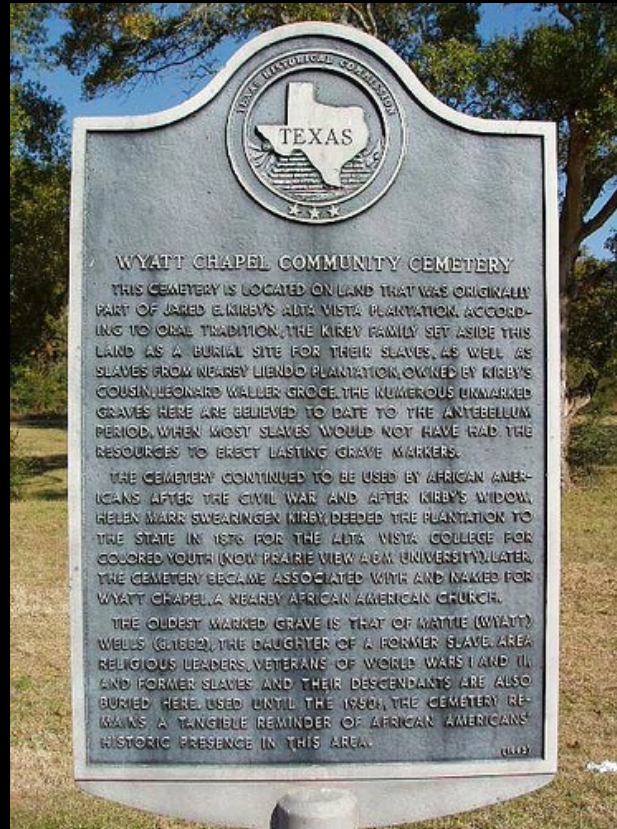


Group 4

Wyatt Chapel Community Cemetery

Prairie View, TX



[flickr.com/.../texashistoricalmarkers/400159517/](https://www.flickr.com/photos/texashistoricalmarkers/400159517/)

Bill Baker, Jan Grout, Nancy Fiegel, Molly
Nipper, Jared Sallee, Sally Wall & Carol Waters

Archives Research



- key names associated with the cemetery
- documentation of historic flooding to confirm the oral history of headstones being washed away
- documentation of any epidemics or outbreaks

History of Flooding



<http://texashistory.unt.edu/ark:/67531/metapth63>

Two major flooding events of the Brazos River could have affected the Wyatt Chapel Cemetery area.

- July 2, 1899 - The river crested near Hempstead at 63.6'. The overflow affected 66,000 sq. miles. Property damage was estimated at \$9 million. The highest crest was recorded at Hearne, Texas.
- December 1-5, 1913 - The river was at flood stage when 20-25 additional inches of rain fell. The river crested at Hempstead on Dec. 8, 1913 at 66.1'. The flood waters were up to 12 miles wide. This flood was more severe than the 1899 flood.

<http://lifeonthebrazosriver.com/Floods.htm>

Flash Floods of Texas by Jonathan Burnett; Texas A&M University Press

Geology

- The site studied is located on the Pleistocene Willis Formation. This formation consists of fluvial sands deposited before the last Ice Age. This sand layer runs around 3-6 ft deep and varies.

	Epoch	Period	Era	Eon
0.01	Holocene	Quaternary	Cenozoic	Phanerozoic
	Pleistocene			
1.8	Pliocene	Neogene		
5	Miocene			
24	Oligocene	Paleogene		
35	Eocene			
57	Paleocene			
65		Cretaceous		
	144	Jurassic		
	206	Triassic		
	251	Permian		

- The underlying clay layer was formed during the Tertiary time (around 20 mya) and is known as the Tertiary Fleming Clay. The clay is very hard and would be extremely difficult to dig through without modern machinery.

www.ocean.odu.edu/.../session_09/handout.html

Field Work

GPR

(Ground Penetrating Radar)

- Radar shows disturbances & anomalies in the stratigraphy of the soil.

