Application

01972 - 2014 Pedestrian Facilities (Sidewalks, Streetscaping, and ADA)

02291 - Grade-Separated Bicycle and Pedestrian Crossing of Highway 169

Regional Solicitation - Bicycle and Pedestrian Facilities

Status:	Submitted
Submitted Date:	12/01/2014 12:28 PM

Primary Contact

Name:*		Laura		Holey
	Salutation	First Name	Middle Name	Last Name
Title:	City Planner			
Department:				
Email:	lholey@ci.jordan.mn.us			
Address:	210 East First Street			
*	Jordan	Minnesota	55352	
	City	State/Province	Postal Code/Zip	
Phone:*	952-492-2535			
	Phone		Ext.	
Fax:				
What Grant Programs are you most interested in?	Regional Solicitation - Transit and TDM Projects			

Organization Information

Name:	JORDAN, CITY OF
Jurisdictional Agency (if different):	

Organization Type:	City
Organization Website:	
Address:	210 E 1ST ST

*	JORDAN	Minnesota	55352
	City	State/Province	Postal Code/Zip

County:	Scott
Phone:*	952-492-2535 Ext.
Fax:	
PeopleSoft Vendor Number	0000004645A1

Project Information

Project Name	Grade-Separated Bicycle and Pedestrian Crossing of Highway 169
Primary County where the Project is Located	Scott
Jurisdictional Agency (If Different than the Applicant):	

Brief Project Description (Limit 2,800 characters; approximately 400 words)

The existing crossing of Trunk Highway (TH) 169 is at-grade and located at the TH 282 traffic signal. TH 169, a principal arterial roadway, operates at a posted 55 MPH speed limit and serves over 22,000 vehicles per day. An at-grade crossing of a roadway with this level of traffic and speed can present significant safety concerns for pedestrians. A crash in 2006 at this location occurred when a pedestrian darted out into traffic. This type of crash shows how pedestrian impatience can lead to poor decision making and possible injury. The City has been actively pursuing a project at this location since this crash.

Despite the high safety risks, pedestrians continue to cross TH 169 in multiple locations in addition to the traffic signal at TH 282, using makeshift trails along Sand Creek and dodge traffic on TH 169 outside of the designated crosswalk at the intersection. The makeshift trails are so heavily used they can be seen in the attached aerial figure without any enhancement to the image. Developing a suitable pedestrian crossing of TH 169 will increase safety to the traveling public and pedestrians by providing a safe, grade-separated crossing in a location that will accommodate existing pedestrian and bicyclist demand.

The City of Jordan has developed several preliminary layouts for trail crossing alternatives in the area between TH 282 and Sand Creek along TH 169, including connections to the Minnesota Valley State Trail and Minnesota Valley State Recreation Area. Following development of these alternatives, a public involvement process was conducted and preferred alternative identified based on costs, ideal connectivity, and likely usage. TH 169 underpass will connect to the existing sidewalk along CSAH 9 and Syndicate Street and fill in an existing gap from Sand Creek to CSAH 9

along Syndicate Street across the formidable barrier that is TH 169. The grade-separated crossing and trail connections will provide safe non-motorized access to local attractions, including an elementary school, high school, community parks, and a future hotel with community pool to be constructed in 2015 at the Creek Lane/Triangle Drive intersection south of TH 169.

In addition to increasing bicyclist/pedestrian safety, a grade-separated crossing will significantly increase non-motorized vehicle travel mobility and connectivity by linking the north and south portions of the City. Specifically in the area immediately surrounding the proposed crossing location, an underpass would directly connect a low income/Hispanic neighborhood with the commercial area south of TH 169.

Include location, road name/functional class, type of improvement, etc.

Project Length (Miles) 0.33

Connection to Local Planning:

Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by MnDOT and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses. List the applicable documents and pages.

Connection to Local Planning	-Scott County 2030 Comprehensive Plan Update Scott County Regional Park and Trail System figure after pVII-8 -Metropolitan Council 2030 Regional Parks Policy Plan p3-81 -City of Jordan 2008 Comprehensive Plan Future Land Use Map 6-2 and p12 of the Transportation Plan. Jordan Master Parks, Trails and Natural Resource Plan, 2010. This report documents existing conditions and needs, including the makeshift trail along Sand Creek currently used by bicyclists and pedestrians to cross TH 169. The report also describes locations and desired multimodal characteristics to incorporate in future design plans. p70-80. (Attached) -Scott County Parks and Trails, Regional Park and Trail Master Planning Project, 2010-2011. A summary of public comments related to issues and concerns/needs for continuous regional trail plans in Scott County, including the community of Jordan, was prepared in August 2010. (Attached) -Alternatives Analysis Report, TH 169 Trail Crossing, 2011: Entire report. (Attached)

Project Funding

Are you applying for funds from another source(s) to implement this project?	No
If yes, please identify the source(s)	
Federal Amount	$1,000,000.00
Match Amount	$285,000.00
Minimum of 20% of project total	
Project Total	$1,285,000.00
Match Percentage	22.18%

Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds City of Jordan Local Funds

Preferred Program Year

Select one: 2018

Project Information

County, City, or Lead Agency City of Jordan

Zip Code where Majority of Work is Being Performed 55352

(Approximate) Begin Construction Date 06/04/2018

(Approximate) End Construction Date 08/31/2018

LOCATION

From:
(Intersection or Address) Frontage Road/Syndicate Street

Do not include legal description;
Include name of roadway if majority of facility runs adjacent to a single corridor.

To:
(Intersection or Address) Creek Lane

Type of Work Sidewalk, bituminous trail, ped ramps, box culvert underpass

Examples: grading, aggregate base, bituminous base, bituminous surface, sidewalk, signals, lighting, guardrail, bicycle path, ped ramps, bridge, Park & Ride, etc.)

BRIDGE/CULVERT PROJECTS
(If Applicable)

Old Bridge/Culvert? No

New Bridge/Culvert? Yes

Structure is Over/Under
(Bridge or culvert name): Pedestrian Underpass of Highway 169

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$50,000.00
Removals (approx. 5% of total cost)	$25,000.00
Roadway (grading, borrow, etc.)	$0.00
Roadway (aggregates and paving)	$175,000.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$0.00

Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$0.00
Traffic Control	$50,000.00
Striping	$0.00
Signing	$0.00
Lighting	$0.00
Turf - Erosion & Landscaping	$25,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall	$0.00
Traffic Signals	$0.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$65,000.00
Other Roadway Elements	$0.00
Totals	**$390,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	**Cost**
Path/Trail Construction	$10,000.00
Sidewalk Construction	$30,000.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$5,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$35,000.00
Streetscaping	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$141,500.00
Other Bicycle and Pedestrian Elements	$673,500.00
Totals	**$895,000.00**

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	$0.00
Stations, Stops, and Terminals	$0.00
Support Facilities	$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	$0.00
Vehicles	$0.00
Transit and TDM Contingencies	$0.00
Other Transit and TDM Elements	$0.00
Totals	**$0.00**

Transit Operating Costs

OPERATING COSTS	Cost
Transit Operating Costs	$0.00
Totals	**$0.00**

Totals

Total Cost	$1,285,000.00
Construction Cost Total	$1,285,000.00
Transit Operating Cost Total	$0.00

Requirements - All Projects

All Projects

1.The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2030 Transportation Policy Plan (amended 2013), the 2030 Regional Parks Policy Plan (amended 2013), and the 2030 Water Resources Management Policy Plan (2005).

Check the box to indicate that the project meets this requirement. Yes

2.Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

3.Applicants must not submit an application for the same project in more than one funding sub-category.

Check the box to indicate that the project meets this requirement. Yes

4.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Multiuse trails & bicycle facilities must be between $125,000 and $5,500,000. Pedestrian facilities and Safe Routes to School must be between $125,000 and $1,000,000.

Check the box to indicate that the project meets this requirement. Yes

5.The project must comply with the Americans with Disabilities Act.

Check the box to indicate that the project meets this requirement. Yes

6.The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

7.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

Check the box to indicate that the project meets this requirement. Yes

8.The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

9.The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

10.The project applicant must send written notification regarding the proposed projected to all affected communities and other levels and units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

Requirements - Bicycle and Pedestrian Facilities Projects

1.All projects must relate to surface transportation. As an example, for multiuse trail and bicycle facilities, surface transportation is defined as primarily serving a commuting purpose and/or that connect two destination points. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose.

Check the box to indicate that the project meets this requirement. Yes

2.The project must exclude costs for study completion, preliminary engineering, design, construction engineering, or other similar costs (eligible costs include construction and materials, right-of-way, and land acquisition).

Check the box to indicate that the project meets this requirement. Yes

3.The project must exclude work which is required as a condition of obtaining a permit or concurrence for a different transportation project.

Check the box to indicate that the project meets this requirement. Yes

4.Seventy percent of the project cost must fall under one of the following eligible activities:

Check the box to indicate that the project meets this requirement. Yes

For Safe Routes to School Projects Only

5.All projects must be located within a two-mile radius of the associated primary, middle, or high school site.

Check the box to indicate that the project meets this requirement.

6.All schools benefiting from the SRTS program must conduct after-implementation surveys. These include the student tally form and the parent survey available on the National Center for SRTS website. The school(s) must submit the after-evaluation data to the National Center for SRTS within a year of the project completion date. Additional guidance regarding evaluation can be found at the MnDOT SRTS website.

Check the box to indicate that the project meets this requirement.

7. The applicant must have a Safe Routes to School plan or planning process established to be eligible for funding. MnDOT staff will notify Metropolitan Council staff of all agencies eligible for funding. If an applicant has a new Safe Routes to School plan and has not previously notified MnDOT Safe Routes to School staff of the plan, the applicant should contact Nicole Campbell (Nicole.M.Campbell@state.mn.us; 651-366-4180) prior to beginning an application to discuss the plan and confirm eligibility. MnDOT staff will send updated applicant eligibility information to Metropolitan Council staff, if necessary.

Check the box to indicate that the applicant understands this requirement and will contact MnDOT Safe Routes to School staff, if necessary, to confirm funding eligibility.

Other Attachments

File Name	Description	File Size
2014ScottCountyLetterSupprotJordan.pdf	Scott County letter of support	121 KB
City of Jordan Letter of Support.pdf	City of Jordan letter of support	419 KB
Connection To Local Planning References.pdf	References to the "Connection to Local Planning" portion of the application as referenced in that text.	6.0 MB
Layout.pdf	Project map/layout	717 KB
TAP_Ped_Bike_Crossing_11x17_Landscape.pdf	Graphic showing footpaths of pedestrians crossing Highway 169 midblock.	871 KB
US 169 Jordan PedBike Underpass MnDOT letter of support.pdf	MnDOT letter of support	38 KB

Measure A: Project Location Relative to Jobs, Manufacturing and Education

Select all that apply:

Direct connection into, on an adjacent street, or within a Job Concentration

Direct connection into, on an adjacent street, or within a Manufacturing/Distribution Location

Direct connection into, on an adjacent street, or within an Educational Institution

Project provides a direct connection into, on an adjacent street, or within an existing local activity center identified in an adopted county or city plan

City or County Plan Reference

Response (Limit 700 characters; approximately 100 words)	The City of Jordan 2008 Comprehensive Plan Future Land Use Map 6-2 depicts the planned land uses in the city. The areas immediately adjacent to the proposed underpass location is primarily commercial land. Further north is a residential subdivision and mobile home park. Highway 169 simultaneously acts as a barrier for pedestrians and bicyclists living north of 169 with these commercial destinations along with the Citys school campus, downtown, and public library located south of the highway. A grade-separated pedestrian crossing would provide safer connectivity, allowing lower-income residents without access to a vehicle a safe route to their respective destinations.
Upload Map	Regional Economy.pdf

Measure A: Cost Effectiveness

Existing Population Within One-Half Mile (Integer Only)	4410
Existing Employment Within One-Half Mile (Integer Only)	1605

Completed by Metropolitan Council Staff

Total Project Cost	$1,285,000.00
Cost Effectiveness for Population	$291.38
Cost Effectiveness for Employment	$800.62
Upload Map	Population Summary.pdf

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

Project located in Racially Concentrated Area of Poverty	Yes
Project located in Concentrated Area of Poverty	
Projects census tracts are above the regional average for population in poverty or population of color	
Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly.	

Response (Limit 1,400 characters; approximately 200 words)	The proposed underpass location is positioned to provide safe pedestrian access across Highway 169 to connect the north and south areas of Jordan. As shown in the attached figure, there is significant pedestrian demand for a crossing closer to the river. Multiple footpaths have been worn into the grass and very clearly show where pedestrians desire to cross the highway and where their destinations may be. A lower income, largely Hispanic neighborhood lies just northeast of the proposed location, which is a major source of these pedestrian trips whose residents need to access businesses south of the highway. Children in this neighborhood will also benefit from the underpass by allowing them to safely cross the highway on their way to school. These benefits are not limited only to low income and children, however. The entire population of Jordan living north of 169 will receive benefit from these safety and bicycle/pedestrian mobility improvements. Overall, the underpass would increase safety and connectivity for pedestrians of all kind in the area in a non-intrusive manner as the construction would occur in a largely undeveloped area along and within MnDOT right of way.
Upload Map	Socio-Economic.pdf

Measure B: Affordable Housing

City/Township	Segment Length (Miles)
Jordan	0.33
	0

Total Project Length

Total Project Length	0.33

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township	Segment Length (Miles)	Total Length (Miles)	Score	Segment Length/Total Length	Housing Score Multiplied by Segment percent
Jordan	0.33	0.33	30.0	1.0	30.0
		0	**30**	**1**	**30**

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles)	0.33
Total Housing Score	30.0

Measure A: Gaps, Barriers and Continuity/Connections

Response (Limit 1,400 characters; approximately 200 words)

This project lies within a Regional Trail Search Corridor, extending north to the river and east to Spring Lake Regional Park. Highway 169 is a major barrier to pedestrian traffic within this corridor and operates at a posted 55 MPH speed limit while serving over 22,000 vehicles per day. The City of Jordan has only one existing pedestrian crossing of Highway 169 located at the TH 282 traffic signal approximately ¼ mile from the proposed project location. The combination of high speeds and traffic volumes on the wide four-lane divided section make it extremely difficult to cross, however pedestrians are still choosing to cross midblock between Creek Lane and Syndicate consistent with the findings of recent studies by the LRRB. The traffic signal crossing is too far removed from their desired routes to be deemed acceptable. Changing this behavior is nearly impossible without an improved direct route.

The project will improve travel for pedestrians in the Highway 169 area by providing a more direct route to match existing travel demands. For example, a pedestrian would save over ten minutes with an underpass in place compared to using the existing traffic signal crossing to reach the same point across the highway.

Measure B: Project Improvements

An underpass would improve pedestrian safety and reduce the potential for future pedestrian/vehicle crashes occurring by grade-separating the movements. The underpass would remove four pedestrian/vehicle conflict points that occur when someone walks across the highway midblock. Although no crashes have been reported in recent years, a pedestrian/vehicle crash did occur at the TH 282 signal in 2006. A pedestrian who grew impatient while waiting for the walk indication darted out and was hit by a vehicle.

Response (Limit 1,400 characters; approximately 200 words)

FHWA sites a crash reduction factor of 0.86 for installing a pedestrian underpass and 0.88 for installing sidewalk/trail in areas with an existing gap in the network (along Syndicate Street). Any remaining crash potential would be associated with pedestrians not using the facilities. The installation of the underpass along with the sidewalk connections along Syndicate Street would significantly reduce the crash potential for pedestrian type crashes and would also provide more passable routes in the winter months compared to the existing conditions.

Measure A: Transit Connections

Existing Routes Directly Connected to the Project	N/A
Planned Transitways Directly Connected to the Project (alignment and mode determined and identified in the 2030 TPP)	N/A
Existing Routes Indirectly Connected Within One-Half Mile of the Project	N/A
Planned Transitways Indirectly Connected Within One-Half Mile of the Project (alignment and mode determined and identified in the 2030 TPP)	N/A
Upload Map	Transit Connections.pdf

Response

Met Council Staff Data Entry Only

Route Ridership Directly Connected	0
Transitway Ridership Directly Connected	0
Route Ridership Indirectly Connected	0
Transitway Ridership Indirectly Connected	0

Measure: Bicycle Connections

Response (Limit 1,400 characters; approximately 200 words)

This project would construct bicycle trail facilities and make safe connections within the City immediately and other connections of regional significance in the future. Current gaps in the pedestrian network would be closed by installing sidewalk along the Syndicate Street frontage road to connect with the existing facility along CSAH 9.

A separate City project is planned (preliminary design, ROW acquisition and portions of funding are already secured) to construct a trail along 190th Street from CSAH 9 to the Scott County Fairgrounds in an effort to provide more accessibility to the grounds and also for recreational purposes. This project would complete an important missing link by providing a safe connection between the north and south sides of the city, currently divided by Highway 169.

Scott County currently identifies a regional trail search corridor through this area in their comprehensive plan. The underpass would become the regional trails crossing of Highway 169 and would provide the County the opportunity to construct a 14-mile regional trail from Spring Lake Regional Park in Prior Lake to the Minnesota Valley State Trail along the Minnesota River. This trail and underpass combination would create additional opportunities for bicycle commuters both locally and regionally.

Measure: Multimodal Facilities

Response (Limit 1,400 characters; approximately 200 words)

The pedestrian underpass and associated trail connections to the adjacent local streets will be designed to be wide enough for a shared trail facility for pedestrians and bicyclists. Existing bicycle accommodations force bicycles to cross Highway 169 at the TH 282 traffic signal. No trail is present at the crossing therefore bicyclists are treated as vehicles at this crossing location. It is unlikely that the existing vehicle detection is configured to be sensitive enough to detect bicycles, therefore with no vehicles present a bicyclist would need to use the pedestrian pushbuttons to cross the highway.

The proposed underpass provides a dedicated bicycle and pedestrian crossing location which not only improves safety for those users but also for vehicles traveling on the highway. Less pedestrian activity at grade will reduce the risk of crashes and reduce vehicular delays associated with the pedestrian walk indication activation.

Despite the Citys desire to have transit serving Lions-Riesgraf Park, there is no transit service in the project area.

Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM application, only Park-and-Ride and other construction projects require completion of the Risk Assessment below. Check the box below if the project does not require the Risk Assessment fields, and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred

Yes

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

2)Layout or Preliminary Plan (5 Percent of Points)

Layout or Preliminary Plan completed

100%

Layout or Preliminary Plan started Yes

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion 10/03/2016

3)Environmental Documentation (10 Percent of Points)

EIS

EA

PM Yes

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75%

Document in progress; environmental impacts identified

50%

Document not started Yes

0%

Anticipated date or date of completion/approval 01/02/2017

4)Review of Section 106 Historic Resources (15 Percent of Points)

No known potential for archaeological resources, no historic resources known to be eligible for/listed on the National Register of Historic Places located in the project area, and project is not located on an identified historic bridge Yes

100%

Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated

80%

Historic/archaeological review under way; determination of adverse effect anticipated

40%

Unknown impacts to historic/archaeological resources

0%

Anticipated date or date of completion of historic/archeological review: 11/01/2016

Project is located on an identified historic bridge

5)Review of Section 4f/6f Resources (15 Percent of Points)

(4f is publicly owned parks, recreation areas, historic sites, wildlife or waterfowl refuges; 6f is outdoor recreation lands where Land and Water Conservation Funds were used for planning, acquisition, or development of the property)

No Section 4f/6f resources located in the project area Yes

100%

Project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Adverse effects (land conversion) to Section 4f/6f resources likely

30%

Unknown impacts to Section 4f/6f resources in the project area

0%

6)Right-of-Way (15 Percent of Points)

Right-of-way or easements not required Yes

100%

Right-of-way or easements has/have been acquired

100%

Right-of-way or easements required, offers made

75%

Right-of-way or easements required, appraisals made

50%

Right-of-way or easements required, parcels identified

25%

Right-of-way or easements required, parcels not identified

0%

Right-of-way or easements identification has not been completed

0%

Anticipated date or date of acquisition

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project Yes

100%

Railroad Right-of-Way Agreement is executed (include signature page) 100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

Railroad Right-of-Way Agreement required; negotiations have begun

40%

Railroad Right-of-Way Agreement required; negotiations not begun

0%

Anticipated date or date of executed Agreement

8)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started Yes

0%

Anticipated date or date of completion 01/01/2018

9)Letting

Anticipated Letting Date 04/02/2018

SCOTT COUNTY COMMUNITY SERVICES DIVISION

PHYSICAL DEVELOPMENT · 600 COUNTRY TRAIL EAST · JORDAN, MN 55352-9339
(952) 496-8346 · Fax: (952) 496-8365 · www.co.scott.mn.us

MITCHELL J. RASMUSSEN, P.E.
COUNTY ENGINEER

November 14, 2014

Elaine Koutsoukos
Transportation Advisory Board Coordinator
Transportation Advisory Board
390 North Robert St.
St. Paul, Minnesota 55101

RE: Federal Transportation Alternatives Program Funding
Grade-Separated Bicycle and Pedestrian Crossing of Highway 169 in Jordan

Dear Mr. Koutsoukos:

Scott County would like to extend its support for a future grade-separated pedestrian crossing of U.S. Highway 169 in Jordan near MN Trunk Highway 282/County Road 9. The County is aware of the current safety concerns with the existing crosswalk and how difficult it is for pedestrians and bicyclists to cross TH 169. The proposed project will remove a barrier created by TH 169 and will provide a safe crossing for all modes of non-motorized travel including bicyclists and pedestrians by providing a full access underpass crossing at Creek Lane. It is our understanding that not only will the proposed project address safety concerns, but it will also contribute to connectivity of the local and future regional trail systems in this area, which will allow increased commuting opportunities for non-motorized transportation users.

The County's adopted Comprehensive Plan identifies a regional trail search corridor through this area of Jordan. This project would not only define the trail's location in this area but also serve as a critical element to its development with the crossing of TH 169. In the future, the County would intend to make connection to this project ultimately with a 14-mile regional trail from Spring Lake Regional Park in Prior Lake, to the Minnesota Valley State Trail along the Minnesota River.

Sincerely,

Mitchell J. Rasmussen P.E.
County Engineer

CITY OF
JORDAN

December 1, 2014

Elaine Koutsoukos
Transportation Advisory Board Coordinator
Transportation Advisory Board
390 North Robert St.
St. Paul, Minnesota 55101

RE: Federal Transportation Alternatives Program Funding
Grade-Separated Bicycle and Pedestrian Crossing of Highway 169 in Jordan

Dear Mr. Koutsoukos:

On behalf of the City of Jordan, we would like to extend our support for the construction of a grade-separated crossing of Highway 169 near the intersection of Highway 282, and new pedestrian facilities to connect to existing pedestrian facilities along County State Aid Highway 9 in Jordan. The City of Jordan fully commits to a 20 percent local match contribution identified in the application to the total construction costs of the project. The Jordan City Council will authorize the use of these funds in 2018, the requested program construction year.

The City Council feels strongly, and unanimously supported at its November 17th meeting, that the proposed project is not only an enhancement to the local and regional transportation system, but also an essential safety project for the well-being of our residents, workers, visitors, and travelers through our community. The project will also help complete our planned trail system and connect our facilities to regional facilities including Scott County and future connection to the Minnesota River trails and parks.

The City of Jordan appreciates the opportunity to participate in this very exciting program.

Sincerely,

Tom Nikunen - City Administrator

JORDAN GOVERNMENT CENTER
210 EAST FIRST STREET, JORDAN, MN 55352 • PHONE: (952) 492-2535

BOLTON & MENK, INC.

Consulting Engineers & Surveyors

Alternatives Analysis Report

T.H. 169 Trail Crossing

CITY OF JORDAN

City of Jordan, Minnesota

November 2010

BMI Project No. T17.102792

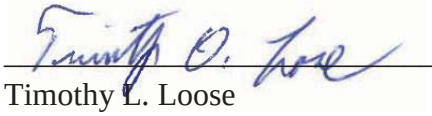
ALTERNATIVES ANALYSIS REPORT

TABLE OF CONTENTS

APPENDIX

CERTIFICATION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By: 

Timothy L. Loose
License No. 20187

Date: November 18, 2010

PROJECT INTRODUCTION

BACKGROUND

The City of Jordan contracted with Bolton & Menk to develop and analyze preliminary layouts for trail crossing alternatives in the area of Sand Creek and Trunk Highway (TH) 169. The existing crossing of TH 169 is at-grade located at the TH 282 intersection. TH 169 through Jordan carries approximately 23,000 vehicles per day. An at-grade trail crossing of a trunk highway with this level of traffic presents significant safety concerns to both vehicular and pedestrian users, and significantly reduces the regional connectivity of the trail crossing. Pedestrians currently cross TH 169 in multiple locations in addition to the crosswalk at TH 282, jumping barriers and using makeshift trails along Sand Creek that are impassable much of the year. Developing a feasible pedestrian crossing of TH 169 will significantly increase pedestrian mobility and connectivity by linking the north and south portions of the city, and will increase safety to the traveling public and pedestrians in the region.

This report includes scoping level layouts for 5 crossing locations, and the evaluation of both an underpass and overpass of TH 169 at each location. The alternatives were evaluated for both technical and non-technical benefits, impacts, and feasibility. Technical factors included constructability, potential right-of-way impacts, cost, impacts to TH 169, future build considerations, and environmental impacts. Non-technical factors included regional connectivity, usability, residential and business impacts, and other environmental considerations.

The intent of the report includes scoping level layouts, cost estimates, and data for each alternative to assist the City in selecting a preferred alternative(s) and moving forward with more detailed preliminary design and cost estimating. Due to the restricted timeline for the development of solutions and preliminary design and analysis, we were unable to include any public input during this early phase of preliminary scoping. It is highly recommended that the City of Jordan further develop and refine the alternatives determined to be feasible, and develop a public involvement plan prior to making any final determinations.

SAND CREEK FLOODPLAIN

As detailed in the Flood Insurance Rate Map (FIRM) included in Appendix C, the construction of a trail crossing in this area of Jordan will have significant impacts to the 1-percent chance (100-year) floodplain. The Federal Emergency Management Agency (FEMA) utilizes these official maps to delineate the areas of special flood hazards, generally to determine flood insurance premiums. There are zoning regulations to manage land uses in mapped floodplains, and stringent requirements related to altering floodplains. These regulations may differ by community, but at a minimum must meet federal and state regulations.

There are significant permitting and regulatory requirements related to new construction in an identified floodplain. FEMA requires a letter of map revision if new construction alters an existing FIRM, and will often require compensatory excavation to offset any volume changes affecting existing floodplains. It will be essential to coordinate with the DNR and FEMA in further developing the alternatives described in this report, to ensure full compliance with federal, state, and local regulations.

ALTERNATIVES EVALUATED

NO-BUILD ALTERNATIVE

The No-Build Alternative includes simple and relatively cost effective modifications to the existing crossing at the intersection of TH 169 and TH 282, and does not add a new grade separated crossing of TH 169. The intent of these modifications is to provide nominal safety and usability improvements for pedestrians and motorists in the area, namely:

- Adjusting the provided walk time
- Adding countdown timers to the crosswalk signal
- Island/median "refuge" point in existing crossing with additional push buttons

These or additional no-build modifications would provide little benefit in the areas of increasing pedestrian mobility and safety in the corridor, but are less cost prohibitive and nominally improve the existing condition.

BUILD ALTERNATIVES

ALTERNATIVE 1 – TH 282 CROSSING

This alternative is to construct a grade separated trail crossing at the existing intersection of TH 169 and TH 282 (see Appendix A for layout). This is currently the location of the existing at-grade pedestrian crossing. In addition to the construction of a trail underpass or overpass, this option includes the construction of approximately 250 LF of additional bituminous walk and approximately 1100 LF of concrete walk along the frontage road north of TH 169. This will connect the new trail with the existing sidewalk on Syndicate Street that crosses Sand Creek on an existing bridge.

This crossing location would increase the connectability of the existing sidewalk system north and south of TH 169 with the new commercial and residential developments north of Valley View Drive and the businesses on TH 282 and Triangle Lane. There are minimal impacts to existing right-of-way for either crossing structure.

One major drawback of this location is the potential construction of a TH 169/TH 282 interchange. The construction of the new interchange would almost certainly require the demolition of an underpass or overpass in this location, and the new bridge will certainly accommodate the connection of sidewalks on the north and south side of TH 169. Construction of a crossing in this location would be temporary in nature, and likely not serve its useful life.

UNDERPASS/OVERPASS COMPARISON

UNDERPASS		OVERPASS	
Pro	**Con**	**Pro**	**Con**
Less costly	Impacts to TH 169 and traffic during construction	No flooding or water table impacts	More costly
Minimal excavation due to existing roadway/ground elevations	Potential flooding and water table impacts	Minimal impacts to TH 169 and traffic during construction	More severe trail grades due to large embankments on approaches
Trail grades less severe – more user friendly	Dewatering – temporary and permanent		Retaining walls required due to right-of-way
	Retaining walls required due to right-of-way		Filling in floodplain may require compensatory excavation

ALTERNATIVE 2 – TRIANGLE LANE/FRONTAGE ROAD CROSSING

This alternative is to construct a new trail crossing east of the Holiday gas station, connecting Triangle Lane and the north Frontage Road (see Appendix A for layout). In addition to the construction of a trail underpass or overpass, this option includes the construction of approximately 500 LF of additional bituminous walk and approximately 1100 LF of concrete walk along the frontage road north of TH 169. This will connect the new trail with the existing sidewalk on Syndicate Street that crosses Sand Creek on an existing bridge and the sidewalk on Quaker Avenue.

As with the TH 282 location, this crossing location would increase the connectability of the existing sidewalk system north and south of TH 169 with the new commercial and residential developments north of Valley View Drive and the businesses on TH 282 and Triangle Lane. This may be the best location when considering the origination and destination of most pedestrians in this area. The crossing is located in the middle of the new developments north of TH 169 and the existing residential neighborhoods east of Sand Creek. However, a crossing in this location would require a trail easement and/or right-of-way acquisition on the south side of TH 169 for either structure type.

Also similar to the TH 282 location, the future construction of a TH 169/TH 282 interchange would diminish the usefulness of a crossing in this location. While the crossing may not need to be removed for construction of the interchange, an additional crossing would not be warranted within 1000’ of the new interchange. The interchange would be the permanent solution to connecting the north and south trail system in the city.

UNDERPASS/OVERPASS COMPARISON

UNDERPASS		OVERPASS	
Pro	**Con**	**Pro**	**Con**
Less costly – similar in scope to TH 282 crossing	Impacts to TH 169 and traffic during construction	No flooding or water table impacts	Most costly option
Minimal excavation due to existing roadway/ground elevations	Potential flooding and water table impacts	Minimal impacts to TH 169 and traffic during construction	More severe trail grades due to large embankments on approaches
Trail grades less severe – more user friendly	Dewatering – temporary and permanent		Substantial retaining walls required due to right-of-way
	Retaining walls required due to right-of-way		Filling in floodplain may require compensatory excavation

ALTERNATIVE 3 – CREEK LANE CROSSING

This alternative would construct a trail crossing at Creek Lane, connecting the existing sidewalks on Triangle Lane and the North Frontage Road (see Appendix A for layout). In addition to the construction of a trail underpass or overpass, this option includes the construction of approximately 500 LF of additional bituminous walk and approximately 1100 LF of concrete walk along the frontage road north of TH 169. This will connect the new trail with the existing sidewalk on Syndicate Street that crosses Sand Creek on an existing bridge and the sidewalk on Quaker Avenue.

Locating the trail crossing in this location will increase mobility for users, as there is evidence of users crossing under the TH 169 mainline bridge and crossing mainline to the west. This location also minimizes additional trail construction, has no impacts to existing right-of-way as it utilizes a city park, and is cost effective due to the lack of retaining walls required due to existing grades and available area for construction of embankments.

The major drawbacks with a crossing in this location are a result of the presence of Sand Creek and the floodplain impacts of construction. Large embankments or cuts will be required to construct either structure, requiring either considerable coordination with regulatory agencies for mitigation and/or final design approval. Extensive coordination for permitting and design approvals will be required. This location will likely have the highest water table affecting both construction and the permanent condition, and will be the most susceptible to flooding. This alternative will undoubtedly have the longest lead time, as the preliminary and final design stages will require more review and coordination with regulatory agencies (FEMA, DNR, Mn/DOT, etc.). The ultimate design may require the construction of flood protection measures to mitigate any impacts to pedestrians during periods of flooding. These and other associated

environmental costs are not reflected in the cost estimates, as costs are difficult to quantify at this stage of project development. It should be assumed that costs for mitigation and coordination will be significant when reviewing a trail crossing in this location.

Similar to Alternatives 1 and 2, construction of a crossing in this location will likely not serve its useful life. The reconstruction of the TH 169 bridge over Sand Creek will likely raise the grade of the highway and move the abutments out of the floodplain, allowing for a trail crossing under the bridge. The crossing proposed in this alternative will likely be removed to allow for the construction of the new mainline bridge.

UNDERPASS/OVERPASS COMPARISON

UNDERPASS		OVERPASS	
Pro	**Con**	**Pro**	**Con**
Least costly of underpass options	Impacts to TH 169 and traffic during construction	Least costly trail crossing option	More severe trail grades due to large embankments on approaches
Minimal excavation due to existing roadway/ground elevations	High probability of flooding and water table impacts	Minimal impacts to TH 169 and traffic during construction	Filling in floodplain may require compensatory excavation
Trail grades less severe – more user friendly	Dewatering – temporary and permanent	No retaining walls required	Some flooding and water table impacts
No retaining walls required	Coordination/approval by Mn/DOT will likely be difficult due to flooding		
	Significant permitting and approval process during design and construction		

ALTERNATIVE 4 – SYNDICATE STREET CROSSING

This alternative is to construct a trail crossing west of Syndicate Street on the east side of Sand Creek, connecting the sidewalk on Syndicate Street north of TH 169 and a new bituminous trail running on the berm east of Sand Creek (see Appendix A for layout). In addition to the construction of a trail underpass or overpass, this option includes the construction of approximately 1700 LF of new bituminous walk and approximately 1100 LF of concrete walk along the frontage road north of TH 169. This will connect the crossing with the existing sidewalk on Syndicate Street north of TH 169 and the trail on TH 282 crossing Sand Creek.

This is a rather cost effective location for either type of structure, due to the available right-of-way and lack of retaining walls required for slope protection. Construction on the south side of

TH 169 will be in the floodplain of Sand Creek but the north side of the crossing will most likely be outside of the affected area, further reducing potential costs.
The major drawback to this crossing alternative is that it does not maximize the connectivity benefits due to its location east of Sand Creek. It is highly unlikely that bike/pedestrian users north of Valley View drive will utilize this crossing if their destination is south west of Sand Creek. The existing at-grade crossing better fulfills their needs than this crossing, regardless of the safety issues previously outlined. Pedestrians will either continue to "risk it" by crossing wherever is convenient, or they will utilize the signal at TH 282. The regional benefit is also reduced, due to the number of pedestrians continuing to cross at-grade, and the lack of connectivity to businesses and industry west of Sand Creek.

Similar to Alternatives 1-3, future build plans make this crossing a temporary solution. The reconstruction of the TH 169 bridge over Sand Creek will likely raise the grade of the highway and move the abutments out of the floodplain, allowing for a trail crossing under the bridge. It is unlikely that this crossing will need to be removed for mainline reconstruction, but it will be less functional than a new crossing closer to Sand Creek.

UNDERPASS/OVERPASS COMPARISON

UNDERPASS		OVERPASS	
Pro	**Con**	**Pro**	**Con**
Cost – cheaper than underpasses west of Sand Creek	Impacts to TH 169 and traffic during construction	Less costly than underpass	More severe trail grades due to large embankments on approaches
Minimal excavation due to existing roadway/ground elevations	Potential flooding and water table impacts	No flooding or water table impacts	Retaining walls required due to existing grades
Trail grades less severe – more user friendly	Dewatering – temporary and permanent	Minimal impacts to TH 169 and traffic during construction	Filling in floodplain may require compensatory excavation
	Retaining walls required due to existing grades		

ALTERNATIVE 5 – VARNER STREET CROSSING

This alternative is to construct an underpass west of Varner Street on the east side of Sand Creek, connecting the existing sidewalk on Varner Street to the existing sidewalk on Maple Drive (see Appendix A for layout). It was determined that an overpass in this location was not feasible, due to the grade differential between TH 169 and the existing ground in this location (776 vs. 754). Constructing an overpass in this location would require an embankment of almost 40 feet to achieve the required vertical and horizontal clear zones, or approach structures that make the option too cost prohibitive.

