

ACTION TRANSMITTAL No. 2017-08

DATE: February 8, 2016
TO: TAC Funding and Programming Committee
PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)
SUBJECT: Scope Change Request for Scott County's TH 169/MN 41/CSAH 78 Intersection Improvement Project
REQUESTED ACTION: Scott county requests a scope change to its TH 169/TH 41/CSAH 78 Intersection Improvement Project (SP # 070-596-013; 7005-121) to add a frontage road and a new overpass north of CSAH 14.
RECOMMENDED MOTION: The Committee can recommend approval or denial of the request.

BACKGROUND AND PURPOSE OF ACTION: Scott County was awarded \$7,560,000 of Surface Transportation Program (STP) funds in the 2014 Regional Solicitation to construct an interchange on US 169 at its intersection with Chestnut Blvd (MN 41 to the west and CSAH 78 to the East) along with extension and modification of the adjacent frontage road.

The County has since received \$17.7 million from the Transportation Investments Generating Economic Recovery (TIGER) program to extend the project's limits 2.4 miles south to incorporate the following elements:

1. Extension of the 1-mile project length to approximately 3.4 miles.
2. Construction of an east side frontage road, extending Emery Way north of CSAH 78, extension to Ventura Court, and connection to CSAH 14.
3. Extension of Dem-Con drive to the south to provide a direct roadway connection to the north side of the Anchor Block property.
4. West Side CSAH 14 frontage road to accommodate closing access at 145th Street.

This scope change also interacts with the recently-awarded CSAH 14 overpass project, a new overpass of US 169 just north of CSAH 14. This will enable closure of the median at CSAH 14, allowing right-in-right-out-only movement at CSAH 14 (east of US 169) and Smith Drive (west of US 169). The County is aware that in order to receive federal funds awarded in the 2016 Solicitation, it must adhere to the scope change policy and will therefore work with MnDOT Metro District State Aid to assure that this award and the scope change application are not contradictory.

RELATIONSHIP TO REGIONAL POLICY: Projects that receive funding through the Regional Solicitation process are subject to the regional scope change policy. The purpose of this policy is to ensure that the project is designed and constructed according to the plans and intent described in the original application. Additionally, federal rules require that any federally-funded project scope change must go through a formal review and TIP amendment process if the project description or total project cost changes substantially. The scope change policy and process allow project sponsors to adjust their projects as needed while still providing substantially the same benefits described in their original project applications.

A TIP amendment request accompanies this request.

STAFF ANALYSIS: Working with the scorers from the Regional Solicitation, Metropolitan Council staff reviewed the original project and scoring. The project originally scored 690 points, 180 points higher than the top-scoring un-funded project. The total score moves to 632, which is still a 122-point margin. All point reductions were connected to the increased project costs (which reduced cost effectiveness) and a reduction in housing score (which for this project was pro-rated based on the rest of the project score).

Because the original project being expanded upon remains intact, there is no need to consider a federal funds reduction, should this application be approved.

ROUTING

| TO | ACTION REQUESTED | COMPLETION DATE |
|-------------------------------------|-------------------------|------------------------|
| TAC Funding & Programming Committee | Review & Recommend | - |
| Technical Advisory Committee | Review & Recommend | - |
| Transportation Advisory Board | Review & Approve | - |



SCOTT COUNTY TRANSPORTATION SERVICES DIVISION

HIGHWAY / MOBILITY MANAGEMENT / FLEET
600 COUNTRY TRAIL EAST · JORDAN, MN 55352-9339
(952) 496-8346 · Fax: (952) 496-8365 · www.scottcountymn.gov

LISA J. FREESE
Transportation Services Director

ANTHONY J. WINIECKI
County Engineer

TROY BEAM
Mobility Services & Fleet Manager

January 20, 2017

Mr. Tim Mayasich
Chair, TAC Funding and Programming Committee
Metropolitan Council
Mears Park Center
230 E 5th Street
St. Paul, MN 55101

Re: Scope Change Request
S.P. 070-596-013
TH 169/TH 41/CSAH 78/CSAH 14 Intersection Improvement Project
Jackson Township and Louisville Township, Scott County, Minnesota

Dear Mr. Mayasich:

Scott County respectfully requests that the Metropolitan Council TAC Funding and Programming Committee consider the attached Scope Change Request for the above referenced project at its February 16, 2017 meeting.

