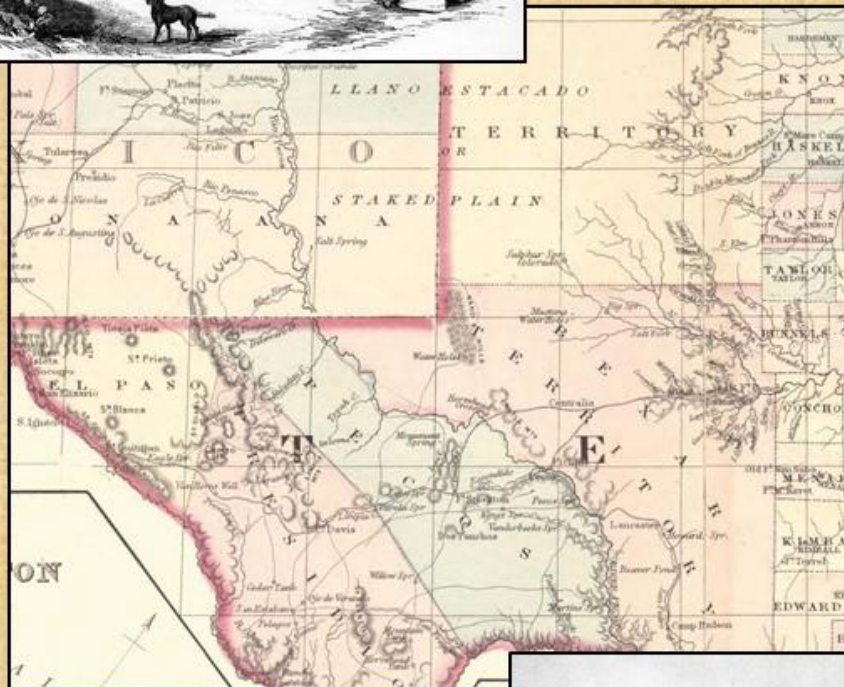


The Butterfield Trail Through The Concho Valley and West Texas



Tom Ashmore

2019, 3rd edition update 2026



Endorsement

Over a ten-plus-year period, it was my pleasure to work with Tom Ashmore on numerous Concho Valley Archeology Society projects. One of the major projects was a CVAS project at Fort Chadbourne, which lasted for five or six years. Other projects included rock shelters on the Nature Conservancy property along Independence Creek over four or five years. Others include Horsehead Crossing and the immigrant Trail at the Green Mounds. Last but not least are the two lost Butterfield stage stations: Johnson Station and Grape Creek Station.

Johnson Station and Grape Creek Station, as we know them, were no longer visible to a person casually passing close by. Even the ranch owners were unaware of the location of either Butterfield site. Now that these sites are uncovered after years of being lost to posterity, we can confidently pass along our knowledge of where these long-lost sites are located to those that follow us. It was my pleasure to work with Tom on this project for over 10 years. After gaining permission from the property owners, we were allowed to access the general area and begin our search for the exact site. If it had not been for Tom's skill in reading satellite maps and his skill in following the scar left on the land by the mules and the stagecoaches, we would have never found the sites. I can honestly say that I was a skeptic at first in reading the satellite facts, but after Tom educated me on how to use the tools, I came to be a believer in the latest modern-day technology, which helped us solve a mystery. I became a believer in the use of the new technology when Tom and I went to the ranches to match up the satellite picture with the ranch land. With a satellite map in hand, we found where the stage line crossed the main ranch road near the Grape Creek Station. We walked the stage trail in multiple places near the Grape Creek Stage Station, and our satellite guidance maps opened these doors for us. Again I'll say that without Tom's skill in reading satellite maps and his application of this modern technology, we would have never found the Johnson Station or the Grape Creek Station. I am a firm believer in the use of this technology and I attach my name to Tom's report concurring with his findings.

Tom and I worked on the Grape Creek site on the weekends and used our metal detectors to pinpoint the remaining metal objects. During the week, it was my job to search the archives at Fort Concho, reading the Scouting reports and looking for any mention of the Grape Creek Station by the cavalry. We also looked into historical articles for mention of the Grape Creek Station. We came upon an article in Marvin Hunter's magazine from 1911 by Emma Elkins, which shed light on what happened when the Indians attacked. Of course, we referred to the Conkling books repeatedly to be certain that we stayed accurate with our work in the field.

Surely those who follow us will find our efforts to be beneficial and will expand their knowledge of an important time in the Concho Valley. I am proud to have been a part of this team effort and greatly appreciate Tom sharing with me the skills he acquired in satellite map reading during his 20 years in military intelligence.

C.A. Maedgen, III
Region 10 Director for TAS
1/9/2019
SMU BS Geology 1966,
SMU MFA Communications 1968

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Forward

One of the most significant periods in West Texas was the pre-Civil War era and the opening of the West. This period saw an explosive expansion in our country as emigrants made their way through this area to points further west, mainly New Mexico and California. This brought about the Butterfield Stage line from 1857 to 1861, as well as settlers in wagon trains, cattle drives, and trade caravans on this same trail. It also brought with it the Indian wars as the Apache and Comanche viewed this expansion as an encroachment on the land so necessary to the survival of their tribes. As the attacks on settlers and emigrants increased, it brought more military camps and forts to the region. As such, studying the various locations associated with these times is significant for clarifying the people and events of those times, and one of the most important was the Butterfield Overland Mail and its road through West Texas. To this end, the United States Congress recognized this trail as a national historic trail on January 5, 2023.

Public Law 117–345 117th Congress

An Act

Jan. 5, 2023
[S. 3519]

To amend the National Trails System Act to designate the Butterfield Overland National Historic Trail, and for other purposes.

Butterfield
Overland
National Historic
Trail Designation
Act.
16 USC 1241
note.
State listing.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Butterfield Overland National Historic Trail Designation Act”.

SEC. 2. DESIGNATION OF THE BUTTERFIELD OVERLAND NATIONAL HISTORIC TRAIL.

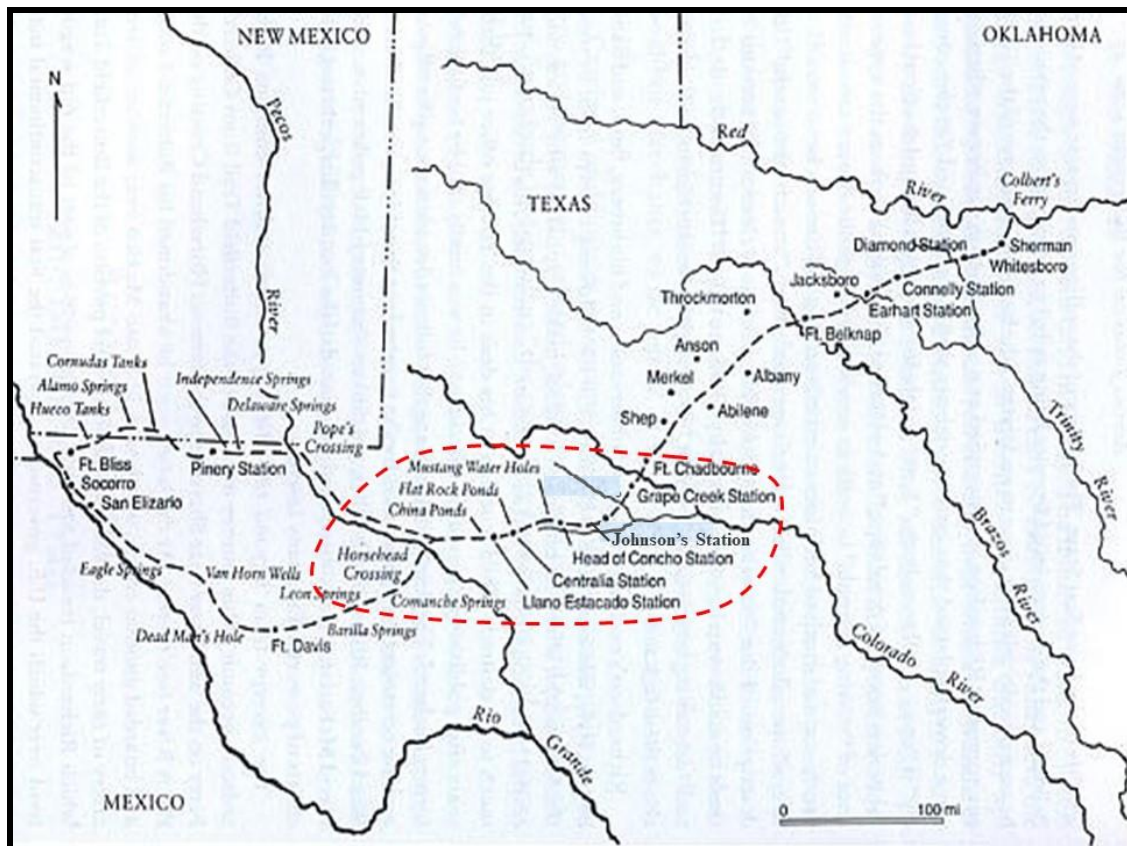
Section 5(a) of the National Trails System Act (16 U.S.C. 1244(a)) is amended by adding at the end the following:

“(31) BUTTERFIELD OVERLAND NATIONAL HISTORIC TRAIL.—

“(A) IN GENERAL.—The Butterfield Overland National Historic Trail, a trail of approximately 3,292 miles following the route operated by the Butterfield Overland Mail Company, known as the ‘Ox-Bow Route’, to transport mail and passengers between the eastern termini of St. Louis, Missouri, and Memphis, Tennessee, and extending westward through the States of Arkansas, Oklahoma, Texas, New Mexico, and Arizona, to the western terminus of San Francisco, California, as generally depicted on the maps numbered 1 through 15, entitled ‘Study Route Maps’, and contained in the report prepared by the National Park Service entitled ‘Butterfield Overland Trail National Historical Trail Special Resource Study’ and dated May 2018.

1. Butterfield Overland Mail Overview

The West Texas section of the Butterfield Trail was one of the most difficult for stagecoach travelers. They knew they were in for a rough ride when they left Fort Chadbourne heading west. Because the trail ran through a dry, unpopulated country and continued to be used long after the Butterfield Overland Mail was discontinued in 1861, the impression can still be seen by a trained eye in satellite imagery in places where no trail can be found on the ground.



Section of Butterfield Trail studied

Many efforts were made over the years to detail the Butterfield Overland Mail route through West Texas. The team of Roscoe and Margaret Conkling conducted the most famous and well-documented study, documented in their 1947 two-volume book, 'Butterfield Overland Mail' (Conkling). This route study is still considered today to be the most accurate and a sort of bible of the trail's route. However, during their research in West Texas, they were unable to travel through many sections of the trail and had to rely on local residents' memories of where the trail ran. Often, residents' memories turned out to be close but not accurate. This series of reports, researched over 17 years, aims to address some of these gaps while tracing a journey from Fort Chadbourne to the Pecos River and beyond to Fort Stockton along the Butterfield Trail.

The official government contract for the Butterfield Overland Mail commenced in September 1858, operating semiweekly on one route between Tipton, Missouri, and Memphis, Tennessee, and on the other between Memphis and San Francisco, California. However, the contract was acquired one year earlier, with a stipulation that the mail would begin running for the government within one year. That year was spent building roads, stations, bridges and everything else needed to complete the project (Butterfield Overland Mail –TSHA). Stages probably began running during that year, but it is unlikely they were carrying paying passengers. They may well have been running as part of the preparation and supplies for the formal opening in September 1858.

The Butterfield Overland Mail schedule called for stagecoaches to pass in each direction twice weekly. The coach had three seats and could carry nine passengers. As the occupants of the front and middle seats faced each other, these six people needed to interlock their knees. The rest of the coach was full of mailbags (Butterfield Overland Mail—Smithsonian).

For the West Texas portion of the trip, the wagons were more rugged than the eastern Concord coaches. Due to their rugged construction, they were built primarily for Butterfield and were called Celerity Wagons or Mud Wagons.



Celerity Wagon or 'Mud Wagon' used by Butterfield Overland Mail Company

(photo Booth Western Art Museum)

Another unique aspect of the route in West Texas was the mules used to pull the wagons. They used semi-wild Spanish Mules, originally brought from Spain to Mexico. Spanish mules were

smaller than their larger cousins and the mules we are familiar with today, but they were harder in this rough and dry country.



Spanish Mules (photo horsejournals.com/)

The coaches arrived at Fort Chadbourne on Tuesdays and Fridays, heading west, and on Wednesdays and Saturdays, heading east. The entire trip took 25 days in one direction.

No. 1.]		OVERLAND MAIL COMPANY.								[Sep. 16th, 1858.	
		THROUGH TIME SCHEDULE BETWEEN									
		ST. LOUIS, MO., MEMPHIS, TENN. } & SAN FRANCISCO, CAL.									
		GOING WEST.				GOING EAST.					
LEAVE.	DAYS.	Hour.	Distance to place.	Time allowed.	Miles per day.	LEAVE.	DAYS.	Hour.	Distance to place.	Time allowed.	Miles per hour.
St. Louis, Mo., & } Memphis, Tenn. }	Every Monday & Thursday.	8.00 A.M.	Miles.	No. Hours.		San Francisco, Cal.	Every Monday & Thursday.	8.00 A.M.	Miles.	No. Hours.	
P. R. R. Terminus, "	Monday & Thursday.	8.00 P.M.	160	10	16	Firebaugh's Ferry, "	Tuesday & Friday.	11.00 A.M.	163	27	6
Springfield, "	Wednesday & Saturday	7.45 A.M.	143	9 $\frac{1}{2}$	3 $\frac{1}{2}$	Vernalis, "	Wednesday & Saturday.	5.00 A.M.	82	19	4 $\frac{1}{2}$
Fayetteville, "	Thursday & Sunday.	10.15 A.M.	100	26 $\frac{1}{2}$	3 $\frac{1}{2}$	St. Tejon, (via Los Angeles)	Thursday & Sunday.	9.00 A.M.	127	28	4 $\frac{1}{2}$
Fort Smith, Ark.	Friday & Monday.	8.30 A.M.	65	17 $\frac{1}{2}$	3 $\frac{1}{2}$	San Bernardino, "	Friday & Monday.	5.30 P.M.	150	32 $\frac{1}{2}$	4 $\frac{1}{2}$
Sherman, Texas	Sunday & Wednesday.	12.30 A.M.	205	45	4 $\frac{1}{2}$	Fort Yuma, "	Sunday & Wednesday.	1.30 P.M.	200	44	4 $\frac{1}{2}$
Fort Belknap, "	Monday & Thursday.	9.00 A.M.	146 $\frac{1}{2}$	32 $\frac{1}{2}$	4 $\frac{1}{2}$	Gila River,* Arizona	Monday & Thursday.	7.30 P.M.	185	30	4 $\frac{1}{2}$
Fort Chadbourne, "	Tuesday & Friday.	8.15 P.M.	136	30 $\frac{1}{2}$	4 $\frac{1}{2}$	Tucson, "	Wednesday & Saturday	3.00 A.M.	141	31 $\frac{1}{2}$	4 $\frac{1}{2}$
Pecos River, (on crossing)	Thursday & Sunday.	3.45 A.M.	165	36 $\frac{1}{2}$	4 $\frac{1}{2}$	Soldier's Farewell, "	Thursday & Sunday.	8.00 P.M.	184 $\frac{1}{2}$	41	4 $\frac{1}{2}$
El Paso, "	Saturday & Tuesday.	11.00 A.M.	248 $\frac{1}{2}$	55 $\frac{1}{2}$	4 $\frac{1}{2}$	El Paso, Tex.	Saturday & Tuesday.	5.30 A.M.	150	33 $\frac{1}{2}$	4 $\frac{1}{2}$
Soldier's Farewell, "	Sunday & Wednesday.	8.30 P.M.	150	33 $\frac{1}{2}$	4 $\frac{1}{2}$	Pecos River, (on crossing)	Monday & Thursday.	12.45 P.M.	248 $\frac{1}{2}$	55 $\frac{1}{2}$	4 $\frac{1}{2}$
Tucson, Arizona	Tuesday & Friday.	1.30 P.M.	184 $\frac{1}{2}$	41	4 $\frac{1}{2}$	Fort Chadbourne, "	Wednesday & Saturday	1.15 A.M.	165	36 $\frac{1}{2}$	4 $\frac{1}{2}$
Gila River,* "	Wednesday & Saturday	9.00 P.M.	141	31 $\frac{1}{2}$	4 $\frac{1}{2}$	Fort Belknap, "	Thursday & Sunday.	7.30 A.M.	136	30 $\frac{1}{2}$	4 $\frac{1}{2}$
Fort Yuma, Cal.	Friday & Monday.	3.00 A.M.	135	30	4 $\frac{1}{2}$	Sherman, "	Friday & Monday.	4.00 P.M.	146 $\frac{1}{2}$	32 $\frac{1}{2}$	4 $\frac{1}{2}$
San Bernardino "	Saturday & Tuesday.	11.00 P.M.	200	44	4 $\frac{1}{2}$	Fort Smith, Ark.	Sunday & Wednesday.	1.00 P.M.	205	45	4 $\frac{1}{2}$
St. Tejon, (via Los Angeles)	Monday & Thursday.	7.30 A.M.	150	32 $\frac{1}{2}$	4 $\frac{1}{2}$	Fayetteville, Mo.	Monday & Thursday.	6.15 A.M.	65	17 $\frac{1}{2}$	8 $\frac{1}{2}$
Vernalis, "	Tuesday & Friday.	11.30 A.M.	127	28	4 $\frac{1}{2}$	Springfield, "	Tuesday & Friday.	8.45 A.M.	100	26 $\frac{1}{2}$	3 $\frac{1}{2}$
Firebaugh's Ferry, "	Wednesday & Saturday	5.30 A.M.	82	18	4 $\frac{1}{2}$	P. R. R. Terminus, "	Wednesday & Saturday	10.30 P.M.	143	37 $\frac{1}{2}$	8 $\frac{1}{2}$
(Arrive) San Francisco,	Thursday & Sunday.	8.30 A.M.	163	27	6	(Arrive) St. Louis, Mo., & } Memphis, Tenn. }	Thursday & Sunday.		160	10	16

This Schedule may not be exact—Superintendents, Agents, Station-men, Conductors, Drivers and all employees are particularly directed to use every possible exertion to get the Stages through in quick time, even though they may be ahead of this time.

If they are behind this time, it will be necessary to urge the animals on to the highest speed that they can be driven without injury.

Remember that no allowance is made to the time for ferries, changing teams, &c. It is therefore necessary that each driver increase his speed over the average per hour enough to gain the necessary time for meals, changing teams, crossing ferries, &c.

Every person in the Company's employ will always bear in mind that each minute of time is of importance. If each driver on the route loses fifteen (15) minutes, it would make a total loss of time, on the entire route, of twenty-five (25) hours, or more than one day. If each one loses ten (10) minutes it would make a total loss of sixteen and one half (16 $\frac{1}{2}$) hours, or, the best part of a day.

On the contrary, if each driver gains that amount of time, it leaves a margin of time against accidents and extra delays.

All hands will see the great necessity of promptness and dispatch: every minute of time is valuable as the Company are under heavy forfeit if the mail is behind time.

Conductors must note the hour and date of departure from St. Louis, the causes of delay, if any, and all particulars. They must also report the same fully to their respective Superintendents.

* The Station referred to on Gila River, is 40 miles west of Maricopa Wells.

JOHN BUTTERFIELD.
Pres't.

1858 Butterfield Overland Mail Weekly Schedule (Smithsonian National Postal Museum)

2. Satellite Imagery Interpretation of Historic Trails

Satellite imagery is the new tool in the archeology tool set. This is now well-known in the professional archeological community but is also available to historians and avocational archeologists. We need to keep pace with technology as it continues to emerge and use it to its fullest to help us reveal the past. I believe that with this new tool, we will continue to find that some accepted theories will be modified or more fully fleshed out, filling in what the military refers to as intelligence gaps. In this case, we can refer to them as historical gaps.

The advent of publicly accessible satellite imagery, via Google Earth, played a crucial role in identifying and interpreting this particular site. First, it helped us locate it by allowing us to follow the Butterfield Trail, which was previously unavailable through other means. Even after 164 years, the trail trace is visible to the trained eye.

A historic trail can be traced through satellite imagery because these images show slight vegetation differences caused by years of constant use, followed by regrowth after the trail was abandoned. The vegetation will generally grow back slightly differently than the surrounding area because the trail has become a depression, which later attracts more soil and water runoff from rain. Bushes and grass tend to grow slightly healthier in the depressions. It can be so slight in most areas that casual observation on the ground or even from an aircraft cannot detect it. However, using satellite imagery, especially with multiple images of the same location, a trained eye can identify the traces of these vegetation changes in long, linear patterns across the terrain, as seen in Google Earth's 'Historical Imagery' tool. A good example of this is a spot just off Arden Road, outside of San Angelo. Standing on the spot where the trail is and looking directly down the trail, if you did not know it was an old trail, you would take the difference in the terrain and vegetation as natural. However, you can see that it is a perfectly straight line, has a slight depression, and exhibits slightly better grass growth due to the long-ago depression.



Butterfield Road Wagon Swales

Using satellite imagery at a highly oblique angle, which Google Earth allows, can reveal the slight difference in much more striking contrast, and you can see the trail as it snakes across the countryside. However, the capability to view historical imagery is another essential feature of Google Earth needed to follow the more difficult stretches of the trail. When viewing a location with historical imagery enabled, you can navigate through many years of images, examining the same piece of land from the same angle and identifying the one that best shows the trace for that area. I try to angle it out and go pretty far out to get a long-distance look. That is usually where I can see the faintest trails. Of course, the old trails tend not to follow existing boundaries or roads. When you see a faint trail crossing multiple properties but in no logical relationship to modern boundaries, it is a good bet that it is an old trail. They always followed the easiest terrain possible, avoiding steep cuts and hills. If they had to go down a cut, they would always find the easiest way possible. You have to look at the trails from all different angles to pick them out piece by piece. Sometimes, I go backward as if looking out the back of an airplane, and sometimes, I go forward as if I'm looking out the front. I've even followed the trail sideways. It all depends, and it's a lot of trial and error. I connect the pieces using the Google Earth line-drawing tool to draw a line over it, then I begin with the next piece from the end of the line. Most of the time, the trail is darker rather than lighter. Sometimes, it appears as a row of bushes, and at other times, it is just a dark splotch that resembles a faint line. The final trick is to be able to move the image forward and backward, or side to side. This allows your eyes to pick up the hard-to-find trace line where they could not in a still picture. I've found that the best elevation to be at is around 3,000 feet.

The following picture shows the trail as it heads south from the North Concho River crossing point. Notice the slightly darker vegetation in a line highlighted by arrows.

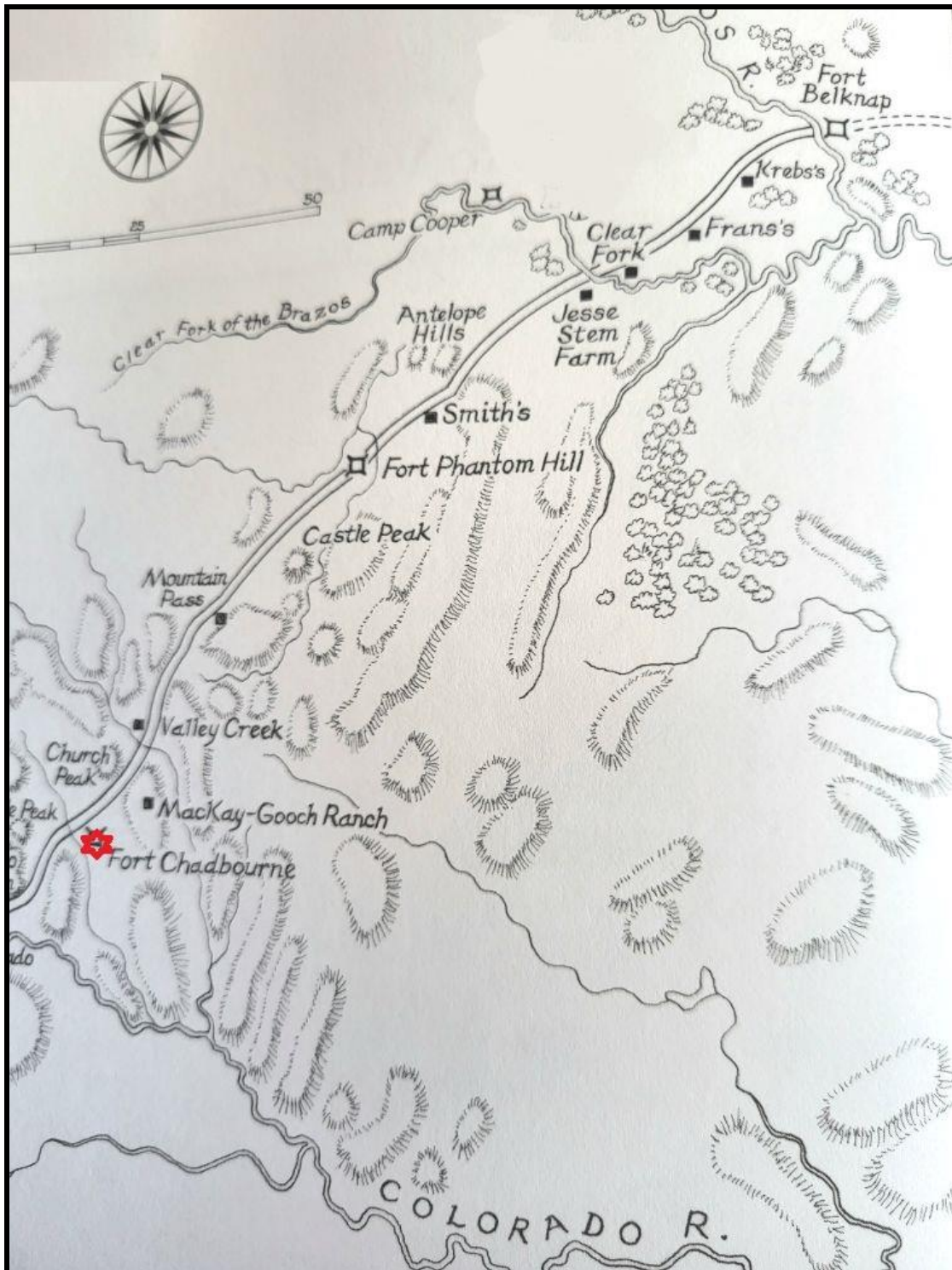


Satellite image of Butterfield Trail as it heads north to Middle Concho River crossing

(Google Earth)

3. Fort Chadbourne Station

Fort Chadbourne Station was a primary station on the route for passengers entering West Texas. It was constructed within the grounds of the fort. They had come down a road built for military movement between forts.



(Ely, map by Gary Zaboly)



Fort Chadbourne – Butterfield Station at top of photo



Reconstructed Fort Chadbourne Station, 2010



Tom Ashmore working on Butterfield Station excavation, 2008



Walls removed and ground excavation commencing

The method of construction used in building the Butterfield Stage Station was similar to the construction of the Officers' Quarters (Ranch Headquarters) building located on the south side of the parade ground of Fort Chadbourne (Riemenschneider 2008). The Officers' Quarter was built in 1858, the same time Butterfield instructed his employees to construct the stage route and build stations along the way. The similar construction was likely the result of Butterfield's employees hiring the masons who constructed the Officers' Quarters. (Riemenschneider 2008)

When the stagecoach pulled into Fort Chadbourne for the first time on September 23, 1858, it was a grand event for the soldiers. It carried their mail, reconnecting them with the world. It also carried a single passenger, New York Herald correspondent, Mr. Waterman Ormsby.



Waterman Ormsby (Wikipedia)

Although they were supposed to change the team quickly and move on, Ormsby reported that they lost almost four hours because the “wild mules” would not be harnessed.

“The mules reared, pitched, twisted, whirled, wheeled, ran, stood still, and cut up all sorts of capers. The wagon performed so many evolutions that I, in fear of my life, abandoned it and took to my heels, fully confident that I could make more progress in a straight line, with much less risk of breaking my neck. ...the gyrations continued to considerable length, winding up with tangling all the mules pretty well in the harness, the escape of one of the leaders into the woods, and the complete demolition of the top of the wagon; while those in charge of it lay around loose on the grass, and all were pretty well tired out and disgusted, except those who had nothing to do but look on.”

4. The Butterfield Trail From Fort Chadbourne

Another quotation on the departure from the fort is again an entertaining entry from Mr. Ormsby’s dispatch:

*“When I had become seated I thought I would ascertain all the chances, and the following dialogue ensued between myself and Mr. Nichols:
How far is it to the next station?
I believe it is thirty miles.
Do you know the road?
No.
How do you expect to get there?
There's only one road; we can't miss it.”*

The best source of the trail heading west out of Fort Chadbourne is the military map created by Brevet Lieutenant Colonel Strang during his 1867 expedition from Fort Stockton to Fort Chadbourne. That expedition included a cartographer who drew a highly detailed map of the entire route. They essentially followed the known road, which was the old Butterfield Road. The old road can be found on Google Earth using the map as a guide.



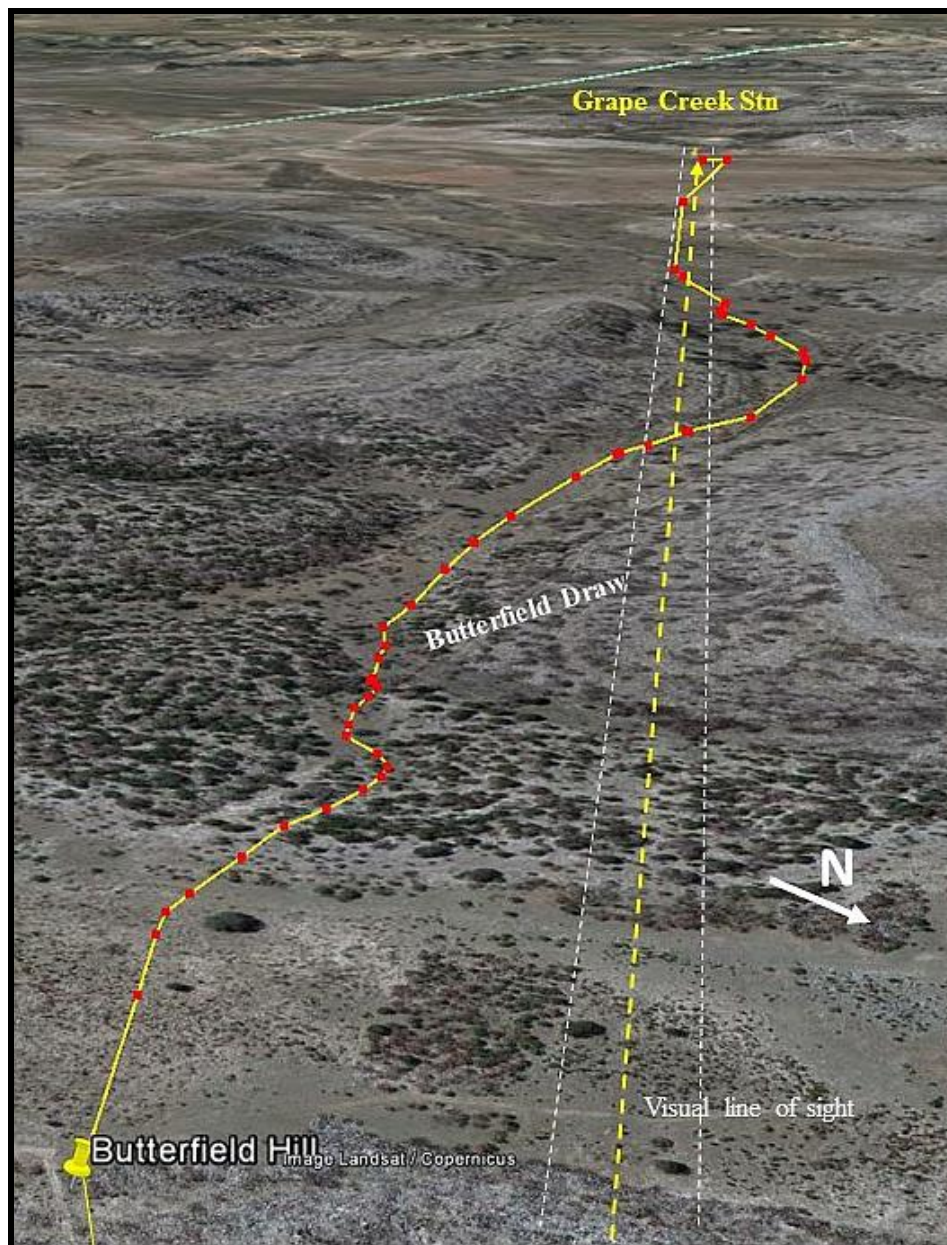
Comparison of Strang map and Google Earth Trace from Colorado River to Fort Chadbourne

Mr. Ormsby's comment on this stretch of road supports the map and the Google Earth road trace.

“Fortunately our course was a clear and straight one, leading across an apparently boundless prairie, with not a tree or shrub to be seen, the parched grass almost glistening in the light of the moon.”

From the Colorado River, heading south, the road ran up what is now called Butterfield Canyon to cross over a set of hills. The road going up is well known, and the hill is known as Butterfield Hill. Heading down the other side, the road runs down what is known as Butterfield Draw. It heads almost straight to the East Fork of Grape Creek.

“About 2 A.M. we came to a steep and stony hill, obstinately jutting from the prairie, right in our path and impossible of avoidance. One mule could neither be coaxed or driven up, so we had to camp until morning, when, after much difficulty, we ascended the hill and discovered the station fire, miles distant - a mere speck among the trees.”

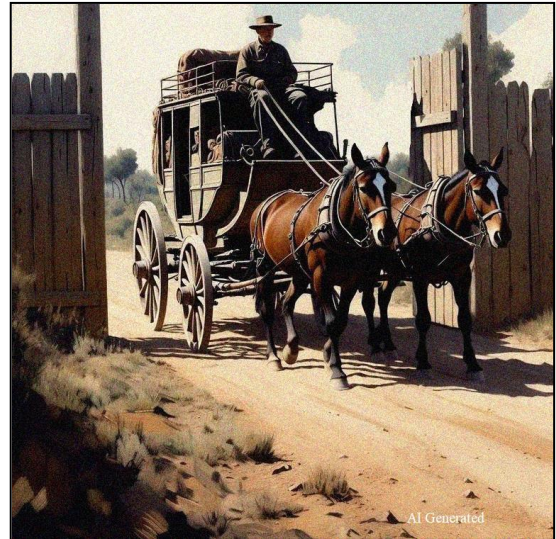


Road trace and view to Grape Creek Station from top of Butterfield Hill (Stone Mountain)

5. Grape Creek Station (41CK305) Coke County

The Butterfield Overland Mail's Grape Creek Station was a smaller, mule-changing station in the Concho Valley before any habitation in the area. It was abandoned in 1861 with the onset of the Civil War, but the former location remained known until the early 1900s. After that, the memory of its location was lost as those with the knowledge passed on. The general location was known, but first-hand knowledge was lost. Roscoe and Margaret Conkling attempted this in the late 1940s

when they wrote their now-famous books on the Butterfield Trail. Still, they could never locate the station site and had to rely on the landowner's description of the location. Over the years, several avocational archeologists and historians attempted to verify the described location while searching the local area, but to no avail. This study used new satellite technology to determine the site's exact location and clarify its history.