With the construction of the underpass, this option includes the construction of approximately 400 LF of new bituminous trail north to Maple Drive and approximately 400 LF of concrete walk connecting to the existing sidewalk on Varner Drive. This alternative will require a trail easement or possibly the purchasing of right-of-way to make the connection to Maple Drive. This will affect both the cost of construction and the time required for final completion.

In addition to the right-of-way issues this option presents, it also has the same connectivity drawbacks as Alternative #4. This location is even further east, making it extremely unlikely that bike/pedestrian users west of the creek will utilize this crossing. The existing at-grade crossing better fulfills their needs than this crossing, regardless of the safety issues previously outlined. Pedestrians will either continue to "risk it" by crossing wherever is convenient, or they will utilize the signal at TH 282. The regional benefit is also reduced, due to the number of pedestrians continuing to cross at-grade, and the lack of connectivity to businesses and industry west of Sand Creek.

This alternative is cost competitive with the other underpasses, and does not have the same drawbacks related to future infrastructure enhancement projects. This crossing will not be affected by construction of the TH 169/TH 282 interchange or the mainline bridge, and will serve its useful life connecting the residential areas north of TH 169 and the downtown area of Jordan.

SUMMARY OF COST ESTIMATES

The following table summarizes the scoping level cost estimates associated with the alternatives previously described. More detailed estimates of each alternative are included in Appendix B.

ITEM	UNDERPASS	OVERPASS
Alternative 1 - TH 282	$1,169,000.00	$1,258,000.00
Alternative 2 - Triangle Lane/Frontage Road	$1,175,000.00	$1,402,000.00
Alternative 3 - Creek Lane	$734,000.00	$703,000.00
Alternative 4 - Syndicate Street	$1,000,000.00	$1,025,000.00
Alternative 5 – Varner Street	$835,000.00	N/A

NEXT STEPS

The City of Jordan and its project partners will need to further evaluate the alternatives included in this report and select a preferred alternative or alternatives to move forward into preliminary design. The scope of our analysis did not include coordination with City staff, regulatory agencies, or the public to allow for proper refinement of the alternatives and a recommendation of a final crossing location.

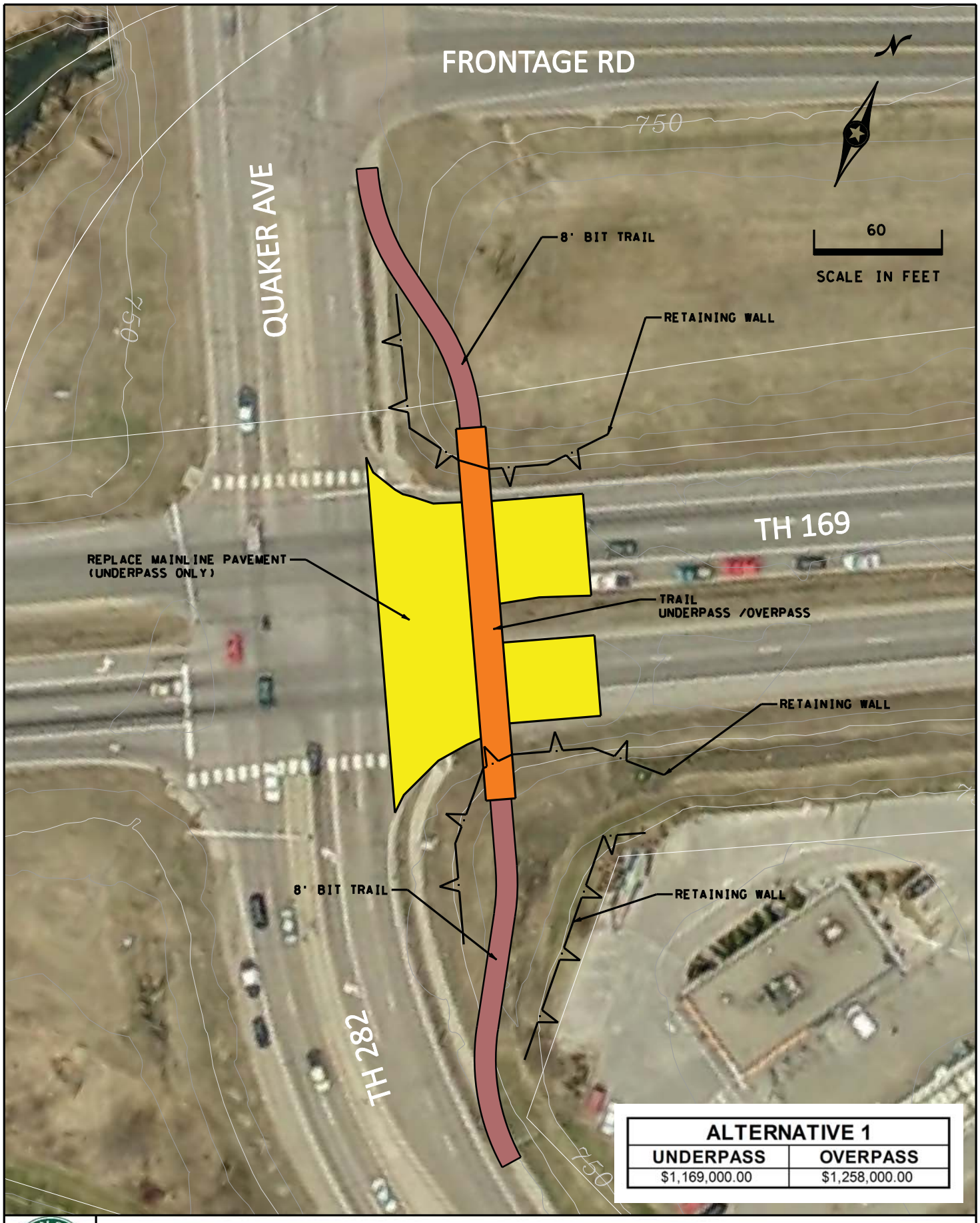
To properly evaluate the alternatives presented in this report and select a preferred solution, it will be essential to engage all potential stakeholders to refine and rank the evaluation criteria (cost, constructability, impacts to TH 169, future build considerations, environmental impacts, regional connectivity, residential and business impacts, etc.). Coordination amongst engineering and planning staff, the park board, Mn/DOT staff, DNR staff, and local businesses will provide a key understanding of the hot button issues related to the location of a future trail crossing. Additional analysis and preliminary design may also be needed to further refine cost estimates and begin securing funding for the project.

It is also vital to include a public involvement process to obtain input from trail users during the project scoping phase and refinement of alternatives. Public input will provide additional guidance for the city to determine the preferred alternative. We recommend scheduling public meetings to gather information from citizens for use in refining and evaluating the alternatives presented.

Further coordination with the DNR and FEMA with respect to construction in the floodplain is also recommended before final selection of a preferred alternative. The additional costs and unknown implications of constructing in the Sand Creek floodplain must be completely understood prior to completing the final evaluation. The estimates included with this report do not attempt to quantify these additional costs, as more detailed design and coordination with FEMA is required to accurately depict the impact.

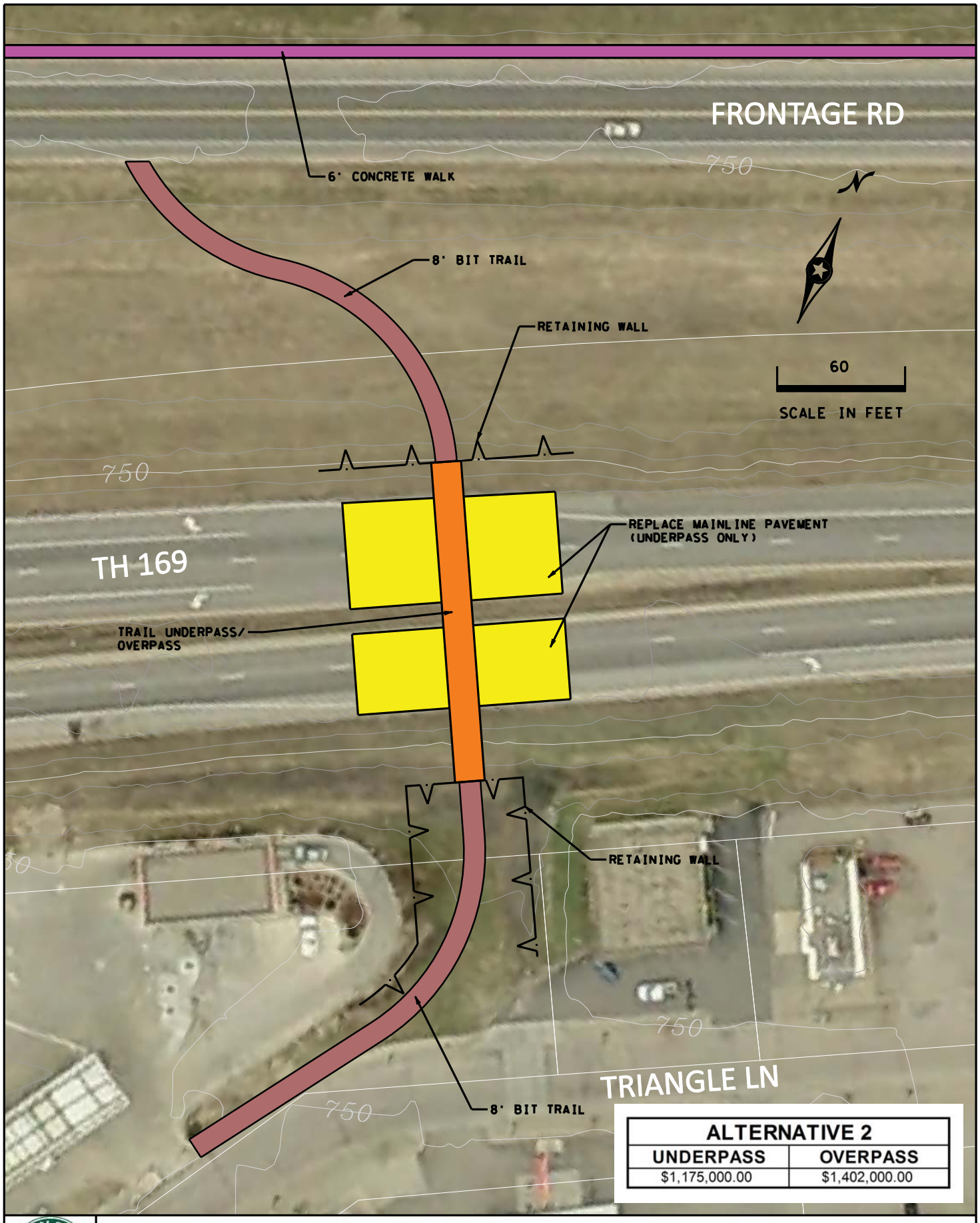
Appendix A

Layout of Alternative Alignments



ALTERNATIVE 1 - TH 282 CROSSING

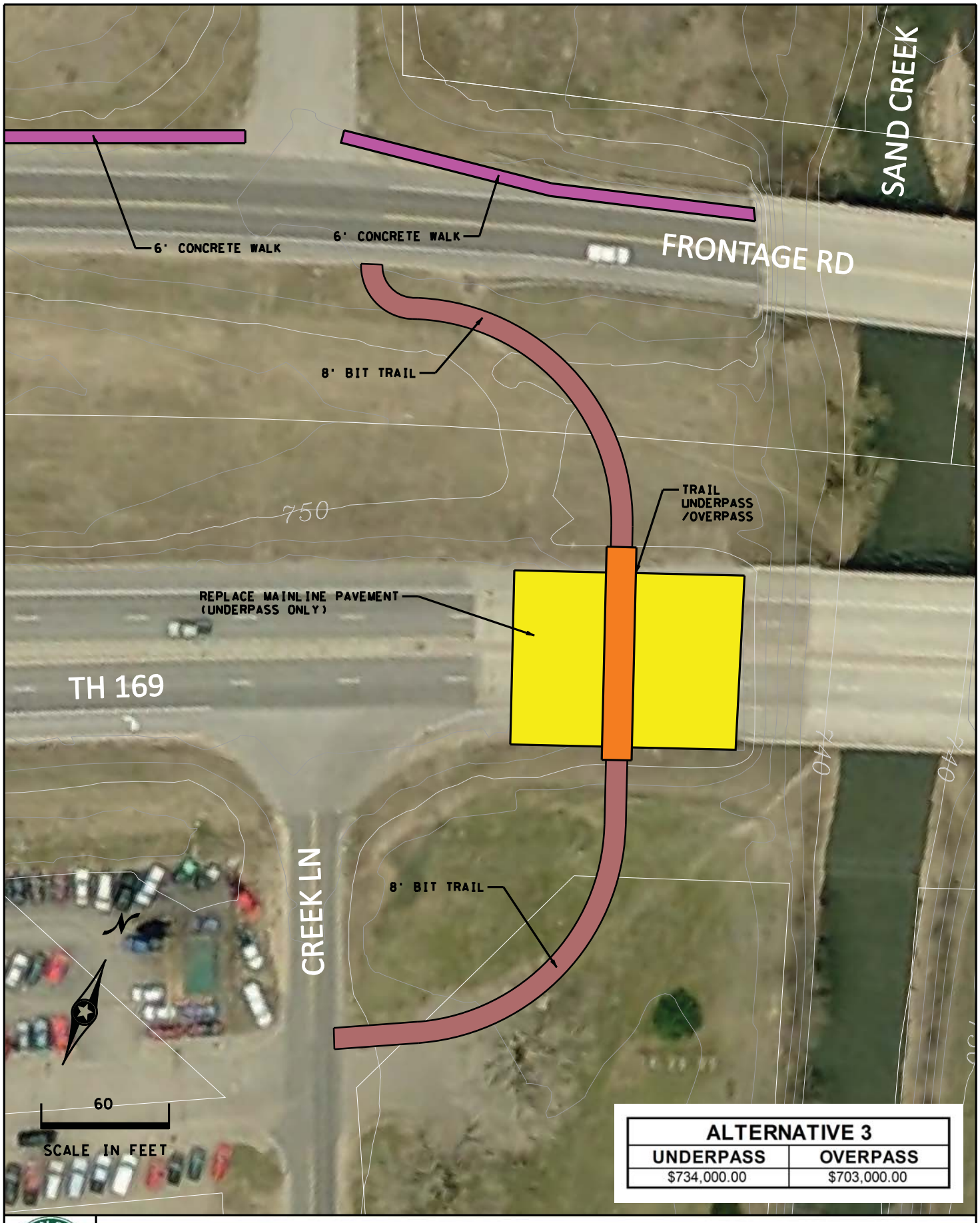
JORDAN TH 169 PEDESTRIAN CROSSING EVALUATION



ALTERNATIVE 2	
UNDERPASS	OVERPASS
$1,175,000.00	$1,402,000.00

ALTERNATIVE 2 - TRIANGLE LANE/FRONTAGE RD CROSSING

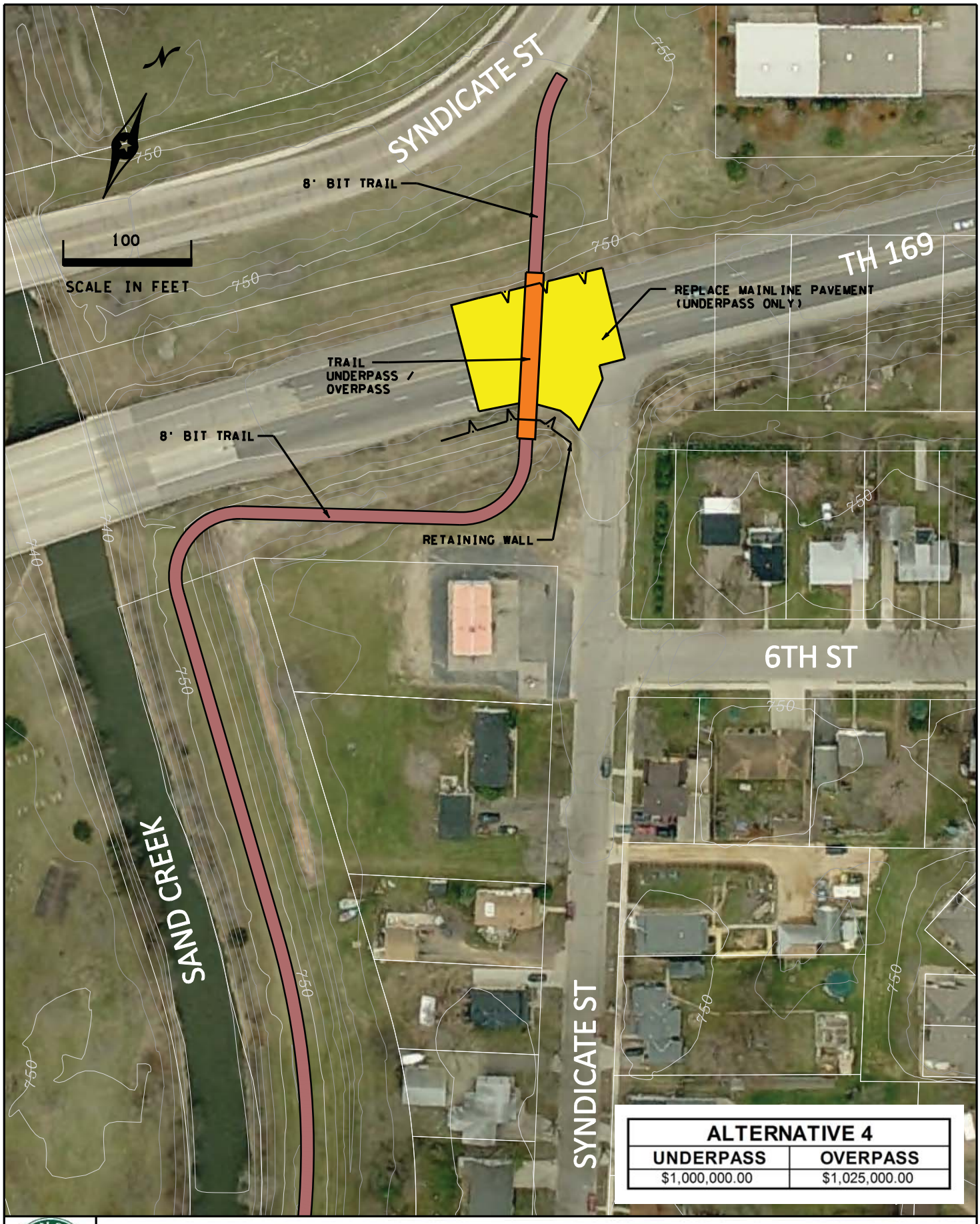
JORDAN TH 169 PEDESTRIAN CROSSING EVALUATION