The Scope request is to add \$17.7 million in Transportation Investments Generating Economic Recovery (TIGER) Program funding and to extend project limits 2.4 miles further south to incorporate the additional elements of the project included in the TIGER grant. The program year is to remain as 2018.

Scott County initially applied in the 2014 Regional Solicitation and received Surface Transportation Program (STP) funding for improvements at the intersection of TH 169 and TH 41/CSAH 78 in Scott County, along with extension and modification of the adjacent frontage road network. Several alternatives for intersection improvements were developed and analyzed, and a Diverging Diamond Interchange was selected as a preferred alternative. The original project includes construction of frontage roads needed to support access removals on TH 169. The original project limits went to just south of 133rd Street and includes stormwater ponding for the interchange and frontage roads, a noise wall, and trails on TH141 and CH 78.

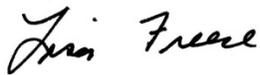
In May 2016, Scott County applied for federal discretionary funding from the TIGER Program. The USDOT notified Scott County on July 29, 2016 of the funding award for the project. The grant application and its concept plan included the improvements previously identified to the north and extended access modifications (an overpass, conversion to right-in/right-out and closures), frontage roads, and non-motorized facilities along and across TH 169 between 133rd Street and just south of CSAH 14. The expanded project includes additional stormwater ponding, drainage repairs, and regional trail accommodations to provide access to the Louisville Swamp area of the Minnesota Valley National Wildlife Refuge, which is owned and operated by the US Fish and Wildlife Service. The freeway design

elements to the north and the non-freeway design elements for the area between 133rd Street and CSAH 14 are consistent with current regional plans and studies.

Project partners including FHWA, MnDOT, Jackson Township, and Louisville Township have been involved in the expanded project scope development.

The enclosed information provides details on our request. If you have any questions or require any additional information please contact me at 952-496-8363 or lfreese@co.scott.mn.us.

Sincerely,

A handwritten signature in cursive script that reads "Lisa Freese".

Lisa Freese
Scott County
Director, Transportation Services Division

SCOPE CHANGE REQUEST
TH 169/TH 41/CSAH 78/CSAH 14 Intersection Improvements Project
S.P. 070-596-013
Jackson Township and Louisville Township, Scott County, Minnesota

SCOPE CHANGE REQUEST

Location Map

A map showing the location of the project within the area and region is attached as **Exhibit 1**. A map delineating the original project area and the additional project area is attached as **Exhibit 2**.

Project Length

The original project length in the approved 2017-2020 STIP is 1.0 miles. The expanded total project length is approximately 3.4 miles. The project extends from 0.6 miles north of the TH 169 and TH 41/CSAH 78 intersections to approximately 0.5 miles south of the TH 169 and CSAH 14 intersection.

Revised Project Description

Following the announcement of TIGER funding for the project, improvements were identified for areas to the south of the original project area, including an extension of the frontage road network, access modifications, at-grade separation over TH 169 near CSAH 14, drainage features, and non-motorized facilities.

The following is the proposed scope change project description:

The proposed project includes the following components: a diverging diamond interchange at TH 169 and TH 41/CSAH 78 along with geometric improvements on TH 41 and CSAH 78; a frontage road extension in the northwest quadrant of the interchange; an extension of Emery Way in the northeast quadrant of the interchange; an extension of Dem Con Drive in the southwest quadrant of the interchange; a frontage road in the southeast quadrant of the interchange connecting to CSAH 14 and an extended Ventura Court; a frontage road in the southwest project area including realignment of Smith Drive; and a new overpass to the north of CSAH 14 over TH 169, closure of all remaining median openings between CSAH 69 through the CSAH 14 intersection and acceleration lanes at CSAH 14 in both directions along TH 169. Along with these elements, there will be associated ponding, new driveway connections to the frontage roads, modifications to utilities, and non-motorized traffic enhancements.