With the landowners' permission, the on-ground efforts began with metal-detecting surveys of a narrowed-down location. Very quickly, the site was identified through metal detection and verification of the trail leading to it, and a more thorough three-month project began to tie the archaeological artifacts recovered from the ground to the research, confirming the identification as the Grape Creek Station.

Grape Creek Station was the first relay station for the Butterfield Stage line heading west after leaving Fort Chadbourne, Texas. It was one in a series of stations for the stages crossing West Texas on the way to or from the Pecos River and New Mexico. It was located on the east side of the east branch of Grape Creek, a spring-fed creek running north to south. Travelers came to the station after a southerly crossing of 30 miles through the dry West Texas land and over a small set of hills. Coming from the west, it was the next station after the Johnson's Station on the Middle Concho River, a distance of 32 miles. Although neither Fort Concho nor San Angelo

existed at the time, the location is situated just over 18 miles north of the current locations and 10 miles northeast of the current town of Grape Creek.

This stage station site was bordered to its west by the east branch of Grape Creek, sitting in a valley running north and south, one mile wide by four miles in length. It is located in an active floodplain along the creek, with low hills to the east and west. Over the decades, the site has experienced numerous severe floods and fires, which is why it has little to show for its occupation on the surface. The main area of interest is situated in an open field that the landowners cleared of cedar and mesquite, unaware of the site's presence there.

This area would have been open prairie in the 1800s. The elevation is 2,190 feet. Grape Creek lies approximately 200 feet west of the location of the original main building. The site takes up just under a quarter of an acre.

We know a few things about the Grape Creek Station construction from first and second-hand accounts of the period. The first account came from Mr. Waterman Ormsby, the first and only passenger of the inaugural run of the Butterfield Overland Mail (Wright). His account of the station follows:

“We soon reached it and found it to be a corral or yard, for the mules, and tents erected inside for the men, under the charge of Mr. Henry Roylan. They had seen us coming and were herding the mules as we drove up. Their corral was built of upright rough timber, planted in the ground. They had pitched their tents inside, for fear of the Indians, and took turns standing guard, two hours on and two hours off. The station was near Grape Creek, a fine stream, and also near some fine timber -- two desirable things not to be found everywhere in Texas.”

Later, a cabin was built outside the corral, and a wooden picket stockade wall enclosed the two. We know this from an account by Mrs. Emma Elkins in a 1911 article in *Hunters Magazine* (Elkins). Mrs. Elkins lived on Fort Chadbourne at the time of an Indian attack, and her account

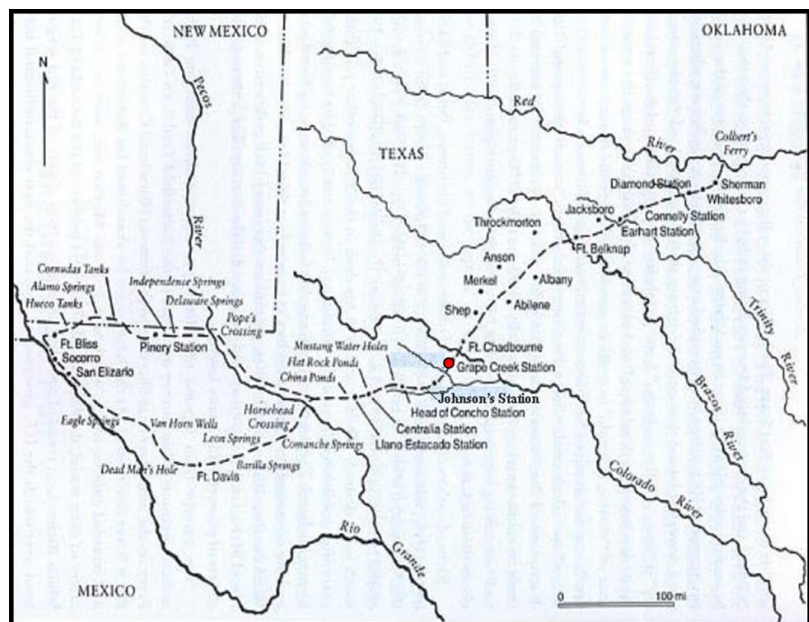
came from the Grape Creek station occupants themselves while Mr. Pennington, the station manager, was recovering in the Fort Chadbourne hospital.

“One fusillade after another was fired at the house without serious results, the house being built of split logs and therefore bullet-proof, and the premises enclosed by a picket fence five feet high.”

The next day, the station was to be closed and abandoned, unrelated to the Indian attack. The company had given orders to close everything down due to the onset of the Civil War, and at the time of the attack, they were already packed to leave. A military rescue detachment escorted them back to Fort Chadbourne after the attack for Mr. Pennington’s recovery, and afterward, they moved back to their home in Mason, Texas.

Grape Creek Station Post Butterfield Stage Period

After the stage station was abandoned in 1861, this route remained the primary road for east-to-west travelers through Texas and on to New Mexico. Until the late 1800s, this road was used by emigrants heading west, cattle drives, the military, ranchers, and freighters, crossing into Texas from what is now Oklahoma at Collier’s Ferry, near Whitesboro. Similar



to Johnson’s Station - the abandoned stage station on the Middle Concho River - the “old” Grape Creek Station became a popular camping spot for travelers headed in either direction. The reason for this was fairly obvious once you saw the location. If you were heading west, you would have just come over a rough set of hills and about an 8-hour day’s travel from Fort Chadbourne. If you were heading north from either the old Johnson’s Station or, in later times,

Fort Concho, you would again have just completed an 8-hour day and would be facing the hills as your next obstacle. The archaeological artifacts recovered from the site indicate it remained a preferred campsite.

Grape Creek Station #2: Two Periods, Two Stations

There has been confusion over the years about whether the station site was reported here or at another site two miles upstream. What we will refer to as the second site, or Grape Creek Station #2, was reported by Glen Sample Ely in his book, 'The Texas Frontier and the Butterfield Overland Mail, 1858–1861'. (Ely) He viewed a Grape Creek Station site, but it was a separate station from 1870 to 1882, not 1858 to 1861.

The San Antonio to El Paso Overland Mail, also known as the Ben Ficklin Mail Line, reconstituted the former overland mail lines in West Texas after the Civil War. Their headquarters was the Concho Mail Station, located just south of Fort Concho, San Angelo, Texas. They initially built the mail line from San Antonio through to El Paso in 1868, but in 1870, they added a northern route from their Concho Mail Station and Fort Concho. That route used the old Butterfield road and stations to reach its ultimate destination, Fort Smith, Arkansas. That route ran until 1882. The main stations along the route are documented in the U.S. Postal and U.S. Army archives, but minor swing stations were not.

The primary station after leaving Fort Concho to the north was Fort Chadbourne Station, as it was in the Butterfield Overland Mail Line. Ficklin reconstituted and used as many of the old Butterfield stations as he could. However, since Fort Concho was not part of the original Butterfield route, the distances between the fort and the initial stations on both the western and northern routes were shorter than the standard spacing of swing stations. Optimum spacing was 25 miles. This shorter spacing was for both Johnson Station to the west and Grape Creek Station to the north. The distance from Fort Concho to the old Johnson's Station was 20 miles, and the distance from Fort Concho to the old Grape Creek Station is 20.5 miles. Both stations had to be moved upstream. Johnson's Station was moved five miles upstream, but it retained the name Johnson's Station. (Ashmore, 2019) The same route extension was accomplished for Grape Creek Station. In that case, they moved as far upstream as possible, to the spring source, two miles farther. This station must have also retained the name, since it was still on Grape Creek.

Upon reviewing Glen Ely's reporting and the imagery associated with Site #2, the route extension from the old Butterfield Station became apparent. By following the old road from Site #2 up the mesas, I found that the descent off the mesa on the north side was very similar to Butterfield Hill. It turns out the two roads descending off the mesas (Butterfield and Ficklin) are only separated by a mile. The descent cuts are also almost identical. This is important because the modern ranch roads coming off the mesas look totally different. Finally, the two roads intersect and continue along the old Butterfield Road.



Both Roads from each station



Zoomed in view of both roads as they reach the hill descent



Comparison of both descent hill roads

This solves the puzzle of two locations for Grape Creek Station. They were constructed for two different periods and for two different stagecoach lines. The periods were close enough to yield similar trash-type artifacts, as shown in this report and Glen Ely's photographs.

Grape Creek Station Ranch Period

The ranching period for this area began in 1899 when John Abe March and his brother, Napoleon Murph March, purchased 30,000 acres from B.M. Collyns. According to Coke County records, Collins purchased the land from the state of Texas in 1880.

There is no indication from the evidence or family history that this site was ever occupied by the March brothers or B.M. Collyns. The March brothers were familiar with the site and attempted to describe it to Roscoe Conkling during his visit in the late 1940s, but they never took him there. There was some confusion about either the conveyance of the site location or Conkling's notes because the site location, as described, was misidentified in Conkling's subsequent book. It was a minor error of compass direction from the March home, but critical in the station's actual location. This was confirmed by the fact that an archeology group from Odessa, TX, searched for the site as described in the Conkling book around the year 2,000, but after extensive searching, their efforts turned up nothing.

Determining the exact trace of the trail was incorporated into this research to properly correlate the satellite imagery data with accounts by stage passengers or any persons with first-hand knowledge. The final step is to obtain access to the property to confirm both the trail and the site, and to work on it as an archaeological project to lay the final piece of the puzzle in place.

Comparing First-Hand Accounts with Satellite Imagery To Find The Location

The first account that needed to be correlated with the imagery interpretation of the trail leading to the station was Ormsby's portion of the trip from Fort Chadbourne to Grape Creek. In his account, he asked the driver how far it was to the next stage stop.

“How far is the next station?”

“I believe it’s 30 miles.”

“Do you know the road?”

“No.”

“How do you expect to get there?”

“There’s only one road. We can’t miss it.”

The road mentioned follows an 1867 military-mapped road between Fort Chadbourne and the Colorado River.



Road between Fort Chadbourne and Colorado River

“Fortunately, our course was a clear straight one, leading across a boundless prairie.”

After the Colorado River, the trail must cross a rugged northwest-to southeast-running set of hills to get over to the valley that Grape Creek runs through. The route leading up to this set of hills,

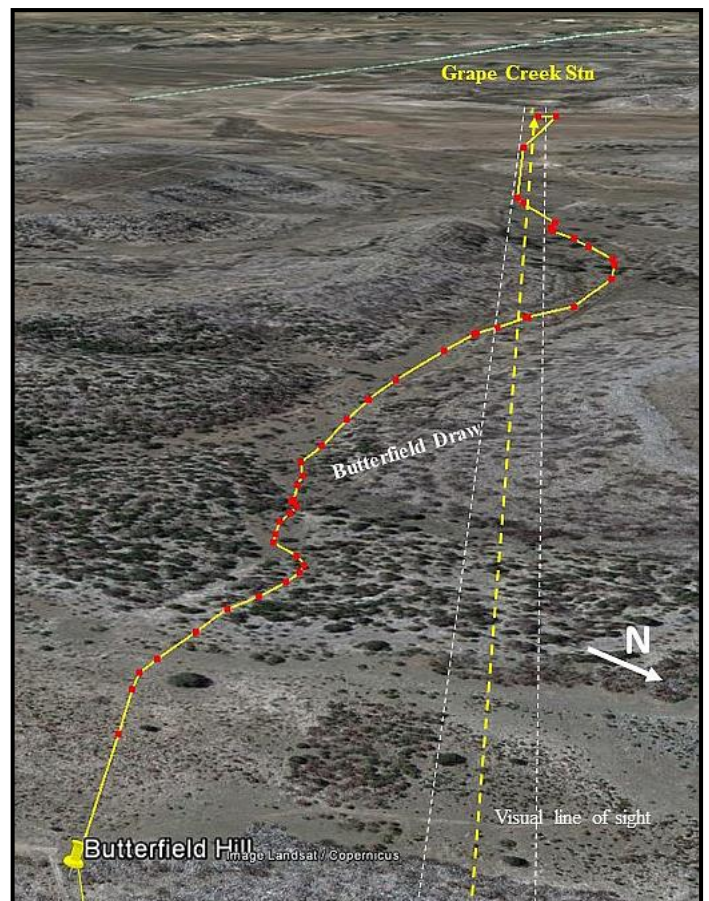
and the road climbing up the east side, are well known. The east side is called Butterfield Canyon, and the road cuts through the rugged limestone.



It is fairly steep getting up. According to Ormsby, because they had to use just two mules instead of four, the mules stopped halfway up and refused to go any further. So, they spent the night letting the mules rest and made it to the top in the very early morning hours while it was still dark. When they reached the top he continues:

“We ascended the hill and discovered the station fire, miles distant – a mere speck among the trees.”

Again, going back to Google Earth and taking the view he was describing, you find that the only possible location he might have been able to see the station fire would have been down a draw, looking west, with a very narrow view between the lower hills. That draw is named Butterfield



Draw on topographic maps.

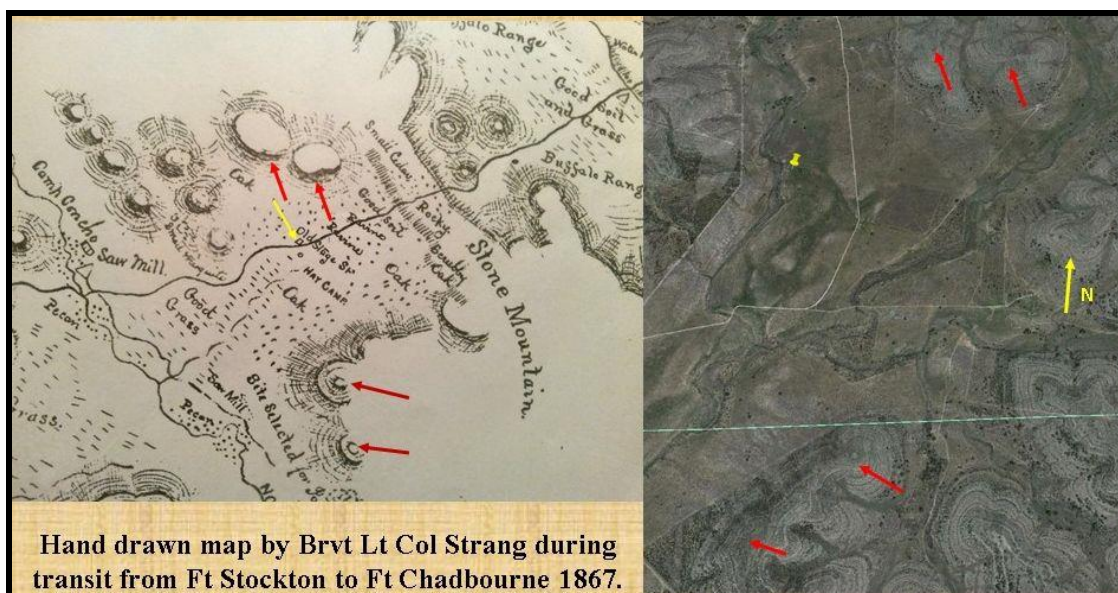
“The station was near Grape Creek, a fine stream, and also near some fine timber -- two desirable things not to be found everywhere in Texas.”

The fine timber is gone, but when running, it is still a fine stream.

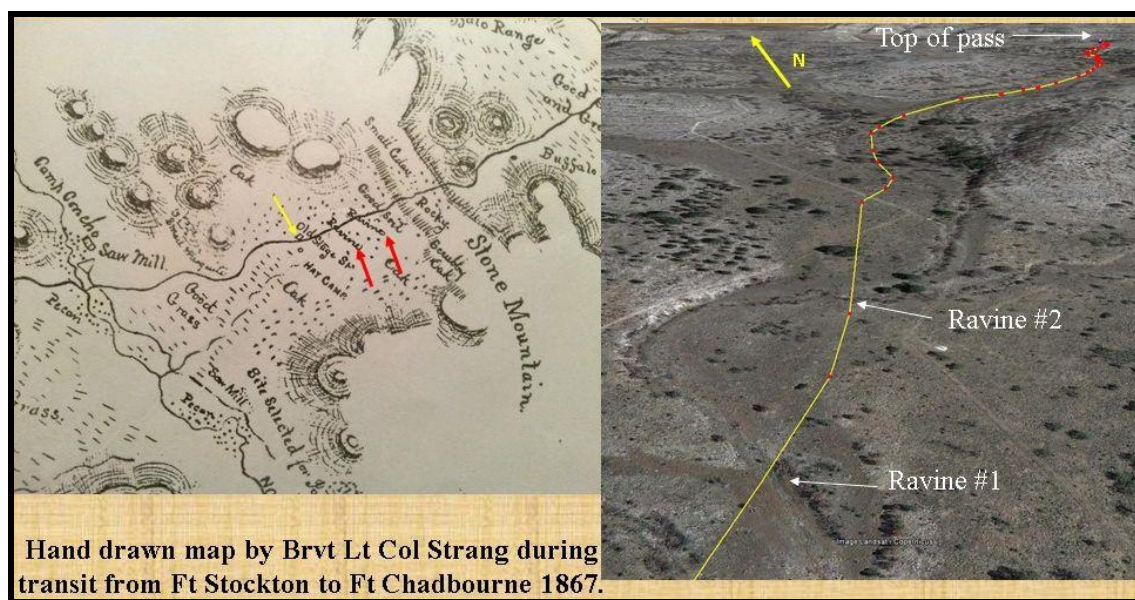


Grape Creek below the station site

The following account comes in the form of a map. In 1867, Brevet Lieutenant Colonel Strang made a journey from Fort Stockton to Fort Chadbourne to assist in preparations for the transfer of the military from Fort Chadbourne to the new Fort Concho. By comparing the map with Google Earth imagery, several items align with the current location. The first is the station, which is in relation to a set of hills to both the north and south. Setting the two side by side makes a perfect match. The second is his description of two ravines they crossed after leaving the station location and heading up the hills as they continued east and north to Fort Chadbourne. Again, it is a perfect match.

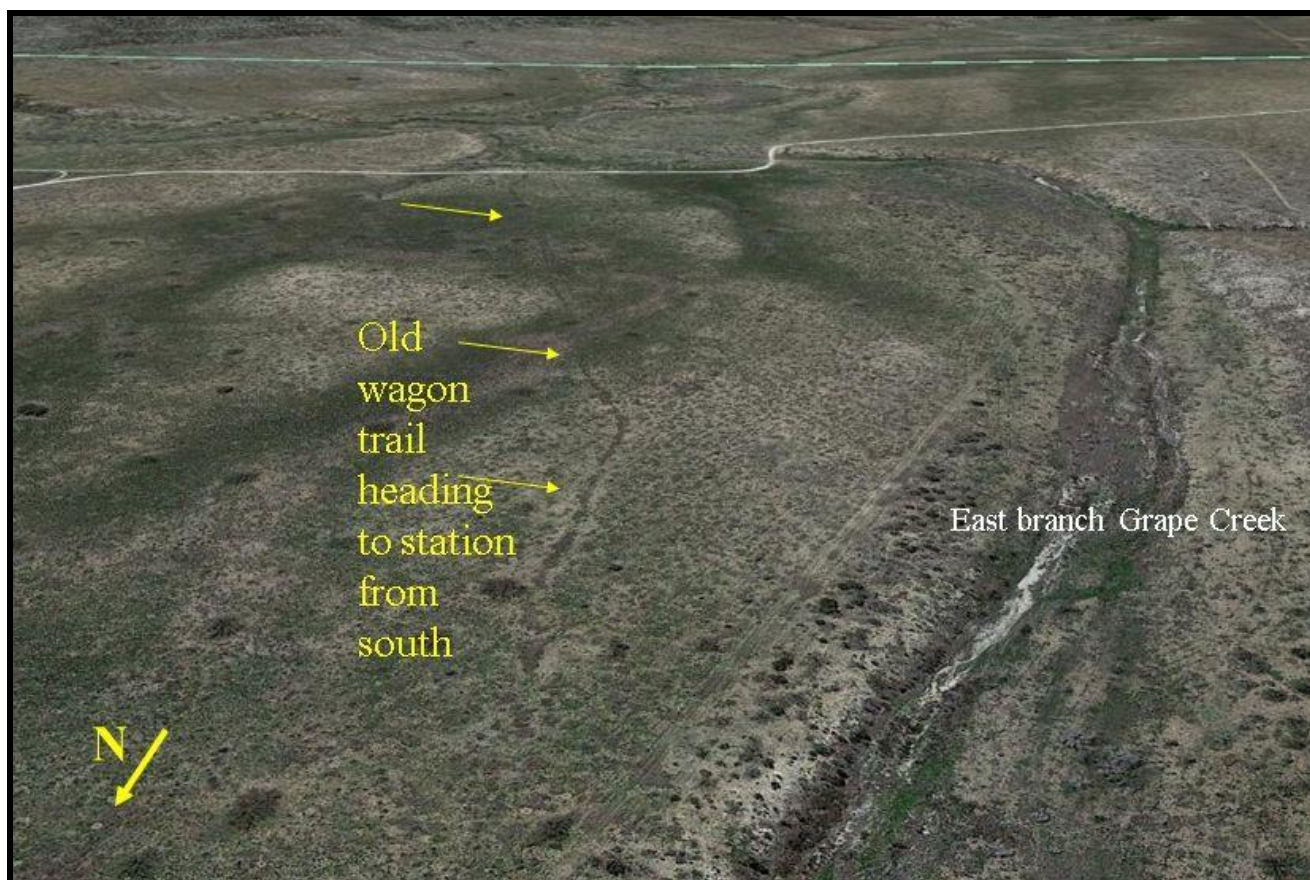


(Google Earth trace on right)



(Google Earth trace on right)

That brings us to the trail, which is still visible in satellite imagery. After crossing the creek, which rises from the south, the trail becomes quite prominent as it makes its way north.



Butterfield Trail trace coming from the south up Grape Creek (Google Earth)

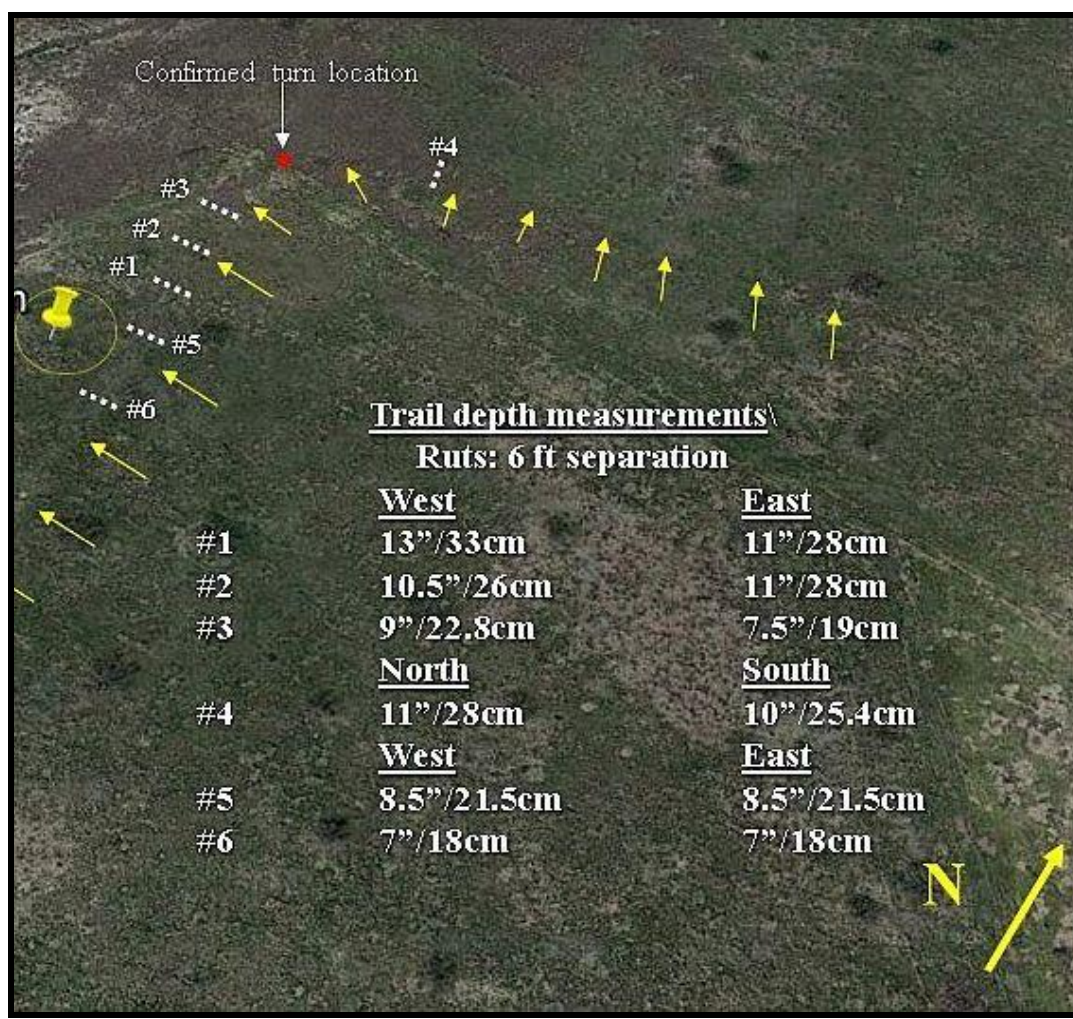
At one point, the trail takes a 90-degree turn to head east up Butterfield Draw and up the hills. There is only one reason it would take such a sharp turn from the creek: the station has to be near the turn. This revealed the proper search location, which ultimately led to the discovery of the site on the ground.

The trail throughout the Grape Creek area left a fairly deep depression in the soft soil. We would have to drive across the trail each day to reach the site, and the vehicle's sensors in the front bumper would be triggered each time we dipped into the depression, which averaged 7 feet wide and 9.5 inches below the surrounding terrain. At the point we drove through, it was 11 – 13 inches deep.



Depth of the trail depression is quite prominent (Front wheels in middle of trail)

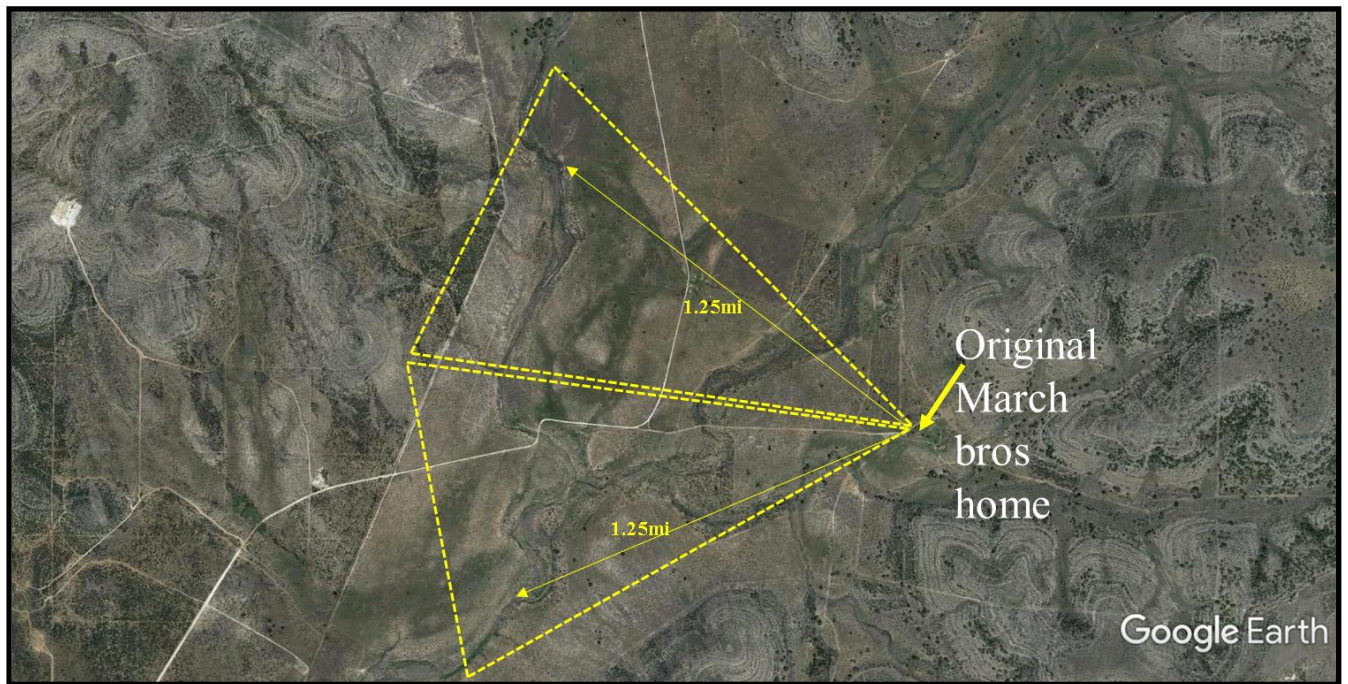
We walked the trail and made extensive measurements to confirm the imagery interpretation. The depression left in the ground is quite apparent in this area, to the point that we could identify the ruts within it. We measured the rut depths relative to the surrounding terrain. We additionally confirmed the locations where the trail crossed the ranch roads, heading both north and south.



Trail depth measurements (Google Earth)

The final piece to the puzzle and the answer to why so many who had previously searched for the site could not find the station location is again based on the Conkling description of the location, as recorded from their discussions with the March family during their travels through the area.

According to Conkling's notes, the location was **"approximately one mile and a quarter southwest of March brothers ranch headquarters."** Whether the notes were written initially or copied incorrectly during preparation for publication, it appears that the compass description was entered incorrectly, and everyone who had previously searched was looking in the wrong location. The site was 1.25 miles from the original March ranch house, but it was northwest rather than southwest.



Grape Creek Station in relation to original March ranch (Google Earth)

Grape Creek Station Archeology

Next to the trail, about 100 yards before the 90-degree turn, a faint circular corral can be seen in a particular satellite image. The circle is approximately 70 feet in diameter.

Within that circle, we got our first metal-detecting hits. Both from the imagery and the layout of the artifacts, this appears to have been a 20 X 15 foot shed within the corral, probably a supply and tack shed. The items found were square nails for the shed, various pieces of metal band, metal tops of containers, small crushed cans, heavy-gauge wire, and a piece of heavier-gauge metal with a hand-punched hole.



Tack/supply shed location and artifacts

Just outside the area, we found a hand-forged Spanish Mule shoe. The mule shoe appears to have been removed due to wear rather than arbitrarily lost. There were no nails in the shoe, and it showed distinct wear, with a crack in the middle of the worn area. This shoe is the exact same size as the mule shoe found during excavations of the Butterfield Station at Fort Chadbourne in 2008. (Reimenschnieder)



Hand-forged Spanish Mule shoe with crack and heavy wear

Spread around the corral area on the surface, we found various pieces of bottle glass. Normally, finding glass bottle fragments in a corral would be unusual. However, Ormsby's account states that the station residents were living in tents within the corral during the inaugural journey. They probably lived in there for quite a bit longer as they built the new cabin.

“Their corral was built of upright rough timber, planted in the ground. They had pitched their tents inside, for fear of the Indians, and took turns standing guard, two hours on and two hours off.”

Later, a log cabin was built outside the corral, and a five-foot-high picket stockade enclosed the entire area. We know this from an account of Mrs. Emma Johnson Elkins in a 1911 Hunter's Magazine, published out of Ozona, TX. Mrs. Elkins lived on Fort Chadbourne at the time, and this was an account of an Indian attack on the station that occurred the day before they were to abandon it at the company's orders. The route was being shut down due to the start of the Civil War. Although the Indian attack received attention in several publications afterward, the pertinent portion of her account follows.

“One fusillade after another was fired at the house without serious results, the house being built of split logs and therefore bullet-proof, and the premises enclosed by a picket fence five feet high.”

The first indication of where the cabin stood is the significant number of cut-footing stones strewn across a relatively small area, along with many smaller stones of the same type.



Sampling of footing stones throughout cabin area

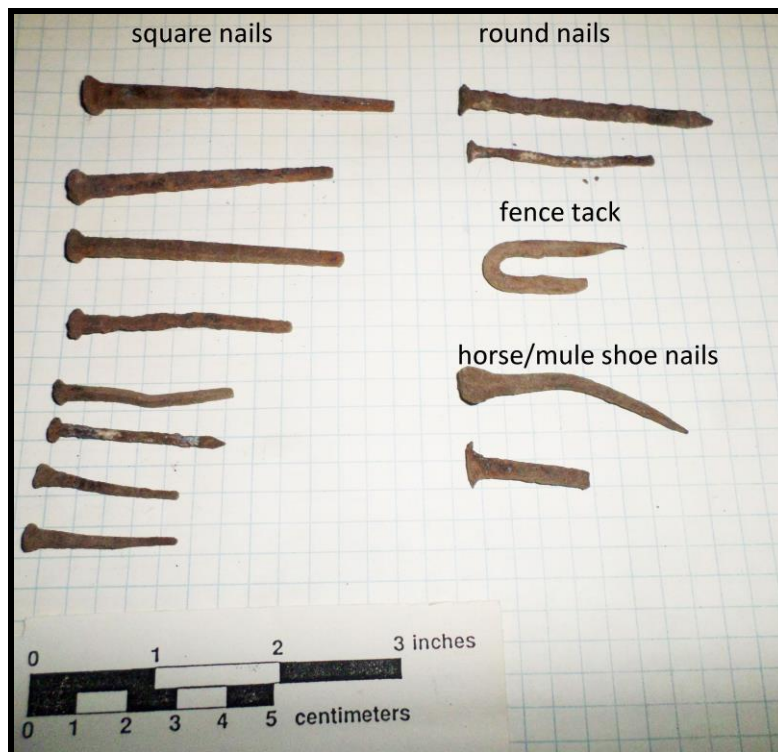
Similar to the vegetation being changed for the trail, the vegetation that grows back after a building blocks sunlight for many years is also different from the surrounding vegetation. This cannot be seen in satellite imagery, but it is visible in drone imagery, and in this case, it is very clear, showing the right angles that make up a three-room L-shaped dogtrot cabin next to the corral. Together, 42 large stones were found on the surface in the area of the cabin. Some of these were exposed during metal detecting digs. Smaller-sized stones, also flat on both sides, were too numerous to count. Note that the dog trot breezeway faces the optimal direction for the predominant southwest wind. This is the same layout for the dog trot cabin found at Johnson’s Station, the next station down the line to the west.



Drone imagery showing cabin area with footing stones

In and around the cabin area, we found hundreds of metal detection hits. Most were square nails of various sizes, and flagging these locations confirmed the building's outline as seen in the vegetation from above. The smaller nails were probably used primarily to nail down hand-cut shakes for the roof, which would explain the larger number found throughout. It can be speculated that the larger nails were for the main roof beams and probably the door and window frames, since a split log cabin would not require much in the way of nails for the walls.

A few of the smaller nails turned out to be round. Given the probable construction period, this was initially a puzzle. Our research, though, indicates that round nails were being manufactured much earlier than previously thought. Several companies began producing round nails (then called wire nails) in New York in the early 1850s (Nelson).



Sample of the many nails found on this site

Notably, no window glass was ever found at this site. That fits with the period and the fact that this cabin was not intended as a homestead site.

The large amount of mortar/plaster found in the shovel tests and throughout all the digging in the cabin area is also significant. A great deal of it came out of almost every dug hole in the area of the cabin. The term "mortar/plaster" is used because this is not mortar in the traditional sense or of the kind typically found, for example, at Fort Chadbourne. Some unearthed stones were covered in a mortar/plaster substance. A slice of pure mortar was found in one of the dug holes.