ALTERNATIVE 3	
UNDERPASS	OVERPASS
$734,000.00	$703,000.00

ALTERNATIVE 3 - CREEK LANE CROSSING

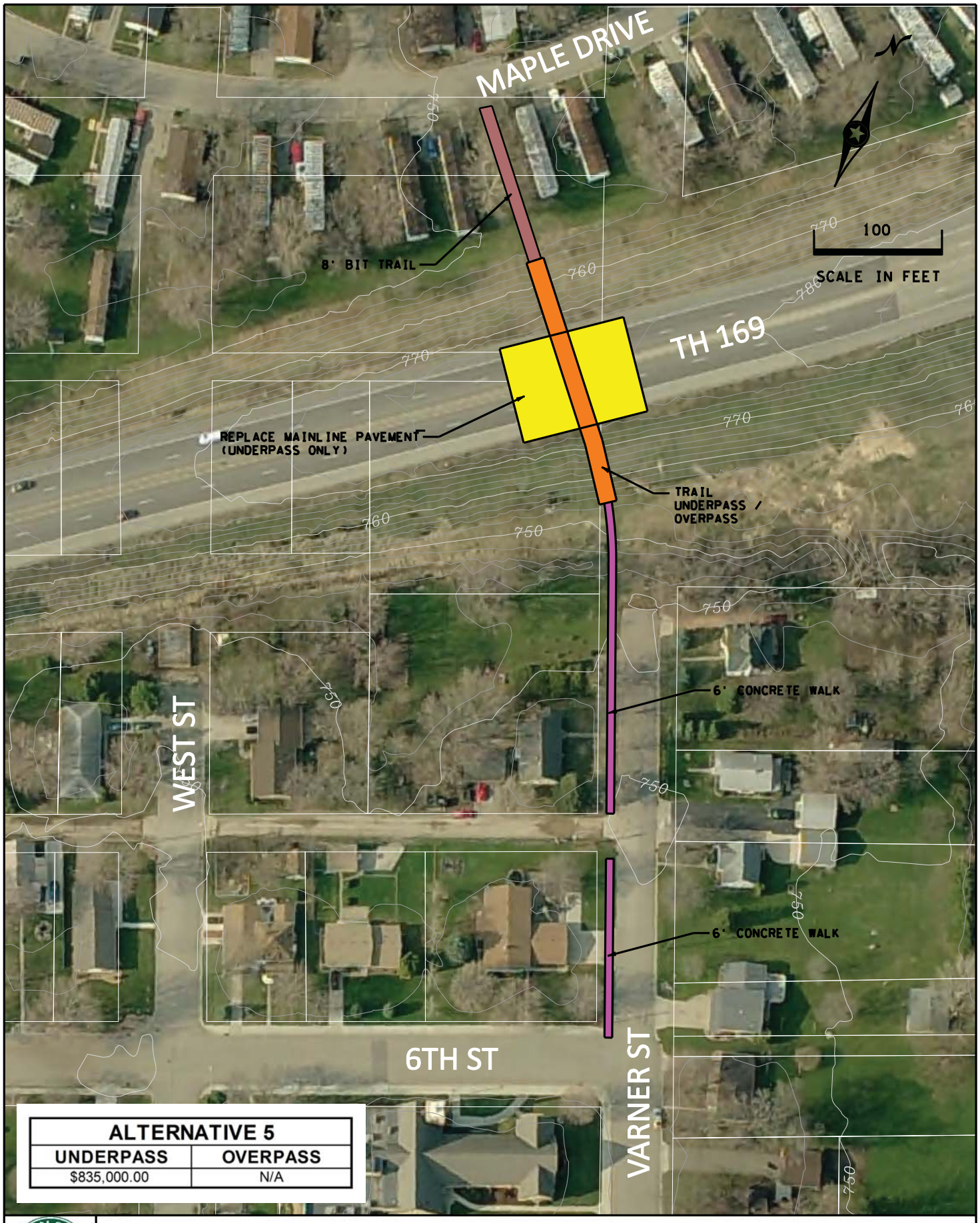
JORDAN TH 169 PEDESTRIAN CROSSING EVALUATION



ALTERNATIVE 4	
UNDERPASS	OVERPASS
$1,000,000.00	$1,025,000.00

ALTERNATIVE 4 - SYNDICATE ST CROSSING

JORDAN TH 169 PEDESTRIAN CROSSING EVALUATION



ALTERNATIVE 5	
UNDERPASS	OVERPASS
$835,000.00	N/A

ALTERNATIVE 5 - VARNER ST CROSSING

JORDAN TH 169 PEDESTRIAN CROSSING EVALUATION

Appendix B

Conceptual Cost Estimates

CONCEPTUAL ESTIMATE - ALTERNATIVE 1 (TH 282 CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

H:\JORD\T17102792\excel\[Concept Estimate_REV1.xls]Alternative 1

UNDERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	COMMON EXCAVATION	4000	CU YD	$5.00	$20,000.00
3	DRAINAGE	1	LUMP SUM	$75,000.00	$75,000.00
4	DEWATERING	1	LUMP SUM	$25,000.00	$25,000.00
5	MAINLINE PAVEMENT (HWY 169)	10600	SQ FT	$4.00	$42,400.00
6	RETAINING WALL	4100	SQ FT	$50.00	$205,000.00
7	14X10 PRECAST CONCRETE BOX CULVERT	175	LIN FT	$1,100.00	$192,500.00
8	MEMBRANE WATERPROOFING	4200	SQ FT	$6.00	$25,200.00
9	6" PERFORATED PVC PIPE DRAIN	400	LIN FT	$10.00	$4,000.00
10	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
11	3" BITUMINOUS WALK	250	LIN FT	$20.00	$5,000.00
12	TRAFFIC CONTROL	1	LUMP SUM	$50,000.00	$50,000.00
13	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
14	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$15,000.00	$15,000.00
15	STORM WATER LIFT STATION	1	LUMP SUM	$50,000.00	$50,000.00
16	TUNNEL LIGHTING SYSTEM	1	LUMP SUM	$20,000.00	$20,000.00
TOTAL CONCEPTUAL CONSTRUCTION COST					**$812,000.00**
				20%-CONTINGENCIES	**$162,000.00**
SUBTOTAL W/ CONTINGENCIES					**$974,000.00**
				20%-ENGINEERING AND ADMINISTRATION	**$195,000.00**
GRAND TOTAL					**$1,169,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 1 (TH 282 CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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OVERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	GRANULAR BORROW (CV)	9000	CU YD	$15.00	$135,000.00
3	APPROACH GRADING	1	LUMP SUM	$2,500.00	$2,500.00
4	PEDESTRIAN BRIDGE	1750	SQ FT	$200.00	$350,000.00
5	RETAINING WALL	5100	SQ FT	$50.00	$255,000.00
6	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
7	3" BITUMINOUS WALK	250	LIN FT	$20.00	$5,000.00
8	TRAFFIC CONTROL	1	LUMP SUM	$12,500.00	$12,500.00
9	DEWATERING	1	LUMP SUM	$12,500.00	$12,500.00
10	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
11	DRAINAGE	1	LUMP SUM	$7,500.00	$7,500.00
12	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$10,000.00	$10,000.00
TOTAL CONCEPTUAL CONSTRUCTION COST					**$873,000.00**
				20%-CONTINGENCIES	**$175,000.00**
SUBTOTAL W/ CONTINGENCIES					**$1,048,000.00**
				20%-ENGINEERING AND ADMINISTRATION	**$210,000.00**
GRAND TOTAL					**$1,258,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 2 (TRIANGLE LN/FRONTAGE RD CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

H:\JORD\T17102792\excel\[Concept Estimate_REV1.xls]Alternative 1

UNDERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	COMMON EXCAVATION	4700	CU YD	$5.00	$23,500.00
3	DRAINAGE	1	LUMP SUM	$75,000.00	$75,000.00
4	DEWATERING	1	LUMP SUM	$25,000.00	$25,000.00
5	MAINLINE PAVEMENT (HWY 169)	8700	SQ FT	$4.00	$34,800.00
6	RETAINING WALL	4800	SQ FT	$50.00	$240,000.00
7	14X10 PRECAST CONCRETE BOX CULVERT	150	LIN FT	$1,100.00	$165,000.00
8	MEMBRANE WATERPROOFING	3600	SQ FT	$6.00	$21,600.00
9	6" PERFORATED PVC PIPE DRAIN	300	LIN FT	$10.00	$3,000.00
10	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
11	3" BITUMINOUS WALK	500	LIN FT	$20.00	$10,000.00
12	TRAFFIC CONTROL	1	LUMP SUM	$50,000.00	$50,000.00
13	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
14	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$15,000.00	$15,000.00
15	STORM WATER LIFT STATION	1	LUMP SUM	$50,000.00	$50,000.00
16	TUNNEL LIGHTING SYSTEM	1	LUMP SUM	$20,000.00	$20,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$816,000.00**
20%-CONTINGENCIES	**$163,000.00**
SUBTOTAL W/ CONTINGENCIES	**$979,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$196,000.00**
GRAND TOTAL	**$1,175,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 2 (TRIANGLE LN/FRONTAGE RD CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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OVERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	GRANULAR BORROW (CV)	10000	CU YD	$15.00	$150,000.00
3	APPROACH GRADING	1	LUMP SUM	$2,500.00	$2,500.00
4	PEDESTRIAN BRIDGE	1500	SQ FT	$200.00	$300,000.00
5	RETAINING WALL	7700	SQ FT	$50.00	$385,000.00
6	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
7	3" BITUMINOUS WALK	500	LIN FT	$20.00	$10,000.00
8	TRAFFIC CONTROL	1	LUMP SUM	$12,500.00	$12,500.00
9	DEWATERING	1	LUMP SUM	$12,500.00	$12,500.00
10	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
11	DRAINAGE	1	LUMP SUM	$7,500.00	$7,500.00
12	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$10,000.00	$10,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$973,000.00**
20%-CONTINGENCIES	**$195,000.00**
SUBTOTAL W/ CONTINGENCIES	**$1,168,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$234,000.00**
GRAND TOTAL	**$1,402,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 3 (CREEK LANE CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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UNDERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	COMMON EXCAVATION	4000	CU YD	$5.00	$20,000.00
3	DRAINAGE	1	LUMP SUM	$75,000.00	$75,000.00
4	DEWATERING	1	LUMP SUM	$25,000.00	$25,000.00
5	MAINLINE PAVEMENT (HWY 169)	8800	SQ FT	$4.00	$35,200.00
6	RETAINING WALL		SQ FT	$50.00	$0.00
7	14X10 PRECAST CONCRETE BOX CULVERT	100	LIN FT	$1,100.00	$110,000.00
8	MEMBRANE WATERPROOFING	2400	SQ FT	$6.00	$14,400.00
9	6" PERFORATED PVC PIPE DRAIN	200	LIN FT	$10.00	$2,000.00
10	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
11	3" BITUMINOUS WALK	500	LIN FT	$20.00	$10,000.00
12	TRAFFIC CONTROL	1	LUMP SUM	$50,000.00	$50,000.00
13	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
14	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$15,000.00	$15,000.00
15	STORM WATER LIFT STATION	1	LUMP SUM	$50,000.00	$50,000.00
16	TUNNEL LIGHTING SYSTEM	1	LUMP SUM	$20,000.00	$20,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$510,000.00**
20%-CONTINGENCIES	**$102,000.00**
SUBTOTAL W/ CONTINGENCIES	**$612,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$122,000.00**
GRAND TOTAL	**$734,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 3 (CREEK LANE CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

H:\JORD\T17102792\excel\[Concept Estimate_REV1.xls]Alternative 1

OVERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	GRANULAR BORROW (CV)	10000	CU YD	$15.00	$150,000.00
3	APPROACH GRADING	1	LUMP SUM	$2,500.00	$2,500.00
4	PEDESTRIAN BRIDGE	1000	SQ FT	$200.00	$200,000.00
5	RETAINING WALL		SQ FT	$50.00	$0.00
6	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
7	3" BITUMINOUS WALK	500	LIN FT	$20.00	$10,000.00
8	TRAFFIC CONTROL	1	LUMP SUM	$12,500.00	$12,500.00
9	DEWATERING	1	LUMP SUM	$12,500.00	$12,500.00
10	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
11	DRAINAGE	1	LUMP SUM	$7,500.00	$7,500.00
12	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$10,000.00	$10,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$488,000.00**
20%-CONTINGENCIES	**$98,000.00**
SUBTOTAL W/ CONTINGENCIES	**$586,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$117,000.00**
GRAND TOTAL	**$703,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 4 (SYNDICATE STREET CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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UNDERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	COMMON EXCAVATION	4400	CU YD	$5.00	$22,000.00
3	DRAINAGE	1	LUMP SUM	$75,000.00	$75,000.00
4	DEWATERING	1	LUMP SUM	$25,000.00	$25,000.00
5	MAINLINE PAVEMENT (HWY 169)	11100	SQ FT	$4.00	$44,400.00
6	RETAINING WALL	2200	SQ FT	$50.00	$110,000.00
7	14X10 PRECAST CONCRETE BOX CULVERT	130	LIN FT	$1,100.00	$143,000.00
8	MEMBRANE WATERPROOFING	3200	SQ FT	$6.00	$19,200.00
9	6" PERFORATED PVC PIPE DRAIN	300	LIN FT	$10.00	$3,000.00
10	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
11	3" BITUMINOUS WALK	1700	LIN FT	$20.00	$34,000.00
12	TRAFFIC CONTROL	1	LUMP SUM	$50,000.00	$50,000.00
13	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
14	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$15,000.00	$15,000.00
15	STORM WATER LIFT STATION	1	LUMP SUM	$50,000.00	$50,000.00
16	TUNNEL LIGHTING SYSTEM	1	LUMP SUM	$20,000.00	$20,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$694,000.00**
20%-CONTINGENCIES	**$139,000.00**
SUBTOTAL W/ CONTINGENCIES	**$833,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$167,000.00**
GRAND TOTAL	**$1,000,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 4 (SYNDICATE STREET CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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OVERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	GRANULAR BORROW (CV)	10000	CU YD	$15.00	$150,000.00
3	APPROACH GRADING	1	LUMP SUM	$2,500.00	$2,500.00
4	PEDESTRIAN BRIDGE	1300	SQ FT	$200.00	$260,000.00
5	RETAINING WALL	2800	SQ FT	$50.00	$140,000.00
6	4" CONCRETE WALK	1100	LIN FT	$21.00	$23,100.00
7	3" BITUMINOUS WALK	1700	LIN FT	$20.00	$34,000.00
8	TRAFFIC CONTROL	1	LUMP SUM	$12,500.00	$12,500.00
9	DEWATERING	1	LUMP SUM	$12,500.00	$12,500.00
10	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
11	DRAINAGE	1	LUMP SUM	$7,500.00	$7,500.00
12	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$10,000.00	$10,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$712,000.00**
20%-CONTINGENCIES	**$142,000.00**
SUBTOTAL W/ CONTINGENCIES	**$854,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$171,000.00**
GRAND TOTAL	**$1,025,000.00**

CONCEPTUAL ESTIMATE - ALTERNATIVE 5 (VARNER STREET CROSSING)

HIGHWAY 169 PEDESTRIAN CROSSING STUDY

CITY OF JORDAN, MN

BMI PROJECT NO. T17.102792

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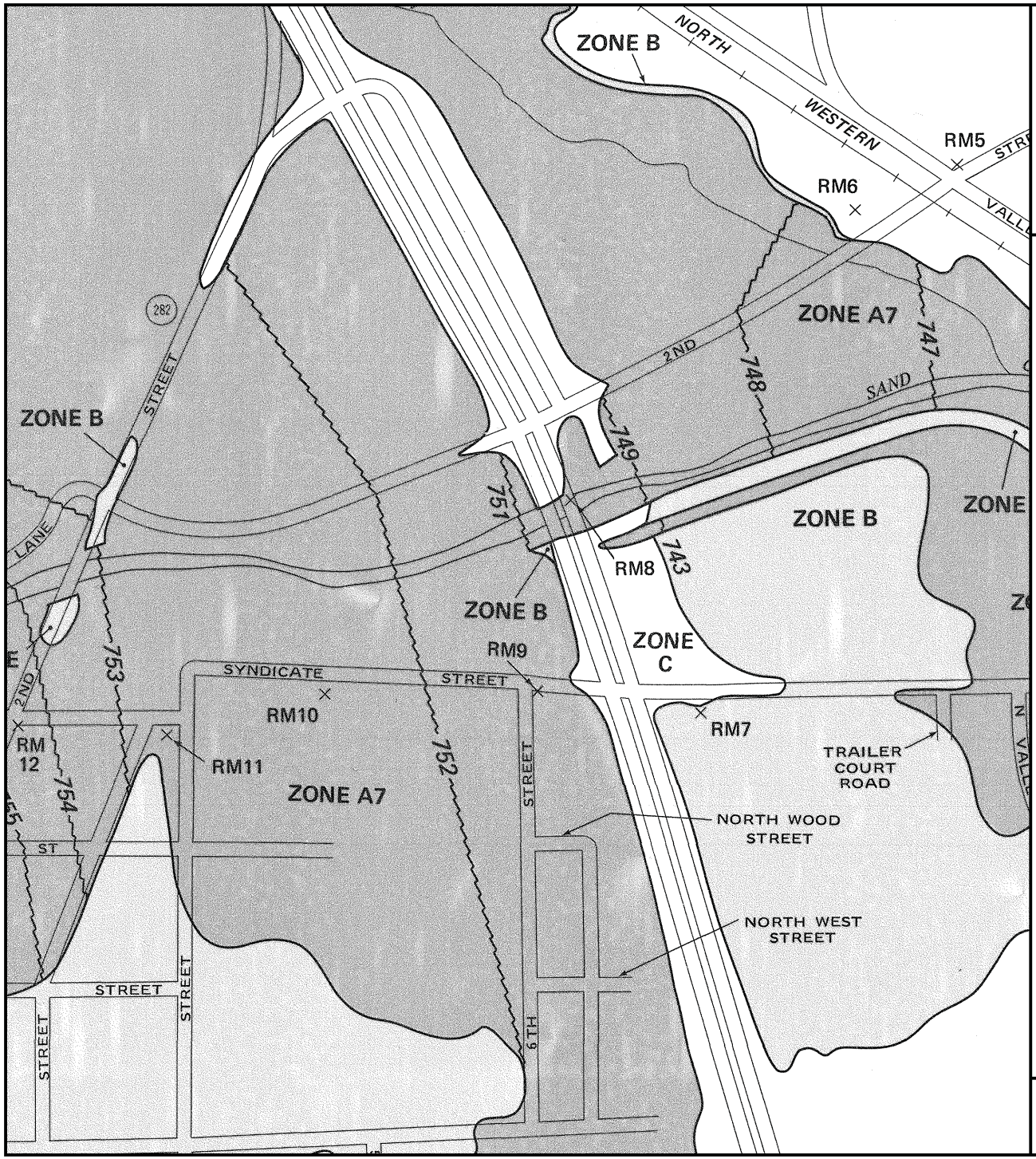
UNDERPASS