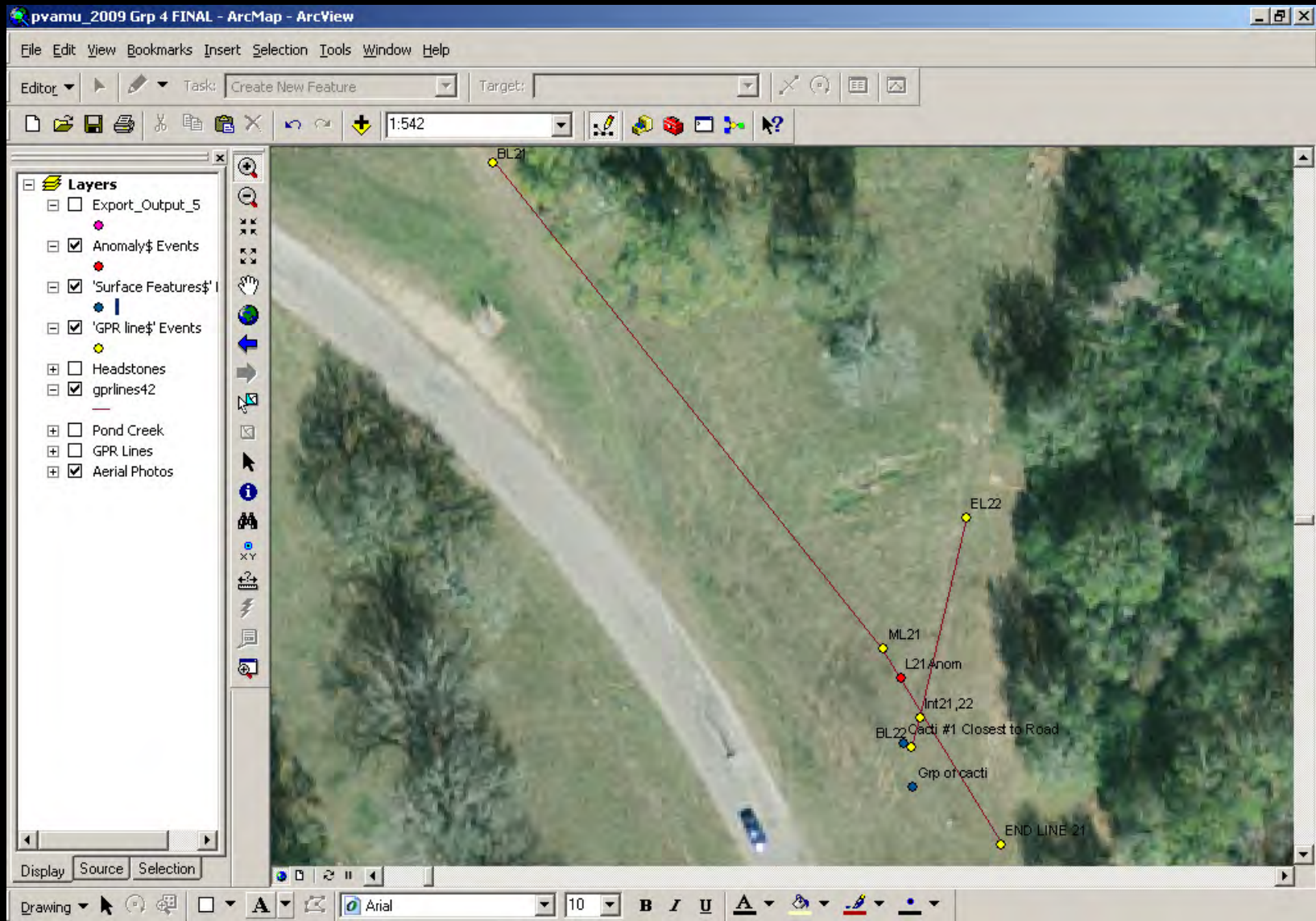
GPS

(Global Positioning System)

- GPS is used to record the actual geographic locations of points of interest.