The project is located within Jackson and Louisville Townships in Scott County. The project area is approximately 1.25 miles southwest of Shakopee and 1.5 miles southeast of Chaska.

Key elements of the project are described in more detail below.

Diverging Diamond Interchange at TH 169 and TH 41/CSAH 78

The diverging diamond interchange brings TH 169 over TH 41 and CSAH 78. Traffic on TH 169 will become free flowing. Traffic on TH 41/CSAH 78 will travel east-west through the interchange and will be controlled by traffic signals. The diverging diamond design, which shifts heavy left-turn movements over to the left side of the roadway, will reduce conflicts with through traffic and will allow greater progression for left turns which are heavy at this intersection.

Frontage Road Extension in the Northwest Quadrant of the Interchange (Holiday Lane)

The existing frontage road on the northwest side of the proposed interchange (Holiday Lane) will be extended further to the north to serve properties located on the west side of TH 169 from the intersection of TH 41 to a landscaping business located approximately 0.6 miles north.

East Side Frontage Road

The east side frontage road in the original project includes an extension of Emery Way to the north of CSAH 78 and construction of a new roadway south of CSAH 78 to 133rd Street. It also includes a connection to the existing businesses located along Ventura Court, which will be disconnected from CSAH 78 as part of the project. Six private accesses on the east side of TH 169 will be closed as will the public street entrance at 133rd Street. Properties along TH 169 and 133rd Street will be served off of the new frontage road.

Dem Con Drive Extension

The project will extend Dem Con Drive roadway slightly beyond the existing cul-de-sac at its southern end to provide a direct roadway connection to the north side of the Anchor Block property. It will also include providing a driveway connection to the Die Mold Tool located adjacent to Anchor Block. Existing driveways and public streets located along the west side of TH 169 between TH 41 and Die Mold Tool will be closed.

The expanded scope includes the following new elements in the expanded project termini as bulleted below.

East Side Frontage Road

- Extend the frontage road from 133th street to CSAH 14. This frontage road alignment was developed by Louisville Township as part of its long-range plans for the area. The alignment as proposed with this project has been slightly modified from the Township's original concept to reduce property impacts and to accommodate the preferred alignment for the overpass near the CSAH 14 intersection.
- The frontage road is proposed as a two-lane roadway with both urban and rural design elements to meet State Aid standards. Stormwater runoff will be transported and treated through new storm sewer, ditches, culverts, and ponds.

West Side CSAH 14 Frontage Road

- The public street entrance at 145th Street and TH 169 will be closed and 145th Street will be shortened with a cul-de-sac.
- A frontage road will be constructed from 145th Street to the south until it connects to the current junction of Smith Drive, which ultimately connects to TH 169. At TH 169/Smith Drive the existing median opening will be closed and right-in/right-out access to TH 169 will be provided. Smith Drive will be realigned slightly. This frontage road provides a connection to the CSAH 14 overpass.
- The frontage road is proposed to be a two-lane facility with both rural and urban elements. Stormwater runoff will be transported and treated through new storm sewer, ditches, culverts, pond, and existing basins.

New Overpass north of TH 169 and CSAH 14

- The proposed overpass will provide an additional grade-separation across TH 169 in the vicinity of CSAH 14 that will eliminate existing left-turning movements onto and off of TH 169 and allows for non-motorized and snowmobile travel across TH 169. The overpass is proposed as a two-lane facility with multipurpose trail accommodations on one side for bike and pedestrian accommodations.
- The overpass provides a separated grade access to regional trail accommodations and the Louisville Swamp area of the Minnesota Valley National Wildlife Refuge, which is owned and operated by the US Fish and Wildlife Service.