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION	1	LUMP SUM	$50,000.00	$50,000.00
2	COMMON EXCAVATION	2900	CU YD	$5.00	$14,500.00
3	DRAINAGE	1	LUMP SUM	$75,000.00	$75,000.00
4	DEWATERING	1	LUMP SUM	$25,000.00	$25,000.00
5	MAINLINE PAVEMENT (HWY 169)	7600	SQ FT	$4.00	$30,400.00
6	RETAINING WALL		SQ FT	$50.00	$0.00
7	14X10 PRECAST CONCRETE BOX CULVERT	200	LIN FT	$1,100.00	$220,000.00
8	MEMBRANE WATERPROOFING		SQ FT	$6.00	$0.00
9	6" PERFORATED PVC PIPE DRAIN	400	LIN FT	$10.00	$4,000.00
10	4" CONCRETE WALK	400	LIN FT	$21.00	$8,400.00
11	3" BITUMINOUS WALK	400	LIN FT	$20.00	$8,000.00
12	TRAFFIC CONTROL	1	LUMP SUM	$50,000.00	$50,000.00
13	LANDSCAPING	1	LUMP SUM	$10,000.00	$10,000.00
14	TURF RESTORATION / EROSION CONTROL	1	LUMP SUM	$15,000.00	$15,000.00
15	STORM WATER LIFT STATION	1	LUMP SUM	$50,000.00	$50,000.00
16	TUNNEL LIGHTING SYSTEM	1	LUMP SUM	$20,000.00	$20,000.00

TOTAL CONCEPTUAL CONSTRUCTION COST	**$580,000.00**
20%-CONTINGENCIES	**$116,000.00**
SUBTOTAL W/ CONTINGENCIES	**$696,000.00**
20%-ENGINEERING AND ADMINISTRATION	**$139,000.00**
GRAND TOTAL	**$835,000.00**

Appendix C

City of Jordan FIRM



APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

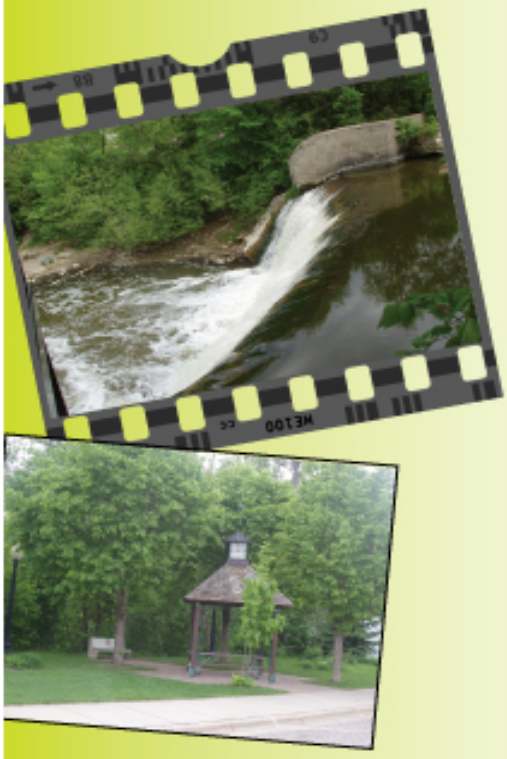
CITY OF
JORDAN,
MINNESOTA
SCOTT COUNTY

(ONLY PANEL PRINTED)

COMMUNITY-PANEL NUMBER
270430 0001 C

EFFECTIVE DATE:
JANUARY 6, 1982

federal emergency management agency
federal insurance administration



Bridges/Connectivity

In addition to gaps in the sidewalk and trail system, a safe pedestrian and non-motorized crossing is needed either over or under TH Highway 169. As a part of the planning process, the City Council authorized preliminary engineering to determine the feasibility of overpasses and underpasses for Highway 169 between CR 282 to Varner.

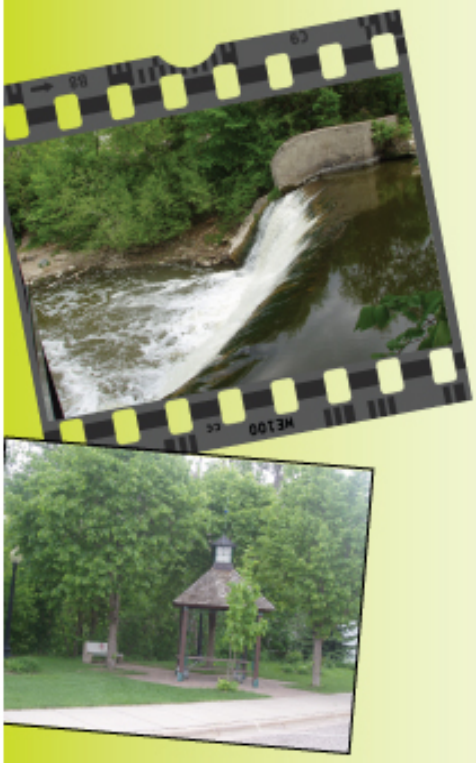
An "Alternatives Analysis Report T.H. 169 Trail Crossing" completed by Bolton & Menk is attached to this plan as Appendix A. The Report notes, *"The existing crossing of TH 169 is at-grade, located at the TH 282 intersection. TH 169 through Jordan carries approximately 23,000 vehicles per day. An at grade trail crossing of a trunk highway with this level of traffic presents significant safety concerns to both vehicular and pedestrian users, and significantly reduces the regional connectivity of the trail crossing.*

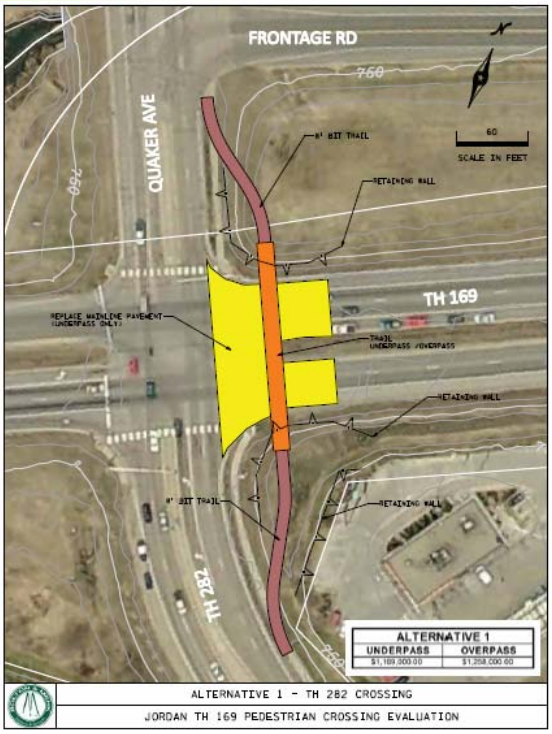
Pedestrians currently cross TH 169 in multiple locations in addition to the crosswalk at TH 282, jumping barriers and using makeshift trails along Sand Creek that are impassable much of the year. Developing a feasible pedestrian crossing of TH 169 will significantly increase pedestrian mobility and connectivity by linking the north and south portions of the city, and will increase safety to the traveling public and pedestrians in the region." [1]

A man-made trail/path is shown above, where pedestrians have created their own trail under the Highway 169 bridge adjacent to Lion's Park. As depicted above, on the right, this unofficial underpass floods with heavy rains, and is not a safe crossing as currently designed. Low clearance, unstable base and a lack of lighting also make this an unsafe crossing.

[1]Alternative Analysis Report -TH 169 Trail Crossing City of Jordan, Bolton & Menk November, 2010

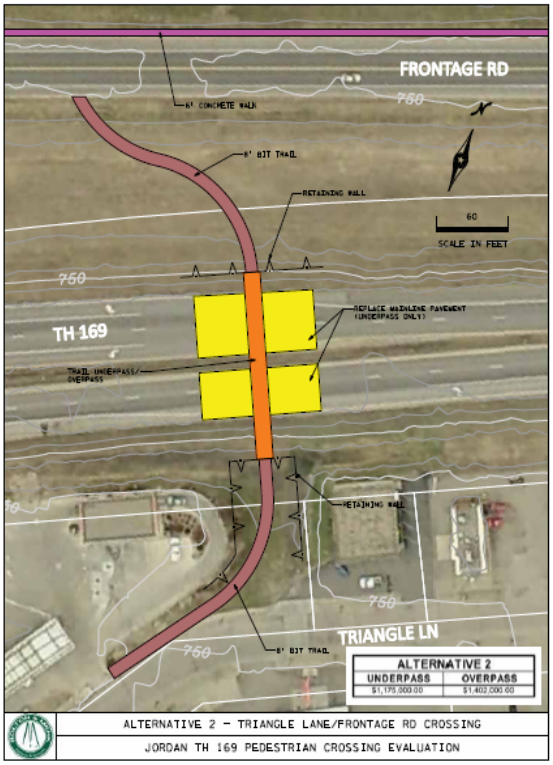
The report analyzes five TH 169 crossing locations and includes cost estimates for both underpasses and overpasses at the locations. Following are maps of the potential sites, as evaluated by Bolton & Menk.



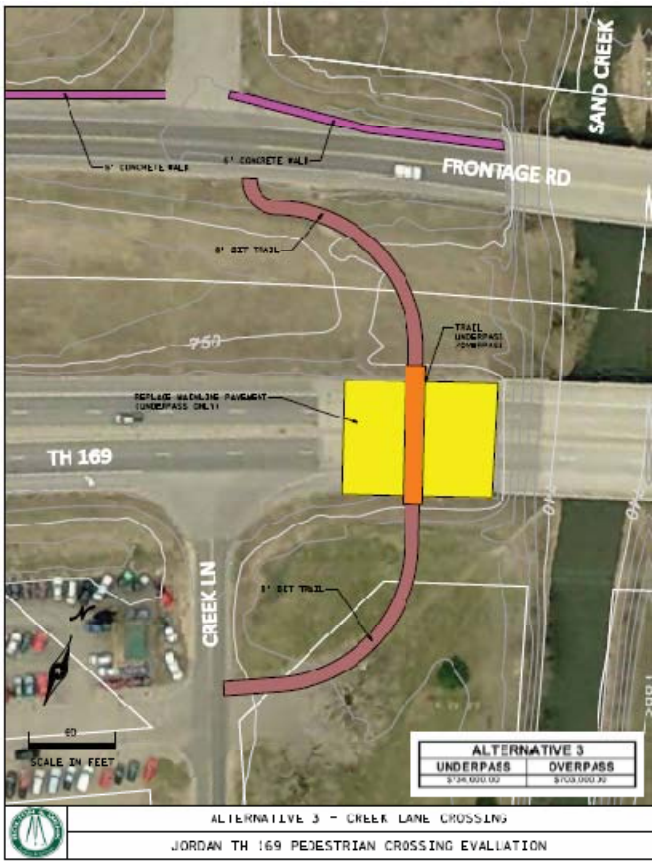


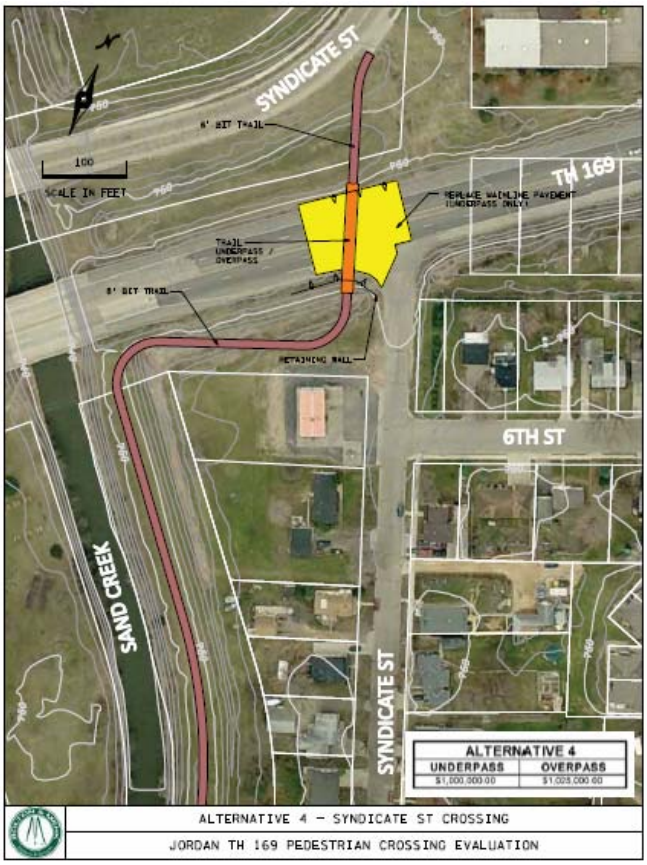
Alternative #1 (top) illustrates a possible underpass or overpass at the existing TH 282/TH 169 crossing.

Alternative #2 (right) illustrates a possible underpass and overpass at the Triangle Lane/Frontage Road Crossing.



Possible Trail Overpass and Underpass Locations – TH 169 Jordan



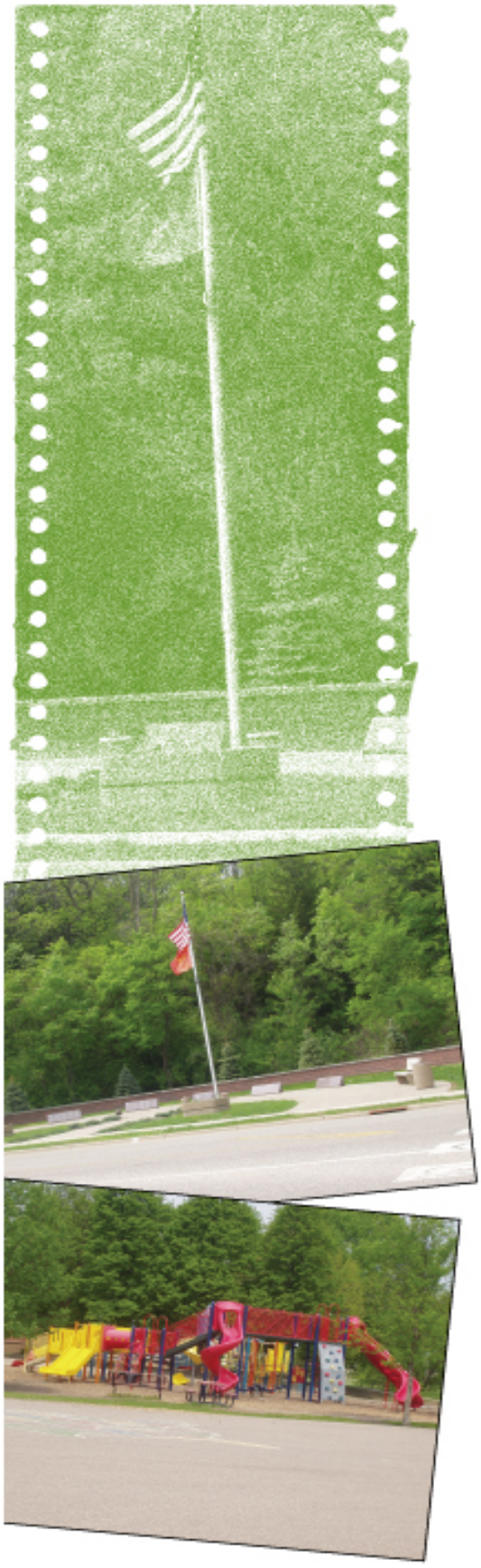


Alternative #3 (top left) illustrates a possible underpass and overpass at the Creek Lane Crossing.

Alternative #4 (top right) illustrates a possible crossing at Syndicate Street.

Alternative #5 (bottom left) illustrates a possible underpass and overpass at Varner Street.

