

CITY OF SHAKOPEE

AMAZON DRAINAGE PROJECT & MEMORIAL PARK TRAIL BRIDGE REPLACEMENT PROJECT UPDATES & ARCHAEOLOGICAL INVESTIGATIONS

Shakopee City Council

June 16, 2020



MEMORIAL PARK TRAIL BRIDGE REPLACEMENT PROJECT

Background and Project Purpose

- Pedestrian bridge over the MN River backwaters was removed in 2016 due to structural and safety concerns.
- Replacing bridge is necessary to connect pedestrians, bicyclists and snowmobilers from Memorial Park to Minnesota Valley State Trail segment to the north.
- Archaeological survey and review was completed due to proximity of existing trail to recorded Pond Mounds Site (21SC0022).



Image source: Shakopee Valley News

Proposed Improvements

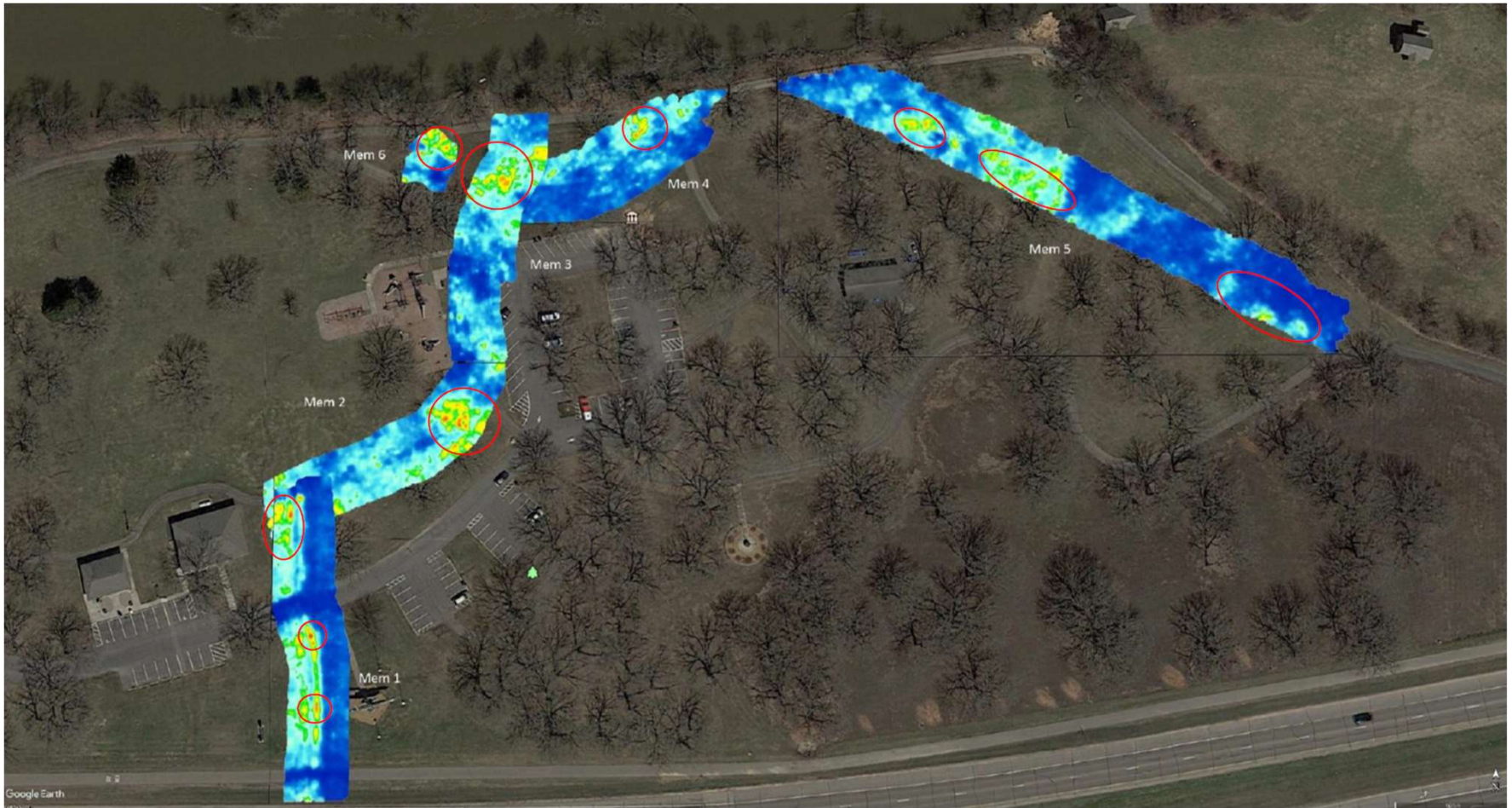
- New trail bridge
- Reconstruct and widen trail between bridge and Highway 101
- Minor trail adjustments to avoid sensitive areas
- Support pedestrian, bicycle, and snowmobile uses



