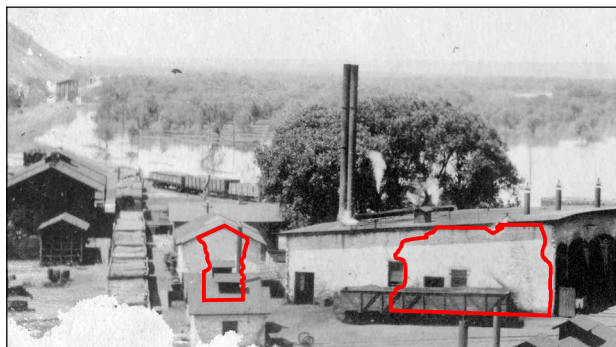


Photo: Paul Harden
Photo of roundhouse and foreman's shack ruins in January 2018, the area exposed during the 2017 bosque fire.



Red lines show likely origin of existing remnants

Photographs of the Roundhouse ruins

Photos by Paul Harden, SCHS
Photos taken January 15, 2018 – after the 2017 bosque fire



Existing remnant of the roundhouse; northeast wall segment, looking east; turntable to the left



Inspecting the roundhouse wall, looking west. Note water stain on wall, depth of 1929 flood waters.



Existing remnant of the back wall of the Foreman's shack, once supporting a pitch roof.



View looking west at Foreman's shack wall (left) and roundhouse wall (center).



Eastbound freight on the former AT&SF mainline track (now BNSF) through San Marcial, looking south from location of roundhouse, about 50 yards to the west (right) of tracks. AT&SF milepost 1005.5.



Mainline trestle across the Rio Grande, looking south, the entrance to the Jornada del Muerto and higher ground. Bridge was raised 8 feet after 1929 flood. AT&SF milepost 1005.8

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Map of San Marcial, 1928 river, railroad facilities

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Account of floods, AT&SF abandonment, bank status

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San Marcial flood photos, roundhouse arrangement

Socorro County Historical Society, member field trip to San Marcial, January 2018
Roundhouse location, identification, mapping, photos

Socorro County Courthouse, Assessor's Office, 1927 land ownership map of San Marcial (used in the squatters lawsuit filed by the Diamond A ranch)
Land ownership; location of railroad structures

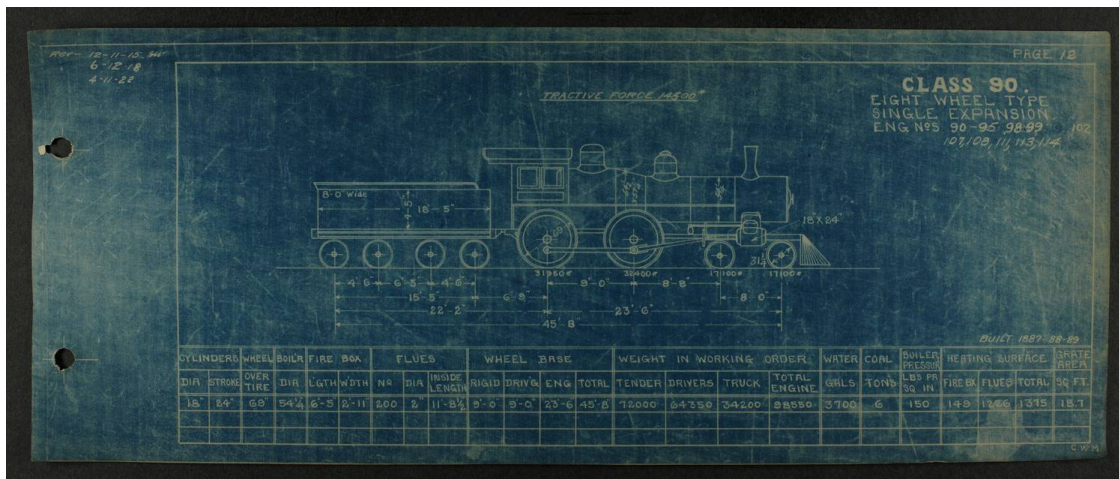
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University of New Mexico Digital Collections, "Map of San Marcial, New Mexico After Flood April-May 1937" by U.S. Soil Conservation Service
1937 map of San Marcial, river, levies, etc.

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Details on engine #1859 and other engines

Yeo, Herbert, 1937, "Report on Surveys Made Near San Marcial, New Mexico, Soil Conservation Service, Albuquerque, NM
Detailed report of flood damage, financial impact, etc.

—— "Improvement of the Rio Grande in Socorro County, New Mexico during 1929-1930, [NM] State Engineer
Description of flood damage, untenable situation



Engineering specifications for the 4-4-0 engines, used in the early days of the AT&SF transcontinental line and those that frequented the San Marcial shops.

From AT&SF online archives at the Kansas City Historical Society