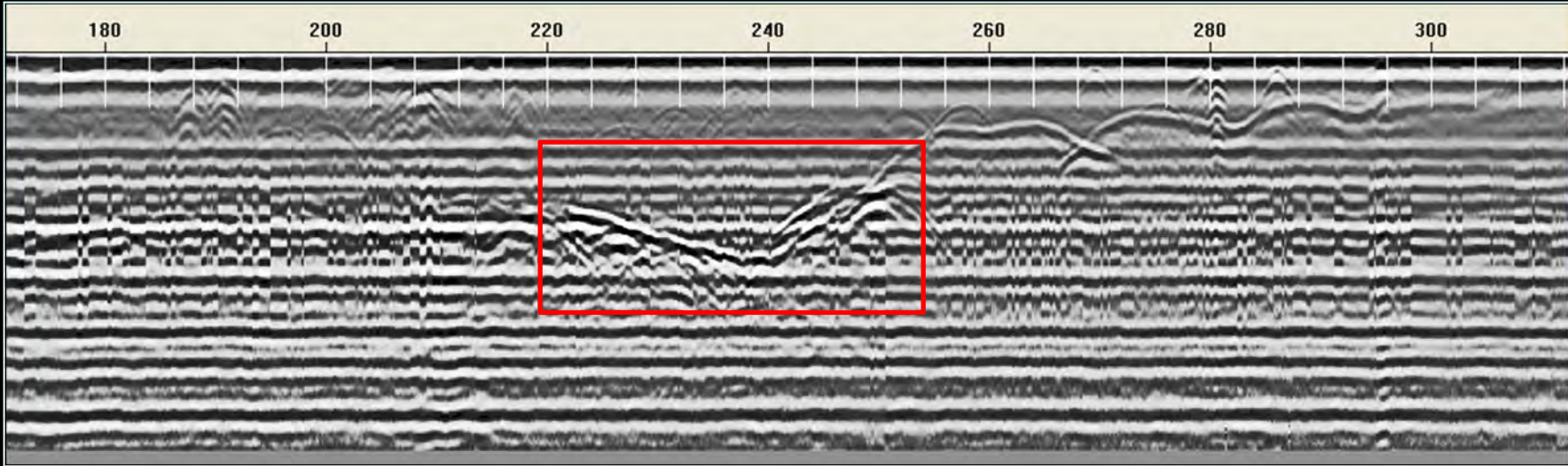
Integration of GPS & GPR Data



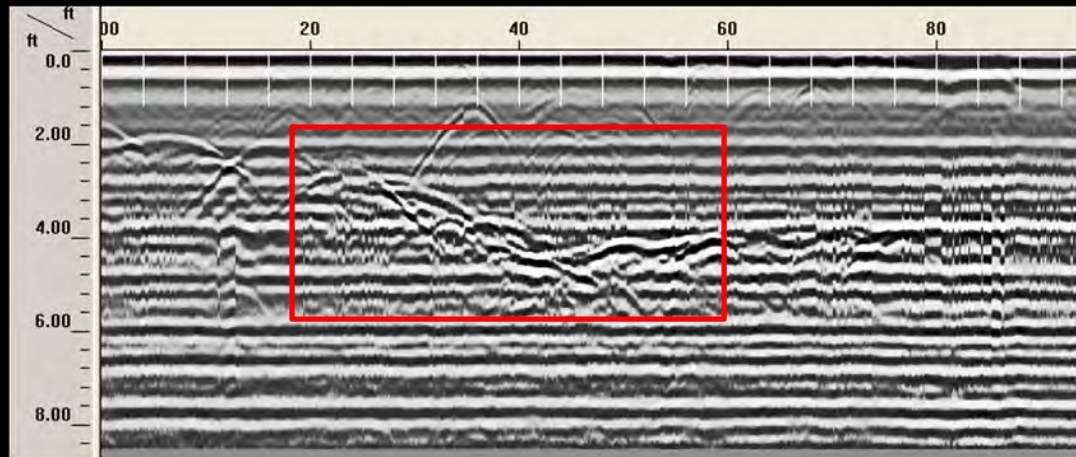
GPR Lines Find Anomaly!!

July 22, 2009

Line 21



Line 22



Excavation of Trench

Intersection of GPR lines 21 &
22



Pebble



Beginning of Clay
Layer

- **Several items of interest were discovered.**
 - Broken glass ~ 12 inches below
 - Assorted tree roots & organic material ~ 18-36 inches
 - Pebbles ~ 41 inches
 - Cobbles ~ 48 -66 inches
- **Primarily found reddish Brazos River sand.**
 - Tertiary clay layer found at 66 inches.

Piecing it all together:

Fluvial Interfaces

- Possible evidence of a flooding event was uncovered at depths of 56 & 58 inches.
- These events probably occurred several thousands of years ago.



Conclusion



- All evidence of the anomaly found at the intersection of lines 21 and 22 point towards natural causes.
- Based on historic records of Brazos River flooding, we can interpret what may have occurred over several thousands of years.
- Additional GPR lines and excavations are recommended closer to the creek bed.