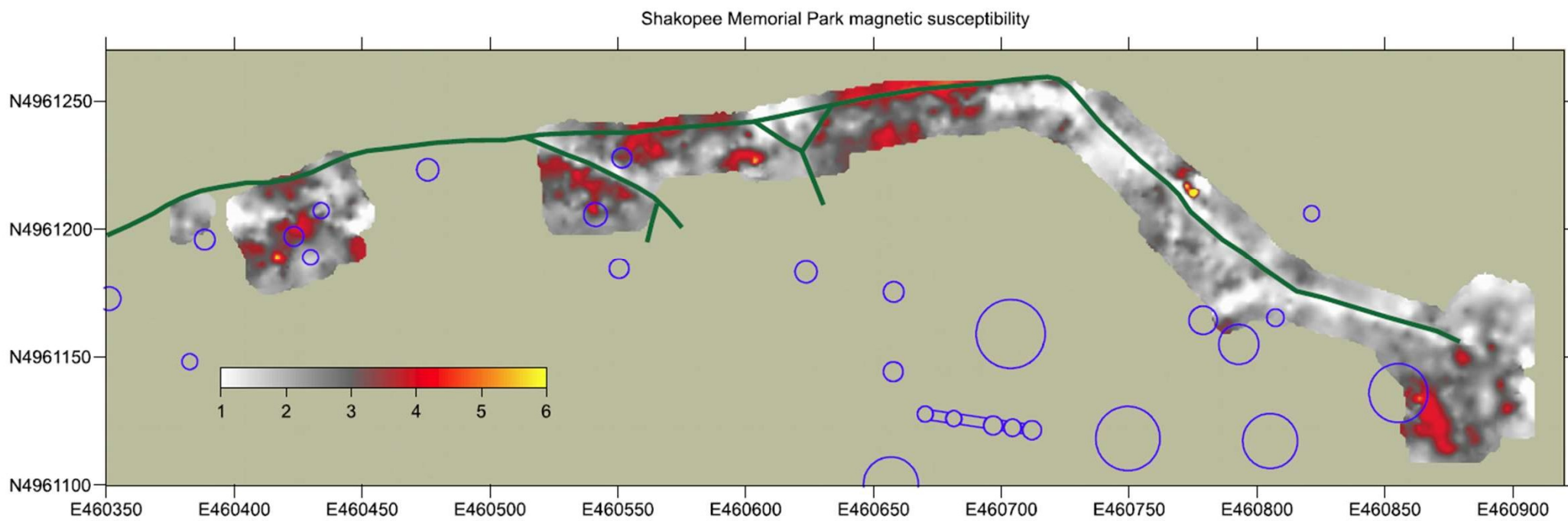
Archeological Investigations

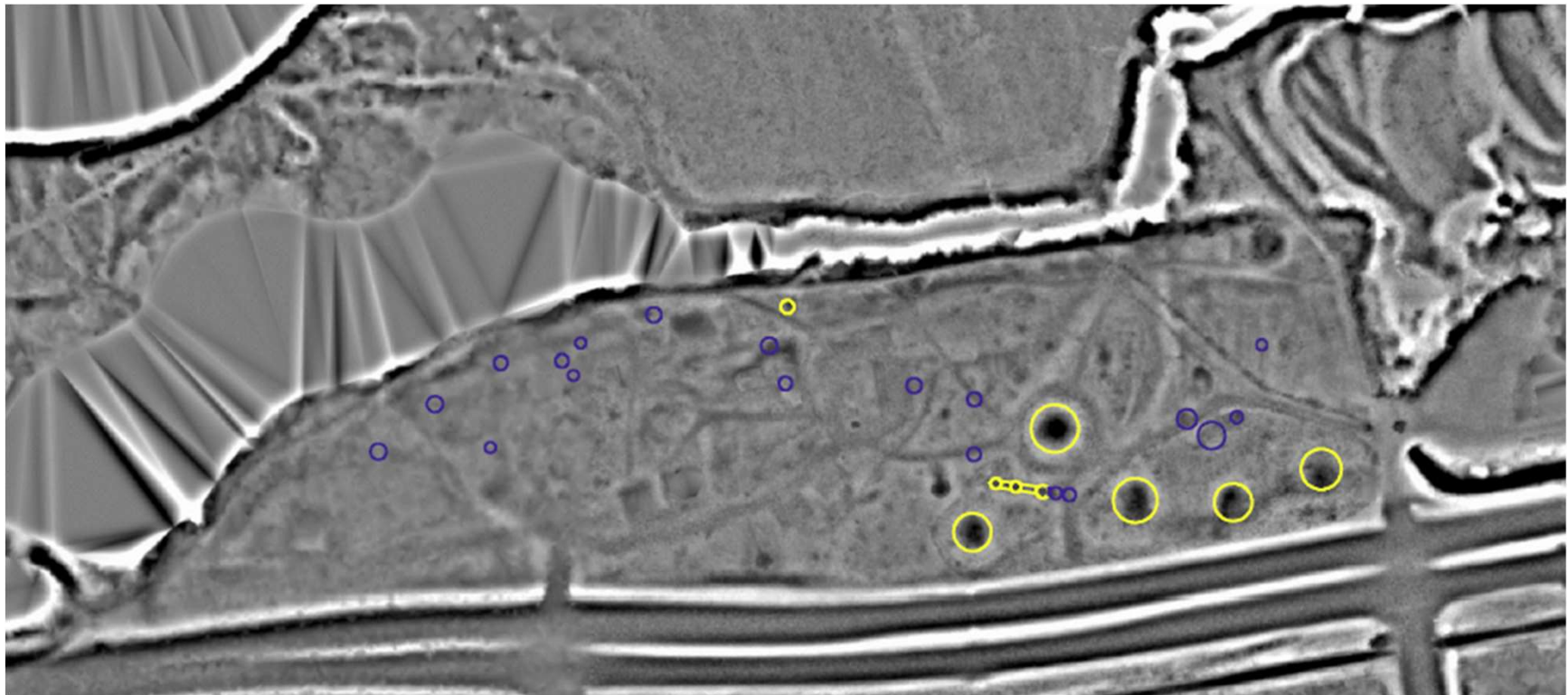


- Blondo Consulting, in consultation with stakeholders, performed the investigations.
- Geophysical studies included Ground Penetrating Radar (GPR) and magnetic susceptibility.
- Tested proposed trail corridor with one-inch soil probe on five-meter interval to look for patterning in soils.
- Shovel tests on opposing five-meter interval.



