

# Butterfield Overland Mail's Horsehead Crossing Station

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*“Horsehead was the setting for so many Indian fights and other dramatic events that some historians believe the crossing exemplifies the challenges of pioneering the West.” Patrick Dearen*

## Abstract

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. This research brings together historical information with satellite and drone imagery, and on-ground reconnaissance to establish the exact location of the site. Found in the National Archives and published by both Patrick Dearen and Glenn Ely was a hand-drawn 1869 map of the area of “old” Horsehead Crossing Station, giving the starting point for the search that revealed not only the location of the station, but the Pecos River ferry crossing site used by the Butterfield Company.

## History

When the Butterfield Overland Stage came to the Pecos River on its inaugural run on the 26<sup>th</sup> of September, 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 newspaper reporter for the New York Herald, 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 are telling as to 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 meet the 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)*

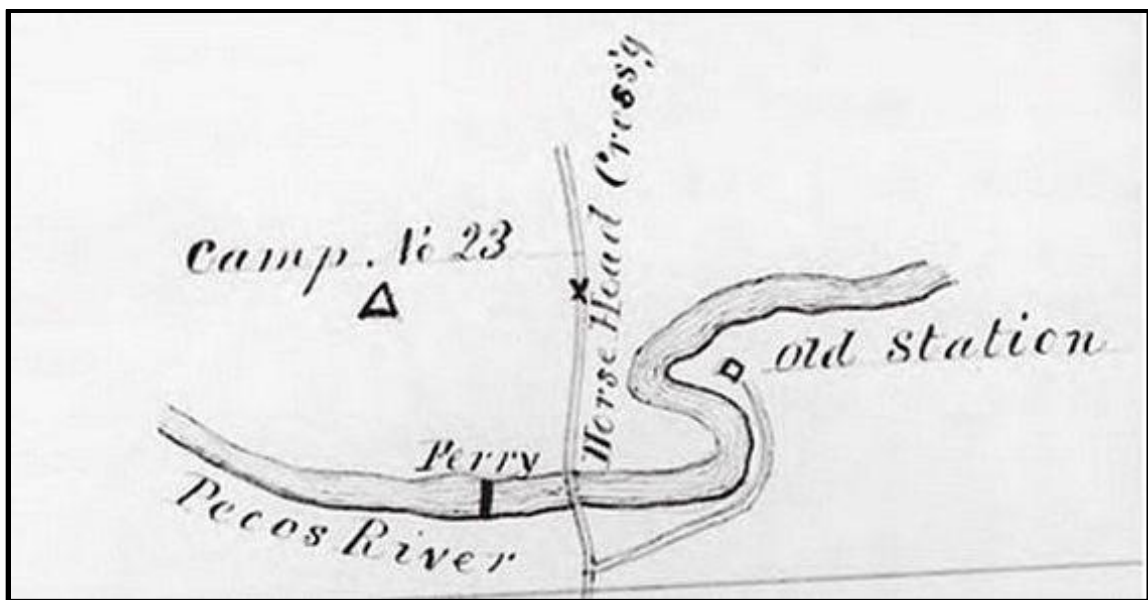
So, the design of the Emigrant Crossing station was a corral and building compound of adobe. This is very much like other Butterfield compounds, whether they were constructed of stone, wood or adobe. The corral and living structure formed one enclosed compound for the protection of both the stock and the occupants from Indian raids. The stagecoaches would drive right into the compound before unloading their passengers and changing out the mules for the next portion 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 transport a coach across the muddy, swift river. 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 was finally ordered to be shut down, along with all other stations, 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 proceeded, and he also identified the “old station” relative to the regular crossing point. This specific river bend can now be easily identified in Google Earth satellite imagery.