- The overpass and connecting road system will direct northbound traffic exiting TH 169 at the intersection with CSAH 14 to do so by taking a right onto CSAH 14. Southbound traffic exiting TH 169 at CSAH 14 will take a right onto the west frontage road and utilize the overpass and eastern frontage to get onto CSAH 14. Motorists going northbound on TH 169 from CSAH 14 will turn right onto TH 169 at the existing intersection. Motorists turning south onto TH 169 from CSAH 14 will turn right onto the east frontage road, utilize the overpass and western frontage road, and turn right onto TH 169.
- The CSAH 14/Smith Drive intersection will have a dedicated right-turn lane and an acceleration lane on TH 169 in both directions to allow turning traffic to safely decelerate or accelerate when exiting or entering TH 169.
- Existing driveway and public road accesses onto TH 169 will be closed and directed to the frontage roads.
- Stormwater runoff will be transported and treated through culverts and a new pond (southwest of the overpass).

Work to be completed

Preliminary plans for the revised project are underway and layouts have been submitted to MnDOT. Additionally, preliminary construction limits and construction cost estimates have been developed for the revised scope. Preliminary environmental reviews have also been completed (including wetland delineations and reports, Phase I site assessments, noise modeling, etc.), with an EAW and Categorical Exclusion expected for review by MnDOT and FHWA yet this winter. With approval of the scope change request, Scott County will complete the project in the schedule outlined in **Table 1**.

Table 1. Project Schedule

| Milestone | Finish Date |
|---|---------------------------|
| Right of Way Acquisition | |
| Title Opinions | April 2017 |
| Right of Way Package | June 2017 |
| Prepare Appraisals | December 2017 |
| Acquisition | September 2017 - May 2018 |
| Title and Possession | May 2018 |
| Project Development and Documentation | |
| Draft Catex and EAW Submittal | February 2017 |
| Final Catex and EAW Submittal (pending review time) | May 2017 |
| Catex and EAW Approval (pending review time) | June 2017 |
| Final Design and Construction | |
| Layout Submittal to MnDOT for Approval | January 2017 |
| Final Roadway Design Preparation | |
| 30% Roadway Plan Submittal | April 2017 |
| 60% Roadway Plan Submittal | September 2017 |
| 100% Roadway Plan Submittal | December 2017 |
| Plans Finalized | February 2018 |
| Final Bridge Design Preparation | |
| 30% Bridge Plan Submittal | June 2017 |
| 60% Bridge Plan Submittal | September 2017 |
| 95% Bridge Plan Submittal | November 2017 |
| Bridge Plan Finalized | January 2018 |
| Permits | May 2017 |

| | |
|-----------------------|------------|
| Bidding | May 2018 |
| Begin Construction | July 2018 |
| Complete Construction | March 2021 |

In 2015, the County secured \$10 million in additional funding for the project through the State TED grant program. Under this grant, \$10 million was approved for the project. TED grants have more flexibility than STP funding and can be used for items beyond construction. The TED funding is reflected as its own element (S.P. 7005-121) in the 2017-2020 STIP. The remainder of the project (S.P. 070-596-013 and 070-596-013AC) reflects the remaining \$19,734,000 (\$12,174,000 & \$7,560,000).

Revised cost estimate

In 2016, the County secured additional funding, receiving a federal TIGER grant award for \$17,700,000. TIGER grants, unlike the STP funding, do not require a local match and can be used for construction costs and for construction engineering/administration.