Ground Penetrating Radar Results
Red circles - possible buried artifacts





LiDAR local relief model with recorded mound locations

Shovel Tests

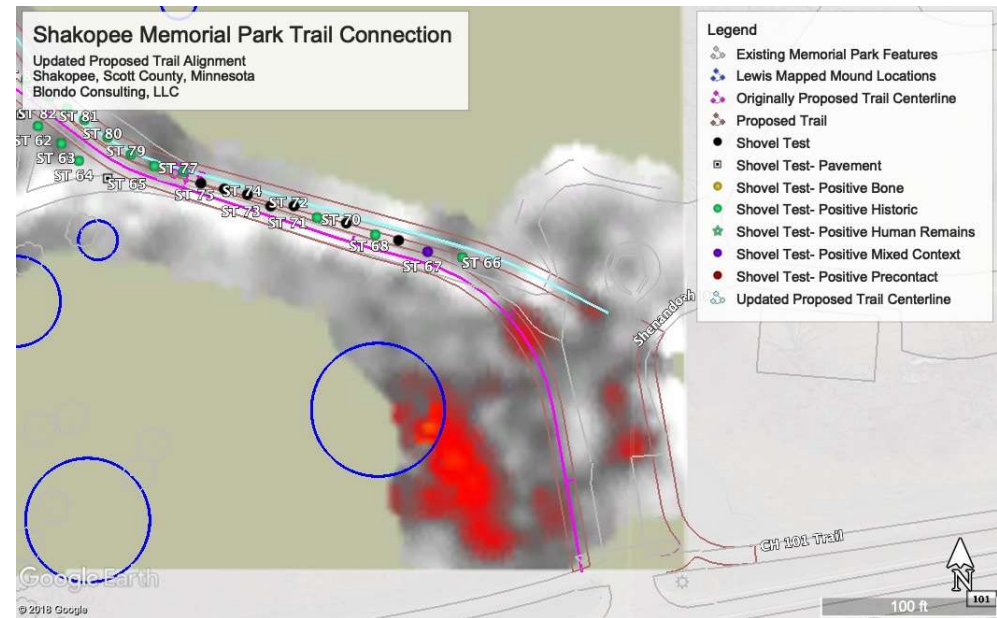
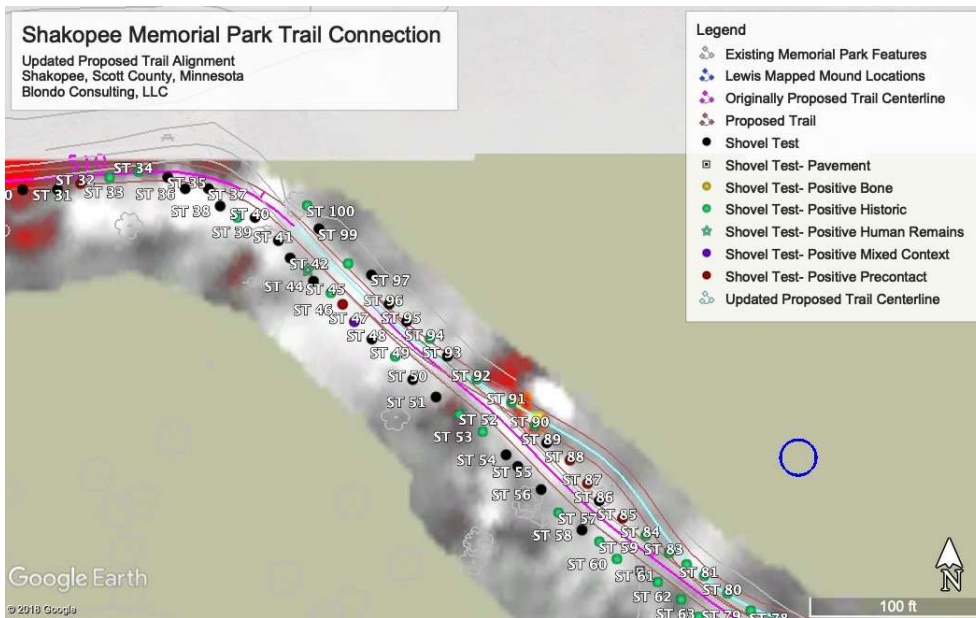
- 48 of 100 shovel tests were positive for cultural material:
 - One possible human bone fragment
 - Precontact artifacts (lithic, ceramic)
 - Various other historic and modern artifacts
 - Animal bone fragments



Photo 2: Shovel Test 7, demonstrating shallow limestone bedrock. Shakopee, Scott County, Minnesota.

Proposed Improvements Refined

Ground disturbing activities have been minimized to the extent practical and alignment was adjusted to avoid sensitive locations.



Outcomes of Archaeological Investigations

- No further archaeological work is expected.
- Archaeological and/or tribal monitoring will occur during construction.

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NW 1/4 NW 1/4, Sec 5, T115, R22

1001	—	—	30	2 1/2
1002	N 87° E	137	30	1 1/2
2003	S 52° E	131	20	1 1/2
2004	N 58° E	144	26	1 1/2
4005	N 40° E	114	25	1 1/2
5006	S 48° E	98	28	1
5007	N 38 1/2° E	48	26	7 1/2
7008	N 61° E	146	28	2 1/2
8009	S 83° E	222	39	2 1/2