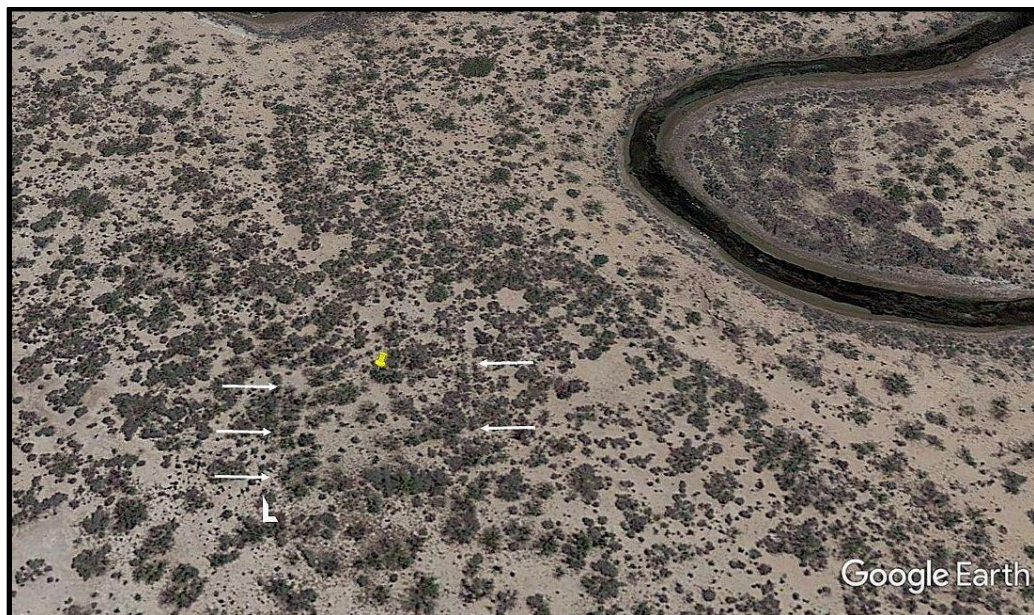
**Brevet LTC Thomas B. Hunt, 1869 map (National Archives)**



### Comparison of Hunt 1869 map and identified location of station through imagery interpretation.

When searching in an area that has had little human activity but has seen significant effects by the natural forces the thing to look for within the vegetation is unusual straight lines, 90-degree angles, and unusual greening of an area that has no perceptible reason for such greening. The area of this bend is entirely restricted to cattle due to the dangers of the mud and is totally fenced off by the ranchers.

In order to search properly using Google Earth, the historical capabilities of the application is invaluable since images will be taken in different seasons throughout the years. Years of drought may reveal things that were covered during wetter years. In this case, 2014 was a drought year and the year that revealed vegetation anomalies. Two straight line remnants of wall structures and one 90-degree angle can be seen in this image.



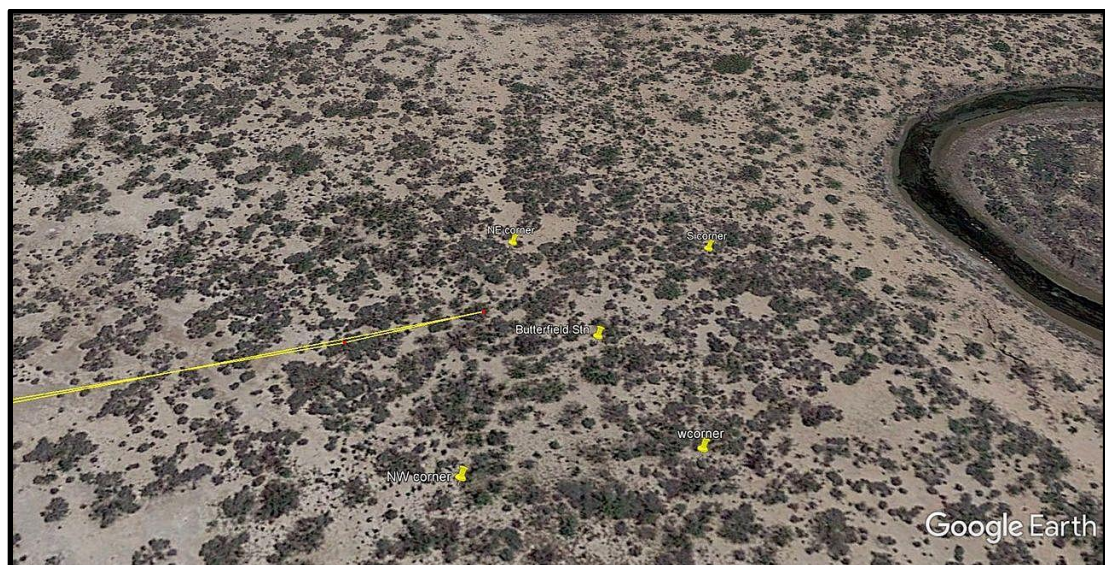
**Anomalous straight lines and 90 angles in vegetation**