These stones were likely used to build the fireplaces; one was typically placed at each end. The smaller stones, which are all flat on both sides, were mortared/plastered as they were placed. Most were not exposed to high heat, but we found fire-cracked limestone spread farther out from the cabin area. At first, we thought this might be remnants of Middle Archaic Indian encampments since there was abundant evidence of stone tools and a few diagnostic points throughout the area. However, we found one very large cut limestone block that had been fired and was covered with mortar/plaster. This was probably one of the main fireplace blocks, which

strongly indicated that the smaller fire-cracked rocks were also part of the inner fireplace construct and had been spread from the ranch clearing operations. The smaller stones were probably the outer portion of the fireplace that was not exposed to the high heat.



Mortar/plaster on stone, slice of mortar/plaster, and various chunks

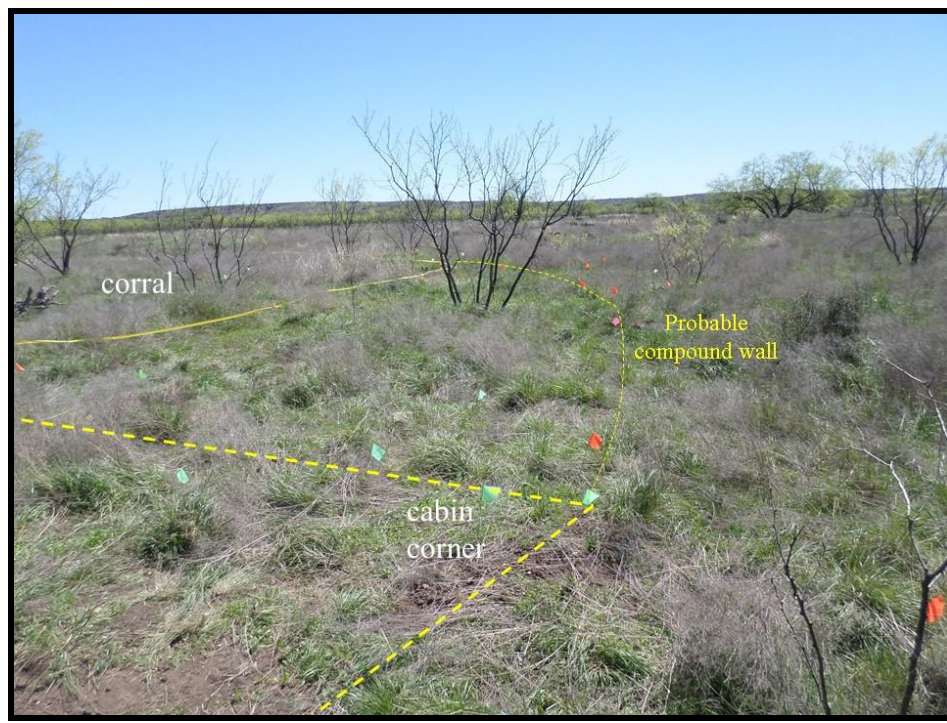


Large cut, fire-heated limestone block

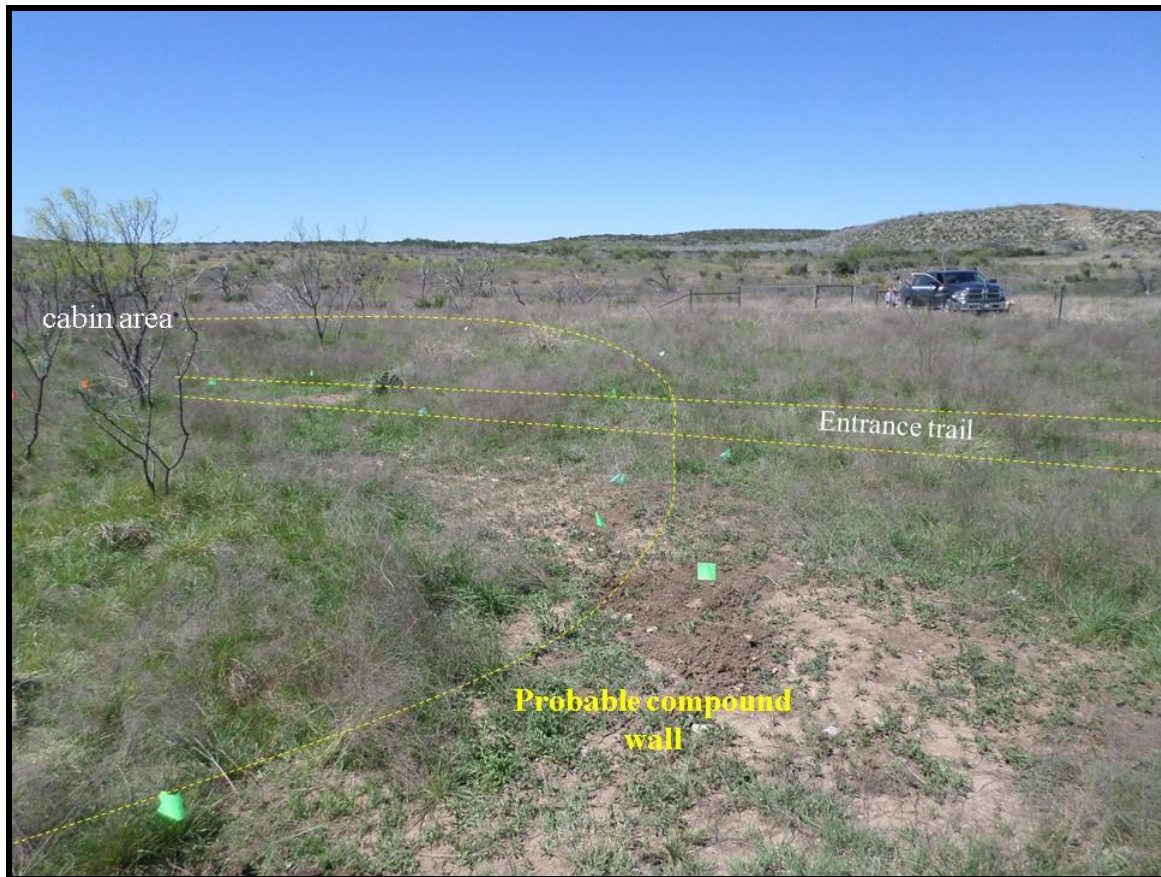


Mortar on side and top of large limestone block

As reported by Mrs. Elkin in her account, after the cabin was built a stockade-type wall was added using a picket wall construct. A faint outline of this wall and the entrance trail from the main trail can be seen in one particular satellite image. The entrance trail leads up to the cabin. It appears that they extended the corral to the cabin on each side to form an oval stockade. Flagging the nails that were metal-detected tends to support this outline seen in the imagery.



Probable south compound wall shown by flagged nail areas



Probable north compound wall shown by flagged nail areas



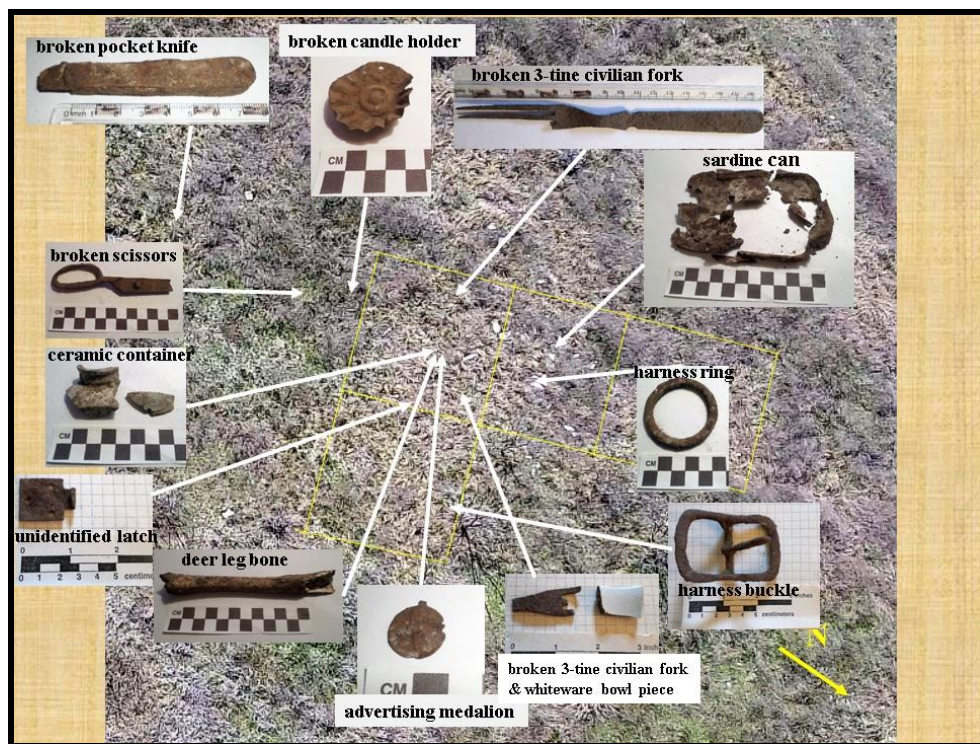
Outline of entire stage stop with stockade wall (Google Earth)

Grape Creek Station Artifacts

Similar to Johnson's Station, the next station down the line, the artifacts found at this location represent multiple periods. There are artifacts that date back to the period when the stagecoach was active, as well as those from the post-stage station period, which represents camping for those using the old stage road.

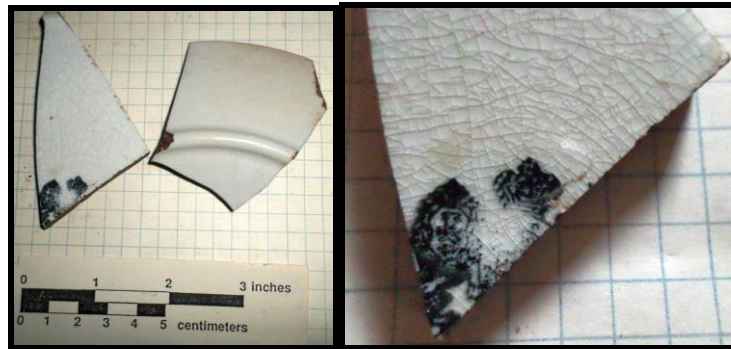
The artifacts that fit the stagecoach period are limited. This is because the owners were ordered to vacate the station in the spring of 1861. In their account of the Indian attack conveyed by Mrs. Elkins, they stated that their wagon was packed and that they were to depart the next morning. After the attack, a contingent from Fort Chadbourne was dispatched to the station to provide medical aid and assist in transporting the wounded back to the fort. So, we know they departed, taking all their possessions with them. The only artifacts left to find are those they purposely discarded as trash.

The numerous square nails used to construct the cabin were obviously of the proper period. Beyond that, most of the items of proper period were found in or very close to the estimated cabin perimeter. The following shows the artifacts and their locations.



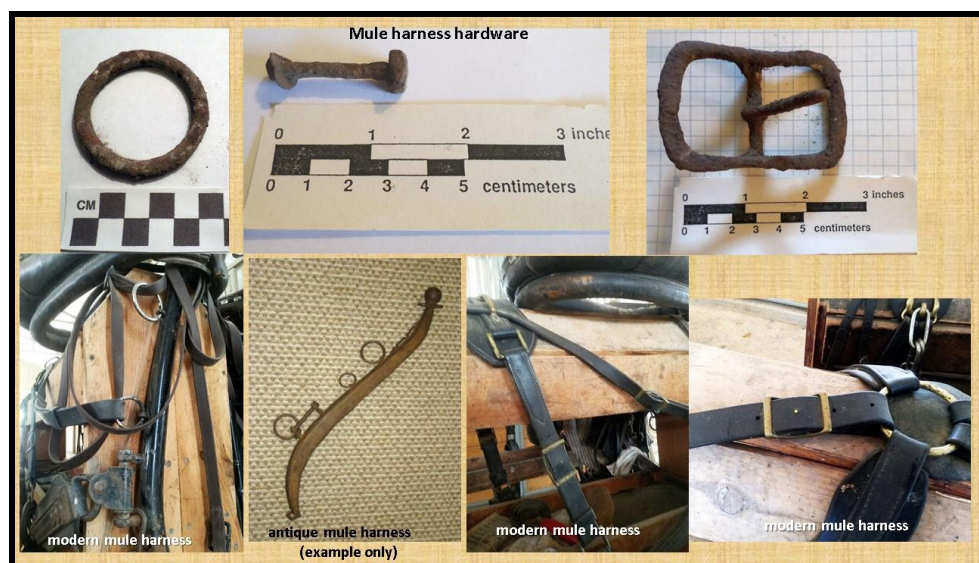
Artifacts in and around cabin area of probable Butterfield stage period

Some large pieces of whiteware were also found in an area just in front of the building perimeter. One was an identifiable piece of dishware, and the other had a partial stoneware stamp. The maker's mark is from L.F. Field, Utica, N.Y., produced 1860 – 1870 (Pottery Magic).



Whiteware dish pieces and partial stoneware stamp

In addition to the hand-forged mule shoe found near the corral, three items, in particular, appear to be mule harness hardware. Those are the harness buckle, harness ring, and a hand-forged square head hinge pin for the mule yoke. The buckle and ring were both found within the cabin perimeter. The hinge pin was found in the area that would have been the stockade gate for the wagon to enter. The hinge pin is smaller than most mule yoke hinge pins. This can be attributed to the smaller size of the Spanish mules used in Texas.



Mule harness hardware (artifacts top, examples bottom)

Post Stage Station Period Artifacts

After the stagecoach site was abandoned, it continued to be used by travelers. Some of the items found were obviously from this later period. None of them points to any permanent habitation. One of the things we did not find is just as important as the ones we did. That is, we did not find window pane glass. This supports the proposition that this was never a later-period home structure. One of the things people usually do when trying to homestead is add windows. This was not the case at this location.

Two distinct military camping periods were identified – the Fort Chadbourne and Fort Concho periods. A 50-70 cartridge matched a similar one found at Johnson's Station on the Middle Concho River in a 2009 project. This was a Berdan-primed, raised-ring centerfire cartridge. This is also identified as UMC Ringed Folded Head. This was the earliest of the .50-70 Government cartridges. It was a black powder round adopted in 1866 for the US Springfield Model 1866 Trapdoor Rifle.



50-70 Military cartridge

In June 1867, Lieutenant Boehm left Fort Chadbourne with a detachment of 40 men and followed the Butterfield Trail down to the Middle Concho. They set up what they called 'Permanent Camp' at the location of Johnson's Station. Basing out of this location, they escorted cattle herds to the Pecos for one month, when they were relieved by G Company of the 4th U.S. Cavalry. This rotation of company-size detachments continued for six months, until November 1867, when Fort Chadbourne closed, and preparations began for the establishment of Fort Concho the following month. (Haley, Taylor)

The other possibility is the unit from Fort Stockton, led by Brevet Lieutenant Colonel Strang, on its march to Fort Chadbourne in October 1867. Both these units probably camped at the Grape Creek site, as it is

approximately eight 8 hours by wagon between this site and the next stage site, Johnson's Station. It should be noted that a similar cartridge was found at the Johnson's Station site.

The other military artifacts found at this site date back to the Fort Concho period. A broken knife and fork from an M1874 military mess kit were found at two separate locations within the estimated compound walls, but not within the estimated building perimeter.



Utensils from the M1874 mess kit

This site did not show up in any Fort Concho patrol reports. However, it was known to be a temporary camp for soldiers from Fort Concho passing this way. It is unknown how long this building stood and remained usable. It could have eventually been washed away by some of the massive floods reported in the early 1900s. The landowner told us she had been riding along this creek since she was a teenager (in the 1960s) and had never seen the remnants of the station.

Other camping items found appear to be civilian in nature. We know this road was used extensively after the Civil War by immigrant wagon trains and cattle drives. For the trail drives, the name changed to become the Goodnight-Loving Trail.

The 44-40 was the most popular cartridge of the 1870s. Three were found at this location, and six were previously found at Johnson's Station. These particular ones were stamped Winchester (WRC). The primer is missing in one cartridge, but based on the comparison of the hammer pin indentation, the other two were not fired from the same gun.

Except for one 44-40 cartridge, the camping items appeared scattered outside the building's perimeter. In addition to the 44-40 cartridge, a UMC 12-gauge 'Club' shotgun shell was dug up in the area of the cabin perimeter. The UMC Club double ring was the first in the Club family of shells. It was a black-powder shell and the first generation of Club shells. It was produced from 1892 to 1896.



44-40 cartridges

One of the three medicine bottle tops matches one of the most common Sarsaparilla bottles manufactured and most likely dates from the late 1890s to the early 1900s. (Lindsey) A second does not appear to be hand-blown, suggesting it is probably of the same general era as the Sarsaparilla bottle. A third could not be identified.



Medicine bottle tops (left bottle is Sarsaparilla)

A Dutch oven lid was found in an area considered completely outside the compound. Dutch ovens were the most often found in wagon trains and cattle drives.

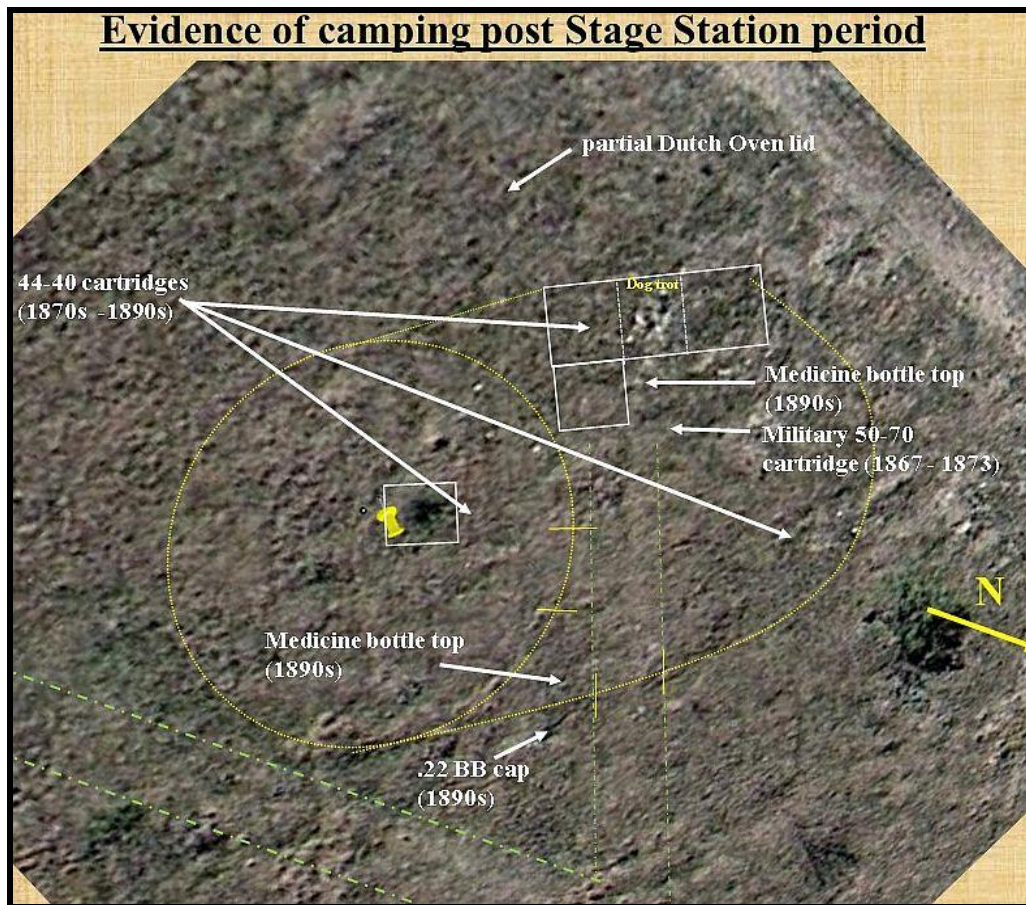


11-inch Dutch oven lid



Solder top can lid

Closer to the creek, we found a solder-top can lid. These were common from the 1870s to the 1880s, often with military units. The lid was cut off below the seal.



Locations of probable camping artifacts (Google Earth)

Grape Creek Station Summary



The Butterfield Overland Mail's Grape Creek Station was located precisely where those with first-hand knowledge described it. And it was also constructed exactly as described. Time, floods, fires, and modern ranching had almost removed all traces of it. Only a close inspection using new technology and following clues from our long-ago travelers could help find this elusive ghost of the past. To the casual eye, there is nothing left, and there hasn't been for a long time. The owner stated she had ridden up and down this creek as a young girl and had never known of or seen this site.

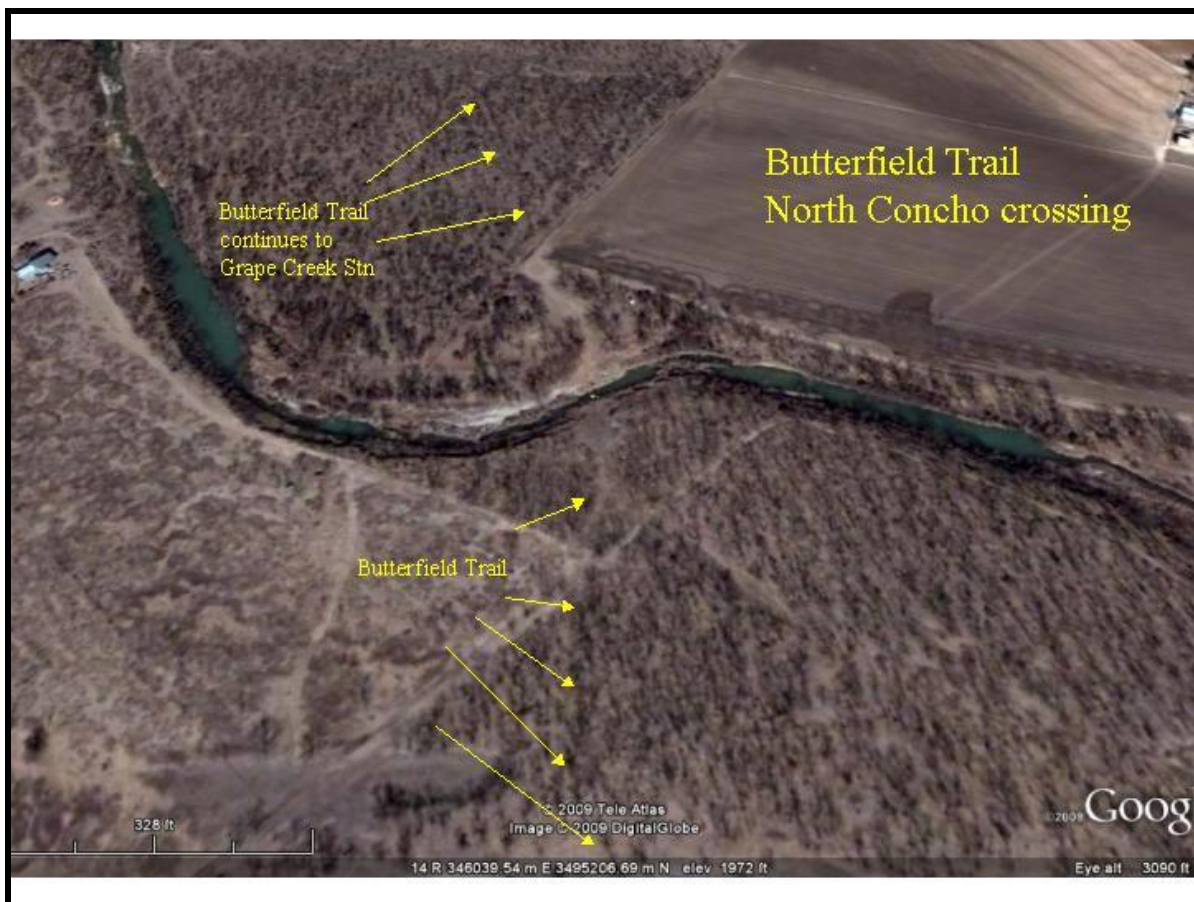
Although this primitive station stood for only a short time, it had a profound effect on the opening of the West and tying our country together across vast distances of a harsh, unforgiving land. Only the hardest could build something out of nothing while withstanding everything nature and a hostile Indian nation could throw at them.

For the weary travelers, it was a small spot where they could find peace and respite, sitting on the banks of a clear, spring-fed creek under the shade of lingering pecan trees. I'm sure many who came to this spot in covered wagons after the station was abandoned stayed more than just one day, knowing the next part of their journey would be unforgiving.

The location has been lost for the better part of 75 years, and it was essential to find it and pull from the ground what small bits of the past we could. We can now let the past go back to sleep and let the land continue on its path of reclaiming what it owns and what we only borrow and then return.

6. The North Concho River Butterfield Trail Crossing

After leaving the Grape Creek Station, the trail led down to the North Concho River through what is now the small town of Carlsbad. This information is fairly well documented, and the trace validated the reported route. The actual crossing site was where the information differed from the trace as seen in satellite imagery. According to Conkling, the original crossing was “where the ruins of the first concrete bridge over the river may be seen.” Undoubtedly, there was a crossing at that location, but it was not for the Butterfield Trail. He mentioned two other crossings that were not for the Butterfield Trail either. The actual trail crossing was 1.2 miles southwest of the town of Carlsbad, close to where Mule Creek empties into the North Concho. This crossing is verified by continuing to follow the trail south of the crossing as it leads down to the Middle Concho River and eventually to the next station, Johnson’s Station.



North Concho crossing of Butterfield Trail (Google Earth)



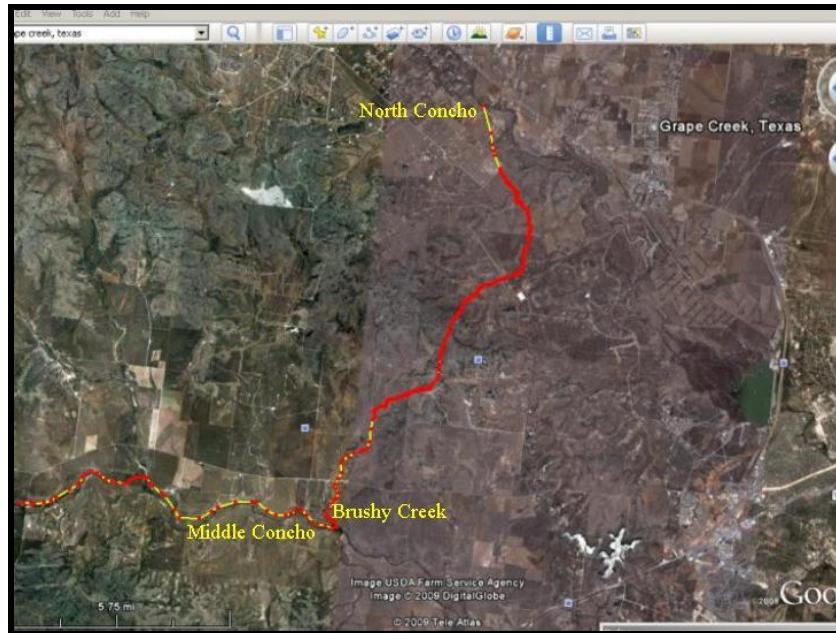
Old cut in bank on south side of North Concho River crossing



Trail heading south from North Concho River crossing (Google Earth)

From the North Concho, the trail ran through the dry country down to the Middle Concho River. Again, Conkling made an educated guess on where the trail came down to meet the Middle Concho, stating it was a “short distance east of the site of the old Arden post office.” This was

previously thought to be Rocky Creek. It crossed Arden Road, following alongside Brushy Creek down to the river. As the trail continued up the Middle Concho River, it came to Johnson's Station.



**Entire trace of Butterfield Trail as it comes from North Concho and continues down
Middle Concho River (Google Earth)**

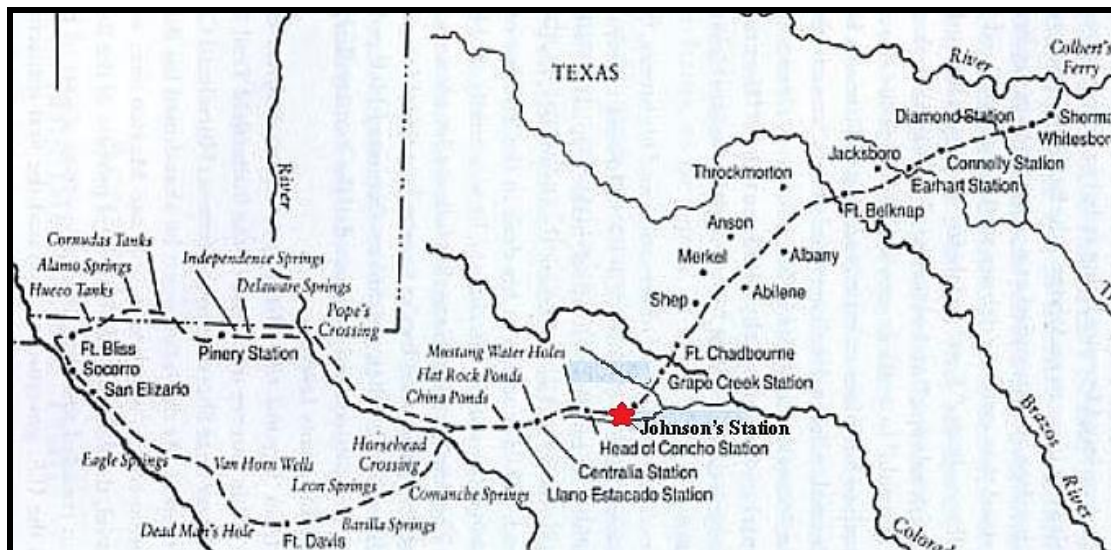
7. Johnson's Station (41IR123) Irion County



Johnson's Station field during the 2009 archeological project, and AI image insert

Although there have been numerous references to Johnson's Station by historians of the Butterfield Trail, the location slipped away into history. Research on publicly available maps and publications provided a general area to begin searching. High-resolution satellite imagery, newly available to the public, helped narrow the probable location by following the trail trace. The landowner was contacted and agreed to a survey. During our first survey, an unknown historic site was discovered, featuring white-ware pieces, metal, and numerous stones scattered around that appeared to have been used in the construction of a building. Additionally, a nearby brush pile contained fired stones, as if they might have been used for a fireplace or hearth. When this information was presented to the landowner, whose family had owned the property since the late 1890s, he indicated there was no known site at that location. Thus began an extensive survey that eventually revealed a much larger site that turned out to be Johnson's Station.

Johnson's Station was the second relay station for the Butterfield Stage line heading west after leaving Fort Chadbourne. It was one in a series of stations crossing West Texas on the way to or from the Pecos River and New Mexico. It was located on the Middle Concho River after a southwesterly crossing of 32 miles from the previous Grape Creek Station. Coming from the west, it was the next station after the Head of the Concho station. Although neither Fort Concho nor San Angelo existed at the time, the location is just over 20 miles west of both.



Johnson's Station - Butterfield Overland Mail route

This entire area covers approximately five acres. It is bordered on the eastern side by a shallow draw, on the northern side by a slight rise and open ranch land, on the southeastern side by a 25-foot deep draw, and on the south side by a large area of pecan trees. It is in an active floodplain with low hills to the north and south. The main area of interest is open fields cleared of cedar and mesquite by the landowner and pushed into brush piles. In the 1800s, this area would have been open prairie. The elevation is 2,050 feet. During that period, the Middle Concho River would have been approximately 300 feet south of the main building. A seepage spring runoff gully was located approximately 340 yards from the building. This would have been a good source of clean water.

There has been considerable confusion throughout the history books and articles over the years regarding this small station west of San Angelo. Many historians confused this station with Camp Johnston on the North Concho River. Camp Johnston was never a stage station. It was the military camp that preceded Fort Chadbourne. Some have also confused the name, calling it Johnston's Station. This is based on the same confusion but mixes names from each location. First-hand reports from the time refer to the name as Johnson's Station or Johnson Station. Finally, some confuse the Middle Concho Johnson's Station with another Johnson's Station in Tarrant County, just south of present-day Arlington, Texas, between Dallas and Fort Worth.

Johnson's Station Butterfield Stage Period

It was a Friday afternoon at Johnson's Station on the Middle Concho River, and the stage was due at any time. Johnson's Station was a small line station, just enough for a quick meal and a change of mules. Mr. and Mrs. Evaness ran it with five other hands. Suddenly, a large group of Comanche appeared out of nowhere. The Indians tried stealing the mules, but they were hobbled with chains and locks, so they killed them. Then, they turned their attention to the station. The men and one woman barricaded themselves into one side of a double-log cabin, separated by a 10-foot breezeway called a dog trot. The Indians looted one unbarred side of the cabin, including the kitchen. However, they were not satisfied and began using flaming arrows on the roof to force the occupants out of the barricaded side. The station workers yelled out in Spanish that they were well-armed but would not fire on the Indians if they let them go. The Indians agreed, but when Mrs. Evaness emerged, one of them said in English that the white woman was beautiful and that he wanted her for his own. Mr. Evaness heard the comment and killed the

Indian on the spot. The employees ran for cover in a grove of trees, with the Indians firing on them. Mr. and Mrs. Evaness were wounded, and things were not looking good. Just at that time, the stagecoach appeared on the road. Thinking the coach might be bringing troops from Fort Chadbourne, the Indians quickly departed. (Wilbarger)

Such was life on the Butterfield Stage route from 1857 to 1861. Although the larger stations, such as Fort Chadbourne, were what folks saw on the route schedules, they needed stations spaced approximately 25-30 miles apart to relieve the mule teams.

Another account, in October 1859, by a traveler, went like this.

“Our spirited little landlady, reared in eastern Texas, gave us a description of an attack on the station by one hundred twenty Comanche who were held off by the stock tender, her husband and herself three weeks before.” The lady declared, “We won’t be driven out by worthless red-skins.”

The traveler also noted iron-pointed arrows with feathers were still sticking in the cottonwood log fence that surrounded the station. (Haley, Green) The reference to cottonwood logs was likely a misidentification of pecan trees by someone unfamiliar with the area.



Tree Grove Next To Station



Cottonwood tree

Pecan tree

The Butterfield Overland Mail schedule called for stagecoaches to pass in each direction twice weekly. At Johnson's Station, the coaches would arrive on Tuesdays and Fridays heading west, and on Wednesdays and Saturdays heading east.

Adam Rankin Johnson

Adam Rankin Johnson served as the county surveyor and agent for the Butterfield Overland Mail as far west as El Paso and later became a stage driver for the company. Although he did not purchase the land for Johnson's Station, he did purchase several other sections of land along the Middle Concho River. It was likely Johnson who first chose the location for the mail station, probably owing to the name Johnson's Station. When the Civil War broke out, Johnson joined the Partisan Rangers of the Confederate States Army, later reaching the rank of Brigadier General. After the Civil War, Johnson founded the town of Marble Falls, Texas.



Adam Rankin “Stovepipe” Johnson

Some researchers have speculated that the station moved shortly after its initial service with the Butterfield Overland Mail, but no records support this claim. Logic also dictates that this small group had neither the time nor the security to build an entirely new station while keeping their stock tended and maintaining the station schedule. The Middle Concho Johnson's Station probably served the Butterfield (later Wells Fargo) mail and stage route until the line was shut down in 1861 due to the onset of the Civil War. However, the historians weren't completely wrong. Johnson's Station moved upriver later, after the Civil War, when the San Antonio to El Paso Overland Mail began operations out of the Concho Mail Station and Fort Concho.