9010	N 17° E	84	25	2
9011	S 11 1/2° E	76	25	1
11012	N 83° E	239	24	1 1/2
12013	S 85° E	115	26	1
13014	S 8° E	102	25	1
14015	S 45° E	64	20	2
15016	S 15° W	100	78	4 1/2
16017	S 87° E	37	20	2
17018	S 88° E	67	24	2
18019	N 84 1/2° E	25	22	2
19020	N 47° E	85	24	2
20021	15, 17, 18, 19, 20 corner	126	88	6 1/2
20022	N 20 1/2° W	123	92	5 1/2
22023	N 83° E	140	70	6
23024	N 61 1/2° E	175	75	4 1/2

0 1 7 6

NORTHWESTERN ARCHAEOLOGICAL SURVEY.
FIELD NOTEBOOKS AND RELATED VOLUMES, pre-1880, 1880-1895.
MINNESOTA HISTORICAL SOCIETY. ST. PAUL, MINNESOTA 55101



Agency and Stakeholder Involvement

- Coordination in accordance with:
 - Private Cemeteries Act (Minnesota Statute 307.08)
 - Minnesota Field Archaeology Act and Historic Sites Act (Minnesota Statute 138)
 - Section 106 of the National Historic Preservation Act
- Participating agencies:
 - City of Shakopee
 - Shakopee Mdewakanton Sioux Community
 - Three Rivers Parks District
 - Office of the State Archaeologist
 - Department of Natural Resources
 - Minnesota State Historic Preservation Office
 - Minnesota Indian Affairs Council
 - MnDOT Office of Environmental Stewardship (Section 106 Lead Agency)