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



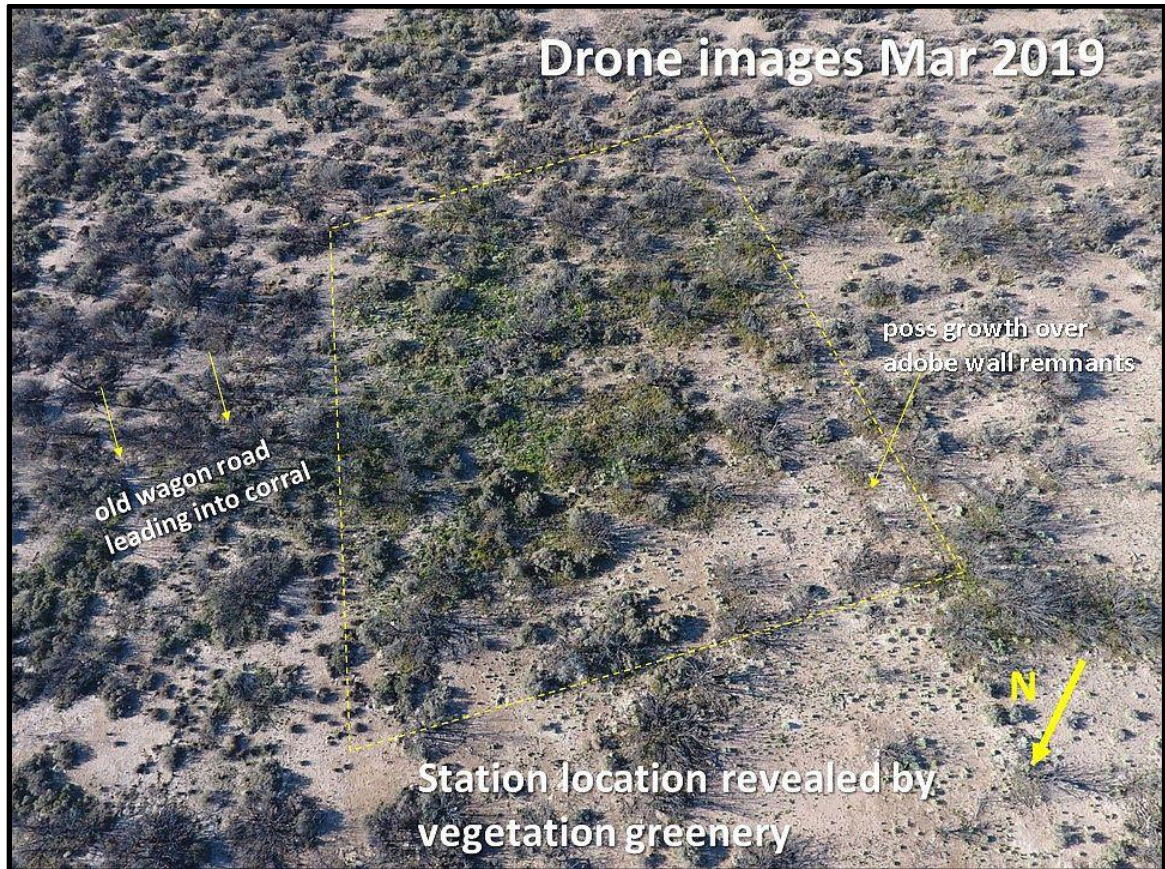
**Wagon road leading in and out to the former structure. Note: Long straight line in upper left corner is modern fence line.**

Additionally, this road leads directly to the rear portion of the compound. This would be the corral area. According to a 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 alike 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 very common for former building sites to adopt a completely different vegetation cycle after the site is long gone. This is due to bioturbation during and after the period of occupation. Bioturbation is the alteration and disturbance of a site by living organisms; the turning and mixing of sediments. In this case, it is both human and animal waste products changing the soil, which makes it a better soil for plant growth - similar to mulching of a garden - but is an entirely unintentional and natural process. The greenest part of the site is to the rear, where the mules were kept.