Ben Ficklin Mail Station (Johnson's Station #2)

Johnson's Station moved when the Ben Ficklin (San Antonio to El Paso) mail route began operating after the Civil War in 1868, connecting to the old Butterfield Trail after leaving Fort Concho (San Angelo). The stage would leave the Ben Ficklin stage station a few miles south of Fort Concho and drive to the fort to pick up passengers and mail before heading west to follow the old Butterfield Trail to the Pecos River and on to El Paso. The original Johnson's Station was located at the best location possible within the maximum range set for the mules to be relieved for the Butterfield route coming from the north. In this case, it was 32 miles from the Grape Creek Station. The next stop after Johnson's Station was Head of the Concho Station, a distance

of 32 miles again. When the Ben Ficklin line began, they must have realized the first stop was too short from Fort Concho – only 22 miles. So they moved it farther upriver to even out the spacing between stations to 27 miles apart. They retained the same name and referred to this second stage station as Johnson's Station. Land deeds support the successive ownership of this new location by various Ben Ficklin Stage Line partners. A detailed satellite imagery search of the latter station and the 'Grierson shortcut' portion of that road revealed the likely location of this station at the proper distance from Fort Concho and indicated on the land deeds. The commander of Fort Concho ordered the shortcut. (Temple) The Grierson cutoff begins on the east side, three miles from the original Johnson's Station, bypasses it heading west, and then another five miles to the second Johnson's Station.

US Cavalry, Fort Chadbourne

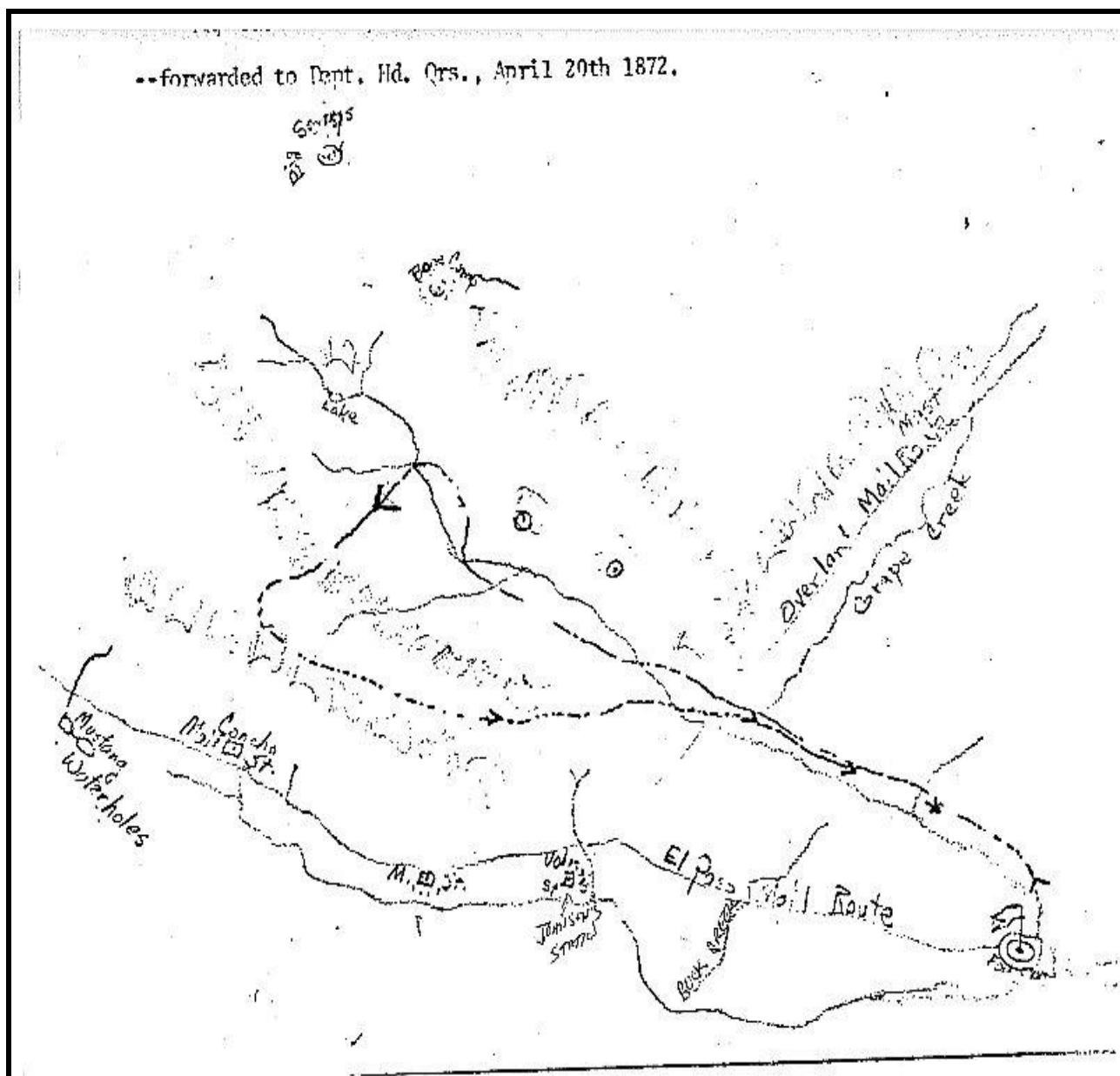
During the same general time frame that the Ben Ficklin line was being established, the original Johnson's Station likely served as a military camp for units from Fort Chadbourne. In June 1867, Lieutenant Boehm left Fort Chadbourne with a detachment of 40 men and followed the Butterfield Trail down to the Middle Concho. They set up what they called 'Permanent Camp', listed as 18 miles from the junction of the Middle and North Concho Rivers. This is the location of the original Johnson's Station, measured by the trail running along the Middle Concho River to the junction of the two rivers. Basing out of this location, they escorted cattle herds to the Pecos River for a deployment period of one month, at which time they were relieved by G Company of the 4th U.S. Cavalry. This rotation of company-size detachments continued for six months, until November 1867, when Fort Chadbourne closed, and preparations began for the establishment of Fort Concho the following month. (Haley, Taylor)

US Cavalry, Fort Concho

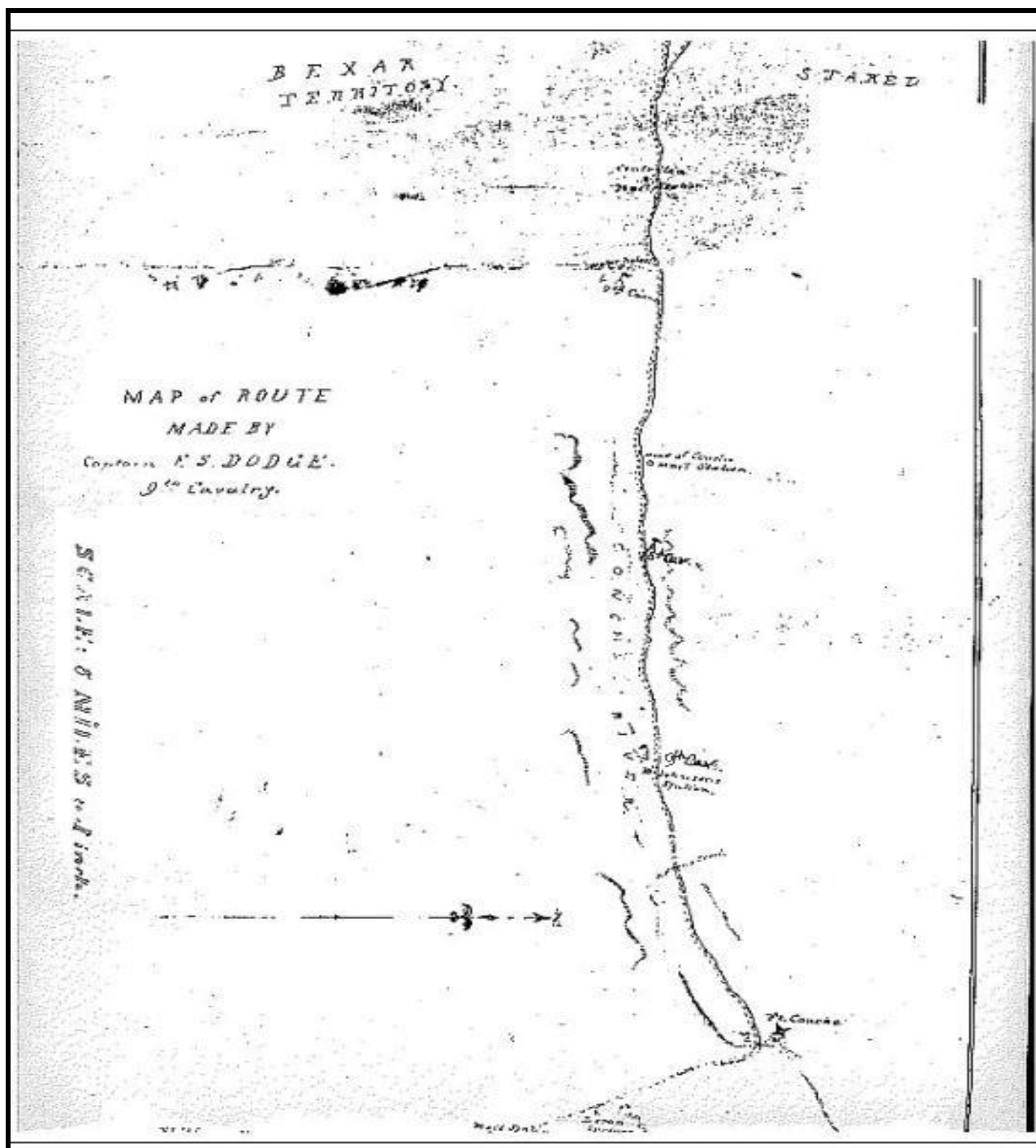
After Fort Concho was established, the troops again assumed responsibility for protecting the Ben Ficklin mail line and escorting cattle drives. In June 1869, soldiers began permanent picket duty at Johnson's Station #2, set up by the Ben Ficklin line. In December, the commander of the Pecos Region instructed the Fort Concho commander to build permanent quarters at the station – a building with a pole roof covered with mud or unformed adobe that could overlook the corral. The picket outpost consisted of one noncommissioned officer and four privates from Fort Concho. (Concho)

One day, just before Christmas in 1869, a band of Indians hit this mail station and ran off five cavalry horses. The raid brought a quick reaction. Fifty troopers rode out of Fort Concho in pursuit. To forestall further raids, the command later dispatched a lieutenant with two sergeants, two corporals, and twenty-three privates of E Company, Ninth Cavalry, plus a hospital attendant, to Johnson's Station. They planned to stay for at least a month, scouting the region vigorously for hostile bands. (Uglow) Likely, this large detachment once again utilized the original Johnson's Station location as its base of operations. Artifacts, as reported further down in this report, tend to support this.

Documents from Fort Concho indicate that both Johnson's Stations were well known and referenced by cavalry scouting parties well into 1879. An 1872 scouting map shows Johnson's Station and two mail stations farther on, one of which is Head of the Concho and the other the newer Johnson's Station, but both are designated only as "mail station." Another 1874 scouting map shows units of the 9th Cavalry camped at Johnson's Station, and the 10th Cavalry at Camp Charlotte, but nothing is listed at either of the mail stations. Since mail station guard detachments were constantly detailed to the mail stations during this time, this map was probably intended to show only the cavalry camp locations, one of which was the original Johnson's Station. The map also provides a scale in miles, accurately matching the 9th Cavalry location to the original Johnson's Station. Finally, an 1879 scouting report states the detachment passed the "old and the new Johnson's Station" on their way out to Camp Charlotte. Additional evidence that the newer station maintains the Johnson's Station name comes from multiple reports that reference Johnson's Station and the distances marched from known points to the station. Six reports provide the correct distance, indicating they referenced the newer mail station location. These reports covered the periods of 1872, 1877, and 1879. Two reports provide the proper distance, suggesting that they referenced the original Johnson's Station. These reports were dated 1874 and 1879. (Concho)



1872 scout map shows old Johnson's Station and the new mail station. Author annotation for clarity of old Johnson's Station (Fort Concho archives)



1874 scout map shows cavalry at two camp locations (Camp Charlotte, Johnson's Station) but does not convey the infantry detachments during that period at both the new mail station and Head of Concho mail station. Distance is correct for old Johnson's Station. (Fort Concho archives)

Although the railroad from San Antonio to El Paso was completed in 1883, which alleviated San Antonio passengers from having to take stagecoaches, stagecoaches continued to operate from Fort Concho to El Paso until 1886. After that, all mail overland stations were abandoned.



Stagecoach from Fort Concho to Fort Stockton, dated 1886 (Fort Concho Archives)

Johnson's Station Ranch Period

The current landowner's family purchased the property on which the old Johnson's Station was located in the late 1890s. There is no family memory of this location ever having a structure or being occupied. In recent years, the area had been cleared of brush by bulldozing. The known location of the original ranch house is designated 41IR118, located approximately one mile upriver.

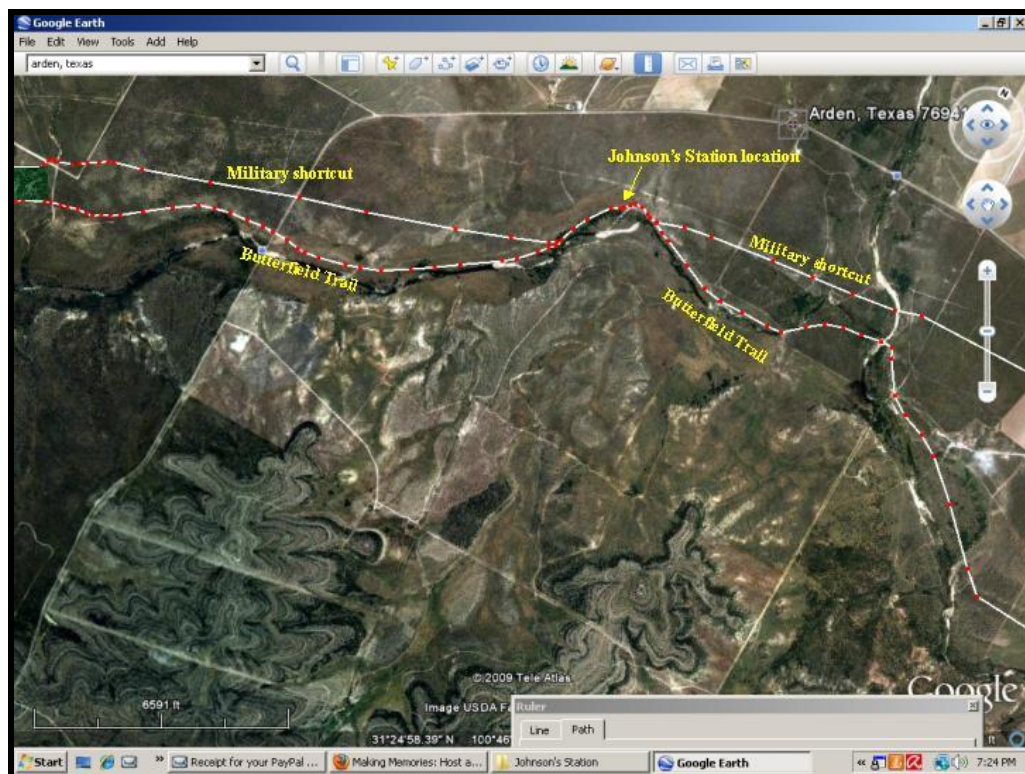
From the mixed period of artifacts, some were quite obviously ranching artifacts; coming out of the Johnson's Station site, it appears that, in addition to the Butterfield and cavalry period of 1857 – 1882, at least one period in the late 1880s or 90s, this location must have been continuously occupied for a short period. This may have been by the partner in the original purchase. The current landowner's grandfather lived in town with his wife and family before moving to the ranch, probably after the main ranch headquarters was built. However, there is no documentation of where his partner in the land purchase resided after the purchase.

Butterfield Trail and Fort Stockton/El Paso Mail Road

Interpreting the two major trails through the area was as important as the station location. In addition to helping determine the station's likely location, the trails helped confirm it because they had to run right through or past the station.

Two trails run along the Middle Concho River. Fort Concho records revealed that the military constructed a second trail to facilitate wagon travel and reduce distances. Soldiers referred to this second trail as either the Fort Stockton Road or the El Paso Mail Road, also known as Grierson's Shortcut. The newer section of the trail shortcuts the older Butterfield Trail. This is the shortcut referred to by Colonel Grierson in his 1872 writing. The two come within 300 feet of each other in the area of the original Johnson's Station. There is a deviation of the newer trail at that point that goes to the station.

Some current topographical maps list the Grierson shortcut as the Butterfield Trail. However, the Butterfield Trail followed the winding river, while the newer trail was straight and usually ran about half a mile away from the river. In the area of the newer Johnson's Station upriver, the trails merged, and from that point west, it remains the same trail as the original Butterfield Trail.



Butterfield Trail and later military shortcut built by Col Grierson (Google Earth)



Two trails passing Johnson's Station (Google Earth)

Location and investigation

A satellite imagery search of the Johnson's Station area revealed earth disturbances, leaving the impression of a building and a corral area. The building measures 35 feet by 55 feet and is oriented on a north-south axis. The corral measured 65 X 65 feet. The Johnson's Station building was said to be a double log cabin with a 10-foot-wide dog trot. One side was used as living quarters and the other as a kitchen area. (Wilbarger) These types of buildings were very common in early Texas. One of the officers' quarters at Fort Chadbourne is a very similar design. The outer foundation measured 51 feet, 8 inches by 33 feet, 4 inches, with a 10-foot-wide dog trot in the middle. Each side of that building was divided into two rooms. (Riemenschneider)



Johnson's Station building and corral area via satellite imagery (Google Earth)

For the construction of the log cabin, the area was near a large stand of Pecan trees (as referenced in Mr. and Mrs. Evaness's 1857 account) that likely provided the wood for the building.

A metal detector search of the area revealed two locations, approximately 325 feet apart, separated by the pecan grove. The southern location revealed square nails, dishes, and pieces of cast-iron cookware. A military-issued .50-70 military cartridge found at the northern location spurred a more thorough search. Many items were scattered throughout the area, and an artifact mapping regimen ensued. The northern area was the primary focus of this site. There were brush piles in the area due to brush clearing by the ranch, so it was not possible to determine precisely where any particular item originated unless it was buried deeper than the brush removal operation. Large footing stones were found near the brush piles, which were likely pushed by

bulldozers. These stones were large limestone and not natural to the immediate area. They were large enough to be footing stones for a pier and beam log cabin construction.



Unearthed limestone was probably used for footings of pier and beam construction

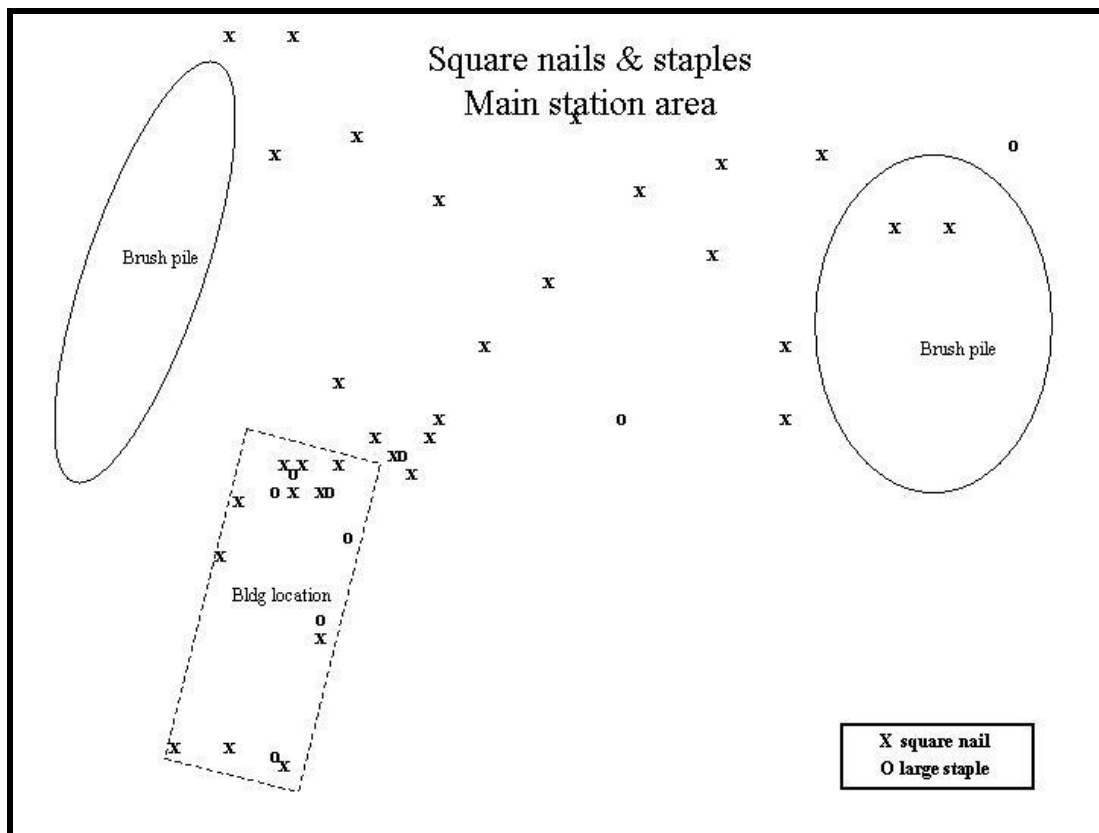
A metal detecting search of the identified area to the south revealed many objects, many of which were within or around the perimeter of the bounded area, later identified as a probable building site through imagery interpretation. Artifacts found in the area were either surface finds or averaged 3 – 6 inches in depth. Many objects were building-related (e.g., square nails, large wood staples). Other objects included cooking and eating utensils, as well as military and civilian cartridges.

Some items in the main area were consistent with the civilian and military artifacts of the late 1860s and early 1870s. Many items could not be tied down to a specific period. It appeared that this site had been occupied by multiple periods, including the Butterfield Overland Mail 1860s & 70s U.S. Cavalry (1860s and 1870s), civilians (1870s and 1880s), and homesteaders (1890s &

early 1900s). The secondary building, located 225 feet away in the trees, probably had some relationship during one of these periods, but which period could not be determined. The entire area covered approximately five acres and was designated as a single site.

Results of the Johnson's Station Archeological Investigation

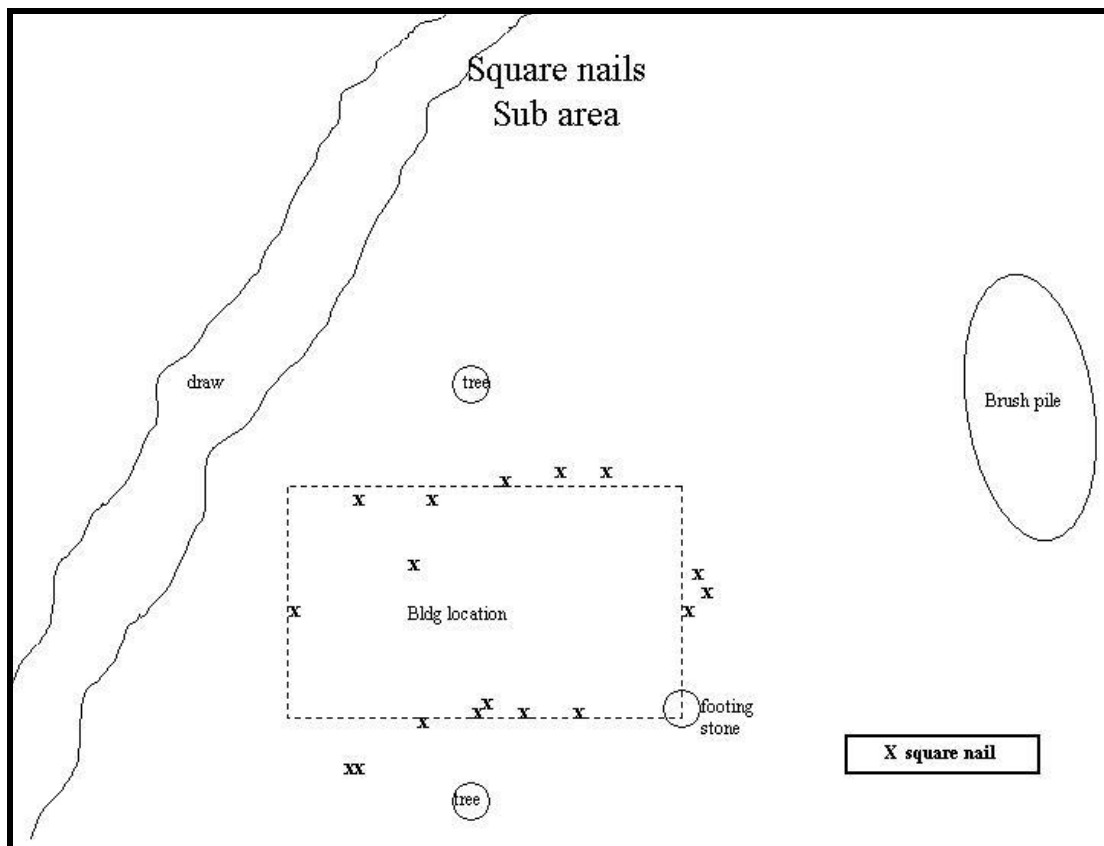
Although seemingly less significant, square nails played a major role in determining the location, size, and likely structure of the two buildings at this site. As explained previously, the original site location and at least one of the building's structure locations and dimensions were initially determined through satellite imagery interpretation. Although many of the artifacts were moved by previous bulldozing of the area, the number of nails supported the likelihood that these structures were log construction, and the patterns were sufficient to discern their likely orientation and size. Nail sizes varied from very small to very large (6 inches) and every size in between. Since it appeared that large staples (usually used for fencing) were also used in these structures, those were also included in the pattern analysis.



Square nail and staple distribution at main site location

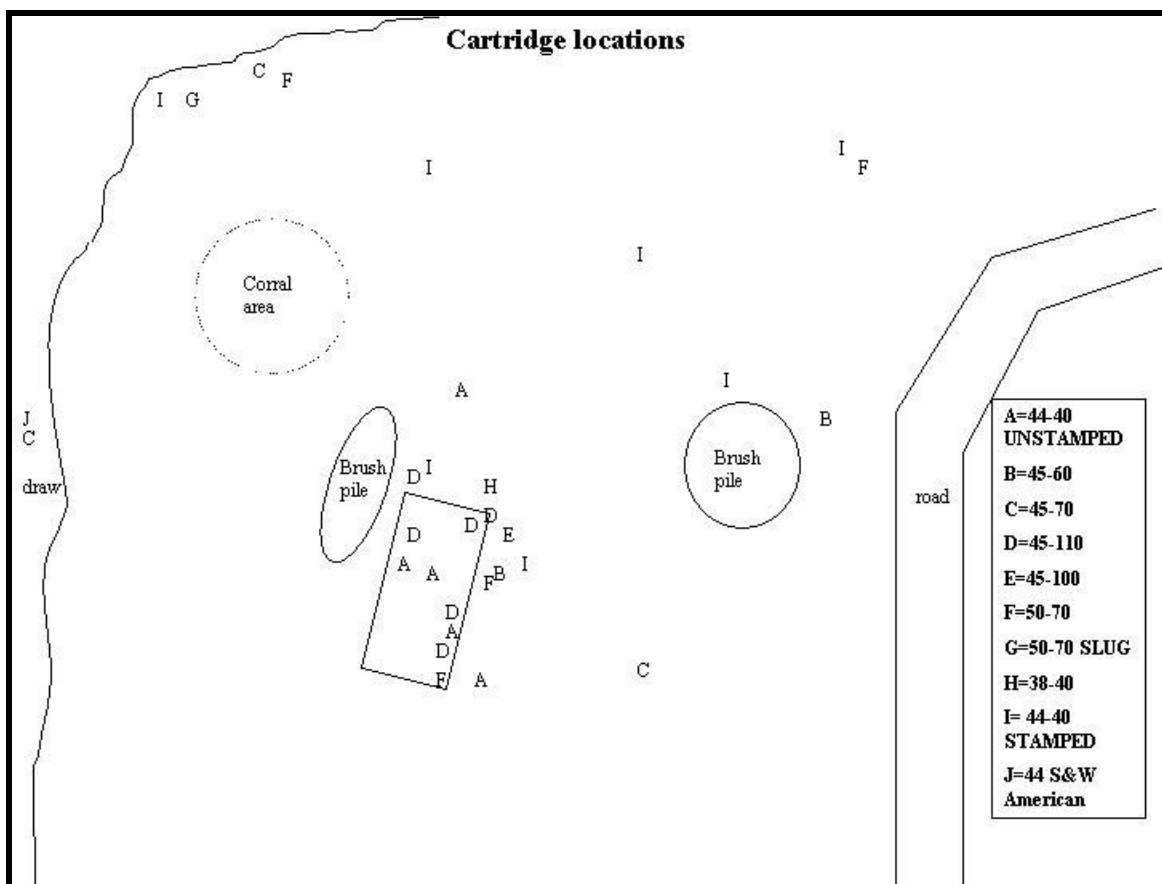
At the main station site, many of the nails appeared to have been randomly distributed by the bulldozing activity. However, the numbers support a probable log cabin structure, and the concentration along or close to the assessed building perimeter supports the building's location, size, and orientation. Six round nails were also found within the site area. These probably came from the occupation during the early homesteading period. Large-scale production of round wire nails began in the U.S. in the 1870s. About 1890, wire (round) nails became more popular than cut nails in the United States. In the Far West, wire nails outnumbered cut nails by about 1900.

At the southern building location, there was also a concentration of square nails. The distribution and orientation support the assessment that this building was of similar construction to the main area – a 35 X 55-foot log cabin. The only discernible evidence of the period is a single shotgun shell found at this site, dating to the proper period of military occupation. It's possible that the Fort Chadbourne soldiers occupied this building during their six-month stay in 1867.



Square nail distribution at building #2 (southern) location

A pattern analysis could be conducted with the numerous cartridges found at the main building. Once again, the pattern correlated with the main building's location, size, and orientation, as interpreted from satellite imagery. The most numerous cartridges found around the building perimeter were the .45-110/45-100 Sharps, unstamped .44-40, and the military .50-70. It is difficult to assess why the firing was conducted. It is possible that buffalo/deer hunting was taking place, but it seems unlikely to have occurred from an occupied building, given the large number and variety of cartridges. Given the numerous reported encounters with hostile Comanche Indians in the area during the Fort Chadbourne and Fort Concho cavalry period, it is not too big a leap to theorize that occupants at this location often believed they were defending themselves from hostile bands of Indians. However, cavalry units officially reported no encounters from this location. A possibility could be that night guards - military or civilian - employed a 'shoot first, ask questions later' approach when encountering any perceived encroachment on their camp, whether actual or imagined.



Cartridge distribution at main site location

Although many of the artifacts are general in nature and cannot be directly tied to a specific period, some can be attributed to four distinct periods of occupation (e.g., the Butterfield Overland Mail, the U.S. Cavalry, a possible buffalo-hunter camp, and ranching).

Johnson's Station Butterfield Overland Mail Period

One 54-caliber round ball was found on a rise above the main site area, approximately 350 feet away from the building location. The ball was probably dropped. The seam is very apparent, as is the cut from the mold. The ball is uneven, measuring from 0.501 to 0.540 inches, with the most common measurements falling between 0.520 and 0.530 inches. The 54-caliber flintlock was a common trade gun among Indians, and this ball could have originated from one of the two documented times when Comanche Indians attacked the stage station. Additionally, a 4.25 x 0.5-inch thin strip of lead was found about 240 yards from the station. This was probably used to make lead balls and was dropped from a pouch.

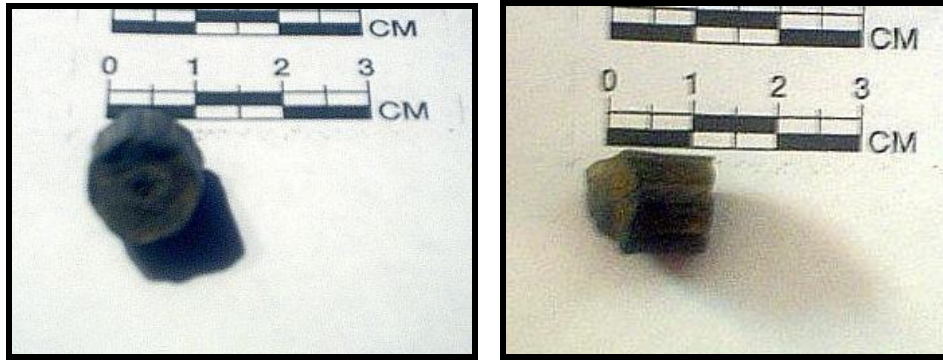


.54 caliber round ball



Typical .54 caliber flintlock Indian trade gun (www.apacheria.com)

Another unusual lead bullet from a probable percussion pistol was found on the Butterfield Trail leading up to the station, approximately 550 feet out. It has an unusual hexagonal shape with straight grooves running lengthwise of the bullet. The diameter ranges between .442 and .445 inches.



Hexagonal-shaped bullet

The length and weight are almost half of the famous Whitworth hexagonal bullet from the Civil War, so the assumption is that it must have come from a pistol rather than a rifle. The only pistol we've been able to research that fits this bullet is a double-barreled percussion boot pistol. This pistol is of a type possibly carried by persons during the Butterfield Overland Mail stagecoach period.



This double-barreled boot pistol with hexagonal bores is 6.5 inches long and has a 3.5-inch barrel. The hexagon barrel is 3/8 inch, which fits the hexagonal bullet found along the Butterfield Trail.

A very large tin spout canteen, dug up in the area of the main site, cannot be matched to any known military canteen of the period. The depth was much deeper than any other artifacts excavated, indicating it was discarded much earlier than most of the artifacts. It is an unusual 12 inches in diameter and probably held two quarts of water. It has a tin spout. The tin spout canteen was popular before and throughout the Civil War. The tin spout was soldered onto the canteen and was well known for failing. Later, the spouts were made of pewter. Although this canteen was constructed from two pie-shaped pieces soldered together, the spout is offset from the seam rather than soldered to it. Given its size, it was probably carried on wagons rather than by horse. The stage drivers of the Butterfield Overland Mail carried their own personal canteen, and each passenger was allowed one personal canteen to carry. Since they were passing long distances across arid country, the canteens would have had to be as large as possible. This may have been carried by either the driver or a passenger, and the tin spout failed, leading to it being thrown away at the station.



Excavated 12-inch pre-Civil War period canteen



12-inch tin spout canteen

Johnson's Station U.S. Cavalry Period (1867 – 1882)

The .50-70 and the .45-70 cartridges found at this site are one of the most direct connections to the U.S. Army occupying this location. The .50-70 Government cartridge was a black powder round adopted in 1866 for the US Springfield Model 1866 Trapdoor Rifle. The cartridge became the official Government cartridge of the US military until it was replaced by the .45-70 in 1873. Two types of .50-70 cartridges were found. Two cartridges were internally primed Benet cup and likely fired by a Model 1868 or 1870 Springfield or Remington carbine. This is based on the lack of firing pin drag common to the Sharps carbine. One cartridge is a Remington-made Berdan cartridge, externally primed with brass and featuring a raised ring. The firing pin markings indicate this was fired from a rifle other than the Sharps, but identification could not be determined.