These alternatives were analyzed as they relate to connectivity to residential and commercial areas, connectivity to local and regional trail systems, safety and cost. The Park and Recreation Commission and City Council have identified the following as top alternatives: ___TO BE DETERMINED__



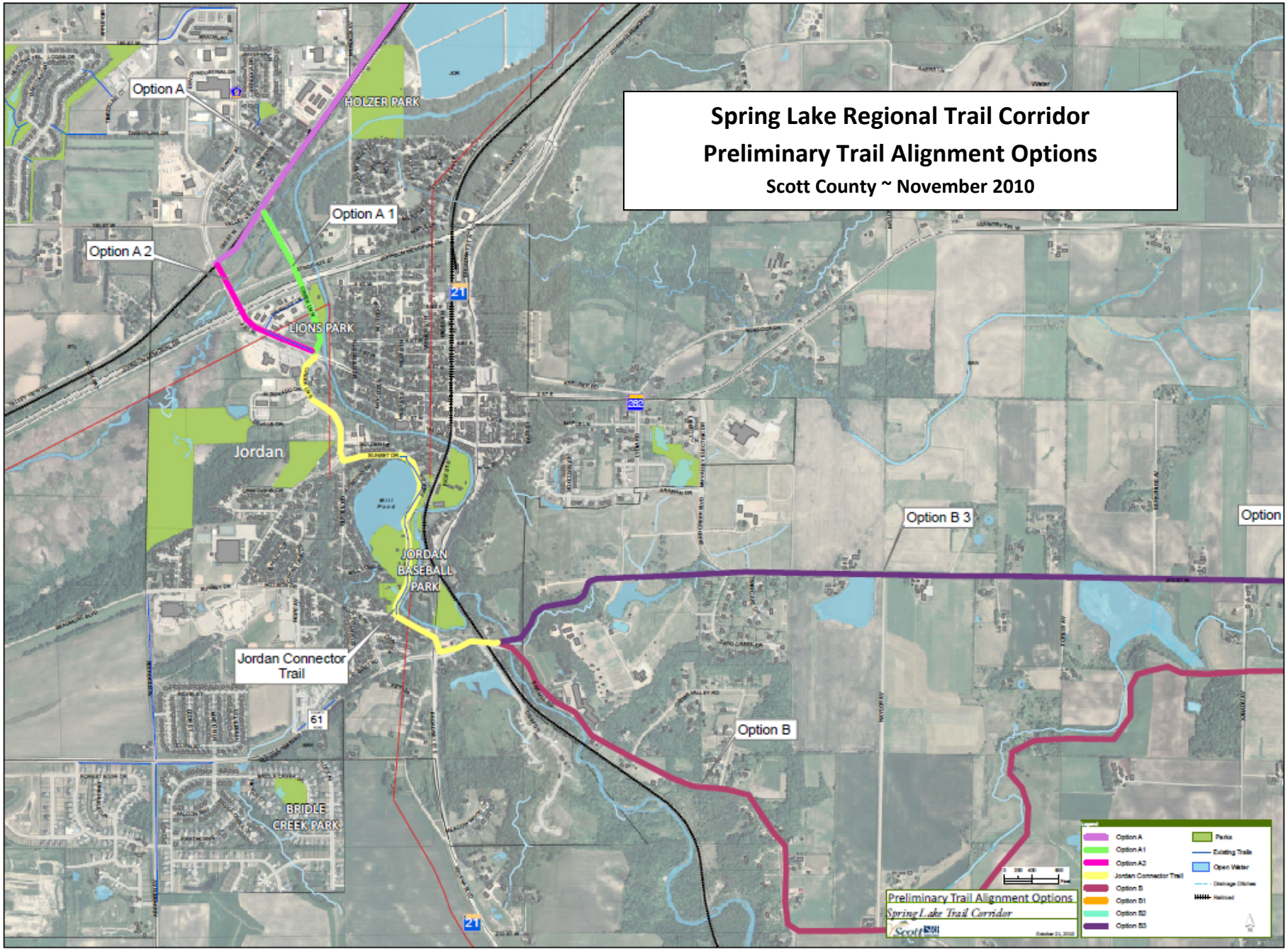
Regional Trails - Spring Lake Regional Trail Corridor

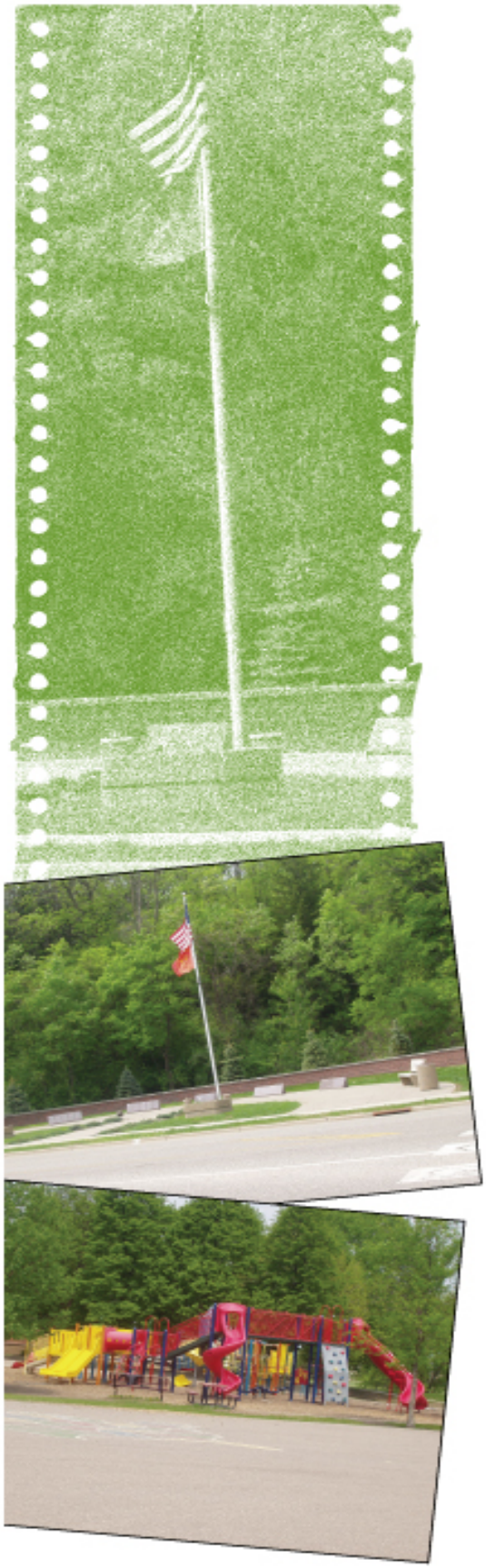
At the time of the development of this Master Parks, Trails and Natural Resource Plan, Scott County was also in the process of master planning the Spring Lake Regional Trail Corridor. Scott County and Metropolitan Council have identified an approximately ten-mile regional trail corridor that would run from Spring Lake Regional Park in Prior Lake southwest towards the Jordan and across the Minnesota River to the future Minnesota River Bluff and Ravines Regional Park search area in Carver County. This trail corridor will primarily travel through a rural setting before entering Jordan.

Attached is a map which illustrates the potential routes for the segment of this trail, as it extends through the City of Jordan. At this time, it is proposed the trail would enter/exit Jordan at the northwest side near Holzer Park, along Valleyview Drive/195th Street West and cross TH 169 at either Creekview Lane or 2nd Street West, consistent with the City's optional trail routes, providing access to the Triangle Lane commercial areas as well as Lion's Park.

The Spring Lake Regional Trail is proposed to extend south along Creek Lane South, Sunset Drive (past Fireman's Park) and to Park Drive which leads to Lagoon Park and the Mini-Met Baseball Park. This park may serve as a trailhead within the community. The trail is proposed to continue south to the existing trail along CR 66, utilizing the existing underpass under Highway 169 and connecting to the trail and sidewalk system in Sawmill Woods Subdivision.

It is recommended the City and Scott County continue to work closely on the future alignment of this regional trail and local trail development as they relate to the crossing of TH 169, trail head locations in Jordan and grant opportunities.


Spring Lake Regional Trail Corridor
Preliminary Trail Alignment Options
Scott County ~ November 2010
Option A
Option A 1
Option A 2
HOLZER PARK
LIONS PARK
Jordan
JORDAN BASEBALL PARK
Jordan Connector Trail
BRIDLE CREEK PARK
Option B
Option B 3
Option
21
280
61
Preliminary Trail Alignment Options
Spring Lake Trail Corridor



Future Pathway Design

Trails or greenways should be designed with the following goals in mind (1) Safety – trails should be designed to protect non-motorized and motorized users (depending on the type of trail) from adjacent or crossing vehicular traffic, (2) Linkages - trails should provide links between local parks and recreational areas, regional trail systems, educational facilities and between residential areas and commercial areas, for shopping and commuting to places of employment (3) Natural Environment – when designing the trail system consideration should be given to protect the natural environment and natural features, and (4) Continuity – trails should be designed to be continuous systems with as few interruptions in user movement as possible.

Following are design guidelines suggested by the National Recreation and Park Association for the various types of pathways:

1. **Park Trails**

- Type I: These separate or single purpose trails are typically ten feet wide and hard surfaced for pedestrians, bicyclists and/or in-line skaters.

- Type II: These multi-purpose trails typically include a natural buffer; such as shrubs, trees or changes in topography, from adjacent uses on either side of the trail. A 50-foot right-of-way to accommodate the buffers is common with a ten foot paved surface.

- Type III: Nature trails are generally six to eight feet wide and are soft surfaced. Trail grades vary depending on the topography of the area in which they are located. Interpretive signage is common along nature trails.

2. **Connector Trails**

Type I and II: These separate or single-purpose hard surfaced trails are designed for pedestrians or bicyclists/in line skaters. If designed for pedestrians only, an eight foot width is common. If designed for bicyclists/in-line skaters, a ten foot paved surface is recommended. The trails may be developed on one or both sides of the roadway and may include one or two-way traffic. The trail is typically separated from the roadway with a boulevard, grass and/or plantings.

3. **On-Street Bikeways or Bike Lanes:** Bike Lanes are typically designed as a five-foot lane adjacent to the driving lane. On-street parking may occur between the on-street bike lane and the curb or edge of the road. In essence each side of the roadway is divided into three sections (1) driving lane, (2) on-street bikeway and (3) on-street parking.

   On Street Bike Route: This bicycle route is typically designated with signage. On Street Bike Routes are typically paved shoulders along roadways.

4. **All Terrain Bike Trails:** Design and length vary depending on the topography in the area. These trails are generally a part of a larger regional park or natural resource area.

5. **Cross Country Ski Trails:** The design of the cross-country ski trail is dependent upon its intended use. The traditional diagonal skiing typically includes a packed groomed trail with set tracks. Skate-skiing designs include a wider packed and groomed surface. The length of the trails may vary. Cross-country ski trails may be designed to be used as equestrian trails during summer months.

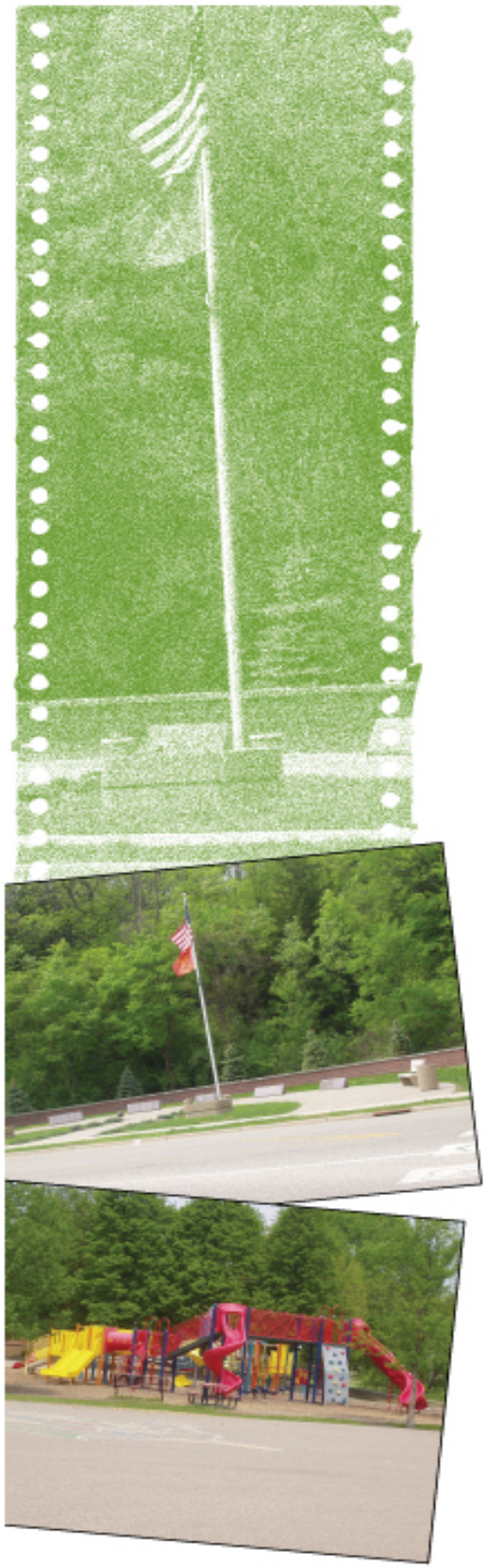
6. **Equestrian Trails:** These horseback riding trails, typically are designed with woodchips or grass surface. They are located in larger parks and natural resource areas where conflict with other trail users may be avoided. The length of an equestrian trail varies but is generally looped.

7. **A multi-purpose trail/greenway corridor** may serve several purposes or a singular purpose.

Future trail design should take into consideration the purpose of the trail (commuter, bicycle, multi-purpose, commuting, etc.). The location of the trail may be somewhat dependent upon the intended users and purpose of a trail. For example, a commuter trail may be constructed in road right- of -way, while a more recreational trail designed to access natural resources and take advantage of scenic overlooks such as bluffs in the northeast growth area of Jordan, may be designed away from roadways.

Existing trails and sidewalks within Jordan and the surrounding area have been categorized within the following table.

Classification	General Description	Description of each type	Existing Facilities
Park Trail	Multi-purpose trails located within greenways, parks and natural resource areas. Focus in on recreational value and harmony with the natural environment.	Type I: Separate/single purpose hard –surfaced trails for pedestrians or bicyclists/in-line skaters. Type II: Multi-purpose hard-surfaced trails for pedestrians and bicyclists/in-line skaters. Type III: Nature trails for pedestrians. May be hard or soft surfaced.	Trails within Lagoon Park, Mini Met Ball Park, Timberline Park
Connector Trails	Multi-purpose trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is as much on transportation as it is on recreation.	Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters located in independent R.O.W (e.g. old railroad R.O.W). Type II: Separate/single-purpose hard-surfaced trails for pedestrian or bicyclists/in-line skaters. Typically located within road R.O.W.	Trails along CR 66, Bridle Creek Subdivisions
On-Street Bikeways	Paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic.	Bike Route: Designated portions of the roadway for the preferential or exclusive use of bicyclists. Bike Lane: Shared portions of the roadway that provide separation between motor vehicles and bicyclists, such as paved shoulders.	None
All-Terrain Bike Trail	Off-road trail for all-terrain (mountain) bikes	Single-purpose loop trails usually located in larger parks and natural resource areas.	DNR Trails along the MN River in the Minnesota Valley State Recreation Area
Cross Country Ski Trail	Trails developed for traditional and skate-style cross-country skiing.	Loop trails usually located in larger parks and natural resource areas.	DNR Trails along the MN River in the Minnesota Valley State Recreation Area
Equestrian Trail	Trails developed for horseback riding.	Loop trails usually located in larger parks and natural resource areas. Sometimes developed as multi-purpose with hiking and all-terrain biking. These trails are developed so conflict can be controlled.	DNR Trails along the MN River in the Minnesota Valley State Recreation Area



Future Sidewalks and Trails

Existing sidewalks and trails should be incorporated into future trail and sidewalk planning activities. Proposed trails add 48.8 miles to the system. This includes regional trail segments that are in the growth area and may not be developed for 20+ year, and trails that may be developed as a part of a regional system versus as a city project.

Trails and sidewalks provide many benefits to a community including:

- Increased safety for non-motorized traffic
- Health and wellness
- Access to natural resources
- Economic development with links to the historic downtown
- Non-motorized commuting options

The Park and Recreation Commission is recommending an "Active Living by Design Philosophy" when reviewing future subdivisions, and developing parks and trails. To implement this philosophy, the Commission is recommending the City further pursue a "Complete Streets Policy" which addresses a system that is designed and operated to be safe and accessible for pedestrians, transit, vehicles, etc. A local Complete Street Policy would declare political support for a balanced approach to road construction.

Some of the concepts of "Complete Streets" include but are not limited to:

- Constructing narrower automobile lanes to help calm traffic and reduce construction and maintenance expense;
- Requiring the connectivity of sidewalks and trails as a part of Subdivision requirements;
- Addressing pedestrian crossings (e.g. Highway 282) and solutions such as bump-outs and medians;
- Expanding support for bicycling including bike racks in the downtown; and
- Improving access for people with disabilities.

Subdivision Ordinance Requirements

The City's current Subdivision Ordinance does include sidewalk installation requirements for new subdivisions as follows:

Sidewalks are required in the following locations:

- Commercial Areas and along all collector streets: Six (6) foot wide concrete sidewalks shall be located on both sides of the street.

- Industrial Areas: Six (6) foot wide concrete sidewalks shall be located on at least one side of the street with additional requirements for collector streets in industrial areas.

- Residential Areas: Six (6) foot wide concrete sidewalks shall be located on at least one side of all streets, except cul-de-sacs., with additional requirements for collector street requirements in residential areas.

