Burleigh County Awards Project



Calls to SHPO Begin







Meet with State Historical Preservation Officer (SHPO) for 30% Plan Review

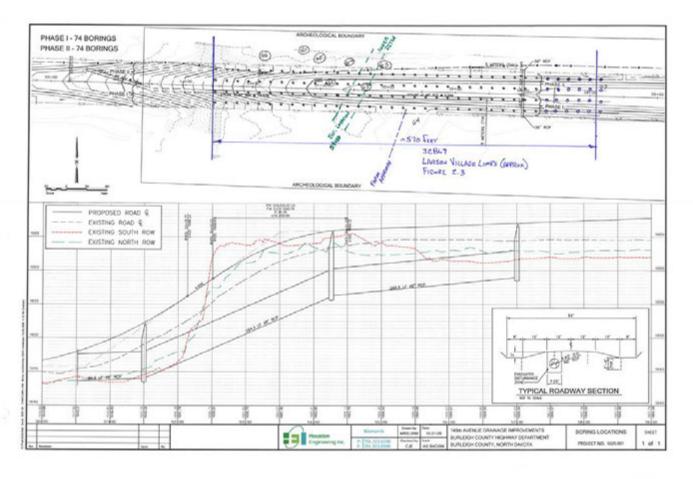








Borings in Road to determine Potential Impact









Preliminary Site Design Review









Project Design – Storm Sewer and Open Channel









Project Design – Roadway Considerations

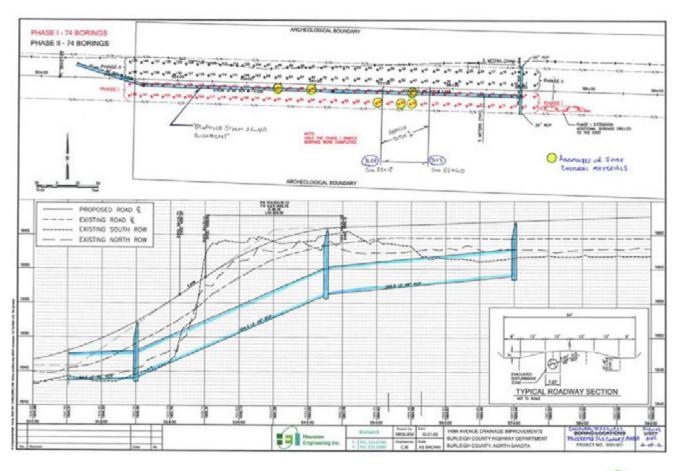








Project Design – Cultural Considerations









Special Provision for Project

Archaeological Requirements

- May remove the top 20 to 25 inches with excavator and will be monitored on site. Area was previously filled.
- Undisturbed archaeological zone will be removed in 1 to 2 inch depths and will be monitored.
- Any excavations in archaeological zone will not exceed width of trench box required for storm sewer installation.
- Any human remains and/or burials will not be disturbed and work shall cease immediately.







SHPO Review and Approval of Cultural











Bid-Contract Award

BID SHEET 149th Ave NW Roadway and Drainage Improvement Plan 149th Ave NW West of ND Highway 1804 To Sundown Acres

Bid Opening: July 16, 2010 1:30) pm	Engineer's Estimate: \$1,043,717.	
CONTRACTOR	ADDENDUM NO. 1	BID BOND	TOTAL BASE BID
Guthmiller & Son 5050 93 rd St. SE Bismarck, ND 58504			
Mariner Construction Inc. 1771 West Cavalry Drive Bismarck, ND58504	×	Χ	# 918, 270.91
Northern Improvement 3320 E. Century Ave Bismarck, ND 58502	×	χ	#839,756.44
Sand Creek Corporation 1641 Santa Gertudis Lp. Bismarck, ND 58503			
Weisz & Sons Inc. 3333 E. Broadway Ave Ste. 1212 Bismarck, ND 58501			
	-		

NAWS 3553-041 Contract 2-2B & 4-2B









Construction-Road









Construction-Storm









Construction-Ditch Channel









Construction-Cultural Impacts









Methods to Avoid and Mitigate

Confinement of Work

- Reroute overland flow through storm sewer so erosion is minimized in cultural area.
- Excavate in smallest area possible.
- Construct road within limits of cultural area. Fill acceptable as long as it ties into existing.
- Equipment cannot park and material cannot be stored in cultural area.
- Officers patrolling area to protect artifacts.







Project Construction Complete









Continued Cultural Analysis and Mitigation

- On site removal of cultural resources is complete. Yeah!
- Sorting of major items is complete.
- Seeking institutions that want to advance research and funding of research.
- Human remains are being analyzed and will be reinterred.







METCALF ARCHAEOLOGICAL CONSULTANTS, INC.