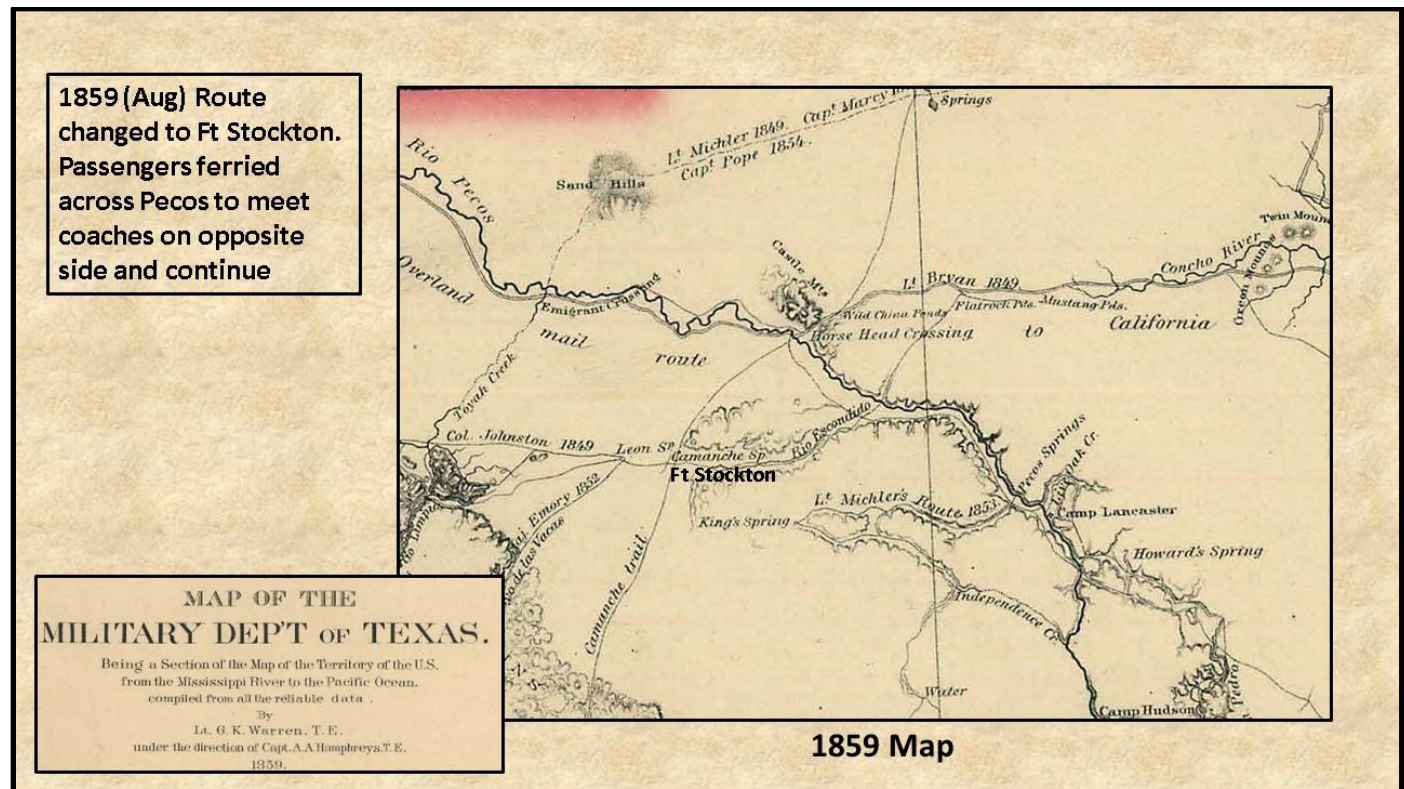
**Inside the rectangle the vegetation is greening, whereas the rest of the bend of this river at this time of the year (early Spring) is still totally dormant. Notice the wagon trail running right into the rear of the compound.**

One wagon trail within the bend, but not the main road leading in and out, was at first 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 draw or 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. With the line of bushes beginning at the station and running along level land, it must 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