.50-70: internally primed Benet cup Remington Berdan cartridge

One 50-caliber slug was also found, which had mushroomed close to where the first .50-70 cartridge was found.



.50 caliber bullet found not far from .50-70 cartridge

A 10-gauge shotgun shell stamped UMC CO No 10 was uncovered at the site of the second building to the south and in the Pecan grove from the main building. In 1873, UMC acquired the patent rights to the C.D. Leet Company's paper shotshells and began manufacturing primed but unloaded paper shotshells in 10- and 12-gauge loads. During the 1800s, shotguns were a popular weapon employed by cavalry units. Cavalry units on both sides of the American Civil War employed shotguns. American cavalry (including the Texas Rangers) went on to use shotguns extensively during the Indian Wars. Horseback units favored the shotgun for its ease of aiming and devastating close-range firepower.



UMC No 10 shotgun shell

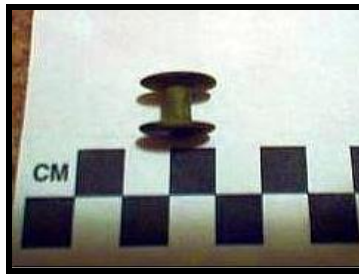
Another cartridge from the U.S. Army period of occupation found here was the .44 Smith and Wesson American. The 44 S&W American was one of the earliest American center-fire revolver cartridges. It was used in the S&W single-action Model 3 revolver. It is known to have been used late in 1870 and was probably introduced as early as 1869. The U.S. Army used this cartridge and revolver until 1873. (Barnes) When it was introduced, many officers and enlisted men preferred the Smith & Wesson No. 3 to the much slower-loading Colt Model of 1860 .44 cap-and-ball revolver. While the US Army purchased approximately 2,000 No. 3 for issue, troops also privately bought large numbers. The Model No. 3 S&W was carried in many engagements against the Indians, long before the Colt was finally issued. According to 1874 ordnance returns, the 4th Cavalry still had a few .44 Smith & Wesson revolvers in use at the time. (Cruse)

Sitting on top of one of the brush piles and next to the stagecoach building site was an M1858 cavalry canteen. A pewter spout for this canteen was located approximately 200 feet away. Two one-inch roller buckles, commonly used on the M1858 canteen leather sling, were also found - one at each building site location. Finding one of these buckles at the second building site supports the theory that soldiers may have built the second building during the six-month occupation period in early 1867. The canteen leather straps were on all pre-1862 canteens. After that, they went to cloth straps.



M1858 canteen and buckles commonly used for leather canteen slings

A military knapsack brad similar to those found at many Civil War and Indian war battle sites was also found.



Knapsack brad adjustment

The lead-soldered side seam No.2 cans, like this, were standard for army provisions. Many of these cans were found on this site and are of the same type as those found and reported from the Battle of Red River site and Indian Village 41B1544 in Tule Canyon (Cruse).



Lead-soldered lap side seam No.2 can

A Confederate-made eight-bar curry comb, also of the same type, was found at the Battle of Red River site and Indian Village site 41BI544 in Tule Canyon, and additionally excavated in Tennessee at a Civil War battle site and displayed in the book 'Confederate Saddles and Horse Equipment,' by William Stone. Each cavalry soldier was required to carry a currycomb like this in their saddlebag. (Cruse).



Confederate-made cavalry eight-bar curry comb

One unstamped .45-70 or .45-55 (the only difference was the number of grains internally) and two stamped cartridges were found at the site. The headstamp on the first one indicates it is a Carbine cartridge made at the Frankford Arsenal in March (3rd month) of 1878. The second headstamp indicates that it was a Rifle cartridge produced by the Union Metallic Cartridge Company of Bridgeport, Conn, in October of 1878. Also, the two fired cartridges were crushed, indicating they were probably military. Crushing cartridges was a common practice to prevent Indians from reusing the cartridges found on the battlefield. There was concern that Indians were reloading .45-70 and .50-70 cartridge cases that the Army discarded. This was accomplished by inserting a percussion cap in a hole punched in the base of the copper case, filling the case with black powder, and inserting either a newly cast or a reclaimed bullet. The practice of crushing cartridges was officially endorsed by the War Department in General Order No. 13, dated February 16, 1876.



.45-70 cartridge



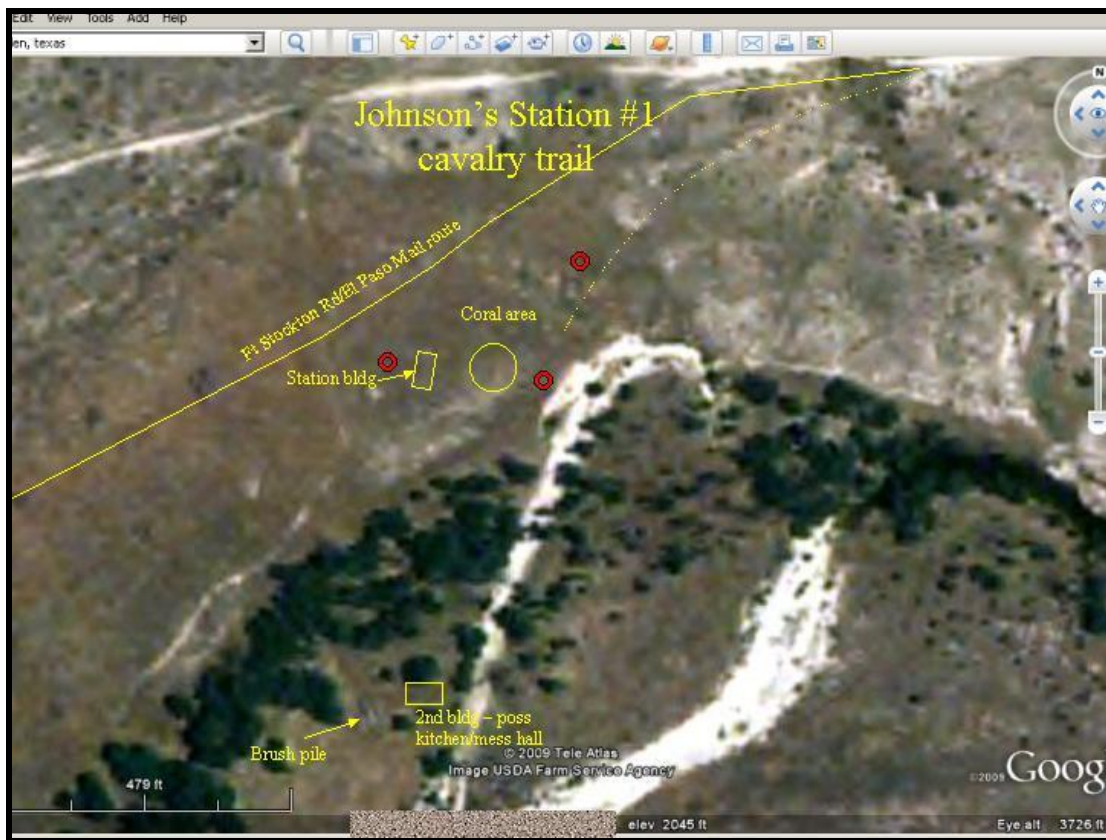
Unfired Benet primed .45-70



Stamped Berdan primed .45-70



The three 45-70/55 cartridges were found in areas suggesting positions along the outer perimeter. This theory is supported by a number of tin cans of the same type found in proximity to the cartridge locations. These perimeter positions also suggest the military used this site as a camp.



Perimeter guard positions in red (Google Earth)

Johnson's Station Buffalo Hunter Camp

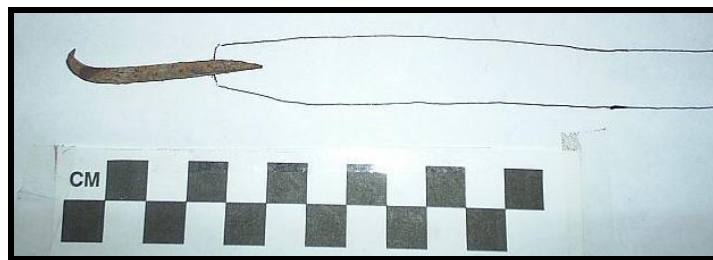
One .45-100 (also known as 45-2.4"), one either .45-100 or .45-110 (also known as 45-2 7/8"), and five .45-110 cartridges were found at this site. All these cartridges were unstamped. The .45-100 is fired. One .45-110 is fired, and one is unfired. Four look to be unfired reloads with replaced primers. These replaced primers had marks likely made by the priming punch used to seat them. Possibly related to this, a modified piece of heavy-gauge wire, which may have been used as a decapping tool, was unearthed nearby. This could have been used to remove the old primers after being drilled.



Sharps 45-110 (left), Sharps 45-100 (middle), two .45-110 one .45-100/110 (right)



.45-110 re-primed cartridge



This was made from a piece of heavy wire and may be a primer decapping tool

The .45-110 Sharps were introduced in 1876, and the .45-100 were added at the end of 1876. At the time, buffalo hunters widely used the .45-100/110. Also, two unstamped .44-60 probable Sharps cartridges with Berdan primers were found at the site – both fired. This cartridge was used in the Sharps Model 1874 and was also employed for large-game and buffalo hunting. The .44-60 Peabody 'Creedmoor' and Winchester rounds were identical except for designation and were not particularly popular. The Sharps cartridge was introduced in 1869, the Winchester cartridge in 1874-75, and the Peabody 'Creedmoor' cartridge in 1877-78. (Barnes)

Buffalo hunters likely used this unoccupied site as a base camp between 1876 and 1877. The buffalo had been visiting the area in the fall for many years, escaping the bitter winters to the north. In 1876, Captain R.G. Carter of the 4th U.S. Cavalry recalled numerous buffalo herds in the area between the Twin Mountains and the fort, not far from this location. (Hurt) An immense slaughter of buffalo occurred around San Angelo between 1874 and the winter of 1877, when a particularly hard winter forced the bison from the area. (Nickels) A survey party scouting the route through the area for the Texas Western Railway in 1876 reported as many as 30,000 in the area. The herd was so large that it took the two men over an hour to ride through

the herd. The outfit of Bishop and Sullivan was known to operate a buffalo-hunting outfit along the Middle Concho in 1876. William Kelly financed another outfit known to work the area. His six-man team reportedly killed a thousand buffalo during the 1876 season. (Tom Green)

Johnson's Station Ranching Period

A few of the items found pointed directly to a period of occupation much later than the Butterfield, military, or buffalo hunter encampment period. For example, two kinds of barbed wire were found. One was common in the late 1800s/early 1900s but not distinctive enough to warrant a true period interpretation. The second was identifiable as the Scutt Arrow Plate. It is a variation of a patent called the Scutt Single H Plate, patented in 1878.



Scutt Arrow Plate barbed wire

A suspenders clip stamped 'Paris' came from the ranching period. Paris suspenders were made by the A. Stein & Company, established in 1887 and incorporated in Illinois in February 1909. The company manufactured garters, suspenders, rubber sundries, and other products of elastic webbing under the trade names "Paris," "Ivory," and "Hickory."

A 12-gauge shotgun shell, marked REM-UMC NITRO CLUB 12 comes from the post-1911 period. Another 12-gauge Winchester shotgun shell, marked "LEADER," dates from 1894 to 1936.

Four Winchester .44 caliber cartridges, stamped "44 WCF, W.R.A. Co.", were found scattered. This cartridge was first offered by the Winchester Company beginning in 1886.

Window glass was found throughout the area surrounding the building location. Window glass was most likely installed for a permanent occupant in the late 1800s or early 1900s.

Experts at Texas Wagon Works (Gonzalez, TX), Witmer Coach Shop (New Holland, PA), and Bar E Ranch Wagon Restoration (Clinton, AK) all identified this 14-inch threaded bolt found at this site as a bolt for a box buggy/buckboard. Four of these bolts held the passenger seat board to

the body of the buggy box by extending vertically through the seat board and into the floor frame of the buggy box. The length of the bolt, combined with the seat cushion's height, determines the seat's total height, ensuring the passenger has sufficient legroom to extend their legs in the sitting position.



14-inch threaded bolt for box buggy seat



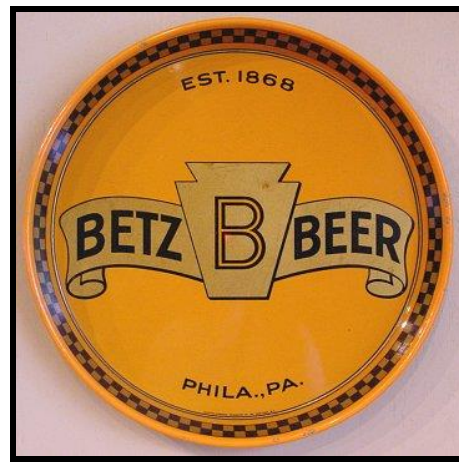
Box buggy that would use a 14-inch threaded seat bolt (tucsonrodeoparade.org)

This piece is broken at the top, where it begins to curve toward what appears to be a 90-degree angle. It has the capital letter B embossed on it. This appears to be a wall-mounted bottle opener from the turn of the century. It fits the cap of a bottle perfectly. After the first effective bottle cap was patented in 1894, people began designing devices to open them, including wall-mounted varieties.



Probable broken wall-mounted bottle opener

The B probably stands for the Betz Brewing Company, established in 1868 and which went out of business in the 1930s. Note the similarity in the style of the B.



Betz Beer Company beer cap with the same 'B' logo (www.trayman.net)

Non-specific Period Artifacts

Artifacts that could have originated from any of the periods but could not be definitively tied to one or the other were listed in a general category below, along with thoughts and comments.

Many of the artifacts found at this site were very similar to those found and reported in the 'Archeological Investigations Fort Chadbourne (41CK129) Butterfield Overland Stage Station Coke County, Texas' (Riemenschneider).

Cartridges

Eleven unstamped .44-40 cartridges were found at the site. All have been fired, and they appear to come from three different rifles based on the firing pin strikes. The .44-40 Winchester was introduced in 1873. Between 1873 and 1885, the cartridges lacked an identifying headstamp. It was the first center-fire cartridge offered by Winchester and was brought out as the standard chambering for the new Winchester Model 1873 rifle. It was also interchangeable with the Colt Army revolver, but this didn't come until 1888.

These cartridges could have come from personal rifles of various cattle drives or trade/freight outfits passing through the area, taking advantage of the opportunity to have a walled building and possibly a roof over their heads. This location was about a day's ride from Fort Concho at a slow pace and was a good stopping point. The 44-40 were scattered much more than the other cartridges found in the area. This could have come from bulldozing the area. There's no way to be sure why these particular cartridges were more scattered than the rest. It seems unlikely they were used for hunting. Target practice is possible, but there may also have been a defensive action against Indian raiding parties. Indian problems persisted in Fort Concho scouting reports well into 1879.

Household goods and hardware artifacts



Various latches & latch bolt (stamped 117LG)

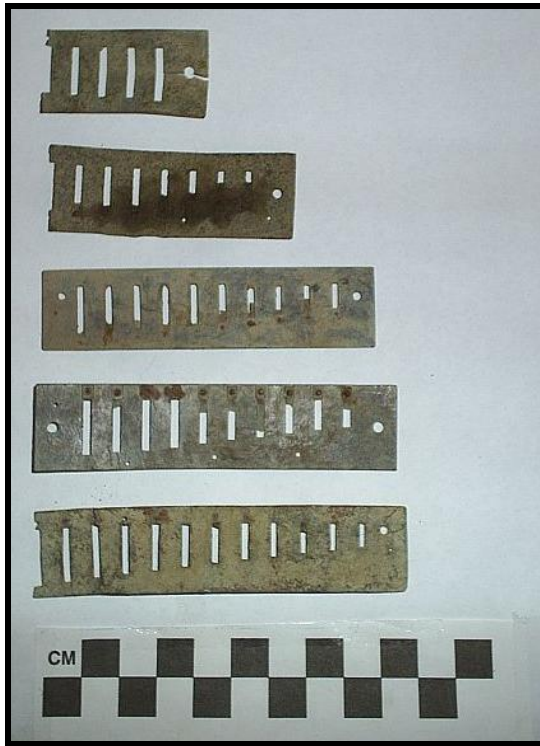


top 2 rows: washtub pieces, third row: possible canteen screw cap, tin can screw cap
bottom row: door hinge pin

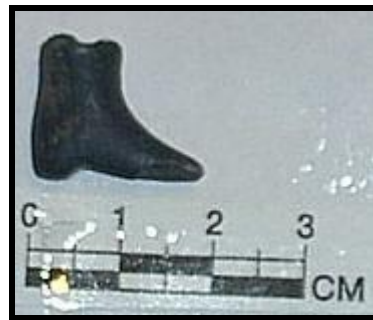


12-inch and 6-inch supply can lids

Recreational artifacts



Harmonica reeds



bisque (porcelain) doll foot

Food and beverage preparation and serving



spoons, salt shaker top



various pieces cast iron ware



kitchen items (left to right)

top: stove top lid lifter, piece cast iron tortilla skillet

middle: dutch oven handle, pot handle

bottom: grinding wheel (coffee), lid top hinge thumb lever



various pieces crockery



various pieces whiteware



various pieces bottles



various pieces white-ware



various unidentified pieces



probable oil lamp glass



Green wine bottle pieces



**for comparison - green wine bottle
dated mid to late 1800s at auction
(www.greybirdrelics.com)**



Cooking items (top to bottom: ladle strainer, cooking spoon, ladle, cooking item handle)



Possible broken cast-iron skillet handle with raised number 7

Workshop artifacts

Two seven-inch axe heads were excavated, one near the main building and the other approximately 100 feet away. These could have been used during any of the occupation periods, but they are easily large enough to have been used to cut down the pecan trees for building the log cabins, posts and rails for the corral area.



7-inch axe heads

Transportation artifacts



saddle ring & broken singletree piece



horseshoes



wagon plate, possible heavy seat back iron

A martingale found at this site appears to be civilian, similar to the Texas martingales found along other cattle drive routes throughout Texas. However, this one lacks the star in the middle and has more elaborate flourishes. A martingale is a breastplate on horse tack used to control the horse's head carriage.



Martingale (civilian)

Construction artifacts



**Construction tools (top row: lag, metal strap with rivet
middle row: nut, chuck for brace & bit, broken hand axe
bottom row: lag, bolt [squared on top])**



Assorted nails, staple
(left) square nails (right) round/wire nails

Johnson's Station Summary

This investigation clarified numerous inaccuracies in historical documentation. In addition to the location, it is important to delineate the difference between the first and second Johnson's Station and their general purposes. The first Johnson's Station was the only station used by the Butterfield Overland Mail, and the second Johnson's Station was the only station used by the Ben Ficklin/San Antonio To El Paso mail and stage line. Although occupation at the original Johnson's Station was not constant, it was a popular location for various occupants from 1857 until after the turn of the century. There are several fairly obvious reasons for this. First, it was approximately one day's ride from Fort Concho and San Angelo at a slow pace. Second, it was near water, wood, and good grazing. Third, it had a log cabin that could be used to shelter from the weather and provided some protection against Indian raiding parties.

The second building, located on the other side of the Pecan grove, is difficult to determine precisely when and by whom it was built. However, a process of elimination can help make an assessment. Items found at the main building site, such as barbed wire, late-period cartridges, and clothing items from the late 1890s and early 1900s, suggest that it was also used during the beginning of the ranching period; however, this is not the case at the second building location.

This second building could have been originally occupied by the stagehands assisting the station master and his wife during the Butterfield period. It could have been built and used during the 6 months of continuous occupation by the companies from Fort Chadbourne in 1867. If the site needed to house up to 40 troops for six months, they may have decided that a second building was worth the effort. Unfortunately, most of this building and its contents were likely washed away during the major floods of 1882 and 1936.

8. Camp Mather (Station)

The parcel of land for this later station was surveyed in 1860, and the title was issued in February. It was probably determined that the original 32-mile stretch was too much for the mules, and they established another intermediate station. The station was named Camp Mather (Station) after the line agent in charge of the station. (Ely) Camp Mather was a swing station, probably with just enough time to change out a mule team and continue. There are no comments about this station in the various travelers' journals. However, the existence of this station was recorded on the last published timetable for the Overland Mail in 1861.



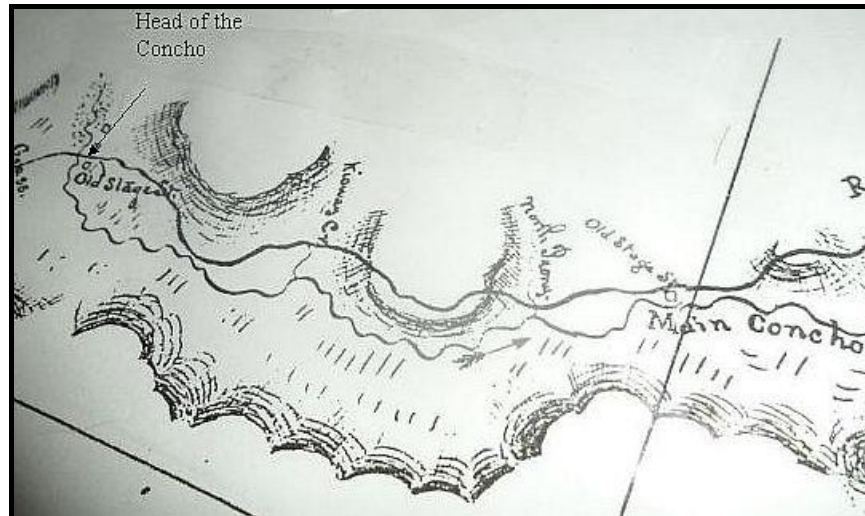
Distances from St. Louis, Missouri, to MESSILA, ARIZONA (Station to Station) VIA THE OVERLAND MAIL ROUTE.	
From St. Louis to	After Hards Spring, 40
	Cottonwood, 15
St. Louis, 165	El Dorado, 15
Springfield, 148	Barrel Spring, 32
Fort Smith, Arkansas, 165	El Dorado, 15
St. Louis, Texas, 20	Van Horn's Wells, 40
Fort Belknap, 165	Eagle Spring, 32
Fort Chadbourne, 186	Camp Fargo, 25
Cottonwood, 17	Camp Rice, 22
Grape Creek, 18	Fort Quitman, 5
Camp Johnson, 25	Sanita's Rancho, 9
Camp Mather, 22	Camp Hawkins, 14
Head of Concho (Stn), 15	San Frazito, 14
Llano Estacado (Stn), 25	El Paso, 28
Castle Mountain (Stn), 40	Chihuahua, 12
Horse Head Crof Pecos (Stn), 12	Willow Bar, 12
Camp Pleasant (Stn), 25	Messila, 18
Comanche Spring, Ft Stockton, 9	Total distance, 1085
Leon Hole (Stn), 9	

Fort Chadbourne
Colorado (River Stn)
Grape Creek (Stn)
Camp Johnson (Stn)
Camp Mather (Stn)
Head of the Concho (Stn)
Llano Estacado (Stn)
Castle Mountain (Stn)
Horse Head Crof Pecos (Stn)
Camp Pleasant (Stn)
Comanche Spring, Ft Stockton
Leon Hole (Stn)

Note: Camp Pleasant also called
Antelope Spring Station

Messila, Arizona Overland Route with Camp Pleasant

The location in question is again identified through a military map created by Brevet Lieutenant Colonel E.J. Strang during his expedition from Fort Stockton to Fort Chadbourne in October and November 1867. The map shows the abandoned stations along his route, and the distances are very precise.



Close-up of the map with the Head of the Concho and Mather Station

By measuring the distances on the map, the station's location was determined and analyzed on Google Earth. The imagery revealed the abandoned station site precisely where the cartographer placed it. The abandoned station compound left a square impression on the vegetation. That, along with the wagon trace leading into and back out of the station compound, shows this to be the correct site. The terms 'compound' and 'station' are used interchangeably here.



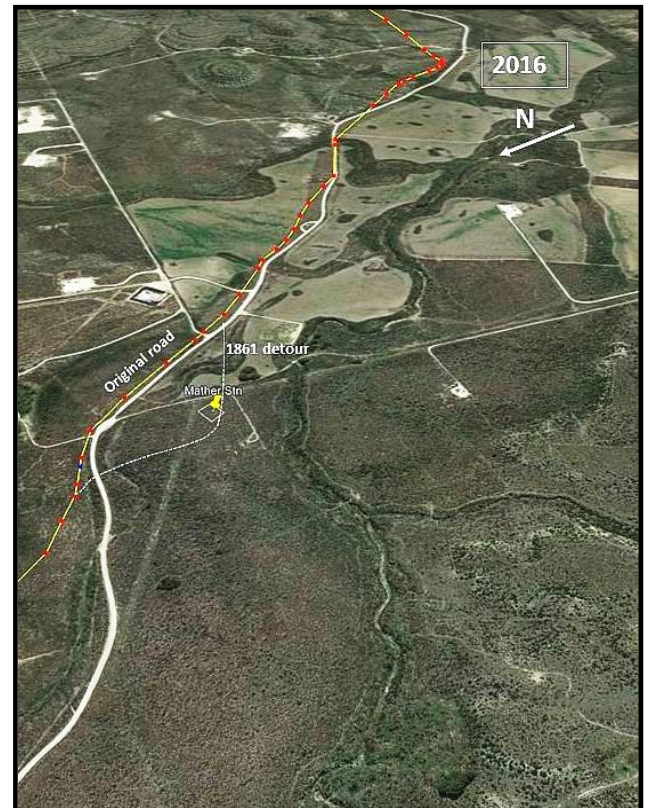
Vegetation Impression of Station Compound and Wagon Trace

All stations in West Texas required a defensive compound due to attacks from Indians. Stealing mules and horses was the main threat. Still, the stations and stagecoaches were also considered to be unwelcome interlopers by the Comanche and Kiowa, and lives were also constantly under threat. High walls were required to contain both animals and people. The large pecan trees along the river were used as building materials, and the compound walls were likely constructed from high, straight logs in a picket style. Pecan was also used at Grape Creek and Johnson's Stations. (Ashmore, 2019)



Example of Picket Wall Compound

The remnants of the compound, along with everything else in it, were washed away long ago in the massive floods of the late 1800s and early 1900s. However, vegetation grows back in lines and angles along the lines where these walls were built. That vegetation provides a remnant image of the compound when viewed from a high vantage point.



Original Wagon Road and Detour to Camp Mather



Wagon Trail Trace Runs Through Compound at an Angle

The original wagon road passes by this site area, but the new road detours from its previous route to this new stage station compound. Besides being generally halfway between the other stations, this site was probably chosen because a creek runs past it and down to the river. This creek was likely spring-fed, making this location highly desirable. The new wagon road runs through the creek on the east side and crosses the creek again on the northwest side, intersecting back into the main road.

This station compound wagon entrance and exit is unique. It runs through the compound at an angle. Most station compounds had the wagons run straight in a single door, turn around inside the compound, and exit out the same door. Here, it enters a door on the south side and exits through a second door on the adjacent wall of the northwest side. This must be because the road had to continue in the direction of the northwest side wall.

The compound measures 150 x 130 feet, making it large enough to house the animals. One image from 2022 may hint at where the animals were being kept within the compound. Our work on the 1869–1882 Concho Mail Station, near San Angelo, Texas, indicated that prickly pear growth within an abandoned compound area tends to reveal where animal dung bioturbation

previously occurred. (Ashmore, 2023) The prickly pear tended to grow more heavily in areas we know were corral and tending areas, even after 140 – 150 years.

At Mather Station, the 2022 imagery shows prickly pear growing heavily in the area, which was likely the team's hitching and unhitching area within the compound. An additional area (highlighted in yellow) also shows growth north of the wagon trace hitching area. This likely was a small corral area.



Prickly Pear Growth indications of: likely wagon hitching Area (white), Possible Corral Area (yellow), wagon swale (arrows)

The wagon swale can still be seen from above and on the ground. The swale is approximately 15 feet across and 12 – 24 inches deep, and 10 feet wide as it approaches the compound from the

east (highlighted in green). This matches the width and depth of the wagon swale under similar soil conditions at Grape Creek Station.



Wagon Swale

9. Head Of The Concho Station

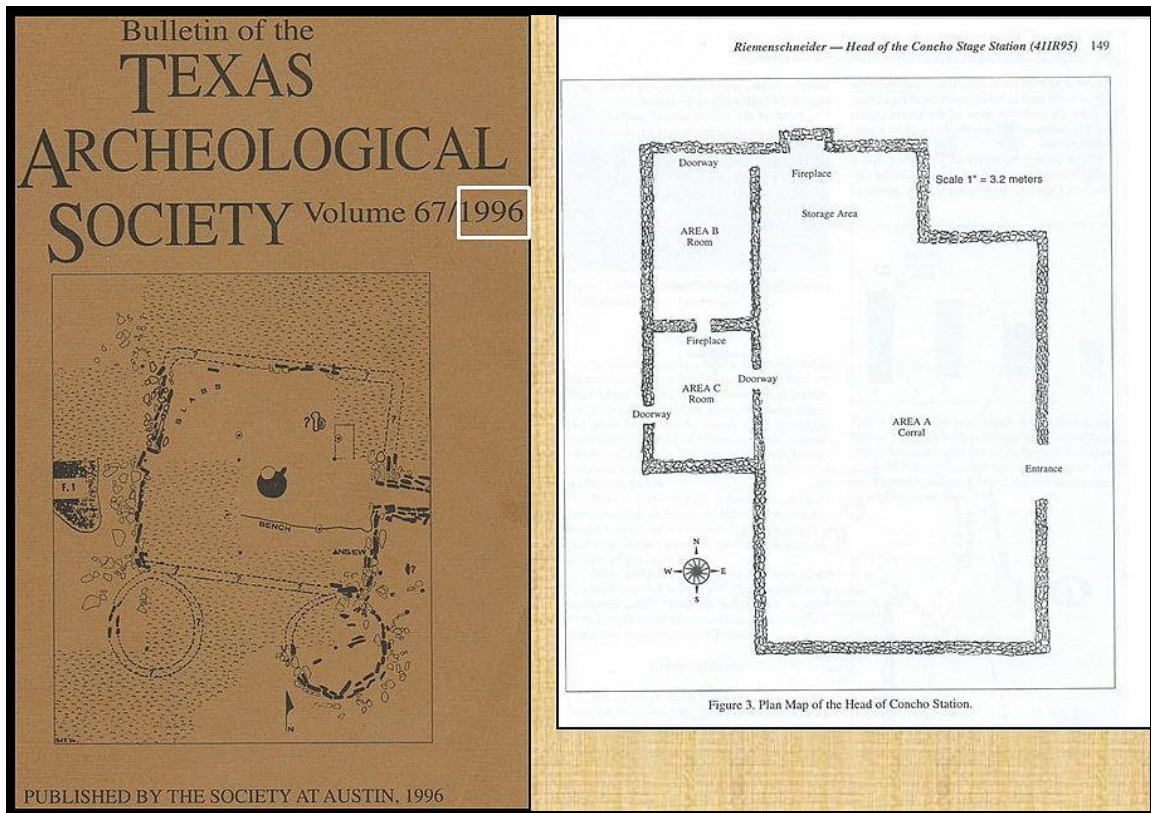
From Mather Station, put in place in 1860, it was a short 16 miles to Head Of The Concho Station. In a 1996 field project conducted by the University of Texas and the Concho Valley Archeological Society, the Head of the Concho Station was thoroughly recorded and reported on. This station, being near several north-south corridors known to be used by Comanche and Kiowa for the journeys, and the fact that there were no large trees in the area, was made entirely of stone and virtually impregnable. However, the livestock had to be corralled and grazed outside the station, making the animals vulnerable and those tending them under extreme threat.



Butterfield Trail continues from Mather Station to Head Of The Concho Station



Head Of Concho Station



Head Of Concho Station Report (Riemenschneider)

In June 1860, Comanche raiders caught the manager outside the station, killing and scalping him. The Indians then turned their attention to a 12-year-old Mexican boy tending the grazing mules. The boy, riding a pony with metal shoes, was able to outrun the Indians in the rocky terrain and make it to the safety of the station. A very small horseshoe discovered in 1996 near the river and not far from the station may well be a pony's horseshoe, possibly from that boy's pony. (Ely)



Spanish Mule Shoe & probable pony shoe (photo Bill Wimberly)



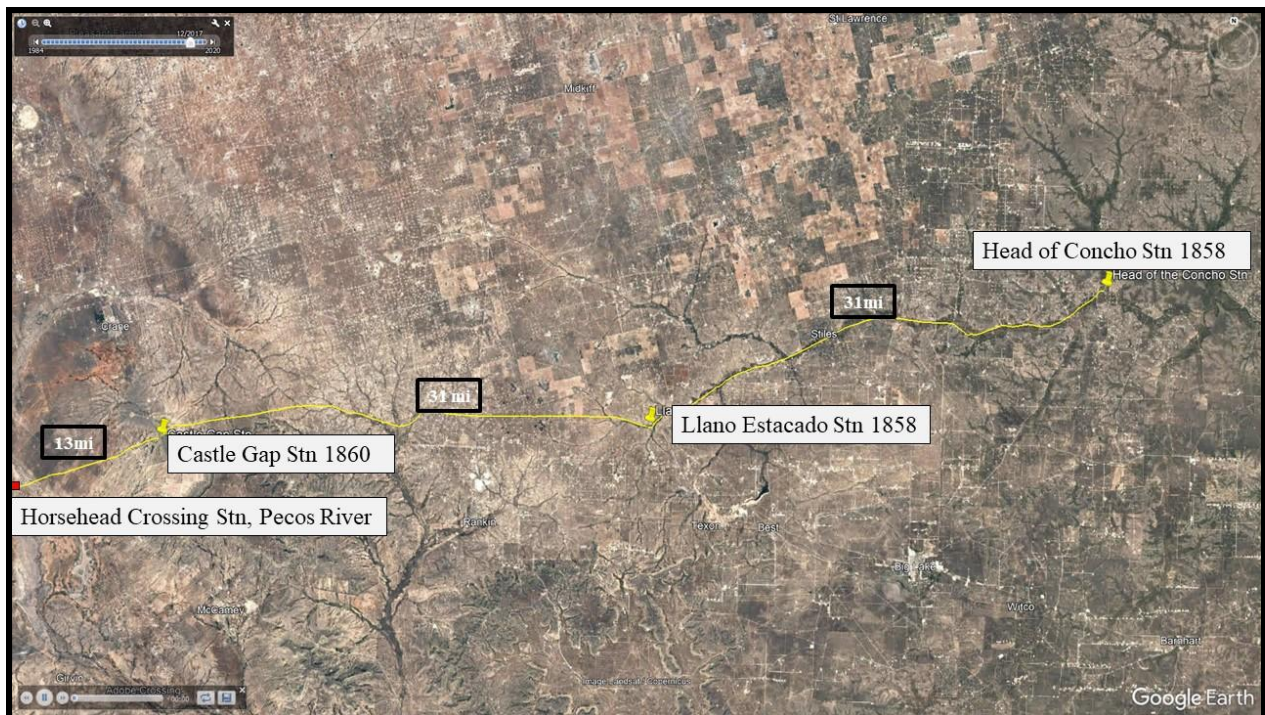
Spanish Mule Shoe

Probable Pony Shoe

(photos Bill Wimberly)

From Head of the Concho Mail Station, the trail continued west, crossing 66 miles of arid plains and draws to Castle Gap. Only seasonal water holes could be found over this dry land. Most of the time, though, they were dry.