A Full-Service
Cultural Resource Management Firm
www.metcalfarchaeology.com

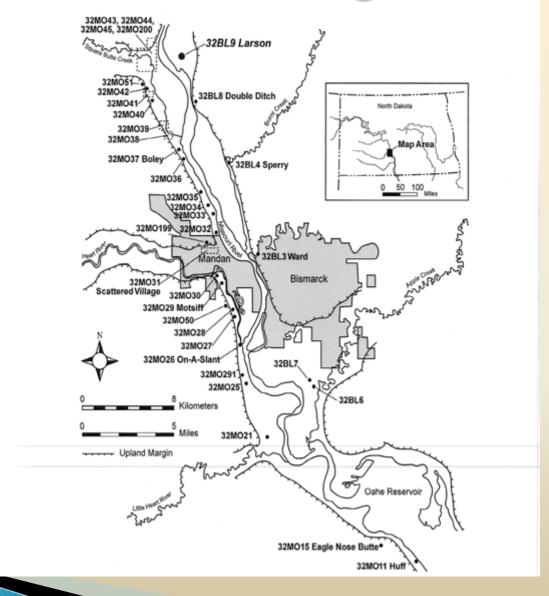




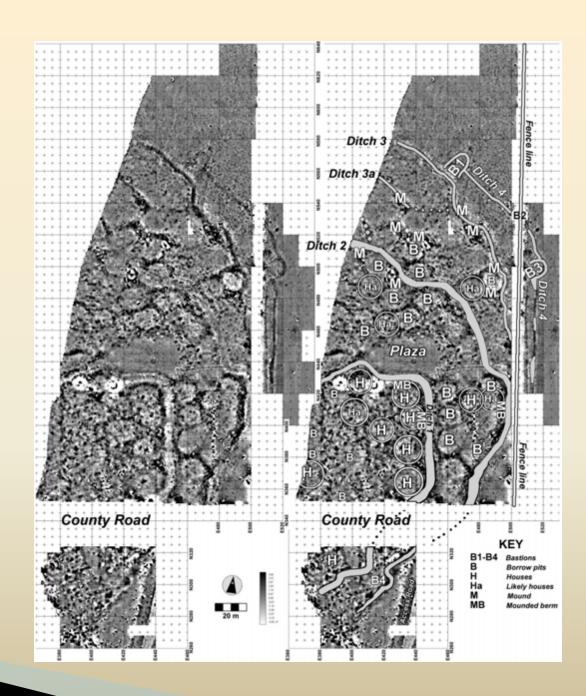
- Large prehistoric village
- Occupied 1480s to 1780s
- Ancestors of historic Mandan peoples



Heart River Region



2006-2007 Geophysical Surveys at Larson



Mitigation at the Larson Site: 2010





Monitoring Phase at Larson





Excavation Phase at Larson







▶ 54 features:

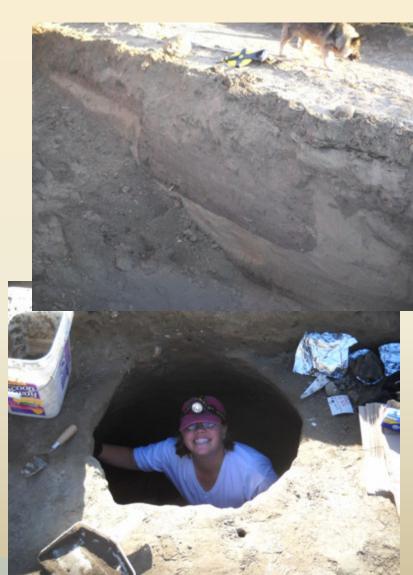
- 50 storage pits
- 3 fortification ditches
- 1 borrow filled with midden
- 5 burials (four of which were excavated)



Salvage Excavations at Larson

Storage pits





Salvage Excavations at Larson

Possible house floor





Salvage Excavations at Larson



Fortification ditches

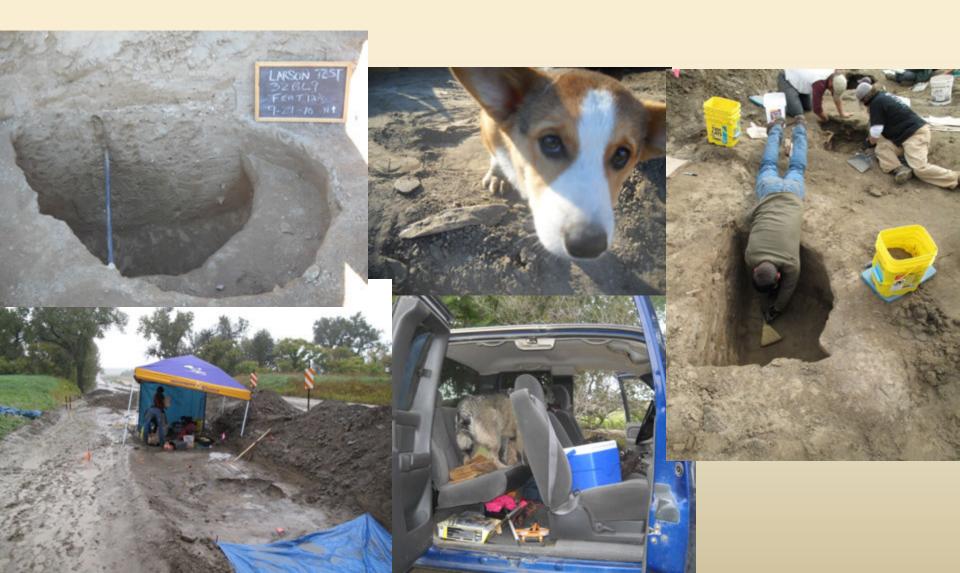


Archival Photos of Artifacts from Larson



Difficulties at Larson





Artifact Processing and Cataloguing Phase

- Water screening
- Size grading
- Artifact sorting



NAGPRA: Treatment of Human Remains

- Native American Graves and Repatriation Act 1989
- Tribal Historic Preservation Office (THPO) requested non-destructive analysis of human remains





Acknowledgements

- Houston Engineering
- Burleigh County
- Construction crews
- Perry Brady and Bridgette Brady from Fort Berthhold THPO
- Numerous volunteers
- SHSND
- Metcalf crew