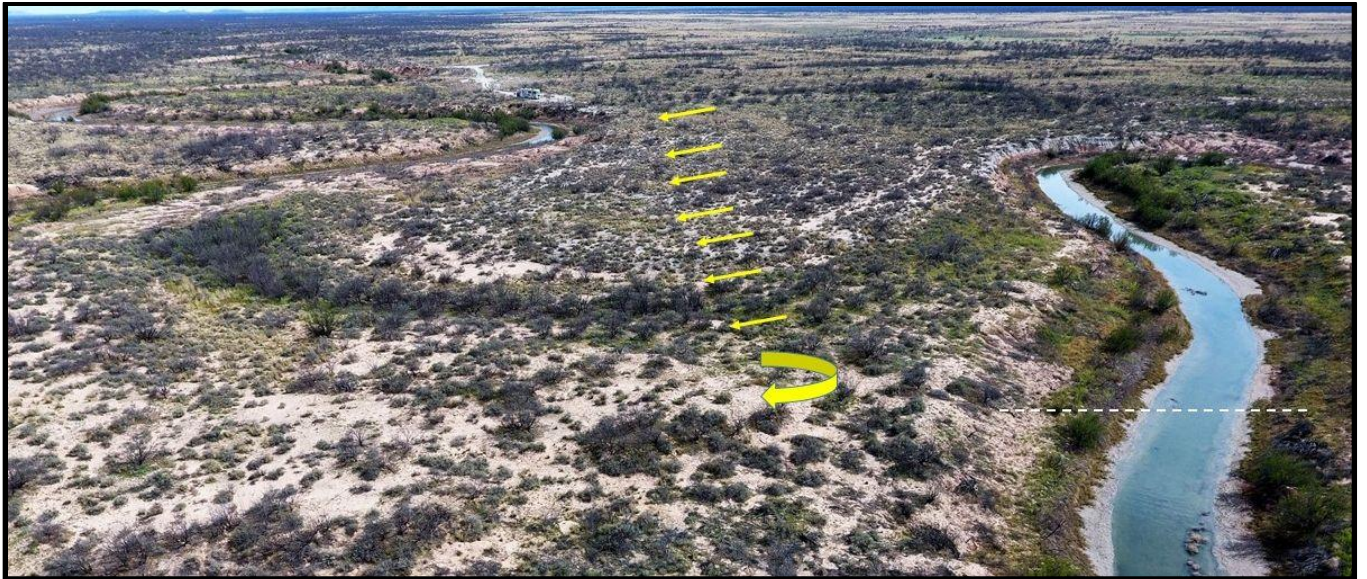
forts Stockton, Davis, and Quitman to the mail route 2) better water sources 3) more passengers were available on the lower route. (Green)

To accomplish this change, the company built a ferry system near the station. 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 using a small skiff-type boat. (Green/Ely/Dearen) The skiff was probably connected to a rope line to keep it from being swept downstream with the strong current. The station continued to operate under this route and methodology from this point on.