10. Llano Estacado Station



Entire trail section between Head of Concho and Horsehead Crossing (Google Earth)

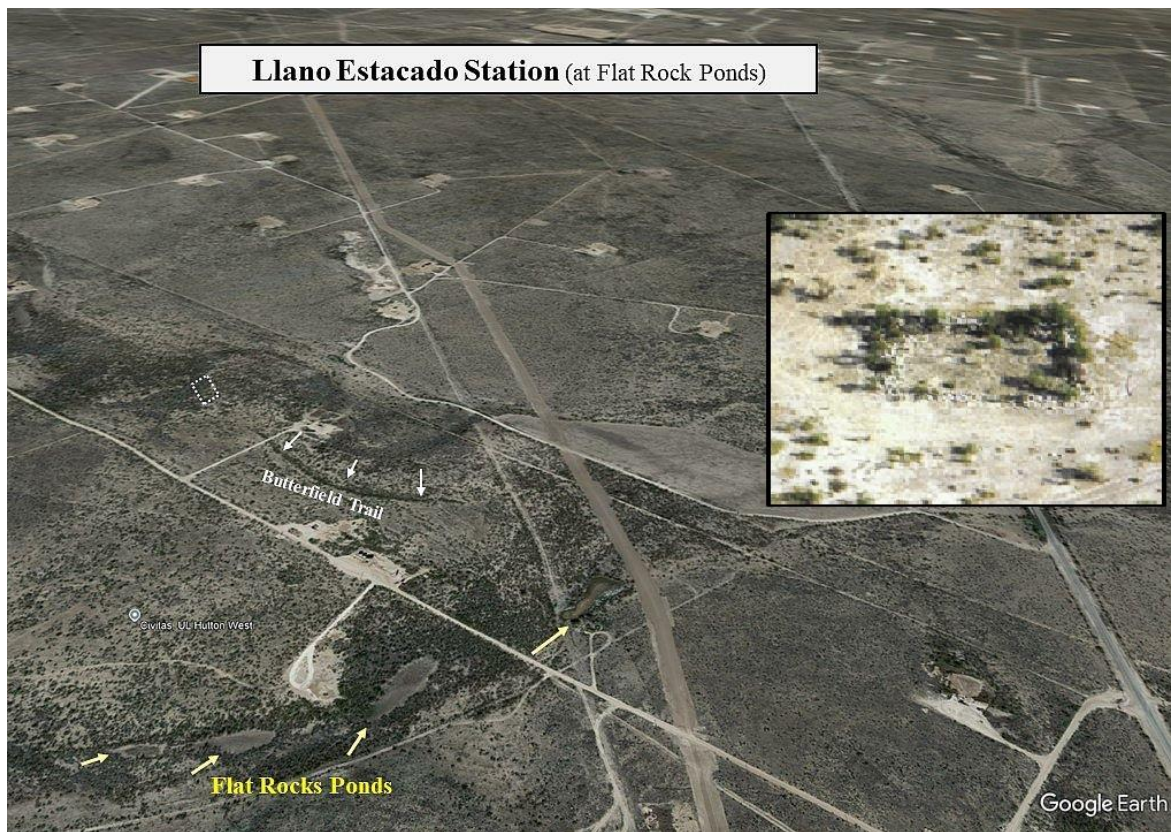
The Llano Estacado Station was constructed approximately halfway between the Head Of The Concho Station and Castle Gap. According to the 1867 military map, it was located at Flat Rock Ponds. However, Flat Rock Ponds were seasonal at best in terms of water availability. The Butterfield Company had to contract for water to be hauled by wagon from Mustang Water Holes, seven and a half miles east. (Ely) After the Civil War, the station was reused by the San Antonio To El Paso Mail Line and renamed Centralia Station.

Camps and Stations		Approximate Distances
Fort Stockton		
Antelope Spring		11.11
Horse Head Crossing - Pecos River		22.51
Salt Lake		6.00
Horse Head Crossing - Llanos River		6.00
Gap Water Pass - Cholla Mountains		12.30
Wild China Ponds		11.46
Old Stage Station - Flat Rock Ponds		15.02
Mustang Water Holes		22.52
Head of Concho		9.82

Military map annotation of crossing west to east during 1867 expedition



Vegetation impression of Llano Estacado Station remnant and Butterfield Road



(insert photo by Bill Yeates)

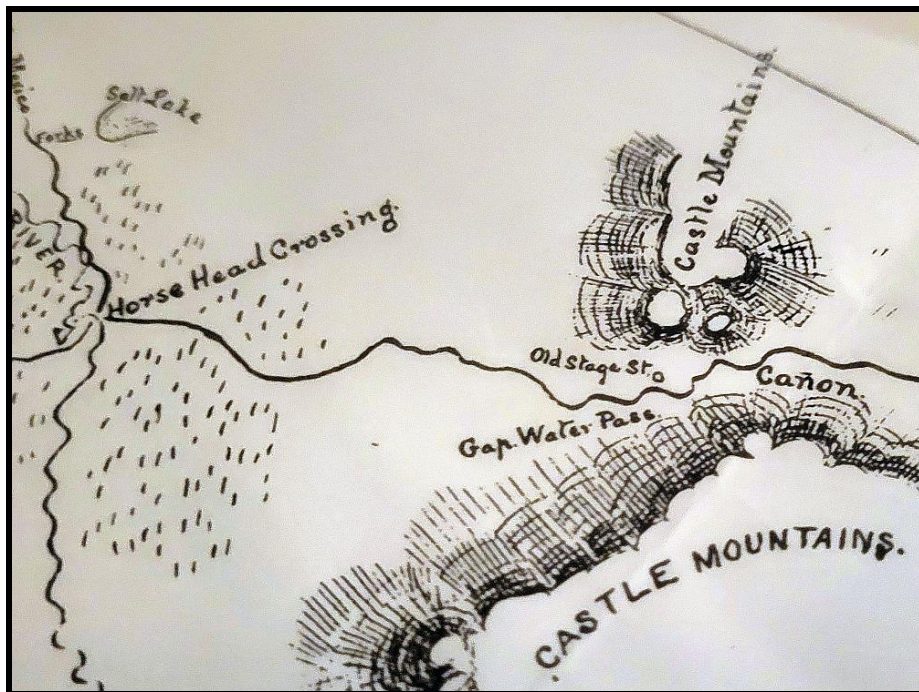
11. Castle Gap Station

Castle Gap Station was added to the route in 1859, one year after the road's opening. After crossing 66 miles of arid plains, Castle Gap (also called Castle Mountain at the time) greeted westbound travelers as a narrow gap in a 40-mile-long wall of mesas.



Castle Gap (photo Donnie Henderson, <https://www.txgenwebcounties.org>)

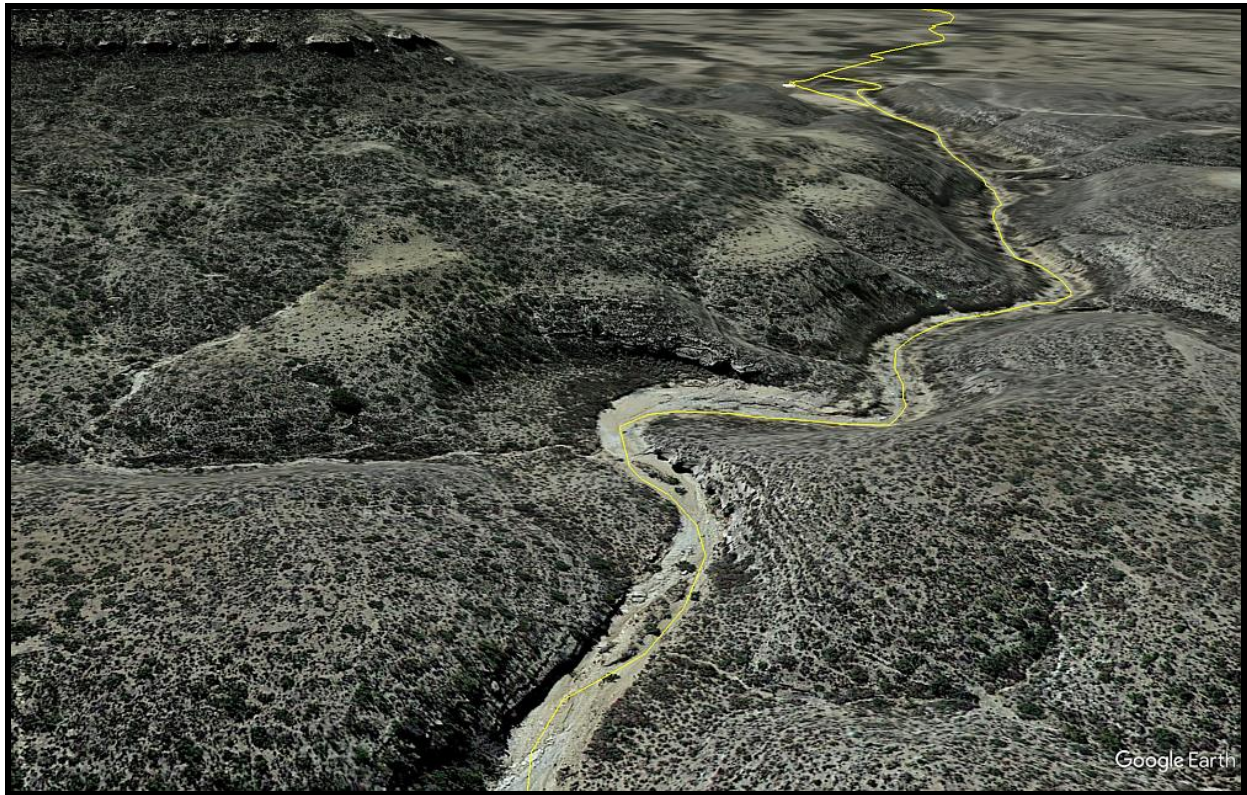
The company found that continuing another 12 miles to the Horsehead Crossing Station pushed the mules beyond their endurance, especially without water. They discovered a small seep spring with brackish water at the west end of Castle Gap, which prompted the company to construct this small station. (Ely) The abandoned station is annotated on the 1867 military map. It measures only 60 x 30 feet. It was built of local limestone. It was small in comparison to most station compounds. This was too small for a stagecoach to drive inside the compound. It was only enough to maintain a watering stop for the mules, and possibly a few mules to change if some were broken down from the long run across the open prairie.



1867 Military Map with abandoned Castle Gap Station annotated



Ruins of Castle Gap Station (photo Bill Yeates)



Route Through Castle Cap (heading west)

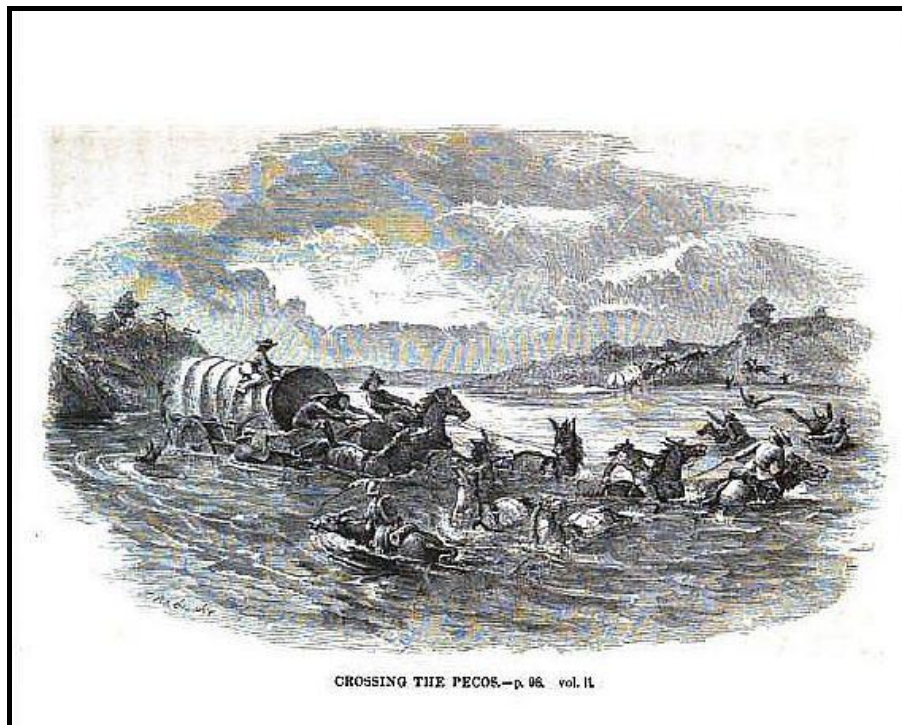


Overhead Compound Impression of Castle Gap Station Remnant

12. Horsehead Crossing On The Pecos River & Horsehead Crossing Station

“Oct 30th, 1850: After breakfast, I examined the river with a view of crossing, intending to devote the day to it, and recruit our tired animals. Found the water at Horse-head Crossing, which was a quarter of a mile from our encampment, to afford the greatest facilities. Here there was a bank about half the height of the main bank, to which there was an easy descent, and one equally to the water. It is the place where other parties seem to have crossed, and hence rendered easy of access. I noticed long line of horse or mule skulls placed along the bank, which probably gave it the name it bears.” John Russell Bartlett

Bartlett goes on to describe a harrowing experience trying to cross the swift waters and keeping their wagons and mules from being swept away. They had to enter the waters and cross diagonally to the opposite bank. At one point, the mules lost their footing and panicked. They were saved from being swept downriver by a young soldier who swam to the mules with a long picket line. The men could then pull the mules from the opposite bank back to an area where they regained their footing.

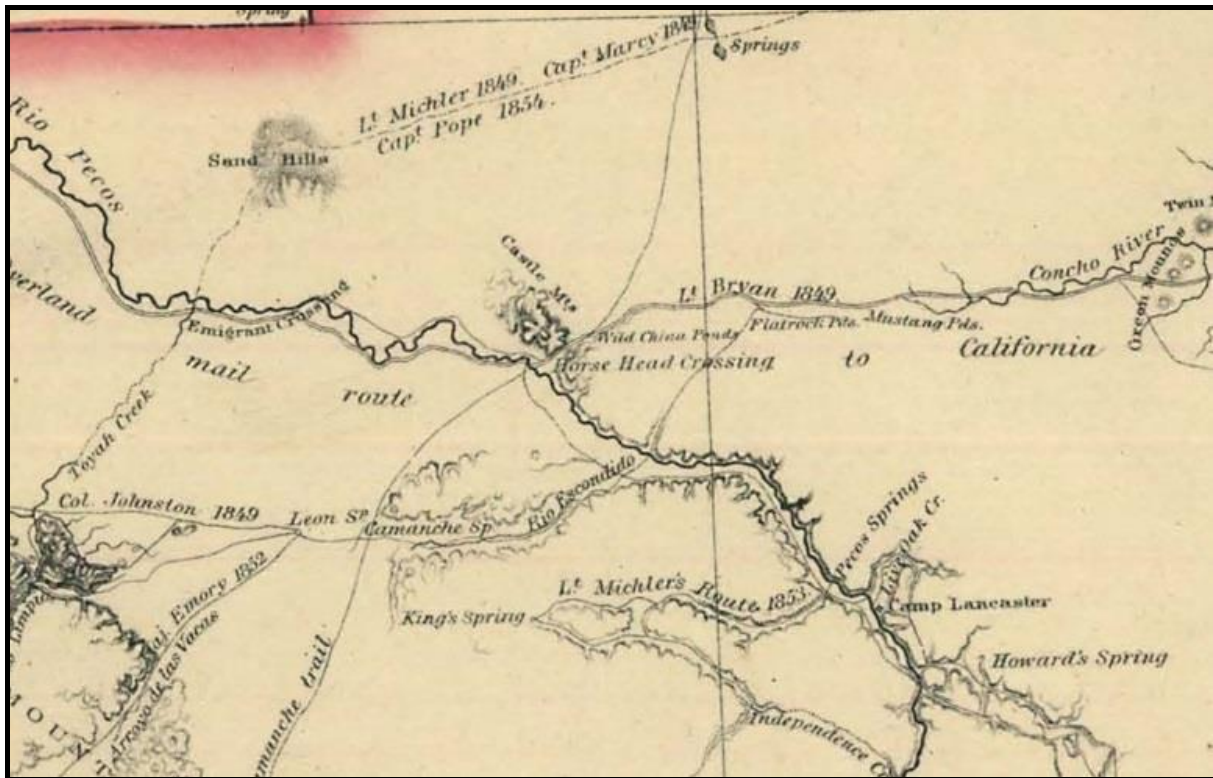


Drawing from Bartlett's account of 1850 crossing the Pecos River at Horsehead Crossing (Bartlett)



Same crossing point of Bartlett's account

Horsehead Crossing on the Pecos River is well-known to most people in West Texas. It was the main crossing for the Jumano Indians on their trading excursions from the Concho River area, the Comanche on their raids into Mexico, the early emigrants on their way to California, the Butterfield Overland Mail, and numerous freighters and cattle drives on their way to and from New Mexico. Horsehead Crossing was one of the few fordable points on the Pecos River in the early days of this wild and open territory. The Pecos River's steep, muddy banks, unpredictable currents, and quicksand were dangerous in most other locations for many miles in each direction. After long treks across the surrounding desert, thirsty animals would either drink themselves to death or become hopelessly mired in the mud at the crossing. This was especially true for Comanche raids returning from Mexico, where horses were the main commodity. This is where the name of Horsehead Crossing came from. So many of the horses died that when the emigrants and others making the trek arrived at the crossing, they began hanging the horse skulls on the bushes.

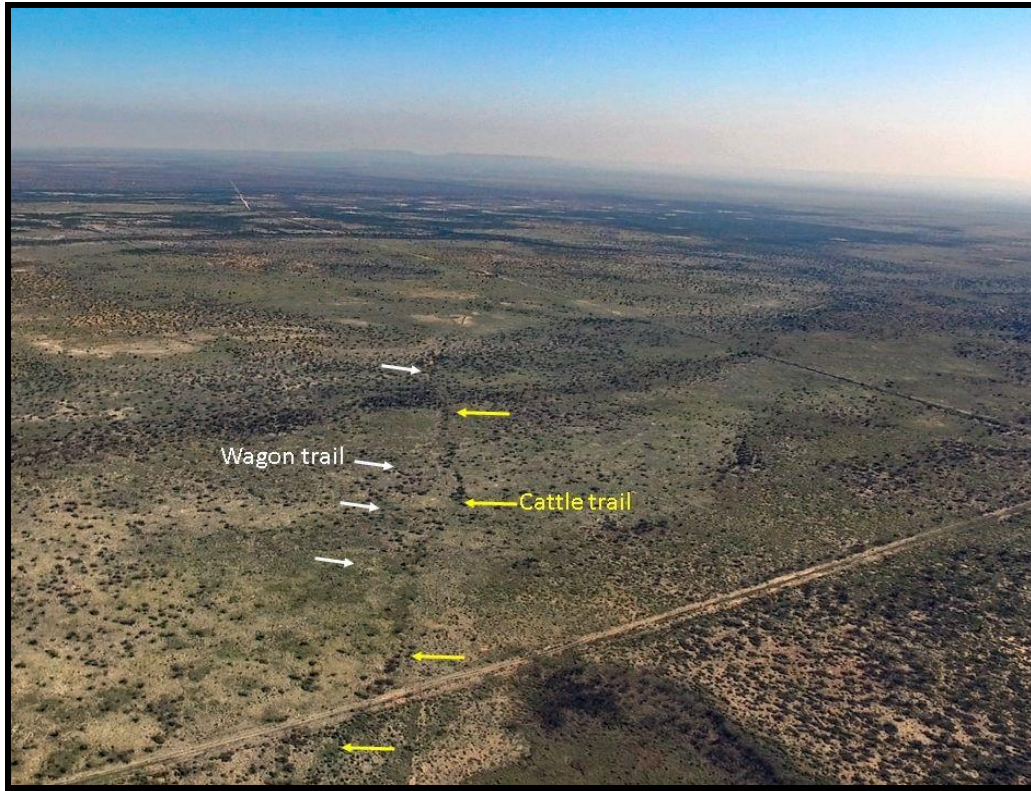


1859 Military Map of Texas with Horsehead Crossing

When Charles Goodnight and Oliver Loving made their first cattle drive to New Mexico in 1866, they weren't quite sure what they were getting into. After 72 hours non-stop with no water, they passed through Castle Gap, just 13 miles from the Pecos River. The cattle became crazed for water, and when they passed through the gap, they could smell the water and burst into a run. They ran so hard that the ones behind the leaders pushed them right across the river so they could not even stop to drink. After the herd crossed the river, Goodnight turned them back to the water to get their fill. After a few days of rest, they started what remained of the herd up the east side of the Pecos River, which was the continuation of the Butterfield Trail, heading northwest toward the southeastern boundary of New Mexico. Their herd of 2,000 was now down to about 1,500. Hundreds were lost on the three-day waterless trek, and hundreds more died in quicksand along the river. However, they still made a considerable profit from that drive, and with that news, the many cattle drives across West Texas, on to New Mexico, and into Colorado began.

It appears that the later cattle drives were directed to this section, probably to keep them from destroying the wagon-crossing location. It also leads right into a perfect bend in the river that could serve as a natural corral for resting cattle. Finally, I found another crossing that appeared

to have no relationship to the wagon trail. This trail is very wide and heads northeast, crossing near the probable cattle crossing, but it then turns in a completely different direction. The change in vegetation indicates the cattle trail, which parallels the wagon trail, which is very narrow and straight.



Drone image of wagon and cattle trails

Horsehead Crossing Station

Although it's long been known that the Butterfield Overland Mail built a stage station about a half mile upriver from Horsehead Crossing, the site's location has never been specifically identified in any archeological publications. Found in the National Archives and published by both Patrick Dearen and Glenn Ely was a hand-drawn 1869 map of the location of "old" Horsehead Crossing Station, which provided the starting point for the search that revealed not only the location of the station but also the Pecos River ferry crossing site used by the Butterfield Company.

When the Butterfield Overland Stage came to the Pecos River on its inaugural run on September 26, 1858, the Horsehead Crossing Station did not exist yet. The future location was no more than

a camp of one Butterfield employee and 15 Mexican hired hands. The lone rider on the stage, Waterman L. Ormsby, a New York Herald reporter, described the event.

“As I lay dozing on the seat, about three o’clock on Sunday morning, I heard a cry from Jones that we had reached the Pecos River, and there we were, sure enough, right into it. After hallooing and blowing our horn, we obtained an answer, as we supposed, from the other side of the river, telling us to drive up stream which advice we followed, when to our astonishment we found ourselves in camp on the same side of the river. The fact is, the Pecos makes such a turn here that you can hardly tell which side you are on...”

We found that Mr. Glover had arrived with his train but a few hours before us and had brought the stock for stocking the road. He had employed here fifteen Mexicans, or “greaser” as they are more commonly called – and a more miserable looking set of fellows I have never saw.” (Ormsby)

Several items in this description indicate the location. The camp was upriver from Horsehead Crossing, proper, and it was inside a large bend of the river, with the river practically encircling the bend, leading to the comment, “You can hardly tell which side you are on.”

Another telling item is the number of Mexicans Mr. Glover had with him. It does not take 15 Mexicans to lead a mule train of 22 mules tied together. Thus, these Mexicans were very likely brought in to stay, build the station, and run the temporary camp that would serve as a stop for stagecoaches twice a week, one from each direction.

It appears the same thing was already underway at the next station upriver, Emigrant Crossing Station. Again, Ormsby described it as they arrived after a grueling trip from Horsehead Crossing.

“The three Americans in charge of the station had, with the assistance of half a dozen greasers, built a very find “adobe” corral, and had started a house of the same material, and calculated that they could defend the stock against a whole tribe of Indians.” (Ormsby)

The design of the Emigrant Crossing station was an adobe corral and building compound, very much like other Butterfield compounds, whether they were constructed of stone, wood, or adobe.

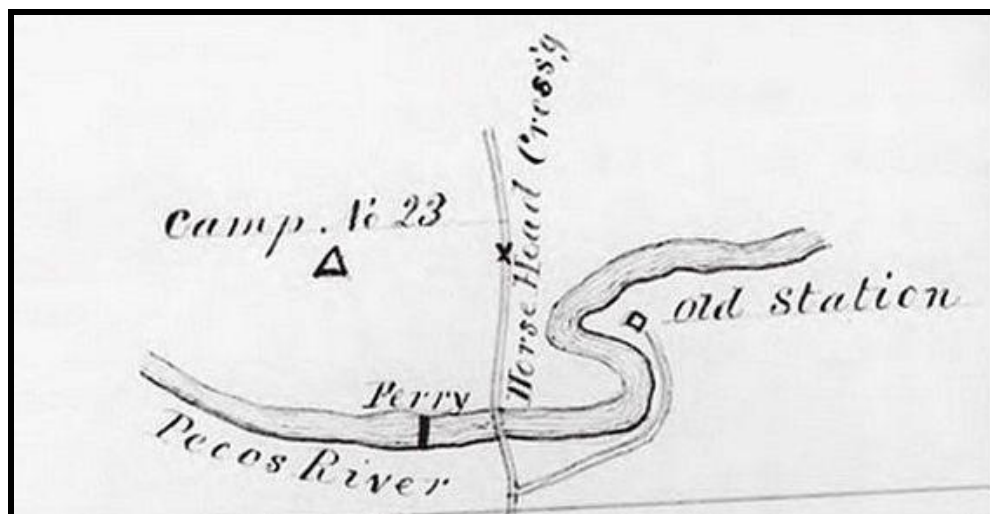
The corral and living structure formed a single enclosed compound to protect both the stock and the occupants from Indian raids. The stagecoaches would drive right into the compound, where they would unload their passengers and exchange the mules for the next leg of the journey.

Horsehead Crossing Station was probably completed in the spring of 1858. But it wasn't long after that the route was dramatically changed, abandoning the northern route and moving to a southern route from the Pecos River through Fort Stockton, Fort Davis, and Fort Quitman before heading on to El Paso. They accomplished this by building a ferry system rather than attempting to cross the muddy, swift river in a coach. The ferry was a small skiff that carried mail and passengers across. They continued with this method until the station was closed.

Forage for the animals was brought from Head of Concho Station, 79 miles east. Indians attacked the station at least twice, running off with the mule stock and stealing whatever they could. (Ely) The station and all other stations were finally ordered to be shut down in March 1861 due to the onset of the Civil War.

Finding The Station

The main historical item related to the specific location of Horsehead Crossing Station is a hand-drawn map by Brevet Lieutenant Colonel Thomas B. Hunt from his 1869 expedition through the Horsehead Crossing area on his way to Fort Craig, New Mexico. This map shows Horsehead Crossing proper, through which his unit passed, and he also identified the "old station" relative to the regular crossing point. This specific river bend can now be easily identified through Google Earth satellite imagery.



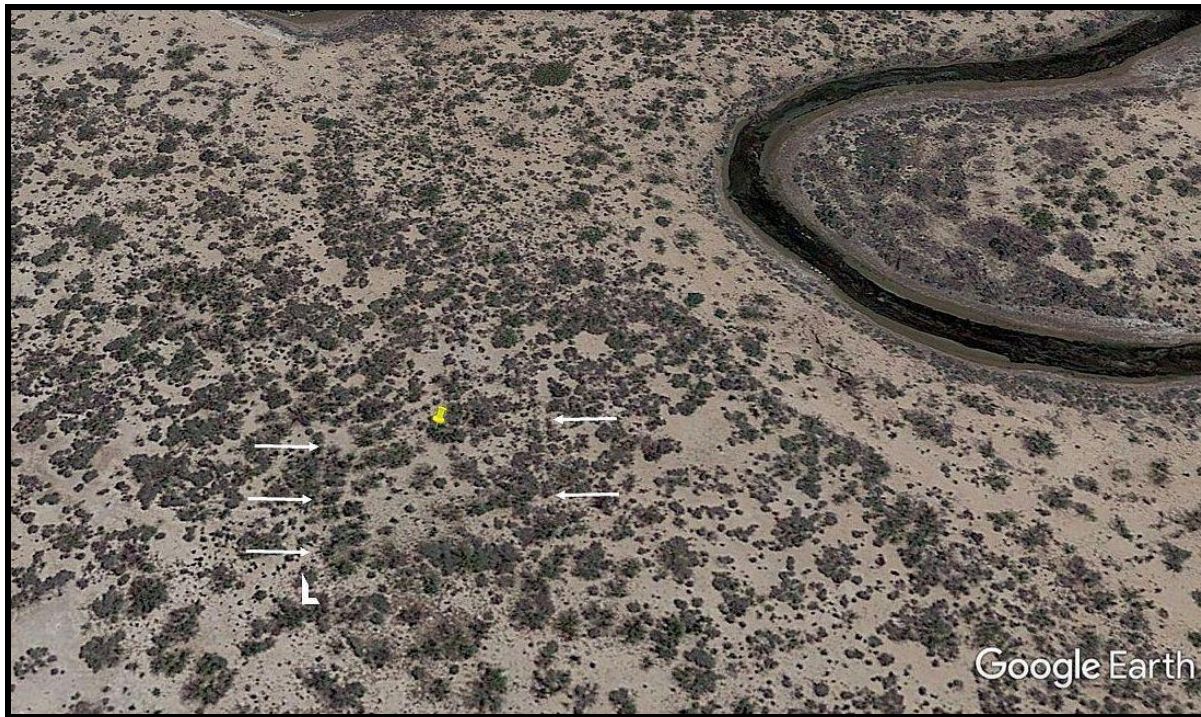
Brevet LTC Thomas B. Hunt, 1869 map (National Archives)



Comparison of Hunt's 1869 map and identified the location of station through imagery interpretation.

When searching in an area with little human activity but significant effects from natural forces, the key features to look for in the vegetation are unusual straight lines, 90-degree angles, and unexpected greening of an area with no apparent cause. The area of this bend is completely restricted to cattle due to the dangers of the mud and is fenced off by the ranchers.

The application's historical capabilities are invaluable for effective searching in Google Earth, as images are captured in different seasons over the years. Years of drought may reveal what was previously covered during wetter years. In this case, 2014 was a drought year that revealed vegetation anomalies. Two straight-line remnants of wall structures and one 90-degree angle are visible in this image.



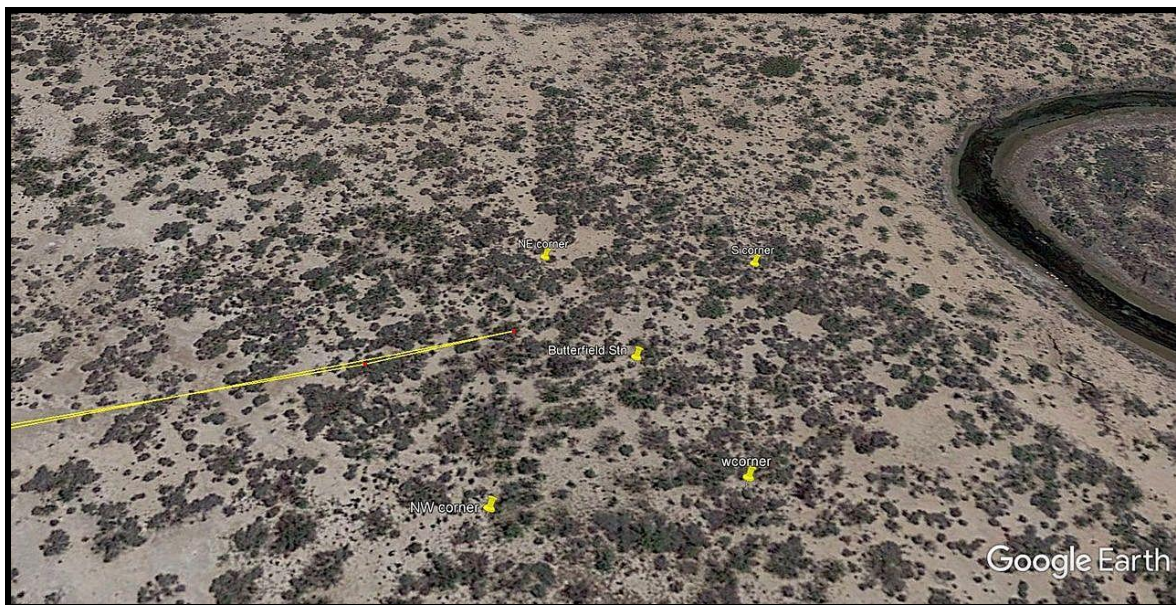
Anomalous straight lines and 90-degree angles in vegetation

After finding what appears to be the remnants of a structure, it is time to look for roads leading to it and to determine where they come from. In this case, a well-known wagon road from the Horsehead Crossing cutoff heading upriver to the next crossing point, Emigrant Crossing, passes by this bend in the river. From that wagon road, another, less well-traveled wagon road can be seen in satellite imagery leading in and out of the bend and directly to the location of this former structure.



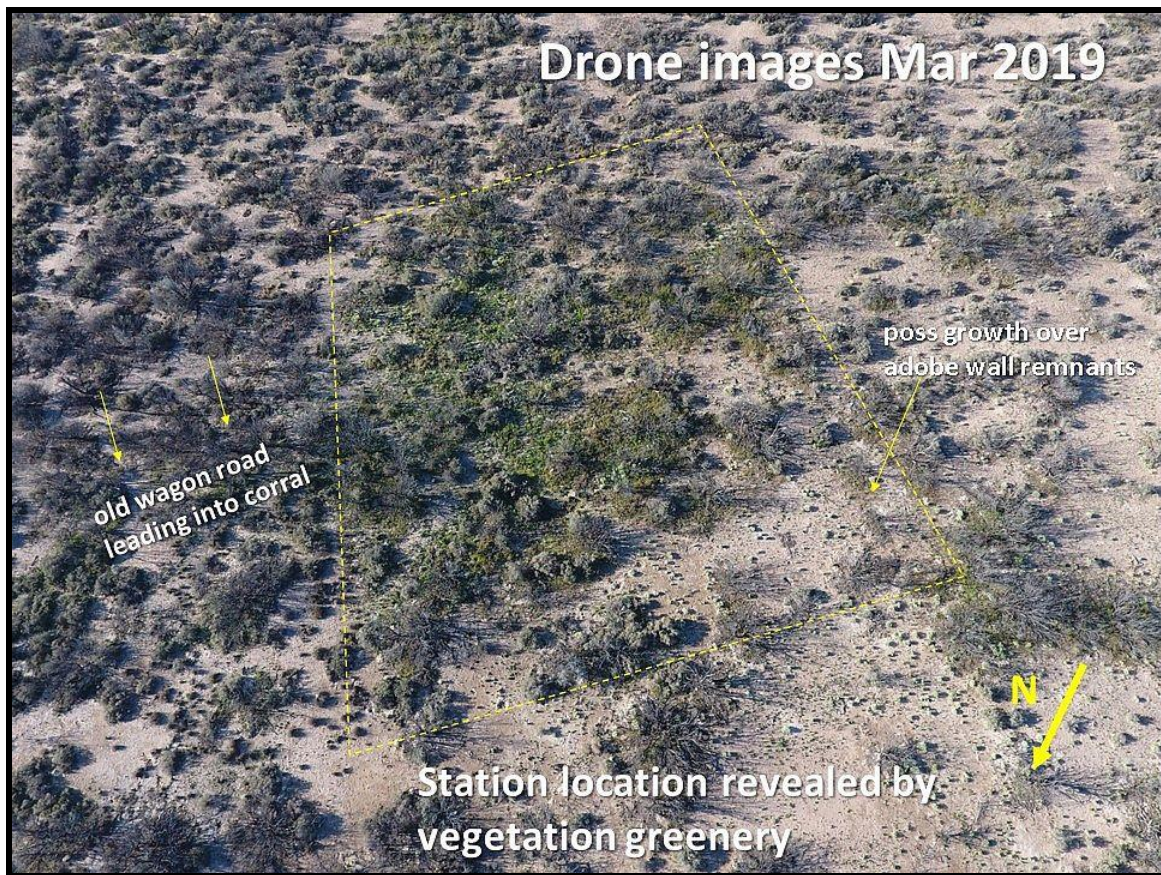
Wagon road leading in and out to the former structure. Note: The long straight line in the upper left corner is the modern fence line.