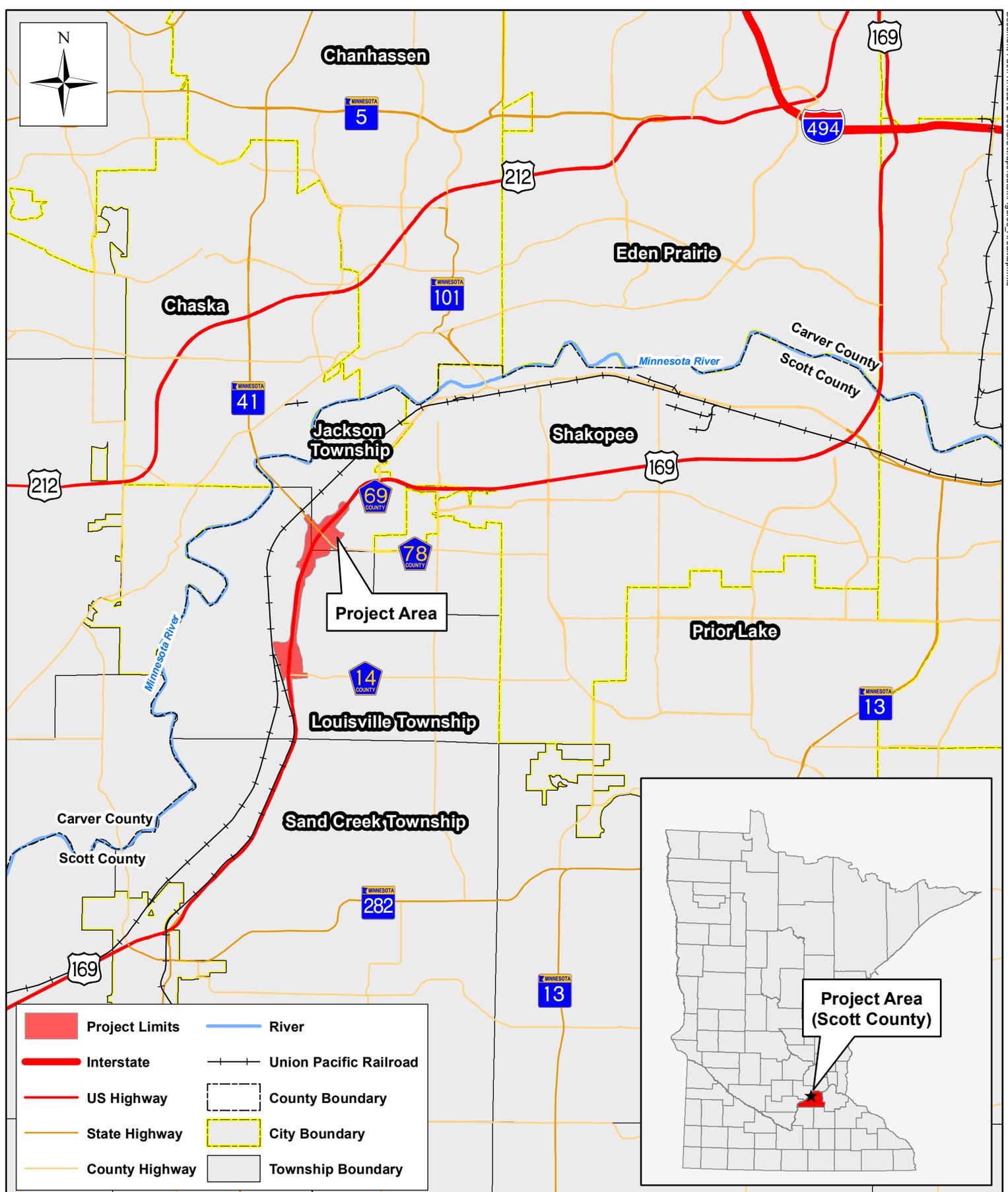
Project funding and preliminary construction costs (revised scope) are shown in **Table 2**.

Table2. Updated Project Construction Cost Estimate and Funding Revision Request

| | Total | FHWA | AC (2019) | Local |
|---|--------------|---------------|------------------|----------------|
| Original Interchange (SP 070-596-013) | \$12,174,000 | \$5,936,000 | | \$6,238,000 |
| Original Interchange (SP 070-596-013AC) | \$7,560,000 | | \$7,560,000 | |
| Proposed Expanded Scope (includes Construction & CE) | \$41,584,000 | \$23,636,000* | \$7,560,000 | \$17,948,000** |