Funding Sources

- City of Shakopee: \$250,000
- Scott County: \$50,000
- Shakopee Mdewakanton Sioux Community: \$100,000
- DNR grant funds (FHWA administered by MnDOT): \$300,000



Schedule

Coordination and review under Minnesota Statute
307.08, Minnesota Statute 138 and Section 106

Construction Plans

Project Letting

Construction

Winter 2019-Summer 2020

Summer 2020

Fall 2020

Fall 2020-Summer 2021



AMAZON STORMWATER REROUTE PROJECT TO PROTECT HISTORIC SITES

Why are we doing this work?

Stormwater discharge from the southside of TH 101 is causing erosion and has the potential to damage burial mounds (specifically the Steele Mounds (21SC0024)) and other cultural resources in its flow path.



Proposed Improvements

- Plug the culvert that directs flows from Amazon and the County ROW north through the Steele Mounds burial site
- Redirect flows through a new pipe in the centerline of TH 101
- Improve ravine on the east side of The Landing



What Archaeological Work has been completed, and what has been discovered?

- T.H. Lewis's 1883 mound survey
- Geophysical survey
- Shovel tests



Photo 1: APE overview facing west, Scott County, Minnesota.

What Archaeological Work has been completed, and what has been discovered?

- Shovel tests identified a variety of cultural material including:
 - Two non-human faunal (bone) fragments
 - One possible human bone fragment
 - Lithic debitage
 - Various other historic and modern artifacts



Photo 6: Shovel Test 69 with asphalt at bottom, Scott County, Minnesota

Shakopee Amazon Drainage Project

Proposed APE with 21SC0024 Mound Locations
Shakopee, Scott County, Minnesota
Blondo Consulting, LLC

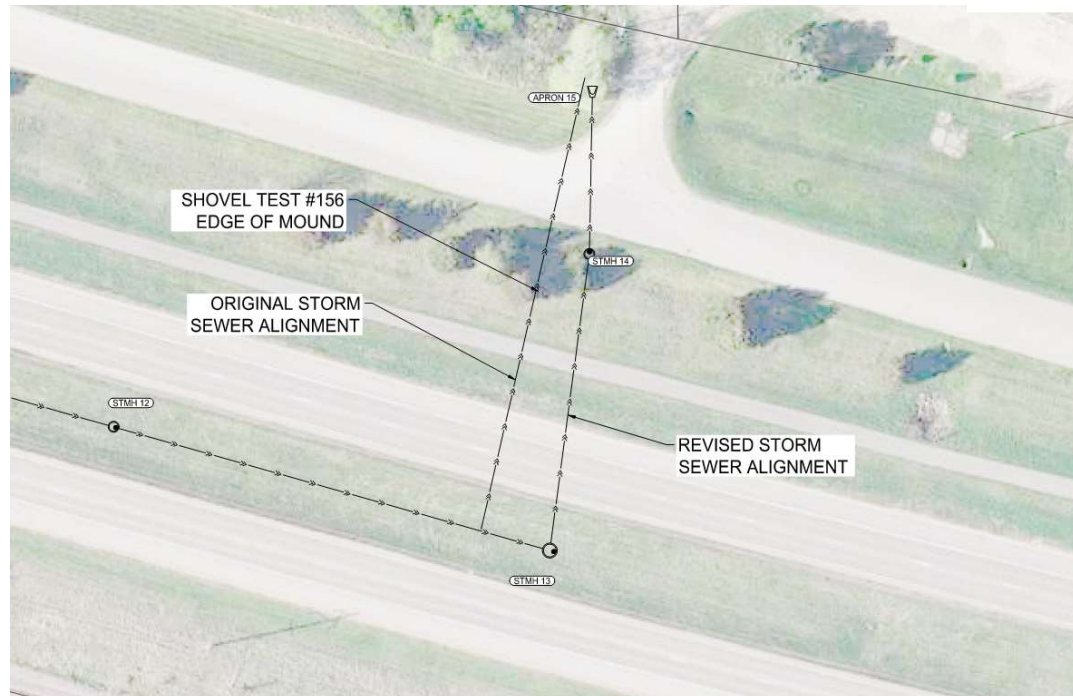
Legend

- Lewis Mapped Mound Location
- Proposed stormwater
- The Landing, Minnesota River Heritage Park



Proposed Improvements Refined

- Shovel test #156
- Storm sewer alignment shifted east





Construction

- No significant archaeological artifacts encountered
- Ravine armoring

Construction

- Storm sewer installation



Construction

- Forcemain offset





What steps are left?