Additionally, this road leads directly to the rear portion of the compound. This would be the corral area. According to the description by Butterfield employee J.M. Browne, the adobe compound layout had the corral area to the rear (nearest the river) and the building to the front. (Ely) It was common for Butterfield stations to have the stagecoach drive directly into the compound for the safety of the passengers and station keepers while changing out the mules.



Wagon road leading directly into the rear of the compound.

One aspect that reveals the station location, in addition to the 2014 satellite image, is the drone images taken in March 2019. The drone reveals the site is the only location in the bend with greening vegetation, and it is all within the rectangular shape of the old compound. It is common for former building sites to undergo a significantly different vegetative cycle after they have been abandoned for an extended period. This is due to bioturbation during and after the occupation period. Bioturbation is the alteration and disturbance of a site by living organisms through the mixing of sediments. In this case, both human and animal waste products are altering the soil, making it a more favorable medium for plant growth - similar to the mulching of a garden - but this is an entirely unintentional and natural process. The most greening of the site is to the rear, where the mules were kept.



Inside the rectangle, the vegetation is greening, whereas the rest of the river's bend is still dormant at this time of year (early Spring). Notice the wagon trail running right into the rear of the compound.

Using the Google Earth measuring tool on the best 2014 imagery of the wall remnants indicates the walls were about 3 feet thick. This is an expected width for an Adobe structure, as there is very little reinforcement, and a thick wall is necessary to maintain the structure's integrity.

Butterfield's Vallecito Station in San Diego County, California, is a good example. This 1953 photo from the San Diego Historical Society clearly shows the wall's width.

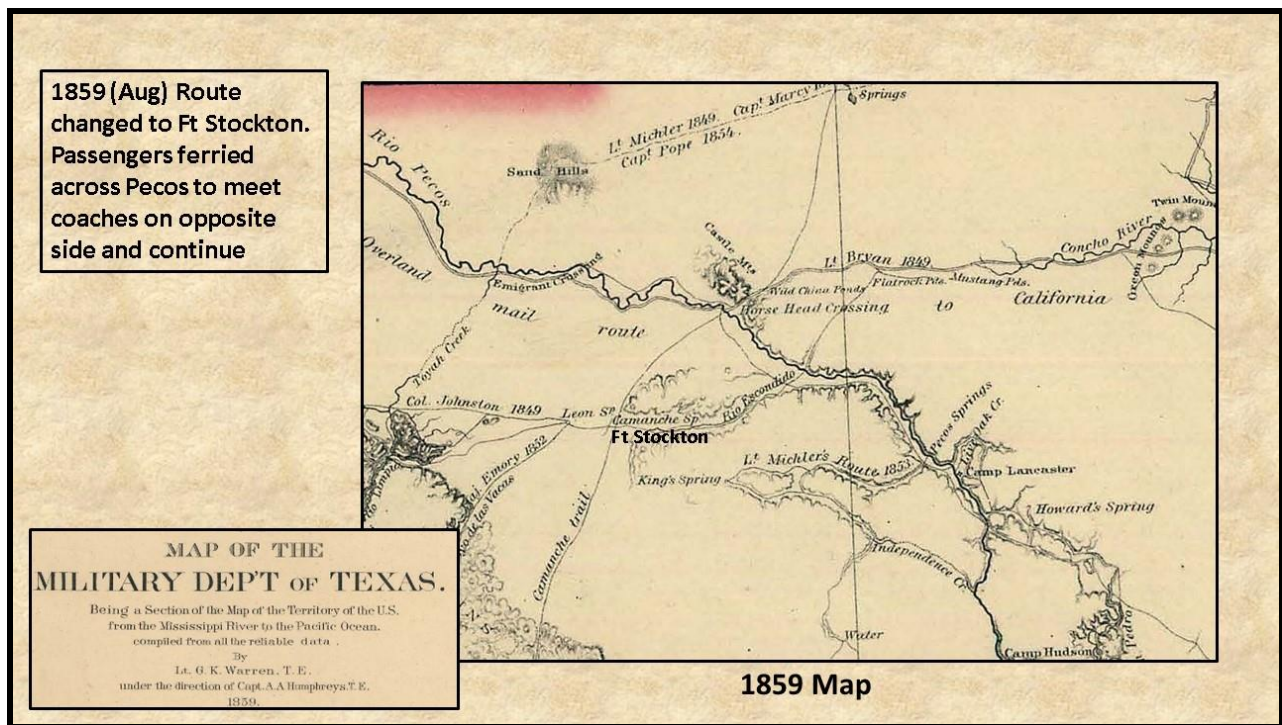


Vallecito Stage Station, San Diego County, CA (1953)

One wagon trail within the bend, which was not the main road leading in or out, was initially puzzling. It ran from the station directly to the river in a southerly direction. This road can be seen as a series of bushes in a straight line. The only reason for natural growth in a straight line would be some change in the earth that would cause the land to be lower for a distance and in a straight line. That was not the case here. The line of bushes, beginning at the station and on level land, had to have been created from a former wagon road.

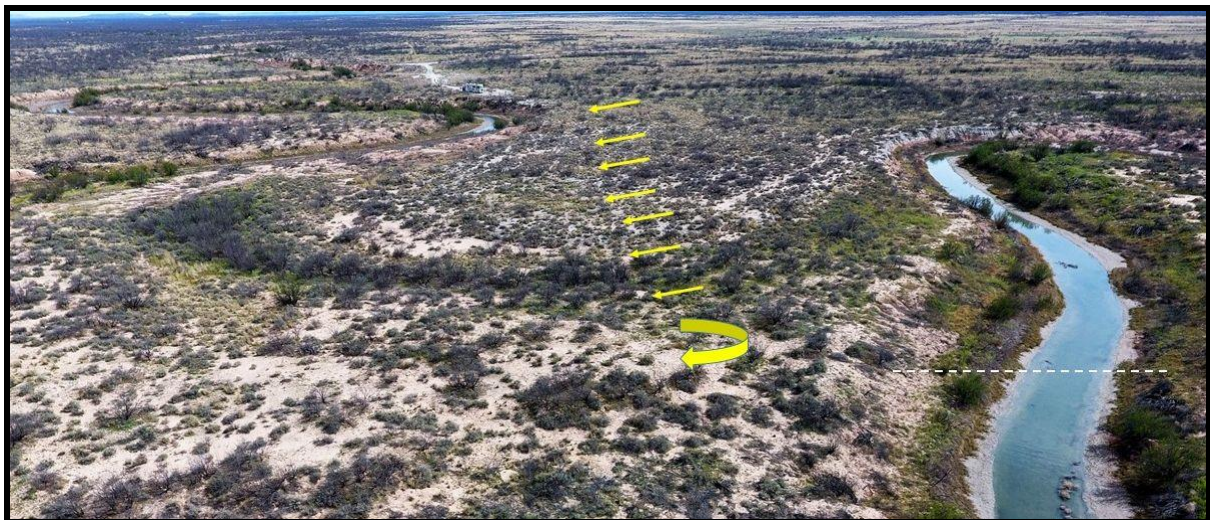
The documented Butterfield ferry system answers the question of this road's purpose. In August of 1859, it was decided to forego the route further north of Horsehead Crossing and begin operations from Horsehead Crossing south to Fort Stockton. The change was made for several reasons: 1) to add the forts Stockton, Davis, and Quitman to the mail route 2) better water sources 3) more passengers were available on the lower route. (Green)

The company built a ferry system near the station to accomplish this change. Coaches could not cross the muddy, deep Pecos River, and they had no better crossing to the south. The coaches would arrive at the ferry points on either side. Passengers and mail would be ferried across in a small skiff. (Green/Ely/Dearen) The skiff was probably connected to a rope line to keep it from being swept downstream with the strong current. From this point on, the station continued to operate under this route and methodology.



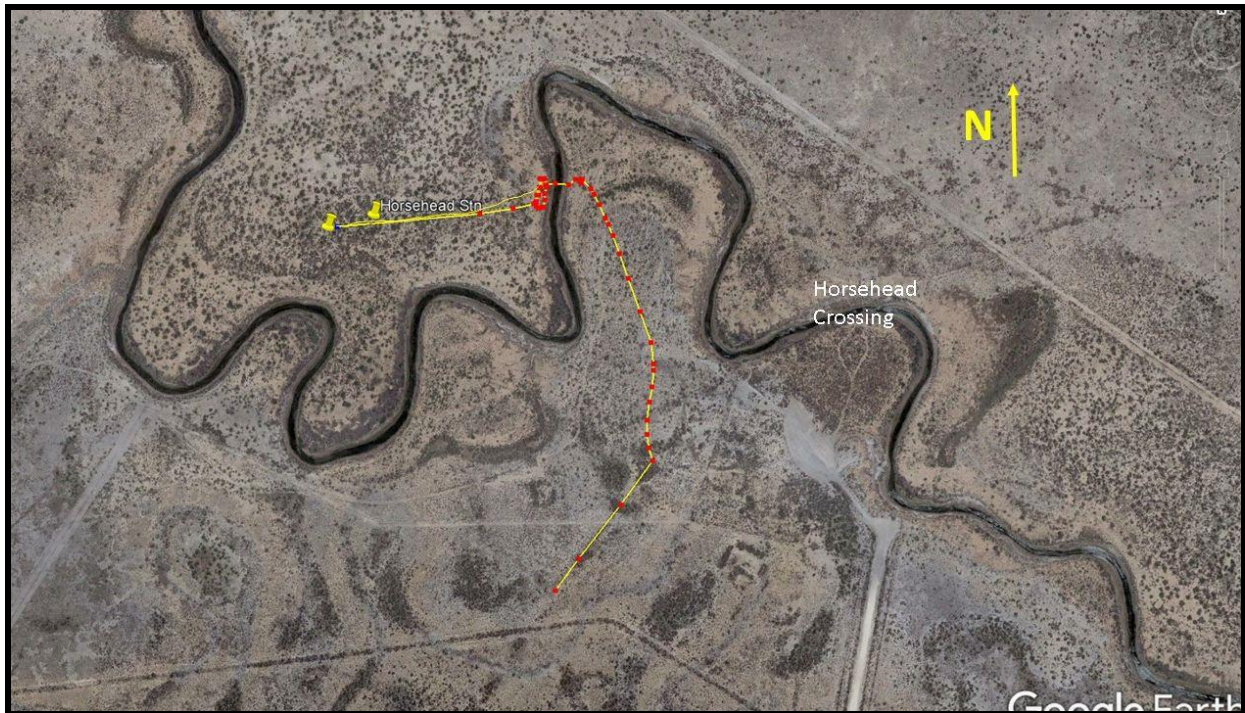
1859 map of road from Horsehead to Fort Stockton ('Ft Stockton' added for location)

A wagon trail on the other side of the river is required to verify that the wagon road from the station was for the ferry crossing. As a result, a wagon trail can be seen departing the established Fort Stockton road before it reaches Horsehead Crossing proper and heads straight to the riverbank directly opposite from the wagon trail turnaround on the other side.

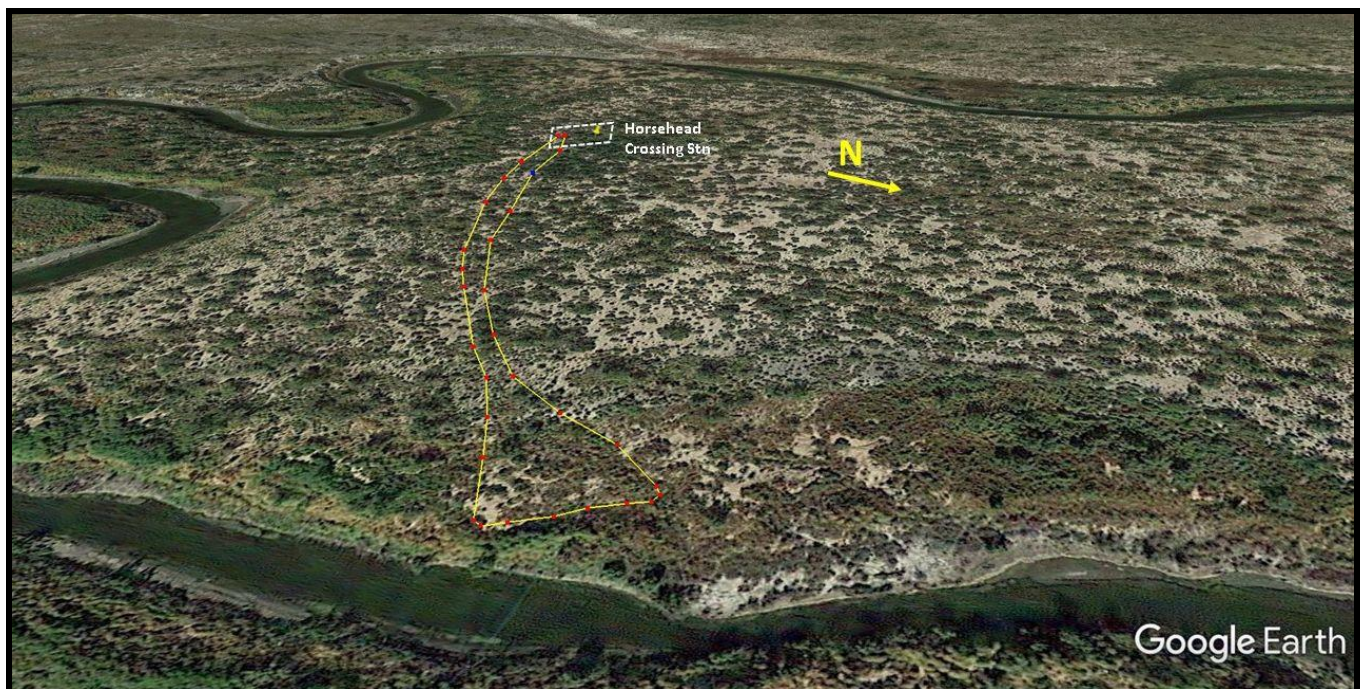


Dark line of bushes is the old wagon road from Fort Stockton road to ferry west side crossing point.

On the west side of the river, the road came to what appeared to be a turnaround area. On the east side, the coach may have driven along the bank, looping around and back to the station.



Roads from Ft Stockton road and stage station leading to opposite sides of river



A loop wagon road from stage station to river and back to station

A thorough surface search and metal detection sweep revealed nothing on the ground. Artifact hunters discovered this site in the distant past, likely removing some of the few metal artifacts found. Artifacts were probably very scarce to begin with since this site was somewhat off the main wagon road. Since the station was constructed of adobe, it was extremely vulnerable to flooding and was probably washed away long ago. Although the river is now a timid reflection of its former self, past floods were devastating. The Pecos River has a long history of flooding, with notable events occurring in 1904, 1950, 1952, 1954, 1978, and 2014. (Dearen) The 1954 flood, for example, crested at 96 feet downriver and was 3 miles wide, taking out entire bridges as it raged through Texas.

Crossing the Pecos River for freight much earlier than reported

The Butterfield Overland Mail is documented to have used the northern route, also known as the Upper Road, which led from Horsehead Crossing on the Pecos River up the east side of the Pecos and through the Guadalupe Mountains to El Paso. This was the uncontested, postmaster-directed route for all the coaches until it changed in June 1859. It made its first run in September 1858 and operated on the Upper Road until June 1859, when it abandoned the northern route and began using the southern route, also known as the Lower Road. This southern route required them to use a roped skiff boat to cross the river at Horsehead Crossing, where they would meet a waiting coach on the west side. They then made their way through Forts Davis and Quitman, continuing to El Paso. (Ely)

However, a report and illustration by Frank Leslie's Illustrated Newspaper, dated November 27, 1858, of Butterfield coaches using the Horsehead Crossing to transfer packages and mail sheds new light on the fact that the company was using at least a portion of the southern route in addition to the northern route to haul additional freight long before the 1859 route change.



Newspaper Head for November 27, 1858 illustration

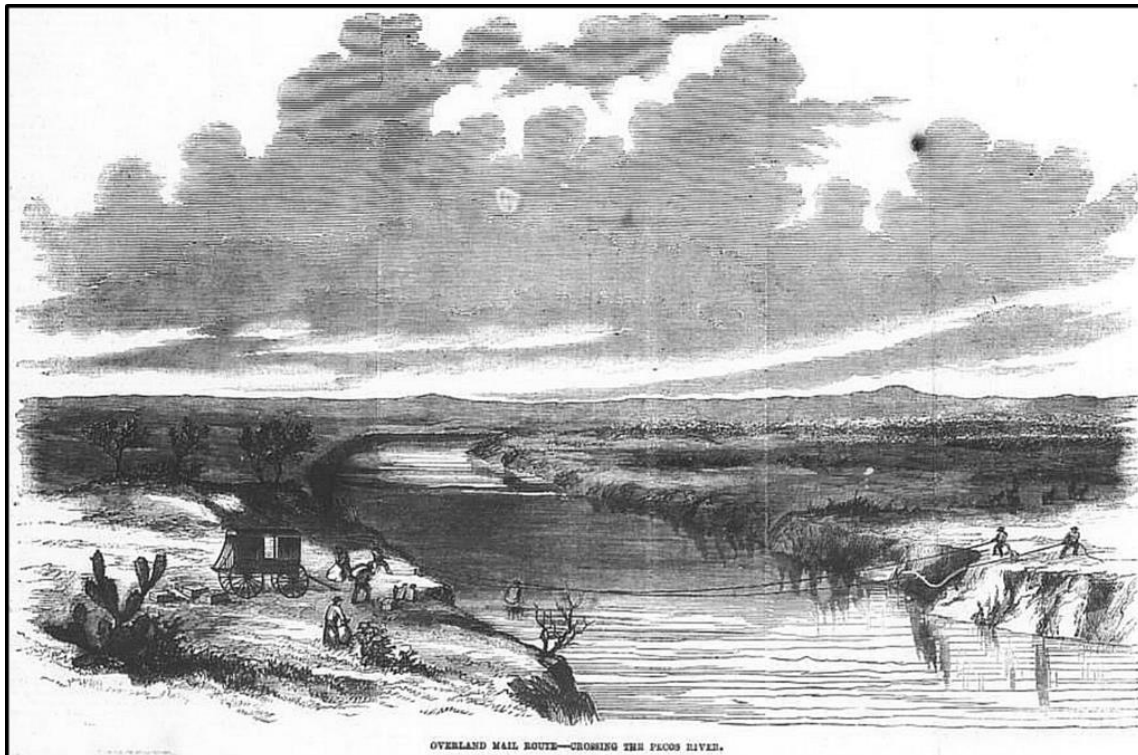


Illustration of Horsehead Crossing transfer of packages and mail via rope line

In this illustration, we see six men working to transfer bags and boxes across the river by rope, carried in a hide bag (as described in the accompanying article). Four men are working the west side, and two are working the east side. On the west side, three men are working with bags for transfer, and one is maintaining the rope that has a pulley wheel. Boxes are on the ground behind the stagecoach, and some packages are gathered at the edge of the embankment. The mules have been removed from the coach, likely because they were being grazed, as there was no station on the west side. A leather-hide bag is hanging on the rope. On the east side, the rope passes through a ring set in the ground to ensure the pull's stability. One man is letting the rope out while the other is pulling. In the background on the east side are four loose mules. There are no passengers in the illustration.

The stagecoach transfer point at Horsehead Crossing was a quarter mile upriver from the well-known wagon crossing point. It was created in a separate bend of the river, 300 yards east of Horsehead Crossing Station. In my previous research, I identified this crossing point by following wagon tracks on both sides of the river. Due to the area's sandy soil, these traces are only visible today when viewed from above, revealing the linear pattern of vegetation growth. Coming from the west, the trail branches off the main road and heads across the bend to a circular turn area. On the east side, the road originates from the station, located in the middle of

the next bend, and makes a large loop along the riverbank before returning to the station. My research is documented in an in-depth paper devoted to this site and the old station. (Ashmore 2019) The newspaper illustration is in the same spot as when it was later used, after the route was officially changed.

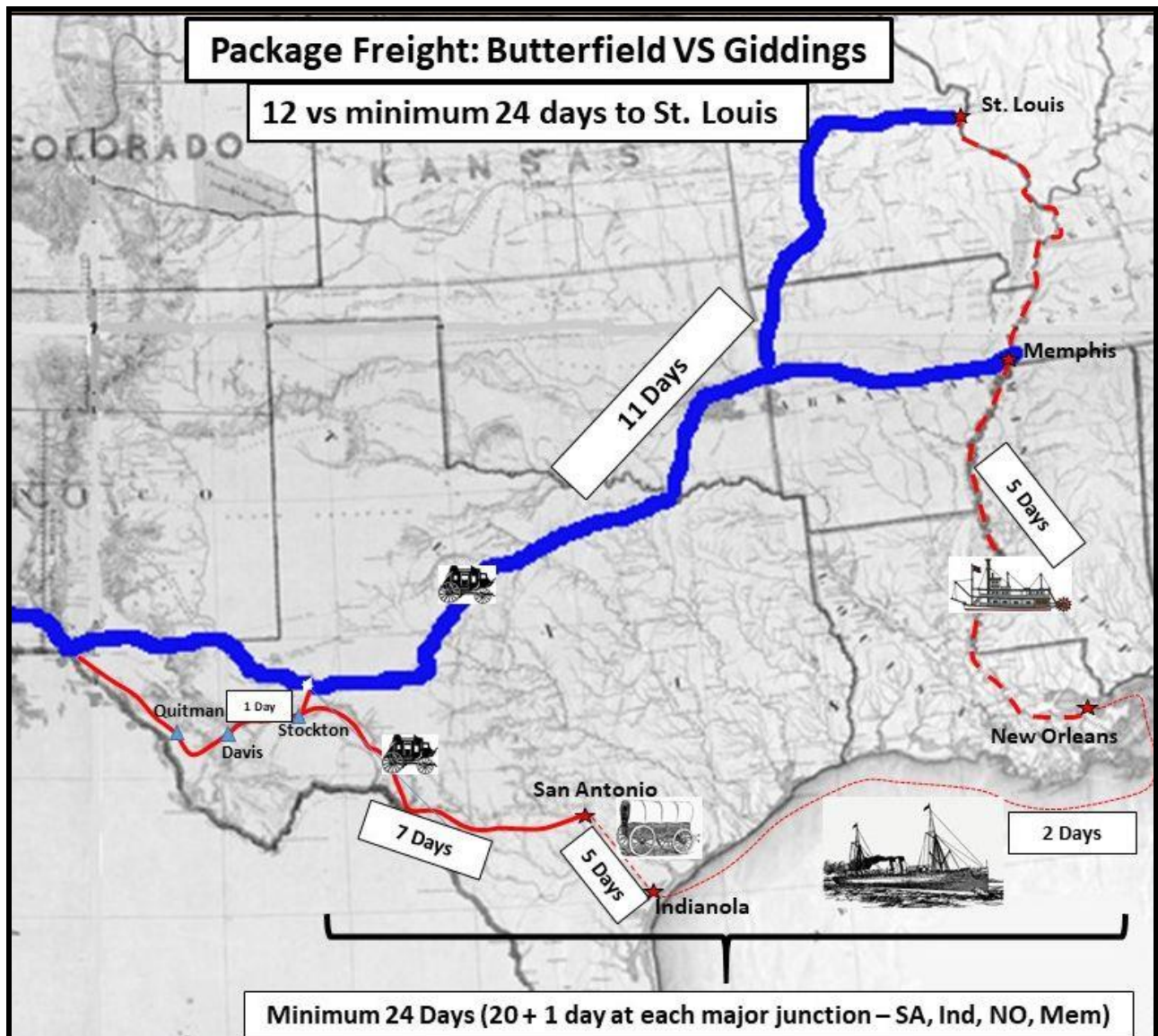
During this period, George Giddings held a separate contract for mail delivery from San Antonio to El Paso, utilizing the Lower Road. Giddings received a contract for Route 8076 for semi-monthly service, effective January 1, 1858. The contract ran for three and a half years. The route was increased to weekly service from Indianola to San Antonio, then on to El Paso, in February 1859. (Mullins)

So, the question is, why was the Butterfield Overland Mail running a separate and undocumented coach freight service on much of the same route and during the same time frame as the Giddings' mail route? At this time, Camp Stockton did not exist and could not have been part of the explanation. I believe the answer lies in several issues of the time. First, two populated locations were being bypassed by Butterfield's northern route. Both were military installations with potential as shipping customers, offering a direct and quick route back to Saint Louis. Second, the company must have been aware of the political implications of the upcoming route change and was getting ahead of the curve.

Both locations with any population were military. The first was Fort Davis. In early 1858, Fort Davis housed around five companies, but by August, this number had decreased to three. On September 28, 1858, a company of 86 men from Fort Davis opened up Fort Quitman on the Lower Road, 120 miles west of Fort Davis. (Dings) On April 12, 1859, Camp Stockton started up with one company from Fort Lancaster. (Francell) In November, approximately 250 military personnel were assigned to the Lower Road protection, along with any civilian support personnel for farm products and construction. By January, another 80 or so soldiers were stationed at Camp Stockton, along with civilians who had come into the area to support the military. By June 1859, the entire route had been changed, abandoning the northern route and utilizing the river crossing for mail and passengers. Butterfield knew about this coming change in advance and had already made their preparations.

Before the route was changed, anyone who wanted to ship moderately small items to or from Saint Louis would have preferred the Butterfield Overland Mail over the San Antonio route. The Butterfield Overland Mail ran in both directions twice a week, compared with twice a month on

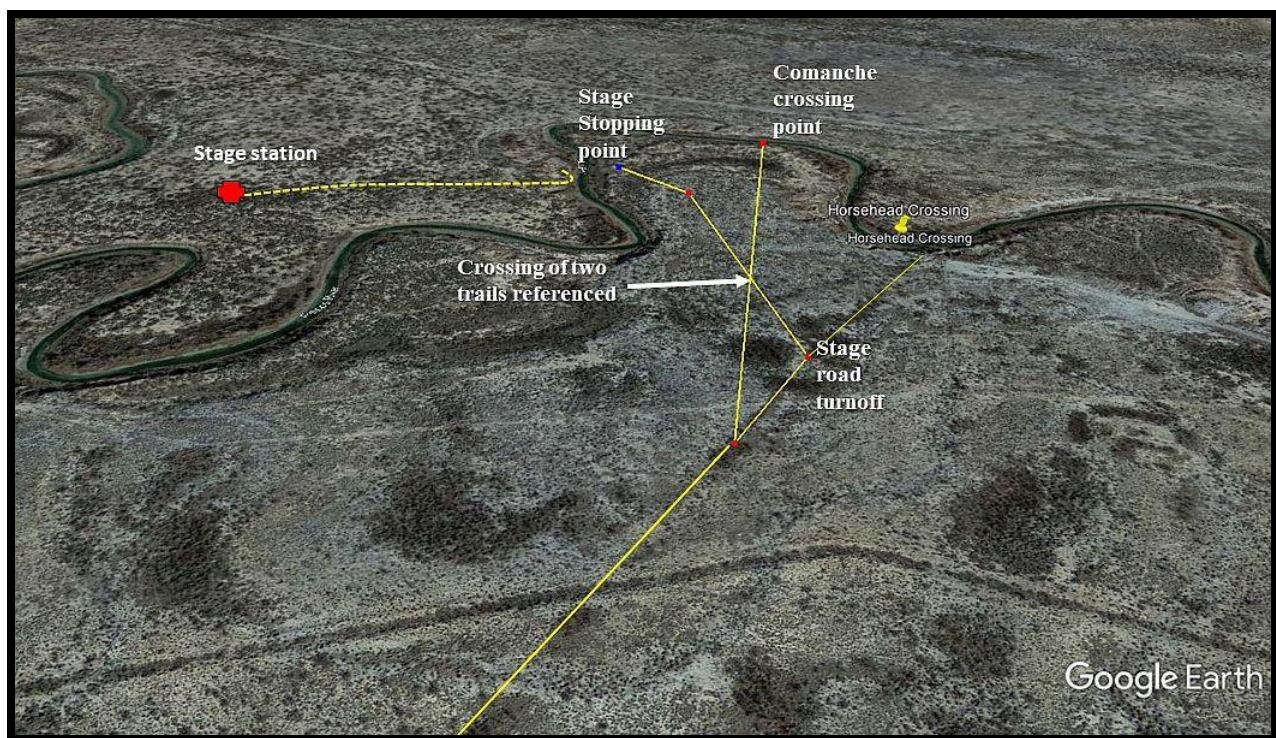
the San Antonio route. Additionally, it would have been a one-day run to Horsehead Crossing from Fort Davis (a two-day run from Fort Quitman), followed by an 11-day journey to reach Saint Louis. Conversely, the other route would have taken around 8 days to San Antonio after waiting for the bi-weekly coach, then ground freighted to Indianola, steamed to New Orleans, and finally sent up the Mississippi to Saint Louis, with a stop at Memphis. By my calculation, this would have taken at least 24 days to Saint Louis if everything had gone perfectly, compared to 12 days by the Butterfield coach. Ordering from Saint Louis would take about the same amount of time. As long as the freight was small enough, the obvious choice would have been the Butterfield Overland coaches, which would have warranted a separate freight run for the Butterfield Company while continuing their main coach route through the Guadalupe Mountains.



13. Horsehead Crossing To Fort Stockton

A first-hand historical account validates this Comanche War Trail water crossing point near Horsehead Crossing in an unexpected way. The year was 1859, and the Butterfield Overland Mail route had been changed from continuing up the Pecos River and crossing the Guadalupe Mountains to a new route down to Camp Stockton, then on to Fort Davis and El Paso via a southern route. A westbound passenger noted after leaving from the west side of the river on the way to Camp Stockton, the coach crossed “eight beaten paths, side by side [which] indicated the frequency of their bloody raids into northern Mexico for cattle, horses, and children.” (Dearen)

The crossing point mentioned by the passenger can be found through Google Earth analysis of both trails. Although the stagecoach/wagon road becomes one with the Comanche Trail just a little further to the west, the two trails diverged to their separate crossing points, making an X just before each reached the water line.

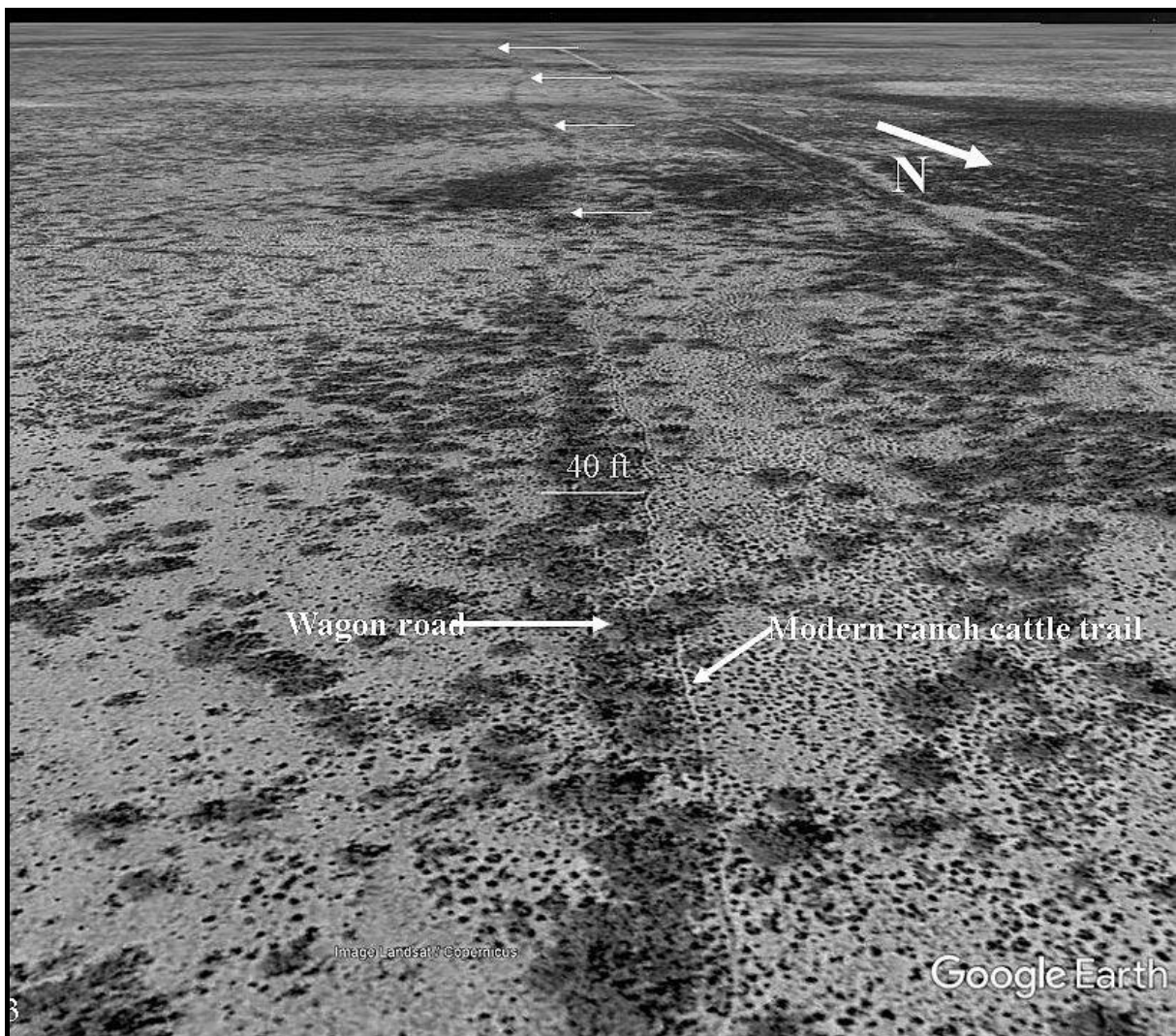


Two Trails Cross - Horsehead Crossing looking northeast

As you can see in the image, the wagon road and the Comanche War Trail merge into one soon after leaving Horsehead Crossing. The wagon road runs right down the middle of the Indian trail to Fort Stockton. At the time, I’m sure there was no brush growing up as it is today, and it was

the easiest, ready-made road for the stagecoach and wagons. The road runs straight to a low plateau seven miles from the river. Although the wagon road is about eight feet wide, the brush scar averages 40 feet wide to the plateau.