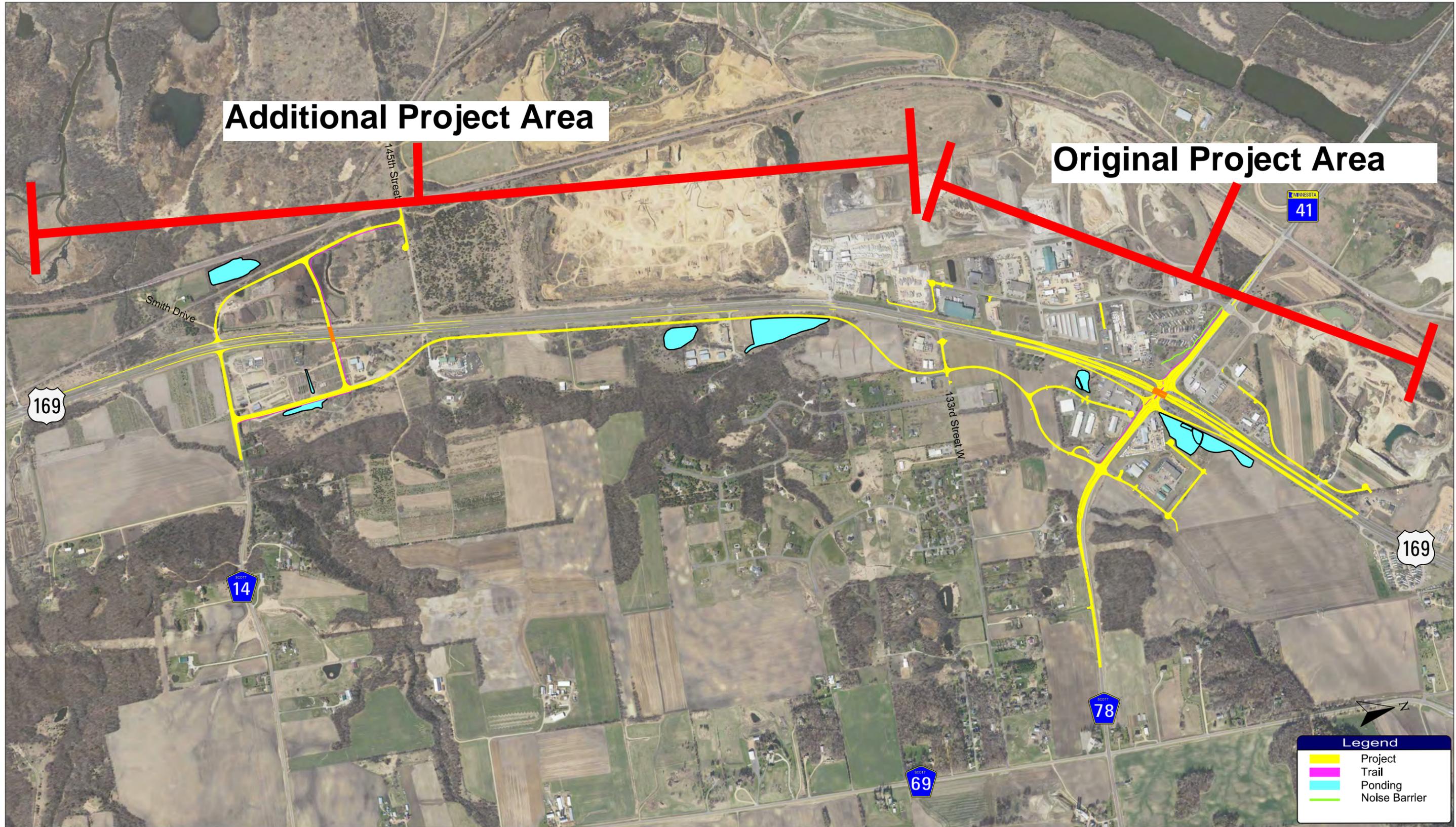
* FHWA Funds Include \$5,936,000 (STP) and \$17,700,000 (TIGER).

**The local funding will come from Scott County Transportation Sales Tax and remaining funds from the State TED funds after used for right of way acquisition and final design.



**Scope Change Request
Exhibit 1: Project Location**





Additional Project Area

Original Project Area

| Legend | |
|--------|---------------|
| | Project |
| | Trail |
| | Ponding |
| | Noise Barrier |