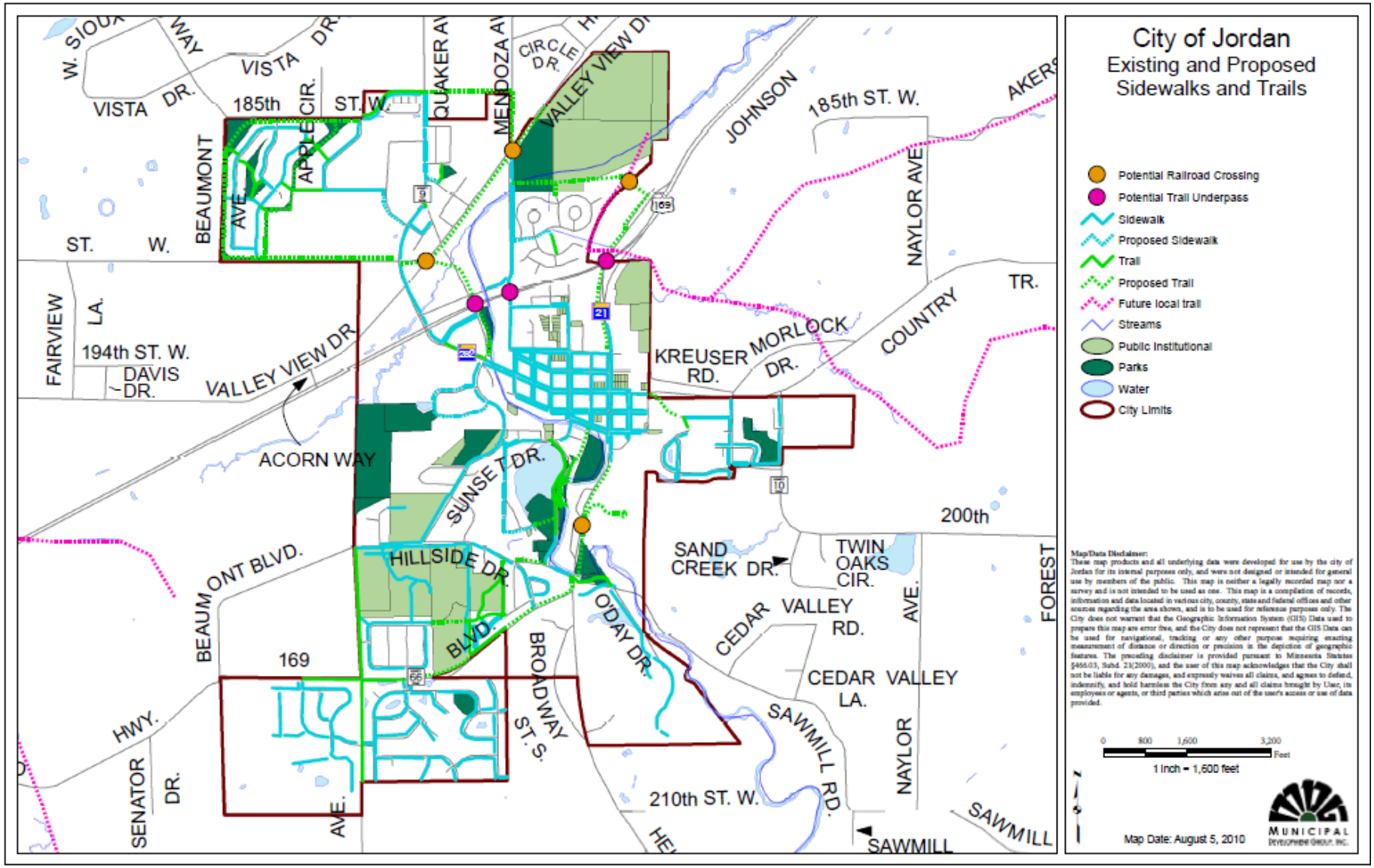
The Subdivision Ordinance also requires the installation of eight (8) foot wide trails, with a 25 foot right-of-way in areas designated by the City.

It is the intent of this plan to identify the primary trails which are needed for connectivity, to remove ambiguity when reviewing plat. Along with those areas identified on the future sidewalk and trail map, trails and sidewalks are recommended to provide connectivity to:

- Downtown and commercial areas
- Schools
- Existing and future parks
- Lineal trails in passive recreation areas or around natural resources and open spaces.
- Regional trail systems
- Residential areas

Collaboration with Other Entities

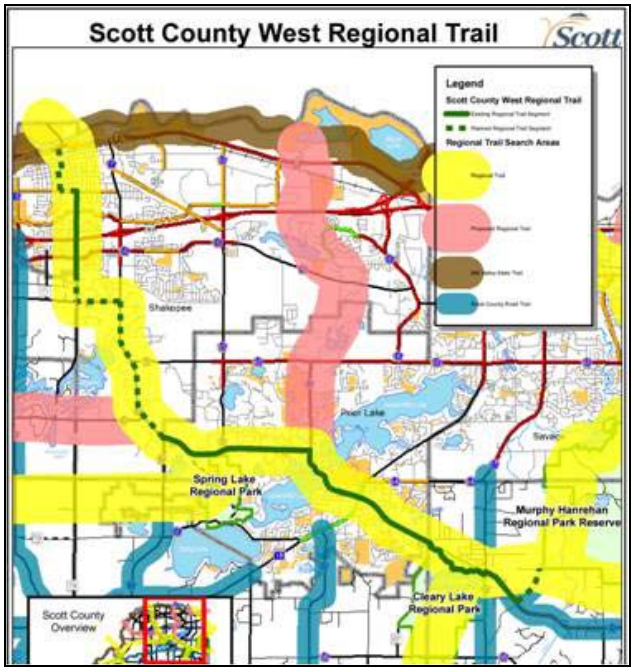
As future trails and greenways are a planned, it is important to coordinate plans with other entities such as MnDOT, Scott County, Carver County (County Road 9 connection), the DNR for connectivity to state parks, the school district (safe routes to schools), the township, landowners and developers.


City of Jordan
Existing and Proposed
Sidewalks and Trails
Potential Railroad Crossing
Potential Trail Underpass
Sidewalk
Proposed Sidewalk
Trail
Proposed Trail
Future local trail
Streams
Public Institutional
Parks
Water
City Limits
Map/Data Disclaimer:
1 Inch = 1,600 feet
Map Date: August 5, 2010
MUNICIPAL
VISTA DR.
185th ST. W.
BEAUMONT AVE
APPLE CIR.
QUAKER AVE
MENDOZA AVE
CIRCLE DR.
VALLEY VIEW DR
JOHNSON
NAYLOR AVE
FAIRVIEW LA.
194th ST. W.
DAVIS DR.
VALLEY VIEW DR
ACORN WAY
SUNSET DR.
KREUSER RD.
MORLOCK DR.
COUNTRY TR.
200th
HILLSIDE DR.
BEAUMONT BLVD.
169
HWY.
SENATOR DR.
BROADWAY ST S.
O'DAY DR.
SAND CREEK DR.
TWIN OAKS CIR.
CEDAR VALLEY RD.
CEDAR VALLEY LA.
SAWMILL RD.
210th ST. W.
SAWMILL
FOREST AVE.

Scott County Parks and Trails
Regional Park and Trail Master Planning Project 2010-2011

Summary of Public Input Comments for Regional Trail Master Planning

Scott West Regional Trail Public Workshop #1 Comments (8/26):



Group Discussion:

- Connection along Marshall
- Obvious connections
- Focus efforts on a destination trail within county
- Get additional easements to provide buffer zone along road
- Make connections to trail within drainage ways
- Separation of trails from roadway
- Consider interim routes until major roadway projects are implemented
- Public Safety is a concern
- Plan trails that make good sense
- Trails along hunting land is a concern
- What do we want the trail to be?

Individual Forms: (6 Forms-2 had comments to questions, map comments included here)

1. *What opportunities do you see for developing the West Regional Trail? (i.e. What are the critical connections to be made?)*
   a. Make obvious connection along Marschall and 78 with existing ROW - try 10'-12' buffer from road with vegetation (2)
   b. Maybe connect to O'Dowd for scenic
   c. Critical connection to the City of Jordan which is illustrated as a hub for several Scott Co. trails and which could serve as a trailhead/park and ride
   d. Lions Park-Jordan
   e. Tie into State Trail system-MN River Valley Trail
   f. Nature is an opportunity

g. Connect to Parks as destination
h. Shakopee streets are wide
i. Use drainage ways to connect to Lyon's Park, etc.
j. Negotiate with Mystic Lake-trail would work with their amenities/rentals/camping

2. *What issues or challenges do you see with developing the West Regional Trail?*
   a. Stay away from tribal land on east
   b. Lakes on West
   c. Buffer from roadway for safety
   d. Work with property owners along any potential route proactively to ensure support/buy-in. Unwilling property owners could impact future construction.
   e. Funding
   f. Grades/slopes entering Jordan, if along Hwy 282
   g. Maintenance with limited funding
   h. Crossing Highway 169, Marystown Rd.
   i. Clear separation between path and road

3. *What types of user groups would like to see accommodated on the West Regional Trail?*
   a. Bikes (2)
   b. rollerblades
   c. walkers/runners (2)
   d. families
   e. near Jordan - cross-country skiing

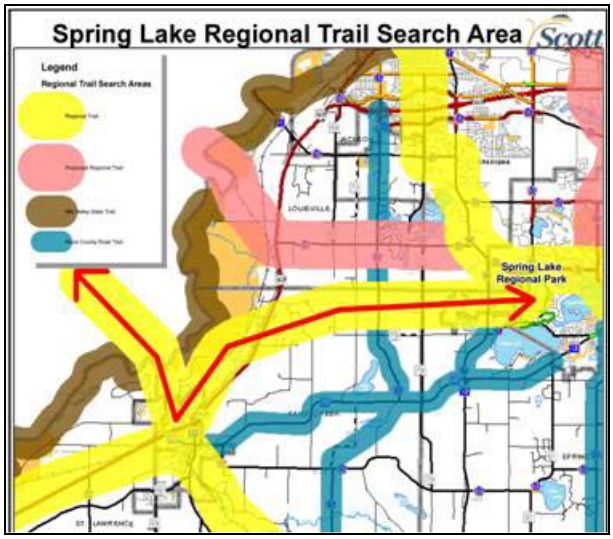
4. *What ideas do you have for the proposed trail alignment?*
   a. Obvious connection along Marschall
   b. Use curb stops to designate bike/trail on suburban Shakopee street-or rumble strip?
   c. Floating boardwalks - the very expensive creative trail idea

Additional Map Comments:

- Route to follow existing highlighted route
- Potential Spur down 79 to County Road 14 near O'Dowd Lake and Thole Lake
- Have alternate route that goes past Mystic Lake
- Have bluff view point on east side of O'Dowd lake
- Consider connection or use of Shakopee's trails within the drainage system

Spring Lake Regional Trail Public Workshop #1 Comments:

(No individual forms completed-See Map Comments)



Group Discussion:

- Potential for Green Space Trail
- Options for Road R.O.W.
- Property rights issue - use public ROW where possible
- Off road vs. on-road - how to create a nicer experience
- Trail use conflict between pedestrians and bikers (commuters)?
- There are different types of bikers looking for different experiences (recreation vs commuting, slow vs fast)
- Topography will be an issue due to the many bluffs and ravines – How do you get down the bluffs?

Map Comments:

- Route to follow 170th St from Spring Lake Park to Valley View Dr into Jordan
- Co. Rd. 21 under 169-propose interchange?
- Make a side loop at Grass Lake
- Long, straight stretches of trails are boring and won't be popular
- Trails will be used more by walkers than bikers
- Crossing along River near Jordan
- City Park around Campbell Lake?

Comments from Tour with Citizen Design Team (September 25th)

Scott West Trail - Group Discussion:

- Downtown Shakopee is a destination and should somehow be connected with the trail system.
- Parking is a big issue that would need to be addressed if the trail went through the downtown area.
- On-road bike lanes could work, but would take away parking for downtown businesses. Probably not supportive.
- Where do you cross Hwy 17? Are there any opportunities for underpasses?

Spring Lake Trail - Group Discussion:

- The bluffs area will be very difficult to cross with a trail. Existing roads are very steep for bikers and walkers.
- Jordan has a new underpass trail connection under Hwy 21.
- Lagoon Park is a great destination/trailhead opportunity within Jordan.
- To provide more gradual declines along the bluffs, the trail may be most appropriate coming into Jordan from the southeast. Sawmill Road and Naylor Avenue may be opportunities to explore.
- Jordan is looking at potential pedestrian crossings over Hwy 169. These crossings should be considered along with the regional trail routes.

SCOTT COUNTY PARKS AND TRAILS
COMMUNITY DEVELOPMENT DIVISION

GOVERNMENT CENTER 114 · 200 FOURTH AVENUE WEST · SHAKOPEE, MN 55379-1220
(952) 496-8475 · Fax (952) 496-8496 · Web www.co.scott.mn.us

Northern Scott County Regional Trails Master Planning Process
Project Summary – 2010-2011

The mission for Scott County parks and trails is to enhance the health and spirit of our residents and guests by creating a sustainable system that connects people to the natural world.

Background

Scott County's Parks and Trails system is a burgeoning part of the Twin Cities Metropolitan Regional Park System. Rapid population growth in the last two decades has resulted in an increased demand for park and trail development. In 2004, Scott County took a more active role as a regional park implementing agency and now owns two future regional parks (Spring Lake and Doyle-Kennefick), and in 2009 began limited park operations at a third site, Cedar Lake Farm Regional Park. Scott County also has one partially developed regional trail that will ultimately connect Cleary Lake Regional Park with Prior Lake, Shakopee, and the Minnesota River. Roughly 130 miles of regional trail corridors have been identified in the County's 2030 Comprehensive Plan traversing through both urban and rural settings.

Scott County is embarking upon a major planning process to define two regional trail search areas into detailed trail alignments in 2010-2011. The end result will be a *Scott County Regional Trails Master Plan* document with corresponding trail route graphics. A major goal for this project is to implement a creative, open and welcoming public process that incorporates county and regional considerations along with site specific opportunities and local needs and flavor. The overall approach should stress the following:

- Use of practical, creative, and responsive public input techniques that fully engage stakeholders and allow County and consultants to openly hear and respond to feedback; and a fully welcoming process that respects and utilizes recent in-depth public input through the 2030 Comprehensive Plan Update.
- Identification of trail corridors and lands to provide natural resource based recreation and safe alternative transportation opportunities for the next 100 years, buffering of natural and cultural resources and a County park agency that is a good neighbor.

Project Timeframe

The Northern Scott County Regional Trails Master Planning Process will begin in *May 2010*. The resulting master plan must be complete and have full Metropolitan Council approval by *June 30, 2011*.

Contact

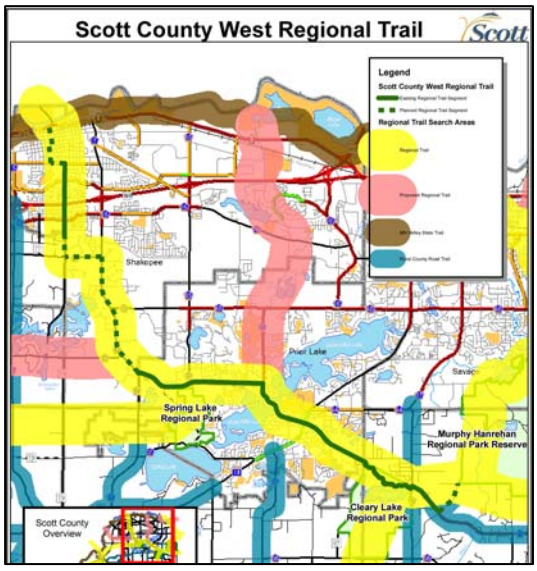
Andy Hingeveld
Associate Planner
Scott County Community Development
(952) 496-8839
ahingeveld@co.scott.mn.us

Updates, announcements and other information on this project will be posted on the County's website (www.co.scott.mn.us) by selecting *Parks & Trails* under the *Parks, Library & Environment* tab.

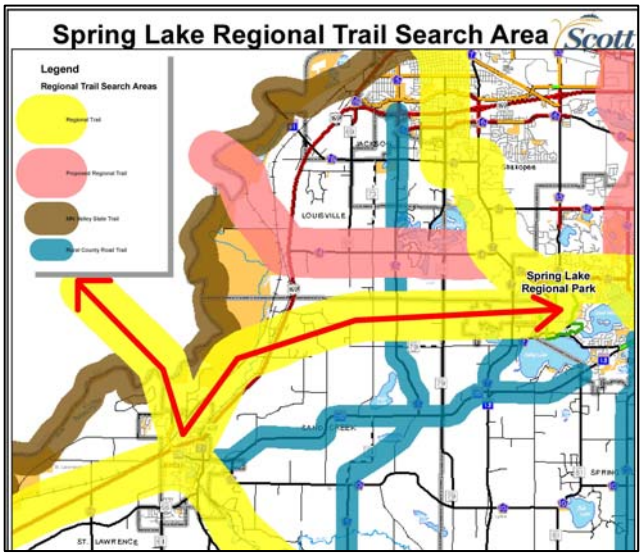
Funding for Scott County's regional parks and trails master planning has been provided through a grant received under the Minnesota Clean Water, Land, and Legacy Act, in which 14.25% of the funds generated from the 3/8% increase in the state sales tax will provide funding for regional and state parks and trails.

Regional Trail Search Areas

The Northern Scott County Regional Trails Master Planning process is intended to identify trail alignments for two trail search areas. These search areas have been classified for regional connections in the Metropolitan Council's 2030 Parks Policy Plan and the Scott County 2030 Comprehensive Plan Update. The following includes a brief description of each search area.



Scott County West Regional Trail – Around eight miles of this planned regional trail are complete. Approximately fifteen miles is planned from Murphy-Hanrehan Park Reserve in Credit River Township to Cleary Lake Regional Park in Credit River Township, then to Spring Lake Regional Park in Prior Lake, and finally connecting to the Minnesota Valley State Trail in Shakopee. The master plan for this trail, which was fairly brief and did not provide clear direction on alignments and routes, will be updated to re-evaluate the alignment.



Spring Lake Regional Trail Corridor - Metropolitan Council has identified an approximately ten-mile regional trail corridor that would run from Spring Lake Regional Park in Prior Lake southwest towards the Jordan and across the Minnesota River to the future Minnesota River Bluff and Ravines Regional Park search area in Carver County. This trail corridor will primarily travel through a rural setting.

What is a Regional Trail?

Regional trails provide a unique linear recreational experience that connects people and places while protecting quality natural resources and implementing conservation practices. Regional trails serve two purposes: connecting two or more regional park or major open space destinations, or creating a destination itself by providing a high-quality recreation experience that traverses significant natural resource areas.

What is a Master Plan?

A master plan defines the specifics of land acquisition, development and operation of regional parks and trails facilities. The master planning process allows other units of government and citizens the opportunity to know what is planned for a regional park or trail, how it affects them, and how much it will cost to build and operate the facility.

As a regional park implementing agency, Scott County is responsible for preparing master plans that address the following eleven components set forth by state statutes and Metropolitan Council requirements for each regional park and regional trail site.