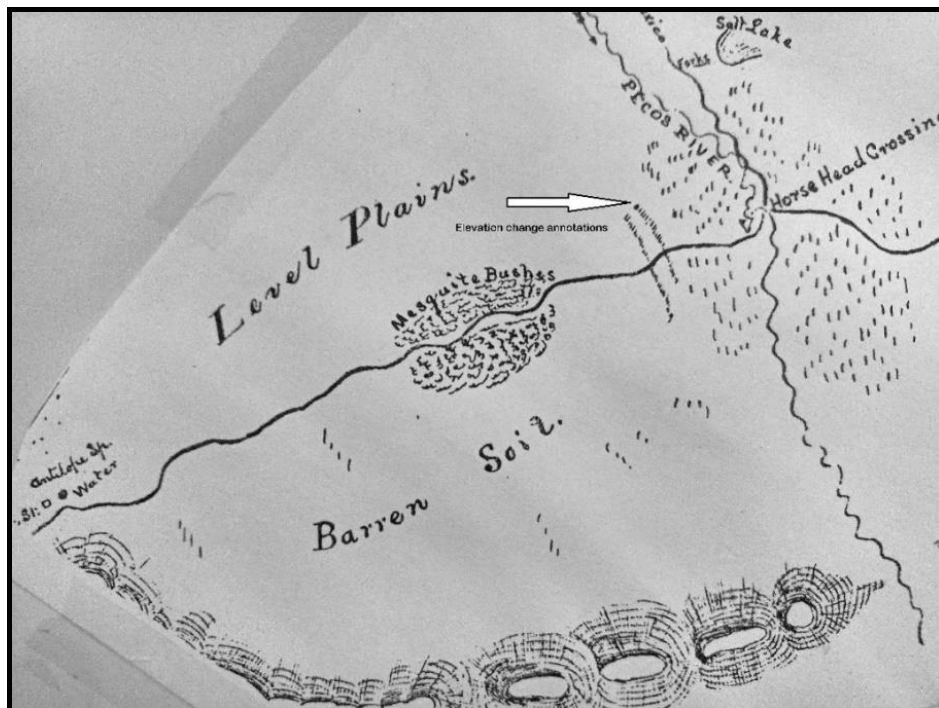
As the trail reaches the plateau seven miles from Horsehead Crossing, it ascends a draw to the flat terrain. It makes two elevation changes of 60 feet each. This is the second piece of information that confirms this is a trail and wagon road. In 1867, Brevet Lieutenant Colonel E. J. Strang led a large-unit march from Fort Stockton to Fort Chadbourne, making a detailed topographical map along the way. He used the main wagon road, and as he came off the plateau toward Horsehead Crossing, his topographer annotated two elevation changes on his map that matched those seen on Google Earth.



Trail leading away from Horsehead Crossing to the southwest



60-foot elevation changes leading up to plateau



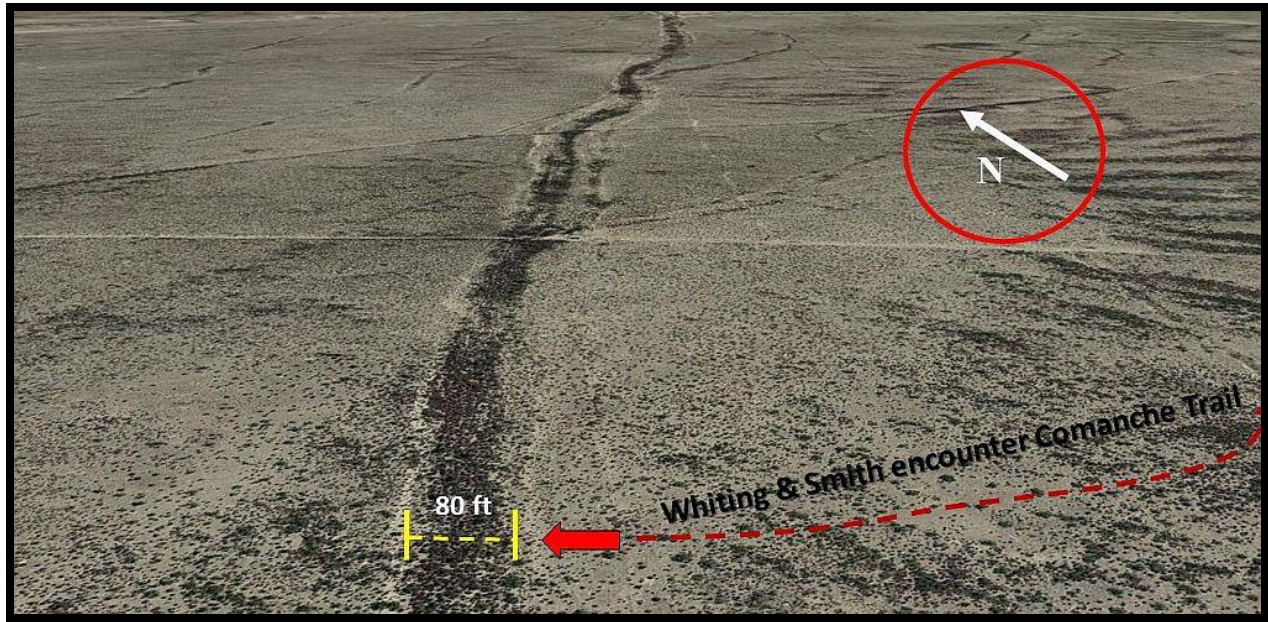
Brevet LTC Strang map with elevation change annotations

After the trail moves to the plateau proper, it becomes apparent from above. The trail widens, and the aftergrowth brush is thicker. The width in this area ranges from 80 to 130 feet, and the scar is clearly visible. In a close-up view, you can also see the wagon road continuing down the middle.



Comanche War Trail looking northeast back to Horsehead Crossing

Earlier, in 1849, when the area was first being explored for a route from San Antonio to El Paso by Lieutenant William Whiting and Smith Expedition, they came across the Comanche War Trail while following the Pecos River on the west side. Their journal states they came across “a large Comanche war path, which filled us with much astonishment. Close together, 25 deep-worn, and much-used trails made a great road which told us this was a highway by which each year the Comanche of the north desolate Durango and Chihuahua.” (Williams)



Whiting & Smith Encounter Location

By following their general path before encountering the trail, which was provided in some detail, it appears the party was already on the plateau where the Comanche War Trail is at its widest when they came across it. This would explain their description of 25 deep-worn trails. It also states that they traveled five miles along the trail to camp at Antelope Spring, which was the spring near the later stagecoach station, as further addressed in this report. That again verifies the location of their intersection with the Comanche War Trail on the plateau and at its widest point. From Antelope Spring, they followed the trail to what they described as southwest to a high table ridge, now known as the southern point of 7-Mile Mesa, just before you enter Fort Stockton.

14. Antelope Spring (Camp Pleasant) Station

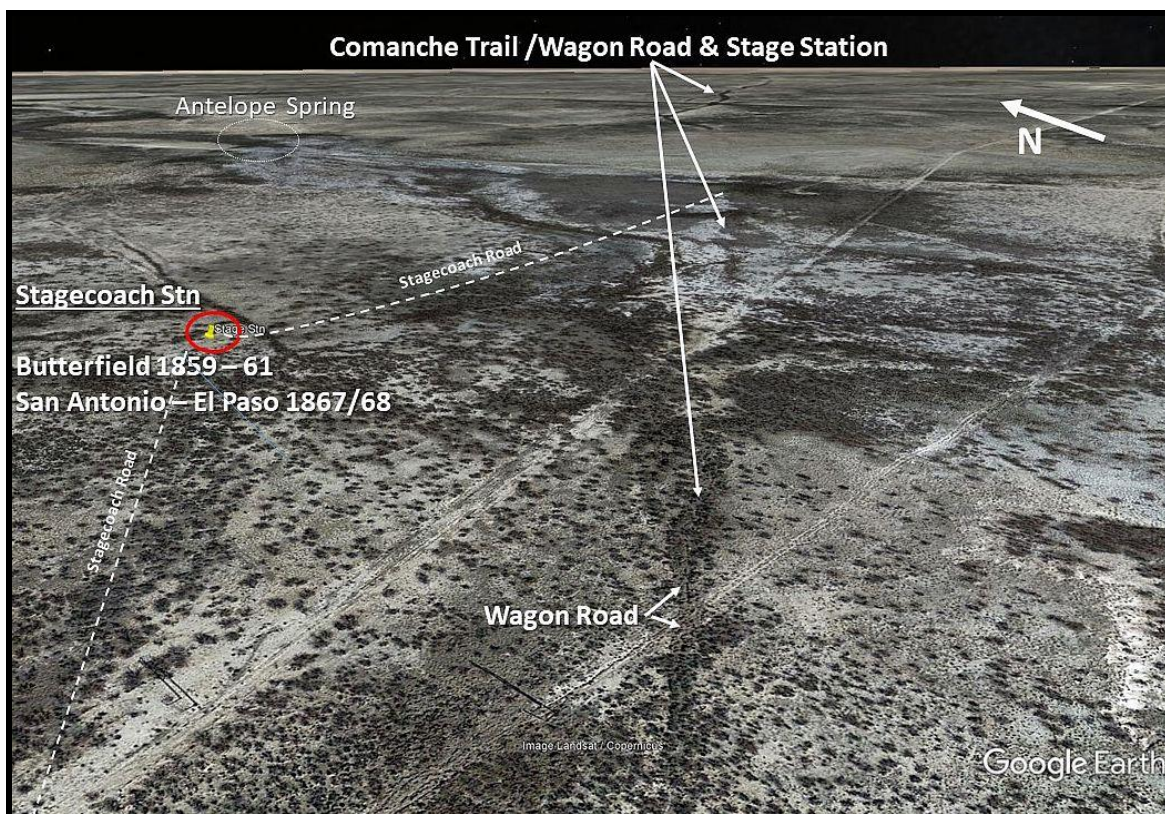
This station was situated just off the main wagon road, which ran down the middle of the Comanche Trail. Antelope Spring drainage ran to the station and was its water supply.

Antelope Spring Station, also called Camp Pleasant Station, sits just off the main road, 23 miles from Horsehead Crossing and 11 miles outside Fort Stockton. Pleasant was a common surname, and may have been the station agent, similar to Camp Mather. Solid documentation shows that the Butterfield used this route as early as November 1858 to freight packages from communities and forts on the Lower Road to Horsehead Crossing. (Ashmore, 2023)

Distances from St. Louis, Missouri, to MESILLA, ARIZONA (Station to Station) VIA THE OVER LAND MAIL ROUTE.	
From St. Louis to	Miller-Marcia Spring 69
St. Louis	Cottonwood 15
St. Louis	165 Ft. Davis 15
Springfield	148 Bartel Spring 32
Fort Smith, Arkansas	165 Ft. Morris 15
St. Louis, Texas	205 Van Horn's Wells 40
Fort Belknap	140 Eagle Spring 22
Fort Chadbourne	186 Camp Fargo 25
Colorado	17 Camp Rice 22
Grape Creek	15 Fort Quitman 5
Camp Johnson	25 Smith's Rancho 9
Camp Mather	22 Camp Hawkins 14
Head of the Concho (Stn)	15 San Elizario 14
Llano Estacado (Stn)	25 Ft. Pass 28
Castle Mountain (Stn)	40 Canutillo 15
Horse Head Crof Pecos (Stn)	17 Will. W. Bar 12
Camp Pleasant (Stn)	25 Mesilla 15
Comanche Spring, Ft Stockton	—
Leon Hole (Stn)	9 Total distance, 1585

- Fort Chadbourne
- Colorado (River Stn)
- Grape Creek (Stn)
- Camp Johnson (Stn)
- Camp Mather (Stn)
- Head of the Concho (Stn)
- Llano Estacado (Stn)
- Castle Mountain (Stn)
- Horse Head Crof Pecos (Stn)
- Camp Pleasant (Stn)
- Comanche Spring, Ft Stockton
- Leon Hole (Stn)

Note: Camp Pleasant also called
Antelope Spring Station



Antelope Spring (Camp Pleasant) Station

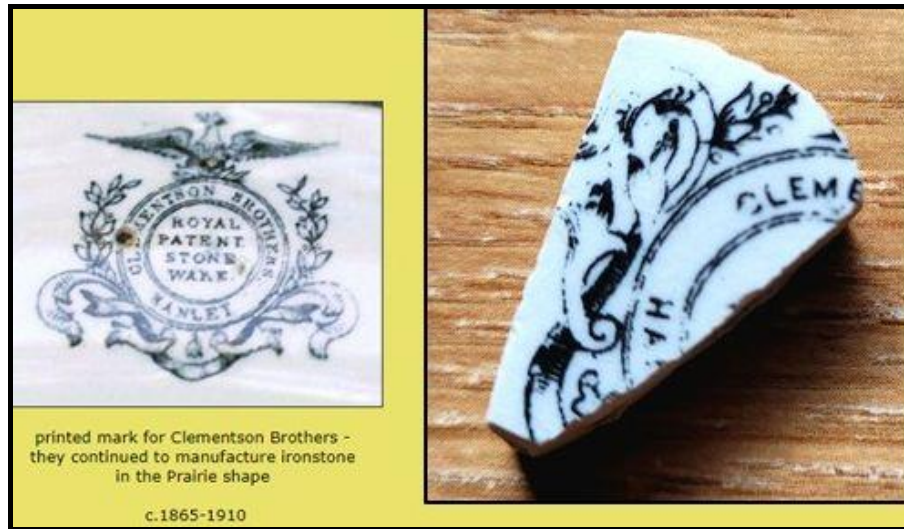
The area around the former building is littered with dishware and glass, much of which is probably from a later period than the Butterfield Overland Mail, given the fancy designs and colored dishware. This analysis is based on our previous excavations of three abandoned Butterfield Stagecoach Stations in West Texas, which were never restored as stations. All Butterfield-period dishware was very common and had little design. Station managers were living in crude conditions in a barren, hostile country at the time.

This dishware can be attributed to the fact that this station was reused after the Civil War by the San Antonio to El Paso Upper Road Stage Line, also known as the Ben Ficklin Stage Line. The contract began in July 1867, but the first stage, which ran along the Lower Road, commenced in October because the Upper Road was not yet ready. The Upper Road stage line used the same route to Fort Stockton as the old Butterfield mail route. This means Antelope Spring Station was probably in the restoration stage beginning shortly after July 1867. The Upper Road line started in March of 1868. On June 3, 1868, T. G. Williams, the agent in San Antonio, announced express mail service through to El Paso in 6½ days. The stage left San Antonio on Mondays, Wednesdays, and Fridays at 8 a.m. (Ficklin Mail Service).

However, the Indian problems became so acute at Horsehead Crossing (and probably at this location) in the 1867-68 period that the commander at Fort Stockton ordered a new river crossing to be created 35 miles further downstream. The alternate location became known as Pecos Mail Station/Camp Melvin/Pontoon Crossing. (Ashmore, 2023) Camp Melvin was the military detachment stationed there. The new stagecoach crossing point was originally upriver at a site nicknamed Ficklin's Ferry in the fall of 1868. (Ashmore, 2024) Later, the entire operation relocated to Pecos Mail Station, located one mile downstream. Therefore, the Antelope Spring station was likely occupied for only about six months by the San Antonio To El Paso Mail Line. This was not unprecedented: a former Butterfield Station had been reused. This same stagecoach line also reused Head Of The Concho, Llano Estacado, and Horsehead Crossing Stations.

We found one critical piece of evidence on our reconnaissance that supports this theory. A small piece of stoneware was discovered in the center of the station, in a room that was likely used to serve meals to passengers. This room is the same size and same location as the one at Fort

Chadbourne, which was found to be a similar passenger meal and kitchen area. The artifact is a small piece of stoneware with a maker's mark. The maker's mark is from the Clementson Brothers of Hanley, England. This maker's mark existed only from 1865 to 1910 (A-Z Stoke-On-Trent Potters). This fits perfectly for the period of the San Antonio to El Paso (Ben Ficklin) stage line, the initial period of 1867/1868. This would have been a prized possession of the station manager and an extremely unfortunate accident, but very fortunate for our research.

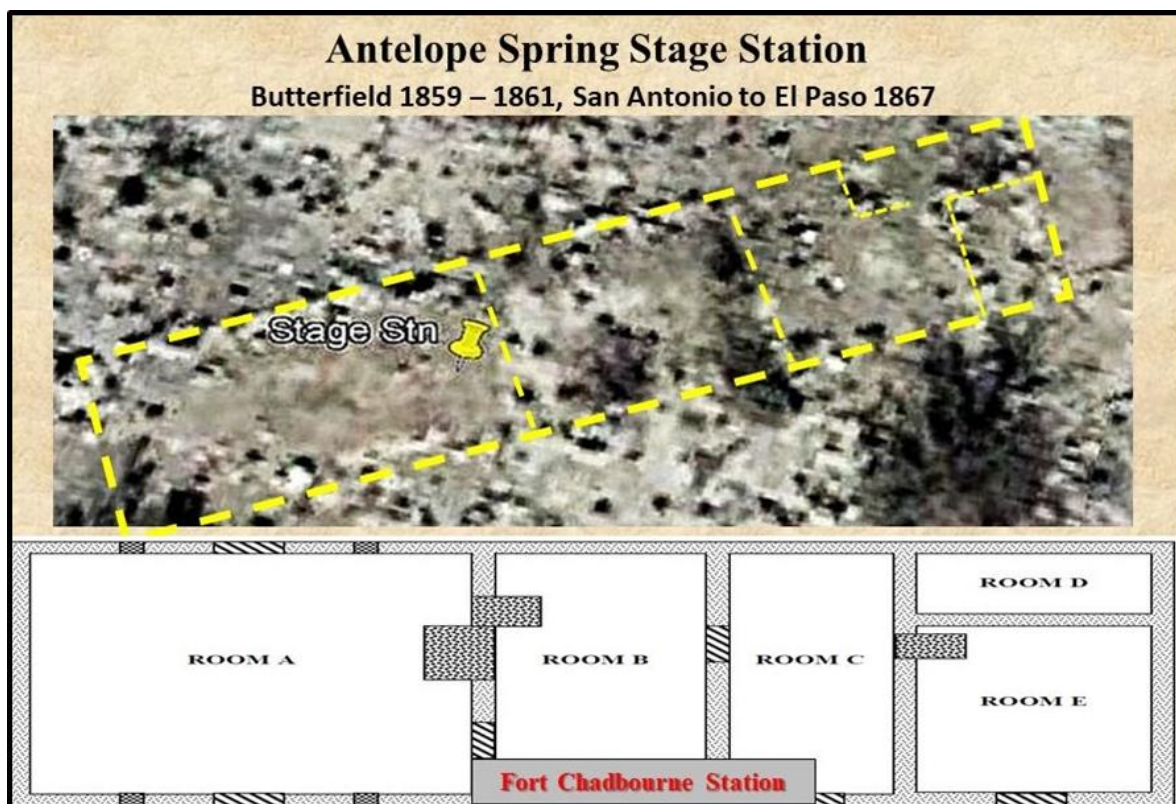


Stoneware Found Within Station Walls



Wagon route into and around station

This station was constructed in a manner similar to the station at Fort Chadbourne, where we participated in the 2008 excavation (Riemenschneider). The Fort Chadbourne station was a major station on the Butterfield route. Antelope Spring construction appears to have used the same design. It was the same length but 5 feet narrower. The internal rooms are also very similar in layout. Using conversions, we determined that the station was designed in yard measurements, a standard building measurement at the time. The folding yardstick was the most common tool for this type of work. For this reason, we are using their measurement method, which is based on yards, throughout this report. The station measures 27 X 6 yards.



Comparison of Fort Chadbourne and Antelope Spring Stations

Passengers would have been dropped off at a south-side porch leading into the room listed in the Fort Chadbourne excavation layout as Room A. This is the same room where the critical piece of stoneware was found. Although only the base of the walls remains, a large pile of wall stones was piled 30 yards away and then abandoned at some time in the past. We found a stone pile mixed with numerous pieces of glass and dishware from the building, indicating the building had been bulldozed. Bulldozing was likely done post-WWII, when bulldozers became widely available through the army surplus market. There is an old cattle capture pen nearby, and we can

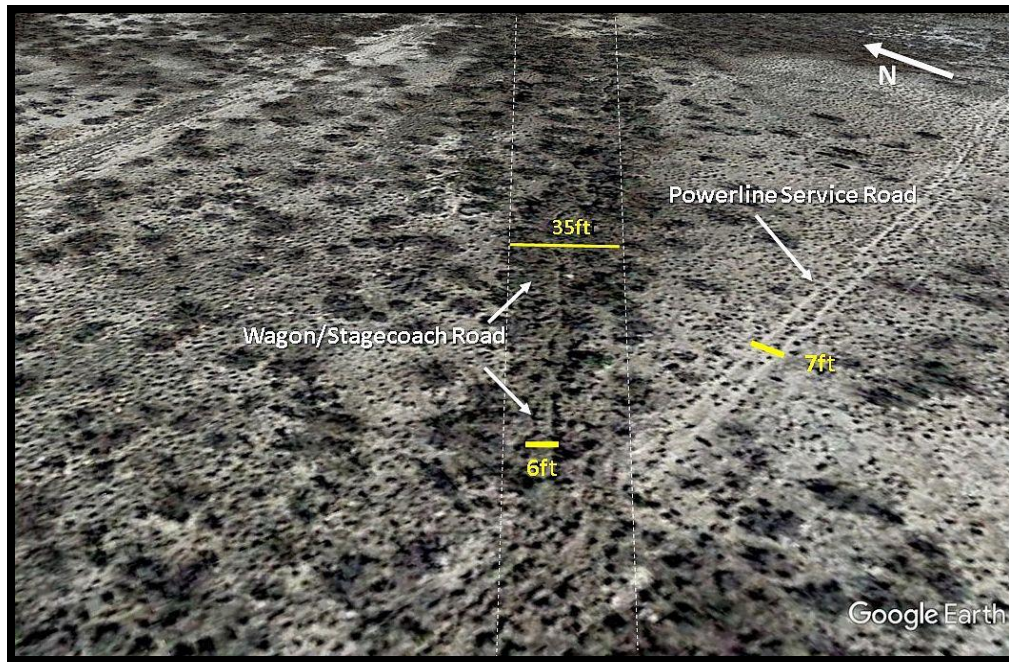
theorize that the rancher at the time decided to bulldoze the building to prevent travelers or squatters from continuously using it and causing problems with the ranching operations. In the late 1950s, although the road may have been abandoned, the railroad was still there, running right by the site, a quarter mile away. This abandoned site was probably well-known to most people in the area at the time. The West Texas section of this railroad runs from San Angelo to Fort Stockton and eventually on to El Paso. It runs through all the major towns along the way and is still in use today. The family memory of the current owner is that the rail line was used by travelers walking the tracks to Fort Stockton.



Antelope Spring Station Ruins

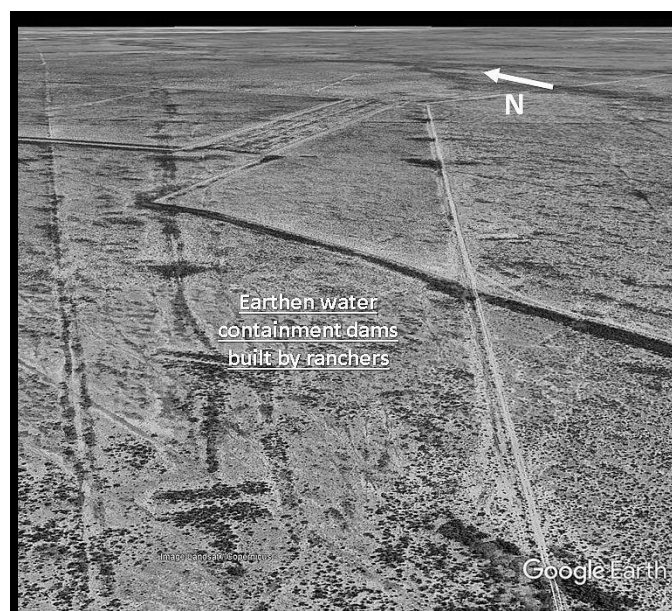
In addition to inspecting the stagecoach site, we walked the wagon road, finding it with the proper wagon rut depressions and wagon width. This road was used until the early 1900s, and we found period tins and bottle fragments from that era along it. It was also very apparent that the soil in this area is very fine sand just beneath the surface. This is probably another reason the trail is more defined than in other regions.

Satellite imagery shows a close-up of the wagon road within the Comanche War Trail near the stagecoach station. A modern powerline road crosses this area, giving a good comparison of dimensions. The wheel tracks are 6 feet wide and rutted from the narrow wooden wheels.



Wagon road within Comanche War Trail after-growth brush

One interesting fact has emerged from this imagery analysis. The trail is so wide and deep in many places that modern ranchers have built earthen dams across it to capture any rainwater that might accumulate after storms. In some locations, they are set as close as every 300 feet and in others as far apart as 700 feet. It also appears that these earthen water containment dams were copied for other man-made modern ditches and roads, as can be seen on the right side of the image.



Modern water containment earthen dams created within the Comanche Trail

From the stage station area, the Comanche War Trail/wagon road continues to Fort Stockton, winding around the southwestern tip of 7-Mile Mesa, just as reported by Lt William Whiting in his 1849 expedition.



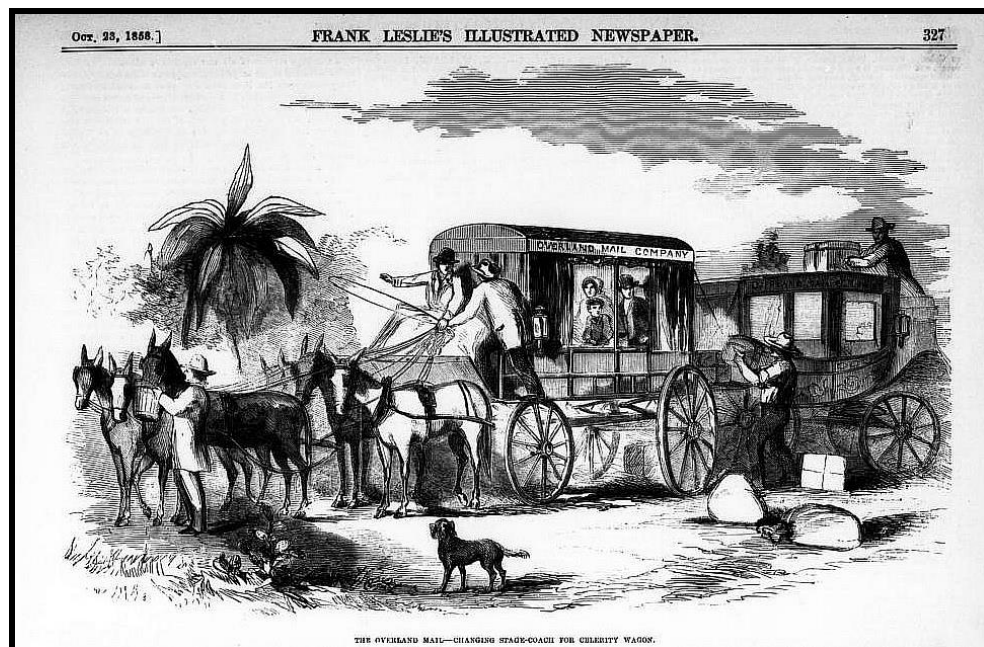
Comanche War Trail/Wagon Road Passing 7-Mile Mesa

Final Summary

Although operational for only a few short years, the Butterfield Overland Mail was one of the most significant achievements in the opening of the American West. Before this road was built, travelers heading to the West Coast had to either pay an exorbitant price for months on a sailing ship or brave the wilds with very little to guide them through a highly hostile environment. Many did not survive using either option. The Butterfield Overland Mail Company constructed a formal road that could be used by their stagecoaches and any other travelers heading west. For customers of the stage line, paying a lower fee and enduring 25 days of difficult but acceptable travel was a reasonable choice compared to the other options.

The trip through West Texas was by far the most severe portion of this route. It was so severe that they had to construct special wagons driven by hardy and fairly wild mule teams to handle it. Each stage stop was approximately 30 miles. According to the schedule, the distance from the Red River to the Pecos River was 436 miles, and the journey passed through 21 stations, taking 4 days. This was only half the distance through West Texas. From Fort Stockton, they still had another 260 miles of desert to go through to reach El Paso.

Hopefully, this study sheds light on some of the forgotten locations and provides a new understanding of the trail itself in this challenging region of West Texas.



Changing from the standard stagecoach to the Texas 'Mud Wagon.'

Tom Ashmore spent 22 years in the Air Force as a special intelligence analyst. After retiring from active duty, he taught special intelligence skills worldwide for another five years and then taught for 15 years at the Air Force Intelligence School at Goodfellow AFB, Texas. He has headed up multiple avocational archeological investigations for the Concho Valley, Iraan, and the West Texas Archeological Societies. He is currently the president of the West Texas Archeological Society and a board member of the Southwest Federation of Archeological Societies.



References

A-Z Stoke-On-Trent Potters: Joseph Clementson (Online)

<http://www.thepotteries.org/allpotters/272.htm>

Ashmore, Tom

2023 *Pecos Mail Station (41CX1825/1826) & Camp Melvin (41CX20): The Rest Of The Story*

2024 *Ficklin Ferry Crossing and Old Camp Melvin (Melbourne)*

2023 *The Concho Mail Station 41TG427*

2024 *A Case for the Butterfield Overland Mail Using the Lower Road Much Earlier Than Previously Known*

2019 *The Butterfield Trail Through The Concho Valley and West Texas*

(all reference material online) <https://westtexasarcheologicalsociety.website/reports>

Barnes, Frank C.

2006 *Cartridges of the World*, 11th Edition

Gun Digest Books, Frank C. Barnes and Krause Publications, Inc.

Bartlett, John Russel

1854 *The Personal Narrative of Exploration and Incidents in Texas, New Mexico, California, Sonora and Chihuahua, Vol. I*, Connected With The United States Boundary Commission During The Years of 1850, 51, 52, 53, New York: D. Appleton and Company (available online)

<https://books.google.com/books?id=VkyTAAAAyAAJ>

Butterfield Overland Mail - Smithsonian

Smithsonian National Postal Museum (online)

<https://postalmuseum.si.edu/collections/object-spotlight/PassengersImpressions.html>

Butterfield Overland Mail - TSHA

Texas State Historical Association (available online)

<https://tshaonline.org/handbook/online/articles/egb01> (online)

Camp Melvin, Texas State Historical Association, *Handbook Of Texas* (Online)

<https://www.tshaonline.org/handbook/entries/camp-melvin>

Carlson, Paul H. and Shafter, William Rufus

Handbook of Texas (available online)

<http://www.tshaonline.org/handbook/online/articles/fsh02>.

Concho

2009 *Military scouting reports and official orders, 1866 – 1880*

Fort Concho Historical Archives

Conkling, Roscoe P. and Margaret B. Conkling.

1947 *The Butterfield Overland Mail, 1857-1869*. Glendale: The Arthur H. Clark Co.

Cruse, J. Brett

2008 *Battles of the Red River War, Archeological Perspectives of the Indian Campaign of 1874*, Texas A&M University Press

Dearen, Patrick

1996 *Crossing Rio Pecos*, Texas Christian University Press

Dings, Bruce

1952 *History of Fort Quitman: A Military Post in Texas*
<https://www.tshaonline.org/handbook/entries/fort-quitman>

Elkins, Emma

1911 *The Story of Old Fort Chadbourne*, Hunters Magazine, Marvin Hunter, July issue, Ozona, TX

Ely, Glen

2016 *The Texas Frontier and the Butterfield Overland Mail, 1858–1861*, University of Oklahoma Press

Ficklin Mail Service, 1866–1872 (online)

<http://thomasrife.com/part-seven/ficklin-mail-service/>

Francell, Lawrence

1999 *Fort Lancaster*, Texas Parks and Wildlife Dept.

Green, A.C.

1994 *900 Miles on the Butterfield Trail*, University of North Texas Press

Haley, James Evetts

1952 *Fort Concho and the Texas Frontier*, San Angelo Standard Times

Hurt, Richard Dwain

1980 *Archeological Investigations of Portions of the Middle Concho Valley, A Thesis in Anthropology*, Master of Arts, Texas Tech University (online)
<http://etd.lib.ttu.edu/theses/available/etd-08212009.../31295002532363.pdf>

Lindsey, Bill *Historic Glass Bottle Identification & Information Website*

Society for Historical Archeology, <https://sha.org/bottle/index.htm> (online)

Mullins, Phillip and George

George Giddings' second mail contract, July 1857–February 1862

<http://www.thomasrife.com/part-five/giddings-second-contract/#fn:106>

Nelson, Lee H.

1968 *Nail Chronology As An Aid To Dating Old Buildings*, American Association for State and Local History Leaflet 48, History News, Volume 24, No. 11, National Park Service

Ormsby, Waterman L.

The Butterfield Overland Mail, 1834-1908; Wright, Lyle Henry, 1903-1979; Bynum, Josephine M; Henry E. Huntington Library and Art Gallery

<https://archive.org/details/butterfieldoverl00wate>

Nickels, David L. and Mauldin, Raymond P.

2001 *Twin Buttes Archeological Report*, University of Texas, San Antonio (online)

<http://car.utsa.edu/Publications/twinbuttespopularrpt.pdf>

Pottery Magic

http://www.pottery-magic.com/pottery/topics/pottery_marksCL.htm (online)

Taylor, Glenn

1947 *The Early Days of Fort Concho*, Tom Green County Historical Society

Temple, Frank

1959 *Colonel B.H. Grierson's Texas Commands, A Thesis in History* (online)

<http://etd.lib.ttu.edu/theses/.../etd-06302009-31295001675684/>

Tom Green County Historical Society

2003 *Tom Green County Chronicles of our Heritage*, Volume 1, H.V. Chapman and Sons

Uglow, Loyd

1952 *Standing in the Gap, Army Outposts, Picket Stations and the Pacification of the Texas Frontier 1866-1886*, Texas Christian University Press

Riemenschneider, Larry

2008 *Archeological Investigations Fort Chadbourne (41CK129) Officer's Quarters (Ranch Headquarters) Coke County, Texas*, Fort Chadbourne Foundation Archives

https://www.academia.edu/36003673/Archeological_Investigations_Fort_Chadbourne_41CK129_Officers_Quarters_Ranch_Headquarters_Coke_County_Texas

2008 *Archeological Investigations Fort Chadbourne (41CK129) Butterfield Overland Stage Station, Coke County, Texas*, Fort Chadbourne Foundation Archives

https://www.academia.edu/36003828/ARCHEOLOGICAL_INVESTIGATIONS_FORT_CHADBOURNE_41CK129_BUTTERFIELD_OVERLAND_STAGE_STATION_COKE_COUNTY_TEXAS

1996 *Head of the Concho Stage Station 41IR95*, Bulletin of the Texas Archeological Society, Volume 67

https://www.academia.edu/36004650/Head_of_the_Concho_Stage_Station_41IR95

Sutton, Mark Q. and Arkush, Brooke S.

1996 *Archeological Laboratory Methods: An Introduction*, Kendall/Hunt Publishing Co.

Turtlefoot Headstamp Project (online)

<http://www.headstamps.x10.mx/umcco.html>

Wilbarger, J. W., Eakin Ed

1985 *Indian Depredations in Texas*, Eakin Press

Williams, Clayton

1969 *Never Again, Volume 3*, Naylor Company

Wright, Lyle H.

1942 *The Butterfield Overland Mail*. Contributors: Waterman Lilly Ormsby. The Huntington Library, San Marino, CA.