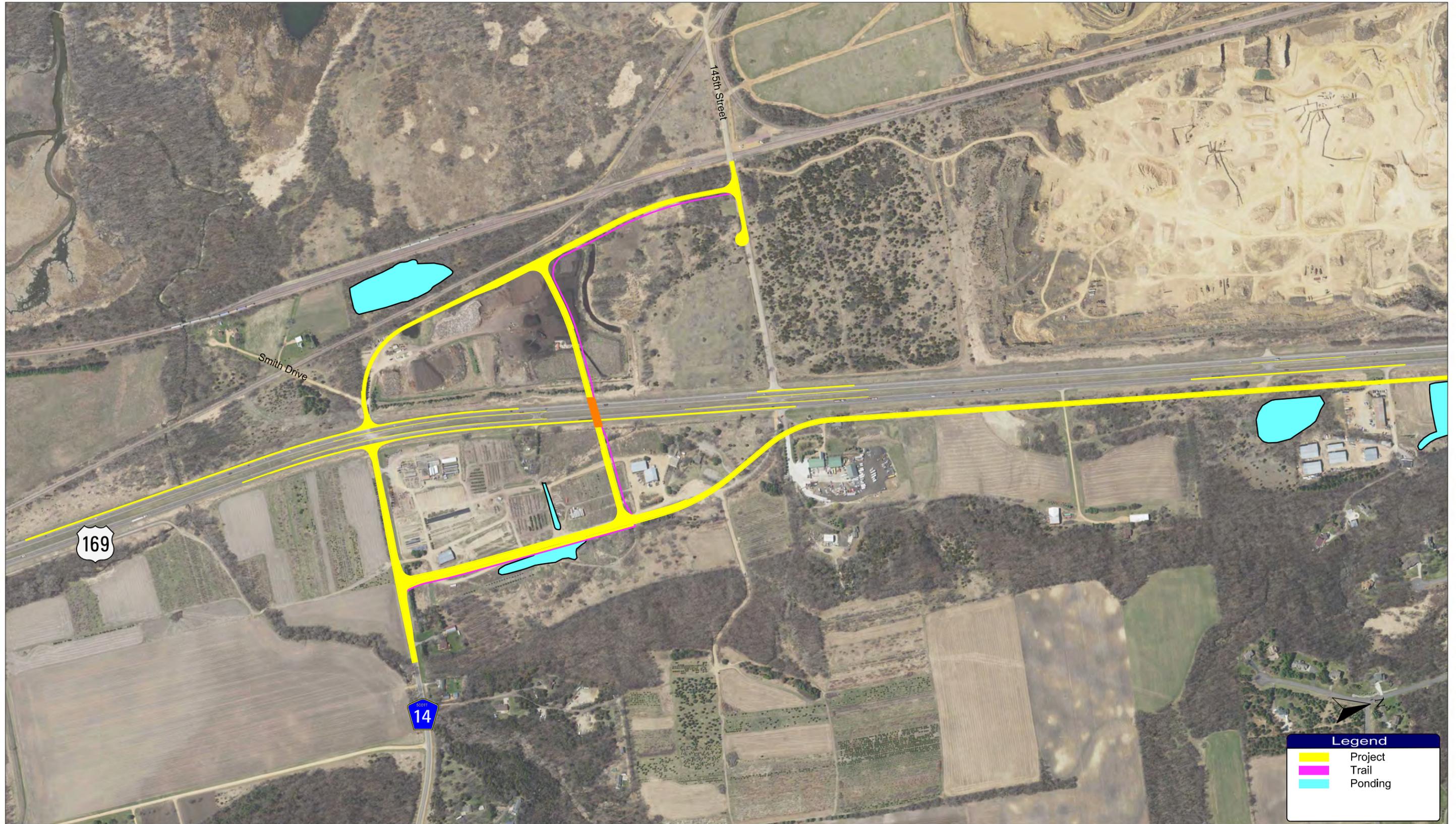
Scope Change Request
Exhibit 2: Updated Project Layout



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Scope Change Request
Exhibit 3a: North Project Area