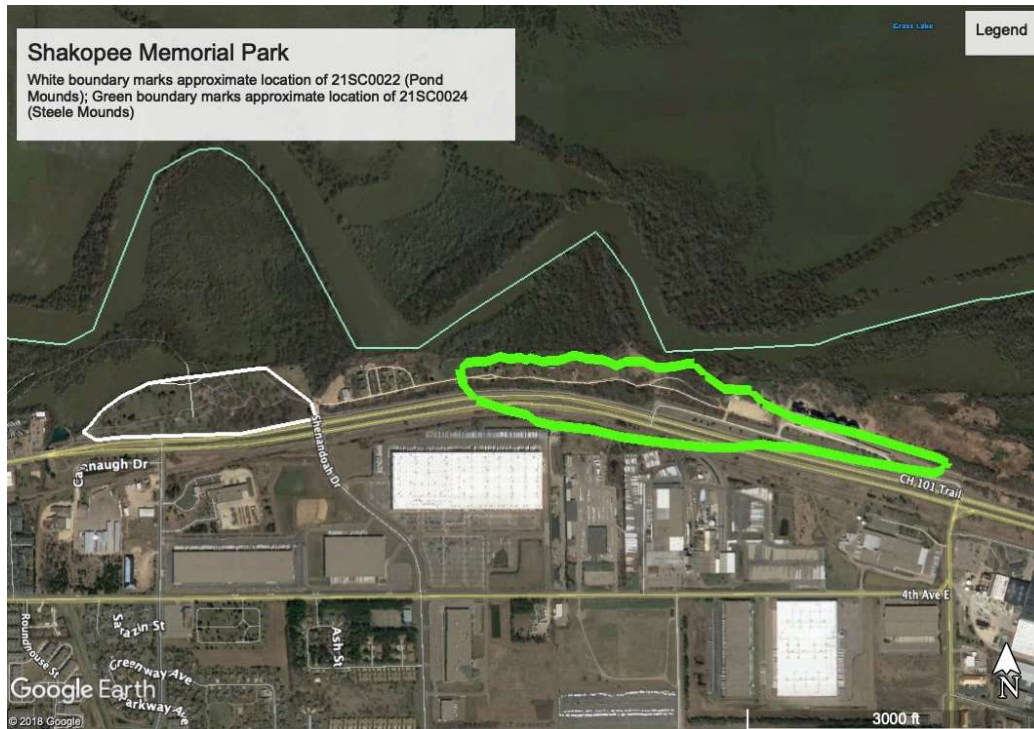
- Complete the listing of both the Pond Mounds (21SC0022) and the Steele Mounds (21SC0024) on the *National Register of Historic Places* (NRHP) - Ongoing
- Complete construction June 2020



National Register of Historic Places (NHRP) – the “Who’s Who of Historic Properties”

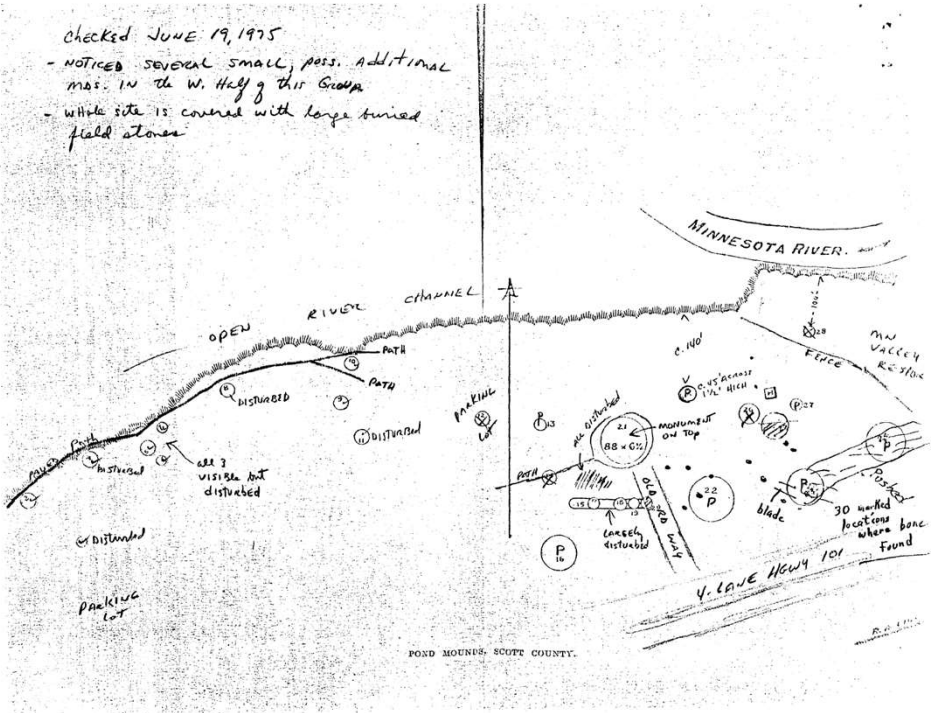
- Significance
 - Criteria A: Association with Historic Events
 - Criteria B: Important People
 - Criteria C: Design, Style
 - Criteria D: Potential to Yield Information
- Integrity
 - Location, Design, Setting, Materials, Workmanship, Feeling, Association