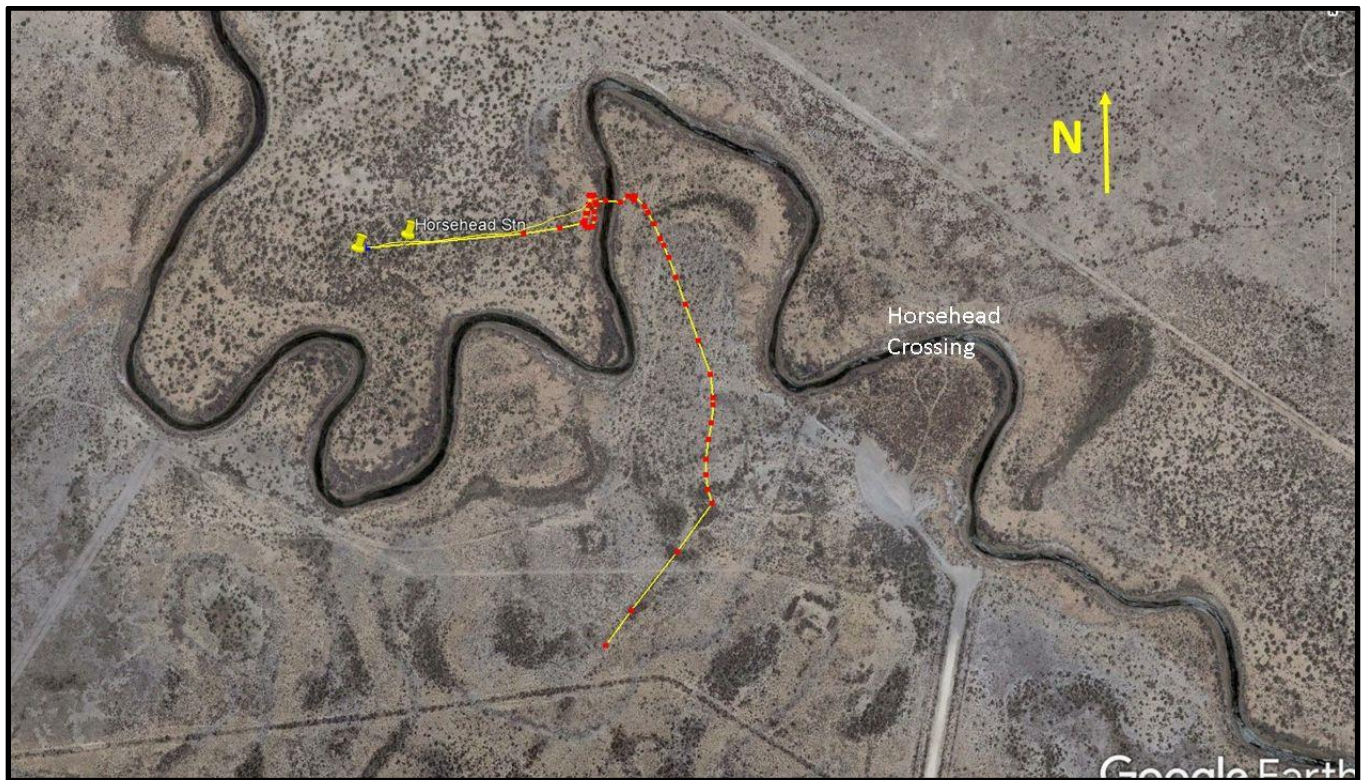
**1859 map of road from Horsehead to Fort Stockton ('Ft Stockton' added for location)**

To verify that the wagon road from the station was for the ferry crossing, a review of any wagon trail on the other side of the river was required. The result was that a wagon trail can be seen departing the established Fort Stockton road before it reaches Horsehead Crossing proper and heads straight to the river bank directly opposite from the wagon trail turn around on the other side.