1. Boundaries and Acquisition Costs
2. Stewardship Plan
3. Demand Forecast
4. Development Concept
5. Conflicts and Mitigation
6. Public Services
7. Operations and Maintenance
8. Citizen Participation
9. Public Awareness
10. Special Needs
11. Natural Resource Inventory and Management

CITY OF JORDAN

BOLTON & MENK

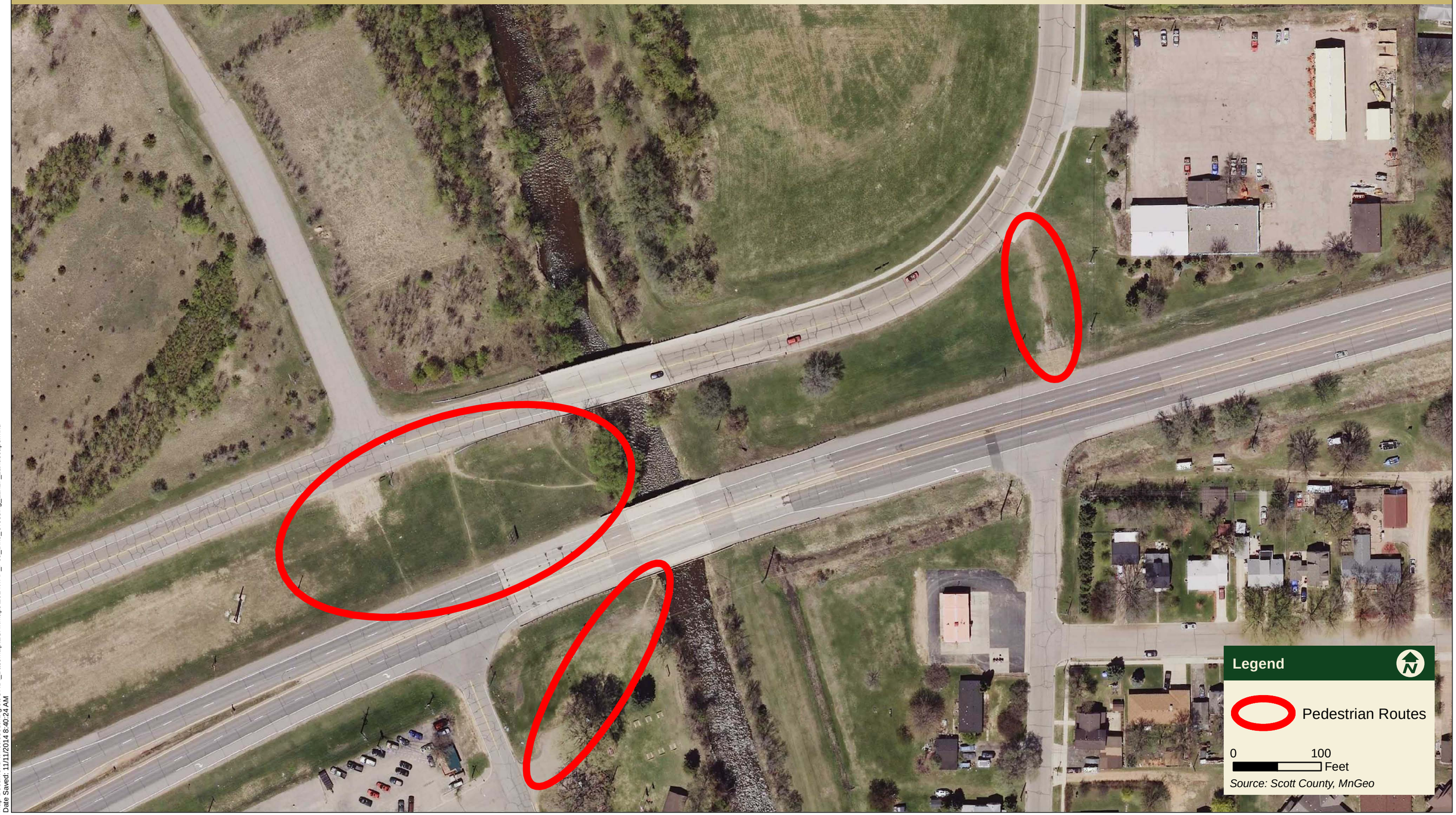
PROPOSED PEDESTRIAN UNDERPASS CONCEPT
JORDAN, MN

Transportation Alternatives Program: Grade-Separated Bicycle and Pedestrian Crossing of Highway 169 in Jordan

City of Jordan

Existing Pedestrian Routes

November 2014



Map Document: \\metrosouth1\gis\JORD_Basemap\ESRI\Maps\2014\TAP_Ped_Bike_Crossing_11x17_Landscape.mxd
Date Saved: 11/11/2014 8:40:24 AM

Minnesota Department of Transportation
Metro District
1500 West County Road B-2
Roseville, MN 5511

November 25, 2014

Scott Haas
Public Works Director
City of Jordan
210 East First Street
Jordan, MN 55352

RE: Regional Solicitation Application for Highway 169 Ped/Bike Underpass

Dear Mr. Haas:

Thank you for requesting a letter of support from MnDOT for the Metropolitan Council's 2014 Regional Solicitation. Your application for the Grade-Separated Bicycle and Pedestrian Crossing of Highway 169 in Jordan impacts MnDOT right of way on Highway 169.

As the agency with jurisdiction over Highway 169, MnDOT supports the application for the grade-separated bicycle and pedestrian crossing of Highway 169 in Jordan. Details of a future maintenance agreement with the City will be determined during project development to define how the project will be maintained; however, ped/bike bridges over MnDOT right of way are normally owned and maintained by the local agency.

This project currently has no funding from MnDOT.

Sincerely,

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
Jon Solberg, MnDOT Metro District - South Area Manager

Regional Economy

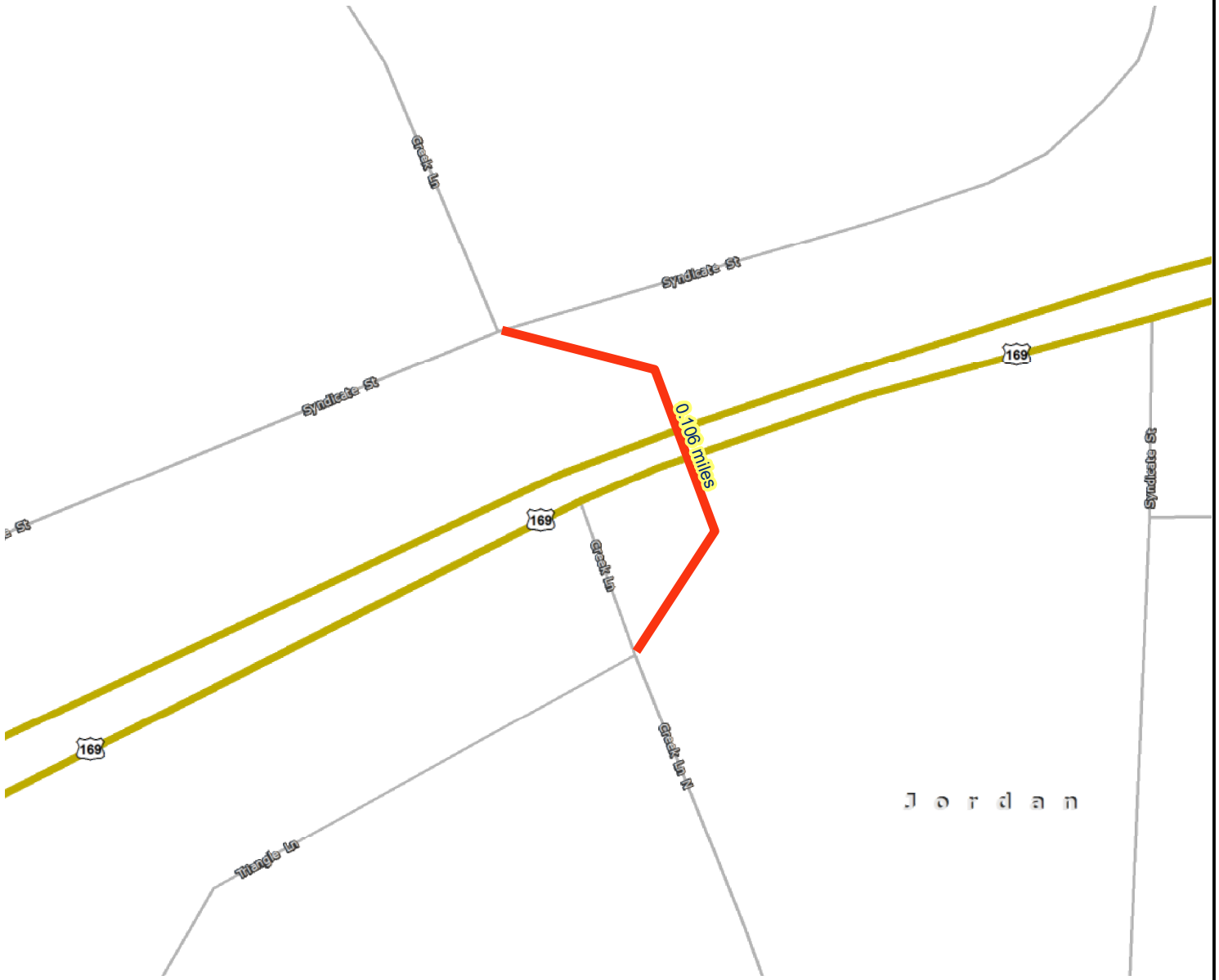
Pedestrian Facilities Project: Grade-Separated Bicycle and Pedestrian Crossing of Highway 1 | Map ID: 1415654491152

Results

Project **NOT IN** area of Job Concentration.

Project **NOT IN** to area of Manufacturing and Distribution.

Project **NOT CONNECTED** to area of Education Institutions.



Project
Manfacturing/Distribution Centers
PostSecondary Education Centers
Job Concentration Centers

0 0.02 0.04 0.08 0.12 0.16 Miles

Created: 11/10/2014
LandscapeRSA5

For complete disclaimer of accuracy, please visit http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

Population Summary

Pedestrian Facilities Project: Grade-Separated Bicycle and Pedestrian Crossing of Highway 1 | Map ID: 1415654491152

Results

Within HALF Mile of project:
Total Population: 4410
Total Employment: 1605

Project
School
2010 TAZ

0 0.02 0.04 0.08 0.12 0.16 Miles

Created: 11/10/2014
LandscapeRSA4

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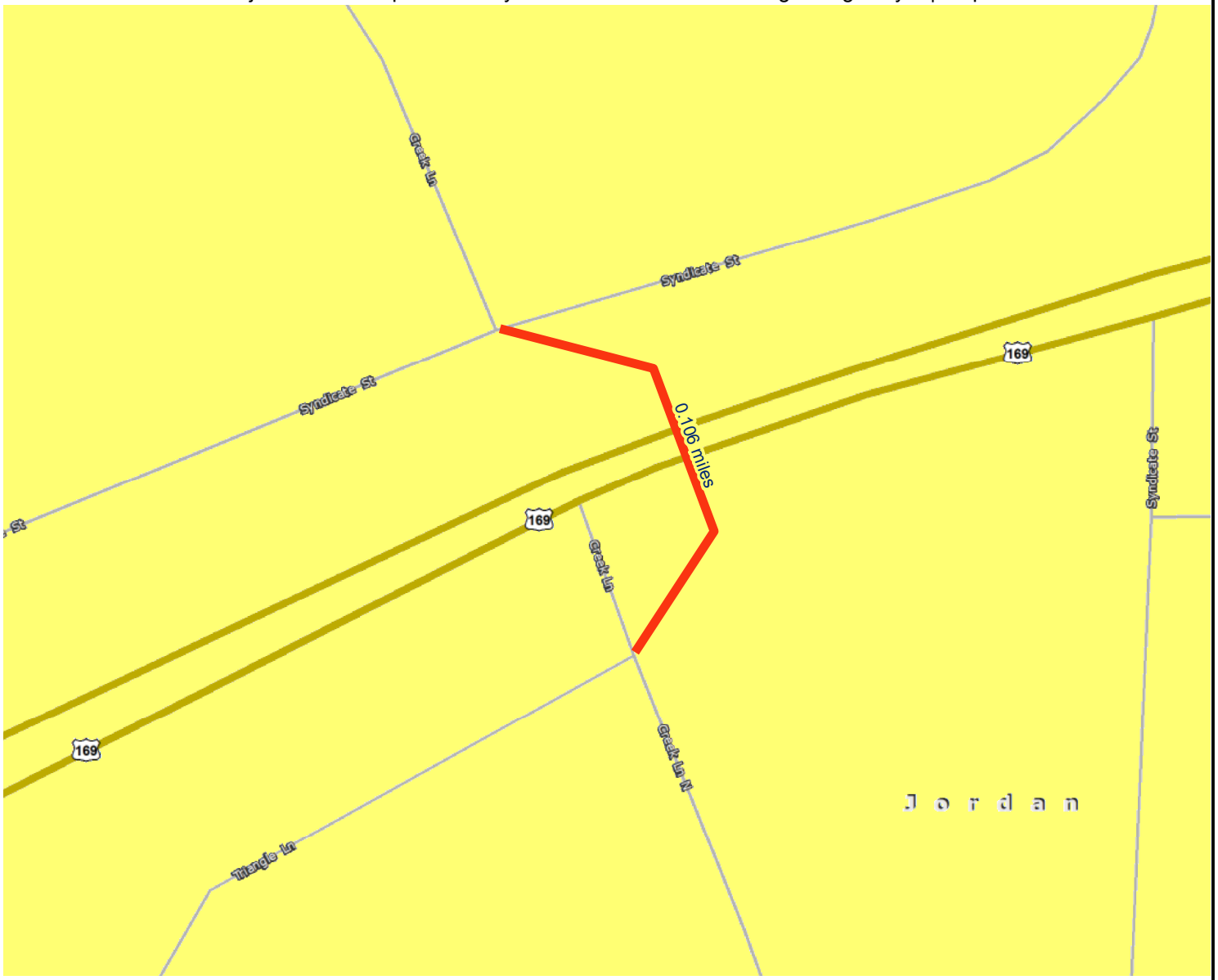
METROPOLITAN COUNCIL

Socio-Economic Conditions

Pedestrian Facilities Project: Grade-Separated Bicycle and Pedestrian Crossing of Highway 1 | Map ID: 1415654491152

Results

Project **IN** area of above average concentration of race or poverty.



Project

Concentrated area of poverty

Racially concentrated area of poverty

Above reg'l avg conc of race/poverty

0 0.02 0.04 0.08 0.12 0.16 Miles

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LandscapeRSA2

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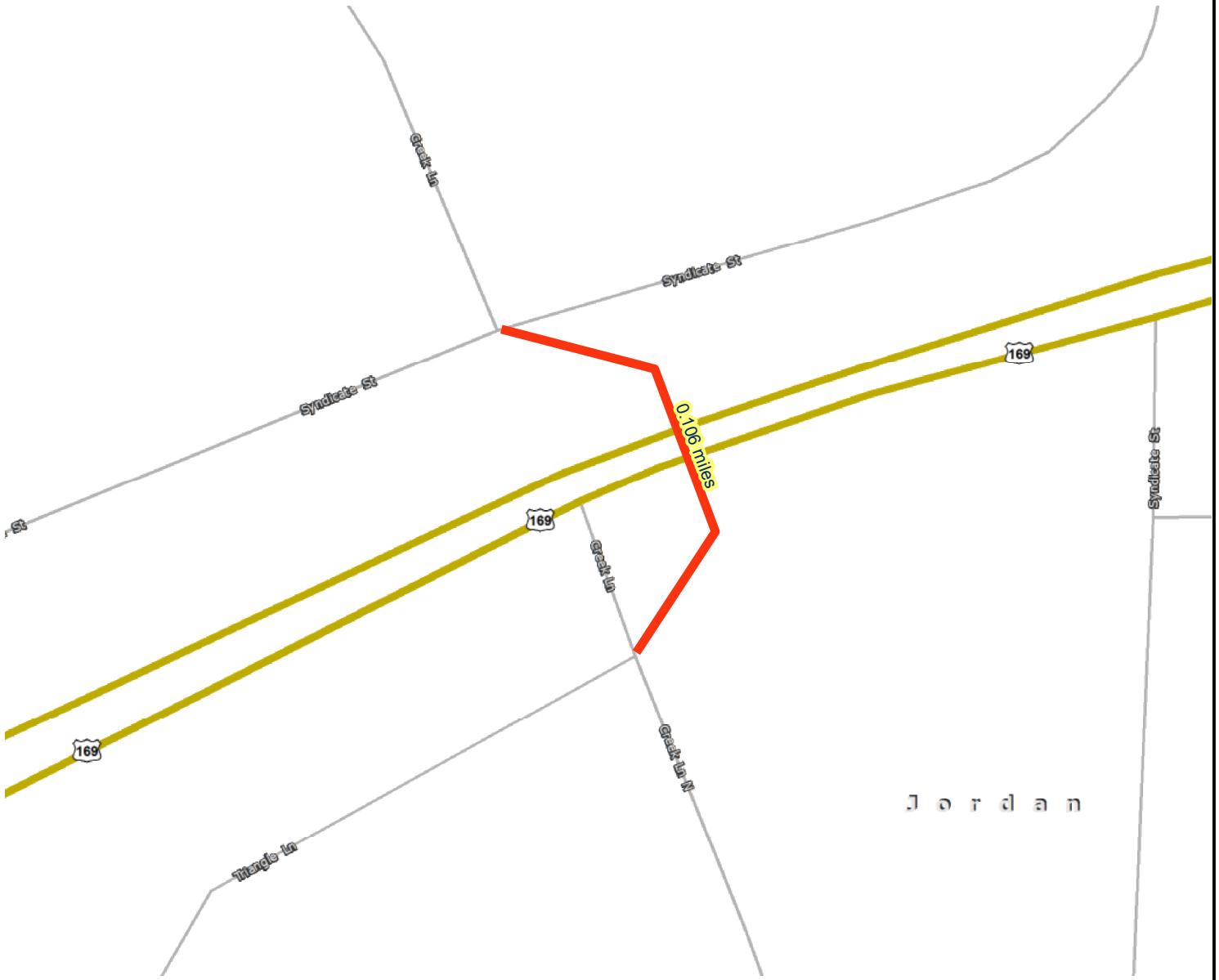
METROPOLITAN COUNCIL

Transit Connections

Pedestrian Facilities Project: Grade-Separated Bicycle and Pedestrian Crossing of Highway 1 | Map ID: 1415654491152



Results

Transit with a Direct Connection to project:
-- NONE --

Transit within HALF mile of project:
-- NONE --

**indicates Planned Alignments*

Project

Active Stop

0 0.02 0.04 0.08 0.12 0.16 Miles

Created: 11/10/2014
LandscapeRSA3

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METROPOLITAN COUNCIL