NRHP Nomination of Pond Mounds (21SC0022) and Steele Mounds (21SC0024)

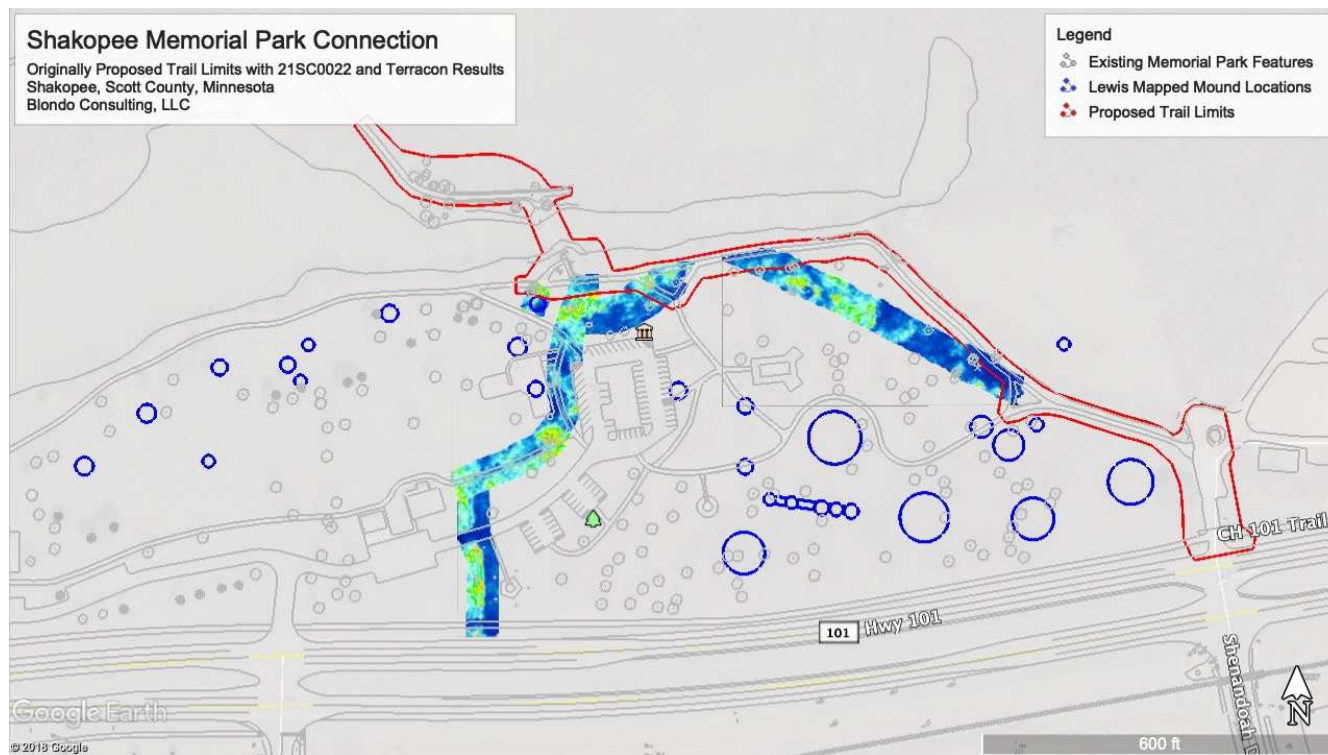


- Currently, there are very few mound sites listed on NRHP (also few archaeological sites)
- Acknowledgement of their significance within local, state, and national historic context
- Protection when state or federal projects could potentially affect properties
- Access to grant funds for future work
- History and understanding of properties over time (especially historic impacts)

- 9 intact (surface expression)
- 3 subsurface only
- 15 remain unknown



Pond Mounds (21SC0022)