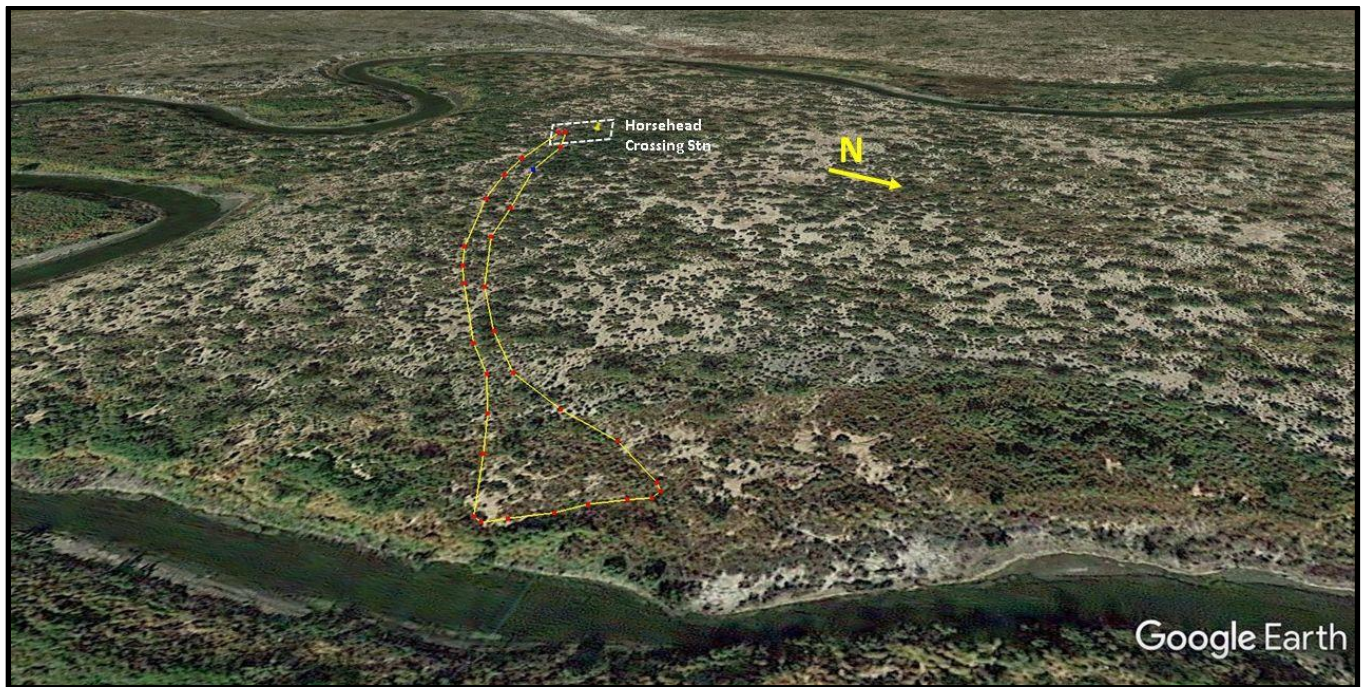


**Dark line of bushes is old wagon road from Fort Stockton road to ferry crossing point on west side of Pecos**

On the west side of the river the road came to what looks like a turnaround area. On the east side it appears the coach may have driven along the bank in a kind of loop 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**

## **Reconnaissance**

On March 26, 2019, Mr. Ernest Woodward, landowner on the west side of the Pecos River across from the station, and I used his canoe to cross the river and hike to the station site. Upon arrival, we found that the many floods had eliminated any evidence on the ground in this area. Although the river is now a timid reflection of its earlier self, past floods were devastating. The Pecos River has a long history of flooding: 1904, 1950, 1952, 1954, 1978, and 2014. (Dearen) The 1954 flood, for example, crested at 96 feet and was 3 miles wide, taking out entire bridges as it raged through Texas.

Although our time on site was very limited, we conducted a thorough surface search and metal detection sweep. The metal detection sweep was negative. This is probably because there is estimated to be 12 to 18 inches of flood soil on top of any remaining objects from the station, and the metal detector used cannot reach that depth. Additionally, it is known that artifact hunters found 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 and the station was only in operation for two years. Finally, the station was likely constructed from adobe, making it highly vulnerable to flooding.

During the Butterfield stage's inaugural run, Ormsby commented that the next station up the line was still under construction by Mexican workers. It was a whole adobe compound – corral and building combination. This was likely the same design and construction method used for Horsehead Crossing Station. The soil along the Pecos River in this area is a very sandy loam, the perfect soil for making adobe bricks. It is also the most vulnerable to flooding.

Using the Google Earth measuring tool on the best 2014 imagery of the wall remnants indicates the walls were about 3.5 feet thick. This is an expected width for an adobe structure since there is very little reinforcement and must be a thick wall to maintain the integrity for the structure.



### Measurement of width of wall remnants

A good example of this is the Butterfield's Vallecito Station in San Diego County, CA. This 1953 photo from the San Diego Historical Society shows clearly the width of the walls.



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

## **Conclusion**

Satellite and drone imaging can locate the sites of old stage stations, even when they have been completely removed from the landscape. It can be used to follow the wagon road directly to the site, thereby supporting the site's location. The only green vegetation in the entire horseshoe bend at the site in the early spring of 2019 was in a rectangular layout. This is caused by bioturbation and is a telltale sign of previous human habitation when looking for old sites of this type. The measurements of the remnants of the wall structure from the imaging support the conclusion that this station was probably an adobe structure with walls approximately 3.5 feet thick. The location matches the hand-drawn 1869 map by Brevet Lieutenant Colonel Thomas Hunt, which adds to the supporting evidence that this is the correct location. Floods either swept away or buried deep any remnants. Old wagon roads also indicate the documented stagecoach ferry system: one runs from Fort Stockton to the river's edge, and the other leads from the station and back in a loop. Both end up directly across from each other on each side of the river.

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