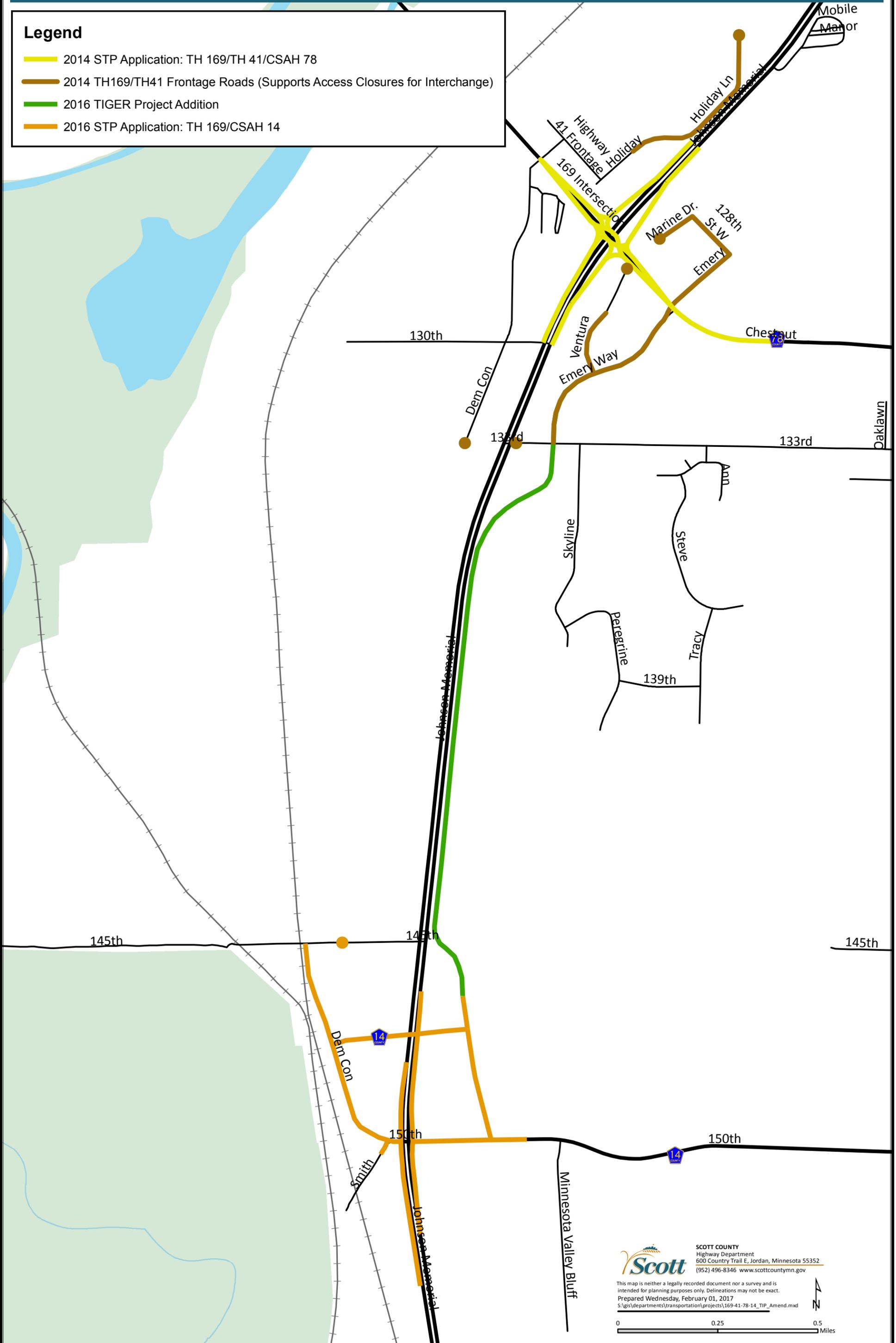


Scope Change Request
Exhibit 3b: South Project Area

US 169 Freight Mobility Project TIP Amendment

Legend

- 2014 STP Application: TH 169/TH 41/CSAH 78
- 2014 TH169/TH41 Frontage Roads (Supports Access Closures for Interchange)
- 2016 TIGER Project Addition
- 2016 STP Application: TH 169/CSAH 14



SCOTT COUNTY
 Highway Department
 600 Country Trail E, Jordan, Minnesota 55352
 (952) 496-8346 www.scottcountymn.gov

This map is neither a legally recorded document nor a survey and is intended for planning purposes only. Delineations may not be exact.
 Prepared Wednesday, February 01, 2017
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