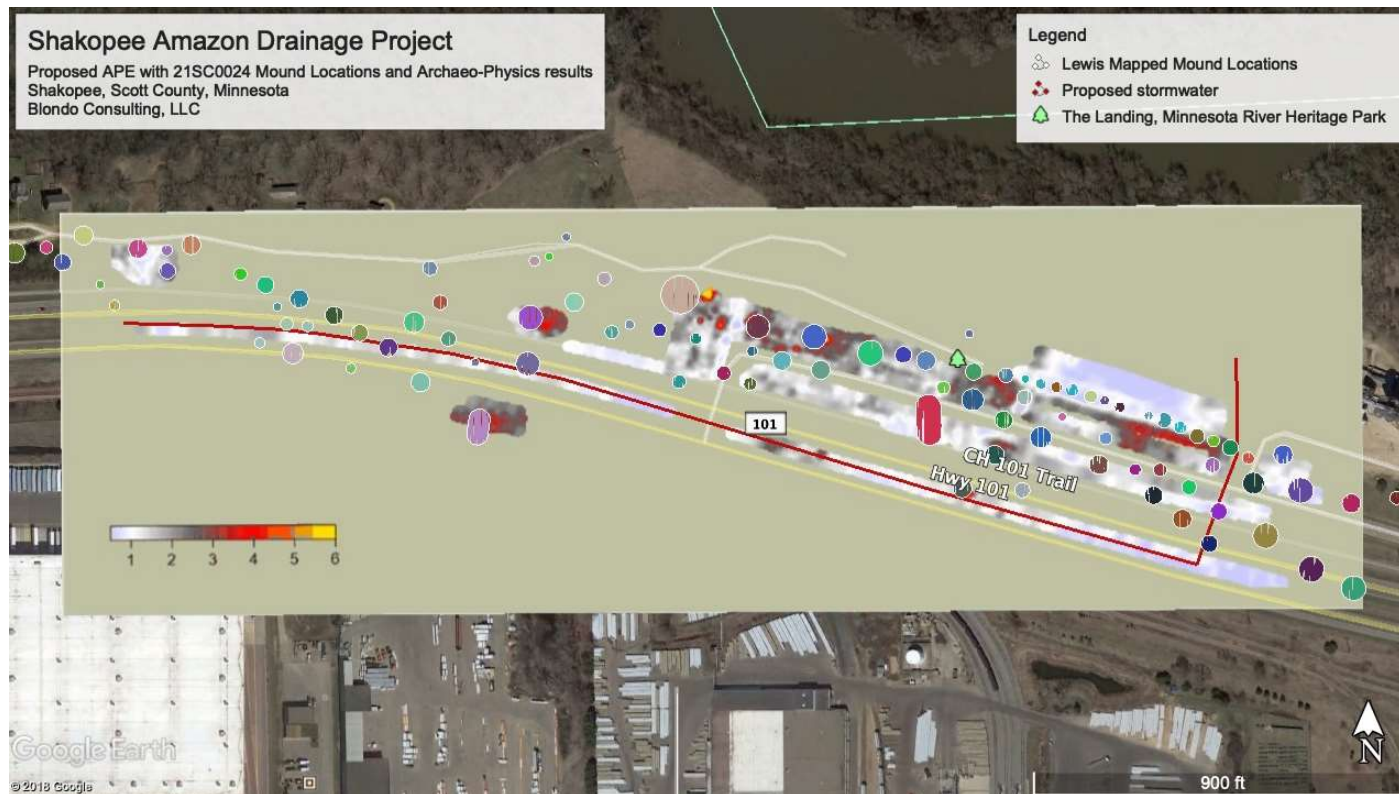




Steele Mounds (21SC0024)

- Mapped by T.H. Lewis in 1882
- Recorded as a group of 111 individual mounds
- 1964 University of Minnesota Excavation of 21 mounds
- Previous assessments of mounds identified some intact mounds
- 2019 Project Results – no archaeological testing in mound group, geophysical, and LiDAR
 - 18 intact (surface expression)
 - 22 subsurface only
 - 5 nonexistent
 - 66 remain unknown

Steele Mounds (21SC0024)





Stakeholders

- City of Shakopee
- Scott County
- Mdewakanton Sioux Community
- Three Rivers Park District
- Lower Minnesota River Watershed District
- Office of the State Archaeologist
- SHPO
- MIAC
- Minnesota Historical Society



Project Funding Sources

- City of Shakopee
- Minnesota Historical Society Cultural Heritage Grant
- Scott County
- Mdewakanton Sioux Community
- Lower Minnesota River Watershed District



QUESTIONS?



THANK YOU

